## **DRAGONAIR**

## A320/A321

## **OPERATIONS MANUAL**

## MINIMUM EQUIPMENT LIST

This volume forms part of the Operations Manual. It is issued by the Operations Department and is authorised by the General Manager (Operations).

Signed

Peter SANDERSON
General Manager Operations

The MEL Revision is based upon the EASA approved Airbus A320/A321 MMEL at Revision dated 19 JULY 2012.

The holder of this volume is responsible for its revision.

Page (i) Rev Date: 19 JUL 12







### 安全、質量及保安政策

安全、質量及保安是港龍航空的核心價值。藉著各員工絕不妥協地致力推行各種持續提升質量、保安及安全管理系統計劃,我們務求在這些方面均達到最高的水平。

港龍航空一直以來均十分重視及鼓勵/任何有關運作安全及保安事件的報告。我們有既定 政策、鼓勵每一位員工向公司匯報任何可能影響航班及地動營運安全及保安的情况及資 料、並積極推動這種文化。我們更製訂了一套程序,適用於航空安全報告、機艙安全報 告、地勤安全報告、品質審計報告及保安審查報告所收集紀錄及發放的資訊,確保溝通 可以在不受拘束的情況下進行。

我們亦確立機制,以量度及訂立在所有有關安全、質量及保安方面的主要表現水平,並 以嚴謹的風險評審,按其重要性訂定改善措施的優先次序。

爲建立互信關係,港龍航空推行公平文化的政策,決不會紀律處分任何匯報有關航班安 全事件的員工。但如果有關資訊是來自其他來源,或員工刻意澳視既定的政策及程序, 此項政策則不適用。我們希望從錯誤中學習,以不斷提升水平。

作為行政總裁,我自然責無旁貸,除致力履行承諾提供安全的運作及工作環境,我務請 大家積極負責,廉港配航空繼續在安全,品質及保安方面均達致廣高的水平,騰顧客、 員工及商業夥伴均受惠,並保持公司在這方面的業界極讓地位。

行政總裁 楊偉添 ニロー・モハ月

### SAFETY, QUALITY AND SECURITY POLICY

Safety, quality and security are core values of Dragonair. We are dedicated to achieving the highest standards in these disciplines by the uncompromising efforts and vigilance of every employee in implementing continuous quality improvement, security and safety management system programmes that are in place in Dragonair.

It is imperative that we have uninhibited reporting of all incidents and occurrences which compromise the safe and secure conduct of our operations. We have a policy of an open reporting culture where every employee is encouraged to communicate any information that may affect the integrity of flight and ground safety and security. Such communication is free of reprisal. Our method of collecting, recording and disseminating information obtained from Air Safety Reports, Cabin Safety Reports, Ground Safety Reports, Quality Audits and Security Inspections has been developed to achieve this aim.

We have established methods to measure and set key performance standards in all the safety, quality and security disciplines coupled with a rigorous process of risk assessment in order to prioritise the deployment of corrective actions in a timely and efficient manner.

To engender mutual trust, Dragonair has a just culture policy where it will not take disciplinary action against any employee who discloses an incident or occurrence involving safety. This policy shall not apply to information received by the company from a source other than the employee, or when the employee knowingly disregards established policies and procedures. We constantly improve our standards by learning from our own mistakes and errors as well as those made by others.

As the Chief Executive Officer I am ultimately accountable and fully committed to providing a safe operational and working environment. However I require you all to take responsibility to ensure Dragonair maintain its industry position as a leader in providing our customers, employees and business partners with the highest level of safety, quality and security.

Patrick Yeung Chief Executive Officer August 2011

KASQSPDMS-201108-REV2

Rev Date: 29 NOV 11 Page (ii)



### POLICY STATEMENTS

### COMMANDER/PILOT IN COMMAND/PIC

The term "Commander" throughout the Operations manuals is synonymous with "Pilot in Command (PIC)"

### CREW RESOURCE MANAGEMENT (CRM)

Dragonair is committed to the application of modern Crew Resource Management principles in Flight Operations. CRM principles of today are considered by Hong Kong Dragon Airlines to provide the most proven methods of achieving effective leadership and communication, aimed at the promotion of safe and efficient flight. While traditional high standards of technical excellence remain the comerstone of the airline, it is recognised that effective team management is essential. This must involve the promotion of a comfortable and understanding working environment, especially in multi-cultural crew situations, through clear and unambiguous communication and task sharing. It is Company Policy that CRM principles will be promoted and adopted by all persons in Flight Operations.

#### AUTOMATION

It is Dragonair policy to regard Automation as a tool to be used, but not blindly relied upon. At all times, flight crew must be aware of what automation is doing, and if not understood, or not requested, reversion to basic modes of operation must be made immediately without analysis or delay. Trainers must ensure that all flight crew are taught with emphasis how to quickly revert to basic modes when necessary. In the man-machine interface, man is still in charge.

### **QUALITY MANAGEMENT**

Dragonair is committed to the application of a Quality Management System in Flight Operations. To this end the management system is defined in OM Part A and shall be complied with for all future policy and procedural development.

### **GENDER**

Masculine terms in all the operations manuals, such as he, him or his also imply the female gender.

### **ELECTRONIC MANUALS**

Electronic manuals are an established means of communicating information and data in support of a wide range of FOP activities.

Access to electronic manuals is available to all approved users via Dragonet. All FOP staff are encouraged to utilise electronic manuals on a routine and ongoing basis. Electronic manuals posted on Dragonet represent the latest revised versions and, where differences exist with physical documentation, are considered to be the master source. In some cases manuals can be downloaded directly onto storage devices for offline use. Persons utilising information and data in this manner must be careful to ensure that it represents the latest in-use version available on Dragonet.

### STANDARD OPERATING PROCEDURES

Airbus customized FCOM chapters and QRH as well as Dragonair customized FCOM and QRH chapters are accepted as the Standard operating Procedures for Dragonair. Where there is a difference between Airbus and Dragonair customized material, the latter is the overriding authority.

### DESIGNATED COMMON LANGUAGE

It is Dragonair Policy that English shall be the designated common language for Flight Operations. All communications pertaining to Flight Operations, whether oral or written will be conducted in English. This includes all oral communications between Flight Crew within the Cockpit, and between the Flight Crew and all other staff (includes the Cabin Crew, Ground Handling Personnel, Passengers, Air Traffic Control and any other ground station or aircraft). All operational documentation including training materials shall be written in English. All Flight Crew and Cabin Crew training activities and evaluations shall be conducted in English.

General Manager Operations

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Page (iii) Rev Date: 29 NOV 11



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Rev Date: 29 NOV 11 Page (iv)



### TRANSMITTAL LETTER

Issue date: 19 JUL 12

This is the MINIMUM EQUIPMENT LIST at issue date 19 JUL 12 for the A320/A321 and replacing last issue dated 04 APR 12

HDA A320/A321 FLEET TRL P 1/2



## TRANSMITTAL LETTER

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HDA A320/A321 FLEET
MEL



Please incorporate the revision as follow:

Localization	Domessa	Insert
Subsection Title	Remove	Rev. Date
HOW	ALL	19 JUL 12
How to Use ME-21		
ME-21 Air Conditioning	ALL	19 JUL 12
ME-26	<del> </del>	
Fire Protection	ALL	19 JUL 12
ME-28	ALL	19 JUL 12
Fuel		
ME-29	ALL	19 JUL 12
Hydraulic Power		
ME-32 Landing Gear	ALL	19 JUL 12
ME-34	+	-
Navigation	ALL	19 JUL 12
ME-36	ALL	10 1111 10
Pneumatic	ALL	19 JUL 12
ME-52	ALL	19 JUL 12
Doors	ALL	19 301 12
MI-00-01	ALL	19 JUL 12
Approval Reference		
MI-00-02 Introduction to the MEL	ALL	19 JUL 12
MI-00-05	+	<del>                                     </del>
Repair Interval	ALL	19 JUL 12
MI-00-07	ALL	19 JUL 12
Definitions	ALL	19 JOL 12
MI-00-08	ALL	19 JUL 12
ECAM and MAINTENANCE STATUS		
MI-21-00 MAINTENANCE Messages on the STATUS SD page	ALL	19 JUL 12
MI-21-51	+	<u> </u>
Pack Flow Control	ALL	19 JUL 12
MI-21-52	A11	10 1111 10
Air Cooling System	ALL	19 JUL 12
MI-21-63	ALL	19 JUL 12
Cockpit and Cabin Temperature Control	,	10 002 12
MI-22-60 Flight Augmentation (FAC)	ALL	19 JUL 12
MI-22-70	<del> </del>	
Flight Management System (FMS)	ALL	19 JUL 12

HDA A320/A321 FLEET MEL



Localization	Remove	Insert	
Subsection Title	nemove	Rev. Date	
MI-22-81-01	ALL	19 JUL 12	
Auto Flight Control Panel (FCU)	ALL	19 JUL 12	
MI-22-81-02	ALL	19 JUL 12	
EFIS Control Panel (FCU)	ALL	19 JUL 12	
MI-22-81-03	ALL	19 JUL 12	
FCU Channel	,,,,,	10 002 12	
MI-23-01-02	ALL	19 JUL 12	
CALLS Overhead Panel			
MI-23-13	ALL	19 JUL 12	
Radio Management		ļ	
MI-23-31	ALL	19 JUL 12	
Passenger Address System			
MI-23-73-01	ALL	19 JUL 12	
Cabin Intercommunication Data System (CIDS)		ļ	
MI-23-73-03 <b>DEU B</b>	ALL	19 JUL 12	
MI-23-73-10			
Smoke Detection Function	ALL	19 JUL 12	
MI-23-74			
Cabin Crew Panel	ALL	19 JUL 12	
MI-24-01-01			
ELEC Overhead Panel	ALL	19 JUL 12	
MI-24-23			
AC Auxiliary Generation	ALL	19 JUL 12	
MI-24-26		40 11 11 40	
Galley and Commercial Supply System	ALL	19 JUL 12	
MI-24-32	ALL	10 11 10	
DC Main Generation (TR 1, TR 2)	ALL	19 JUL 12	
MI-24-41	ALL	19 JUL 12	
AC External Power Control	ALL	19 JOL 12	
MI-25-07	ALL	19 JUL 12	
Indications on the DOOR/OXY SD page	ALL	10 001 12	
MI-25-62	ALL	19 JUL 12	
Cabin Escape Facilities	,	1000012	
MI-26-00	ALL	19 JUL 12	
MAINTENANCE Message on the STATUS SD page			
MI-26-01-01	ALL	19 JUL 12	
FIRE Overhead Panel			
MI-26-01-02	ALL	19 JUL 12	
CARGO SMOKE Overhead Panel		-	
MI-26-13	ALL	19 JUL 12	
APU Fire and Overheat Detection			

HDA A320/A321 FLEET

FI P 2/8



Localization	Domeste	Insert
Subsection Title	Remove	Rev. Date
MI-26-16 Cargo Compartment Smoke Detection	ALL	19 JUL 12
MI-26-17 Lavatory Smoke Detection	ALL	19 JUL 12
MI-26-23 Cargo Compartment Fire Extinguishing	ALL	19 JUL 12
MI-27-07 Indications on SD pages	ALL	19 JUL 12
MI-27-51 Flaps Electrical Control and Monitoring	ALL	19 JUL 12
MI-27-94 SEC System (Spoiler and Elevator Computer)	ALL	19 JUL 12
MI-28-01-01 FUEL Overhead Panel	ALL	19 JUL 12
MI-28-07-01 Fuel Quantity Indications on the FUEL SD page	ALL	19 JUL 12
MI-28-07-02 Fuel Temperature Indications on the FUEL SD page	ALL	19 JUL 12
MI-28-07-03 Tank Pump Indications on the FUEL SD page	ALL	19 JUL 12
MI-28-07-04 Valve Indications on the FUEL SD page	ALL	19 JUL 12
MI-28-09 ECAM Alerts	ALL	19 JUL 12
MI-28-12 Tank Venting System	ALL	19 JUL 12
MI-28-15 Intercell Transfer System	ALL	19 JUL 12
MI-28-20 Distribution	ALL	19 JUL 12
MI-28-21 Main Fuel Pump System	ALL	19 JUL 12
MI-28-22 APU Fuel Pump System	ALL	19 JUL 12
MI-28-25 Refuel/Defuel System	ALL	19 JUL 12
MI-28-43 Manual Magnetic Indicators	ALL	19 JUL 12
MI-28-46 Tank Level Sensing	ALL	19 JUL 12
MI-29-09 ECAM Alerts	ALL	19 JUL 12

HDA A320/A321 FLEET FI P 3/8 19 JUL 12



Localization	Remove	Insert	
Subsection Title	nelliove	Rev. Date	
MI-30-01-02	ALL	19 JUL 12	
WIPER Overhead Panel	ALL	19 JUL 12	
MI-31-07	ALL	19 JUL 12	
Indications on the System Display (SD)	/\LL	10 002 12	
MI-31-30	ALL	19 JUL 12	
Centralized Fault Display System (CFDS) and Data Recording System			
MI-31-38	ALL	19 JUL 12	
Up and Down Data Loading System Acquisition/Interface and Equipment			
MI-31-62	ALL	19 JUL 12	
Display Management Computer (DMC) MI-31-63			
MI-31-o3 Display Unit (DU)	ALL	19 JUL 12	
MI-32-07	+		
MI-32-07 Indications on the WHEEL SD page	ALL	19 JUL 12	
MI-32-09	+		
ECAM Alerts	ALL	19 JUL 12	
MI-32-31	+		
Normal Extension and Retraction	ALL	19 JUL 12	
MI-32-41			
Wheels	ALL	19 JUL 12	
MI-32-44		40 1111 40	
Alternate Braking	ALL	19 JUL 12	
MI-33-01-02	ALL	19 JUL 12	
SIGNS Overhead Panel	ALL	19 JUL 12	
MI-33-10	ALL	19 JUL 12	
Cockpit General Illumination	ALL	19 301 12	
MI-33-40	ALL	19 JUL 12	
Exterior Lighting	7122	10 002 12	
MI-33-51	ALL	19 JUL 12	
Cabin Emergency Lighting	, ,		
MI-34-01-01	ALL	19 JUL 12	
ADIRS Overhead Panel			
MI-34-05	ALL	19 JUL 12	
Indications on the Primary Flight Display (PFD)			
MI-34-10 Air Data/Inertial Reference System (ADIRS)	ALL	19 JUL 12	
MI-34-22			
MI-34-22 Attitude and Heading Standby Data	ALL	19 JUL 12	
MI-34-23	+	-	
Integrated Standby Instrument System (ISIS)	ALL	19 JUL 12	
MI-34-40	+		
GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar	ALL	19 JUL 12	

 HDA A320/A321 FLEET
 FI P 4/8

 MEL
 19 JUL 12



Localization	D-m	Insert
Subsection Title	Remove	Rev. Date
MI-34-50 ATC and Radio/GPS Navigation Systems	ALL	19 JUL 12
MI-36-00 MAINTENANCE Message on the STATUS SD page	ALL	19 JUL 12
MI-36-11 Engine Bleed Air Supply System	ALL	19 JUL 12
MI-36-12 APU Bleed Air Supply and Crossbleed Systems	ALL	19 JUL 12
MI-36-22 Leak Detection Loop	ALL	19 JUL 12
MI-47-00 MAINTENANCE Message on the STATUS SD page	ALL	19 JUL 12
MI-52-07 Indications on the DOOR/OXY SD page	ALL	19 JUL 12
MI-52-10 Passenger/Crew Door	ALL	19 JUL 12
MI-52-51 Reinforced Cockpit Door (CDLS)	ALL	19 JUL 12
MI-73-10 Distribution	ALL	19 JUL 12
MO-21-23 Lavatory and Galley Ventilation	ALL	19 JUL 12
MO-21-26 Avionics Equipment Ventilation	ALL	19 JUL 12
MO-21-31 Pressure Control and Monitoring	ALL	19 JUL 12
MO-21-51 Pack Flow Control	ALL	19 JUL 12
MO-21-52 Air Cooling System	ALL	19 JUL 12
MO-21-63 Cockpit and Cabin Temperature Control	ALL	19 JUL 12
MO-22-70 Flight Management System (FMS)	ALL	19 JUL 12
MO-23-74 Cabin Crew Panel	ALL	19 JUL 12
MO-24-01-01 ELEC Overhead Panel	ALL	19 JUL 12
MO-24-07 Indications on the ELEC SD page	ALL	19 JUL 12
MO-24-22 AC Main Generation	ALL	19 JUL 12

HDA A320/A321 FLEET FI P 5/8 19 JUL 12



Localization	Remove	Insert	
Subsection Title	nelliove	Rev. Date	
MO-24-26	ALL	19 JUL 12	
Galley and Commercial Supply System	ALL	19 JUL 12	
MO-25-07	ALL	19 JUL 12	
Indications on the DOOR/OXY SD page	//	10 002 12	
MO-26-15	ALL	19 JUL 12	
Avionics Compartment Smoke Detection			
MO-27-64	ALL	19 JUL 12	
Spoiler Hydraulic Actuation			
MO-27-92	ALL	19 JUL 12	
Electrical Flight Control System (EFCS) Control Inputs and Power Supply MO-27-94			
MO-27-94 SEC System (Spoiler and Elevator Computer)	ALL	19 JUL 12	
MO-28-01-01			
FUEL Overhead Panel	ALL	19 JUL 12	
MO-28-07-01	+		
Fuel Quantity Indications on the FUEL SD page	ALL	19 JUL 12	
MO-28-07-04	+		
Valve Indications on the FUEL SD page	ALL	19 JUL 12	
MO-28-09			
ECAM Alerts	ALL	19 JUL 12	
MO-28-12	<del></del>		
Tank Venting System	ALL	19 JUL 12	
MO-28-15	A	40 1111 40	
Intercell Transfer System	ALL	19 JUL 12	
MO-28-20	ALL	19 JUL 12	
Distribution	ALL	19 JUL 12	
MO-28-21	ALL	19 JUL 12	
Main Fuel Pump System	ALL	19 JUL 12	
MO-29-23	ALL	19 JUL 12	
Power Transfer	ALL	10 002 12	
MO-30-11	ALL	19 JUL 12	
Wing Ice Protection	, , , , ,	10 002 12	
MO-30-21	ALL	19 JUL 12	
Engine Air Intake Ice Protection			
MO-30-31	ALL	19 JUL 12	
Probe Ice Protection		ļ	
MO-31-07	ALL	19 JUL 12	
Indications on the System Display (SD) MO-31-56	+	1	
MO-31-56 ECAM Control Panel (ECP)	ALL	19 JUL 12	
MO-31-62	+	<del>                                     </del>	
MO-31-ରଥ Display Management Computer (DMC)	ALL	19 JUL 12	

 HDA A320/A321 FLEET
 FI P 6/8

 MEL
 19 JUL 12



Localization	Remove	Insert
Subsection Title	nemove	Rev. Date
MO-32-07	ALL	19 JUL 12
Indications on the WHEEL SD page	ALL	13 00L 12
MO-32-09	ALL	19 JUL 12
ECAM Alerts	/\LL	10 002 12
MO-32-32	ALL	19 JUL 12
Proximity Detector System	,	10 002 12
MO-32-42	ALL	19 JUL 12
Normal Braking	,	10 002 12
MO-34-01-01	ALL	19 JUL 12
ADIRS Overhead Panel	,	10 002 12
MO-34-10	ALL	19 JUL 12
Air Data/Inertial Reference System (ADIRS)	,	10 002 12
MO-34-23	ALL	19 JUI 12
Integrated Standby Instrument System (ISIS)	,	10 002 12
MO-52-07	ALL	19 JUL 12
Indications on the DOOR/OXY SD page	,	10 002 12
MO-52-10	ALL	19 JUL 12
Passenger/Crew Door	, , , ,	10 002 12
MO-73-20	ALL	19 JUL 12
Controlling	,,,,,	10 001 12
MO-78-30	ALL	19 JUL 12
Thrust Reversers	,,,,,	10 001 12

HDA A320/A321 FLEET FI P 7/8



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 HDA A320/A321 FLEET
 FI P 8/8

 MEL
 19 JUL 12

# **PRELIMINARY PAGES**





## PRELIMINARY PAGES TABLE OF CONTENTS

### **PLP PRELIMINARY PAGES**

TABLE OF CONTENTS
LIST OF EFFECTIVE SECTIONS/SUBSECTIONS
AIRCRAFT ALLOCATION TABLE
LIST OF MODIFICATIONS

**GEN General** 

**HOW How to Use** 

**ME MEL Entries** 

MI MEL Items

**MO MEL Operational Procedures** 

HDA A320/A321 FLEET PLP-TOC P 1/2



# PRELIMINARY PAGES TABLE OF CONTENTS

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 HDA A320/A321 FLEET
 PLP-TOC P 2/2

 MEL
 19 JUL 12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
	GEN	General	04 APR 12
R	HOW	How to Use	19 JUL 12
Е	ME-21	Air Conditioning	19 JUL 12
	ME-22	Auto Flight	29 NOV 11
	ME-23	Communications	29 NOV 11
	ME-24	Electrical Power	04 APR 12
R	ME-26	Fire Protection	19 JUL 12
	ME-27	Flight Controls	04 APR 12
E	ME-28	Fuel	19 JUL 12
E	ME-29	Hydraulic Power	19 JUL 12
	ME-30	Ice and Rain Protection	29 NOV 11
	ME-31	Indicating/Recording Systems	29 NOV 11
R	ME-32	Landing Gear	19 JUL 12
Е	ME-34	Navigation	19 JUL 12
Е	ME-36	Pneumatic	19 JUL 12
	ME-46	Information Systems	29 NOV 11
	ME-49	Airborne Auxiliary Power	29 NOV 11
Е	ME-52	Doors	19 JUL 12
	ME-70	Engine	04 APR 12
R	MI-00-01	Approval Reference	19 JUL 12
R	MI-00-02	Introduction to the MEL	19 JUL 12
	MI-00-03	Criteria for Dispatch	04 APR 12
	MI-00-04	Maintenance Action	04 APR 12
R	MI-00-05	Repair Interval	19 JUL 12
	MI-00-06	Repair Interval Extension	04 APR 12
R	MI-00-07	Definitions	19 JUL 12
Е	MI-00-08	ECAM and MAINTENANCE STATUS	19 JUL 12
Е	MI-21-00	MAINTENANCE Messages on the STATUS SD page	19 JUL 12
	MI-21-01-01	AIR COND Overhead Panel	29 NOV 11
	MI-21-01-02	CABIN PRESS Overhead Panel	29 NOV 11
	MI-21-01-03	CARGO VENT Overhead Panel	29 NOV 11
	MI-21-01-04	VENTILATION Overhead Panel	29 NOV 11
	MI-21-07-01	Indications on the BLEED SD page	29 NOV 11
	MI-21-07-02	Indications on the CAB PRESS SD page	29 NOV 11
	MI-21-07-03	Indications on the COND SD page	29 NOV 11
	MI-21-07-04	Indications on the CRUISE SD page	29 NOV 11
	MI-21-09	ECAM Alerts	29 NOV 11
	MI-21-21	Air Distribution and Recirculation	29 NOV 11
	MI-21-23	Lavatory and Galley Ventilation	29 NOV 11
	MI-21-26	Avionics Equipment Ventilation	29 NOV 11
	MI-21-28	Cargo Compartment Ventilation	29 NOV 11

HDA A320/A321 FLEET PLP-LESS P 1/12 19 JUL 12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
	MI-21-31	Pressure Control and Monitoring	29 NOV 11
Е	MI-21-51	Pack Flow Control	19 JUL 12
R	MI-21-52	Air Cooling System	19 JUL 12
	MI-21-55	Emergency Ram Air Inlet	29 NOV 11
	MI-21-61	Pack Temperature Control	29 NOV 11
R	MI-21-63	Cockpit and Cabin Temperature Control	19 JUL 12
	MI-22-01	FLT CTL Overhead Panel	29 NOV 11
	MI-22-05	FMA Indications on the PFD	29 NOV 11
	MI-22-10	Autopilot/Flight Director (AP/FD)	29 NOV 11
	MI-22-30	Autothrust	29 NOV 11
R	MI-22-60	Flight Augmentation (FAC)	19 JUL 12
Е	MI-22-70	Flight Management System (FMS)	19 JUL 12
Е	MI-22-81-01	Auto Flight Control Panel (FCU)	19 JUL 12
Е	MI-22-81-02	EFIS Control Panel (FCU)	19 JUL 12
Е	MI-22-81-03	FCU Channel	19 JUL 12
	MI-22-82	Multipurpose Control and Display Unit (MCDU)	29 NOV 11
	MI-22-83	Flight Management and Guidance Computer (FMGC)	29 NOV 11
	MI-23-00	MAINTENANCE Message on the STATUS SD page	29 NOV 11
	MI-23-01-01	RCDR Overhead Panel	29 NOV 11
R	MI-23-01-02	CALLS Overhead Panel	19 JUL 12
	MI-23-01-03	AUDIO SWITCHING Overhead Panel	29 NOV 11
	MI-23-09	ECAM Alerts	29 NOV 11
	MI-23-10	Speech Communication	29 NOV 11
Е	MI-23-13	Radio Management	19 JUL 12
	MI-23-20	Data Transmission and Automatic Calling	29 NOV 11
Е	MI-23-31	Passenger Address System	19 JUL 12
	MI-23-40	Interphone	29 NOV 11
	MI-23-51	Audio Management	29 NOV 11
	MI-23-52	Audio Control Panel (ACP)	29 NOV 11
	MI-23-71	Cockpit Voice Recorder (CVR)	29 NOV 11
	MI-23-72	Cabin Surveillance	29 NOV 11
Е	MI-23-73-01	Cabin Intercommunication Data System (CIDS)	19 JUL 12
	MI-23-73-02	DEU A	29 NOV 11
Е	MI-23-73-03	DEU B	19 JUL 12
	MI-23-73-04	Cabin Individual Call	29 NOV 11
	MI-23-73-05	Cabin Loudspeaker	29 NOV 11
	MI-23-73-06	Handset	29 NOV 11
	MI-23-73-07	Prerecorded Announcement and Music Reproducer (PRAM)	29 NOV 11
	MI-23-73-08	Cabin Assignment Module (CAM)	29 NOV 11
Е	MI-23-73-10	Smoke Detection Function	19 JUL 12
E	MI-23-74	Cabin Crew Panel	19 JUL 12

 HDA A320/A321 FLEET
 PLP-LESS P 2/12

 MEL
 19 JUL 12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
	MI-24-00	MAINTENANCE Messages on the STATUS SD page	29 NOV 11
Ε	MI-24-01-01	ELEC Overhead Panel	19 JUL 12
	MI-24-01-02	EMER ELEC PWR Overhead Panel	29 NOV 11
	MI-24-07	Indications on the ELEC SD page	29 NOV 11
	MI-24-09	ECAM Alerts	29 NOV 11
	MI-24-22	AC Main Generation	29 NOV 11
R	MI-24-23	AC Auxiliary Generation	19 JUL 12
	MI-24-24	AC Emergency Generation	29 NOV 11
	MI-24-25	AC Essential Generation Switching	29 NOV 11
E	MI-24-26	Galley and Commercial Supply System	19 JUL 12
	MI-24-28	Static Inverter AC Generation	29 NOV 11
E	MI-24-32	DC Main Generation (TR 1, TR 2)	19 JUL 12
	MI-24-34	DC Emergency Generation (ESS TR)	29 NOV 11
	MI-24-35	DC Essential and Normal Generation Switching	29 NOV 11
	MI-24-38	DC Battery Generation	29 NOV 11
R	MI-24-41	AC External Power Control	19 JUL 12
E	MI-25-07	Indications on the DOOR/OXY SD page	19 JUL 12
	MI-25-11	Pilot Seats	29 NOV 11
	MI-25-12	Third and Fourth Occupant Seats	29 NOV 11
	MI-25-13	Lining and Furnishings	29 NOV 11
	MI-25-20	Cabin Seats	04 APR 12
	MI-25-35	Galley Equipment	29 NOV 11
	MI-25-40	Lavatories	29 NOV 11
	MI-25-45	Cabin Furnishings	29 NOV 11
	MI-25-50	Cargo Compartments	29 NOV 11
E	MI-25-62	Cabin Escape Facilities	19 JUL 12
	MI-25-63	Evacuation Signaling Equipment	29 NOV 11
	MI-25-64	First Aid Equipment	29 NOV 11
	MI-25-65	Emergency Equipment	04 APR 12
	MI-25-66	Floatation and Survival Equipment	29 NOV 11
E	MI-26-00	MAINTENANCE Message on the STATUS SD page	19 JUL 12
R	MI-26-01-01	FIRE Overhead Panel	19 JUL 12
Е	MI-26-01-02	CARGO SMOKE Overhead Panel	19 JUL 12
	MI-26-12	Engine Fire and Overheat Detection	29 NOV 11
R	MI-26-13	APU Fire and Overheat Detection	19 JUL 12
	MI-26-15	Avionics Compartment Smoke Detection	29 NOV 11
Е	MI-26-16	Cargo Compartment Smoke Detection	19 JUL 12
Е	MI-26-17	Lavatory Smoke Detection	19 JUL 12
	MI-26-22	APU Fire Extinguishing	29 NOV 11
Е	MI-26-23	Cargo Compartment Fire Extinguishing	19 JUL 12
	MI-26-24	Portable Fire Extinguisher	29 NOV 11

HDA A320/A321 FLEET PLP-LESS P 3/12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
	MI-26-25	Lavatory Fire Extinguishing	29 NOV 11
	MI-27-00	MAINTENANCE Messages on the STATUS SD page	29 NOV 11
	MI-27-01-01	FLT CTL Overhead Panel	29 NOV 11
Е	MI-27-07	Indications on SD pages	19 JUL 12
	MI-27-08	Indications on the EWD	29 NOV 11
	MI-27-14	Aileron and Hydraulic Actuation	29 NOV 11
	MI-27-21	Rudder Mechanical Control	29 NOV 11
	MI-27-22	Rudder Trim Actuation	29 NOV 11
	MI-27-23	Artificial feel and rudder travel limiting actuation	29 NOV 11
	MI-27-34	Elevator and Hydraulic Actuation	29 NOV 11
	MI-27-40	Trimmable Horizontal Stabilizer (THS)	29 NOV 11
R	MI-27-51	Flaps Electrical Control and Monitoring	19 JUL 12
	MI-27-54	Flaps Hydraulic Actuation and Power Transmission	29 NOV 11
	MI-27-64	Spoiler Hydraulic Actuation	29 NOV 11
	MI-27-81	Slats Electrical Control and Monitoring	29 NOV 11
	MI-27-84	Slats Hydraulic Actuation and Power Transmission	29 NOV 11
	MI-27-92	Electrical Flight Control System (EFCS) Control Inputs and Power Supply	29 NOV 11
	MI-27-93	ELAC System (Elevator Aileron Computer)	29 NOV 11
R	MI-27-94	SEC System (Spoiler and Elevator Computer)	19 JUL 12
	MI-27-95	FCDC System (Flight Control Data Concentrator)	29 NOV 11
	MI-28-00	MAINTENANCE Message on the STATUS SD page	29 NOV 11
Е	MI-28-01-01	FUEL Overhead Panel	19 JUL 12
Е	MI-28-07-01	Fuel Quantity Indications on the FUEL SD page	19 JUL 12
Е	MI-28-07-02	Fuel Temperature Indications on the FUEL SD page	19 JUL 12
Е	MI-28-07-03	Tank Pump Indications on the FUEL SD page	19 JUL 12
Е	MI-28-07-04	Valve Indications on the FUEL SD page	19 JUL 12
Е	MI-28-09	ECAM Alerts	19 JUL 12
Е	MI-28-12	Tank Venting System	19 JUL 12
Е	MI-28-15	Intercell Transfer System	19 JUL 12
Е	MI-28-20	Distribution	19 JUL 12
Е	MI-28-21	Main Fuel Pump System	19 JUL 12
Ε	MI-28-22	APU Fuel Pump System	19 JUL 12
	MI-28-23	Crossfeed System	29 NOV 11
	MI-28-24	Engine LP Fuel Shutoff	29 NOV 11
R	MI-28-25	Refuel/Defuel System	19 JUL 12
	MI-28-26	Main Transfer System	29 NOV 11
	MI-28-28	Additional Center Tank Transfer System	04 APR 12
	MI-28-29	APU LP Fuel Shutoff	29 NOV 11
Е	MI-28-43	Manual Magnetic Indicators	19 JUL 12
E	MI-28-46	Tank Level Sensing	19 JUL 12

 HDA A320/A321 FLEET
 PLP-LESS P 4/12

 MEL
 19 JUL 12



**A320/A321** MINIMUM EQUIPMENT LIST

M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
	MI-28-50	Fuel Management	29 NOV 11
	MI-29-01-01	HYD Overhead Panel	29 NOV 11
	MI-29-01-02	Maintenance HYD Overhead Panel	29 NOV 11
	MI-29-07	Indications on the HYD SD page	29 NOV 11
Е	MI-29-09	ECAM Alerts	19 JUL 12
	MI-29-10	Main Hydraulic Power	29 NOV 11
	MI-29-22	Blue Auxiliary Hydraulic Power	29 NOV 11
	MI-29-23	Power Transfer	29 NOV 11
	MI-29-24	Yellow Auxiliary Hydraulic Power	29 NOV 11
	MI-30-01-01	ANTI ICE Overhead Panel	29 NOV 11
Е	MI-30-01-02	WIPER Overhead Panel	19 JUL 12
	MI-30-07	Indications on the BLEED SD page	29 NOV 11
İ	MI-30-11	Wing Ice Protection	29 NOV 11
	MI-30-21	Engine Air Intake Ice Protection	29 NOV 11
	MI-30-31	Probe Ice Protection	04 APR 12
	MI-30-42	Windshield Anti-Icing and Defogging	29 NOV 11
	MI-30-45	Windshield Rain Protection	29 NOV 11
	MI-30-71	Waste Water Ice Protection	29 NOV 11
	MI-30-81	Ice Detection	29 NOV 11
	MI-31-00	MAINTENANCE Message on the STATUS SD page	29 NOV 11
	MI-31-05	Indications on the Primary Flight Display (PFD)	29 NOV 11
	MI-31-06	Indications on the Navigation Display (ND)	29 NOV 11
Е	MI-31-07	Indications on the System Display (SD)	19 JUL 12
	MI-31-08	Indications on the Engine Warning Display (EWD)	29 NOV 11
	MI-31-20	Independent Instruments	29 NOV 11
R	MI-31-30	Centralized Fault Display System (CFDS) and Data Recording System	19 JUL 12
Е	MI-31-38	Up and Down Data Loading System Acquisition/Interface and Equipment	19 JUL 12
	MI-31-53	Flight Warning Computer (FWC)	29 NOV 11
	MI-31-55	System Data Acquisition Concentrator (SDAC)	29 NOV 11
	MI-31-56	ECAM Control Panel (ECP)	29 NOV 11
R	MI-31-62	Display Management Computer (DMC)	19 JUL 12
Е	MI-31-63	Display Unit (DU)	19 JUL 12
	MI-31-68	Switching Panel	29 NOV 11
Е	MI-32-07	Indications on the WHEEL SD page	19 JUL 12
Е	MI-32-09	ECAM Alerts	19 JUL 12
	MI-32-11	Main Gear	29 NOV 11
	MI-32-12	Main Gear Doors	29 NOV 11
R	MI-32-31	Normal Extension and Retraction	19 JUL 12
	MI-32-32	Proximity Detector System	04 APR 12

HDA A320/A321 FLEET PLP-LESS P 5/12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
	MI-32-33	Free Fall Extension	04 APR 12
R	MI-32-41	Wheels	19 JUL 12
	MI-32-42	Normal Braking	04 APR 12
Е	MI-32-44	Alternate Braking	19 JUL 12
	MI-32-45	Parking/Ultimate Emergency Braking	29 NOV 11
	MI-32-47	Brake Temperature System	29 NOV 11
	MI-32-48	Brake Cooling	29 NOV 11
	MI-32-51	Steering	29 NOV 11
	MI-32-61	Landing Gear Panel on the Center Instrument Panel	29 NOV 11
	MI-33-01-01	ANN LT Overhead Panel	29 NOV 11
R	MI-33-01-02	SIGNS Overhead Panel	19 JUL 12
Е	MI-33-10	Cockpit General Illumination	19 JUL 12
	MI-33-20	Cabin General Illumination	29 NOV 11
	MI-33-30	Cargo and Service Compartment Lighting	29 NOV 11
R	MI-33-40	Exterior Lighting	19 JUL 12
Е	MI-33-51	Cabin Emergency Lighting	19 JUL 12
	MI-34-00	MAINTENANCE Messages on the STATUS SD page	29 NOV 11
Е	MI-34-01-01	ADIRS Overhead Panel	19 JUL 12
	MI-34-01-02	GPWS Overhead Panel	04 APR 12
R	MI-34-05	Indications on the Primary Flight Display (PFD)	19 JUL 12
	MI-34-06	Indications on the Navigation Display (ND)	29 NOV 11
R	MI-34-10	Air Data/Inertial Reference System (ADIRS)	19 JUL 12
	MI-34-11	Sensors	29 NOV 11
	MI-34-21	Altitude and Airspeed Standby Data	29 NOV 11
Е	MI-34-22	Attitude and Heading Standby Data	19 JUL 12
Е	MI-34-23	Integrated Standby Instrument System (ISIS)	19 JUL 12
	MI-34-30	Landing and Taxiing Aid	29 NOV 11
Е	MI-34-40	GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar	19 JUL 12
Е	MI-34-50	ATC and Radio/GPS Navigation Systems	19 JUL 12
	MI-35-01-01	OXYGEN Overhead Panel	04 APR 12
	MI-35-07	Indications on the DOOR/OXY SD page	04 APR 12
	MI-35-10	Crew Oxygen	29 NOV 11
	MI-35-20	Passenger Oxygen	29 NOV 11
	MI-35-30	Portable Oxygen	29 NOV 11
R	MI-36-00	MAINTENANCE Message on the STATUS SD page	19 JUL 12
	MI-36-01	AIR COND Overhead Panel	29 NOV 11
	MI-36-07	Indications on the BLEED SD page	29 NOV 11
Е	MI-36-11	Engine Bleed Air Supply System	19 JUL 12
R	MI-36-12	APU Bleed Air Supply and Crossbleed Systems	19 JUL 12
Е	MI-36-22	Leak Detection Loop	19 JUL 12
	MI-46-21	Air Traffic and Information Management System	29 NOV 11

 HDA A320/A321 FLEET
 PLP-LESS P 6/12

 MEL
 19 JUL 12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
E	MI-47-00	MAINTENANCE Message on the STATUS SD page	19 JUL 12
	MI-49-00	MAINTENANCE Message on the STATUS SD page	29 NOV 11
	MI-49-01	APU Overhead Panel	29 NOV 11
	MI-49-07	Indications on the APU SD page	29 NOV 11
	MI-49-10	Power Plant	29 NOV 11
	MI-52-01-01	CKPT DOOR CONT Normal Overhead Panel	29 NOV 11
Е	MI-52-07	Indications on the DOOR/OXY SD page	19 JUL 12
R	MI-52-10	Passenger/Crew Door	19 JUL 12
	MI-52-30	Cargo Door	29 NOV 11
	MI-52-33	Bulk Cargo Compartment Door	29 NOV 11
E	MI-52-51	Reinforced Cockpit Door (CDLS)	19 JUL 12
	MI-52-53	COCKPIT DOOR Panel on the Center Pedestal	29 NOV 11
	MI-56-10	Cockpit	29 NOV 11
	MI-56-20	Cabin	29 NOV 11
	MI-70-00	MAINTENANCE Messages on the STATUS SD page	29 NOV 11
	MI-73-07	Indications on the ENGINE SD page	29 NOV 11
	MI-73-08	Indications on the EWD	29 NOV 11
	MI-73-09	ECAM Alert	29 NOV 11
R	MI-73-10	Distribution	19 JUL 12
	MI-73-20	Controlling	04 APR 12
	MI-74-07	Indications on the ENGINE SD page	29 NOV 11
	MI-74-09	ECAM Alert	29 NOV 11
	MI-74-31	Ignition Starting and Continuous Relight	29 NOV 11
	MI-76-11	Throttle Control	29 NOV 11
	MI-77-07-01	Indications on the CRUISE SD page	29 NOV 11
	MI-77-07-02	Indications on the ENGINE SD page	29 NOV 11
	MI-77-08	Indications on the EWD	29 NOV 11
	MI-78-08	Indications on the EWD	29 NOV 11
	MI-78-30	Thrust Reversers	29 NOV 11
	MI-79-07	Indications on the ENGINE SD page	04 APR 12
	MI-79-09	ECAM Alerts	29 NOV 11
	MI-79-20	Distribution	29 NOV 11
	MI-80-01	ENG MAN START Overhead Panel	29 NOV 11
	MI-80-07	Indication on the ENGINE SD page	29 NOV 11
	MI-80-11	Pneumatic Starter and Valve System	29 NOV 11
	MI-80-12	ENG MASTER Panel on the Center Pedestal	29 NOV 11
	MO-21-09	ECAM Alerts	29 NOV 11
E	MO-21-23	Lavatory and Galley Ventilation	19 JUL 12
R	MO-21-26	Avionics Equipment Ventilation	19 JUL 12
	MO-21-28	Cargo Compartment Ventilation	29 NOV 11
E	MO-21-31	Pressure Control and Monitoring	19 JUL 12

HDA A320/A321 FLEET PLP-LESS P 7/12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
Е	MO-21-51	Pack Flow Control	19 JUL 12
R	MO-21-52	Air Cooling System	19 JUL 12
	MO-21-61	Pack Temperature Control	29 NOV 11
R	MO-21-63	Cockpit and Cabin Temperature Control	19 JUL 12
	MO-22-05	FMA Indications on the PFD	29 NOV 11
	MO-22-10	Autopilot/Flight Director (AP/FD)	04 APR 12
	MO-22-30	Autothrust	29 NOV 11
	MO-22-60	Flight Augmentation (FAC)	29 NOV 11
Е	MO-22-70	Flight Management System (FMS)	19 JUL 12
	MO-22-81-01	Auto Flight Control Panel (FCU)	29 NOV 11
	MO-22-83	Flight Management and Guidance Computer (FMGC)	29 NOV 11
	MO-23-01-01	RCDR Overhead Panel	29 NOV 11
	MO-23-09	ECAM Alerts	04 APR 12
	MO-23-40	Interphone	29 NOV 11
	MO-23-51	Audio Management	29 NOV 11
	MO-23-52	Audio Control Panel (ACP)	29 NOV 11
	MO-23-72	Cockpit Door Surveillance System (CDSS)	29 NOV 11
	MO-23-73-02	DEU A	29 NOV 11
	MO-23-73-03	DEU B	29 NOV 11
	MO-23-73-05	Cabin Loudspeaker	29 NOV 11
	MO-23-73-06	Handset	29 NOV 11
	MO-23-73-07	Prerecorded Announcement and Music Reproducer (PRAM)	29 NOV 11
Е	MO-23-74	Cabin Crew Panel	19 JUL 12
Е	MO-24-01-01	ELEC Overhead Panel	19 JUL 12
Е	MO-24-07	Indications on the ELEC SD page	19 JUL 12
	MO-24-09	ECAM Alerts	29 NOV 11
Е	MO-24-22	AC Main Generation	19 JUL 12
	MO-24-25	AC Essential Generation Switching	29 NOV 11
Е	MO-24-26	Galley and Commercial Supply System	19 JUL 12
	MO-24-32	DC Main Generation (TR 1, TR 2)	29 NOV 11
	MO-24-38	DC Battery Generation	29 NOV 11
Е	MO-25-07	Indications on the DOOR/OXY SD page	19 JUL 12
	MO-25-11	Pilot Seats	29 NOV 11
	MO-25-12	Third and Fourth Occupant Seats	29 NOV 11
	MO-25-20	Cabin Seats	29 NOV 11
	MO-25-35	Galley Equipment	29 NOV 11
	MO-25-40	Lavatories	29 NOV 11
	MO-25-63	Evacuation Signaling Equipment	29 NOV 11
R	MO-26-15	Avionics Compartment Smoke Detection	19 JUL 12
	MO-26-17	Lavatory Smoke Detection	29 NOV 11
	MO-26-25	Lavatory Fire Extinguishing	29 NOV 11

 HDA A320/A321 FLEET
 PLP-LESS P 8/12

 MEL
 19 JUL 12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
	MO-27-07	Indications on SD pages	29 NOV 11
	MO-27-14	Aileron and Hydraulic Actuation	29 NOV 11
	MO-27-21	Rudder Mechanical Control	29 NOV 11
	MO-27-22	Rudder Trim Actuation	29 NOV 11
	MO-27-40	Trimmable Horizontal Stabilizer (THS)	29 NOV 11
	MO-27-51	Flaps Electrical Control and Monitoring	29 NOV 11
R	MO-27-64	Spoiler Hydraulic Actuation	19 JUL 12
R	MO-27-92	Electrical Flight Control System (EFCS) Control Inputs and Power Supply	19 JUL 12
	MO-27-93	ELAC System (Elevator Aileron Computer)	29 NOV 11
R	MO-27-94	SEC System (Spoiler and Elevator Computer)	19 JUL 12
	MO-27-95	FCDC System (Flight Control Data Concentrator)	29 NOV 11
R	MO-28-01-01	FUEL Overhead Panel	19 JUL 12
E	MO-28-07-01	Fuel Quantity Indications on the FUEL SD page	19 JUL 12
E	MO-28-07-04	Valve Indications on the FUEL SD page	19 JUL 12
E	MO-28-09	ECAM Alerts	19 JUL 12
E	MO-28-12	Tank Venting System	19 JUL 12
R	MO-28-15	Intercell Transfer System	19 JUL 12
R	MO-28-20	Distribution	19 JUL 12
R	MO-28-21	Main Fuel Pump System	19 JUL 12
	MO-28-22	APU Fuel Pump System	29 NOV 11
	MO-28-26	Main Transfer System	04 APR 12
	MO-28-28	Additional Center Tank Transfer System	29 NOV 11
	MO-28-29	APU LP Fuel Shutoff	04 APR 12
	MO-28-50	Fuel Management	29 NOV 11
	MO-29-07	Indications on the HYD SD page	29 NOV 11
	MO-29-09	ECAM Alerts	04 APR 12
	MO-29-10	Main Hydraulic Power	29 NOV 11
R	MO-29-23	Power Transfer	19 JUL 12
	MO-29-24	Yellow Auxiliary Hydraulic Power	29 NOV 11
	MO-30-01-01	ANTI ICE Overhead Panel	29 NOV 11
E	MO-30-11	Wing Ice Protection	19 JUL 12
E	MO-30-21	Engine Air Intake Ice Protection	19 JUL 12
R	MO-30-31	Probe Ice Protection	19 JUL 12
	MO-30-42	Windshield Anti-Icing and Defogging	29 NOV 11
	MO-30-45	Windshield Rain Protection	29 NOV 11
	MO-30-81	Ice Detection	04 APR 12
E	MO-31-07	Indications on the System Display (SD)	19 JUL 12
	MO-31-20	Independent Instruments	04 APR 12
	MO-31-53	Flight Warning Computer (FWC)	29 NOV 11
R	MO-31-56	ECAM Control Panel (ECP)	19 JUL 12

HDA A320/A321 FLEET PLP-LESS P 9/12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
Е	MO-31-62	Display Management Computer (DMC)	19 JUL 12
	MO-31-63	Display Unit (DU)	04 APR 12
	MO-31-68	Switching Panel	29 NOV 11
Е	MO-32-07	Indications on the WHEEL SD page	19 JUL 12
Е	MO-32-09	ECAM Alerts	19 JUL 12
	MO-32-31	Normal Extension and Retraction	04 APR 12
Е	MO-32-32	Proximity Detector System	19 JUL 12
	MO-32-33	Free Fall Extension	04 APR 12
R	MO-32-42	Normal Braking	19 JUL 12
	MO-32-47	Brake Temperature System	29 NOV 11
	MO-32-51	Steering	04 APR 12
	MO-33-20	Cabin General Illumination	29 NOV 11
	MO-33-40	Exterior Lighting	04 APR 12
Е	MO-34-01-01	ADIRS Overhead Panel	19 JUL 12
	MO-34-05	Indications on the Primary Flight Display (PFD)	29 NOV 11
R	MO-34-10	Air Data/Inertial Reference System (ADIRS)	19 JUL 12
	MO-34-11	Sensors	29 NOV 11
	MO-34-21	Altitude and Airspeed Standby Data	29 NOV 11
	MO-34-22	Attitude and Heading Standby Data	29 NOV 11
E	MO-34-23	Integrated Standby Instrument System (ISIS)	19 JUL 12
	MO-34-30	Landing and Taxiing Aid	29 NOV 11
	MO-34-40	GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar	04 APR 12
	MO-35-07	Indications on the DOOR/OXY SD page	04 APR 12
	MO-35-10	Crew Oxygen	29 NOV 11
	MO-35-20	Passenger Oxygen	29 NOV 11
	MO-36-00	MAINTENANCE Message on the STATUS SD page	04 APR 12
	MO-36-11	Engine Bleed Air Supply System	04 APR 12
	MO-36-12	APU Bleed Air Supply and Crossbleed Systems	29 NOV 11
	MO-36-22	Leak Detection Loop	04 APR 12
	MO-49-10	Power Plant	29 NOV 11
	MO-52-01-01	CKPT DOOR CONT Normal Overhead Panel	29 NOV 11
Е	MO-52-07	Indications on the DOOR/OXY SD page	19 JUL 12
R	MO-52-10	Passenger/Crew Door	19 JUL 12
	MO-52-30	Cargo Door	29 NOV 11
	MO-52-51	Reinforced Cockpit Door (CDLS)	04 APR 12
	MO-52-53	COCKPIT DOOR Panel on the Center Pedestal	29 NOV 11
	MO-56-10	Cockpit	29 NOV 11
E	MO-73-20	Controlling	19 JUL 12
	MO-74-07	Indications on the ENGINE SD page	29 NOV 11
	MO-74-31	Ignition Starting and Continuous Relight	29 NOV 11
R	MO-78-30	Thrust Reversers	19 JUL 12

 HDA A320/A321 FLEET
 PLP-LESS P 10/12

 MEL
 19 JUL 12



M <sup>(1)</sup>	Localization	Subsection Title	Rev. Date
	MO-79-09	ECAM Alerts	29 NOV 11
	MO-79-20	Distribution	29 NOV 11
	MO-80-11	Pneumatic Starter and Valve System	04 APR 12

<sup>(1)</sup> Evolution code: N=New, R=Revised, E=Effectivity, M=Moved

HDA A320/A321 FLEET PLP-LESS P 11/12 19 JUL 12



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 HDA A320/A321 FLEET
 PLP-LESS P 12/12

 MEL
 19 JUL 12



## PRELIMINARY PAGES AIRCRAFT ALLOCATION TABLE

This table gives, for each delivered aircraft, the cross reference between:

- The Manufacturing Serial Number (MSN).
- The Fleet Serial Number (FSN) of the aircraft as known by AIRBUS S.A.S.
- The registration number of the aircraft as known by AIRBUS S.A.S.
- The aircraft model.

M <sup>(1)</sup>	MSN	FSN	Registration Number	Model
	0633	HDA 0103	B-HTF	321-231
	0756	HDA 0051	B-HSD	320-232
	0784	HDA 0052	B-HSE	320-232
	0812	HDA 0001	B-HSG	320-232
	0930	HDA 0055	B-HSI	320-232
	0993	HDA 0101	B-HTD	321-231
	1024	HDA 0102	B-HTE	321-231
	1253	HDA 0002	B-HSJ	320-232
	1695	HDA 0104	B-HTG	321-231
	1721	HDA 0056	B-HSK	320-232
	1984	HDA 0151	B-HTH	321-231
	2021	HDA 0152	B-HTI	321-231
	2229	HDA 0003	B-HSL	320-232
	2238	HDA 0004	B-HSM	320-232
	2428	HDA 0005	B-HSN	320-232
	4023	HDA 0057	B-HSO	320-232
	4247	HDA 0058	B-HSP	320-232
	5024	HDA 0060	B-HSQ	320-232
	5030	HDA 0059	B-HSR	320-232
	5362	HDA 0061	B-HST	320-232
	5429	HDA 0062	B-HSU	320-232

(1) Evolution code: N=New, R=Revised

HDA A320/A321 FLEET PLP-AAT P 1/2
MEL 19 JUL 12



# PRELIMINARY PAGES AIRCRAFT ALLOCATION TABLE

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 HDA A320/A321 FLEET
 PLP-AAT P 2/2

 MEL
 19 JUL 12



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	
	K10494		29 MAR 10	AIRBORNE AUXILIARY POWER - GENERAL - INSTALL APIC APS3200 APU AS STANDARD (REPLACES HONEYWELL GTCP36-300)
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	P10383		29 MAR 10	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2-F5
	Applicable to: ALL		•	
	K2113			FUSELAGE - REAR FUSELAGE SECTION 16A - DEFINE A321 BASIC STRUCTURE
	Applicable to: B-HTD,	B-HTE, B-HTF, B-		-HTI
	K1688			FIRE PROTECTION-CARGO COMPARTMENT FIRE EXTINGUISHING-INSTALL A FLOW METERING SYSTEM FOR ETOPS
	Applicable to: B-HSD,	B-HSE, B-HSG, B	-HSI, B-HSJ, B-	HSK, B-HSL, B-HSM, B-HSN
	J1735		29 MAR 10	LANDING GEAR-POSITION AND WARNING- INTRODUCE LGCIU STD -4D
	Applicable to: ALL			
	P9594			PNEUMATIC - LEAK DETECTION - ACTIVATE PYLON LEAK DETECTION MONITORING
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	P4801		29 MAR 10	ELECTRICAL POWER-GENERAL-DEFINE NEW ELECTRICAL GENERATION CONCEPT FOR SINGLE AISLE A/C
	Applicable to: B-HSN,	В-HSO, В-HSP, В	-HSQ, B-HSR, I	3-HST, B-HSU
	J2879		29 NOV 11	INERT GAS SYSTEM - CERTIFY FUEL TANK INERTING SYSTEM AND ACTIVATE MONITORING
	Applicable to: B-HSQ,	B-HSR, B-HST, B		
	K1806		29 MAR 10	ELECTRICAL POWER-AC/DC ESSENTIAL POWER DISTRIBUTION-PROVIDE PROVISIONS FOR ETOPS-
	Applicable to: ALL			
	P11146		29 NOV 11	LANDING GEAR - PARKING/ULTIMATE EMERGENCY BRAKING ACTIVATE PARKING BRAKE MONITORING FUNCTION ON SA A/C
	Applicable to: B-HSQ,	B-HSR, B-HST, B	-HSU	
	P7175		29 MAR 10	ELECTRICAL POWER - GENERAL - INSTALL A COMMERCIAL SHEDDING PUSH-BUTTON SWITCH IN COCKPIT
	Applicable to: B-HSK, B-HTI	B-HSL, B-HSM, B	-HSN, B-HSO, I	B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH,
	P6437			INDICATING RECORDING SYSTEM-FWS INTRODUCE FWC STANDARD H1PE3P
	Applicable to: B-HSD, B-HTG, B-HTH, B-HTI	B-HSE, B-HSG, B	-HSI, B-HSJ, B-	HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF,

HDA A320/A321 FLEET PLP-LOM P 1/12



M <sup>(1)</sup>	MODIFICATION	1:1 100		<b>-</b> :
M,	MODIFICATION	Linked SB	Incorp. Date	
	P4808		29 MAR 10	LANDING GEAR-WHEELS AND BRAKES- INTRODUCE BSCU COMMON STD
		B-HSM, B-HSN, B		3-HSQ, B-HSR, B-HST, B-HSU
	P3956		29 MAR 10	HYDRAULIC POWER-GENERAL-INTRODUCE AN HYDRAULIC SHUT-OFF VALVE ON THE IAE T/R SYSTEM
	Applicable to: ALL			
	P5175		29 MAR 10	COMMUNICATIONS-AUDIO MANAGEMENT-INSTALL SENNHEISER HEADSET P/N 045-260-011 (HD45K) AT FOURTH OCCUPANT STATION
	Applicable to: B-HSL,	B-HSM, B-HSN, B	-HTH, B-HTI	
	J2765		19 JUL 12	WING - MAIN STRUCTURE - TOP SKIN PANEL NO. 2 - REMOVE MANUAL REFUEL APERTURE
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	K4574			AIR CONDITIONING-FLOW CONTROL AND INDICATING INTRODUCE MODIFIED AIR CONDITIONING FLOW CONTROL
	Applicable to: B-HSI, E B-HTD, B-HTE, B-HTG		HSL, B-HSM, B-	HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU,
	P6538		29 MAR 10	INDICATING/RECORDING SYSTEMS-FWC TO COMPLY WITH EM2 BSCS WARNING/ECAM INDICATIONS
	Applicable to: B-HSO,	B-HSP, B-HSQ, B	-HSR, B-HST, E	3-HSU
	K9473		29 MAR 10	AIR CONDITIONING - PRESSURE CONTROL AND MONITORING - INSTALL RPCU AND WIRING PROVISIONS FOR RPWS
	Applicable to: B-HSO,	B-HSP, B-HSQ, B	-HSR, B-HST, E	3-HSU
	P10300			ELECTRICAL POWER - AC MAIN GENERATION - INSTALL EEPGS GCU SOFTWARE STANDARD "5.2"
	Applicable to: B-HSN,	B-HSO, B-HSP, B		
	P4151		29 MAR 10	INDICATING/RECORDING SYSTEM - INSTALL A PORTABLE DATA LOADER CONNECTOR AND DISK STOWAGE
	Applicable to: B-HSJ, B-HTH, B-HTI	B-HSK, B-HSL, B-	HSM, B-HSN, E	HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG,
	P3379		29 MAR 10	INDICATING/RECORDING SYSTEMS - GENERAL- DEFINE CPIP3
	Applicable to: ALL			
	J0071		29 MAR 10	WINGS-WING TIP FENCES-INTRODUCE WING TIPS INCLUDING FENCES-
	Applicable to: ALL			
	P1063		29 MAR 10	AUTO FLIGHT - IMPROVE SEGREGATION OF AUTO PILOT DISCONNECT CIRCUIT -
	Applicable to: ALL			

 HDA A320/A321 FLEET
 PLP-LOM P 2/12

 MEL
 19 JUL 12



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	
	K2450		29 MAR 10	AIRBORNE AUXILIARY POWER UNIT - INTRODUCE APIC APS-3200
	Applicable to: ALL			7.11.0 7.11 0 0200
	J2963		29 MAR 10	WINGS - MAIN STRUCTURE - REDUCE THE QUANTITY OF MAGNETIC LEVEL INDICATORS
	Applicable to: B-HSO,	B-HSP, B-HSQ, B	I -HSR, B-HST, E	
	K0052		29 MAR 10	INDICATING/RECORDING SYSTEMS - INSTALL AN AIRCRAFT INTEGRATED DATA SYSTEM -
	Applicable to: ALL			
	P6319		17 NOV 10	COMMUNICATIONS - AUDIO MANAGEMENT - INSTALL TEAM DIGITAL AMU P/N 4031-SA-01
	Applicable to: B-HSL,	B-HSM, B-HSN, B	-HSO, B-HSP, E	3-HSQ, B-HSR, B-HST, B-HSU, B-HTH, B-HTI
	P7754		29 MAR 10	NAVIGATION - DDRMI - REPLACE THALES DDRMI P/N 63543-150-3 BY P/N 63543-150-4.
	Applicable to: ALL			
	33-1057 03		19 JUL 11	LIGHTS - INSTRUMENT AND PANEL INTEGRAL LIGHTING - ENSURE EMERGENCY LIGHTING FOR STAND-BY INSTRUMENTS.
		B-HSE, B-HSG, B		HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI
	P4149		29 MAR 10	ENGINE FUEL AND CONTROL-CONTROLLING- INTRODUCE E.E.C. SOFTWARE SCN 10A ON IAE V2500-A5
	Applicable to: ALL			
	P10098		29 MAR 10	ELECTRICAL POWER - AC ESSENTIAL GENERATION SWITCHING - INSTALL AUTO SWITCHING SYSTEM FOR AC AND DC ESS BUS
	Applicable to: ALL			
	P0661		29 MAR 10	EQUIPMENT/FURNISHINGS-COCKPIT-ADD A FIFTH STRAP ON 3RD OCCUPANT SHOULDER HARNESS-
	Applicable to: ALL			
	P0198		29 MAR 10	COMMUNICATIONS - HF SYSTEM - INSTALL A SECOND SYSTEM
	Applicable to: ALL			
	P6801		29 MAR 10	INDICATING/RECORDING SYSTEMS - FWC - INSTALL FWC STANDARD H2E4
	Applicable to: ALL			
	K7755		29 MAR 10	EQUIPMENT FURNISHINGS-CURTAINS AND PARTITIONS-MODIFIED INTRUSION AND PENETRATION RESISTANT COCKPIT DOOR
	Applicable to: ALL			
	P10267		29 MAR 10	NAVIGATION - RADIO MAGNETIC INFORMATION SWITCHING AND INDICATING - RE-INSTALL THALES DDRMI VOR/DME INDICATORS
	Applicable to: B-HSO,	B-HSP		

HDA A320/A321 FLEET PLP-LOM P 3/12



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	Title
IVI	P2316	Linked SB	29 MAR 10	AUTO FLIGHT - ACTIVATE WINDSHEAR FUNCTION
	Applicable to: ALL		29 WAR 10	AUTO FLIGHT - ACTIVATE WINDSHEAR FUNCTION
	J0012		29 MAR 10	LIGHTS - NAVIGATION LIGHTS - INSTALL A SECOND
			29 WAN 10	NAVIGATION LIGHT SYSTEM -
	Applicable to: ALL			
	P0197		29 MAR 10	COMMUNICATIONS - HF SYSTEM - INSTALL A SINGLE SYSTEM
	Applicable to: ALL			
	K0024		29 MAR 10	DOORS- BULK CARGO COMPARTMENT- INSTALL AN ADDITIONAL DOOR AT FR 60/62-
	Applicable to: ALL			
	P8440		29 MAR 10	LANDING GEAR - WHEELS AND BRAKES INTRODUCE GOODRICH DURACARB CARBON BRAKES WITH ANTI - OXYDAN "M1"
	Applicable to: B-HSD, B-HSU	B-HSE, B-HSG, B	-HSI, B-HSJ, B-	HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST,
	K8905		29 MAR 10	EQUIPMENT/FURNISHINGS-CURTAINS AND PARTITIONS-INSTALL DEADBOLT ON CENTER LATCH OF REINFORCED COCKPIT DOOR
	Applicable to: B-HSD, B-HSU, B-HTD, B-HTE			HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST,
	K4457		29 NOV 11	A.P.UPOWER PLANT-INTRODUCE ALLIED SIGNAL APU 131-9(A)
	Applicable to: B-HSQ,	B-HSR		
	P7945		17 NOV 10	ELECTRICAL POWER - AC MAIN GENERATION- INSTALL NEW GCU SOFTWARE STD 5.1 ON SA A/C EQUIPPED WITH ENHANCED EPGS
	Applicable to: B-HSN,	B-HSO, B-HSP, B	-HSQ, B-HSR, E	B-HST, B-HSU
	P4576			LANDING GEAR-ALTERNATE BRAKING- INTRODUCE MODIFIED ALTERNATE BRAKING SYSTEM
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	P10777			AUTO FLIGHT - FAC (FLIGHT AUGMENTATION COMPUTER) - INTRODUCE FAC SOFTWARE STANDARD "BAM0620"
	Applicable to: B-HSO,	B-HSP, B-HSQ, B	-HSR, B-HST	
	J0006		29 MAR 10	FUEL- INSTALL A CENTRE TANK SYSTEM-
	Applicable to: ALL			
	P6071		19 JUL 11	INDICATING/RECORDING SYSTEMS - DMC - DISPLAY ALTITUDE IN METRIC UNITS ON THE PRIMARY FLIGHT DISPLAY (PFD)
	Applicable to: B-HSL,	B-HSM, B-HSN, B	-HSO, B-HSP, E	3-HSQ, B-HSR, B-HST, B-HSU, B-HTH, B-HTI

PLP-LOM P 4/12 HDA A320/A321 FLEET



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	Title				
	P4170		29 MAR 10	FLIGHT CONTROLS - FCDC SYSTEM - PROVIDE A VISUAL INDICATION FOR SIMULTANEOUS SIDE STICK ACTION				
	Applicable to: ALL							
	P4437			FUEL - GENERAL - INSTALL ACT SYSTEM (A/S PART)				
	Applicable to: B-HTD,	B-HTE, B-HTF, B-						
	P6954			AUTO-FLIGHT - FLIGHT AUGMENTATION COMPUTER (FAC) - INTRODUCE FAC SOFTWARE "BAM0616"				
	Applicable to: B-HSL,	B-HSM, B-HSN, B		3-HSQ, B-HSR, B-HST, B-HSU				
	P2798		29 MAR 10	NAVIGATION - VOR/MARKER - MODIFY VOR ANTENNA FAIRING				
	Applicable to: ALL							
	K10575		29 MAR 10	FIRE PROTECTION-CARGO COMPARTMENT FIRE EXTINGUISHING - INSTALL 2ND FIREX BOTTLE FOR ETOPS 120/180 ON A320 A/C				
	Applicable to: B-HSO,	B-HSP, B-HSQ, B						
	K0036		29 MAR 10	FIRE PROTECTION - AFT CARGO COMPARTMENT - INSTALL SMOKE DETECTION SYSTEM -				
	Applicable to: ALL							
	K0037		29 MAR 10	FIRE PROTECTION - CARGO COMPARTMENT FIRE EXTINGUISHING - INSTALL A SINGLE SHOT SYSTEM -				
	Applicable to: ALL							
	P8257		29 MAR 10	FLIGHT CONTROLS - SEC SYSTEM - INSTALL SPOILER AND ELEVATOR COMPUTER SOFTWARE FOR A318 EIS (BAM0511)				
	Applicable to: ALL							
	K0035		29 MAR 10	FIRE PROTECTION - FWD CARGO COMPARTMENT - INSTALL SMOKE DETECTION SYSTEM -				
	Applicable to: ALL							
	P9107		29 MAR 10	INDICATING/RECORDING SYSTEMS - FLIGHT WARNING COMPUTER (FWC) - INSTALL FWC STANDARD H2F3				
	Applicable to: ALL		•					
	P4977		29 MAR 10	INDICATING/RECORDING SYSTEMS - FWC - PROVIDE NEW SYNTHETIC VOICE "DUAL INPUT"				
	Applicable to: ALL							
	K1498		29 MAR 10	HYDRAULIC POWER-BLUE SYTEM ACCUMULATOR- RELOCATE CONNECTOR				
	Applicable to: ALL							
	P9824		29 MAR 10	INDICATING/RECORDING SYSTEMS-ELECTRONIC INSTRUMENT SYSTEM(EIS)-INSTALL DISPLAY MANAGEMENT COMPUTER SOFTWARE EIS2 S7				
	Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU							

HDA A320/A321 FLEET PLP-LOM P 5/12



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	Title
	P7125		29 MAR 10	INDICATING RECORDING SYSTEM-FWC- INTRODUCE FWC STANDARD H2 F1
	Applicable to: ALL			
	P2493		29 MAR 10	EQUIPMENT/FURNISHINGS - COCKPIT SEATS - INTRODUCE TYPE A340 SEATS
	Applicable to: ALL			
	P1362		29 MAR 10	EQUIPMENT/FURNISHINGS - COCKPIT - ADD A FIFTH STRAP ON 4TH OCCUPANT SEAT SHOULDER HARNESS -
	Applicable to: ALL			
	P11620		04 APR 12	INDICATING/RECORDING SYSTEMS - FWC - ACQUISITION/INTERFACE ACTIVATE MONITORING OF ATC/XPDR
	Applicable to: B-HSQ,	B-HSR, B-HST, B	-HSU	
	P4287		29 MAR 10	INDICATING/RECORDING SYSTEMS - FWC - DEFINE OEB REMINDER WITHIN FWC STD -E1 AND SUBSEQUENT
	Applicable to: ALL			
	P8671		29 MAR 10	INDICATING/RECORDING SYSTEMS-ELECTRONIC INSTRUMENT SYSTEM(EIS)- INSTALL DISPLAY MANAGEMENT COMPUTER SOFTWARE EIS2 S4-2
	Applicable to: B-HSL,	B-HSM, B-HSN, B	-HSO, B-HSP, E	3-HSQ, B-HSR, B-HST, B-HSU
	P4906			NAVIGATION - WEATHER RADAR SYSTEM - INSTALL SECOND WEATHER RADAR TRANSCEIVER
	Applicable to: B-HSD, B-HSU, B-HTD, B-HTE,	B-HSE, B-HSG, B B-HTF, B-HTG, E	-HSI, B-HSJ, B- B-HTH, B-HTI	HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST,
	P0435			ICE AND RAIN PROTECTION-WINDSHIELD RAIN PROTECTION - ADD AN INTERMITTENT FUNCTION
	Applicable to: B-HSD, B-HSU, B-HTD, B-HTE,			HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST,
	P4502		29 MAR 10	INFORMATION SYSTEM - AIR TRAFFIC AND INFORMATION SYSTEM (ATIMS) - INSTALL ATSU COMPUTER FOR ACARS
	Applicable to: ALL			
	P8863		04 APR 12	INDICATING/RECORDING SYSTEM FWC ACQUISITION INTERFACE CONNECT FWC TO RPWS TO PREVENT DOOR OPENING WITH RESIDUAL CABIN PRESSURE
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	P7721		29 MAR 10	LANDING GEAR-WHEELS AND BRAKES-CANCEL MIXABILITY BETWEEN GOODRICH BRAKES 2-1600-2 AND -3 AUTHOR. WITH MOD 31803
	Applicable to: B-HSD, B-HSU	B-HSE, B-HSG, B	-HSI, B-HSJ, B-	HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST,

HDA A320/A321 FLEET PLP-LOM P 6/12 MEL



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	Title			
	K2962			HYDRAULIC POWER-BLUE MAIN HYDRAULIC			
	112002		20 11/11/10	POWER-IMPROVE MAINTENANCE STATUS OF BLUE			
				HYDRAULIC RESERVOIR			
			-HSI, B-HSJ, B-	HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ,			
	B-HSR, B-HST, B-HSU						
	P6578		29 MAR 10	INDICATING RECORDING SYSTEMS- EIS-INSTALL			
				DMC, DU AND DISKETTES FOR EIS2			
		B-HSM, B-HSN, B		3-HSQ, B-HSR, B-HST, B-HSU			
	K3680		29 MAR 10	APU - STORAGE AND DISTRIBUTION - MODIFY APU			
	Annilaskia ta Alii			COMMON LUBRICATION SYSTEM			
	Applicable to: ALL		00 141 0 40	ABIL CONTROL AND MONITORING MODIFY FOR			
	K3681		29 MAR 10	APU - CONTROL AND MONITORING - MODIFY ECB FORCOMMON LUBRICATION SYSTEM APU/GEN			
	Applicable to: ALL			FONCOIVIIVION LUBRICATION 3131 EW AFU/GEN			
	K3737		29 MAR 10	AIR CONDITIONING - AIR COOLING SYSTEM -			
	110707		25 WAIT TO	INTRODUCE MODIFIED RAM AIR INLET			
	Applicable to: ALL			MATTIOS GOL MIOSII IES TUMMAMIT INCELT			
	P5638		29 MAR 10	NAVIGATION-STANDBY DATA : ALTITUDE AND			
				HEADING - INSTALL INTEGRATED STANDBY			
				INSTRUMENT SYSTEM (ISIS)			
		B-HSM, B-HSN, B	-HSO, B-HSP, E	B-HSQ, B-HSR, B-HST, B-HSU			
	P2726		29 MAR 10	INDICATING/RECORDING SYSTEMS - USE METRIC			
				UNITS IN PLACE OF US UNITS			
	Applicable to: B-HSD,	B-HSE, B-HSI, B-I					
	K2770		29 MAR 10	AIRBORNE AUXILIARY POWER - CONTROL AND			
	Applicable to: ALL			MONITORING - INTRODUCE ECB P/N 304640-3			
	P3524		29 MAR 10	ELECTRICAL POWER - AC AUXILIARY GENERATION			
	P3024		29 WAR 10	(APU GENERATOR) - INTRODUCE MODIFIED			
				GENERATOR			
	Applicable to: ALL			or in the state of			
	K0402		29 MAR 10	ICE AND RAIN PROTECTION - DRAIN MAST			
				ICE PROTECTION - INSTALL TEMPERATURE			
				REGULATED HEATING SYSTEM			
	Applicable to: ALL						
	P11677		29 NOV 11	ENGINE FUEL AND CONTROL- FADEC SYSTEM-			
				INTRODUCE EEC SOFTWARE STANDARD SCN21/AA			
				FOR IAE V2500-A5			
	Applicable to: B-HSQ,	B-HSR, B-HST, B		LANDING OFAD MORNAL DRAWING INCT.			
	P10891		29 MAR 10	LANDING GEAR - NORMAL BRAKING - INSTALL			
	Applicable to D UCO	D UCD D UCA B	HED DUCT T	BSCU SOFTWARE STD "L4.9 B" (EM2)			
	Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU						

HDA A320/A321 FLEET PLP-LOM P 7/12



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	Title		
	P7005		29 MAR 10	LANDING GEAR - NORMAL BRAKING - INTRODUCE		
				STD 9 BSCU (TWIN VERSION)		
	Applicable to: ALL		1			
	K6465		29 MAR 10	FUEL - TANKS - ADAPTATION OF ACT-		
				INTRODUCTION OF VALVE ACTUATORS WITH PRESSURE HOLDING VALVE		
	Applicable to: B-HTG,	B-HTH. B-HTI		THEOGOTIC HOLDING VALVE		
	P3341	,	29 MAR 10	LANDING GEAR - WHEELS AND BRAKES - INSTALL		
				MESSIER GOODRICH WHEELS AND BRAKES ON		
				A321		
	Applicable to: B-HTD,	B-HTE, B-HTF, B-				
	P7092		19 JUL 11	INDICATING/RECORDING SYSTEM - EIS - ACTIVATE		
				FUEL FLOW/DELTA ISA FUNCTION BY PIN		
	Applicable to: B-HSL,	DUCM DUCM D	 	PROGRAMMING ON DMC		
	K3682	D-113W, D-113W, D		AIRBORNE AUXILIARY POWER - MODIFY WIRING		
	N3002		29 WAN 10	FOR COMMON LUBRICATION SYSTEM APU/GEN		
	Applicable to: ALL			THE STATE OF THE S		
	28-1149 03		04 APR 12	FUEL - GENERAL - INTRODUCE NEW FUEL		
				STRAINERS		
	Applicable to: B-HSJ					
	P9126		29 MAR 10	AUTOFLIGHT - FMGC - INSTALL FMGC IAE/PW STD P1I10 (WITH FMS2 HONEYWELL) ON A/C FITTED		
	Applicable to D UC I	D HEN D HEL D	LOW BROW B	WITH IAE OR PW POWERPLANTS B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG,		
	B-HTH, B-HTI	<b>⊳-пок, ⊳-по</b> ⊾, <b>⊳</b> -	riow, b-riow, c	o-noo, o-nor, o-nou, o-non, o-no1, o-nou, o-n1u,		
	28-1149 01		19 JUL 11	FUEL - GENERAL - INTRODUCE NEW FUEL		
				STRAINERS		
	Applicable to: B-HSJ					
	P11484		29 NOV 11	FLIGHT CONTROLS - FCDC SYSTEM - INTRODUCE FCDC STANDARD 58		
	Applicable to: B-HSQ,	B-HSR, B-HST				
	P3924		29 NOV 11	LANDING GEAR - MLG - MESSIER - INTRODUCE BRAKES P/N C202253		
	Applicable to: B-HSQ,	B-HSR	•			
	J0376		29 MAR 10	LANDING GEAR - MLG - MINOR IMPROVEMENTS INTRODUCED FROM A/C 44 -		
	Applicable to: ALL					
	J0680		29 MAR 10	LANDING GEAR - MLG - INTRODUCE 82.2 T MTOW GEAR FOR A321		
	Applicable to: B-HTD,	B-HTE, B-HTF, B-	НТG, В-НТН, В			
	P8340		29 MAR 10	NACELLES / PYLONS - PYLONS - IMPROVE		
				AERODYNAMIC SHAPE OF IAE PYLON		
1	Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU					

HDA A320/A321 FLEET PLP-LOM P 8/12 MEL 19 JUL 12



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	
	P6146		29 MAR 10	INDICATING/RECORDING SYSTEM - FWC - INTRODUCE "F/CTL FLAP LVR NOT ZERO" RED WARNING
		B-HSK, B-HSL, B-		B-HSO, B-HSP, B-HSQ, B-HSR, B-HTG, B-HTH, B-HTI
	J2832		29 MAR 10	FUEL - MAIN FUEL PUMP SYSTEM - INSPECT AND ADMINISTER CORRECT TORQUE AND SCREW LOCKING ON FIXING BOLTS
	Applicable to: ALL			
	K8400		29 MAR 10	COMMUNICATIONS-CIDS-INTRODUCE ENHANCED CIDS (A318 VERSION) AND RELATED SYSTEMS ON SINGLE AISLE FAMILY
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	P0159		29 MAR 10	EQUIPMENT/FURNISHINGS - ADD A FIFTH STRAP TO FLIGHT CREW SHOULDER HARNESS -
	Applicable to: ALL			
	P8799		29 MAR 10	NAVIGATION- GPWS - USE LATERAL GPS POSITION WITH AUTOMATIC DESELECTION
	Applicable to: ALL			
	K11047		29 MAR 10	COMMUNICATIONS - ANTI HIJACK CAMERA MONITORING - INSTALL COCKPIT DOOR SURVEILLANCE SYSTEM DISPLAYED ON SD
	Applicable to: B-HSO,	B-HSP, B-HST, B	HSU	
	K4160		29 MAR 10	DOORS-CARGO COMPARTMENT FWD/AFT- INTRODUCE MODIFIED ACTUATOR FITTING AND ATTACHMENT
	Applicable to: ALL			
	P8303		29 MAR 10	NAVIGATION - DDRMI - REMOVE DDRMI VOR/ADF/DME INDICATORS
	Applicable to: B-HSO,	B-HSP, B-HSQ, B	-HSR, B-HST, E	
	P5121		19 JUL 12	INDICATING/RECORDING SYSTEMS - DATA LOADING SYSTEMS -INSTALL A MULTIPURPOSE DISC DRIVE UNIT IN A COCKPIT
	Applicable to: B-HSJ, B-HTH, B-HTI	B-HSK, B-HSL, B-	HSM, B-HSN, E	3-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG,
	K7790		29 MAR 10	DOORS-PASSENGER COMPARTMENT FIXED INTERIOR DOORS-INSTALL ELECTRICAL COCKPIT DOOR RELEASE SYSTEM
	Applicable to: ALL			
	K5446		29 MAR 10	INDICATING/RECORDING SYSTEMS-CFDS- INTRODUCE A COMBINED FDIU/DMU
	Applicable to: B-HSK, B-HTI	B-HSL, B-HSM, B	-HSN, B-HSO, I	B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH,

HDA A320/A321 FLEET PLP-LOM P 9/12



/1)			1					
M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date					
	K0070		29 MAR 10	AIR CONDITIONING - CARGO COMPARTMENT - VENTILATION - INSTALL SYSTEM IN AFT COMPARTMENT -				
	Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI							
	P0053		29 MAR 10	EQUIPMENT/FURNISHINGS - FLIGHT COMPARTMENT - INSTALL SLIDING TABLES AT PILOT'S STATION -				
	Applicable to: ALL							
	P5794		19 JUL 12	INDICATING RECORDING SYS-DATA LOADING -INTRODUCE A MULTIPURPOSE DISK DRIVE UNIT P/N AC68A200 IN THE COCKPIT				
	Applicable to: B-HSJ, B-HTH, B-HTI	B-HSK, B-HSL, B-	HSM, B-HSN, E	3-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG,				
	P5518		29 MAR 10	LANDING GEAR-NORMAL BRAKING- INTRODUCE STD 8 BSCU (TWIN VERSION)				
	Applicable to: ALL		•					
	K0064		29 MAR 10	LIGHTS - EXTERIOR LIGHTS - INSTALL SYNCHRONIZED STROBE LIGHTS				
	Applicable to: ALL							
	K6461		29 MAR 10	LIGHTS-EMERGENCY LIGHTING-INTRODUCE LED EXIT SIGNS				
	B-HTI	B-HSL, B-HSM, B		B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH,				
	P3401		29 MAR 10	DELETE "EXPEDITE" FUNCTION FROM FCU				
	Applicable to: B-HSD, B-HSU, B-HTD, B-HTE			HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST,				
	J1617		29 MAR 10	FLIGHT CONTROLS-GENERAL- DELETION OF L.A.F. FEATURE FROM A320 A/C (SERIAL SOLUTION)				
	Applicable to: B-HSD, B-HSR, B-HST, B-HSU		-HSI, B-HSJ, B	HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ,				
	P5706		29 MAR 10	INDICATING RECORDING SYSTEM-FWC- INTRODUCE FWC STANDARD H2/E3P				
	Applicable to: ALL		•					
	31-1141 04		29 MAR 10	INDICATING/RECORDING SYSTEMS - FWS - INTRODUCE FWC STANDARD H1P-E3P.				
	Applicable to: B-HSD,	B-HSE, B-HSG, B	-HSI, B-HTD, B	-HTE, B-HTF				
	K4913		29 MAR 10	POWER - INSTALL A319 RAM AIR TURBINE ON A320				
	• •	B-HSK, B-HSL, B-		3-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU				
	J1764		19 JUL 11	FUEL-QUANTITY INDICATING-INTRODUCE MODIFIED PRE-SELECTOR UNITS P/N 0203				
	Applicable to: B-HSG,	B-HSI, B-HSJ, B-I	HSK, B-HSL, B-	HSM, B-HSN, B-HSO, B-HSP				

PLP-LOM P 10/12 HDA A320/A321 FLEET



M <sup>(1)</sup>	MODIFICATION	Linked SB	Incorp. Date	Title
	P9522		29 MAR 10	AUTO-FLIGHT-MULTIPURPOSE CONTROL AND DISPLAY UNIT(MCDU) - ACTIVATE BACK-UP NAV FUNCTION
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	J1570		29 MAR 10	CROSS FEED VALVE P/N-2
	Applicable to: ALL			
	29-1111 01		29 MAR 10	HYDRAULIC POWER - AUXILIARY HYDRAULIC POWER - AIRBORNE GROUND CHECKOUT MODULE (AGCM) - INTRODUCE MODIFIED AGCM
	Applicable to: B-HSD,	B-HSE, B-HSG, B		
	P4885		29 MAR 10	NAVIGATION - GPWS - ACTIVATE ENHANCED FUNCTIONS OF THE EGPWS
	Applicable to: ALL			
	P5253		29 MAR 10	NAVIGATION - ADIRS - REPLACE ADIRS CDU BY MSU (MODE SELECTOR UNIT)
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	P10443		19 JUL 11	FLIGHT CONTROL - ELAC SYSTEM - INTRODUCE ELAC "L93" SOFTWARE STANDARD
	Applicable to: B-HSO,	B-HSP, B-HSQ, B	-HSR, B-HST	
	P10402		17 NOV 10	COMMUNICATIONS - AUDIO MANAGEMENT - MODIFY AMU POWER SUPPLY TO COPE WITH DC ESSENTIAL BUS LOSS
	Applicable to: B-HSL,	B-HSM, B-HSN, B		B-HSQ, B-HSR, B-HST, B-HSU, B-HTH, B-HTI
	J0739			LANDING GEAR-MLG-INTRODUCE TORQUE LINK APEX DAMPER
	Applicable to: B-HSD, B-HSR, B-HST, B-HSU		-HSI, B-HSJ, B-	HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ,
	P1970		29 MAR 10	COMMUNICATIONS - INSTALL HF1 FOR EROPS
	Applicable to: ALL			
	J0937		29 MAR 10	LANDING GEAR - MAIN LANDING GEAR (TWIN WHEELS) - INTRODUCE A NEW STANDARD TORQUE LINKS DAMPER AND ABEX PIN.
	Applicable to: B-HSD, B-HSR, B-HST, B-HSU		-HSI, B-HSJ, B	HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ,
	K6443		29 MAR 10	AIR CONDITIONING-AIR COOLING- INSTALL A NEW ECS
	Applicable to: B-HSO,	B-HSP, B-HSQ, B		
	P1631		29 MAR 10	NAVIGATION - MODIFY GPWC WARNING -
	Applicable to: ALL			
	P4539			AUTOFLIGHT-FLIGHT CONTROL UNIT- (FCU) INTRODUCE SEXTANT MODULAR FCU
	Applicable to: B-HSJ, B-HTH, B-HTI	B-HSK, B-HSL, B-	HSM, B-HSN, E	i-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG,

HDA A320/A321 FLEET PLP-LOM P 11/12



$\mathbf{M}^{(1)}$	MODIFICATION	Linked SB	Incorp. Date	Title
	P0040		29 MAR 10	EQUIPMENT/FURNISHINGS - FLIGHT
				COMPARTMENT - INSTALL A 4TH OCCUPANT SEAT -
	Applicable to: ALL			
	P0143		29 MAR 10	COMMUNICATIONS - RADIO MANAGEMENT - INSTALL A 3RD RMP -
	Applicable to: B-HSD, B-HSU, B-HTD, B-HTE			HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST,
	P3365		29 MAR 10	ICE AND RAIN PROTECTION-ICE DETECTION- PROVIDE ICE DETECTOR ILLUMINATION
	Applicable to: ALL			
	K2335		29 MAR 10	FIRE PROTECTION - LAVATORY SMOKE
				DETECTION - INTRODUCE AMBIENT SYSTEM
	Applicable to: ALL			
	K1522		29 MAR 10	COMMUNICATIONS - INSTALL PA IN USE INDICATORS LIGHT -
	Applicable to: B-HSL,	B-HSM, B-HSN, B	-HSO, B-HSP, E	B-HST, B-HSU, B-HTH, B-HTI
	K7778		29 NOV 11	COMMUNICATIONS-ANTI HIJACK CAMERA MONITORING-INSTALL A COCKPIT DOOR SURVEILLANCE SYSTEM
	Applicable to: B-HSQ,	B-HSR		
	P9655		29 MAR 10	LANDING GEAR - NORMAL BRAKING - INSTALL BSCU SOFTWARE STD "L4.9"
	Applicable to: B-HSO,	B-HSP, B-HSQ, B	-HSR, B-HST, E	3-HSU
	K3901		29 MAR 10	COMMUNICATIONS-CIDS-INTRODUCE MODIFIED DIRECTOR POWER SUPPLY PRINCIPLE
	Applicable to: B-HSO,	B-HSP, B-HSQ, B	-HSR, B-HST, E	3-HSU
	P7268		29 MAR 10	CAPABILITIES (SERIAL SOLUTION)
	Applicable to: B-HSK, B-HTI	B-HSL, B-HSM, B	-HSN, B-HSO, E	3-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH,
	P6125		29 MAR 10	NAVIGATION-ADIRU-INSTALL HONEYWELL ADIR U 4 MCU AD11 (NEW HARD)
	Applicable to: B-HSK,	B-HSL, B-HSM, B	-HSN, B-HSO, E	3-HSP, B-HSQ, B-HSR, B-HST, B-HSU
	P5451		29 MAR 10	DISTRIBUTION - INSTALL AC-DC SHEDDABLE BUSBARS
	Applicable to: B-HSJ, B-HTH, B-HTI	B-HSK, B-HSL, B-	HSM, B-HSN, E	i-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG,

(1) Evolution code : N=New, R=Revised, E=Effectivity

 HDA A320/A321 FLEET
 PLP-LOM P 12/12

 MEL
 19 JUL 12







# GENERAL PRELIMINARY PAGES - TABLE OF CONTENTS

# **GEN-PLP PRELIMINARY PAGES**

TABLE OF CONTENTS

MEL/CDL Approval Reference	. Α
Safety, Quality and Security Policy	
Policy Statements	. C



# GENERAL PRELIMINARY PAGES - TABLE OF CONTENTS

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 HDA A320/A321 FLEET
 GEN-PLP-TOC P 2/2

 MEL
 04 APR 12



# MEL/CDL APPROVAL REFERENCE

Ident.: GEN-20802012.9001001 / 04 APR 12

Applicable to: ALL

This volume forms part of the A320/A321 Operations Manual for Hong Kong Dragon Airlines Limited and is to be used by crew, staff, servants or agents of the Company. It is issued by the Flight Operations Department and is authorised by General Manager (Operations).

Signed :

Peter SANDERSON General Manager Operations

This MEL revision dated 4th April 2012 is based upon the EASA approved Airbus A320 MMEL with the reference 0010002556-001 as Approval reference and published on the 4th April 12. This CDL revision is based upon the EASA approved Airbus A320 AFM Revision 29 for the A320 and Revision 18 for the A321 with the 10034412 as Approval reference and published on the 3rd May 2012 for the A320 and the 7th of June 2011 for the A321.

The holder of this volume is responsible for its revision.



# SAFETY, QUALITY AND SECURITY POLICY

Ident.: GEN-20801722.9001001 / 29 NOV 11

MINIMUM EQUIPMENT LIST

Applicable to: ALL



# 安全、質量及保安政策

安全、質量及保安是港龍航空的核心價值。藉著各員工絕不妥協地致力推行各種持續提 升質量、保安及安全管理系統計劃,我們務求在這些方面均達到最高的水平。

港龍航空一直以來均十分重視及鼓勵任何有關運作安全及保安事件的報告。我們有既定 政策、鼓勵榜一位員工向公司課報任何可能影響新班及投聯營運安全及保宏的情况及資 料,並積極推動遊種女化。我們更製訂了一套程序,適用於航空安全報告、機能安全報 告、地勤安全報告、品質審計報告及保安審查報告所收集和協及競放的資訊。確保蔣通 可以在不受拘束的情況下進行。

我們亦確立機制,以量度及訂立在所有有關安全、質量及保安方面的主要表現水平,並 以嚴謹的國驗評審,按其重要性訂定改善措施的優先次序。

為建立互信關係,港龍航空推行公平文化的政策,決不會紀律處分任何匯報有關航班安 全事件的員工。但如果有關資訊是來自其他來源,或員工刻意淚視跃定的政策及程序, 此項政策則不適用,我們看望從銷與中學者,以不斷提升水平。

作爲行政總裁,我自然責無旁貸。除致力履行承諾提供安全的選作及工作環境,我務請 大家積極負責,讓海賴航空繼續在安全、品質及保安方面均達安最高的水平,讓顧客、 員工及商業夥伴均受惠,並保持公司在這方面的業界領導地位。







### SAFETY, QUALITY AND SECURITY POLICY

Safety, quality and security are core values of Dragonair. We are dedicated to achieving the highest standards in these disciplines by the uncompromising efforts and vigilance of every employee in implementing continuous quality improvement, security and safety management system programmes that are in place in Dragonair.

It is imperative that we have uninhibited reporting of all incidents and occurrences which compromise the safe and secure conduct of our operations. We have a policy of an open compromise the sale and secure conduct or our operations, we have a policy of an open reporting culture where every employee is encouraged to communicate any information that may affect the integrity of flight and ground safety and security. Such communication is free of reprisal. Our method of collecting, recording and disseminating information obtained from Air Safety Reports, Cabin Safety Reports, Ground Safety Reports, Quality Audits and Security Inspections has been developed to achieve this aim

We have established methods to measure and set key performance standards in all the safety, quality and security disciplines coupled with a rigorous process of risk assessment in order to prioritise the deployment of corrective actions in a timely and

To engender mutual trust, Dragonair has a just culture policy where it will not take disciplinary action against any employee who discloses an incident or occurrence involving safety. This policy shall not apply to information received by the company from a source other than the employee, or when the employee knowingly disregards established policies and procedures. We constantly improve our standards by learning from our own mistakes and errors as well as those made by others.

As the Chief Executive Officer I am ultimately accountable and fully committed to providing a safe operational and working environment. However I require you all to take responsibility to environment. However I require you all to take responsibility to environment. However I require you all to take responsibility to environment and the providing our customers, employees and business partners with the highest level of safety, quality and security.



KASQSPDMS-201108-REV2





## **POLICY STATEMENTS**

Ident.: GEN-20801723.9001001 / 29 NOV 11

Applicable to: ALL



### POLICY STATEMENTS

### COMMANDER/PILOT IN COMMAND/PIC

The term "Commander" throughout the Operations manuals is synonymous with "Pilot in Command (PIC)"

#### CREW RESOURCE MANAGEMENT (CRM)

Dragonair is committed to the application of modern Crew Resource Management principles in Highl Operations. CPM principles of forday are considered by Hong Kong Dragon, Arthines to provide the most proven methods of achieving effective leadership and communication, simed at the promotion of safe and efficient flight. While traditional high standards of technical excellence remain the concertions of the artificient flight. While traditional high standards of technical excellence remain the concertions of the artificient flight. This must involve the promotion of a comfortable and understanding working environment, especially in multi-cultural crew situations, through clear and unambiguous communication and task sharing. It is Company Policy that CRM principles will be promoted and adopted by all persons in Flight Operations.

#### AUTOMATION

It is Dragonair policy to regard Automation as a tool to be used, but not blindly relied upon. At all times, flight crew must be aware of what automation is doing, and if not understood, or not requested, reversion to basic modes of operation must be made immediately without analysis or delay. Trainers must ensure that all flight crew are taught with emphasis how to quickly revert to basic modes when necessary. In the man-machine interface, mun is still in charge.

# QUALITY MANAGEMENT

Dragonair is committed to the application of a Quality Management System in Flight Operations. To this end the management system is defined in OM Part A and shall be complied with for all future policy and procedural development.

### GENDER

Masculine terms in all the operations manuals, such as he, him or his also imply the female gender.

Signed : \_

### ELECTRONIC MANUALS

Electronic manuals are an established means of communicating information and data in support of a wide range of FOP activities.

Access to electronic manuals is a wailable to all approved users by Dragenet. All FOP staff are encouraged to utilise electronic manuals on a rotatine and epicopologists. Electronic manuals posted on Dragenet represent the latest revised versions and, where offerences exist with physical documentation, are considered to be the master source. In some cases manuals can be downloaded directly onto storage devices for offline use. Persons utilising information and data in this manner must be careful to ensure that it represents the latest in-use version available on Dragenet.

### STANDARD OPERATING PROCEDURES

Airbus customized FCOM chapters and QRH as well as Dragonair customized FCOM and QRH chapters are accepted as the Standard operating Procedures for Dragonair. Where there is a difference between Airbus and Dragonair customized material, the latter is the overriding authority.

### DESIGNATED COMMON LANGUAGE

It is Dragonair Policy that English shall be the designated common language for Flight Operations. All communications pertaining to Flight Operations, whether oral or written will be conducted in English. This includes all oral communications between Flight Crew within the Codcytic, and between the Flight Crew and all other staff (includes the Cabio Crew, Cround Handing Personnel, Passnagers, alt Traffic Cord and any other ground station or aircraft). All Operational documentation including training materials shall be written in English. All Flight Crew and Cabio Crew training activities and evaluations shall be conducted in English.

Maudesson

General Manager Operations (01 OCT 10)



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HDA A320/A321 FLEET
MEL





# HOW TO USE PRELIMINARY PAGES - TABLE OF CONTENTS

# **HOW-PLP PRELIMINARY PAGES**

TABLE OF CONTENTS
SUMMARY OF HIGHLIGHTS

	Revision Highlights	A
_	Foreword	B
I	MEL Contents	C
	Documentary Unit (DU)	D
	MEL Revision Procedure	
	MEL Revision Management	F
	Removal of Item	G
I	How to Use the MEL Entries Section?	H
	How to Use the MEL Items Section?	
-	How to Use the MEL Operational Procedures Section	J
	Landing Capabilities (CAT 2, CAT 3 SINGLE, CAT 3 DUAL)	K
I	Required Navigation Performance (RNP)	
•	Reduced Vertical Separation Minimum (RVSM)	
	Abhreviations	N



# HOW TO USE PRELIMINARY PAGES - TABLE OF CONTENTS

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 HDA A320/A321 FLEET
 HOW-PLP-TOC P 2/2

 MEL
 19 JUL 12



# HOW TO USE PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization	Toc	ID	Reason
Title	Index		
HOW	Α	1	11 Oct 2012 : Modification of content of the element
Revision Highlights			20803191.9001001
HOW	Α	2	20 Sep 2012 : Modification of content of the element
Revision Highlights			20803191.9001001
HOW	С	3	17 Sep 2012 : Modification of content of the element
MEL Contents			00012804.0001001
HOW	Н	4	17 Sep 2012 : Modification of content of the element
How to Use the MEL Entries Section?			00012810.0001001
HOW	I	5	15 Oct 2012 : Modification of content of the element
How to Use the MEL Items Section?			00012811.0001001
HOW	1	6	26 Sep 2012 : Modification of content of the element
How to Use the MEL Items Section?			00012811.0001001
HOW	I	7	26 Sep 2012 : Modification of content of the element
How to Use the MEL Items Section?			00012811.0001001
HOW	I	8	26 Sep 2012 : Modification of content of the element
How to Use the MEL Items Section?			00012811.0001001
HOW	J	9	26 Sep 2012 : Modification of content of the element
How to Use the MEL Operational			00012818.0001001
Procedures Section			
HOW	J	10	26 Sep 2012 : Modification of content of the element
How to Use the MEL Operational			00012818.0001001
Procedures Section			
HOW	L	11	26 Sep 2012 : Modification of content of the element
Required Navigation Performance			00012813.0001001
(RNP)			

HDA A320/A321 FLEET HOW-PLP-SOH P 1/2



# HOW TO USE PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

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HDA A320/A321 FLEET MEL



# **REVISION HIGHLIGHTS**

Ident.: HOW-20803191.9001001 / 19 JUL 12

Applicable to: ALL

1 1 2

# **MEL REVISION (19 JUL 12) HIGHLIGHTS**

MEL REFERENCE	REASON
PLP-AAT	Update aircraft allocation table with FSN HDA0061
HOW – MEL Contents	KA editorial changes
HOW - HOW TO USE THE	
MEL ENTRIES SECTION	KA editorial changes
HOW - HOW TO USE THE	
MEL ITEMS SECTION	KA editorial changes
HOW - HOW TO USE	
THE MEL OPERATIONAL	
PROCEDURES SECTION	KA editorial changes
HOW - REQUIRED	
NAVIGATION	
PERFORMANCE (RNP)	KA editorial changes
ME-26 APU FIRE DET	
FAULT	MMEL revision of condition of dispatch
ME-26 APU FIRE LOOP A	
(B) FAULT	MMEL revision of condition of dispatch
ME-32 BRAKES PARK	
BRAKE LO PR	MMEL revision of condition of dispatch
MI-00-01 MEL/CDL	
APPROVAL REFERENCE	KA editorial change to update the revision date and add note
MI-00-02 INTRO TO THE	
MEL	KA editorial change
MI-00-05 REPAIR	
INTERVAL	KA editorial change - improve content and layout of information
MI-00-07 DEFINITIONS	KA editorial changes
MI 21-52-01-A, B, D, E Air	
Conditioning Pack	MMEL update of operational titles
MI 21-63-01-A, C Zone	
Controller Channel	MMEL change of information and layout of notes
Mi 21-63-02C Cockpit and	L
Cabin Trim Air Valve	MMEL change of information in notes
MI 21-63-03A Hot Air Press	L
Reg Valve	MMEL change of information in notes
MI 22-60-02A FAC 2	MMEL editorial changes
MI 22-60-03A Reactive	
Windshear Detection	MMEL change number installed to 1, editorial change to condition, change note. No change
Function	to relief

Continued on the following page



Continued from the previous page

MEL REFERENCE	Continued from the previous page
MI 23-01-02-32 Calls	ITEAGOR
Overhead Panel	MMEL change of Functional title.
MI 24-23-01 AC Auxiliary	INNIEE Grange of Furiodorial title.
Generation	MMEL update of info in note
MI 24-41-01A Ground	ININIEL apaate of fillo in hote
Power Control Unit	MMEL update of info in note
MI 24-41-02A External	ININIEL apaate of fillo in note
Power Receptacle	MMEL update of info in note
MI 26-01-01-02B Eng	ININIEL apaate of fillo in note
Agent pb Disch Light	MMEL update of operational title
MI 26-13-01A, B, C APU	MMEL changes - 26-13-01 and 26-13-02 merged and revised operational titles. No change to
Fire Det Loop	Invited that the changes - 26-13-01 and 26-13-02 merged and revised operational titles. No change to Irelief
MI 27-51-02A SFCC Slat	Tellet
Channel	MMEL changes editorial
************	MMEL changes- editorial
MI 27-94-03 SEC 3	MMEL changes to conditions. No change to relief
MI 00 05 00 D ( 1)/ 1	MMEL changes- effectivity no longer applies to all, new DU created for effectivity split. No
MI 28-25-03 Refuel Valve	change to relief
MI 31-07-02A Permanent	MATERIAL W. 117
Data Ind on SD	MMEL changes- effectivity update
MI 31-30-04A Data	
Management Unit	MMEL changes- effectivity changes- 2 DU's merged into one, updated Functional title
MI 31-30-05A Flight Data	
Interface	MMEL changes- functional title and note updated
MI 31-62-01B DMC1	MMEL editorial change in conditions
MI 32-31-02A Landing	
Gear Retracting System	MMEL changes- update with (m) procedure reference
MI 32-41-01 Nose Wheel	
Tie Bolt	MMEL editorial change in conditions
MI 33-01-02-01A Emerg	
Exit LT OFF Light	MMEL editorial changes- deletion of information
MI 33-40-01 Nav Light	
System 1	MMEL change to operational title
MI 33-40-03A Landing	
Light	MMEL editorial changes to operational title and conditions. No change in relief
MI 34-05-02D Mach	
Number Ind on PFD	MMEL editorial change to operational title
MI 36-00-01B, C Air Bleed	
Maint Message	MMEL change - addition of (m) procedure ref.
MI 36-12-02A, B, APU	
Bleed Air Supply System	MMEL change of operational title, wording change in conditions. No change to relief

Continued on the following page



Continued from the previous page

MEL REFERENCE	REASON
MI 52-10-01A effectivities	
B-HSD - B-HSP, B-HSQ	
- B-HSU, and B-HTD -	
B-HTI	Change door inop passenger reduction numbers
MI 52-10-06A Check Door	
Pressure Message on FAP	MMEL editorial change to condition, addition of (m) procedure ref.
MO 21-26-05A, B, Avionics	
Skin Air Inlet valve	MMEL wording change in procedure to allow "one or two" packs to be sel on instead of both.
MO 21-52-01A,B,D,E Air	
Conditioning Pack	MMEL wording change to Procedural title
MO 21-63-01A, C Zone	MMEL changes - single procedure now split into 2 for single channel failure of zone
Controller Channel	controller, or both channels failed
MO 21-63-02A, D Cockpit	
and cabin Trim Air valve	
(affected valve closed)	MMEL editorial changes, effectivity change to include B-HSU
MO 21-63-02B,C Cockpit	
and Cabin Trim Air Valve	Effectivity change - add B-HSU
MO 21-63-03B Hot Air	
Press Reg Valve	MMEL editorial change, Effectivity change- add B-HSU
MO 21-63-03C Hot Air	
Press Reg valve	MMEL changes to procedure
MO 26-15-01A Avionics	
Smoke Det Sys	MMEL change to procedure
MO 27-64-02A Spoiler 1 or	
3	MMEL change to landing dist calculation factor
MO 27-64-04A	
(B-HSD-HSU) Spoiler 1	
and 2	MMEL change to landing dist calculation factor
MO 28-15-01A, C LH Wing	
Transfer Valve	MMEL change in procedure
MO 28-15-02A, C RH Wing	
Transfer Valve	MMEL change in procedure
MO 28-20-01A Automatic	
Fuel Feed System	MMEL change to procedure
MO 28-21-02A Center	
Tank Pump (one inop)	MMEL change to procedure
MO 29-23-01A Power	
Transfer Unit	MMEL editorial changes
MO 30-31-01B Probe Heat	
Computer	MMEL changes to procedure and split effectivity to give one additional DU

Continued on the following page



Continued from the previous page

MEL REFERENCE	REASON
MO 31-07-02A Permanent	
Data Ind on SD (B-HSL-	
HSP and B-HSQ-HSR)	MMEL changes to consolidate 2 DU's into one.
MO 31-56-07A T.O Config	
pb on the ECP	MMEL changes to wording in procedure
MO 34-10-04B, C, IR1	
(both effectivities)	MMEL changes- rewording of DU title to IR 1 (Only Nav Mode of IR 1 Inoperative)
MO 52-10-01A effectivities	
B-HSD - B-HSP, B-HSQ	
- B-HSU, and B-HTD -	
B-HTI	Change door inop passenger reduction numbers
MO 78-30-01A Thrust	MMEL changes- deletion of information in Performance adjustments table, and change of ref
Reverser (all 3 effectivities)	for In Flight Failure.

# **FOREWORD**

Ident.: HOW-00012802.0001001 / 29 NOV 11

Applicable to: ALL

The Flight Crew Operating Manual (FCOM) Minimum Equipment List (MEL) is organized in a standardized format agreed by the Air Transport Association (ATA) and uses the ATA chapter and item numbering system.

The Master Minimum Equipment List (MMEL) is a reference manual published in English. It is approved by the European Aviation Safety Agency (EASA).

The MMEL is produced in XML format and can be published in PDF format and in electronic format for electronic consultation on EFB.

# **MEL CONTENTS**

Ident.: HOW-00012804.0001001 / 19 JUL 12

Applicable to: ALL

This Minimum Equipment List (MEL) covers the Airbus A320/A321 series aircraft operated by Hong Kong Dragon Airlines Limited. This MEL has six sections:

- General (GEN) : This section contains HDA Policy.

- How to Use (HOW): This section contains general information and describes the organization

of the manual.

- MEL Entries (ME) : This section lists all the ECAM alerts and indicates the associated

MEL item (if any) to apply for dispatching the aircraft. This section is a user-friendly entry point for the flight crew and the maintenance personnel

when an ECAM alert reports a system failure.

HDA A320/A321 FLEET HOW P 4/28
MEL ← A to C → 19 JUL 12



 MEL Items (MI) : This section is approved by the EASA and lists all the MEL items with the associated dispatch conditions.

 MEL Operational : This section gives the operational procedures that are associated with the Procedures (MO) MEL items.

- Configuration : The Configuration Deviation List (CDL) contains additional certificated limitations for operation of the A320/1 aircraft without certain secondary airframe and engine parts.

Note: Hong Kong Dragon Airlines Ltd have incorporated the (CDL) into the (MEL) and as it forms part of the aircraft Flight Manual, the (CDL) limitations must always reflect the aircraft Flight Manual (CDL) limitations.

Note: The MEL Maintenance Procedures are published in the AMM.

# **DOCUMENTARY UNIT (DU)**

Ident.: HOW-00012806.0001001 / 04 APR 12

Applicable to: ALL

This MEL is made of Documentary Units (DU). The DUs contain the technical data.

In the MEL, a DU can be:

- An ECAM alert.
- An MEL item,
- An MEL operational procedure.

The List of Effective Documentary Units (LEDU) lists all the DUs that constitute this MEL.

## DU IDENTIFICATION STRIP

In the PDF format, below the title of the DU, the grey identification strip indicates for each DU:

- The DU identification (Ident.). Each DU is identified by its unique identification number. This DU identification is used to cross-refer to the LEDU.
- The DU date. For non customized DUs, for approved DUs (MMEL items DU), this date corresponds to the approval date by the EASA of the MMEL revision. For non-approved DUs, this date corresponds to the date of release of the DU by Airbus. For customized DUs, this date corresponds to the date of release of the DU.
- The "Applicable to" field that lists the aircraft to which the DU applies.

Note: 1. HSO, HSP means that DU applies only to the specified aircraft.

- 2. ALL means that DU applies to all A320/1 aircraft in Dragonair Fleet.
- Correspondence between MSN and registration may be found in the Aircraft Allocation Table.

# DRAGONAIR A320/A321 MINIMUM EQUIPMENT LIST

## **HOW TO USE**

# LIST OF EFFECTIVE DOCUMENTARY UNITS (LEDU)

For each DU, the LEDU indicates the following information:

- The "M" field that may indicate the following Evolution Code:
  - The "E" letter indicates an aircraft validity change of the DU. The list of aircraft to which the DU applies has changed compared to the previous MEL revision, by addition or deletion of one or several aircraft.
  - The "N" letter indicates a new DU added by this MEL revision.
  - The "R" letter indicates a revised DU. The content of the DU is updated by this MEL revision.
- The "Localization" field that is the identification of the subsection that contains the DU. In the PDF format, this cross-refers to the page footer, which permits the user to localize the DU within the manual.
- The DU title.
- The DU identification (Ident.). Each DU is identified by its unique identification number. This DU identification is used to cross-refer to the LEDU.
- The DU date. For non customized DUs, for approved DUs (MEL items DU), this date corresponds to the approval date by the EASA of the MEL revision. For non-approved DUs, this date corresponds to the date of release of the DU by Airbus. For customized DUs, this date corresponds to the date of release of the DU.
- The criteria: This field indicates the aircraft configuration to which the DU applies.
- The "Applicable to" field that lists the aircraft to which the DU applies.

Note:

- 1. HSO, HSP means that DU applies only to the specified aircraft.
- 2. ALL means that DU applies to all A320/1 aircraft in Dragonair Fleet.
- Correspondance between MSN and registration may be found in the Aircraft Allocation Table.

### MEL REVISION PROCEDURE

Ident.: HOW-20801727.9001001 / 29 NOV 11

Applicable to: ALL

## INTRODUCTION

The General Manager – Operations is responsible for the Airbus MEL. The Technical Manager – Airbus (TM-A) is responsible for the processing of MEL revisions.

## **REVISION PROCEDURES**

All revision proposals, normal or temporary, must be submitted on the Amendment Approval Submission Form KA/OPS 1. Revisions which do not require any further relief than that stated in this manual will be processed in accordance with Procedure 'A'. Those which require extra relief, including those items in Master MEL annotated "as required by regulations", will be processed in accordance with Procedure 'B'.

# DRAGONAIR A320/A321 MINIMUM EQUIPMENT LIST

### HOW TO USE

# PROCEDURE 'A' - NO EXTRA RELIEF SOUGHT

These revisions will normally be in one of the following categories:

- Editorial corrections
- Changes to operating and maintenance procedures to reflect MEL,FCOM, Flight Manual or MMEL procedures, references or revisions.
- Changes which reduce the relief already allowed in this manual.

TM-A is to prepare a draft copy of the proposed revision.

TM-A is to prepare the Amendment Approval Submission Form KA/OPS 1 with the 'Procedure A' box marked and attach it to the draft revision with supporting documentation for circulation to the following addressees for approval:

Chief Pilot Airbus – KA Flight Operations Manager Maintenance Support - CX Engineering

After approval a copy of the revision will be sent to the HKCAD (Attn: Senior Airworthiness Officer) for amendment incorporation.

Should any addressee not agree with the revision, or if adverse comments are received from HKCAD, which cannot be resolved, then the revision will be subject to review as detailed under the procedure - Review Meeting

## PROCEDURE 'B' - EXTRA RELIEF SOUGHT

Revisions which require extra relief must be approved by the HKCAD and will be actioned as follows:

TM-A is to prepare the Amendment Approval Submission Form KA/OPS 1 with the 'Procedure B' box marked and attach it to the draft revision and supporting documentation for circulation to the following addressees for approval:

Chief Pilot Airbus – KA Flight Operations Manager Maintenance Support - CX Engineering **HKCAD** 

After approval a copy of the revision will be sent to the HKCAD for amendment incorporation.

HDA A320/A321 FLEET HOW P 7/28 19 JUL 12



# In all cases:

 Revisions under Procedure 'A' or 'B', that do not gain approval will be actioned in the following manner:

# **Review Meeting**

TM-A will call a Review Meeting for discussion, and copies of the revisions and supporting documentation will be circulated to the following addressees prior to the meeting:

Chief Pilot Airbus – KA Flight Operations Manager Maintenance Support - CX Engineering HKCAD

- Revisions requiring changes will have a revised draft prepared and circulated to all addressees for final approval before incorporation in the manual.
- Approved revisions will be processed by TM-A for incorporation into the MEL.
- Rejected revisions will be placed on the Fleet MEL file with the reason for rejection.

### MEL REVISION MANAGEMENT

Ident.: HOW-00012807.0001001 / 04 APR 12 Applicable to: ALL

### MEL REVISION CONTENTS

Each MEL revision contains the following information that is useful to update the MEL and to identify the changes that the revision has inserted:

- The List of Effective Sections/Subsections (LESS) (in PDF format only).
- The Filing Instructions (in PDF format only),
- The List of Effective Documentary Units (LEDU),
- The Summary of Highlights (SOH).

Each MEL revision also contains:

- An Aircraft Allocation Table (AAT).
- A List of Modifications (LOM).

When there is a change within a DU, the MEL revision updates the whole subsection that contains the DU.

## PDF PAGE HEADER AND FOOTER

In the PDF format, the header of the page contains the subsection title whereas the footer contains:

- The subsection identification,
- The subsection issue date. The subsection issue date corresponds to the issue date of the latest MEL revision that has revised the subsection.



- The page number within this subsection and the total number of pages within this subsection.
- The Table of Contents (TOC) indexing.

This TOC indexing uses the TOC indexes. Each TOC entry has an alphabetical index that identifies this TOC entry within its subsection. The manual user can easily find a TOC entry content within the manual thanks to this alphabetical index and the subsection identification. Both are indicated in the TOC and both cross-refer to the PDF page footer.

In the PDF page footer, the TOC indexing is of the following type:

The PDF page contains the whole "B" TOC entry content.

- B to D The PDF page contains the whole "B", "C" and "D" TOC entries contents. The "B" TOC entry content starts on this PDF page and continues on the - B→

following PDF page.

- ←B The "B" TOC entry content starts on a previous PDF page and finishes on this

PDF page.

The "B" TOC entry content starts on a previous PDF page and continues on the - ←B→

following PDF page.

- B to D→ The PDF page contains the whole "B" and "C" TOC entries contents but the "D"

TOC entry content starts on this PDF page and continues on the following PDF

page.

The PDF page contains the whole "C" and "D" TOC entries contents but the ←B to D

"B" TOC entry content starts on a previous PDF page and finishes on this PDF

page.

- ←B to D→: The PDF page contains the whole "C" TOC entry content but the "B" TOC entry

> content starts on a previous PDF page and finishes on this PDF page and the "D" TOC entry content starts on this PDF page and continues on the following

PDF page.

1. The indexes follow the alphabetical order: A, B, C, ..., Z, AA, AB, AC, ..., AZ, BA, Note:

BB.BC. ...

2. For each subsection, the index starts again from A.

# LIST OF EFFECTIVE SECTIONS/SUBSECTIONS (LESS)

The manual is organized by sections and subsections (also called PSL). The subsections contain the DUs.

The LESS lists all the subsections that constitute this MEL. The LESS only exists in the PDF format.

For each subsection, the LESS indicates:

- The subsection identification (also referred to as localization),
- The subsection title.

# DR AGONAIR A320/A321 MINIMUM EQUIPMENT LIST

## **HOW TO USE**

- The subsection issue date. The subsection issue date corresponds the issue date of the latest MEL revision that has revised the subsection.
- The "M" field that may indicate the following Evolution Code:
  - The "E" letter indicates only an aircraft validity change of one or several DUs of this subsection compared to the previous MEL revision. No DU content of this subsection has changed compared to the previous MEL revision.
  - The "M" letter indicates a subsection that has moved compared to the previous MEL revision.
  - The "N" letter indicates a new subsection added by this MEL revision.
  - The "R" letter indicates a revised subsection. The content of one or several DUs of this subsection is updated by this MEL revision.

Each PDF page footer indicates the subsection identification and the subsection issue date for cross-reference with the LESS. Therefore the manual holder can use the LESS to ensure that the MEL is up-to-date and that no page is missing.

# HIGHLIGHTS AND REVISION MARKS

In the PDF format, a vertical bar in the margin of the DU identifies the modified part. Each vertical bar has a numerical index that refers to the associated reason of the change in the Summary of Highlights (SOH).

The SOH lists all the changes and associated reasons of the change (if necessary) that the revision has inserted.

# AIRCRAFT ALLOCATION TABLE (AAT)

The AAT indicates the list of aircraft that are taken into account in this MEL. For each aircraft, the AAT indicates the following information:

- The MSN number.
- The Fleet Serial Number (FSN) of the aircraft as known by Airbus,
- The registration number of the aircraft as known by Airbus,
- The aircraft model.

The "M" field may indicate the following Evolution Code:

- The "N" letter indicates a new aircraft added by this MEL revision,
- The "R" letter indicates a change of the FSN or registration number or aircraft model.

# **LIST OF MODIFICATIONS (LOM)**

The LOM lists the criteria (Modification Proposals (MP) and Service Bulletins (SB)) which the installation on the aircraft affects the MEL.

<u>Note:</u> Each MP has one or more associated MODs. The MP/MOD correlation is available in AirN@v / Engineering.



The LOM also indicates:

- The title of the criteria.
- The date of incorporation of the criteria in the MEL,
- The list of aircraft that have the criteria.
- The "M" field that may indicate the following Evolution Code:
  - The "E" letter indicates an aircraft validity change of the criteria. The list of aircraft to which the criteria applies has changed compared to the previous MEL revision, by addition or deletion of one or several aircraft.
  - The "N" letter indicates new criteria added by this MEL revision,
  - The "R" letter indicates a change in the criteria title or associated SB.

# **REMOVAL OF ITEM**

Ident.: HOW-00012809.0001001 / 29 NOV 11

Applicable to: ALL

When operating under MEL, it is not permitted to remove the item from its place in the aircraft, unless the associated dispatch condition clearly authorizes the Operator to do it.

# HOW TO USE THE MEL ENTRIES SECTION?

Ident.: HOW-00012810.0001001 / 19 JUL 12

Applicable to: ALL

This section lists all the ECAM alerts. The ECAM monitors the condition of some systems. In the case of malfunction of one or more systems, the ECAM provides the flight crew with an associated ECAM alert. Refer to MI-00-08 ECAM and Maintenance Status.

For each ECAM alert, this section indicates the associated MEL item (if any) to be applied for the dispatch.

When an ECAM alert reports a system failure, the flight crew and the maintenance personnel should refer to this section as a user-friendly entry point in the MEL.

## AIRCRAFT STATUS COLUMN

An ECAM alert may cover one or several failure modes of the monitored system.



For each failure mode, the AIRCRAFT STATUS column may indicate the following status:

- NIL : When there is only one failure mode, the AIRCRAFT STATUS column

indicates NIL.

When there are several failure modes, the AIRCRAFT STATUS column might give a short description of each failure mode and/or a simple way to identify each failure mode. If the MEL does not give this information,

the column displays NIL.

- Actual alert : This indicates that the monitored system is inoperative. The failure mode

is the failure of the monitored system.

- False alert : This indicates that the monitoring system is inoperative. The failure

mode is the failure of the monitoring system. The monitored system

remains fully operative.

The Operator is responsible for identifying the failure mode.

## CONDITION OF DISPATCH COLUMN

For each failure mode, the CONDITION OF DISPATCH column gives the applicable MEL item(s) for dispatch. But the flight crew is responsible for checking that the condition of the aircraft systems/components complies with the MEL requirements. If not, the dispatch of the aircraft is not permitted.

The CONDITION OF DISPATCH column may also give the following alternate possibilities:

- NO DISPATCH : It is not permitted to dispatch the aircraft when the ECAM displays this

alert.

- Not related to MEL: The ECAM alert does not report a system failure but a reversible

abnormal condition such as the state of a system or an aircraft configuration or an external condition. This condition is not a system

failure and is not related to MEL. The MEL shall not be used.

This is not a NO-GO situation. The corrective action to revert to normal condition is immediate, obvious or well known by flight crew and/or

maintenance personnel.

# HOW TO USE THE MEL ITEMS SECTION?

Ident.: HOW-00012811.0001001 / 19 JUL 12
Applicable to: ALL

5

This section lists the equipment, components, systems or functions that are safety-related and that are temporarily permitted to be inoperative at departure provided that the Operator complies with the associated MEL requirements.

HDA A320/A321 FLEET HOW P 12/28
MEL ← H to I → 19 JUL 12

# DR AGONAIR A320/A321 MINIMUM EQUIPMENT LIST

## HOW TO USE

One single computer may include several functions. The corresponding MEL item is either: Note:

- The computer: The MEL does not consider the loss of a single function. In this case, when one function is inoperative, the Operator must consider that the computer is inoperative.
- Each function separately. In this case, if several functions are inoperative, the Operator must apply all the related MEL items.

## ITEM NUMBERING

A code of three pairs of digits or four pairs of digits identifies each MEL item.

The three first digits of this numbering system follow the ATA Spec 2200.

For practical reasons, the second pair of digits also follows the below Airbus organization:

- **00** refers to maintenance messages on the STATUS SD page.
- 01 refers to items located on the overhead panels.
- 05 refers to indications on the PFD.
- 06 refers to indications on the ND.
- 07 refers to indications on the SD pages,
- 08 refers to indications on the EWD.
- 09 refers to ECAM alerts.
- 10 to 95 follows the ATA Spec 2200 (first digit only).

The last pair of digits is the item rank. The item rank complies with the following Airbus organization rules:

- Item ranks from 01 to 49 are for Airbus MMEL items.

For items on the overhead panels:

- · Item ranks from 01 to 29 refer to lights,
- Item ranks from 31 to 49 refer to pushbutton switches and selectors.
- Item ranks from 50 to 99 are for Operator's MEL items.

### DISPATCH CONDITIONS

The dispatch conditions indicate (for each applicable item) the suitable conditions, limitations (placards, operational procedures, maintenance procedures) necessary to ensure that an acceptable level of safety is maintained.

Some MEL items may have several dispatch conditions. Each dispatch condition offers a different option to dispatch the aircraft.

A reference identifies each dispatch condition.



# **EXAMPLE**

Dispatch condition reference 21-52-01B:

- 21-52-01 corresponds to the item number
- The letter "B" identifies the dispatch condition within the item 21-52-01.

Note: If an MEL item has only the dispatch conditions 21-52-01A, B, G, and H for example, this means that the dispatch conditions 21-52-01C, D, E, F etc do not apply to the Operators fleet or to the aircraft selected (This does not mean the dispatch conditions 21-52-01C, D, E, F etc are missing from the MEL).

The dispatch condition reference is used:

- To identify the open MEL items in the logbook,
- To refer to the associated operational procedure (if any),
- To refer to the associated maintenance procedure (if any),
- To provide the Operator's engineering and maintenance personnel with a unique reference at fleet level for each option of dispatch for tracking and reporting purposes.

When an MEL item has several dispatch conditions, the Operator must select and apply only one dispatch condition at a time. An optional title might help the Operator to identify the appropriate dispatch condition. When necessary, the Operator may successively apply other dispatch conditions of the same item provided that the Operator complies with the MEL requirements and provided that the starting point of the repair interval countdown is not modified.

# **PROVISO**

Each dispatch condition has one or several requirements, called provisos. Provisos are numbered 1), 2), 3)...

The Operator must comply with all the provisos of the selected dispatch condition.

## 7 REPAIR INTERVAL

Each dispatch condition has an associated repair interval. The preamble of this MEL defines the repair interval categories. Refer to MI-00-05 Repair Interval.

A dash symbol replaces the repair interval in the following cases:

- For items that refer to another manual (Weight and Balance, CDL...). The MEL is not the appropriate manual for this item.
- For NO-GO items.

## NBR INSTALLED

Each dispatch condition has a "number installed" that specifies the quantity of equipment, components, systems or functions installed on the aircraft.



This quantity corresponds to the aircraft type certified configuration and, therefore required for all flight conditions, unless otherwise indicated in the "number required" in conjunction with the provisos of the dispatch condition.

A dash symbol indicates that a variable quantity is installed.

#### **NBR REQUIRED**

Each dispatch condition has a "number required" that specifies the minimum quantity of equipment, components, systems or functions that must be operative for dispatch in accordance with the provisos of the dispatch condition.

A dash symbol indicates that a variable quantity is required for dispatch.

#### **PLACARD**

The dispatch condition may require putting a placard in the cockpit. The control(s), and/or indicator(s) that the flight crew can access in flight and that are related to inoperative equipment, component, system or function should be clearly placarded to inform the flight crew of the equipment condition.

In the PDF format, the "YES" in the "Placard" column indicates the request for a placard. In the electronic format, the "PLACARD" symbol indicates the request for a placard.

Unless otherwise specified herein, placard wording and location will be determined by the personel (maintenance and/or flight crew) authorized to placard items.

#### **OPERATIONAL AND MAINTENANCE PROCEDURES**

The dispatch condition may require an operational or maintenance procedure to ensure an acceptable level of safety.

The (o) symbol identifies an operational procedure.

The (m) symbol identifies a maintenance procedure.

The (o)(m) symbol means that the dispatch condition requires both an operational procedure and a maintenance procedure.

The Operator is responsible to ensure that all operational and maintenance procedures are appropriately performed regardless of who performs the procedures.

#### **OPERATIONAL PROCEDURE**

The use of the (o) symbol indicates that an appropriate Operating Procedure must be actioned for each flight to maintain the required level of safety while operating under the terms of the MEL.

Note: Normally these procedures are accomplished by the flight crew. However, other personnel may be qualified and authorised to perform certain functions.



#### MAINTENANCE PROCEDURE

The use of the (m) symbol indicates a requirement for a specific Maintenance Procedure which must be accomplished prior to the First Flight and if necessary, repeated at specific intervals during the operation with the listed item inoperative as mentioned in the dispatch conditions. Normally these procedures are accomplished by maintenance personnel; however, depending on HK CAD approval, other personnel may be qualified and authorised to perform certain functions. Procedures requiring specialised knowledge or skill, or requiring the use of tools or test equipment should be accomplished by maintenance personnel. The satisfactory accomplishment of all maintenance procedures, regardless of who performs them, is the responsibility of the operator.

Note:

- Both symbols (o) and (m), used singularly or in combination, require appropriate
  procedures to be established, published, and complied with if flight is accomplished
  with the listed item or equipment inoperative.
- An alternative maintenance procedure not in the maintenance manual may only be used if CX Engineering - Maintenance Control HKG, are contacted and a MAINTENANCE CONCESSION is issued by Maintenance Control.

The MEL maintenance procedures are published in the AMM. The MEL item number must be used to find the associated task in the AMM via the "Deac/Reac Task by CDL/MEL..." function of AirN@v (in the "AMM" menu of AirN@v).

Note:

- 1. The MEL item indicates the associated AMM task reference. However using the AMM task reference is not the recommended method to find the task in the AMM. The MEL item number must be used instead with the above AirN@v function.
- 2. The MEL item might indicate "Refer to AMM task" instead of the AMM task reference. This indicates that the MEL item is associated with several AMM tasks. The above AirN@v function shall be used to find the applicable AMM task.

#### SYMBOL

"A": This symbol signifies that there is an approved Alternate Procedure in lieu of the standard Maintenance Procedure "(m)", which may be utilized by CFDS authorised Pilots but only when approved engineering support is not available on station. To use the "A" Alternate Procedure the Pilot must refer to FCOM PRO-SUP-45 and action accordingly.

Dispatch from Hong Kong to an outport where the "A" procedures will be used is allowed. The provision for dispatch using an "A" pilot approved procedure is limited to the overnight following the first dispatch under the MEL item.

# DR AGONAIR A320/A321 MINIMUM EQUIPMENT LIST

#### HOW TO USE

- ոլո . Identifies items that affect the LANDING CAPABILITY for LVO. Reference must be made to the "LANDING CAPABILITY - EQUIPMENT REQUIRED" in the associated operational procedure or the QRH(Refer to QRH/OPS.04). The certifying engineer must state the current AUTOLAND capability in the Technical Log deferral.
  - When a "L" item is entered or removed, the item must be telexed to HKG Flight Dispatch, HKGWNCX, copied HKGOWKA, HKGMMCX and HKGXEXH.
- "P" : Identifies items with a performance limitation or which affect aircraft utilisation and when deferred must be transferred to the yellow Performance ADD Technical Log page. When a Performance ADD is entered or removed, the item must be telexed to HKGWNCX, copied HKGOWKA, HKGMMCX and HKGXEXH.
- "S" : Identifies a Significant ADD and, when deferred, must be transferred to the grey Significant ADD page of the Aircraft Technical Log. SADDs are identified by one or more of the following:
  - a. Requiring verification, inspection or maintenance before each flight as detailed in the MEL.
  - b. Having a sector or flight or time limitation in either MEL, CDL, or AMM.
  - c. Affects normal transit servicing.
  - d. Is the subject of a Maintenance Concession/Engineering Concession/DDO that is not the subject of a performance limitation (performance items must be entered in the PADD sheets).
  - e. Toilets inoperative.
  - f. APU defects, rendering the APU incapable of starting engines, supplying air conditioning or electrical power.
  - g. Manual operation of cargo doors. Items classified with an "S" must be repaired at the earliest opportunity in accordance with the CX EOMP 7A-12 Defect Control. When a Significant ADD is entered or removed in the Log, the item must be telexed to HKGWNCX, copied HKGOWKA, HKGMMCX and HKGXEXH.
- "Z" : Identifies a Cabin (significant) ADD which will be deferred in the Cabin Maintenance Log only. When deferred, the ZADD must be transferred to the grey Cabin (significant) ADD page of the Cabin Maintenance Log
  - a. Items are defined as defects in cabin equipment and systems that are deemed to have passenger inconvenience effect but do not cause a Flight Deck Effect or require a Flight Crew operational procedure.
  - b. Item repair intervals are annotated in the MEL.
  - c. The FA1 is to be briefed as required on Z item restrictions and/or alternate procedures.

HDA A320/A321 FLEET HOW P 17/28



#### NOTES

There are three levels of notes:

- Notes at the level of the item: these notes appear below the item title and before the first dispatch condition of this item. These notes apply to all the dispatch conditions of the item.
- Notes at the level of the dispatch condition: these notes appear at the end of the dispatch condition. These notes apply only to this dispatch condition.
- Notes at the level of the proviso: these notes appear within a proviso. These notes apply only to this proviso.

#### REFERENCES

The references assist the Operator in complying with MEL requirements. However, as indicated in the preamble of this MEL (Refer to MI-00-03 Criteria for Dispatch), the Operator is still responsible for determining the applicable interrelationships and associated requirements.

References are used in the following cases:

- To permit the aircraft dispatch, another item has to be considered inoperative, or
- Another source of information has to be reviewed and associated restrictions, and/or procedures must be applied (e.g. "Refer to FCOM", or "Refer to Weight and Balance Manual"), or
- To redirect to the applicable MEL item. In that case, the referred relevant MEL item must be entered and the associated dispatch conditions must be applied, including the respective (o) and (m) procedures if any.

#### HOW TO USE THE MEL OPERATIONAL PROCEDURES SECTION

Ident.: HOW-00012818.0001001 / 19 JUL 12

Applicable to: ALL

9

This section lists the operational procedures associated with the MEL items. The dispatch conditions may require an operational procedure to permit the dispatch of the aircraft.

The operational procedures are split and organized into specific flight phases. The flight crew has to apply the part of the operational procedure related to the relevant flight phase.

The operational procedures may also have the following parts:

- General Information This part includes all information that the pilots must know due to

MEL condition.

- Fliaht This part groups all the limitations due to MEL condition that the pilots

Preparation/Limitation must consider for the route selection and flight preparation.



#### **ACARS PERFORMANCE CODES**

These codes are provided for certain performance related MEL and CDL items. The code(s) must be entered in the appropriate MCDU field when requesting ACARS RTOW or ACARS LANDING data. The codes are also valid for use with backup means. Dispatch with multiple failures is allowed provided a valid ACARS RTOW/LANDING generated output is received. The following types of codes are provided: Refer to PER-TOF-ACA ACARS RTOW.

#### MFI

- ACARS RTOW MFL codes
- ACARS LANDING FAIL codes

#### CDL

- ACARS RTOW CDL/SP-OPS codes
- ACARS LANDING CDL codes

### LANDING CAPABILITIES (CAT 2, CAT 3 SINGLE, CAT 3 DUAL)

Ident.: HOW-00012812.0001001 / 29 NOV 11

Applicable to: ALL

When the landing capability of the aircraft is impacted by an inoperative item, the associated MEL operational procedure provides the maximum landing capability.

The equipment to be operative to get CAT 2, CAT 3 SINGLE, or CAT 3 DUAL capability displayed on the FMAs are listed in the QRH (Refer to QRH/OPS.04).

### REQUIRED NAVIGATION PERFORMANCE (RNP)

Ident.: HOW-00012813.0001001 / 19 JUL 12

Applicable to: ALL

The MEL does not include the minimum equipment required for RNP operations.

The minimum equipment/functions required to begin RNP operations are listed in the FCOM (Refer to FCOM/PRO-SPO-51.

### REDUCED VERTICAL SEPARATION MINIMUM (RVSM)

Ident.: HOW-00012814.0001001 / 29 NOV 11

Applicable to: ALL

When the RVSM capability of the aircraft is impacted by an inoperative item, the associated MEL operational procedure provides the RVSM limitations.

The minimum equipment/functions required to begin RVSM operations are listed in the Flight Manual (Refer to AFM/NORM-34 Reduced Vertical Separation Minimum (RVSM)) and FCOM (Refer to FCOM/PRO-SPO-50 Reduced Vertical Separation Minimum (RVSM)) and Part A 8.3.1.5.

HDA A320/A321 FLEET HOW P 19/28 MEL 19 JUL 12



### **ABBREVIATIONS**

Ident.: HOW-00012817.0001001 / 29 NOV 11

Applicable to: ALL

### Α

Abbreviation	Term
A/C	Aircraft
A/THR	Autothrust
AAP	Additional Attendant Panel
AAT	Aircraft Allocation Table
ABCU	Alternate Braking Control Unit
AC	Alternating Current
ACARS	ARINC Communication Addressing and Reporting System
ACFT	Aircraft
ACMS	Aircraft Condition Monitoring System
ACOC	Air Cooled Oil Cooler
ACP	Audio Control Panel
ACT	Additional Center Tank
ADF	Automatic Direction Finder
ADIRS	Air Data Inertial Reference System
ADIRU	Air Data Inertial Reference Unit
ADR	Air Data Reference
AEVC	Avionic Equipment Ventilation Controller
AGL	Above Ground Level
AIDS	Aircraft Integrated Data System
AIP	Attendant Indication Panel
ALT	Altitude
AMM	Aircraft Maintenance Manual
AOA	Angle of Attack
AOC	Airline Operational Control
AP	Autopilot
APU	Auxiliary Power Unit
ATA	Air Transport Association
ATC	Air Traffic Control
ATSU	Air Traffic Service Unit
ATT	Attitude
AUTO	Automatic
AVNCS	Avionics



В

Abbreviation	Term
B/UP	Backup
BAT	Battery
BCL	Battery Charge Limiter
BMC	Bleed Air Monitoring Computer
BSCU	Braking Steering Control Unit
BTMU	Brake Temperature Monitoring Unit

<u>C</u>

Abbreviation	Term
C/B	Circuit Breaker
CAD	Civil Aviation Department
CAM	Cabin Assignment Module
CAPT	Captain
CDL	Configuration Deviation List
CDLS	Cockpit Door Locking System
CDSS	Cockpit Door Surveillance System
CDU	Control Display Unit
CFDIU	Centralized Fault Data Interface Unit
CFDS	Centralized Fault Display System
CG	Center of Gravity
CIDS	Cabin Intercommunication Data System
CL	Climb
CLB	Climb
COND	Conditioning
CONF	Configuration
CPC	Cabin Pressure Controller
CRS	Certificate of Release to Service
CTL	Control
CTR	Center
CVR	Cockpit Voice Recorder

D

Abbreviation	Term
DAC	Double Annular Combustor
DAR	Digital AIDS Recorder
DC	Direct Current
DDRMI	Digital Distance and Radio Magnetic Indicator
DEU	Decoder / Encoder Unit
DFDR	Digital Flight Data Recorder

Continued on the following page

HDA A320/A321 FLEET HOW P 21/28 MEL  $\leftarrow$  N  $\rightarrow$  19 JUL 12



Continued from the previous page

Abbreviation	Term
	Decision Heigh
	Data Loading Routing Box
DMC	Display Management Computer
DME	Distance Measuring Equipment
DMU	Data Management Unit
DU	Display Unit

### E

Abbreviation	Term
EASA	European Aviation Safety Agency
ECAM	Electronic Centralized Aircraft Monitoring
ECAS	Emergency Cockpit Alerting System
ECP	ECAM Control Panel
ECU	Engine Control Unit
EEC	Engine Electronic Controller
EFB	Electronic Flight Bag
EFIS	Electronic Flight Instrument System
EGT	Exhaust Gas Temperature
EIU	Engine Interface Unit
ELAC	Elevator Aileron Computer
ELEC	Electric
ELT	Emergency Locator Transmitter
EMCD	Electronic Magnetic Chip Detector
ENG	Engine
EPR	Engine Pressure Ratio
ESS	Essential
ETOPS	Extended Range Twin Engined Aircraft Operations
EVMU	Engine Vibration Monitoring Unit
EWD	Engine Warning Display
EWDU	Engine Warning Display Unit

# F

Abbreviation	Term
F/O	First Officer
FAC	Flight Augmentation Computer
FADEC	Full Authority Digital Engine Control
FANS	Future Air Navigation System
FAP	Flight/Forward Attendant Panel
FCDC	Flight Control Data Concentrator
FCOM	Flight Crew Operating Manual

# DRAGONAIR A320/A321 MINIMUM EQUIPMENT LIST

# **HOW TO USE**

Continued from the previous page

Abbreviation	Term
FCU	Flight Control Unit
FD	Flight Director
FDIMU	Flight Data Interface and Management Unit
FDIU	Flight Data Interface Unit
FL	Flight Level
FMA	Flight Mode Annunciator
FMGC	Flight Management Guidance Computer
FMS	Flight Management System
FOB	Fuel on Board
FPEEPMS	Floor Proximity Emergency Escape Path Marking System
FPLN	Flight Plan
FQI	Fuel Quantity Indication
FQIC	Fuel Quantity Indication Computer
FSN	Fleet Serial Number
FU	Fuel Used
FWC	Flight Warning Computer
FWD	Forward

### G

Abbreviation	Term
GCU	Generator Control Unit
GEN	Generator
GLS	GNSS Landing System
GND	Ground
GNSS	Global Navigation Satellite System
GPCU	Ground Power Control Unit
GPS	Global Positioning System
GPU	Ground Power Unit
GPWS	Ground Proximity Warning System
GW	Gross Weight

### Н

Abbreviation	Term
HF	High Frequency
HK	Hong Kong
HKAR	To be completed
HKCAD	Hong Kong Civil Aviation Department
HKG	Hong Kong
HP	High Pressure
HUD	Head Up Display
HYD	Hydraulics



Ī

Abbreviation	Term
IAS	Indicated Airspeed
IDG	Integrated Drive Generator
IFE	In-Flight Entertainment
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IOC	To be completed
IP	Intermediate Pressure
IR	Inertial Reference
IRS	Inertial Reference System
ISA	International Standard Atmosphere
ISB	Inspection Service Bulletin
ISIS	Integrated Standby Instrument System

J

Abbreviation	Term
JAA	Joint Aviation Authorities

<u>K</u>

Abbreviation	Term
KA	To be completed

L

Abbreviation	Term
L/G	Landing Gear
LAF	Load Alleviation Function
LED	Light Emitting Diode
LEDU	List of Effective Documentary Units
LESS	List of Effective Sections/Subsections
LGCIU	Landing Gear Control Interface Unit
LH	Left Hand
LOM	List of Modifications
LP	Low Pressure
LVDT	Linear Variable Differential Transformer
LVR CLB	Lever Climb

### M

Abbreviation	Term
MAN	Manual
MCDU	Malfunction Control and Display Unit



Continued from the previous page

Abbreviation	Term
MCT	Maximum Continuous Thrust
MDA	Minimum Decision Altitude
MDDU	Multipurpose Disk Drive Unit
MEL	Minimum Equipment List
MES	Main Engine Start
MLS	Microwave Landing System
MMEL	Master Minimum Equipment List
MMI	Manual Magnetic Indicator
MMO	Maximum Operating Mach
MOD	Modification
MP	Modification Proposal
MSN	Manufacturer Serial Number
MTO	Maximum Take-Off
MTOW	Maximum Takeoff Weight

### N

Abbreviation	Term
NAV	Navigation
ND	Navigation Display
NDU	Navigation Display Unit
NWS	Nose Wheel Steering

### 0

Abbreviation	Term
OAT	Outside Air Temperature
OEB	Operations Engineering Bulletin
OEI	One Engine Inoperative
OP CLB	Open Climb

# <u>P</u>

Abbreviation	Term
P/N	Part Number
PA	Passenger Address
PADD	Performance ADD
PAX	Passenger
PBE	Portable Breathing Equipment
PCU	Power Control Unit
PDF	Portable Document Format
PF	Pilot Flying
PFD	Primary Flight Display



Continued from the previous page

Abbreviation	Term
PFDU	Primary Flight Display Unit
PHC	Probes Heat Computer
PM	Pilot Monitoring
PNF	Pilot Non Flying
PRAM	Prerecorded Announcement and Music Reproducer
PRV	Pressure Regulation Valve
PSL	Product Structure Level
PSU	Passenger Service Unit
PTP	Programming and Test Panel
PTU	Power Transfer Unit (Hydraulic)
PVI	Paravisual Indicator
PWR	Power

Q

Abbreviation	Term
QAR	Quick Access Recorder
QCCU	Quantity Calculation Control Unit
QNH	Sea Level Atmospheric Pressure
QRH	Quick Reference Handbook

R

Abbreviation	Term
RA	Radio Altitude
RAT	Ram Air Turbine
RH	Right Hand
RMI	Radio Magnetic Indicator
RMP	Radio Management Panel
RNP	Required Navigation Performance
RTO	Rejected Takeoff
RTOW	Rejected Takeoff Weight
RVR	Runway Visual Range
RVSM	Reduced Vertical Separation Minimum

<u>s</u>

Abbreviation	Term
SADD	Significant ADD
SAC	Single Annular Combustor
SAT	Static Air Temperature
SATCOM	Satellite Communication
SB	Service Bulletin



Continued from the previous page

Abbreviation	Term
SD	System Display
SDAC	System Data Acquisition Concentrator
SDCU	Smoke Detection Control Unit
SDF	Smoke Detection Function
SDU	System Display Unit
SEC	Flight Control Secondary Computer (FCSC)
SFCC	Slat/Flap Control Computer
SFCS	Slat/Flap Control System
SOH	Summary of Highlights
STBY	Standby

 $\underline{\textbf{T}}$ 

Abbreviation	Term
T/O	Takeoff
TAS	True Air Speed
TAT	Total Air Temperature
TAWS	Terrain Awareness and Warning System
TCA	Throttle Control Assy
TCAS	Traffic Alert and Collision Avoidance System
TCC	Turbine Case Cooling
TLA	Thrust Lever Angle
TLC	Takeoff and Landing Chart Computation Program
TM-A	Technical Manager-Airbus
TOC	Table of Contents
TOGA	Takeoff/Go Around
TOW	Takeoff Weight
TPIC	Tire Pressure Indicating Computer
TR	Transformer Rectifier Unit

U

Abbreviation	Term
UTC	Universal Coordinated Time

<u>v</u>

Abbreviation	Term
V1	Critical Engine Failure Speed
V2	Takeoff Safety Speed
VAPP	Approach Speed
VENT	Ventilation
VFE	Maximum Speed for each Flap Configuration



Continued from the previous page

Abbreviation	Term
VFR	Visual Flight Rules
VHF	Very High Frequency
VLE	Max Landing Gear Extended Speed
VMC	Visual Meteorological Conditions
VMCA	Minimum Control Speed in Flight
VMCG	Minimum Control Speed on Ground
VMO	Maximum Operating Speed
VMU	Minimum Unstick Speed
VOR	VHF Omnidirectional Range
VR	Rotation Speed
VS	Reference Stalling Speed
VSB	Vender Service Bulletin

### W

Abbreviation	Term
WBS	Weight and Balance System
WTB	Wing Tip Brake

# <u>X</u>

Abbreviation	Term
XML	Extensible Mark-up Language

# <u>Z</u>

Abbreviation	Term
ZFW	Zero Fuel Weight

# **MEL ENTRIES**





### **ME-PLP PRELIMINARY PAGES**

TABLE OF CONTENTS
SUMMARY OF HIGHLIGHTS

### **ME-21 Air Conditioning**

	AIH COND CTL 1(2)-A(B)	t
	AIR PACK 1(2) FAULT	C
	AIR PACK 1+2 FAULT	D
	<u>AIR</u> PACK 1(2) OFF	E
	<u>AIR</u> PACK 1(2) OVHT	F
	AIR PACK 1(2) REGUL FAULT	G
	CAB PR EXCESS CAB ALT	
	CAB PR EXCES RESIDUAL PR	
	CAB PR LDG ELEV FAULT	d
	CAB PR LO DIFF PR	K
	CAB PR OFV NOT OPEN	L
	CAB PR SAFETY VALVE OPEN	N
	CAB PR SYS 1(2) FAULT	N
	CAB PR SYS 1+2 FAULT	
	COND AFT CAB DUCT OVHT	
	COND AFT CRG ISOL VALVE	C
	COND CKPT DUCT OVHT	P
	COND FWD CAB DUCT OVHT	
	COND HOT AIR FAULT	T
	COND L+R CAB FAN FAULT	
	COND LAV+GALLEY FAN FAULT	V
	COND TRIM AIR SYS FAULT	W
	COND ZONE REGUL FAULT	X
	<u>VENT</u> AVNCS SYS FAULT	Y
	<u>VENT</u> BLOWER FAULT	Z
	<u>VENT</u> EXTRACT FAULT	AA
	<u>VENT</u> SKIN VALVE FAULT	AE
	A.A	
ME-2	2 Auto Flight	
	AUTO FLT A/THR LIMITED	
	AUTO FLT A/THR OFF	
	AUTO FLT AP OFF	
	AUTO FLT FAC 1 FAULT	
	AUTO FLT FAC 2 FAULT	
	AUTO FLT FAC 1+2 FAULT	
	AUTO FLT FCU 1(2) FAULT	G

AIR AFT CRG VENT FAULT.....



	AUTO FLT FCU 1+2 FAULT	. F
	AUTO FLT REAC W/S DET FAULT	
	AUTO FLT RUD TRIM 1(2) FAULT	,
	AUTO FLT RUD TRIM SYS	ł
	AUTO FLT RUD TRV LIM 1(2)	
	AUTO FLT RUD TRV LIM SYS	. 1
	AUTO FLT YAW DAMPER 1(2)	۱.
	AUTO FLT YAW DAMPER SYS	. (
	WINDSHEAR DET FAULT	. F
ME-23	Communications	
	COM ACARS FAULT	. /
	COM CIDS 1+2 FAULT	
	COM HF 1(2) DATA FAULT	
	COM HF 1(2) EMITTING	
	COM VHF 3 DATA FAULT	
	<u>COM</u> VHF 1(2)(3) EMITTING	I
NAT 04	Floridad Bosses	
IVIE-24	Electrical Power	
	C/B TRIPPED	
	ELEC AC BUS 1 FAULT	
	ELEC AC BUS 2 FAULT	
	ELEC AC ESS BUS ALTN	
	ELEC AC ESS BUS FAULT.	
	ELEC AC ESS BUS SHED.	
	ELEC APU GEN FAULT	
	ELEC APU GEN OVERLOAD.	
	ELEC BAT 1(2) FAULT	
	ELEC BAT 1(2) OFF	
	ELEC BOL 1(2) FAULT	
	ELEC DC BAT BUS FAULT.	
	ELEC DC BUS 1 FAULT	
	ELEC DC BUS 2 FAULT	
	ELEC DC BUS 1+2 FAULTELEC DC EMER CONFIG	
	ELEC DC ESS BUS FAULT	
	ELEC DC ESS BUS SHED	
	ELEC EMER CONFIG	
	ELEC EMER GEN 1 LINE OFF	
	ELEC ESS BUSSES ON BAT	
	ELEC ESS TR FAULT	
	ELEC GEN 1(2) FAULT	



**A320/A321** MINIMUM EQUIPMENT LIST

	ELEC GEN 1(2) OFF	. X
	ELEC GEN 1(2) OVERLOAD	Y
	ELEC IDG 1(2) DISCONNECTED	Z
	ELEC IDG 1(2) OIL LO PR	AΑ
	ELEC IDG 1(2) OIL OVHT	AΒ
	ELEC STATIC INV FAULT	AC
	ELEC TR 1(2) FAULT	AD
ME-20	6 Fire Protection	
	APU FIRE	
	APU FIRE DET FAULT	
	APU FIRE LOOP A(B) FAULT	
	AVIONICS SMOKE	
	CARGO SMOKE AFT BTL SQUIB FAULT	Е
	CARGO SMOKE FWD BTL SQUIB FAULT	F
	ENG 1(2) FIRE	. G
	ENG 1(2) FIRE DET FAULT	Н
	ENG 1(2) FIRE LOOP A FAULT	1
	ENG 1(2) FIRE LOOP B FAULT	J
	SMOKE AFT CARGO SMOKE	K
	SMOKE AFT CRG BTL 1 FAULT	L
	SMOKE AFT CRG BTL 2 FAULT	. M
	SMOKE AFT CRG DET FAULT	. N
	SMOKE FWD CARGO SMOKE	0
	SMOKE FWD CRG BTL 1 FAULT	Р
	SMOKE FWD CRG BTL 2 FAULT	. Q
	SMOKE FWD CRG DET FAULT	R
	SMOKE LAV+CRG DET FAULT	S
	SMOKE DET FAULT	T
	SMOKE LAVATORY DET FAULT	. U
	SMOKE LAVATORY SMOKE	٠. ٧
ME-2	7 Flight Controls	
	CONFIG L(R) SIDESTICK FAULT	
	CONFIG PITCH TRIM NOT IN T.O. RANGE	
	CONFIG RUD TRIM NOT IN T.O. RANGE	
	CONFIG SLATS(FLAPS) NOT IN T.O. CONFIG	
	CONFIG SPEED BRK NOT RETRACTED	
	F/CTL AIL SERVO FAULT	
	<u>F/CTL</u> ALTN LAW	
	F/CTL DIRECT LAW	
	F/CTL ELAC 1 FAULT	I



F/CTL ELAC 1 PITCH FAULT	
F/CTL ELAC 2 FAULT	k
F/CTL ELAC 2 PITCH FAULT	
F/CTL ELEV SERVO FAULT	N
F/CTL FCDC 1 FAULT	N
F/CTL FCDC 2 FAULT	C
F/CTL FCDC 1+2 FAULT	F
F/CTL FLAP ATTACH SENSOR	C
F/CTL FLAP LVR NOT ZERO	F
F/CTL FLAP SYS 1 FAULT	S
F/CTL FLAP SYS 2 FAULT	
F/CTL FLAP TIP BRK FAULT	U
F/CTL FLAPS(SLATS) FAULT	V
F/CTL FLAPS(SLATS) LOCKED	W
F/CTL GND SPLR FAULT	Χ
F/CTL GND SPLR 1+2(3+4) FAULT	Ү
<u>F/CTL</u> L(R) AIL FAULT	
<u>F/CTL</u> L(R) ELEV FAULT	
F/CTL L+R ELEV FAULT	
F/CTL L(R) SIDESTICK FAULT	
F/CTL SEC 1 FAULT	
F/CTL SEC 2 FAULT	
F/CTL SEC 3 FAULT	
F/CTL SIDESTICK PRIORITY	
F/CTL SLAT SYS 1 FAULT	
F/CTL SLAT SYS 2 FAULT	
F/CTL SLAT TIP BRK FAULT	
F/CTL SPD BRK DISAGREE	
F/CTL SPD BRK FAULT	
F/CTL SPD BRK STILL OUT	
F/CTL SPD BRK 2(3+4) FAULT	
F/CTL SPLR FAULT	
F/CTL STABILIZER JAM	AF
ME-28 Fuel	
FUEL ACT PUMP LO PR	
FUEL ACT UNUSABLE	
FUEL ACT XFR FAULT	C
FUEL APU LP VALVE FAULT	Ε
FUEL AUTO FEED FAULT	
FUEL AUTO TRANSFER FAULT	
FUEL CTR TK PUMP 1(2) LO PR	G



FUEL CTR TK PUMPS LO PR	H
FUEL CTR TK PUMPS OFF	
FUEL CTR TK XFR OFF	J
FUEL ENG 1(2) LP VALVE OPEN	K
<u>FUEL</u> FQI CH 1(2) FAULT	L
FUEL L(R) INNER(OUTER) TK HI TEMP	
FUEL L(R) WING TK HI TEMP	N
FUEL L(R) INNER(OUTER) TK LO TEMP	
FUEL L(R) WING TK LO TEMP	P
FUEL L(R) TK PUMP 1(2) LO PR	Q
FUEL L(R) TK PUMP 1+2 LO PR	R
FUEL L(R) WING TK LO LVL	S
FUEL L+R WING TK LO LVL	T
FUEL L(R) WING TK OVERFLOW	U
FUEL L(R) XFR VALVE CLOSED	V
FUEL L(R) XFR VALVE FAULT	W
FUEL L(R) XFR VALVE OPEN	X
FUEL X FEED VALVE FAULT	Υ
FUEL XFR VALVES FAULT	Z
ME-29 Hydraulic Power	
HYD B ELEC PUMP LO PR	
HYD B ELEC PUMP OVHT	B
HYD B RSVR LO AIR PR	C
HYD B RSVR LO LVL	
HYD B RSVR OVHT	E
HYD B SYS LO PR	F
HYD B+G SYS LO PR	G
HYD B+Y SYS LO PR	H
HYD G ENG 1 PUMP LO PR	
HYD G RSVR LO AIR PR	J
HYD G RSVR LO LVL	K
HYD G RSVR OVHT	L
HYD G SYS LO PR	M
HYD G+Y SYS LO PR	N
HYD PTU FAULT	O
HYD RAT FAULT	
HYD Y ELEC PUMP LO PR	Q



	HYD Y ELEC PUMP OVHT	R
	HYD Y ENG 2 PUMP LO PR	
	HYD Y RSVR LO AIR PR	T
	HYD Y RSVR LO LVL	U
	HYD Y RSVR OVHT	V
	HYD Y SYS LO PR	
/IE-3	30 Ice and Rain Protection	
	ANTI ICE ALL PITOT	A
	ANTI ICE CAPT(F/O)(STBY) AOA	B
	ANTI ICE CAPT(F/O)(STBY) L(R) STAT	C
	ANTI ICE CAPT(F/O)(STBY) PITOT	D
	ANTI ICE CAPT+F/O PITOT	E
	ANTI ICE CAPT+STBY PITOT	F
	ANTI ICE CAPT(F/O)(STBY) PROBES	G
	ANTI ICE CAPT(F/O) TAT	
	ANTI ICE ENG 1(2) VALVE CLSD	
	ANTI ICE ENG 1(2) VALVE OPEN	J
	ANTI ICE F/O+STBY PITOT	
	ANTI ICE L(R) WINDOW	
	ANTI ICE L(R) WINDSHIELD	
	ANTI ICE L+R WINDSHIELD	
	WING ANTI ICE L(R) HI PR	O
	WING ANTI ICE L(R) VALVE OPEN	
	WING ANTI ICE OPEN ON GND	
	WING ANTI ICE SYS FAULT	
/IE-3	31 Indicating/Recording Systems	
	EIS DMC 1 FAULT	A
	EIS DMC 2 FAULT	B
	EIS DMC 3 FAULT	C
	FWS FWC 1 FAULT	D
	FWS FWC 2 FAULT	E
	FWS FWC 1+2 FAULT	F
	FWS OEB/FWC DISCREPANCY	G
	FWS SDAC 1 FAULT	Н
	FWS SDAC 2 FAULT	
	FWS SDAC 1+2 FAULT	J
	RECORDER DFDR FAULT	K
	RECORDER SVS FALLET	1



**ME-32 Landing Gear** 

	Brakes altn brk fault	<i>F</i>
	BRAKES ALTN L(R) RELEASED	E
	BRAKES A/SKID N/WS FAULT	C
	BRAKES A/SKID N/WS OFF	D
	BRAKES AUTO BRK FAULT	E
	BRAKES BRK Y ACCU LO PR	F
	BRAKES SYS 1 FAULT	G
	BRAKES SYS 2 FAULT	F
	BRAKES HOT	
	BRAKES NORM BRK FAULT	
	BRAKES NORM+ALT FAULT	k
	BRAKES PARK BRK FAULT	l
	Brakes Park Brk LO Pr	N
	BRAKES PARK BRK ON	۸
	BRAKES RELEASED	C
	BRAKES-NWS MINOR FAULT	F
	CONFIG PARK BRK ON	C
	L/G DOORS NOT CLOSED	F
	<u>L/G</u> GEAR NOT DOWN	S
	<u>L/G</u> GEAR NOT DOWNLOCKED	1
	<u>L/G</u> GEAR NOT UPLOCKED	ل
	<u>L/G</u> GEAR UPLOCK FAULT	
	<u>L/G</u> LGCIU 1 FAULT	V
	L/G LGCIU 2 FAULT	
	L/G SHOCK ABSORBER FAULT	
	<u>L/G</u> SYS DISAGREE	
	WHEEL HYD SEL FAULT	
	WHEEL NW STRG FAULT	AE
NAT 0	M Novimetten	
IVIE-3	34 Navigation	
	NAV ADR DISAGREE	
	NAV ADR 1 FAULT	
	NAV ADR 2 FAULT	
	NAV ADR 3 FAULT	
	NAV ADR 1+2(1+3)(2+3) FAULT	
	NAV ADR 1+2+3 FAULT	
	NAV ATOMORPH 400/4 O FAULT	
	NAV ATC/XPDR 1(2)(1+2) FAULT	
	NAV ATT PROPERTY.	
	NAV CART(SO) OTRIVI AGA FAULT	
	NAV CAPT(F/O)(STBY) AOA FAULT	r



	NAV FM/GPS POS DISAGREE	L
	NAV GPS 1(2) FAULT	N
	NAV GPWS FAULT	۸
	NAV GPWS TERR DET FAULT	C
	NAV HDG DISCREPANCY	F
	NAV IAS DISCREPANCY	C
	<u>NAV</u> ILS 1(2)(1+2) FAULT	F
	NAV IR DISAGREE	8
	NAV IR NOT ALIGNED	1
	<u>NAV</u> IR 1 FAULT	ل
	<u>NAV</u> IR 2 FAULT	٧
	NAV IR 3 FAULT	W
	<u>NAV</u> IR 1+2(1+3)(2+3) FAULT	×
	NAV PRED W/S DET FAULT	Y
	NAV RA DEGRADED	Z
	<u>NAV</u> RA 1(2) FAULT	.AA
	NAV TCAS FAULT	.AE
	NAV TCAS STANDBY	AC
	OVERSPEED	ΑC
IE-36	Pneumatic	
	AIR APU BLEED FAULT	<i>P</i>
	AIR APU BLEED LEAK	E
	AIR BLEED 1(2) OFF	C
	AIR ENG HP VALVE FAULT	C
	AIR ENG 1(2) BLEED ABNORM PR	E
	AIR ENG 1(2) BLEED FAULT	F
	AIR ENG 1(2) BLEED LEAK	G
	AIR ENG 1(2)(1+2) BLEED LO TEMP	⊦
	AIR ENG 1(2) BLEED NOT CLSD	
	AIR ENG 1(2) LEAK DET FAULT	ر
	AIR L(R) WING LEAK	K
	AIR L(R) WING LEAK DET FAULT	L
	AIR X BLEED FAULT	N
	BLEED MONITORING FAULT	٨
	BLEED MONIT SYS 1(2) FAULT	C
IE-46	Information Systems	
	DATA LINK ATC FAULT	A
	DATA LINK ATSU FAULT	Е
	DATA LINK COMPANY FAULT	C



ME-49	<b>Airborne</b>	<b>Auxiliary</b>	Power

APU AUTO(EMER) SHUT DOWN	A
ME-52 Doors	
DOOR AFT(BULK)(FWD) CARGO	Δ
DOOR L(R) AFT AVIONICS	
DOOR L(R) AFT CABIN	
DOOR L(R) AFT EMER EXIT	
DOOR L(R) FWD AVIONICS	
DOOR L(R) FWD CABIN	
DOOR L(R) FWD EMER EXIT	
ME-70 Engine	
ENG DUAL FAILURE	Δ
ENG THR LEVERS NOT SET	
ENG REV SET	
ENG THRUST LOCKED	D
ENG TYPE DISAGREE	E
ENG VIB SYS FAULT	
ENG 1(2) A/C FADEC SUPPLY	G
ENG 1(2) AIR EXCHANGR FAULT AIR VALVE CLOSED	H
ENG 1(2) AIR EXCHANGR FAULT AIR VALVE OPEN	
ENG 1(2) BEARING 4 OIL SYS HI PRESS	
ENG 1(2) BEARING 4 OIL SYS SCAVENGE VALVE FAULT	
ENG 1(2) COMPRESSOR VANE	L
ENG 1(2) EGT(EPR)(FF)(N1)(N2) DISCREPANCY	
ENG 1(2) EGT EXCEEDED DURING AIR START	
ENG 1(2) EIU FAULT	
ENG 1(2) EPR MODE FAULT	
ENG 1(2) FADEC A(B) FAULT	
ENG 1(2) FADEC ALTERNATOR	
ENG 1(2) FADEC FAULT	
ENG 1(2) FADEC OVHT	
ENG 1(2) FADEC PLUG FAULT	
ENG 1(2) FAIL	
ENG 1(2) FUEL CTL FAULT	
ENG 1(2) FUEL FILTER CLOG	
ENG 1(2) FUEL HEAT SYS	
ENG 1(2) FUEL VALVE FAULT	
ENG 1(2) FON A(2) FAULT	
ENG 1(2) IGN A(B) FAULT	
ENG 1(2) IGN A+B FAULT	AC



ENG 1(2) N1(N2)(EGT) OVER LIMIT	AD
ENG 1(2) OIL FILTER CLOG	AE
ENG 1(2) OIL HI TEMP	AF
ENG 1(2) OIL LO PR	
ENG 1(2) OIL LO TEMP	AH
ENG 1(2) ONE TLA FAULT	Al
ENG 1(2) OVSPD PROT FAULT	
ENG 1(2) REV ISOL FAULT	AK
ENG 1(2) REV PRESSURIZED	AL
ENG 1(2) REV SWITCH FAULT	AM
ENG 1(2) REVERSE UNLOCKED	AN
ENG 1(2) REVERSER FAULT	AO
ENG 1(2) SENSOR FAULT	AP
ENG 1(2) SHUT DOWN	AQ
ENG 1(2) STALL	AR
ENG 1(2) START FAULT	
ENG 1(2) START VALVE FAULT	AT
ENG 1(2) SYSTEM FAULT	
ENG 1(2) THR LEVER ABV IDLE	AV
ENG 1(2) THR LEVER DISAGREE	AW
ENG 1(2) THR LEVER FAULT	



### **MEL ENTRIES PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS**

Localization	Toc	ID	Reason
Title	Index		
ME-21 AIR COND CTL 1(2)-A(B)	В	1	Effectivity update: The information now also applies to MSN 5429.
ME-21 AIR PACK 1(2) REGUL FAULT	G	2	Effectivity update: The information now also applies to MSN 5429.
ME-21	T	3	Effectivity update: The information now also applies to MSN 5429.
COND HOT AIR FAULT	'	٥	
ME-21 COND TRIM AIR SYS FAULT	W	4	Effectivity update: The information now also applies to MSN 5429.
ME-26 APU FIRE DET FAULT	В	1	18 Sep 2012 : Modification of content of the element 00007939.0001001
ME-26 APU FIRE LOOP A(B) FAULT	С	2	18 Sep 2012 : Modification of content of the element 00007940.0001001
ME-26 SMOKE AFT CRG BTL 1 FAULT	L	3	Effectivity update: The information now also applies to MSN 5429.
ME-26 SMOKE AFT CRG BTL 2 FAULT	М	4	Effectivity update: The information now also applies to MSN 5429.
ME-26 SMOKE FWD CRG BTL 1 FAULT	Р	5	Effectivity update: The information now also applies to MSN 5429.
ME-26 SMOKE FWD CRG BTL 2 FAULT	Q	6	Effectivity update: The information now also applies to MSN 5429.
ME-26 SMOKE DET FAULT	Т	7	Effectivity update: The information now also applies to MSN 5429.
ME-28 FUEL AUTO FEED FAULT	E	1	Effectivity update: The information now also applies to MSN 5429.
ME-28 FUEL CTR TK PUMP 1(2) LO PR	G	2	Effectivity update: The information now also applies to MSN 5429.
ME-28 FUEL CTR TK PUMPS LO PR	Н	3	Effectivity update: The information now also applies to MSN 5429.
ME-28 FUEL CTR TK PUMPS OFF	I	4	Effectivity update: The information now also applies to MSN 5429.
ME-28 FUEL L(R) INNER(OUTER) TK HI TEMP	М	5	Effectivity update: The information now also applies to MSN 5429.
ME-28 FUEL L(R) INNER(OUTER) TK LO TEMP	0	6	Effectivity update: The information now also applies to MSN 5429.
ME-28 FUEL L(R) XFR VALVE CLOSED	V	7	Effectivity update: The information now also applies to MSN 5429.
ME-28 FUEL L(R) XFR VALVE OPEN	Х	8	Effectivity update: The information now also applies to MSN 5429.
ME-29 HYD B RSVR LO AIR PR	С	1	Effectivity update: The information now also applies to MSN 5429.

HDA A320/A321 FLEET ME-PLP-SOH P 1/2



### **MEL ENTRIES** PRELIMINARY PAGES - SUMMARY OF HIGHLIGHTS

Localization	Toc	ID	Reason
Title	Index	יי	nedSUII
ME-32	A	1	Effectivity update: The information now also applies to MSN 5429.
BRAKES ALTN BRK FAULT	_ ^	'	Lincollytty update. The information flow also applies to MSN 3429.
ME-32	В	2	Effectivity update: The information now also applies to MSN 5429.
BRAKES ALTN L(R) RELEASED		-	
ME-32	E	3	Effectivity update: The information now also applies to MSN 5429.
BRAKES AUTO BRK FAULT			
ME-32	F	4	Effectivity update: The information now also applies to MSN 5429.
BRAKES BRK Y ACCU LO PR			
ME-32	J	5	Effectivity update: The information now also applies to MSN 5429.
BRAKES NORM BRK FAULT			
ME-32	K	6	Effectivity update: The information now also applies to MSN 5429.
BRAKES NORM+ALT FAULT			
ME-32	L	7	Effectivity update: The information now also applies to MSN 5429.
BRAKES PARK BRK FAULT		L_	
ME-32	М	8	Effectivity update: The information now also applies to MSN 5429.
BRAKES PARK BRK LO PR		_	Land Company Market Company Company Company
ME-32 BRAKES PARK BRK LO PR	М	9	18 Sep 2012 : Modification of content of the element 00013832.0003001
ME-32	0	10	Effectivity update: The information now also applies to MSN 5429.
BRAKES RELEASED		10	Effectivity update: The information now also applies to MSN 5429.
ME-32	P	11	Effectivity update: The information now also applies to MSN 5429.
BRAKES-N/WS MINOR FAULT	F	''	Lineouvity appeare. The information flow also applies to MSN 3429.
ME-34	H	1	Effectivity update: The information now also applies to MSN 5429.
NAV ATC/XPDR 1(2)(1+2) FAULT	''	'	Encourty appears. The information now also applies to More 9429.
ME-34		2	Effectivity update: The information now also applies to MSN 5429.
NAV ATC/XPDR STBY	·	-	applied to more and applied to more ap
ME-34	K	3	Effectivity update: The information now also applies to MSN 5429.
NAV CAPT(F/O)(STBY) AOA FAULT			''
ME-36	J	1	Effectivity update: The information now also applies to MSN 5429.
AIR ENG 1(2) LEAK DET FAULT			
ME-36	0	2	Effectivity update: The information now also applies to MSN 5429.
BLEED MONIT SYS 1(2) FAULT			
ME-52	D	1	Effectivity update: The information now also applies to MSN 5429.
DOOR L(R) AFT EMER EXIT			
ME-52	G	2	Effectivity update: The information now also applies to MSN 5429.
DOOR L(R) FWD EMER EXIT			

HDA A320/A321 FLEET ME-PLP-SOH P 2/2 MEL 19 JUL 12



### **ECAM Alert: AIR AFT CRG VENT FAULT**

Ident.: ME-21-00007457.0001001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-28-03 AFT Cargo
	Extraction Fan

### ECAM Alert: AIR COND CTL 1(2)-A(B)

Ident.: ME-21-00007680.0001001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-63-04 Air Conditioning
	System Controller Channel (COND CTL
	1(2)-A(B))

### ECAM Alert: AIR PACK 1(2) FAULT

Ident.: ME-21-00007683.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-52-01 Air Conditioning
	Pack

### ECAM Alert: AIR PACK 1+2 FAULT

Ident.: ME-21-00008959.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to FCOM/PRO-SPO-20 Flight
	Without Cabin Pressurization (FCOM
	2.04.20)



### ECAM Alert: AIR PACK 1(2) OFF

Ident.: ME-21-00007685.0001001 / 11 MAR 10

Applicable to: ALL

Alf	RCRAFT STATUS	CONDITION OF DISPATCH
NIL		Refer to Item 21-52-01 Air Conditioning
		Pack

### ECAM Alert: AIR PACK 1(2) OVHT

Ident.: ME-21-00007684.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-52-01 Air Conditioning
	Pack

### ECAM Alert: AIR PACK 1(2) REGUL FAULT

Ident.: ME-21-00007687.0001001 / 17 SEP 10 Applicable to: B-HSD, B-HSE, B-HSG, B-HTF

AIRCRAFT STATUS	CONDITION OF DISPATCH
If pack ram air inlet flap is affected	Refer to Item 21-52-02 Air Conditioning Pack Ram Air Inlet Flap
If pack ram air outlet flap is affected	Refer to Item 21-52-03 Air Conditioning Pack Ram Air Outlet Flap
If pack controller, pack anti-ice valve or water exchanger temperature sensor are affected	Refer to Item 21-61-02 Pack Controller Primary Channel
If turbine bypass valve is affected	Refer to Item 21-61-01 Pack Turbine Bypass Valve

# ECAM Alert: AIR PACK 1(2) REGUL FAULT

Ident.: ME-21-00007687.0003001 / 17 SEP 10

Applicable to: B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
If pack ram air inlet flap is affected	Refer to Item 21-52-02 Air Conditioning
	Pack Ram Air Inlet Flap



Continued from the previous page

AIRCRAFT STATUS	CONDITION OF DISPATCH
If pack controller, pack anti-ice valve or water exchanger	Refer to Item 21-61-02 Pack Controller
temperature sensor are affected	Primary Channel
If turbine bypass valve is affected	Refer to Item 21-61-01 Pack Turbine
	Bypass Valve

# ECAM Alert: AIR PACK 1(2) REGUL FAULT

Ident.: ME-21-00007687.0002001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
If pack outlet temperature is affected	Refer to Item 21-07-01-01 Pack Outlet
	Temperature Indication on the BLEED
	SD page
If pack compressor outlet temperature is affected	Refer to Item 21-07-01-03 Pack
	Compressor Outlet Temperature
	Indication on the BLEED SD page
If pack flow sensor is affected	Refer to Item 21-51-03 Pack Flow
	Sensor
If pack flow control valve is affected	Refer to Item 21-52-01 Air Conditioning
	Pack
If pack ram air inlet is affected	Refer to Item 21-52-02 Air Conditioning
	Pack Ram Air Inlet Flap
If turbine bypass valve is affected	Refer to Item 21-61-01 Pack Turbine
	Bypass Valve

### ECAM Alert: CAB PR EXCESS CAB ALT

Ident.: ME-21-00007713.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

HDA A320/A321 FLEET ME-21 P 3/10
MEL ← G to H 19 JUL 12



### ECAM Alert: CAB PR EXCES RESIDUAL PR

Ident.: ME-21-00007714.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Apply ECAM procedure

### **ECAM Alert: CAB PR LDG ELEV FAULT**

Ident.: ME-21-00007715.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-31-04 Landing
	Elevation Selection AUTO Function

### ECAM Alert: CAB PR LO DIFF PR

Ident.: ME-21-00007716.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

### **ECAM Alert: CAB PR OFV NOT OPEN**

Ident.: ME-21-00007717.0002001 / 04 OCT 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### **ECAM Alert: CAB PR SAFETY VALVE OPEN**

Ident.: ME-21-00007718.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to FCOM/PRO-SPO-20-FLIGHT
	WITHOUT CABIN PRESSURIZATION
	(FCOM 2.04.20)



Continued from the previous page

AIRCRAFT STATUS	CONDITION OF DISPATCH
False alert	Refer to Item 21-09-03 CAB PR SAFETY
	VALVE OPEN Alert

# ECAM Alert: CAB PR SYS 1(2) FAULT

Ident.: ME-21-00007719.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT ST	ATUS	CONDITION OF DISPATCH
NIL		Refer to Item 21-31-01 Automatic Cabin Pressure Control System (CPC, Outflow
		Valve AUTO Channel)

### ECAM Alert: CAB PR SYS 1+2 FAULT

Ident.: ME-21-00007720.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to FCOM/PRO-SPO-20 Flight
	Without Cabin Pressurization (FCOM
	2.04.20)

### ECAM Alert: COND AFT CAB DUCT OVHT

Ident.: ME-21-00007703.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-63-02 Cockpit and
	Cabin Trim Air Valve



### ECAM Alert: COND AFT CRG ISOL VALVE

Ident.: ME-21-00007692.0001001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-28-04 AFT Cargo
	Isolation Valve

### **ECAM Alert: COND CKPT DUCT OVHT**

Ident.: ME-21-00007697.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-63-02 Cockpit and
	Cabin Trim Air Valve

### ECAM Alert: COND FWD CAB DUCT OVHT

Ident.: ME-21-00007698.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-63-02 Cockpit and
	Cabin Trim Air Valve

### **ECAM Alert: COND HOT AIR FAULT**

Ident.: ME-21-00007707.0001001 / 11 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the COND TRIM AIR SYS FAULT alert is not	Refer to Item 21-63-03 Hot Air Pressure
displayed on the EWD .	Regulating Valve
If the COND TRIM AIR SYS FAULT alert is displayed on	Refer to Item 21-63-02 Cockpit and
the EWD.	Cabin Trim Air Valve



### **ECAM Alert: COND HOT AIR FAULT**

Ident.: ME-21-00007707.0003001 / 19 JUL 12

3 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-63-03 Hot Air Pressure
	Regulating Valve

### ECAM Alert: COND L+R CAB FAN FAULT

Ident.: ME-21-00007708.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### **ECAM Alert: COND LAV+GALLEY FAN FAULT**

Ident.: ME-21-00007709.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 21-23-01 Lavatory and
	Galley Extraction Fan

### **ECAM Alert: COND TRIM AIR SYS FAULT**

Ident.: ME-21-00007710.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the trim air valves are closed	Not related to MEL
If associated with the AFT CAB TRIM VALVE subtitle	Refer to Item 21-63-02 Cockpit and Cabin Trim Air Valve
If associated with the FWD CAB TRIM VALVE subtitle	Refer to Item 21-63-02 Cockpit and Cabin Trim Air Valve
If associated with the CKPT TRIM VALVE subtitle	Refer to Item 21-63-02 Cockpit and Cabin Trim Air Valve



Continued from the previous page

AIRCRAFT STATUS	CONDITION OF DISPATCH
If associated with the TRIM AIR HI PR subtitle	Refer to Item 21-63-03 Hot Air Pressure
	Regulating Valve

## **ECAM Alert: COND TRIM AIR SYS FAULT**

Ident.: ME-21-00007710.0003001 / 19 JUL 12

4 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the trim air valves are closed	Not related to MEL
If associated with the AFT CAB TRIM VALVE subtitle	Refer to Item 21-63-02 Cockpit and Cabin Trim Air Valve
If associated with the FWD CAB TRIM VALVE subtitle	Refer to Item 21-63-02 Cockpit and Cabin Trim Air Valve
If associated with the CKPT TRIM VALVE subtitle	Refer to Item 21-63-02 Cockpit and Cabin Trim Air Valve
If associated with the TRIM AIR HI PR subtitle	Refer to Item 21-63-02 Cockpit and Cabin Trim Air Valve

### **ECAM Alert: COND ZONE REGUL FAULT**

Ident.: ME-21-00007711.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the CAB ZONE AT FIXED TEMP STATUS info is	Refer to Item 21-63-01A Zone Controller
displayed on the STATUS SD page.	Channel
If the PACKS AT FIXED TEMP STATUS info is	Refer to Item 21-63-01C Zone Controller
displayed on the STATUS SD page.	Channel



# MEL ENTRIES 21 - AIR CONDITIONING

# ECAM Alert: VENT AVNCS SYS FAULT

Ident.: ME-21-00007721.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the VENT SKIN VALVE FAULT alert is displayed on	Refer to Item 21-26-04 Avionics Skin Air
the EWD due to the Avionics Skin Air Outlet valve.	Outlet Valve
If the VENT SKIN VALVE FAULT alert is displayed on	Refer to Item 21-26-05 Avionics Skin Air
the EWD due to the Avionics Skin Air Inlet valve.	Inlet Valve
NIL	Refer to Item 21-26-03 Avionics Skin
	Exchanger Inlet Bypass Valve
	or
	Refer to Item 21-26-08 Avionics Air
	Conditioning Inlet Valve
	or
	Refer to Item 21-26-06 Avionics Skin
	Exchanger Isolation Valve
	or
	Refer to Item 21-26-10 Avionics
	Equipment Ventilation Computer (AEVC)

# **ECAM Alert: VENT BLOWER FAULT**

Ident.: ME-21-00007722.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to Item 21-26-01 Avionics Blower Fan
False alert	Refer to Item 21-09-01 VENT BLOWER FAULT Alert



# MEL ENTRIES 21 - AIR CONDITIONING

# ECAM Alert: VENT EXTRACT FAULT

Ident.: ME-21-00007723.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to Item 21-26-02 Avionics Extract
	Fan
False alert	Refer to Item 21-09-02 VENT EXTRACT
	FAULT Alert

# ECAM Alert: VENT SKIN VALVE FAULT

Ident.: ME-21-00007725.0001001 / 29 NOV 11

AIRCRAFT STATUS	CONDITION OF DISPATCH
Outlet valve determined faulty on the <u>CAB PRESS</u> SD	Refer to Item 21-26-04 Avionics Skin Air
page	Outlet Valve
Inlet valve determined faulty on the <u>CAB PRESS</u> SD	Refer to Item 21-26-05 Avionics Skin Air
page	Inlet Valve



# **ECAM Alert: AUTO FLT A/THR LIMITED**

Ident.: ME-22-00007837.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

#### **ECAM Alert: AUTO FLT A/THR OFF**

Ident.: ME-22-00007838.0001001 / 18 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to Item 22-30-01 Autothrust
	(A/THR)
False alert	Refer to Item 22-30-03 Autothrust
	Disengagement Warning

#### **ECAM Alert: AUTO FLT AP OFF**

Ident.: ME-22-00007840.0001001 / 18 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to Item 22-10-01 Autopilot (AP)
False alert	Refer to Item 22-10-06 AP
	Disengagement Warning

## ECAM Alert: AUTO FLT FAC 1 FAULT

Ident.: ME-22-00007841.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 22-60-01 FAC 1



## ECAM Alert: AUTO FLT FAC 2 FAULT

Ident.: ME-22-00007842.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 22-60-02 FAC 2

#### ECAM Alert: AUTO FLT FAC 1+2 FAULT

Ident.: ME-22-00007843.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: AUTO FLT FCU 1(2) FAULT

Ident.: ME-22-00007844.0001001 / 11 MAR 10

Applicable to: ALL

	AIRCRAFT STATUS	CONDITION OF DISPATCH
NI	IL	Refer to Item 22-81-03-01 FCU Channel

## ECAM Alert: AUTO FLT FCU 1+2 FAULT

Ident.: ME-22-00007847.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## **ECAM Alert: AUTO FLT REAC W/S DET FAULT**

Ident.: ME-22-00007849.0001001 / 29 NOV 11

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 22-60-03 Reactive
	Windshear Detection Function



## ECAM Alert: AUTO FLT RUD TRIM 1(2) FAULT

Ident.: ME-22-00007855.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-22-01 Rudder Trim
	System

## **ECAM Alert: AUTO FLT RUD TRIM SYS**

Ident.: ME-22-00007856.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: AUTO FLT RUD TRV LIM 1(2)

Ident.: ME-22-00007857.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-23-01 Rudder Travel
	Limiter System (Including Rudder and
	Pedals Travel Limiter Units)

## **ECAM Alert: AUTO FLT RUD TRV LIM SYS**

Ident.: ME-22-00007858.0001001 / 11 MAR 10

	AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL		NO DISPATCH



## **ECAM Alert: AUTO FLT YAW DAMPER 1(2)**

Ident.: ME-22-00007859.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 22-60-04 Yaw Damper
	System

## **ECAM Alert: AUTO FLT YAW DAMPER SYS**

Ident.: ME-22-00007860.0001001 / 11 MAR 10

Applicable to: ALL

	AIRCRAFT STATUS	CONDITION OF DISPATCH
ı	NIL	NO DISPATCH

## **ECAM Alert: WINDSHEAR DET FAULT**

Ident.: ME-22-00007861.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 22-60-03 Reactive
	Windshear Detection Function



# MEL ENTRIES 23 - COMMUNICATIONS

## **ECAM Alert: COM ACARS FAULT**

Ident.: ME-23-00007862.0002001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 46-21-01 Air Traffic Service
	Unit (ATSU)

## ECAM Alert: COM CIDS 1+2 FAULT

Ident.: ME-23-00007864.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: COM HF 1(2) DATA FAULT

Ident.: ME-23-00007867.0004001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 23-10-01 HF System

## ECAM Alert: COM HF 1(2) EMITTING

Ident.: ME-23-00007865.0002001 / 29 NOV 11

AIRCRAFT STATUS	CONDITION OF DISPATCH
If hand microphone selector is jammed in the transmitting position	Refer to Item 23-51-03 Hand Microphone
If sidestick PTT sw is jammed in the transmitting position	Refer to Item 23-51-06 Sidestick PTT sw
If a transmission Key on one ACP is jammed in the transmitting position	Refer to Item 23-52-05 ACP Transmission Key
False alert	Refer to Item 23-09-01 COM HF 1(2) EMITTING Alert



# MEL ENTRIES 23 - COMMUNICATIONS

# ECAM Alert: COM VHF 3 DATA FAULT

Ident.: ME-23-00007872.0004001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 23-10-02 VHF System

# ECAM Alert: COM VHF 1(2)(3) EMITTING

Ident.: ME-23-00007871.0001001 / 29 NOV 11

AIRCRAFT STATUS	CONDITION OF DISPATCH
If hand microphone selector is jammed in the transmitting position	Refer to Item 23-51-03 Hand Microphone
If sidestick PTT sw is jammed in the transmitting position	Refer to Item 23-51-06 Sidestick PTT sw
If a transmission Key on one ACP is jammed in the transmitting position	Refer to Item 23-52-05 ACP Transmission Key
False alert	Refer to Item 23-09-02 COM VHF 1(2)(3) EMITTING Alert



## ECAM Alert: C/B TRIPPED

Ident.: ME-24-00007881.0001001 / 18 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to affected systems
False alert	Refer to Item 24-09-02 C/B TRIPPED Alert

#### **ECAM Alert: ELEC AC BUS 1 FAULT**

Ident.: ME-24-00007873.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ELEC AC BUS 2 FAULT

Ident.: ME-24-00007874.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### **ECAM Alert: ELEC AC ESS BUS ALTN**

Ident.: ME-24-00010320.0003001 / 04 APR 12

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ELEC AC ESS BUS FAULT

Ident.: ME-24-00007875.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



# ECAM Alert: ELEC AC ESS BUS SHED

Ident.: ME-24-00007876.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 24-09-01 ELEC AC ESS BUS SHED Alert

## ECAM Alert: ELEC APU GEN FAULT

Ident.: ME-24-00007877.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
	Refer to Item 24-23-01 AC Auxiliary Generation (APU Generator, GCU, Line
	Contactor)

## ECAM Alert: ELEC APU GEN OVERLOAD

Ident.: ME-24-00013870.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-26-01 Galley Automatic
	Load Shed System

# ECAM Alert: ELEC BAT 1(2) FAULT

Ident.: ME-24-00007878.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## ECAM Alert: ELEC BAT 1(2) OFF

Ident.: ME-24-00007879.0001001 / 11 MAR 10

Applicable to: ALL

ſ	AIRCRAFT STATUS	CONDITION OF DISPATCH
ſ	NIL	Not related to MEL

# ECAM Alert: ELEC BCL 1(2) FAULT

Ident.: ME-24-00007880.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-38-02 Battery Charger
	Limiter (BCL)

## ECAM Alert: ELEC DC BAT BUS FAULT

Ident.: ME-24-00007883.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### **ECAM Alert: ELEC DC BUS 1 FAULT**

Ident.: ME-24-00007886.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ELEC DC BUS 2 FAULT

Ident.: ME-24-00007887.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



# ECAM Alert: ELEC DC BUS 1+2 FAULT

Ident.: ME-24-00007884.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### **ECAM Alert: ELEC DC EMER CONFIG**

Ident.: ME-24-00007888.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: ELEC DC ESS BUS FAULT

Ident.: ME-24-00007889.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ELEC DC ESS BUS SHED

Ident.: ME-24-00007891.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## **ECAM Alert: ELEC EMER CONFIG**

Ident.: ME-24-00007892.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## **ECAM Alert: ELEC EMER GEN 1 LINE OFF**

Ident.: ME-24-00007894.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

#### ECAM Alert: ELEC ESS BUSSES ON BAT

Ident.: ME-24-00007895.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: ELEC ESS TR FAULT

Ident.: ME-24-00007904.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-34-01 DC Emergency
	Generation (ESS TR)

#### ECAM Alert: ELEC GEN 1(2) FAULT

Ident.: ME-24-00007905.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-22-01 AC Main
	Generation (IDG, GCU, Line Contactor)

## ECAM Alert: ELEC GEN 1(2) OFF

Ident.: ME-24-00007906.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL



## ECAM Alert: ELEC GEN 1(2) OVERLOAD

Ident.: ME-24-00007907.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-26-01 Galley Automatic
	Load Shed System

# ECAM Alert: ELEC IDG 1(2) DISCONNECTED

Ident.: ME-24-00010319.0001001 / 04 APR 12

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-22-01 AC Main
	Generation (IDG, GCU, Line Contactor)

# ECAM Alert: ELEC IDG 1(2) OIL LO PR

Ident.: ME-24-00007908.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-22-01 AC Main
	Generation (IDG, GCU, Line Contactor)

# ECAM Alert: ELEC IDG 1(2) OIL OVHT

Ident.: ME-24-00007909.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-22-01 AC Main
	Generation (IDG, GCU, Line Contactor)



# ECAM Alert: ELEC STATIC INV FAULT

Ident.: ME-24-00007910.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: ELEC TR 1(2) FAULT

Ident.: ME-24-00007911.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 24-32-01 DC Main
	Generation (TR 1, TR 2)



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MEL 04 APR 12



# ECAM Alert: APU FIRE

Ident.: ME-26-00007941.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 49-10-01 Power Plant (APU)

## **ECAM Alert: APU FIRE DET FAULT**

Ident.: ME-26-00007939.0001001 / 19 JUL 12

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 26-13-01 APU Fire
	Detection Loop

# ECAM Alert: APU FIRE LOOP A(B) FAULT

Ident.: ME-26-00007940.0001001 / 19 JUL 12

Applicable to: ALL

2

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 26-13-01 APU Fire
	Detection Loop

## **ECAM Alert: AVIONICS SMOKE**

Ident.: ME-26-00007920.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 26-15-01 Avionics Smoke Detection System



# ECAM Alert: CARGO SMOKE AFT BTL SQUIB FAULT

Ident.: ME-26-00007932.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 26-23-02 Squib of the
	Cargo Bottle 1

#### ECAM Alert: CARGO SMOKE AFT BTL SQUIB FAULT

Ident.: ME-26-00007932.0009001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 26-23-02 Squib of the
	Cargo Bottle 1
	or
	Refer to Item 26-23-03 Squib of the
	Cargo Bottle 2

#### ECAM Alert: CARGO SMOKE FWD BTL SQUIB FAULT

Ident.: ME-26-00007933.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

	AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL		Refer to Item 26-23-02 Squib of the
		Cargo Bottle 1



## ECAM Alert: CARGO SMOKE FWD BTL SQUIB FAULT

Ident.: ME-26-00007933.0010001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 26-23-02 Squib of the
	Cargo Bottle 1
	or
	Refer to Item 26-23-03 Squib of the
	Cargo Bottle 2

## ECAM Alert: ENG 1(2) FIRE

Ident.: ME-26-00007938.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: ENG 1(2) FIRE DET FAULT

Ident.: ME-26-00007935.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) FIRE LOOP A FAULT

Ident.: ME-26-00007936.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
If engine 1 is affected	Refer to Item 26-12-01 Engine Fire
	Detection Loop A on the Engine 1
If engine 2 is affected	Refer to Item 26-12-02 Engine Fire
	Detection Loop A on the Engine 2



## ECAM Alert: ENG 1(2) FIRE LOOP B FAULT

Ident.: ME-26-00007937.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
If engine 1 is affected	Refer to Item 26-12-03 Engine Fire
	Detection Loop B on the Engine 1
If engine 2 is affected	Refer to Item 26-12-04 Engine Fire
	Detection Loop B on the Engine 2

## ECAM Alert: SMOKE AFT CARGO SMOKE

Ident.: ME-26-00007914.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: SMOKE AFT CRG BTL 1 FAULT

Ident.: ME-26-00007916.0026001 / 19 JUL 12

3 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the SMOKE FWD CRG BTL 1 FAULT alert is not	Refer to Item 26-23-02 Squib of the
displayed on the EWD	Cargo Bottle 1
If the SMOKE FWD CRG BTL 1 FAULT alert is	Refer to Item 26-23-01 Cargo Agent
displayed on the EWD	Bottle

#### ECAM Alert: SMOKE AFT CRG BTL 2 FAULT

Ident.: ME-26-00009601.0013001 / 19 JUL 12

<sup>4</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the SMOKE FWD CRG BTL 2 FAULT alert is not	Refer to Item 26-23-03 Squib of the
displayed on the EWD	Cargo Bottle 2
If the SMOKE FWD CRG BTL 2 FAULT alert is	Refer to Item 26-23-01 Cargo Agent
displayed on the EWD	Bottle



## **ECAM Alert: SMOKE AFT CRG DET FAULT**

Ident.: ME-26-00007919.0001001 / 11 MAR 10

Applicable to: ALL

	AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL		Refer to Item 26-16-02 Smoke Detector
		in the AFT and the BULK Cargo
		Compartments

#### ECAM Alert: SMOKE FWD CARGO SMOKE

Ident.: ME-26-00007922.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: SMOKE FWD CRG BTL 1 FAULT

Ident.: ME-26-00007923.0026001 / 19 JUL 12

5 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the SMOKE AFT CRG BTL 1 FAULT alert is not	Refer to Item 26-23-02 Squib of the
displayed on the EWD	Cargo Bottle 1
If the SMOKE AFT CRG BTL 1 FAULT alert is displayed	Refer to Item 26-23-01 Cargo Agent
on the EWD	Bottle

#### ECAM Alert: SMOKE FWD CRG BTL 2 FAULT

Ident.: ME-26-00009602.0013001 / 19 JUL 12

6 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the SMOKE AFT CRG BTL 2 FAULT alert is not	Refer to Item 26-23-03 Squib of the
displayed on the EWD	Cargo Bottle 2
If the SMOKE AFT CRG BTL 2 FAULT alert is displayed	Refer to Item 26-23-01 Cargo Agent
on the EWD	Bottle



#### ECAM Alert: SMOKE FWD CRG DET FAULT

Ident.: ME-26-00007925.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STAT	TUS CONDITION OF DISPATCH
NIL	Refer to Item 26-16-01 Smoke Detector
	in the FWD Cargo Compartment

#### ECAM Alert: SMOKE LAV+CRG DET FAULT

Ident.: ME-26-00007926.0001001 / 11 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 26-17-02 Smoke Detection
	Control Unit (SDCU)

#### **ECAM Alert: SMOKE DET FAULT**

Ident.: ME-26-00007926.0004001 / 19 JUL 12

<sup>7</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 23-73-10-01 Smoke
	Detection Function (CIDS-SDF)

#### **ECAM Alert: SMOKE LAVATORY DET FAULT**

Ident.: ME-26-00007928.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 26-17-01 Lavatory Smoke
	Detection System



# **ECAM Alert: SMOKE LAVATORY SMOKE**

Ident.: ME-26-00007930.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 26-17-01 Lavatory Smoke Detection System



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 ME-26 P 8/8

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 19 JUL 12



## ECAM Alert: CONFIG L(R) SIDESTICK FAULT

Ident.: ME-27-00007983.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### **ECAM Alert: CONFIG PITCH TRIM NOT IN T.O. RANGE**

Ident.: ME-27-00007984.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: CONFIG RUD TRIM NOT IN T.O. RANGE

Ident.: ME-27-00007985.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: CONFIG SLATS(FLAPS) NOT IN T.O. CONFIG.

Ident.: ME-27-00007986.0001001 / 11 MAR 10

Applicable to: ALL

ĺ	AIRCRAFT STATUS	CONDITION OF DISPATCH
ĺ	NIL	NO DISPATCH

## **ECAM Alert: CONFIG SPEED BRK NOT RETRACTED**

Ident.: ME-27-00007987.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



# ECAM Alert: F/CTL AIL SERVO FAULT

Ident.: ME-27-00007942.0001001 / 17 SEP 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-14-01 Left Aileron Blue
	Servo-Control (Controlled by ELAC 1)
	or
	Refer to Item 27-14-02 Left Aileron
	Green Servo-Control (Controlled by
	ELAC 2)
	or
	Refer to Item 27-14-03 Right Aileron
	Green Servo-Control (Controlled by
	ELAC 1)
	or
	Refer to Item 27-14-04 Right Aileron
	Blue Servo-Control (Controlled by ELAC
	2)

# ECAM Alert: F/CTL ALTN LAW

Ident.: ME-27-00007943.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## **ECAM Alert: F/CTL DIRECT LAW**

Ident.: ME-27-00007944.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



# ECAM Alert: F/CTL ELAC 1 FAULT

Ident.: ME-27-00007946.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-93-01 ELAC 1

#### ECAM Alert: F/CTL ELAC 1 PITCH FAULT

Ident.: ME-27-00007945.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-93-01 ELAC 1

#### ECAM Alert: F/CTL ELAC 2 FAULT

Ident.: ME-27-00007948.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: F/CTL ELAC 2 PITCH FAULT

Ident.: ME-27-00007947.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: F/CTL ELEV SERVO FAULT

Ident.: ME-27-00007949.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the servo-control is affected.	NO DISPATCH
If the servo-control position transducer is affected.	Refer to Item 27-34-02 Elevator
	Servo-Control Position Transducer



## ECAM Alert: F/CTL FCDC 1 FAULT

Ident.: ME-27-00007950.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: F/CTL FCDC 2 FAULT

Ident.: ME-27-00007951.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-95-02 FCDC 2

#### ECAM Alert: F/CTL FCDC 1+2 FAULT

Ident.: ME-27-00007952.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: F/CTL FLAP ATTACH SENSOR

Ident.: ME-27-00007953.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: F/CTL FLAP LVR NOT ZERO

Ident.: ME-27-00007954.0001001 / 04 APR 12

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL



# ECAM Alert: F/CTL FLAP SYS 1 FAULT

Ident.: ME-27-00007955.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH
If the maintenance confirms that the F/CTL FLAP SYS 1	Refer to Item 27-54-01 Flap Hydraulic
FAULT alert is displayed on the EWD due to a flap motor	Motor
failure	

# ECAM Alert: F/CTL FLAP SYS 2 FAULT

Ident.: ME-27-00007956.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-51-01 SFCC Flap
	Channel
If the maintenance confirms that the F/CTL FLAP SYS 2	Refer to Item 27-54-01 Flap Hydraulic
FAULT alert is displayed on the EWD due to a flap motor	Motor
failure.	

## ECAM Alert: F/CTL FLAP TIP BRK FAULT

Ident.: ME-27-00007957.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-51-03 Flap Wing Tip
	Brakes Solenoid

# ECAM Alert: F/CTL FLAPS(SLATS) FAULT

Ident.: ME-27-00007958.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



# ECAM Alert: F/CTL FLAPS(SLATS) LOCKED

Ident.: ME-27-00007959.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: F/CTL GND SPLR FAULT

Ident.: ME-27-00007961.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the braking system is affected	Refer to Item 32-42-06 Tachometer
If the braking system is not affected	Refer to Item 27-92-02 Ground Spoiler
	Control System

# ECAM Alert: F/CTL GND SPLR 1+2(3+4) FAULT

Ident.: ME-27-00007960.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-92-02 Ground Spoiler
	Control System

# ECAM Alert: F/CTL L(R) AIL FAULT

Ident.: ME-27-00007964.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## ECAM Alert: F/CTL L(R) ELEV FAULT

Ident.: ME-27-00007965.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: F/CTL L+R ELEV FAULT

Ident.: ME-27-00007963.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: F/CTL L(R) SIDESTICK FAULT

Ident.: ME-27-00007966.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: F/CTL SEC 1 FAULT

Ident.: ME-27-00007967.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-94-01 SEC 1

## ECAM Alert: F/CTL SEC 2 FAULT

Ident.: ME-27-00007968.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-94-02 SEC 2



# ECAM Alert: F/CTL SEC 3 FAULT

Ident.: ME-27-00007969.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-94-03 SEC 3

#### **ECAM Alert: F/CTL SIDESTICK PRIORITY**

Ident.: ME-27-00007970.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to FCOM/PRO-ABN-27 F/CTL
	SIDESTICK PRIORITY
	(FCOM 2.02.27)

# ECAM Alert: F/CTL SLAT SYS 1 FAULT

Ident.: ME-27-00007971.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH
If the maintenance confirms the F/CTL SLAT SYS 1	Refer to Item 27-84-01 Slats Hydraulic
FAULT alert is displayed on the EWD due to a slat motor	Motor
failure.	

# ECAM Alert: F/CTL SLAT SYS 2 FAULT

Ident.: ME-27-00007972.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-51-02 SFCC Slat
	Channel
If the maintenance confirms the F/CTL SLAT SYS 2	Refer to Item 27-84-01 Slats Hydraulic
FAULT alert is displayed on the EWD due to a slat motor	Motor
failure.	



# ECAM Alert: F/CTL SLAT TIP BRK FAULT

Ident.: ME-27-00007973.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-81-01 Slat Wing Tip
	Brakes Solenoids

## ECAM Alert: F/CTL SPD BRK DISAGREE

Ident.: ME-27-00007976.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-92-01 Speedbrake
	Control System

# ECAM Alert: F/CTL SPD BRK FAULT

Ident.: ME-27-00007977.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-92-01 Speedbrake
	Control System

## ECAM Alert: F/CTL SPD BRK STILL OUT

Ident.: ME-27-00007978.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL



# ECAM Alert: F/CTL SPD BRK 2(3+4) FAULT

Ident.: ME-27-00007975.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-92-01 Speedbrake
	Control System

# ECAM Alert: F/CTL SPLR FAULT

Ident.: ME-27-00007979.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 27-64-01 Spoiler 5
	or
	Refer to Item 27-64-02 Spoiler 1 or 3
	or
	Refer to Item 27-64-03 Spoiler 2 or 4
	or
	Refer to Item 27-64-04 Spoilers 1 and 2
	or
	Refer to Item 27-64-05 Spoilers 3 and 4

## ECAM Alert: F/CTL STABILIZER JAM

Ident.: ME-27-00007980.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



#### MEL ENTRIES 28 - FUEL

# ECAM Alert: FUEL ACT PUMP LO PR

Ident.: ME-28-00007988.0001001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-28-03 ACT Transfer
	Pump

# ECAM Alert: FUEL ACT UNUSABLE

Ident.: ME-28-00007990.0001001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL



## MEL ENTRIES 28 - FUEL

# ECAM Alert: FUEL ACT XFR FAULT

Ident.: ME-28-00007991.0003001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to Item 28-12-05 Overpressure Protector in the ACT
	or Refer to Item 28-46-02 High Level Detection System in the Center Tank or Refer to Item 28-28-01 ACT Auto Transfer System
	or Refer to Item 28-28-02 ACT Transfer Valve or Refer to Item 28-28-04 ACT Air Shutoff
	Valve or Refer to Item 28-28-05 ACT Inward Pressure Relief Valve or
	Refer to Item 28-28-06 ACT Vent Valve or Refer to Item 28-28-09 ACT 1 Inlet Valve or Refer to Item 28-46-05 Low Level Detection System in the ACT
False alert	Refer to Item 28-09-03 FUEL ACT XFR FAULT Alert



### ECAM Alert: FUEL APU LP VALVE FAULT

Ident.: ME-28-00007992.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-29-01 APU LP Fuel
	Valve

### **ECAM Alert: FUEL AUTO FEED FAULT**

Ident.: ME-28-00007993.0002001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-20-01 Automatic Fuel
	Feed System

### **ECAM Alert: FUEL AUTO TRANSFER FAULT**

Ident.: ME-28-00007993.0005001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-26-01 Center Tank
	Transfer Valve

## ECAM Alert: FUEL CTR TK PUMP 1(2) LO PR

Ident.: ME-28-00007995.0003001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-21-02 Center Tank
	Pump



## **ECAM Alert: FUEL CTR TK PUMPS LO PR**

Ident.: ME-28-00007996.0003001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-21-02 Center Tank
	Pump

### **ECAM Alert: FUEL CTR TK PUMPS OFF**

Ident.: ME-28-00007997.0002001 / 19 JUL 12

4 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

## ECAM Alert: FUEL CTR TK XFR OFF

Ident.: ME-28-00007997.0005001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

# ECAM Alert: FUEL ENG 1(2) LP VALVE OPEN

Ident.: ME-28-00007998.0001001 / 29 NOV 11

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 28-07-04-01 Engine LP
	Fuel Valve Indication on the FUEL SD
	page



# ECAM Alert: FUEL FQI CH 1(2) FAULT

Ident.: ME-28-00008000.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-50-01 Fuel Quantity
	Indicating Computer (FQIC) Channel

## ECAM Alert: FUEL L(R) INNER(OUTER) TK HI TEMP

Ident.: ME-28-00008003.0002001 / 19 JUL 12

5 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 28-09-01 FUEL L(R) INNER(OUTER)/WING TK HI TEMP
	Alert

## ECAM Alert: FUEL L(R) WING TK HI TEMP

Ident.: ME-28-00008003.0006001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 28-09-01 FUEL L(R) INNER(OUTER)/WING TK HI TEMP Alert

# ECAM Alert: FUEL L(R) INNER(OUTER) TK LO TEMP

Ident.: ME-28-00008004.0001001 / 19 JUL 12

6 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH

Continued on the following page



Continued from the previous page

AIRCRAFT STATUS	CONDITION OF DISPATCH
	Refer to Item 28-09-02 FUEL L(R) INNER(OUTER)/WING TK LO TEMP Alert

# ECAM Alert: FUEL L(R) WING TK LO TEMP

Ident.: ME-28-00008004.0002001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 28-09-02 FUEL L(R) INNER(OUTER)/WING TK LO TEMP
	Alert

# ECAM Alert: FUEL L(R) TK PUMP 1(2) LO PR

Ident.: ME-28-00008006.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-21-01 Wing Tank Pump

## ECAM Alert: FUEL L(R) TK PUMP 1+2 LO PR

Ident.: ME-28-00008005.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: FUEL L(R) WING TK LO LVL

Ident.: ME-28-00008007.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH

Continued on the following page

HDA A320/A321 FLEET ME-28 P 6/8 MEL  $\leftarrow$  O to S  $\rightarrow$  19 JUL 12



Continued from the previous page

AIRC	CRAFT STATUS	CONDITION OF DISPATCH
False alert		Refer to Item 28-46-04 Low Level
		Detection System in the Inner/Wing Tank

# ECAM Alert: FUEL L+R WING TK LO LVL

Ident.: ME-28-00008002.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: FUEL L(R) WING TK OVERFLOW

Ident.: ME-28-00008008.0001001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: FUEL L(R) XFR VALVE CLOSED

Ident.: ME-28-00008009.0001001 / 19 JUL 12

7 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-15-01 LH Wing Transfer
	Valve
	or
	Refer to Item 28-15-02 RH Wing
	Transfer Valve

MEL ← S to V



## ECAM Alert: FUEL L(R) XFR VALVE FAULT

Ident.: ME-28-00008011.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-26-01 Center Tank
	Transfer Valve

### ECAM Alert: FUEL L(R) XFR VALVE OPEN

Ident.: ME-28-00008010.0001001 / 19 JUL 12

8 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-15-01 LH Wing Transfer
	Valve
	or
	Refer to Item 28-15-02 RH Wing
	Transfer Valve

### **ECAM Alert: FUEL X FEED VALVE FAULT**

Ident.: ME-28-00008012.0001001 / 11 MAR 10

Applicable to: ALL

	AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL		NO DISPATCH

### **ECAM Alert: FUEL XFR VALVES FAULT**

Ident.: ME-28-00008013.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 28-26-01 Center Tank
	Transfer Valve



## ECAM Alert: HYD B ELEC PUMP LO PR

Ident.: ME-29-00008021.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-01 HYD B(Y) ELEC PUMP LO PR Alert

### **ECAM Alert: HYD B ELEC PUMP OVHT**

Ident.: ME-29-00008022.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-02 HYD B(Y) ELEC
	PUMP OVHT Alert

### ECAM Alert: HYD B RSVR LO AIR PR

Ident.: ME-29-00008023.0001001 / 19 JUL 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-04 HYD G(B)(Y)
	RSVR LO AIR PR Alert

## ECAM Alert: HYD B RSVR LO AIR PR

Ident.: ME-29-00008023.0003001 / 11 MAR 10 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



# ECAM Alert: HYD B RSVR LO LVL

Ident.: ME-29-00008025.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-05 HYD G(B)(Y) RSVR LO LVL Alert

### ECAM Alert: HYD B RSVR OVHT

Ident.: ME-29-00008026.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-06 HYD G(B)(Y)
	RSVR OVHT Alert

### ECAM Alert: HYD B SYS LO PR

Ident.: ME-29-00008027.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-09 HYD G(B)(Y)(B
	+G)(G+Y)(B+Y) SYS LO PR Alert

### ECAM Alert: HYD B+G SYS LO PR

Ident.: ME-29-00008028.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-09 HYD G(B)(Y)(B
	+G)(G+Y)(B+Y) SYS LO PR Alert



# ECAM Alert: HYD B+Y SYS LO PR

Ident.: ME-29-00008029.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-09 HYD G(B)(Y)(B
	+G)(G+Y)(B+Y) SYS LO PR Alert

## ECAM Alert: HYD G ENG 1 PUMP LO PR

Ident.: ME-29-00008030.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-03 HYD G(Y) ENG
	1(2) PUMP LO PR Alert

### ECAM Alert: HYD G RSVR LO AIR PR

Ident.: ME-29-00008032.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-04 HYD G(B)(Y) RSVR LO AIR PR Alert

### ECAM Alert: HYD G RSVR LO LVL

Ident.: ME-29-00008033.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-05 HYD G(B)(Y)
	RSVR LO LVL Alert



# **ECAM Alert: HYD G RSVR OVHT**

Ident.: ME-29-00008035.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-06 HYD G(B)(Y)
	RSVR OVHT Alert

## ECAM Alert: HYD G SYS LO PR

Ident.: ME-29-00008036.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-09 HYD G(B)(Y)(B
	+G)(G+Y)(B+Y) SYS LO PR Alert

### ECAM Alert: HYD G+Y SYS LO PR

Ident.: ME-29-00008037.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-09 HYD G(B)(Y)(B
	+G)(G+Y)(B+Y) SYS LO PR Alert

### **ECAM Alert: HYD PTU FAULT**

Ident.: ME-29-00008038.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-07 HYD PTU FAULT
	Alert



# **ECAM Alert: HYD RAT FAULT**

Ident.: ME-29-00008039.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-08 HYD RAT FAULT Alert

### **ECAM Alert: HYD Y ELEC PUMP LO PR**

Ident.: ME-29-00008040.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to Item 29-24-01 Yellow System Electric Pump
False alert	Refer to Item 29-09-01 HYD B(Y) ELEC PUMP LO PR Alert

## **ECAM Alert: HYD Y ELEC PUMP OVHT**

Ident.: ME-29-00008041.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to Item 29-24-01 Yellow System
	Electric Pump
False alert	Refer to Item 29-09-02 HYD B(Y) ELEC
	PUMP OVHT Alert

## ECAM Alert: HYD Y ENG 2 PUMP LO PR

Ident.: ME-29-00008043.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH

Continued on the following page



Continued from the previous page

AIRCRAFT STATUS	CONDITION OF DISPATCH
False alert	Refer to Item 29-09-03 HYD G(Y) ENG
	1(2) PUMP LO PR Alert

# ECAM Alert: HYD Y RSVR LO AIR PR

Ident.: ME-29-00008044.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-04 HYD G(B)(Y)
	RSVR LO AIR PR Alert

### ECAM Alert: HYD Y RSVR LO LVL

Ident.: ME-29-00008045.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-05 HYD G(B)(Y)
	RSVR LO LVL Alert

## **ECAM Alert: HYD Y RSVR OVHT**

Ident.: ME-29-00008046.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-06 HYD G(B)(Y)
	RSVR OVHT Alert



# ECAM Alert: HYD Y SYS LO PR

Ident.: ME-29-00008047.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 29-09-09 HYD G(B)(Y)(B
	+G)(G+Y)(B+Y) SYS LO PR Alert



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 HDA A320/A321 FLEET
 ME-29 P 8/8

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 19 JUL 12



## **ECAM Alert: ANTI ICE ALL PITOT**

Ident.: ME-30-00008053.0002001 / 11 MAR 10

Applicable to: ALL

	AIRCRAFT STATUS	CONDITION OF DISPATCH
Ν	VIL	NO DISPATCH

## ECAM Alert: ANTI ICE CAPT(F/O)(STBY) AOA

Ident.: ME-30-00008054.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-31-04 Angle of Attack
	(AOA) Probes Heating

# ECAM Alert: ANTI ICE CAPT(F/O)(STBY) L(R) STAT

Ident.: ME-30-00008056.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-31-03 Static Ports
	Heater

## ECAM Alert: ANTI ICE CAPT(F/O)(STBY) PITOT

Ident.: ME-30-00008058.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-31-02 Pitot Heater

### ECAM Alert: ANTI ICE CAPT+F/O PITOT

Ident.: ME-30-00008059.0002001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## **ECAM Alert: ANTI ICE CAPT+STBY PITOT**

Ident.: ME-30-00008060.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: ANTI ICE CAPT(F/O)(STBY) PROBES

Ident.: ME-30-00008062.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-31-01 Probe Heat
	Computer (PHC)

# ECAM Alert: ANTI ICE CAPT(F/O) TAT

Ident.: ME-30-00008064.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-31-05 TAT Probes
	Heating

## ECAM Alert: ANTI ICE ENG 1(2) VALVE CLSD

Ident.: ME-30-00008068.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-21-01 Engine Anti-Ice
	Valve



## **ECAM Alert: ANTI ICE ENG 1(2) VALVE OPEN**

Ident.: ME-30-00008070.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-21-01 Engine Anti-Ice
	Valve

## ECAM Alert: ANTI ICE F/O+STBY PITOT

Ident.: ME-30-00008071.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: ANTI ICE L(R) WINDOW

Ident.: ME-30-00008089.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the Window Heat Computer is affected	Refer to Item 30-42-01 Window Heat
	Computer
NIL	Refer to Item 30-42-02 Fixed Lateral
	Window and Sliding Window Heating

# ECAM Alert: ANTI ICE L(R) WINDSHIELD

Ident.: ME-30-00008096.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the Window Heat Computer is affected	Refer to Item 30-42-01 Window Heat
·	Computer
NIL	Refer to Item 30-42-03 Windshield
	Heating



## ECAM Alert: ANTI ICE L+R WINDSHIELD

Ident.: ME-30-00008075.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: WING ANTI ICE L(R) HI PR

Ident.: ME-30-00008098.0001001 / 17 SEP 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-11-01B Wing Anti-Ice
	Control Valve

# ECAM Alert: WING ANTI ICE L(R) VALVE OPEN

Ident.: ME-30-00008099.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-11-01 Wing Anti-Ice
	Control Valve

### **ECAM Alert: WING ANTI ICE OPEN ON GND**

Ident.: ME-30-00008100.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-11-01 Wing Anti-Ice
	Control Valve



# **ECAM Alert: WING ANTI ICE SYS FAULT**

Ident.: ME-30-00008101.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 30-11-01 Wing Anti-Ice
	Control Valve



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HDA A320/A321 FLEET MEL



## **ECAM Alert: EIS DMC 1 FAULT**

Ident.: ME-31-00008102.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 31-62-01 DMC 1

### ECAM Alert: EIS DMC 2 FAULT

Ident.: ME-31-00008103.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 31-62-02 DMC 2

### ECAM Alert: EIS DMC 3 FAULT

Ident.: ME-31-00008104.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 31-62-03 DMC 3

## **ECAM Alert: FWS FWC 1 FAULT**

Ident.: ME-31-00008105.0001001 / 11 MAR 10

Applicable to: ALL

ĺ	AIRCRAFT STATUS	CONDITION OF DISPATCH
ĺ	NIL	NO DISPATCH

## **ECAM Alert: FWS FWC 2 FAULT**

Ident.: ME-31-00008106.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 31-53-01 Flight Warning
	Computer (FWC)



### ECAM Alert: FWS FWC 1+2 FAULT

Ident.: ME-31-00008107.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### ECAM Alert: FWS OEB/FWC DISCREPANCY

Ident.: ME-31-00008108.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### ECAM Alert: FWS SDAC 1 FAULT

Ident.: ME-31-00008109.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## **ECAM Alert: FWS SDAC 2 FAULT**

Ident.: ME-31-00008110.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 31-55-01 System Data
	Acquisition Concentrator (SDAC)

### ECAM Alert: FWS SDAC 1+2 FAULT

Ident.: ME-31-00008111.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



# ECAM Alert: RECORDER DFDR FAULT

Ident.: ME-31-00008112.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 31-30-03 Digital Flight Data
	Recorder (DFDR)

# **ECAM Alert: RECORDER SYS FAULT**

Ident.: ME-31-00008113.0002001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
	Refer to Item 31-30-05 Flight Data Interface Unit (FDIU or FDIMU Flight Data Interface function)



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HDA A320/A321 FLEET MEL 29 NOV 11



### **ECAM Alert: BRAKES ALTN BRK FAULT**

Ident.: ME-32-00008135.0002001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: BRAKES ALTN L(R) RELEASED

Ident.: ME-32-00008138.0002001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: BRAKES A/SKID N/WS FAULT

Ident.: ME-32-00008129.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### ECAM Alert: BRAKES A/SKID N/WS OFF

Ident.: ME-32-00008131.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

### **ECAM Alert: BRAKES AUTO BRK FAULT**

Ident.: ME-32-00008132.0001001 / 11 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
If normal braking is lost (BRAKE RELEASED message	NO DISPATCH
is not displayed)	

Continued on the following page



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AIRCRAFT STATUS	CONDITION OF DISPATCH
If the autobrake function is affected (BRAKE	Refer to Item 32-42-05 AUTO/BRK
RELEASED message is displayed)	Function
If a tachometer is affected (BRAKE RELEASED	Refer to Item 32-42-06 Tachometer
message is displayed)	

## ECAM Alert: BRAKES AUTO BRK FAULT

Ident.: ME-32-00008132.0002001 / 19 JUL 12

3 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 32-42-05 AUTO/BRK
	Function

### ECAM Alert: BRAKES BRK Y ACCU LO PR

Ident.: ME-32-00008134.0002001 / 19 JUL 12

<sup>4</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 32-44-02 ACCU PRESS
	Indicator

### **ECAM Alert: BRAKES SYS 1 FAULT**

Ident.: ME-32-00008139.0002001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 32-42-03 Braking/Steering
	Control Unit (BSCU) Channel 1 / System
	1



# ECAM Alert: BRAKES SYS 2 FAULT

Ident.: ME-32-00008140.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 32-42-04 Braking/Steering
	Control Unit (BSCU) Channel 2 / System
	2

### **ECAM Alert: BRAKES HOT**

Ident.: ME-32-00008141.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 32-07-01 Brakes
	Temperature Indication on the WHEEL
	SD page

## **ECAM Alert: BRAKES NORM BRK FAULT**

Ident.: ME-32-00008136.0002001 / 19 JUL 12

5 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### ECAM Alert: BRAKES NORM+ALT FAULT

Ident.: ME-32-00008137.0002001 / 19 JUL 12

6 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

H to K



### ECAM Alert: BRAKES PARK BRK FAULT

Ident.: ME-32-00013833.0002001 / 19 JUL 12

<sup>7</sup> Applicable to: B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
If associated with the BRK PRESS STILL ON subtitle	NO DISPATCH
If there is no subtitle	Apply ECAM procedure

### ECAM Alert: BRAKES PARK BRK LO PR

Ident.: ME-32-00013832.0003001 / 19 JUL 12

8 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS CONDITION OF DISPATCH

NIL Not related to MEL.

### **ECAM Alert: BRAKES PARK BRK ON**

Ident.: ME-32-00008142.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

### **ECAM Alert: BRAKES RELEASED**

Ident.: ME-32-00008133.0002001 / 19 JUL 12

10 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
If green brake supply affected	Refer to Item 32-42-02 Green System
	Brake
If a tachometer is affected	Refer to Item 32-42-06 Tachometer



### ECAM Alert: BRAKES-N/WS MINOR FAULT

Ident.: ME-32-00008143.0002001 / 19 JUL 12

11 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 32-09-01 BRAKES-N/WS
	MINOR FAULT Alert

### ECAM Alert: CONFIG PARK BRK ON

Ident.: ME-32-00008127.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS CONDITION OF DISPATCH

NIL NO DISPATCH

## ECAM Alert: L/G DOORS NOT CLOSED

Ident.: ME-32-00008115.0001001 / 11 MAR 10

Applicable to: ALL

AIR	CRAFT STATUS	CONDITION OF DISPATCH
NIL		NO DISPATCH

### ECAM Alert: L/G GEAR NOT DOWN

Ident.: ME-32-00008116.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

## ECAM Alert: L/G GEAR NOT DOWNLOCKED

Ident.: ME-32-00008117.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL



## ECAM Alert: L/G GEAR NOT UPLOCKED

Ident.: ME-32-00008118.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

### ECAM Alert: L/G GEAR UPLOCK FAULT

Ident.: ME-32-00008119.0001001 / 17 SEP 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 32-31-02 Landing Gear
	Retracting System

## ECAM Alert: L/G LGCIU 1 FAULT

Ident.: ME-32-00008120.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### ECAM Alert: L/G LGCIU 2 FAULT

Ident.: ME-32-00008121.0003001 / 17 SEP 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the LGCIU 2 is inoperative	Refer to Item 32-31-01 Landing Gear
	Control and Interface Unit (LGCIU)

Continued on the following page



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AIRCRAFT STATUS	CONDITION OF DISPATCH
If a RH L/G proximity detector associated with the	Refer to Item 32-32-02 LGCIU 2 RH L/G
LGCIU 2 is inoperative: apply the relevant item.	Shock Absorber Proximity Detector
	or
	Refer to Item 32-32-05 LGCIU 2 RH L/G
	Down Lock Proximity Detector
	or
	Refer to Item 32-32-08 LGCIU 2 RH L/G
	Up Lock Proximity Detector
	or
	Refer to Item 32-32-11 LGCIU 2 RH L/G
	Doors Open Proximity Detector
	or
	Refer to Item 32-32-14 LGCIU 2 RH L/G
	Doors Closed Proximity Detector
	l
If a LH L/G proximity detector associated with the LGCIU	I
2 is inoperative: apply the relevant item.	Shock Absorber Proximity Detector
	or
	Refer to Item 32-32-06 LGCIU 2 LH L/G
	Down Lock Proximity Detector
	or
	Refer to Item 32-32-09 LGCIU 2 LH L/G
	Up Lock Proximity Detector
	or
	Refer to Item 32-32-12 LGCIU 2 LH L/G
	Doors Open Proximity Detector
	or
	Refer to Item 32-32-15 LGCIU 2 LH L/G
	Doors Closed Proximity Detector

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AIRCRAFT STATUS	CONDITION OF DISPATCH
If a Nose L/G proximity detector associated with the	Refer to Item 32-32-04 LGCIU 2 Nose
LGCIU 2 is inoperative: apply the relevant item.	L/G Shock Absorber Proximity Detector
	or
	Refer to Item 32-32-07 LGCIU 2 Nose
	L/G Down Lock Proximity Detector
	or
	Refer to Item 32-32-10 LGCIU 2 Nose
	L/G Up Lock Proximity Detector
	or
	Refer to Item 32-32-13 LGCIU 2 Nose
	L/G Doors Open Proximity Detector
	or
	Refer to Item 32-32-16 LGCIU 2 Nose
	L/G Doors Closed Proximity Detector

# ECAM Alert: L/G SHOCK ABSORBER FAULT

Ident.: ME-32-00008122.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

# ECAM Alert: L/G SYS DISAGREE

Ident.: ME-32-00008123.0001001 / 11 MAR 10

	AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	<u></u>	NO DISPATCH



# ECAM Alert: WHEEL HYD SEL FAULT

Ident.: ME-32-00008124.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### **ECAM Alert: WHEEL N/W STRG FAULT**

Ident.: ME-32-00008125.0002001 / 18 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 32-51-01 Nose Wheel
	Steering Control System



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 HDA A320/A321 FLEET
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 19 JUL 12



# MEL ENTRIES 34 - NAVIGATION

# ECAM Alert: NAV ADR DISAGREE

Ident.: ME-34-00008144.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### **ECAM Alert: NAV ADR 1 FAULT**

Ident.: ME-34-00008145.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-01 ADR 1

### ECAM Alert: NAV ADR 2 FAULT

Ident.: ME-34-00008146.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-02 ADR 2

# ECAM Alert: NAV ADR 3 FAULT

Ident.: ME-34-00008147.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-03 ADR 3

# ECAM Alert: NAV ADR 1+2(1+3)(2+3) FAULT

Ident.: ME-34-00008148.0001001 / 29 NOV 11

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



### MEL ENTRIES 34 - NAVIGATION

# ECAM Alert: NAV ADR 1+2+3 FAULT

Ident.: ME-34-00008149.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

### **ECAM Alert: NAV ALTI DISCREPANCY**

Ident.: ME-34-00008150.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-01 ADR 1
	or Refer to Item 34-10-02 ADR 2
	or Refer to Item 34-10-03 ADR 3

# ECAM Alert: NAV ATC/XPDR 1(2)(1+2) FAULT

Ident.: ME-34-00013848.0001001 / 19 JUL 12

1 Applicable to: B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-50-01 ATC

### **ECAM Alert: NAV ATC/XPDR STBY**

Ident.: ME-34-00013846.0001001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSQ, B-HSR, B-HST, B-HSU

	AIRCRAFT STATUS	CONDITION OF DISPATCH
N	IIL	Not related to MEL



## ECAM Alert: NAV ATT DISCREPANCY

Ident.: ME-34-00008151.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-04 IR 1
	or
	Refer to Item 34-10-05 IR 2
	or
	Refer to Item 34-10-06 IR 3
	or
	Refer to 00008554 **Not found**

## ECAM Alert: NAV CAPT(F/O)(STBY) AOA FAULT

Ident.: ME-34-00010323.0003001 / 19 JUL 12

3 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-11-01 Angle of Attack
	(AOA) Sensor

## ECAM Alert: NAV FM/GPS POS DISAGREE

Ident.: ME-34-00008153.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

## ECAM Alert: NAV GPS 1(2) FAULT

Ident.: ME-34-00008158.0001001 / 29 NOV 11

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-50-09 Global
	Positioning System (GPS)



## **ECAM Alert: NAV GPWS FAULT**

Ident.: ME-34-00008159.0001001 / 11 MAR 10

Applicable to: ALL

	AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL		Refer to Item 34-40-01 Ground Proximity
		Warning System (GPWS)

## **ECAM Alert: NAV GPWS TERR DET FAULT**

Ident.: ME-34-00008160.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-40-01 Ground Proximity
	Warning System (GPWS)

## **ECAM Alert: NAV HDG DISCREPANCY**

Ident.: ME-34-00008161.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-04 IR 1
	or
	Refer to Item 34-10-05 IR 2
	or
	Refer to Item 34-10-06 IR 3
	or
	Refer to 00008554 **Not found**



## **ECAM Alert: NAV IAS DISCREPANCY**

Ident.: ME-34-00008165.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-01 ADR 1
	or Refer to Item 34-10-02 ADR 2
	or
	Refer to Item 34-10-03 ADR 3

## ECAM Alert: NAV ILS 1(2)(1+2) FAULT

Ident.: ME-34-00008166.0004001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-30-04 Instrument
	Landing System (ILS)

## ECAM Alert: NAV IR DISAGREE

Ident.: ME-34-00008167.0002001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## **ECAM Alert: NAV IR NOT ALIGNED**

Ident.: ME-34-00008172.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-04 IR 1
	or
	Refer to Item 34-10-05 IR 2
	or
	Refer to Item 34-10-06 IR 3
	or
	Refer to 00008554 **Not found**

## ECAM Alert: NAV IR 1 FAULT

Ident.: ME-34-00008168.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-04 IR 1

## **ECAM Alert: NAV IR 2 FAULT**

Ident.: ME-34-00008169.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-05 IR 2

## **ECAM Alert: NAV IR 3 FAULT**

Ident.: ME-34-00008170.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-10-06 IR 3
	or
	Refer to 00008554 **Not found**



## ECAM Alert: NAV IR 1+2(1+3)(2+3) FAULT

Ident.: ME-34-00008171.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### **ECAM Alert: NAV PRED W/S DET FAULT**

Ident.: ME-34-00008157.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-40-06 Predictive
	Windshear Detection Function

## **ECAM Alert: NAV RA DEGRADED**

Ident.: ME-34-00010321.0001001 / 04 APR 12

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
During the previous flight, both RA s disagreed. If the	Refer to Item 34-40-03 Radio Altimeter
RA 1(2) is confirmed faulty by troubleshooting, the radio	System
altimeter 1(2) must be considered inoperative.	

## ECAM Alert: NAV RA 1(2) FAULT

Ident.: ME-34-00008174.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-40-03 Radio Altimeter
	System



## **ECAM Alert: NAV TCAS FAULT**

Ident.: ME-34-00008175.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 34-40-04 Traffic Collision
	Avoidance System (TCAS)

## ECAM Alert: NAV TCAS STANDBY

Ident.: ME-34-00010322.0001001 / 04 APR 12

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

## **ECAM Alert: OVERSPEED**

Ident.: ME-34-00008176.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL



## ECAM Alert: AIR APU BLEED FAULT

Ident.: ME-36-00008236.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-12-02 APU Bleed Valve

#### **ECAM Alert: AIR APU BLEED LEAK**

Ident.: ME-36-00008238.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-12-01 APU Bleed Air
	Supply System

## ECAM Alert: AIR BLEED 1(2) OFF

Ident.: ME-36-00008244.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-11-01 Engine Bleed Air
	Supply System

## **ECAM Alert: AIR ENG HP VALVE FAULT**

Ident.: ME-36-00008251.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-11-07 Engine Bleed HP
	Valve



## ECAM Alert: AIR ENG 1(2) BLEED ABNORM PR

Ident.: ME-36-00008246.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-11-01 Engine Bleed Air
	Supply System

## ECAM Alert: AIR ENG 1(2) BLEED FAULT

Ident.: ME-36-00008247.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-11-01 Engine Bleed Air
	Supply System

## ECAM Alert: AIR ENG 1(2) BLEED LEAK

Ident.: ME-36-00008248.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 36-22-01 Pylon Leak
	Detection System

## ECAM Alert: AIR ENG 1(2)(1+2) BLEED LO TEMP

Ident.: ME-36-00008245.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-11-04 Engine Bleed
	Fan Air Valve



## ECAM Alert: AIR ENG 1(2) BLEED NOT CLSD

Ident.: ME-36-00008249.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-11-02 Engine Bleed
	Valve (PRV)

## ECAM Alert: AIR ENG 1(2) LEAK DET FAULT

Ident.: ME-36-00008250.0001001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-22-01 Pylon Leak
	Detection System

## ECAM Alert: AIR L(R) WING LEAK

Ident.: ME-36-00008252.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT S	TATUS	CONDITION OF DISPATCH
NIL		NO DISPATCH

## ECAM Alert: AIR L(R) WING LEAK DET FAULT

Ident.: ME-36-00008253.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

MEL I to L



## ECAM Alert: AIR X BLEED FAULT

Ident.: ME-36-00008254.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-12-04 Automatic
	Control of the X Bleed Valve

## **ECAM Alert: BLEED MONITORING FAULT**

Ident.: ME-36-00008255.0001001 / 11 MAR 10

Applicable to: ALL

	AIRCRAFT STATUS	CONDITION OF DISPATCH
ı	NIL	NO DISPATCH

## ECAM Alert: BLEED MONIT SYS 1(2) FAULT

Ident.: ME-36-00008256.0001001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 36-11-08 Bleed Monitoring
	Computer (BMC)



## MEL ENTRIES 46 - INFORMATION SYSTEMS

## ECAM Alert: DATA LINK ATC FAULT

Ident.: ME-46-00008259.0005001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 46-21-01 Air Traffic Service
	Unit (ATSU)

## ECAM Alert: DATA LINK ATSU FAULT

Ident.: ME-46-00008257.0005001 / 11 MAR 10

Applicable to: ALL

ſ	AIRCRAFT STATUS	CONDITION OF DISPATCH
Γ	NIL	Refer to Item 46-21-01 Air Traffic Service
		Unit (ATSU)

## **ECAM Alert: DATA LINK COMPANY FAULT**

Ident.: ME-46-00008258.0005001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 46-21-01 Air Traffic Service
	Unit (ATSU)



## MEL ENTRIES 46 - INFORMATION SYSTEMS

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HDA A320/A321 FLEET MEL



## MEL ENTRIES 49 - AIRBORNE AUXILIARY POWER

## ECAM Alert: APU AUTO(EMER) SHUT DOWN

Ident.: ME-49-00008260.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 49-10-01 Power Plant
	(APU)



## MEL ENTRIES 49 - AIRBORNE AUXILIARY POWER

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 HDA A320/A321 FLEET
 ME-49 P 2/2

 MEL
 29 NOV 11



## ECAM Alert: DOOR AFT(BULK)(FWD) CARGO

Ident.: ME-52-00008261.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 52-07-05 Cargo Door
	Indication on the DOOR/OXY SD page

## ECAM Alert: DOOR L(R) AFT AVIONICS

Ident.: ME-52-00008262.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 52-07-06 Avionics
	Compartment Access Door Indication on
	the DOOR/OXY SD page

## ECAM Alert: DOOR L(R) AFT CABIN

Ident.: ME-52-00008264.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 52-07-01 Passenger
	Door/Emergency Exit Permanently
	Indicated Open on the DOOR/OXY SD
	page

## ECAM Alert: DOOR L(R) AFT EMER EXIT

Ident.: ME-52-00008266.0002001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH

Continued on the following page



Continued from the previous page

	AIRCRAFT STATUS	CONDITION OF DISPATCH
False alert		Refer to Item 52-07-03 Overwing
		Emergency Exit Permanently Indicated
		Open on the DOOR/OXY SD page

## ECAM Alert: DOOR L(R) AFT EMER EXIT

Ident.: ME-52-00008266.0005001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 52-07-01 Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page

## ECAM Alert: DOOR L(R) FWD AVIONICS

Ident.: ME-52-00008263.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 52-07-06 Avionics Compartment Access Door Indication on the DOOR/OXY SD page

## ECAM Alert: DOOR L(R) FWD CABIN

Ident.: ME-52-00008265.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH

Continued on the following page



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Continued normale provided p		
	AIRCRAFT STATUS	CONDITION OF DISPATCH
False alert		Refer to Item 52-07-01 Passenger
		Door/Emergency Exit Permanently
		Indicated Open on the DOOR/OXY SD
		page

## ECAM Alert: DOOR L(R) FWD EMER EXIT

Ident.: ME-52-00008267.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 52-07-03 Overwing
	Emergency Exit Permanently Indicated
	Open on the DOOR/OXY SD page

## ECAM Alert: DOOR L(R) FWD EMER EXIT

Ident.: ME-52-00008267.0004001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 52-07-01 Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page



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 HDA A320/A321 FLEET
 ME-52 P 4/4

 MEL
 19 JUL 12



## **ECAM Alert: ENG DUAL FAILURE**

Ident.: ME-70-00008406.0001001 / 11 MAR 10

Applicable to: ALL

ſ	AIRCRAFT STATUS	CONDITION OF DISPATCH
ſ	NIL	Not related to MEL

#### **ECAM Alert: ENG THR LEVERS NOT SET**

Ident.: ME-70-00008408.0004001 / 17 SEP 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 73-20-01 Flex Takeoff
	Mode

## **ECAM Alert: ENG REV SET**

Ident.: ME-70-00008409.0003001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

#### **ECAM Alert: ENG THRUST LOCKED**

Ident.: ME-70-00008411.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

#### **ECAM Alert: ENG TYPE DISAGREE**

Ident.: ME-70-00008415.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## ECAM Alert: ENG VIB SYS FAULT

Ident.: ME-70-00008416.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 77-07-02-05 N1 Vibration
	Indication on the ENGINE SD page
	or
	Refer to Item 77-07-02-06 N2 Vibration
	Indication on the ENGINE SD page

## ECAM Alert: ENG 1(2) A/C FADEC SUPPLY

Ident.: ME-70-00008284.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 73-20-06 EEC ACFT 28V
	Power Supply

## ECAM Alert: ENG 1(2) AIR EXCHANGR FAULT

AIR VALVE CLOSED

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) AIR EXCHANGR FAULT AIR VALVE OPEN

Ident.: ME-70-00008289.0001001 / 18 MAR 10

Ident.: ME-70-00008285.0001001 / 18 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 79-20-01 Air Cooled Oil
	Cooler (ACOC) Modulating Valve



## ECAM Alert: ENG 1(2) BEARING 4 OIL SYS HI PRESS

Ident.: ME-70-00008299.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) BEARING 4 OIL SYS SCAVENGE VALVE FAULT

Ident.: ME-70-00008292.0001001 / 18 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 79-09-03 ENG 1(2)
	BEARING 4 OIL SYS Alert

#### ECAM Alert: ENG 1(2) COMPRESSOR VANE

Ident.: ME-70-00008303.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) EGT(EPR)(FF)(N1)(N2) DISCREPANCY

Ident.: ME-70-00008311.0002001 / 05 OCT 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



#### ECAM Alert: ENG 1(2) EGT EXCEEDED DURING AIR START

Ident.: ME-70-00008306.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) EIU FAULT

Ident.: ME-70-00008308.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) EPR MODE FAULT

Ident.: ME-70-00008310.0001001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 73-20-04 EPR Control
	Mode

## ECAM Alert: ENG 1(2) FADEC A(B) FAULT

Ident.: ME-70-00008313.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) FADEC ALTERNATOR

Ident.: ME-70-00008315.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## ECAM Alert: ENG 1(2) FADEC FAULT

Ident.: ME-70-00008317.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) FADEC OVHT

Ident.: ME-70-00008319.0003001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) FADEC PLUG FAULT

Ident.: ME-70-00008320.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) FAIL

Ident.: ME-70-00008321.0001001 / 11 MAR 10

Applicable to: ALL

ĺ	AIRCRAFT STATUS	CONDITION OF DISPATCH
	NIL	Not related to MEL

## ECAM Alert: ENG 1(2) FUEL CTL FAULT

Ident.: ME-70-00008323.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## ECAM Alert: ENG 1(2) FUEL FILTER CLOG

Ident.: ME-70-00008325.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 73-09-01 ENG 1(2) FUEL FILTER CLOG Alert

## ECAM Alert: ENG 1(2) FUEL HEAT SYS

Ident.: ME-70-00008327.0002001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) FUEL VALVE FAULT

Ident.: ME-70-00008331.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) HOT FUEL

Ident.: ME-70-00008333.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## ECAM Alert: ENG 1(2) IGN A(B) FAULT

Ident.: ME-70-00008337.0001001 / 04 APR 12

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	Refer to Item 74-31-01 Ignition System A
	or
	Refer to Item 74-31-02 Ignition System B
False alert	Refer to Item 74-09-01 ENG 1(2) IGN
	A(B)(A+B) FAULT Alert

## ECAM Alert: ENG 1(2) IGN A+B FAULT

Ident.: ME-70-00008339.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 74-09-01 ENG 1(2) IGN
	A(B)(A+B) FAULT Alert

## ECAM Alert: ENG 1(2) N1(N2)(EGT) OVER LIMIT

Ident.: ME-70-00008343.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

## ECAM Alert: ENG 1(2) OIL FILTER CLOG

Ident.: ME-70-00008346.0002001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## ECAM Alert: ENG 1(2) OIL HI TEMP

Ident.: ME-70-00008348.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) OIL LO PR

Ident.: ME-70-00008350.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
Actual alert	NO DISPATCH
False alert	Refer to Item 79-09-01 ENG 1(2) OIL LO PR Alert

## ECAM Alert: ENG 1(2) OIL LO TEMP

Ident.: ME-70-00008352.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Apply ECAM procedure.

## ECAM Alert: ENG 1(2) ONE TLA FAULT

Ident.: ME-70-00008353.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 76-11-01 Thrust lever
	Position Sensor



## ECAM Alert: ENG 1(2) OVSPD PROT FAULT

Ident.: ME-70-00008355.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) REV ISOL FAULT

Ident.: ME-70-00008361.0001001 / 17 SEP 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 78-30-03 Thrust Reverser
	Shutoff Valve

## ECAM Alert: ENG 1(2) REV PRESSURIZED

Ident.: ME-70-00008367.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

#### ECAM Alert: ENG 1(2) REV SWITCH FAULT

Ident.: ME-70-00008369.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Refer to Item 78-30-02 Thrust Reverser
	Inhibition Relay sw

### ECAM Alert: ENG 1(2) REVERSE UNLOCKED

Ident.: ME-70-00008370.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH



## ECAM Alert: ENG 1(2) REVERSER FAULT

Ident.: ME-70-00008372.0001001 / 11 MAR 10

Applicable to: ALL

ſ	AIRCRAFT STATUS	CONDITION OF DISPATCH
ſ	NIL	Refer to Item 78-30-01 Thrust Reverser

## ECAM Alert: ENG 1(2) SENSOR FAULT

Ident.: ME-70-00008374.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	NO DISPATCH

## ECAM Alert: ENG 1(2) SHUT DOWN

Ident.: ME-70-00008376.0001001 / 11 MAR 10

Applicable to: ALL

	AIRCRAFT STATUS	CONDITION OF DISPATCH
N	IIL	Not related to MEL

## ECAM Alert: ENG 1(2) STALL

Ident.: ME-70-00008378.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

## ECAM Alert: ENG 1(2) START FAULT

Ident.: ME-70-00008379.0003001 / 29 NOV 11

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
If the associated THR LEVER NOT AT IDLE subtitle is	Apply ECAM procedure.
displayed	

Continued on the following page



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AIRCRAFT STATUS	CONDITION OF DISPATCH
Dispatch is permitted if MAN start is successful, all	Refer to FCOM/PRO-SUP-70 Manual
engine parameters are normal and at least one auto start attempt is performed each day. This auto start attempt must show successful engine light-off (EGT rise).	Engine Start (FCOM 2.04.20)

ECAM Alert: ENG 1(2) START VALVE FAULT

Ident.: ME-70-00008381.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH	
NIL	Refer to Item 80-11-01 Start Valve	

## ECAM Alert: ENG 1(2) SYSTEM FAULT

Ident.: ME-70-00008383.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS		CONDITION OF DISPATCH	
NIL		NO DISPATCH	

## ECAM Alert: ENG 1(2) THR LEVER ABV IDLE

Ident.: ME-70-00008387.0001001 / 11 MAR 10

Applicable to: ALL

AIRCRAFT STATUS	CONDITION OF DISPATCH
NIL	Not related to MEL

## ECAM Alert: ENG 1(2) THR LEVER DISAGREE

Ident.: ME-70-00008389.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH	
NIL	NO DISPATCH	



## ECAM Alert: ENG 1(2) THR LEVER FAULT

Ident.: ME-70-00008391.0001001 / 11 MAR 10

AIRCRAFT STATUS	CONDITION OF DISPATCH	
NIL	NO DISPATCH	

# **MEL ITEMS**





## **MI-PLP PRELIMINARY PAGES**

TABLE OF CONTENTS
SUMMARY OF HIGHLIGHTS

	_	_		
RЛ	เกก	Prea	mbla	
IVI	1-1717	FIEA	mone	

	MI-00-01 Approval Reference  MEL Approval Reference	Α
	MI-00-02 Introduction to the MEL Introduction to the MEL General Policy	
	MI-00-03 Criteria for Dispatch Criteria for Dispatch Operations outside the Conditions of the MEL	
	MI-00-04 Maintenance Action  Maintenance Action	F
	MI-00-05 Repair Interval Repair Interval	. /
	MI-00-06 Repair Interval Extension Repair Interval Extension Repeat Defect Deferral	
	MI-00-07 Definitions  Definitions	. /
	MI-00-08 ECAM and MAINTENANCE STATUS  ECAM and MAINTENANCE STATUS	. /
	MI-21 Air Conditioning MI-21-00 MAINTENANCE Messages on the STATUS SD page 21-00-01 PACK 1(2) MAINTENANCE Message	E
	MI-21-01 Overhead Panels MI-21-01-01 AIR COND Overhead Panel 21-01-01-01 PACK pb-sw FAULT light	E
	21-01-01-04 HOT AIR pb-sw OFF light	L



MI-21-01-02 CABIN PRESS Overhead Panel 21-01-02-01 CABIN PRESS MODE SEL pb-sw FAULT light	A
MI-21-01-03 CARGO VENT Overhead Panel 21-01-03-02 AFT ISOL VALVE pb-sw FAULT light	A
MI-21-01-04 VENTILATION Overhead Panel 21-01-04-01 CAB FANS pb-sw OFF light	В
MI-21-07 Indications on SD pages MI-21-07-01 Indications on the BLEED SD page 21-07-01-01 Pack Outlet Temperature Indication on the BLEED SD page	A
21-07-01-02 Pack Turbine Bypass Valve Position Indication on the BLEED SD page	B D D
MI-21-07-02 Indications on the CAB PRESS SD page 21-07-02-01 INLET and EXTRACT Indications on the CAB PRESS SD page	В
MI-21-07-03 Indications on the COND SD page 21-07-03-01 Indications on the COND SD page	A
MI-21-07-04 Indications on the CRUISE SD page 21-07-04-01 Indications on the CRUISE SD page	A
MI-21-09 ECAM Alerts 21-09-01 VENT BLOWER FAULT Alert	В
MI-21-21 Air Distribution and Recirculation 21-21-01 Cabin Fan	A
MI-21-23 Lavatory and Galley Ventilation	Δ



A320/A321 MINIMUM EQUIPMENT LIST

MI-21-26 Avionics Equipment Ventilation	
21-26-01 Avionics Blower Fan	A
21-26-02 Avionics Extract Fan	B
21-26-03 Avionics Skin Exchanger Inlet Bypass Valve	C
21-26-04 Avionics Skin Air Outlet Valve	D
21-26-05 Avionics Skin Air Inlet Valve	E
21-26-06 Avionics Skin Exchanger Isolation Valve	F
21-26-07 Avionics Skin Exchanger Outlet Bypass Valve	G
21-26-08 Avionics Air Conditioning Inlet Valve	
21-26-09 Avionics Ventilation Filter	l
21-26-10 Avionics Equipment Ventilation Computer ( AEVC )	J
MI-21-28 Cargo Compartment Ventilation	
21-28-03 AFT Cargo Extraction Fan	Α
21-28-04 AFT Cargo Isolation Valve	
MI-21-31 Pressure Control and Monitoring	
21-31-01 Automatic Cabin Pressure Control System ( CPC , Outflow Valve AUTO Channel)	
21-31-02 Manual Cabin Pressure Control System (MAN V/S CTL selector, Outflow Valve MAN Channel)	
21-31-03 Pressure Safety Valve	
21-31-04 Landing Elevation Selection AUTO Function	
21-31-05 Landing Elevation Selection MAN Function	⊏
MI-21-51 Pack Flow Control	
21-51-01 Pack Flow Control Valve	A
21-51-02 Pack Flow Selection	B
21-51-03 Pack Flow Sensor	C
MI-21-52 Air Cooling System	
21-52-01 Air Conditioning Pack	Α
21-52-02 Air Conditioning Pack Ram Air Inlet Flap	
21-52-03 Air Conditioning Pack Ram Air Outlet Flap	
MI-21-55 Emergency Ram Air Inlet	
21-55-01 Emergency Ram Air Inlet	A
MI-21-61 Pack Temperature Control	
21-61-01 Pack Turbine Bypass Valve	A
21-61-02 Pack Controller Primary Channel	
MI-21-63 Cockpit and Cabin Temperature Control	
21-63-01 Zone Controller Channel	
21-63-01 Zone Controller Channel	
21-63-03 Hot Air Pressure Regulating Valve	
21-63-04 Air Conditioning System Controller Channel (COND CTL 1(2)-A(B))	
21 00 07 All Conditioning System Controller Charlier (COND CTE 1(2)-A(D))	∪



## MI-22 Auto Flight

MI-22-01 FLT CTL Overhead Panel	
22-01-01 FAC pb-sw FAULT light	A
22-01-02 FAC pb-sw OFF light	В
MI-22-05 FMA Indications on the PFD	
22-05-01 AP Related Indications on the FMA	Λ
22-05-01 AP Related Indications on the FMA	
22-05-02 After Aleiated Indications of the FMA	
22-05-04 Special Messages on the FMA	
·	
MI-22-10 Autopilot/Flight Director (AP/FD)	
22-10-01 Autopilot ( AP )	
22-10-02 Flight Director ( FD )	
22-10-03 Take-over pb Priority Function	
22-10-04 Take-over pb AP Disconnection Function	
22-10-05 AUTO LAND light 22-10-06 AP Disengagement Warning	
22-10-06 AP Disengagement warming	
MI-22-30 Autothrust	
22-30-01 Autothrust ( A/THR )	
22-30-02 Autothrust Instinctive Disconnect pb	
22-30-03 Autothrust Disengagement Warning	C
MI-22-60 Flight Augmentation (FAC)	
22-60-01 FAC 1	A
22-60-02 FAC 2	B
22-60-03 Reactive Windshear Detection Function	C
22-60-04 Yaw Damper System	D
MI-22-70 Flight Management System (FMS)	
22-70-01 Flight Management System (FMS)	۸
22-70-01 Flight Management System ( FMS )	
22-70-01 hight Management System (1 Mis )	
22-70-03 Performance Information	
22-70-04 Fuel/Time Prediction	
MI-22-81 Flight Control Unit (FCU)	
MI-22-81-01 Auto Flight Control Panel (FCU)	
22-81-01-01 AP Engagement pb	
22-81-01-02 A/THR Arming pb	
22-81-01-03 Mode Engagement pb (LOC, EXPED, APPR)	C



22-81-01-03 Mode Engagement pb (LOC, APPR)	D
22-81-01-04 Selection knob (ALT, HDG-TRK, SPD-MACH)	
22-81-01-05 V/S-FPA Selection knob	F
22-81-01-06 HDG-V/S/TRK-FPA Change Over pb	G
22-81-01-07 SPD/MACH Change Over pb	H
22-81-01-08 METRIC ALT pb	
22-81-01-09 Selection Window (SPD-MACH, HDG-TRK, ALT, V/S-FPA)	J
22-81-01-10 AP1, AP2 and A/THR pb light Bars	K
22-81-01-11 Mode Engagement (LOC, EXPED, APPR) pb light Bars	L
22-81-01-11 Mode Engagement (LOC, APPR) pb light Bars	M
MI-22-81-02 EFIS Control Panel (FCU)	
22-81-02-01 Baro Reference Display Window	A
22-81-02-02 Baro Reference selector Outer Ring (in Hg/hPa)	
22-81-02-03 Baro Reference selector Inner knob	
22-81-02-04 FD pb	D
22-81-02-05 ILS pb	E
22-81-02-05 LS pb	F
22-81-02-06 Optional Data (ARPT, NDB, VOR.D, WPT, CSTR) Display pb	G
22-81-02-07 ND Range selector	H
22-81-02-08 ND Mode selector	I
22-81-02-09 ADF/VOR sw	J
22-81-02-10 ILS and FD pb light Bars	K
22-81-02-10 LS and FD pb light Bars	L
22-81-02-11 Optional Data (ARPT, NDB, VOR.D, WPT, CSTR) Display pb light Bars	M
MI-22-81-03 FCU Channel	
22-81-03-01 FCU Channel	A
MI-22-82 Multipurpose Control and Display Unit (MCDU)	
22-82-01 MCDU 1	Δ
22-82-02 MCDU 2	
22-82-04 MCDU Annunciator light	
MI-22-83 Flight Management and Guidance Computer (FMGC)	
22-83-01 Flight Management and Guidance Computer ( FMGC )	A
MI-23 Communications	
MI-23-00 MAINTENANCE Message on the STATUS SD page	
23-00-01 CIDS 1(2) MAINTENANCE Message	Δ



MI-23-01 Overhead Panels	
MI-23-01-01 RCDR Overhead Panel 23-01-01-01 RCDR GND CTL pb-sw ON light	
23-01-01-31 RCDR GND CTL pb-sw	
23-01-01-32 CVR ERASE pb	
MI-23-01-02 CALLS Overhead Panel	
23-01-02-31 CALLS ALL pb	
23-01-02-32 CALLS EMER pb, CALLS FWD pb, CALLS MID <sup>≪</sup> pb, CALLS EXIT <sup>≪</sup> pb, CALLS PURS pb, CALLS AFT pb	
MI-23-01-03 AUDIO SWITCHING Overhead Panel	
23-01-03-31 AUDIO SWITCHING selector	A
MI-23-09 ECAM Alerts	
23-09-01 COM HF 1(2) EMITTING Alert	A
23-09-02 COM VHF 1(2)(3) EMITTING Alert	B
MI-23-10 Speech Communication	
23-10-01 HF System	
23-10-02 VHF System	B
MI-23-13 Radio Management	
23-13-01 Radio Management Panel (RMP)	
23-13-02 RMP Selection Key	В
MI-23-20 Data Transmission and Automatic Calling	
23-20-01 Aircraft Communications Addressing Reporting System (ACARS)	A
MI-23-31 Passenger Address System	
23-31-01 Passenger Address System	
23-31-02 PA IN USE light	В
MI-23-40 Interphone	
23-40-01 Ground External Horn	
23-40-03 Flight Crew to Ground Communication System	
23-40-04 Service Interphone Jack	



MINIMUM EQUIPMENT	LIST

MI-23-51 Audio Management	
23-51-01 SELCAL Function	A
23-51-02 Boomset	B
23-51-03 Hand Microphone	C
23-51-04 Cockpit Loudspeaker	D
23-51-05 Cockpit Loudspeaker Volume Control	E
23-51-06 Sidestick PTT sw	F
MI-23-52 Audio Control Panel (ACP)	
23-52-01 CAPT and F/O ACP	Δ
23-52-02 ACP 3	
23-52-05 ACP Transmission Key	
23-52-06 ACP Reception knob	
23-52-07 ACP Reception knob light	
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MI-23-71 Cockpit Voice Recorder (CVR)	
23-71-01 Cockpit Voice Recorder (CVR)	A
MI-23-72 Cabin Surveillance	
23-72-01-51 CDSS	A
23-72-01-52 CDSS-Monitor	B
23-72-01-53 CDSS-Camera	C
23-72-01-54 CDSS-Cabin Ready Function	D
23-72-01-55 CDSS-Viewing Spy Hole	E
MI-23-73 Cabin Intercommunication Data System	
MI-23-73-01 Cabin Intercommunication Data System (CIDS)	
23-73-01-01 Cabin Intercommunication Data System (CIDS)	Λ
	A
MI-23-73-02 DEU A	
23-73-02-01 Cabin DEU A	
23-73-02-02 Lavatory DEU A	B
MI-23-73-03 DEU B	
23-73-03-01 Cabin DEU B	Α
MI-23-73-04 Cabin Individual Call	
23-73-04-01 Passenger Call	A
MI-23-73-05 Cabin Loudspeaker	
23-73-05-01 Cabin Loudspeaker	A
23-73-05-02 Lavatory Loudspeaker	B



MI-23-73-06 Handset	
23-73-06-01 Cockpit Handset	A
23-73-06-02 Cabin Handset	E
23-73-06-03 Cabin Handset Key	C
MI-23-73-07 Prerecorded Announcement and Music Reproducer (PRAM) 23-73-07-01 Prerecorded Announcement and Music Reproducer ( PRAM )	A
MI-23-73-08 Cabin Assignment Module (CAM) 23-73-08-01 Cabin Assignment Module (CAM)	A
MI-23-73-10 Smoke Detection Function 23-73-10-01 Smoke Detection Function ( CIDS - SDF )	<i>p</i>
MI-23-74 Cabin Crew Panel	
23-74-01 Forward Attendant Panel	A
23-74-01 FAP Display Unit	E
23-74-02 EMER pb on the Hardkey FAP Sub-panel	C
23-74-03 Other Controls on the Hardkey FAP Sub-panel	
23-74-04 PTP Display Unit	
23-74-05 Door Bottle Pressure Monitoring on the PTP	
23-74-06 Door Bottle Pressure Monitoring on the FAP	
23-74-07 Slide Pressure Monitoring on the PTP	
23-74-09 Since Pressure Monitoring on the FAP	
23-74-11 Additional Attendant Panel (AAP)	
23-74-12 CIDS Caution Light of the Forward Attendant Panel	
23-74-13 Lighting Module of the Forward Attendant Panel	
MI-24 Electrical Power	
MI-24-00 MAINTENANCE Messages on the STATUS SD page 24-00-01 DC BUS TIE MAINTENANCE Message	,
24-00-01 DC BOS TIE MAINTENANCE Message	
24-00-02 GPC0 MAINTENANCE Message	
MI-24-01 Overhead Panels	
MI-24-01-01 ELEC Overhead Panel	
24-01-01-01 BAT 1(2) pb-sw FAULT light	
24-01-01-02 BAT 1(2) pb-sw OFF light	
24-01-01-03 GEN pb-sw FAULT light and APU GEN pb-sw FAULT light	
24-01-01-04 GEN pb-sw OFF light and APU GEN pb-sw OFF light	
24-01-01-05 AC ESS FEED pb-sw FAULT light	



**A320/A321** MINIMUM EQUIPMENT LIST

24-01-01-07 EXT PWR pb-sw AVAIL light	G
24-01-01-08 EXT PWR pb-sw ON light	
24-01-01-09 GALY & CAB pb-sw FAULT light	
24-01-01-10 GALLEY pb-sw OFF light	
24-01-01-10 COMMERCIAL pb-sw OFF light	
24-01-01-12 BUS TIE pb-sw OFF light	
24-01-01-13 IDG pb-sw FAULT light	
MI-24-01-02 EMER ELEC PWR Overhead Panel 24-01-02-01 RAT & EMER GEN FAULT light	Д
MI-24-07 Indications on the ELEC SD page	
24-07-01 AC Generation Indications on the ELEC SD page	А
24-07-02 DC Generation Indications on the ELEC SD page	
24-07-03 AC ESS BUS SHED Indication on the ELEC SD page	C
MI-24-09 ECAM Alerts	
24-09-01 ELEC AC ESS BUS SHED Alert	А
24-09-02 C/B TRIPPED Alert	E
MI-24-22 AC Main Generation	
24-22-01 AC Main Generation ( IDG , GCU , Line Contactor)	
24-22-02 AC Bus Tie Control Function	B
MI-24-23 AC Auxiliary Generation	
24-23-01 AC Auxiliary Generation ( APU Generator, GCU , Line Contactor)	А
MI-24-24 AC Emergency Generation	
24-24-01 Emergency Generator	A
24-24-02 RAT Extension Automatic Control	
24-24-03 RAT Extension Manual Control	C
MI-24-25 AC Essential Generation Switching	
24-25-01 Manual Transfer to the AC BUS 2 (ALTN Function)	
24-25-02 Automatic Transfer to the AC BUS 2	B
MI-24-26 Galley and Commercial Supply System	
24-26-01 Galley Automatic Load Shed System	
24-26-01 GALY & CAB Automatic Load Shed System	
24-26-02 Galley Manual Load Shed System ( GALLEY pb-sw )	
24-26-02 GALT & CAB Manual Load Stied System (GALT & CAB po-sw )	



MI-24-28 Static Inverter AC Generation 24-28-01 Static Inverter AC Generation	A
MI-24-32 DC Main Generation (TR 1, TR 2) 24-32-01 DC Main Generation (TR 1, TR 2)	A
MI-24-34 DC Emergency Generation (ESS TR) 24-34-01 DC Emergency Generation (ESS TR)	A
MI-24-35 DC Essential and Normal Generation Switching 24-35-01 DC TIE Contactor 1PC1 (DC BUS 1-DC BAT BUS), 4PC (DC ESS BUS-DC BAT BUS) 24-35-02 DC TIE Contactor 1PC2 (DC BUS 2-DC BAT BUS)	
MI-24-38 DC Battery Generation 24-38-01 BAT 1(2) Channel	E
MI-24-41 AC External Power Control 24-41-01 Ground Power Control Unit (GPCU)	
MI-25 Equipment/Furnishings	
MI-25-07 Indications on the DOOR/OXY SD page	
25-07-01 Passenger Door Slide Permanently Indicated Armed	A
25-07-01 Cabin Passenger Door / Emergency Exit Slide Permanently Indicated Armed	
25-07-02 Passenger Door Slide Permanently Indicated Not Armed	
25-07-02 Cabin Passenger Door / Emergency Exit Slide Permanently Indicated Not Armed	
25-07-03 Overwing Emergency Exit Slide Permanently Indicated Armed	
25-07-04 Overwing Emergency Exit Slide Permanently Indicated Not Armed	F
MI-25-11 Pilot Seats	
25-11-01 Pilot Seat Manual Horizontal Adjustment	Δ
25-11-02 Pilot Seat Manual Vertical Adjustment	
25-11-03 Pilot Seat Recline Adjustment	
25-11-04 Pilot Seat Other Manual Adjustments	
25-11-05 Pilot Seat Electrical Adjustment	
25-11-06 Pilot Seat Shoulder Harness and Lap Strap	
25-11-07 Pilot Seat Fifth Strap	
25-11-08 Pilot Sidestick Armrest Height Adjustment	
25-11-09 Pilot Sidestick Armrest Pitch Adjustment	
25-11-10 Pilot Sidestick Armrest Memory Position Display	
25-11-11 Pilot Inboard Armrest Vertical Adjustment	
25-11-12 Pilot Seat Headrest	L



A320/A321 Minimum equipment list

MI-25-12 Third and Fourth Occupant Seats	
25-12-01 Third Occupant Seat	A
25-12-02 Third Occupant Seat Shoulder Harness	B
25-12-03 Lap Strap	C
25-12-04 Third Occupant Seat Fifth Strap	D
25-12-05 Fourth Occupant Seat	
25-12-06 Fourth Occupant Seat Shoulder Harness	
25-12-07 Fourth Occupant Seat Lap Strap	
25-12-08 Fourth Occupant Seat Fifth Strap	Н
MI-25-13 Lining and Furnishings	
25-13-01 Pilot Sliding Table	A
25-13-02 Pilot Retractable Footrest	B
MI-25-20 Cabin Seats	
25-20-01-51 Passenger Seat Backs	A
25-20-01-52 Passenger Seat - Recline Mechanism	B
25-20-01-53 Passenger Seat - Underseat Baggage Restraining Bars	
25-20-01-54 Passenger Seat - Armrests	D
25-20-01-55 Passenger Seat - Foot Rest/Leg Rest	
25-20-01-56 Passenger Seat - Headrest	
25-20-01-57 Passenger Seat - Meal Tray	
25-20-01-58 Passenger Seat - Seat Electrical/Electronic Systems/Components	
25-20-01-59 Passenger Seat - PSU Overhead Reading Light	
25-20-01-60 Passenger Seat - In-Seat Personal Reading Light	
MI-25-35 Galley Equipment	
25-35-01 Galley Waste Compartment Flapper Door	
25-35-51 Ovens	
25-35-52 Beverage Makers	
25-35-53 Chiller Unit(s)	U
MI-25-40 Lavatories	
25-40-01 Toilet Waste Compartment Flapper Door	
25-40-02 Exterior Lavatory Ashtray	
25-40-03 Interior Lavatory Ashtray	
25-40-51 Lavatory	
•	С
MI-25-45 Cabin Furnishings	
25-45-51 Storage Bin(s)/Cabin and Galley Storage Compartments/ Closets	A



MI-25-50 Cargo Compartments	
25-50-02 Decompression Panels in the Cargo Compartments	A
25-50-03 Sidewall Linings and Ceiling Panels in the Cargo Compartments	В
25-50-04 Cargo Compartment Restraint Components (Nets, Attach Points, Stanchions)	C
25-50-51 Cargo Valuables Locker	D
MI-25-62 Cabin Escape Facilities	
25-62-01 Cabin Passenger Door Slide or Slide Raft	
25-62-02 Overwing Emergency Exit Slide or Slide Raft	
25-62-03 Emergency Exit Slide or Slide Raft	
25-62-04 SLIDE ARMED light	
25-62-06 Passenger Door SLIDE PRESS LOW Message on Programming and Test Panel (PTP) STATUS Page 25-62-06 Passenger Door CHECK SLIDE PRESSURE Message on Flight Attendant Panel (FAP)	F
25-62-07 Overwing Emergency Exit SLIDE PRESS LOW Message on Programming and Test Panel ( P7 STATUS Page	
25-62-07 Overwing Emergency Exit CHECK SLIDE PRESSURE Message on Flight Attendant Panel (FAP) 25-62-08 Overwing Escape Life Line	
MI-25-63 Evacuation Signaling Equipment 25-63-01 Emergency Evacuation Signaling System (COMMAND pb-sw, HORN SHUT OFF pb, CAPT&PURS CAPT sw)	
MI-25-64 First Aid Equipment	
25-64-01 First Aid Kit	А
25-64-02 Emergency Medical Kit	
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MI-25-65 Emergency Equipment	
25-65-01 Cockpit Flashlight	
25-65-02 Cabin Flashlight	
25-65-03 Crash Axe/Crowbar	
25-65-05 Fireproof Gloves	
25-65-06 Megaphone	
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MI-25-66 Floatation and Survival Equipment	
25-66-01 Life Vest	A
MI-26 Fire Protection	
MI-26-00 MAINTENANCE Message on the STATUS SD page	
26-00-01 SDCU MAINTENANCE Message	A
26-00-01 SMOKE MAINTENANCE Message	



MI-26-01 Overhead Panels

MI-26-01-01 FIRE Overhead Panel	
26-01-01-01 Bulb/LED in the ENG FIRE-PUSH pb-sw	A
26-01-01-02 ENG AGENT pb DISCH light	
26-01-01-03 ENG AGENT pb SQUIB light	C
26-01-01-04 Bulb/ LED in the APU FIRE-PUSH pb-sw	
26-01-01-05 APU AGENT pb DISCH light	
26-01-01-06 APU AGENT pb SQUIB light	F
26-01-01-31 ENG FIRE TEST pb	G
26-01-01-32 APU FIRE TEST pb	
26-01-01-33 APU FIRE PUSH pb-sw	I
26-01-01-34 APU AGENT pb	J
MI-26-01-02 CARGO SMOKE Overhead Panel	
26-01-02-01 CARGO SMOKE DISCH light	Δ
26-01-02-02 CARGO SMOKE DISCH AGENT 2 light	
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MI-26-12 Engine Fire and Overheat Detection	
26-12-01 Engine Fire Detection Loop A on the Engine 1	
26-12-02 Engine Fire Detection Loop A on the Engine 2	
26-12-03 Engine Fire Detection Loop B on the Engine 1	
26-12-04 Engine Fire Detection Loop B on the Engine 2	
26-12-05 FIRE light on the ENG MASTER Panel	E
MI-26-13 APU Fire and Overheat Detection	
26-13-01 APU Fire Detection Loop	A
MI-26-15 Avionics Compartment Smoke Detection	
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26-15-01 Avionics Smoke Detection System	A
MI-26-16 Cargo Compartment Smoke Detection	
26-16-01 Smoke Detector in the FWD Cargo Compartment	A
26-16-02 Smoke Detector in the AFT and the BULK Cargo Compartments	B
MI-26-17 Lavatory Smoke Detection	
26-17-01 Lavatory Smoke Detection System	Δ
26-17-01 Eavacity Shicke Detection System	
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MI-26-22 APU Fire Extinguishing	
26-22-01 APU Automatic Fire Extinguishing Control on Ground	A
26-22-02 APU Fire Extinguisher Overpressure Indication (Red Disc)	
26-22-03 Squib of the APU Fire Extinguisher Bottle	
26-22-04 APU Fire Extinguisher Bottle	
26-22-05 APU AUTO EXTING TEST pb-sw on the Maintenance Panel	
26-22-06 APU FIRE light on the External Power Panel	F
26-22-07 APU SHUT OFF pb on the External Power Panel	G
MI-26-23 Cargo Compartment Fire Extinguishing	
26-23-01 Cargo Agent Bottle	A
26-23-02 Squib of the Cargo Bottle 1	В
26-23-03 Squib of the Cargo Bottle 2	C
MI-26-24 Portable Fire Extinguisher	
26-24-01-01 Portable Fire Extinguisher - Cockpit	A
26-24-01-02 Portable Fire Extinguisher - Cabin	
MI-26-25 Lavatory Fire Extinguishing	
26-25-01 Lavatory Waste Bin Fire Extinguishing System	A
MI-27 Flight Controls	
MI-27-00 MAINTENANCE Messages on the STATUS SD page	
27-00-01 F/CTL MAINTENANCE Messages on the STATOS SD page	٨
27-00-01 P/CTL MAINTENANCE Message	
•	D
MI-27-01 Overhead Panels	
MI-27-01-01 FLT CTL Overhead Panel	
27-01-01-01 ELAC pb-sw FAULT light	
27-01-01-02 ELAC pb-sw OFF light	
27-01-01-03 SEC pb-sw FAULT light	
27-01-01-04 SEC pb-sw OFF light	D
MI-27-07 Indications on SD pages	
27-07-01 Aileron Actuator Indication on the F/CTL SD page	A
27-07-02 Aileron Position Indication on the F/CTL SD page	
27-07-03 Elevator Actuator Indication on the F/CTL SD page	C
27-07-04 Elevator Position Indication on the F/CTL SD page	D
27-07-05 Pitch Trim Position Indication on the F/CTL SD page	
27-07-06 Rudder Position Indication on the F/CTL SD page	F



A320/A321 Minimum Equipment List

27-07-07 Rudder Trim Position Indication on the F/CTL SD page	G
27-07-08 Rudder Travel Limiter Position Indication on the F/CTL SD page	
27-07-09 ELAC Indication on the F/CTL SD page	
27-07-10 SEC Indication on the F/CTL SD page	
27-07-11 Spoilers/Speedbrakes Indication on the F/CTL SD page	K
27-07-12 Spoilers/Speedbrakes Indication on the WHEEL SD page	L
MI-27-08 Indications on the EWD	
27-08-01 Flap Position Indication on the EWD	Α
27-08-02 Slat Position Indication on the EWD	
MI-27-14 Aileron and Hydraulic Actuation	
27-14-01 Left Aileron Blue Servo-Control (Controlled by ELAC 1)	Δ
27-14-02 Left Aileron Green Servo-Control (Controlled by ELAC 2)	
27-14-03 Right Aileron Green Servo-Control (Controlled by ELAC 1)	
27-14-04 Right Aileron Blue Servo-Control (Controlled by ELAC 2)	
MI-27-21 Rudder Mechanical Control	
27-21-01 Rudder Pedal Adjustment System	<i>P</i>
MI-27-22 Rudder Trim Actuation	
27-22-01 Rudder Trim System	Α
27-22-02 Manual Rudder Trim Reset Function	
27-22-03 Rudder Trim Position Indication on the Center Pedestal	C
MI-27-23 Artificial feel and rudder travel limiting actuation	
27-23-01 Rudder Travel Limiter System (Including Rudder and Pedals Travel Limiter Units)	Α
MI-27-34 Elevator and Hydraulic Actuation 27-34-01 Elevator Servo-Control	
27-34-01 Elevator Servo-Control	
	E
MI-27-40 Trimmable Horizontal Stabilizer (THS)	
27-40-01 Stabilizer Mechanical Control	
27-40-02 Stabilizer Actuator Electric Motor	B
MI-27-51 Flaps Electrical Control and Monitoring	
27-51-01 SFCC Flap Channel	Д
27-51-02 SFCC Slat Channel	
27-51-03 Flap Wing Tip Brakes Solenoid	C
MI-27-54 Flaps Hydraulic Actuation and Power Transmission	
27-54-01 Flap Hydraulic Motor	Δ
27-54-02 Flap PCU Valve Block	
27-54-03 Flap Proceure Off Brake	



MI-27-64 Spoiler Hydraulic Actuation	
27-64-01 Spoiler 5	A
27-64-02 Spoiler 1 or 3	В
27-64-03 Spoiler 2 or 4	C
27-64-04 Spoilers 1 and 2	D
27-64-05 Spoilers 3 and 4	Е
MI-27-81 Slats Electrical Control and Monitoring	
27-81-01 Slat Wing Tip Brakes Solenoids	A
MI-27-84 Slats Hydraulic Actuation and Power Transmission	
27-84-01 Slats Hydraulic Motor	Δ
27-84-02 Slat PCU Valve Block	
27-84-03 Slat Pressure-Off Brake	
MI-27-92 Electrical Flight Control System (EFCS) Control Inputs and Power Supply	
27-92-01 Speedbrake Control System	Δ
27-92-02 Ground Spoiler Control System	
27-92-03 SIDESTICK PRIORITY light	
27-92-04 Sidestick Dual Input Visual Warnings	
27-92-05 Sidestick Dual Input Aural Warning	
MI-27-93 ELAC System (Elevator Aileron Computer)	
27-93-01 ELAC 1	A
27-93-02 ELAC 2	В
27-93-03 Pitch Normal Law	C
MI-27-94 SEC System (Spoiler and Elevator Computer)	
27-94-01 SEC 1	A
27-94-02 SEC 2	
27-94-03 SEC 3	
MI-27-95 FCDC System (Flight Control Data Concentrator)	
27-95-01 FCDC 1	Δ
27-95-02 FCDC 2	
MI-28 Fuel	
MI-28-00 MAINTENANCE Message on the STATUS SD page	
28-00-01 FUEL MAINTENANCE Message	Δ
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MI-28-01 Overhead Panels

WI-26-01 Overnead Fallels	
MI-28-01-01 FUEL Overhead Panel	
28-01-01-01 Wing TK PUMP pb-sw FAULT light	A
28-01-01-02 Wing TK PUMP pb-sw OFF light	B
28-01-01-03 X FEED pb-sw ON light	C
28-01-01-04 X FEED pb-sw OPEN light	D
28-01-01-05 CTR TK PUMP pb-sw FAULT light	E
28-01-01-05 CTR TK XFR pb-sw FAULT light	F
28-01-01-06 CTR TK PUMP pb-sw OFF light	
28-01-01-06 CTR TK XFR pb-sw OFF light	
28-01-01-07 FUEL MODE SEL pb-sw FAULT light	
28-01-01-08 ACT pb-sw FAULT light	
28-01-01-09 ACT pb-sw FWD light	K
MI-28-07 Indications on the FUEL SD page	
MI-28-07-01 Fuel Quantity Indications on the FUEL SD page	
28-07-01-01 Fuel On Board (FOB) Indication on the FUEL SD page	A
28-07-01-02 Fuel Quantity Indication ( FQI ) in Degraded Mode on the FUEL SD page	
28-07-01-03 Outer Tank Fuel Quantity Indication on the FUEL SD page	
28-07-01-04 Inner Tank Fuel Quantity Indication on the FUEL SD page	
28-07-01-04 Wing Tank Fuel Quantity Indication on the FUEL SD page	E
28-07-01-05 Center Tank Fuel Quantity Indication on the FUEL SD page	
28-07-01-06 ACT Fuel Quantity Indication on the FUEL SD page	G
MI-28-07-02 Fuel Temperature Indications on the FUEL SD page	
28-07-02-01 Fuel Temperature Indication on the FUEL SD page	A
MI-28-07-03 Tank Pump Indications on the FUEL SD page	
1	Δ.
28-07-03-01 Wing Tank Pump Indication on the FUEL SD page	
28-07-03-02 Center Tank Pump Indication on the FUEL SD page	B
MI-28-07-04 Valve Indications on the FUEL SD page	
28-07-04-01 Engine LP Fuel Valve Indication on the FUEL SD page	
28-07-04-02 APU LP Fuel Valve Indication on the FUEL SD page	
28-07-04-03 Crossfeed Valve Indication on the FUEL SD page	
28-07-04-04 Wing Transfer Valve Indication on the FUEL SD page	
28-07-04-05 Center Tank Transfer Valve Indication on the FUEL SD page	
28-07-04-06 ACT to CTR TK Transfer (Arrow) Indication on the FUEL SD page	F
MI-28-09 ECAM Alerts	
28-09-01 FUEL L(R) INNER(OUTER) TK HI TEMP Alert	A
28-09-01 FUEL L(R) WING TK HI TEMP Alert	
28-09-02 FUEL L(R) INNER(OUTER) TK LO TEMP Alert	C



28-09-02 FUEL L(R) WING TK LO TEMP Alert	
28-09-03 FUEL ACT XFR FAULT Alert	E
MI-28-12 Tank Venting System	
28-12-01 Overpressure Protector between the Inner and the Outer Tank	
28-12-02 Overpressure Protector in the Vent Surge Tank	
28-12-03 Overpressure Protector in the Inner Tank	
28-12-03 Overpressure Protector in the Wing Tank	
28-12-04 Overpressure Protector between the Center and the Inner Tank	
28-12-04 Overpressure Protector between the Center and the Wing Tank	
MI-28-15 Intercell Transfer System	
28-15-01 LH Wing Transfer Valve	
28-15-02 RH Wing Transfer Valve	В
MI-28-20 Distribution	
28-20-01 Automatic Fuel Feed System	A
MI-28-21 Main Fuel Pump System	
28-21-01 Wing Tank Pump	A
28-21-02 Center Tank Pump	
28-21-03 Wing Tank Pump Sequence Valve	C
MI-28-22 APU Fuel Pump System	
28-22-01 APU Fuel Pump	Α
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MI-28-23 Crossfeed System 28-23-01 Crossfeed Valve	
	A
MI-28-24 Engine LP Fuel Shutoff	
28-24-01 Engine LP Fuel Valve Electrical Motor	A
MI-28-25 Refuel/Defuel System	
28-25-01 Fuel Quantity Preselector	A
28-25-02 Fuel Quantity on the Refuel/Defuel Control Panel	
28-25-03 Refuel Valve	C
28-25-04 Transfer Defuel Valve	
28-25-05 Exterior Refuel/Defuel Control Panel	E
MI-28-26 Main Transfer System	
28-26-01 Center Tank Transfer Valve	A



MI-28-28 Additional Center Tank Transfer System	
28-28-01 ACT Auto Transfer System	A
28-28-02 ACT Transfer Valve	
28-28-03 ACT Transfer Pump	
28-28-04 ACT Air Shutoff Valve	
28-28-05 ACT Inward Pressure Relief Valve	
28-28-06 ACT Vent Valve	
28-28-07 ACT Refuel Valve	
28-28-08 ACT Integrated Impact Wall	
MI-28-29 APU LP Fuel Shutoff	
28-29-01 APU LP Fuel Valve	A
MI-28-43 Manual Magnetic Indicators	
28-43-01 Manual Magnetic Indicators	A
MI-28-46 Tank Level Sensing	
28-46-01 High Level Detection System in the Inner Tank	A
28-46-01 High Level Detection System in the Wing Tank	
28-46-02 High Level Detection System in the Center Tank	C
28-46-03 High Level Detection System in the ACT	D
28-46-04 Low Level Detection System in the Inner Tank	
28-46-04 Low Level Detection System in the Wing Tank	
28-46-05 Low Level Detection System in the ACT	G
MI-28-50 Fuel Management	
28-50-01 Fuel Quantity Indicating Computer ( FQIC ) Channel	A
MI-29 Hydraulic Power	
MI-29-01 Overhead Panels	
MI-29-01-01 HYD Overhead Panel	
29-01-01-01 B(Y) ELEC PUMP pb-sw FAULT light	A
29-01-01-02 B ELEC PUMP pb-sw OFF light	B
29-01-01-03 Y ELEC PUMP pb-sw ON light	C
29-01-01-04 G(Y) ENG 1(2) PUMP pb-sw FAULT light	
29-01-01-05 G(Y) ENG 1(2) PUMP pb-sw OFF light	
29-01-01-06 PTU pb-sw FAULT light	
29-01-01-07 PTU pb-sw OFF light	G
MI-29-01-02 Maintenance HYD Overhead Panel	
ZM-UI-UZ-UI I-(B)(V) LEAK MEASHREMENH VALVES NN-OW HEE HANT	Δ



MI-29-07 Indications on the HYD SD page	
29-07-01 Yellow ELEC Pump Indication on the HYD SD page	A
29-07-02 Pump Indication on the HYD SD page	
29-07-03 Fire Valve Indication on the HYD SD page	
29-07-04 PTU Indication on the HYD SD page	
29-07-05 Reservoir Quantity Indication on the HYD SD page	
29-07-06 RAT Indication on the HYD SD page	F
29-07-07 System Label Indication on the HYD SD page	G
29-07-08 System Pressure Indication on the HYD SD page	H
MI-29-09 ECAM Alerts	
29-09-01 HYD B(Y) ELEC PUMP LO PR Alert	A
29-09-02 HYD B(Y) ELEC PUMP OVHT Alert	
29-09-03 HYD G(Y) ENG 1(2) PUMP LO PR Alert	C
29-09-04 HYD G(B)(Y) RSVR LO AIR PR Alert	D
29-09-05 HYD G(B)(Y) RSVR LO LVL Alert	E
29-09-06 HYD G(B)(Y) RSVR OVHT Alert	F
29-09-07 HYD PTU FAULT Alert	
29-09-08 HYD RAT FAULT Alert	Н
29-09-09 HYD G(B)(Y)(B+G)(G+Y)(B+Y) SYS LO PR Alert	
MI-29-10 Main Hydraulic Power	
29-10-01 Engine Driven Pump	A
29-10-02 Engine Driven Pump Depressurization Function	
29-10-03 Blue System Electric Pump	
29-10-04 Hydraulic System Accumulator	
29-10-05 Yellow Brake Accumulator	
29-10-07 Engine Pump Fire Valve	
29-10-08 Hydraulic System Filter	
29-10-09 Hydraulic Case Drain Filter	H
MI-29-22 Blue Auxiliary Hydraulic Power	
29-22-01 Ram Air Turbine	A
MI-29-23 Power Transfer	
29-23-01 Power Transfer Unit ( PTU )	A
MI-29-24 Yellow Auxiliary Hydraulic Power	
29-24-01 Yellow System Electric Pump	A



MI-30 Ice and Hain Protection	
MI-30-01 Overhead Panels	
MI-30-01-01 ANTI ICE Overhead Panel	
30-01-01-01 ANTI ICE ENG 1(2) pb-sw FAULT light	
30-01-01-02 ANTI ICE ENG 1(2) pb-sw ON light	
30-01-01-03 ANTI ICE WING pb-sw FAULT light	
30-01-01-04 ANTI ICE WING pb-sw ON light	D
MI-30-01-02 WIPER Overhead Panel	
30-01-02-01 Wiper High Speed Function (FAST Position)	
30-01-02-02 Wiper Low Speed Function (SLOW Position)	
30-01-02-03 Wiper Intermittent Speed Function (INTMT Position)	C
MI-30-07 Indications on the BLEED SD page	
30-07-01 ANTI ICE Indication on the BLEED SD page	
30-07-02 Arrow Indication on the BLEED SD page	B
MI-30-11 Wing Ice Protection	
30-11-01 Wing Anti-Ice Control Valve	A
MI-30-21 Engine Air Intake Ice Protection	
30-21-01 Engine Anti-Ice Valve	A
MI-30-31 Probe Ice Protection	
30-31-01 Probe Heat Computer ( PHC )	٨
30-31-02 Pitot Heater	
30-31-03 Static Ports Heater	
30-31-04 Angle of Attack ( AOA ) Probes Heating	D
30-31-05 TAT Probes Heating	E
MI-30-42 Windshield Anti-Icing and Defogging	
30-42-01 Window Heat Computer	A
30-42-02 Fixed Lateral Window and Sliding Window Heating	B
30-42-03 Windshield Heating	
30-42-04 PROBES/WINDOW HEAT pb-sw AUTO Control	
30-42-05 PROBES/WINDOW HEAT pb-sw ON light	E
MI-30-45 Windshield Rain Protection	
30-45-01 Windshield Wiper	
30-45-02 Windshield Wiper PARK Function	
30-45-03 Rain Repellent System	C
MI-30-71 Waste Water Ice Protection	
30-71-01 Waste Water Drain Mast Heating System	A



MI-30-81 Ice Detection	
30-81-02 External Visual Icing Indicator	
MI-31 Indicating/Recording Systems	
MI-31-00 MAINTENANCE Message on the STATUS SD page	
31-00-01 QAR MAINTENANCE Message	A
31-00-02 ACMS MAINTENANCE Message	B
31-00-03 DAR MAINTENANCE Message	C
31-00-04 CFDIU MAINTENANCE Message	
31-00-05 DMC 1/3 MAINTENANCE Message	
31-00-06 DMC 2/3 MAINTENANCE Message	F
MI-31-05 Indications on the Primary Flight Display (PFD)	
31-05-01 AP Related Indications on the FMA	A
31-05-02 A/THR Related Indications on the FMA	B
31-05-03 Approach and Landing Capabilities on the FMA	C
31-05-04 Special Messages on the FMA	
31-05-05 Actual Airspeed Reference Line and Scale Indications on the PFD	
31-05-06 Mach Number Indication on the PFD	
31-05-07 VMO / MMO Characteristic Speed Indication on the PFD	
31-05-08 Altitude Indication on the PFD	
31-05-09 Vertical Speed Indication on the PFD	
31-05-10 Other Air Data Related Indications on the PFD	
31-05-11 Attitude Indication on the PFD	
31-05-12 Heading Indication on the PFD	L
MI-31-06 Indications on the Navigation Display (ND)	
31-06-01 Ground Speed Indication on the ND	
31-06-02 True Air Speed Indication on the ND	
31-06-03 Wind Indication on the ND	
31-06-04 Heading Indication on the ND	
31-06-05 Position (Aircraft Symbol) Indication on the ND	
31-06-06 Navigation Station Information on the ND	
31-06-07 Chrono Indication on the ND	G
MI-31-07 Indications on the System Display (SD)	
31-07-01 Indications on the System Display pages	
31-07-02 Permanent Data ( TAT , SAT , GLOAD - ALT SEL, UTC , GW ) Indications on the SD	
31-07-02 Permanent Data ( TAT , SAT , GLOAD, UTC , GW ) Indications on the SD	
31-07-02 Permanent Data (TAT, SAT, ISA, GLOAD, UTC, GW) Indications on the SD	D



MI-31-08 Indications of	n the Engine	Warning	Display	(EWD)

31-08-01 Engine Parameter Indications on the EWD	A
31-08-02 Fuel On Board ( FOB ) Indication on the EWD	
31-08-03 MEMO Messages on the EWD	C
31-08-04 Slats/Flaps Position Indications on the EWD	D
MI-31-20 Independent Instruments	
31-20-01 Electrical Clock Indicator	Δ
<sup>3</sup> MI-31-30 Centralized Fault Display System (CFDS) and Data Recording System	
31-30-01 Centralized Fault Display System (CFDS)	
31-30-02 Digital AIDS Recorder (DAR)	
31-30-03 Digital Flight Data Recorder (DFDR)	
31-30-04 Data Management Unit (DMU) part of Flight Data Interface and Management Unit(FDIMU)	
31-30-05 Flight Data Interface Unit (FDIU or FDIMU Flight Data Interface function)	
31-30-06 Quick Access Recorder (QAR)	
31-30-07 Printer	G
MI-31-38 Up and Down Data Loading System Acquisition/Interface and Equipment	
31-38-01 DATA LOADING selector	A
31-38-02 Data Loading Routing Box (DLRB)	
31-38-03 Multipurpose Disk Drive Unit (MDDU)	
MI-31-53 Flight Warning Computer (FWC)	
31-53-01 Flight Warning Computer(FWC)	
31-53-03 MASTER WARN Cancel Function	
31-53-04 MASTER CAUTION light	
31-53-05 MASTER WARN light	
31-53-06 Altitude Alert	
MI-31-55 System Data Acquisition Concentrator (SDAC)	
31-55-01 System Data Acquisition Concentrator (SDAC)	A
MI-31-56 ECAM Control Panel (ECP)	
31-56-01 System Page Manual Call pb on the ECP	A
31-56-02 ALL pb on the ECP	
31-56-03 CLR pb on the ECP	C
31-56-04 EMER CANC pb on the ECP	D
31-56-05 RCL pb on the ECP	E
31-56-06 STS pb on the ECP	F
31-56-07 T.O. CONFIG. ph. on the ECP	G



MI-31-	62 Display Management Computer (DMC)	
	31-62-01 DMC 1	. A
	31-62-02 DMC 2	. В
	31-62-03 DMC 3	.С
MI-31-	63 Display Unit (DU)	
	31-63-01 PFDU 1	. A
	31-63-02 PFDU 2	
	31-63-03 NDU 1	. C
	31-63-04 NDU 2	. С
	31-63-05 SDU	Е
	31-63-06 EWDU	F
MI-31-	68 Switching Panel	
VII O I	31-68-01 AIR DATA SWITCHING selector on the Center Pedestal	Δ
	31-68-02 ATT HDG SWITCHING selector on the Center Pedestal.	
	31-68-03 ECAM/ND XFR SWITCHING selector on the Center Pedestal.	
	31-68-04 EIS DMC SWITCHING selector on the Center Pedestal	
	31-68-05 PFD/ND XFR pb on the Lateral Instrument Panel	
	·	
MI-32	Landing Gear	
MI-32-	07 Indications on the WHEEL SD page	
	32-07-01 Brakes Temperature Indication on the WHEEL SD page	. A
	32-07-02 L/G Position Indication on the WHEEL SD page	
	32-07-03 L/G Doors Position Indication on the WHEEL SD page	
	32-07-04 L/G CTL Indication on the WHEEL SD page	. С
	32-07-05 UP LOCK Indication on the WHEEL SD page	. E
	32-07-06 [Y] N/W STEERING Indication on the WHEEL SD page	F
	32-07-08 ANTI SKID Indication on the WHEEL SD page	
	32-07-08 ANTI SKID, [1], [2] Indication on the WHEEL SD page	
	32-07-09 AUTO BRK Indication on the WHEEL SD page	
	32-07-10 [G] NORM BRK Indication on the WHEEL SD page	
	32-07-11 Release Brake Indication on the WHEEL SD page	
	32-07-12 ACCU PRESS/ACCU ONLY Indication on the WHEEL SD page	
	32-07-13 [Y] ALTN BRK Indication on the WHEEL SD page	. IV
MI-32-	09 ECAM Alerts	
	32-09-01 BRAKES-NWS MINOR FAULT Alert	
MI-32-	11 Main Gear	
*:1 OL	32-11-01 Main Gear Torque Link Damper	Δ
		٠,-
VII-32-	12 Main Gear Doors	
	32-12-01 Main Gear Door Ground Opening Cable	Α



	MI-32-31 Normal Extension and Retraction	
_	32-31-01 Landing Gear Control and Interface Unit ( LGCIU )	
	32-31-02 Landing Gear Retracting System	В
	MI-32-32 Proximity Detector System	
	32-32-01 LGCIU 1 Proximity Detector	. A
	32-32-02 LGCIU 2 RH L/G Shock Absorber Proximity Detector	. B
	32-32-03 LGCIU 2 LH L/G Shock Absorber Proximity Detector	C
	32-32-04 LGCIU 2 Nose L/G Shock Absorber Proximity Detector	D
	32-32-05 LGCIU 2 RH L/G Down Lock Proximity Detector	E
	32-32-06 LGCIU 2 LH L/G Down Lock Proximity Detector	F
	32-32-07 LGCIU 2 Nose L/G Down Lock Proximity Detector	. G
	32-32-08 LGCIU 2 RH L/G Up Lock Proximity Detector	.Н
	32-32-09 LGCIU 2 LH L/G Up Lock Proximity Detector	I
	32-32-10 LGCIU 2 Nose L/G Up Lock Proximity Detector	J
	32-32-11 LGCIU 2 RH L/G Doors Open Proximity Detector	. K
	32-32-12 LGCIU 2 LH L/G Doors Open Proximity Detector	L
	32-32-13 LGCIU 2 Nose L/G Doors Open Proximity Detector	.М
	32-32-14 LGCIU 2 RH L/G Doors Closed Proximity Detector	N
	32-32-15 LGCIU 2 LH L/G Doors Closed Proximity Detector	
	32-32-16 LGCIU 2 Nose L/G Doors Closed Proximity Detector	Р
	MI-32-33 Free Fall Extension	
	32-33-01 Landing Gear Gravity Extension System	A
	MI-32-41 Wheels	
ı	32-41-01 Nose Wheel Tie Bolt	Δ
•	32-41-02 Main Wheel Tie Bolt	
	MI-32-42 Normal Braking	
	32-42-01 Main Wheel Brake	
	32-42-02 Green System Brake	
	32-42-03 Braking/Steering Control Unit ( BSCU ) System 1	
	32-42-04 Braking/Steering Control Unit ( BSCU ) System 2	
	32-42-05 AUTO/BRK Function	E
	32-42-06 Tachometer	F
	32-42-07 Nose Landing Gear Wheel Brake Pad	G



MI-32-44 Alternate Braking	
32-44-01 Yellow System Brake	A
32-44-02 ACCU PRESS Indicator	В
32-44-03 BRAKES Pressure Indicator	
32-44-04 Alternate Braking Control Unit (ABCU)	D
MI-32-45 Parking/Ultimate Emergency Braking	
32-45-01 Parking Brake Control Valve Electrical Motor	A
MI-32-47 Brake Temperature System	
32-47-01 Brake Temperature Monitoring Unit (BTMU)	A
• • • • • • • • • • • • • • • • • • • •	
MI-32-48 Brake Cooling	
32-48-01 Brake Fan System	
32-48-03 BRK FAN pb-sw ON light	
·	
MI-32-51 Steering	
32-51-01 Nose Wheel Steering Control System	
32-51-03 NWS Electrical Deactivation Box	
32-51-04 PARKING BRAKE light on the NWS Electrical Deactivation	
MI-32-61 Landing Gear Panel on the Center Instrument Panel	
32-61-01 LDG GEAR Indicator Panel	Δ
32-61-02 DOWN Red Arrow light on the Landing Gear lever	
MI-33 Lights	
MI-33-01 Overhead Panels	
MI-33-01-01 ANN LT Overhead Panel	
33-01-01 TEST Function of ANN LT sw	A
33-01-01-02 DIM Function of ANN LT sw	B
33-01-01-03 BRT Function of ANN LT sw	C
MI-33-01-02 SIGNS Overhead Panel	
33-01-02-01 EMER EXIT LT OFF light	A
33-01-02-02 AUTO Function of SEAT BELT SIGNS sw	B
33-01-02-03 AUTO Function of NO SMOKING SIGNS sw	C
MI-33-10 Cockpit General Illumination	
33-10-01 Cockpit General Illumination (Center & Main Instrument Lighti	ng, Console and Floor Lighting, Dome lights
and Lighting Strips, Instrument and Panel Integral Lighting, Map Holde	• • • • •



MI-33-20 Cabin General Illumination	
33-20-01 Cabin General Illumination	
33-20-02 Cabin Signs (No Smoking/No Electronic Devices/Fasten Seat Belt/Return to Seat)	,
33-20-03 Lavatory Sign (Return to seat)	C
MI-33-30 Cargo and Service Compartment Lighting	
33-30-01 Cargo and Service Compartment Lighting System	A
MI-33-40 Exterior Lighting	
33-40-01 Navigation light System 1	A
33-40-02 Navigation light System 2	B
33-40-03 Landing light	C
33-40-04 Landing light Extension/Retraction System	D
33-40-05 Runway Turnoff light	E
33-40-06 Taxi and Takeoff light	F
33-40-07 Logo light	G
33-40-08 Beacon light	H
33-40-09 Wing Scan light	
33-40-10 Strobe light	J
MI-33-51 Cabin Emergency Lighting	
33-51-01 Exit Marking Sign	
33-51-02 Exit Location Sign in the Main Aisle	
33-51-03 Overhead Emergency Lighting System in the Main Aisle	
33-51-04 Overhead Emergency Lighting System in the Door Vicinity	
33-51-05 Floor Proximity Emergency Escape Path Marking System in the Main Aisle	
33-51-06 Galley Strips	
33-51-07 Floor Proximity Emergency Escape Path Marking System Exit Marker	
33-51-08 Overwing Emergency light	
33-51-10 Escape Slide Lighting	
33-51-11 Lavatory Auxiliary light	
33-51-12 BAT TEST pb on the PTP	
33-51-13 SYS TEST pb on the PTP	
•	
MI-34 Navigation	
MI-34-00 MAINTENANCE Messages on the STATUS SD page	
34-00-01 ADR (1)(2)(3) MAINTENANCE Message	
34-00-02 IR MAINTENANCE Message	B



MI-34	-01 Overhead Panels	
MI-34	-01-01 ADIRS Overhead Panel	
	34-01-01-01 ADR pb-sw FAULT light	А
	34-01-01-02 ADR pb-sw OFF light	
	34-01-01-03 IR FAULT light	
	34-01-01-04 IR ALIGN light	D
	34-01-01-04 IR pb-sw OFF light	
	34-01-01-05 ON BAT light	F
	34-01-01-31 ADR pb-sw	G
	34-01-01-32 IR pb-sw	H
	34-01-01-33 IR Mode selector	
	34-01-01-34 DATA DISPLAY selector of ADIRS CDU	
	34-01-01-35 SYS DISPLAY selector of ADIRS CDU	K
	34-01-01-36 Display Unit of ADIRS CDU	
	34-01-01-37 Keyboard of ADIRS CDU	N
MI-34	-01-02 GPWS Overhead Panel	
	34-01-02-01 GPWS SYS FAULT light	Α
N AL O A	Č	
IVII-34	-05 Indications on the Primary Flight Display (PFD)	
	34-05-01 Actual Airspeed Reference Line and Scale Indication on the PFD.	
	34-05-02 Mach Number Indication on the PFD	
	34-05-03 VMO/MMO Characteristic Speed Indication on the PFD	
	34-05-05 Baro Reference Indication on the PFD	
	34-05-06 Vertical Speed in Inertial Mode Indication on the PFD.	
	34-05-07 Other Air Data Related Indications on the PFD	
	34-05-08 Attitude Indication on the PFD	
	34-05-09 Heading Indication on the PFD	
MI OA		
IVII-34	-06 Indications on the Navigation Display (ND)	
	34-06-01 Ground Speed Indication on the ND.	
	34-06-02 True Air Speed Indication on the ND	
	34-06-03 Wind Indication on the ND	
	34-06-04 Heading Indication on the ND	
	34-06-06 Radio Navaids Indications on the ND	
	34-00-00 nauio inavaius indications on the ind	Г



MI-34-10 Air Data/Inertial Reference System (ADIRS)	
34-10-01 ADR 1	
34-10-02 ADR 2	
34-10-03 ADR 3	C
34-10-04 IR 1	
34-10-05 IR 2	E
34-10-06 IR 3	F
MI-34-11 Sensors	
34-11-01 Angle of Attack ( AOA ) Sensor	A
34-11-02 CAPT Total Air Temperature (TAT) Sensor Element Connected to the ADR 1	
34-11-03 CAPT Total Air Temperature (TAT) Sensor Element Connected to the ADR 3	C
34-11-04 F/O Total Air Temperature (TAT) Sensor Element Connected to the ADR 2	
MI-34-21 Altitude and Airspeed Standby Data	
34-21-01 Standby ALT Indicator	Δ
34-21-02 Bugs on the Standby ALT Indicator	
34-21-03 Standby IAS Indicator	
34-21-04 Bugs on the Standby IAS Indicator	
34-21-05 Standby ALT Metric Indicator	
MI-34-22 Attitude and Heading Standby Data	
34-22-01 Standby Compass Indicator	
34-22-02 Standby Compass Lighting	
34-22-03 Standby Horizon Indicator	C
MI-34-23 Integrated Standby Instrument System (ISIS)	
34-23-01 ISIS Altitude Indication	A
34-23-02 ISIS Airspeed Indication	B
34-23-03 ISIS Bugs Indication	
34-23-04 ISIS Attitude Indication	D
34-23-05 ISIS ILS Indication	E

34-23-06 ISIS Mach Number Indication.....F

MI-34-30 Landing and Taxiing Aid



MI-34-40 GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar	
34-40-01-01 Ground Proximity Warning System (GPWS)	A
34-40-01-02 Terrain Awareness and Warning System (TAWS)	B
34-40-02 Radio Altimeter Automatic Callout	C
34-40-03 Radio Altimeter System	D
34-40-04 Traffic Collision Avoidance System (TCAS)	E
34-40-05 Weather Radar System	F
34-40-06 Predictive Windshear Detection Function	G
34-40-07 PULL UP-GPWS pb-sw	H
MI-34-50 ATC and Radio/GPS Navigation Systems	
34-50-01 ATC	
34-50-03 ADF	B
34-50-04 DME	C
34-50-05 VOR	D
34-50-06 MARKER	
34-50-07 DDRMI	
34-50-08 RMI ADF	•
34-50-09 Global Positioning System (GPS)	H
MI-35 Oxygen	
MI-35-01 Overhead Panels	
MI-35-01-01 OXYGEN Overhead Panel	
35-01-01-01 CREW SUPPLY pb-sw OFF light	Δ
35-01-01-02 PASSENGER SYS ON light	
35-01-01-31 MANUAL Control of the MASK MAN ON pb	
35-01-01-32 AUTO Control of the MASK MAN ON pb	
MI-35-07 Indications on the DOOR/OXY SD page	
35-07-01 Crew OXY High Pressure Indication on the DOOR/OXY SD page	Δ
35-07-07 Crew OXY High Pressure indication on the DOOR/OXY SD page	
35-07-50 Crew Oxygen Minimum Dispatch Pressure	
MI-35-10 Crew Oxygen	
	Δ.
35-10-01 Crew Oxygen Mask	
35-10-02 Crew Oxygen Mask Microphone	
MI-35-20 Passenger Oxygen	
35-20-01 Passenger Oxygen Unit	
35-20-03 Lavatory Oxygen Unit	
35-20-04 Galley Oxygen Unit	
35-20-05 Manual Release Tool	D



A320/A321 Minimum equipment list

MI-35-30 Portable Oxygen	
35-30-01 Flight Crew Portable Device	А
35-30-02-01 Cabin Attendants Portable Device -PBE	B
35-30-02-02 Cabin Attendants Portable Device - Portable Oxygen	C
MI-36 Pneumatic	
MI-36-00 MAINTENANCE Message on the STATUS SD page	
36-00-01 AIR BLEED MAINTENANCE Message	A
MI-36-01 AIR COND Overhead Panel	
36-01-01 ENG BLEED pb-sw FAULT light	
36-01-02 ENG BLEED pb-sw OFF light	
36-01-03 APU BLEED pb-sw FAULT light	
36-01-04 APU BLEED pb-sw ON light	L
MI-36-07 Indications on the BLEED SD page	
36-07-01 APU Bleed Valve Indication on the BLEED SD page	
36-07-02 Engine Bleed Valve Indication on the BLEED SD page	
36-07-03 Engine Bleed HP Valve Indication on the BLEED SD page	
36-07-04 Engine Bleed Precooler Inlet Pressure Indication on the BLEED SD page	
36-07-05 Engine Bleed Precooler Outlet Temperature Indication on the BLEED SD page	
	Г
MI-36-11 Engine Bleed Air Supply System	
36-11-01 Engine Bleed Air Supply System	
36-11-02 Engine Bleed Valve ( PRV )	
36-11-03 Engine Bleed Overpressure Valve	
36-11-04 Engine Bleed Fan Air Valve	
36-11-06 Engine Bleed IP Check Valve	
36-11-07 Engine Bleed HP Valve	
36-11-08 Bleed Monitoring Computer ( BMC )	H
MI-36-12 APU Bleed Air Supply and Crossbleed Systems	
36-12-01 APU Bleed Air Supply System	Δ
36-12-02 APU Bleed Valve	
36-12-03 APU Bleed Check Valve	
36-12-04 Automatic Control of the X Bleed Valve	D
MI-36-22 Leak Detection Loop	
36-22-01 Pylon Leak Detection System	А
36-22-02 Wing Leak Detection System	B
36-22-03 APU Leak Detection Loop	C



MI-46 Information Systems	
MI-46-21 Air Traffic and Information Management System	
46-21-01 Air Traffic Service Unit (ATSU)	А
MI-47 Inert Gas System	
MI-47-00 MAINTENANCE Message on the STATUS SD page	
47-00-01 FUEL INERT MAINTENANCE Message	
47-00-01 FOEL INERT MAINTENANCE Message	<i>P</i>
MI-49 Airborne Auxiliary Power	
MI-49-00 MAINTENANCE Message on the STATUS SD page	
49-00-01 APU MAINTENANCE Message	Δ
MI-49-01 APU Overhead Panel	_
49-01-01 APU MASTER SW pb-sw FAULT light	
49-01-02 APU MASTER SW pb-sw ON light	
49-01-04 APU START pb-sw AVAIL light	
· · · · · · · · · · · · · · · · · · ·	
MI-49-07 Indications on the APU SD page	
49-07-01 Indications on the APU SD page	A
MI-49-10 Power Plant	
49-10-01 Power Plant ( APU )	A
49-10-02 APU Air Intake Flap	E
MI-52 Doors	
MI-52-01 Overhead Panels	
MI-52-01-01 CKPT DOOR CONT Normal Overhead Panel	
52-01-01-01 CHAN (1, 2) LED s on the CKPT DOOR CONT Overhead Panel	A
52-01-01-02 STRIKE (TOP, MID, BOT) LED s on the CKPT DOOR CONT Overhead Panel	
52-01-01-03 Pressure Rate Sensor on the CKPT DOOR CONT Overhead Panel	C
MI-52-07 Indications on the DOOR/OXY SD page	
52-07-01 Passenger Door Permanently Indicated Open on the DOOR/OXY SD page	Δ
52-07-01 Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page	
52-07-02 Passenger Door Permanently Indicated Closed on the DOOR/OXY SD page	
52-07-02 Passenger Door/Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page	D
52-07-03 Overwing Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page	
52-07-04 Overwing Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page	
52-07-05 Cargo Door Indication on the DOOR/OXY SD page	
52-07-06 Avionics Compartment Access Door Indication on the DOOR/OXY SD page	⊦



MI-52-10 Passenger/Crew Door	
52-10-01 Cabin Passenger Door and Emergency Exits	A
52-10-02 Overwing Emergency Exit	В
52-10-03 Passenger Exit Stop Fitting	C
52-10-04 Door Damper Function	
52-10-05 Door Emergency Opening Function	
52-10-06 DOOR PRESS LOW Message on the Programming and Test Panel (PTP) STATUS Page	
52-10-06 CHECK DOOR PRESSURE Message on the Flight Attendant Panel (FAP)	
52-10-07 Passenger Door Stay Mechanism	
52-10-08 CABIN PRESSURE light (on Doors)	
MI-52-30 Cargo Door	
52-30-01 Cargo Door (FWD, AFT and BULK) Inoperative	A
52-30-02 Cargo Door Actuator	
52-30-03 Cargo Door Electrical Control	
52-30-04 Cargo Door Locking Hooks and Spools (Rollers)	
52-30-05 Cargo Door Hand Pump	
52-30-06 Cargo Door Drift Pin	
52-30-07 Cargo Doors Open/Locked Indicator light	G
MI-52-33 Bulk Cargo Compartment Door	
52-33-01 Cargo Door Balance Mechanism	A
MI-52-51 Reinforced Cockpit Door (CDLS)	
52-51-03 CDLS Buzzer	Δ
52-51-04 CDLS Keypad	
52-51-05 CDLS Keypad Green and Red LED s	
52-51-06 CDLS Door Release Strike (Catch, Spring, Solenoid, Bolt)	
52-51-07 CDLS Deadbolt	
MI-52-53 COCKPIT DOOR Panel on the Center Pedestal	
52-53-01 COCKPIT DOOR FAULT light	۸
52-53-02 COCKPIT DOOR OPEN light	
52-53-03 LOCK Function of the COCKPIT DOOR sw	
52-53-04 UNLOCK Function of the COCKPIT DOOR sw	
MI-56 Windows	
MI-56-10 Cockpit	
56-10-01 Front Windshield	A
56-10-02 Lateral Fixed/Sliding Window	B
56-10-03 Sliding Window Opening/Closing Mechanism	C
MI-56-20 Cabin	
56-20-01 Cabin Window	Δ
55 25 71 WWW. THINGST	



MI-70 Engine	
MI-70-00 MAINTENANCE Messages on the STATUS SD page	
70-00-01 ENG FADEC MAINTENANCE Message	A
70-00-02 ENG EIU MAINTENANCE Message	
70-00-03 ENG EVMU MAINTENANCE Message	C
MI-73 Engine Fuel and Control	
MI-73-07 Indications on the ENGINE SD page	
73-07-01 F. USED Indication on the ENGINE SD page	A
73-07-02 Fuel Filter Clog Indication on the ENGINE SD page	
MI-73-08 Indications on the EWD	
73-08-01 Fuel Flow Indication on the EWD	A
MI-73-09 ECAM Alert	
73-09-01 ENG 1(2) FUEL FILTER CLOG Alert	A
MI-73-10 Distribution	
73-10-03 Fuel Metering Valve	A
73-10-04 Engine HP Fuel Valve	
MI-73-20 Controlling	
73-20-01 Flex Takeoff Mode	A
73-20-04 EPR Control Mode	B
73-20-05 Minimum Idle on Ground	
73-20-06 EEC ACFT 28V Power Supply	D
MI-74 Ignition	
MI-74-07 Indications on the ENGINE SD page	
74-07-01 Selected Igniter Indication on the ENGINE SD page	A
MI-74-09 ECAM Alert	
74-09-01 ENG 1(2) IGN A(B)(A+B) FAULT Alert	A
MI-74-31 Ignition Starting and Continuous Relight	
74-31-01 Ignition System A	A
74-31-02 Ignition System B	B
MI-76 Engine Controls	
MI-76-11 Throttle Control	
76-11-01 Thrust lever Position Sensor	A



#### **MI-77 Engine Indicating**

MI-77-07 Indications on SD pages	
MI-77-07-01 Indications on the CRUISE SD page	
77-07-01-01 N1 Vibration Indication on the CRUISE SD page	Α
77-07-01-02 N2 Vibration Indication on the CRUISE SD page	
77-07-01-03 F. USED (Fuel Used) Indication on the CRUISE SD page	
77-07-01-04 OIL QT (Oil Quantity) Indication on the CRUISE SD page	
MI-77-07-02 Indications on the ENGINE SD page	
77-07-02-01 Engine Bleed Pressure Indication on the ENGINE SD page	A
77-07-02-02 Fuel Filter Clog Indication on the ENGINE SD page	
77-07-02-03 Fuel Used Indication on the ENGINE SD page	
77-07-02-04 Nacelle Temperature Indication on the ENGINE SD page	D
77-07-02-05 N1 Vibration Indication on the ENGINE SD page	
77-07-02-06 N2 Vibration Indication on the ENGINE SD page	
77-07-02-07 Oil Filter Clog Indication on the ENGINE SD page	G
77-07-02-08 Oil Pressure Indication on the ENGINE SD page	H
77-07-02-09 Oil Quantity Indication on the ENGINE SD page	1
77-07-02-10 Oil Temperature Indication on the ENGINE SD page	J
77-07-02-11 Selected Igniter Indication on the ENGINE SD page	K
77-07-02-12 Start Valve Position Indication on the ENGINE SD page	L
MI-77-08 Indications on the EWD	
77-08-01 EGT Indication on the EWD	A
77-08-02 EPR Indication on the EWD	B
77-08-03 Fuel Flow Indication on the EWD	C
77-08-04 N1 Indication on the EWD	D
77-08-05 N2 Indication on the EWD	E
MI-78 Exhaust	
MI-78-08 Indications on the EWD	
78-08-01 REV Indication on the EWD	Δ.
	A
MI-78-30 Thrust Reversers	
78-30-01 Thrust Reverser	
78-30-02 Thrust Reverser Inhibition Relay sw	
78-30-03 Thrust Reverser Shutoff Valve	



#### MI-79 Oil

A
В
C
D
A
B
A
A
A
A
A

MI-PLP-TOC P 36/36 HDA A320/A321 FLEET MEL 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MI-PLP-TOC		1	Documentation update: Deletion of the "00008482 APU Fire
APU Fire and Overheat Detection			Detection Loop A" table of content entry.
			Documentation update: Deletion of the "00008484 APU Fire
			Detection Loop B" table of content entry.
MI-PLP-TOC		2	Documentation update: Deletion of the "00007850.0003001
Indications on the System Display			Permanent Data (TAT, SAT, ISA, GLOAD - ALT SEL, UTC,
(SD)			GW ) Indications on the SD" documentary unit.
MI-PLP-TOC		3	Documentation update: Deletion of the "00007787.0001001 Data
Centralized Fault Display System			Management Unit (DMU)" documentary unit.
(CFDS) and Data Recording System			
MI-00-01	Α	1	05 Oct 2012 : Modification of content of the element
MEL Approval Reference			00010655.0001001
MI-00-02	Α	1	18 Sep 2012 : Modification of content of the element
Introduction to the MEL			00012616.0001001
MI-00-05	Α	1	19 Sep 2012 : Modification of content of the element
Repair Interval			00012620.0001001
MI-00-07	Α	1	27 Sep 2012 : Modification of content of the element
Definitions			00012622.0001001
MI-00-07	Α	2	18 Sep 2012 : Modification of content of the element
Definitions			00012622.0001001
MI-00-08	Α	1	Effectivity update: The information now also applies to MSN 5429.
ECAM and MAINTENANCE STATUS			Effectivity update: The information no longer applies to MSN 5429.
MI-21-00	С	1	Effectivity update: The information now also applies to MSN 5429.
21-00-04 TEMP CTL 1(2)			
MAINTENANCE Message			
MI-21-51	С	1	Effectivity update: The information now also applies to MSN 5429.
21-51-03 Pack Flow Sensor			
MI-21-52	Α	1	15 Oct 2012 : Modification of content of the element
21-52-01 Air Conditioning Pack			00007502.0004001
			16 Oct 2012 : Modification of content of the element
			00007502.0004001
MI-21-52	Α	2	Effectivity update: The information now also applies to MSN 5429.
21-52-01 Air Conditioning Pack			
MI-21-52	Α	3	27 Sep 2012 : Modification of content of the element
21-52-01 Air Conditioning Pack			00007502.0010001
			15 Oct 2012 : Modification of content of the element
			00007502.0010001
			16 Oct 2012 : Modification of content of the element
			00007502.0010001
MI-21-63	В	1	19 Sep 2012 : Modification of content of the element
21-63-02 Cockpit and Cabin Trim Air			00007509.0001001
Valve			

HDA A320/A321 FLEET MI-PLP-SOH P 1/12 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MI-21-63	В	2	Effectivity update: The information now also applies to MSN 5429.
21-63-02 Cockpit and Cabin Trim Air			
Valve			
MI-21-63	В	3	05 Oct 2012 : Modification of content of the element
21-63-02 Cockpit and Cabin Trim Air			00007509.0002001
Valve			
MI-21-63	С	4	Effectivity update: The information now also applies to MSN 5429.
21-63-03 Hot Air Pressure Regulating			
Valve			
MI-21-63	С	5	19 Sep 2012 : Modification of content of the element
21-63-03 Hot Air Pressure Regulating			00007510.0002001
Valve			
MI-21-63	D	6	Effectivity update: The information now also applies to MSN 5429.
21-63-04 Air Conditioning System			
Controller Channel (COND CTL			
1(2)-A(B))			
MI-22-60	В	1	27 Sep 2012 : Modification of content of the element
22-60-02 FAC 2			00007540.0001001
MI-22-70	В	1	Effectivity update: The information now also applies to MSN 5429.
22-70-01 Flight Management System			
(FMS)			
MI-22-81-01	М	1	Effectivity update: The information now also applies to MSN 5429.
22-81-01-11 Mode Engagement			
(LOC, APPR) pb light Bars		ļ.,	
MI-22-81-02	F	1	Effectivity update: The information now also applies to MSN 5429.
22-81-02-05 LS pb			
MI-22-81-02	L	2	Effectivity update: The information now also applies to MSN 5429.
22-81-02-10 LS and FD pb light Bars			
MI-22-81-03	Α	1	Effectivity update: The information now also applies to MSN 5429.
22-81-03-01 FCU Channel		<u> </u>	
MI-23-01-02	В	1	19 Sep 2012 : Modification of content of the element
23-01-02-32 CALLS EMER pb,			00007587.0001001
CALLS FWD pb, CALLS MID ◀ pb,			
CALLS EXIT ◀ pb, CALLS PURS			
● pb, CALLS AFT pb		L .	
MI-23-13	Α	1	Effectivity update: The information now also applies to MSN 5429.
23-13-01 Radio Management Panel			
(RMP)		<u> </u>	[
MI-23-31	В	1	Effectivity update: The information now also applies to MSN 5429.
23-31-02 PA IN USE light		l	

HDA A320/A321 FLEET MI-PLP-SOH P 2/12 MEL 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MI-23-73-01 23-73-01-01 Cabin Intercommunication Data System ( CIDS ) Function	A	1	Effectivity update: The information now also applies to MSN 5429.
MI-23-73-03 23-73-03-01 Cabin DEU B	Α	1	Effectivity update: The information now also applies to MSN 5429.
MI-23-73-10 23-73-10-01 Smoke Detection Function ( CIDS - SDF )	A	1	Effectivity update: The information now also applies to MSN 5429.
MI-23-74 23-74-01 FAP Display Unit	В	1	Effectivity update: The information now also applies to MSN 5429.
MI-23-74 23-74-06 Door Bottle Pressure Monitoring on the FAP	G	2	Effectivity update: The information now also applies to MSN 5429.
MI-23-74 23-74-08 Slide Pressure Monitoring on the FAP	I	3	Effectivity update: The information now also applies to MSN 5429.
MI-24-01-01 24-01-01-09 GALY & CAB pb-sw FAULT light	J	1	Effectivity update: The information now also applies to MSN 5429.
MI-24-01-01 24-01-01-10 GALY & CAB pb-sw OFF light	L	2	Effectivity update: The information now also applies to MSN 5429.
MI-24-01-01 24-01-01-11 COMMERCIAL pb-sw OFF light	М	3	Effectivity update: The information now also applies to MSN 5429.
MI-24-23 24-23-01 AC Auxiliary Generation ( APU Generator, GCU , Line Contactor)	A	1	19 Sep 2012 : Modification of content of the element 00008440.0002001
MI-24-26 24-26-01 GALY & CAB Automatic Load Shed System	В	1	Effectivity update: The information now also applies to MSN 5429.
MI-24-26 24-26-02 GALY & CAB Manual Load Shed System ( GALY & CAB pb-sw )	D	2	Effectivity update: The information now also applies to MSN 5429.
MI-24-26 24-26-03 Commercial Supply System	E	3	Effectivity update: The information now also applies to MSN 5429.
MI-24-32 24-32-01 DC Main Generation (TR 1, TR 2)	A	1	Effectivity update: The information now also applies to MSN 5429.

HDA A320/A321 FLEET MI-PLP-SOH P 3/12



Localization	Toc	ID	Reason
Title	Index		
MI-24-41 24-41-01 Ground Power Control Unit (GPCU)	A	1	27 Sep 2012 : Modification of content of the element 00008468.0001001
MI-24-41 24-41-01 Ground Power Control Unit (GPCU)	A	2	19 Sep 2012 : Modification of content of the element 00008468.0001001
MI-24-41 24-41-02 External Power Receptacle	В	3	27 Sep 2012 : Modification of content of the element 00008471.0001001
MI-24-41 24-41-02 External Power Receptacle	В	4	19 Sep 2012 : Modification of content of the element 00008471.0001001
MI-25-07 25-07-01 Passenger Door Slide Permanently Indicated Armed	А	1	Effectivity update: The information now also applies to MSN 5429.
MI-25-07 25-07-02 Passenger Door Slide Permanently Indicated Not Armed	С	2	Effectivity update: The information now also applies to MSN 5429.
MI-25-07 25-07-03 Overwing Emergency Exit Slide Permanently Indicated Armed	Е	3	Effectivity update: The information now also applies to MSN 5429.
MI-25-07 25-07-04 Overwing Emergency Exit Slide Permanently Indicated Not Armed	F	4	Effectivity update: The information now also applies to MSN 5429.
MI-25-62 25-62-02 Overwing Emergency Exit Slide or Slide Raft	В	1	Effectivity update: The information now also applies to MSN 5429.
MI-25-62 25-62-04 SLIDE ARMED light	D	2	Effectivity update: The information now also applies to MSN 5429.
MI-25-62 25-62-06 Passenger Door CHECK SLIDE PRESSURE Message on Flight Attendant Panel (FAP)	F	3	Effectivity update: The information now also applies to MSN 5429.
MI-25-62 25-62-07 Overwing Emergency Exit CHECK SLIDE PRESSURE Message on Flight Attendant Panel (FAP)	Н	4	Effectivity update: The information now also applies to MSN 5429.
MI-25-62 25-62-08 Overwing Escape Life Line	I	5	Effectivity update: The information now also applies to MSN 5429.
MI-26-00 26-00-01 SMOKE MAINTENANCE Message	В	1	Effectivity update: The information now also applies to MSN 5429.

HDA A320/A321 FLEET MI-PLP-SOH P 4/12 MEL 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MI-26-01-01 26-01-01-02 ENG AGENT pb DISCH	В	1	18 Sep 2012 : Modification of content of the element 00008450.0001001
light			
MI-26-01-02	В	1	Effectivity update: The information now also applies to MSN 5429.
26-01-02-02 CARGO SMOKE DISCH			
AGENT 2 light		1	10 Con 0010 - Madification of content of the element
MI-26-13	Α	1	18 Sep 2012 : Modification of content of the element
26-13-01 APU Fire Detection Loop		2	00008482.0001001
MI-26-13	Α	2	MMEL items 26-13-01 and 26-13-02 are merged into a single item
26-13-01 APU Fire Detection Loop			named APU fire detection loop. There is no change in the relief.
MI 00 10		_	Documentation update: Deletion of information.
MI-26-13	Α	3	MMEL items 26-13-01 and 26-13-02 are merged into a single item
26-13-01 APU Fire Detection Loop			named APU fire detection loop. There is no change in the relief.
NII 00 40		_	Documentation update: Deletion of information.
MI-26-13	Α	4	MMEL items 26-13-01 and 26-13-02 are merged into a single item
26-13-01 APU Fire Detection Loop			named APU fire detection loop. There is no change in the relief.
MI-26-16	Α	1	Effectivity update: The information now also applies to MSN 5429.
26-16-01 Smoke Detector in the FWD			
Cargo Compartment		_	FIG. 8.3. L. T. 16. 8. L. MONEGOO
MI-26-16	В	2	Effectivity update: The information now also applies to MSN 5429.
26-16-02 Smoke Detector in the AFT			
and the BULK Cargo Compartments MI-26-17	A	1	Effectivity update: The information now also applies to MSN 5429.
26-17-01 Lavatory Smoke Detection	A	'	Ellectivity update: The information now also applies to MiSN 3429.
System			
MI-26-23	A	1	Effectivity update: The information now also applies to MSN 5429.
26-23-01 Cargo Agent Bottle	_ ^	l '	Ellectivity update. The information flow also applies to More 3423.
MI-26-23	В	2	Effectivity update: The information now also applies to MSN 5429.
26-23-02 Squib of the Cargo Bottle 1		_	Enountly appeare. The information now also applies to Morv 6 126.
MI-26-23	С	3	Effectivity update: The information now also applies to MSN 5429.
26-23-03 Squib of the Cargo Bottle 2		ľ	Zhourty apacte. The information how also applies to more of Es.
MI-27-07	Н	1	Effectivity update: The information now also applies to MSN 5429.
27-07-08 Rudder Travel Limiter			
Position Indication on the F/CTL SD			
page			
MI-27-51	В	1	18 Sep 2012 : Modification of content of the element
27-51-02 SFCC Slat Channel			00008341.0001001
MI-27-94	С	1	18 Sep 2012 : Modification of content of the element
27-94-03 SEC 3			00008394.0001001
MI-28-01-01	Е	1	Effectivity update: The information now also applies to MSN 5429.
28-01-01-05 CTR TK PUMP pb-sw			
FAULT light			

HDA A320/A321 FLEET MI-PLP-SOH P 5/12



Localization	Тос	ID	Reason
Title	Index		
MI-28-01-01 28-01-01-06 CTR TK PUMP pb-sw OFF light	G	2	Effectivity update: The information now also applies to MSN 5429.
MI-28-01-01 28-01-01-07 FUEL MODE SEL pb-sw FAULT light	I	3	Effectivity update: The information now also applies to MSN 5429.
MI-28-07-01 28-07-01-03 Outer Tank Fuel Quantity Indication on the FUEL SD page	С	1	Effectivity update: The information now also applies to MSN 5429.
MI-28-07-01 28-07-01-04 Inner Tank Fuel Quantity Indication on the FUEL SD page	D	2	Effectivity update: The information now also applies to MSN 5429.
MI-28-07-01 28-07-01-05 Center Tank Fuel Quantity Indication on the FUEL SD page	F	3	Effectivity update: The information now also applies to MSN 5429.
MI-28-07-02 28-07-02-01 Fuel Temperature Indication on the FUEL SD page	А	1	Effectivity update: The information now also applies to MSN 5429.
MI-28-07-03 28-07-03-02 Center Tank Pump Indication on the FUEL SD page	В	1	Effectivity update: The information now also applies to MSN 5429.
MI-28-07-04 28-07-04-04 Wing Transfer Valve Indication on the FUEL SD page	D	1	Effectivity update: The information now also applies to MSN 5429.
MI-28-09 28-09-01 FUEL L(R) INNER(OUTER) TK HI TEMP Alert	A	1	Effectivity update: The information now also applies to MSN 5429.
MI-28-09 28-09-02 FUEL L(R) INNER(OUTER) TK LO TEMP Alert	С	2	Effectivity update: The information now also applies to MSN 5429.
MI-28-12 28-12-01 Overpressure Protector between the Inner and the Outer Tank	A	1	Effectivity update: The information now also applies to MSN 5429.
MI-28-12 28-12-03 Overpressure Protector in the Inner Tank	С	2	Effectivity update: The information now also applies to MSN 5429.
MI-28-12 28-12-04 Overpressure Protector between the Center and the Inner Tank	E	3	Effectivity update: The information now also applies to MSN 5429.

HDA A320/A321 FLEET



Localization	Toc	ID	Reason
Title	Index		
MI-28-15	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-15-01 LH Wing Transfer Valve			
MI-28-15	В	2	Effectivity update: The information now also applies to MSN 5429.
28-15-02 RH Wing Transfer Valve			
MI-28-20	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-20-01 Automatic Fuel Feed			
System			
MI-28-21	В	1	Effectivity update: The information now also applies to MSN 5429.
28-21-02 Center Tank Pump			
MI-28-21	С	2	Effectivity update: The information now also applies to MSN 5429.
28-21-03 Wing Tank Pump Sequence			
Valve			
MI-28-22	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-22-01 APU Fuel Pump			
MI-28-25	С	1	Effectivity update: The information no longer applies to MSN 5024
28-25-03 Refuel Valve			4023 5429 5030 4247 5362.
MI-28-25	С	3	18 Sep 2012 : Modification of content of the element
28-25-03 Refuel Valve			00008212.0003001
MI-28-25	С	2	Documentation update: Addition of "Refuel Valve" documentary
28-25-03 Refuel Valve			unit
MI-28-43	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-43-01 Manual Magnetic Indicators			
MI-28-46	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-46-01 High Level Detection			
System in the Inner Tank			
MI-28-46	С	2	Effectivity update: The information now also applies to MSN 5429.
28-46-02 High Level Detection			
System in the Center Tank			
MI-28-46	Е	3	Effectivity update: The information now also applies to MSN 5362.
28-46-04 Low Level Detection			Effectivity update: The information now also applies to MSN 5429.
System in the Inner Tank			
MI-29-09	D	1	Effectivity update: The information now also applies to MSN 5429.
29-09-04 HYD G(B)(Y) RSVR LO AIR			
PR Alert			
MI-30-01-02	С	1	Effectivity update: The information now also applies to MSN 5429.
30-01-02-03 Wiper Intermittent			
Speed Function (INTMT Position)			
MI-31-07	С	1	Effectivity update: The information now also applies to MSN 5429.
31-07-02 Permanent Data ( TAT ,			
SAT , GLOAD, UTC , GW )			
Indications on the SD			

HDA A320/A321 FLEET MI-PLP-SOH P 7/12 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MI-31-07	D	2	Effectivity update: The information now also applies to MSN 5024.
31-07-02 Permanent Data ( TAT ,		İ	Effectivity update: The information now also applies to MSN 5030.
SAT , ISA , GLOAD, UTC , GW )			
Indications on the SD			
MI-31-30	D	1	Effectivity update: The information now also applies to MSN 5429.
31-30-04 Data Management Unit			Effectivity update: The information now also applies to MSN all.
(DMU) part of Flight Data Interface			
and Management Unit(FDIMU)			
MI-31-30	E	2	20 Sep 2012 : Modification of content of the element
31-30-05 Flight Data Interface Unit			00007788.0001001
(FDIU or FDIMU Flight Data Interface			
function)			
MI-31-38	Α	1	Effectivity update: The information now also applies to MSN 5429.
31-38-01 DATA LOADING selector			
MI-31-38	В	2	Effectivity update: The information now also applies to MSN 5429.
31-38-02 Data Loading Routing Box			
(DLRB)			
MI-31-38	С	3	Effectivity update: The information now also applies to MSN 5429.
31-38-03 Multipurpose Disk Drive			
Unit (MDDU)		<u> </u>	
MI-31-62	Α	1	Effectivity update: The information now also applies to MSN 5429.
31-62-01 DMC 1			
MI-31-62	Α	2	20 Sep 2012 : Modification of content of the element 00007808.0005001
31-62-01 DMC 1		_	
MI-31-62	В	3	Effectivity update: The information now also applies to MSN 5429.
31-62-02 DMC 2		ļ.,	F(( , ( ) )   1   T    ( , , , , )
MI-31-62	С	4	Effectivity update: The information now also applies to MSN 5429.
31-62-03 DMC 3 MI-31-63	E	-	Fff - 4: :4
31-63-05 SDU		1	Effectivity update: The information now also applies to MSN 5429.
MI-32-07	F	1	Effectivity undeter The information you also emplies to MCN 5400
32-07-06 [Y] N/W STEERING	Г	'	Effectivity update: The information now also applies to MSN 5429.
Indication on the WHEEL SD page			
MI-32-07	H	2	Effectivity update: The information now also applies to MSN 5429.
32-07-08 ANTI SKID, [1], [2]		′	Lineouvity appeare. The information now also applies to MSN 3429.
Indication on the WHEEL SD page			
MI-32-07	J	3	Effectivity update: The information now also applies to MSN 5429.
32-07-10 [G] NORM BRK Indication		١ĭ	apacto. The information flow also applied to MON 0720.
on the WHEEL SD page			
MI-32-07	L	4	Effectivity update: The information now also applies to MSN 5429.
32-07-12 ACCU PRESS/ACCU	_		
ONLY Indication on the WHEEL SD			
page			
ı <i>u</i>			ļ

HDA A320/A321 FLEET MEL



Localization	Toc	ID	Reason
Title	Index		
MI-32-07 32-07-13 [Y] ALTN BRK Indication on the WHEEL SD page	M	5	Effectivity update: The information now also applies to MSN 5429.
MI-32-09 32-09-01 BRAKES-N/WS MINOR FAULT Alert	A	1	Effectivity update: The information now also applies to MSN 5429.
MI-32-31 32-31-02 Landing Gear Retracting System	В	1	20 Sep 2012 : Modification of content of the element 00007690.0001001
MI-32-41 32-41-01 Nose Wheel Tie Bolt	Α	1	20 Sep 2012 : Modification of content of the element 00007735.0001001
MI-32-44 32-44-02 ACCU PRESS Indicator	В	1	Effectivity update: The information now also applies to MSN 5429.
MI-32-44 32-44-04 Alternate Braking Control Unit (ABCU)	D	2	Effectivity update: The information now also applies to MSN 5429.
MI-33-01-02 33-01-02-01 EMER EXIT LT OFF light	А	1	20 Sep 2012 : Modification of content of the element   00007637.0001001     05 Oct 2012 : Modification of content of the element   00007637.0001001
MI-33-10 33-10-01 Cockpit General Illumination (Center & Main Instrument Lighting, Console and Floor Lighting, Dome lights and Lighting Strips, Instrument and Panel Integral Lighting, Map Holder Lighting, Center Pedestal Lighting)	A	1	Effectivity update: The information now also applies to MSN 5429.
MI-33-40 33-40-01 Navigation light System 1	Α	1	21 Sep 2012 : Modification of content of the element 00007645.0002001
MI-33-40 33-40-03 Landing light	С	2	21 Sep 2012 : Modification of content of the element 00007647.0001001
MI-33-51 33-51-01 Exit Marking Sign	Α	1	Effectivity update: The information now also applies to MSN 5429.
MI-33-51 33-51-02 Exit Location Sign in the Main Aisle	В	2	Effectivity update: The information now also applies to MSN 5429.
MI-33-51 33-51-04 Overhead Emergency Lighting System in the Door Vicinity	D	3	Effectivity update: The information now also applies to MSN 5429.

HDA A320/A321 FLEET MI-PLP-SOH P 9/12



Localization	Toc	ID	Reason
Title	Index		
MI-33-51	G	4	Effectivity update: The information now also applies to MSN 5429.
33-51-07 Floor Proximity Emergency			
Escape Path Marking System Exit Marker			
MI-33-51	H	5	Effectivity update: The information now also applies to MSN 5429.
33-51-08 Overwing Emergency light	"	٥	Ellectivity update. The information now also applies to MiSN 5429.
MI-33-51		6	Effectivity update: The information now also applies to MSN 5429.
33-51-09 Overwing Exit Handle light	'	ľ	Effectivity update. The information flow also applies to MSN 3425.
MI-33-51	J	7	Effectivity update: The information now also applies to MSN 5429.
33-51-10 Escape Slide Lighting	ľ	l '	Encountry apacite. The information now also applies to More 5425.
MI-34-01-01	С	1	Effectivity update: The information now also applies to MSN 5429.
34-01-01-03 IR pb-sw FAULT light		'	Enoughly apacto. The information now also applied to More 6 125.
MI-34-01-01	E	2	Effectivity update: The information now also applies to MSN 5429.
34-01-01-04 IR pb-sw OFF light	-	-	
MI-34-01-01	Н	3	Effectivity update: The information now also applies to MSN 5429.
34-01-01-32 IR pb-sw			
MI-34-01-01	I	4	Effectivity update: The information now also applies to MSN 5429.
34-01-01-33 IR Mode selector			
MI-34-05	В	1	Effectivity update: The information now also applies to MSN 5429.
34-05-02 Mach Number Indication on			
the PFD			
MI-34-05	В	2	21 Sep 2012 : Modification of content of the element
34-05-02 Mach Number Indication on			00008712.0002001
the PFD			
MI-34-10	D	1	Effectivity update: The information now also applies to MSN 5429.
34-10-04 IR 1			
MI-34-10	E	2	Effectivity update: The information now also applies to MSN 5429.
34-10-05 IR 2		_	[
MI-34-10 34-10-06 IR 3	F	3	Effectivity update: The information now also applies to MSN 5429.
		1	Effectivity and stor The information no longer annies to MCN 1004
MI-34-22 34-22-01 Standby Compass Indicator	A	1	Effectivity update: The information no longer applies to MSN 1984.
, ,		_	Effectivity update: The information no longer applies to MSN 2021.
MI-34-22	Α	2	Effectivity update: The information now also applies to MSN 1984.
34-22-01 Standby Compass Indicator	İ		Effectivity update: The information now also applies to MSN 2021.
MI 04 00			Effectivity update: The information now also applies to MSN 5429.
MI-34-23	A	1	Effectivity update: The information now also applies to MSN 5429.
34-23-01 ISIS Altitude Indication MI-34-23		_	F#-4: it
	В	2	Effectivity update: The information now also applies to MSN 5429.
34-23-02 ISIS Airspeed Indication	C	-	Effectivity and stor The information ways also smaller to MACAL FOCO.
MI-34-23 34-23-03 ISIS Bugs Indication		3	Effectivity update: The information now also applies to MSN 5362.
34-23-03 ISIS Duys Iriulcation	ĺ	l	Effectivity update: The information now also applies to MSN 5429.

HDA A320/A321 FLEET MI-PLP-SOH P 10/12 MEL 19 JUL 12



Localization	Toc	ID	Reason	
Title	Index			
MI-34-23 34-23-04 ISIS Attitude Indication	D	4	Effectivity update: The information now also applies to MSN 5429.	
MI-34-23 34-23-05 ISIS ILS Indication	Е	5	Effectivity update: The information now also applies to MSN 5429.	
MI-34-23 34-23-06 ISIS Mach Number Indication	F	6	Effectivity update: The information now also applies to MSN 5429.	
MI-34-40 34-40-05 Weather Radar System	F	1	Effectivity update: The information now also applies to MSN 5429.	
MI-34-40 34-40-06 Predictive Windshear Detection Function	G	2	Effectivity update: The information now also applies to MSN 5429.	
MI-34-50	F	1	Effectivity update: The information no longer applies to MSN 1984.	
34-50-07 DDRMI			Effectivity update: The information no longer applies to MSN 2021.	
MI-36-00 36-00-01 AIR BLEED MAINTENANCE Message	А	1	21 Sep 2012 : Modification of content of the element 00008776.0003001	
MI-36-00 36-00-01 AIR BLEED MAINTENANCE Message	А	2	Effectivity update: The information now also applies to MSN 5429.	
MI-36-11 36-11-08 Bleed Monitoring Computer ( BMC )	Н	1	Effectivity update: The information now also applies to MSN 5429.	
MI-36-12 36-12-02 APU Bleed Valve	В	1	21 Sep 2012 : Modification of content of the element 00008801.0001001	
MI-36-22 36-22-01 Pylon Leak Detection System	А	1	Effectivity update: The information now also applies to MSN 5429.	
MI-47-00 47-00-01 FUEL INERT MAINTENANCE Message	А	1	Effectivity update: The information now also applies to MSN 5429.	
MI-52-07 52-07-01 Passenger Door Permanently Indicated Open on the DOOR/OXY SD page	А	1	Effectivity update: The information now also applies to MSN 5429.	
MI-52-07 52-07-02 Passenger Door Permanently Indicated Closed on the DOOR/OXY SD page	С	2	Effectivity update: The information now also applies to MSN 5429.	
MI-52-07 52-07-03 Overwing Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page	Е	3	Effectivity update: The information now also applies to MSN 5362.  Effectivity update: The information now also applies to MSN 5429.	

HDA A320/A321 FLEET MI-PLP-SOH P 11/12



Localization	Toc	ID	Reason
Title	Index		
MI-52-07	F	4	Effectivity update: The information now also applies to MSN 5362.
52-07-04 Overwing Emergency Exit		İ	Effectivity update: The information now also applies to MSN 5429.
Permanently Indicated Closed on the			
DOOR/OXY SD page			
MI-52-10	Α	1	11 Oct 2012 : Modification of content of the element
52-10-01 Cabin Passenger Door and			00008689.0001001
Emergency Exits MI-52-10		_	F(( , c , c , c , c , c , c , c , c , c ,
52-10-01 Cabin Passenger Door and	Α	2	Effectivity update: The information now also applies to MSN 5429.
Emergency Exits			
MI-52-10	A	3	11 Oct 2012 : Modification of content of the element
52-10-01 Cabin Passenger Door and	_ ^	ľ	00008689.9001002
Emergency Exits			000000000000000000000000000000000000000
MI-52-10	A	4	11 Oct 2012 : Modification of content of the element
52-10-01 Cabin Passenger Door and			00008689.0004001
Emergency Exits			
MI-52-10	В	5	Effectivity update: The information now also applies to MSN 5429.
52-10-02 Overwing Emergency Exit			
MI-52-10	D	6	Effectivity update: The information now also applies to MSN 5429.
52-10-04 Door Damper Function			
MI-52-10	E	7	Effectivity update: The information now also applies to MSN 5429.
52-10-05 Door Emergency Opening			
Function			
MI-52-10	G	8	Effectivity update: The information now also applies to MSN 5429.
52-10-06 CHECK DOOR			
PRESSURE Message on the Flight Attendant Panel (FAP)			
MI-52-10	G	9	21 Sep 2012 : Modification of content of the element
52-10-06 CHECK DOOR		ľ	00008694.9001002
PRESSURE Message on the Flight			26 Sep 2012 : Modification of content of the element
Attendant Panel (FAP)			00008694.9001002
MI-52-10	Н	10	Effectivity update: The information now also applies to MSN 5429.
52-10-07 Passenger Door Stay			
Mechanism			
MI-52-10	I	11	Effectivity update: The information now also applies to MSN 5429.
52-10-08 CABIN PRESSURE light			
(on Doors)		<u> </u>	
MI-52-51	Е	1	Effectivity update: The information now also applies to MSN 5429.
52-51-07 CDLS Deadbolt		<u> </u>	
MI-73-10	Α	2	Effectivity update: The information now also applies to MSN all.
73-10-03 Fuel Metering Valve			
MI-73-10	Α	1	Documentation update: Addition of "Fuel Metering Valve"
73-10-03 Fuel Metering Valve			documentary unit

HDA A320/A321 FLEET MEL



00-01 - Approval Reference

#### MEL APPROVAL REFERENCE

Ident.: MI-00-01-00010655.0001001 / 19 JUL 12

Applicable to: ALL

MINIMUM EQUIPMENT LIST	REVISION
	19 July 2012

This Minimum Equipment List (MEL) covers the Airbus A320 and A321 aircraft with IAE V2527 engines operated by Hong Kong Dragon Airline Limited.

This MEL is based on the following:

- AIRBUS A320/321 MMEL Issue date 19 July 2012.
- HKAR MMEL/MEL issue 1 revision 3 dated 25 February 2009.

Note: The Airbus MMEL issue date identifies each MMEL revision. The issue date appears in the Transmittal Letter for the PDF format and is different from the EASA approval date of the MMEL. The EASA approval date appears in the Approval Reference of the MMEL preamble, and is date that the MMEL is accepted by EASA as the basis for the individual operator to prepare the MEL. The applicability date of the MMEL is based on the issue date and not the approval date, and starts at the issued date +30 calender days. The 90 day limit as referred to in HKAR-MMEL/MEL.60 is recommended to start from the applicability date.



## MEL ITEMS 00 - PREAMBLE 00-01 - Approval Reference

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 HDA A320/A321 FLEET
 MI-00-01 P 2/2

 MEL
 19 JUL 12



00-02 - Introduction to the MEL

#### INTRODUCTION TO THE MEL

Ident.: MI-00-02-00012616.0001001 / 19 JUL 12 Applicable to: ALL

The Minimum Equipment List (MEL) is based on the Master Minimum Equipment List (MMEL). The MEL shall not deviate from any applicable Airworthiness Directive or any other Mandatory Requirement.

The MEL is a document that lists the system, function, or equipment which may be temporarily inoperative, subject to certain conditions, while maintaining an acceptable level of safety. It does not contain obviously required items such as wings, flaps, and rudders.

ALL ITEMS RELATED TO THE AIRWORTHINESS OF THE AIRCRAFT AND NOT INCLUDED IN THE MEL ARE AUTOMATICALLY REQUIRED TO BE OPERATIVE FOR DISPATCH.

Likewise items required by Air Navigation legislation and/or Additional Certification Requirements as appropriate which are not listed, must be operative.

Non-safety related equipment such as galley equipment and passenger convenience items need not be listed.

It is important that repairs be accomplished at the earliest opportunity.

Suitable conditions and limitations in the form of placards, maintenance procedures, crew operational procedures, and other restrictions are necessary in the MEL to ensure that an acceptable level of safety is maintained.

When an item is discovered to be inoperative, it is reported by making an entry in the technical logbook. The item is then either rectified or may be deferred per the MEL before further operation. MEL conditions and limitations do not relieve the operator from determining that the aircraft is in a fit condition for safe operation with items inoperative.

The provisions of the MEL are applicable until the aircraft commences the flight. Any decision to continue a flight following a failure or unserviceability which becomes apparent after the commencement of a flight must be subject to pilot judgment and good airmanship. The Commander may continue to make reference to and use the MEL as appropriate.

By approval of the MEL, the Authority permits dispatch of the aircraft for revenue, ferry, or training flights with certain items inoperative provided an acceptable level of safety is maintained by use of appropriate operational or maintenance procedures, by transfer of the function to another operating system, or by reference to other instruments or system providing the required information.

#### **GENERAL POLICY**

Ident.: MI-00-02-20802011.9001001 / 04 APR 12

Applicable to: ALL

In compiling this MEL, it has been assumed that deficiencies would be correctly determined and not accompanied by some other hidden defect.

Every effort must be made to ensure this basic assumption is correct when faced with a defect.



00-02 - Introduction to the MEL

It is essential that maintenance staff make every endeavour (when available and within the limitations of the station and the scheduled times on ground) to rectify all defects.

Precautions to be taken prior to an aeroplane being released to any lesser equipment standard than basic are as follows:

- a. The Commander must be fully acquainted with the proposed limitation.
- b. Consideration must be given to isolating defective equipment from the remainder of the system by reference to the procedures contained in this MEL.
- Any unserviceable equipment in the aeroplane must be clearly and unmistakably labeled as
  defective.
- d. Any action taken must be clearly entered in the Aircraft Technical Log and certified by the individual concerned

It should be appreciated that occasions may arise where equipment not included in this list can be unserviceable without the responsible maintenance personnel considering that the aeroplane is unserviceable for flight.

No flight shall take place with any item of aircraft equipment inoperative or outside the requirements of the MEL if, in the opinion of the Commander, the lack of such equipment or the relaxing of an Operations Manual requirement will ieopardize the safe conduct of the flight.

Commanders should make every endeavour to radio/ACARS details of defects to stations before arrival, as this can greatly assist in minimising subsequent late departures by the positioning of spares and labour.

The amendment procedure for this Minimum Equipment List is contained in the Dragonair MEL *Refer to HOW MEL Revision Procedure*. All proposals for amendment must be submitted to Dragonair Operations on Form KA/OPS1.

This MEL is based upon the following documentation:

DGAC Approved Airbus Industrie A320 and A321 MMEL.

The Air Navigation (Hong Kong) Order 1995 and Airworthiness Notices.

The HKAR MMEL/MEL CAD 549.



00-03 - Criteria for Dispatch

#### CRITERIA FOR DISPATCH

Ident.: MI-00-03-00012617.0001001 / 04 APR 12

Applicable to: ALL

The decision of the Commander of the flight to have inoperative items corrected before the flight will take precedence over the provisions contained in the MEL. The Commander may request requirements above the minimum listed, whenever in his judgment such added equipment is essential to the safety of a particular flight under the special condition prevailing at the time. It is emphasised that the existence of these lists in no way absolves the Commander from ensuring that an aeroplane is safe for flight and, as previously, the decision of the Commander regarding acceptance of the aeroplane is final, as specified in the Air Navigation (Hong Kong) Order. The MEL cannot take into account all multiple unserviceabilities. Therefore, before dispatching an aircraft with multiple MEL items inoperative, it must be assured that any interface or inter-relationship between inoperative items will not result in a degradation in the level of safety and/or an undue increase in crew workload. It is particularly in this area of multiple discrepancies and especially discrepancies in related systems, that good judgment, based on the circumstances of the case, including climatic and en-route conditions, must be used.

The MEL does not anticipate the effects of combinations of apparently unrelated unserviceabilities or allow for situations where systems are made inoperative for special purposes such as demonstration, flight test or crew training. Other provisions may apply to positioning or ferrying flights but these may not necessarily be included in the MEL.

The MEL indicates that a decision to operate the aircraft with multiple unserviceabilities should only be made after due consideration of possible interrelated or additive efforts and, if necessary, following consultation with appropriate engineering specialists.

#### OPERATIONS OUTSIDE THE CONDITIONS OF THE MEL

Ident.: MI-00-03-20801728.9001001 / 04 APR 12 Applicable to: ALL

- 1. Dragonair is approved by the HKCAD to implement Special Procedures (know as Operations Dispensation) in accordance with HKAR-MMEL/MEL to operate outside the conditions of the MEL.
- Commanders requesting approval to operate outside the MEL should contact the Integrated Operations Centre in the first instance.
- 3. In the case where approval is sought, procedures in the Operations Manual Part A 2.6 and the Integrated Operations Centre Policy and Procedures Manual must be followed.
- 4. In the case where approval to operate outside the MEL is granted, any conditions specified in the approval must be complied with.



00-03 - Criteria for Dispatch

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HDA A320/A321 FLEET MI-00-03 P 2/2 MEL 04 APR 12



00-04 - Maintenance Action

#### MAINTENANCE ACTION

Ident.: MI-00-04-00012619.0001001 / 04 APR 12

Applicable to: ALL

Every effort shall be made by the maintenance to correct all technical defects as early as practicable and that the aircraft be released from a maintenance station in fully operational condition. The Commander must be informed by the maintenance as soon as practicable, should it be impossible to rectify the inoperative item before the dispatch.

Whenever an aircraft is released by the maintenance for dispatch with items inoperative, the following is required:

- The technical logbook aboard the aircraft must contain a detailed description of the inoperative item(s), special advice to the flight crew, if necessary, and information about corrective action taken.
- When they are accessible to the crew in flight, the control(s), and/or indicator(s) related to inoperative system(s), function(s) or component(s) must be clearly placarded.

Note:

- To the extent practical, placards should be located adjacent to the control or indicator for the item affected, unless otherwise specified.
- 2. If inadvertent operation could produce a hazard, such equipment must be rendered inoperative (physically) as given in the appropriate Maintenance Procedure.
- 3. The relevant Operational Procedures are contained in the MEL.
- 4. The relevant Maintenance Procedures are contained in the Aircraft Maintenance Manual.



## MEL ITEMS 00 - PREAMBLE 00-04 - Maintenance Action

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 HDA A320/A321 FLEET
 MI-00-04 P 2/2

 MEL
 04 APR 12



00-05 - Repair Interval

#### REPAIR INTERVAL

Ident.: MI-00-05-00012620.0001001 / 19 JUL 12

Applicable to: ALL

Inoperative items, deferred in accordance with the MEL, must be rectified at or before the expiration of the repair interval that is established by the following letter designators given in the "Repair Interval" column.

Repair Interval A Items in this category shall be rectified in accordance with the dispatch

conditions stated in the provisos.

Items in this category shall be rectified within three (3) consecutive Repair Interval B

calendar days, excluding the day of discovery.

Repair Interval C Items in this category shall be rectified within ten (10) consecutive

calendar days, excluding the day of discovery.

Items in this category shall be rectified within sixty (60) consecutive Repair Interval D

calendar days, excluding the day of discovery.

The start of the rectification interval is the date the "Aircraft Release" box is signed and not the date that the ADD was entered. Except for FC, FH and sector limited rectification intervals listed under Category A, which begin immediately.

Excluding Main Base (HKG), the aircraft may dispatch for flight, and land after expiry of original or extended Time Limit period, provided the Release for Service for that sector has been signed during the period of validity.

EXAMPLE	An Aircraft Release is signed off at 03:00 UTC on 6th March. Should this be
	category "C" (10 days), the appropriate time limit commences at 00:01 UTC on 7th
	March and expires at mindnight UTC on 16th March.

A calendar day rectification interval may be granted an extension for an additional period of Note: time to maximum duration as specified in the MEL and CDL for Categories B, C, and D.



## MEL ITEMS 00 - PREAMBLE 00-05 - Repair Interval

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 HDA A320/A321 FLEET
 MI-00-05 P 2/2

 MEL
 19 JUL 12



00-06 - Repair Interval Extension

#### REPAIR INTERVAL EXTENSION

Ident.: MI-00-06-00012621.0001001 / 04 APR 12

Applicable to: ALL

- a. The approved Dragonair "MEL Rectification Interval Extension Scheme" (refer EOMP 4-21-1) provides for a one time extension to calendar day rectification interval for an additional period of time equal to a maximum duration as that specified in the MEL and are authorized by CX MQA.
- b. An extension of a rectification interval is a temporary extension of the "Calendar Day" period laid down in the MEL for Category 'B', 'C' and 'D'. No extension can be made for CAT 'A' items under this scheme.
- c. The original Maintenance Log ADD or PADD or SADD number will be retained. A Maintenance Log entry will be made at the time of the MEL extension issue. The MEL extension authority number and new expiry date will be entered into the repair extension column of the ADD page.
- d. Extensions outside of this scheme can only be issued and approved by HK CAD and the request for such extensions must originate from within CX Engineering Department.

#### REPEAT DEFECT DEFERRAL

Ident.: MI-00-06-20802010.9001001 / 04 APR 12

Applicable to: ALL

In the event of a defect recurring within the first 2 flights after clearing an ADD for the same defect. The fault shall be rectified or, if deferring under the same MEL reference, the defect shall be back dated to the start date of the original ADD.



00-06 - Repair Interval Extension

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 HDA A320/A321 FLEET
 MI-00-06 P 2/2

 MEL
 04 APR 12



#### **DEFINITIONS**

Ident.: MI-00-07-00012622.0001001 / 19 JUL 12

Applicable to: ALL

1

The conditions/restrictions of the referenced item are required for Apply

dispatch and operation of the aircraft for the intended flight.

Authority The Civil Aviation Department (Hong Kong).

Calendar day A 24 hour period from midnight to midnight based on UTC.

Centralized Fault Display:

System (CFDS)

The Centralised Fault Display System indicates the identity of a faulty system. The failures are classified into three categories as follows:

Failures which are indicated to the flight crew by means Class I:

of the ECAM or local warnings which require reference

to the MFI

Class II: The crew is informed of Class II failures on the ECAM

STATUS pages by the MAINT STATUS (white) which only shows the system affect by a Class II failure. No warning or caution messages on the upper ECAM display and no local warning occurs. Although these failures are go without condition, they are listed with the

corresponding ECAM message at the top of each ATA

chapter and must be repaired within 10 days.

Class III · Failures detected by the CFDS which are not indicated

> to the flight crew by the ECAM STATUS. Only the CFDS knows the existence of Class III failures. They can be left uncorrected until the next adequate maintenance opportunity. Interrogation of the CFDS messages is accomplished in accordance with the requirements of the Approved A320 Maintenance

Schedule.

Considered inoperative : The listed item of equipment must be treated as inoperative.

> Therefore, the "considered inoperative" MEL item must also be entered in the Log and the associated dispatch conditions must be applied,

including the respective (o) and (m) procedures if any.

The shorter rectification interval between the initial inoperative item and

the "considered inoperative" item shall be applied.



Day of Discovery

The calendar day a malfunction/defect was recorded in the Aircraft Technical Log Book. This date is calculated from the Certificate of Release to Service (CRS) sign-off date of the defect deferral in the Technical Log Book.

Daylight operations

Period between the beginning of the morning civil twilight and the end of the evening civil twilight relevant to the local aeronautical airspace; or such other period, as may be prescribed by the appropriate Authority.

Dispatch

The point at which an aircraft first moves under its own power for the purpose of commencing a flight.

Note:

The definition above is in accordance with that given in Article 98(3)(a) of the AN(HK)O and it is at the point of dispatch that the provisions of the MEL cease to apply. They come into effect again when the aircraft next comes to rest the end of its flight.

It is within the authority of the Commander to accept a defect without consulting a ground engineer after the doors are closed, provided the defect does not require a maintenance procedure (m) and it is covered in the MEL.

If a failure occurs during the taxi phase before the start of the takeoff roll, any decision to continue the flight shall be subject to pilot judgement and good airmanship. The applicable ECAM/FCOM procedure shall be actioned and the Commander should refer to the MEL before any decision to continue the flight is taken.

**ER/ETOPS** 

Refers to "extended range" operations which may be defined as "operation of a two-engine aeroplane over a route that contains a point farther than one hour flying time at the normal one-engine inoperative cruise speed (in still air) from an adequate airport".

Note: Hong Kong Dragon Airlines Ltd A320/1 do not operate ER/ETOPS routes at the present time, information is included for possible future use.

Extended Overwater Flight

Refers to an operation overwater at a horizontal distance of more than 50 nautical miles from the nearest shoreline.

HDA A320/A321 FLEET MI-00-07 P 2/4



Flammable or combustible material Material which is capable of catching fire and burning.

Where loading of flammable or combustible material is prohibited, no material may be loaded except the following: cargo handling equipment (Unloaded, empty or with ballast), fly away kits (excluding e.g. cans of hydraulic fluid, cleaning solvents, batteries, capacitors, chemical generators, etc.), and in-flight service material (Return catering - only closed catering trolleys/boxes, no newspapers, no alcohol or duty free goods).

Note: If serviceable tires are included, they should only be inflated to

a minimum pressure that preserves their serviceability.

Flight One "flight" is defined as the period of time that begins the moment

> at which an aircraft begins to move by its own means in preparation for takeoff, continues during takeoff and the applicable flight phases, and ends when the aircraft lands and comes to a complete stop in its

parking area.

Flight Day A twenty four (24) hour period (from midnight to midnight) during which

at least one flight is scheduled for the affected aeroplane.

Flight Hour The time from the moment an aeroplane leaves the surface of the earth

until it touches it at the next point of landing.

Icing Conditions Refer to PRO-SUP-30 Icing Conditions.

Inoperative The listed item of equipment is unserviceable or malfunctioning to

> the extent that it does not accomplish its intended purpose, or is not consistently functioning within its designed operating limits or

tolerances.

Some systems have been designed to be fault tolerant and are monitored by digital computers which transmit fault messages to the CFDS. The presence of this category of fault messages does not mean

that the system is inoperative.

LVO (Low Visibility Operations)

Procedures applied at airfields when the RVR is less than 400m for Takeoff and less than 550m for Approach and Landing. The DH for

CAT II is not less than 100ft, CAT IIIA is not less than 50ft and CAT IIIB

is Oft.

**Normal Conditions** That all aircraft systems are operative for the initial performance

calculations.

HDA A320/A321 FLEET MI-00-07 P 3/4 19 JUL 12



Operates Normally

The specified item or system has no current malfunctions displayed or recorded in the Technical log. A specific check to confirm normal operation is not required unless detailed in the associated Operating or Maintenance Procedures of the MEL.

... provided that system :

The system X must not be reported to be inoperative in the logbook.

X is operative

Regulations

... provided that system : X is checked operative

The system X must be checked and confirmed operative via either an

(o) and/or an (m) procedure.

Required cabin attendant:

The applicable portion(s) of the Air Navigation (Hong Kong) Order. A seat required to be occupied by a cabin attendant during critical

phases of flight.

seat

The following are nominated as required seat: A320: L1, and L1A, and L2, and Swivel.

A321: L1/L1A, and L2, and L3/R3, and L4/Swivel.

Refer to

The referenced item may have an impact on the dispatch or operation

of the aircraft for the intended flight.

RVSM:

RVSM reduces the vertical separation requirement to 1.000ft at

prescribed altitudes.

System

The group of directly related components which together performs a specified function, for example 'RPM Indication System' which would include the RPM indicator, tachometer generator, circuit breaker and

associated circuitry.

Visible Moisture

An atmospheric environment containing water in any form that can be seen in natural or artificial light, i.e. clouds, fog, rain, sleet, hail, snow.

"VMC" (Visual Meteorological Conditions) and "IMC" (Instrument Meteorological

conditions)

The definition of these items are those used in Article 64. Section I of

the AN(HK)O - Rules of the Air.



00-08 - ECAM and MAINTENANCE STATUS

#### **ECAM AND MAINTENANCE STATUS**

Ident.: MI-00-08-00012623.0003001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **ECAM**

The A320 Family aircraft is equipped with the Electronic Centralized Aircraft Monitoring (ECAM) which provides different levels of aircraft systems monitoring messages:

- ECAM warning
- ECAM advisory
- ECAM caution
- ECAM memo

ECAM warning and ECAM caution messages are listed in the "MEL Entries" section. ECAM advisory and ECAM memo messages are not listed in the "MEL Entries".

#### HANDLING OF MAINTENANCE MESSAGES ON THE STATUS SD page

At the beginning of each ATA chapter of the "MEL Item" section, the related MAINTENANCE messages which may be displayed on the STATUS SD page are listed in the Sub-Chapter "00" with the associated dispatch status.

A MAINTENANCE message indicates the presence of a category of failure which can only be identified by interrogation of the CFDS.

All ECAM Maintenance Status messages that require deferral action must be entered as SADD's. These SADD's must be rectified at the first available opportunity but must not exceed 10 days (CAT 'C') interval. This limitation does not apply to the following messages: DAR, DMU, QAR which are Category D (60 days).

Flight Crew handling of ECAM Maintenance Status messages is stipulated in Part A 8.6. Maintenance Personnel handling is stipulated in the Transit Check sheet item 5.

Dispatch with MAINTENANCE messages displayed on the STATUS SD page is permitted without condition except for the following messages:

- DMC 1/3: Refer to Item 31-00-05 DMC 1/3 MAINTENANCE Message
- DMC 2/3: Refer to Item 31-00-06 DMC 2/3 MAINTENANCE Message

#### **ECAM AND MAINTENANCE STATUS**

Ident.: MI-00-08-00012623.0002001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### **ECAM**

The A320 Family aircraft is equipped with the Electronic Centralized Aircraft Monitoring (ECAM) which provides different levels of aircraft systems monitoring messages:



00-08 - ECAM and MAINTENANCE STATUS

- ECAM warning
- ECAM advisory
- ECAM caution
- ECAM memo

ECAM warning and ECAM caution messages are listed in the "MEL Entries" section. ECAM advisory and ECAM memo messages are not listed in the "MEL Entries" section.

#### HANDLING OF MAINTENANCE MESSAGES ON THE STATUS SD page

At the beginning of each ATA chapter of the "MEL Item" section, the related <u>MAINTENANCE</u> messages which may be displayed on the <u>STATUS</u> SD page are listed in the Sub-Chapter "00" with the associated dispatch status.

A <u>MAINTENANCE</u> message indicates the presence of a category of failure which can only be identified by interrogation of the CFDS.

All ECAM Maintenance Status messages that require deferral action must be entered as SADD's. These SADD's must be rectified at the first available opportunity but must not exceed 10 days (CAT `C') interval. This limitation does not apply to the following messages: DAR, DMU, QAR which are Category D (60 days).

Flight Crew handling of ECAM Maintenance Status messages is stipulated in Part A 8.6. Maintenance Personnel handling is stipulated in the Transit Check sheet item 5.

Dispatch with <u>MAINTENANCE</u> messages displayed on the <u>STATUS</u> SD page is permitted without condition except for the following messages:

- AIR BLEED: Refer to Item 36-00-01 AIR BLEED MAINTENANCE Message
- DMC 1/3: Refer to Item 31-00-05 DMC 1/3 MAINTENANCE Message
- DMC 2/3: Refer to Item 31-00-06 DMC 2/3 MAINTENANCE Message



21-00 - MAINTENANCE Messages on the STATUS SD page

21-00-01	PACK 1(2) <u>MAINTENANCE</u> Message

Ident.: MI-21-00-00007458.0001001 / 29 NOV 11

Applicable to: ALL

### 21-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

Dispatch with this MAINT STATUS is grante	a.
Reference	s) —

S

21-00-02	ZONE CONT MAINTENANCE Message
----------	-------------------------------

Ident.: MI-21-00-00007459.0002001 / 29 NOV 11

Applicable to: ALL

#### 21-00-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

Dispatch with this MAINT STATUS is granted.

Reference(s)

S



21-00 - MAINTENANCE Messages on the STATUS SD page

21-00-04	TEMP CTL 1(2) MAINTENANCE Message
	.,

Ident.: MI-21-00-00007461.9001002 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 21-00-04A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

ı	2	
ı	3	
L	_	

S

Dispatch with this <u>MAINT STATUS</u> is granted.	



21-01 - Overhead Panels 21-01-01 - AIR COND Overhead Panel

21-01-01 PACK pb-sw FAULT light
---------------------------------

Ident.: MI-21-01-01-00007462.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

21-01-01-02	PACK pb-sw OFF light
-------------	----------------------

Ident.: MI-21-01-01-00007463.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

21-01-01-03	HOT AIR pb-sw FAULT light
	1

Ident.: MI-21-01-01-00007464.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-01-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that all zone duct temperature indications are operative on the <u>COND</u> SD page.



21-01 - Overhead Panels 21-01-01 - AIR COND Overhead Panel

21-01-01-04	HOT AIR pb-sw OFF light
-------------	-------------------------

Ident.: MI-21-01-01-00007465.0001001 / 22 MAR 10

Applicable to: ALL

## 21-01-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



21-01 - Overhead Panels 21-01-02 - CABIN PRESS Overhead Panel

21-01-02-01	CABIN PRESS MODE SEL pb-sw FAULT light
-------------	--

Ident.: MI-21-01-02-00007466.0001001 / 22 MAR 10

Applicable to: ALL

## 21-01-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



21-01 - Overhead Panels 21-01-02 - CABIN PRESS Overhead Panel

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HDA A320/A321 FLEET MI-21-01-02 P 2/2 MEL 29 NOV 11



21-01 - Overhead Panels 21-01-03 - CARGO VENT Overhead Panel

21-01-03-02	AFT ISOL VALVE pb-sw FAULT light
-------------	----------------------------------

Ident.: MI-21-01-03-00007468.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## 21-01-03-02A ETOPS not conducted.

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative provided that ETOPS is not conducted.

#### 21-01-03-02B Others.

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

S

May be inoperative provided that isolation valves indications are available on ECAM <u>CONE</u>
page.
Reference(s)

S



21-01 - Overhead Panels 21-01-03 - CARGO VENT Overhead Panel

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HDA A320/A321 FLEET MI-21-01-03 P 2/2 MEL 29 NOV 11



21-01 - Overhead Panels 21-01-04 - VENTILATION Overhead Panel

|--|

Ident.: MI-21-01-04-00007469.0001001 / 22 MAR 10

Applicable to: ALL

### 21-01-04-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

21-01-04-02	BLOWER pb-sw FAULT light

Ident.: MI-21-01-04-00007470.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-01-04-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

21-01-04-03	EXTRACT pb-sw FAULT light

Ident.: MI-21-01-04-00007471.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-01-04-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



21-01 - Overhead Panels 21-01-04 - VENTILATION Overhead Panel

Intentionally left blank

HDA A320/A321 FLEET MI-21-01-04 P 2/2 MEL 29 NOV 11



21-07 - Indications on SD pages 21-07-01 - Indications on the BLEED SD page

21-07-01-01 Pack Outlet Ten	nperature Indication on the <u>BLEED</u> SD page
-----------------------------	--

Ident.: MI-21-07-01-00007512.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-07-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

21-07-01-02	Pack Turbine Bypass Valve Position Indication on the <u>BLEED</u> SD page
-------------	---

Ident.: MI-21-07-01-00007513.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-07-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

21-07-01-03	Pack Compressor Outlet Temperature
	Indication on the <u>BLEED</u> SD page

Ident.: MI-21-07-01-00007514.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-07-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



21-07 - Indications on SD pages 21-07-01 - Indications on the BLEED SD page

21-07-01-04	Pack Flow Indication on the <u>BLEED</u> SD page
-------------	--

Ident.: MI-21-07-01-00007515.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-07-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

|--|

Ident.: MI-21-07-01-00007516.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-07-01-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

21-07-01-06	Emergency Ram Air Inlet Indication on the <u>BLEED</u> SD page

Ident.: MI-21-07-01-00007517.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-07-01-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



21-07 - Indications on SD pages 21-07-02 - Indications on the CAB PRESS SD page

21-07-02-01 INLET and EXTRACT Indications on the <u>CAB PRESS</u> SD page	age
---	-----

Ident.: MI-21-07-02-00007518.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-07-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

During ground operations, correct avionics ventilation should be provided. Note:

21-07-02-02	Pressure Safety Valves Position Indication on the <u>CAB PRESS</u> SD page
-------------	--

Ident.: MI-21-07-02-00007519.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-07-02-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(m) Pressure safety	valves may be indicated	d open provided t	hat both valves	are visually
checked closed.				

Reference(s)

(m) Refer to AMM 21-31-00-040-004

S

MEL A to B



21-07 - Indications on SD pages 21-07-02 - Indications on the CAB PRESS SD page

21-07-02-03 Pack 1 and 2 Indications on the <u>CAB PRESS</u> SD page	
--	--

Ident.: MI-21-07-02-00007520.0001001 / 22 MAR 10

Applicable to: ALL

### 21-07-02-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



21-07 - Indications on SD pages 21-07-03 - Indications on the COND SD page

21-07-03-01	Indications on the <u>COND</u> SD page
-------------	--

Ident.: MI-21-07-03-00007521.0001001 / 22 MAR 10

Applicable to: ALL

### 21-07-03-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

One or more indications may be inoperative.



21-07 - Indications on SD pages 21-07-03 - Indications on the COND SD page

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HDA A320/A321 FLEET MI-21-07-03 P 2/2 MEL 29 NOV 11



21-07 - Indications on SD pages 21-07-04 - Indications on the CRUISE SD page

21-07-04-01	Indications on the <u>CRUISE</u> SD page
-------------	--

Ident.: MI-21-07-04-00007522.0001001 / 22 MAR 10

Applicable to: ALL

### 21-07-04-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

Cabin and cockpit zone indications may be inoperative.



21-07 - Indications on SD pages 21-07-04 - Indications on the CRUISE SD page

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HDA A320/A321 FLEET MI-21-07-04 P 2/2 MEL 29 NOV 11



21-09 - ECAM Alerts

21-09-01	<u>VENT</u> BLOWER FAULT Alert

Ident.: MI-21-09-00007523.0001001 / 29 NOV 11

Applicable to: ALL

Note: During ground operations, correct avionics ventilation should be provided.

#### 21-09-01A Blower fan operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be displayed provided that:
  - 1) The blower fan is checked operative before each flight, and
  - 2) The VENT AVNCS SYS FAULT alert is checked operative before each flight.

Reference(s)

- (o) Refer to OpsProc 21-09-01A VENT BLOWER FAULT Alert
- (m) Refer to AMM 21-26-00-040-010

S

## 21-09-01B Blower fan inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be displayed provided that the avionics blower fan is considered inoperative. Refer to Item 21-26-01 Avionics Blower Fan

21-09-02	<u>VENT</u> EXTRACT FAULT Alert
Ident.: MI-21-09-00007524.000100 <sup>-1</sup> <b>Applicable to: ALL</b>	1 / 29 NOV 11
Applicable to: ALL	

<u>Note:</u> During ground operations, correct avionics ventilation should be provided.

Continued on the following page



21-09 - ECAM Alerts

Continued from the previous page

## 21-09-02A Extract fan operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be displayed provided that:
  - 1) The extract fan is checked operative before each flight, and
  - 2) The <u>VENT</u> AVNCS SYS FAULT alert is checked operative before each flight.

------ Reference(s)

- (o) Refer to OpsProc 21-09-02A VENT EXTRACT FAULT Alert
- (m) Refer to AMM 21-26-00-040-011

S

### 21-09-02B Extract fan inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be displayed provided that the avionics extract fan is considered inoperative. Refer to Item 21-26-02 Avionics Extract Fan

21-09-03	CAB PR SAFETY VALVE OPEN Alert

Ident.: MI-21-09-00007525.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-09-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(m) May be displayed provided that both safety valves are visually checked closed.

(m) Refer to AMM 21-31-00-040-005

S



21-21 - Air Distribution and Recirculation

21-21-01	Cabin Fan

Ident.: MI-21-21-00007472.0001001 / 22 MAR 10

Applicable to: ALL

### 21-21-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.



21-21 - Air Distribution and Recirculation

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HDA A320/A321 FLEET MI-21-21 P 2/2 MEL 29 NOV 11



21-23 - Lavatory and Galley Ventilation

21-23-01 Lavatory and Galley Extraction Fan
---

Ident.: MI-21-23-00007473.0002001 / 29 NOV 11

Applicable to: ALL

### 21-23-01B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(o)	May be inoperative provided that all duct temperatures indications for the cabin are
	operative on the <u>COND</u> SD page .

Reference(s)

(o) Refer to OpsProc 21-23-01B Lavatory and Galley Extraction Fan

S



21-23 - Lavatory and Galley Ventilation

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HDA A320/A321 FLEET MI-21-23 P 2/2 MEL 29 NOV 11



21-26 - Avionics Equipment Ventilation

21-26-01	Avionics Blower Fan

Ident.: MI-21-26-00007474.0001001 / 29 NOV 11

Applicable to: ALL

During ground operation, correct avionics ventilation should be provided. Note:

#### 21-26-01A VENT AVNCS SYS FAULT not displayed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The BLOWER pb-sw is set to OVRD, and
  - 2) Both air conditioning packs are operative, and
  - 3) The VENT AVNCS SYS FAULT alert is not displayed.

Reference(s)

(o) Refer to OpsProc 21-26-01A Avionics Blower Fan (VENT AVNCS SYS FAULT Alert not displayed)

#### 21-26-01B Air conditioning inlet valve checked open

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (o) (m) May be inoperative provided that:
  - 1) The BLOWER pb-sw is set to OVRD, and
  - 2) Both air conditioning packs are operative, and
  - 3) The air conditioning inlet valve is checked open before each flight.

Reference(s)

- (o) Refer to OpsProc 21-26-01B Avionics Blower Fan (Air conditioning inlet valve checked open before each flight)
- (m) Refer to AMM 21-26-00-040-006

S

Continued on the following page



21-26 - Avionics Equipment Ventilation

Continued from the previous page

#### 21-26-01C Avionics ventilation system checked

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (o) (m) May be inoperative provided that:
  - 1) The BLOWER pb-sw is set to OVRD, and
  - 2) Both air conditioning packs are operative, and
  - 3) The air conditioning inlet valve is secured in the open position, and
  - 4) The avionics ventilation system is checked before each flight.

Poforonoo(o)
 Reference(s) ——————

- (o) Refer to OpsProc 21-26-01C Avionics Blower Fan (Avionics ventilation system checked before each flight)
- (m) Refer to AMM 21-26-00-040-013

S

21-26-02	Avionics Extract Fan	
Ident.: MI-21-26-00007475.000100 Applicable to: ALL	1 / 29 NOV 11	

<u>Note:</u> During ground operation, correct avionics ventilation should be provided.

## 21-26-02A VENT AVNCS SYS FAULT not displayed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The blower fan is operative, and
  - 2) The EXTRACT pb-sw is set to OVRD, and
  - 3) Both air conditioning packs are operative, and
  - 4) The VENT AVNCS SYS FAULT alert is not displayed.

Continued on the following page



21-26 - Avionics Equipment Ventilation

	Continued from the previous pag
(o)	Refer to OpsProc 21-26-02A Avionics Extract Fan (VENT AVNCS SYS FAULT Alert not
	displayed)

#### 21-26-02B Air conditioning inlet valve checked open

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (o) (m) May be inoperative provided that:
  - 1) The blower fan is operative, and
  - 2) The EXTRACT pb-sw is set to OVRD, and
  - 3) Both air conditioning packs are operative, and
  - 4) The air conditioning inlet valve is checked open before each flight.

- (o) Refer to OpsProc 21-26-02B Avionics Extract Fan (Air conditioning inlet valve checked open before each flight)
- (m) Refer to AMM 21-26-00-040-007

S

## 21-26-02C Avionics ventilation system checked

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (o) (m) May be inoperative provided that:
  - 1) The blower fan is operative, and
  - 2) The EXTRACT pb-sw is set to OVRD, and
  - 3) Both air conditioning packs are operative, and
  - 4) The air conditioning inlet valve is secured in the open position, and
  - 5) The avionics ventilation system is checked before each flight.

Continued on the following page

**HDA A320/A321 FLEET** MI-21-26 P 3/12 ← B →



S

### **MEL ITEMS** 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

			Continued from	n the previous pa
		Reference(s) —		
befo	r to OpsProc 21 re each flight) rr to AMM 21-26	-26-02C Avionics Extract Fal	n (Avionics ventilation syste	em checked
21-26-03		Avionics Skin Exc	hanger Inlet Bypass Valve	е
lent.: MI-21-26-00007	7476.0001001 / 29 NC	V 11		
21-26-03A				
Repa	ir interval	Nbr installed	Nbr required	Placard
	С	1	0	No
S				
<b>1)</b> Th	osition, and	provided that: exchanger inlet bypass valve ilation system is checked bef	•	e closed
Note		nd operations, correct avioni	_	ovided.
		Reference(s)		
	er to OpsProc 21	-26-03A Avionics Skin Excha	anger Inlet Bypass Valve	



21-26 - Avionics Equipment Ventilation

	21-26-04	Avionics Skin Air Outlet Valve
--	----------	--------------------------------

Ident.: MI-21-26-00007477.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-26-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The internal flap is manually secured in the open position, and
  - 2) The skin air outlet valve is displayed in a partially open position amber or green on the <u>CAB PRESS</u> SD page , and
  - 3) Both air conditioning packs are operative, and
  - 4) The skin exchanger isolation valve is secured in the open position, and
  - 5) The avionics ventilation system is checked before each flight.

Note:	During ground operations, correct avionics ventilation should be provided.
	Reference(s)

- (o) Refer to OpsProc 21-26-04A Avionics Skin Air Outlet Valve
- (m) Refer to AMM 21-26-00-040-002

S

21-26-05		Avionics Skin Air Inlet Valve
Ident.: MI-21- Applicable to	I-21-26-00007478.0001001 / 29 NOV 11 Die to: ALL	
Note:	During ground operations, correct avionics ventilation should be provided.	

Continued on the following page



21-26 - Avionics Equipment Ventilation

Continued from the previous page

### 21-26-05A Air Conditioning Inlet Valve open on ground

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The avionics skin air inlet valve is manually secured in the closed position, and
  - 2) The air conditioning inlet valve is open on ground, and
  - 3) The avionics ventilation system is checked before each flight.

Poforonoo(s)
 neletetice(s) ————

- (o) Refer to OpsProc 21-26-05A Avionics Skin Air Inlet Valve (Air conditioning inlet valve open on the ground)
- (m) Refer to AMM 21-26-00-040-004

S

## 21-26-05B Air Conditioning Inlet Valve Secured Open

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The avionics skin air inlet valve is manually secured in the closed position, and
  - 2) The air conditioning inlet valve is secured in the open position, and
  - 3) The avionics ventilation system is checked before each flight.


- (o) Refer to OpsProc 21-26-05B Avionics Skin Air Inlet Valve (Air conditioning inlet valve secured in the open position)
- (m) Refer to AMM 21-26-00-040-014

S



21-26 - Avionics Equipment Ventilation

|--|

Ident.: MI-21-26-00007479.0001001 / 29 NOV 11

Applicable to: ALL

Note: During ground operations, correct avionics ventilation should be provided.

#### 21-26-06A Valve inoperative in the open position

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(o) (m) May be inoperative in the open position provided that the avionics ventilation system is checked before each flight.

---- Reference(s) ------

- (o) Refer to OpsProc 21-26-06A Avionics Skin Exchanger Isolation Valve
- (m) Refer to AMM 21-26-00-040-008

S

### 21-26-06B Valve secured open

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - The avionics skin exchanger isolation valve is secured in the open position, and
     <u>Note:</u> If the valve cannot be secured in the open position, it can be interchanged with
     the skin exchanger outlet bypass valve.
  - 2) The avionics ventilation system is checked before each flight.

 Reference(s) ———	

- (o) Refer to OpsProc 21-26-06B Avionics Skin Exchanger Isolation Valve
- (m) Refer to AMM 21-26-00-040-016

S

MEL F



21-26 - Avionics Equipment Ventilation

21-26-07	Avionics Skin Exchanger Outlet Bypass Valve

Ident.: MI-21-26-00007480.0001001 / 22 MAR 10

Applicable to: ALL

#### 21-26-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

Note: During ground operations, correct avionics ventilation should be provided.

21-26-08	Avionics Air Conditioning Inlet Valve	
dopt - MI 21 26 00007491 0001001 / 20 NOV 11		

dent.: MI-21-26-00007481.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-26-08A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



- (o) (m) May be inoperative provided that:
  - 1) The avionics air conditioning inlet valve is manually secured in the open position, and
  - 2) Both air conditioning packs are operative, and
  - 3) The avionics ventilation is checked before each flight.

- (o) Refer to OpsProc 21-26-08A Avionics Air Conditioning Inlet Valve
- (m) Refer to AMM 21-26-00-040-003

S



21-26 - Avionics Equipment Ventilation

21-26-09	Avionics Ventilation Filter

Ident.: MI-21-26-00007483.0001001 / 29 NOV 11

Applicable to: ALL

Note: During ground operations, correct avionics ventilation should be provided.

#### 21-26-09A VENT AVNCS SYS FAULT not displayed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative (clogged) provided that:
  - 1) The blower and extract fans are operative, and
  - 2) The EXTRACT pb-sw is set to OVRD, and
  - 3) Both air conditioning packs are operative, and
  - 4) The VENT AVNCS SYS FAULT alert is not displayed.

(o) Refer to OpsProc 21-26-09A Avionics Ventilation Filter (VENT AVNCS SYS FAULT Alert not displayed)

#### 21-26-09B Valve checked open

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative (clogged) provided that:
  - 1) The blower and extract fans are operative, and
  - 2) The EXTRACT pb-sw is set to OVRD, and
  - 3) Both air conditioning packs are operative, and
  - 4) The air conditioning inlet valve is checked open before each flight.

Deference(e)
neleterice(s)

- (o) Refer to OpsProc 21-26-09B Avionics Ventilation Filter (Air conditioning inlet valve checked open before each flight)
- (m) Refer to AMM 21-26-00-040-009

S

Continued on the following page

HDA A320/A321 FLEET MI-21-26 P 9/12
MEL I → 29 NOV 11



21-26 - Avionics Equipment Ventilation

Continued from the previous page

#### 21-26-09C Valve secured open

Repair interval	Nbr installed	Nbr required	Placard
C 1		0	No

S

- (o) (m) May be inoperative (clogged) provided that:
  - 1) The blower and extract fans are operative, and
  - 2) The EXTRACT pb-sw is set to OVRD, and
  - 3) Both air conditioning packs are operative, and
  - 4) The air conditioning inlet valve is secured in the open position, and
  - 5) The avionics ventilation system is checked before each flight.

|--|

- (o) Refer to OpsProc 21-26-09C Avionics Ventilation Filter (Avionics ventilation system checked before each flight)
- (m) Refer to AMM 21-26-00-040-017

S

21-26-10	Avionics Equipment Ventilation Computer ( AEVC )
Ident : MI-21-26-00007484.0001001 / 29 NOV 11	

# Applicable to: ALL 21-26-10A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) Both air conditioning packs are operative, and
  - 3) The BLOWER pb-sw and the EXTRACT pb-sw are set to OVRD, and
  - 4) The air conditioning inlet valve and the skin air outlet valve are checked in the correct position before each flight, and
  - 5) The extract fan is checked operative before each flight, and
  - 6) The skin air inlet valve is secured in the closed position.

<u>Note:</u> During ground operations, correct avionics ventilation should be provided.

Continued on the following page



21-26 - Avionics Equipment Ventilation

Continued from the previous pag	
Refer to OpsProc 21-26-10A Avionics Equipment Ventilation Computer (AEVC)	(o) Refer to OpsProc
m) Refer to AMM 21-26-00-040-005	(m) Refer to AMM 21-2
	S



21-26 - Avionics Equipment Ventilation

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HDA A320/A321 FLEET MI-21-26 P 12/12 MEL 29 NOV 11



21-28 - Cargo Compartment Ventilation

21-28-03 AFT Cargo Extraction Fan
-----------------------------------

Ident.: MI-21-28-00007488.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 21-28-03A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

(0)	iviay be inoperative.		
		Reference(s)	

(o) Refer to OpsProc 21-28-03A AFT Cargo Extraction Fan

21-28-04 AFT Cargo Isolation Valve
------------------------------------

Ident.: MI-21-28-00007489.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 21-28-04A AFT ISOL VALVE pb-sw FAULT light operative

	Repair interval	Nbr installed	Nbr required	Placard
ı	D	2	0	No

S

- (o) One or both may be inoperative provided that:
  - 1) Both valves are checked closed, and
  - 2) AFT ISOL VALVE pb-sw FAULT light is checked operative.

Deference(a)
Reference(s)

(o) Refer to OpsProc 21-28-04A AFT Cargo Isolation Valve (Valves checked closed)

S

#### 21-28-04B Both valves secured closed

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

S

(o) (m) One or both may be inoperative provided that both valves are secured in the closed position.

Continued on the following page



21-28 - Cargo Compartment Ventilation

Continued fro	om the previous page
(o) Refer to OpsProc 21-28-04B AFT Cargo Isolation Valve (Valves secured of	losed)
(m) Refer to AMM 21-28-00-040-002	•
S	



21-31 - Pressure Control and Monitoring

21-31-01 Automatic Cabin Pressure Control System ( CPC , Outflow Valve AUTO Channel)

Ident.: MI-21-31-00007492.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-31-01A Automatic CPC 1 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

- (o) Automatic cabin pressure control system 1 may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) System 1 is deactivated, and
  - The cabin pressure indications on the <u>CAB PRESS</u> SD page are checked operative in manual mode, and
  - 4) The LDG ELEV selector MAN function is operative.

Deference(s)	
Reference(s)	•

(o) Refer to OpsProc 21-31-01A Automatic Cabin Pressure Control System (CPC, Outflow Valve AUTO Channel)

### 21-31-01B Automatic CPC 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

- (o) Automatic cabin pressure control system 2 may be inoperative provided that:
  - 1) System 2 is deactivated, and
  - 2) The cabin pressure indications on the <u>CAB PRESS</u> SD page are checked operative in manual mode, and
  - 3) The LDG ELEV selector MAN function is operative.

Deference(e)	
 neletetice(s)	

(o) Refer to OpsProc 21-31-01B Automatic Cabin Pressure Control System (CPC, Outflow Valve AUTO Channel)

Continued on the following page



21-31 - Pressure Control and Monitoring

Continued from the previous page

### 21-31-01C Both automatic CPC s inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both may be inoperative provided that:

- 1) The manual cabin pressure control system is operative, and
- **2)** The flight is not pressurized. *Refer to FCOM/PRO-SPO-20 Flight Without Cabin Pressurization*

21-31-02	Manual Cabin Pressure Control System (MAN
	V/S CTL selector, Outflow Valve MAN Channel)

Ident.: MI-21-31-00007493.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-31-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



- (m) May be inoperative provided that:
  - 1) The LDG ELEV selector MAN function is operative, and
  - 2) Both automatic cabin pressure control systems are checked operative before each flight.

Reference(s)

(m) Refer to AMM 21-31-00-040-002

S



21-31 - Pressure Control and Monitoring

21-31-03 Pressure Safety Valve
--------------------------------

Ident.: MI-21-31-00007494.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-31-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (m) One may be inoperative in the closed position provided that:
  - 1) Both automatic cabin pressure control systems are operative, and
  - 2) The three outflow valve motors are checked operative.

Deference(e)
Reference(s)

(m) Refer to AMM 21-31-00-040-001

S

21-31-04	Landing Elevation Selection AUTO Function
	•

Ident.: MI-21-31-00007495.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-31-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

<ul><li>(o) May be inoperative</li></ul>
--

(o) Refer to OpsProc 21-31-04A Landing Elevation Selection AUTO Function



21-31 - Pressure Control and Monitoring

21-31-05 Landing Elevation Selection MAN Function
---

Ident.: MI-21-31-00007496.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-31-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The landing elevation selection AUTO function is operative, and
  - 2) Both FMGC s are operative.

Refer to Item 21-31-01 Automatic Cabin Pressure Control System (CPC, Outflow Valve AUTO Channel)

Refer to Item 21-31-02 Manual Cabin Pressure Control System (MAN V/S CTL Sel, Outflow Valve MAN Channel)

|--|

(o) Refer to OpsProc 21-31-05A Landing Elevation Selection MAN Function



21-51 - Pack Flow Control

	21-51-01	Pack Flow Control Valve
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Ident.: MI-21-51-00007499.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 21-51-01A One inoperative in the closed position

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No



- (m) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The affected pack flow control valve is secured in the closed position, and
  - 3) The associated air conditioning pack is considered inoperative. Refer to Item 21-52-01 Air Conditioning Pack

Reference(s)	
	Reference(s)

(m) Refer to AMM 21-51-00-040-001

P

## 21-51-01B Non pressurized flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both may be inoperative provided that:

- 1) The manual cabin pressure control system is operative, and
- 2) The flight is not pressurized. Refer to FCOM/PRO-SPO-20 Flight Without Cabin Pressurization



21-51 - Pack Flow Control

	21-51-02	Pack Flow Selection
--	----------	---------------------

Ident.: MI-21-51-00007500.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-51-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

21-51-03	Pack Flow Sensor	
Hant: MI 21 51 00007501 0001001 / 10 IIII 12		

dent.: MI-21-51-00007501.0001001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 21-51-03A

	Repair interval	Nbr installed	Nbr required	Placard
Ì	С	2	1	No

(o) One may be inoperative.

(o) Refer to OpsProc 21-51-03A Pack Flow Sensor



21-52 - Air Cooling System

21-52-01 Air Conditioning Pack
--------------------------------

Ident.: MI-21-52-00007502.0004001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 21-52-01A With Speedbrakes Available for 'C' Repair Interval

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

P

- (o) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The COND ZONE REGUL FAULT alert is not displayed, and
  - 3) The affected PACK 1(2) pb-sw is set to OFF, and
  - 4) The speedbrakes are operative, and
  - 5) The associated pack flow control valve is checked closed on the BLEED SD page. Note: This proviso does not apply if the pack flow control valve has been secured in the closed position as per item 21-51-01.

Refe	rence(s)

(o) Refer to OpsProc 21-52-01A Air Conditioning Pack (One Air Conditioning Pack Inoperative for C Repair Interval)

Р

### 21-52-01B Limitation to 31 500 ft for 'C' Repair Interval

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

P

- (o) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The flight altitude is limited to 31 500 ft (9 600 m), and
  - 3) The COND ZONE REGUL FAULT alert is not displayed on the EWD, and
  - 4) The affected PACK 1(2) pb-sw is set to OFF, and
  - 5) The associated pack flow control valve is checked closed on the BLEED SD page. This proviso does not apply if the pack flow control valve has been secured in Note: the closed position as per item 21-51-01.

Continued on the following page

**HDA A320/A321 FLEET** MI-21-52 P 1/8 MEL 19 JUL 12  $A \rightarrow$ 



21-52 - Air Cooling System

		Reference(s) —	Continued fr	rom the previous p
` '	o OpsProc 21 epair Interval)	-52-01B Air Conditioning Pa	ck (One Air Conditioning	Pack Inoperativ
<b>52-01G Air</b> Repair i	cycle machi	ne failed Nbr installed	Nbr required	Placard
C	,	2	1	No
o) One ma that:	ay be operate	d on heat exchanger cooling	only (air cycle machine f	ailure) provided
•		g pack controller is operative		
2) The	affected pack	outlet temperature indicatio	n is operative on the <u>BLE</u>	<u>ED</u> SD page .

## 21-52-01H Non pressurized flight

S

Exchanger Cooling Mode only)

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both may be inoperative provided that the flight is not pressurized. Refer to FCOM/PRO-SPO-20 Flight Without Cabin Pressurization



21-52 - Air Cooling System

21-52-01	Air Conditioning Pack
----------	-----------------------

Ident.: MI-21-52-00007502.0010001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

3

# 21-52-01D With Speedbrakes Available for 'C' Repair Interval

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes



- (o) (m) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The following alerts:

AIR PACK 1(2) REGUL FAULT

AIR COND CTL 1(2)-A FAULT

AIR COND CTL 1(2)-B FAULT

associated with the operative pack are not displayed on the EWD, and

- 3) The affected PACK 1(2) pb-sw is set to OFF, and
- 4) The speedbrakes are operative, and
- 5) The associated pack flow control valve is secured in the closed position.

- (o) Refer to OpsProc 21-52-01D Air Conditioning Pack (One Air Conditioning Pack Inoperative for C Repair Interval)
- (m) Refer to AMM 21-51-00-040-002



Continued on the following page

HDA A320/A321 FLEET MI-21-52 P 3/8



21-52 - Air Cooling System

Continued from the previous page

### 21-52-01E Limitation to 31 500 ft for 'C' Repair Interval

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes



- (o) (m) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The flight altitude is limited to 31 500 ft (9 600 m), and
  - 3) The following alerts:

AIR PACK 1(2) REGUL FAULT AIR COND CTL 1(2)-A FAULT AIR COND CTL 1(2)-B FAULT

associated with the operative pack are not displayed on the EWD, and

- 4) The affected PACK 1(2) pb-sw is set to OFF, and
- 5) The associated pack flow control valve is secured in the closed position.

- (o) Refer to OpsProc 21-52-01E Air Conditioning Pack (One Air Conditioning Pack Inoperative for C Repair Interval)
- (m) Refer to AMM 21-51-00-040-002

Р

# 21-52-01G Air cycle machine failed

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (o) One may be operated on heat exchanger cooling only (air cycle machine failure) provided that:
  - 1) The following alerts:

AIR COND CTL 1(2)-A FAULT

AIR COND CTL 1(2)-B FAULT

associated with the operative pack are not displayed on the EWD, and

2) The affected pack outlet temperature indication is operative on the  $\underline{\sf BLEED}$  SD page .



21-52 - Air Cooling System

Continued from the previous page

(o) Refer to OpsF Exchanger Co		-52-01G Air Conditioning Pa Mode only)	ck (One Air Conditioning Pa	ck in Heat
S				
21-52-01H Non pres	surize	d flight		
Repair interva		Nbr installed	Nbr required	Placard
С		2	0	No
Refer to FCOI	M/PRC	0-SPO-20 Flight Without Cab	in Pressurization  Pack Ram Air Inlet Flap	
			rack nam All Illiet Flap	
Ident.: MI-21-52-00007503.000200 <sup>-</sup> <b>Applicable to: ALL</b>	1 / 29 NC	V 11		
21-52-02A Flap dead	tivate	d		
Repair interva		Nbr installed	Nbr required	Placard
С		2	0	No
S				
(m) One or both m position.	ay be	inoperative provided that the	affected flap is deactivated	in the open
		Reference(s) —		
(m) Refer to AMM	21-61	-00-040-002		

- Reference(s) -

MEL  $\leftarrow$  A to B  $\rightarrow$ 



21-52 - Air Cooling System

Continued from the previous page

#### 21-52-02B Only one inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No



One may be inoperative in the closed position provided that the associated air conditioning pack is considered inoperative.

Refer to Item 21-52-01 Air Conditioning Pack

Reference(s)

Ρ

# 21-52-02C Non pressurized flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both may be inoperative in the closed position provided that the flight is not pressurized. Refer to FCOM/PRO-SPO-20 Flight Without Cabin Pressurization

21-52-03	Air Conditioning Pack Ram Air Outlet Flap

Ident.: MI-21-52-00007504.0001001 / 29 NOV 11 Applicable to: B-HSD, B-HSE, B-HSG, B-HTF

### 21-52-03A Flap deactivated

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

- (m) One or both may be inoperative provided that:
  - 1) The affected flap is checked not loose, and
  - 2) The affected flap is deactivated in the open position.

Reference(s)

(m) Refer to AMM 21-61-00-040-003

S



21-52 - Air Cooling System

Continued from the previous page

# 21-52-03B Only one inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No



One may be inoperative in the closed position provided that the associated air conditioning pack is considered inoperative.

Refer to Item 21-52-01 Air Conditioning Pack

Reference(s)	
--------------	--



# 21-52-03C Non pressurized flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both may be inoperative in the closed position provided that the flight is not pressurized. Refer to FCOM/PRO-SPO-20 Flight Without Cabin Pressurization.

HDA A320/A321 FLEET MI-21-52 P 7/8 MEL C 19 JUL 12



# MEL ITEMS 21 - AIR CONDITIONING 21-52 - Air Cooling System

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 HDA A320/A321 FLEET
 MI-21-52 P 8/8

 MEL
 19 JUL 12



21-55 - Emergency Ram Air Inlet

21-55-01 Emergency Ram Air Inlet	
----------------------------------	--

Ident.: MI-21-55-00007505.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-55-01A Ram air inlet deactivated

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (m) May be inoperative provided that:
  - 1) The emergency ram air inlet is deactivated in the closed position, and
  - 2) Both air conditioning packs are checked operative.

Reference(s)	
— neielelice(s)	

(m) Refer to AMM 21-55-00-040-002

S

# 21-55-01B Non pressurized flight

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



May be inoperative in the open position provided that:

- 1) ETOPS and extended overwater flight is not conducted, and
- 2) The flight is not pressurized.

Refer to FCOM/PRO-SPO-20 Flight Without Cabin Pressurization







21-55 - Emergency Ram Air Inlet

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 HDA A320/A321 FLEET
 MI-21-55 P 2/2

 MEL
 29 NOV 11



21-61 - Pack Temperature Control

21-61-01	Pack Turbine Bypass Valve

Ident.: MI-21-61-00007506.0001001 / 29 NOV 11

Applicable to: ALL

#### 21-61-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

21-61-02	Pack Controller Primary Channel
----------	---------------------------------

Ident.: MI-21-61-00007507.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 21-61-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

(o) One may be inoperative.

- Reference(s)

(o) Refer to OpsProc 21-61-02A Pack Controller Primary Channel



21-61 - Pack Temperature Control

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 HDA A320/A321 FLEET
 MI-21-61 P 2/2

 MEL
 29 NOV 11



21-63 - Cockpit and Cabin Temperature Control

21-63-01	Zone Controller Channel
	<u>l</u>

Ident.: MI-21-63-00007508.0001001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 21-63-01A Primary channel inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

(o) Primary channel may be inoperative provided that the hot air pressure regulating valve is checked closed on the <u>COND</u> SD page .

Note:

- Unequal passengers distribution may cause high temperature in the rear cabin when the hot air pressure regulating valve is closed.
- 2. The temperature in the cockpit may be low when the hot air pressure regulating valve is closed combined with single pack operation.

 Reference(c)	
neletetice(s) —	

(o) Refer to OpsProc 21-63-01A Zone Controller Channel (Primary channel inoperative)

#### 21-63-01B Secondary channel inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

Secondary channel may be inoperative provided that the minimum idle on ground is considered inoperative.

Refer to Item 73-20-05A Minimum Idle on Ground



21-63 - Cockpit and Cabin Temperature Control

Continued from the previous page

#### 21-63-01C Both channels inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

- (o) (m) Primary and secondary channel may be inoperative provided that:
  - 1) The hot air pressure regulating valve is secured in the closed position, and
  - 2) The minimum idle on ground is considered inoperative.

    Refer to Item 73-20-05A Minimum Idle on Ground

Note:

- 1. Unequal passengers distribution may cause high temperature in the rear cabin when the hot air pressure regulating valve is closed.
- 2. The temperature in the cockpit may be low when the hot air pressure regulating valve is closed combined with single pack operation.

Reference(s)	_
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- (o) Refer to OpsProc 21-63-01C Zone Controller Channel (Both channels inoperative)
- (m) Refer to AMM 21-63-00-040-004

S

21-63-02	Cockpit and Cabin Trim Air Valve		
dent.: MI-21-63-00007509.0001001 / 19 JUL 12			
Applicable to: B-HSD, B-HSE, B-	HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI		

Note:

- Unequal passengers distribution may cause high temperature in the rear cabin when more than one trim air valves are inoperative or when the hot air pressure regulating valve is closed.
- 2. The temperature in the cockpit may be low when the hot air pressure regulating valve is closed combined with single pack operation.



21-63 - Cockpit and Cabin Temperature Control

Continued from the previous page

### 21-63-02C Hot air pressure valve checked closed

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

- (o) One or more may be inoperative provided that:
  - 1) The HOT AIR pb-sw is set to OFF, and
  - 2) The hot air pressure regulating valve is checked closed on the COND SD page.

------Reference(s)

(o) Refer to OpsProc 21-63-02C Cockpit and Cabin Trim Air Valve (Hot air pressure regulating valve checked closed/operative)

#### 21-63-02D Affected valve secured closed

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	3	0	No

S

(o) (m) One or more ma	ay be inoperative	provided that the	affected va	lve is secured i	in the c	closed
position.						

Reference(s)

(o) Refer to OpsProc 21-63-02D Cockpit and Cabin Trim Air Valve (Affected valve secured/checked in the closed position)

(m) Refer to AMM 21-63-00-040-001

S



21-63 - Cockpit and Cabin Temperature Control

1-63-02	ĺ		Cooknit one	Cohin Trim Air Valva		
		Cockpit and Cabin Trim Air Valve				
	63-00007509.0002001 b: B-HSO, B-HSP, B-H		HST R-HSII			
mouble to	,, , , , , , , , , , , , , , , , , , ,	, D 11011, D	1101, 2 1100			
<u>Note:</u>	more than or valve is close 2. The tempera	ne trim air v ed. ature in the	alves are inoperative	nigh temperature in the rear control or when the hot air pressure then the hot air pressure regul	regulating	
21-63-0	)2A Affected v					
	Repair interval		Nbr installed	Nbr required	Placard	
	С		3	0	No	
(o)	One or more m		erative provided that t	he affected valve is checked	closed on the	
(o)	Refer to OpsPi secured/check		•	Trim Air Valve (Affected valv	/e	
21-63-0	)2B Hot air pre		ve checked operativ		Disposed	
	Repair interval		Nbr installed	Nbr required	Placard	
	<u> </u>		3	0	No	
(o)			erative provided that t <u>COND</u> SD page .	he hot air pressure regulating	valve is	
			Reference(s) -			
(o)	•		2B Cockpit and Cabin	Trim Air Valve (Hot air press	sure regulatir	
	valve checked	closed/one	rative)		•	



21-63 - Cockpit and Cabin Temperature Control

Continued from the previous page

# 21-63-02E Hot air pressure valve considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

One or more may be inoperative provided that the hot air pressure regulating valve is considered inoperative.

Refer to Item 21-63-03 Hot Air Pressure Regulating Valve

21-63-03	Hot Air Pressure Regulating Valve

Ident.: MI-21-63-00007510.0001001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

Note:

- 1. Unequal passengers distribution may cause high temperature in the rear cabin when more than one trim air valves are inoperative or when the hot air pressure regulating valve is closed.
- 2. The temperature in the cockpit may be low when the hot air pressure regulating valve is closed combined with single pack operation.

#### 21-63-03A Valve checked closed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The HOT AIR pb-sw is set to OFF, and
  - 2) The hot air pressure regulating valve is checked closed on the COND SD page.

(o) Refer to OpsProc 21-63-03A Hot Air Pressure Regulating Valve (Hot air pressure valve checked closed)

Continued on the following page

HDA A320/A321 FLEET MI-21-63 P 5/8 19 JUL 12



21-63 - Cockpit and Cabin Temperature Control

Continued from the previous page

#### 21-63-03C Hot air pressure valve secured closed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) (m) May be inoperative	provided that the hot	air pressure r	regulating valve is	secured in the
closed position.				

Reference(s)

- (o) Refer to OpsProc 21-63-03C Hot Air Pressure Regulating Valve (Affected valve secured in the closed position)
- (m) Refer to AMM 21-63-00-040-002



21-63	-03	Hot Air Pressure Regulating Valve		
Ident.: M	1-21-63-00007510.000200	1 / 19 JUL 12		
<sup>4</sup> Applical	le to: B-HSO, B-HSP, B-	HSQ, B-HSR, B-HST, B-HSU		

Note:

- 1. Unequal passengers distribution may cause high temperature in the rear cabin when the hot air pressure regulating valve is closed.
- The temperature in the cockpit may be low when the hot air pressure regulating valve is closed combined with single pack operation.

# 21-63-03A Hot air pressure valve checked closed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- **(o)** May be inoperative in the closed position provided that:
  - 1) HOT AIR pb-sw is set to OFF, and
  - 2) Hot Air Pressure Regulating Valve is checked closed on the COND SD page .

(o) Refer to OpsProc 21-63-03A Hot Air Pressure Regulating Valve (Hot air pressure valve checked closed)



21-63 - Cockpit and Cabin Temperature Control

Continued from the previous page

#### 21-63-03B All trim valve checked closed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- May be inoperative in the open position provided that: (o) 1) HOT AIR pb-sw is set to OFF, and
  - 2) All Trim Air Valves are checked closed on the COND SD page.

— Reference(s)

(o) Refer to OpsProc 21-63-03B Hot Air Pressure Regulating Valve (Trim air valve checked closed)

### 21-63-03C Hot air pressure valve secured closed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

(o) (m) May be inoperative provided that the hot air pressure regulating valve is secured in the closed position.

Reference(s) —

- (o) Refer to OpsProc 21-63-03C Hot Air Pressure Regulating Valve (Affected valve secured in the closed position)
- (m) Refer to AMM 21-63-00-040-002

S

21-63-04 Air Conditioning Syst	em Controller Channel (COND CTL 1(2)-A(B))
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Ident.: MI-21-63-00007511.0001001 / 19 JUL 12

6 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 21-63-04A Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No

One may be inoperative on each side provided that ETOPS is not conducted.



21-63 - Cockpit and Cabin Temperature Control

Continued from the previous page

# 21-63-04B ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No

For ETOPS, one may be inoperative on each side provided that the  $\underline{AIR}$  COND CTL 1–B FAULT alert is not displayed on the EWD.



22-01 - FLT CTL Overhead Panel

22-01-01	FAC pb-sw FAULT light
----------	-----------------------

Ident.: MI-22-01-00007527.0001001 / 22 MAR 10

Applicable to: ALL

## 22-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative.

22-01-02	FAC pb-sw OFF light
----------	---------------------

Ident.: MI-22-01-00007528.0001001 / 22 MAR 10

Applicable to: ALL

# 22-01-02A

Repair interval Nbr installed		Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.



# MEL ITEMS 22 - AUTO FLIGHT 22-01 - FLT CTL Overhead Panel

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HDA A320/A321 FLEET MI-22-01 P 2/2 MEL 29 NOV 11



22-05 - FMA Indications on the PFD

22-05-01 AP Related Indications on the FMA	
--	--

Ident.: MI-22-05-00007577.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-05-01A Inoperative on one FMA

Repair interval Nbr installed		Nbr required	Placard
С	1	1	No

One or more indications may be inoperative on one FMA.

### 22-05-01B Inoperative on both FMA s

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

LP

- (o) One or more indications may be inoperative on both FMA s provided that:
  - 1) ETOPS is not conducted, and
  - 2) The AP is not used.

Reference(s)	
nelelelice(s)	

(o) Refer to OpsProc 22-05-01B AP Related Indications on the FMA

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22-05-02	A/THR Related Indications on the FMA

Ident.: MI-22-05-00007578.0001001 / 29 NOV 11

Applicable to: ALL

## 22-05-02A Inoperative on one FMA

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

One or more indications may be inoperative on one FMA.



22-05 - FMA Indications on the PFD

Continued from the previous page

#### 22-05-02B Inoperative on both FMA s

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

L	1	Ρ
_	ı	•

- (o) One or more indications may be inoperative on both FMA s provided that :
  - 1) ETOPS is not conducted, and
  - 2) The autothrust (A/THR) is considered inoperative. Refer to Item 22-30-01 Autothrust (A/THR)

Reference(s)	
Hererence(s)	

(o) Refer to OpsProc 22-05-02B A/THR Related Indications on the FMA

L

22-05-03	Approach and Landing Capabilities on the FMA
	,, , , , , , , , , , , , , , , , , , , ,

Ident.: MI-22-05-00007579.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-05-03A

Repair interval	Nbr installed	Nbr required	Placard
C	-	0	No

LP

(o) One or more may be inoperative on one or both FMA s.

(o) Refer to OpsProc 22-05-03A Approach and Landing Capabilities on the FMA

L



22-05 - FMA Indications on the PFD

22-05-04	Special Messages on the FMA
----------	-----------------------------

Ident.: MI-22-05-00007580.0001001 / 29 NOV 11

Applicable to: ALL

## 22-05-04A

Repair interval	Nbr installed	Nbr required	Placard
С	-	1	No

	"MAN PITCH TRIM ONLY" is required on one side.		
L			



22-05 - FMA Indications on the PFD

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 HDA A320/A321 FLEET
 MI-22-05 P 4/4

 MEL
 29 NOV 11



22-10 - Autopilot/Flight Director (AP/FD)

22-10-01 Autopilot ( AP )	
---------------------------	--

Ident.: MI-22-10-00007529.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-10-01A One inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

LP

(o)	One may be inoperative provided procedures are not dependent on its use.
	Refer to FCOM

Reference(s) -

(o) Refer to OpsProc 22-10-01A Autopilot (AP)

# 22-10-01B Both inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

L P

- (o) Both may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) Procedures are not dependent on its use. Refer to Item 31-53-06 Altitude Alert, and Refer to FCOM.

- Reference(s) -

- (o) Refer to OpsProc 22-10-01B Autopilot (AP)



22-10 - Autopilot/Flight Director (AP/FD)

22-10-02 Flight Director ( FD )
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Ident.: MI-22-10-00007530.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-10-02A

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	2	0	Yes

LP

(o) One or both may be inoperative provided procedures are not dependent on its use. Refer to FCOM.

(o) Refer to OpsProc 22-10-02A Flight Director (FD)

L P

22-10-03 Take-over pb Priority Function
---

Ident.: MI-22-10-00007531.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-10-03A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

22-10-04	Take-over pb AP Disconnection Function

Ident.: MI-22-10-00007532.0001001 / 29 NOV 11

Applicable to: ALL

# 22-10-04A One inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

LP

(o) One may be inoperative.



22-10 - Autopilot/Flight Director (AP/FD)

•		Continued from the previous page
	Re	ference(s) ———
(o) Re	efer to OpsProc 22-10-04A Take-ov	ver pb AP Disconnection Function (One inoperative)
L		
P		
22-10-04B	Both inoperative	

	Repair interval	Nbr installed	Nbr required	Placard
С		2	0	No

LP

(o) Both may be inoperative provided that the AP is not used for approach.

Reference(s)

(o) Refer to OpsProc 22-10-04B Take-over pb AP Disconnection Function (Both inoperative)

L P

22-10-05 AUTO LAND light
--------------------------

Ident.: MI-22-10-00007533.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-10-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

L	Р
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(o) One or both may be inoperative.

Reference(s)

(o) Refer to OpsProc 22-10-05A AUTO LAND light

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HDA A320/A321 FLEET MI-22-10 P 3/4
MEL ← D to E 29 NOV 11



22-10 - Autopilot/Flight Director (AP/FD)

22-10-06	AP Disengagement Warning

Ident.: MI-22-10-00007534.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-10-06A

Repair interval	Nbr installed	Nbr required	Placard
C 1		0	Yes

Ī	]	Ρ

- (o) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The AP is not engaged.

Deference(e)
neierence(s) —

(o) Refer to OpsProc 22-10-06A AP Disengagement Warning



Ident.: MI-22-10-00007535.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-10-07A

Repair interval	Nbr installed	Nbr required	Placard
С	3	1	No

L	Ρ
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(o) One or two may be inoperative unlocked provided that no autoland is performed.

(o) Refer to OpsProc 22-10-07A Sticks and Rudder Pedals Locking Solenoid in AP Mode

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22-30 - Autothrust

22-30-01 Autothrust ( A/THR )
-------------------------------

Ident.: MI-22-30-00007536.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-30-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

L		Р
_	Ш	- 1

May be inoperative provided that the autothrust ( A/THR ) is disconnected before each (o) fliaht.

Refer to Item 76-11-01 Thrust lever Position Sensor

Reference(s) -

(o) Refer to OpsProc 22-30-01A Autothrust (A/THR)



22-30-02	Autothrust Instinctive Disconnect pb

Ident.: MI-22-30-00007537.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-30-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative provided that the ability to disconnect the autothrust (A/THR) via (o) the remaining Instinctive Disconnect pb and by the FCU A/THR pb is checked before each flight.

Reference(s) -

(o) Refer to OpsProc 22-30-02A Autothrust Instinctive Disconnect pb



22-30 - Autothrust

22-30-03	Autothrust Disengagement Warning

Ident.: MI-22-30-00007538.0001001 / 29 NOV 11

Applicable to: ALL

## 22-30-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

(o)	May be inoperative provided that the autothrust ( A/THR ) is considered inoperative. Refer to Item 22-30-01 Autothrust (A/THR)
	Reference(s)

(o) Refer to OpsProc 22-30-03A Autothrust Disengagement Warning





22-60 - Flight Augmentation (FAC)

22-60-01	FAC 1
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Ident.: MI-22-60-00007539.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-60-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No



(m) Must be operative.

Note:

ii) ividot be operative.

The <u>AUTO FLT</u> FAC 1 FAULT alert may be displayed with the associated AUTO FLT/FAC1/28VDC C/B tripped.

This may be due to a short circuit within either rudder trim actuator channel 1 or rudder travel actuator channel 1.

In this case, the FAC 1 may be recovered provided that the affected part of the faulty actuator is deactivated using the associated maintenance procedure.

Refer to AMM 27-22-00-040-001, or

Refer to AMM 27-23-00-040-001.

Refer to Item 27-22-01 Rudder Trim System, or

Refer to Item 27-23-01 Rudder Travel Limiter System (Including Rudder and Pedals Travel Limiter Units)

Reference(s)

(m) Refer to AMM task

S



22-60 - Flight Augmentation (FAC)

22-60-02	FAC 2

Ident.: MI-22-60-00007540.0001001 / 19 JUL 12

Applicable to: ALL

#### 22-60-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

- (o) May be inoperative provided that:
  - 1) All ADIRS s, ELAC s, SEC s, SFCC s, LGCIU s and RA s are operative, and
  - 2) The Rudder Travel Limiter System 2 is considered inoperative.

Refer to Item 22-60-04 Yaw Damper System, and

Refer to Item 27-22-01 Rudder Trim System, and

Refer to Item 27-23-01 Rudder Travel Limiter System (Including Rudder and Pedals

Travel Limiter Units)

(o) Refer to OpsProc 22-60-02A FAC 2



22-60-03	Reactive Windshear Detection Function

Ident.: MI-22-60-00007542.0001001 / 19 JUL 12

Applicable to: ALL

#### 22-60-03A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No



May be inoperative provided that the Commander is satisfied that windshear conditions are not likely to be encountered at departure, destination or alternate airfields, having regard to actual and forecast weather conditions.

<u>Note:</u> For Predictive Windshear System refer to item 34-40-06 Predictive Windshear Detection Function (if installed).



22-60 - Flight Augmentation (FAC)

	Continued from the previous page
Reference(s)	

Р

22-60-04 Yaw Damper System

Ident.: MI-22-60-00007543.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-60-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

PL

(o) One may be inoperative.

Reference(s)

(o) Refer to OpsProc 22-60-04A Yaw Damper System

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HDA A320/A321 FLEET MI-22-60 P 3/4
MEL ← C to D 19 JUL 12



22-60 - Flight Augmentation (FAC)

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 HDA A320/A321 FLEET
 MI-22-60 P 4/4

 MEL
 19 JUL 12



22-70 - Flight Management System (FMS)

22-70-01 Flight Management System (FMS)
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Ident.: MI-22-70-00007544.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 22-70-01C FMS 1 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes



The FMS 1 may be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) The flight remains within radio navaids coverage.

- Reference(s) -



## 22-70-01D FMS 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes



The FMS 2 may be inoperative provided that the flight remains within radio navaids coverage.

- Reference(s) -

Р



22-70 - Flight Management System (FMS)

22-70-01	Flight Management System ( FMS )

Ident.: MI-22-70-00007544.0002001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 22-70-01A FMS 1 inoperative with IR 1 ( NAV mode) or GPS 1 operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

- (o) The FMS 1 may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) Two MCDU s are operative, and
  - 3) The IR 1 NAV mode or GPS 1 is operative.

(o) Refer to OpsProc 22-70-01A Flight Management System (FMS)

#### 22-70-01B FMS 2 inoperative with IR 1 ( NAV mode) or GPS 1 operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

(o) The FMS 2 may be inoperative provided that the IR 1 NAV mode or GPS 1 is operative.

(o) Refer to OpsProc 22-70-01B Flight Management System (FMS)

#### 22-70-01C FMS 1 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes



The FMS 1 may be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) The flight remains within radio navaids coverage.

Ρ



22-70 - Flight Management System (FMS)

Continued from the previous page

# 22-70-01D FMS 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

P

The FMS 2 may be inoperative provided that the flight remains within radio	navaids
coverage.	

Reference(s)

P

22-70-02	Navigation Database
----------	---------------------

Ident.: MI-22-70-00007545.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-70-02A

Repair interval	Nbr installed	Nbr required	Placard
Α	2	1	No



The previous navigation data base cycle may be used, provided that:

- 1) ETOPS is not conducted, and
- 2) No previous faults associated with the data base have been reported, and
- 3) An approved navigation chart or computer flight plan is used to check the waypoints inserted in the FPLN (this may be achieved by checking the actual coordinates and / or track and distances between waypoints in the FPLN), and
- All navigational aids must be manually tuned and identified for departures and arrivals, and
- 5) The replacement nav cycle data base is loaded within 3 calendar days or at the next overnight in HONG KONG whichever occurs first, and
- 6) The aircraft shall not depart HONG KONG for a flight or series of flights during which the NAV DATA BASE would become out of date, and
  7) Advise IOC

i) Auvisc	100.		
_		 Reference(s)	

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22-70 - Flight Management System (FMS)

22-70-03	Performance Information
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Ident.: MI-22-70-00007546.0001001 / 22 MAR 10

Applicable to: ALL

# 22-70-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

22-70-04	Fuel/Time Prediction	

Ident.: MI-22-70-00007547.0001001 / 22 MAR 10

Applicable to: ALL

# 22-70-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



22-81 - Flight Control Unit (FCU) 22-81-01 - Auto Flight Control Panel (FCU)

22-81-01-01	AP Engagement pb
-------------	------------------

Ident.: MI-22-81-01-00007549.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative provided that the associated autopilot ( AP ) is considered inoperative.

Refer to Item 22-10-01 Autopilot (AP)

22-81-01-02	A/THR Arming pb
-------------	-----------------

Ident.: MI-22-81-01-00007550.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the autothrust ( A/THR ) is considered inoperative. Refer to Item 22-30-01 Autothrust (A/THR)

22-81-01-03	Mode Engagement pb (LOC, EXPED, APPR)
-------------	---------------------------------------

Ident.: MI-22-81-01-00007551.0001001 / 29 NOV 11

Applicable to: B-HSQ, B-HSR

#### 22-81-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.



22-81 - Flight Control Unit (FCU) 22-81-01 - Auto Flight Control Panel (FCU)

22-81-01-03	Mode Engagement pb (LOC, APPR)

Ident.: MI-22-81-01-00007551.0002001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 22-81-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

22-81-01-04	Selection knob (ALT, HDG-TRK, SPD-MACH)
-------------	---

Ident.: MI-22-81-01-00007552.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-01-04A

Repair interval	Nbr installed	Nbr required	Placard
-	3	3	No

Must be operative.

00 04 04 05	VIO EDA Calastian Imak
22-81-01-05	V/S-FPA Selection knob

Ident.: MI-22-81-01-00007553.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-01-05A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	Yes

May be inoperative provided that operations do not required its use.



22-81 - Flight Control Unit (FCU) 22-81-01 - Auto Flight Control Panel (FCU)

HDG-V/S/TRK-FPA Change Over pb

Ident.: MI-22-81-01-00007554.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-01-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the HDG-V/S selection is operative.

22-81-01-07 SPD/MACH Change Over pb
-------------------------------------

Ident.: MI-22-81-01-00007555.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-01-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the SPD selection is operative.

22-81-01-08	METRIC ALT pb

Ident.: MI-22-81-01-00007556.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-01-08A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



22-81 - Flight Control Unit (FCU) 22-81-01 - Auto Flight Control Panel (FCU)

Ident.: MI-22-81-01-00007557.0002001 / 22 MAR 10

Applicable to: ALL

#### 22-81-01-09B

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	Yes

One or more may be inoperative provided that the associated indications are operative on both PFDs and both NDs

22-81-01-10 AP1, AP2 and A/THR pb light Bars
--

Ident.: MI-22-81-01-00007558.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-81-01-10A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

One or more may be inoperative provided that the associated indication is operative on both PFDs.

22-81-01-11	Mode Engagement (LOC, EXPED, APPR) pb light Bars
-------------	--

Ident.: MI-22-81-01-00007559.0001001 / 29 NOV 11

Applicable to: B-HSQ, B-HSR

#### 22-81-01-11A

Repair interval	Nbr installed	Nbr required	Placard
D	3	0	No

One or more may be inoperative.



22-81 - Flight Control Unit (FCU) 22-81-01 - Auto Flight Control Panel (FCU)

22-81-01-11	Mode Engagement (LOC, APPR) pb light Bars
-------------	---

Ident.: MI-22-81-01-00007559.0002001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 22-81-01-11A

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

One or both may be inoperative.



22-81 - Flight Control Unit (FCU) 22-81-01 - Auto Flight Control Panel (FCU)

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 HDA A320/A321 FLEET
 MI-22-81-01 P 6/6

 MEL
 19 JUL 12



22-81 - Flight Control Unit (FCU) 22-81-02 - EFIS Control Panel (FCU)

22-81-02-01	Baro Reference Display Window

Ident.: MI-22-81-02-00007560.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

22-81-02-02	Baro Reference selector Outer Ring (in Hg/hPa)
-------------	--

Ident.: MI-22-81-02-00007561.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-02-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative provided that the unit required for the intended flight is operative on both EFIS control panels.

22-81-02-03 Baro Reference selector Inner knob
--

Ident.: MI-22-81-02-00007562.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-02-03A

Repair interval	Nbr installed	Nbr required	Placard
_	2	2	No

Both must be operative.



22-81 - Flight Control Unit (FCU) 22-81-02 - EFIS Control Panel (FCU)

22-81-02-04	FD pb
-------------	-------

Ident.: MI-22-81-02-00007563.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-02-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative provided that the associated FD is considered inoperative. Refer to Item 22-10-02 Flight Director (FD)

22-81-02-05	ILS pb

Ident.: MI-22-81-02-00007564.0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

#### 22-81-02-05A

Repair interval	Nbr installed	Nbr required	Placard
_	2	0	No

One or both may be inoperative provided that the associated ILS is considered inoperative. Refer to Item 34-30-04 Instrument Landing System (ILS)

22-81-02-05	LS pb
-------------	-------

Ident.: MI-22-81-02-00007564.0002001 / 19 JUL 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

#### 22-81-02-05A

Repair interval	Nbr installed	Nbr required	Placard
-	2	0	No

One or both may be inoperative provided that the associated ILS is considered inoperative. Refer to Item 34-30-04 Instrument Landing System (ILS)



22-81 - Flight Control Unit (FCU) 22-81-02 - EFIS Control Panel (FCU)

Ident.: MI-22-81-02-00007565.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-02-06A

Repair interval	Nbr installed	Nbr required	Placard
С	10	0	Yes

One or more may be inoperative.

22-81-02-07	ND Range selector
-------------	-------------------

Ident.: MI-22-81-02-00007566.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-02-07A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative provided that the ND unit associated with the operative ND range selector is operative.

22-81-02-08	ND Mode selector

Ident.: MI-22-81-02-00007567.0001001 / 22 MAR 10

Applicable to: ALL

#### 22-81-02-08A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative provided that the ND unit associated with the operative ND mode selector is operative.



22-81 - Flight Control Unit (FCU) 22-81-02 - EFIS Control Panel (FCU)

22-81-02-09 ADF/VOR sw
------------------------

Ident.: MI-22-81-02-00007568.0001001 / 15 SEP 10

Applicable to: ALL

#### 22-81-02-09A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

One or more may be inoperative provided that the associated ADF / VOR indication on ND is considered inoperative.

Refer to Item 34-06-06 Radio Navaids Indications on the ND

22-81-02-10 ILS and FD pb light Bars
--------------------------------------

Ident.: MI-22-81-02-00007569.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

#### 22-81-02-10A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

One or more may be inoperative provided that the associated indication is operative on both PFDs.

22-81-02-10	LS and FD pb light Bars

Ident.: MI-22-81-02-00007569.0002001 / 19 JUL 12

2 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

#### 22-81-02-10A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

One or more may be inoperative provided that the associated indication is operative on both PFDs.



22-81 - Flight Control Unit (FCU) 22-81-02 - EFIS Control Panel (FCU)

22-81-02-11 Optional Data (ARPT, NDB, VOR.D, WPT, CSTR) Display pb light Bars

Ident.: MI-22-81-02-00007570.0001001 / 29 NOV 11

Applicable to: ALL

# 22-81-02-11A

Repair interval	Nbr installed	Nbr required	Placard
С	10	0	No

One or more may be inoperative.



22-81 - Flight Control Unit (FCU) 22-81-02 - EFIS Control Panel (FCU)

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 HDA A320/A321 FLEET
 MI-22-81-02 P 6/6

 MEL
 19 JUL 12



22-81 - Flight Control Unit (FCU) 22-81-03 - FCU Channel

Ident.: MI-22-81-03-00007571.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 22-81-03-01A Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) Two RMPs, all DUs, both RAs, both LGCIUs, both FACs, both Automatic Cabin Pressure Control Systems, all ADIRUs and the Standby ALT Indicator are operative.

# 22-81-03-01B ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
Α	2	1	No

S

For ETOPS, one may be inoperative for one flight provided that two RMPs, all DUs, both RAs, both LGCIUs, both FACs, both Automatic Cabin Pressure Control Systems, all ADIRUs and the Standby ALT Indicator are operative.

Deference(e)	
Reference(s)	

S

22-81-03-01	FCU Channel
-------------	-------------

Ident.: MI-22-81-03-00007571.0002001 / 19 JUL 12

1 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 22-81-03-01A Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One channel may be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) Two RMPs, all DUs, both RAs, both LGCIUs, both FACs, both Automatic Cabin Pressure Control Systems, all ADIRUs and the ISIS altitude indication are operative.

Continued on the following page



22-81 - Flight Control Unit (FCU) 22-81-03 - FCU Channel

Continued from the previous page

# 22-81-03-01B ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
A	2	1	No

S

For ETOPS, one channel may be inoperative for one flight provided that two R	RMPs, a	ıll DUs,
both RAs, both LGCIUs, both FACs, both Automatic Cabin Pressure Control S	Systems	s, all
ADIRUs and the ISIS altitude indication are operative.		

	F	Reference(s)
_	•	1010101100(0)
S		
_		



MINIMUM EQUIPMENT LIST

# MEL ITEMS 22 - AUTO FLIGHT

22-82 - Multipurpose Control and Display Unit (MCDU)

22-82-01 MCDU 1
-----------------

Ident.: MI-22-82-00007572.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-82-01B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



May be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) The MCDU 2 is operative, and
- 3) The flight remains within radio navaids coverage.

----- Reference(s) -----



22-82-02	MCDU 2
----------	--------

Ident.: MI-22-82-00007573.0001001 / 29 NOV 11

Applicable to: ALL

# 22-82-02B Flight within navaids coverage

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



May be inoperative provided that the flight remains within radio navaids coverage.

Reference(s)





22-82 - Multipurpose Control and Display Unit (MCDU)

22-82-04	MCDU Annunciator light
----------	------------------------

Ident.: MI-22-82-00007575.0001001 / 29 NOV 11

Applicable to: ALL

# 22-82-04A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

One or more may be inoperative.



MINIMUM EQUIPMENT LIST

# MEL ITEMS 22 - AUTO FLIGHT

22-83 - Flight Management and Guidance Computer (FMGC)

22-83-01 Flight Management and Guidance Computer ( FMGC )
---

Ident.: MI-22-83-00007576.0001001 / 29 NOV 11

Applicable to: ALL

#### 22-83-01A FMGC 1 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

- (o) FMGC 1 may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) FMGC 1 is deactivated, and
  - 3) FMS 1 is considered inoperative. Refer to Item 22-70-01 Flight Management System (FMS)

If FMGC 1 is inoperative, Terrain function of TAWS is also inoperative. Note: Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS) - Reference(s) -

(o) Refer to OpsProc 22-83-01A Flight Management and Guidance Computer (FMGC)

# 22-83-01B FMGC 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

- (o) FMGC 2 may be inoperative provided that:
  - 1) FMGC 2 is deactivated, and
  - 2) FMS 2 is considered inoperative. Refer to Item 22-70-01 Flight Management System (FMS)

Poforono	0(0)
	e(s)

(o) Refer to OpsProc 22-83-01B Flight Management and Guidance Computer (FMGC)



22-83 - Flight Management and Guidance Computer (FMGC)

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HDA A320/A321 FLEET MI-22-83 P 2/2 MEL 29 NOV 11



23-00 - MAINTENANCE Message on the STATUS SD page

23-00-01	CIDS 1(2) MAINTENANCE Message

Ident.: MI-23-00-00007581.0001001 / 29 NOV 11

Applicable to: ALL

# 23-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

S

S

CIDS 1(2) $\underline{\text{MAINTENANCE}}$ message may be displayed on the $\underline{\text{STATUS}}$ SD page



23-00 - MAINTENANCE Message on the STATUS SD page

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HDA A320/A321 FLEET MI-23-00 P 2/2 MEL 29 NOV 11



23-01 - Overhead Panels 23-01-01 - RCDR Overhead Panel

23-01-01 RCDR GND CTL pb-sw ON light	23-01-01-01	RCDR GND CTL pb-sw ON light
--------------------------------------	-------------	-----------------------------

Ident.: MI-23-01-01-00007582.0001001 / 22 MAR 10

Applicable to: ALL

#### 23-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

23-01-01-31 RCDR GND CTL pb-sw
--------------------------------

Ident.: MI-23-01-01-00007583.0001001 / 29 NOV 11

Applicable to: ALL

# 23-01-01-31A AUTO position

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative in the AUTO position.

- Reference(s) -

(o) Refer to OpsProc 23-01-01-31A RCDR GND CTL pb-sw (Inoperative in the AUTO position)

# 23-01-01-31B ON position

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative in the ON position.

Reference(s) -

(o) Refer to OpsProc 23-01-01-31B RCDR GND CTL pb-sw (Inoperative in the ON position) Continued on the following page



23-01 - Overhead Panels 23-01-01 - RCDR Overhead Panel

Continued from the previous page

# 23-01-01-31C CVR considered inoperative

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	A	1	0	Yes

S

May be inoperative provided that the CVR is considered inoperative. Refer to Item 23-71-01 Cockpit Voice Recorder (CVR)

S

23-01-01-32 CVR ERASE pb		23-01-01-32	CVR ERASE pb
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Ident.: MI-23-01-01-00007584.0001001 / 22 MAR 10

Applicable to: ALL

#### 23-01-01-32A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

23-01-01-33	CVR TEST pb
-------------	-------------

Ident.: MI-23-01-01-00007585.0001001 / 29 NOV 11

Applicable to: ALL

#### 23-01-01-33A

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	Yes



May be inoperative provided that the Cockpit Voice Recorder ( CVR ) is considered inoperative.

Refer to Item 23-71-01 Cockpit Voice Recorder (CVR)

Continued on the following page



S

# MEL ITEMS 23 - COMMUNICATIONS

23-01 - Overhead Panels 23-01-01 - RCDR Overhead Panel

Continued from the previous page



23-01 - Overhead Panels 23-01-01 - RCDR Overhead Panel

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HDA A320/A321 FLEET MI-23-01-01 P 4/4
MEL 29 NOV 11



23-01 - Overhead Panels 23-01-02 - CALLS Overhead Panel

23-01-02-31	CALLS ALL pb
-------------	--------------

Ident.: MI-23-01-02-00007586.0001001 / 29 NOV 11

Applicable to: ALL

#### 23-01-02-31A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative.

23-01-02-32	CALLS EMER pb, CALLS FWD pb, CALLS MID ◀ pb,	
	CALLS EXIT ≪ pb, CALLS PURS ≪ pb, CALLS AFT pb	

Ident.: MI-23-01-02-00007587.0001001 / 19 JUL 12

Applicable to: ALL

# 23-01-02-32A Use of passenger address system

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

One or more may be inoperative provided that the passenger address system is used for communication between the cockpit and the cabin.

# 23-01-02-32B Use of cockpit handset interphone

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

One or more may be inoperative provided that the cockpit handset interphone is used for communication between the cockpit and the cabin.



23-01 - Overhead Panels 23-01-02 - CALLS Overhead Panel

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 HDA A320/A321 FLEET
 MI-23-01-02 P 2/2

 MEL
 19 JUL 12



23-01 - Overhead Panels 23-01-03 - AUDIO SWITCHING Overhead Panel

23-01-03-31	AUDIO SWITCHING selector
-------------	--------------------------

Ident.: MI-23-01-03-00007616.0001001 / 29 NOV 11

Applicable to: ALL

# 23-01-03-31A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



23-01 - Overhead Panels 23-01-03 - AUDIO SWITCHING Overhead Panel

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HDA A320/A321 FLEET MI-23-01-03 P 2/2 MEL 29 NOV 11



# MEL ITEMS 23 - COMMUNICATIONS 23-09 - ECAM Alerts

23-09-01 COM HF 1(2) EMITTING Alert

Ident.: MI-23-09-00007665.0001001 / 29 NOV 11

Applicable to: ALL

#### 23-09-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	-	No

- (o) One or both may be displayed provided that:
  - 1) The alert is confirmed to be false by troubleshooting, and
  - 2) The affected HF is deactivated and considered inoperative. Refer to Item 23-10-01 HF System

Reference(s) -

(o) Refer to OpsProc 23-09-01A COM HF 1(2) EMITTING Alert

23-09-02	COM VHF 1(2)(3) EMITTING Alert
----------	--------------------------------

Ident.: MI-23-09-00007666.0001001 / 29 NOV 11

Applicable to: ALL

#### 23-09-02A

Repair interval	Nbr installed	Nbr required	Placard
С	3	-	No

- (o) One or more may be displayed provided that:
  - 1) The alert is confirmed to be false by troubleshooting, and
  - 2) The affected VHF is deactivated and considered inoperative. Refer to Item 23-10-02 VHF System

Reference(s) -

(o) Refer to OpsProc 23-09-02A COM VHF 1(2)(3) EMITTING Alert



# MEL ITEMS 23 - COMMUNICATIONS 23-09 - ECAM Alerts

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 HDA A320/A321 FLEET
 MI-23-09 P 2/2

 MEL
 29 NOV 11



23-10 - Speech Communication

20 To 01	23-10-01	HF System
----------	----------	-----------

Ident.: MI-23-10-00007588.0001001 / 29 NOV 11

Applicable to: ALL

# 23-10-01A HF 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

HF 2 may be inoperative.		
	Reference(s)	

S

# 23-10-01B Both inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

One or both systems may be inoperative provided that communications can be covered by VHF.

Reference(s)	
11010101100(0)	

S

23-10-02	VHF System
----------	------------

Ident.: MI-23-10-00007589.0002001 / 29 NOV 11

Applicable to: ALL

#### 23-10-02B

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

One may be inoperative provided VHF 1 is operative.

<u>Note:</u> The VHF 3 may be used as one of the VHFs required by regulations, provided that the VHF 3 is set to VOICE mode before each flight.



23-10 - Speech Communication

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 HDA A320/A321 FLEET
 MI-23-10 P 2/2

 MEL
 29 NOV 11



23-13 - Radio Management

23-13-01	Radio Management Panel (RMP)

Ident.: MI-23-13-00007591.0001001 / 29 NOV 11

Applicable to: B-HSQ, B-HSR

#### 23-13-01A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

All must be operative.

23-13-01	Radio Management Panel (RMP)
----------	------------------------------

Ident.: MI-23-13-00007591.0002001 / 19 JUL 12

#### 23-13-01B

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	Yes

RMP 2 or RMP 3 may be inoperative.

23-13-02	RMP Selection Key

Ident.: MI-23-13-00007592.0001001 / 22 MAR 10

Applicable to: ALL

#### 23-13-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

One may be inoperative on each RMP provided that:

- 1) VHF 1 selection key is operative on RMP 1, and
- 2) If HF is required, HF 1 selection key is operative on RMP 1.

<sup>1</sup> Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI



23-13 - Radio Management

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 HDA A320/A321 FLEET
 MI-23-13 P 2/2

 MEL
 19 JUL 12



23-20 - Data Transmission and Automatic Calling

23-20-01 Aircraft Communications Addressing Reporting System (ACARS)

Ident.: MI-23-20-00007593.0001001 / 29 NOV 11

Applicable to: ALL

### 23-20-01A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No



May be inoperative.

Note: If available, AIDS stored report <02> (engine cruise report) should be printed and faxed to CX MC (+852-23627416) after each sector.

- Reference(s) -





23-20 - Data Transmission and Automatic Calling

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HDA A320/A321 FLEET MI-23-20 P 2/2 MEL 29 NOV 11



23-31 - Passenger Address System

23-31-01	Passenger Address System
----------	--------------------------

Ident.: MI-23-31-00007595.0001001 / 29 NOV 11

Applicable to: ALL

### 23-31-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

Note:

- 1. In the case of partial failure of the passenger address system, refer to the item(s) of the affected system(s).
- 2. Total failure of the passenger address system (indicated by the <u>COM</u> CIDS 1+2 FAULT alert displayed on the EWD) is not permitted.

23-31-02	PA IN USE light
20 01 02	TAIN OOL IIGH

Ident.: MI-23-31-00007596.0001001 / 19 JUL 12

1 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST, B-HSU, B-HTH, B-HTI

#### 23-31-02A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative.



23-31 - Passenger Address System

Intentionally left blank

 HDA A320/A321 FLEET
 MI-23-31 P 2/2

 MEL
 19 JUL 12



23-40 - Interphone

23-40-01 Gro	ound External Horn
--------------	--------------------

Ident.: MI-23-40-00007597.0001001 / 29 NOV 11

Applicable to: ALL

### 23-40-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(o) May be inoperative.

---- Reference(s)

(o) Refer to OpsProc 23-40-01A Ground External Horn

S

23-40-02 Flight Crew Interphone System
--

Ident.: MI-23-40-00007598.0001001 / 29 NOV 11

Applicable to: ALL

#### 23-40-02A

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	-	1	1	No

Required for all crew members on Flight Deck duty

23-40-03	Flight Crew to Ground Communication System

Ident.: MI-23-40-00007599.0001001 / 29 NOV 11

Applicable to: ALL

### 23-40-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) May be inoperative provided that:
  - 1) Procedures are not dependent upon its use.
  - 2) Alternate procedures are established and used.

Continued on the following page



### MEL ITEMS 23 - COMMUNICATIONS

23-40 - Interphone

			Reference(s) —	Continued fro	om the previous page
	(o) Refer to OpsP	roc 23-	-40-03A Flight Crew to Grou	nd Communication Syste	m
23-	10-04		Service I	nterphone Jack	
	MI-23-40-00007600.0001001	/ 29 NO	V 11		
23	3-40-04A				
	Repair interval		Nbr installed	Nbr required	Placard
	С		8	0	No
	(o) One or more n	nav be	inoperative.		<del></del>

Reference(s) —

(o) Refer to OpsProc 23-40-04A Service Interphone Jack



23-51 - Audio Management

|--|

Ident.: MI-23-51-00007601.0001001 / 22 MAR 10

Applicable to: ALL

### 23-51-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

	23-51-02	Boomset
--	----------	---------

Ident.: MI-23-51-00007602.0001001 / 29 NOV 11

Applicable to: ALL

### 23-51-02A

Repair interval	Nbr installed	Nbr required	Placard
В	-	-	No

Headset including boom microphone must be operative for each person on flight deck duty.

23-51-03	Hand Microphone

Ident.: MI-23-51-00007603.0001001 / 22 MAR 10

Applicable to: ALL

#### 23-51-03A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

One or more may be inoperative, or missing, or removed.



23-51 - Audio Management

23-51-04	Cockpit Loudspeaker

Ident.: MI-23-51-20801956.9001001 / 29 NOV 11

Applicable to: ALL

### 23-51-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

Only F/O loudspeaker may be inoperative provided that at least one crewmember on cockpit duty wears a boomset compatible with the quick donning oxygen mask.

	23-51-05	Cockpit Loudspeaker Volume Control
--	----------	------------------------------------

Ident.: MI-23-51-00007605.0001001 / 29 NOV 11

Applicable to: ALL

### 23-51-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

(o)	One may be inoperative provided that the affected crewmember on cockpit duty wears a
	boomset compatible with the quick donning oxygen mask.

(o) Refer to OpsProc 23-51-05A Cockpit Loudspeaker Volume Control



23-51 - Audio Management

23-51-06	Sidestick PTT sw
----------	------------------

Ident.: MI-23-51-00007606.0001001 / 29 NOV 11

Applicable to: ALL

### 23-51-06B

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(m) One or both may be inoperative in the open position (non transmitting position) provided that the INT/RAD sw on CAPT ACP, on F/O ACP and on ACP 3 are operative.

<u>Note:</u> Apply the maintenance procedure only when the inoperative sidestick PTT sw is failed in the closed position (transmitting position).

Reference(s)

(m) Refer to AMM 23-51-00-040-001

S



# MEL ITEMS 23 - COMMUNICATIONS 23-51 - Audio Management

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HDA A320/A321 FLEET MI-23-51 P 4/4
MEL 29 NOV 11



23-52 - Audio Control Panel (ACP)

23-52-01 CAPT and F/O ACP
---------------------------

Ident.: MI-23-52-00007609.0001001 / 29 NOV 11

Applicable to: ALL

#### 23-52-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

- (o) One may be inoperative provided that:
  - 1) ACP 3 is operative, and
  - 2) The AUDIO SWITCHING selector is operative.

Reference(s)

(o) Refer to OpsProc 23-52-01A CAPT and F/O ACP

23-52-02	ACP 3

Ident.: MI-23-52-00007610.0001001 / 22 MAR 10

Applicable to: ALL

### 23-52-02A

Γ	Repair interval	Nbr installed	Nbr required	Placard
Γ	С	1	0	Yes

May be inoperative.

23-52-05	ACP Transmission Key

Ident.: MI-23-52-00007613.0001001 / 22 MAR 10

Applicable to: ALL

#### 23-52-05A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

One may be inoperative on each ACP provided that:

- 1) VHF 1 transmission key is operative either on CAPT ACP or on F/O ACP, and
- If HF is required, HF 1 transmission key is operative either on CAPT ACP or on F/O ACP.



23-52 - Audio Control Panel (ACP)

23-52-06	ACP Reception knob
----------	--------------------

Ident.: MI-23-52-00007614.0001001 / 22 MAR 10

Applicable to: ALL

#### 23-52-06A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

One may be inoperative on each ACP provided that :

- 1) VHF 1 reception knob is operative either on CAPT ACP or on F/O ACP, and
- If HF is required, HF 1 reception knob is operative either on CAPT ACP or on F/O ACP, and
- If ILS is required for approach, one ILS reception knob is operative either on CAPT ACP or on F/O ACP.

23-52-07	ACP Reception knob light
	1/001115 /0

Ident.: MI-23-52-00007615.0001001 / 22 MAR 10

Applicable to: ALL

#### 23-52-07A

Repair interval	Nbr installed	Nbr required	Placard
D	-	0	No

One or more may be inoperative.



23-71 - Cockpit Voice Recorder (CVR)

23-71-01 Cockpit Voice Recorder (CVR)
---------------------------------------

Ident.: MI-23-71-00007617.0001001 / 29 NOV 11

Applicable to: ALL

### 23-71-01A

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No



May be inoperative for a maximum of 8 sectors or 72 hours elapsed, whichever occurs first provided that:

- 1) The DFR is operative, and
- 2) The aircraft does not depart Hong Kong.

Note: CVR must be operative ex-HKG unless: If the CVR is found to be inoperative during crew predeparture checks, then the defect can be entered in the Maintenance Log for rectification at next HKG transit.







23-71 - Cockpit Voice Recorder (CVR)

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HDA A320/A321 FLEET MI-23-71 P 2/2 MEL 29 NOV 11



23-72 - Cabin Surveillance

23-72-01-51 CDSS
------------------

Ident.: MI-23-72-20801308.9001001 / 29 NOV 11

Applicable to: ALL

### 23-72-01-51A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(o)	The whole system may be inoperative, provided cabin interphone and cockpit door viewing
	spyhole are serviceable.

Reference(s)

(o) Refer to OpsProc 23-72-01-51A CDSS

S

23-72-01-52	CDSS-Monitor

Ident.: MI-23-72-20801312.9001001 / 29 NOV 11

Applicable to: ALL

### 23-72-01-52A

Repair interval	Nbr installed	Nbr required	Placard
D	2	1	No

One may be inoperative.

### 23-72-01-52B

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(o) Both may be inoperative, provided cabin interphone and cockpit door viewing spyhole are serviceable.

Continued on the following page



23-72 - Cabin Surveillance

	Continued from the previous page
(o) Refer to OpsProc 23-72-01-52B CDSS-Monitor	

23-72-01-53 CDSS-Camera

Ident.: MI-23-72-20801313.9001001 / 29 NOV 11

Applicable to: ALL

### 23-72-01-53A

Repair interval	Nbr installed	Nbr required	Placard
С	3	1	No

One or two may be inoperative.

### 23-72-01-53B

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

S

(o) All may be inoperative, provided cabin interphone and cockpit door viewing spyhole are serviceable.

Reference(s)

(o) Refer to OpsProc 23-72-01-53B CDSS-Camera

S

23-72-01-54	CDSS-Cabin Ready Function

Ident.: MI-23-72-20801314.9001001 / 29 NOV 11

Applicable to: ALL

#### 23-72-01-54A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

(o) May be inoperative provided cabin interphone is serviceable.

Continued on the following page



23-72 - Cabin Surveillance

	Continued from the previous page
Reference(s)	
1161616166(3)	

(o) Refer to OpsProc 23-72-01-54A CDSS-Cabin Ready Function

23-72-01-55	CDSS-Viewing Spy Hole
-------------	-----------------------

Ident.: MI-23-72-20801327.9001001 / 29 NOV 11

Applicable to: ALL

### 23-72-01-55A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative provided it is not missing.



# MEL ITEMS 23 - COMMUNICATIONS 23-72 - Cabin Surveillance

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 HDA A320/A321 FLEET
 MI-23-72 P 4/4

 MEL
 29 NOV 11



MINIMUM EQUIPMENT LIST

### MEL ITEMS 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-01 - Cabin Intercommunication Data System (CIDS)

23-73-01-01	Cabin Intercommunication Data System ( CIDS ) Function
-------------	--

Ident.: MI-23-73-01-00007619.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM. B-HSN

#### 23-73-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

The CIDS function must be operative.

Note:

1. Failure of a single CIDS director is indicated by a MAINTENANCE message on the STATUS SD page.

Refer to Item 23-00-01 CIDS 1(2) MAINTENANCE Message

2. In the case of disturbance of the CIDS function, the removal of the affected CIDS director may recover normal operation of the CIDS function.

Refer to AMM TASK 23-73-00-040-001

23-73-01-01	Cabin Intercommunication Data System ( CIDS ) Function
-------------	--

Ident.: MI-23-73-01-00007619.0002001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 23-73-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

The CIDS function must be operative.

Note:

1. Failure of a single CIDS director is indicated by a MAINTENANCE message on the STATUS SD page.

Refer to Item 23-00-01 CIDS 1(2) MAINTENANCE Message

2. In the case of disturbance of the CIDS function, the deactivation of the affected CIDS director may recover normal operation of the CIDS function. Refer to AMM TASK 23-73-00-040-001



23-73 - Cabin Intercommunication Data System 23-73-01 - Cabin Intercommunication Data System (CIDS)

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HDA A320/A321 FLEET MI-23-73-01 P 2/2 MEL 19 JUL 12



23-73 - Cabin Intercommunication Data System 23-73-02 - DEU A

23-73-02-01	Cabin DEU A
-------------	-------------

Ident.: MI-23-73-02-00007620.0001001 / 29 NOV 11

Applicable to: ALL

### 23-73-02-01A Affected seat occupied

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

- (o) One or more may be inoperative and affected passenger seat may be occupied provided that:
  - 1) The passenger announcement can be heard throughout the cabin during the flight, and
  - 2) The passenger address system is used to alert the passengers when "Return to Seat / Fasten Seat Belt / No Smoking" signs are requested.

Deference(a)	
Reference(s)	

(o) Refer to OpsProc 23-73-02-01A Cabin DEU A

### 23-73-02-01B Affected seat not occupied

Repair interval	Nbr installed	Nbr required	Placard
С	-	_	Yes

One or more may be inoperative provided that the affected seats are blocked and placarded inoperative.

23-73-02-02	Lavatory DEU A
-------------	----------------

Ident.: MI-23-73-02-00007621.0001001 / 29 NOV 11

Applicable to: ALL

### 23-73-02-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

One or more may be inoperative provided that the affected lavatory is closed and placarded inoperative.



23-73 - Cabin Intercommunication Data System 23-73-02 - DEU A

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HDA A320/A321 FLEET MI-23-73-02 P 2/2 MEL 29 NOV 11



23-73 - Cabin Intercommunication Data System 23-73-03 - DEU B

23-73-03-01	Cabin DEU B
-------------	-------------

Ident.: MI-23-73-03-00007622.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 23-73-03-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	2	No

- (o) One or more may be inoperative provided that:
  - 1) One DEU B and the associated handset are operative at each pair of floor level exit doors, and
  - 2) The slide bottle pressure and door bottle pressure associated with each affected DEU B are checked on the associated direct reading pressure gauge before the first flight of each day.

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP, and Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP

		Reference(s)	_
_	_		

(o) Refer to OpsProc 23-73-03-01A Cabin DEU B



23-73 - Cabin Intercommunication Data System 23-73-03 - DEU B

23-73-03-01	Cabin DEU B

Ident.: MI-23-73-03-00007622.0004001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 23-73-03-01B

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	-	2	No

- (o) One or more may be inoperative provided that:
  - One DEU B and the associated handset are operative at each pair of floor level exit doors, and
  - 2) The slide bottle pressure and door bottle pressure associated with each affected DEU B are checked on the associated direct reading pressure gauge before the first flight of each day, and
  - 3) The associated lavatory fire extinguisher system is checked operative, and
  - 4) The absence of smoke in the affected lavatory is periodically checked. Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP, and Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP, and

Refer to Item 26-17-01 Lavatory Smoke Detection System.

Defere	noo(o)
nelele	(ICE(S) —

(o) Refer to OpsProc 23-73-03-01B Cabin DEU B



23-73 - Cabin Intercommunication Data System 23-73-04 - Cabin Individual Call

23-73-04-01	Passenger Call

Ident.: MI-23-73-04-00007623.0001001 / 29 NOV 11

Applicable to: ALL

### 23-73-04-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

Z

Z

One or more may be inoperative.		
	Reference(s)	



23-73 - Cabin Intercommunication Data System 23-73-04 - Cabin Individual Call

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HDA A320/A321 FLEET MI-23-73-04 P 2/2 MEL 29 NOV 11



23-73 - Cabin Intercommunication Data System 23-73-05 - Cabin Loudspeaker

23-73-05-01 Cabin Loudspeaker	

Ident.: MI-23-73-05-00007624.0001001 / 29 NOV 11

Applicable to: ALL

#### 23-73-05-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	1	No

Z

One or more may be inoperative provided that no seat is occupied from which a passenger cannot hear a passenger announcement.

Reference(s)

Z

23-73-05-02	Lavatory Loudspeaker
-------------	----------------------

Ident.: MI-23-73-05-00007625.0001001 / 29 NOV 11

Applicable to: ALL

#### 23-73-05-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

Z

(o) One or more may be inoperative provided the FA1 is made aware that alternate normal and emergency procedures shall be established to alert a passenger in the lavatory.

(o) Refer to OpsProc 23-73-05-02A Lavatory Loudspeaker

Z



23-73 - Cabin Intercommunication Data System 23-73-05 - Cabin Loudspeaker

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HDA A320/A321 FLEET MI-23-73-05 P 2/2 MEL 29 NOV 11



MINIMUM EQUIPMENT LIST

## MEL ITEMS

### 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-06 - Handset

23-73-06-01	Cockpit Handset
-------------	-----------------

Ident.: MI-23-73-06-00007626.0001001 / 22 MAR 10

Applicable to: ALL

#### 23-73-06-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the cockpit audio control panel (ACP) is used for the communication between the cockpit and the cabin.

23-73-06-02	Cabin Handset

Ident.: MI-23-73-06-00007627.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 23-73-06-02A

Repair interval	Nbr installed	Nbr required	Placard
С	6	4	Yes

S

- (o) Two may be inoperative provided that:
  - 1) The handset at all the Required cabin attendant seats are operative, and
  - 2) The FA1 is made aware that alternate normal and emergency procedures shall be established for the use of the operative handsets, and
  - 3) The FA1 identifies the handset location for the appropriate cabin crew member and informs the commander accordingly.

 Reference(s)	

(o) Refer to OpsProc 23-73-06-02A Cabin Handset

S



23-73 - Cabin Intercommunication Data System 23-73-06 - Handset

23-73-06-02	Cabin Handset

Ident.: MI-23-73-06-00007627.9001002 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

### 23-73-06-02A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	Yes



- (o) One may be inoperative provided that:
  - 1) L1 handset is operative, and
  - 2) The FA1 is made aware that alternate normal and emergency procedures shall be established for the use of the operative handsets, and
  - **3)** The FA1 identifies the handset location for the appropriate cabin crew member and informs the commander accordingly.

Deference/e	1

(o) Refer to OpsProc 23-73-06-02A Cabin Handset

S

23-73-06-03	Cabin Handset Key
-------------	-------------------

Ident.: MI-23-73-06-00007628.0001001 / 29 NOV 11

Applicable to: ALL

# 23-73-06-03A Passenger address and Cabin to cockpit interphone operative

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes



One or more may be inoperative provided that:

- 1) Passenger address from the affected handset is operative, and
- 2) Cabin to cockpit interphone from affected handset is operative.

Reference(s) -	
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S

Continued on the following page



23-73 - Cabin Intercommunication Data System 23-73-06 - Handset

Continued from the previous page

# 23-73-06-03B Affected handset considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

S

One or more may be inoperative provided that the affected handset is considered
inoperative.

Refer to Item 23-73-06-02 Cabin Handset

Reference(s)

S



23-73 - Cabin Intercommunication Data System 23-73-06 - Handset

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HDA A320/A321 FLEET MI-23-73-06 P 4/4 MEL 29 NOV 11



# A320/A321 MINIMUM EQUIPMENT LIST

# MEL ITEMS 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-07 - Prerecorded Announcement and Music Reproducer (PRAM)

23-73-07-01 Prerecorded Announcement and Music Reproducer ( PRAM )

Ident.: MI-23-73-07-00007629.0001001 / 29 NOV 11 Applicable to: ALL

### 23-73-07-01A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

Z

- (o) May be inoperative provided that:
  - The FA1 is made aware that alternate procedures shall be established to replace the prerecorded announcements, and
  - 2) Manual safety demonstration must be given if the automatic demonstration equipment is affected.

(o) Refer to OpsProc 23-73-07-01A Prerecorded Announcement and Music Reproducer (PRAM)

Z



23-73 - Cabin Intercommunication Data System 23-73-07 - Prerecorded Announcement and Music Reproducer (PRAM)

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HDA A320/A321 FLEET MI-23-73-07 P 2/2 MEL 29 NOV 11



23-73 - Cabin Intercommunication Data System 23-73-08 - Cabin Assignment Module (CAM)

23-73-08-01	Cabin Assignment Module (CAM)

Ident.: MI-23-73-08-00007630.0001001 / 22 MAR 10

Applicable to: ALL

### 23-73-08-01A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative or missing.



23-73 - Cabin Intercommunication Data System 23-73-08 - Cabin Assignment Module (CAM)

Intentionally left blank

HDA A320/A321 FLEET MI-23-73-08 P 2/2 MEL 29 NOV 11



23-73 - Cabin Intercommunication Data System 23-73-10 - Smoke Detection Function

23-73-10-01 Smoke Detection Function ( CIDS - SDF )

Ident.: MI-23-73-10-00007632.0005001 / 19 JUL 12

Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 23-73-10-01B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the restrictions concerning lavatory smoke detection system and cargo smoke detection system are applied.

Refer to Item 26-17-01 Lavatory Smoke Detection System, and

Refer to Item 26-16-01 Smoke Detector in the FWD Cargo Compartment, and

Refer to Item 26-16-02 Smoke Detector in the AFT and the BULK Cargo Compartments

<u>Note:</u> Failure of a single CIDS - SDF channel is indicated by a <u>MAINTENANCE</u> message on the STATUS SD page.

Refer to Item 26-00-01 SDCU MAINTENANCE Message



23-73 - Cabin Intercommunication Data System 23-73-10 - Smoke Detection Function

Intentionally left blank

HDA A320/A321 FLEET MI-23-73-10 P 2/2 MEL 19 JUL 12



23-74 - Cabin Crew Panel

23-74-01 Forward Attendant Panel
----------------------------------

Ident.: MI-23-74-00007634.0001001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSI, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 23-74-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that associated Forward Attendant Panel functions are considered inoperative.

Refer to Item 23-73-07-01 Prerecorded Announcement and Music Reproducer (PRAM), and

Refer to Item 23-74-12 CIDS Caution Light of the Forward Attendant Panel, and Refer to Item 23-74-13 Lighting Module of the Forward Attendant Panel.

23-74-01	FAP Display Unit

Ident.: MI-23-74-00007634.0004001 / 19 JUL 12

Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 23-74-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative provided that the safety related messages on the FAP are considered inoperative.

Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP, and

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP , and Refer to Item 25-62-07 Overwing Emergency Exit Slide Pressure Message on the PTP/FAP

 Reference(s)
 neielelice(s)

(o) Refer to OpsProc 23-74-01A FAP Display Unit



23-74 - Cabin Crew Panel

23-74-02	EMER pb on the Hardkey FAP Sub-panel
	,

Ident.: MI-23-74-00007648.0001001 / 29 NOV 11

Applicable to: ALL

### 23-74-02A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	No

Must be operative.

23-74-03	Other Controls on the Hardkey FAP Sub-panel

Ident.: MI-23-74-00007649.0001001 / 29 NOV 11

Applicable to: ALL

### 23-74-03A

Repair interval	Nbr installed	Nbr required	Placard
D	-	0	No

One or more may be inoperative.

23-74-04	PTP Display Unit

Ident.: MI-23-74-00007650.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

### 23-74-04A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes



May be inoperative provided that the display of the safety related messages on PTP are considered inoperative.

Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP, and

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP, and Refer to Item 25-62-07 Overwing Emergency Exit Slide Pressure Message on the PTP/FAP Continued on the following page



23-74 - Cabin Crew Panel

Continued from the previous page

Z

**PTP Display Unit** 23-74-04

Ident.: MI-23-74-00007650.0005001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 23-74-04A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

Z

May be inoperative provided that the display of the safety related messages on PTP are considered inoperative.

Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP, and

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP

Reference(s) -

Z

Door Bottle Pressure Monitoring on the PTP	23-74-05
--	----------

Ident.: MI-23-74-00007652.0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 23-74-05A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP

HDA A320/A321 FLEET MI-23-74 P 3/6 19 JUL 12



23-74 - Cabin Crew Panel

23-74-06	Door Bottle Pressure Monitoring on the FAP
Ident.: MI-23-74-00007653.000400	1 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 23-74-06A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP

Ident.: MI-23-74-00007655.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

### 23-74-07A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP Refer to Item 25-62-07 Overwing Emergency Exit Slide Pressure Message on the PTP/FAP

Note: Apply both MEL Items.

23-74-07	Slide Pressure Monitoring on the PTP
----------	--------------------------------------

Ident.: MI-23-74-00007655.0005001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 23-74-07A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP



23-74 - Cabin Crew Panel

23-74-08 Slide Pressure Monitoring on the FAP	23-74-08	Slide Pressure Monitoring on the FAP
---	----------	--------------------------------------

Ident.: MI-23-74-00007656.0004001 / 19 JUL 12

<sup>3</sup>Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 23-74-08A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP Refer to Item 25-62-07 Overwing Emergency Exit Slide Pressure Message on the PTP/FAP

Note: Apply both MEL Items.

23-74-09	Area Call Panel

Ident.: MI-23-74-00007660.0001001 / 22 MAR 10

Applicable to: ALL

### 23-74-09A

Repair interval	Nbr installed	Nbr required	Placard
D	-	0	Yes

One or more may be inoperative.

23-74-11	Additional Attendant Panel (AAP)
	, ,

Ident.: MI-23-74-00007663.0001001 / 29 NOV 11

Applicable to: ALL

### 23-74-11A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

One or more may be inoperative.



23-74 - Cabin Crew Panel

23-74-12 CIDS Caution Light of the Forward Attendant Panel
--

Ident.: MI-23-74-00013904.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 23-74-12A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o)	May be inoperative provided that PTP messages are checked before each flight.

(o) Refer to OpsProc 23-74-12A CIDS Caution Light of the Forward Attendant Panel

	23-74-13	Lighting Module of the Forward Attendant Panel
--	----------	--

Ident.: MI-23-74-00013905.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 23-74-13A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative.

Reference(s) —

(o) Refer to OpsProc 23-74-13A Lighting Module of the Forward Attendant Panel



24-00 - MAINTENANCE Messages on the STATUS SD page

24-00-01	DC BUS TIE <u>MAINTENANCE</u> Message
	Į.

Ident.: MI-24-00-00008421.0001001 / 29 NOV 11

Applicable to: ALL

# 24-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

DC BUS TIE $\underline{MAINTENANCE}$ message may be displayed on the $\underline{STATUS}$ SD page

S

24-00-02	GPCU MAINTENANCE Message
----------	--------------------------

Ident.: MI-24-00-20801341.9001001 / 29 NOV 11

Applicable to: ALL

# 24-00-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

Reference(s)

S



24-00 - MAINTENANCE Messages on the STATUS SD page

24-00-03 AC GEN MAINTENANCE Message
-------------------------------------

Ident.: MI-24-00-00008423.0001001 / 29 NOV 11

Applicable to: ALL

# 24-00-03A

Repair interval	Nbr installed	Nbr required	Placard
C	-	-	No

S

AC GEN MAINTENANCE message	ge may be displayed on the <u>STATUS</u> SD pa	ıge.
	Reference(s)	



24-01 - Overhead Panels 24-01-01 - ELEC Overhead Panel

24-01-01-01	BAT 1(2) pb-sw FAULT light
-------------	----------------------------

Ident.: MI-24-01-01-00008424.0001001 / 22 MAR 10

Applicable to: ALL

### 24-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

24-01-01-02 BAT 1(2) pb-sw OFF light	
--------------------------------------	--

Ident.: MI-24-01-01-00008425.0001001 / 22 MAR 10

Applicable to: ALL

### 24-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

24-01-01-03	GEN pb-sw FAULT light and APU GEN pb-sw FAULT light

Ident.: MI-24-01-01-00008426.0001001 / 29 NOV 11

Applicable to: ALL

### 24-01-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	3	1	Yes

One GEN pb-sw FAULT light and/or the APU GEN pb-sw FAULT light may be inoperative provided that the associated generator indications are operative on the ELEC SD page. Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)



24-01 - Overhead Panels 24-01-01 - ELEC Overhead Panel

24-01-01-04	GEN pb-sw OFF light and APU GEN pb-sw OFF light
-------------	---

Ident.: MI-24-01-01-00008427.0001001 / 29 NOV 11

Applicable to: ALL

### 24-01-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.

Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

Ident.: MI-24-01-01-00008428.0001001 / 22 MAR 10

Applicable to: ALL

#### 24-01-01-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the AC ESS bus indication is operative on the  $\underline{\sf ELEC}$  SD page.

24-01-01-06	AC ESS FEED pb-sw ALTN light
-------------	------------------------------

Ident.: MI-24-01-01-00008429.0001001 / 22 MAR 10

Applicable to: ALL

### 24-01-01-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the AC ESS bus indication is operative on the  $\underline{\sf ELEC}$  SD page.



24-01 - Overhead Panels 24-01-01 - ELEC Overhead Panel

24-01-01-07	EXT PWR pb-sw AVAIL light
•	

Ident.: MI-24-01-01-00008430.0001001 / 29 NOV 11

Applicable to: ALL

### 24-01-01-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative.

(o) Refer to OpsProc 24-01-01-07A EXT PWR pb-sw AVAIL light

24-01-01-08 EXT PWR pb-sw ON light
------------------------------------

Ident.: MI-24-01-01-00008431.0001001 / 29 NOV 11

Applicable to: ALL

### 24-01-01-08A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

24-01-01-09	GALLEY pb-sw FAULT light
-------------	--------------------------

Ident.: MI-24-01-01-00008432.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

### 24-01-01-09A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) For each generator, the AC load indication is operative on the ELEC SD page, and
  - 2) The galley automatic load shed system is checked operative.

Deference(a)
Reference(s)

(o) Refer to OpsProc 24-01-01-09A GALLEY/GALY & CAB pb-sw FAULT light



24-01 - Overhead Panels 24-01-01 - ELEC Overhead Panel

24-01-01-09 GALY & CAB pb-sw FAULT light
--

Ident.: MI-24-01-01-00008432.0002001 / 19 JUL 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

### 24-01-01-09A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) For each generator, the AC load indication is operative on the ELEC SD page, and
  - 2) The GALY & CAB automatic load shed system is checked operative.

Reference(s)

(o) Refer to OpsProc 24-01-01-09A GALLEY/GALY & CAB pb-sw FAULT light

24-01-01-10	GALLEY pb-sw OFF light
-------------	------------------------

Ident.: MI-24-01-01-00008433.0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

### 24-01-01-10A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

24-01-01-10	GALY & CAB pb-sw OFF light
21010110	anzi a one pe ou oi i light

Ident.: MI-24-01-01-00008433.0002001 / 19 JUL 12

2 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

# 24-01-01-10A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



24-01 - Overhead Panels 24-01-01 - ELEC Overhead Panel

24-01-01-11 COMMERCIAL pb-sw OFF light
--

Ident.: MI-24-01-01-00008434.0004001 / 19 JUL 12

3 Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

### 24-01-01-11A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

24-01-01-12 BUS TIE pb-sw OFF light
-------------------------------------

Ident.: MI-24-01-01-00008435.0001001 / 22 MAR 10

Applicable to: ALL

# 24-01-01-12A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

24-01-01-13	IDG pb-sw FAULT light
-------------	-----------------------

Ident.: MI-24-01-01-00008436.0001001 / 29 NOV 11

Applicable to: ALL

### 24-01-01-13A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative provided that the frequency and the temperature indications of the affected generator are operative on the  $\underline{\sf ELEC}$  SD page .

Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)



24-01 - Overhead Panels 24-01-01 - ELEC Overhead Panel

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 HDA A320/A321 FLEET
 MI-24-01-01 P 6/6

 MEL
 19 JUL 12



24-01 - Overhead Panels 24-01-02 - EMER ELEC PWR Overhead Panel

24-01-02-01 RAT & EMER GEN FAULT light	24-01-02-01	RAT & EMER GEN FAULT light
--	-------------	----------------------------

Ident.: MI-24-01-02-00008437.0001001 / 22 MAR 10

Applicable to: ALL

# 24-01-02-01A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	Yes

May be inoperative.



24-01 - Overhead Panels 24-01-02 - EMER ELEC PWR Overhead Panel

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HDA A320/A321 FLEET MI-24-01-02 P 2/2 MEL 29 NOV 11



24-07 - Indications on the ELEC SD page

	24-07-01	AC Generation Indications on the ELEC SD page
--	----------	---

Ident.: MI-24-07-00008472.0001001 / 29 NOV 11

Applicable to: ALL

### 24-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

- (o) One or more indications related to the AC generation may be inoperative provided that:
  - The load, voltage, and frequency indications are operative on one engine driven generator, and
  - 2) The associated ELEC GEN 1(2) FAULT alert is operative, and
  - 3) The galley automatic load shed system is checked operative.

    Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

Deference(a)
 Reference(s)

(o) Refer to OpsProc 24-07-01A AC Generation Indications on the ELEC SD page

24-07-02	DC Generation Indications on the <u>ELEC</u> SD page

Ident.: MI-24-07-00008474.0001001 / 22 MAR 10

Applicable to: ALL

### 24-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

One or more indications related to the DC generation may be inoperative.

24-07-03	AC ESS BUS SHED Indication on the <u>ELEC</u> SD page

Ident.: MI-24-07-00008475.0001001 / 22 MAR 10

Applicable to: ALL

#### 24-07-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be displayed.



24-07 - Indications on the ELEC SD page

Intentionally left blank

HDA A320/A321 FLEET MI-24-07 P 2/2 MEL 29 NOV 11



24-09 - ECAM Alerts

24-09-01	ELEC AC ESS BUS SHED Alert

Ident.: MI-24-09-00008477.0002001 / 29 NOV 11

Applicable to: ALL

### 24-09-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be displayed provided that:
  - 1) The alert is confirmed to be false by troubleshooting, and
  - 2) The AC ESS BUS SHED is checked operative before each flight, and
  - 3) HF 1 is deactivated. Refer to Item 23-10-01 HF System

Reference(s) —

(o) Refer to OpsProc 24-09-01A ELEC AC ESS BUS SHED Alert

24-09-02	C/B TRIPPED Alert

Ident.: MI-24-09-00008479.0001001 / 29 NOV 11

Applicable to: ALL

### 24-09-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(m) May be displayed provided that the alert is confirmed to be false by troubleshooting.

Reference(s) -

(m) Refer to AMM 24-50-00-040-001

S



# MEL ITEMS 24 - ELECTRICAL POWER 24-09 - ECAM Alerts

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HDA A320/A321 FLEET MI-24-09 P 2/2 MEL 29 NOV 11



24-22 - AC Main Generation

24-22-01 AC Main Generation ( IDG , GCU , Line Contactor)

Ident.: MI-24-22-00008438.0005001 / 29 NOV 11

Applicable to: ALL

### 24-22-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes



- (o) (m) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The flight altitude is limited to 33 500 ft, and
  - 3) The APU and AC auxiliary generation are operative and used throughout the flight, and
  - 4) The APU fuel pump is operative, and
  - 5) The APU oil consumption is checked adequate for the intended flight, and
  - 6) The fuel recirculation system associated with the operative IDG is checked operative before each flight, and
  - 7) All busses have power, and
  - 8) The indications and alerts for the remaining AC main generation and the AC auxiliary generation are operative, and

	-					
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v	THE GUILD	, automatio	iouu oi iou o	VOICIII IO	or iconca a	polativo.

|--|

(o) Refer to OpsProc 24-22-01A AC Main Generation (IDG, GCU, Line Contactor)

(m) Refer to AMM 24-20-00-040-001



Α

24-22-02 AC Bus Tie Control Function	
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Ident.: MI-24-22-00008439.0001001 / 29 NOV 11

Applicable to: ALL

### 24-22-02A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.



# MEL ITEMS 24 - ELECTRICAL POWER 24-22 - AC Main Generation

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HDA A320/A321 FLEET MI-24-22 P 2/2 MEL 29 NOV 11



24-23 - AC Auxiliary Generation

	24-23-01	AC Auxiliary Generation ( APU Generator, GCU , Line Contactor)
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Ident.: MI-24-23-00008440.0002001 / 19 JUL 12

Applicable to: ALL

Note:

When the GPCU / GAPCU Auxiliary Power Control function and the APU Generator are both inoperative, the engines cannot be started.

### 24-23-01A Non ETOPS flight and APU GEN pb-sw set to OFF

	Repair interval	Nbr installed	Nbr required	Placard
Г	С	1	0	Yes

S

May be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) The APU GEN pb-sw is set to OFF.

  Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

Reference(s)

S

# 24-23-01B ETOPS 120 min flight and APU GEN pb-sw set to OFF

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	Yes

S

May be inoperative for four flights provided that:

- 1) ETOPS beyond 120 min is not conducted, and
- 2) The APU GEN pb-sw is set to OFF.

Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

Reference(s) -

S

Continued on the following page



24-23 - AC Auxiliary Generation

Continued from the previous page

# 24-23-01C Non ETOPS flight and AC auxiliary generation deactivated or removed

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

S

(m	) Ma	y be ir	operative	provided	that:
----	------	---------	-----------	----------	-------

- 1) ETOPS is not conducted, and
- 2) The AC auxiliary generation is deactivated or removed.

|--|--|

(m) Refer to AMM task

S



24-24 - AC Emergency Generation

24-24-01 Emergency Generator		24-24-01	
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Ident.: MI-24-24-00008441.0001001 / 22 MAR 10

Applicable to: ALL

### 24-24-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

24-24-02 RAT Extension Automatic Control
--

Ident.: MI-24-24-00008442.0001001 / 29 NOV 11

Applicable to: ALL

### 24-24-02A

ſ	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	1	0	No

S

- (m) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The RAT Extension manual control is checked operative before the first flight of each day.

- Reference(s) -

(m) Refer to AMM 24-20-00-040-002

S



24-24 - AC Emergency Generation

24-24-03 RAT Extension Manual Control	
---------------------------------------	--

Ident.: MI-24-24-00008443.0001001 / 22 MAR 10

Applicable to: ALL

# 24-24-03A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	Yes

May be inoperative provided that ETOPS is not conducted.



24-25 - AC Essential Generation Switching

24-25-01 Manual Transfer to the AC BUS 2 (ALTN Function)
--

Ident.: MI-24-25-00008444.0001001 / 29 NOV 11

Applicable to: ALL

### 24-25-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The AC ESS FEED pb-sw is set to NORM, and
  - 2) It is checked on the ELEC SD page that the AC BUS 1 supplies the AC ESS BUS, and
  - 3) The TR 2 is operative.

Poforonoo(s)	
neletetice(s)	

(o) Refer to OpsProc 24-25-01A Manual Transfer to the AC BUS 2 (ALTN Function)

24-25-02	Automatic Transfer to the AC BUS 2
----------	------------------------------------

Ident.: MI-24-25-00008445.0001001 / 29 NOV 11

Applicable to: ALL

### 24-25-02A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The AC ESS FEED pb-sw is set to NORM, and
  - 2) It is checked on the ELEC SD page that the AC BUS 1 supplies the AC ESS BUS, and
  - 3) The TR 2 is operative.

 Reference(s)

(o) Refer to OpsProc 24-25-02A Automatic Transfer to the AC BUS 2



24-25 - AC Essential Generation Switching

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HDA A320/A321 FLEET MI-24-25 P 2/2 MEL 29 NOV 11



24-26 - Galley and Commercial Supply System

24-26-01 Galley Automatic Load Shed System
--

Ident.: MI-24-26-00008446.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

### 24-26-01A Manual load shed system operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the manual load shed system and the GALLEY pb-sw FAULT light are operative.

Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

# 24-26-01B All galley loads disconnected

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

AS

(m) May be inoperative provided that all galley loads are disconnected.	
Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contact	or)

- Reference(s)

(m) Refer to AMM 24-56-00-040-001

Α

		S

24-26-01	GALY & CAB Automatic Load Shed System	
Ident.: MI-24-26-00008446.0002001 / 19 JUL 12		

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

# 24-26-01A Manual load shed system operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the manual load shed system and the GALY & CAB pb-sw FAULT light are operative.

Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

Continued on the following page



24-26 - Galley and Commercial Supply System

Continued from the previous page

### 24-26-01B All GALY & CAB loads disconnected

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

Reference(s) —

Α	S
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(m) May be inoperative provided that all GALY & CAB loads are disconnected
Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

(m) Refer to AMM 24-56-00-040-001

A

_	 ٥2		

Galley Manual Load Shed System ( GALLEY pb-sw )

Ident.: MI-24-26-00008448.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

### 24-26-02A

24-26-02

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

AS

(m) May be inoperative provided that all galley loads are disconnected.

Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

(m) Refer to AMM 24-56-00-040-003

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MINIMUM EQUIPMENT LIST

# MEL ITEMS 24 - ELECTRICAL POWER

24-26 - Galley and Commercial Supply System

GALY & CAB Manual Load Shed System (GALY & CAB pb-sw)

Ident.: MI-24-26-00008448.0003001 / 29 NOV 11

Applicable to: B-HSJ

24-26-02

### 24-26-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

Δ	Ш	S

(m) May be inoperative provided that all GALY & CAB loads are discon	nected.
Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Cont	actor)

- Reference(s) -

(m) Refer to AMM 24-56-00-040-003

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S

24-26-02	GALY & CAB Manual Load Shed System ( GALY & CAB pb-sw )
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Ident.: MI-24-26-00008448.0004001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

### 24-26-02A All GALY & CAB loads disconnected

Repair inte	rval Nbr inst	alled Nbr requi	ired Placard
С	1	0	Yes

AS

(m) May be inoperative provided that all GALY & CAB loads are disconnected. Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

- Reference(s)

(m) Refer to AMM 24-56-00-040-002

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Continued on the following page

HDA A320/A321 FLEET MI-24-26 P 3/4 MEL D  $\rightarrow$  19 JUL 12



24-26 - Galley and Commercial Supply System

Continued from the previous page

# 24-26-02B COMMERCIAL supply system operative

Repair interval	Nbr installed	Nbr required	Placard
C	1	0	Yes

_

(o) (m) May be inoperative provided that the COMMERCIAL supply system is checked	l operative.
Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)	

(o) Refer to OpsProc 24-26-02B Galley Manual Load Shed System (GALLEY/GALY & CAB pb-sw)

(m) Refer to AMM 24-51-00-040-001

S

24-26-03	Commercial Supply System
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Ident.: MI-24-26-00008449.0001001 / 19 JUL 12

3 Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

### 24-26-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

(o) May be inoperative.

Refer to Item 24-26-02 Galley Manual Load Shed System (GALLEY/GALY & CAB pb-sw)

(o) Refer to OpsProc 24-26-03A Commercial Supply System

S



24-28 - Static Inverter AC Generation

24-28-01	Static Inverter AC Generation
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Ident.: MI-24-28-00008457.0001001 / 22 MAR 10

Applicable to: ALL

# 24-28-01A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	No

Must be operative.



24-28 - Static Inverter AC Generation

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HDA A320/A321 FLEET MI-24-28 P 2/2 MEL 29 NOV 11



MINIMUM EQUIPMENT LIST

### MEL ITEMS 24 - ELECTRICAL POWER

24-32 - DC Main Generation (TR 1, TR 2)

24-32-01	DC Main Generation ( TR 1, TR 2)

Ident.: MI-24-32-00008458.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 24-32-01A TR 1 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

LP

(o) TR 1 may be inoperative provided that ETOPS is not conducted. Refer to Item 27-64-05 Spoilers 3 and 4

- Reference(s) -

(o) Refer to OpsProc 24-32-01A DC Main Generation (TR 1 inoperative)

### 24-32-01B TR 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No



- (o) (m) TR 2 may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The AC ESS FEED control is checked operative before the first flight of each day, and
  - 3) The standby IAS indicator is operative, and
  - 4) The standby altimeter is operative, and
  - 5) The standby horizon is operative, and
  - **6)** The standby compass is operative. Refer to Item 27-64-05 Spoilers 3 and 4

Deference(a)
 Reference(s)

(o) Refer to OpsProc 24-32-01B DC Main Generation (TR 2 inoperative)

(m) Refer to AMM 24-30-00-040-002

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HDA A320/A321 FLEET MI-24-32 P 1/2



24-32 - DC Main Generation (TR 1, TR 2)

	<del>,</del>
24-32-01	DC Main Generation ( TR 1, TR 2)

Ident.: MI-24-32-00008458.0002001 / 19 JUL 12

Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 24-32-01A TR 1 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

(o) TR 1 may be inoperative provided that ETOPS is not conducted.

(o) Refer to OpsProc 24-32-01A DC Main Generation (TR 1 inoperative)

### 24-32-01B TR 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

- (o) (m) TR 2 may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The AC ESS FEED control is checked operative before the first flight of each day, and
  - 3) The ISIS airspeed indication is operative, and
  - 4) The ISIS altitude indication is operative, and
  - 5) The ISIS attitude indication is operative, and
  - 6) The standby compass is operative.

- (o) Refer to OpsProc 24-32-01B DC Main Generation (TR 2 inoperative)
- (m) Refer to AMM 24-30-00-040-002



24-34 - DC Emergency Generation (ESS TR)

24-34-01 DC Emergency Generation (ESS TR)
---

Ident.: MI-24-34-00008460.0001001 / 22 MAR 10

Applicable to: ALL

## 24-34-01A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	No

Must be operative.



24-34 - DC Emergency Generation (ESS TR)

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HDA A320/A321 FLEET MI-24-34 P 2/2 MEL 29 NOV 11



24-35 - DC Essential and Normal Generation Switching

24-35-01	DC TIE Contactor 1PC1 (DC BUS 1-DC BAT
	BUS), 4PC (DC ESS BUS-DC BAT BUS)

Ident.: MI-24-35-00008462.0001001 / 22 MAR 10

Applicable to: ALL

### 24-35-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative in the open position.

24-35-02	DC TIE Contactor 1PC2 (DC BUS 2-DC BAT BUS)

Ident.: MI-24-35-00008463.0001001 / 22 MAR 10

Applicable to: ALL

## 24-35-02A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.



24-35 - DC Essential and Normal Generation Switching

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HDA A320/A321 FLEET MI-24-35 P 2/2 MEL 29 NOV 11



24-38 - DC Battery Generation

24-38-01 BAT 1(2) Channel	
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Ident.: MI-24-38-00008464.0001001 / 22 MAR 10

Applicable to: ALL

#### 24-38-01A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Must be operative.

24-38-02 Battery Charger Limiter ( BCL )
--

Ident.: MI-24-38-00008465.0001001 / 29 NOV 11

Applicable to: ALL

#### 24-38-02A

Repair interval	Nbr installed	Nbr required	Placard
A	2	1	No

S

- (o) (m) One may be inoperative for 10 flights provided that:
  - 1) ETOPS is not conducted, and
  - 2) No APU start is attempted neither on ground nor in flight, and
  - 3) Both AC main generations are operative, and
  - 4) The refueling is made with an external power unit connected, and
  - 5) The battery associated with the inoperative BCL is charged before each flight.

Reference(s)

- (o) Refer to OpsProc 24-38-02A Battery Charger Limiter (BCL)
- (m) Refer to AMM 24-30-00-040-001

S



24-38 - DC Battery Generation

24-38-03	Battery Voltmeter
----------	-------------------

Ident.: MI-24-38-00008466.0001001 / 22 MAR 10

Applicable to: ALL

## 24-38-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the associated voltage indication is operative on the  $\underline{\sf ELEC}$  SD page.



24-41 - AC External Power Control

24-41-01	Ground Power Control Unit (GPCU)

Ident.: MI-24-41-00008468.0001001 / 19 JUL 12 Applicable to: ALL

1

#### 24-41-01A

Repair interval	Nbr installed	Nbr required	Placard
C	1	0	No

S

May be inoperative.

Note: When the GPCU / GAPCU Ground Power Control function and the APU Generator

are both inoperative, the engines cannot be started.

- Reference(s) -

S

24-41-02	External Power Receptacle

Ident.: MI-24-41-00008471.0001001 / 19 JUL 12

Applicable to: ALL

3

#### 24-41-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

(m) May be inoperative provided that the receptacle is placarded inoperative and not used.

When the GPCU / GAPCU Ground Power Control function and the APU Generator Note: are both inoperative, the engines cannot be started.

Reference(s) -

(m) Refer to AMM 24-41-00-040-001

S



24-41 - AC External Power Control

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 HDA A320/A321 FLEET
 MI-24-41 P 2/2

 MEL
 19 JUL 12



25-07 - Indications on the DOOR/OXY SD page

25-07-01	Passenger Door Slide Permanently Indicated Armed

Ident.: MI-25-07-00008583.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

<u>Note:</u> The correct indication may be recovered by performing the AMM task 52-70-00-040-007.

#### 25-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

(o) One or more may be permanently indicated in the armed position provided that the associated slide is visually checked to be armed before each flight.

Reference(s)

(o) Refer to OpsProc 25-07-01A Passenger Door/Cabin Passenger Door - Emergency Exit Slide Permanently Indicated Armed on the DOOR/OXY SD page

25-07-01	Cabin Passenger Door / Emergency
	Exit Slide Permanently Indicated Armed

Ident.: MI-25-07-00008583.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

Note: The correct indication may be recovered by performing the AMM task 52-70-00-040-007.

#### 25-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	8	0	No

One or more may be permanently indicated in the armed position provided that the associated slide is visually checked to be armed before each flight.

(o) Refer to OpsProc 25-07-01A Passenger Door/Cabin Passenger Door - Emergency Exit Slide Permanently Indicated Armed on the DOOR/OXY SD page



## MEL ITEMS

### 25 - EQUIPMENT/FURNISHINGS

25-07 - Indications on the DOOR/OXY SD page

			ermanently Indicated Not	Armed
	7-00008584.0001001 / 19 JUL B-HSD, B-HSE, B-HSG, B-H	. 12 ISI, B-HSJ, B-HSK, B-HSL, B-HSM, B-	-HSN, B-HSO, B-HSP, B-HSQ, B-HS	R, B-HST, B-H
Note:	The correct indication	n may be recovered by perfo	rming the AMM task 52-70-	00-040-00
25-07-02	2A Associated doo	r considered operative		
	Repair interval	Nbr installed	Nbr required	Placar
	С	4	0	No
	2) The associated sli	de is visually checked to be	armed before each flight.	
	2) The associated sli	de is visually checked to be	armed before each flight.	
	2) The associated sli	de is visually checked to be Reference(s)	armed before each flight.	
(o)		•		rgency Ex
_	Refer to OpsProc 25	Reference(s)	bin Passenger Door - Emer	rgency Exi
(o) P	Refer to OpsProc 25	Reference(s) — -07-02A Passenger Door/Ca	bin Passenger Door - Emer	rgency Exi
_	Refer to OpsProc 25	Reference(s) — -07-02A Passenger Door/Ca	bin Passenger Door - Emer	rgency Ex
P	Refer to OpsProc 25 Slide Permanently In	Reference(s) — -07-02A Passenger Door/Ca	bin Passenger Door - Emer	rgency Ex
P 25-07-02	Refer to OpsProc 25 Slide Permanently In	Reference(s) — -07-02A Passenger Door/Ca dicated Not Armed on the Do	bin Passenger Door - Emer	gency Exi

- Reference(s) -

Refer to Item 52-10-01 Cabin Passenger Door

P



25-07 - Indications on the DOOR/OXY SD page

25-07-02	Cabin Passenger Door / Emergency Exit
	Slide Permanently Indicated Not Armed

Ident.: MI-25-07-00008584.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

Note: The correct indication may be recovered by performing the AMM task 52-70-00-040-007.

### 25-07-02A Associated door considered operative

Repair interval	Nbr installed	Nbr required	Placard
С	8	0	No

Р

- (o) One or more may be permanently indicated in the not armed position provided that:
  - 1) The aircraft is not operated at night, and
  - 2) The associated slide is visually checked to be armed before each flight.

— Reference(s) —

(o) Refer to OpsProc 25-07-02A Passenger Door/Cabin Passenger Door - Emergency Exit Slide Permanently Indicated Not Armed on the DOOR/OXY SD page

P

## 25-07-02B Associated door considered inoperative

Repai	r interval	Nbr installed	Nbr required	Placard
	В	8	7	Yes

P

One may be permanently indicated in the not armed position provided that the associated door is considered inoperative.

Refer to Item 52-10-01 Cabin Passenger Door



Р



## MEL ITEMS

#### 25 - EQUIPMENT/FURNISHINGS

25-07 - Indications on the DOOR/OXY SD page

25-07-03 Overwing Emergency Exit Slide Permanently Indicated Armed

Ident.: MI-25-07-00008585.0001001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

Note: The correct indication may be recovered by performing the AMM task 52-70-00-040-007.

#### 25-07-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No



(m) One or both may be permanently indicated in the armed position provided that the associated slide is visually checked to be armed before the first flight of the day.

Reference(s)

(m) Refer to AMM 52-70-00-040-008

S

25-07-04 Overwing Emergency Exit Slide	Permanently Indicated Not Armed
--	---------------------------------

Ident.: MI-25-07-00008586.0001001 / 19 JUL 12

4 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

Note: The correct indication may be recovered by performing the AMM task 52-70-00-040-007.

## 25-07-04A Overwing emergency exits considered operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No



- (m) One or both may be permanently indicated in the not armed position provided that:
  - 1) The aircraft is not operated at night, and
  - 2) The associated slide is visually checked to be armed before the first flight of the day.



25-07 - Indications on the DOOR/OXY SD page

	- Reference(s) -	Continued from the previous page
(m) Refer to AMM 52-70-00-040-009	)	
-07-04B Overwing Emergency exit	s considered inoperative	

-	Repair interval	Nbr installed	Nbr required	Placard
	В	2	1	Yes
E	2		,	

One may be permanently indicated in the not armed position provided that both overwing emergency exits on the same side are considered inoperative. Refer to Item 52-10-02 Overwing Emergency Exit - Reference(s) -

Р



25-07 - Indications on the DOOR/OXY SD page

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 HDA A320/A321 FLEET
 MI-25-07 P 6/6

 MEL
 19 JUL 12



25-11 - Pilot Seats

25-11-01	Pilot Seat Manual Horizontal Adjustment

Ident.: MI-25-11-00008481.0001001 / 22 MAR 10

Applicable to: ALL

#### 25-11-01A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

25-11-02 Pilot Seat Manual Vertical Adjustment
--

Ident.: MI-25-11-00008483.0001001 / 29 NOV 11

Applicable to: ALL

## 25-11-02A Associated electrical control operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

One or both may be inoperative p	provided that the associated	d electrical control is operative
----------------------------------	------------------------------	-----------------------------------

Reference(s)

S

## 25-11-02B Associated electrical control inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

One or both may be inoperative provided that the seating position is acceptable to the affected pilot.

Reference(s)

S



25-11 - Pilot Seats

25-11-03	Pilot Seat Recline Adjustment

Ident.: MI-25-11-00008487.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-11-03A

ſ	Repair interval	Nbr installed	Nbr required	Placard
Γ	С	2	0	No

S

(m) One or both may be inoperative provided that the seat is secured in an upright position acceptable to the affected pilot.

- Reference(s) -

(m) Refer to AMM 25-11-00-040-001

S

25-11-04	Pilot Seat Other Manual Adjustments
----------	-------------------------------------

Ident.: MI-25-11-00008507.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-11-04A

ĺ	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	-	0	No

One or more may be inoperative provided that the seating position is acceptable to the affected pilot.



25-11 - Pilot Seats

25-11-05	Pilot Seat Electrical Adjustment
----------	----------------------------------

Ident.: MI-25-11-00008508.0001001 / 29 NOV 11

Applicable to: ALL

### 25-11-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(m) One or both may	y be inoperative	provided the	at the electric	cal adjustment	of the	associated
seat is deactivat	ed.					

- Reference(s) ----

(m) Refer to AMM 25-11-00-040-002

S

25-11-06	Pilot Seat Shoulder Harness and Lap Strap
----------	---

Ident.: MI-25-11-00008514.0001001 / 29 NOV 11

Applicable to: ALL

### 25-11-06A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

25-11-07	Pilot Seat Fifth Strap
----------	------------------------

Ident.: MI-25-11-00008515.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-11-07A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o) One or both may be inoperative.



25-11 - Pilot Seats

Continued fron	n the previous	s page

(o) Refer to OpsProc 25-11-07A Pilot Seat Fifth Strap

25-11-08	Pilot Sidestick Armrest Height Adjustment
	1 / 00 MAD 10

Ident.: MI-25-11-00008517.0001001 / 22 MAR 10 Applicable to: ALL

### 25-11-08A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative provided that the associated armrest position is acceptable to the affected crewmember.

25-11-09	Pilot Sidestick Armrest Pitch Adjustment

Ident.: MI-25-11-00008518.0001001 / 22 MAR 10

Applicable to: ALL

#### 25-11-09A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative provided that the associated armrest position is acceptable to the affected crewmember.

25-11-10	Pilot Sidestick Armrest Memory Position Display	

Ident.: MI-25-11-00008519.0001001 / 22 MAR 10

Applicable to: ALL

#### 25-11-10A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



25-11 - Pilot Seats

25-11-11	Pilot Inboard Armrest Vertical Adjustment
----------	---

Ident.: MI-25-11-00008520.0001001 / 22 MAR 10

Applicable to: ALL

## 25-11-11A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

25-11-12	Pilot Seat Headrest
----------	---------------------

Ident.: MI-25-11-00008522.0001001 / 29 NOV 11

Applicable to: ALL

## 25-11-12A

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

One or both may be inoperative.



25-11 - Pilot Seats

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 HDA A320/A321 FLEET
 MI-25-11 P 6/6

 MEL
 29 NOV 11



25-12 - Third and Fourth Occupant Seats

25-12-01 Third Occupant Seat
------------------------------

Ident.: MI-25-12-00008524.0001001 / 29 NOV 11

Applicable to: ALL

### 25-12-01A Seat stowed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the seat is in its stowed position.

#### 25-12-01B Seat removed

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

S

(m)	Mav	he	ren	าดเ	ıed
1 I I I I I	iviav	nc	1611	IUV	cu.

(m) Refer to AMM 25-11-00-040-003

S

25-12-02	Third Occupant Seat Shoulder Harness

Ident.: MI-25-12-00008525.0001001 / 22 MAR 10

Applicable to: ALL

#### 25-12-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the seat is not occupied during takeoff and landing.



#### MEL ITEMS

### 25 - EQUIPMENT/FURNISHINGS

25-12 - Third and Fourth Occupant Seats

25-12-03	Lap Strap

Ident.: MI-25-12-00008527.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-12-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that:

- 1) The seat is placarded inoperative, and
- 2) The seat is not occupied.

25-12-04	Third Occupant Seat Fifth Strap
	4 / 00 NOV 44

Ident.: MI-25-12-00008528.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-12-04A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

0			oera	

Reference(s)

(o) Refer to OpsProc 25-12-04A Third Occupant Seat Fifth Strap

25-12-05	Fourth Occupant Seat

Ident.: MI-25-12-00008529.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-12-05A Seat stowed

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative provided that the seat is in its stowed position.



25-12 - Third and Fourth Occupant Seats

Continued from the previous page

### 25-12-05B Seat removed

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

S

(	m	) May	be	removed.
---	---	-------	----	----------

Reference(s)

(m) Refer to AMM 25-11-00-040-004

S

25-12-06	Fourth Occupant Seat Shoulder Harness
----------	---------------------------------------

Ident.: MI-25-12-00008531.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-12-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the seat is not occupied during takeoff and landing.

25-12-07	Fourth Occupant Seat Lap Strap

Ident.: MI-25-12-00008532.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-12-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that:

- 1) The seat is placarded inoperative, and
- 2) The seat is not occupied.



## MEL ITEMS

#### 25 - EQUIPMENT/FURNISHINGS

25-12 - Third and Fourth Occupant Seats

25-12-08 Fourth Occupant Seat Fifth Strap
---

Ident.: MI-25-12-00008533.0002001 / 29 NOV 11

May be ineperative

Applicable to: ALL

### 25-12-08A

(0)

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

(0)	way be moperative.	
		Reference(s)

(o) Refer to OpsProc 25-12-08A Fourth Occupant Seat Fifth Strap



25-13 - Lining and Furnishings

i iii ii ii ii ii ii ii ii ii ii ii ii	25-13-01	Pilot Sliding Table
--	----------	---------------------

Ident.: MI-25-13-00008535.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-13-01A Table stowed

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

One or both may be inoperative in its stowed position.

#### 25-13-01B Table removed

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

S

m	One	or hoth	may he	removed.
un		טו טטנוו	Illav be	removed.

- Reference(s) -

(m) Refer to AMM 25-13-00-040-001

S

25-13-02	Pilot Retractable Footrest
20 10 02	i not rictionable i obticat

Ident.: MI-25-13-00008536.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-13-02A Footrest stowed

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

One or more may be inoperative in its stowed position.

#### 25-13-02B Footrest removed

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

S

(m) One or more may be removed.



25-13 - Lining and Furnishings

I I		
	—— Reference(s) ————	Continued from the previous page
(m) Refer to AMM 25-13-00-040-	( )	
S		



25-20 - Cabin Seats

	25-20-01-51	Passenger Seat Backs
--	-------------	----------------------

Ident.: MI-25-20-00008538.0001001 / 04 APR 12

Applicable to: ALL

Note:

- 1. A seat position with an inoperative seat belt is considered inoperative.
- 2. Inoperative seats do not affect the required number of Flight Attendants.

#### 25-20-01-51A

F	Repair interval	Nbr installed	Nbr required	Placard
	С	-	-	Yes

Z

May be inoperative in other than the upright position provided that:

- 1) Does not block an Emergency Exit, and
- 2) Does not restrict any passenger access to the main aircraft aisle, and
- 3) The affected seat(s) is blocked and placarded "DO NOT OCCUPY", and
- 4) May not be occupied by a Flight Attendant moved due to an inoperative cabin crew seat.

Reference(s)

Z

25-20-01-52	Passenger Seat - Recline Mechanism		
Ident : MI-25-20-20801378 9001001 / 29 NOV 11			

Applicable to: ALL

Note:

- 1. A seat position with an inoperative seat belt is considered inoperative.
- 2. Inoperative seats do not affect the required number of Flight Attendants.



25-20 - Cabin Seats

Continued from the previous page

#### 25-20-01-52A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

Z

May be inoperative and the seat occupied provided that the seat is secured in the upright position.

Reference(s)

Z

25-20-01-53	Passenger Seat - Underseat Baggage Restraining Bars	
Hont - MI 25 20 20801706 0001001 / 20 NOV 11		

dent.: MI-25-20-20801706.9001001 / 29 NOV 11

Applicable to: ALL

Note: 1. A seat position with an inoperative seat belt is considered inoperative.

2. Inoperative seats do not affect the required number of Flight Attendants.

#### 25-20-01-53A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes



May be inoperative provided that:

- 1) Baggage is not stowed under the seat with inoperative restraining bar, and
- 2) Associated seat(s) is placarded "DO NOT STOW BAGGAGE UNDER THIS SEAT", and
- 3) Procedures are established to alert Cabin Crew of inoperative restraining bar.

Reference(s)	
--------------	--

Z



25-20 - Cabin Seats

25-20-01-54	Passenger Seat - Armrests

Ident.: MI-25-20-20801715.9001001 / 29 NOV 11

Applicable to: ALL

Note:

- 1. A seat position with an inoperative seat belt is considered inoperative.
- 2. Inoperative seats do not affect the required number of Flight Attendants.

#### 25-20-01-54A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

Z

May be damaged or missing and seat any be occupied provided that the following actions are performed:

- 1) Damaged parts are safely secured, and
- 2) If damage renders the seat unsafe, placard the seat as "DO NOT OCCUPY".

Doforopoo(s)	
Helefelle(S)	

Z

25-20-01-55	Passenger Seat - Foot Rest/Leg Rest	
N. N. 05 00 00001714 0001001 / 00 NOV 11		

Ident.: MI-25-20-20801714.9001001 / 29 NOV 11

Applicable to: ALL

Note:

- 1. A seat position with an inoperative seat belt is considered inoperative.
- 2. Inoperative seats do not affect the required number of Flight Attendants.



25-20 - Cabin Seats

Continued from the previous page

#### 25-20-01-55A

	Repair interval	Nbr installed	Nbr required	Placard
ſ	C	-	-	No

Z

May be damaged or missing provided:

- 1) Foot rest/Leg rest does not block an emergency exit, and
- 2) Foot rest/Leg rest does not restrict any passenger access to the aisle.

 Reference(s) -	
1101010100(3)	

Z

25-20-01-56	Passenger Seat - Headrest
Idont : MI 25 20 20801713 000100	1 / 20 NOV 11

dent.: MI-25-20-20801713.9001001 / 29 NOV 11

Applicable to: ALL

Note:

- 1. A seat position with an inoperative seat belt is considered inoperative.
- 2. Inoperative seats do not affect the required number of Flight Attendants.

### 25-20-01-56A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No



May be damaged or missing.

Z



25-20 - Cabin Seats

25-20-01-57	Passenger Seat - Meal Tray

Ident.: MI-25-20-20801712.9001001 / 29 NOV 11

Applicable to: ALL

Note:

- 1. A seat position with an inoperative seat belt is considered inoperative.
- 2. Inoperative seats do not affect the required number of Flight Attendants.

#### 25-20-01-57A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

Z

May be damaged and the seat may be occupied provided that the table is safe for normal usage.

Reference(s)

Z

25-20-01-58	Passenger Seat - Seat Electrical/Electronic Systems/Components
-------------	--

Ident.: MI-25-20-20801711.9001001 / 29 NOV 11

Applicable to: ALL

Note:

- 1. A seat position with an inoperative seat belt is considered inoperative.
- 2. Inoperative seats do not affect the required number of Flight Attendants.

#### 25-20-01-58A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

Z

May be inoperative and seat may be occupied provided that the following actions are performed:

- 1) Associated system(s) and/or component(s) is/are deactivated, and
- 2) Where appropriate, mechanical back up system operates normally.



25-20 - Cabin Seats

	 Z	Refere	Continued	l from the previous pag –
25-2	20-01-59	Passenger S	Seat - PSU Overhead Reading	Light
	MI-25-20-20801708.9001001	/ 29 NOV 11		
_	•	•	nt belt is considered inoperative. Uired number of Flight Attendant	ts.
Γ	Repair interval	Nbr installed	d Nbr required	Placard
Į	С	-	-	No
	Z			
	May be inopera	ative.		

25-20-01-60	Passenger Seat - In-Seat Personal Reading Light

Reference(s) -

Ident.: MI-25-20-20801710.9001001 / 29 NOV 11

Applicable to: ALL

Note:

Z

1. A seat position with an inoperative seat belt is considered inoperative.

2. Inoperative seats do not affect the required number of Flight Attendants.



25-20 - Cabin Seats

Continued from the previous page

#### 25-20-01-60A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

May be inoperative. Reference(s) -Z

25-20-03	Cabin Attendant Seat

Ident.: MI-25-20-00008540.0001001 / 29 NOV 11

Applicable to: ALL

Note:

A cabin attendant seat with an inoperative or missing seat belt or harness should be considered inoperative.

## 25-20-03A Non required cabin attendant seat

Repair interval	Nbr installed	Nbr required	Placard
D	-	-	Yes

S

(m) One or more non-required cabin attendant seats may be inoperative or not usable provided that the affected seat is secured in its stowed position or removed.

Reference(s) -

(m) Refer to AMM 25-22-00-040-001

S



25-20 - Cabin Seats

Continued from the previous page

### 25-20-03B Required cabin attendant seat

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

S

- (o) (m) One required cabin attendant seat may be inoperative or not usable provided that:
  - 1) The cabin attendant assigned to affected seat occupies a passenger seat as close to or closer than nearest seated passenger to the associated exit, and
  - 2) The passenger seat to be used by cabin attendant is correctly placarded, and
  - 3) The cabin attendant can reach assigned exit and emergency equipment in nearly the same time as from normally assigned seat, and
  - 4) The direct view of passenger cabin by flight attendants is not impaired, and
  - **5)** The affected seat is secured in its stowed position or removed.

Reference(s)
--------------

- (o) Refer to OpsProc 25-20-03B Cabin Attendant Seat
- (m) Refer to AMM 25-22-00-040-001

S



25-35 - Galley Equipment

25-35-01	Galley Waste Compartment Flapper Door

Ident.: MI-25-35-00008543.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-35-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

Z

- (o) (m) One or more may be inoperative or missing provided that:
  - 1) The galley waste compartment is empty, and
  - 2) The associated access is secured in the closed position to prevent waste introduction.

- (o) Refer to OpsProc 25-35-01A Galley Waste Compartment Flapper Door
- (m) Refer to AMM 25-35-00-040-001

Z

25-35-51	Ovens
----------	-------

Ident.: MI-25-35-20801453.9001001 / 29 NOV 11

Applicable to: ALL

#### 25-35-51A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

Z

Multiple Ovens (3 or more) may be inoperative in one galley.

Z



25-35 - Galley Equipment

25-35-52	Beverage Makers	
15-35-52	Beverage Makers	
	ļ.	

Ident.: MI-25-35-20801456.9001001 / 29 NOV 11

Applicable to: ALL

#### 25-35-52A

Repair interval	Nbr installed	Nbr required	Placard
C	-	-	Yes

Z

Multiple Coffee Makers (3 or more) may be inoperative in one galley.

Z

25-35-53	Chiller Unit(s)

Ident.: MI-25-35-20801455.9001001 / 29 NOV 11

Applicable to: ALL

#### 25-35-53A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

Z

Chiller unit may be inoperative in one or more galley zones.

Note: Inform catering staff or IOC of any inoperative chiller unit(s).

Ζ



25-40 - Lavatories

25-40-01 Toilet Waste Compartment Flapper Door
--

Ident.: MI-25-40-00008544.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-40-01A The toilet waste compartment empty

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

S

- (o) (m) One or more may be inoperative or missing provided that:
  - 1) The toilet waste compartment is empty, and
  - 2) The associated access is secured in the closed position to prevent waste introduction.

- (o) Refer to OpsProc 25-40-01A Toilet Waste Compartment Flapper Door
- (m) Refer to AMM 25-40-00-040-001

S

## 25-40-01B The lavatory inoperative

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	-	0	Yes

S

One or more may be inoperative provided associated lavatory is considered inoperative. *Refer to Item 25-40-51 Lavatory* 

Reference(s)



25-40 - Lavatories

25-40-02	Exterior Lavatory Ashtray

Ident.: MI-25-40-00012606.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-40-02A

Repair interval	Nbr installed	Nbr required	Placard
D	-	0	Yes

S

One or more may be damaged or missing provided that the flight is non-smoking.

S

25-40-03	Interior Lavatory Ashtray

Ident.: MI-25-40-00012607.0001001 / 29 NOV 11

Applicable to: ALL

## 25-40-03A Lavatory fire extinguishing system operative

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

S

One or more may be damaged or missing provided that the associated lavatory fire extinguishing system is operative.

S

# 25-40-03B Lavatory locked closed

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

One or more may be damaged or missing provided that the associated lavatory is locked closed and placarded inoperative.



25-40 - Lavatories

25-40-51 Lavatory
-------------------

Ident.: MI-25-40-20801470.9001001 / 29 NOV 11

Applicable to: ALL

#### 25-40-51A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

S

One or more lavatories may be inoperative provided the door is locked and placarded.

Notify IOC. Note: Reference(s) -

S

25-40-53 Lavatory Waste Systems
---------------------------------

Ident.: MI-25-40-20801476.9001001 / 29 NOV 11

Applicable to: ALL

#### 25-40-53A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

S

Individual components may be inoperative provided that the following actions are performed:

- 1) Associated components are deactivated or isolated, and
- 2) Associated system components are verified not to have any leaks.

Note: Any portion of the system which operates normally may be used.

- Reference(s) -

S

Continued on the following page



25-40 - Lavatories

Continued from the previous page

#### 25-40-53B

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes



Associated lavatory system(s) may be inoperative provided that the following actions are performed:

- 1) Associated components are deactivated or isolated specifically to prevent any leaks, and
- Associated lavatory door is secured closed and placarded as "INOPERATIVE DO NOT ENTER".

Refer to Item 25-40-51 Lavatory, and

3) If required, the associated waste tank is drained.

Note: 1. These provisions are not intended to prohibit periodic inspections by crew members.
2. Check to ensure that there are sufficient lavatories for the intended flight.

. Chook to chould that there are cumotern lavateries for the interial

Reference(s)



25-45 - Cabin Furnishings

25-45-51 Storage Bin(s)/Cabin and Galley Storage Compartments/ Closets

Ident.: MI-25-45-20801486.9001001 / 29 NOV 11

Applicable to: ALL

#### 25-45-51A

Repair interval	Nbr installed	Nbr required	Placard
С	-	1	Yes

Z

May be inoperative provided that:

- 1) The FA1 is briefed to ensure the compartment is not used for storage of emergency equipment, and
- 2) The FA1 is briefed to ensure the affected compartment is not used for storage of any item(s) except for those permanently affixed, and
- 3) The inoperative bin(s) or compartment(s) or closet(s) are secured closed.

<u>ivote:</u>	ir no partitions are installed in the overnead storage bin, the entire compartment must be considered as one bin.
	Reference(s)

Z



# MEL ITEMS 25 - EQUIPMENT/FURNISHINGS 25-45 - Cabin Furnishings

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HDA A320/A321 FLEET MI-25-45 P 2/2 MEL 29 NOV 11



25-50 - Cargo Compartments

Ident.: MI-25-50-00008548.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-50-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

One or more may be damaged or missing provided that the associated cargo compartment is empty or does not contain flammable or combustible materials.

Reference(s)

S

25-50-03	Sidewall Linings and Ceiling Panels in the Cargo Compartments
----------	---

Ident.: MI-25-50-00008550.0001001 / 29 NOV 11

Applicable to: ALL

## 25-50-03A Damaged panel

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

One or more may be damaged provided that the associated cargo compartment is empty or does not contain flammable or combustible materials.

Reference(s)

S

# 25-50-03B Missing panel

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

One or more may be missing provided that the associated cargo compartment is empty.

\*\*Continued on the following page\*\*



25-50 - Cargo Compartments

D-f(-)	Continued from the previous page

25-50-04 Cargo Compartment Restraint Components (Nets, Attach Points, Stanchions)

Ident.: MI-25-50-00008551.0001001 / 29 NOV 11

Applicable to: ALL

S

#### 25-50-04A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	No

Refer to Weight and Balance Manual.

25-50-51	Cargo Valuables Locker
	•

Ident.: MI-25-50-20801492.9001001 / 29 NOV 11

Applicable to: ALL

#### 25-50-51A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

S

May be inoperative.

Reference(s)



25-62 - Cabin Escape Facilities

	25-62-01	Cabin Passenger Door Slide or Slide Raft
--	----------	--

Ident.: MI-25-62-00008553.0001001 / 29 NOV 11

Applicable to: ALL

## 25-62-01A Slide inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	Yes

Р

Р

One may be inoperative provided that the associated door is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

## 25-62-01B Slide removed

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	Yes

Р

(m) One may be removed provided that the associated door is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

(m) Refer to AMM 52-10-00-040-001

P



25-62 - Cabin Escape Facilities

25-62-02	Overwing Emergency Exit Slide or Slide Raft
	•

Ident.: MI-25-62-00008555.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 25-62-02A Slide inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	2	1	Yes



One may be inoperative provided that the associated overwing emergency exit is considered inoperative.

Refer to Item 52-10-02 Overwing Emergency Exit

<u>Note:</u> When an overwing escape slide is inoperative, both emergency exits on the same side are considered inoperative.

Reference(s) —



#### 25-62-02B Slide removed

Repair interval	Nbr installed	Nbr required	Placard
В	2	1	Yes



(m) One may be removed provided that the associated overwing emergency exit is considered inoperative.

Refer to Item 52-10-02 Overwing Emergency Exit

<u>Note:</u> When an overwing escape slide is inoperative, both emergency exits on the same side are considered inoperative.

- Reference(s) -

(m) Refer to AMM 25-62-00-040-006

P



25-62 - Cabin Escape Facilities

25-62-03 Emergency Exit Slide or Slide Raft	
---	--

Ident.: MI-25-62-00008556.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## 25-62-03A Slide Inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	Yes



One may be inoperative provided that the associated emergency exit is considered inoperative.

Refer to Item 52-10-01 Cabin Passenger Door





#### 25-62-03B Slide Removed

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	Yes

P

(m) One may be removed provided that the associated emergency exit is considered inoperative.

Refer to Item 52-10-01 Cabin Passenger Door



(m) Refer to AMM 25-62-00-040-007





25-62 - Cabin Escape Facilities

25-62-04	SLIDE ARMED light

Ident.: MI-25-62-00008557.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSR, B-HSR, B-HST, B-HSU

#### 25-62-04A

Repair interval	Nbr installed	Nbr required	Placard
С	6	0	Yes

One or more may be inoperative.

25-62-04 SLIDE ARMED light
----------------------------

Ident.: MI-25-62-00008557.0004001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 25-62-04A

Repair interval	Nbr installed	Nbr required	Placard
С	8	0	Yes

One or more may be inoperative.

05 00 00	December Desir CLIDE DDECC LOW Message on
25-62-06	Passenger Door SLIDE PRESS LOW Message on
	Programming and Test Panel (PTP) STATUS Page

Ident.: MI-25-62-00008563.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

#### 25-62-06A

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

S

(m) One or more messages may be displayed provided that the slide bottle pressure is checked before the first flight under this item.

(m) Refer to AMM 25-62-00-040-008



25-62 - Cabin Escape Facilities

25-62-06	Passenger Door SLIDE PRESS LOW Message on
	Programming and Test Panel (PTP) STATUS Page

Ident.: MI-25-62-00008563.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## 25-62-06A

Repair interval	Nbr installed	Nbr required	Placard
D	8	0	No

S

(m) One or more messages may be displayed provided that the slide bottle pressure is chec	ked
before the first flight under this item.	

(m) Refer to AMM 25-62-00-040-008

S

25-62-06	Passenger Door CHECK SLIDE PRESSURE
	Message on Flight Attendant Panel (FAP)

Ident.: MI-25-62-00008563.0002001 / 19 JUL 12

3 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 25-62-06A

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

S

(m)	One or more	messages ma	y be dis	splayed	provided	that the	slide	bottle	pressure	is o	checked
	before the fire	st flight under	this iten	١.							

Reference(s) -

(m) Refer to AMM 25-62-00-040-009



25-62 - Cabin Escape Facilities

25-62-07

Overwing Emergency Exit SLIDE PRESS LOW Message on Programming and Test Panel ( PTP ) STATUS Page

Ident.: MI-25-62-00008565.0008001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

#### 25-62-07A Check of the slide bottle pressure

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

S

(m) One or both messages may be displayed provided that the associated slide bottle pressure is checked before the first flight of each day.

Reference(s)

(m) Refer to AMM 25-62-00-040-001

S

## 25-62-07B Overwing emergency exits considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	2	1	Yes

Р

One message may be displayed provided that both overwing emergency exits on the same side are considered inoperative.

Refer to Item 52-10-02 Overwing Emergency Exit



Р



25-62 - Cabin Escape Facilities

25-62-07	Overwing Emergency Exit CHECK SLIDE PRESSURE  Message on Flight Attendant Panel (FAP)
	,

Ident.: MI-25-62-00008565.0005001 / 19 JUL 12

4 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 25-62-07A Check of the slide bottle pressure

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

S

(m) One or both messages may be displayed provided that the associated slide bottle pressure is checked before the first flight of each day.	ıre
(m) Refer to AMM 25-62-00-040-005	

S

# 25-62-07B Overwing emergency exits considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	2	1	Yes

Ρ

One message may be displayed provided that both overwing emergency exits on the same side are considered inoperative.

Refer to Item 52-10-02 Overwing Emergency Exit

- Reference(s)

P

HDA A320/A321 FLEET MI-25-62 P 7/8

MEL Н 19 JUL 12



25-62 - Cabin Escape Facilities

25-62-08	Overwing Escape Life Line

Ident.: MI-25-62-00008567.0001001 / 19 JUL 12

5 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSK, B-HSN, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

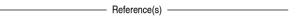
## 25-62-08A Associated overwing emergency exit considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	Yes



One may be inoperative or missing provided that the associated overwing emergency exit is considered inoperative.

Refer to Item 52-10-02 Overwing Emergency Exit





# 25-62-08B Non extended overwater flight

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

One or more may be inoperative or missing provided that extended overwater flight is not conducted.

HDA A320/A321 FLEET MI-25-62 P 8/8
MEL I 19 JUL 12



25-63 - Evacuation Signaling Equipment

25-63-01	Emergency Evacuation Signaling System (COMMAND
	pb-sw, HORN SHUT OFF pb, CAPT&PURS and CAPT sw)

Ident.: MI-25-63-00008568.0001001 / 29 NOV 11

May be inoperative.

Applicable to: ALL

## 25-63-01A

(o)

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

	Reference(s)
(o)	Refer to OpsProc 25-63-01A Emergency Evacuation Signaling System (COMMAND pb-sw HORN SHUT OFF pb, CAPT&PURS and CAPT sw)



## **MEL ITEMS**

## 25 - EQUIPMENT/FURNISHINGS

25-63 - Evacuation Signaling Equipment

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HDA A320/A321 FLEET MI-25-63 P 2/2 MEL 29 NOV 11



25-64 - First Aid Equipment

Ident.: MI-25-64-00008569.0001001 / 29 NOV 11

Applicable to: ALL

## 25-64-01A

Repair interval	Nbr installed	Nbr required	Placard
A	2	1	No

Z

One may be missing or partially used for 2 calendar days.	

Z

25-64-02	Emergency Medical Kit

- Reference(s) -

Ident.: MI-25-64-00008570.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-64-02A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

Z

May be missing or partially used.

Reference(s)

Z



# MEL ITEMS 25 - EQUIPMENT/FURNISHINGS 25-64 - First Aid Equipment

Intentionally left blank

HDA A320/A321 FLEET MI-25-64 P 2/2 MEL 29 NOV 11



25-65 - Emergency Equipment

	25-65-01	Cockpit Flashlight
--	----------	--------------------

Ident.: MI-25-65-00008574.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-65-01A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

05.05.00	A 11 Ft 18 1
25-65-02	Cabin Flashlight

Ident.: MI-25-65-00008576.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

#### 25-65-02A

Repair interval	Nbr installed	Nbr required	Placard
С	6	-	No

One operative unit required for each cabin crew member.

25-65-02	Cabin Flashlight
----------	------------------

Ident.: MI-25-65-00008576.9001002 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 25-65-02A

Repair interval	Nbr installed	Nbr required	Placard
С	9	1	No

One operative unit required for each cabin crew member.



25-65 - Emergency Equipment

25-65-03	Crash Axe/Crowbar

Ident.: MI-25-65-00008577.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-65-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be damaged or missing.

25-65-04	Emergency Locator Transmitter (ELT)

Ident.: MI-25-65-00008578.0001001 / 04 APR 12

Applicable to: ALL

#### 25-65-04A

Repair interval	Nbr installed	Nbr required	Placard
Α	2	0	No



One or both may be inoperative for a maximum of 6 sectors or 25 flight hours, whichever occurs first.

Reference(s) -	

S

25-65-05	Fireproof Gloves

Ident.: MI-25-65-00008579.0001001 / 29 NOV 11

Applicable to: ALL

#### 25-65-05A

Repair interval	Nbr installed	Nbr required	Placard	
С	1	0	No	

May be damaged or missing.



25-65 - Emergency Equipment

25-65-06	Megaphone
	_ ·

Ident.: MI-25-65-00008580.0001001 / 29 NOV 11

Applicable to: ALL

## 25-65-06A

Repair interval	Nbr installed	Nbr required	Placard	
_	- 2		No	

Both must be operative.



# MEL ITEMS 25 - EQUIPMENT/FURNISHINGS 25-65 - Emergency Equipment

Intentionally left blank

HDA A320/A321 FLEET MI-25-65 P 4/4
MEL 04 APR 12



25-66 - Floatation and Survival Equipment

25-66-01	Life Vest

Ident.: MI-25-66-00008581.0001001 / 29 NOV 11

Applicable to: ALL

## 25-66-01A

Repair interval	Nbr installed	Nbr required	Placard	
Α	-	-	No	

S

One flotation device is required for each and every person on board.	
Reference(s)	



25-66 - Floatation and Survival Equipment

Intentionally left blank

HDA A320/A321 FLEET MI-25-66 P 2/2 MEL 29 NOV 11



26-00 - MAINTENANCE Message on the STATUS SD page

26-00-01	SDCU <u>MAINTENANCE</u> Message

Ident.: MI-26-00-00008419.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## 26-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

SDCU MAINTENANCE message ma	y be displayed on the $\underline{STATUS}$ SD page.
Re	ference(s) —

S

26-00-01 SMOKE MAINTENANCE Message	
------------------------------------	--

Ident.: MI-26-00-00008419.9001002 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 26-00-01A

Repair interval	Nbr installed	Nbr required	Placard	
С	C –		No	

S

SMOKE	MAINTE	NANCE	message	may b	e disp	layed o	on the	<u>STATUS</u>	SD p	age.

Reference(s)



26-00 - MAINTENANCE Message on the STATUS SD page

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 HDA A320/A321 FLEET
 MI-26-00 P 2/2

 MEL
 19 JUL 12



26-01 - Overhead Panels 26-01-01 - FIRE Overhead Panel

26-01-01-01	Bulb/LED in the ENG FIRE-PUSH pb-sw

Ident.: MI-26-01-01-00008447.0001001 / 22 MAR 10

Applicable to: ALL

#### 26-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	16	8	No

A maximum of four bulbs or LEDs may be inoperative in each ENG FIRE-PUSH pb-sw.

26-01-01-02	ENG AGENT pb DISCH light

Ident.: MI-26-01-01-00008450.0001001 / 19 JUL 12

Applicable to: ALL

## 26-01-01-02A One inoperative on each engine

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	Yes

S

(m) One may be inoperative on each engine provided that the associated fire extinguisher both	ttle
is checked before the first flight of each day.	

Reference(s)

(m) Refer to AMM 26-21-00-040-001

S

# 26-01-01-02B Both inoperative on one engine

Repair interval	Nbr installed	Nbr required	Placard
Α	4	2	Yes

S

(m) Both may be inoperative on one engine for a maximum of 4 sectors or 15 flight hours, whichever occurs first, provided associated bottles pressures are checked before each flight.

Continued on the following page



26-01 - Overhead Panels 26-01-01 - FIRE Overhead Panel

	Continued from the previous page
Reference(s)	

(m) Refer to AMM 26-21-00-040-001

26-01-01-03	ENG AGENT pb SQUIB light
Ident · MI-26-01-01-00008451 000	001 / 29 NOV 11

Applicable to: ALL

#### 26-01-01-03A

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	4	0	Yes

S

(m) One or more may be inoperative provided that the engine extinguishing system firing circuit is checked operative before the first flight of each day.

- Reference(s) -

(m) Refer to AMM 26-21-00-040-003

S

26-01-01-04	Bulb/ LED in the APU FIRE-PUSH pb-sw
-------------	--------------------------------------

Ident.: MI-26-01-01-00008452.0001001 / 29 NOV 11

Applicable to: ALL

# 26-01-01-04A A maximum of four bulbs or LED s inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	8	4	No

A maximum of four bulbs or LED s may be inoperative.

Continued on the following page



26-01 - Overhead Panels 26-01-01 - FIRE Overhead Panel

Continued from the previous page

## 26-01-01-04B Five or more bulbs or LED s inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	8	0	No

Five or more bulbs or LED s may be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) The APU is deactivated. Refer to Item 49-10-01C Power Plant (APU)

26-01-01-05	APU AGENT pb DISCH light
I-I	004 / 00 NOV 44

ldent.: MI-26-01-01-00008453.0001001 / 29 NOV 11

Applicable to: ALL

## 26-01-01-05A Check of bottle pressure

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(m) May be inoperative provided that the APU fire extinguisher bottle is checked before the first flight of each day.
Reference(s)

(m) Refer to AMM 26-22-00-040-004

S

#### 26-01-01-05B APU deactivated

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

May be inoperative provided that the APU is deactivated. Refer to Item 49-10-01C Power Plant (APU)

- Reference(s) -



26-01 - Overhead Panels 26-01-01 - FIRE Overhead Panel

26-01-01-06	APU AGENT pb SQUIB light

Ident.: MI-26-01-01-00008454.0001001 / 29 NOV 11

Applicable to: ALL

# 26-01-01-06A Check of APU extinguishing system firing circuit

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

(m) May be inoperative provided that the APU extinguishing system firing circuit is checked operative before the first flight of each day.
(m) D-f t- AMM 00 00 00 040 005

(m) Refer to AMM 26-22-00-040-005

S

## 26-01-01-06B APU deactivated

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

May be inoperative provided that the APU is deactivated.	
Refer to Item 49-10-01C Power Plant (APU)	
,	



26-01 - Overhead Panels 26-01-01 - FIRE Overhead Panel

26-01-01-31	ENG FIRE TEST pb

Ident.: MI-26-01-01-00008455.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-01-01-31A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

(m)	One may be inoperative prov	ded that the	associated	engine fire	extinguishing	and detection
	systems are checked operation	e before the	first flight o	f each day.		

Reference(s) -

(m) Refer to AMM 26-21-00-040-002

S

26-01-01-32	APU FIRE TEST pb
-------------	------------------

Ident.: MI-26-01-01-00008456.0001001 / 29 NOV 11

Applicable to: ALL

# 26-01-01-32A Daily check

Repair interval	Nbr installed Nbr required		Placard
С	1	0	Yes

S

(m) May be inoperative provided that the APU extinguishing system firing circuit and the bottle low pressure detection system are checked operative before the first flight of each day.

- Reference(s) -

(m) Refer to AMM 26-22-00-040-012

Continued on the following page

MEL G to  $H \rightarrow$ 



26-01 - Overhead Panels 26-01-01 - FIRE Overhead Panel

Continued from the previous page

#### 26-01-01-32B APU deactivated

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

May be inoperative provided that the APU is deactivated. Refer to Item 49-10-01C Power Plant (APU)

S

26-01-01-33 APU FIRE PUSH pb-sw
---------------------------------

Ident.: MI-26-01-01-00008459.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-01-01-33A

Repair interval	Repair interval Nbr installed		Placard
С	1	0	Yes

S

May be inoperative provided that the APU is deactivated.

Refer to Item 49-10-01C Power Plant (APU)



26-01 - Overhead Panels 26-01-01 - FIRE Overhead Panel

26-01-01-34 APU AGENT pb
--------------------------

Ident.: MI-26-01-01-00008461.0001001 / 29 NOV 11

Applicable to: ALL

### 26-01-01-34A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



May be inoperative provided that the APU is deactivated.	
Refer to Item 49-10-01C Power Plant (APU)	

Reference(s)





26-01 - Overhead Panels 26-01-01 - FIRE Overhead Panel

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 HDA A320/A321 FLEET
 MI-26-01-01 P 8/8

 MEL
 19 JUL 12



26-01 - Overhead Panels 26-01-02 - CARGO SMOKE Overhead Panel

26-01-02-01	CARGO SMOKE DISCH light

Ident.: MI-26-01-02-00008467.0001001 / 29 NOV 11

Applicable to: ALL

### 26-01-02-01A Check of bottle weight

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

S

(m) May be inoperative provided that t flight of each day.	he associate	d bottle weight is checked before the first
	Reference(s)	
(m) Refer to AMM 26-23-00-040-001		

# 26-01-02-01B Associated bottle considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

S

May be inoperative provided that the associated bottle is considered inoperative
Refer to Item 26-23-01 Cargo Agent Bottle

Reference(s)



26-01 - Overhead Panels 26-01-02 - CARGO SMOKE Overhead Panel

26-01-02-02 CARGO SMOKE DISCH AGENT 2 light
---

Ident.: MI-26-01-02-00008469.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 26-01-02-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



May be inoperative provided that the agent bottle 2 is considered inoperative.
Refer to Item 26-23-01 Cargo Agent Bottle



26-12 - Engine Fire and Overheat Detection

26-12-01	Engine Fire Detection Loop A on the Engine 1
----------	--

Ident.: MI-26-12-00008470.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-12-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

May be inoperative provided that:

- 1) ETOPS beyond 120 min is not conducted, and
- 2) The associated detection loop B is operative, and
- 3) The engine fire test is made before each flight.

Reference(s)

S

26-12-02	Engine Fire Detection Loop A on the Engine 2
----------	--

Ident.: MI-26-12-00008473.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-12-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

May be inoperative on each engine provided that:

- 1) The associated detection loop B is operative, and
- 2) The engine fire test is made before each flight.



26-12 - Engine Fire and Overheat Detection

26-12-03 Engine Fire Detection Loop B on the Engine 1
---

Ident.: MI-26-12-00008476.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-12-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

May be inoperative provided that the engine fire test is made before each flight.

Reference(s)

S

26-12-04	Engine Fire Detection Loop B on the Engine 2
----------	--

Ident.: MI-26-12-00008478.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-12-04A

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	1	0	No

S

May be inoperative provided that:

- 1) ETOPS beyond 120 min is not conducted, and
- 2) The engine fire test is made before each flight.

Poforonoo(c)	



26-12 - Engine Fire and Overheat Detection

26-12-05	FIRE light on the ENG MASTER Panel
----------	------------------------------------

Ident.: MI-26-12-00008480.0001001 / 22 MAR 10

Applicable to: ALL

### 26-12-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.



26-12 - Engine Fire and Overheat Detection

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HDA A320/A321 FLEET MI-26-12 P 4/4
MEL 29 NOV 11



MINIMUM EQUIPMENT LIST

#### MEL ITEMS 26 - FIRE PROTECTION

26-13 - APU Fire and Overheat Detection

26-13-01	APU Fire Detection Loop
	<u> </u>

Ident.: MI-26-13-00008482.0001001 / 19 JUL 12

Applicable to: ALL

# 26-13-01A Loop A inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

APU fire detection loop A may be inoperative provided that:

- 1) ETOPS beyond 120 min is not conducted, and
- 2) The APU fire test is made before each APU start, and
- 3) During APU operations on ground, APU condition is continuously monitored in the cockpit.

- Reference(s) -

S

### 26-13-01B Loop B inoperative

	Repair interval	Nbr installed	Nbr required	Placard
Γ	С	2	1	No

S

APU fire detection loop B may be inoperative provided that:

- 1) ETOPS beyond 120 min is not conducted, and
- 2) The APU fire test is made before each APU start.

Reference(s) -

S

Continued on the following page



26-13 - APU Fire and Overheat Detection

Continued from the previous page

# 26-13-01C Both loops inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No



Both loops may be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) The APU is deactivated.

  Refer to Item 49-10-01C Power Plant (APU)

 Reference(s)	
 Reference(s)	



26-15 - Avionics Compartment Smoke Detection

26-15-01	Avionics Smoke Detection System

Ident.: MI-26-15-00008485.0001001 / 29 NOV 11

Applicable to: ALL

### 26-15-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(	0	Ma	v be	ino	perative	provided	that I	ETOP:	S is	not	conducted	d.

Reference(s)

(o) Refer to OpsProc 26-15-01A Avionics Smoke Detection System



26-15 - Avionics Compartment Smoke Detection

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HDA A320/A321 FLEET MI-26-15 P 2/2 MEL 29 NOV 11



MINIMUM EQUIPMENT LIST

#### MEL ITEMS 26 - FIRE PROTECTION

26-16 - Cargo Compartment Smoke Detection

26-16-01	Smoke Detector in the FWD Cargo Compartment

Ident.: MI-26-16-00008486.0003001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

Note:

- 1. Notify CX IOC of any cargo smoke detection system malfunctions.
- 2. Failure of a single detector in the cavity is indicated by a MAINTENANCE message on the STATUS SD page.

Refer to Item 26-00-01 SDCU MAINTENANCE Message

3. Notify IOC of any cargo compartment restrictions.

### 26-16-01A Empty FWD cargo compartment

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

S

Both detectors in the cavity may be inoperative provided that the FWD cargo compartment is empty.

nelelelice(s)	

S

### 26-16-01B Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both detectors in the cavity may be inoperative provided that ETOPS is not conducted.

# 26-16-01D Check of liner integrity

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(m) Both detectors in the cavity may be inoperative provided that the liner integrity in the FWD cargo compartment is checked before each flight.

Continued on the following page



26-16 - Cargo Compartment Smoke Detection

(n  S	n) Refer to AMM	25-50-	Reference(s) — 00-200-806	Continued fror	n the previous pag
6-16-01	ı		Smoke Detector in the	ne FWD Cargo Compartm	ent
	i-16-00008486.000900 to: B-HSO, B-HSP, B-I				
Note:	2. Failure of a the <u>STATUS</u> Refer to Iter	single ( <u>S</u> SD pa n 26-00	ny cargo smoke detection s detector in the cavity is indic age . O-01 SDCU MAINTENANCE argo compartment restrictio	ated by a <u>MAINTENANCE</u> Message	message on
26-16-	01A Empty FV	VD car	go compartment		
	Repair interva		Nbr installed	Nbr required	Placard

#### \_\_\_\_

	-	
,		

S

Both detectors in the cavity may be inoperative provided that the FWD cargo compartment is empty.

Reference(s)

S

# 26-16-01B Non ETOPS flight

D

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both detectors in the cavity may be inoperative provided that ETOPS is not conducted.

Continued on the following page



26-16 - Cargo Compartment Smoke Detection

Continued from the previous page

### 26-16-01D Check of liner integrity

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(m) Both detectors in the cavity may be inoperative provided that the liner integrity in the FWD
cargo compartment is checked before each flight.

Reference(s)

(m) Refer to AMM 25-50-00-200-002A

S

26-16-01	Smoke Detector in the FWD Cargo Compartment
	4 (00 NOV 44

Ident.: MI-26-16-00008486.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

Note:

- 1. Notify CX IOC of any cargo smoke detection system malfunctions.
- 2. Failure of a single detector in the cavity is indicated by a <u>MAINTENANCE</u> message on the <u>STATUS</u> SD page .

Refer to Item 26-00-01 SDCU MAINTENANCE Message

3. Notify IOC of any cargo compartment restrictions.

#### 26-16-01A

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

S

Both detectors in one or both cavities may be inoperative provided that the FWD cargo compartment is empty or does not contain flammable or combustible materials.

<ul><li>Reference(s)</li></ul>	



26-16 - Cargo Compartment Smoke Detection

26-16-02

Smoke Detector in the AFT and the BULK Cargo Compartments

Ident.: MI-26-16-00008488.0003001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM. B-HSN

Note:

- 1. Notify CX IOC of any cargo smoke detection system malfunctions.
- 2. Failure of a single detector in the cavity is indicated by a <u>MAINTENANCE</u> message on the <u>STATUS</u> SD page.

Refer to Item 26-00-01 SDCU MAINTENANCE Message

3. Notify IOC of any cargo compartment restrictions.

#### 26-16-02A No flammable or combustible materials

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No



Both detectors in one or both cavities may be inoperative provided that the AFT and the BULK cargo compartments are empty or do not contain flammable or combustible materials.

- Reference(s)			
	D-f/-		

S

# 26-16-02B Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

Both detectors in one or both cavities may be inoperative provided that ETOPS is not conducted.

### 26-16-02D Check of liner integrity

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No



(m) Both detectors in one or both cavities may be inoperative provided that the liner integrity in the AFT and the BULK cargo compartments is checked before each flight.

Continued on the following page



26-16 - Cargo Compartment Smoke Detection

		Continued from the previous page
	Reference(s)	
(m) Refer to AMM 25-	50-00-200-002A	
S		

26-16-02 Smoke Detector in the AFT and the BULK Cargo Compartments

Ident.: MI-26-16-00008488.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

Note: 1. Notify CX IOC of any cargo smoke detection system malfunctions.

> 2. Failure of a single detector in the cavity is indicated by a MAINTENANCE message on the STATUS SD page.

Refer to Item 26-00-01 SDCU MAINTENANCE Message

3. Notify IOC of any cargo compartment restrictions.

#### 26-16-02A

Repair interval	Nbr installed	Nbr required	Placard
D	6	0	No

S

Both detectors in one or more cavities may be inoperative provided that the AFT and the BULK cargo compartments are empty or do not contain flammable or combustible materials.

- Reference(s) -



26-16 - Cargo Compartment Smoke Detection

26-16-02 Smoke Detector in the AFT and the BULK Cargo Compartments

Ident.: MI-26-16-00008488.0006001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

Note:

- 1. Notify CX IOC of any cargo smoke detection system malfunctions.
- 2. Failure of a single detector in the cavity is indicated by a <u>MAINTENANCE</u> message on the <u>STATUS</u> SD page .

Refer to Item 26-00-01 SDCU MAINTENANCE Message

3. Notify IOC of any cargo compartment restrictions.

#### 26-16-02A No flammable or combustible materials

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No



Both detectors in one or both cavities may be inoperative provided that the AFT and the BULK cargo compartments are empty or do not contain flammable or combustible materials.

- Reference(s) -----

S

# 26-16-02B Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

Both detectors in one or both cavities may be inoperative provided that ETOPS is not conducted.

# 26-16-02D Check of liner integrity

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

S

(m) Both detectors in one or both cavities may be inoperative provided that the liner integrity in the AFT and the BULK cargo compartments is checked before each flight.

Continued on the following page



26-16 - Cargo Compartment Smoke Detection

	D ( /)	Continued from the previous page
	Reference(s)	
/ \ D /		
(m) Refer to AMM 25-50-00-200-806		
S		
<u> </u>		



26-16 - Cargo Compartment Smoke Detection

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 HDA A320/A321 FLEET
 MI-26-16 P 8/8

 MEL
 19 JUL 12



26-17 - Lavatory Smoke Detection

Zavatory Simone Zotostien System	26-17-01	Lavatory Smoke Detection System
----------------------------------	----------	---------------------------------

Ident.: MI-26-17-00008489.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 26-17-01A Associated lavatory fire extinguishing system operative

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

- (o) One or more may be inoperative provided that:
  - 1) The associated lavatory fire extinguishing system is operative, and
  - Absence of smoke in the associated lavatory is checked periodically in accordance with Vol.7 Emergency Procedures.

Deference(e)	
 neierence(s)	·

(o) Refer to OpsProc 26-17-01A Lavatory Smoke Detection System

S

#### 26-17-01B Associated lavatory not used

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

S

- (o) One or more may be inoperative provided that:
  - 1) The associated lavatory waste receptacle is empty, and
  - 2) The associated lavatory door is locked closed and placarded inoperative, and
  - 3) The lavatory is not used for storage or for any other purpose, and
  - 4) Absence of smoke in the associated lavatory is checked periodically in accordance with Vol.7 Emergency Procedures.

Deference(e)	
Reference(s)	•

(o) Refer to OpsProc 26-17-01B Lavatory Smoke Detection System



26-17 - Lavatory Smoke Detection

Lavatory Smoke Detection System	26-17-01	Lavatory Smoke Detection System
---------------------------------	----------	---------------------------------

Ident.: MI-26-17-00008489.0002001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 26-17-01A Associated lavatory fire extinguishing system operative

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

- (o) One or more may be inoperative provided that:
  - 1) The associated lavatory fire extinguishing system is operative, and
  - 2) Absence of smoke in the associated lavatory is checked periodically in accordance with Vol.7 Emergency Procedures.

(o) Refer to OpsProc 26-17-01A Lavatory Smoke Detection System

S

#### 26-17-01B Associated lavatory not used

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

S

- (o) One or more may be inoperative provided that:
  - 1) The associated lavatory waste receptacle is empty, and
  - ${\bf 2)}$  The associated lavatory door is locked closed and placarded inoperative, and
  - 3) The lavatory is not used for storage or for any other purpose, and
  - **4)** Absence of smoke in the associated lavatory is checked periodically in accordance with Vol.7 Emergency Procedures.

(o) Refer to OpsProc 26-17-01B Lavatory Smoke Detection System



26-17 - Lavatory Smoke Detection

26-17-02 Smoke Detection Control Unit ( SDCU )
--

Ident.: MI-26-17-00008490.0007001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

#### 26-17-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



May be inoperative provided that:

- The FWD, AFT and BULK cargo smoke detection systems are considered inoperative, and
- 2) The lavatory smoke detection system is considered inoperative.

  Refer to Item 26-16-01 Smoke Detector in the FWD Cargo Compartment, and

  Refer to Item 26-16-02 Smoke Detector in the AFT and the BULK Cargo Compartments, and

Refer to Item 26-17-01 Lavatory Smoke Detection System

<u>Note:</u>	Failure of a single SDCU channel is indicated by a MAINTENANCE message on
	the <u>STATUS</u> SD page.
	Refer to Item 26-00-01 SDCU MAINTENANCE Message
	Reference(s)



26-17 - Lavatory Smoke Detection

26-17-02 Smoke Detection Control Unit ( SDCU )
--

Ident.: MI-26-17-00008490.0006001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 26-17-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



May be inoperative provided that:

- 1) The FWD, AFT, and BULK cargo compartments are empty or do not contain flammable or combustible materials, and
- 2) The lavatory smoke detection system is considered inoperative. Refer to Item 26-17-01 Lavatory Smoke Detection System

<u>Note:</u>	Failure of a single SDCU channel is indicated by a <u>MAINTENANCE</u> message on
	the <u>STATUS</u> SD page . Refer to Item 26-00-01 SDCU MAINTENANCE Message
	Reference(s)



26-22 - APU Fire Extinguishing

26-22-01	APU Automatic Fire Extinguishing Control on Ground

Ident.: MI-26-22-00008491.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-22-01A APU operations on ground monitored

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

May be inoperative provided that the A	NPU condition is	continuously monitor	ed in the cockpit
during APU operations on ground.			

--- Reference(s) -----

S

#### 26-22-01B APU deactivated

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

May be inoperative provided that the APU is deactivated. Refer to Item 49-10-01C Power Plant (APU)

S

26-22-02	APU Fire Extinguisher Overpressure Indication (Red Disc)
	, , , , , , , , , , , , , , , , , , , ,

Ident.: MI-26-22-00008492.0001001 / 29 NOV 11

Applicable to: ALL

# 26-22-02A APU Fire extinguisher bottle pressure switch operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(m) May be damaged or missing provided that the APU fire extinguisher bottle pressure switch is checked operative before the fist flight of each day.

Continued on the following page

HDA A320/A321 FLEET MI-26-22 P 1/6 MEL A to B  $\rightarrow$  29 NOV 11



### MEL ITEMS 26 - FIRE PROTECTION

26-22 - APU Fire Extinguishing

26-22-02B APU o		d Nbr installed	Nbr required	Placard
C	71 VUI	1	0	Yes
Refer to It	em 49-10-0	01C Power Plant (APU)  Reference(s)		
S				
S 26-22-03		Squib of the APU	Fire Extinguisher Bottl	e
<b>26-22-03</b> Ident.: MI-26-22-00008493.00	01001 / 29 NO	<u> </u>	Fire Extinguisher Bottl	e
		V 11	Fire Extinguisher Bottl	e
26-22-03 Ident.: MI-26-22-00008493.00 Applicable to: ALL	noperative	V 11	Fire Extinguisher Bottl  Nbr required	e Placard
26-22-03 Ident.: MI-26-22-00008493.00 Applicable to: ALL 26-22-03A One in	noperative	V 11		



26-22 - APU Fire Extinguishing

Continued from the previous page

### 26-22-03B Both inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

Both may be inoperative provided that the APU is deactivated.

Refer to Item 49-10-01C Power Plant (APU)

Reference(s)

S

26-22-04	APU Fire Extinguisher Bottle

Ident.: MI-26-22-00008494.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-22-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

May be inoperative provided that the APU is deactivated. Refer to Item 49-10-01C Power Plant (APU)

Reference(s)

S

HDA A320/A321 FLEET MI-26-22 P 3/6
MEL ← C to D 29 NOV 11



26-22 - APU Fire Extinguishing

26-22-05 APU AUTO EXTING TEST pb-sw on the Maintenance Panel

Ident.: MI-26-22-00008495.0001001 / 22 MAR 10

Applicable to: ALL

#### 26-22-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the APU automatic fire extinguishing control on ground is considered inoperative.

Refer to Item 26-22-01 APU Automatic Fire Extinguishing Control on Ground

26-22-06	APU FIRE light on the External Power Panel
Lalant . MIL OC DO DODOO 400 DOD 100	4 / 00 NOV 44

dent.: MI-26-22-00008496.0001001 / 29 NOV 11

Applicable to: ALL

### 26-22-06A APU Automatic fire extinguishing control on ground operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

(m) May be inoperative provided that the APU automatic fire extinguishing control on g	round is
checked operative.	

(m) Refer to AMM 26-22-00-040-010

S

# 26-22-06B APU Automatic fire extinguishing control on ground considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the APU automatic fire extinguishing control on ground is considered inoperative.

Refer to Item 26-22-01 APU Automatic Fire Extinguishing Control on Ground



26-22 - APU Fire Extinguishing

26-22-07 APU SHUT OFF pb on the External Power Panel	
--	--

Ident.: MI-26-22-00008497.0001001 / 29 NOV 11

Applicable to: ALL

### 26-22-07A APU Automatic fire extinguishing control on ground operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

(m) May be inoperative provided that the APU automatic fire extinguishing control on ground checked operative.	d is
Reference(s)	

(m) Refer to AMM 26-22-00-040-011

S

# 26-22-07B APU Automatic fire extinguishing control on ground considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the APU automatic fire extinguishing control on ground is considered inoperative.

Refer to Item 26-22-01 APU Automatic Fire Extinguishing Control on Ground

G



# MEL ITEMS 26 - FIRE PROTECTION 26-22 - APU Fire Extinguishing

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 HDA A320/A321 FLEET
 MI-26-22 P 6/6

 MEL
 29 NOV 11



26-23 - Cargo Compartment Fire Extinguishing

26-23-01	Cargo Agent Bottle

Ident.: MI-26-23-00008498.0009001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

Note:

- 1. Notify CX IOC of any cargo smoke detection system malfunctions.
- 2. Notify IOC of any cargo compartment restrictions.

#### 26-23-01A No flammable or combustible materials

Repa	ir interval	Nbr installed	Nbr required	Placard
	D	2	0	Yes

S

One or both may be inoperative provided that the cargo compartments are empty or do not contain flammable or combustible materials.

Reference(	٥١
nelelelice(	5) ———

S

### 26-23-01B Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

One or both may be inoperative provided that ETOPS is not conducted.

Deference(a)
Reference(s) ——————

S

# 26-23-01D Check of liner integrity

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

(m) One or both may be inoperative provided that the liner integrity in the cargo compartments is checked before each flight.

Continued on the following page



26-23 - Cargo Compartment Fire Extinguishing

Continued from the previous page Reference(s) -(m) Refer to AMM 25-50-00-200-806 S 26-23-01 **Cargo Agent Bottle** Ident.: MI-26-23-00008498.0005001 / 29 NOV 11 Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI 1. Notify CX IOC of any cargo smoke detection system malfunctions. Note: 2. Notify IOC of any cargo compartment restrictions. 26-23-01A No flammable or combustible materials Repair interval Nbr installed Nbr required Placard ח 0 1 Yes S May be inoperative provided that the cargo compartments are empty or do not contain flammable or combustible materials - Reference(s) -S 26-23-01 **Cargo Agent Bottle** 

Note:

Ident.: MI-26-23-00008498.9001002 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

- 1. Notify CX IOC of any cargo smoke detection system malfunctions.
- 2. Notify IOC of any cargo compartment restrictions.
- The cargo smoke detection function is part of CIDS Smoke Detection Function (CIDS-SDF). Refer to Item 23-73-10-01 Smoke Detection Function (CIDS-SDF)

Continued on the following page



26-23 - Cargo Compartment Fire Extinguishing

Continued from the previous page

#### 26-23-01A No flammable or combustible materials

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	Yes

•

One or both may be inoperative provided that the cargo compartments are empty or do not contain flammable or combustible materials.

S

### 26-23-01B Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

One or both may b	e inoperative provide	dthat ETOPS is not conducted.
•		

Reference(s)

S

# 26-23-01D Check of liner integrity

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

(m) One or both may be inoperative	provided that the line	r integrity in the cargo	compartments
is checked before each flight.			

(m) Refer to AMM 25-50-00-200-806

Š



26-23 - Cargo Compartment Fire Extinguishing

	26-23-02	Squib of the Cargo Bottle 1
	Ident.: MI-26-23-00008499.000600	1 / 19 JUL 12
2	Applicable to: B-HSD, B-HSE, B-	HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

Note: Notify CX IOC of any cargo smoke detection system malfunctions.

#### 26-23-02A No flammable or combustible materials

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	Yes

S

One or both may be inoperative provided that the associated cargo compartment is empty or does not contain flammable or combustible materials.

Reference(s)

S

# 26-23-02B Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

One or both may be inoperative provided that ETOPS is not conducted.

Reference(s)

S

# 26-23-02C Check of liner integrity

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

(m) One or both may be inoperative provided that the liner integrity in the associated cargo compartment is checked before each flight.

Continued on the following page



Note:

#### MEL ITEMS 26 - FIRE PROTECTION

26-23 - Cargo Compartment Fire Extinguishing

Continued from the previous page

Continued on the following page

(m) Refer to AMM 25-50-00-200-806 S 26-23-02 Squib of the Cargo Bottle 1 Ident.: MI-26-23-00008499.0005001 / 29 NOV 11 Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI Notify CX IOC of any cargo smoke detection system malfunctions. Note: 26-23-02A No flammable or combustible materials Repair interval Nbr installed Nbr required Placard D 2 Yes S One or both may be inoperative provided that the associated cargo compartment is empty or does not contain flammable or combustible materials. — Reference(s) — S 26-23-03 Squib of the Cargo Bottle 2 Ident.: MI-26-23-00008500.0007001 / 19 JUL 12 3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

Reference(s) -

Notify CX IOC of any cargo smoke detection system malfunctions.



26-23 - Cargo Compartment Fire Extinguishing

Continued from the previous page

#### 26-23-03A No flammable or combustible materials

	Repair interval Nbr install		Nbr required	Placard			
D		2	0	Yes			
S							
	One or both may be ineperative provided that the associated earge compartment is empty						

One or both may be inoperative provided that the associated cargo compartment is empty or does not contain flammable or combustible materials.

S

### 26-23-03B Non ETOPS flight

Repair interval	Repair interval Nbr installed		Placard
С	2	0	Yes

S

One or both may be inoperative provided that ETOPS is not conducted.

Reference(s)

S

### 26-23-03C Check of liner integrity

Repair interval	pair interval Nbr installed		Placard
С	2	0	Yes

S

(m)	One or both	may be i	noperative	provided t	that the	liner in	tegrity	in the	associated	cargo
	compartmer	nt is chec	ked before	each fligh	t.					

(m) Refer to AMM 25-50-00-200-806



26-24 - Portable Fire Extinguisher

26-24-01-01 Portable Fire Extinguisher - Cockpit
--

Ident.: MI-26-24-00008501.0001001 / 29 NOV 11

Applicable to: ALL

#### 26-24-01-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

26 24 01 02	Postoble Five Fytinguisher Cobin
26-24-01-02	Portable Fire Extinguisher - Cabin

Ident.: MI-26-24-20801505.9001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

#### 26-24-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	4	3	No

One may be inoperative.

26-24-01-02	Portable Fire Extinguisher - Cabin
-------------	------------------------------------

Ident.: MI-26-24-20801505.9001002 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 26-24-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	8	7	No

One may be inoperative.



26-24 - Portable Fire Extinguisher

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HDA A320/A321 FLEET MI-26-24 P 2/2 MEL 29 NOV 11



26-25 - Lavatory Fire Extinguishing

26-25-01	Lavatory Waste Bin Fire Extinguishing System
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Ident.: MI-26-25-00008502.0001001 / 29 NOV 11

One or more may be inoperative

Applicable to: ALL

## 26-25-01A

(o)

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

(-)	one or more may be moperature.	
		Reference(s)
(o)	Refer to OpsProc 26-25-01A Lava	ntory Waste Bin Fire Extinguishing System



26-25 - Lavatory Fire Extinguishing

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HDA A320/A321 FLEET MI-26-25 P 2/2 MEL 29 NOV 11



27-00 - MAINTENANCE Messages on the STATUS SD page

27-00-01	F/CTL <u>MAINTENANCE</u> Message

Ident.: MI-27-00-00008295.0001001 / 29 NOV 11

Applicable to: ALL

## 27-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

F/CTL MAINTENANCE message ma	y be displayed on the <u>STATUS</u> SD page.
Re	eference(s) ————

27-00-02	SFCS <u>MAINTENANCE</u> Message

Ident.: MI-27-00-00008296.0001001 / 29 NOV 11

Applicable to: ALL

S

## 27-00-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

SFCS $\underline{\text{MAINTENANCE}}$ message may be displayed on the $\underline{\text{STATUS}}$ SD	page.
--	-------

Reference(s) —

S



27-00 - MAINTENANCE Messages on the STATUS SD page

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HDA A320/A321 FLEET MI-27-00 P 2/2 MEL 29 NOV 11



27-01 - Overhead Panels 27-01-01 - FLT CTL Overhead Panel

27-01-01-01	ELAC pb-sw FAULT light
-------------	------------------------

Ident.: MI-27-01-01-00008297.0001001 / 22 MAR 10

Applicable to: ALL

## 27-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative.

27-01-01-02	ELAC pb-sw OFF light
-------------	----------------------

Ident.: MI-27-01-01-00008298.0001001 / 22 MAR 10

Applicable to: ALL

#### 27-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

27-01-01-03	SEC pb-sw FAULT light

Ident.: MI-27-01-01-00008300.0001001 / 22 MAR 10

Applicable to: ALL

#### 27-01-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	Yes

One may be inoperative.



27-01 - Overhead Panels 27-01-01 - FLT CTL Overhead Panel

27-01-01-04	SEC pb-sw OFF light

Ident.: MI-27-01-01-00008301.0001001 / 22 MAR 10

Applicable to: ALL

## 27-01-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.



27-07 - Indications on SD pages

27-07-01	Aileron Actuator Indication on the <u>F/CTL</u> SD page

Ident.: MI-27-07-00008397.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

One or more may be inoperative.

27-07-02	Aileron Position Indication on the F/CTL SD page
----------	--

Ident.: MI-27-07-00008398.0001001 / 29 NOV 11

Applicable to: ALL

## 27-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(o) One or more may be inoperative provided that the deflection of the affected aileron through each servo-control is visually checked before each flight.

|--|

(o) Refer to OpsProc 27-07-02A Aileron Position Indication on the F/CTL SD page

S

27-07-03	Elevator Actuator Indication on the F/CTL SD page
----------	---

Ident.: MI-27-07-00008399.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-07-03A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

One or more may be inoperative.



27-07 - Indications on SD pages

27-07-04 Elevator Position Indication on the <u>F/CTL</u> SD page
---

Ident.: MI-27-07-00008400.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-07-04A

ſ	Repair interval	Nbr installed	Nbr required	Placard
Γ	С	2	0	No

S

(o) One or both may be inoperative provided that the deflection of the affected elevator is visually checked before each flight.

Reference(s) ——

(o) Refer to OpsProc 27-07-04A Elevator Position Indication on the F/CTL SD page

S

27-07-05	Pitch Trim Position Indication on the <u>F/CTL</u> SD page
----------	--

Ident.: MI-27-07-00008401.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-07-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(o) May be inoperative provided that the pitch trim handwheel and the stabilizer are visually checked to synchronously operate before each flight.

(o) Refer to OpsProc 27-07-05A Pitch Trim Position Indication on the F/CTL SD page

S



27-07 - Indications on SD pages

	27-07-06	Rudder Position Indication on the <u>F/CTL</u> SD page
--	----------	--

Ident.: MI-27-07-00008402.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-07-06A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No

S

(o)	May be inoperative provided that the deflection of the rudder is visually checked before
	each flight.

- Reference(s) -(o) Refer to OpsProc 27-07-06A Rudder Position Indication on the F/CTL SD page

S

27-07-07	Rudder Trim Position Indication on the F/CTL SD page

Ident.: MI-27-07-00008403.0001001 / 29 NOV 11

Applicable to: ALL

## 27-07-07A Rudder trim position indication operative on the center pedestal

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the rudder trim position indication is operative on the center pedestal.

## 27-07-07B Rudder position checked at zero

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the rudder position is checked at zero on the F/CTL SD page before takeoff.



27-07 - Indications on SD pages

27-07-08 Rudder Travel Limiter Position Indication on the <u>F/CTL</u> SD page
--

Ident.: MI-27-07-00008405.0003001 / 19 JUL 12

1 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 27-07-08A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.

27-07-09	ELAC Indication on the <u>F/CTL</u> SD page
Idant - MI 07 07 00000407 000100	1 / 00 MAD 10

Ident.: MI-27-07-00008407.0001001 / 22 MAR 10

Applicable to: ALL

#### 27-07-09A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

27-07-10	SEC Indication on the <u>F/CTL</u> SD page
----------	--

Ident.: MI-27-07-00008410.0001001 / 22 MAR 10

Applicable to: ALL

## 27-07-10A

Repair interval	Nbr installed	Nbr required	Placard
C	3	0	No

One or more may be inoperative.



27-07 - Indications on SD pages

27-07-11	Spoilers/Speedbrakes Indication on the F/CTL SD page

Ident.: MI-27-07-00008412.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-07-11A

Repair interval	Nbr installed	Nbr required	Placard
С	10	0	No

S

(o) One or more may be inoperative provided that the deflection of the affected surface is visually checked before each flight.

Reference(s) ——

(o) Refer to OpsProc 27-07-11A Spoilers/Speedbrakes Indication on the F/CTL SD page

S

27-07-12	Spoilers/Speedbrakes Indication on the WHEEL SD page
----------	--

Ident.: MI-27-07-00008414.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-07-12A

Repair interval	Nbr installed	Nbr required	Placard
С	10	0	No

S

One or more may be inoperative provided that the deflection of the affected surface is (o) visually checked before each flight.

- Reference(s) -

(o) Refer to OpsProc 27-07-12A Spoilers/Speedbrakes Indication on the WHEEL SD page

S



27-07 - Indications on SD pages

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 HDA A320/A321 FLEET
 MI-27-07 P 6/6

 MEL
 19 JUL 12



27-08 - Indications on the EWD

	27-08-01	Flap Position Indication on the EWD
--	----------	-------------------------------------

Ident.: MI-27-08-00008417.0001001 / 22 MAR 10

Applicable to: ALL

## 27-08-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

27-08-02 Slat Position Indication	on on the EWD
-----------------------------------	---------------

Ident.: MI-27-08-00008418.0001001 / 22 MAR 10

Applicable to: ALL

## 27-08-02A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.



27-08 - Indications on the EWD

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HDA A320/A321 FLEET MI-27-08 P 2/2 MEL 29 NOV 11



27-14 - Aileron and Hydraulic Actuation

27-14-01 Left Aileron Blue Servo-Control (Controlled by ELAC 1)

Ident.: MI-27-14-00008312.0002001 / 29 NOV 11

Applicable to: ALL

#### 27-14-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

## AS

- (o) (m) May be inoperative provided that:
  - 1) It is electrically disconnected, and
  - 2) It remains mechanically connected and hydraulically supplied (damping function is not affected), and
  - 3) The left aileron green servo-control (controlled by ELAC 2) is operative, and
  - 4) The right aileron blue servo-control (controlled by ELAC 2) is operative, and
  - 5) All roll spoilers are operative, and
  - 6) The TR 1 and TR 2 are operative, and
  - 7) The DC TIE contactor 1PC1 is checked closed.

		neierice(s)		
(	(o)	Refer to OpsProc 27-14-01A Left Aileron Blue Servo-Control (Controlled by El	LAC 1	)

(m) Refer to AMM 27-14-00-040-001

Δ

S



27-14 - Aileron and Hydraulic Actuation

27-14-02	Left Aileron Green Servo-Control (Controlled by ELAC 2)
----------	---

Ident.: MI-27-14-00008314.0002001 / 29 NOV 11

Applicable to: ALL

#### 27-14-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

## AS

- (m) May be inoperative provided that:
  - 1) It is electrically disconnected, and
  - It remains mechanically connected and hydraulically supplied (damping function is not affected), and
  - 3) All roll spoilers are operative.

Doforonoo(c)	
Reference(s)	

(m) Refer to AMM 27-14-00-040-001

Α

S

27-14-03	Right Aileron Green Servo-Control (Controlled by ELAC 1)
----------	--

Ident.: MI-27-14-00008316.0002001 / 29 NOV 11

Applicable to: ALL

#### 27-14-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

## AS

- (o) (m) May be inoperative provided that:
  - 1) It is electrically disconnected, and
  - It remains mechanically connected and hydraulically supplied (damping function is not affected), and
  - 3) The right aileron blue servo-control (controlled by ELAC 2) is operative, and
  - 4) The left aileron green servo-control (controlled by ELAC 2) is operative, and
  - 5) All roll spoilers are operative, and
  - 6) The TR 1 and TR 2 are operative, and
  - 7) The DC TIE contactor 1PC1 is checked closed.

Continued on the following page



27-14 - Aileron and Hydraulic Actuation

	Continued from the previous page
(o) Refer to OpsProc 27-14-03A Right Aileron Green Servo-Contr (m) Refer to AMM 27-14-00-040-001	ol (Controlled by ELAC 1)
A	
A S	

Right Aileron Blue Servo-Control (Controlled by ELAC 2) 27-14-04

Ident.: MI-27-14-00008318.0002001 / 29 NOV 11 Applicable to: ALL

#### 27-14-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

## AS

- (m) May be inoperative provided that:
  - 1) It is electrically disconnected, and
  - 2) It remains mechanically connected and hydraulically supplied (damping function is not affected), and
  - 3) All roll spoilers are operative.

Reference(s) -

- (m) Refer to AMM 27-14-00-040-001



27-14 - Aileron and Hydraulic Actuation

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 HDA A320/A321 FLEET
 MI-27-14 P 4/4

 MEL
 29 NOV 11



27-21 - Rudder Mechanical Control

27-21-01	Rudder Pedal Adjustment System
----------	--------------------------------

Ident.: MI-27-21-00008322.0001001 / 29 NOV 11

Applicable to: ALL

## 27-21-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

- (o) One or both may be inoperative provided that:
  - The rudder pedals can be secured in a position which meets individual pilot requirements, and
  - 2) The full and unrestricted movement of the rudder pedals and brake pedals deflection is possible at both pilot stations.

Deference(a)	
Reference(s) —	

(o) Refer to OpsProc 27-21-01A Rudder Pedal Adjustment System



27-21 - Rudder Mechanical Control

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HDA A320/A321 FLEET MI-27-21 P 2/2 MEL 29 NOV 11



27-22 - Rudder Trim Actuation

Nbr required

Placard

27-22-01	Rudder Trim System	

Ident.: MI-27-22-00008324.0001001 / 29 NOV 11

Repair interval

Applicable to: ALL

## 27-22-01A Rudder trim system 1 inoperative

		l		
	С	2	1	No
LP	]			
(o)	Rudder Trim System	1 may be inoperative provide	ded that ETOPS is not condu	ucted.
		Reference(s) —		
(0	Refer to OpsProc 27	-22-01A Rudder Trim Syster	m	
L	]			
P	]			

Nbr installed

## 27-22-01B Rudder trim system 2 inoperative

C 2 1 No	Repair interval	Nbr installed	Nbr required	Placard
	С	2	1	No

LΡ	
(o)	Rudder Trim System 2 may be inoperative.
(o)	Refer to OpsProc 27-22-01B Rudder Trim System
Р	



27-22 - Rudder Trim Actuation

	27-22-02	Manual Rudder Trim Reset Function
--	----------	-----------------------------------

Ident.: MI-27-22-00008326.0001001 / 22 MAR 10

Applicable to: ALL

## 27-22-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that one rudder trim position indication is operative.

27-22-03	Rudder Trim Position Indication on the Center Pedestal			
Ident.: MI-27-22-00008328.0001001 / 29 NOV 11 Applicable to: ALL				
27-22-03A				

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



S

May be inoperative.	
	Reference(s)



27-23 - Artificial feel and rudder travel limiting actuation

27-23-01	Rudder Travel Limiter System (Including
	Rudder and Pedals Travel Limiter Units)

Ident.: MI-27-23-00008330.0001001 / 29 NOV 11

Applicable to: ALL

## 27-23-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.



27-23 - Artificial feel and rudder travel limiting actuation

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HDA A320/A321 FLEET MI-27-23 P 2/2 MEL 29 NOV 11



27-34 - Elevator and Hydraulic Actuation

27-34-01 Elevator Servo-Control	
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Ident.: MI-27-34-00008332.0001001 / 22 MAR 10

Applicable to: ALL

## 27-34-01A

Repair interval	Nbr installed	Nbr required	Placard
-	4	4	No

All must be operative.

27-34-02 Elevator Servo-Control Position Transducer
---

Ident.: MI-27-34-00008334.0001001 / 29 NOV 11

Applicable to: ALL

## 27-34-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	4	No

S

	(m)	One transducer	per	servo-control	must	be operative	Э.
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Reference(s) —

(m) Refer to AMM 27-34-00-040-001

S



27-34 - Elevator and Hydraulic Actuation

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HDA A320/A321 FLEET MI-27-34 P 2/2 MEL 29 NOV 11



27-40 - Trimmable Horizontal Stabilizer (THS)

27-40-01 Stabilizer Mechanical Control	
--	--

Ident.: MI-27-40-00008336.0001001 / 22 MAR 10

Applicable to: ALL

#### 27-40-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

27-40-02 Stabilizer Actuator Electric Motor	
---	--

Ident.: MI-27-40-00008338.0001001 / 29 NOV 11

Applicable to: ALL

## 27-40-02A Electric motor 3 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

The stabilizer actuator electric motor 3 may be inoperative.

## 27-40-02B Electric motor 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

LP

- (o) The stabilizer actuator electric motor 2 may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) ELAC 1 pitch channel is considered inoperative.

Refer to Item 27-93-01 ELAC 1

 Reference(s) —	

(o) Refer to OpsProc 27-40-02B Stabilizer Actuator Electric Motor

틷



27-40 - Trimmable Horizontal Stabilizer (THS)

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HDA A320/A321 FLEET MI-27-40 P 2/2 MEL 29 NOV 11



27-51 - Flaps Electrical Control and Monitoring

27-51-01	SFCC Flap Channel
----------	-------------------

Ident.: MI-27-51-00008340.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-51-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

## SA

- (o) (m) Only SFCC 2 flap channel may be inoperative provided that:
  - 1) It is deactivated, and
  - 2) The slats and flaps are checked operative on SFCC 1, and
  - 3) The SFCC 1 flap WTB is checked operative before each flight, and
  - 4) All ELAC s, SEC s, LGCIU s, RA s, FAC s and ADIRS are operative, and
  - 5) The minimum idle on ground is considered inoperative. Refer to Item 73-20-05 Minimum Idle on Ground

- (o) Refer to OpsProc 27-51-01A SFCC Flap Channel
- (m) Refer to AMM 27-51-00-040-001

S

Α



27-51 - Flaps Electrical Control and Monitoring

27-51-02 SFCC Slat Channel
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Ident.: MI-27-51-00008341.0001001 / 19 JUL 12

Applicable to: ALL

#### 1 27-51-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

PA

- (o) (m) Only SFCC 2 slat channel may be inoperative provided that:
  - 1) It is deactivated, and
  - 2) The slats and flaps are checked operative on SFCC 1, and
  - 3) The SFCC 1 slat WTB is checked operative before each flight, and
  - 4) All ELAC s, SEC s, LGCIU s, RA s, FAC s and ADIRS are operative, and
  - 5) Takeoff is not performed in CONF 1+F.

Reference(s)

- (o) Refer to OpsProc 27-51-02A SFCC Slat Channel
- (m) Refer to AMM 27-51-00-040-005

P

Α

27-51-03	Flap Wing Tip Brakes Solenoid
•	

Ident.: MI-27-51-00009138.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-51-03A

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No

AS

(m) One or two solenoids associated with the SFCC 2 may be inoperative provided that the SFCC 1 flap WTB is checked operative before each flight.

Continued on the following page



27-51 - Flaps Electrical Control and Monitoring

	- Reference(s)	Continued from the previous page
	11010101100(3)	
(m) Refer to AMM 27-51-00-040-004		
A		
S		



27-51 - Flaps Electrical Control and Monitoring

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 HDA A320/A321 FLEET
 MI-27-51 P 4/4

 MEL
 19 JUL 12



27-54 - Flaps Hydraulic Actuation and Power Transmission

27-54-01	Flap Hydraulic Motor

Ident.: MI-27-54-00008344.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-54-01A Green motor inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

S

Reference(s)

S

## 27-54-01B Yellow motor inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

S

Yellow motor may be inoperative provided that the blue slat motor is operative.

S

27-54-02 Flap PCU Valve Block
-------------------------------

Ident.: MI-27-54-00008345.0001001 / 15 SEP 10

Applicable to: ALL

## 27-54-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

The valve block associated with SFCC 2 may be inoperative provided that the SFCC 2 flap channel is considered inoperative.

Refer to Item 27-51-01 SFCC Flap Channel



27-54 - Flaps Hydraulic Actuation and Power Transmission

27-54-03 Flap Pressure-Off Brake
----------------------------------

Ident.: MI-27-54-00008347.0001001 / 22 MAR 10

Applicable to: ALL

## 27-54-03A

Repair interval	Nbr installed	Nbr required	Placard
_	2	2	No

Both must be operative.



27-64 - Spoiler Hydraulic Actuation

27-64-01	Spoiler 5
----------	-----------

Ident.: MI-27-64-00008349.0002001 / 29 NOV 11

Applicable to: ALL

#### 27-64-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

- (o) (m) The pair of spoilers 5 may be inoperative provided that:
  - 1) The affected spoiler is deactivated in the retracted position, and
  - 2) The pairs of spoilers 1, 2, 3, and 4 are operative.

- Reference(s)

- (o) Refer to OpsProc 27-64-01A Spoiler 5
- (m) Refer to AMM 27-64-00-040-001

S

27-64-02 Spoiler 1 or 3
-------------------------

Ident.: MI-27-64-00008351.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-64-02A

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No

P

- (o) (m) One pair of spoilers 1 or 3 may be inoperative provided that:
  - 1) The affected spoiler is deactivated in the retracted position, and
  - 2) The pairs of spoilers 2, 4, and 5 are operative, and
  - 3) Performance penalties are applied, see Operational Procedure.

- Reference(s) -

- (o) Refer to OpsProc 27-64-02A Spoiler 1 or 3
- (m) Refer to AMM 27-64-00-040-001

P



27-64 - Spoiler Hydraulic Actuation

27-64-03	Spoiler 2 or 4
----------	----------------

Ident.: MI-27-64-00008354.0002001 / 29 NOV 11

Applicable to: ALL

#### 27-64-03A

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No



- (o) (m) One pair of spoilers 2 or 4 may be inoperative in the retracted position provided that:
  - 1) The affected spoiler is deactivated in the retracted position, and
  - 2) The pairs of spoilers 1, 3, and 5 are operative, and
  - 3) The SFCC 2 flap channel is operative, and
  - 4) Performance penalties are applied, see Operational Procedure.

|--|

- (o) Refer to OpsProc 27-64-03A Spoiler 2 or 4
- (m) Refer to AMM 27-64-00-040-001

P

27-64-04 Spoilers 1 and 2
---------------------------

Ident.: MI-27-64-00008357.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-64-04A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No



- (o) (m) The pairs of spoilers 1 and 2 may be inoperative in the retracted position provided that:
  - 1) The affected spoilers are deactivated in the retracted position, and
  - 2) The pairs of spoilers 3, 4, and 5 are operative, and
  - 3) The SFCC 2 flap channel is operative, and
  - 4) Performance penalties are applied, see Operational Procedure.

Continued on the following page



## MEL ITEMS 27 - FLIGHT CONTROLS

27-64 - Spoiler Hydraulic Actuation

Continued	from	the	previous	page

		` '
(o)	Refer to OpsProc 27-64-04A 04 - Spoilers	1 and 2

(m) Refer to AMM 27-64-00-040-001

P

27-64-05	Spoilers 3 and 4

Reference(s)

Ident.: MI-27-64-00008359.0002001 / 29 NOV 11

Applicable to: ALL

#### 27-64-05A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No



- (o) (m) The pairs of spoilers 3 and 4 may be inoperative in the retracted position provided that:
  - 1) The affected spoilers are deactivated in the retracted position, and
  - 2) The pairs of spoilers 1, 2, and 5 are operative, and
  - 3) The TR 1 and TR 2 are operative, and
  - 4) The DC TIE contactor 1PC1 is checked closed, and
  - 5) The SFCC 2 flap channel is operative, and
  - 6) Performance penalties are applied, see Operational Procedure.

Refer to Item 27-64-01 Spoiler 5, and

Refer to Item 27-64-02 Spoiler 1 or 3, and

Refer to Item 27-64-03 Spoiler 2 or 4, and Refer to Item 27-64-04 Spoilers 1 and 2.

- (o) Refer to OpsProc 27-64-05A Spoilers 3 and 4
- (m) Refer to AMM 27-64-00-040-001

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27-64 - Spoiler Hydraulic Actuation

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 HDA A320/A321 FLEET
 MI-27-64 P 4/4

 MEL
 29 NOV 11



27-81 - Slats Electrical Control and Monitoring

27-81-01 Slat Wing Tip Brakes Solenoids
---

Ident.: MI-27-81-00008366.0001001 / 29 NOV 11

Applicable to: ALL

## 27-81-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No

## AS

(m) One or two solenoids associated with the SFCC 2 may be inoperative provided that t	the
SFCC 1 WTB is checked operative before each flight.	

Reference(s)

(m) Refer to AMM 27-81-00-040-001

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27-81 - Slats Electrical Control and Monitoring

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HDA A320/A321 FLEET MI-27-81 P 2/2 MEL 29 NOV 11



27-84 - Slats Hydraulic Actuation and Power Transmission

27-84-01	Slats Hydraulic Motor
----------	-----------------------

Ident.: MI-27-84-00008368.0001001 / 22 MAR 10

Applicable to: ALL

#### 27-84-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

27-84-02	Slat PCU Valve Block
----------	----------------------

Ident.: MI-27-84-00008371.0001001 / 22 MAR 10

Applicable to: ALL

#### 27-84-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

The valve block associated with SFCC 2 may be inoperative provided that the SFCC 2 slat channel is considered inoperative.

Refer to Item 27-51-02 SFCC Slat Channel

27-84-03	Slat Pressure-Off Brake
----------	-------------------------

Ident.: MI-27-84-00008373.0001001 / 22 MAR 10

Applicable to: ALL

#### 27-84-03A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.



27-84 - Slats Hydraulic Actuation and Power Transmission

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HDA A320/A321 FLEET MI-27-84 P 2/2 MEL 29 NOV 11



27-92 - Electrical Flight Control System (EFCS) Control Inputs and Power Supply

27-92-01	Speedbrake Control System

Ident.: MI-27-92-00008375.0001001 / 29 NOV 11

inoperative)

Applicable to: ALL

## 27-92-01A Speedbrake control system inoperative

	Repair interval	Nbr installed	Nbr required	Placard
	С	1	0	Yes
P (a)	C		arouided that the parformance	

(o) Refer to OpsProc 27-92-01A Speedbrake Control System (speedbrake control system

Р

## 27-92-01B Speedbrake 2 or speedbrakes 3 and 4 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

P

(o) Speedbrake 2 or speedbrakes 3 and 4 may be inoperative provided that the performance penalties associated with one or two pairs of spoilers inoperative are applied.

(o) Refer to OpsProc 27-92-01B Speedbrake Control System (speedbrake 2 or speedbrakes 3 and 4 inoperative)

P



27-92 - Electrical Flight Control System (EFCS) Control Inputs and Power Supply

27-92-02	Ground Spoiler Control System

Ident.: MI-27-92-00008377.0001001 / 29 NOV 11

Applicable to: ALL

## 27-92-02A Ground spoiler control system inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

_	 
P	L

- (o) May be inoperative provided that:
  - 1) Takeoff and landing performance penalties are applied, and
  - 2) Autobrake function lost

    Refer to Item 32-42-05 AUTO/BRK Function

    Reference(s)

(o) Refer to OpsProc 27-92-02A Ground Spoiler Control System (ground spoiler control system inoperative)



## 27-92-02B Spoilers 5 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

(o) The pair of spoilers 5 may be inoperative.

(o) Refer to OpsProc 27-92-02B Ground Spoiler Control System (pair of spoilers 5 inoperative)

## 27-92-02C Spoilers 1 and 2, or spoilers 3 and 4 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

Р

(o) The pairs of spoilers 1 and 2 or the pairs of spoilers 3 and 4 may be inoperative provided that the Flight Manual performance penalties are applied.

Continued on the following page



27-92 - Electrical Flight Control System (EFCS) Control Inputs and Power Supply

	Continued from the previous page
Beference(s)	

(o) Refer to OpsProc 27-92-02C Ground Spoiler Control System (pairs of spoilers 1 and 2 or pairs of spoilers 3 and 4 inoperative)

Р

	27-92-03	SIDESTICK PRIORITY light
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Ident.: MI-27-92-00008380.0001001 / 29 NOV 11 Applicable to: ALL

### 27-92-03A

Repair interval	Nbr installed	Nbr required	Placard
_	4	4	No

All must be operative.

27-92-04 Sidestick Dual Input Visual Warnings	
---	--

Ident.: MI-27-92-00008382.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-92-04A

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

One or both may be inoperative.

27-92-05 Sidestick Dual Input Aural Warning
---

Ident.: MI-27-92-00008384.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-92-05A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.



27-92 - Electrical Flight Control System (EFCS) Control Inputs and Power Supply

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HDA A320/A321 FLEET MI-27-92 P 4/4
MEL 29 NOV 11



## MEL ITEMS 27 - FLIGHT CONTROLS

27-93 - ELAC System (Elevator Aileron Computer)

27-93-01	ELAC 1

Ident.: MI-27-93-00008385.0008001 / 29 NOV 11

Applicable to: ALL

#### 27-93-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

## LPA

- (o) (m) ELAC 1 or any ELAC 1 function may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) Both accelerometers associated with the ELAC 2 are checked operative before each flight, and
  - 3) All sidesticks transducers associated with the ELAC 2 and the three SEC s are checked operative before each flight, and
  - 4) The elevators and roll spoilers control is checked operative through the SEC s before each flight.
  - 5) All SEC s, SFCC s, LGCIU s, RA s, ADIRS and FAC s are operative, and
  - 6) The TR 1 and the TR 2 are operative, and
  - 7) The pairs of spoilers 2, 3, 4, and 5 are operative, and
  - 8) The DC TIE contactor 1PC1 is checked closed, before each flight, and

<u>Note:</u>	F/O take-over pb cannot disengage AP 1.
	Reference(s)
` '	to OpsProc 27-93-01A ELAC 1 to AMM 27-93-00-040-001



27-93 - ELAC System (Elevator Aileron Computer)

27-93-02	ELAC 2

Ident.: MI-27-93-00008386.0001001 / 22 MAR 10

Applicable to: ALL

## 27-93-02A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

	27-93-03	Pitch Normal Law
--	----------	------------------

Ident.: MI-27-93-00008388.0001001 / 22 MAR 10

Applicable to: ALL

## 27-93-03A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.



## MEL ITEMS 27 - FLIGHT CONTROLS

27-94 - SEC System (Spoiler and Elevator Computer)

27-94-01	SEC 1

Ident.: MI-27-94-00008390.0002001 / 29 NOV 11

Applicable to: ALL

#### 27-94-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



- (o) (m) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) It is deactivated, and
  - 3) The SEC 2 and the SEC 3 are operative, and
  - 4) All ELAC s, SFCC s, LGCIU s, RA s, FAC s and ADIRS are operative, and
  - 5) The SFCC 2 flap channel is operative, and
  - 6) All aileron servo-controls associated with the operative SEC s are operative, and
  - 7) The TR 1 and TR 2 are operative, and
  - 8) The sidestick transducers associated with the ELAC s and the operative SEC s are checked operative before each flight, and
  - 9) The DC TIE contactor 1PC1 is checked closed, before each flight, and
  - 10) The elevators control through the SEC 2 and the ELAC s and the roll spoilers control through the operative SEC s are checked operative before each flight, and
  - 11) Performance penalties for two pairs of spoilers inoperative are applied.

	Reference(s)	
O D O.	7.04.044.050.4	

- (o) Refer to OpsProc 27-94-01A SEC 1
- (m) Refer to AMM 27-94-00-040-002





27-94 - SEC System (Spoiler and Elevator Computer)

27-94-02	SEC 2

Ident.: MI-27-94-00008392.0002001 / 29 NOV 11

Applicable to: ALL

#### 27-94-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



- (o) (m) May be inoperative provided that:
  - 1) It is deactivated, and
  - 2) The SEC 1 and the SEC 3 are operative, and
  - 3) All ELAC s, SFCC s, LGCIU s, RA s, FAC s and ADIRS are operative, and
  - 4) All aileron servo-controls and roll spoilers associated with the operative SEC s are operative, and
  - 5) The sidestick transducers associated with the ELAC s and the operative SEC s are checked operative before each flight, and
  - **6)** The elevators control through the SEC 1 and the ELAC s and the roll spoilers control through the operative SEC s are checked operative before each flight.

- (o) Refer to OpsProc 27-94-02A SEC 2
- (m) Refer to AMM 27-94-00-040-002

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## MEL ITEMS 27 - FLIGHT CONTROLS

27-94 - SEC System (Spoiler and Elevator Computer)

27-94-03	SEC 3

Ident.: MI-27-94-00008394.0001001 / 19 JUL 12

Applicable to: ALL

#### 27-94-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

P

- (o) May be inoperative provided that:
  - 1) It is deactivated, and
  - 2) The SEC 1 and SEC 2 are operative, and
  - 3) The SFCC 2 flap channel is operative, and
  - 4) All aileron servo-controls and roll spoilers associated with the operative SEC s are operative, and
  - 5) The performance penalties for the pairs of spoilers 1 and 2 inoperative are applied.

- Reference(s) -

(o) Refer to OpsProc 27-94-03A SEC 3

P



27-94 - SEC System (Spoiler and Elevator Computer)

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 HDA A320/A321 FLEET
 MI-27-94 P 4/4

 MEL
 19 JUL 12



27-95 - FCDC System (Flight Control Data Concentrator)

27-95-01 FCDC 1
-----------------

Ident.: MI-27-95-00008395.0001001 / 22 MAR 10

Applicable to: ALL

## 27-95-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

27-95-02	FCDC 2
----------	--------

Ident.: MI-27-95-00008396.0001001 / 29 NOV 11

Applicable to: ALL

#### 27-95-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative.

Reference(s)

(o) Refer to OpsProc 27-95-02A FCDC 2



27-95 - FCDC System (Flight Control Data Concentrator)

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HDA A320/A321 FLEET MI-27-95 P 2/2 MEL 29 NOV 11



28-00 - MAINTENANCE Message on the STATUS SD page

28-00-01	FUEL MAINTENANCE Message
	J

Ident.: MI-28-00-00008177.0001001 / 29 NOV 11

Applicable to: ALL

## 28-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

S

	FUEL MAINTENANCE message may be displayed on the STATUS SD page.
S	



28-00 - MAINTENANCE Message on the STATUS SD page

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HDA A320/A321 FLEET MI-28-00 P 2/2 MEL 29 NOV 11



28-01 - Overhead Panels 28-01-01 - FUEL Overhead Panel

Ident.: MI-28-01-01-00008178.0001001 / 22 MAR 10

Applicable to: ALL

#### 28-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	Yes

One or more may be inoperative provided that the corresponding pump is set to OFF when the associated tank is empty.

28-01-01-02	Wing TK PUMP pb-sw OFF light

Ident.: MI-28-01-01-00008179.0001001 / 22 MAR 10

Applicable to: ALL

#### 28-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	Yes

One or more may be inoperative provided that the corresponding pump indication is operative on the <u>FUEL SD</u> page.

28-01-01-03	X FEED pb-sw ON light
-------------	-----------------------

Ident.: MI-28-01-01-00008180.0001001 / 22 MAR 10

Applicable to: ALL

#### 28-01-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the X FEED indication is operative on the  $\underline{\text{FUEL}}$  SD page.



28-01 - Overhead Panels 28-01-01 - FUEL Overhead Panel

28-01-01-04 X FEED pb-sw OPEN light	
-------------------------------------	--

Ident.: MI-28-01-01-00008181.0001001 / 22 MAR 10

Applicable to: ALL

#### 28-01-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the X FEED indication is operative on the <u>FUEL</u> SD page.

28-01-01-05 CTR TK PUMP pb-sw FAULT light
---

Ident.: MI-28-01-01-00008182.0002001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSR, B-HSR, B-HST, B-HSU

#### 28-01-01-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the corresponding pump is set to OFF when there is no fuel in the center tank.

28-01-01-05 CTR TK XFR pb-sw FAULT light	
--	--

Ident.: MI-28-01-01-00008182.0005001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-01-01-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the corresponding transfer valve is set to OFF when there is no fuel in the center tank.



28-01 - Overhead Panels 28-01-01 - FUEL Overhead Panel

28-01-01-06 CTR TK PUMP pb-sw OFF light
---

Ident.: MI-28-01-01-00008183.0002001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-01-01-06A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the corresponding pump indication is operative on the FUEL SD page.

28-01-01-06	CTR TK XFR pb-sw OFF light

Ident.: MI-28-01-01-00008183.0005001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-01-01-06A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the corresponding transfer valve indication is operative on the <u>FUEL SD</u> page.

28-01-01-07	FUEL MODE SEL pb-sw FAULT light
-------------	---------------------------------

Ident.: MI-28-01-01-00008184.0003001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-01-01-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative provided that all tank pumps indications are operative on the <u>FUEL</u> SD page.

(o) Refer to OpsProc 28-01-01-07A FUEL MODE SEL pb-sw FAULT light



28-01 - Overhead Panels 28-01-01 - FUEL Overhead Panel

28-01-01-07	FUEL MODE SEL pb-sw FAULT light
-------------	---------------------------------

Ident.: MI-28-01-01-00008184.0002001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-01-01-07B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that all wing tank pumps and center tank transfer valves indications are operative on the FUEL SD page.

28-01-01-08	ACT pb-sw FAULT light

Ident.: MI-28-01-01-00008185.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-01-01-08A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative provided that the fuel quantity indications of the ACT (s) and of the center tank are operative on the FUEL SD page.

Reference(s)
Deleterice(S)

(o) Refer to OpsProc 28-01-01-08A ACT pb-sw FAULT light

28-01-01-09	ACT pb-sw FWD light

Ident.: MI-28-01-01-00008186.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-01-01-09A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

Fuel On Board (FOB) Indication on the FUEL SD page

MINIMUM EQUIPMENT LIST 28-0/-01 - Fuel Quantity Indications on the FUEL SD page

Ident.: MI-28-07-01-00008270.0001001 / 29 NOV 11

Applicable to: ALL

28-07-01-01

#### 28-07-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

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(o)	Mav	be	inop	erative

Deference(a)
Reference(s) —

(o) Refer to OpsProc 28-07-01-01A Fuel On Board (FOB) Indication on the FUEL SD page

S

28-07-01-02	Fuel Quantity Indication ( FQI ) in
	Degraded Mode on the <u>FUEL</u> SD page

Ident.: MI-28-07-01-00008271.0001001 / 29 NOV 11

Applicable to: ALL

#### 28-07-01-02A

Repair interval	Nbr installed	Nbr required	Placard
D	-	0	No

(o) One or more FQI may be in the degraded mode (with dashes on the two last digits) provided that the loss of accuracy is taken into account for the fuel planning for each affected tank.

Note:	The Fuel On Board Indication is also in the degraded mode.
	Reference(s)

(o) Refer to OpsProc 28-07-01-02A Fuel Quantity Indication (FQI) in Degraded Mode on the FUEL SD page



28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

28-07-01-03	
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## Outer Tank Fuel Quantity Indication on the FUEL SD page

Ident.: MI-28-07-01-00008272.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

## 28-07-01-03A Check of fuel quantity in the associated tank after refueling

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (o) (m) One may be inoperative provided that:
  - The fuel quantity in the associated tank is checked after each refueling by the manual magnetic indicators or by the corresponding fuel quantity indicator on refuel/defuel control panel, and
  - 2) The associated fuel used indication is operative, and
  - 3) The associated inner tank indication is operative.

Reference(s)
1101010100(3)

(o) Refer to OpsProc 28-07-01-03A Outer Tank Fuel Quantity Indication on the FUEL SD page

(m) Refer to AMM 28-40-00-040-003

S

## 28-07-01-03B High level fuel detection system checked operative before refueling and associated inner tank indication operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (m) One may be inoperative provided that:
  - 1) The high level fuel detection system is checked operative before refueling, and
  - 2) The tanks in both wings are full, and
  - 3) The associated fuel used indication is operative, and
  - 4) The associated inner tank indication is operative.

D/	oforonoo(c)
ne ne	leference(s) ————————

(m) Refer to AMM 28-40-00-040-003

S

Continued on the following page



## MEL ITEMS 28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

Continued from the previous page

## 28-07-01-03C Check of fuel quantity in the associated wing after refueling/defueling

Repair interval	Nbr installed	Nbr required	Placard
В	2	1	No

- (o) (m) One may be inoperative provided that:
  - 1) The fuel quantity in the associated wing (inner and outer tanks) is checked after each refueling/defueling by the manual magnetic indicators or by the corresponding fuel quantity indicator on the refuel/defuel control panel, and
  - 2) The associated fuel used indication is operative. - Reference(s)
  - (o) Refer to OpsProc 28-07-01-03C Outer Tank Fuel Quantity Indication on the FUEL SD page (m) Refer to AMM 28-40-00-040-003

S

## 28-07-01-03D High level fuel detection system checked operative before refueling

Repair interval	Nbr installed	Nbr required	Placard
В	2	1	No

S

- (m) One may be inoperative provided that:
  - 1) The high level fuel detection system is checked operative before refueling, and
  - 2) The tanks in both wings are full, and
  - 3) The associated fuel used indication is operative.

 Poforonoo(o)

(m) Refer to AMM 28-40-00-040-003

S



28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

Outer Tank Fuel Quantity Indication on the FUEL SD page

MINIMUM EQUIPMENT LIST	μ.g.

Ident.: MI-28-07-01-00008272.0005001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-07-01-03A Check of fuel quantity in the associated tank after refueling

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

28-07-01-03

- (o) (m) One may be inoperative provided that:
  - The fuel quantity in the associated tank is checked after each refueling by the corresponding fuel quantity indicator on the refuel/defuel control panel, and
  - 2) The associated fuel used indication is operative, and
  - 3) The associated inner tank indication is operative.

(o) Refer to OpsProc 28-07-01-03A Outer Tank Fuel Quantity Indication on the FUEL SD page (m) Refer to AMM 28-40-00-040-003

S

# 28-07-01-03B High level fuel detection system checked operative before refueling and associated inner tank indication operative

Γ	Repair interval	Nbr installed	Nbr required	Placard
Ī	С	2	1	No

S

- (m) One may be inoperative provided that:
  - 1) The high level fuel detection system is checked operative before refueling, and
  - 2) The tanks in both wings are full, and
  - 3) The associated fuel used indication is operative, and
  - 4) The associated inner tank indication is operative.

Reference(s)	
nelelelice(s)	

(m) Refer to AMM 28-40-00-040-003

S

Continued on the following page

HDA A320/A321 FLEET MI-28-07-01 P 4/10
MEL ← C → 19 JUL 12



## MEL ITEMS 28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

Continued from the previous page

## 28-07-01-03C Check of fuel quantity in the associated wing after refueling/defueling

Repair interval	Nbr installed	Nbr required	Placard
В	2	1	No

S

- (o) (m) One may be inoperative provided that:
  - 1) The fuel quantity in the associated wing (inner and outer tanks) is checked after each refueling/defueling by the corresponding fuel quantity indicator on the refuel/defuel control panel, and
  - 2) The associated fuel used indication is operative. - Reference(s)
  - (o) Refer to OpsProc 28-07-01-03C Outer Tank Fuel Quantity Indication on the FUEL SD page (m) Refer to AMM 28-40-00-040-003

S

## 28-07-01-03D High level fuel detection system checked operative before refueling

Repair interval	Nbr installed	Nbr required	Placard
В	2	1	No

S

- (m) One may be inoperative provided that:
  - 1) The high level fuel detection system is checked operative before refueling, and
  - 2) The tanks in both wings are full, and
  - 3) The associated fuel used indication is operative.

 Reference(s)	

(m) Refer to AMM 28-40-00-040-003

S

MEL C



28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

28-07-01-04	Inner Tank Fuel Quantity Indication on the FUEL SD page

Ident.: MI-28-07-01-00008273.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-07-01-04A Check of fuel quantity in the associated tank after refueling

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (o) (m) One may be inoperative provided that:
  - The fuel quantity in the associated tank is checked after each refueling by the manual magnetic indicators or by the corresponding fuel quantity indicator on the refuel/defuel control panel, and
  - 2) The associated fuel used indication is operative.

|--|

- (o) Refer to OpsProc 28-07-01-04A Inner/Wing Tank Fuel Quantity Indication on the FUEL SD page
- (m) Refer to AMM 28-40-00-040-005

S

## 28-07-01-04B High level fuel detection system checked operative before refueling

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (m) One may be inoperative provided that:
  - 1) The high level fuel detection system is checked operative before refueling, and
  - 2) The tanks in both wings are full, and
  - 3) The associated fuel used indication is operative.

Deference(e)
neleterice(s)

(m) Refer to AMM 28-40-00-040-005

S



### MEL ITEMS 28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

28-07-01-04

Wing Tank Fuel Quantity Indication on the <u>FUEL</u> SD page

Ident.: MI-28-07-01-00008273.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## 28-07-01-04A Check of fuel quantity in the associated tank after refueling

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (o) (m) One may be inoperative provided that:
  - The fuel quantity in the associated tank is checked after each refueling by the manual magnetic indicators or by the corresponding fuel quantity indicator on the refuel/defuel control panel, and
  - 2) The associated fuel used indication is operative.

Reference(s) —
nelelelice(s) ————————————————————————————————————

- (o) Refer to OpsProc 28-07-01-04A Inner/Wing Tank Fuel Quantity Indication on the FUEL SD page
- (m) Refer to AMM 28-40-00-040-005

S

28-07-01-05	Center Tank Fuel Quantity Indication on the <u>FUEL</u> SD page
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Ident.: MI-28-07-01-00008274.0002001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 28-07-01-05A Check of fuel quantity after refueling

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The fuel quantity in the center tank is checked after each refueling by the manual magnetic indicators or by the corresponding fuel quantity indicator on the refuel/defuel control panel, and
  - 2) All wing tanks fuel quantity indications are operative, and
  - 3) Both fuel used indications are operative.

Continued on the following page



28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

			Continued from	the previous page
		Reference(s) —		
(m) Refer to	o AMM 28-40		el Quantity Indication on the	FUEL SD page
Repair		Nbr installed	Nbr required	Placard
C	;	1	0	No
is cons	idered as not ination.		in the center tank or the fuel W and is taken into account	
<u>ivole.</u>	neiei io rai			
		Reference(s) —		
P				
3-07-01-05		Center Tank Fuel Quantit	v Indication on the FUEL S	D page

	I.			
ldent.: MI-28-07-01-00008274.0006001 / 04 APR 12				
Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI				

<u>Note:</u> This failure will result in the display of the <u>FUEL</u> ACT XFR FAULT alert while the automatic transfer is still operative.

Refer to Item 28-09-03 FUEL ACT XFR FAULT Alert

Continued on the following page



## MEL ITEMS 28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

Continued from the previous page

## 28-07-01-05A Check of fuel quantity after refueling

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The fuel quantity in the center tank is checked after each refueling by the manual magnetic indicators or by the corresponding fuel quantity indicator on the refuel/defuel control panel, and
  - 2) All wing tanks and ACT (s) fuel quantity indications are operative, and
  - 3) Both fuel used indications are operative, and
  - 4) The forward transfer from ACT (s) to the center tank is monitored during the flight.

Reference(s) -	
----------------	--

- (o) Refer to OpsProc 28-07-01-05A Center Tank Fuel Quantity Indication on the FUEL SD page
- (m) Refer to AMM 28-40-00-040-006

S

### 28-07-01-05B Fuel in the center tank not usable

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

P

May be inoperative provided that:

- 1) There is no fuel in the center tank or the fuel in this tank is considered as not usable and as part of the ZFW and is taken into account for CG determination, and
- 2) There is no fuel in any ACT.

Note:	Refer to Part A 8.1.7.4 Unusable Fuel.			
	Reference(s)			

Ρ



28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

28-07-01-06

ACT Fuel Quantity Indication on the FUEL SD page

Ident.: MI-28-07-01-00008275.0002001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

Note:

This failure will result in the inhibition of the <u>FUEL</u> ACT XFR FAULT alert. Refer to Item 28-09-03 FUEL ACT XFR FAULT Alert

#### 28-07-01-06B Fuel in the ACT

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No

- (o) May be inoperative provided that:
  - 1) All wing tanks and center tank fuel quantity indications are operative, and
  - 2) Both fuel used indications are operative, and
  - 3) The forward transfer from ACT to the center tank is monitored during the flight.

------ Reference(s)

(o) Refer to OpsProc 28-07-01-06B ACT Fuel Quantity Indication on the FUEL SD page

## 28-07-01-06C ACT empty

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



One or more may be inoperative provided that there is no fuel in this ACT.

Р



28-07 - Indications on the FUEL SD page 28-07-02 - Fuel Temperature Indications on the FUEL SD page

28-07-02-01	Fuel Temperature Indication on the <u>FUEL</u> SD page
-------------	--

Ident.: MI-28-07-02-00008276.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-07-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No

One in each wing or both in one wing may be inoperative.

28-07-02-01	Fuel Temperature Indication on the FUEL SD page
-------------	---

Ident.: MI-28-07-02-00008276.0004001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-07-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.



28-07 - Indications on the FUEL SD page 28-07-02 - Fuel Temperature Indications on the FUEL SD page

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 HDA A320/A321 FLEET
 MI-28-07-02 P 2/2

 MEL
 19 JUL 12



28-07 - Indications on the FUEL SD page 28-07-03 - Tank Pump Indications on the FUEL SD page

28-07-03-01	Wing Tank Pump Indication on the <u>FUEL</u> SD page
-------------	--

Ident.: MI-28-07-03-00008277.0001001 / 22 MAR 10

Applicable to: ALL

#### 28-07-03-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

One or more may be inoperative.

28-07-03-02	Center Tank Pump Indication on the <u>FUEL</u> SD page
-------------	--

Ident.: MI-28-07-03-00008278.0003001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSK, B-HSN, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-07-03-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



28-07 - Indications on the FUEL SD page 28-07-03 - Tank Pump Indications on the FUEL SD page

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HDA A320/A321 FLEET MI-28-07-03 P 2/2 MEL 19 JUL 12



MINIMUM EQUIPMENT LIST

#### **MEL ITEMS** 28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-04 - Valve Indications on the FUEL SD page

# Engine LP Fuel Valve Indication on the FUEL SD page

Ident.: MI-28-07-04-00008279.0001001 / 04 APR 12

Applicable to: ALL

28-07-04-01

#### 28-07-04-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(m) O	ne or both may be inoperative provided that the associated LP valve is checked ope	rative
be	efore each flight.	

(m) Refer to AMM 28-40-00-040-009A

S

28-07-04-02	APU LP Fuel Valve Indication on the <u>FUEL</u> SD page
-------------	---

- Reference(s) -

Ident.: MI-28-07-04-00008280.0001001 / 29 NOV 11

Applicable to: ALL

#### 28-07-04-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (m) May be inoperative provided that:
  - 1) The APU LP valve is secured in the closed position and,
  - 2) The APU is considered inoperative.

Refer to Item 49-10-01 Power Plant (APU)

	Deference(c)	

(m) Refer to AMM 28-40-00-040-001

S

MEL A to B



28-07 - Indications on the FUEL SD page 28-07-04 - Valve Indications on the FUEL SD page

	28-07-04-03	Crossfeed Valve Indication on the <u>FUEL</u> SD page
--	-------------	---

Ident.: MI-28-07-04-00008281.0001001 / 29 NOV 11

Applicable to: ALL

# 28-07-04-03A Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (m) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) Operation of the crossfeed valve is checked before the first flight of each day.

(m) Refer to AMM 28-40-00-040-002

S

# 28-07-04-03B ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(m) For ETOPS, may be inoperative provided that the operation of crossfeed valve is checked before each flight.

(m) Refer to AMM 28-40-00-040-002



28-07 - Indications on the FUEL SD page 28-07-04 - Valve Indications on the FUEL SD page

#### A320/A321 Minimum equipment list

28-07-04-04	Wing Transfer Valve Indication on the <u>FUEL</u> SD page

Ident.: MI-28-07-04-00008282.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-07-04-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

- (o) (m) One or both may be inoperative provided that:
  - 1) The fuel quantity indications of the associated inner and outer tanks are operative, and
  - 2) The transfer valve operation is checked before each flight and when used in flight.

- (o) Refer to OpsProc 28-07-04-04A Wing Transfer Valve Indication on the FUEL SD page
- (m) Refer to AMM 28-40-00-040-004

S

28-07-04-05	Center Tank Transfer Valve Indication on the FUEL SD page			

Ident.: MI-28-07-04-00008283.0001001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-07-04-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



28-07 - Indications on the FUEL SD page 28-07-04 - Valve Indications on the FUEL SD page

28-07-04-06

28-07-04-06A

ACT to CTR TK Transfer (Arrow) Indication on the FUEL SD page

Ident.: MI-28-07-04-00008286.0002001 / 22 MAR 10

# Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the fuel quantity indications (both FQI if both ACTs installed) of the ACT(s) and of the center tank are operative on the <u>FUEL</u> SD page.



### **MEL ITEMS** 28 - FUEL 28-09 - ECAM Alerts

28-09-01	FUEL L(R) INNER(OUTER) TK HI TEMP Alert

Ident.: MI-28-09-00008287.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-09-01A One or two inoperative

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	4	2	No

S

- (o) One in each wing or both in one wing may be displayed provided that:
  - 1) The fuel temperature indications of the non affected tanks are operative on the FUEL SD page, and
  - 2) The fuel temperature is monitored before takeoff and during the flight.

<u>Note:</u>	For fuel temperature limitations refer to FCOM LIM 28.		
	Reference(s)	-	

(o) Refer to OpsProc 28-09-01A FUEL L(R) INNER(OUTER)/WING TK HI TEMP Alert

S

# 28-09-01B One or more inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

S

- (o) One or more may be displayed provided that:
  - 1) The fuel temperature indications are operative on the FUEL SD page , and
  - 2) The fuel temperature is monitored before takeoff and during the flight.

<u>ivote:</u>	For tuel temperature limitations refer to FCOM LIM 28.		

(o) Refer to OpsProc 28-09-01B FUEL L(R) INNER(OUTER)/WING TK HI TEMP Alert



28-09 - ECAM Alerts

28-09-01 FUEL L(R) WING TK HI TEMP Alert

Ident.: MI-28-09-00008287.0004001 / 04 APR 12
Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-09-01A One inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (o) One may be displayed provided that:
  - The fuel temperature indications of the opposite wing are operative on the <u>FUEL</u> SD page, and
  - 2) The fuel temperature is monitored before takeoff and during the flight.

Note: For fuel temperature limitations refer to FCOM LIM 28.

Reference(s)

(o) Refer to OpsProc 28-09-01A FUEL L(R) INNER(OUTER)/WING TK HI TEMP Alert

S

### 28-09-01B Two inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

- (o) One or both may be displayed provided that:
  - 1) The fuel temperature indications are operative on the FUEL SD page , and
  - 2) The fuel temperature is monitored before takeoff and during the flight.

Note: For fuel temperature limitations refer to FCOM LIM 28.

Reference(s)

(o) Refer to OpsProc 28-09-01B FUEL L(R) INNER(OUTER)/WING TK HI TEMP Alert



### MEL ITEMS 28 - FUEL 28-09 - ECAM Alerts

28-09-02 <u>FUEL</u> L(R) INNER(OUTER) TK LO TEMP Alert
---

Ident.: MI-28-09-00008288.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-09-02A One or two inoperative

ſ	Repair interval	Nbr installed	Nbr required	Placard
	С	4	2	No

S

- (o) One in each wing or both in one wing may be displayed provided that:
  - The fuel temperature indications of the non affected tanks are operative on the <u>FUEL</u> SD page, and
  - 2) The fuel temperature is monitored before takeoff and during the flight.

<u>Note:</u>	For fuel temperature limitations refer to FCOM LIM 28.
	Reference(s) —

(o) Refer to OpsProc 28-09-02A FUEL L(R) INNER(OUTER)/WING TK LO TEMP Alert

S

# 28-09-02B One or more inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

S

- (o) One or more may be displayed provided that:
  - 1) The fuel temperature indications are operative on the  $\underline{\text{FUEL}}$  SD page , and
  - 2) The fuel temperature is monitored before takeoff and during the flight.

lote:	For fuel temperature limitations refer to FCOM LIM 28.

(o) Refer to OpsProc 28-09-02B FUEL L(R) INNER(OUTER)/WING TK LO TEMP Alert

S

MEL C



28-09 - ECAM Alerts

28-09-02 <u>FUEL</u> L(R) WING TK LO TEMP Alert
---

Ident.: MI-28-09-00008288.0004001 / 04 APR 12
Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-09-02A One inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (o) One may be displayed provided that:
  - 1) The fuel temperature indications of the opposite wing are operative on the <u>FUEL</u> SD page, and
  - 2) The fuel temperature is monitored before takeoff and during the flight.

Note:	For fuel temperature limitations refer to FCOM LIM 28.
	Reference(s)

(o) Refer to OpsProc 28-09-02A FUEL L(R) INNER(OUTER)/WING TK LO TEMP Alert

S

### 28-09-02B Both inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

- (o) One or both may be displayed provided that:
  - 1) The fuel temperature indications are operative on the FUEL SD page , and
  - 2) The fuel temperature is monitored before takeoff and during the flight.

<u>INote:</u>	For fuel temperature limitations refer to FCOM LIM 28.
	Reference(s)

(o) Refer to OpsProc 28-09-02B FUEL L(R) INNER(OUTER)/WING TK LO TEMP Alert



### MEL ITEMS 28 - FUEL 28-09 - ECAM Alerts

28-09-03	<u>FUEL</u> ACT XFR FAULT Alert

Ident.: MI-28-09-00008290.0002001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 28-09-03A ACT empty

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

P

Р

May be displayed provided that the	re is no fuel in any ACT .
1	Reference(s)

#### 28-09-03B ACT fuel transfer monitored

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative provided that:
  - 1) Forward transfer from ACT to center tank is monitored during flight, and
  - 2) Both FWC operate normally.

D.	oforonoo(o)
n	eference(s) ———————

(o) Refer to OpsProc 28-09-03B FUEL ACT XFR FAULT Alert

Ε



MEL ITEMS 28 - FUEL 28-09 - ECAM Alerts

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 HDA A320/A321 FLEET
 MI-28-09 P 6/6

 MEL
 19 JUL 12



28-12 - Tank Venting System

28-12-01 Overpressure Protector between the Inner and the Outer Tank
--

Ident.: MI-28-12-00008195.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-12-01A Inner tank temperature monitored

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o)	One or both may be broken or missing provided that the fuel temperature of the inner tank is
	monitored.

Reference(s)

(o) Refer to OpsProc 28-12-01A Overpressure Protector Between the Inner and the Outer Tank (Inner tank fuel temperature monitored)

#### 28-12-01B Transfer valves secured open

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o) (m) One or both may be broken or missing provided that the associated transfer valves are secured in the open position after each refueling.

Reference(s)
--------------

- (o) Refer to OpsProc 28-12-01B Overpressure Protector Between the Inner and the Outer Tank (Transfer valves opened)
- (m) Refer to AMM 28-12-00-040-003

28-12-02	Overpressure Protector in the Vent Surge Tank

Ident.: MI-28-12-00008196.0001001 / 29 NOV 11

Applicable to: ALL

#### 28-12-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o) One or both may be broken or missing.

Continued on the following page



28-12 - Tank Venting System

			Contin	nued from the previous pa	ıge
	Re	ference(s) —			
	110	10101100(0)			

(o) Refer to OpsProc 28-12-02A Overpressure Protector in the Vent Surge Tank

28-12-03	Overpressure Protector in the Inner Tank

Ident · MI-28-12-00008197 0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSL, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-12-03A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

28-12-03 Overpressure Protector in the Wing Tank
--

Ident.: MI-28-12-00008197.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-12-03A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

28-12-04	Overpressure Protector between the Center and the Inner Tank

Ident.: MI-28-12-00008198.0002001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 28-12-04A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	No

Must be operative.



28-12 - Tank Venting System

28-12-04	Overpressure Protector between the Center and the Wing Tank
----------	---

Ident.: MI-28-12-00008198.0005001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-12-04A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

28-12-05	Overpressure Protector in the ACT
	Стогразовано г тогового ин ино тто г

Ident.: MI-28-12-00008199.0002001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-12-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be broken or missing provided that the ACT auto transfer system is considered inoperative.

Refer to Item 28-28-01 ACT Auto Transfer System



28-12 - Tank Venting System

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HDA A320/A321 FLEET MI-28-12 P 4/4
MEL 19 JUL 12



28-15 - Intercell Transfer System

28-15-01	LH Wing Transfer Valve

Ident.: MI-28-15-00008201.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-15-01A One or both inoperative open

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

1	(o)	One or both ma	v he ino	nerative in	the or	nen nosition
ı	v	One of both ma	y De IIIO	peranve in	uic o	pen position.

------ Reference(s)

(o) Refer to OpsProc 28-15-01A LH Wing Transfer Valve (At least one transfer valve open)

# 28-15-01B One or both inoperative with not usable fuel

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o) One or both may be inoperative in the closed position provided that the fuel in the LH outer tank is considered as not usable and as part of the ZFW.

Refer to Part A 8.1.7.4 Unusable Fuel. Note:

Reference(s)

(o) Refer to OpsProc 28-15-01B LH Wing Transfer Valve (At least one transfer valve failed closed)

# 28-15-01C One inoperative closed

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	2	1	No

S

(o) (m) One may be inoperative in the closed position provided that the remaining LH wing transfer valve is secured in the open position after each refueling.

Reference(s)

(o) Refer to OpsProc 28-15-01C LH Wing Transfer Valve (At least one transfer valve open)

(m) Refer to AMM 28-15-00-040-001



28-15 - Intercell Transfer System

28-15-02	RH Wing Transfer Valve

Ident.: MI-28-15-00008202.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 28-15-02A One or both inoperative open

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o	) (	One or	both may	be	inoperat	tive ir	n the	open	position.
----	-----	--------	----------	----	----------	---------	-------	------	-----------

(o) Refer to OpsProc 28-15-02A RH Wing Transfer Valve (At least one transfer valve open)

# 28-15-02B One or both inoperative with not usable fuel

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o) One or both may be inoperative in the closed position provided that the fuel in the RH outer tank is considered as not usable and as part of the ZFW.

(o) Refer to OpsProc 28-15-02B RH Wing Transfer Valve (At least one transfer valve failed closed)

# 28-15-02C One inoperative closed

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

(o) (m) One may be inoperative in the closed position provided that the remaining RH wing transfer valve is secured in the open position after each refueling.

Reference(s)

- (o) Refer to OpsProc 28-15-02C RH Wing Transfer Valve (At least one transfer valve open)
- (m) Refer to AMM 28-15-00-040-002



28-20 - Distribution

	28-20-01	Automatic Fuel Feed System
--	----------	----------------------------

Ident.: MI-28-20-00008203.0006001 / 19 JUL 12

May be inonerative

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 28-20-01A

(0)

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

(0)	way be inoperative.
(o)	Refer to OpsProc 28-20-01A Automatic Fuel Feed System



MEL ITEMS
28 - FUEL
28-20 - Distribution

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 HDA A320/A321 FLEET
 MI-28-20 P 2/2

 MEL
 19 JUL 12



28-21 - Main Fuel Pump System

28-21-01	Wing Tank Pump

Ident.: MI-28-21-00008204.0002001 / 29 NOV 11

Applicable to: ALL

#### 28-21-01A JP4/JET B not used

Repair interval	Nbr installed	Nbr required	Placard
С	4	3	Yes

S

Any one pump may	be inoperative provided	that JP4/JET B is not used.
------------------	-------------------------	-----------------------------

Reference(s)

S

#### 28-21-01B Use of JP4/JET B

Repair interval	Nbr installed	Nbr required	Placard
С	4	3	Yes

S

Pump 2 LH or pump 2 RH may be inoperative when JP4/JET B is used provided that the fuel temperature is less than 30 °C.

Reference(s)	

S

28-21-02 Center Tank Pump
---------------------------

Ident.: MI-28-21-00008205.0006001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 28-21-02A One inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

P

(o) One may be inoperative provided that the flight routes permit a landing at a suitable airport if the remaining center tank pump fails with fuel in the center tank.

Continued on the following page



28-21 - Main Fuel Pump System

	Continued from the previous page
(o) Refer to OpsProc 28-21-02A Center Tank Pump	

# 28-21-02D Both inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes



- (o) Both may be inoperative provided that:
  - 1) There is no fuel in the center tank or the fuel in the center tank is considered as not usable and as part of the ZFW and is taken into account for CG determination, and
  - 2) The center tank pumps are set to OFF.

<u>Note</u>	e: Refer to Part A 8.1.7.4 Unusable Fuel.			
	Reference(s)			
o) Refe	r to OnsProc 28-21-02D Center Tank Pump (Roth inonerative)			

(o) Refer to OpsProc 28-21-02D Center Tank Pump (Both inoperative)

P

28-21-03	Wing Tank Pump Sequence Valve
----------	-------------------------------

Ident.: MI-28-21-00008206.0003001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-21-03A

Repair interval	Nbr installed	Nbr required	Placard
С	4	3	No

One may be inoperative provided that the associated pump is set to OFF when the center tank is feeding.



28-22 - APU Fuel Pump System

28-22-01 APU Fuel Pump
------------------------

Ident.: MI-28-22-00008207.0001001 / 29 NOV 11 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI

#### 28-22-01A Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative provided that ETOPS is not conducted. Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

- Reference(s) -

(o) Refer to OpsProc 28-22-01A APU Fuel Pump

28-22-01	APU Fuel Pump
----------	---------------

Ident.: MI-28-22-00008207.0002001 / 19 JUL 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 28-22-01A Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative provided that ETOPS is not conducted. Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

- Reference(s) -

(o) Refer to OpsProc 28-22-01A APU Fuel Pump

# 28-22-01B ETOPS 120 min flight

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	Yes

S

(o) May be inoperative for four flights provided that ETOPS beyond 120 min is not conducted. Refer to Item 24-22-01 AC Main Generation (IDG, GCU, Line Contactor)

Continued on the following page

MEL



28-22 - APU Fuel Pump System

Continued from the previous page

Reference(s)

(o) Refer to OpsProc 28-22-01B APU Fuel Pump

S



28-23 - Crossfeed System

28-23-01	Crossfeed Valve

Ident.: MI-28-23-00008208.0001001 / 22 MAR 10

Applicable to: ALL

# 28-23-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.



28-23 - Crossfeed System

Intentionally left blank

 HDA A320/A321 FLEET
 MI-28-23 P 2/2

 MEL
 29 NOV 11



28-24 - Engine LP Fuel Shutoff

28-24-01 Engine LP Fuel Valve Electrical Motor
--

Ident.: MI-28-24-00008209.0002001 / 29 NOV 11

Applicable to: ALL

#### 28-24-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	3	No

S

- (m) One may be inoperative on one engine provided that:
  - 1) The affected motor is deactivated, and
  - 2) The remaining motor is checked operative.

---- Reference(s)

(m) Refer to AMM 28-24-00-040-002



28-24 - Engine LP Fuel Shutoff

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 HDA A320/A321 FLEET
 MI-28-24 P 2/2

 MEL
 29 NOV 11



28-25 - Refuel/Defuel System

28-25-01 Fuel Quantity Preselector
------------------------------------

Ident.: MI-28-25-00008210.0001001 / 29 NOV 11

Applicable to: ALL

#### 28-25-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

28-25-02	Fuel Quantity on the Refuel/Defuel Control Panel

Ident.: MI-28-25-00008211.0001001 / 29 NOV 11

Applicable to: ALL

#### 28-25-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

One or more indications may be inoperative provided that the fuel quantity is continuously monitored on the FUEL SD page during refueling and defueling.

Reference(s) -

S

28-25-03	Refuel Valve

Ident.: MI-28-25-00008212.0002001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 28-25-03A Manual refueling

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	3	0	Yes

S

(m) One or more may be inoperative provided that the aircraft is manually refueled.

Continued on the following page

A to  $C \rightarrow$ 



28-25 - Refuel/Defuel System

		Continued fr	rom the previous pa
	Reference(s) —		
(m) Refer to AMM 28-2			
28-25-03B Gravity refuel	I <b>ng</b> Nbr installed	Nlaw wa ay iwa d	Placard
Repair interval	Nor installed	Nbr required 0	Yes
<u> </u>	J	U	168
00.05.00			
28-25-03	Ret	uel Valve	
ent.: MI-28-25-00008212.0003001 / 19 J oplicable to: B-HSO, B-HSP, B-HSQ, E			
28-25-03A Manual refuel	ina		
Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes
S			
(m) One or more may b	e inoperative provided that the	aircraft is manually refu	eled.
	Reference(s)		
(m) Refer to AMM 28-2  S	5-00-040-005		



28-25 - Refuel/Defuel System

28-25-04 Transfer Defuel Valve	
--------------------------------	--

Ident.: MI-28-25-00008213.0001001 / 29 NOV 11

Applicable to: ALL

#### 28-25-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

(m) May be inoperative provided that the valve is secured in the closed position.

Reference(s)

(m) Refer to AMM 28-25-00-040-004

S

28-25-05 Exterior Refuel/Defuel Control Panel
---

Ident.: MI-28-25-00008214.0001001 / 29 NOV 11

Applicable to: ALL

#### 28-25-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

(m) May be inoperative provided that the aircraft is manually refueled.

Reference(s)

(m) Refer to AMM 28-25-00-040-008



28-25 - Refuel/Defuel System

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 HDA A320/A321 FLEET
 MI-28-25 P 4/4

 MEL
 19 JUL 12



28-26 - Main Transfer System

28-26-01 Center Tank Transfer Valve
-------------------------------------

Ident.: MI-28-26-00013893.0006001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-26-01B One inoperative closed

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	2	1	Yes

(o) One may be inoperative in the closed position provided that the flight routes permit a landing at a suitable airport if the remaining center tank transfer valve fails with fuel in the center tank and in any ACT.

Reference(s)

(o) Refer to OpsProc 28-26-01B Center Tank Transfer Valve

# 28-26-01E Both inoperative closed

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

Both may be inoperative in the closed position provided that there is no fuel in any ACT and the center tank or the fuel in any ACT and the center tank is considered as not usable and as part of the ZFW and is taken into account for CG determination.

Note: Refer to Part A 8.1.7.4 Unusable Fuel.

# 28-26-01F One or both inoperative open

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative in the open position provided that there is no fuel in the center tank and in any ACT.



28-26 - Main Transfer System

Intentionally left blank

 HDA A320/A321 FLEET
 MI-28-26 P 2/2

 MEL
 29 NOV 11



MINIMUM EQUIPMENT LIST

# MEL ITEMS 28 - FUEL

28-28 - Additional Center Tank Transfer System

	28-28-01	ACT Auto Transfer System
--	----------	--------------------------

Ident.: MI-28-28-00008216.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-28-01A ACT empty

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

Р

May be inoperative	provided that there	is no fuel in any ACT.
--------------------	---------------------	------------------------

Reference(s)

Р

### 28-28-01B Manual fuel transfer operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative provided that:
  - 1) The manual transfer from the ACT (s) to the center tank is operative, and
  - 2) The fuel quantity indications of the ACT (s) and of the center tank are operative on the FUEL SD page.

Deference(a)	
Reference(s)	

(o) Refer to OpsProc 28-28-01B ACT Auto Transfer System (Manual transfer from the ACT(s) to the center tank operative)

#### 28-28-01C ACT fuel not usable

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

Р

- (o) (m) May be inoperative provided that:
  - 1) The fuel in the ACT (s) is considered as not usable and as part of the ZFW and is taken into account for CG determination (Refer to Part A 8.1.7.4 Unusable Fuel), and
  - 2) The ACT transfer valve is secured in the closed position.

Continued on the following page



28-28 - Additional Center Tank Transfer System

not usable) (m) Refer to AMM 28 P	-28-00-040-009		
-28-02	ACT T	ransfer Valve	
t.: MI-28-28-00008217.0001001 / 04 licable to: B-HTD, B-HTE, B-HTF,			
28-28-02A Valve closed	with the ACT empty		
Repair interval	Nbr installed	Nbr required	Placard
			No
C  May be inoperative	/e in the closed position provide  Reference(s)		1
May be inoperative P 8-28-02B Valve open	/e in the closed position provide  Reference(s)	d that there is no fuel in ar	ny ACT .
May be inoperative P 8-28-02B Valve open Repair interval	ve in the closed position provide Reference(s) —  Nbr installed	d that there is no fuel in ar	ny ACT .
May be inoperative P 28-28-02B Valve open	/e in the closed position provide  Reference(s)	d that there is no fuel in ar	ny ACT .



### 28-28 - Additional Center Tank Transfer System

Continued from the previous page

#### 28-28-02C Valve closed with the ACT fuel not usable

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

Р

- (o) (m) May be inoperative provided that:
  - 1) It is secured in the closed position, and
  - 2) The fuel in the ACT (s) is considered as not usable and as part of the ZFW and is taken into account for CG determination.

Note:	Refer to Part A 8.1.7.4 Unusable Fuel.
	Reference(s)

- (o) Refer to OpsProc 28-28-02C ACT Transfer Valve
- (m) Refer to AMM 28-28-00-040-010

Р

28-28-03	ACT Transfer Pump

Ident.: MI-28-28-00008218.0001001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-28-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



28-28 - Additional Center Tank Transfer System

|--|

Ident.: MI-28-28-00008219.0002001 / 29 NOV 11 Applicable to: B-HTG, B-HTH, B-HTI

#### 28-28-04B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the ACT auto transfer system is considered inoperative. Refer to Item 28-28-01 ACT Auto Transfer System

28-28-04 ACT Air Shutoff Valve
--------------------------------

Ident.: MI-28-28-00008219.0005001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF

#### 28-28-04C Valve closed

Repair interval	Nbr installed	Nbr required	Placard
C	1	0	No

May be inoperative in the closed position provided that the ACT auto transfer system is considered inoperative.

Refer to Item 28-28-01 ACT Auto Transfer System

# 28-28-04E Valve open

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(m) May be inoperative in the open position provided that the ACT vent valve is secured in the open position.

Refer to Item 28-28-06 ACT Vent Valve

Deference(c)	
neierenceisi	

(m) Refer to AMM 28-28-00-040-002

S



MINIMUM EQUIPMENT LIST

# MEL ITEMS 28 - FUEL

28-28 - Additional Center Tank Transfer System

28-28-05	ACT Inward Pressure Relief Valve

Ident.: MI-28-28-00008220.0002001 / 29 NOV 11 Applicable to: B-HTG, B-HTH, B-HTI

### 28-28-05A Valve open with fuel in the ACT

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative in the open position provided that:
  - 1) The manual transfer from the ACT (s) to the center tank is operative, and
  - 2) The fuel quantity indications of the ACT (s) and of the center tank are operative on the FUEL SD page.

- Reference(s) -

(o) Refer to OpsProc 28-28-05A ACT Inward Pressure Relief Valve

# 28-28-05B ACT empty

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

Р

One or more may be inoperative provided that there is no fuel in any ACT.



28-28-05 ACT Inward Pressure Relief Valve
---

Ident.: MI-28-28-00008220.0005001 / 29 NOV 11 Applicable to: B-HTD, B-HTE, B-HTF

#### 28-28-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative in the open position provided that:
  - 1) The manual transfer from the ACT to the center tank is operative, and
  - **2)** The fuel quantity indications of the ACT and of the center tank are operative on the <u>FUEL</u> SD page .

Continued on the following page

HDA A320/A321 FLEET MI-28-28 P 5/10 MEL E  $\rightarrow$  04 APR 12



28-28 - Additional Center Tank Transfer System

	Continued from the previous page
(o) Refer to OpsProc 28-28-05A ACT Inward Pressure Relief Valve	•

28-28-06 ACT Vent Valve

|dent.: MI-28-28-00008221.0002001 / 04 APR 12

#### 28-28-06A Use of ACT fuel

Applicable to: B-HTG, B-HTH, B-HTI

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) One or more may be inoperative in the open position provided that:
  - 1) The manual transfer from the ACT (s) to the center tank is operative, and
  - **2)** The fuel quantity indications of the ACT (s) and of the center tank are operative on the <u>FUEL</u> SD page .

- (o) Refer to OpsProc 28-28-06A ACT Vent Valve (Manual transfer from the ACT(s) to the center tank operative)
- (m) Refer to AMM 28-28-00-040-003

S

### 28-28-06B ACT fuel not usable

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

Р

- (o) (m) One or more may be inoperative provided that:
  - The fuel in the ACT (s) is considered as not usable and as part of the ZFW and is taken into account for CG determination and
  - 2) The ACT transfer valve is secured in the closed position.

Note: Refer to Part A 8.1.7.4 Unusable Fuel.

Continued on the following page



28-28 - Additional Center Tank Transfer System

**A320/A321** MINIMUM EQUIPMENT LIST

(o) Refer to OpsProc 28-28 (m) Refer to AMM 28-28-00 P			ed as not usal
3-28-06E ACT empty			
Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No
P			
	ACT	Vent Valve	
8-06 MI-28-28-00008221.0005001 / 29 NOV 1 able to: B-HTD, B-HTE, B-HTF		Vent Valve	
8-06 MI-28-28-00008221.0005001 / 29 NOV 1 able to: B-HTD, B-HTE, B-HTF -28-06D			Placard
8-06 MI-28-28-00008221.0005001 / 29 NOV 1 able to: B-HTD, B-HTE, B-HTF -28-06D  Repair interval  C	1	Nbr required	Placard No



28-28 - Additional Center Tank Transfer System

28-28-07	ACT Refuel Valve

Ident.: MI-28-28-00008222.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-28-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

May be inoperative.

<u>Note:</u> If the refuel valve is inoperative in the closed position, the ACT cannot be

refuelled.

Reference(s)

S

28-28-08	ACT Integrated Impact Wall

Ident.: MI-28-28-00008223.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 28-28-08A Heat shield not damaged

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

S

(m) The protection cover of the ACT integrated impact wall may be damaged provided that the heat shield is not damaged.

Reference(s)

(m) Refer to AMM 28-28-00-040-006

S

Continued on the following page



28-28 - Additional Center Tank Transfer System

Continued from the previous page

# 28-28-08B AFT cargo compartment empty

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

		<b></b>		
May be damaged	or missing prov	ided that the AFT	cargo compartment is (	emptv.

Note: Notify KA IOC of any cargo compartment restriction.

Reference(s)

S

	28-28-09	ACT 1 Inlet Valve
--	----------	-------------------

Ident.: MI-28-28-00008224.0001001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-28-09B All ACT s empty

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

P

May be inoperative in the closed position provided that there is no fuel in the ACT.

Reference(s)

Р

#### 28-28-09C ACT s fuel not usable

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

P

- (o) (m) May be inoperative in the closed position provided that:
  - 1) The fuel in the ACT is considered as not usable and as part of the ZFW and is taken into account for CG determination, and
  - 2) The ACT transfer valve is secured in the closed position.

Note: Refer to Part A 8.1.7.4 Unusable Fuel.

Continued on the following page

HDA A320/A321 FLEET MI-28-28 P 9/10
MEL ← H to I → 04 APR 12



28-28 - Additional Center Tank Transfer System

	Reference(s) —	Continued fr	om the previous pa
(o) Refer to OpsProc 28 (m) Refer to AMM 28-28 P  B-28-09D Use of ACT fue			
Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No
. , , , .	n the open position provided h flight when the ACT is use		ve is checked
	Reference(s) —		
(m) Refer to AMM 28-28 S	-00-040-004		



# MEL ITEMS 28 - FUEL 28-29 - APU LP Fuel Shutoff

28-29-01 APU LP Fuel Valve

Ident.: MI-28-29-00008232.0001001 / 29 NOV 11

Applicable to: ALL

# 28-29-01A Checked closed on FUEL SD page

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (o) May be inoperative provided that:
  - 1) It is checked closed on the FUEL SD page, and
  - 2) The APU is not used.

 Reference(s) ————	

(o) Refer to OpsProc 28-29-01A APU LP Fuel Valve

S

#### 28-29-01B Secured closed

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (m) May be inoperative provided that:
  - 1) It is secured in the closed position, and
  - 2) The APU is not used.

Reference(s)

(m) Refer to AMM 28-29-00-040-002

S



# MEL ITEMS 28 - FUEL 28-29 - APU LP Fuel Shutoff

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 HDA A320/A321 FLEET
 MI-28-29 P 2/2

 MEL
 29 NOV 11



28-43 - Manual Magnetic Indicators

28-43-01	Manual Magnetic Indicators
----------	----------------------------

Ident.: MI-28-43-00008233.0002001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

### 28-43-01A Associated fuel quantity indication operative on the FUEL SD page

Repair interval	Nbr installed	Nbr required	Placard
С	11	0	No

One or more may be inoperative provided that the associated fuel quantity indication is operative on the FUEL SD page.

### 28-43-01B High level fuel detection and fuel used indication operative

Repair interval	Nbr installed	Nbr required	Placard
C	11	0	No

One or more may be inoperative provided that:

- 1) The high level fuel detection system is checked operative before refueling, and
- 2) The tanks in both wings are full, and
- 3) The associated fuel used indication is operative.

28-43-01	Manual Magnetic Indicators
----------	----------------------------

Ident.: MI-28-43-00008233.0005001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 28-43-01A Associated fuel quantity indication operative on the FUEL SD page

Repair interval	Nbr installed	Nbr required	Placard
С	15	0	No

One or more may be inoperative provided that the associated fuel quantity indication is operative on the <u>FUEL SD</u> page.

Continued on the following page

MEL A → 19 JUL 12



#### 28-43 - Manual Magnetic Indicators

Continued from the previous page

# 28-43-01B High level fuel detection and fuel used indication operative

Repair interval	Nbr installed	Nbr required	Placard
С	15	0	No

S

- (m) One or more may be inoperative provided that:
  - 1) The high level fuel detection system is checked operative before refueling, and
  - 2) The tanks in both wings are full, and
  - 3) The associated fuel used indication is operative.

Reference(s)	
--------------	--

(m) Refer to AMM 28-40-00-040-012

S

28-43-01	Manual Magnetic Indicators

Ident.: MI-28-43-00008233.9001002 / 19 JUL 12

Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 28-43-01A Associated fuel quantity indication operative on the FUEL SD page

Repair interval	Nbr installed	Nbr required	Placard
С	9	0	No

One or more may be inoperative provided that the associated fuel quantity indication is operative on the <u>FUEL SD</u> page.

# 28-43-01B High level fuel detection and fuel used indication operative

Repair interval	Nbr installed	Nbr required	Placard
С	9	0	No

One or more may be inoperative provided that:

- 1) The high level fuel detection system is checked operative before refueling, and
- 2) The tanks in both wings are full, and
- 3) The associated fuel used indication is operative.



28-46 - Tank Level Sensing

28-46-01	High Level Detection System in the Inner Tank

Ident.: MI-28-46-00008235.0001001 / 19 JUL 12

#### 28-46-01A

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	2	0	Yes

S

One or both may be inoperative provided that the fuel quantity is continuously monitored during refueling.

Reference(s)

S

28-46-01	High Level Detection System in the Wing Tank
----------	--

Ident.: MI-28-46-00008235.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-46-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

One or both may be inoperative provided that the fuel quantity is continuously monitored during refueling.

Reference(s)

S

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU



28-46 - Tank Level Sensing

28-46-02	High Level Detection System in the Center Tank

Ident.: MI-28-46-00008237.0002001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 28-46-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



May be inoperative provided that the fuel quantity is continuously monitored during refueling.

- Reference(s) -----

S

28-46-02	High Level Detection System in the Center Tank
----------	--

Ident.: MI-28-46-00008237.0006001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-46-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



May be inoperative provided that:

- 1) The fuel quantity is continuously monitored during refueling, and
- 2) The ACT auto transfer system is considered inoperative. Refer to Item 28-28-01 ACT Auto Transfer System

S



28-46 - Tank Level Sensing

20-40-00 Thigh Level Detection System in the AOT	28-46-03	High Level Detection System in the ACT
--	----------	--

Ident.: MI-28-46-00008239.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-46-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

May be inoperative provided that the fuel quantity is continuously monitored during refueling.

- Reference(s) -

S

28-46-04 Low Level Detection System in the Inner Tank	
---	--

Ident.: MI-28-46-00008240.0001001 / 19 JUL 12

#### 28-46-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

28-46-04	Low Level Detection System in the Wing Tank
----------	---

Ident.: MI-28-46-00008240.0004001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 28-46-04A

Repair interval	Nbr installed	Nbr required	Placard
C	2	1	No

One may be inoperative.

<sup>3</sup> Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU



28-46 - Tank Level Sensing

28-46-05	Low Level Detection System in the ACT
----------	---------------------------------------

Ident.: MI-28-46-00008241.0002001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 28-46-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

One or more may be inoperative provided that the ACT auto transfer system is considered inoperative.

Refer to Item 28-28-01 ACT Auto Transfer System



28-50 - Fuel Management

28-50-01 Fuel Quantity Indicating Computer ( FQIC ) Channel
---

Ident.: MI-28-50-00008242.0001001 / 29 NOV 11

Applicable to: ALL

# 28-50-01A

Repair interval	Nbr installed	Nbr required	Placard
A	2	1	No

S

(o) One may be inoperative for 10 calendar days provided that ETOPS is not conducted.

Reference(s)

(o) Refer to OpsProc 28-50-01A Fuel Quantity Indicating Computer (FQIC) Channel

S



28-50 - Fuel Management

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 HDA A320/A321 FLEET
 MI-28-50 P 2/2

 MEL
 29 NOV 11



29-01 - Overhead Panels 29-01-01 - HYD Overhead Panel

29-01-01-01	B(Y) ELEC PUMP pb-sw FAULT light
-------------	----------------------------------

Ident.: MI-29-01-01-00008031.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the associated reservoir quantity indication is operative on the HYD SD page.

Note:

Simultaneous illumination of the BLUE ELEC PUMP pb-sw FAULT light and the ENG 1(2) PUMP pb-sw FAULT light with engines off may be due to a failed engine oil low pressure switch. In this case, the <u>ENG 1(2)</u> OIL LO PR alert is inoperative. Refer to Item 79-09-01 ENG 1(2) OIL LO PR Alert

29-01-01-02	B ELEC PUMP pb-sw OFF light

Ident.: MI-29-01-01-00008034.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

29-01-01-03
-------------

Ident.: MI-29-01-01-00008042.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-01-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



29-01 - Overhead Panels 29-01-01 - HYD Overhead Panel

Ident.: MI-29-01-01-00008048.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-01-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the associated reservoir quantity indication is operative on the HYD SD page .

Note:

Simultaneous illumination of the BLUE ELEC PUMP pb-sw FAULT light and the ENG 1(2) PUMP pb-sw FAULT light with engines off may be due to a failed engine oil low pressure switch. In this case, the <u>ENG 1(2)</u> OIL LO PR alert is inoperative. Refer to Item 79-09-01 ENG 1(2) OIL LO PR Alert

29-01-01-05 G(Y) ENG 1(2) PUMP pb-sw OFF light
--

Ident.: MI-29-01-01-00008049.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-01-01-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.



29-01 - Overhead Panels 29-01-01 - HYD Overhead Panel

29-01-01-06	PTU pb-sw FAULT light
-------------	-----------------------

Ident.: MI-29-01-01-00008050.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-01-01-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the quantity indications of the yellow and green reservoir are operative on the HYD SD page .

Note:

Illumination of two lights (one from the Blue ELEC PUMP pb and one from ENG 1(2) PUMP pb) with engines off, may be due to a failed engine oil low pressure switch. In this case, the ENG OIL LO PRESS warning is inoperative.

Refer to Item 79-09-01 ENG 1(2) OIL LO PR Alert

29-01-01-07	PTU pb-sw OFF light
	·

Ident.: MI-29-01-01-00008051.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-01-01-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



29-01 - Overhead Panels 29-01-01 - HYD Overhead Panel

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HDA A320/A321 FLEET MI-29-01-01 P 4/4
MEL 29 NOV 11



29-01 - Overhead Panels 29-01-02 - Maintenance HYD Overhead Panel

29-01-02-01 G(B)(Y) LEAK MEASUREMENT VALVES pb-sw OFF light

Ident.: MI-29-01-02-00008052.0001001 / 22 MAR 10

Applicable to: ALL

# 29-01-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.



29-01 - Overhead Panels 29-01-02 - Maintenance HYD Overhead Panel

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HDA A320/A321 FLEET MI-29-01-02 P 2/2 MEL 29 NOV 11



29-07 - Indications on the HYD SD page

29-07-01 Yellow ELEC Pump Indication on the HYD SD page
---

Ident.: MI-29-07-00008078.0001001 / 22 MAR 10

Applicable to: ALL

# 29-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

29-07-02	Pump Indication on the <u>HYD</u> SD page

Ident.: MI-29-07-00008079.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

One or more may be inoperative.

29-07-03	Fire Valve Indication on the HYD SD page
----------	--

Ident.: MI-29-07-00008080.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-07-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



29-07 - Indications on the HYD SD page

29-07-04 PTU Indication on the HYD SD page	
--	--

Ident.: MI-29-07-00008081.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-07-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

29-07-05	Reservoir Quantity Indication on the HYD SD page
11 . 141.00 07.0000000 000400	4 / 00 NOV 44

Ident.: MI-29-07-00008082.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-07-05A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

S

- (m) One may be inoperative provided that:
  - 1) The associated HYD B(G)(Y) RSVR LO LVL alert is checked operative, and
  - 2) The associated reservoir quantity is checked before each flight.

Reference(s)

(m) Refer to AMM task

S



29-07 - Indications on the HYD SD page

25 57 55 page	29-07-06	RAT Indication on the HYD SD page
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Ident.: MI-29-07-00008083.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-07-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the RAT is visually checked to be stowed before each flight.

29-07-07 System Label Indication on the <u>HYD</u> SD page
--

Ident.: MI-29-07-00008084.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-07-07A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

S

(o) One or more may be inoperative provided that the associated system pressure is checked available before each flight.

(o) Refer to OpsProc 29-07-07A System Label Indication on the HYD SD page

S

29-07-08	System Pressure Indication on the <u>HYD</u> SD page

Ident.: MI-29-07-00008085.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-07-08A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

(o) One may be inoperative provided that the associated system label indication is checked operative before each flight.

Continued on the following page



29-07 - Indications on the HYD SD page

		Continued from the previous page
	Reference(s)	
(o) Refer to OpsProc	29-07-08A System Pressure Indication	on the HYD SD page



29-09 - ECAM Alerts

29-09-01	HYD B(Y) ELEC PUMP LO PR Alert

Ident.: MI-29-09-00008086.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-09-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be displayed provided that the associated system pressure indication is operative.

29-09-02	HYD B(Y) ELEC PUMP OVHT Alert

Ident.: MI-29-09-00008087.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-09-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be displayed.

29-09-03	HYD G(Y) ENG 1(2) PUMP LO PR Alert
----------	------------------------------------

Ident.: MI-29-09-00008088.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-09-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

- One or both may be displayed provided that: (o)
  - 1) The associated system pressure indications are operative, and
  - 2) The engine pumps are checked operative before each flight.

Reference(s) -

(o) Refer to OpsProc 29-09-03A HYD G(Y) ENG 1(2) PUMP LO PR Alert



29-09 - ECAM Alerts

	29-09-04	HYD G(B)(Y) RSVR LO AIR PR Alert
--	----------	----------------------------------

Ident.: MI-29-09-00008090.0001001 / 19 JUL 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 29-09-04A

Re	oair interval	Nbr installed	Nbr required	Placard
	С	3	2	No

S

(m) One may be inoperative provided	that the air	pressure is	checked on	the associated
reservoir before each flight.				

- Reference(s) -

(m) Refer to AMM task

S

29-09-04	HYD G(B)(Y) RSVR LO AIR PR Alert
Ident.: MI-29-09-00008090.0003001	1 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI

#### 29-09-04A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

S

(m)	One may	be displa	ayed for the	e green	or the	yellow	system	provided	that the	air	pressur	e is
	checked of	on the as	ssociated re	eservoii	r before	each	flight.					

(m) Refer to AMM 29-34-00-040-001

S



29-09 - ECAM Alerts

1 71 1	29-09-05	HYD G(B)(Y) RSVR LO LVL Alert
--------	----------	-------------------------------

Ident.: MI-29-09-00008091.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-09-05A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

One may be displayed provided that the associated reservoir quantity is checked on the <u>HYD</u> SD page before each flight.

Note:

- When the alert is displayed on the EWD, the associated PUMP pb-sw FAULT light and the PTU pb-sw FAULT light (if the green or the yellow system is affected) may simultaneously come on.
  - Refer to Item 29-01-01-01 B(Y) ELEC PUMP pb-sw FAULT light, and Refer to Item 29-01-01-04 G(Y) ENG 1(2) PUMP pb-sw FAULT light, and Refer to Item 29-01-01-06 PTU pb-sw FAULT light
- 2. If the blue reservoir is affected, EMER GEN may appear in the INOP SYS column on the <u>STATUS</u> SD page before engine start.

29-09-06	HYD G(B)(Y) RSVR OVHT Alert
----------	-----------------------------

Ident.: MI-29-09-00008092.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-09-06A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

The HYD G RSVR OVHT alert or the HYD Y RSVR OVHT alert may be displayed.



29-09 - ECAM Alerts

29-09-07	<u>HYD</u> PTU FAULT Alert

Ident.: MI-29-09-00008093.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-09-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

(o) May be displayed provided that the PTU is checked operative before each flight.

(o) Refer to OpsProc 29-09-07A HYD PTU FAULT Alert

<u></u>	29-09-08	HYD RAT FAULT Alert
---------	----------	---------------------

Ident.: MI-29-09-00008094.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-09-08A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

(m) May be displayed provided that the RAT integrity is checked before each flight.

Reference(s)

(m) Refer to AMM 29-30-00-040-001

S

29-09-09	HYD G(B)(Y)(B+G)(G+Y)(B+Y) SYS LO PR Alert
----------	--

Ident.: MI-29-09-00008095.0001001 / 29 NOV 11

Applicable to: ALL

# 29-09-09A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

(o) One or more may be displayed provided that the associated system pressure is checked available before each flight.

Continued on the following page



# MEL ITEMS 29 - HYDRAULIC POWER 29-09 - ECAM Alerts

		Continued from the previous page
	Reference(s)	
(o) Refer to OnsE	Proc 29-09-09A HYD G(B)(Y)(B+G)(G+Y)(	B+Y) SYS LO PR Alert



# MEL ITEMS 29 - HYDRAULIC POWER 29-09 - ECAM Alerts

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 HDA A320/A321 FLEET
 MI-29-09 P 6/6

 MEL
 19 JUL 12



29-10 - Main Hydraulic Power

|--|

Ident.: MI-29-10-00008055.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-10-01A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

29-10-02	Engine Driven Pump Depressurization Function

Ident.: MI-29-10-00010628.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-10-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

Ident.: MI-29-10-00008057.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-10-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

(o) The automatic control may be inoperative provided that the pump is manually operated.

(o) Refer to OpsProc 29-10-03A Blue System Electric Pump



29-10 - Main Hydraulic Power

29-10-04	Hydraulic System Accumulator
Idam - MI 00 10 00000061 000000	1 / 20 NOV 11

Ident.: MI-29-10-00008061.0002001 / 29 NOV 11

Applicable to: ALL

#### 29-10-04A No hydraulic fluid leakage

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

S

(m) One or more may be inoperative provided that it is checked that there is no hydra	ulic fluid
leakage in the accumulator nitrogen charging circuit.	

(m) Refer to AMM 29-10-00-040-007

S

#### 29-10-04B Accumulator deactivated

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

S

(m) One or more may be inoperative provided that the affected accumulator is deactiva	ated
---	------

(m) Refer to AMM task

S

29-10-05	Yellow Brake Accumulator
	·

Ident.: MI-29-10-00008063.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-10-05A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	No

Must be operative.



29-10 - Main Hydraulic Power

29-10-07	Engine Pump Fire Valve
	·

Ident.: MI-29-10-00008067.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-10-07A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

29-10-08 Hydraulic System Filter	
----------------------------------	--

Ident.: MI-29-10-00008069.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-10-08A One LP filter inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	8	7	No

One LP filter may be inoperative.

#### 29-10-08B Reservoir filling filter inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	8	7	No

The reservoir filling filter may be inoperative.

29-10-09	Hydraulic Case Drain Filter

Ident.: MI-29-10-00008072.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-10-09A

Repair interval	Nbr installed	Nbr required	Placard
C	3	2	No

S

(m) One may be inoperative provided that it is removed.

Continued on the following page



29-10 - Main Hydraulic Power

	Reference(s)	Continued from the previous page
	riciorchoo(s)	
(m) Refer to AMM task		
S		



29-22 - Blue Auxiliary Hydraulic Power

29-22-01	Ram Air Turbine
----------	-----------------

Ident.: MI-29-22-00008074.0001001 / 22 MAR 10

Applicable to: ALL

#### 29-22-01A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	No

Must be operative.



29-22 - Blue Auxiliary Hydraulic Power

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HDA A320/A321 FLEET MI-29-22 P 2/2 MEL 29 NOV 11



29-23 - Power Transfer

29-23-01	Power Transfer Unit ( PTU )
----------	-----------------------------

Ident.: MI-29-23-00008076.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-23-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

S

(o)	PTU may continuously run when set to AUTO provided that the operation of the PTU in both
	directions is checked before the first flight of each day.

Reference(s)

(o) Refer to OpsProc 29-23-01A Power Transfer Unit (PTU)

S



29-23 - Power Transfer

Intentionally left blank

HDA A320/A321 FLEET MI-29-23 P 2/2 MEL 29 NOV 11



29-24 - Yellow Auxiliary Hydraulic Power

29-24-01	Yellow System Electric Pump
----------	-----------------------------

Ident.: MI-29-24-00008077.0001001 / 29 NOV 11

Applicable to: ALL

#### 29-24-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o)	May be inoperative provided that the associated pb-sw is set to off.
	Reference(s)

(o) Refer to OpsProc 29-24-01A Yellow System Electric Pump



29-24 - Yellow Auxiliary Hydraulic Power

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HDA A320/A321 FLEET MI-29-24 P 2/2 MEL 29 NOV 11



30-01 - Overhead Panels 30-01-01 - ANTI ICE Overhead Panel

30-01-01-01	ANTI ICE ENG 1(2) pb-sw FAULT light
-------------	-------------------------------------

Ident.: MI-30-01-01-00007866.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-01-01-01A One inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative provided that the associated engine anti-ice valve is considered inoperative in the CLOSED position.

Refer to Item 30-21-01A Engine Anti-Ice Valve

#### 30-01-01-01B One or both inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the associated engine anti-ice valve is considered inoperative in the OPEN position.

Refer to Item 30-21-01 Engine Anti-Ice Valve

30-01-01-02	ANTI ICE ENG 1(2) pb-sw ON light
	71

Ident.: MI-30-01-01-00007870.0001001 / 22 MAR 10

Applicable to: ALL

#### 30-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.



30-01 - Overhead Panels 30-01-01 - ANTI ICE Overhead Panel

30-01-01-03 ANTI ICE WING pb-sw FAULT light	
---	--

Ident.: MI-30-01-01-00007882.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-01-01-03A Anti-ice "arrow" symbols operative on the BLEED SD page

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o)	May be inoperative provided that the anti-ice "arrow" symbols are operative on the BLEED
	SD page.

(o) Refer to OpsProc 30-01-01-03A ANTI ICE WING pb-sw FAULT light

#### 30-01-01-03B Non ETOPS flight

ſ	Repair interval	Nbr installed	Nbr required	Placard
Γ	С	1	0	Yes

Р

- (m) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - **2)** The wing anti-ice control valves are deactivated in the closed position and considered inoperative.

Refer to Item 30-11-01 Wing Anti-Ice Control Valve

Reference(s)

(m) Refer to AMM 30-11-00-040-002

Р



30-01 - Overhead Panels 30-01-01 - ANTI ICE Overhead Panel

30-01-01-04	ANTI ICE WING pb-sw ON light
-------------	------------------------------

Ident.: MI-30-01-01-00007885.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-01-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



30-01 - Overhead Panels 30-01-01 - ANTI ICE Overhead Panel

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HDA A320/A321 FLEET MI-30-01-01 P 4/4 MEL 29 NOV 11



30-01 - Overhead Panels 30-01-02 - WIPER Overhead Panel

30-01-02-01 Wiper High Speed Function (FAS
--

Ident.: MI-30-01-02-00007890.0001001 / 22 MAR 10

Applicable to: ALL

#### 30-01-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the associated low speed function is operative.

30-01-02-02	Wiper Low Speed Function (SLOW Position)

Ident.: MI-30-01-02-00007893.0001001 / 22 MAR 10

Applicable to: ALL

#### 30-01-02-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

30-01-02-03	Wiper Intermittent Speed Function (INTMT Position)
-------------	--

Ident.: MI-30-01-02-00007896.0001001 / 19 JUL 12

#### 30-01-02-03A

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	Yes

One or both may be inoperative.

<sup>1</sup> Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI



30-01 - Overhead Panels 30-01-02 - WIPER Overhead Panel

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 HDA A320/A321 FLEET
 MI-30-01-02 P 2/2

 MEL
 19 JUL 12



#### MEL ITEMS

#### 30 - ICE AND RAIN PROTECTION

30-07 - Indications on the BLEED SD page

30-07-01	ANTI ICE Indication on the <u>BLEED</u> SD page
----------	---

Ident.: MI-30-07-00008019.0001001 / 22 MAR 10

Applicable to: ALL

#### 30-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

30-07-02	Arrow Indication on the BLEED SD page
----------	---------------------------------------

Ident.: MI-30-07-00008020.0001001 / 22 MAR 10

Applicable to: ALL

#### 30-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



30-07 - Indications on the BLEED SD page

Intentionally left blank

HDA A320/A321 FLEET MI-30-07 P 2/2 MEL 29 NOV 11



30-11 - Wing Ice Protection

30-11-01 Wing Anti-Ice Control Valve	
--------------------------------------	--

Ident.: MI-30-11-00007897.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-11-01A Inoperative in the open position

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

P

(o) (m) The RH valve may be inoperative in the open position provided that the associated ECAM procedure is applied.

Refer to FCOM/PRO/ABN/WING ANTI ICE L (R) VALVE OPEN

Deference(a)	
Reference(s)	

- (o) Refer to OpsProc 30-11-01A Wing Anti-Ice Control Valve
- (m) Refer to AMM 30-11-00-040-004

Р

#### 30-11-01B Inoperative in the closed position

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	2	0	Yes

P

- (m) One or both may be inoperative in the closed position provided that:
  - 1) ETOPS is not conducted, and
  - 2) The aircraft is not operated in known or forecast icing conditions.

(m) Refer to AMM 30-11-00-040-001

P



# MEL ITEMS 30 - ICE AND RAIN PROTECTION 30-11 - Wing Ice Protection

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HDA A320/A321 FLEET MI-30-11 P 2/2 MEL 29 NOV 11



30-21 - Engine Air Intake Ice Protection

30-21-01 Engine Anti-Ice Valve
--------------------------------

Ident.: MI-30-21-00007898.0002001 / 29 NOV 11

Applicable to: ALL

#### 30-21-01A Inoperative in the closed position

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

P

- (m) One may be inoperative in the CLOSED position provided that:
  - 1) ETOPS is not conducted, and
  - 2) The aircraft is not operated in known or forecast icing conditions.

(m) Refer to AMM 30-21-00-040-020

Р

#### 30-21-01C Inoperative in the open position

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

P

- (o) (m) One or both may be inoperative in the open position provided that:
  - 1) Performance penalties as per operational procedures are applied, and
  - 2) The OAT is below ISA + 35 °C.

- Reference(s) -

- (o) Refer to OpsProc 30-21-01C Engine Anti-Ice Valve
- (m) Refer to AMM 30-21-00-040-010

P



30-21 - Engine Air Intake Ice Protection

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HDA A320/A321 FLEET MI-30-21 P 2/2 MEL 29 NOV 11



30-31 - Probe Ice Protection

30-31-01 Probe Heat Computer ( PHC )	30-31-01	Probe Heat Computer ( PHC )
--------------------------------------	----------	-----------------------------

Ident.: MI-30-31-00007899.0001001 / 04 APR 12

Applicable to: ALL

#### 30-31-01A Associated probe heating operative

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

AS

(m) One may be inoperative provided that the associated probe heating is checked operative before each flight.

Refer to Item 34-21-03 Standby IAS Indicator, and Refer to Item 34-21-04 Bugs on the Standby IAS Indicator

— Reference(s) —

(m) Refer to AMM 30-31-00-040-001

#### 30-31-01B F/O PHC inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

AS

(o) (m) The F/O PHC may be inoperative provided that the ADR s, heaters and failure alerts associated with the operative computers are checked operative before the first flight of each dav.

Refer to Item 34-21-03 Standby IAS Indicator, and Refer to Item 34-21-04 Bugs on the Standby IAS Indicator

----- Reference(s) -

(o) Refer to OpsProc 30-31-01B Probe Heat Computer (PHC)

(m) Refer to AMM 30-31-00-040-005

Continued on the following page

HDA A320/A321 FLEET MI-30-31 P 1/8 MEL 04 APR 12



30-31 - Probe Ice Protection

Continued from the previous page

#### 30-31-01C STBY PHC inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

#### A P

- (m) The STBY PHC may be inoperative provided that:
  - 1) The ADR s, heaters and failure alerts associated with the operative computers are checkedoperative before the first flight of each day, and
  - The aircraft is not operated in visible moisture or in known or forecast icing conditions, and
  - 3) The OAT at the departure airport is above 5 °C when the taxiway or the runway are contaminated with water or slush.

Refer to Item 34-21-03 Standby IAS Indicator, and Refer to Item 34-21-04 Bugs on the Standby IAS Indicator

<b>-</b>	
— Reference(s)	

(m) Refer to AMM 30-31-00-040-005

Α

Р

30-31-02	Pitot Heater
	1

Ident.: MI-30-31-00007900.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-31-02A F/O pitot heater inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

#### A S

(o) (m) The F/O pitot heater may be inoperative provided that the ADR s, heaters and failure alerts associated with the CAPT and the STBY probes (pitot, static, AOA, TAT) are checked operative before the first flight of each day.

Continued on the following page



30-31 - Probe Ice Protection

	Reference(s) —	Continued fro	om the previous pa
(o) Refer to OpsProc	30-31-02A Pitot Heater		
(m) Refer to AMM 30- A S			
0-31-02B CAPT pitot h	eater inoperative		
Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No
AP			
2) The aircraft is i  (m) Refer to AMM 30-  A  P  0-31-02C STBY pitot h		or in known or forecast ic	ing conditions.
Repair interval	Nbr installed	NII	
		iyor required	Placard
C	3	Nbr required 2	Placard No



30-31 - Probe Ice Protection

30-31-03	Static Ports Heater
----------	---------------------

Ident.: MI-30-31-00007901.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-31-03A One STBY static port heater inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	6	5	No

One STBY static ports heater may be inoperative.

#### 30-31-03B Both STBY static port heater inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	6	4	No

_	 _
Α	Р

- (m) Both STBY static ports heaters may be inoperative provided that:
  - 1) The ADR s, heaters and failure alerts associated with the CAPT and the F/O probes (pitot, static, AOA, TAT) are checked operative before the first flight of each day, and
  - 2) The OAT at the departure airport is above 5 °C when the runway is contaminated with water or slush.

	Reference(s)	
(m) Refer to AMM 30-31-00-040-003		

A

#### 30-31-03C One or both F/O static port heater inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	6	4	No

AS

(o) (m) One or both F/O static ports heaters may be inoperative provided that the ADR s, heaters and failure alerts associated with the CAPT and the STBY probes (pitot, static, AOA, TAT) are checked operative before the first flight of each day.

Continued on the following page



30-31 - Probe Ice Protection

	Continued from the previous page
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- (o) Refer to OpsProc 30-31-03C Static Ports Heater
- (m) Refer to AMM 30-31-00-040-003

Α

#### 30-31-03D One or both CAPT static port heater inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	6	4	No

#### AP

- (m) One or both CAPT static ports heaters may be inoperative provided that:
  - 1) The ADR s, heaters and failure alerts associated with the F/O and the STBY probes (pitot, static, AOA, TAT) are checked operative before the first flight of each day, and
  - 2) The OAT at the departure airport is above 5 °C when the runway is contaminated with water or slush.

	_
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(m) Refer to AMM 30-31-00-040-003

Α

Р

30-31-04	Angle of Attack ( AOA ) Probes Heating
1	

Ident.: MI-30-31-00007902.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-31-04A F/O AOA inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

#### ALP

(o) (m) The F/O AOA probes heating may be inoperative provided that the ADR s, heaters and failure alerts associated with the CAPT and the STBY probes (pitot, static, AOA, TAT) are checked operative before the first flight of each day.

Continued on the following page



30-31 - Probe Ice Protection

(o) Refer to OpsProc 30 (m) Refer to AMM 30-31 A L P	Reference(s) — 1-31-04A Angle of Attack (AC -00-040-004	OA) Probes Heating (F/O inc	operative)
31-04B STBY AOA inop Repair interval	perative  Nbr installed	Nbr required	Placard
C	3	2	No
failure alerts associa	pes heating may be inoperati ted with the CAPT and the F efore the first flight of each d Reference(s)	O probes (pitot, static, AO	
(o) Refer to OpsProc 30 inoperative) (m) Refer to AMM 30-31	1-31-04B Angle of Attack (AC	OA) Probes Heating (CAPT o	or STBY

#### ALP

Repair interval

С

(o) (m) The CAPT AOA probes heating may be inoperative provided that:

Nbr installed

1) The ADR s, heaters and failure alerts associated with the F/O and the STBY probes (pitot, static, AOA, TAT) are checked operative before the first flight of each day, and

Nbr required

2

Placard

No

2) The aircraft is not operated in visible moisture or in known or forecast icing conditions

Continued on the following page



30-31 - Probe Ice Protection

1

Continued from the previous page — Reference(s) — (o) Refer to OpsProc 30-31-04C Angle of Attack (AOA) Probes Heating (CAPT or STBY inoperative) (m) Refer to AMM 30-31-00-040-004 **TAT Probes Heating** 30-31-05 Ident.: MI-30-31-00007903.0001001 / 29 NOV 11 Applicable to: ALL 30-31-05A One inoperative Repair interval Nbr required Placard Nbr installed

One may be inoperative.

#### 30-31-05B Both inoperative

С

Repair interval	Nbr installed	Nbr required	Placard
C	2	0	No

2



Р

Both may be inoperative provided that the aircraft is not operated in visible moisture or in known or forecast icing conditions.

Reference(s) -

HDA A320/A321 FLEET MI-30-31 P 7/8 MEL ← D to E

No



# MEL ITEMS 30 - ICE AND RAIN PROTECTION 30-31 - Probe Ice Protection

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HDA A320/A321 FLEET MI-30-31 P 8/8 MEL 04 APR 12



#### MEL ITEMS

#### 30 - ICE AND RAIN PROTECTION

30-42 - Windshield Anti-Icing and Defogging

30-42-01 Window neat Computer	30-42-01	Window Heat Computer
-------------------------------	----------	----------------------

Ident.: MI-30-42-00007912.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-42-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

ALP

- (o) (m) One may be inoperative provided that:
  - 1) The aircraft is not operated in known or forecast icing conditions, and
  - 2) All heaters and failure alerts on the front and sliding windows associated with the operative computer are checked operative before the first flight of each day.

Deference(e)	
Reference(s)	·

- (o) Refer to OpsProc 30-42-01A Window Heat Computer
- (m) Refer to AMM 30-42-00-040-001

Δ

F

30-42-02 Fixed Lateral Window and Sliding Window Heating	
--	--

Ident.: MI-30-42-00007913.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-42-02A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

One or more may be inoperative.



30-42 - Windshield Anti-Icing and Defogging

30-42-03	Windshield Heating
----------	--------------------

Ident.: MI-30-42-00007915.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-42-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

LP

(o) One may be inoperative provided that the aircraft is not operated in known or forecast icing conditions.

Reference(s)

(o) Refer to OpsProc 30-42-03A Windshield Heating



30-42-04	PROBES/WINDOW HEAT pb-sw AUTO Control

Ident.: MI-30-42-00007918.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-42-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

Automatic control may be inoperative provided that the PROBES/WINDOW HEAT system is manually selected.



#### MEL ITEMS

#### 30 - ICE AND RAIN PROTECTION

30-42 - Windshield Anti-Icing and Defogging

30-42-05	PROBES/WINDOW HEAT pb-sw ON light
----------	-----------------------------------

Ident.: MI-30-42-00007921.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-42-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



30-42 - Windshield Anti-Icing and Defogging

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HDA A320/A321 FLEET MI-30-42 P 4/4
MEL 29 NOV 11



30-45 - Windshield Rain Protection

30-45-01 Windshield Wiper
---------------------------

Ident.: MI-30-45-00007927.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-45-01A One inoperative on the PM side

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	A	2	1	Yes

S

One may be inoperative on the PM side for three flight
--

Reference(s)

S

#### 30-45-01B One or both inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

LP

- (o) One or both may be inoperative provided that:
  - 1) The aircraft is not operated in precipitation within departure and arrival areas, and
  - 2) The approach minima do not require their use.

Deference(a)
 Reference(s) —

- (o) Refer to OpsProc 30-45-01B Windshield Wiper
- 틷

#### 30-45-01C Rain repellent system operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative provided that the associated rain repellent system is installed and operative.



30-45 - Windshield Rain Protection

|--|

Ident.: MI-30-45-00007929.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-45-02A One or both inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the associated wipers can be positioned in a location that will not obstruct forward vision

#### 30-45-02B One or both inoperative and removed

Repair interval	Nbr installed	Nbr required	Placard
-	2	0	No

S

(m) One or both may be inoperative provided that the associated wipers are removed. Refer to Item 30-45-01 Windshield Wiper

Reference(s)	

(m) Refer to AMM 30-45-00-040-003

S

30-45-03	Rain Repellent System

Ident.: MI-30-45-00007931.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-45-03A

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	Yes

One or both may be inoperative.



#### 30 - ICE AND RAIN PROTECTION

30-71 - Waste Water Ice Protection

|--|

Ident.: MI-30-71-00007934.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-71-01A

Repair interval	Nbr installed	Nbr required	Placard
C 2		0	No



- (m) One or both may be inoperative provided that:
  - 1) The associated galleys and lavatories are not used, and
  - 2) The associated lavatory water supplies are closed, and
  - 3) Associated lavatory door is placarded 'INOPERATIVE' and locked closed.

- Reference(s) -----

(m) Refer to AMM 30-71-00-040-001



# MEL ITEMS 30 - ICE AND RAIN PROTECTION 30-71 - Waste Water Ice Protection

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HDA A320/A321 FLEET MI-30-71 P 2/2 MEL 29 NOV 11



# MEL ITEMS 30 - ICE AND RAIN PROTECTION

30-81 - Ice Detection

30-81-02	External Visual Icing Indicator
----------	---------------------------------

Ident.: MI-30-81-00008017.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-81-02A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	No

Refer to CDL/ Icing Indicator

30-81-03	Lighting of External Visual leing Indicator

Ident.: MI-30-81-00008018.0001001 / 29 NOV 11

Applicable to: ALL

#### 30-81-03A

Repair interval	Nbr installed	Nbr required	Placard
D	D 1		No

(o) May be inoperative.

Reference(s)

(o) Refer to OpsProc 30-81-03A Lighting of External Visual Icing Indicator



# MEL ITEMS 30 - ICE AND RAIN PROTECTION 30-81 - Ice Detection

Intentionally left blank

HDA A320/A321 FLEET MI-30-81 P 2/2 MEL 29 NOV 11



#### 31 - INDICATING/RECORDING SYSTEMS

31-00 - MAINTENANCE Message on the STATUS SD page

31-00-01	QAR <u>MAINTENANCE</u> Message

Ident.: MI-31-00-00007776.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-00-01A

Repair interval	Nbr installed	Nbr required	Placard
D –		-	No

S

QAR MAINTENANCE message may be displayed on the STATUS SD page	)

S

31-00-02 ACMS MAINTENANCE Message
-----------------------------------

Ident.: MI-31-00-00007777.0002001 / 29 NOV 11

Applicable to: ALL

#### 31-00-02A

Repair interval	Repair interval Nbr installed		Placard
D –		-	No

S

ACMS MAINTENANCE	message may b	oe displayed	on the STATI	JS SD page.
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Reference(s) —



#### 31 - INDICATING/RECORDING SYSTEMS

31-00 - MAINTENANCE Message on the STATUS SD page

31-00-03	DAR <u>MAINTENANCE</u> Message

Ident.: MI-31-00-00007778.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-00-03A

	Repair interval	Nbr installed	Nbr required	Placard
ı	D	-	_	No

S

DAR MAINTENANCE message may be displayed on the STATUS SD page.

S

31-00-04 CFDIU MAINTENANCE Message
------------------------------------

Ident.: MI-31-00-00007779.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-00-04A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

CFDIU MAINTENANCE message may be displayed on the STATUS SD page.



#### 31 - INDICATING/RECORDING SYSTEMS

31-00 - MAINTENANCE Message on the STATUS SD page

	31-00-05	DMC 1/3 <u>MAINTENANCE</u> Message
--	----------	------------------------------------

Ident.: MI-31-00-00007780.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-00-05A

Repair interval	Nbr installed	Nbr required	Placard
С	-	1	No

S

DMC 1/3 <u>MAINTENANCE</u> message may be displayed on the <u>STATUS</u> SD page provided that the DMC 2/3 MAINTENANCE message is not displayed on the STATUS SD page.

- Reference(s) -

S

31-00-06	DMC 2/3 MAINTENANCE Message
	_

Ident.: MI-31-00-00007781.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-00-06A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

DMC 2/3  $\underline{\text{MAINTENANCE}}$  message may be displayed on the  $\underline{\text{STATUS}}$  SD page.

Reference(s)



#### 31 - INDICATING/RECORDING SYSTEMS

31-00 - MAINTENANCE Message on the STATUS SD page

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HDA A320/A321 FLEET MI-31-00 P 4/4
MEL 29 NOV 11



#### 31 - INDICATING/RECORDING SYSTEMS

31-05 - Indications on the Primary Flight Display (PFD)

31-05-01 AP R	elated Indications on the FMA
---------------	-------------------------------

Ident.: MI-31-05-00007820.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-01A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 22-05-01 AP Related Indications on the FMA

31-05-02	A/THR Related Indications on the FMA

Ident.: MI-31-05-00007821.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-02A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 22-05-02 A/THR Related Indications on the FMA

31-05-03	Approach and Landing Capabilities on the FMA
	ļ.

Ident.: MI-31-05-00007822.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-03A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	_

Refer to Item 22-05-03 Approach and Landing Capabilities on the FMA



#### 31 - INDICATING/RECORDING SYSTEMS

31-05 - Indications on the Primary Flight Display (PFD)

31-05-04	Special Messages on the FMA
----------	-----------------------------

Ident.: MI-31-05-00007823.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-04A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 22-05-04 Special Messages on the FMA

31-05-05	Actual Airspeed Reference Line and Scale Indications on the PFD	
		_

Ident.: MI-31-05-00007824.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-05A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 34-05-01 Actual Airspeed Reference Line and Scale Indication on the PFD

31-05-06	Mach Number Indication on the PFD

Ident.: MI-31-05-00007825.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-06A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 34-05-02 Mach Number Indication on the PFD



#### 31 - INDICATING/RECORDING SYSTEMS

31-05 - Indications on the Primary Flight Display (PFD)

31-05-07	VMO / MMO Characteristic Speed Indication on the PFD
----------	--

Ident.: MI-31-05-00007826.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-07A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 34-05-03 VMO/MMO Characteristic Speed Indication on the PFD

31-05-08	Altitude Indication on the PFD

Ident.: MI-31-05-00007827.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-08A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	_

Refer to Item 34-05-04 Altitude Indication on the PFD

31-05-09	Vertical Speed Indication on the PFD

Ident.: MI-31-05-00007828.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-09A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	_

Refer to Item 34-05-06 Vertical Speed in Inertial Mode Indication on the PFD



#### 31 - INDICATING/RECORDING SYSTEMS

31-05 - Indications on the Primary Flight Display (PFD)

31-05-10	Other Air Data Related Indications on the PFD
----------	---

Ident.: MI-31-05-00007829.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-10A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	-

Refer to Item 34-05-07 Other Air Data Related Indications on the PFD

31-05-11	Attitude Indication on the PFD
Ident - MI 21 05 00007920 000100	1 / 00 MAD 10

Applicable to: ALL

#### 31-05-11A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 34-05-08 Attitude Indication on the PFD

_
---

Ident.: MI-31-05-00007831.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-05-12A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	_

Refer to Item 34-05-09 Heading Indication on the PFD



#### 31 - INDICATING/RECORDING SYSTEMS

31-06 - Indications on the Navigation Display (ND)

31-06-01	Ground Speed Indication on the ND
----------	-----------------------------------

Ident.: MI-31-06-00007832.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-06-01A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 34-06-01 Ground Speed Indication on the ND

31-06-02	True Air Speed Indication on the ND

Ident.: MI-31-06-00007834.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-06-02A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 34-06-02 True Air Speed Indication on the ND

31-06-03 Wind Indication on the ND
------------------------------------

Ident.: MI-31-06-00007835.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-06-03A

Repair interval	Nbr installed	Nbr required	Placard
-	-	1	1

Refer to Item 34-06-03 Wind Indication on the ND



#### 31 - INDICATING/RECORDING SYSTEMS

31-06 - Indications on the Navigation Display (ND)

31-06-04 Heading Indication on the ND
---------------------------------------

Ident.: MI-31-06-00007836.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-06-04A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 34-06-04 Heading Indication on the ND

31-06-05	Position (Aircraft Symbol) Indication on the ND
Ident : MI 21 06 00007920 000100	1 / 22 MAD 10

dent.: MI-31-06-00007839.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-06-05A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 34-06-05 Position (Aircraft Symbol) Indication on the ND

31-06-06	Navigation Station Information on the ND
Ident : MI 21 06 00007945 000100	1 / 20 MAD 10

Ident.: MI-31-06-00007845.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-06-06A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 34-06-06 Radio Navaids Indications on the ND



#### 31 - INDICATING/RECORDING SYSTEMS

31-06 - Indications on the Navigation Display (ND)

31-06-07	Chrono Indication on the ND

Ident.: MI-31-06-00007846.0001001 / 22 MAR 10

Applicable to: ALL

## 31-06-07A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 34-06-07 Chrono Indication on the ND



#### 31 - INDICATING/RECORDING SYSTEMS

31-06 - Indications on the Navigation Display (ND)

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HDA A320/A321 FLEET MI-31-06 P 4/4
MEL 29 NOV 11



#### 31 - INDICATING/RECORDING SYSTEMS

31-07 - Indications on the System Display (SD)

Ident.: MI-31-07-00007848.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-07-01A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	No

Refer to corresponding item in the associated ATA chapter.

31-07-02	Permanent Data ( TAT , SAT , GLOAD -
	ALT SEL, UTC , GW ) Indications on the SD

Ident.: MI-31-07-00007850.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG

#### 31-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	6	1	No

(o) TAT indication must be available.

Deference(e)	

(o) Refer to OpsProc 31-07-02A Permanent Data Indications on the SD

31-07-02	Permanent Data ( TAT , SAT , GLOAD,
	UTC , GW ) Indications on the SD

Ident.: MI-31-07-00007850.0002001 / 19 JUL 12

Applicable to: B-HST, B-HSU, B-HTH, B-HTI

#### 31-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	5	1	No

(o) TAT indication must be available.

Deference(c)	

(o) Refer to OpsProc 31-07-02A Permanent Data Indications on the SD



#### 31 - INDICATING/RECORDING SYSTEMS

31-07 - Indications on the System Display (SD)

31-07-02	Permanent Data ( TAT , SAT , ISA ,
	GLOAD, UTC , GW ) Indications on the SD

Ident.: MI-31-07-00007850.0004001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR

TAT indication must be available

## 31-07-02A

**(**0)

Repair interval	Nbr installed	Nbr required	Placard
С	6	1	No

(5)	1711 III dioation mast be available.
	- neielelice(s)

(o) Refer to OpsProc 31-07-02A Permanent Data Indications on the SD



#### 31 - INDICATING/RECORDING SYSTEMS

31-08 - Indications on the Engine Warning Display (EWD)

31-08-01	Engine Parameter Indications on the EWD
----------	---

Ident.: MI-31-08-00007851.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-08-01A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	No

Refer to 77-08

31-08-02 Fuel On Board ( FOB ) Indication on the	EWD
--	-----

Ident.: MI-31-08-00007852.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-08-02A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	_

Refer to Item 28-07-01-01 Fuel On Board (FOB) Indication on the FUEL SD page

|--|

Ident.: MI-31-08-00007853.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-08-03A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

One or more may be inoperative.



#### 31 - INDICATING/RECORDING SYSTEMS

31-08 - Indications on the Engine Warning Display (EWD)

31-08-04	Slats/Flaps Position Indications on the EWD
	· ·

Ident.: MI-31-08-00007854.0001001 / 29 NOV 11

Applicable to: ALL

## 31-08-04A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 27-08-01 Flap Position Indication on the EWD Refer to Item 27-08-02 Slat Position Indication on the EWD

Note: Apply both MEL Items.



# MEL ITEMS 31 - INDICATING/RECORDING SYSTEMS

31-20 - Independent Instruments

31-20-01	Electrical Clock Indicator
----------	----------------------------

Ident.: MI-31-20-00007782.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-20-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The UTC indication from the CFDIU is operative on the permanent data of the SD, and
  - 2) A chrono indication is operative on at least one ND.

(o) Refer to OpsProc 31-20-01A Electrical Clock Indicator



# MEL ITEMS 31 - INDICATING/RECORDING SYSTEMS

31-20 - Independent Instruments

Intentionally left blank

HDA A320/A321 FLEET MI-31-20 P 2/2 MEL 29 NOV 11



#### 31 - INDICATING/RECORDING SYSTEMS

31-30 - Centralized Fault Display System (CFDS) and Data Recording System

31-30-01	Centralized Fault Display System (CFDS)
----------	---

Ident.: MI-31-30-00007784.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-30-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

31-30-02	Digital AIDS Recorder (DAR)
----------	-----------------------------

Ident.: MI-31-30-00007785.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-30-02A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 31-00-03 DAR MAINTENANCE Message

<u>Note:</u> Failure of DAR is indicated by a <u>MAINTENANCE</u> message on the <u>STATUS</u> SD

page .



#### 31 - INDICATING/RECORDING SYSTEMS

31-30 - Centralized Fault Display System (CFDS) and Data Recording System

31-30-03 Digital Flight Data Recorder (DFDR)
--

Ident.: MI-31-30-00007786.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-30-03A

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No



May be inoperative for a maximum of 8 sectors or 72 hours elapsed, whichever occurs first, provided that:

- 1) The CVR is operative, and
- 2) The aircraft does not depart Hong Kong.

Note: DFR must be operative ex-HKG unless: If the DFR is found to be inoperative during crew predeparture checks, then the defect can be entered in the Maintenance Log for rectification at next HKG transit.



S

31-30-04	Data Management Unit (DMU) part of Flight
	Data Interface and Management Unit(FDIMU)

Ident.: MI-31-30-00007787.0002001 / 19 JUL 12

1 Applicable to: ALL

#### 31-30-04A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

May be inoperative.



#### 31 - INDICATING/RECORDING SYSTEMS

31-30 - Centralized Fault Display System (CFDS) and Data Recording System

MINIMUM EQUIPMENT LIST

31-30-05	Flight Data Interface Unit (FDIU or
	FDIMU Flight Data Interface function)

Ident.: MI-31-30-00007788.0001001 / 19 JUL 12

Applicable to: ALL

1 <sup>2</sup> 31-30-05A

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

May be inoperative.

Note: If FDIU or FDIMU Flight Data Interface function is inoperative the DFDR and the

QAR *⋖* are inoperative.

Refer to Item 31-30-03 Digital Flight Data Recorder (DFDR), and Refer to Item 31-30-06 Quick Access Recorder (QAR) (If Installed)

Reference(s)

S

31-30-06	Quick Access Recorder (QAR)

Ident.: MI-31-30-00007789.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-30-06A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	_

Refer to Item 31-00-01 QAR MAINTENANCE Message

<u>Note:</u> Failure of QAR is indicated by a <u>MAINTENANCE</u> message on the <u>STATUS</u> SD

page .



#### 31 - INDICATING/RECORDING SYSTEMS

31-30 - Centralized Fault Display System (CFDS) and Data Recording System

31-30-07	Printer

Ident.: MI-31-30-00007790.0001001 / 29 NOV 11

Applicable to: ALL

## 31-30-07A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No

	May be inoperative.		
		Reference(s)	
P			



#### 31 - INDICATING/RECORDING SYSTEMS

31-38 - Up and Down Data Loading System Acquisition/Interface and Equipment

31-38-01 DATA LOADING selector
--------------------------------

Ident.: MI-31-38-00007791.0001001 / 19 JUL 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

#### 31-38-01A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative.

31-38-02 Data Loading Routing Box (DLRB)
--

Ident.: MI-31-38-00007792.0001001 / 19 JUL 12

2 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

#### 31-38-02A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.

31-38-03 Multipurpose Disk Drive Unit (MDDU)
--

Ident.: MI-31-38-00007793.0001001 / 19 JUL 12

3 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HSU, B-HTG, B-HTH, B-HTI

#### 31-38-03A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.



## 31 - INDICATING/RECORDING SYSTEMS

31-38 - Up and Down Data Loading System Acquisition/Interface and Equipment

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HDA A320/A321 FLEET MI-31-38 P 2/2 MEL 19 JUL 12



# MEL ITEMS 31 - INDICATING/RECORDING SYSTEMS

31-53 - Flight Warning Computer (FWC)

# 31-53-01 Flight Warning Computer ( FWC )

Ident.: MI-31-53-00007794.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-53-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

LP

(o) FWC 2 may be inoperative.

Reference(s)

(o) Refer to OpsProc 31-53-01A Flight Warning Computer (FWC)

L

31-53-02	MASTER CAUTION Cancel Function
----------	--------------------------------

Ident.: MI-31-53-00007795.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-53-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

31-53-03	MASTER WARN Cancel Function

Ident.: MI-31-53-00007796.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-53-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.



#### 31 - INDICATING/RECORDING SYSTEMS

31-53 - Flight Warning Computer (FWC)

|--|

Ident.: MI-31-53-00007797.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-53-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative.

31-53-05	MASTER WARN light	

Ident.: MI-31-53-00007798.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-53-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative.

31-53-06	Altitude Alert

Ident.: MI-31-53-00007799.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-53-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



- (o) May be inoperative provided that:
  - 1) The aircraft does not depart Hong Kong, and
  - 2) One Autopilot with altitude hold function is operative.

(o) Refer to OpsProc 31-53-06A Altitude Alert

P



#### 31 - INDICATING/RECORDING SYSTEMS

31-55 - System Data Acquisition Concentrator (SDAC)

Ident.: MI-31-55-00007800.0001001 / 15 SEP 10

Applicable to: ALL

## 31-55-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

SDAC 2 may be inoperative.



## 31 - INDICATING/RECORDING SYSTEMS

31-55 - System Data Acquisition Concentrator (SDAC)

Intentionally left blank

HDA A320/A321 FLEET MI-31-55 P 2/2 MEL 29 NOV 11



# MEL ITEMS 31 - INDICATING/RECORDING SYSTEMS

31-56 - ECAM Control Panel (ECP)

31-56-01	System Page Manual Call pb on the ECP
----------	---------------------------------------

Ident.: MI-31-56-00007801.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-56-01A

Repair interval	Nbr installed	Nbr required	Placard
С	11	0	Yes

One or more may be inoperative.

	31-56-02	ALL pb on the ECP
--	----------	-------------------

Ident.: MI-31-56-00007802.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-56-02A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

3	1-56-03	CLR pb on the ECP

Ident.: MI-31-56-00007803.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-56-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

One may be inoperative.



#### 31 - INDICATING/RECORDING SYSTEMS

31-56 - ECAM Control Panel (ECP)

31-56-04	EMER CANC pb on the ECP
----------	-------------------------

Ident.: MI-31-56-00007804.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-56-04A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	No

Must be operative.

31-56-05	RCL pb on the ECP

Ident.: MI-31-56-00007805.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-56-05A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

31-56-06	STS pb on the ECP

Ident.: MI-31-56-00007806.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-56-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



# MEL ITEMS 31 - INDICATING/RECORDING SYSTEMS

31-56 - ECAM Control Panel (ECP)

31-56-07	T.O CONFIG pb on the ECP
----------	--------------------------

Ident.: MI-31-56-00007807.0001001 / 29 NOV 11

Applicable to: ALL

## 31-56-07A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o)	May be inoperative provided that T.O CONFIG is verified before each departure.

(o) Refer to OpsProc 31-56-07A T.O CONFIG pb on the ECP



# MEL ITEMS 31 - INDICATING/RECORDING SYSTEMS 31-56 - ECAM Control Panel (ECP)

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HDA A320/A321 FLEET MI-31-56 P 4/4
MEL 29 NOV 11



MINIMUM EQUIPMENT LIST

# MEL ITEMS

#### 31 - INDICATING/RECORDING SYSTEMS

31-62 - Display Management Computer (DMC)

31-62-01	DMC 1

Ident.: MI-31-62-00007808.0002001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 31-62-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that:

- 1) The DMC 2 and DMC 3 are operative, and
- 2) The standby IAS indicator is operative, and
- 3) The standby altimeter is operative, and
- 4) The standby horizon is operative, and
- 5) The standby compass is operative, and
- 6) The EIS DMC SWITCHING selector is set to CAPT 3.

21 62 01	DMC 1
31-62-01	DINIC I

Ident.: MI-31-62-00007808.0005001 / 19 JUL 12

1 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 31-62-01B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative provided that:
  - 1) The DMC 2 and DMC 3 are operative, and
  - 2) The ISIS airspeed indication is operative, and
  - 3) The ISIS altitude indication is operative, and
  - 4) The ISIS attitude indication is operative, and
  - 5) The standby compass is operative, and
  - 6) The EIS DMC SWITCHING selector is set to CAPT 3.

Reference(s)

(o) Refer to OpsProc 31-62-01B DMC 1



#### **MEL ITEMS**

#### 31 - INDICATING/RECORDING SYSTEMS

31-62 - Display Management Computer (DMC)

31-62-02	DMC 2

Ident.: MI-31-62-00007809.0003001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 31-62-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (m) May be inoperative provided that:
  - 1) The DMC 1 and DMC 3 are operative, and
  - 2) The standby IAS indicator is operative, and
  - 3) The standby altimeter is operative, and
  - 4) The standby horizon is operative, and
  - 5) The standby compass is operative, and
  - 6) The EIS DMC SWITCHING selector is set to F/O 3, and
  - 7) The AC ESS FEED control is checked operative before the first flight of each day, and
  - 8) The AC ESS FEED pb-sw FAULT light is checked operative before the first flight of each day.

(m) Refer to AMM 31-68-00-040-005



MINIMUM EQUIPMENT LIST

# MEL ITEMS

#### 31 - INDICATING/RECORDING SYSTEMS

31-62 - Display Management Computer (DMC)

31-62-02 DMC<sub>2</sub>

Ident.: MI-31-62-00007809.0002001 / 19 JUL 12

3 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 31-62-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The DMC 1 and DMC 3 are operative, and
  - 2) The ISIS airspeed indication is operative, and
  - 3) The ISIS altitude indication is operative, and
  - 4) The ISIS attitude indication is operative, and
  - 5) The standby compass is operative, and
  - 6) The EIS DMC SWITCHING selector is set to F/O 3, and
  - 7) The AC ESS FEED control is checked operative before the first flight of each day, and
  - 8) The AC ESS FEED pb-sw FAULT light is checked operative before the first flight of each dav.

Reference(s) -

- (o) Refer to OpsProc 31-62-02A DMC 2
- (m) Refer to AMM 31-68-00-040-005

S

MEL ← B



#### MEL ITEMS

#### 31 - INDICATING/RECORDING SYSTEMS

31-62 - Display Management Computer (DMC)

31-62-03	DMC 3

Ident.: MI-31-62-00007810.0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 31-62-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that:

- 1) The DMC 1 and DMC 2 are operative, and
- 2) The standby IAS indicator is operative, and
- 3) The standby altimeter is operative, and
- 4) The standby horizon is operative, and
- 5) The standby compass is operative.

21 62 02	DMC 3
31-62-03	DIVIC 3

Ident.: MI-31-62-00007810.0004001 / 19 JUL 12

<sup>4</sup>Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 31-62-03B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative provided that:
  - 1) The DMC 1 and DMC 2 are operative, and
  - 2) The ISIS airspeed indication is operative, and
  - 3) The ISIS altitude indication is operative, and
  - 4) The ISIS attitude indication is operative, and
  - 5) The standby compass is operative.

----- Reference(s) ------

(o) Refer to OpsProc 31-62-03B DMC 3



31-63 - Display Unit (DU)

31-63-01 PFDU 1
-----------------

Ident.: MI-31-63-00009664.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-63-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

I .	31-63-02	PFDU 2	
-----	----------	--------	--

Ident.: MI-31-63-00007811.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-63-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

(o) May be inoperative provided that PFDU 1, NDU 1, NDU 2, EWDU and SDU are operative.

Reference(s)

(o) Refer to OpsProc 31-63-02A PFDU 2

L P

31-63-03	NDU 1

Ident.: MI-31-63-00007812.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-63-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

(o) May be inoperative provided that PFDU 1, PFDU 2, NDU 2, EWDU and SDU are operative.

Continued on the following page



31-63 - Display Unit (DU)

(o) Refer to OpsProd L P	——————————————————————————————————————	Continued from	n the previous pag
31-63-04		NDU 2	
ldent.: MI-31-63-00007813.0001001 / 2 Applicable to: ALL	29 NOV 11		
31-63-04A			
Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes
	ive provided that PFDU 1, PFDU Reference(s) — c 31-63-04A NDU 2		J are operative.
31-63-05		SDU	
Ident.: MI-31-63-00007814.0001001 / C Applicable to: B-HSD, B-HSE, B-HSC	04 APR 12 G, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B	-HSN, B-HSQ, B-HSR, B-HTD, B-HT	E, B-HTF, B-HTG,

#### 31-63-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (o) (m) May be inoperative provided that:
  - 1) The PFDU 1, PFDU 2, NDU 1, NDU 2 and EWDU are operative, and
  - 2) The AC ESS FEED control is checked operative before the first flight of each day, and
  - 3) The AC ESS FEED pb-sw FAULT light is checked operative before the first flight of each day.

Continued on the following page



MINIMUM EQUIPMENT LIST

# MEL ITEMS 31 - INDICATING/RECORDING SYSTEMS

31-63 - Display Unit (DU)

Continued from the previous page

(0)	Refer to	<b>OpsProc</b>	31-63-05A	SDU

(m) Refer to AMM 31-68-00-040-006

S

31-63-05	SDU

------ Reference(s)

Ident.: MI-31-63-00007814.9001002 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HST, B-HSU

#### 31-63-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (o) (m) May be inoperative provided that:
  - 1) The PFDU 1, PFDU 2, NDU 1, NDU 2 and EWDU are operative, and
  - 2) The AC ESS FEED control is checked operative before the first flight of each day, and
  - 3) The AC ESS FEED pb-sw FAULT light is checked operative before the first flight of each day, and
  - 4) The CDSS is considered inoperative.

    Refer to Cockpit Door Surveillance System (CDSS)

- (o) Refer to OpsProc 31-63-05A SDU
- (m) Refer to AMM 31-68-00-040-006

S

HDA A320/A321 FLEET MI-31-63 P 3/4



31-63 - Display Unit (DU)

31-63-06	EWDU

Ident.: MI-31-63-00009604.0001001 / 22 MAR 10

Applicable to: ALL

# 31-63-06A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.



31-68 - Switching Panel

31-68-01	AIR DATA SWITCHING selector on the Center Pedestal
----------	--

Ident.: MI-31-68-00007815.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-68-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the AIR DATA SWITCHING selector is set to NORM.

31-68-02 ATT HDG SWITCHING selector on the Center Pedestal
--

Ident.: MI-31-68-00007816.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-68-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the ATT HDG SWITCHING selector is set to NORM.

31-68-03	ECAM/ND XFR SWITCHING selector on the Center Pedestal

Ident.: MI-31-68-00007817.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-68-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that:

- 1) Both ECAM DU are operative, and
- 2) The ECAM/ND XFR SWITCHING selector is set to NORM.



31-68 - Switching Panel

31-68-04 EIS DMC SWITCHING selector on the Center Pedestal
--

Ident.: MI-31-68-00007818.0001001 / 22 MAR 10

Applicable to: ALL

#### 31-68-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the EIS DMC SWITCHING selector is set to NORM.

31-68-05	PFD/ND XFR pb on the Lateral Instrument Panel
Ident : MI 21 69 00007910 000100	1 / 20 NOV 11

dent.: MI-31-68-00007819.0001001 / 29 NOV 11

Applicable to: ALL

#### 31-68-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

- (o) One or both may be inoperative provided that:
  - 1) The PFD and ND units are operative, and
  - 2) The PFD to ND automatic switching is checked operative on the PF side before each flight.

(o) Refer to OpsProc 31-68-05A PFD/ND XFR pb on the Lateral Instrument Panel



32-07 - Indications on the WHEEL SD page

32-07-01 Brakes Temperature Indication on the <u>WHEEL</u> SD page
--

Ident.: MI-32-07-00007761.0001001 / 29 NOV 11

Applicable to: ALL

# 32-07-01A BRAKES HOT alert not displayed

Repair interval Nbr installed Nbr required					
C 4 0 N					
S					
(o)	One or more may be inoperative provided that the ground brake cooling time is applied.			is applied.	

Reference(s)

(o) Refer to OpsProc 32-07-01A Brakes Temperature Indication on the WHEEL SD page S

# 32-07-01B BRAKES HOT alert displayed

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

S

- (o) (m) One or more may be inoperative provided that:
  - 1) The associated sensor is deactivated if the <u>BRAKES</u> HOT alert is displayed on the EWD , and
  - 2) The ground brake cooling time is applied.

 Reference(s) —
 neielelice(s)

- (o) Refer to OpsProc 32-07-01B Brakes Temperature Indication on the WHEEL SD page
- (m) Refer to AMM 32-47-00-040-001

S

MEL A 19 JUL 12



32-07 - Indications on the WHEEL SD page

	32-07-02	L/G Position Indication on the WHEEL SD page
--	----------	--

Ident.: MI-32-07-00007762.0001001 / 22 MAR 10

Applicable to: ALL

#### 32-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	6	0	No

One or more may be inoperative provided that the L/G gear position indications are operative on the LDG GEAR indicator panel.

32-07-03	L/G Doors Position Indication on the WHEEL SD page

Ident.: MI-32-07-00007763.0001001 / 29 NOV 11

Applicable to: ALL

#### 32-07-03A

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	3	0	No

Ρ

(o)	One or more may be inoperati	ve.
-----	------------------------------	-----

(o) Refer to OpsProc 32-07-03A L/G Doors Position Indication on the WHEEL SD page

ı	$\mathbf{r}$
ı	

32-07-04	L/G CTL Indication on the WHEEL SD page
----------	---

Ident.: MI-32-07-00007764.0001001 / 22 MAR 10

Applicable to: ALL

#### 32-07-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



32-07 - Indications on the WHEEL SD page

32-07-05	UP LOCK Indication on the WHEEL SD page
----------	---

Ident.: MI-32-07-00007765.0001001 / 22 MAR 10

Applicable to: ALL

#### 32-07-05A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

One or more may be inoperative.

32-07-06	[Y] N/W STEERING Indication on the WHEEL SD page
----------	--

Ident.: MI-32-07-00007766.0002001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 32-07-06A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

32-07-08	ANTI SKID Indication on the WHEEL SD page
----------	---

Ident.: MI-32-07-00007768.0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 32-07-08A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



32-07 - Indications on the WHEEL SD page

32-07-08 ANTI SKID, [1], [2] Indication on the WHEEL SD page	е
--	---

Ident.: MI-32-07-00007768.0003001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 32-07-08A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

One or more may be inoperative.

32-07-09	AUTO BRK Indication on the WHEEL SD page

Ident.: MI-32-07-00007769.0001001 / 22 MAR 10

Applicable to: ALL

#### 32-07-09A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

32-07-10	[G] NORM BRK Indication on the WHEEL SD page
----------	--

Ident.: MI-32-07-00007770.0002001 / 19 JUL 12

3 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 32-07-10A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



32-07 - Indications on the WHEEL SD page

32-07-11 Release Brake Indication on the WHEEL SD page
--

Ident.: MI-32-07-00007771.0001001 / 22 MAR 10

Applicable to: ALL

#### 32-07-11A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

One or more may be inoperative.

32-07-12	ACCU PRESS/ACCU ONLY Indication on the WHEEL SD page
----------	--

Ident.: MI-32-07-00007772.0002001 / 19 JUL 12

<sup>4</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 32-07-12A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

32-07-13	[Y] ALTN BRK Indication on the WHEEL SD page
----------	--

Ident.: MI-32-07-00007773.0002001 / 19 JUL 12

5 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 32-07-13A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



32-07 - Indications on the WHEEL SD page

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 HDA A320/A321 FLEET
 MI-32-07 P 6/6

 MEL
 19 JUL 12



32-09 - ECAM Alerts

32-09-01	BRAKES-N/WS MINOR FAULT Alert	

Ident.: MI-32-09-00007774.0005001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 32-09-01A Fault on an alternate braking system pressure transducer

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	-	-	No

May be displayed provided that:

- 1) The alert is confirmed to be caused by a fault on an alternate braking system pressure transducer by troubleshooting, and
- 2) The associated BRAKES pressure indicator is considered inoperative.

  Refer to Item 32-44-03 BRAKES Pressure Indicator

# 32-09-01C Both BRAKES pressure indicators operative

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	-	-	No

S

- (o) (m) May be displayed provided that:
  - 1) Both BRAKES pressure indicators are operative, and
  - 2) The alternate braking system is checked operative before the first flight of each day, and
  - 3) It is checked before each flight that the CFDS failure message related to the BRAKES-N/WS MINOR FAULT alert do not report a fault on an alternate pressure transducer.

- (o) Refer to OpsProc 32-09-01C BRAKES-N/WS MINOR FAULT Alert (Alternate braking checked operative)
- (m) Refer to AMM 32-46-00-040-001

S

MEL A 19 JUL 12



MEL ITEMS
32 - LANDING GEAR
32-09 - ECAM Alerts

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 HDA A320/A321 FLEET
 MI-32-09 P 2/2

 MEL
 19 JUL 12



32-11 - Main Gear

32-11-01 Main Gear Torque Link Damper	
---------------------------------------	--

Ident.: MI-32-11-00007682.0002001 / 29 NOV 11

Applicable to: ALL

# 32-11-01A

Repair interval	Nbr installed	Nbr required	Placard
Α	2	0	No

S

One or both may be inoperative for 7 flights.	



# MEL ITEMS 32 - LANDING GEAR 32-11 - Main Gear

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 HDA A320/A321 FLEET
 MI-32-11 P 2/2

 MEL
 29 NOV 11



32-12 - Main Gear Doors

32-12-01	Main Gear Door Ground Opening Cable
----------	-------------------------------------

Ident.: MI-32-12-00007686.0001001 / 29 NOV 11

Applicable to: ALL

# 32-12-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(m) One or both may be broken or mis	ssing.
	Reference(s)
(m) Refer to AMM 32-12-00-040-006	



# MEL ITEMS 32 - LANDING GEAR 32-12 - Main Gear Doors

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 HDA A320/A321 FLEET
 MI-32-12 P 2/2

 MEL
 29 NOV 11



MINIMUM EQUIPMENT LIST

# MEL ITEMS 32 - LANDING GEAR

32-31 - Normal Extension and Retraction

Landing dear Control and Interface Offit (Edcio)	32-31-01	Landing Gear Control and Interface Unit ( LGCIU )
--	----------	---

Ident.: MI-32-31-00007688.0002001 / 29 NOV 11

Applicable to: ALL

#### 32-31-01A

Repair interval	Nbr installed	Nbr required	Placard
A	2	1	No

S

- (o) The LGCIU 2 may be inoperative for 7 flights provided that:
  - 1) All ELAC s, SEC s, SFCC s, RA s, FAC s, and ADIRS s are operative, and
  - 2) Both air conditioning packs are operative, and
  - 3) Use TOGA thrust for Takeoff, and
  - 4) The operation of avionics equipment is time limited on ground. Refer to Item 76-11-01 Thrust lever Position Sensor

- Reference(s) -

(o) Refer to OpsProc 32-31-01A Landing Gear Control and Interface Unit (LGCIU)

S

32-31-02	Landing Gear Retracting System
II . MI 00 01 00007000 000100	4 /40       40

Ident.: MI-32-31-00007690.0001001 / 19 JUL 12

Applicable to: ALL

1 1

#### 32-31-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

P

- (o) (m) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The aircraft is operated in accordance with the Flight Manual supplement for the flight with landing gear down.

Continued on the following page



Р

# MEL ITEMS 32 - LANDING GEAR

32-31 - Normal Extension and Retraction

	Continued from the previous page
(o) Refer to OpsProc 32-31-02A Landing Gear Retracting System	
(m) Refer to AMM 32-31-00-040-803	



32-32 - Proximity Detector System

	32-32-01	LGCIU 1 Proximity Detector
--	----------	----------------------------

Ident.: MI-32-32-00007693.0001001 / 22 MAR 10

Applicable to: ALL

#### 32-32-01A

Repair interval	Nbr installed	Nbr required	Placard
-	16	16	No

All must be operative.

32-32-02	LGCIU 2 RH L/G Shock Absorber Proximity Detector
----------	--

Ident.: MI-32-32-00007694.0001001 / 04 APR 12

Applicable to: ALL

#### 32-32-02A

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No



- (o) (m) May be inoperative for 7 flights provided that:
  - 1) Both radio altimeters are operative, and
  - 2) The other proximity detectors are operative, and
  - 3) The origin of the failure is checked to be electrical.

    Refer to Item 76-11-01 Thrust lever Position Sensor

Reference(s)

- (o) Refer to OpsProc 32-32-02A LGCIU 2 RH L/G Shock Absorber Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

S

Continued on the following page



32-32 - Proximity Detector System

Continued from the previous page

#### 32-32-02B

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

S

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU), and Refer to Item 76-11-01 Thrust lever Position Sensor

Reference(s)

S

32-32-03	LGCIU 2 LH L/G Shock Absorber Proximity Detector
Ident.: MI-32-32-00007695.0001001 / 04 APR 12	

Applicable to: ALL

#### 32-32-03A

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

S

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) Both radio altimeters are operative, and
  - 2) The other proximity detectors are operative, and
  - 3) The origin of the failure is checked to be electrical.

    Refer to Item 76-11-01 Thrust lever Position Sensor

- (o) Refer to OpsProc 32-32-03A LGCIU 2 LH L/G Shock Absorber Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

S

Continued on the following page



32-32 - Proximity Detector System

Continued from the previous page

#### 32-32-03B

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU), and Refer to Item 76-11-01 Thrust lever Position Sensor

Reference(s)

S

32-32-04	LGCIU 2 Nose L/G Shock Absorber Proximity Detector
----------	--

Ident.: MI-32-32-00007696.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-04A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

S

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

(o) Refer to OpsProc 32-32-04A LGCIU 2 Nose L/G Shock Absorber Proximity Detector

(m) Refer to AMM 32-31-00-040-003

S

Continued on the following page

MEL



32-32 - Proximity Detector System

Continued from the previous page

# 32-32-04B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

S

32-32-05	LGCIU 2 RH L/G Down Lock Proximity Detector
----------	---

Ident.: MI-32-32-00007699.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-05A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

- (o) Refer to OpsProc 32-32-05A LGCIU 2 RH L/G Down Lock Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

S

# 32-32-05B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

Continued on the following page



S

# **MEL ITEMS** 32 - LANDING GEAR

32-32 - Proximity Detector System

Continued from the previous page

	_				
2-	32-06		LGCIU 2 LH L/G Do	wn Lock Proximity Detecto	r
	: MI-32-32-00007700.0001001 cable to: ALL	/ 29 NO	V 11		
3	2-32-06A Other pro	ximity	detectors operative		
	Repair interval		Nbr installed	Nbr required	Placard
	С		1	0	No
		roximit	rovided that:  ty detectors are operative, a allure is checked to be elected.  Reference(s)		
3	(o) Refer to OpsPa (m) Refer to AMM S	32-31-	-32-06A LGCIU 2 LH L/G Do -00-040-003	own Lock Proximity Detector	
	Repair interval		Nbr installed	Nbr required	Placard

- Reference(s) -

HDA A320/A321 FLEET MI-32-32 P 5/14 MEL ← E to F

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative.

- Reference(s) -

Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

Α

S

S

No



32-32 - Proximity Detector System

32-32-07 LGCIU 2 Nose L/G Down Lock Proximity Detector
--

Ident.: MI-32-32-00007701.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-07A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

Deference(a)
Reference(s) ————

- (o) Refer to OpsProc 32-32-07A LGCIU 2 Nose L/G Down Lock Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

S

# 32-32-07B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

S

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

Reference(s)



32-32 - Proximity Detector System

32-32-08 LGCIU 2 RH L/G Up Lock Proximity Detector	
--	--

Ident.: MI-32-32-00007702.0001001 / 29 NOV 11

Applicable to: ALL

#### 32-32-08A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

 Reference(c)

- (o) Refer to OpsProc 32-32-08A LGCIU 2 RH L/G Up Lock Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

S

# 32-32-08B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

Reference(s)



32-32 - Proximity Detector System

32-32-09 LGCIU 2 LH L/G Up Lock Proximity Detector
--

Ident.: MI-32-32-00007712.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-09A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

- (o) Refer to OpsProc 32-32-09A LGCIU 2 LH L/G Up Lock Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

S

# 32-32-09B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

Reference(s)



32-32 - Proximity Detector System

32-32-10 LGCIU 2 Nose L/G Up Lock Proximity Detector
--

Ident.: MI-32-32-00007726.0001001 / 29 NOV 11

Applicable to: ALL

#### 32-32-10A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

S

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

Deferen	00(0)
	CE(S)

- (o) Refer to OpsProc 32-32-10A LGCIU 2 Nose L/G Up Lock Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

S

# 32-32-10B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

S

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

Reference(s)



32-32 - Proximity Detector System

32-32-11	LGCIU 2 RH L/G Doors Open Proximity Detector

Ident.: MI-32-32-00007727.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-11A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

- (o) Refer to OpsProc 32-32-11A LGCIU 2 RH L/G Doors Open Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

#### 32-32-11B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

32-32-12	LGCIU 2 LH L/G Doors Open Proximity Detector
----------	--

Ident.: MI-32-32-00007728.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-12A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

- (o) Refer to OpsProc 32-32-12A LGCIU 2 LH L/G Doors Open Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

Continued on the following page



32-32 - Proximity Detector System

Continued from the previous page

#### 32-32-12B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

32-32-13 LGCIU 2 Nose L/G Doors Open Proximity Detector	
---	--

Ident.: MI-32-32-00007729.0001001 / 29 NOV 11

Applicable to: ALL

#### 32-32-13A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
Α	2	0	No

- (o) (m) One or both may be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

Poforonoo(s)	

- (o) Refer to OpsProc 32-32-13A LGCIU 2 Nose L/G Doors Open Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

# 32-32-13B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	2	0	No

One or both may be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative.

Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)



32-32 - Proximity Detector System

32-32-14	LGCIU 2 RH L/G Doors Closed Proximity Detector	

Ident.: MI-32-32-00007730.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-14A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

- (o) Refer to OpsProc 32-32-14A LGCIU 2 RH L/G Doors Closed Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

#### 32-32-14B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

32-32-15	LGCIU 2 LH L/G Doors Closed Proximity Detector
----------	--

Ident.: MI-32-32-00007731.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-15A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

- (o) Refer to OpsProc 32-32-15A LGCIU 2 LH L/G Doors Closed Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

Continued on the following page



32-32 - Proximity Detector System

Continued from the previous page

## 32-32-15B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

32-32-16	LGCIU 2 Nose L/G Doors Closed Proximity Detector
----------	--

Ident.: MI-32-32-00007732.0001001 / 29 NOV 11

Applicable to: ALL

# 32-32-16A Other proximity detectors operative

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

- (o) (m) May be inoperative for 7 flights provided that:
  - 1) The other proximity detectors are operative, and
  - 2) The origin of the failure is checked to be electrical.

Poforonoo(s)	
neletetice(s)	

- (o) Refer to OpsProc 32-32-16A LGCIU 2 Nose L/G Doors Closed Proximity Detector
- (m) Refer to AMM 32-31-00-040-003

# 32-32-16B LGCIU 2 considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No

May be inoperative for 7 flights provided that the LGCIU 2 is considered inoperative. Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU)

HDA A320/A321 FLEET MI-32-32 P 13/14 MEL ← O to P 04 APR 12



32-32 - Proximity Detector System

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HDA A320/A321 FLEET MI-32-32 P 14/14 MEL 04 APR 12



32-33 - Free Fall Extension

32-33-01 Landing Gear Gravity Extension System	32-33-01
--	----------

Ident.: MI-32-33-00007734.0001001 / 04 APR 12

Applicable to: ALL

## 32-33-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



- (o) (m) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The aircraft is operated in accordance with gear down procedures (Refer to FCOM/PRO-SPO-25-FLIGHT WITH GEAR DOWN).

Reference(s)

- (o) Refer to OpsProc 32-33-01A Landing Gear Gravity Extension System
- (m) Refer to AMM 32-31-00-040-802A

P



32-33 - Free Fall Extension

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 HDA A320/A321 FLEET
 MI-32-33 P 2/2

 MEL
 04 APR 12



32-41 - Wheels

32-41-01 Nose Wheel Tie Bolt
------------------------------

Ident.: MI-32-41-00007735.0001001 / 19 JUL 12

Applicable to: ALL

## 32-41-01A

1

Repair interval	Nbr installed	Nbr required	Placard
A	-	-	No

S

- (m) One tie bolt on one wheel may be broken or missing for 15 flights provided that:
  - 1) The aircraft does not depart Hong Kong, and
  - 2) The affected wheel tie bolt is removed, and
  - 3) The affected wheel is checked for absence of damage.

- Reference(s) -

(m) Refer to AMM 32-41-00-040-002

S

32-41-02	Main Wheel Tie Bolt
----------	---------------------

Ident.: MI-32-41-00007736.0001001 / 29 NOV 11

Applicable to: ALL

### 32-41-02A

Repair interval	Nbr installed	Nbr required	Placard
A	-	-	No

S

- (m) One tie bolt on one wheel may be broken or missing for 15 flights provided that:
  - 1) The aircraft does not depart Hong Kong, and
  - 2) The affected wheel tie bolt is removed, and
  - 3) The affected wheel and the associated brake are checked for absence of damage.

Reference(s)

(m) Refer to AMM 32-41-00-040-003

S



MEL ITEMS
32 - LANDING GEAR
32-41 - Wheels

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 HDA A320/A321 FLEET
 MI-32-41 P 2/2

 MEL
 19 JUL 12



32-42 - Normal Braking

32-42-01	Main Wheel Brake
----------	------------------

Ident.: MI-32-42-00007737.0001001 / 29 NOV 11

Applicable to: ALL

### 32-42-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	3	No

LP

- (o) (m) One may be inoperative provided that:
  - 1) The nose wheel steering is operative, and
  - 2) Both thrust reversers are operative, and
  - 3) The green and yellow systems are operative on operative brakes, and
  - 4) The affected brake is deactivated or removed, and
  - 5) The runway width at departure and arrival airports is at least 45 m, and
  - 6) Performance penalty is applied.

 Reference(s)	
Reference(s)	

- (o) Refer to OpsProc 32-42-01A Main Wheel Brake
- (m) Refer to AMM 32-42-00-040-003

빋

32-42-02	Green System Brake
----------	--------------------

Ident.: MI-32-42-00007738.0001001 / 04 APR 12

Applicable to: ALL

### 32-42-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No



- (o) (m) Braking on one wheel may be inoperative provided that:
  - 1) The nose wheel steering is operative, and
  - 2) Both thrust reversers are operative, and
  - 3) The green hydraulic supply of affected brake is deactivated, and
  - 4) The runway width at departure and arrival airports is at least 45 m, and
  - 5) Performance penalties are applied.

Continued on the following page



32-42 - Normal Braking

	Continued from the previous page
ofor to Ono Prog 22 12 021 Groon System Proke	

(o) Refer to OpsProc 32-42-02A Green System Brake

(m) Refer to AMM 32-42-00-040-002

Р

32-42-03	Braking/Steering Control Unit ( BSCU ) System 1
Hard MI 00 40 00007700 0000004 / 00 NOV 44	

Ident.: MI-32-42-00007739.0002001 / 29 NOV 11

Applicable to: ALL

#### 32-42-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



- (o) (m) May be inoperative provided that:
  - 1) The BSCU system 2 is operative, and
  - 2) The affected system is deactivated, and
  - 3) It is checked that the CFDS does not report a fault related to the <u>L/G</u> SYS DISAGREE alert before each flight, and
  - 4) The AUTO/BRK (LO, MED, MAX) pb-sw DECEL light and the AUTO/BRK (LO, MED, MAX) pb-sw ON light are considered inoperative.

Refer to Item 32-42-08 AUTO/BRK (LO, MED, MAX) pb-sw DECEL light, and Refer to Item 32-42-09 AUTO/BRK (LO, MED, MAX) pb-sw ON light



(o) Refer to OpsProc 32-42-03A Braking/Steering Control Unit (BSCU) Channel 1 / System 1 (m) Refer to AMM 32-42-00-040-007

S



32-42 - Normal Braking

32-42-04	Braking/Steering Control Unit ( BSCU ) System 2

Ident.: MI-32-42-00007740.0002001 / 29 NOV 11

Applicable to: ALL

### 32-42-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) (m) May be inoperative provided that:
  - 1) The affected system is deactivated, and
  - 2) It is checked that the CFDS does not report a fault related to the <u>L/G</u> SYS DISAGREE alert before each flight.

- (o) Refer to OpsProc 32-42-04A Braking/Steering Control Unit (BSCU) Channel 2 / System 2
- (m) Refer to AMM 32-42-00-040-007

S

	·
32-42-05	AUTO/BRK Function

Ident.: MI-32-42-00007741.0001001 / 29 NOV 11

Applicable to: ALL

### 32-42-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

(o) May be inoperative.

Reference(s)

(o) Refer to OpsProc 32-42-05A AUTO/BRK Function

L

P



32-42 - Normal Braking

32-42-06	Tachometer
----------	------------

Ident.: MI-32-42-00007742.0001001 / 29 NOV 11

Applicable to: ALL

## 32-42-06B

Repair interval	Nbr installed	Nbr required	Placard
-	4	4	No

Must be operative.

32-42-07	Nose Landing Gear Wheel Brake Pad
----------	-----------------------------------

Ident.: MI-32-42-00007743.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

## 32-42-07A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(m) One or both may be inoperative provided that they are removed.

Reference(s)

(m) Refer to AMM 32-42-00-040-006

S

32-42-08	AUTO/BRK (LO, MED, MAX) pb-sw DECEL light
Marie MI 00 40 00007744 0004001 / 00 MAD 40	

Ident.: MI-32-42-00007744.0001001 / 22 MAR 10

Applicable to: ALL

## 32-42-08A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.



32-42 - Normal Braking

32-42-09	AUTO/BRK (LO, MED, MAX) pb-sw ON light
----------	--

Ident.: MI-32-42-00007745.0001001 / 29 NOV 11

Applicable to: ALL

# 32-42-09A AUTO/BRK mode arming displayed on the WHEEL SD page

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative provided that, when appropriate, the associated AUTO/BRK mode arming is displayed on the <u>WHEEL</u> SD page.

# 32-42-09B AUTO/BRK function considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative provided that the AUTO/BRK function is considered inoperative.

Refer to Item 32-42-05 AUTO/BRK Function

HDA A320/A321 FLEET MI-32-42 P 5/6
MEL I 04 APR 12



MEL ITEMS 32 - LANDING GEAR 32-42 - Normal Braking

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HDA A320/A321 FLEET MI-32-42 P 6/6 MEL 04 APR 12



32-44 - Alternate Braking

32-44-01 Yellow System Brake
------------------------------

Ident.: MI-32-44-00007746.0001001 / 29 NOV 11

Applicable to: ALL

### 32-44-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

S

- (m) Braking on one wheel may be inoperative provided that:
  - 1) Both thrust reversers are operative, and
  - 2) The yellow hydraulic supply of the affected brake is deactivated.

- Reference(s)

(m) Refer to AMM 32-43-00-040-001

S

Ident · MI-32-44-00007747 0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## 32-44-02A Brakes pressure indicator operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that:

- 1) Both brakes pressure indicators are operative, and
- 2) The pressure on both brakes pressure indicators is checked with parking brake ON before each flight.



32-44 - Alternate Braking

32-44-02 ACCU PRESS Indicator
-------------------------------

Ident.: MI-32-44-00007747.0002001 / 19 JUL 12

Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 32-44-02A Brakes pressure indicator operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that:

- 1) Both brakes pressure indicators are operative, and
- The pressure on both brakes pressure indicators is checked with parking brake ON before each flight.

## 32-44-02B Checks on WHEEL SD page

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that:

- 1) The ACCU PRESS/ACCU ONLY indication is operative on the WHEEL SD page, and
- The hydraulic pressure of the brake accumulator is checked on the <u>WHEEL</u> SD page before each flight.

32-44-03 BRAKES Pressure Indicator
------------------------------------

Ident.: MI-32-44-00007748.0002001 / 22 MAR 10

Applicable to: ALL

#### 32-44-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that the BSCU system 1 and the BSCU system 2 are operative.



32-44 - Alternate Braking

32-44-04	Alternate Braking Control Unit (ABCU)
----------	---------------------------------------

Ident.: MI-32-44-00007749.0003001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 32-44-04A

Repair interval	Nbr installed	Nbr required	Placard
_	1	1	No

Must be operative.



# MEL ITEMS 32 - LANDING GEAR 32-44 - Alternate Braking

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 HDA A320/A321 FLEET
 MI-32-44 P 4/4

 MEL
 19 JUL 12



32-45 - Parking/Ultimate Emergency Braking

32-45-01	Parking Brake Control Valve Electrical Motor
	<u>I</u>

Ident.: MI-32-45-00007750.0001001 / 29 NOV 11

Applicable to: ALL

## 32-45-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (m) One may be inoperative provided that:
  - 1) Both thrust reversers are operative, and
  - 2) The aircraft is not towed if the STBY motor is affected and when the batteries supply the aircraft.

Reference(s)

(m) Refer to AMM 32-45-00-040-001

S



32-45 - Parking/Ultimate Emergency Braking

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HDA A320/A321 FLEET MI-32-45 P 2/2 MEL 29 NOV 11



32-47 - Brake Temperature System

32-47-01	Brake Temperature Monitoring Unit ( BTMU )
----------	--

Ident.: MI-32-47-00007751.0001001 / 29 NOV 11

Applicable to: ALL

# 32-47-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o)	One or both may be inoperative provided that the ground brake cooling time is applied.
	Reference(s)

(o) Refer to OpsProc 32-47-01A Brake Temperature Monitoring Unit (BTMU)



32-47 - Brake Temperature System

Intentionally left blank

 HDA A320/A321 FLEET
 MI-32-47 P 2/2

 MEL
 29 NOV 11



32-48 - Brake Cooling

32-40-01 Blake rall System	32-48-01	Brake Fan System
----------------------------	----------	------------------

Ident.: MI-32-48-00007752.0001001 / 29 NOV 11

Applicable to: ALL

## 32-48-01A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative.

	32-48-02	BRK FAN pb-sw HOT light
--	----------	-------------------------

Ident.: MI-32-48-00007753.0001001 / 29 NOV 11

Applicable to: ALL

## 32-48-02A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative.

32-48-03	BRK FAN pb-sw ON light

Ident.: MI-32-48-00007754.0001001 / 29 NOV 11

Applicable to: ALL

## 32-48-03A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative.



MEL ITEMS 32 - LANDING GEAR 32-48 - Brake Cooling

Intentionally left blank

 HDA A320/A321 FLEET
 MI-32-48 P 2/2

 MEL
 29 NOV 11



32-51 - Steering

32-51-01 Nose Wheel Steering Control System

Ident.: MI-32-51-00007755.0002001 / 29 NOV 11

Applicable to: ALL

## 32-51-01A

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	Yes

LP

- (o) May be inoperative for three flights provided that:
  - 1) The failure is detected by the BSCU (the <u>WHEEL</u> N/W STRG FAULT alert is displayed on the EWD), and
  - 2) The runway width at departure and arrival airports is at least 45 m, and
  - 3) The runway is not contaminated, and
  - 4) The crosswind component is below 20 kt at departure and arrival airports.

Note: For nose wheel steering offset, Refer to FCOM/PRO-SUP-32 Operation with Nosewheel Steering Offset.

Reference(s)

(o) Refer to OpsProc 32-51-01A Nose Wheel Steering Control System

Ident.: MI-32-51-00007756.0001001 / 29 NOV 11

Applicable to: ALL

#### 32-51-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

(o) One or both may be inoperative in the released position provided that the Nose Wheel Steering by rudder pedals is operative for both pilots.

(o) Refer to OpsProc 32-51-02A Rudder PEDALS DISC pb



(o)

May be inoperative.

# **MEL ITEMS** 32 - LANDING GEAR

32-51 - Steering

32-51-03 NWS Electrical Deactivation Box				
lent.: MI-32-51-00007757.0001 pplicable to: ALL	001 / 29 NC	DV 11		
•	ng mod	le when lever in the TOWI	NG position	
Repair inter	/al	Nbr installed	Nbr required	Placard
С		1	0	No
(o) May be inoperative.				
<u>Note:</u> The	e towing	mode is not available when	the lever is in the TOWING	position.
		Reference(s) —		
(o) Refer to On	sProc 32	2-51-03A NWS Electrical Dea	activation Box (towing mode	is not availa
· , ,		the TOWING position)	Suration Box (towning mode	io not availai
WHOH HE		and revented positioni		
32-51-03B NWS el	ectrical	deactivation box deactiva	ated	
Repair interval Nbr installed Nbr required Placard				
С		1	0	No
S		,	,	
_	erative r	provided that the NWS electr	ical deactivation box is deac	ctivated.
——————————————————————————————————————		Reference(s)		
(a) Refer to On	sProc 32	2-51-03B NWS Electrical Dea	activation Box (NWS Flectric	al Deactivati
Box deactive		. S. SOBTITIO Elocation Doc	Caradon Box (14440 Eloculo	a. Dodonvan
(m) Refer to AM	,	-00-040-002		
S				
32-51-04	F	PARKING BRAKE light on t	he NWS Electrical Deactiv	ation Box
dent.: MI-32-51-00007758.0001	001 / 29 NC	DV 11		
32-51-04A				
Repair inter	/al	Nbr installed	Nbr required	Placard
С		1	0	No
		1		

HDA A320/A321 FLEET MI-32-51 P 2/4 MEL C to D → 29 NOV 11

Continued on the following page



# MEL ITEMS 32 - LANDING GEAR 32-51 - Steering

	Continued from the previous page
(o)	Refer to OpsProc 32-51-04A PARKING BRAKE light on the NWS Electrical Deactivation
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# MEL ITEMS 32 - LANDING GEAR 32-51 - Steering

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 HDA A320/A321 FLEET
 MI-32-51 P 4/4

 MEL
 29 NOV 11



32-61 - Landing Gear Panel on the Center Instrument Panel

32-61-01	LDG GEAR Indicator Panel

Ident.: MI-32-61-00007759.0001001 / 22 MAR 10

Applicable to: ALL

## 32-61-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

32-61-02 DOWN Red Arrow light on the Landin	g Gear lever
---	--------------

Ident.: MI-32-61-00007760.0001001 / 29 NOV 11

Applicable to: ALL

## 32-61-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

# SA

(m)	May be inoperative provided that the $\underline{\text{L/G}}$ GEAR NOT DOWN alert and the $\underline{\text{L/G}}$ G	EAR NOT
	DOWNLOCKED alert are checked operative.	

Reference(s)

(m) Refer to AMM 32-61-00-040-001

S

Δ



32-61 - Landing Gear Panel on the Center Instrument Panel

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HDA A320/A321 FLEET MI-32-61 P 2/2 MEL 29 NOV 11



33-01 - Overhead Panels 33-01-01 - ANN LT Overhead Panel

# 33-01-01-01 TEST Function of ANN LT sw

Ident.: MI-33-01-01-00007633.0001001 / 22 MAR 10

Applicable to: ALL

## 33-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

33-01-01-02 DIM Function of ANN LT sw
---------------------------------------

Ident.: MI-33-01-01-00007635.0001001 / 22 MAR 10

Applicable to: ALL

## 33-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

Dim lighting may be inoperative provided that the bright lighting is operative.

33-01-01-03 BRT Function of ANN LT sw
---------------------------------------

Ident.: MI-33-01-01-00007636.0001001 / 29 NOV 11

Applicable to: ALL

### 33-01-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

Bright lighting may be inoperative for night operation.

Refer to Item 33-01-01-02 DIM Function of ANN LT sw

S



33-01 - Overhead Panels 33-01-01 - ANN LT Overhead Panel

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 HDA A320/A321 FLEET
 MI-33-01-01 P 2/2

 MEL
 29 NOV 11



# **MEL ITEMS**

33 - LIGHTS

33-01 - Overhead Panels 33-01-02 - SIGNS Overhead Panel

33-01-02-01 EMER EXIT LT OFF light

Ident.: MI-33-01-02-00007637.0001001 / 19 JUL 12

Applicable to: ALL

1

## 33-01-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

33-01-02-02 AUTO Function of SEAT BELT SIGNS sw

Ident.: MI-33-01-02-00007638.0001001 / 29 NOV 11

Applicable to: ALL

### 33-01-02-02A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.

33-01-02-03 AUTO Function of NO SMOKING SIGNS sw

Ident.: MI-33-01-02-00007639.0001001 / 29 NOV 11

Applicable to: ALL

## 33-01-02-03A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.



33-01 - Overhead Panels 33-01-02 - SIGNS Overhead Panel

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 HDA A320/A321 FLEET
 MI-33-01-02 P 2/2

 MEL
 19 JUL 12



33-10 - Cockpit General Illumination

33-10-01	Cockpit General Illumination (Center & Main Instrument
	Lighting, Console and Floor Lighting, Dome lights
	and Lighting Strips, Instrument and Panel Integral
	Lighting, Map Holder Lighting, Center Pedestal Lighting)

Ident.: MI-33-10-00007640.0004001 / 19 JUL 12

1 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 33-10-01A Day or Night Operations

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

May be inoperative provided that:

- 1) The lighting is sufficient for all instruments and controls, and
- 2) The RH dome light is operative.

33-10-01	Cockpit General Illumination (Center & Main Instrument
	Lighting, Console and Floor Lighting, Dome lights
	and Lighting Strips, Instrument and Panel Integral
	Lighting, Map Holder Lighting, Center Pedestal Lighting)

Ident.: MI-33-10-00007640.0002001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## 33-10-01A Day or Night Operations

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

May be inoperative provided that:

- 1) The lighting is sufficient for all instruments and controls, and
- 2) The RH dome light is operative, and
- 3) The left section of the center instrument panel flood lighting is operative.

MEL Α 19 JUL 12



33-10 - Cockpit General Illumination

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 HDA A320/A321 FLEET
 MI-33-10 P 2/2

 MEL
 19 JUL 12



33-20 - Cabin General Illumination

33-20-01 Cabin General Illumination
-------------------------------------

Ident.: MI-33-20-00007641.0001001 / 29 NOV 11

Applicable to: ALL

## 33-20-01A Cabin Lights (Aircraft with Photo-Luminescent FPEEPMS)

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

Individual overhead, ceiling and sidewall lights may be inoperative provided that:

- 1) The lighting must be sufficient for cabin attendants to perform their duties.
- 2) They do not exceed more than 10 percent of the total quantity per zone.
- 3) No more than two adjacent lamps in the longitudinal or lateral direction may be inoperative. (Adjacent lamps are those next to or diagonally opposing each other.)
- 4) All inoperative lamps must be clear of galley, cabinets and life-raft storage areas.
- 5) Cabin emergency lighting is verified operative.

Note: Cabin emergency lighting does not include floor proximity lights.

Refer to Item 33-51-05 Floor Proximity Emergency Escape Path Marking System in the Main Aisle

# 33-20-01B Cabin Lights (Aircraft with Photo-Luminescent FPEEPMS)

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

Overhead, ceiling and sidewall lights may be inoperative provided that:

- 1) Passengers are not carried.
- 2) The lighting must be sufficient for cabin attendants to perform their duties.

Reference(s)
--------------

S



33-20 - Cabin General Illumination

33-20-02 Cabin Signs (No Smoking/No Electronic Devices/Fasten Seat Belt/Return to Seat)
---

Ident.: MI-33-20-00007642.0001001 / 29 NOV 11

Applicable to: ALL

# 33-20-02A Passenger seat occupied

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

One or more may be inoperative and the affected passenger seat may be occupied provided that:

- 1) PA can be clearly heard throughout the cabin during the flight, and
- PA is used to alert the cabin attendants when passengers must return to seat, seat belts should be fastened.

S

## 33-20-02B Passenger seat not occupied

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	Yes

S

Seats from which a passenger cannot see a readily legible "No Smoking/Fasten Seat Belts" sign must be blocked and placarded "DO NOT OCCUPY".

Reference(s)

S



33-20 - Cabin General Illumination

33-20-03 Lavatory S	ign (Return to seat)
---------------------	----------------------

Ident.: MI-33-20-00007643.0001001 / 29 NOV 11

Applicable to: ALL

# 33-20-03A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes

S

- (o) One or more may be inoperative and the affected lavatory may be used provided that:
  - 1) The passenger address system is checked operative in the affected lavatory, and
  - 2) The passenger address system is used to alert the occupant to return to his seat.

(o) Refer to OpsProc 33-20-03A Lavatory Sign (Return to seat)

S



33-20 - Cabin General Illumination

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 HDA A320/A321 FLEET
 MI-33-20 P 4/4

 MEL
 29 NOV 11



33-30 - Cargo and Service Compartment Lighting

33-30-01	Cargo and Service Compartment Lighting System
----------	---

Ident.: MI-33-30-00007644.0001001 / 22 MAR 10

Applicable to: ALL

# 33-30-01A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.



33-30 - Cargo and Service Compartment Lighting

Intentionally left blank

HDA A320/A321 FLEET MI-33-30 P 2/2 MEL 29 NOV 11



33-40 - Exterior Lighting

33-40-01	Navigation light System 1

Ident.: MI-33-40-00007645.0002001 / 19 JUL 12

Applicable to: ALL

# 33-40-01A Navigation light System 1 and 2 inoperations

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

S

One or more may be inoperative for daylight operations.

- Reference(s) -

S

# 33-40-01B Navigation light system 2 operative

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

S

One or more may be inoperative provided that the Navigation light system 2 is operative.

S

33-40-02 Navigation light System 2	33-40-02	Navigation light System 2
------------------------------------	----------	---------------------------

Ident.: MI-33-40-00007646.0001001 / 22 MAR 10

Applicable to: ALL

### 33-40-02A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.



33-40 - Exterior Lighting

33-40-03	Landing light
Idont : ML 33 40 00007647 000100	1/10       12

dent.: MI-33-40-00007647.0001001 / 19 JUL 12

Applicable to: ALL

# 33-40-03A Taxi and takeoff lights operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

S

One may be inoperative provided that the both taxi and takeoff lights are operative.

Reference(s)

S

# 33-40-03B Daylight operations

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

S

One or both may be inoperative for daylight operations.

Reference(s)

S

33-40-04	Landing light Extension/Retraction System
----------	---

Ident.: MI-33-40-00007651.0001001 / 29 NOV 11

Applicable to: ALL

# 33-40-04A Inoperative in extended position

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

P

(o) One or both may be inoperative in the extended position.

Continued on the following page



33-40 - Exterior Lighting

		Continued fro	om the previous pag
-	Reference(s) —		
P	33-40-04A Landing light Exten	sion/Retraction System	
33-40-04B Inoperative in	retracted position		
Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No
	•		

One or both may be inoperative in the retracted position provided that the associated light is considered inoperative.

Refer to Item 33-40-03 Landing light

Reference(s)

S

33-40-05 Runway Turnoff light	
-------------------------------	--

Ident.: MI-33-40-00007654.0001001 / 22 MAR 10

Applicable to: ALL

### 33-40-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.



33-40 - Exterior Lighting

33-40-06	Taxi and Takeoff light

Ident.: MI-33-40-00007657.0001001 / 22 MAR 10

Applicable to: ALL

### 33-40-06A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

33-40-07	Logo light

Ident.: MI-33-40-00007658.0001001 / 22 MAR 10

Applicable to: ALL

### 33-40-07A

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	Yes

One or both may be inoperative.

33-40-08	Beacon light
----------	--------------

Ident.: MI-33-40-00007659.0002001 / 04 APR 12

Applicable to: ALL

# 33-40-08C Strobe lights operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

(o) One may be inoperative provided that the Strobe lights are operative.

(o) Refer to OpsProc 33-40-08C Beacon light

Continued on the following page



33-40 - Exterior Lighting

Continued from the previous page

# 33-40-08D Daylight operations

	Repair interval	Nbr installed	Nbr required	Placard
Г	С	2	0	Yes

(o)	One or both may be inoperative for daylight operations only provided aircraft does not depart HKG.

(o) Refer to OpsProc 33-40-08D Beacon light

33-40-09	Wing Scan light

Ident.: MI-33-40-00007662.0001001 / 29 NOV 11

Applicable to: ALL

### 33-40-09A

Repair interva	l Nbr insta	lled Nbr required	d Placard
В	2	0	Yes

(o) One or both may be inoperative.

- Reference(s) -

(o) Refer to OpsProc 33-40-09A Wing Scan light

33-40-10	Strobe light
----------	--------------

Ident.: MI-33-40-00007664.0001001 / 22 MAR 10

Applicable to: ALL

### 33-40-10A

Repair interval	Nbr installed	Nbr required	Placard
D	3	0	Yes

One or more may be inoperative.



MEL ITEMS 33 - LIGHTS 33-40 - Exterior Lighting

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 HDA A320/A321 FLEET
 MI-33-40 P 6/6

 MEL
 19 JUL 12



33-51 - Cabin Emergency Lighting

33-51-01	Exit Marking Sign
----------	-------------------

Ident.: MI-33-51-00007667.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ

### 33-51-01A A maximum of three non-adjacent bulbs inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	6	6	No

A maximum of three non-adjacent bulbs may be inoperative in one or more signs.

# 33-51-01C Associated exit considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	6	5	No



One or more may be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door, and Refer to Item 52-10-02 Overwing Emergency Exit

Reference(s)



33-51-01	Exit Marking Sign
----------	-------------------

Ident.: MI-33-51-00007667.0003001 / 29 NOV 11 Applicable to: B-HTD, B-HTE, B-HTF

# 33-51-01A A maximum of three non-adjacent bulbs inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	8	8	No

A maximum of three non-adjacent bulbs may be inoperative in one or more signs.

Continued on the following page



33-51 - Cabin Emergency Lighting

Continued from the previous page

# 33-51-01C Associated exit considered inoperative

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	В	8	7	No



One or more may be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door



33-51-01	Exit Marking Sign
----------	-------------------

Ident.: MI-33-51-00007667.0004001 / 19 JUL 12

1 Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 33-51-01B A maximum of three non-adjacent LED s inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	6	6	No

A maximum of three non-adjacent LED s may be inoperative in one or more signs.

# 33-51-01C Associated exit considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	6	5	No



One or more may be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door, and Refer to Item 52-10-02 Overwing Emergency Exit

Reference(s)

Р



33-51 - Cabin Emergency Lighting

33-51-01	Exit Marking Sign
----------	-------------------

Ident.: MI-33-51-00007667.0007001 / 29 NOV 11 Applicable to: B-HTG, B-HTH, B-HTI

# 33-51-01B A maximum of three non-adjacent LED s inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	8	8	No

A maximum of three non-adjacent LED s may be inoperative in one or more signs.

# 33-51-01C Associated exit considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	8	7	No



One or more may be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

Reference(s) -



33-51-02	Exit Location Sign in the Main Aisle

Ident.: MI-33-51-00007668.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HTD, B-HTE, B-HTF

### 33-51-02B

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	No

Must be operative.



33-51 - Cabin Emergency Lighting

33-51-02 Exit Location Sign in the Main Aisle
---

Ident.: MI-33-51-00007668.0002001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

### 33-51-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

A maximum of three non-adjacent LEDs may be inoperative in one or more signs.

33-51-03	Overhead Emergency Lighting System in the Main Aisle

Ident.: MI-33-51-00007669.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 33-51-03A

Repair interval	Nbr installed	Nbr required	Placard
С	11	8	No

A maximum of three non-adjacent overhead emergency lights may be inoperative.

33-51-03	Overhead Emergency Lighting System in the Main Aisle
----------	--

Ident.: MI-33-51-00007669.9001002 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

### 33-51-03A

Repair interval	Nbr installed	Nbr required	Placard
С	8	5	No

A maximum of three non-adjacent overhead emergency lights may be inoperative.



MINIMUM EQUIPMENT LIST

# MEL ITEMS 33 - LIGHTS

33-51 - Cabin Emergency Lighting

33-51-04	Overhead Emergency Lighting System in the Door Vicinity
----------	---

Ident.: MI-33-51-00007670.0001001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 33-51-04A

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	No



One or more may be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door, and Refer to Item 52-10-02 Overwing Emergency Exit

Reference(s)



33-51-04	Overhead Emergency Lighting System in the Door Vicinity
----------	---

Ident.: MI-33-51-00007670.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 33-51-04A

Repair interval	Nbr installed	Nbr required	Placard
В	8	7	No



One or more may be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

 Reference(s)	 

Р



33-51 - Cabin Emergency Lighting

33-51-05	Floor Proximity Emergency Escape Path Marking System in the Main Aisle

Ident.: MI-33-51-00007671.0001001 / 29 NOV 11

Applicable to: ALL

# 33-51-05A

Repair interval	Nbr installed	Nbr required	Placard
D	-	-	No

S

Mav	/ he	inon	erative	for	daylig	ht o	perations	only
IVIC	, ,,	II IOP	CIGUIO	101	daying	111	porations	Oilly.

---- Reference(s) ------

S

### 33-51-05B

Repair interval	Repair interval i indicinstalled i		Placard	
С	-	-	No	



For aircraft with Photo-Luminescent FPEEPMS installed, provided all required sidewall EXIT signs and markers are operative, each of the photoluminescent strips of an aisle may be partly inoperative up to a length of 4.8 inches or 10% of the strip length if it is less than 48 inches, provided the inoperative or missing parts are not directly opposite each other and are not closer together than 48 inches. No more than 4 such inoperative or missing parts are allowed.



S



33-51 - Cabin Emergency Lighting

33-51-06 Galley Strips
------------------------

Ident.: MI-33-51-20801578.9001001 / 29 NOV 11

Applicable to: ALL

### 33-51-06A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

May be inoperative.

33-51-07 Floor Proximity Emergency Escape Path Marking System Exit Marker

Ident.: MI-33-51-00007673.0001001 / 19 JUL 12

4 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 33-51-07A

Repair interval	Nbr installed	Nbr required	Placard	
-	8	-	Yes	

P

One or more may be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door, and Refer to Item 52-10-02 Overwing Emergency Exit

Reference(s)

Р

33-51-07	Floor Proximity Emergency Escape Path Marking System Exit Marker
----------	--

Ident.: MI-33-51-00007673.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 33-51-07A

Repair interval	Nbr installed	Nbr required	Placard
-	8	-	Yes

Р

One or more may be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

Continued on the following page



P

# MEL ITEMS 33 - LIGHTS

33-51 - Cabin Emergency Lighting

	Reference(s)	Continued fr	om the previous
P	.,		
3-51-08	Overwing E	Emergency light	
nt.: MI-33-51-00007674.0001001 / 19 J		ON B 1100 B 1100 B 1100 B	UOD D 1107 D 11
	3-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-H	SN, B-HSO, B-HSP, B-HSQ, B-	HSR, B-HST, B-H
33-51-08A Daylight opera			1 5
Repair interval	Nbr installed	Nbr required	Placard
С		0	No
S			
<del></del>	pe inoperative for daylight opera	tions	
One of more may b	Reference(s)		
	Reference(s)		
S			
33-51-08B Associated ex	cit considered inoperative		
		Nhr roquirod	
Repair interval	Nbr installed	nor required	Placard
Repair interval	Nbr installed –	Nbr required -	Placard No
В	Nbr installed –	-	
В	- 1	-	No
B One or more may b	e inoperative provided that the	-	No
B  One or more may b	- 1	-	No



33-51 - Cabin Emergency Lighting

|--|

Ident.: MI-33-51-00007675.0001001 / 19 JUL 12

6 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 33-51-09A

Repair interval	Nbr installed	Nbr required	Placard	
С	2	0	No	

One or more may be inoperative.

33-51-10	Escape Slide Lighting

Ident.: MI-33-51-00007676.0001001 / 19 JUL 12

7 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 33-51-10A Daylight operations

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

Лау	be inope	rative for	daylight	operations.
-----	----------	------------	----------	-------------

Reference(s)

S

# 33-51-10B Associated exit considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	-	1	No

P

May be inoperative provided that the associated exit is considered inoperative.

Refer to Item 52-10-01 Cabin Passenger Door, and Refer to Item 52-10-02 Overwing Emergency Exit

Reference(s)

P

MEL I to J  $\rightarrow$  19 JUL 12



33-51 - Cabin Emergency Lighting

33-51-10	Escape Slide Lighting
----------	-----------------------

Ident.: MI-33-51-00007676.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 33-51-10A Daylight operations

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

May be inoperative for daylight operations.

Reference(s)

S

# 33-51-10B Associated exit considered inoperative

Repair int	erval Nbı	r installed	Nbr required	Placard
В		-	-	No

Р

May be inoperative provided that the associated exit is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

Р

33-51-11	Lavatory Auxiliary light

Ident.: MI-33-51-00007677.0001001 / 29 NOV 11

Applicable to: ALL

### 33-51-11A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

May be inoperative provided main (fluorescent) lavatory light operates normally.



33-51 - Cabin Emergency Lighting

33-51-12 BAT TEST pb on the PTP
---------------------------------

Ident.: MI-33-51-00007678.0001001 / 29 NOV 11

Applicable to: ALL

### 33-51-12A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the batteries are correctly charged.

33-51-13	SYS TEST pb on the PTP
----------	------------------------

Ident.: MI-33-51-00007679.0001001 / 29 NOV 11

Applicable to: ALL

### 33-51-13A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(m) May be inoperative provided that the operational test of the emergency lighting system is performed as an alternative to this test.

--- Reference(s) -----

(m) Refer to AMM 33-51-00-040-001

S



33-51 - Cabin Emergency Lighting

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HDA A320/A321 FLEET MI-33-51 P 12/12 MEL 19 JUL 12



34-00 - MAINTENANCE Messages on the STATUS SD page

A320/A321
MINIMUM EQUIPMENT LIST

	34-00-01	ADR (1)(2)(3) MAINTENANCE Message
--	----------	-----------------------------------

Ident.: MI-34-00-00008503.0001001 / 29 NOV 11

Applicable to: ALL

# 34-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

ADR (1)(2)(3) MAINTENANCE message may be	displayed on the <u>STATUS</u> SD page.
Reference(s)	

S

in <u>MAINTENANCE</u> Message	34-00-02	IR <u>MAINTENANCE</u> Message
-------------------------------	----------	-------------------------------

Ident.: MI-34-00-00008504.0001001 / 29 NOV 11

Applicable to: ALL

# 34-00-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

IR MAINTENANCE				OTATIO	
IR MAINLENIANCE	maccada mai	/ na dieni	avaa an tna		SIInada
	IIICSSAUC IIIA	, pe algoli	avou on mo		OD Dauc.

Reference(s)

S



34-00 - MAINTENANCE Messages on the STATUS SD page

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HDA A320/A321 FLEET MI-34-00 P 2/2 MEL 29 NOV 11



34-01 - Overhead Panels 34-01-01 - ADIRS Overhead Panel

34-01-01-01	ADR pb-sw FAULT light
-------------	-----------------------

Ident.: MI-34-01-01-00008505.0001001 / 22 MAR 10

Applicable to: ALL

### 34-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.

34-01-01-02	ADR pb-sw OFF light
	!

Ident.: MI-34-01-01-00008506.0001001 / 22 MAR 10

Applicable to: ALL

### 34-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.

Ident.: MI-34-01-01-00008509.0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 34-01-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.



34-01 - Overhead Panels 34-01-01 - ADIRS Overhead Panel

34-01-01-03	IR pb-sw FAULT light
-------------	----------------------

Ident.: MI-34-01-01-00008509.0002001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 34-01-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.

34-01-01-04	IR ALIGN light
-------------	----------------

Ident.: MI-34-01-01-00008510.0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSK, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 34-01-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.

34-01-01-04	IR pb-sw OFF light
-------------	--------------------

Ident.: MI-34-01-01-00008510.0002001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 34-01-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	Yes

One or more may be inoperative.



34-01 - Overhead Panels 34-01-01 - ADIRS Overhead Panel

34-01-01-05	ON BAT light

Ident.: MI-34-01-01-00008511.0001001 / 22 MAR 10

Applicable to: ALL

### 34-01-01-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

34-01-01-31	ADR pb-sw
-------------	-----------

Ident.: MI-34-01-01-00008512.0001001 / 29 NOV 11

Applicable to: ALL

### 34-01-01-31A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	Yes

- (o) ADR 2 or ADR 3 pb-sw may be inoperative provided that:
  - 1) The associated mode selector is operative, and
  - 2) The two ADR s and the two IR s associated with the two operative ADRs pb-sw are operative.

Reference(c)	

(o) Refer to OpsProc 34-01-01-31A ADR pb-sw

34-01-01-32	IR pb-sw
-------------	----------

Ident.: MI-34-01-01-00008513.0001001 / 19 JUL 12

<sup>3</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### 34-01-01-32A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	Yes

- (o) IR 2 or IR 3 pb-sw may be inoperative provided that:
  - 1) The associated mode selector is operative, and
  - The two ADR s and the two IR s associated with the two operative IRs pb-sw are operative.

Continued on the following page



34-01 - Overhead Panels 34-01-01 - ADIRS Overhead Panel

Continued from the previous page

(o) Refer to OpsProc 34-01-01-32A IR pb-sw

34-01-01-33	IR Mode selector

Ident : MI-34-01-01-00008516 0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 34-01-01-33A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	Yes

IR 2 or IR 3 mode selector may be inoperative provided that the associated ADIRS is considered inoperative.

Refer to the associated Items.

34-01-01-33	IR Mode selector
	2004 / 40   111   40

Ident.: MI-34-01-01-00008516.0002001 / 19 JUL 12

<sup>4</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 34-01-01-33A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	Yes

One may be inoperative.

34-01-01-34	DATA DISPLAY selector of ADIRS CDU
-------------	------------------------------------

Ident.: MI-34-01-01-00008521.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 34-01-01-34A MCDU 1 and MCDU 2 operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the MCDU 1 and the MCDU 2 are operative.

Continued on the following page



34-01 - Overhead Panels 34-01-01 - ADIRS Overhead Panel

Continued from the previous page

# 34-01-01-34B Navigation not planned on inertial data

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

P

May be inoperative provided	that the navigation is not	planned on inertial data
-----------------------------	----------------------------	--------------------------

Reference(s) -

Р

34-01-01-35	SYS DISPLAY selector of ADIRS CDU

Ident.: MI-34-01-01-00008523.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 34-01-01-35A MCDU 1 and MCDU 2 operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that:

- 1) The MCDU 1 and the MCDU 2 are operative, and
- 2) The IRS initialization is available through the FMGC.

# 34-01-01-35B Navigation not planned on inertial data

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

Р

May be inoperative provided that the navigation is not planned on inertial data.

- Reference(s) -

Р



34-01 - Overhead Panels 34-01-01 - ADIRS Overhead Panel

34-01-01-36	Display Unit of ADIRS CDU
-------------	---------------------------

Ident.: MI-34-01-01-00008526.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 34-01-01-36A MCDU 1 and MCDU 2 operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the MCDU 1 and the MCDU 2 are operative.

# 34-01-01-36B Navigation not planned on inertial data

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

Р

May be inoperative provided that the navigation is not planned on inertial data.

Reference(s)

Р

34-01-01-37	Keyboard of ADIRS CDU

Ident.: MI-34-01-01-00008530.0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### 34-01-01-37A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the MCDU 1 and the MCDU 2 are operative.



34-01 - Overhead Panels 34-01-02 - GPWS Overhead Panel

34-01-02-01	GPWS SYS FAULT light

Ident.: MI-34-01-02-00008534.0001001 / 04 APR 12

Applicable to: ALL

# 34-01-02-01A

S

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No



May be inoperative for	a maximum of 6 sector	s or 25 flight hours	or 2 calendar days,
whichever occurs first	provided that aircraft do	es not depart Hong	g Kong.

Reference(s)



34-01 - Overhead Panels 34-01-02 - GPWS Overhead Panel

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 HDA A320/A321 FLEET
 MI-34-01-02 P 2/2

 MEL
 04 APR 12



34-05 - Indications on the Primary Flight Display (PFD)

34-05-01	Actual Airspeed Reference Line and Scale Indication on the PFD
----------	--

Ident.: MI-34-05-00008711.0001001 / 22 MAR 10

Applicable to: ALL

### 34-05-01A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

34-05-02	Mach Number Indication on the PFD

Ident.: MI-34-05-00008712.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 34-05-02A One indication inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

# 34-05-02B Both indications inoperative - FCU operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both may be inoperative provided that the SPD/MACH selection window on the FCU is operative.

# 34-05-02C Both indications inoperative - FL limitation

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Р

Both may be inoperative provided that the flight altitude is limited to 25 000 ft.

Reference(s) —

P

MEL A to B  $\rightarrow$ 



34-05 - Indications on the Primary Flight Display (PFD)

34-05-02	Mach Number Indication on the PFD
----------	-----------------------------------

Ident.: MI-34-05-00008712.0002001 / 19 JUL 12

Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 34-05-02A One indication inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

# 34-05-02B Both indications inoperative - FCU operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both may be inoperative provided that the SPD/MACH selection window on the FCU is operative.

# 34-05-02C Both indications inoperative - FL limitation

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Р

Both may be inoperative provided that the flight altitude is limited to 25 000 ft.

Deference(a)	
 Reference(s)	

Р

# 34-05-02D Both indications inoperative - ISIS Mach Number Indication operative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Both may be inoperative provided that the ISIS Mach Number indication is operative.



34-05 - Indications on the Primary Flight Display (PFD)

34-05-03	VMO/MMO Characteristic Speed Indication on the PFD
----------	--

Ident.: MI-34-05-00008713.0001001 / 22 MAR 10

Applicable to: ALL

# 34-05-03A

Repair interval	Nbr installed	Nbr required	Placard
_	2	2	No

Both must be operative.

34-05-04	Altitude Indication on the PFD
	•

Ident.: MI-34-05-00008714.0001001 / 22 MAR 10

Applicable to: ALL

### 34-05-04A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

34-05-05	Baro Reference Indication on the PFD
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Ident.: MI-34-05-00008715.0001001 / 29 NOV 11

Applicable to: ALL

### 34-05-05A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.



34-05 - Indications on the Primary Flight Display (PFD)

34-05-06 Vertical Speed in Inertial Mode Indication on the PFD	
--	--

Ident.: MI-34-05-00008716.0001001 / 22 MAR 10

Applicable to: ALL

### 34-05-06A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

34-05-07	Other Air Data Related Indications on the PFD
1-1 NI 04 OF 00000717 000100	1 / 00 NOV 11

dent.: MI-34-05-00008717.0001001 / 29 NOV 1

Applicable to: ALL

### 34-05-07A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

(o) One or more may be inoperative.

Reference(s)	

(o) Refer to OpsProc 34-05-07A Other Air Data Related Indications on the PFD

34-05-08	Attitude Indication on the PFD

Ident.: MI-34-05-00008718.0001001 / 29 NOV 11

Applicable to: ALL

### 34-05-08A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

# LP

- (o) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The aircraft is operated in day VMC conditions.

Continued on the following page



34-05 - Indications on the Primary Flight Display (PFD)

		Continued from the previous page
(o)	Refer to OpsProc 34-05-08A Attitude Indication on the PFD	

34-05-09 Heading Indication on the PFD

Ident.: MI-34-05-00008719.0001001 / 22 MAR 10

Applicable to: ALL

## 34-05-09A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.



34-05 - Indications on the Primary Flight Display (PFD)

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 HDA A320/A321 FLEET
 MI-34-05 P 6/6

 MEL
 19 JUL 12



34-06 - Indications on the Navigation Display (ND)

·	34-06-01	Ground Speed Indication on the ND
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Ident.: MI-34-06-00008720.0001001 / 22 MAR 10

Applicable to: ALL

## 34-06-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

	34-06-02	True Air Speed Indication on the ND
--	----------	-------------------------------------

Ident.: MI-34-06-00008721.0001001 / 22 MAR 10

Applicable to: ALL

#### 34-06-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

Ident.: MI-34-06-00008722.0001001 / 22 MAR 10

Applicable to: ALL

#### 34-06-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.



34-06 - Indications on the Navigation Display (ND)

34-06-04 Heading Indication on the ND
---------------------------------------

Ident.: MI-34-06-00008723.0001001 / 15 SEP 10

Applicable to: ALL

#### 34-06-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative provided that the heading indications are operative on both PFDs.

34-06-05	Position (Aircraft Symbol) Indication on the ND
11 . 141.04.00.0000704.000400	4 /00 MAD 40

Ident.: MI-34-06-00008724.0001001 / 22 MAR 10

Applicable to: ALL

#### 34-06-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

|--|

Ident.: MI-34-06-00008725.0001001 / 22 MAR 10

Applicable to: ALL

#### 34-06-06A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

One or more may be inoperative.



34-06 - Indications on the Navigation Display (ND)

34-06-07	Chrono Indication on the ND
----------	-----------------------------

Ident.: MI-34-06-00008726.0001001 / 29 NOV 11

Applicable to: ALL

## 34-06-07A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

Refer to Item 31-20-01 Electrical Clock Indicator



34-06 - Indications on the Navigation Display (ND)

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HDA A320/A321 FLEET MI-34-06 P 4/4
MEL 29 NOV 11



34-10 - Air Data/Inertial Reference System (ADIRS)

34-10-01	ADR 1

Ident.: MI-34-10-00008541.0001001 / 22 MAR 10

Applicable to: ALL

## 34-10-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

34-10-02	ADR 2
	*

Ident.: MI-34-10-00008542.0001001 / 29 NOV 11

Applicable to: ALL

#### 34-10-02B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



- (o) May be inoperative provided that:
  - 1) The IR 1, IR 3, ADR 1 and ADR 3 are operative, and
  - 2) The takeoff is not performed in CONF 1+F.

- Reference(s) -

(o) Refer to OpsProc 34-10-02B ADR 2



34-10 - Air Data/Inertial Reference System (ADIRS)

34-10-03	ADR 3
	-

Ident.: MI-34-10-00008545.0001001 / 29 NOV 11

Applicable to: ALL

#### 34-10-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

П	1	D
I۳	L	Г

(o) May be inoperative provided that the IR 1, IR 2, ADR 1 and ADR 2 are operative.

Reference(s)

(o) Refer to OpsProc 34-10-03A ADR 3

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34-10-04	IR 1
----------	------

Ident.: MI-34-10-00008547.0001001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

#### 34-10-04B GPS 1 operative

Repair interval	Nbr installed	Nbr required	Placard
С	C 1		Yes

## LP

- (o) The NAV mode may be inoperative provided that:
  - 1) The IR 1 is operated in ATT mode, and
  - 2) The IR 2 and IR 3 are operative, and
  - 3) The GPS 1 is operative, and
  - 4) The terrain function of the TAWS is considered inoperative.

    Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)

Reference(s)

(o) Refer to OpsProc 34-10-04B IR 1 (only NAV mode of IR1 inoperative)

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Continued on the following page



MINIMUM EQUIPMENT LIST

## MEL ITEMS 34 - NAVIGATION

34-10 - Air Data/Inertial Reference System (ADIRS)

Continued from the previous page

## 34-10-04C GPS 1 inoperative

ſ	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	1	0	Yes

LP

- (o) The NAV mode may be inoperative provided that:
  - 1) The IR 1 is operated in ATT mode, and
  - 2) The IR 2 and IR 3 are operative, and
  - 3) The Flight remains within radio navaids coverage, and
  - 4) The terrain function of the TAWS is considered inoperative. Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)

(o) Refer to OpsProc 34-10-04C IR 1 (only NAV mode of IR1 inoperative)

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34-10-04 IR 1	
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Ident.: MI-34-10-00008547.0006001 / 19 JUL 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

#### 34-10-04B GPS 1 operative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

- (o) The NAV mode may be inoperative provided that:
  - 1) The IR 1 is operated in ATT mode, and
  - 2) The IR 2 and IR 3 are operative, and
  - 3) The GPS 1 is operative, and
  - 4) The terrain function of the TAWS is considered inoperative Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS), and
  - 5) The FMGC 1 is considered inoperative. Refer to Item 22-83-01 Flight Management and Guidance Computer (FMGC)

Continued on the following page

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34-10 - Air Data/Inertial Reference System (ADIRS)

page

		Continued from	n the previous
	Reference(s) —		
E P	-10-04B IR 1 (only NAV mod	de of IR1 inoperative)	
34-10-04C GPS 1 inoperat			1 5
Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes
LP			
(o) The NAV mode may	be inoperative provided that		
	ed in ATT mode, and		
2) The IR 2 and IR 3			
-	s within radio navaids covera	age, and	
, .	on of the TAWS is considered	•	
•			
Refer to Item 34-4	10-01-01 Ground Proximity V	Varning System (GPWS) . a	nd

Refer to Item 22-83-01 Flight Management and Guidance Computer (FMGC)

Reference(s) —

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34-10 - Air Data/Inertial Reference System (ADIRS)

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	A320/A321
MININ	IUM EQUIPMENT LIST

34-10-05	IR 2

Ident.: MI-34-10-00008549.0013001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 34-10-05B IR 2 totally inoperative

Repair interval Nbr installed		Nbr required	Placard
С	1	0	Yes

LP

- (o) May be inoperative provided that:
  - 1) The IR 2 pb-sw is set to OFF, and
  - 2) The IR 1, the IR 3 and two ADR s are operative, and
  - 3) The FMGC 2 is considered inoperative.

    Refer to Item 22-83-01 Flight Management and Guidance Computer (FMGC)

- (o) Refer to OpsProc 34-10-05B IR 2 (IR 2 totally inoperative)
- L P

## 34-10-05C Only NAV mode of IR 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

- (o) The NAV mode may be inoperative provided that:
  - 1) The IR 2 is operated in ATT mode, and
  - 2) The IR 1 and the IR 3 are operative, and
  - 3) The FMGC 2 is considered inoperative.

Refer to Item 22-83-01 Flight Management and Guidance Computer (FMGC)

 Reference(s)	
1101010100(3)	

(o) Refer to OpsProc 34-10-05C IR 2 (only NAV mode of IR 2 inoperative)

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HDA A320/A321 FLEET MI-34-10 P 5/10



34-10 - Air Data/Inertial Reference System (ADIRS)

Ident.: MI-34-10-00008549.0006001 / 29 NOV 11

Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTG, B-HTH, B-HTI

#### 34-10-05B IR 2 totally inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

- (o) May be inoperative provided that:
  - 1) The IR 2 mode selector is set to OFF, and
  - 2) The IR 1, the IR 3, the ADR 1 and the ADR 3 are operative, and
  - 3) The takeoff is not performed in CONF 1+F, and
  - 4) The FMGC 2 is considered inoperative.

Refer to Item 22-83-01 Flight Management and Guidance Computer (FMGC)

--- Reference(s) -----

(o) Refer to OpsProc 34-10-05B IR 2 (IR 2 totally inoperative)

L

34-10-05C Only NAV mode of IR 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

- (o) The NAV mode may be inoperative provided that:
  - 1) The IR 2 is operated in ATT mode, and
  - 2) The IR 1 and the IR 3 are operative, and
  - 3) The FMGC 2 is considered inoperative.

Refer to Item 22-83-01 Flight Management and Guidance Computer (FMGC)

Reference(s)

(o) Refer to OpsProc 34-10-05C IR 2 (only NAV mode of IR 2 inoperative)

Р



MINIMUM EQUIPMENT LIST

## MEL ITEMS 34 - NAVIGATION

34-10 - Air Data/Inertial Reference System (ADIRS)

34-10-05	IR 2

Ident.: MI-34-10-00008549.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

### 34-10-05B IR 2 totally inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

- (o) May be inoperative provided that:
  - 1) The IR 2 mode selector is set to OFF, and
  - 2) The IR 1, the IR 3, the ADR 1 and the ADR 3 are operative, and
  - 3) The takeoff is not performed in CONF 1+F.

- Reference(s)

(o) Refer to OpsProc 34-10-05B IR 2 (IR 2 totally inoperative)



## 34-10-05C Only NAV mode of IR 2 inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) The NAV mode may be inoperative provided that:
  - 1) The IR 2 is operated in ATT mode, and
  - 2) The IR 1 and the IR 3 are operative.

(o) Refer to OpsProc 34-10-05C IR 2 (only NAV mode of IR 2 inoperative)

MEL ← E 19 JUL 12



34-10 - Air Data/Inertial Reference System (ADIRS)

MINIMUM EQUIPMENT LIST				
34-10-06			IR 3	
Ident.: MI-34-10-00008552.0001001 Applicable to: B-HSD, B-HSE, B-H		12 SI, B-HSJ, B-HSK, B-HSL, B-HSM, B-	-HSN. B-HTD. B-HTE. B-HTF. B-HTG	S. B-HTH. B-HTI
34-10-06A IR 3 mode	•			,
Repair interval		Nbr installed	Nbr required	Placard
С		1	0	Yes
LP				
•	ode sel	rovided that: lector is set to OFF, and the ADR 1, and the ADR 2	are operative.	
(o) Refer to OpsP totally inoperat  P  34-10-06B IR 3 opera	tive)	10-06A IR 3 (for aircraft with	hout Honeywell 10 MCU AE	NRU with IR 3
Repair interval		Nbr installed	Nbr required	Placard
С		1	0	Yes
(o) The NAV mode 1) The IR 3 is	e mav l	be inoperative provided that	•	



34-10 - Air Data/Inertial Reference System (ADIRS)

## A320/A321 MINIMUM EQUIPMENT LIST

34-10-06	IR 3
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Ident.: MI-34-10-00008552.0002001 / 19 JUL 12

3 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 34-10-06A IR 3 pb-sw set to OFF

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

- (o) May be inoperative provided that:
  - 1) The IR 3 pb-sw is set to OFF, and
  - 2) The IR 1, the IR 2, the ADR 1 and the ADR 2 are operative.

(o) Refer to OpsProc 34-10-06A IR 3 (for aircraft without Honeywell 10 MCU ADIRU with IR 3 totally inoperative)

L P

## 34-10-06B IR 3 operated in ATT mode

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP

- (o) The NAV mode may be inoperative provided that:
  - 1) The IR 3 is operated in ATT mode, and
  - 2) The IR 1 and the IR 2 are operative.

Reference(s)

(o) Refer to OpsProc 34-10-06B IR 3 (for aircraft without Honeywell 10 MCU ADIRU with only NAV mode of IR 3 inoperative)

HDA A320/A321 FLEET MI-34-10 P 9/10



34-10 - Air Data/Inertial Reference System (ADIRS)

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 HDA A320/A321 FLEET
 MI-34-10 P 10/10

 MEL
 19 JUL 12



34-11 - Sensors

34-11-01 Angle of Attack ( AOA ) S	Sensor
------------------------------------	--------

Ident.: MI-34-11-00008558.0001001 / 22 MAR 10

Applicable to: ALL

#### 34-11-01A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

The F/O or the STBY Angle Of Attack sensor may be inoperative provided that the associated ADR is considered inoperative.

Refer to Item 34-10-02 ADR 2 . or

Refer to Item 34-10-03 ADR 3

34-11-02	CAPT Total Air Temperature ( TAT )
	Sensor Element Connected to the ADR 1

Ident.: MI-34-11-00008560.0001001 / 29 NOV 11

Applicable to: ALL

#### 34-11-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative provided that:
  - 1) The CAPT sensor element connected to the ADR 3 is operative, and
  - 2) The F/O sensor connected to the ADR 2 is operative, and
  - 3) The ADR 2 and the ADR 3 are operative, and
  - 4) The TAT indication on the SD is checked operative, and
  - 5) The TAS indication on the ND 1 is considered inoperative. Refer to Item 34-06-02 True Air Speed Indication on the ND

 Reference(s)	

(o) Refer to OpsProc 34-11-02A CAPT Total Air Temperature (TAT) Sensor Element Connected to the ADR 1



34-11 - Sensors

34-11-03 CAPT Total Air Temperature ( TAT )
Sensor Element Connected to the ADR 3

Ident.: MI-34-11-00008561.0001001 / 29 NOV 11

Applicable to: ALL

#### 34-11-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative provided that:
  - 1) The CAPT sensor element connected to the ADR 1 is operative, and
  - 2) The F/O sensor connected to the ADR 2 is operative, and
  - 3) The ADR 1 and the ADR 2 are operative, and
  - 4) The TAT indication on the SD is checked operative.

(o) Refer to OpsProc 34-11-03A CAPT Total Air Temperature (TAT) Sensor Element Connected to the ADR 3

34-11-04	F/O Total Air Temperature ( TAT )
	Sensor Element Connected to the ADR 2

Ident.: MI-34-11-00008562.0001001 / 29 NOV 11

Applicable to: ALL

#### 34-11-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

- (o) May be inoperative provided that:
  - 1) Both CAPT TAT sensor elements are operative, and
  - 2) The ADR 1 and the ADR 3 are operative, and
  - 3) The TAT indication on the SD is checked operative, and
  - 4) The TAS indications on the ND 2 is considered inoperative. Refer to Item 34-06-02 True Air Speed Indication on the ND

<b>5</b>	
 Reference(s) ——————	

(o) Refer to OpsProc 34-11-04A F/O Total Air Temperature (TAT) Sensor Element Connected to the ADR 2



34-21 - Altitude and Airspeed Standby Data

34-21-01 Standby ALT Indicator
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Ident.: MI-34-21-00008572.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 34-21-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

Р

May be inoperative provided that the aircraft is operated in day VMC conditions.

- Reference(s) -

Р

34-21-02 Bugs on the Standby ALT Indicator	
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Ident : MI-34-21-00008573 0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 34-21-02A

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

One or more may be inoperative.

34-21-03	Standby IAS Indicator

Ident.: MI-34-21-00008575.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 34-21-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- May be inoperative provided that: (o)
  - 1) The three ADR s are operative, and
  - 2) The three Probe Heat Computers are operative, and
  - 3) The Standby horizon is operative, and
  - 4) The AIR DATA SWITCHING selector, the EIS DMC SWITCHING selector and the PFD/ND XFR pb are checked operative.

Continued on the following page



34-21 - Altitude and Airspeed Standby Data

Continued from the previous page

(o) Refer to OpsProc 34-21-03A Standby IAS Indicator

34-21-04 Bugs on the Standby IAS Indicator
--

Ident · MI-34-21-00008613 0001001 / 22 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 34-21-04A

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

One or more may be inoperative.

34-21-05	Standby ALT Metric Indicator
34-21-03	Standby ALT Metric indicator

Ident.: MI-34-21-00008614.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 34-21-05A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.



34-22 - Attitude and Heading Standby Data

34-22-01	Standby Compass Indicator

Ident.: MI-34-22-00008615.0004001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HTD, B-HTE, B-HTF, B-HTG

## 34-22-01A Applicable to aircraft fitted with NORTHROP GRUMMAN (LITTON) ADIRU except P/N 465020-0303-0316 or subsequent, having the shelf modified ( MOD 30650/ SB 25-1248, or MOD 30872)

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

# 34-22-01B Applicable to aircraft fitted with NORTHROP GRUMMAN (LITTON) ADIRU P/N 465020-0303-0316 or subsequent, having the shelf modified ( MOD 30650/ SB 25-1248, or MOD 30872) or HONEYWELL ADIRU

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The three IR s are operative, and
  - 2) The ATT/HDG SWITCHING selector, the EIS DMC SWITCHING selector and the PFD/ND XFR pb are checked operative.

Deference(e)	
nelelelice(s)	

(o) Refer to OpsProc 34-22-01B Standby Compass Indicator

## 34-22-01C Applicable to aircraft fitted with NORTHROP GRUMMAN (LITTON) ADIRU P/N 465020-0303-0316 or subsequent, having the shelf modified (Mod 30650/ SB 25-1248, or MOD 30872) or HONEYWELL ADIRU

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that:

- 1) The three IR s are operative, and
- 2) The DDRMI is operative.

19 JUL 12



34-22 - Attitude and Heading Standby Data

34-22-01 Standby Compass Indicator
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Ident.: MI-34-22-00008615.0005001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSQ, B-HSR, B-HST, B-HSU, B-HTH, B-HTI

## 34-22-01A Applicable to aircraft fitted with NORTHROP GRUMMAN (LITTON) ADIRU except P/N 465020-0303-0316 or subsequent, having the shelf modified ( MOD 30650/ SB 25-1248, or MOD 30872)

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

## 34-22-01B Applicable to aircraft fitted with NORTHROP GRUMMAN (LITTON) ADIRU P/N 465020-0303-0316 or subsequent, having the shelf modified ( MOD 30650/ SB 25-1248, or MOD 30872) or HONEYWELL ADIRU

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

- (o) May be inoperative provided that:
  - 1) The three IR s are operative, and
  - **2)** The ATT/HDG SWITCHING selector , the EIS DMC SWITCHING selector and the PFD/ND XFR pb are checked operative.

D-f(-)
neierence(s)

(o) Refer to OpsProc 34-22-01B Standby Compass Indicator

34-22-02	Standby Compass Lighting
Idamt - MI 24 22 00000616 000100	1 / 00 MAD 10

Ident.: MI-34-22-00008616.0001001 / 22 MAR 10

Applicable to: ALL

#### 34-22-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



34-22 - Attitude and Heading Standby Data

34-22-03	Standby Horizon Indicator
	ļ.

Ident.: MI-34-22-00008617.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

34-22-03A Applicable to aircraft fitted with NORTHROP GRUMMAN (LITTON) ADIRU except P/N 465020-0303-0316 or subsequent, having the shelf modified ( MOD 30650/ SB 25-1248, or MOD 30872)

Repair interval	Nbr installed	Nbr required	Placard	
-	1	1	No	
LP				
Must be operative.				
	Reference(s) -			

34-22-03B Applicable to aircraft fitted with NORTHROP GRUMMAN (LITTON) ADIRU P/N 465020-0303-0316 or subsequent, having the shelf modified (MOD 30650/SB 25-1248, or MOD 30872) or HONEYWELL ADIRU

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

LP				
(o)	May be inoperative p	rovided that the aircraft is op	perated in day VMC conditio	ns.
		Reference(s)		
(o)	Refer to OpsProc 34	-22-03B Standby Horizon Inc	dicator	
Р				

HDA A320/A321 FLEET MI-34-22 P 3/4 19 JUL 12



34-22 - Attitude and Heading Standby Data

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 HDA A320/A321 FLEET
 MI-34-22 P 4/4

 MEL
 19 JUL 12



MINIMUM EQUIPMENT LIST

## MEL ITEMS 34 - NAVIGATION

34-23 - Integrated Standby Instrument System (ISIS)

34-23-01	ISIS Altitude Indication

Ident.: MI-34-23-00008618.0001001 / 19 JUL 12

1 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 34-23-01A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No

Р

May be inoperative provided that the aircraft is operated in day VMC conditions.

Reference(s)

Р

34-23-02	ISIS Airspeed Indication
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Ident.: MI-34-23-00008619.0005001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 34-23-02A

	Repair interval	Nbr installed	Nbr required	Placard
Γ	С	1	0	No

May be inoperative provided that:

- 1) The ISIS attitude indication is operative, and
- 2) The ADRs, DMCs and probe heat computers are operative, and
- **3)** The AIR DATA SWITCHING selector, the EIS DMC SWITCHING selector and the PFD/ND XFR pb are operative.



34-23 - Integrated Standby Instrument System (ISIS)

34-23-03 ISIS Bugs Indication
-------------------------------

Ident.: MI-34-23-00008620.0001001 / 19 JUL 12

3 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 34-23-03A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.

34-25-04 ISIS Attitude indication	34-23-04	ISIS Attitude Indication
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Ident.: MI-34-23-00008621.0001001 / 19 JUL 12

4 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# 34-23-04B Applicable to aircraft fitted with NORTHROP GRUMMAN (LITTON) ADIRU P/N 465020-0303-0316 or subsequent, having the shelf modified ( MOD 30650/ SB 25-1248, or MOD 30872) or HONEYWELL ADIRU

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No

LP

(o) May be inoperative provided that the aircraft is operated in day VMC conditions.

(o) Refer to OpsProc 34-23-04B ISIS Attitude Indication

L



34-23 - Integrated Standby Instrument System (ISIS)

34-23-05	ISIS ILS Indication
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Ident.: MI-34-23-00008622.0001001 / 19 JUL 12

<sup>5</sup> Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 34-23-05A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.

|--|

Ident.: MI-34-23-00008623.0001001 / 19 JUL 12

6 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 34-23-06A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.



34-23 - Integrated Standby Instrument System (ISIS)

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 HDA A320/A321 FLEET
 MI-34-23 P 4/4

 MEL
 19 JUL 12



34-30 - Landing and Taxiing Aid

34-30-04 Instrument Landing System (ILS)
--

Ident.: MI-34-30-00008627.0001001 / 29 NOV 11

Applicable to: ALL

## 34-30-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

LP

(o) One may be inoperative.

Note: When the ILS 1 is inoperative, the GPWS is inoperative.

Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)

Reference(s)

(o) Refer to OpsProc 34-30-04A Instrument Landing System (ILS)

P



34-30 - Landing and Taxiing Aid

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 HDA A320/A321 FLEET
 MI-34-30 P 2/2

 MEL
 29 NOV 11



34-40 - GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar

## A320/A321 Minimum equipment list

34-40-01-01 Ground Proximity Warning System (GPWS)
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Ident.: MI-34-40-00008697.0001001 / 04 APR 12

Applicable to: ALL

#### 34-40-01-01A

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

S

May be inoperative for a maximum of 6 sectors or 25 flight hours or 2 calendar days, whichever occurs first provided that aircraft does not depart Hong Kong.

- Reference(s) -

S

34-40-01-02	Terrain Awareness and Warning System (TAWS)
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Ident.: MI-34-40-20801585.9001001 / 29 NOV 11

Applicable to: ALL

#### 34-40-01-02A

Repair interval	Nbr installed	Nbr required	Placard
Α	1	0	No

Р

Enhanced function may be inoperative for a maximum of 10 calendar days provided the GPWS functions are operative.

Note: TAWS functions must be serviceable EX HKG for flight departing to PUS, KTM or DAC-KTM.

Reference(s)

Р

MEL A to B



34-40 - GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar

A-40-02A  Repair interval Nbr installed Nbr required Placard C 1 0 No  L P  (o) May be inoperative.  Reference(s)  O Refer to OpsProc 34-40-02A Radio Altimeter Automatic Callout  Repair interval Nbr installed Nbr required Placard A-40-03 Radio Altimeter System  A-40-03 Radio Altimeter System  A-40-03A  Repair interval Nbr installed Nbr required Placard B 2 1 No  L P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  Refer to OpsProc 34-40-03A Radio Altimeter System  Reference(s)  O Refer to OpsProc 34-40-03A Radio Altimeter System			Radio Altimet	er Automatic Callout	
Repair interval Nbr installed Nbr required Placard C 1 0 No  IP  (o) May be inoperative.  Reference(s)  Refer to OpsProc 34-40-02A Radio Altimeter Automatic Callout  P  Repair interval Nbr installed Nbr required Placard  Repair interval Nbr installed Nbr required Placard  B 2 1 No  IP  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  Refer to OpsProc 34-40-03A Radio Altimeter System			OV 11		
Repair interval Nbr installed Nbr required Placard C 1 0 No  L P   (o) May be inoperative.  Reference(s)  Refer to OpsProc 34-40-02A Radio Altimeter Automatic Callout  P   1-40-03 Radio Altimeter System  Radio Altimeter System  Repair interval Nbr installed Nbr required Placard B 2 1 No  L P   (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  Refer to OpsProc 34-40-03A Radio Altimeter System					
C 1 0 No    P					
L P  (o) May be inoperative.  Reference(s)  Radio Altimeter Automatic Callout  L P  4-40-03  Radio Altimeter System  Repair interval  Nbr installed  Nbr required  Placard  B 2 1 No  L P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note:  When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Refer to OpsProc 34-40-03A Radio Altimeter System  L  (o) Refer to OpsProc 34-40-03A Radio Altimeter System	F			·	
(o) May be inoperative.  Reference(s)  Refer to OpsProc 34-40-02A Radio Altimeter Automatic Callout  Radio Altimeter System  Radio Altimeter System  Repair interval Nbr installed Nbr required Placard  B 2 1 No  Perconsiderative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Refer to OpsProc 34-40-03A Radio Altimeter System		С	1	0	No
Reference(s)  (o) Refer to OpsProc 34-40-02A Radio Altimeter Automatic Callout    P	LP				
Reference(s)  (o) Refer to OpsProc 34-40-02A Radio Altimeter Automatic Callout  L P  1-40-03  Radio Altimeter System  nt.: MI-34-40-00008699.0001001 / 29 NOV 11  plicable to: ALL  34-40-03A  Repair interval  Nbr installed  Nbr required  Placard  B 2 1 No  L P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  (o) Refer to OpsProc 34-40-03A Radio Altimeter System  L	(o)	May be inoperative			
(o) Refer to OpsProc 34-40-02A Radio Altimeter Automatic Callout    L   P					
Radio Altimeter System  1.:. MI-34-40-00008699.0001001 / 29 NOV 11  34-40-03A  Repair interval Nbr installed Nbr required Placard B 2 1 No    P	(2)				
Radio Altimeter System  t:: MI-34-40-00008699.0001001 / 29 NOV 11	(0)	neiei io Opsrioc s	4-40-02A hadio Allifficiel Adio	omalic Gallout	
Radio Altimeter System  tt:: MI-34-40-00008699.0001001 / 29 NOV 11  34-40-03A  Repair interval Nbr installed Nbr required Placard B 2 1 No  P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  (o) Refer to OpsProc 34-40-03A Radio Altimeter System	L				
Radio Altimeter System  1.: MI-34-40-00008699.0001001 / 29 NOV 11  34-40-03A  Repair interval Nbr installed Nbr required Placard B 2 1 No  P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  (o) Refer to OpsProc 34-40-03A Radio Altimeter System	片				
Repair interval Nbr installed Nbr required Placard B 2 1 No  L P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  ———————————————————————————————————	<u> </u>				
Repair interval Nbr installed Nbr required Placard B 2 1 No  LP  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  ———————————————————————————————————					
Repair interval Nbr installed Nbr required Placard B 2 1 No  LP  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  ———————————————————————————————————					
Repair interval Nbr installed Nbr required Placard  B 2 1 No  P (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  (o) Refer to OpsProc 34-40-03A Radio Altimeter System	I-40-03		Radio A	Itimeter System	
Repair interval Nbr installed Nbr required Placard  B 2 1 No  L P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Refer to OpsProc 34-40-03A Radio Altimeter System	nt.: MI-34-40	-00008699.0001001 / 29 N	OV 11		
Repair interval Nbr installed Nbr required Placard  B 2 1 No  L P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  ———————————————————————————————————	olicable to:	ALL			
B 2 1 No  L P  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Refer to OpsProc 34-40-03A Radio Altimeter System	34-40-03	BA			
LP  (o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Refer to OpsProc 34-40-03A Radio Altimeter System	F	Repair interval	Nbr installed	Nbr required	Placard
(o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Refer to OpsProc 34-40-03A Radio Altimeter System		В	2	1	No
(o) One may be inoperative provided that both FCU channels, all ELAC s, SEC s, ADIRU s, SFCC s, LGCIU s and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Refer to OpsProc 34-40-03A Radio Altimeter System					
SFCC s, LGCIU's and FAC s are operative.  Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative. Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  Refer to OpsProc 34-40-03A Radio Altimeter System		0	-45	-1	- 101011-
Note: When the radio altimeter 1 is inoperative, the GPWS or the reactive modes of TAWS are inoperative.  Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  Reference(s)  Refer to OpsProc 34-40-03A Radio Altimeter System	(0)			channels, all ELAC s, SEC	s, adiku s,
TAWS are inoperative. Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  ———————————————————————————————————		うていし S. Lはいけし S と			
Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)  ———————————————————————————————————			•		
(o) Refer to OpsProc 34-40-03A Radio Altimeter System		Note: When the	radio altimeter 1 is inoperative	e, the GPWS or the reactive	modes of
(o) Refer to OpsProc 34-40-03A Radio Altimeter System		Note: When the TAWS are	radio altimeter 1 is inoperative inoperative		
		Note: When the TAWS are	radio altimeter 1 is inoperative inoperative		
		Note: When the TAWS are	radio altimeter 1 is inoperative inoperative. em 34-40-01-01 Ground Proxi	mity Warning System (GPV	
峝		Note: When the TAWS are Refer to Ite	radio altimeter 1 is inoperative inoperative. em 34-40-01-01 Ground Proxi ————— Reference(s)	mity Warning System (GPV	
		Note: When the TAWS are Refer to Ite	radio altimeter 1 is inoperative inoperative. em 34-40-01-01 Ground Proxi ————— Reference(s)	mity Warning System (GPV	



MINIMUM EQUIPMENT LIST

## MEL ITEMS 34 - NAVIGATION

34-40 - GPWS/TAWS. Radio Altimeter, TCAS, Weather Radar

34-40-04	Traffic Collision Avoidance System (TCAS)
----------	---

Ident.: MI-34-40-00008700.0002001 / 04 APR 12

Applicable to: ALL

#### 34-40-04A

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No



May be inoperative for a maximum of 10 calendar days provided that aircraft does not transit Hong Kong.

Note:

- 1. Minimum requirements for a TCAS system to be considered serviceable are: at least one TA or RA ND display and audio annunciation.
- 2. The TCAS system must be serviceable ex HKG unless it is found unserviceable during pre-flight checks in which case the defect can be deferred in the AML for rectification at, or prior to, the next HKG Transit.

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υ.	IV	otify	$^{\prime}$ $^{\prime}$	v.

Reference(s)



34-40-05	Weather Radar System

Ident.: MI-34-40-00008701.0002001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSO, B-HSP, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 34-40-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

Continued on the following page



34-40 - GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar

Continued from the previous page

#### 34-40-05B

	Repair interval	Nbr installed	Nbr required	Placard
İ	С	2	0	No



Both systems and/or displayed information may be inoperative provided that:

- Any forecast cumulonimbus or potentially hazardous weather conditions are unlikely to be encountered. In daylight, such conditions may be encountered provided that they can be seen and avoided.
- 2) When both weather radars are inoperative, the predictive Windshear Detection System is inoperative.

Refer to Item 34-40-06 Predictive Windshear Detection Function	



34-40-05	Weather Radar System
11 . 141.04 40 00000704 0004004	1/0/1707/0

Ident.: MI-34-40-00008701.0001001 / 04 APR 12

Applicable to: B-HSQ, B-HSR

#### 34-40-05A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

Continued on the following page



MINIMUM EQUIPMENT LIST

## MEL ITEMS 34 - NAVIGATION

34-40 - GPWS/TAWS. Radio Altimeter, TCAS, Weather Radar

Continued from the previous page

#### 34-40-05B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

P

The system and/or displayed information may be inoperative provided that:

- 1) Any forecast cumulonimbus or potentially hazardous weather conditions are unlikely to be encountered. In daylight, such conditions may be encountered provided that they can be seen and avoided.
- 2) When the weather radar is inoperative, the predictive Windshear Detection System is inoperative.

Reter to Item 34-40-06 Predictive V	Vindshear Detection Function
Refe	erence(s) —

Р

34-40-06	Predictive Windshear Detection Function
----------	---

Ident.: MI-34-40-00007541.0002001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 34-40-06A

Repair interval	Nbr installed	Nbr required	Placard
В	2	0	No



Both may be inoperative provided that the Commander is satisfied that windshear conditions are not likely to be encountered at departure, destination or alternate airfields, having regard to actual and forecast weather conditions.

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neieleliceisi	

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34-40 - GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar

34-40-06	Predictive Windshear Detection Function ◀
04 40 00	Tredictive Williamical Detection 1 another 4

Ident.: MI-34-40-00007541.0001001 / 04 APR 12

Applicable to: B-HSQ, B-HSR

#### 34-40-06A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No



May be inoperative provided that the Commander is satisfied that windshear conditions are not likely to be encountered at departure, destination or alternate airfields, having regard to actual and forecast weather conditions.

Reference(s)



34-40-07 PULL UP-GPWS pb-sw
-----------------------------

Ident.: MI-34-40-00008702.0002001 / 29 NOV 11

Applicable to: ALL

## 34-40-07A One inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes

(o) One may be inoperative provided that the GPWS aural and visual warnings are checked operative.

(o) Refer to OpsProc 34-40-07A GPWS/PULL UP-G/S pb-sw

## 34-40-07B Both inoperative

Repair interval	Nbr installed	Nbr required	Placard
-	2	0	Yes

Both may be inoperative provided that the GPWS is considered inoperative. Refer to Item 34-40-01-01 Ground Proximity Warning System (GPWS)



# MEL ITEMS 34 - NAVIGATION

34-50 - ATC and Radio/GPS Navigation Systems

34-50-01	ATC
----------	-----

Ident.: MI-34-50-00008703.0001001 / 29 NOV 11

Applicable to: ALL

# 34-50-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

34-50-03	ADF
----------	-----

Ident.: MI-34-50-00008705.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 34-50-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

34-50-03	ADF

Ident.: MI-34-50-00008705.9001002 / 29 NOV 11

Applicable to: B-HSQ, B-HSR

#### 34-50-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

Must be operative.



# MEL ITEMS 34 - NAVIGATION

34-50 - ATC and Radio/GPS Navigation Systems

Ident.: MI-34-50-00008706.0001001 / 29 NOV 11

Applicable to: ALL

#### 34-50-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative.

34-50-05	VOR
----------	-----

Ident.: MI-34-50-00008707.0001001 / 29 NOV 11

Applicable to: ALL

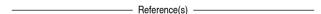
#### 34-50-05A

Repair interval	Nbr installed	Nbr required	Placard
A	2	1	No



One may be inoperative provided that:

- 1) One ADF, one DME and one Marker Beacon are operative, and
- 2) The aircraft has not made more than six flight since the item was last serviceable, and
- 3) The Commander of the aircraft has satisfied himself that, taking into account the latest information available as to the route and aerodrome to be used (including any planned diversion) and the weather conditions likely to be encountered, the flight can be made safely and in accordance with any relevant requirements of the appropriate air traffic control unit.







MINIMUM EQUIPMENT LIST

# MEL ITEMS 34 - NAVIGATION

34-50 - ATC and Radio/GPS Navigation Systems

34-50-06	MARKER
34-30-00	MAINEIL

Ident.: MI-34-50-00009155.0001001 / 29 NOV 11

Applicable to: ALL

#### 34-50-06A

Repair interval	Nbr installed	Nbr required	Placard
A	1	0	No



May be inoperative provided that:

- 1) Both VOR, one DME and one ADF systems are operative, and
- It is not reasonably practical for repairs or replacement to be carried out before the beginning of the flight, and
- 3) The Commander of the aircraft has reasonably satisfied himself that he will be able to establish the position of any 75Mhz marker beacon appropriate to the intended flight by a suitable alternative means, and
- 4) Marker u/s approach minima should be used if appropriate, and
- 5) The commander of the aircraft has satisfied himself that, taking into account the latest information available as to the route and aerodrome to be used (including any planned diversion) and the weather conditions likely to be encountered, the flight can be made safely and in accordance with any relevant requirements of the appropriate air traffic control unit, and

6)	The aircraft has	not made more	than six flights	since the item v	vas last serviceable.

34-50-07	DDRMI

Reference(s) -

Ident.: MI-34-50-00008708.0004001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HTD, B-HTE, B-HTF, B-HTG

#### 34-50-07A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

May be inoperative.



# **MEL ITEMS** 34 - NAVIGATION

34-50 - ATC and Radio/GPS Navigation Systems

34-50-08	RMI ADF
----------	---------

Ident.: MI-34-50-20801616.9001001 / 29 NOV 11

Applicable to: ALL

# 34-50-08A

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	No

May be inoperative.

34-50-09	Global Positioning System (GPS)
Ident : MI-34-50-00008710 000100	1 / 20 NOV 11

Applicable to: ALL

# 34-50-09A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No



One or both may be inoperative.

Reference(s) -





35-01 - Overhead Panels 35-01-01 - OXYGEN Overhead Panel

35-01-01-01	CREW SUPPLY pb-sw OFF light

Ident.: MI-35-01-01-00008727.0001001 / 22 MAR 10

Applicable to: ALL

#### 35-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

35-01-01-02	PASSENGER SYS ON light

Ident.: MI-35-01-01-00008729.0001001 / 22 MAR 10

Applicable to: ALL

#### 35-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

35-01-01-31	MANUAL Control of the MASK MAN ON pb
-------------	--------------------------------------

Ident.: MI-35-01-01-00008731.0001001 / 04 APR 12

Applicable to: ALL

#### 35-01-01-31A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

P

- (m) May be inoperative provided that:
  - 1) The AUTO control is checked operative, and
  - 2) Operating altitude is limited to FL 250.

Deference(a)
 neletetice(s)

(m) Refer to AMM 35-23-00-040-008

P



35-01 - Overhead Panels 35-01-01 - OXYGEN Overhead Panel

35-01-01-32	AUTO Control of the MASK MAN ON pb
-------------	------------------------------------

Ident.: MI-35-01-01-00008732.0001001 / 29 NOV 11

Applicable to: ALL

# 35-01-01-32A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes



May be inoperative provided that the operating altitude is limited to FL 250
Refer to Item 35-01-01-31 MANUAL Control of the MASK MAN ON pb

Р



35-07 - Indications on the DOOR/OXY SD page

35-07-01

Crew OXY High Pressure Indication on the DOOR/OXY SD page

Ident.: MI-35-07-00008771.0001001 / 29 NOV 11

Applicable to: ALL

#### 35-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

- (o) May be inoperative provided that:
  - 1) The oxygen pressure is checked by direct reading before each flight, and
  - 2) The oxygen pressure is sufficient for the intended flight.

Note: For minimum pressure, Refer to FCOM/ Cockpit Fixed Oxygen System

Reference(s)

(o) Refer to OpsProc 35-07-01A Crew OXY High Pressure Indication on the DOOR/OXY SD page

S

35-07-02	Crew Oxygen REGUL LO PR Indication on the DOOR/OXY SD page

Ident.: MI-35-07-00008773.0001001 / 29 NOV 11

Applicable to: ALL

#### 35-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

S

(o) (m) May be inoperative provided that the oxygen pressure is checked before the first flight of each day.

Note: For minimum pressure, Refer to FCOM/ Cockpit Fixed Oxygen System.

Continued on the following page



S

# **MEL ITEMS** 35 - OXYGEN

35-07 - Indications on the DOOR/OXY SD page

			Reference(s) —	Continued fro	om the previous pag
•	SD page n) Refer to AMM		5-07-02A Crew Oxygen REGU -00-040-002	JL LO PR Indication on th	e DOOR/OXY
35-07-50	)		Crew Oxygen Min	imum Dispatch Pressur	<u> </u>
Ident.: MI-35 Applicable t	-07-20803186.900100 to: ALL	1 / 04 AP	R 12		
35-07-	50A				
	Repair interva	ıl	Nbr installed	Nbr required	Placard
	-		-	-	No
S	made befo for the inte 2) If the Crew	re each nded fl Oxyge	ed when Crew Oxygen presson flight to ensure that the mining ight.  en pressure is at or below 1 1 and a common of the common of	mum Crew Oxygen press	-
			neletetice(s) —		



35-10 - Crew Oxygen

35-10-01 Crew Oxygen Mask
---------------------------

Ident.: MI-35-10-00008748.0001001 / 29 NOV 11

Applicable to: ALL

# 35-10-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	1	Yes

Each occupant of the cockpit must have his assigned mask operative.

35-10-02 Crew Oxygen Mask Microphone
--------------------------------------

Ident.: MI-35-10-00008749.0001001 / 29 NOV 11

Applicable to: ALL

#### 35-10-02A

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	Yes

One must be operative for each pilot.

35-10-03	Exterior Crew Oxygen Overpressure Indicator Disc (Green Disc)
100 10 00	Exterior orew oxygen overpressure maleuter bise (areen bise)

Ident.: MI-35-10-00008751.0001001 / 29 NOV 11

Applicable to: ALL

#### 35-10-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

(o) May be missing or damaged.

Deference(e)	
Reference(s)	

(o) Refer to OpsProc 35-10-03A Exterior Crew Oxygen Overpressure Indicator Disc (Green Disc)



MEL ITEMS 35 - OXYGEN 35-10 - Crew Oxygen

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 HDA A320/A321 FLEET
 MI-35-10 P 2/2

 MEL
 29 NOV 11



35-20 - Passenger Oxygen

35-20-01 Passenger Oxygen Unit
--------------------------------

Ident.: MI-35-20-00008753.0001001 / 29 NOV 11

Applicable to: ALL

#### 35-20-01A Associated seats considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

One or more may be inoperative provided the	at associated seats are not occupied and are
placarded "DO NOT OCCUPY".	

Reference(s) -

S

#### 35-20-01B FL limitation

Repair interval	Nbr installed	Nbr required	Placard
В	-	0	Yes

P

- (o) One or more modules may be inoperative provided that:
  - 1) Flight is not conducted where the minimum enroute altitude is above 12,000 feet MSL, and
  - 2) Both air-conditioning packs operate normally, and
  - 3) All other components of the pressurisation system operate normally, and
  - 4) Maximum flight altitude does not exceed FL250, and
  - 5) Portable oxygen units containing sufficient oxygen for 30 minutes endurance are provided for 10% of the passengers, and
  - 6) Passengers are appropriately briefed.

 Reference(s)	

(o) Refer to OpsProc 35-20-01B Passenger Oxygen Unit

Ρ



35-20 - Passenger Oxygen

35-20-03	Lavatory Oxygen Unit

Ident.: MI-35-20-00008756.0001001 / 29 NOV 11

Applicable to: ALL

#### 35-20-03A

Repair interval	Nbr installed	Nbr required	Placard
С	3	-	No



One or more may be inoperative provided that:

- Associated toilet door is locked closed and placarded "INOPERATIVE DO NOT OCCUPY", and
- 2) The lavatory is not used for storage or any other purpose.

Reference(s)	
11010101100(0)	

S

35-20-04 Galley Oxygen Unit
-----------------------------

Ident.: MI-35-20-00008757.0001001 / 29 NOV 11

Applicable to: ALL

# 35-20-04A Adjacent cabin attendant oxygen unit available

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	Yes



One or more may be inoperative and associated galley area may be occupied provided that the cabin attendant portable oxygen devices are available for the associated galley area occupants.



S



35-20 - Passenger Oxygen

35-20-05	Manual Release Tool
----------	---------------------

Ident.: MI-35-20-00008758.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 35-20-05A

Repair interval	Nbr installed	Nbr required	Placard
D	8	4	No

One must be operative at each pair of exit doors.

35-20-05	Manual Release Tool
----------	---------------------

Ident.: MI-35-20-00008758.9001002 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

#### 35-20-05A

Repair interval	Nbr installed	Nbr required	Placard
D	4	2	No

One must be operative at each pair of exit doors.



# MEL ITEMS 35 - OXYGEN 35-20 - Passenger Oxygen

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 HDA A320/A321 FLEET
 MI-35-20 P 4/4

 MEL
 29 NOV 11



35-30 - Portable Oxygen

1 light of twi of table before	35-30-01	Flight Crew Portable Device
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Ident.: MI-35-30-00008767.0001001 / 29 NOV 11

Applicable to: ALL

# 35-30-01A

Repair interval	Nbr installed	Nbr required	Placard
-	1	1	No

Must be operative.

35-30-02-01 Cabin Attendants Portable Device -PBE	
---	--

Ident.: MI-35-30-20801629.9001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

#### 35-30-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	6	-	No

One required for each cabin crew member.

Ident.: MI-35-30-20801629.9001002 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 35-30-02-01A

Repair interval	Nbr installed	Nbr required	Placard
С	8	-	No

One required for each cabin crew member.



# MEL ITEMS

#### 35 - OXYGEN

35-30 - Portable Oxygen

35-30-02-02	Cabin Attendants Portable Device - Portable Oxygen
-------------	--

Ident.: MI-35-30-20801630.9001001 / 29 NOV 11

Applicable to: ALL

# 35-30-02-02A

Repair interval	Nbr installed	Nbr required	Placard
С	7	4	No

Minimum of 4 operative bottles are required.

# 35-30-02-02B

Repair interval	Nbr installed	Nbr required	Placard
С	7	-	No

With less than full load of passengers, one operative bottle per 50 passengers but never less than two operative bottles.



# MEL ITEMS 36-00 - MAINTENANCE Message on the STATUS SD page

36 - PNEUMATIC

#### A320/A321 MINIMUM EQUIPMENT LIST

36-00-01	AIR BLEED MAINTENANCE Message

Ident.: MI-36-00-00008776.0003001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# 36-00-01A No fault on BMC or on pylon leak detection loop

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

1

(m)	AIR BLEED MAINTENANCE message may be displayed on the STATUS SD page provided
	that it is checked that the CFDS does not report a fault on a BMC or on a pylon leak
	detection loop.

Reference(s)

(m) Refer to AMM 36-11-00-040-004

S

#### 36-00-01B No FL limitation

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

Р

- (o) (m) AIR BLEED MAINTENANCE message may be displayed on the STATUS SD page provided that:
  - 1) ETOPS is not conducted, and
  - 2) Only the LH side or the RH side is affected, and
  - 3) The associated BLEED pb-sw is set to OFF, and
  - 4) The associated PACK pb-sw is set to OFF, and
  - 5) The X-BLEED selector is set to SHUT, and
  - 6) The APU BLEED pb-sw is set to OFF if the LH side is affected, and
  - 7) The aircraft is not operated in known or forecast icing conditions, and
  - 8) The speedbrakes are operative.

Poforonoo(s)	
Reference(s)	

(o) Refer to OpsProc 36-00-01B AIR BLEED MAINTENANCE Message

(m) Refer to AMM 36-11-00-040-802

Ρ

Continued on the following page

ı



36-00 - MAINTENANCE Message on the STATUS SD page

Continued from the previous page

#### 36-00-01C Limitation to 31 500 ft

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

- (o) (m) AIR BLEED MAINTENANCE message may be displayed on the STATUS SD page provided that:
  - 1) ETOPS is not conducted, and
  - 2) Only the LH side or the RH side is affected, and
  - 3) The associated BLEED pb-sw is set to OFF, and
  - 4) The associated PACK pb-sw is set to OFF, and
  - 5) The X-BLEED selector is set to SHUT, and
  - 6) The APU BLEED pb-sw is set to OFF if the LH side is affected, and
  - 7) The aircraft is not operated in known or forecast icing conditions, and
  - 8) The altitude is limited to 31 500 ft ( 9 600 m ).

- (o) Refer to OpsProc 36-00-01C AIR BLEED MAINTENANCE Message
- (m) Refer to AMM 36-11-00-040-802

36-00-01 AIR BLEED MAINTENANCE Message	
--	--

Ident.: MI-36-00-00008776.0014001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 36-00-01F

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

	Ξ		
1	С	۰	
ď	7	٩	
	۰		

AIR BLEED MAINTENANCE message may be displayed on the STATUS SD page.

S



36-01 - AIR COND Overhead Panel

36-01-01	ENG BLEED pb-sw FAULT light
----------	-----------------------------

Ident.: MI-36-01-00008778.0001001 / 22 MAR 10

Applicable to: ALL

# 36-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

36-01-02 ENG BLEED pb-sw OFF light
------------------------------------

Ident.: MI-36-01-00008783.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.

36-01-03	APU BLEED pb-sw FAULT light

Ident.: MI-36-01-00008785.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



36-01 - AIR COND Overhead Panel

36-01-04 APU BLEED pb-sw ON light	
-----------------------------------	--

Ident.: MI-36-01-00008787.0001001 / 22 MAR 10

Applicable to: ALL

# 36-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



36-07 - Indications on the BLEED SD page

36-07-01	APU Bleed Valve Indication on the <u>BLEED</u> SD page
----------	--

Ident.: MI-36-07-00008807.0001001 / 22 MAR 10

Applicable to: ALL

# 36-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.

36-07-02	Engine Bleed Valve Indication on the <u>BLEED</u> SD page
L	

Ident.: MI-36-07-00008808.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

36-07-03	Engine Bleed HP Valve Indication on the <u>BLEED</u> SD page

Ident.: MI-36-07-00008809.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-07-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



36-07 - Indications on the BLEED SD page

# 36-07-04 Engine Bleed Precooler Inlet Pressure Indication on the <u>BLEED</u> SD page

Ident.: MI-36-07-00008810.0001001 / 22 MAR 10

Applicable to: ALL

# 36-07-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

36-07-05	Engine Bleed Precooler Outlet Temperature
	Indication on the <u>BLEED</u> SD page

Ident.: MI-36-07-00008811.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-07-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

36-07-06	X Bleed Valve Indication on the <u>BLEED</u> SD page
----------	--

Ident.: MI-36-07-00008812.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-07-06A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



36-11 - Engine Bleed Air Supply System

# MINIMUM EQUIPMENT LIST

# **Engine Bleed Air Supply System**

Ident.: MI-36-11-00008788.0002001 / 04 APR 12

Applicable to: ALL

36-11-01

#### 36-11-01E Non ETOPS flight

Repa	r interval	Nbr installed	Nbr required	Placard
	С	2	1	Yes



- (o) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The associated ENG BLEED pb-sw is set to OFF, and
  - 3) The X-BLEED selector is set to OPEN, and
  - 4) The altitude is limited to 31,500ft (9,600m).

|--|

(o) Refer to OpsProc 36-11-01E Engine Bleed Air Supply System (non-ETOPS flights)

# P

# 36-11-01F ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
Α	2	1	Yes



- (o) For ETOPS, one may be inoperative for one flight provided that:
  - 1) The APU bleed air supply system is operative, and
  - 2) The APU is running throughout the flight, and
  - 3) The associated ENG BLEED pb-sw is set to OFF, and
  - 4) The X-BLEED selector is set to OPEN, and
  - 5) The altitude is limited to 31,500ft (9,600m).

 Deference(e)
 Reference(s)

(o) Refer to OpsProc 36-11-01F Engine Bleed Air Supply System (ETOPS flights)

Р



36-11 - Engine Bleed Air Supply System

Ident.: MI-36-11-00008790.0001001 / 29 NOV 11

Applicable to: ALL

#### 36-11-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes



- (m) One may be inoperative provided that:
  - 1) The affected engine bleed valve is secured in the closed position, and
  - 2) The associated bleed air supply system is considered inoperative. Refer to Item 36-11-01 Engine Bleed Air Supply System

- Reference(s) -----

(m) Refer to AMM 36-11-00-040-001

Р

36-11-03	Engine Bleed Overpressure Valve
----------	---------------------------------

Ident.: MI-36-11-00008792.0001001 / 29 NOV 11

Applicable to: ALL

# 36-11-03A Associated bleed considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No



One may be inoperative provided that the associated bleed air supply system is considered inoperative.

Refer to Item 36-11-01 Engine Bleed Air Supply System



Р

Continued on the following page



# MEL ITEMS 36-11 - Engine Bleed Air Supply System

36 - PNEUMATIC

Continued from the previous page

#### 36-11-03B Associated Bleed still available

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative provided that neither AIR ENG BLEED FAULT nor AIR ENG BLEED ABNORM PR caution was displayed during the previous flight.

36-11-04 Engine Bleed Fan Air Valve
-------------------------------------

Ident.: MI-36-11-00008794.0001001 / 29 NOV 11

Applicable to: ALL

#### 36-11-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	Yes



One may be inoperative provided that the associated engine bleed air supply system is considered inoperative.

Refer to Item 36-11-01 Engine Bleed Air Supply System

Reference(s) -



36-11-05	Engine Bleed Air Precooler

Ident.: MI-36-11-00008796.0001001 / 29 NOV 11

Applicable to: ALL

#### 36-11-05A

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	2	1	Yes



One may be inoperative provided that the associated engine bleed air supply system is considered inoperative.

Refer to Item 36-11-01 Engine Bleed Air Supply System

Continued on the following page



36-11 - Engine Bleed Air Supply System

 Reference(s)	Continued from the previous page
 neletefice(s)	

36-11-06 Engine Bleed IP Check Valve

Applicable to: ALL

Р

# 36-11-06A Associated bleed considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

Р

One may be inoperative provided that the associated engine bleed air supply system is considered inoperative.

Refer to Item 36-11-01 Engine Bleed Air Supply System

Р

# 36-11-06B Associated HP valve secured in the closed position

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

(o) (m) One may be inoperative in the open position provided that the associated HP valve is secured in the closed position.

- (o) Refer to OpsProc 36-11-06B Engine Bleed IP Check Valve
- (m) Refer to AMM 36-11-00-040-002

S



36-11 - Engine Bleed Air Supply System

#### **Engine Bleed HP Valve** 36-11-07

Ident.: MI-36-11-00008798.0001001 / 29 NOV 11

Applicable to: ALL

# 36-11-07A Associated bleed considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No



One may be inoperative in the closed position provided that the associated engine bleed air supply system is considered inoperative.

Refer to Item 36-11-01 Engine Bleed Air Supply System

Reference(s) -

Р

# 36-11-07B HP valve secured in the closed position

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

(o) (m) One may be inoperative provided that the affected engine bleed HP valve is secured in the closed position.

Reference(s) —

- (o) Refer to OpsProc 36-11-07B Engine Bleed HP Valve
- (m) Refer to AMM 36-11-00-040-003

S



36-11 - Engine Bleed Air Supply System

36-11-08	Bleed Monitoring Computer ( BMC )

Ident.: MI-36-11-00008799.0012001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 36-11-08A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative provided that the associated engine bleed air supply system is considered inoperative.

Refer to Item 36-11-01 Engine Bleed Air Supply System



MINIMUM EQUIPMENT LIST

# MEL ITEMS 36 - PNEUMATIC

36-12 - APU Bleed Air Supply and Crossbleed Systems

36-12-01	APU Bleed Air Supply System

Ident.: MI-36-12-00008800.0001001 / 29 NOV 11

Applicable to: ALL

#### 36-12-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

May be inoperative provided that the APU BLEED pb-sw is set to OFF.

Reference(s) -

S

36-12-02	APU Bleed Valve
----------	-----------------

Ident.: MI-36-12-00008801.0001001 / 19 JUL 12

Applicable to: ALL

# 36-12-02A Inoperative in the closed position

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (m) May be inoperative provided that:
  - 1) The APU bleed valve is deactivated in the closed position, and
  - 2) The APU bleed air supply system is considered inoperative. Refer to Item 36-12-01 APU Bleed Air Supply System

— Reference(s) —

(m) Refer to AMM 49-51-00-040-002

S

Continued on the following page



36-12 - APU Bleed Air Supply and Crossbleed Systems

Continued from the previous page

# 36-12-02B Inoperative in the open position

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

P

(o) May be inoperative in the open position provided that the APU is not used in flight. Refer to Item 49-10-01 Power Plant (APU)

Reference(s)

(o) Refer to OpsProc 36-12-02B APU Bleed Valve

Ρ

36-12-03 APU Bleed Check Valve
--------------------------------

Ident.: MI-36-12-00008802.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-12-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative provided that the APU bleed air supply system is considered inoperative.

Refer to Item 36-12-01 APU Bleed Air Supply System

36-12-04	Automatic Control of the X Bleed Valve

Ident.: MI-36-12-00008803.0001001 / 29 NOV 11

Applicable to: ALL

#### 36-12-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

(o) May be inoperative provided that the manual control is checked operative.

Continued on the following page



# **MEL ITEMS**

36 - PNEUMATIC

36-12 - APU Bleed Air Supply and Crossbleed Systems

	Continued from the previous page
(o) Refer to OpsProc 36-12-04A Automatic control of the X Bleed	l Valve



36-12 - APU Bleed Air Supply and Crossbleed Systems

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 HDA A320/A321 FLEET
 MI-36-12 P 4/4

 MEL
 19 JUL 12



36-22 - Leak Detection Loop

36-22-01 Pylon Leak Detection System	36-22-01
--------------------------------------	----------

Ident.: MI-36-22-00008804.0003001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 36-22-01B

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (o) (m) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The associated pylon leak detection loop is deactivated, and
  - 3) The associated BLEED pb-sw is set to OFF, and
  - 4) The associated PACK pb-sw is set to OFF, and
  - 5) The X-BLEED selector is set to SHUT, and
  - 6) The APU BLEED pb-sw is set to OFF if LH side is affected, and
  - 7) The aircraft is not operated in known or forecast icing conditions, and
  - 8) The speedbrakes are operative.

- Reference(s) -

- (o) Refer to OpsProc 36-22-01B Pylon Leak Detection System
- (m) Refer to AMM 36-22-00-040-001

S

36-22-01 Pylon Leak Detection System
--------------------------------------

Ident : MI-36-22-00008804 0008001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 36-22-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

- (m) One may be inoperative provided that:
  - 1) The associated pylon leak detection loop is deactivated, and
  - 2) The AIR ENG 1(2) BLEED LEAK alert is confirmed to be false by troubleshooting, and
  - 3) The associated bleed air supply system is considered inoperative. Refer to Item 36-11-01 Engine Bleed Air Supply System

Continued on the following page



36-22 - Leak Detection Loop

	Contin	ued from the previous page
 Reference(s) -		<del></del>

(m) Refer to AMM 36-22-00-040-001

36-22-02	Wing Leak Detection System
----------	----------------------------

Ident.: MI-36-22-00008805.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-22-02A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Must be operative.

Note: Failure of one loop in one or both wing leading edges is indicated by a

<u>MAINTENANCE</u> message displayed on the <u>STATUS</u> SD page . Refer to Item 36-00-01 AIR BLEED MAINTENANCE Message

36-22-03	APU Leak Detection Loop
I-I+ - MI OC OO 0000000 000100	4 /00 MAD 40

Ident.: MI-36-22-00008806.0001001 / 22 MAR 10

Applicable to: ALL

#### 36-22-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

May be inoperative.



# MEL ITEMS 46 - INFORMATION SYSTEMS

46-21 - Air Traffic and Information Management System

46-21-01	Air Traffic Service Unit (ATSU)
----------	---------------------------------

Ident.: MI-46-21-00008795.0002001 / 29 NOV 11

Applicable to: ALL

# 46-21-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	1	No

May be inoperative provided that voice communications are permitted and used.



# MEL ITEMS 46 - INFORMATION SYSTEMS

46-21 - Air Traffic and Information Management System

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HDA A320/A321 FLEET MI-46-21 P 2/2 MEL 29 NOV 11



# MEL ITEMS 47 - INERT GAS SYSTEM

47-00 - MAINTENANCE Message on the STATUS SD page

47-00-01 FUEL INERT MAINTENANCE Message	
---	--

Ident.: MI-47-00-00010615.0001001 / 19 JUL 12

1 Applicable to: B-HSQ, B-HSR, B-HST, B-HSU

## 47-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

FUEL INERT  $\underline{\mathsf{MAINTENANCE}}$  Message may be displayed on the  $\underline{\mathsf{STATUS}}$  SD page.



## MEL ITEMS 47 - INERT GAS SYSTEM

47-00 - MAINTENANCE Message on the STATUS SD page

Intentionally left blank

 HDA A320/A321 FLEET
 MI-47-00 P 2/2

 MEL
 19 JUL 12



# MEL ITEMS

#### 49 - AIRBORNE AUXILIARY POWER

49-00 - MAINTENANCE Message on the STATUS SD page

49-00-01	APU <u>MAINTENANCE</u> Message

Ident.: MI-49-00-00008813.0001001 / 29 NOV 11

Applicable to: ALL

## 49-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	1	No

S

APU MAINTENANCE message	e may be displayed on the <u>STATUS</u> SD page.
-	Reference(s)



49-00 - MAINTENANCE Message on the STATUS SD page

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HDA A320/A321 FLEET MI-49-00 P 2/2 MEL 29 NOV 11



49-01 - APU Overhead Panel

	49-01-01	APU MASTER SW pb-sw FAULT light
--	----------	---------------------------------

Ident.: MI-49-01-00008814.0001001 / 22 MAR 10

Applicable to: ALL

#### 49-01-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the N and the EGT indications are operative on the  $\underline{\text{APU}}$  SD page.

49-01-02	APU MASTER SW pb-sw ON light

Ident.: MI-49-01-00008816.0001001 / 22 MAR 10

Applicable to: ALL

#### 49-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.

49-01-03	APU START pb-sw AVAIL light
----------	-----------------------------

Ident.: MI-49-01-00008817.0001001 / 22 MAR 10

Applicable to: ALL

#### 49-01-03A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative provided that the N indication is operative on the <u>APU</u> SD page.



49-01 - APU Overhead Panel

49-01-04 APU START pb-sw ON light	
-----------------------------------	--

Ident.: MI-49-01-00008818.0001001 / 22 MAR 10

Applicable to: ALL

## 49-01-04A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

May be inoperative.



49-07 - Indications on the APU SD page

49-07-01	Indications on the APU SD page
----------	--------------------------------

Ident.: MI-49-07-00008821.0001001 / 22 MAR 10

Applicable to: ALL

## 49-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

One or more may be inoperative.



49-07 - Indications on the APU SD page

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HDA A320/A321 FLEET MI-49-07 P 2/2 MEL 29 NOV 11



49-10 - Power Plant

49-10-01	Power Plant ( APU )
	•
Idont - MI 40 10 00008810 000000	11 / 20 NOV 11

Applicable to: ALL

## 49-10-01A Non ETOPS flight

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes
S			

(o) May be inoperative provided that ETOPS is not conducted.

Reference(s) -

(o) Refer to OpsProc 49-10-01A Power Plant (APU)

S

## 49-10-01B ETOPS 120 min flight

		Nbr required	riacaiu
A	1	0	Yes

S

May be inoperative for four flights provided that ETOPS beyond 120 min is not conducted. (o)

----- Reference(s) -

(o) Refer to OpsProc 49-10-01B Power Plant (APU)

S

### 49-10-01C APU deactivated or removed

Repair interval	Nbr installed	Nbr required	Placard
D	1	0	Yes

S

- (o) (m) May be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The APU is deactivated or removed.

Continued on the following page



## **MEL ITEMS 49 - AIRBORNE AUXILIARY POWER**

49-10 - Power Plant

(o) Refer to OpsPro (m) Refer to AMM 48	Reference(s) — c 49-10-01C Power Plant (APU) 9-10-00-040-007		
9-10-02	APU A	ir Intake Flap	
ent.: MI-49-10-00008820.0001001 / 2	29 NOV 11		
49-10-02A APU not us	ed		
	Nbr installed	Nbr required	Placard
Repair interval			
	1 ive in the closed position provide	0 d that the APU is not used	<b>No</b> d.
C S May be inoperat	ive in the closed position provide -10-01 Power Plant (APU)	d that the APU is not used	
C S May be inoperat	1 ive in the closed position provide	d that the APU is not used	
May be inoperati	ive in the closed position provide -10-01 Power Plant (APU)	d that the APU is not used	
May be inoperating Refer to Item 49	ive in the closed position provide -10-01 Power Plant (APU)	d that the APU is not used	
May be inoperating Refer to Item 49  S  49-10-02B APU used	ive in the closed position provide -10-01 Power Plant (APU)  Reference(s)	d that the APU is not used	d.
May be inoperating Refer to Item 49  S  49-10-02B APU used  Repair interval	ive in the closed position provide -10-01 Power Plant (APU)  Reference(s) —  Nbr installed	d that the APU is not used	d. Placard
May be inoperating Refer to Item 49  S  49-10-02B APU used  Repair interval  A	ive in the closed position provide -10-01 Power Plant (APU)  Reference(s) —  Nbr installed	d that the APU is not used  Nbr required  0	d. Placard



52-01 - Overhead Panels 52-01-01 - CKPT DOOR CONT Normal Overhead Panel

52-01-01-01 CHAN (1, 2) LED s on the CKPT DOOR CONT Overhead Panel

Ident.: MI-52-01-01-00008677.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-01-01-01A

Repair interval	Nbr installed	Nbr required	Placard
Α	2	0	No

(o) One or more may be inoperative provided that the FAULT light on the COCKPIT DOOR Panel is checked operative.

--- Reference(s) -----

(o) Refer to OpsProc 52-01-01-01A LEDs on the CKPT DOOR CONT Overhead Panel

E0 01 01 00	CTDIVE (TOD MID BOT) I ED a an tha
52-01-01-02	STRIKE (TOP, MID, BOT) LED s on the
	CKPT DOOR CONT Overhead Panel

Ident.: MI-52-01-01-00008678.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-01-01-02A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

(o) One or more may be inoperative provided that the FAULT light on the COCKPIT DOOR Panel is checked operative.

(o) Refer to OpsProc 52-01-01-02A LEDs on the CKPT DOOR CONT Overhead Panel



52-01 - Overhead Panels 52-01-01 - CKPT DOOR CONT Normal Overhead Panel

52-01-01-03	Pressure Rate Sensor on the CKPT DOOR CONT Overhead Panel

Ident.: MI-52-01-01-00008679.0001001 / 29 NOV 11

Applicable to: ALL

## 52-01-01-03A One inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	2	1	Yes

S

(o) (m) One may be inoperative for 60 consecutive calendar days provided that the remaini	ing
pressure rate sensor is checked operative.	

- (o) Refer to OpsProc 52-01-01-03A Pressure Rate Sensor on the CKPT DOOR CONT Overhead Panel
- (m) Refer to AMM 52-51-00-040-011

S

## 52-01-01-03B Both inoperative

Repair interval	Nbr installed	Nbr required	Placard
В	2	0	No

(o) Both may be inoperative provided that the complete CDLS is considered	l inoperative.
---	----------------

(o) Refer to OpsProc 52-01-01-03B Pressure Rate Sensor on the CKPT DOOR CONT Overhead Panel



MINIMUM EQUIPMENT LIST

## MEL ITEMS 52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

52-07-01	Passenger Door Permanently Indicated Open on the <u>DOOR/OXY</u> SD page

Ident.: MI-52-07-00008777.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 52-07-01A Check of associated door and 'C' repair interval

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

S

- (o) One or more may be permanently indicated open when actually closed provided that:
  - 1) The associated door is visually checked to be closed and locked before each flight, and
  - 2) The white SLIDE ARMED light on the associated door does not come on when the door is closed and locked and the slide arming lever is in the armed position.

Reference(s)

(o) Refer to OpsProc 52-07-01A Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light operative)

S

## 52-07-01B Check of associated door and 'B' repair interval

Repair interval	Nbr installed	Nbr required	Placard
В	4	0	No

S

(o) One or more may be permanently indicated open when actually closed provided that the associated door is visually checked to be closed and locked before each flight.

(o) Refer to OpsProc 52-07-01B Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light may be permanently illuminated)

S

Continued on the following page

19 JUL 12



52-07 - Indications on the DOOR/OXY SD page

Continued from the previous page

### 52-07-01C No night operations

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

Р

- (o) One or more may be permanently indicated open when actually closed provided that:
  - 1) The aircraft is not operated at night, and
  - 2) The associated door is visually checked to be closed and locked before each flight.

(o) Refer to OpsProc 52-07-01C Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light may be permanently illuminated)

Ρ

#### 52-07-01D Slide of the associated door not armed

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	Yes

S

- (o) One or more may be permanently indicated open when actually closed provided that:
  - 1) The associated door is visually checked to be closed and locked before each flight, and
  - 2) The slide of the associated door is not armed, and
  - **3)** The associated door is considered inoperative. *Refer to Item 52-10-01 Cabin Passenger Door*

(o) Refer to OpsProc 52-07-01D Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light may be permanently illuminated)



MINIMUM EQUIPMENT LIST

## MEL ITEMS 52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

52-07-01

Passenger Door/Emergency Exit Permanently Indicated Open on the <u>DOOR/OXY</u> SD page

Ident.: MI-52-07-00008777.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 52-07-01A Check of associated door and 'C' repair interval

Repair interval	Nbr installed	Nbr required	Placard
С	8	0	No

S

- (o) One or more may be permanently indicated open when actually closed provided that:
  - 1) The associated door is visually checked to be closed and locked before each flight, and
  - 2) The white SLIDE ARMED light on the associated door does not come on when the door is closed and locked and the slide arming lever is in the armed position.

Reference(s)

(o) Refer to OpsProc 52-07-01A Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light operative)

S

# 52-07-01B Check of associated door and 'B' repair interval

Repair interval	Nbr installed	Nbr required	Placard
В	8	0	No

S

(o) One or more may be permanently indicated open when actually closed provided that the associated door is visually checked to be closed and locked before each flight.

(o) Refer to OpsProc 52-07-01B Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light may be permanently illuminated)

S

Continued on the following page



52-07 - Indications on the DOOR/OXY SD page

Continued from the previous page

## 52-07-01C No night operations

Repair interval	Nbr installed	Nbr required	Placard
С	8	0	No

r	1	
1	n	

- (o) One or more may be permanently indicated open when actually closed provided that:
  - 1) The aircraft is not operated at night, and
  - 2) The associated door is visually checked to be closed and locked before each flight.

(o) Refer to OpsProc 52-07-01C Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light may be permanently illuminated)

## Ρ

#### 52-07-01D Slide of the associated door not armed

Repair interval	Nbr installed	Nbr required	Placard
С	8	7	Yes



- (o) One or more may be permanently indicated open when actually closed provided that:
  - 1) The associated door is visually checked to be closed and locked before each flight, and
  - 2) The slide of the associated door is not armed, and
  - **3)** The associated door is considered inoperative. *Refer to Item 52-10-01 Cabin Passenger Door*

(o) Refer to OpsProc 52-07-01D Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light may be permanently illuminated)



MINIMUM EQUIPMENT LIST

## MEL ITEMS 52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

52-07-02 Passenger Door Permanently Indicated
Closed on the <u>DOOR/OXY</u> SD page

Ident.: MI-52-07-00008779.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 52-07-02A No night operations

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

Р

- (o) One or more may be permanently indicated closed when actually open provided that:
  - 1) The aircraft is not operated at night, and
  - 2) The associated door is visually checked to be closed and locked before each flight.

(o) Refer to OpsProc 52-07-02A Passenger Door/Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page

P

#### 52-07-02B Check of associated door

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	Yes

S

- (o) One or more may be permanently indicated closed when actually open provided that:
  - 1) The associated door is visually checked to be closed and locked before each flight, and
  - 2) The associated door is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

(o) Refer to OpsProc 52-07-02B Passenger Door/Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page



52-07 - Indications on the DOOR/OXY SD page

52-07-02 Passenger Door/Emergency Exit Permanently Indicated Closed on the <u>DOOR/OXY</u> SD page

Ident.: MI-52-07-00008779.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## 52-07-02A No night operations

Repair interval	Nbr installed	Nbr required	Placard
С	8	0	No

Р

- (o) One or more may be permanently indicated closed when actually open provided that:
  - 1) The aircraft is not operated at night, and
  - 2) The associated door is visually checked to be closed and locked before each flight.

(o) Refer to OpsProc 52-07-02A Passenger Door/Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page

P

### 52-07-02B Check of associated door

Repair interval	Nbr installed	Nbr required	Placard
В	8	7	Yes

S

- (o) One or more may be permanently indicated closed when actually open provided that:
  - 1) The associated door is visually checked to be closed and locked before each flight, and
  - 2) The associated door is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

**(o)** Refer to OpsProc 52-07-02B Passenger Door/Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page



52-07 - Indications on the DOOR/OXY SD page

**A320/A321** Minimum Equipment List

52-07-03 Overwing Emergency Exit Permanently Indicated Open on the <u>DOOR/OXY</u> SD page

Ident.: MI-52-07-00008780.0001001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 52-07-03A Check of associated exit and 'C' repair interval

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

S

- (o) (m) One or more may be permanently indicated open when actually closed provided that:
  - 1) The associated exit is visually checked to be closed and locked before each flight, and
  - 2) The associated SLIDE indication is displayed in white on the DOOR/OXY SD page.

Reference(s)

- (o) Refer to OpsProc 52-07-03A Overwing Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page
- (m) Refer to AMM 52-70-00-040-010

S

## 52-07-03B Check of associated exit and 'B' repair interval

Repair interval	Nbr installed	Nbr required	Placard
В	4	0	No

S

(o) (m) One or more may be permanently indicated open when actually closed provided that the associated exit is visually checked to be closed and locked before each flight.

Reference(s)

- (o) Refer to OpsProc 52-07-03B Overwing Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page
- (m) Refer to AMM 52-70-00-040-010

S

Continued on the following page

HDA A320/A321 FLEET MI-52-07 P 7/10



52-07 - Indications on the DOOR/OXY SD page

Continued from the previous page

## 52-07-03C No night operations

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

ı	
	_

- (o) (m) One or more may be permanently indicated open when actually closed provided that:
  - 1) The aircraft is not operated at night, and
  - 2) The associated exit is visually checked to be closed and locked before each flight.

Poforonoo(a)
Reference(s) ————

- (o) Refer to OpsProc 52-07-03C Overwing Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page
- (m) Refer to AMM 52-70-00-040-010

ı	п
ı	_

## 52-07-03D Both exits on the same side considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	4	-	Yes



- (o) (m) One or more may be permanently indicated open when actually closed provided that:
  - 1) The associated exit is visually checked to be closed and locked before each flight, and
  - 2) Both exits on the same side are considered inoperative. Refer to Item 52-10-02 Overwing Emergency Exit

 —— Reference(s) ——	

- (o) Refer to OpsProc 52-07-03D Overwing Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page
- (m) Refer to AMM 52-70-00-040-010



52-07 - Indications on the DOOR/OXY SD page

**A320/A321** Minimum equipment list

52-07-04 Overwing Emergency Exit Permanently Indicated Closed on the <u>DOOR/OXY</u> SD page

Ident.: MI-52-07-00008781.0001001 / 19 JUL 12

4 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## 52-07-04A No night operations

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

Р

- (o) (m) One or more may be permanently indicated closed when actually open provided that:
  - 1) The aircraft is not operated at night, and
  - 2) The associated exit is visually checked to be closed and locked before each flight.

- (o) Refer to OpsProc 52-07-04A Overwing Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page
- (m) Refer to AMM 52-70-00-040-011

P

### 52-07-04B Both exits on the same side considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
-	4	-	Yes

S

- (o) (m) One or more may be permanently indicated closed when actually open provided that:
  - 1) The associated exit is visually checked to be closed and locked before each flight, and
  - 2) Both exits on the same side are considered inoperative. Refer to Item 52-10-02 Overwing Emergency Exit

Deference(c)	

- (o) Refer to OpsProc 52-07-04B Overwing Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page
- (m) Refer to AMM 52-70-00-040-011

S

19 JUL 12

MEL F



52-07 - Indications on the DOOR/OXY SD page

52-07-05 Cargo Door Indication on the <u>DOOR/OXY</u> SD page
---

Ident.: MI-52-07-00008782.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-07-05A

Repair interval	Nbr installed	Nbr required	Placard
С	3	0	No

S

(o) (m) O	ne or more	may be i	noperative	provided t	that the	associated	door is	s visually	checked t	to be
cle	osed and lo	cked bef	ore each fli	ght.						

- (o) Refer to OpsProc 52-07-05A Cargo Door Indication on the DOOR/OXY SD page
- (m) Refer to AMM 52-70-00-040-001

S

52-07-06	Avionics Compartment Access Door
	Indication on the <u>DOOR/OXY</u> SD page

Ident.: MI-52-07-00008784.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-07-06A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No

S

(o) (m) One or more may be inoperative provided that the associated door is visually checked to be closed and locked before each flight.

- (o) Refer to OpsProc 52-07-06A Avionics Compartment Access Door Indication on the DOOR/OXY SD page
- (m) Refer to AMM 52-70-00-040-004



52-10 - Passenger/Crew Door

52-10-01	Cabin Passenger Door and Emergency Exits		
·			

Ident.: MI-52-10-00008689.0001001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

#### 52-10-01A

1

Repair interval	Nbr installed	Nbr required	Placard
В	8	-	Yes



- (o) (m) One Cabin Passenger Door and/or its associated escape slide -OR- One Overwing Emergency Exit (or both Overwing Emergency Exits on same side as an inoperative Offwing Escape Slide), may be inoperative provided that:
  - 1) The exit is secured closed prior to passenger boarding and is not used for any purpose whilst passengers are on board, and
  - 2) All other exits and escape slides are fully operative, and
  - 3) The maximum number of passengers carried is restricted as follows:

Inoperative Exits	Fwd Door	Overwing Exit (Slide)	Aft door
Max Pax Load for 158 Config	125	145 (110)	125

Refer Operating Procedures for detailed seating restrictions, and

- 4) All the emergency exits and/or exit markings, signs and lights associated with the affected door must be obscured, and
- 5) The exit is marked by a red disc at least 23cm in diameter with a horizontal white bar across it bearing the words "NO EXIT" in English and Chinese in red letters, and
- 6) Passengers are not seated near the unserviceable exit, for this purpose seat rows should be blocked off and clearly marked to prevent their use for takeoff and landing, and
- 7) The pre-takeoff briefing to the passengers must reflect the current state and condition of the aircraft escape facilities. A briefing by reference to a briefing card must be immediately qualified by an oral announcement to emphasize the exits to be used in the affected zones and the fact that a particular exit is unusable and displays a red "NO EXIT" sign, and
- 8) Where the evacuation drill calls for cabin crew to be seated by the inoperative exit, they are briefed to direct passengers to a serviceable exit, and
- 9) If the emergency escape slide is removed, the Maintenance Procedures for load adjustment of the control handle is applied before the first flight under this item.

Notify IOC /Load Control of any inoperative PAX DOOR/EMER EXIT. Note:

Continued on the following page

 $A \rightarrow$ 



52-10 - Passenger/Crew Door

	Continued from the previous page
(o) Refer to OpsProc 52-10-01A Cabin Passenger Door	
(m) Refer to AMM 52-10-00-040-001	
P	



52-10 - Passenger/Crew Door

52-10-01	Cabin Passenger Door and Emergency Exits
Ident.: MI-52-10-00008689.900100	2 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSQ, B-HSR, B-HST, B-HSU

#### 52-10-01A

Repair interval	Nbr installed	Nbr required	Placard
В	8	-	Yes



- (o) (m) One Cabin Passenger Door and/or its associated escape slide -OR- One Overwing Emergency Exit (or both Overwing Emergency Exits on same side as an inoperative Offwing Escape Slide), may be inoperative provided that:
  - 1) The exit is secured closed prior to passenger boarding and is not used for any purpose whilst passengers are on board, and
  - 2) All other exits and escape slides are fully operative, and
  - 3) The maximum number of passengers carried is restricted as follows:

		Overwing	
Inoperative Exits	Fwd Door	Exit (Slide)	Aft door
Max Pax Load for 168 Config	125	145 (110)	125

Refer Operating Procedures for detailed seating restrictions, and

- 4) All the emergency exits and/or exit markings, signs and lights associated with the affected door must be obscured, and
- 5) The exit is marked by a red disc at least 23cm in diameter with a horizontal white bar across it bearing the words "NO EXIT" in English and Chinese in red letters, and
- 6) Passengers are not seated near the unserviceable exit, for this purpose seat rows should be blocked off and clearly marked to prevent their use for takeoff and landing, and
- 7) The pre-takeoff briefing to the passengers must reflect the current state and condition of the aircraft escape facilities. A briefing by reference to a briefing card must be immediately qualified by an oral announcement to emphasize the exits to be used in the affected zones and the fact that a particular exit is unusable and displays a red "NO EXIT" sign, and
- 8) Where the evacuation drill calls for cabin crew to be seated by the inoperative exit, they are briefed to direct passengers to a serviceable exit, and
- 9) If the emergency escape slide is removed, the Maintenance Procedures for load adjustment of the control handle is applied before the first flight under this item.

Note: Notify IOC /Load Control of any inoperative PAX DOOR/EMER EXIT.

Continued on the following page



52-10 - Passenger/Crew Door

	Continued from the previous page
(o) Refer to OpsProc 52-10-01A Cabin Passenger Door	
(m) Refer to AMM 52-10-00-040-001	
P	



52-10 - Passenger/Crew Door

3 ,	52-10-01	Cabin Passenger Door and Emergency Exits
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Ident.: MI-52-10-00008689.0004001 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 4

#### 52-10-01A

Repair interval	Nbr installed	Nbr required	Placard
В	8	7	Yes



- (o) (m) One passenger door or emergency passenger door, and/or its associate escape slide, may be inoperative provided that:
  - 1) The exit is secured closed prior to passenger boarding and is not used for any purpose whilst passengers are on board, and
  - 2) All other exits and escape slides are fully operative, and
  - 3) The maximum number of passengers carried is restricted as follows:

Inoperative Exits	Door 1	Door 2	Door 3	Door 4
Max Pax Load for 172 Config	165	134	134	134

Refer Operating Procedures for detailed seating restrictions, and

- 4) All the emergency exits and/or exit markings, signs and lights associated with the affected door must be obscured, and
- 5) The exit is marked by a red disc at least 23cm in diameter with a horizontal white bar across it bearing the words "NO EXIT" in English and Chinese in red letters, and
- 6) Passengers are not seated near the unserviceable exit, for this purpose seat rows should be blocked off and clearly marked to prevent their use for takeoff and landing, and
- 7) The pre-takeoff briefing to the passengers must reflect the current state and condition of the aircraft escape facilities. A briefing by reference to a briefing card must be immediately qualified by an oral announcement to emphasize the exits to be used in the affected zones and the fact that a particular exit is unusable and displays a red "NO EXIT" sign, and
- 8) Where the evacuation drill calls for cabin crew to be seated by the inoperative exit, they are briefed to direct passengers to a serviceable exit, and
- If the emergency escape slide is removed, the Maintenance Procedures for load adjustment of the control handle is applied before the first flight under this item.

Note: Notify IOC /Load Control of any inoperative PAX DOOR/EMER EXIT.

Continued on the following page



52-10 - Passenger/Crew Door

	Reference(s)		n the previous p
(o) Refer to OpsP (m) Refer to AMM P	roc 52-10-01A Cabin Passenger 52-10-00-040-001	Door	
52-10-02	Overwin	ng Emergency Exit	
Ident.: MI-52-10-00008690.0001001 Applicable to: B-HSD, B-HSE, B-H	/ 19 JUL 12 ISG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM,	B-HSN, B-HSO, B-HSP, B-HSQ, B-HS	R, B-HST, B-HSL
52-10-02A	· , , , , , , , , , , , , , , , , , , ,	,	, , , , , , , , , , , , , , , , , , , ,
Repair interval	Nbr installed	Nbr required	Placard
	-	_	No
52-10-03	Passenc	ger Exit Stop Fitting	
		, , <u>, , , , , , , , , , , , , , , , , </u>	
52-10-03A			
Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No
_			•
P			
A maximum of	one per exit may be inoperative N/PRO-SPO-20 Flight Without Ca		pressurized.
A maximum of	one per exit may be inoperative  //PRO-SPO-20 Flight Without Ca	abin Pressurization.	pressurized.



52-10 - Passenger/Crew Door

52-10-04 Door Damper Function	52-10-04	Door Damper Function
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Ident.: MI-52-10-00008692.0001001 / 19 JUL 12

6 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 52-10-04A

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

One or more may be inoperative.

52-10-04 Door Damper Function	
-------------------------------	--

Ident.: MI-52-10-00008692.0004001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 52-10-04A

Repair interval	Nbr installed	Nbr required	Placard
D	8	0	No

One or more may be inoperative.

52-10-05	Door Emergency Opening Function
----------	---------------------------------

Ident.: MI-52-10-00008693.0001001 / 19 JUL 12

7 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 52-10-05A

Repair interval	Nbr installed	Nbr required	Placard
В	4	3	Yes



One or more may be inoperative provided that the affected door is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

- Reference(s)

Р

D to E  $\rightarrow$ 



52-10 - Passenger/Crew Door

52-10-05 Door Emergency Opening Function
--

Ident.: MI-52-10-00008693.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 52-10-05A

Repair interval	Nbr installed	Nbr required	Placard
В	8	7	Yes



One or more may be inoperative provided that the affected door is considered inoperative. Refer to Item 52-10-01 Cabin Passenger Door

- Reference(s) -

Р

52-10-06	DOOR PRESS LOW Message on the	
	Programming and Test Panel (PTP) STATUS Page	

Ident.: MI-52-10-00008694.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

#### 52-10-06A

Repair interval	Nbr installed	Nbr required	Placard
D	4	0	No

S

(o) One or more may be inoperative provided that door bottle pressure is checked before the first flight under this item and thereafter every 8 days

(o) Refer to OpsProc 52-10-06A DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP



52-10 - Passenger/Crew Door

52-10-06 DOOR PRESS LOW Message on the Programming and Test Panel (PTP) STATUS Page

Ident.: MI-52-10-00008694.0003001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 52-10-06A

	Repair interval	Nbr installed	Nbr required	Placard
ſ	D	8	0	No

S

(o) One or more may be inoperative provided that door bottle pressure is checked before the first flight under this item and thereafter every 8 days

Reference(s)

(o) Refer to OpsProc 52-10-06A DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP

S

52-10-06	CHECK DOOR PRESSURE Message
	on the Flight Attendant Panel (FAP)

Ident.: MI-52-10-00008694.9001002 / 19 JUL 12

8 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

9

#### 52-10-06A

	Repair interval	Nbr installed	Nbr required	Placard
١	D	4	0	No

S

(o) (m) One or more messages may be displayed provided that the door bottle pressure is checked on the associated bottle pressure gauge before the first MEL dispatch and then every 8 days.

Continued on the following page

HDA A320/A321 FLEET MI-52-10 P 9/12



52-10 - Passenger/Crew Door

	MINIMUM EQUIPMENT LIS	'			
			Reference(s) —	Continued fro	m the previous pag
	(o) Refer to Opsi the PTP/FAP (m) Refer to AMN S		2-10-06A DOOR PRESS LOV	V/CHECK DOOR PRESS	JRE Message o
	52-10-07		Passenger D	oor Stay Mechanism	
	Ident.: MI-52-10-00008695.000100				
10		HSG, B-I	HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B	-HSN, B-HSO, B-HSP, B-HSQ, B-H	SR, B-HST, B-HSU
	52-10-07A				
	Repair interva	d	Nbr installed	Nbr required	Placard
	В		4	3	Yes
	Refer to Item		e inoperative provided that the 01 Cabin Passenger Door Reference(s) —		eu moperative.
	52-10-07		Passenger D	oor Stay Mechanism	
	Ident.: MI-52-10-00008695.000400 Applicable to: B-HTD, B-HTE, B-				
	52-10-07A	, 5	, 5		
	Repair interva	ıl	Nbr installed	Nbr required	Placard
	В		8	7	Yes
	Refer to Item		inoperative provided that the 01 Cabin Passenger Door  Reference(s)	e affected door is consider	ed inoperative.
	Р				



52-10 - Passenger/Crew Door

52-10-08 CABIN PRESSURE light (on Doors)
--

Ident.: MI-52-10-00008696.0001001 / 19 JUL 12

11 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 52-10-08A

Repair interval	Nbr installed	Nbr required	Placard
C 4		0	No

One or more may be inoperative.

52-10-08	CABIN PRESSURE light (on Doors)

Ident.: MI-52-10-00008696.0004001 / 22 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 52-10-08A

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	C 8		No

One or more may be inoperative.

HDA A320/A321 FLEET MI-52-10 P 11/12 19 JUL 12



52-10 - Passenger/Crew Door

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 HDA A320/A321 FLEET
 MI-52-10 P 12/12

 MEL
 19 JUL 12



52-30 - Cargo Door

52-30-01	Cargo Door (FWD, AFT and BULK) Inoperative

Ident.: MI-52-30-00008733.0001001 / 29 NOV 11

Applicable to: ALL

# 52-30-01A Cargo Door Indication on DOOR/OXY SD page operative

Repair interval	Nbr installed	Nbr required	Placard
С	C 3		No

S

One or more may be inoperative in the closed and locked position provided that they are	е
indicated locked on the DOOR/OXY SD page.	

Reference(s)

S

## 52-30-01B Cargo Door Indication on DOOR/OXY SD page inoperative

	Repair interval	Nbr installed	Nbr required	Placard
C 3		0	No	

S

(m) One or more may be inoperative	in the closed and lock	ed position provided that the
associated cargo door is visually	checked to be closed	and locked before each flight.

---- Reference(s) ------

(m) Refer to AMM 52-30-00-040-001



52-30 - Cargo Door

52-30-02	Cargo Door Actuator
----------	---------------------

Ident.: MI-52-30-00008734.0002001 / 29 NOV 11

Applicable to: ALL

## 52-30-02A A maximum of one actuator inoperative per cargo door

Repair interval	Nbr installed	Nbr required	Placard
C 4		2	No

S

A maximum of one per cargo door may be inoperative provided that:

- 1) The integrity of the yellow hydraulic system is not affected, and
- 2) The wind velocity during loading and unloading operations is below 30 kt, and
- 3) The operation of the door with a single actuator is limited to 100 open/close cycles.

Reference(s) —

S

## 52-30-02B One or more actuator inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

S

- (m) One or more may be inoperative provided that:
  - 1) The integrity of the yellow hydraulic system is not affected, and
  - 2) The associated cargo door is manually closed and locked.

Reference(s)

(m) Refer to AMM 52-36-00-040-001



52-30 - Cargo Door

52-30-03	Cargo Door Electrical Control

Ident.: MI-52-30-00008737.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-30-03A Cargo door operated using hand pump

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

One or more may be inoperative	e provided that the a	ssociated cargo	doors can be	operated
using the hand pump.				

Reference(s)

S

#### 52-30-03B Cargo door considered inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

One or more may be inoperative provided that the associated cargo doors are considered inoperative.

Refer to Item 52-30-01 Cargo Door (FWD, AFT and BULK) Inoperative

Reference(s)

S



52-30 - Cargo Door

52-30-04   Cargo Door Locking Hooks and Spools (Rollers)
--

Ident.: MI-52-30-00008739.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-30-04A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No



A maximum of one locking hook or one spool per cargo door may be inoperative provided that:

- 1) All the others have no damage, and
- 2) The flight is not pressurized.

Reference(s)



52-30-05	Cargo Door Hand Pump
	•

Ident.: MI-52-30-00008741.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-30-05A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No



May be inoperative provided that the integrity of the yellow hydraulic system is not affected.

Reference(s)

S



52-30 - Cargo Door

52-30-06	Cargo Door Drift Pin

Ident.: MI-52-30-00008742.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-30-06A

Repair interval	Nbr installed	Nbr required	Placard
A	4	0	No

S

- Reference(s) -

S

Ident.: MI-52-30-00008743.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-30-07A

Repair interval	Nbr installed	Nbr required	Placard
D	2 0		No

(o) One or both may be inoperative provided that the associated cargo door is in the fully open position during loading and unloading operations.

 Reference(s)	

(o) Refer to OpsProc 52-30-07A Cargo Door Open/Locked Indicator light



MEL ITEMS 52 - DOORS 52-30 - Cargo Door

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 HDA A320/A321 FLEET
 MI-52-30 P 6/6

 MEL
 29 NOV 11



52-33 - Bulk Cargo Compartment Door

52-33-01 Cargo Door Balance Mechanism
---------------------------------------

Ident.: MI-52-33-00008746.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-33-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	Yes

S

- (m) May be inoperative or damaged provided that:
  - 1) A safety hold device is used to maintain the cargo door in the open position during loading and unloading operations, and
  - 2) The associated cargo door is visually checked to be closed and locked.

	Reference(s)
(m) Refer to AMM 52-33-00-040-001	

S



52-33 - Bulk Cargo Compartment Door

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 HDA A320/A321 FLEET
 MI-52-33 P 2/2

 MEL
 29 NOV 11



52-51 - Reinforced Cockpit Door (CDLS)

Ident.: MI-52-51-00008754.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-51-03A

Repair interval	Nbr installed	Nbr required	Placard
С	C 1		No

- (o) (m) May be inoperative provided that:
  - 1) The interphone system between the cabin and the cockpit is operative, and
  - 2) The keypad is deactivated.

Reference(s) -

- (o) Refer to OpsProc 52-51-03A CDLS Buzzer
- (m) Refer to AMM 52-51-00-040-007

52-51-04 CDLS Keypad
----------------------

Ident.: MI-52-51-00008759.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-51-04A

Repair interval	Nbr installed	Nbr required	Placard
C 1		0	Yes

S

- (o) (m) May be inoperative provided that:
  - 1) The interphone system between the cabin and the cockpit is operative, and
  - 2) The CDLS keypad is deactivated.

Reference(s) -

- (o) Refer to OpsProc 52-51-04A CDLS Keypad
- (m) Refer to AMM 52-51-00-040-007

S



52-51 - Reinforced Cockpit Door (CDLS)

52-51-05	CDLS Keypad Green and Red LED s	
Ident - MI EQ E4 00000762 0004004 / 90 NOV 44		

dent.: MI-52-51-00008762.0001001 / 29 NOV 11 Applicable to: ALL

#### 52-51-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2		No

(0)	One or both may be inoperative.		
		Reference(s)	

(o) Refer to OpsProc 52-51-05A CDLS Keypad Green and Red LEDs

52-51-06	CDLS Door Release Strike (Catch, Spring, Solenoid, Bolt)	
Ident.: MI-52-51-00008764.0001001 / 29 NOV 11		

Applicable to: ALL

Application of the maintenance procedure is only necessary when the inoperative door Note: release strike is failed in locked position.

#### 52-51-06A

Repair interval	Nbr installed	Nbr required	Placard
С	3	2	No

S

(m) One may be inoperative. Reference(s) ——

(m) Refer to AMM 52-51-00-040-010

S

Continued on the following page



52-51 - Reinforced Cockpit Door (CDLS)

Continued from the previous page

#### 52-51-06B

Repair interval	Nbr installed	Nbr required	Placard
Α	3	1	No

S

(m) Two may be inoperative for return	to HKG .
	Reference(s)
(m) Refer to AMM 52-51-00-040-010	

#### 52-51-06C

Repair interval	Nbr installed	Nbr required	Placard
В	3	0	No

S

(o) (m) Two or more may be inoperative provided that Deadbolt is operative and used.			
Reference(s)			
(o) Refer to OpsProc 52-51-06C CDLS Door Release Strike (Catch, Spring, Solenoid, Bolt			

(m) Refer to AMM 52-51-00-040-010

S

Ident.: MI-52-51-00008766.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST, B-HSU, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 52-51-07A

Repair interval	Nbr installed	Nbr required	Placard
В	1	0	No

May be inoperative.



52-51 - Reinforced Cockpit Door (CDLS)

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 HDA A320/A321 FLEET
 MI-52-51 P 4/4

 MEL
 19 JUL 12



52-53 - COCKPIT DOOR Panel on the Center Pedestal

52-53-01	COCKPIT DOOR FAULT light
	,

Ident.: MI-52-53-00008768.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-53-01A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

(o) May be inoperative.

(o) Refer to OpsProc 52-53-01A COCKPIT DOOR FAULT light

52-53-02	COCKPIT DOOR OPEN light

Ident.: MI-52-53-00008770.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-53-02A

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

(o) May be inoperative.

Reference(s)

(o) Refer to OpsProc 52-53-02A COCKPIT DOOR OPEN light

52-53-03 LOCK Function of the COCKPIT DOOR sw
---

Ident.: MI-52-53-00008772.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-53-03B

	Repair interval	Nbr installed	Nbr required	Placard
ſ	В	1	0	No

- (o) (m) May be inoperative provided that:
  - 1) The interphone system between the cabin and the cockpit is operative, and
  - 2) The keypad is deactivated.

Continued on the following page



52-53 - COCKPIT DOOR Panel on the Center Pedestal

Continued from the pr	evious page
(o) Refer to OpsProc 52-53-03B LOCK Function of the COCKPIT DOOR sw	
(m) Refer to AMM 52-51-00-040-007	

52-53-04 UNLOCK Function of the COCKPIT DOOR sw

Ident.: MI-52-53-00008774.0001001 / 29 NOV 11

Applicable to: ALL

#### 52-53-04B

Repair interval	Nbr installed	Nbr required	Placard
С	1	0	No

(o) May be inoperative provided that the interphone system between the cabin and the cockpit is operative.

Reference(s)

(o) Refer to OpsProc 52-53-04B UNLOCK Function of the COCKPIT DOOR sw



	56-10-01	Front Windshield
--	----------	------------------

Ident.: MI-56-10-00008671.0001001 / 29 NOV 11

Applicable to: ALL

A cockpit window with minor damages (as described in the associated maintenance Note: procedure) is considered operative, but the vision through this cockpit window must be acceptable to the flight crew.

#### 56-10-01A For SPS Windshields (Except P/N STA320-1-3-1 and STA320-2-3-1) and for PPG Windshields and for PAL Windshields (Only P/N PAL 06282& 06283)

Repair interval	Nbr installed	Nbr required	Placard
Α	2	2	No



- (o) (m) One front windshield external ply may be cracked for ten flights provided that:
  - 1) The other front windshield is not damaged, and
  - 2) The associated windshield heating is deactivated, and
  - 3) The visibility through the associated front windshield is acceptable to the flight crew, and
  - 4) The aircraft is not operated in known or forecast icing conditions.

- Reference(s)

- (o) Refer to OpsProc 56-10-01A Front Windshield
- (m) Refer to AMM 56-10-00-040-001



Continued on the following page

HDA A320/A321 FLEET MI-56-10 P 1/6 MEL 29 NOV 11



## MEL ITEMS 56 - WINDOWS 56 10 Cooksit

56-10 - Cockpit

Continued from the previous page

### 56-10-01B For SPS Windshields (Except P/N STA320-1-3-1 and STA320-2-3-1) and for PPG Windshields and for PAL Windshields (Only P/N PAL 06282& 06283)

Repair interval	Nbr installed	Nbr required	Placard
С	2	2	No

- (o) (m) One front windshield may have burn spots in the bus bar area beyond the limits provided that:
  - 1) The other front windshield is not damaged, and
  - 2) The associated windshield heating is deactivated, and
  - 3) The visibility through the associated front windshield is acceptable to the flight crew, and
  - 4) The aircraft is not operated in known or forecast icing conditions.

	Reference(s)	
	Helerence(s)	

- (o) Refer to OpsProc 56-10-01B Front Windshield
- (m) Refer to AMM 56-10-00-040-001

S

#### 56-10-01C For SPS Windshields (only P/N STA320-1-3-1 and STA320-2-3-1)

Repair interval	Nbr installed	Nbr required	Placard
Α	2	2	No



- (o) (m) One front windshield external ply may be cracked for one flight provided that:
  - 1) The other front windshield is not damaged, and
  - 2) The associated windshield heating is deactivated, and
  - 3) The visibility through the associated front windshield is acceptable to the flight crew, and
  - 4) The aircraft is not operated in known or forecast icing conditions.

Reference(s)	
 neieleliceisi	

- (o) Refer to OpsProc 56-10-01C Front Windshield
- (m) Refer to AMM 56-10-00-040-001

Р

Continued on the following page



Continued from the previous page

#### 56-10-01D For SPS Windshields (only P/N STA320-1-3-1 and STA320-2-3-1)

Repair interval	Nbr installed	Nbr required	Placard
С	2	2	No

S

- (o) (m) One front windshield may have burn spots in the bus bar area beyond the limits provided that:
  - 1) The other front windshield is not damaged, and
  - 2) The associated windshield heating is deactivated, and
  - 3) The visibility through the associated front windshield is acceptable to the flight crew, and
  - 4) The aircraft is not operated in known or forecast icing conditions.

	Poforonoo(s)
·	Reference(s) —

- (o) Refer to OpsProc 56-10-01D Front Windshield
- (m) Refer to AMM 56-10-00-040-001

S

56-10-02	Lateral Fixed/Sliding Window
Ident.: MI-56-10-00008673.0001001 /	29 NOV 11

Applicable to: ALL

Note:

A cockpit window with minor damages (as described in the associated maintenance procedure) is considered operative, but the vision through this cockpit window must be acceptable to the flight crew.

#### 56-10-02A For Acrylic Window (LUCAS/ACT Supplier, P/N starting with NH)

Repair interval	Nbr installed	Nbr required	Placard
С	4	4	No

S

- (m) One or more lateral windows may have burn spots in the bus bar area provided that:
  - 1) The diameter of the mark is less than 10 mm, and
  - 2) The associated lateral window heating is deactivated, and
  - 3) The visibility through the affected lateral window is acceptable to the flight crew.

Continued on the following page



	Continued from the previous page
<ul><li>Reference(s)</li></ul>	

(m) Refer to AMM 56-10-00-040-002

S

### 56-10-02B For Glass Window (SPS Supplier (P/N starting with SPS) and PPG Supplier (P/N starting with NP))

Repair interval	Nbr installed	Nbr required	Placard
Α	4	4	No

Р

- (m) External ply may be cracked for one flight provided that:
  - 1) The other lateral windows are not damaged, and
  - 2) The associated lateral window heating is deactivated, and
  - 3) The visibility through the affected lateral window is acceptable to the flight crew.

Reference(s)

(m) Refer to AMM 56-10-00-040-002

P

### 56-10-02C For Glass Window (SPS Supplier (P/N starting with SPS) and PPG Supplier (P/N starting with NP))

Repair interval	Nbr installed	Nbr required	Placard
С	4	4	No

S

- (m) One or more lateral windows may have burn spots in the bus bar area provided that:
  - 1) The diameter of the mark is less than 10 mm, and
  - 2) The associated lateral window heating is deactivated, and
  - 3) The visibility through the affected lateral window is acceptable to the flight crew.

(m) Refer to AMM 56-10-00-040-002

S

HDA A320/A321 FLEET MI-56-10 P 4/6
MEL ← B 29 NOV 11



56-10-03 Sliding Window Opening/Closing Mechanism
---

Ident.: MI-56-10-00008675.0001001 / 22 MAR 10

Applicable to: ALL

#### 56-10-03A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.



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 HDA A320/A321 FLEET
 MI-56-10 P 6/6

 MEL
 29 NOV 11



#### MEL ITEMS 56 - WINDOWS 56-20 - Cabin

56-20-01 Cabin Window	
-----------------------	--

Ident.: MI-56-20-00008676.0001001 / 29 NOV 11

Applicable to: ALL

#### 56-20-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	0	No



Р

One or more may be cracked provided that the llight is not pressurized.	
	-



MEL ITEMS 56 - WINDOWS 56-20 - Cabin

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 HDA A320/A321 FLEET
 MI-56-20 P 2/2

 MEL
 29 NOV 11



#### MEL ITEMS 70 - ENGINE

70-00 - MAINTENANCE Messages on the STATUS SD page

70-00-01	ENG FADEC MAINTENANCE Message

Ident.: MI-70-00-00008668.0001001 / 29 NOV 11

Applicable to: ALL

#### 70-00-01A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

ENG FADEC <u>MAINTENANCE</u> message may be displayed on the $\underline{\sf S1}$	<u>ΓΑΤUS</u> SD page.

S

70-00-02	ENG EIU <u>MAINTENANCE</u> Message
----------	------------------------------------

Ident.: MI-70-00-00008669.0001001 / 29 NOV 11

Applicable to: ALL

#### 70-00-02A

Repair interval	Nbr installed	Nbr required	Placard
С	-	-	No

S

ENG EIU $\underline{MAINTENANCE}$ message may be displayed on the $\underline{STATUS}$ SD pa	ge.
--	-----

Reference(s) —

S



#### MEL ITEMS 70 - ENGINE

70-00 - MAINTENANCE Messages on the STATUS SD page

70-00-03 ENG EVMU MAINTENANCE Message
---------------------------------------

Ident.: MI-70-00-00008670.0001001 / 29 NOV 11

Applicable to: ALL

#### 70-00-03A

Repair interval	Nbr installed	Nbr required	Placard
C	-	-	No



S

ENG EVMU MAINTENANCE message may be displayed on the STATUS SD pag	e.
Reference(s)	



73-07 - Indications on the ENGINE SD page

Ident.: MI-73-07-00008664.0001001 / 29 NOV 11

Applicable to: ALL

#### 73-07-01A One indication inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One may be inoperative provided that the fuel quantity indications of the associated tanks are operative on the FUEL SD page.

#### 73-07-01B Both indicationS inoperative

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	2	0	No



Both may be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) The fuel quantity indications of the associated tanks are operative on the <u>FUEL</u> SD page.

- Reference(s) -



73-07-02	Fuel Filter Clog Indication on the ENGINE SD page

Ident.: MI-73-07-00008665.0001001 / 22 MAR 10

Applicable to: ALL

#### 73-07-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.



73-07 - Indications on the ENGINE SD page

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HDA A320/A321 FLEET MI-73-07 P 2/2 MEL 29 NOV 11



73-08 - Indications on the EWD

73-08-01	Fuel Flow Indication on the EWD
----------	---------------------------------

Ident.: MI-73-08-00008666.0001001 / 29 NOV 11

Applicable to: ALL

#### 73-08-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

One fuel flow indication may be inoperative.



# MEL ITEMS 73 - ENGINE FUEL AND CONTROL 73-08 - Indications on the EWD

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HDA A320/A321 FLEET MI-73-08 P 2/2 MEL 29 NOV 11



73-09 - ECAM Alert

73-09-01	ENG 1(2) FUEL FILTER CLOG Alert
----------	---------------------------------

Ident.: MI-73-09-00008667.0001001 / 29 NOV 11

Applicable to: ALL

#### 73-09-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

- (m) One may be displayed provided that:
  - 1) The alert is confirmed to be false by troubleshooting, and
  - 2) The associated filter is replaced every day.

<ul> <li>Reference(s)</li> </ul>	
— Reference(s)	

(m) Refer to AMM 73-30-00-040-042

S



# MEL ITEMS 73 - ENGINE FUEL AND CONTROL 73-09 - ECAM Alert

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 HDA A320/A321 FLEET
 MI-73-09 P 2/2

 MEL
 29 NOV 11



73-10 - Distribution

73-10-03 Fuel Metering Valve
------------------------------

1 Ident.: MI-73-10-20803248.9001001 / 19 JUL 12

#### 73-10-03A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

73-10-04	Engine HP Fuel Valve
70 10 04	Engine in Tuer valve

Ident.: MI-73-10-00008656.0001001 / 22 MAR 10

Applicable to: ALL

#### 73-10-04A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Both must be operative.

<sup>&</sup>lt;sup>2</sup> Applicable to: ALL



73-10 - Distribution

Intentionally left blank

 HDA A320/A321 FLEET
 MI-73-10 P 2/2

 MEL
 19 JUL 12



73-20 - Controlling

73-20-01	Flex Takeoff Mode

Ident.: MI-73-20-00008657.0001001 / 29 NOV 11

Applicable to: ALL

#### 73-20-01A

Repair interval	Nbr installed	Nbr required	Placard
D	2	0	No

May be inoperative on one or both engines provided TOGA is used for takeoff.

73-20-04 EPR Control Mode
---------------------------

Ident.: MI-73-20-20802095.9001001 / 04 APR 12

Applicable to: ALL

#### 73-20-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No



- (o) The EPR control mode may be inoperative on one or both engines provided that:
  - 1) ETOPS is not conducted, and
  - 2) The N1 rated control mode is operative on both engines ( ENG 1(2) N1 DEGRADED MODE message is not displayed on the STATUS SD page ), and
  - 3) Performance penalties are applied.

Refere	nco(s)
1101010	100(3)

(o) Refer to OpsProc 73-20-04A EPR Control Mode





73-20 - Controlling

73-20-05 Minimum Idle on Ground
---------------------------------

Ident.: MI-73-20-00008661.0001001 / 29 NOV 11

Applicable to: ALL

#### 73-20-05A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Р

(o) One or both may be inoperative provided that the Flight Manual performance penalties are applied.

(o) Refer to OpsProc 73-20-05A Minimum Idle on Ground

P

73-20-06	EEC ACFT 28V Power Supply
----------	---------------------------

Ident.: MI-73-20-00008662.0001001 / 15 SEP 10

Applicable to: ALL

#### 73-20-06A

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No

The channel B power supply may be inoperative on one or both engines.



#### MEL ITEMS 74 - IGNITION

74-07 - Indications on the ENGINE SD page

74-07-01	Selected Igniter Indication on the ENGINE SD page
----------	---

Ident.: MI-74-07-00008651.0001001 / 29 NOV 11

Applicable to: ALL

#### 74-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No

(o)	One or more may be inoperative provided that the associated ENG 1(2) IGN A(B)(A+B)
	FAULT alert is checked operative.

--- Reference(s) -----

(o) Refer to OpsProc 74-07-01A Selected Igniter Indication on the ENGINE SD page



#### MEL ITEMS 74 - IGNITION

74-07 - Indications on the ENGINE SD page

Intentionally left blank

HDA A320/A321 FLEET MI-74-07 P 2/2 MEL 29 NOV 11



# MEL ITEMS 74 - IGNITION

74-09 - ECAM Alert

74-09-01	ENG 1(2) IGN A(B)(A+B) FAULT Alert
----------	------------------------------------

Ident.: MI-74-09-00008652.0002001 / 22 MAR 10

Applicable to: ALL

#### 74-09-01A

Repair interval	Nbr installed	Nbr required	Placard
С	4	2	No

One or two may be displayed.



MEL ITEMS 74 - IGNITION 74-09 - ECAM Alert

Intentionally left blank

 HDA A320/A321 FLEET
 MI-74-09 P 2/2

 MEL
 29 NOV 11



#### MEL ITEMS 74 - IGNITION

74-31 - Ignition Starting and Continuous Relight

74-31-01 Ignition System A
----------------------------

Ident.: MI-74-31-00008649.0002001 / 29 NOV 11

Applicable to: ALL

#### 74-31-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

- (o) One may be inoperative provided that:
  - 1) ETOPS is not conducted, and
  - 2) The associated engine ignition system B is operative.

Note: System A is considered inoperative on both engines (NO DISPATCH) when the common power supply line from 401XP 115VAC ESS BUS is inoperative as a result of either a loss of electrical continuity or a short circuit (ENGINE/1 AND 2 IGN/SYS A (49VUA03) C/B tripped).

Reference(s)

(o) Refer to OpsProc 74-31-01A Ignition System A

74-31-02	Ignition System B

Ident.: MI-74-31-00008650.0001001 / 29 NOV 11

Applicable to: ALL

#### 74-31-02A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o) One or both may be inoperative.

Refer to Item 74-31-01 Ignition System A

Reference(s)

(o) Refer to OpsProc 74-31-02A Ignition System B



#### MEL ITEMS 74 - IGNITION

74-31 - Ignition Starting and Continuous Relight

Intentionally left blank

 HDA A320/A321 FLEET
 MI-74-31 P 2/2

 MEL
 29 NOV 11



## MEL ITEMS 76 - ENGINE CONTROLS

76-11 - Throttle Control

76-11-01	Thrust lever Position Sensor
----------	------------------------------

Ident.: MI-76-11-00008646.0001001 / 29 NOV 11

Applicable to: ALL

#### 76-11-01A

Repair interval	Nbr installed	Nbr required	Placard
A	4	3	No



One may be inoperative on one engine for three days provided that:

- 1) The A/THR is operative, and
- 2) Both LGCIUs are operative, and
- 3) The L/G shock absorbers proximity detectors are operative.

Reference(s)	

S



# MEL ITEMS 76 - ENGINE CONTROLS 76-11 - Throttle Control

Intentionally left blank

 HDA A320/A321 FLEET
 MI-76-11 P 2/2

 MEL
 29 NOV 11



## MEL ITEMS 77 - ENGINE INDICATING

77-07 - Indications on SD pages 77-07-01 - Indications on the CRUISE SD page

77-07-01-01	N1 Vibration Indication on the <u>CRUISE</u> SD page
-------------	--

Ident.: MI-77-07-01-00008609.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-01-01A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 77-07-02-05 N1 Vibration Indication on the ENGINE SD page

77-07-01-02	N2 Vibration Indication on the <u>CRUISE</u> SD page
-------------	--

Ident.: MI-77-07-01-00008610.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-01-02A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 77-07-02-06 N2 Vibration Indication on the ENGINE SD page

77-07-01-03	F. USED (Fuel Used) Indication on the <u>CRUISE</u> SD page

Ident.: MI-77-07-01-00008611.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-01-03A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 73-07-01 Fuel Used Indication on the ENGINE SD page



#### 77 - ENGINE INDICATING

77-07 - Indications on SD pages 77-07-01 - Indications on the CRUISE SD page

77-07-01-04 OIL QT (Oil Quantity) Indication on the CRUISE SD page

Ident.: MI-77-07-01-00008612.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-01-04A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 79-07-03 Oil Quantity Indication on the ENGINE SD page



## MEL ITEMS 77 - ENGINE INDICATING

77-07 - Indications on SD pages 77-07-02 - Indications on the ENGINE SD page

77-07-02-01	Engine Bleed Pressure Indication on the <u>ENGINE</u> SD page
-------------	---

Ident.: MI-77-07-02-00008629.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-01A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 36-07-04 Engine Bleed Precooler Inlet Pressure Indication on the BLEED SD page

77-07-02-02	Fuel Filter Clog Indication on the ENGINE SD page

Ident.: MI-77-07-02-00008630.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-02A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	_

Refer to Item 73-07-02 Fuel Filter CLOG Indication on the ENGINE SD page

77-07-02-03	Fuel Used Indication on the ENGINE SD page
-------------	--

Ident.: MI-77-07-02-00008631.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-03A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	_

Refer to Item 73-07-01 Fuel Used Indication on the ENGINE SD page



#### 77 - ENGINE INDICATING

77-07 - Indications on SD pages 77-07-02 - Indications on the ENGINE SD page

77-07-02-04	Nacelle Temperature Indication on the ENGINE SD page
11-01-02-04	nacelle reliiperature iliulcation on the <u>Livolive</u> 3D page

Ident.: MI-77-07-02-00008632.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-04A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

77-07-02-05	N1 Vibration Indication on the ENGINE SD page
	·
	004 / 00 NOV 44

Applicable to: ALL

#### 77-07-02-05A One indication inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

One	may	he	inor	erat	tive
<b>0</b> 110	iiiuy		1110	Joia	uvo.

- Reference(s) -

S

#### 77-07-02-05B Both indications inoperative

Repair interval	Nbr installed	Nbr required	Placard
A	2	0	No

S

Both may be inoperative for three flights provided that:

- 1) ETOPS is not conducted, and
- 2) No vibration advisory was displayed during the previous flight.

Reference(s)

S



## MEL ITEMS 77 - ENGINE INDICATING

77-07 - Indications on SD pages 77-07-02 - Indications on the ENGINE SD page

77-07-02-06	N2 Vibration Indication on the ENGINE SD page

Ident.: MI-77-07-02-00008634.0001001 / 29 NOV 11

Applicable to: ALL

#### 77-07-02-06A One indication inoperative

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

One may be inoperative.	

S

#### 77-07-02-06B Both indications inoperative

Repair interval	Nbr installed	Nbr required	Placard
Α	2	0	No

S

Both may be inoperative for three flights provided that:

- 1) ETOPS is not conducted, and
- 2) No vibration advisory was displayed during the previous flight.

Reference(s)
neielelice(s) —

S

-
---

Ident.: MI-77-07-02-00008635.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-07A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 79-07-01 CLOG Indication on the ENGINE SD page



#### 77 - ENGINE INDICATING

77-07 - Indications on SD pages 77-07-02 - Indications on the ENGINE SD page

Ident.: MI-77-07-02-00008636.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-08A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 79-07-02 Oil Pressure Indication and Advisory on the ENGINE SD page

77-07-02-09	Oil Quantity Indication on the <u>ENGINE</u> SD page	
Hant MI 77 07 00 00000007 0001001 / 00 MAD 10		

Ident.: MI-77-07-02-00008637.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-09A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 79-07-03 Oil Quantity Indication on the ENGINE SD page

77-07-02-10	Oil Temperature Indication on the <u>ENGINE</u> SD page
Ident - MI 77 07 02 00000229 0001001 / 22 MAD 10	

dent.: MI-77-07-02-00008638.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-10A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	_

Refer to Item 79-07-04 Oil Temperature Indication on the ENGINE SD page



## MEL ITEMS 77 - ENGINE INDICATING

77-07 - Indications on SD pages 77-07-02 - Indications on the ENGINE SD page

77-07-02-11	Selected Igniter Indication on the ENGINE SD page
-------------	---

Ident.: MI-77-07-02-00008639.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-11A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 74-07-01 Selected Igniter Indication on the ENGINE SD page

77-07-02-12	Start Valve Position Indication on the ENGINE SD page
-------------	---

Ident.: MI-77-07-02-00008640.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-07-02-12A

Repair interval	Nbr installed	Nbr required	Placard
-	-	-	-

Refer to Item 80-07-01 Start Valve Position Indication on the ENGINE SD page



#### 77 - ENGINE INDICATING

77-07 - Indications on SD pages 77-07-02 - Indications on the ENGINE SD page

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HDA A320/A321 FLEET MI-77-07-02 P 6/6 MEL 29 NOV 11



## MEL ITEMS 77 - ENGINE INDICATING

77-08 - Indications on the EWD

77-08-01 EGT Indication on the EWD
------------------------------------

Ident.: MI-77-08-00008641.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-08-01A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Must be operative.

77-08-02	EPR Indication on the EWD

Ident.: MI-77-08-00008642.0001001 / 29 NOV 11

Applicable to: ALL

#### 77-08-02A

	Repair interval	Nbr installed	Nbr required	Placard
ĺ	С	2	0	No



One or both EPR indications may be inoperative provided that EPR control mode is considered inoperative.

Refer to Item 73-20-05 Minimum Idle on Ground



77-08-03	Fuel Flow Indication on the EWD
	l .

Ident.: MI-77-08-00008643.0001001 / 29 NOV 11

Applicable to: ALL

#### 77-08-03A

Repair interval	Nbr installed	Nbr required	Placard
_	-	-	-

Refer to Item 73-08-01 Fuel Flow Indication on the EWD



## MEL ITEMS 77 - ENGINE INDICATING

77-08 - Indications on the EWD

77-08-04	N1 Indication on the EWD
----------	--------------------------

Ident.: MI-77-08-00008644.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-08-04A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Must be operative.

77-08-05	N2 Indication on the EWD

Ident.: MI-77-08-00008645.0001001 / 22 MAR 10

Applicable to: ALL

#### 77-08-05A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Must be operative.



78-08 - Indications on the EWD

78-08-01	REV Indication on the EWD
----------	---------------------------

Ident.: MI-78-08-00008608.0002001 / 29 NOV 11

Applicable to: ALL

#### 78-08-01B

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No



One or both may be inoperative provided that the associated thrust reverser is considered inoperative.

Refer to Item 78-30-01 Thrust Reverser

Reference(s)





78-08 - Indications on the EWD

Intentionally left blank

 HDA A320/A321 FLEET
 MI-78-08 P 2/2

 MEL
 29 NOV 11



78-30 - Thrust Reversers

78-30-01	Thrust Reverser
----------	-----------------

Ident.: MI-78-30-00008603.0002001 / 29 NOV 11

Applicable to: ALL

#### 78-30-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes



- (o) (m) One or both may be inoperative provided that:
  - 1) The inoperative reverser is deactivated and secured in the stowed position, and
  - 2) Both LVDT s on the inoperative reverser are checked operative, and
  - The ENG 1(2) REV PRESSURIZED alert is not displayed on the EWD after deactivation, and
  - 4) The appropriate performance adjustments are applied. Refer to Item 32-42-01 Main Wheel Brake, and

Refer to Item 32-42-02 Green System Brake, and

Refer to Item 32-44-01 Yellow System Brake, and

Refer to Item 32-45-01 Parking Brake Control Valve Electrical Motor.

- (o) Refer to OpsProc 78-30-01A Thrust Reverser
- (m) Refer to AMM 78-30-00-040-013

Ρ

Ident.: MI-78-30-00008604.0001001 / 29 NOV 11

Applicable to: ALL

#### 78-30-02A

Repair interval	Nbr installed	Nbr required	Placard
С	4	0	No



One or more may be inoperative provided that the associated thrust reverser is considered inoperative.

Refer to Item 78-30-01 Thrust Reverser

Continued on the following page



78-30 - Thrust Reversers

		Continued from the previous page
-	Reference(s)	

Р

78-30-03 Thrust Reverser Shutoff Valve

Ident.: MI-78-30-00008605.0001001 / 22 MAR 10

Applicable to: ALL

#### 78-30-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative in the open position.



#### 79 - OIL

79-07 - Indications on the ENGINE SD page

79-07-01 CLOG Indication on the ENGINE SD page	
--	--

Ident.: MI-79-07-00008596.0001001 / 29 NOV 11

Applicable to: ALL

#### 79-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

One or both may be inoperative.

79-07-02 Oil Pressure Indication and Advisory on the ENGINE SD page
---

Ident.: MI-79-07-00008597.0001001 / 04 APR 12

Applicable to: ALL

#### Note:

- Simultaneous illumination of the BLUE ELEC PUMP pb-sw FAULT light and the ENG 1(2) PUMP pb-sw FAULT light with engines off may be due to a failed engine oil low pressure switch. In this case, the <u>ENG 1(2)</u> OIL LO PR alert is inoperative.
- 2. If Engine Oil Pressure C/B 2EN1(2) (121VU: N40 (N42)) is tripped, associated Thrust Reverser is inoperative Refer to Item 78-30-01 Thrust Reverser

#### 79-07-02C

	Repair interval	Nbr installed	Nbr required	Placard
ſ	С	2	1	No

One may be inoperative provided that:

- 1) ETOPS is not conducted, and
- 2) The associated ENG 1(2) OIL LO PR alert is operative, and
- 3) The associated oil quantity indication is operative on the ENGINE SD page.



#### 79 - OIL

79-07 - Indications on the ENGINE SD page

79-07-03	Oil Quantity Indication on the ENGINE SD page
----------	---

Ident.: MI-79-07-00008598.0001001 / 29 NOV 11

Applicable to: ALL

#### 79-07-03A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

(m) One may be inoperative provided that the associated oil quantity is checked before each flight.

- Reference(s) -

(m) Refer to AMM 79-31-00-040-041

S

79-07-04	Oil Temperature Indication on the ENGINE SD page
----------	--

Ident.: MI-79-07-00008599.0001001 / 22 MAR 10

Applicable to: ALL

#### 79-07-04A

Repair interval	Nbr installed	Nbr required	Placard
-	2	2	No

Must be operative.



## MEL ITEMS 79 - OIL 79-09 - ECAM Alerts

79-09-01	ENG 1(2) OIL LO PR Alert
75 05 01	ENG I(E) OIL LOT IT AIGIT

Ident.: MI-79-09-00008600.0001001 / 29 NOV 11

Applicable to: ALL

#### 79-09-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

(o) One or both may be displayed.

Reference(s)

(o) Refer to OpsProc 79-09-01A ENG 1(2) OIL LO PR Alert

79-09-03	ENG 1(2) BEARING 4 OIL SYS Alert
----------	----------------------------------

Ident.: MI-79-09-00008602.0001001 / 29 NOV 11

Applicable to: ALL

#### 79-09-03A

Repair interval	Nbr installed	Nbr required	Placard
A	2	0	No

S

One or both may be displayed for 3 days provided that the <u>ENG 1(2)</u> BEARING 4 OIL SYS alert is not associated with the HI PRESS message.

Reference(s)

S



MEL ITEMS 79 - OIL 79-09 - ECAM Alerts

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 HDA A320/A321 FLEET
 MI-79-09 P 2/2

 MEL
 29 NOV 11



**79 - OIL** 79-20 - Distribution

79-20-01	Air Cooled Oil Cooler ( ACOC ) Modulating Valve
----------	---

Ident.: MI-79-20-00008592.0001001 / 29 NOV 11

Applicable to: ALL

#### 79-20-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

Р

(o)	One or both may be inoperative in the open position provided that the fuel tank temperature
	is above minus 20 °C at take-off.

Reference(s)

(o) Refer to OpsProc 79-20-01A Air Cooled Oil Cooler (ACOC) Modulating Valve

Р



MEL ITEMS
79 - OIL
79-20 - Distribution

Intentionally left blank

 HDA A320/A321 FLEET
 MI-79-20 P 2/2

 MEL
 29 NOV 11



80-01 - ENG MAN START Overhead Panel

80-01-31	ENG MAN START pb-sw

Ident.: MI-80-01-00008588.0001001 / 22 MAR 10

Applicable to: ALL

#### 80-01-31A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.



80-01 - ENG MAN START Overhead Panel

Intentionally left blank

HDA A320/A321 FLEET MI-80-01 P 2/2 MEL 29 NOV 11



**80 - STARTING** 80-07 - Indication on the ENGINE SD page

## 80-07-01 Start Valve Position Indication on the <u>ENGINE</u> SD page

Ident.: MI-80-07-00008591.0001001 / 29 NOV 11

Applicable to: ALL

#### 80-07-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	No

S

(m) One or both may be inoperative provided that	the associated start valve is checked closed
after the start of the affected engine.	
Deference(a)	
Reference(s)	

(m) Refer to AMM 80-11-00-040-042

S



80-07 - Indication on the ENGINE SD page

Intentionally left blank

HDA A320/A321 FLEET MI-80-07 P 2/2 MEL 29 NOV 11



80-11 - Pneumatic Starter and Valve System

80-11-01	Start Valve

Ident.: MI-80-11-00008589.0001001 / 29 NOV 11

Applicable to: ALL

#### 80-11-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	1	No

S

(o) (m) One may be inoperative	provided that the sta	rt valve is manually	/ closed after t	he start of the
affected engine.				

— Reference(s) —

- (o) Refer to OpsProc 80-11-01A Start Valve
- (m) Refer to AMM 80-11-00-040-043

S



80-11 - Pneumatic Starter and Valve System

Intentionally left blank

HDA A320/A321 FLEET MI-80-11 P 2/2 MEL 29 NOV 11



80-12 - ENG MASTER Panel on the Center Pedestal

80-12-01	FAULT light on the ENG MASTER Panel
----------	-------------------------------------

Ident.: MI-80-12-00008590.0001001 / 22 MAR 10

Applicable to: ALL

#### 80-12-01A

Repair interval	Nbr installed	Nbr required	Placard
С	2	0	Yes

One or both may be inoperative.



80-12 - ENG MASTER Panel on the Center Pedestal

Intentionally left blank

HDA A320/A321 FLEET MI-80-12 P 2/2 MEL 29 NOV 11

# MEL OPERATIONAL PROCEDURES





## MEL OPERATIONAL PROCEDURES PRELIMINARY PAGES - TABLE OF CONTENTS

#### **MO-PLP PRELIMINARY PAGES**

TABLE OF CONTENTS
SUMMARY OF HIGHLIGHTS

MO-21	Air	Conditioning
-------	-----	--------------

MO-21-09 ECAM Alerts	
21-09-01A VENT BLOWER FAULT Alert	A
21-09-02A VENT EXTRACT FAULT Alert	B
MO-21-23 Lavatory and Galley Ventilation	
21-23-01B Lavatory and Galley Extraction Fan	Α
MO-21-26 Avionics Equipment Ventilation	
21-26-01A Avionics Blower Fan ( VENT AVNCS SYS FAULT Alert not displayed)	
21-26-01B Avionics Blower Fan (Air conditioning inlet valve checked open before each flight)	
21-26-01C Avionics Blower Fan (Avionics ventilation system checked before each flight)	
21-26-02A Avionics Extract Fan (VENT AVNCS SYS FAULT Alert not displayed)	
21-26-02B Avionics Extract Fan (Air conditioning inlet valve checked open before each flight)	
21-26-02C Avionics Extract Fan (Avionics ventilation system checked before each flight)	
21-26-03A Avionics Skin Exchanger Inlet Bypass Valve	
21-26-04A Avionics Skin Air Outlet Valve	
21-26-05A Avionics Skin Air Inlet Valve (Air conditioning inlet valve open on the ground)	
21-26-05B Avionics Skin Air Inlet Valve (Air conditioning inlet valve secured in the open position)	
21-26-06A(B) Avionics Skin Exchanger Isolation Valve	
21-26-08A Avionics Air Conditioning Inlet Valve	
21-26-09A Avionics Ventilation Filter (VENT AVNCS SYS FAULT Alert not displayed)	
21-26-09B Avionics Ventilation Filter (Air conditioning inlet valve checked open before each flight)	
21-26-09C Avionics Ventilation Filter (Avionics ventilation system checked before each flight)	
21-26-10A Avionics Equipment Ventilation Computer (AEVC)	P
MO-21-28 Cargo Compartment Ventilation	
21-28-03A AFT Cargo Extraction Fan	A
21-28-04A AFT Cargo Isolation Valve (Valves checked closed)	
21-28-04B AFT Cargo Isolation Valve (Valves secured closed)	
MO-21-31 Pressure Control and Monitoring	
21-31-01A(B) Automatic Cabin Pressure Control System (CPC, Outflow Valve AUTO Channel)	
21-31-04A Landing Elevation Selection AUTO Function	
21-31-05A Landing Elevation Selection MAN Function	C
MO-21-51 Pack Flow Control	
21-51-03A Pack Flow Sensor	A



## MEL OPERATIONAL PROCEDURES PRELIMINARY PAGES - TABLE OF CONTENTS

MO-21-52 Air Cooling System 21-52-01A(B)(D)(E) Air Conditioning Pack (One Air Conditioning Pack Inoperative for 'C' Repair Interval) 21-52-01G Air Conditioning Pack (One Air Conditioning Pack in Heat Exchanger Cooling Mode only)	
MO-21-61 Pack Temperature Control 21-61-02A Pack Controller Primary Channel	A
1 MO-21-63 Cockpit and Cabin Temperature Control 21-63-01A Zone Controller Channel (Primary Channel Inoperative)	E C E F G
MO-22 Auto Flight  MO-22-05 FMA Indications on the PFD  22-05-01B AP Related Indications on the FMA	E
MO-22-10 Autopilot/Flight Director (AP/FD)  22-10-01A(B) Autopilot (AP)	B C E F
MO-22-30 Autothrust 22-30-01A Autothrust (A/THR)	A
MO-22-60 Flight Augmentation (FAC) 22-60-02A FAC 222-60-04A Yaw Damper System	Δ
MO-22-70 Flight Management System (FMS)  22-70-01A(B) Flight Management System (FMS)	



MO-22-81 Flight Control Unit (FCU) MO-22-81-01 Auto Flight Control Panel (FCU)	
MO-22-83 Flight Management and Guidance Computer (FMGC)	F
22-83-01A(B) Flight Management and Guidance Computer (FMGC)	<i>F</i>
MO-23 Communications MO-23-01 Overhead Panels MO-23-01-01 RCDR Overhead Panel 23-01-01-31A RCDR-GND CTL pb-sw (Inoperative in the AUTO position)	
MO-23-09 ECAM Alerts 23-09-01A COM HF 1(2) EMITTING Alert	
MO-23-40 Interphone 23-40-01A Ground External Horn	E
MO-23-51 Audio Management 23-51-05A Cockpit Loudspeaker Volume Control	<i>F</i>
MO-23-52 Audio Control Panel (ACP) 23-52-01A CAPT and F/O ACP	<i>F</i>
MO-23-72 Cockpit Door Surveillance System (CDSS) 23-72-01-51A CDSS 23-72-01-52B CDSS-Monitor 23-72-01-53B CDSS-Camera 23-72-01-54A CDSS-Cabin Ready Function	E
MO-23-73 Cabin Intercommunication Data System MO-23-73-02 DEU A 23-73-02-01A Cabin DEU A	<i>F</i>
MO-23-73-03 DEU B 23-73-03-01A(B) Cabin DEU B	
MO-23-73-05 Cabin Loudspeaker 23-73-05-02A Lavatory Loudspeaker	<i>F</i>



MO-23-73-06 Handset 23-73-06-02A Cabin Handset	A
MO-23-73-07 Prerecorded Announcement and Music Reproducer (PRAM) 23-73-07-01A Prerecorded Announcement and Music Reproducer (PRAM)	A
MO-23-74 Cabin Crew Panel 23-74-01A FAP Display Unit	B
MO-24 Electrical Power	
MO-24-01 Overhead Panels MO-24-01-01 ELEC Overhead Panel 24-01-01-07A EXT PWR pb-sw AVAIL light24-01-01-09A GALLEY pb-sw FAULT light	
24-01-01-09A GALY & CAB pb-sw FAULT light	
MO-24-07 Indications on the ELEC SD page 24-07-01A AC Generation Indications on the ELEC SD page	A
MO-24-09 ECAM Alerts 24-09-01A ELEC AC ESS BUS SHED Alert	A
MO-24-22 AC Main Generation 24-22-01A AC Main Generation (IDG, GCU, Line Contactor)	A
MO-24-25 AC Essential Generation Switching 24-25-01A Manual Transfer to the AC BUS 2 (ALTN Function)	
MO-24-26 Galley and Commercial Supply System  24-26-02B GALY & CAB Manual Load Shed System (GALY & CAB pb-sw)	
MO-24-32 DC Main Generation (TR 1, TR 2)  24-32-01A DC Main Generation (TR 1 inoperative)	
MO-24-38 DC Battery Generation 24-38-02A Battery Charger Limiter (BCL)	A



MO-25 Equipment/Furnishings
MO-25-07 Indications on the DOOR/OXY SD page
25-07-01A Passenger Door Slide Permanently Indicated Armed
25-07-01A Cabin Passenger Door/Emergency Exit Slide Permanently Indicated Armed
25-07-02A Passenger Door Slide Permanently Indicated Not Armed
25-07-02A Cabin Passenger Door/Emergency Exit Slide Permanently Indicated Not Armed
MO-25-11 Pilot Seats
25-11-07A Pilot Seat Fifth Strap
MO-25-12 Third and Fourth Occupant Seats
25-12-04A Third Occupant Seat Fifth Strap
25-12-08A Fourth Occupant Seat Fifth Strap
MO-25-20 Cabin Seats
25-20-03B Cabin Attendant Seat
MO-25-35 Galley Equipment
25-35-01A Galley Waste Compartment Flapper Door
MO-25-40 Lavatories
25-40-01A Toilet Waste Compartment Flapper Door
MO-25-63 Evacuation Signaling Equipment
25-63-01A Emergency Evacuation Signaling System (COMMAND pb-sw, HORN SHUT OFF pb, CAPT&PURS and
CAPT sw)
MO-26 Fire Protection
MO-26-15 Avionics Compartment Smoke Detection
26-15-01A Avionics Smoke Detection System
MO-26-17 Lavatory Smoke Detection
26-17-01A(B) Lavatory Smoke Detection System
MO-26-25 Lavatory Fire Extinguishing

26-25-01A Lavatory Waste Bin Fire Extinguishing System......A



### **MO-27 Flight Controls**

ino 27 i ngin dominio	
MO-27-07 Indications on SD pages 27-07-02A Aileron Position Indication on the F/CTL SD page	
27-07-05A Pitch Trim Position Indication on the F/CTL SD page	
27-07-06A Rudder Position Indication on the F/CTL SD page	
27-07-11A Spoilers/Speedbrakes Indication on the F/CTL SD page	
27-07-12A Spoilers/Speedbrakes Indication on the WHEEL SD page	F
MO-27-14 Aileron and Hydraulic Actuation	
27-14-01A Left Aileron Blue Servo-Control (Controlled by ELAC 1)	A
27-14-03A Right Aileron Green Servo-Control (Controlled by ELAC 1)	В
MO-27-21 Rudder Mechanical Control	
27-21-01A Rudder Pedal Adjustment System	A
MO-27-22 Rudder Trim Actuation	
27-22-01A(B) Rudder Trim System	Δ
MO-27-40 Trimmable Horizontal Stabilizer (THS)	
27-40-02B Stabilizer Actuator Electric Motor	A
MO-27-51 Flaps Electrical Control and Monitoring	
27-51-01A SFCC Flap Channel	
27-51-02A SFCC Slat Channel	B
MO-27-64 Spoiler Hydraulic Actuation	
27-64-01A Spoiler 5	A
27-64-02A Spoiler 1 or 3	В
27-64-03A Spoiler 2 or 4	
27-64-04A Spoilers 1 and 2	
27-64-05A Spoilers 3 and 4	E
MO-27-92 Electrical Flight Control System (EFCS) Control Inputs and Power Supply	
27-92-01A Speedbrake Control System (speedbrake control system inoperative)	A
27-92-01B Speedbrake Control System (speedbrake 2 or speedbrakes 3 and 4 inoperative)	B
27-92-02A Ground Spoiler Control System (Ground spoiler control system inoperative)	
27-92-02B Ground Spoiler Control System (Pair of spoilers 5 inoperative)	
27-92-02C Ground Spoiler Control System (Pairs of spoilers 1 and 2 or pairs of spoilers 3 and 4 inoperative	′e)E
MO-27-93 ELAC System (Elevator Aileron Computer)	
27-93-01A FLAC 1	Δ



	MO-27-94 SEC System (Spoiler and Elevator Computer) 27-94-01A SEC 1 27-94-02A SEC 2 27-94-03A SEC 3	В
	MO-27-95 FCDC System (Flight Control Data Concentrator) 27-95-02A FCDC 2	. А
	MO-28 Fuel	
Ī	MO-28-01 Overhead Panels  MO-28-01-01 FUEL Overhead Panel  28-01-01-07A FUEL MODE SEL pb-sw FAULT light	
	MO-28-07 Indications on the FUEL SD page MO-28-07-01 Fuel Quantity Indications on the FUEL SD page 28-07-01-01A Fuel On Board (FOB) Indication on the FUEL SD page	. A
	28-07-01-02A Fuel Quantity Indication (FQI) in Degraded Mode on the FUEL SD page	.C D .E
	MO-28-07-04 Valve Indications on the FUEL SD page 28-07-04-04A Wing Transfer Valve Indication on the FUEL SD page	.A
	MO-28-09 ECAM Alerts  28-09-01A(B) FUEL L(R) INNER(OUTER) TK HI TEMP Alert  28-09-01A(B) FUEL L(R) WING TK HI TEMP Alert  28-09-02A(B) FUEL L(R) INNER(OUTER) TK LO TEMP Alert  28-09-02A(B) FUEL L(R) WING TK LO TEMP Alert  28-09-03B FUEL ACT XFR FAULT Alert	B C D
	MO-28-12 Tank Venting System  28-12-01A Overpressure Protector Between the Inner and the Outer Tank (Inner tank fuel temperature monitored)  28-12-01B Overpressure Protector Between the Inner and the Outer Tank (Transfer valves opened)	



MO-28-15 Intercell Transfer System	
28-15-01A(C) LH Wing Transfer Valve (At least one transfer valve open)	A
28-15-01B LH Wing Transfer Valve (At least one transfer valve failed closed)	
28-15-02A(C) RH Wing Transfer Valve (At least one transfer valve open)	C
28-15-02B RH Wing Transfer Valve (At least one transfer valve failed closed)	
MO-28-20 Distribution	
28-20-01A Automatic Fuel Feed System	A
MO-28-21 Main Fuel Pump System	
28-21-02A Center Tank Pump (One inoperative)	Δ
28-21-02D Center Tank Pump (Both inoperative)	
MO-28-22 APU Fuel Pump System	
28-22-01A APU Fuel Pump	A
MO-28-26 Main Transfer System	
28-26-01B Center Tank Transfer Valve	Δ
	A
MO-28-28 Additional Center Tank Transfer System	
28-28-01B ACT Auto Transfer System (Manual transfer from the ACT(s) to the center tank operative)	
28-28-01C ACT Auto Transfer System (Fuel in the ACT(s) considered as not usable)	
28-28-02C ACT Transfer Valve	
28-28-05A ACT Inward Pressure Relief Valve	
28-28-06A ACT Vent Valve (Manual transfer from the ACT (s) to the center tank operative)	
28-28-09C ACT 1 Inlet Valve.	
	u
MO-28-29 APU LP Fuel Shutoff	
28-29-01A APU LP Fuel Valve	A
MO-28-50 Fuel Management	
28-50-01A Fuel Quantity Indicating Computer (FQIC) Channel	A
MO-29 Hydraulic Power	
MO-29-07 Indications on the HYD SD page	
29-07-07A System Label Indication on the HYD SD page	۸
29-07-07A System Laber Indication on the HYD SD page	
• • • • • • • • • • • • • • • • • • • •	
MO-29-09 ECAM Alerts	
29-09-03A HYD G(Y) ENG 1(2) PUMP LO PR Alert	
29-09-07A HYD PTU FAULT AIER	
29-09-09A 11D G(D)(1)(D+G)(G+1)(D+1) 313 LO PH AIRI	U



MO-29-10 Main Hydraulic Power 29-10-03A Blue System Electric Pump	Α
MO-29-23 Power Transfer 29-23-01A Power Transfer Unit (PTU)	
MO-29-24 Yellow Auxiliary Hydraulic Power 29-24-01A Yellow System Electric Pump	
MO-30 Ice and Rain Protection	
MO-30-01 Overhead Panels	
MO-30-01-01 ANTI ICE Overhead Panel 30-01-01-03A ANTI ICE WING pb-sw FAULT light	Д
MO-30-11 Wing Ice Protection 30-11-01A Wing Anti-Ice Control Valve	Д
MO-30-21 Engine Air Intake Ice Protection 30-21-01C Engine Anti-Ice Valve	A
<sup>2</sup> MO-30-31 Probe Ice Protection 30-31-01B Probe Heat Computer (PHC)	B
30-31-04A Angle of Attack (AOA) Probes Heating (F/O inoperative)	D
MO-30-42 Windshield Anti-Icing and Defogging 30-42-01A Window Heat Computer	
MO-30-45 Windshield Rain Protection 30-45-01B Windshield Wiper	A
MO-30-81 Ice Detection  30-81-03A Lighting of External Visual Icing Indicator	A
MO-31 Indicating/Recording Systems	
<sup>3</sup> MO-31-07 Indications on the System Display (SD)	
31-07-02A Permanent Data (TAT, SAT, GLOAD - ALT SEL, UTC, GW) Indications on the SD	
31-07-02A Permanent Data (TAT, SAT, GLOAD, UTC, GW) Indications on the SD	



MO-31-20 Independent Instruments 31-20-01A Electrical Clock Indicator	A
MO-31-53 Flight Warning Computer (FWC) 31-53-01A FLIGHT WARNING COMPUTER (FWC)	
MO-31-56 ECAM Control Panel (ECP) 31-56-07A T.O CONFIG pb on the ECP	A
MO-31-62 Display Management Computer (DMC) 31-62-01B DMC 1	В
MO-31-63 Display Unit (DU) 31-63-02A PFDU 2	B
MO-31-68 Switching Panel 31-68-05A PFD/ND XFR pb on the Lateral Instrument Panel	A
MO-32 Landing Gear  MO-32-07 Indications on the WHEEL SD page  32-07-01A(B) Brakes Temperature Indication on the WHEEL SD page	
MO-32-09 ECAM Alerts 32-09-01C BRAKES-N/WS MINOR FAULT Alert (Alternate braking checked operative)	A
MO-32-31 Normal Extension and Retraction  32-31-01A Landing Gear Control and Interface Unit ( LGCIU )	
MO-32-32 Proximity Detector System  32-32-02A LGCIU 2 RH L/G Shock Absorber Proximity Detector	A
32-32-03A LGCIU 2 LH L/G Shock Absorber Proximity Detector	C
32-32-06A LGCIU 2 LH L/G Down Lock Proximity Detector	E
32-32-08A LGCIU 2 RH L/G Up Lock Proximity Detector	



3	32-32-10A LGCIU 2 Nose L/G Up Lock Proximity Detector	
	32-32-11A LGCIU 2 RH L/G Doors Open Proximity Detector	
	32-32-12A LGCIU 2 LH L/G Doors Open Proximity Detector	
	32-32-13A LGCIU 2 Nose L/G Doors Open Proximity Detector	
	32-32-14A LGCIU 2 RH L/G Doors Closed Proximity Detector	
	92-32-15A LGCIU 2 LH L/G Doors Closed Proximity Detector	
3	32-32-16A LGCIU 2 Nose L/G Doors Closed Proximity Detector	. C
MO-32-3	33 Free Fall Extension	
3	22-33-01A Landing Gear Gravity Extension System	. <i>P</i>
MO-32-4	12 Normal Braking	
	32-42-01A Main Wheel Brake	. <i>F</i>
	32-42-02A Green System Brake	
	32-42-03A Braking/Steering Control Unit (BSCU) System 1	
3	92-42-04A Braking/Steering Control Unit (BSCU) System 2	. [
3	92-42-05A AUTO/BRK Function	E
MO-32-4	7 Brake Temperature System	
	Parame remperature dysterm  2-47-01A Brake Temperature Monitoring Unit ( BTMU )	4
		.,
	51 Steering	
	32-51-01A Nose Wheel Steering Control System	
	32-51-02A Rudder PEDALS DISC pb	
	32-51-03A NWS Electrical Deactivation Box (towing mode is not available when the lever is in the TOWIN position)	
	vosition)	
	22-51-035 NWS Electrical Deactivation Box (NWS Electrical Deactivation Box deactivated)	
	2 01 04A 1 ALIMING BITAIL HIGH OF THE 1990 ELECTRICAL DESCRIPTION DOCUMENTS	
MO-33 L	ights	
	20 Cabin General Illumination	
	33-20-03A Lavatory Sign (Return to seat)	_
		.,
	10 Exterior Lighting	,
	33-40-04A Landing light Extension/Retraction System	
	13-40-09A Wing Scan light	
J	5-40-05A Willy Scall light	
MO-34 N	lavigation	
MO-34-0	01 Overhead Panels	
MO-34-0	01-01 ADIRS Overhead Panel	
	34-01-01-31A ADR pb-sw	4
	34-01-01-32A IR pb-sw	



MO-34-05 Indications on the Primary Flight Display (PFD)	
34-05-07A Other Air Data Related Indications on the PFD	
34-05-08A Attitude Indication on the PFD	B
MO-34-10 Air Data/Inertial Reference System (ADIRS)	
34-10-02B ADR 2	A
34-10-03A ADR 3	
34-10-04B(C) IR 1 (only NAV mode of IR 1 inoperative)	
34-10-05B IR 2 (IR 2 totally inoperative)	
34-10-05C IR 2 (only NAV mode of IR 2 inoperative)	
34-10-06B IR 3 (for aircraft without Honeywell 10 MCU ADIRU with only NAV mode of IR 3 inoperative)	
MO-34-11 Sensors	
34-11-02A CAPT Total Air Temperature (TAT) Sensor Element Connected to the ADR 1	Δ
34-11-03A CAPT Total Air Temperature (TAT) Sensor Element Connected to the ADR 3	
34-11-04A F/O Total Air Temperature ( TAT ) Sensor Element Connected to the ADR 2	
MO-34-21 Altitude and Airspeed Standby Data	
34-21-03A Standby IAS Indicator	A
MO-34-22 Attitude and Heading Standby Data	
34-22-01B Standby Compass Indicator	Α
34-22-03B Standby Horizon Indicator	
MO-34-23 Integrated Standby Instrument System (ISIS)	
34-23-04B ISIS Attitude Indication	A
MO-34-30 Landing and Taxiing Aid	
34-30-04A Instrument Landing System (ILS)	A
MO-34-40 GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar	
34-40-02A Radio Altimeter Automatic Callout	Α
34-40-03A Radio Altimeter System	
34-40-07A PULL UP-GPWS pb-sw	C
MO-35 Oxygen	
MO-35-07 Indications on the DOOR/OXY SD page 35-07-01A Crew OXY High Pressure Indication on the DOOR/OXY SD page	,
35-07-02A Crew Oxy Figh Pressure Indication on the DOOR/OXY SD page	
MO-35-10 Crew Oxygen	
35-10-03A Exterior Crew Oxygen Overpressure Indicator Disc (Green Disc)	F



MO-35-20 Passenger Oxygen 35-20-01B Passenger Oxygen Unit	.А
MO-36 Pneumatic MO-36-00 MAINTENANCE Message on the STATUS SD page 36-00-01B(C) AIR BLEED MAINTENANCE Message	. A
MO-36-11 Engine Bleed Air Supply System  36-11-01E Engine Bleed Air Supply System (non-ETOPS flights)	.B .C
MO-36-12 APU Bleed Air Supply and Crossbleed Systems  36-12-02B APU Bleed Valve	
MO-36-22 Leak Detection Loop  36-22-01B Pylon Leak Detection System	. A
MO-49 Airborne Auxiliary Power MO-49-10 Power Plant 49-10-01A(B)(C) Power Plant (APU)	.А
MO-52 Doors  MO-52-01 Overhead Panels  MO-52-01-01 CKPT DOOR CONT Normal Overhead Panel  52-01-01-01A & 52-01-01-02A LEDs on the CKPT DOOR CONT Overhead Panel	
MO-52-07 Indications on the DOOR/OXY SD page  52-07-01A Passenger Door Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED lig operative)	A DE .B tht .C ge .D



	52-07-02A(B) Passenger Door/Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page	G H
MO-52	2-10 Passenger/Crew Door 52-10-01A Cabin Passenger Door	A
MO-52	l-30 Cargo Door 52-30-07A Cargo Door Open/Locked Indicator light	A
MO-52	F-51 Reinforced Cockpit Door (CDLS)  52-51-03A CDLS Buzzer	B C
MO-52	I-53 COCKPIT DOOR Panel on the Center Pedestal  52-53-01A COCKPIT DOOR FAULT light	B C
	Windows i-10 Cockpit 56-10-01A(B)(C)(D) Front Windshield	A
	Engine Fuel and Control  3-20 Controlling  73-20-04A EPR Control Mode	
	Ignition -07 Indications on the ENGINE SD page 74-07-01A Selected Igniter Indication on the ENGINE SD page	A
MO-74	-31 Ignition Starting and Continuous Relight 74-31-01A Ignition System A	



MO-78 Exhaust
MO-78-30 Thrust Reversers
78-30-01A Thrust Reverser
MO-79 Oil
MO-79-09 ECAM Alerts
79-09-01A ENG 1(2) OIL LO PR Alert
MO-79-20 Distribution
79-20-01A Air Cooled Oil Cooler (ACOC) Modulating Valve
MO-80 Starting
MO-80-11 Pneumatic Starter and Valve System
80-11-01A Start Valve



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 HDA A320/A321 FLEET
 MO-PLP-TOC P 16/16

 MEL
 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MO-PLP-TOC Cockpit and Cabin Temperature		1	Documentation update: Deletion of the "00008892 Zone Controller Channel (Primary Channel Inoperative)" table of content entry.
Control			Documentation update: The "Zone Controller Channel (Primary channel inoperative)" table of content entry moved from "NP02289" to "NP02289"
MO-PLP-TOC Probe Ice Protection		2	Documentation update: Deletion of the "00009050.0001001 Probe Heat Computer (PHC)" documentary unit.
MO-PLP-TOC Indications on the System Display (SD)		3	Documentation update: Deletion of the "00009041.0003001 Permanent Data (TAT, SAT, ISA, GLOAD - ALT SEL, UTC, GW) Indications on the SD" documentary unit.
MO-21-23 21-23-01B Lavatory and Galley Extraction Fan	А	1	Effectivity update: The information now also applies to MSN 5429.
MO-21-26 21-26-02A Avionics Extract Fan (VENT AVNCS SYS FAULT Alert not displayed)	D	1	Effectivity update: The information now also applies to MSN 5429.
MO-21-26 21-26-02B Avionics Extract Fan (Air conditioning inlet valve checked open before each flight)	E	2	Effectivity update: The information now also applies to MSN 5429.
MO-21-26 21-26-02C Avionics Extract Fan (Avionics ventilation system checked before each flight)	F	3	Effectivity update: The information now also applies to MSN 5429.
MO-21-26 21-26-05A Avionics Skin Air Inlet Valve (Air conditioning inlet valve open on the ground)	I	4	21 Sep 2012 : Modification of content of the element 00009186.0001001
MO-21-26 21-26-05B Avionics Skin Air Inlet Valve (Air conditioning inlet valve secured in the open position)	J	5	21 Sep 2012 : Modification of content of the element 00008857.0001001
MO-21-31 21-31-01A(B) Automatic Cabin Pressure Control System (CPC, Outflow Valve AUTO Channel)	A	1	Effectivity update: The information now also applies to MSN 5429.
MO-21-51 21-51-03A Pack Flow Sensor	Α	1	Effectivity update: The information now also applies to MSN 5429.
MO-21-52 21-52-01A(B)(D)(E) Air Conditioning Pack (One Air Conditioning Pack Inoperative for 'C' Repair Interval)	A	1	Effectivity update: The information now also applies to MSN 5429.

HDA A320/A321 FLEET MO-PLP-SOH P 1/10 19 JUL 12



Localization	Тос	ID	Reason
Title	Index	טו	neason
MO-21-52	A	2	15 Oct 2012 : Modification of content of the element
21-52-01A(B)(D)(E) Air Conditioning	^	4	00008889.0005001
Pack (One Air Conditioning Pack			00000003.0003001
Inoperative for 'C' Repair Interval)			
MO-21-52	A	3	Effectivity update: The information no longer applies to MSN 2021.
21-52-01A(B)(D)(E) Air Conditioning	^	"	Effectivity update: The information now also applies to MSN 2021.
Pack (One Air Conditioning Pack			Effectivity update. The information flow also applies to wish 2021.
Inoperative for 'C' Repair Interval)			
MO-21-52	A	4	15 Oct 2012 : Modification of content of the element
21-52-01A(B)(D)(E) Air Conditioning	_ ^	7	00008889.0008001
Pack (One Air Conditioning Pack			000000000000000000000000000000000000000
Inoperative for 'C' Repair Interval)			
MO-21-63	A	1	24 Sep 2012 : Modification of content of the element
21-63-01A Zone Controller Channel	\ \ \ \	'	00008892.0001001
(Primary Channel Inoperative)			000000010001001
MO-21-63	В	2	24 Sep 2012 : Modification of content of the element
21-63-01C Zone Controller Channel		-	00014514.0001001
(Both channels inoperative)			
MO-21-63	В	2	Documentation update: Addition of "Zone Controller Channel
21-63-01C Zone Controller Channel		-	(Both channels inoperative)" documentary unit
(Both channels inoperative)			(,,,
MO-21-63	D	3	Effectivity update: The information now also applies to MSN 5429.
21-63-02A(D) Cockpit and Cabin			
Trim Air Valve (Affected valve			
checked closed)			
MO-21-63	D	4	24 Sep 2012 : Modification of content of the element
21-63-02A(D) Cockpit and Cabin			00008893.0002001
Trim Air Valve (Affected valve			
checked closed)			
MO-21-63	F	5	Effectivity update: The information now also applies to MSN 5429.
21-63-02B(C) Cockpit and Cabin			
Trim Air Valve (Hot air pressure			
regulating valve checked operative)			
MO-21-63	Н	6	Effectivity update: The information now also applies to MSN 5429.
21-63-03B Hot Air Pressure			
Regulating Valve (Trim air valve			
checked closed)			
MO-21-63	Н	7	24 Sep 2012 : Modification of content of the element
21-63-03B Hot Air Pressure			00009196.0002001
Regulating Valve (Trim air valve			
checked closed)			

HDA A320/A321 FLEET MO-PLP-SOH P 2/10 MEL 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MO-22-70 22-70-01A(B) Flight Management System (FMS)	A	1	Effectivity update: The information now also applies to MSN 5429.
MO-23-74 23-74-01A FAP Display Unit	Α	1	Effectivity update: The information now also applies to MSN 5429.
MO-24-01-01 24-01-01-09A GALY & CAB pb-sw FAULT light	С	1	Effectivity update: The information now also applies to MSN 5429.
MO-24-07 24-07-01A AC Generation Indications on the ELEC SD page	A	1	Effectivity update: The information now also applies to MSN 5429.
MO-24-22 24-22-01A AC Main Generation (IDG, GCU, Line Contactor)	A	1	Effectivity update: The information now also applies to MSN 5429.
MO-24-26 24-26-02B GALY & CAB Manual Load Shed System (GALY & CAB pb-sw)	A	1	Effectivity update: The information now also applies to MSN 5429.
MO-24-26 24-26-03A Commercial Supply System	В	2	Effectivity update: The information now also applies to MSN 5429.
MO-25-07 25-07-01A Passenger Door Slide Permanently Indicated Armed	A	1	Effectivity update: The information now also applies to MSN 5429.
MO-25-07 25-07-02A Passenger Door Slide Permanently Indicated Not Armed	С	2	Effectivity update: The information now also applies to MSN 5429.
MO-26-15 26-15-01A Avionics Smoke Detection System	A	1	24 Sep 2012 : Modification of content of the element 00009025.0001001
MO-27-64 27-64-02A Spoiler 1 or 3	В	1	24 Sep 2012 : Modification of content of the element 00009048.0013001
MO-27-64 27-64-04A Spoilers 1 and 2	D	2	25 Sep 2012 : Modification of content of the element 00009055.0003001
MO-27-64 27-64-04A Spoilers 1 and 2	D	3	Effectivity update: The information now also applies to MSN 5429.
MO-27-64 27-64-04A Spoilers 1 and 2	D	4	25 Sep 2012 : Modification of content of the element 00009055.0024001
MO-27-64 27-64-05A Spoilers 3 and 4	E	5	25 Sep 2012 : Modification of content of the element 00009058.0001001
MO-27-64 27-64-05A Spoilers 3 and 4	Е	6	Effectivity update: The information now also applies to MSN 5429.

HDA A320/A321 FLEET MO-PLP-SOH P 3/10 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MO-27-64	E	7	25 Sep 2012 : Modification of content of the element
27-64-05A Spoilers 3 and 4			00009058.9001002
MO-27-92	Α	1	24 Sep 2012 : Modification of content of the element
27-92-01A Speedbrake Control			00009063.0001001
System (speedbrake control system			
inoperative)			
MO-27-92	Α	2	24 Sep 2012 : Modification of content of the element
27-92-01A Speedbrake Control			00009063.0001001
System (speedbrake control system			
inoperative)			
MO-27-92	В	3	24 Sep 2012 : Modification of content of the element
27-92-01B Speedbrake Control			00009064.0001001
System (speedbrake 2 or			
speedbrakes 3 and 4 inoperative) MO-27-92	В	-	Fff. at it and the The information was also and it at MON 5400
27-92-01B Speedbrake Control	B	4	Effectivity update: The information now also applies to MSN 5429.
System (speedbrake 2 or			
speedbrakes 3 and 4 inoperative)			
MO-27-92	В	5	24 Sep 2012 : Modification of content of the element
27-92-01B Speedbrake Control		٥	00009064.9001002
System (speedbrake 2 or			00003004.3001002
speedbrakes 3 and 4 inoperative)			
MO-27-92	С	6	24 Sep 2012 : Modification of content of the element
27-92-02A Ground Spoiler Control	"	ľ	00009065.0002001
System (Ground spoiler control			000000000000000000000000000000000000000
system inoperative)			
MO-27-92	С	7	Effectivity update: The information now also applies to MSN 5024.
27-92-02A Ground Spoiler Control			Effectivity update: The information now also applies to MSN 5030.
System (Ground spoiler control			Effectivity update: The information now also applies to MSN 5429.
system inoperative)	l		Effectivity update: The information now also applies to MSN 5362.
MO-27-92	С	8	24 Sep 2012 : Modification of content of the element
27-92-02A Ground Spoiler Control		ľ	00009065.0026001
System (Ground spoiler control			
system inoperative)			
MO-27-94	А	1	24 Sep 2012 : Modification of content of the element
27-94-01A SEC 1			00009069.0001001
MO-27-94	Α	2	Effectivity update: The information now also applies to MSN 5429.
27-94-01A SEC 1			
MO-27-94	Α	3	24 Sep 2012 : Modification of content of the element
27-94-01A SEC 1			00009069.9001002
MO-27-94	С	4	24 Sep 2012 : Modification of content of the element
27-94-03A SEC 3			00009071.0001001

HDA A320/A321 FLEET MEL



Localization	Тос	ID	Reason
Title	Index		
MO-27-94	С	5	Effectivity update: The information now also applies to MSN 5429.
27-94-03A SEC 3			
MO-27-94	С	6	24 Sep 2012 : Modification of content of the element
27-94-03A SEC 3			00009071.9001002
MO-28-01-01	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-01-01-07A FUEL MODE SEL			
pb-sw FAULT light			
MO-28-01-01	В	2	04 Sep 2012 : Modification of content of the element
28-01-01-08A ACT pb-sw FAULT			00009080.0001001
light			
MO-28-07-01	В	1	Effectivity update: The information now also applies to MSN 5429.
28-07-01-02A Fuel Quantity			
Indication (FQI) in Degraded Mode			
on the FUEL SD page			
MO-28-07-01	С	2	Effectivity update: The information now also applies to MSN 5429.
28-07-01-03A(C) Outer Tank Fuel			
Quantity Indication on the FUEL SD			
page			
MO-28-07-01	D	3	Effectivity update: The information now also applies to MSN 5429.
28-07-01-04A Inner Tank Fuel			
Quantity Indication on the FUEL SD			
page			
MO-28-07-01	F	4	Effectivity update: The information now also applies to MSN 5429.
28-07-01-05A Center Tank Fuel			
Quantity Indication on the FUEL SD			
page			
MO-28-07-04	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-07-04-04A Wing Transfer Valve			
Indication on the FUEL SD page			
MO-28-09	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-09-01A(B) FUEL L(R)			
INNER(OUTER) TK HI TEMP Alert			
MO-28-09	С	2	Effectivity update: The information now also applies to MSN 5429.
28-09-02A(B) FUEL L(R)			
INNER(OUTER) TK LO TEMP Alert			
MO-28-12	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-12-01A Overpressure Protector			
Between the Inner and the Outer			
Tank (Inner tank fuel temperature			
monitored)			

HDA A320/A321 FLEET MO-PLP-SOH P 5/10



Localization	Тос	ID	Reason
Title	Index		
MO-28-12	В	2	Effectivity update: The information now also applies to MSN 5429.
28-12-01B Overpressure Protector			Effectivity update: The information now also applies to MSN 5362.
Between the Inner and the Outer			
Tank (Transfer valves opened)			
MO-28-15	Α	1	Effectivity update: The information no longer applies to MSN 5429.
28-15-01A(C) LH Wing Transfer			Effectivity update: The information now also applies to MSN 5429.
Valve (At least one transfer valve			
open)			
MO-28-15	Α	2	Update of the operational procedure.
28-15-01A(C) LH Wing Transfer			Documentation update: Deletion of information.
Valve (At least one transfer valve			
open)		<u> </u>	
MO-28-20	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-20-01A Automatic Fuel Feed			
System			
MO-28-20	Α	2	25 Sep 2012 : Modification of content of the element
28-20-01A Automatic Fuel Feed			00009092.0003001
System			
MO-28-20	Α	3	25 Sep 2012 : Modification of content of the element
28-20-01A Automatic Fuel Feed			00009092.0003001
System			
MO-28-21	Α	1	Effectivity update: The information now also applies to MSN 5429.
28-21-02A Center Tank Pump (One			
inoperative)			
MO-28-21	Α	2	25 Sep 2012 : Modification of content of the element
28-21-02A Center Tank Pump (One			00009096.0003001
inoperative)			
MO-28-21	В	3	Effectivity update: The information now also applies to MSN 5429.
28-21-02D Center Tank Pump (Both			
inoperative)			
MO-30-11	Α	1	Effectivity update: The information now also applies to MSN 5429.
30-11-01A Wing Anti-Ice Control			
Valve			
MO-30-21	Α	1	Effectivity update: The information now also applies to MSN 5429.
30-21-01C Engine Anti-Ice Valve			
MO-30-31	Α	1	Effectivity update: The information no longer applies to MSN 0633.
30-31-01B Probe Heat Computer			Effectivity update: The information now also applies to MSN 0633.
(PHC)			
MO-30-31	Α	2	Effectivity update: The information now also applies to MSN 5429.
30-31-01B Probe Heat Computer			
(PHC)			

HDA A320/A321 FLEET MO-PLP-SOH P 6/10 MEL 19 JUL 12



Localization	Тос	ID	Reason
Title	Index		
MO-31-07 31-07-02A Permanent Data (TAT, SAT, GLOAD, UTC, GW) Indications on the SD	В	1	Effectivity update: The information now also applies to MSN 5429.
MO-31-07 31-07-02A Permanent Data (TAT, SAT, ISA, GLOAD, UTC, GW) Indications on the SD	С	2	Effectivity update: The information now also applies to MSN 5024.  Effectivity update: The information now also applies to MSN 5030.
MO-31-56 31-56-07A T.O CONFIG pb on the ECP	A	1	24 Sep 2012: Modification of content of the element 00009033.0001001  The GROUND SPOILERS CHECK ARMED action line replaces SPEED BRAKE lever CHECK RET. This action line was misleading since before takeoff the speed brake lever must be in the retracted position and especially the ground spoilers must be armed.
MO-31-62 31-62-01B DMC 1	А	1	Effectivity update: The information now also applies to MSN 5429.
MO-31-62 31-62-02A DMC 2	В	2	Effectivity update: The information now also applies to MSN 5429.
MO-31-62 31-62-03B DMC 3	С	3	Effectivity update: The information now also applies to MSN 5429.
MO-32-07 32-07-01A(B) Brakes Temperature Indication on the WHEEL SD page	A	1	Effectivity update: The information now also applies to MSN 5429.
MO-32-09 32-09-01C BRAKES-N/WS MINOR FAULT Alert (Alternate braking checked operative)	A	1	Effectivity update: The information now also applies to MSN 5429.
MO-32-32 32-32-03A LGCIU 2 LH L/G Shock Absorber Proximity Detector	В	1	Effectivity update: The information now also applies to MSN 5429.
MO-32-42 32-42-01A Main Wheel Brake	A	1	24 Sep 2012 : Modification of content of the element 00009004.0029001
MO-32-42 32-42-01A Main Wheel Brake	Α	2	Effectivity update: The information now also applies to MSN 5429.
MO-32-42 32-42-01A Main Wheel Brake	А	3	24 Sep 2012 : Modification of content of the element 00009004.0170001
MO-32-42 32-42-02A Green System Brake	В	4	24 Sep 2012 : Modification of content of the element 00009005.9001001
MO-32-42 32-42-02A Green System Brake	В	5	24 Sep 2012 : Modification of content of the element 00009005.9001002
MO-34-01-01 34-01-01-32A IR pb-sw	В	1	Effectivity update: The information now also applies to MSN 5429.

 HDA A320/A321 FLEET
 MO-PLP-SOH P 7/10

 MEL
 19 JUL 12



Localization	Toc	ID	Reason
Title	Index		
MO-34-10	Α	1	Effectivity update: The information now also applies to MSN 5429.
34-10-02B ADR 2			
MO-34-10	С	2	Effectivity update: The information now also applies to MSN 5429.
34-10-04B(C) IR 1 (only NAV mode			
of IR 1 inoperative)			
MO-34-10	D	3	Effectivity update: The information now also applies to MSN 5429.
34-10-05B IR 2 (IR 2 totally			
inoperative)			
MO-34-10	Е	4	Effectivity update: The information now also applies to MSN 5429.
34-10-05C IR 2 (only NAV mode of			
IR 2 inoperative)			
MO-34-10	F	5	Effectivity update: The information now also applies to MSN 5429.
34-10-06A IR 3 (for aircraft without			
Honeywell 10 MCU ADIRU with IR 3			
totally inoperative) MO-34-10	G	6	Effectivity and stor The information ways also applies to MCN F400
34-10-06B IR 3 (for aircraft without	G	٥	Effectivity update: The information now also applies to MSN 5429.
Honeywell 10 MCU ADIRU with only			
NAV mode of IR 3 inoperative)			
MO-34-23	Α	1	Effectivity update: The information now also applies to MSN 5429.
34-23-04B ISIS Attitude Indication	_ ^	l '	Encountry appeare. The information now also applies to work 5425.
MO-52-07	A	1	Effectivity update: The information now also applies to MSN 5429.
52-07-01A Passenger Door	,,	l .	Zhoulvity apacte. The information how also applies to more of Est.
Permanently Indicated Open on			
the DOOR/OXY SD page (SLIDE			
ARMED light operative)			
MO-52-07	С	2	Effectivity update: The information now also applies to MSN 5429.
52-07-01B(C)(D) Passenger Door			
Permanently Indicated Open on			
the DOOR/OXY SD page (SLIDE			
ARMED light may be permanently			
illuminated)	<u></u> _		
MO-52-07	E	3	Effectivity update: The information now also applies to MSN 5429.
52-07-02A(B) Passenger Door			
Permanently Indicated Closed on the			
DOOR/OXY SD page MO-52-07	G	4	Effectivity undeter The information new also applies to MCN 5400
MO-52-07 52-07-03A(B)(C)(D) Overwing	G	4	Effectivity update: The information now also applies to MSN 5429.
Emergency Exit Permanently			
Indicated Open on the DOOR/OXY			
SD page			
F-3-			<u>l</u>

 HDA A320/A321 FLEET
 MO-PLP-SOH P 8/10

 MEL
 19 JUL 12



Localization Title	Toc Index	ID	Reason
MO-52-07 52-07-04A(B) Overwing Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page	Н	5	Effectivity update: The information now also applies to MSN 5429.
MO-52-10 52-10-01A Cabin Passenger Door	Α	1	11 Oct 2012 : Modification of content of the element 20801657.9001001
MO-52-10 52-10-01A Cabin Passenger Door	Α	2	Effectivity update: The information now also applies to MSN 5429.
MO-52-10 52-10-01A Cabin Passenger Door	A	3	11 Oct 2012 : Modification of content of the element 20801657.9001003
MO-52-10 52-10-01A Cabin Passenger Door	A	4	11 Oct 2012 : Modification of content of the element 20801657.9001002  12 Oct 2012 : Modification of content of the element 20801657.9001002
MO-73-20 73-20-04A EPR Control Mode	Α	1	Effectivity update: The information now also applies to MSN 5429.
MO-78-30 78-30-01A Thrust Reverser	Α	1	Effectivity update: The information now also applies to MSN 5429.
MO-78-30 78-30-01A Thrust Reverser	A	2	21 Sep 2012 : Modification of content of the element 20802101.9001003
MO-78-30 78-30-01A Thrust Reverser	А	3	21 Sep 2012 : Modification of content of the element 20802101.9001001
MO-78-30 78-30-01A Thrust Reverser	Α	4	21 Sep 2012 : Modification of content of the element 20802101.9001002

HDA A320/A321 FLEET MO-PLP-SOH P 9/10



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 HDA A320/A321 FLEET
 MO-PLP-SOH P 10/10

 MEL
 19 JUL 12



21 - AIR CONDITIONING 21-09 - ECAM Alerts

21-09-01A <u>VENT</u> BLOWER FAULT Alert

Ident.: MO-21-09-00008895.0001001 / 29 NOV 11

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

Disregard the VENT BLOWER FAULT alert displayed on the EWD.

Disregard the BLOWER pb-sw FAULT light illuminated on the VENTILATION Overhead panel.

*Note:* If the ground horn sounds:

EIS/HORN/SPLY (121VU P09) C/B...... Pull

The C/B must be closed again after first engine start

If the ground horn sounds after landing when engines are off, it can be silenced again. In this case, the ADIRS must be set to OFF before leaving the aircraft.

21-09-02A <u>VENT</u> EXTRACT FAULT Alert

Ident.: MO-21-09-00008896.0001001 / 11 MAR 10

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

Disregard the VENT EXTRACT FAULT alert displayed on the EWD.



#### MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-09 - ECAM Alerts

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HDA A320/A321 FLEET MO-21-09 P 2/2 MEL 29 NOV 11



### MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-23 - Lavatory and Galley Ventilation

21-23-01B Lavatory and Galley Extraction Fan
--

Ident.: MO-21-23-00008830.0002001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### **GENERAL INFORMATION**

Two amber crosses replace the cabin zone temperature indications on the <u>COND</u> SD page . Refer to Item 21-07-03-01 Indications on the <u>COND</u> SD page

The INOP SYS column on the STATUS SD page may display the LAV DET message.

The cabin zone temperature regulation is lost. Therefore, cabin zone temperature is constant (  $15\,^{\circ}\text{C}$  ).

To recover the cockpit temperature regulation:

- HOT AIR pb-sw ......OFF
- Set the COCKPIT selector to control cockpit temperature.

21-23-01B Lavatory and Galley Extraction Fan	
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Ident.: MO-21-23-00008830.0005001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### GENERAL INFORMATION

Two amber crosses replace the cabin zone temperature indications on the  $\underline{\text{COND}}$  SD page . Refer to Item 21-07-03-01 Indications on the COND SD page

The INOP SYS column on the STATUS SD page may display the LAV DET message.

The cabin zone temperature regulation is lost. However the FWD cabin and AFT cabin selectors on overhead AIR COND panel will command duct temperatures.

The cockpit temperature regulation is normal.



#### MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-23 - Lavatory and Galley Ventilation

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 HDA A320/A321 FLEET
 MO-21-23 P 2/2

 MEL
 19 JUL 12



#### 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

#### 21-26-01A

Avionics Blower Fan ( VENT AVNCS SYS FAULT Alert not displayed)

Ident.: MO-21-26-00008831.0001001 / 29 NOV 11

Applicable to: ALL

#### DURING COCKPIT PREPARATION

- Energize the aircraft electrical network.
- Check that the air conditioning correctly operates with both air conditioning packs set to on.
- BLOWER pb-sw ......OVRD
- Check that the VENT AVNCS SYS FAULT and VENT EXTRACT FAULT alerts are not displayed on the EWD.
- If the <u>VENT</u> EXTRACT FAULT alert is displayed on the EWD, the blower fan may be seized. In that case:
  - Contact the maintenance personnel to exchange the blower fan and the extract fan. Only the VENT EXTRACT FAULT alert must then be displayed on the EWD.
  - When the blower and extract fans are exchanged, Refer to Item 21-26-02 Avionics Extract Fan

21-26-01B Avionics Blower Fan (Air con valve checked open before	•
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Ident.: MO-21-26-00009179.0001001 / 29 NOV 11

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

- Energize the aircraft electrical network.
- Check that the air conditioning correctly operates with both air conditioning packs set to on.
- BLOWER pb-sw ......OVRD
- Check that the VENT EXTRACT FAULT alert is not displayed on the EWD
- If the <u>VENT</u> EXTRACT FAULT alert is displayed on the EWD, the blower fan may be seized. In that case:
  - Contact the maintenance personnel to exchange the blower fan and the extract fan. Only the VENT EXTRACT FAULT alert must then be displayed on the EWD.
  - When the blower and extract fans are exchanged, Refer to Item 21-26-02 Avionics Extract Fan



21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

21-26-01C

Avionics Blower Fan (Avionics ventilation system checked before each flight)

Ident.: MO-21-26-00009180.0001001 / 29 NOV 11

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

- Energize the aircraft electrical network.
- Check that air the conditioning correctly operates with both air conditioning packs set to on.
- BLOWER pb-sw ......OVRD
- Check that the VENT EXTRACT FAULT alert is not displayed on the EWD
- After application of the maintenance procedure:

Clear the VENT AVNCS SYS FAULT alert using the CLR pb .

The VENT AVNCS SYS FAULT alert will be displayed after landing

- If the <u>VENT</u> EXTRACT FAULT alert is displayed on the EWD, the blower fan may be seized. In that case:
  - Contact the maintenance personnel to exchange the blower fan and the extract fan.

    Only the VENT EXTRACT FAULT alert must then be displayed on the EWD.
  - When the blower and extract fans are exchanged, Refer to Item 21-26-02 Avionics Extract Fan

Ident.: MO-21-26-00009184.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Time limitation on ground with electrical network supplied:

OAT (°C)	≤ 38	≤ 45	≤ 55
Max time	No limit	3 h	35 min

#### DURING COCKPIT PREPARATION

- Energize the aircraft electrical network.
- Check that the air conditioning correctly operates with both air conditioning packs set to on.
- EXTRACT pb-sw ......OVRD
- Clear the VENT EXTRACT FAULT alert using the CLR pb.
- AVNCS VENT/EXTC/FAN (123VU AE2) C/B ......Pull
- Check that the VENT AVNCS SYS FAULT alert is not displayed on the EWD.

Continued on the following page



#### 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

Continued from the previous page

If the around horn sounds: Note:

EIS/HORN/SPLY (121VU P09) C/B ......Pull

The C/B must be closed again after first engine start

If the ground horn sounds after landing when engines are off, it can be silenced again. In this case, the ADIRS must be set to OFF before leaving the aircraft.

Ident : MO-21-26-00009184 0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Time limitation on ground with electrical network supplied:

OAT (°C)	≤ 38	≤ 45	≤ 55
Max time	No limit	3 h	35 min

#### DURING COCKPIT PREPARATION

- Energize the aircraft electrical network.
- Check that the air conditioning correctly operates with both air conditioning packs set to on.
- EXTRACT pb-sw .......OVRD
- Clear the VENT EXTRACT FAULT alert using the CLR pb.
- AVNCS VENT/EXTC/FAN (123VU AC4) C/B ......Pull
- Check that the VENT AVNCS SYS FAULT alert is not displayed on the EWD.

If the ground horn sounds: Note:

EIS/HORN/SPLY (121VU P09) C/B ......Pull

The C/B must be closed again after first engine start

If the ground horn sounds after landing when engines are off, it can be silenced again. In this case, the ADIRS must be set to OFF before leaving the aircraft.

**HDA A320/A321 FLEET** MO-21-26 P 3/12 MEL ← D



#### 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

21-26-02B	Avionics Extract Fan (Air conditioning inlet
21-20-02D	valve checked open before each flight)

Ident.: MO-21-26-00009185.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Time limitation on ground with electrical network supplied:

OAT (°C)	≤ 38	≤ 45	≤ 55
Max time	No limit	3 h	35 min

#### **DURING COCKPIT PREPARATION**

- Energize the aircraft electrical network.
- Check that the air conditioning correctly operates with both air conditioning packs set to on.
- Clear the VENT EXTRACT FAULT alert using the CLR pb.
- AVNCS VENT/EXTC/FAN (123VU AE2) C/B ......Pull

Note: If the ground horn sounds:

EIS/HORN/SPLY (121VU P09) C/B ......Pull

The C/B must be closed again after first engine start

If the ground horn sounds after landing when engines are off, it can be silenced again. In this case, the ADIRS must be set to OFF before leaving the aircraft.

21-26-02B	Avionics Extract Fan (Air conditioning inlet		
	valve checked open before each flight)		

Ident.: MO-21-26-00009185.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Time limitation on ground with electrical network supplied:

Continued on the following page



#### 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

Continued from the previous page

OAT (°C)	≤ 38	≤ 45	≤ 55
Max time	No limit	3 h	35 min

#### DURING COCKPIT PREPARATION

- Energize the aircraft electrical network.
- Check that the air conditioning correctly operates with both air conditioning packs set to on.
- EXTRACT pb-sw .......OVRD
- Clear the VENT EXTRACT FAULT alert using the CLR pb.
- AVNCS VENT/EXTC/FAN (123VU AC4) C/B ......Pull

Note: If the ground horn sounds:

EIS/HORN/SPLY (121VU P09) C/B ......Pull

The C/B must be closed again after first engine start

If the ground horn sounds after landing when engines are off, it can be silenced again. In this case, the ADIRS must be set to OFF before leaving the aircraft.

21-26-02C	Avionics Extract Fan (Avionics ventilation
21-20-020	system checked before each flight)

Ident.: MO-21-26-00008853.0001001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Time limitation on ground with electrical network supplied:

OAT (°C)	≤ 38	≤ 45	≤ 55
Max time	No limit	3 h	35 min

#### **DURING COCKPIT PREPARATION**

- Energize the aircraft electrical network.
- Check that the air conditioning correctly operates with both air conditioning packs set to on.
- Clear the VENT EXTRACT FAULT alert using the CLR pb.
- AVNCS VENT/EXTC/FAN (123VU AE2) C/B ......Pull

#### After application of the maintenance procedure:

Clear the VENT AVNCS SYS FAULT alert using the CLR pb.

The VENT AVNCS SYS FAULT alert will be displayed after landing.

Continued on the following page



21 - AIR CONDITIONING 21-26 - Avionics Equipment Ventilation

Continued from the previous page

If the around horn sounds: Note: EIS/HORN/SPLY (121VU P09) C/B ......Pull The C/B must be closed again after first engine start If the ground horn sounds after landing when engines are off, it can be silenced again. In this case, the ADIRS must be set to OFF before leaving the aircraft. **Avionics Extract Fan (Avionics ventilation** 21-26-02C system checked before each flight) Ident.: MO-21-26-00008853.0004001 / 29 NOV 11 Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI FLIGHT PREPARATION/LIMITATIONS Time limitation on ground with electrical network supplied: OAT (°C) ≤ 38 ≤ 45 ≤ 55 No limit 3 h 35 min Max time DURING COCKPIT PREPARATION

- Energize the aircraft electrical network.
- Check that the air conditioning correctly operates with both air conditioning packs set to on.
- EXTRACT pb-sw ...... OVRD
- Clear the VENT EXTRACT FAULT alert using the CLR pb.
- AVNCS VENT/EXTC/FAN (123VU AC4) C/B ......Pull

#### • After application of the maintenance procedure:

Clear the VENT AVNCS SYS FAULT alert using the CLR pb.

The VENT AVNCS SYS FAULT alert will be displayed after landing.

Note: If the ground horn sounds:

EIS/HORN/SPLY (121VU P09) C/B ......Pull

The C/B must be closed again after first engine start

If the ground horn sounds after landing when engines are off, it can be silenced again. In this case, the ADIRS must be set to OFF before leaving the aircraft.



#### 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

Ident.: MO-21-26-00008855.0001001 / 11 MAR 10

Applicable to: ALL

#### **ON GROUND**

After application of the maintenance procedure:

Clear the <u>VENT</u> AVNCS SYS FAULT alert displayed on the EWD using the CLR pb. The <u>VENT</u> AVNCS SYS FAULT alert will be displayed after landing.

|--|

Ident.: MO-21-26-00008856.0001001 / 11 MAR 10

Applicable to: ALL

#### ON GROUND

After application of the maintenance procedure:

Clear the VENT AVNCS SYS FAULT alert displayed on the EWD using the CLR pb.

The VENT AVNCS SYS FAULT alert will be displayed after landing.

• If the VENT SKIN VALVE FAULT alert is displayed on the EWD:

Apply the ECAM procedure.

Note: Avionics smok

Avionics smoke may be not perceptible from the cockpit due to the opening of the internal flap of the valve.

In the case of AVIONICS SMOKE alert:

Apply the ECAM procedure even if the smoke is not perceptible.

21.26.054	Avionics Skin Air Inlet Valve (Air
21-26-05A	conditioning inlet valve open on the ground)

Ident.: MO-21-26-00009186.0001001 / 19 JUL 12

Applicable to: ALL

4

#### DURING COCKPIT PREPARATION

- Energize the aircraft electrical network.
- Check that the air conditioning is operating with one or two air conditioning packs set to on.
- EXTRACT pb-sw ......OVR
- Check that the skin air inlet valve is closed on the CAB PRESS SD page.
- Clear the <u>VENT</u> AVNCS SYS FAULT alert displayed on the EWD using the CLR pb.

Continued on the following page



5

### MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

Continued from the previous page

With only one air conditioning pack operative, operating time on ground is limited to 1 h. Note: AFTER TAKEOFF AFTER LANDING EXTRACT pb-sw ......OVRD Avionics Skin Air Inlet Valve (Air conditioning 21-26-05B inlet valve secured in the open position) Ident.: MO-21-26-00008857.0001001 / 19 JUL 12 Applicable to: ALL DURING COCKPIT PREPARATION - Energize the aircraft electrical network. - Check that the air conditioning is operating with one or two air conditioning packs set to on. - EXTRACT pb-sw .......OVRD - Check that the skin air inlet valve is closed on the CAB PRESS SD page. • After application of the maintenance procedure: Clear the VENT AVNCS SYS FAULT alert displayed on the EWD using the CLR pb. The VENT AVNCS SYS FAULT alert will be displayed after landing. Note: With only one air conditioning pack operative, operating time on ground is limited to 1 h. AFTER TAKEOFF EXTRACT pb-sw ......AUTO AFTER LANDING EXTRACT pb-sw ......OVRD



#### 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

21-26-06A	
21-26-06B	

## **Avionics Skin Exchanger Isolation Valve**

Ident.: MO-21-26-00008859.0001001 / 11 MAR 10

Applicable to: ALL

### **ON GROUND**

• After application of the maintenance procedure:

Clear the VENT AVNCS SYS FAULT alert displayed on the EWD using the CLR pb.

21-26-08A	Avionics Air Conditioning Inlet Valve

Ident.: MO-21-26-00008860.0001001 / 11 MAR 10

Applicable to: ALL

#### **ON GROUND**

• After application of the maintenance procedure:

Clear the <u>VENT</u> AVNCS SYS FAULT alert displayed on the EWD using the CLR pb.

21-26-09A	Avionics Ventilation Filter ( <u>VENT</u> AVNCS SYS FAULT Alert not displayed)
-----------	--

Ident.: MO-21-26-00008861.0001001 / 29 NOV 11

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

- Energize the aircraft electrical network.
- Check that the air conditioning is operating with both air conditioning packs set to on.
- EXTRACT pb-sw ......OVRD
- Check that the VENT AVNCS SYS FAULT alert is not displayed on the EWD.

milet valve offended open before each mighty	21-26-09B	Avionics Ventilation Filter (Air conditioning inlet valve checked open before each flight)
--	-----------	--

Ident.: MO-21-26-00009187.0001001 / 29 NOV 11 Applicable to: ALL

### **DURING COCKPIT PREPARATION**

- Energize the aircraft electrical network.
- Check that the air conditioning is operating with both air conditioning packs set to on.
- EXTRACT pb-sw ......OVRD



## MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

Avionics Ventilation Filter (Avionics ventilation system checked before each flight)

Ident.: MO-21-26-00009188.0001001 / 29 NOV 11

Applicable to: ALL

21-26-09C

#### **DURING COCKPIT PREPARATION**

- Energize the aircraft electrical network.
- Check that the air conditioning is operating with both air conditioning packs set to on.
- EXTRACT pb-sw ......OVRD

## • After application of the maintenance procedure:

Clear the <u>VENT</u> AVNCS SYS FAULT alert displayed on the EWD using the CLR pb.

The <u>VENT</u> AVNCS SYS FAULT alert will be displayed after landing.

21-26-10A Avionics Equipment Ventilation Computer (AEVC)

Ident.: MO-21-26-00008862.0001001 / 29 NOV 11

Applicable to: ALL

#### DURING COCKPIT PREPARATION

- Energize the aircraft electrical network.
- Check that the conditioning is operating with both air conditioning packs set to on.
- BLOWER pb-sw ......OVRD
- EXTRACT pb-sw ...... OVRD

Note: If the ground horn sounds:

EIS/HORN/SPLY (121VU P09) C/B ......Pull

The C/B must be closed again after first engine start

If the ground horn sounds after landing when engines are off, it can be silenced again. In this case, the ADIRS must be set to OFF before leaving the aircraft.

<u>Note:</u> In the case of a low pressure in the avionics compartment ventilation ducts, the weather radar image may not be displayed on the ND on ground.

Clear the <u>VENT</u> AVNCS SYS FAULT alert displayed on the EWD using the CLR pb

Continued on the following page



### 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

Continued from the previous page

## **IN FLIGHT**

- In the case of an air conditioning pack failure:
  - The cabin altitude may reach about 9 700 ft (3 000 m), and
  - The <u>CAB PR</u> EXCESS CAB ALT alert may be displayed on the EWD.



# MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-26 - Avionics Equipment Ventilation

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 HDA A320/A321 FLEET
 MO-21-26 P 12/12

 MEL
 19 JUL 12



#### 21 - AIR CONDITIONING

21-28 - Cargo Compartment Ventilation

Ident.: MO-21-28-00008871.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

For livestock transportation refer to Part A 8.1.7.4.

#### 21-28-04A AFT Cargo Isolation Valve (Valves checked closed)

Ident.: MO-21-28-00008874.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

For livestock transportation refer to Part A 8.1.7.4. Notify IOC that cargo heat is inoperative.

#### **DURING COCKPIT PREPARATION**

- Check that the AFT ISOL VALVE pb-sw FAULT light comes on
- ANN LT selector ......BRT or DIM - AFT ISOL VALVE pb-sw ......OFF
- Check that the AFT ISOL VALVE pb-sw FAULT light does not come on.

#### If the AFT ISOL VALVE pb-sw FAULT light comes on: Note:

The AFT cargo isolation valve must be secured in the closed position. Refer to Item 21-28-04B AFT Cargo Isolation Valve

#### 21-28-04B AFT Cargo Isolation Valve (Valves secured closed)

Ident : MO-21-28-00012797 0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

For livestock transportation refer to Part A 8.1.7.4. Notify IOC that cargo heat is inoperative.

Continued on the following page



# MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-28 - Cargo Compartment Ventilation

Continued from the previous page

## **ON GROUND**

• When the AFT cargo isolation valves are secured in the closed position:

The AFT isolation valves are displayed open green on the COND SD page.



MINIMUM EQUIPMENT LIST

## **MEL OPERATIONAL PROCEDURES**

#### 21 - AIR CONDITIONING

21-31 - Pressure Control and Monitoring

21-31-01A	Automatic Cabin Pressure Control System
21-31-01B	(CPC, Outflow Valve AUTO Channel)

Ident.: MO-21-31-00008875.0001001 / 11 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

DITIDING	COCKPIT	DDEDA	DATION
DURING	CUCKPII	PREPA	RAHUN

If CPC 1 is affected:     AIR COND/CAB/PRESS/CTL 1 (49VU D09) C/B	Pull
If CPC 2 is affected:     AIR COND/CAB/PRESS/CTL 2 (122VU Y22) C/B	Pull
<ul> <li>MODE SEL pb-sw</li> <li>On the <u>CAB PRESS</u> SD page, check that the cabin differential pressure, the cabin speed, the cabin altitude, and the outflow valve position are available.</li> </ul>	
- MAN V/S CTL sw On the <u>CAB PRESS</u> SD page, check outflow valve movement.	DN
- MODE SEL pb-sw	AUTO

21-31-01A Automatic Cabin Pressure Control System

21-31-01B

Automatic Cabin Pressure Control System (CPC, Outflow Valve AUTO Channel)

Ident.: MO-21-31-00008875.0002001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## DURING COCKPIT PREPARATION

DURING COCKPIT PREPARATION	
● If CPC 1 is affected: AIR COND/CAB/PRESS/CTL 1 (49VU D09) C/BPu	ıll
If CPC 2 is affected:  AIR COND/CAB/PRESS/CTL 2 (122VU Y22) C/BPu	ıll
- RPCU (122VU X23) C/B	
speed, the cabin altitude, and the outflow valve position are available.  - MAN V/S CTL swD  - On the <u>CAB PRESS</u> SD page, check outflow valve movement.  - RPCU (122VU X23) C/BPus	
` '	

- MODE SEL pb-sw......AUTO



# MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-31 - Pressure Control and Monitoring

21-31-04A Landing Elevation Selection AUTO Function

Ident.: MO-21-31-00008876.0001001 / 11 MAR 10

Applicable to: ALL

#### **BEFORE TAKEOFF**

- Set the LDG ELEV selector on the CABIN PRESS panel at the destination airport altitude.
- On the CAB PRESS SD page, check that the LDG ELEV MAN message is displayed .

21-31-05A Landing Elevation Selection MAN Function

Ident.: MO-21-31-00008877.0001001 / 11 MAR 10

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

On the <u>CAB PRESS</u> SD page, check that the LDG ELEV AUTO message is displayed to confirm correct position of the LDG ELEV selector.

<u>Note:</u> The landing field elevation of the destination airport may not be correctly displayed on the CAB PRESS SD page. It is automatically corrected after first engine start.



21 - AIR CONDITIONING

21-51 - Pack Flow Control

21-51-03A	Pack Flow Sensor

Ident.: MO-21-51-00008886.0001001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **GENERAL INFORMATION**

The hot air pressure regulating valve automatically closes.

The Flow Control Valve on the affected side operates in pneumatic backup mode.

## **DURING COCKPIT PREPARATION**

AIR COND HOT AIR pb-sw ......OFF



## MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-51 - Pack Flow Control

Intentionally left blank

 HDA A320/A321 FLEET
 MO-21-51 P 2/2

 MEL
 19 JUL 12



#### 21 - AIR CONDITIONING

21-52 - Air Cooling System

21-52-01A 21-52-01B 21-52-01D 21-52-01E	Air Conditioning Pack (One Air Conditioning Pack Inoperative for 'C' Repair Interval)
--	--

Ident.: MO-21-52-00008889.0005001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## **DURING COCKPIT PREPARATION**

PACK FLOW pb-sw ......HI

#### IN FLIGHT

2

## • If BLOWER pb-sw and EXTRACT pb-sw are set to OVRD:

- The cabin altitude may reach about 9 700 ft, and
- The CAB PR EXCESS CAB ALT alert may be displayed on the EWD

	21-52-01A 21-52-01B	Air Conditioning Pack (One Air Conditioning
	21-52-01D	Pack Inoperative for 'C' Repair Interval)
ı	21-52-01E	

Ident.: MO-21-52-00008889.0008001 / 19 JUL 12

3 Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

**DURING COCKPIT PREPARATION** 

ECON FLOW pb-sw ......Off

#### IN FLIGHT

## • If BLOWER pb-sw and EXTRACT pb-sw are set to OVRD:

- The cabin altitude may reach about 9 700 ft, and
- The CAB PR EXCESS CAB ALT alert may be displayed on the EWD



21 - AIR CONDITIONING

21-52 - Air Cooling System

21-52-01G

Air Conditioning Pack (One Air Conditioning Pack in Heat Exchanger Cooling Mode only)



#### 21 - AIR CONDITIONING

21-61 - Pack Temperature Control

21-61-02A Pack Controller Primary Channel
---

Ident.: MO-21-61-00008891.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH,

#### **GENERAL INFORMATION**

### • If primary channel is failed:

Pack flow is fixed at the value reached at the time of failure.

## • If primary and secondary channels are failed:

The air conditioning pack outlet temperature is controlled by the anti-ice valve to a nominal value of 15°C.



# MEL OPERATIONAL PROCEDURES 21 - AIR CONDITIONING

21-61 - Pack Temperature Control

Intentionally left blank

HDA A320/A321 FLEET MO-21-61 P 2/2 MEL 29 NOV 11



#### 21 - AIR CONDITIONING

21-63 - Cockpit and Cabin Temperature Control

21-63-01A	

## **Zone Controller Channel (Primary Channel Inoperative)**

Ident.: MO-21-63-00008892.0001001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

I 1

#### DURING COCKPIT PREPARATION

- HOT AIR pb-sw	OFF
-----------------	-----

- On the <u>COND</u> SD page page, check that the hot air pressure regulating valve is closed.

21-63-01C	Zone Controller Channel (Both channels inoperative)	
2 Ident.: MO-21-63-00014514.0001001 / 19 JUL 12 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI		
DUDING GOOKRIT DE		

## DURING COCKPIT PREPARATION

HOT AIR pb-sw ......OFF

21-63-02A	Cockpit and Cabin Trim Air Valve (Affected
21-63-02D	valve secured in the closed position)

Ident.: MO-21-63-00008893.0001001 / 19 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSI, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### **DURING COCKPIT PREPARATION**

When one trim air valve is secured in the closed position:

The zone controller closes all trim air valves and the hot air pressure regulating valve at each power up.

To recover normal operation of the operative valves, apply the following procedure after air conditioning pack start:

- If the <u>COND</u> HOT AIR FAULT alert is displayed on the <u>EWD</u>, reset the following C/B s:
  - AIR COND/ZONE TEMP CTL/115 VAC/SYS 1 (122VU V17) C/B
  - AIR COND/ZONE TEMP CTL/115 VAC/SYS 2 (122VU V18) C/B
  - AIR COND/ZONE TEMP CTL/28 VDC/SYS 1 (122VU V19) C/B
  - AIR COND/ZONE TEMP CTL/28 VDC/SYS 2 (122VU V20) C/B
- If the COND HOT AIR FAULT alert is still displayed on the EWD :

Refer to Item 21-63-03 Hot Air Pressure Regulating Valve

Continued on the following page



#### 21 - AIR CONDITIONING

21-63 - Cockpit and Cabin Temperature Control

Continued from the previous page

IN FLIGHT		
If the affected zone temperature becomes uncomfortable:	:	
HOT AIR pb-sw	OFF	

21-63-02A
21-63-02D

Cockpit and Cabin Trim Air Valve (Affected valve checked closed)

Ident.: MO-21-63-00008893.0002001 / 19 JUL 12

<sup>3</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **DURING COCKPIT PREPARATION**

On the COND SD page page, check that the affected trim air valve is closed.

#### IN FLIGHT

If the affected zone temperature becomes uncomfortable:

HOT AIR pb-sw ......OFF

21-63-02B	Cockpit and Cabin Trim Air Valve (Hot air
21-63-02C	pressure regulating valve checked closed)

Ident.: MO-21-63-00009194.0001001 / 19 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### **DURING COCKPIT PREPARATION**

- HOT AIR pb-sw.....OFF

- On the COND SD page, check that the hot air pressure regulating valve is closed amber.

21-63-02B	Cockpit and Cabin Trim Air Valve (Hot air
21-63-02C	pressure regulating valve checked operative)

Ident.: MO-21-63-00009194.0003001 / 19 JUL 12

5 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **DURING COCKPIT PREPARATION**

- HOT AIR pb-sw......OFF then on

 On the <u>COND</u> SD page, check that the hot air pressure regulating valve follows the HOT AIR pb-sw command.

Continued on the following page



**IN FLIGHT** 

## **MEL OPERATIONAL PROCEDURES**

#### 21 - AIR CONDITIONING

21-63 - Cockpit and Cabin Temperature Control

Continued from the previous page

	HOT AIR po-swOr		
	21-63-03A	Hot Air Pressure Regulating Valve (Hot air pressure valve checked closed)	
	Ident.: MO-21-63-00009195.00010 Applicable to: ALL	01 / 11 MAR 10	
	DURING COCKPIT PREPARATION		
		page page, check that the hot air pressure regulating valve is closed amber.	
	21-63-03B	Hot Air Pressure Regulating Valve (Trim air valve checked closed)	
<b>1</b> 6	Ident.: MO-21-63-00009196.00020		
	6 Applicable to: B-HSO, B-HSP, B-HSR, B-HST, B-HSU  7  GENERAL INFORMATION		
	On the COND SD page, the hot air pressure regulating valve is displayed amber open.		
	DURING COCKPIT PREPARATION		
		OF	
	- On the COND SD page, check that all the trim air valves are closed.		
	21-63-03C	Hot Air Pressure Regulating Valve (Affected valve secured in the closed position)	
	Ident.: MO-21-63-00008894.0001001 / 19 JUL 12 Applicable to: ALL		
	<b>DURING COCKPIT PF</b>	EPARATION	
	HOT AIR pb-sw	OF	

• If affected zone temperature becomes uncomfortable:



21 - AIR CONDITIONING

21-63 - Cockpit and Cabin Temperature Control

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HDA A320/A321 FLEET MO-21-63 P 4/4
MEL 19 JUL 12



22 - AUTO FLIGHT

22-05 - FMA Indications on the PFD

22-05-01B AP Related Indications on the FMA

Ident.: MO-22-05-00008922.0001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

RVSM operations are not permitted.

Maximum landing capability is CAT 1.

22-05-02B A/THR Related Indications on the FMA

Ident.: MO-22-05-20801279.9001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 2.

22-05-03A Approach and Landing Capabilities on the FMA

Ident.: MO-22-05-00008923.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

- When one FMA is affected:

  Maximum landing capability is CAT 2.
- When both FMAs are affected:

  Maximum landing capability is CAT 1.



22-05 - FMA Indications on the PFD

Intentionally left blank

HDA A320/A321 FLEET MO-22-05 P 2/2 MEL 29 NOV 11



22-10 - Autopilot/Flight Director (AP/FD)

22-10-01A 22-10-01B	Autopilot (AP)
22 10 015	

Ident.: MO-22-10-00008897.0001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

■ When one AP is inoperative:

Maximum landing capability is CAT 3 SINGLE.

■ When both APs are inoperative:

RVSM operations are not permitted.

Maximum landing capability is CAT 1.

Ident.: MO-22-10-00008898.0001001 / 04 APR 12

Applicable to: ALL

#### **FOR TAKEOFF**

For a takeoff without FDs:

Refer to FCOM/ No Flight Director Takeoff

22-10-04A	Take-over pb AP Disconnection Function (One inoperative)
-----------	--

Ident.: MO-22-10-00008899.0001001 / 11 MAR 10

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 1.

#### **BEFORE ENGINE START**

- AP 1	On
- Operative take-over pb	Press
- Check that the red AP OFF message is displayed on the EWD.	
- AP 2	On
- Operative take-over pb	Press
- Check that the red AP OFF message is displayed on the EWD.	

Continued on the following page



### 22 - AUTO FLIGHT

22-10 - Autopilot/Flight Director (AP/FD)

Continued from the previous page

#### **BEFORE APPROACH**

### • If the AP is used for approach:

The operative AP disconnect pb must be assigned to the PF.

22-10-04B Take-over pb AP Disconnection Function (Both inoperative)

Ident.: MO-22-10-00008900.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 1.

22-10-05A AUTO LAND light

Ident.: MO-22-10-00008901.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

When both lights are inoperative:

Maximum landing capability is CAT 1.

22-10-06A AP Disengagement Warning

Ident.: MO-22-10-00008902.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

RVSM operations are not permitted. Maximum landing capability is CAT 1.

22-10-07A Sticks and Rudder Pedals Locking Solenoid in AP Mode

Ident.: MO-22-10-00008903.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 2 without autoland.



22-30 - Autothrust

22-30-01A	Autothrust (A/THR)
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Ident.: MO-22-30-00008904.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 2.

#### AFTER ENGINE START

- Press and hold either autothrust instinctive disconnect pb for at least 15 s. The A/THR system is permanently disconnected for the entire flight.
- Check that A/THR INOP SYS is displayed on the STATUS SD page.

All A/THR functions including ALPHA FLOOR protection are lost.

22-30-02A	Autothrust Instinctive Disconnect pb
-----------	--------------------------------------

Ident.: MO-22-30-00008905.0002001 / 29 NOV 11

Applicable to: ALL

The purpose of the procedure is to check the A/THR disconnection via the remaining Instinctive Disconnect pb and via the A/THR pb on the FCU.

#### **AFTER IRS ALIGNMENT**

Disregard alerts during the test. Use the EMER CANCEL pb on the ECAM control panel Note: as necessary.

#### Aircraft configuration for the check via the FMS 1:

-	ENG/FADEC GND PWR 1 and 2	ON
-	Both thrust levers	MCT
_	FD	Off
	AUTO FLT/FMGC/2 (121 VU M17) C/B	
	A/THR	

Check that green SPEED and white A/THR indications appear on the PFD.

- Check that A/THR pb light bars are ON.

Continued on the following page



22-30 - Autothrust

Continued from the previous page

Check of the A/THR disconnection via the remaining Instinctive Disconnect pb:
- A/THR instinctive disconnect pb (non affected autothrust)Push - Check that the A/THR pb light bars are OFF Check that green SPEED and white A/THR indications are no more displayed on the PFD A/THR
Check of the A/THR disconnection via the A/THR pb on the FCU:
- A/THR pb (on the FCU)Off - Check that the A/THR pb light bars are OFF Check that green SPEED and white A/THR indications are no more displayed on the PFD A/THROn
Aircraft configuration for the check via the FMS 2:
- AUTO FLT/FMGC/2 (121VU M17) C/BPush - AUTO FLT/FMGC/1 (49VU B02) C/BPull - Wait 2 min.
Check of the A/THR disconnection via the remaining Instinctive Disconnect pb:
- A/THR instinctive disconnect pb (non affected autothrust)Push - Check that the A/THR pb light bars are OFF Check that green SPEED and white A/THR indications are no more displayed on the PFD A/THROn
Check that the A/THR pb light bars are ON. Check that green SPEED and white A/THR indications are displayed on the PFD.
Check of the A/THR disconnection via the A/THR pb on the FCU:
<ul> <li>A/THR pb (on the FCU)Off</li> <li>Check that the A/THR pb light bars are OFF.</li> <li>Check that green SPEED and white A/THR indications are no more displayed on the PFD.</li> </ul>
- A/THROn  Continued on the following page



22-30 - Autothrust

Continued from the previous page

Restore normal aircraft configuration:

_	A/THR	Off
_	AUTO FLT/FMGC/1 (49VU B02) C/B	Push
	ENG/FADEC GND PWR 1 and 2	
-	Both thrust levers	IDLE
-	RCL pb (on the ECAM control panel)	Push
-	Wait 2 min before using the MCDU and the FD.	

22-30-03A

## **Autothrust Disengagement Warning**

Ident.: MO-22-30-20801284.9001001 / 29 NOV 11

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 2.



22 - AUTO FLIGHT

22-30 - Autothrust

Intentionally left blank

HDA A320/A321 FLEET MEL



22 - AUTO FLIGHT 22-60 - Flight Augmentation (FAC)

22-60-02A	FAC 2
-----------	-------

Ident.: MO-22-60-00008906.0001001 / 11 MAR 10

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

#### **ON GROUND**

 If the <u>AUTO FLT</u> FAC 2 FAULT alert is displayed on the <u>EWD</u> or

## If erroneous speeds are displayed:

- AUTO FLT/FAC 2/28VDC (121VU M19) C/B......Pull
- FAC 2 pb-sw......OFF

22-60-04A	Yaw Damper System
-----------	-------------------

Ident.: MO-22-60-00008907.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.



22 - AUTO FLIGHT

22-60 - Flight Augmentation (FAC)

Intentionally left blank

HDA A320/A321 FLEET MEL



22-70 - Flight Management System (FMS)

22-70-01A	Flight Management System (FMS)
22-70-01B	i light management bystem (i mb)

Ident.: MO-22-70-00008913.0001001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### IN FLIGHT

● In the case of FMS 1+2 failure:

Refer to FCOM/DSC-22\_20-60-130 MCDU Back Up Navigation.



22-70 - Flight Management System (FMS)

Intentionally left blank

 HDA A320/A321 FLEET
 MO-22-70 P 2/2

 MEL
 19 JUL 12



22-81 - Flight Control Unit (FCU) 22-81-01 - Auto Flight Control Panel (FCU)

## Mode Engagement pb (LOC, APPR)

Ident.: MO-22-81-01-20801295.9001001 / 29 NOV 11

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 1.



22 - AUTO FLIGHT 22-81 - Flight Control Unit (FCU)

22-81 - Flight Control Unit (FCU)
22-81-01 - Auto Flight Control Panel (FCU)

Intentionally left blank

HDA A320/A321 FLEET MO-22-81-01 P 2/2 MEL 29 NOV 11



22-83 - Flight Management and Guidance Computer (FMGC)

22-83-01A 22-83-01B

Flight Management and Guidance Computer (FMGC)

Ident.: MO-22-83-00008919.0001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

## **DURING COCKPIT PREPARATION**

	GC 1 is affected: ) FLT/FMGC/1 (49VU B02 or 121VU M16) C/B	Pull
	GC 2 is affected: ) FLT/FMGC/2 (121VU M17) C/B	. Pull
<u>Note:</u>	During IR alignment, when the FMGC 2 is deactivated, IRS IN ALIGN memo can be displayed until the FD 1 is engaged.	not



22-83 - Flight Management and Guidance Computer (FMGC)

Intentionally left blank

HDA A320/A321 FLEET MO-22-83 P 2/2 MEL 29 NOV 11



#### 23 - COMMUNICATIONS

23-01 - Overhead Panels 23-01-01 - RCDR Overhead Panel

23-01-01-31A

RCDR-GND CTL pb-sw (Inoperative in the AUTO position)

Ident.: MO-23-01-01-00008925.0001001 / 11 MAR 10

Applicable to: ALL

### **ON GROUND**

CVR can only be tested through the CVR test pb-sw during the first 5 minutes after supply of the aircraft electrical network.

23-01-01-31B	RCDR-GND CTL pb-sw (Inoperative in the ON position)
--------------	---

Ident.: MO-23-01-01-00009178.0001001 / 11 MAR 10

Applicable to: ALL

#### AFTER LANDING

● To stop CVR recording, if needed:

COM/CVR/SPLY (49 VU E14) C/B......PULL



23 - COMMUNICATIONS

23-01 - Overhead Panels 23-01-01 - RCDR Overhead Panel

Intentionally left blank

HDA A320/A321 FLEET MO-23-01-01 P 2/2 MEL 29 NOV 11



23 - COMMUNICATIONS 23-09 - ECAM Alerts

23-09-01A	COM HF 1(2) EMITTING Alert
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Ident.: MO-23-09-00008969.0001001 / 04 APR 12

Applicable to: ALL

## **GENERAL INFORMATION**

To make troubleshooting easier, Refer to FCOM/PRO-ABN-23 COM VHF 1(2)(3)/HF 1(2) EMITTING.

# **DURING COCKPIT PREPARATION**

● To deactivate the HF1 system, apply: COM HF1 (49 VU HA14) C/B	PULL
or COM NAV/HF1 (121 VU L10) C/B	PULL
To deactivate the HF2 system, apply:  COM NAV/HF2 (121 VU L13) C/B	

23-09-02A	COM VHF 1(2)(3) EMITTING Alert
ZJ-UJ-UZA	

Ident.: MO-23-09-00008970.0001001 / 04 APR 12

Applicable to: ALL

### **GENERAL INFORMATION**

To make troubleshooting easier, Refer to FCOM/ COM VHF 1(2)(3)/HF 1(2) EMITTING (If Installed)

#### DUF

RING COCKPIT PREPARATION	
● To deactivate the VHF1 system, apply: COM/VHF/1 (49 VU G09) C/B	PULL
● To deactivate the VHF2 system, apply: COM NAV/VHF/2 (121 VU L04) C/B	PULL
To deactivate the VHF3 system, apply: COM NAV/VHF/3 (121 VU L05) C/B	PULL



23 - COMMUNICATIONS

23-09 - ECAM Alerts

Intentionally left blank

HDA A320/A321 FLEET MEL



## 23 - COMMUNICATIONS

23-40 - Interphone

23-40-01A	Ground External Horn
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Ident.: MO-23-40-00008960.0001001 / 29 NOV 11

Applicable to: ALL

## **ON GROUND**

• When the aircraft electrical network is supplied:

Monitor the avionics equipment ventilation in the cockpit.

## **BEFORE LEAVING THE AIRCRAFT**

Set the three ADIRS Mode selectors to OFF.

23-40-03A	Flight Crew to Ground Communication System
-----------	--

Ident.: MO-23-40-00008961.0001001 / 29 NOV 11

Applicable to: ALL

#### ON GROUND

Flight crew to establish alternate procedures with ground crew prior to commencing engine start.

23-40-04A	Service Interphone Jack
-----------	-------------------------

Ident.: MO-23-40-00008962.0001001 / 29 NOV 11

Applicable to: ALL

#### ON GROUND

Flight crew to establish alternate procedures with ground crew prior to commencing engine start.



23 - COMMUNICATIONS

23-40 - Interphone

Intentionally left blank

HDA A320/A321 FLEET MEL



23 - COMMUNICATIONS

23-51 - Audio Management

23-51-05A	Cockpit Loudspeaker Volume Control

Ident.: MO-23-51-00008963.0001001 / 29 NOV 11

Applicable to: ALL

# ON GROUND AND IN FLIGHT MEL

At Least one crew member on the flight deck must wear a headset.



23 - COMMUNICATIONS

23-51 - Audio Management

Intentionally left blank

HDA A320/A321 FLEET
MEL



### 23 - COMMUNICATIONS

23-52 - Audio Control Panel (ACP)

23-52-01A	CAPT and F/O ACP

Ident.: MO-23-52-00008964.0001001 / 11 MAR 10

Applicable to: ALL

# **DURING COCKPIT PREPARATION**

To recover the audio channel on the affected side:

AUDIO SWITCHING selector......CAPT 3 (F/O 3)



23 - COMMUNICATIONS

23-52 - Audio Control Panel (ACP)

Intentionally left blank

HDA A320/A321 FLEET MO-23-52 P 2/2 MEL 29 NOV 11



#### 23 - COMMUNICATIONS

23-72 - Cockpit Door Surveillance System (CDSS)

23-72-01-51A	CDSS
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Ident.: MO-23-72-20801323.9001001 / 29 NOV 11

Applicable to: ALL

#### **GENERAL INFORMATION**

Place CDSS system control pb sw on overhead panel to OFF. Flight crew are to adopt alternate company procedures for control of cockpit access as per Part A 10.1.3.3 using cockpit door spyhole and cabin interphone for visual and aural identification. The initial return flight to Hong Kong may be made with the requirement for an additional person in the cockpit waived.

23-72-01-52B	CDSS-Monitor
--------------	--------------

Ident.: MO-23-72-20801324.9001001 / 29 NOV 11

Applicable to: ALL

#### **GENERAL INFORMATION**

Flight crew are to adopt alternate company procedures for control of cockpit access as per Part A 10.1.3.3 using cockpit door spyhole and cabin interphone for visual and aural identification. The initial return flight to Hong Kong may be made with requirement for an additional person in the cockpit waived.

23-72-01-53B	CDSS-Camera
--------------	-------------

Ident.: MO-23-72-20801326.9001001 / 29 NOV 11

Applicable to: ALL

#### GENERAL INFORMATION

Flight crew are to adopt alternate company procedures for control of cockpit access as per Part A 10.1.3.3 using cockpit door spyhole and cabin interphone for visual and aural identification. The initial return flight to Hong Kong may be made with the requirement for an additional person in the cockpit waived.

23-72-01-54A	CDSS-Cabin Ready Function
--------------	---------------------------

Ident.: MO-23-72-20801325.9001001 / 29 NOV 11

Applicable to: ALL

#### **GENERAL INFORMATION**

Refer to Part A 8.3.13.2 Company Procedures for cabin ready notification.



23 - COMMUNICATIONS

23-72 - Cockpit Door Surveillance System (CDSS)

Intentionally left blank

HDA A320/A321 FLEET MO-23-72 P 2/2 MEL 29 NOV 11



#### 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-02 - DEU A

23-73-02-01A	Cabin DEU A
--------------	-------------

Ident.: MO-23-73-02-00009538.0001001 / 11 MAR 10

Applicable to: ALL

## **GENERAL INFORMATION**

On the affected cabin area:

- general cabin illumination is set to full brightness,
- Passenger Call is not available,
- The (No Smoking/Fasten Seat Belt/No Portable Electric Device) Signs are not available.

### **IN FLIGHT**

When return to seat is requested,

or

When seat belts should be fasten,

٥r

When smoking is prohibited,

or

When portable electric device use is prohibited,

Use the passenger address system to alert cabin attendants and passengers.



23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-02 - DEU A

Intentionally left blank

HDA A320/A321 FLEET

MEL



### 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-03 - DEU B

23-73-03-01A	Cabin DEU B
23-73-03-01B	

Ident.: MO-23-73-03-00009539.0001001 / 29 NOV 11

Applicable to: ALL

# **PRE-FLIGHT BRIEFING**

- a. The FA1 is made aware that alternate normal and emergency procedures shall be established for the location of the affected handset and
- b. The FA1 identifies the affected handset location for the appropriate cabin crew member.



23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-03 - DEU B

Intentionally left blank

HDA A320/A321 FLEET MO
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### 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-05 - Cabin Loudspeaker

23-73-05-02A	Lavatory Loudspeaker

Ident.: MO-23-73-05-20801698.9001001 / 29 NOV 11

Applicable to: ALL

## **PRE-FLIGHT BRIEFING**

The FA1 is made aware that alternate normal and emergency procedures shall be established to alert the passenger in the affected lavatory.



23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-05 - Cabin Loudspeaker

Intentionally left blank

HDA A320/A321 FLEET
MEL



### 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-06 - Handset

23-73-06-02A	Cabin Handset

Ident.: MO-23-73-06-20801699.9001001 / 29 NOV 11

Applicable to: ALL

## **PRE-FLIGHT BRIEFING**

- a. The FA1 is made aware that alternate normal and emergency procedures shall be established for the location of the affected handset and
- b. The FA1 identifies the affected handset location for the appropriate cabin crew member.



23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-06 - Handset

Intentionally left blank

HDA A320/A321 FLEET MO-23-73-06 P 2/2 MEL 29 NOV 11



MINIMUM EQUIPMENT LIST

# **MEL OPERATIONAL PROCEDURES**

### 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-07 - Prerecorded Announcement and Music Reproducer (PRAM)

23-73-07-01A

Prerecorded Announcement and Music Reproducer (PRAM)

Ident.: MO-23-73-07-20801700.9001001 / 29 NOV 11

Applicable to: ALL

## **PRE-FLIGHT BRIEFING**

- a. The FA1 is made aware that alternate procedure shall be established to replace the pre-recorded announcements and
- b. Manual safety demonstration must be given if the auto demo is inoperative.



## 23 - COMMUNICATIONS

23-73 - Cabin Intercommunication Data System 23-73-07 - Prerecorded Announcement and Music Reproducer (PRAM)

Intentionally left blank

 HDA A320/A321 FLEET
 MO-23-73-07 P 2/2

 MEL
 29 NOV 11



23 - COMMUNICATIONS

23-74 - Cabin Crew Panel

23-74-01A	FAP Display Unit

Ident.: MO-23-74-00008968.0001001 / 19 JUL 12

<sup>1</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### GENERAL INFORMATION

The cabin lighting may be dimmed through the Additional Attendant Panel (AAP) (If available).

23-74-12A	CIDS Caution Light of the Forward Attendant Panel

Ident.: MO-23-74-00013898.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN

#### **ON GROUND**

- If the DOOR PRESS LOW message is displayed on the PTP status page: Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP
- If the Passenger Door SLIDE PRESS LOW message is displayed on the PTP status page:

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP

● If the Emergency Exit SLIDE PRESS LOW message is displayed on the PTP status page:

Refer to Item 25-62-07 Overwing Emergency Exit Slide Pressure Message on the PTP/FAP

23-74-12A	CIDS Caution Light of the Forward Attendant Panel
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Ident : MO-23-74-00013898 0003001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### ON GROUND

- If the DOOR PRESS LOW message is displayed on the PTP status page: Refer to Item 52-10-06 DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP
- If the Passenger Door SLIDE PRESS LOW message is displayed on the PTP status page:

Refer to Item 25-62-06 Passenger Door Slide Pressure Message on the PTP/FAP



## 23 - COMMUNICATIONS

23-74 - Cabin Crew Panel

23-74-13A Lighting Module of the Forward Attendant Panel

Ident.: MO-23-74-00013897.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## **GENERAL INFORMATION**

The cabin lighting may be dimmed through the Additional Attendant Panel (AAP) (If available).



#### 24 - ELECTRICAL POWER

24-01 - Overhead Panels 24-01-01 - FLFC Overhead Panel

24-01-07A EAT F WIT pb-5W AVAIL light	24-01-01-07A	EXT PWR pb-sw AVAIL light
---------------------------------------	--------------	---------------------------

Ident.: MO-24-01-01-00008971.0001001 / 13 MAR 10

Applicable to: ALL

#### **BEFORE PUSHBACK**

Confirm the external power disconnection either on the ELEC SD page or with the ground crew.

#### **PARKING**

#### If the APU is not available:

- EXT PWR pb-sw......ON

 Confirm the external power connection either on the <u>ELEC</u> SD page or with the ground crew before engine shutdown.

24-01-01-09A	GALLEY pb-sw FAULT light
--------------	--------------------------

Ident.: MO-24-01-01-00008972.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

#### DURING COCKPIT PREPARATION

Check of the galley automatic load shed system:

- Supply the electrical network from the APU or the external power.

- GALLEY pb-sw ......AUTO

- ELEC/GALLEY/GND/FLT/LOGIC (122VU S24) C/B .......Pull

- Check that a part of the operative galley equipment does not operate.

24-01-01-09A GALY & CAB pb-sw FAULT light

Ident : MO-24-01-01-00008972 0002001 / 19 .IUI 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

#### **DURING COCKPIT PREPARATION**

Check of the galley automatic load shed system:

- Supply the electrical network from the APU or the external power.

- GALY & CAB pb-sw ......AUTO

- ELEC/GALY & CAB/GND/FLT/LOGIC (122VU S24) C/B ......Pull

- Check that a part of the operative galley equipment does not operate.

- ELEC/GALY & CAB/GND/FLT/LOGIC (122VU S24) C/B ......Push



24-01 - Overhead Panels 24-01-01 - ELEC Overhead Panel

Intentionally left blank

HDA A320/A321 FLEET MO-24-01-01 P 2/2 MEL 19 JUL 12



24-07 - Indications on the ELEC SD page

24-0	7-01	Α
24-U	<i>1</i> -u i	-

## AC Generation Indications on the ELEC SD page

AC Generation Indications on the ELEC SD page

Ident.: MO-24-07-00008983.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

### **DURING COCKPIT PREPARATION**

Check that GEN 1(2) pb-sw FAULT light is on (with the GEN 1(2) pb-sw in the on position).

Check of the galley automatic load shed system:

- Supply the electrical network from the APU or the external power.
- GALLEY pb-sw ......AUTO
- Check that a part of the operative galley equipment does not operate.
- ELEC/GALLEY/GND/FLT/LOGIC (122VU S24) C/B ......Push

24-07-01A

Ident.: MO-24-07-00008983.0002001 / 19 JUL 12 1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

## DURING COCKPIT PREPARATION

Check that GEN 1(2) pb-sw FAULT light is on (with the GEN 1(2) pb-sw in the on position).

Check of the galley automatic load shed system:

- Supply the electrical network from the APU or the external power.
- GALY & CAB pb-sw ......AUTO
- ELEC/GALY & CAB/GND/FLT/LOGIC (122VU S24) C/B ......Pull
- Check that a part of the operative galley equipment does not operate.
- ELEC/GALY & CAB/GND/FLT/LOGIC (122VU S24) C/B ......Push



24-07 - Indications on the ELEC SD page

Intentionally left blank

 HDA A320/A321 FLEET
 MO-24-07 P 2/2

 MEL
 19 JUL 12



24-09 - ECAM Alerts

24-09-01A	ELEC AC ESS BUS SHED Alert
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Ident.: MO-24-09-00008984.0003001 / 18 MAR 10

Applicable to: ALL

#### **GENERAL INFORMATION**

## When the ELEC AC ESS BUS SHED alert is displayed on the EWD:

- The AC ESS BUS SHED message may appear on the ELEC SD page.
- The CAPT AOA message may be displayed in the INOP SYS column on the STATUS SD page,
- The ELEC/AC BUS/8XP/MONG (49VU H11) C/B may trip.

#### **DURING COCKPIT PREPARATION**

COM/HF1 (49VU HA14) C/B......Pull

## Check of the AC ESS BUS SHED:

- Supply the electrical network from the APU or the external power.
- Check that the CAPT right DU is operative.

#### IN FLIGHT

• If either the <u>ANTI ICE</u> F/O AOA alert or the <u>ANTI ICE</u> F/O PROBES alert is displayed on the EWD, and icing conditions cannot be avoided:

- ADR 2 pb-sw.....OFF

Note: If the ADR 2 pb-sw is set to OFF, takeoff in CONF 1+F is not permitted.

 If either the <u>ANTI ICE</u> STBY AOA alert or the <u>ANTI ICE</u> STBY PROBES alert is displayed on the EWD, and icing conditions cannot be avoided:

ADR 3 pb-sw.....OFF



24-09 - ECAM Alerts

Intentionally left blank

HDA A320/A321 FLEET MO-24-09 P 2/2 MEL 29 NOV 11



24-22 - AC Main Generation

24-22-01A	AC Main Generation (IDG, GCU, Line Contactor)
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Ident.: MO-24-22-00008973.0002001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HTD, B-HTE, B-HTF

### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

APU fuel consumption with APU GEN pb-sw On:

FL	GND	200	250	300	335	390
KG/H	100	63	57	54	49	42

When the External Power is disconnected, the IFE is lost until the APU supplies the Note: electrical network.

### **DURING COCKPIT PREPARATION**

Check of the galley automatic load shed system:

in the disconnected mode.

- Supply the electrical network from the APU or the external power.

- GALLEY pb-swAUTO
- ELEC/GALLEY/GND/FLT/LOGIC (122VU S24) C/B
- Check that a part of the operative galley equipment does not operate.
- ELEC/GALLEY/GND/FLT/LOGIC (122VU S24) C/BPush
AFTER ENGINE START
Check that the electrical busses have power:
- APU MASTER SW pb-swON
- APU GEN pb-swOn
- GEN 1 pb-sw
- GEN 2 pb-swOFF
<ul> <li>On the <u>ELEC</u> SD page, check that all AC busses have power.</li> </ul>
- GEN pb-sw (operative)On
- APU GEN pb-swOFF
- On the ELEC SD page, check that all AC busses have power.
- APU GEN pb-swOn
Note: If necessary, the IDG may be disconnected.
CAUTION For economical reason, the IDG should not operate for more than 50 flight hours

Continued on the following page



#### 24 - ELECTRICAL POWER

24-22 - AC Main Generation

Continued from the previous page

#### IN FLIGHT

- If the SMOKE/FUMES/AVNCS SMOKE QRH's procedure is applied
  - If the GEN 1 is inoperative:

When the GEN 2 is set to OFF, the aircraft reverts to the ELEC EMER configuration.

Apply the ELEC EMER CONFIG procedure of the SMOKE/FUMES/AVNCS SMOKE QRH's procedure.

24-22-01A AC Main Generation (IDG, GCU, Line Contactor)	
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Ident.: MO-24-22-00008973.0005001 / 29 NOV 11

Applicable to: B-HSJ

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

APU fuel consumption with APU GEN pb-sw On:

FL	GND	200	250	300	335	390
KG/H	100	63	57	54	49	42

<u>Note:</u> When the External Power is disconnected, the IFE is lost until the APU supplies the electrical network.

#### **DURING COCKPIT PREPARATION**

Check of the galley automatic load shed system:

- Supply the electrical network from the APU or the external power.
- GALY & CAB pb-sw ......AUTO
- ELEC/GALY & CAB/GND/FLT/LOGIC (122VU S24) C/B ......Pull
- Check that a part of the operative galley equipment does not operate.
- ELEC/GALY & CAB/GND/FLT/LOGIC (122VU S24) C/B ......Push

Continued on the following page



24-22 - AC Main Generation

Continued from the previous page

#### **AFTER ENGINE START**

Check that the electrical busses have power:

<ul> <li>APU MAS<sup>-</sup></li> </ul>	TER SW pb-sw	ON
- APU GEN	pb-sw	On
	-SW	
- GEN 2 pb-	-sw	OFF
	EC SD page, check that all AC busses have power.	
	w (operative)	On
	pb-sw	
- On the ELE	EC SD page, check that all AC busses have power.	
- APU GEN	pb-sw	On
	cessary, the IDG may be disconnected.	
	For economical reason, the IDG should not operate for more than 50 flig in the disconnected mode.	ht hours

### IN FLIGHT

- If the SMOKE/FUMES/AVNCS SMOKE QRH's procedure is applied
  - If the GEN 1 is inoperative:

When the GEN 2 is set to OFF, the aircraft reverts to the ELEC EMER configuration. Apply the ELEC EMER CONFIG procedure of the SMOKE/FUMES/AVNCS SMOKE QRH's procedure.

24-22-01A	AC Main Generation (IDG, GCU, Line Contactor)
-----------	---

Ident : MO-24-22-00008973 0048001 / 19 JUL 12

1 Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

APU fuel consumption with APU GEN pb-sw On:

FL	GND	200	250	300	335	390
KG/H	100	63	57	54	49	42

Note: When the External Power is disconnected, the IFE is lost until the APU supplies the electrical network.

Continued on the following page



24-22 - AC Main Generation

Continued from the previous page

# **DURING COCKPIT PREPARATION**

Check of the	galley automatic load shed system:
- GALY & 0 - ELEC/GA - Check tha	e electrical network from the APU or the external power.  CAB pb-swAUTC  LY & CAB/GND/FLT/LOGIC (122VU S24) C/BPul  It a part of the operative galley equipment does not operate.  LY & CAB/GND/FLT/LOGIC (122VU S24) C/BPush
AFTER ENGIN	<u>E START</u>
Check that the	ne electrical busses have power:
- APU GEN - GEN 1 pb	STER SW pb-sw         ON           I pb-sw         Or           0-sw         OFF
- On the EL	o-swOFF <u>EC</u> SD page, check that all AC busses have power.
- GEN pb-s	w (operative)Or I pb-swOFF
- On the EL	EC SD page, check that all AC busses have power.  I pb-swOr
<u>Note:</u> If ne	ecessary, the IDG may be disconnected.
CAUTION	For economical reason, the IDG should not operate for more than 50 flight hours in the disconnected mode.



24 - ELECTRICAL POWER

24-25 - AC Essential Generation Switching

24-25-01A Manual Transfer to the AC BUS 2 (ALTN Function)

Ident.: MO-24-25-00008974.0001001 / 11 MAR 10

Applicable to: ALL

## **DURING PRELIMINARY COCKPIT PREPARATION**

On the ELEC SD page, check that the AC BUS 1 supplies the AC ESS BUS.

24-25-02A Automatic Transfer to the AC BUS 2

Ident.: MO-24-25-00008976.0001001 / 29 NOV 11

Applicable to: ALL

#### **DURING PRELIMINARY COCKPIT PREPARATION**

On the ELEC SD page, check that the AC BUS 1 supplies the AC ESS BUS.



24-25 - AC Essential Generation Switching

Intentionally left blank

HDA A320/A321 FLEET MO-24-25 P 2/2 MEL 29 NOV 11



MINIMUM EQUIPMENT LIST

## MEL OPERATIONAL PROCEDURES 24 - ELECTRICAL POWER

24-26 - Galley and Commercial Supply System

24-26-02B

2 **A** 

GALY & CAB Manual Load Shed System (GALY & CAB pb-sw)

Ident.: MO-24-26-00008979.0002001 / 19 JUL 12

Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

## ON GROUND OR IN FLIGHT

- If the AVNCS SMOKE emergency procedure is applied or if the <u>AVIONICS SMOKE</u> alert is displayed on the EWD replace the action to set the GALY & CAB pb-sw to OFF by the following actions:
  - EMER EXIT LT selector......As required
  - COMMERCIAL pb-sw.....OFF

Note: When the COMMERCIAL pb-sw is set to OFF, the normal cabin lighting goes off.

Minimum cabin lighting is recovered when the EMER EXIT LT selector is set to ON.

Commercial Supply System		
ent.: MO-24-26-00008980.0001001 / 19 JUL 12 oplicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI		
<u>LIGHT</u>		
MOKE emergency procedure is applied or if the <u>AVIONICS SMOKE</u> alert the EWD replace the action to set the COMMERCIAL pb-sw to OFF by tions:		
he F/O NDU, and the ECAM lower display are lost.		
e persists: o-sw		
g gear extension:		
On N 2 pb-sw is set to on, all the electrical busses are recovered but the TR 2 prative		



24-26 - Galley and Commercial Supply System

Intentionally left blank

HDA A320/A321 FLEET MO-24-26 P 2/2 MEL 19 JUL 12



## MEL OPERATIONAL PROCEDURES 24 - ELECTRICAL POWER

24-32 - DC Main Generation (TR 1, TR 2)

24-32-01A	DC Main Generation (TR 1 inoperative)
	,

Ident.: MO-24-32-00008981.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

#### **DURING PRELIMINARY COCKPIT PREPARATION**

TR 1/CNTOR/SPLY (125VU CF01) C/B......Pull On the <u>ELEC</u> SD page, check that the TR 2 and the ESS TR voltages are both equal to or above 27 V.

On the battery voltage indicator, check that the BAT 1 and the BAT 2 voltages are both equal to or above 25.5 V

The batteries must be set to OFF during this check.

24-32-01B DC Main Generation (TR 2 inoperative)

Ident.: MO-24-32-00009495.0001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

#### **DURING PRELIMINARY COCKPIT PREPARATION**

On the battery voltage indicator, check that the BAT 1 and the BAT 2 voltages are both equal to or above 25.5 V.

The batteries must be set to OFF during this check.

AC ESS FEED pb-sw......ALTN

#### IN FLIGHT

• In the case of failure of the AC BUS 2, all DUs are lost. In this case:

AC ESS FEED pb-sw.....Norm

In the case of failure of the AC BUS 1:

RAT MAN ON pb-sw (on HYD overhead panel)......Set



# MEL OPERATIONAL PROCEDURES 24 - ELECTRICAL POWER

24-32 - DC Main Generation (TR 1, TR 2)

Intentionally left blank

HDA A320/A321 FLEET MO-24-32 P 2/2 MEL 29 NOV 11



### 24 - ELECTRICAL POWER

24-38 - DC Battery Generation

24-38-02A	Battery Charger Limiter (BCL)
-----------	-------------------------------

Ident.: MO-24-38-00008982.0001001 / 29 NOV 11

Applicable to: ALL

# FLIGHT PREPARATION/LIMITATIONS

Do not use the APU.

Use a ground power unit to start the engines on ground.

# **DURING PRELIMINARY COCKPIT PREPARATION**

I If BAT 1 is affected:	
BAT 1 pb-sw	OF
·	
I If BAT 2 is affected:	
BAT 2 pb-sw.	OF!



# MEL OPERATIONAL PROCEDURES 24 - ELECTRICAL POWER

24-38 - DC Battery Generation

Intentionally left blank

HDA A320/A321 FLEET MO-24-38 P 2/2 MEL 29 NOV 11



25 - EQUIPMENT/FURNISHINGS

25-07 - Indications on the DOOR/OXY SD page

25-07-01A	Passenger Door Slide Permanently Indicated Armed
-----------	--

Ident.: MO-25-07-20801961.9001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### ON GROUND

Cabin crew must confirm before each flight that the associated slide is armed.

25-07-01A	Cabin Passenger Door/Emergency Exit Slide Permanently Indicated Armed

Ident.: MO-25-07-20801961.9001002 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### ON GROUND

Cabin crew must confirm before each flight that the associated slide is armed.

25-07-02A	Passenger Door Slide Permanently Indicated Not Armed
	,

Ident.: MO-25-07-20801962.9001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### ON GROUND

Cabin crew must confirm before each flight that the associated slide is armed.

Slide Permanently Indicated Not Armed	25-07-02A	Cabin Passenger Door/Emergency Exit Slide Permanently Indicated Not Armed
---------------------------------------	-----------	---

Ident.: MO-25-07-20801962.9001002 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### ON GROUND

Cabin crew must confirm before each flight that the associated slide is armed.



25 - EQUIPMENT/FURNISHINGS

25-07 - Indications on the DOOR/OXY SD page

Intentionally left blank

 HDA A320/A321 FLEET
 MO-25-07 P 2/2

 MEL
 19 JUL 12



25-11 - Pilot Seats

25-11-07A	Pilot Seat Fifth Strap

Ident.: MO-25-11-20802037.9001001 / 29 NOV 11

Applicable to: ALL

# **DURING FLIGHT**

To cope with any potential turbulence situation:

The crewmember of the affected seat must tightly fasten the operative harness straps.



25-11 - Pilot Seats

Intentionally left blank

HDA A320/A321 FLEET MO-25-11 P 2/2 MEL 29 NOV 11



## 25 - EQUIPMENT/FURNISHINGS

25-12 - Third and Fourth Occupant Seats

25-12-04A	Third Occupant Seat Fifth Strap
-----------	---------------------------------

Ident.: MO-25-12-20802038.9001001 / 29 NOV 11

Applicable to: ALL

## **DURING FLIGHT**

To cope with any potential turbulence situation:

The third occupant must tightly fasten the operative harness straps.

25-12-08A	Fourth Occupant Seat Fifth Strap
-----------	----------------------------------

Ident.: MO-25-12-20802039.9001001 / 29 NOV 11

Applicable to: ALL

## **DURING FLIGHT**

To cope with any potential turbulence situation:

The fourth occupant must tightly fasten the operative harness straps.



25 - EQUIPMENT/FURNISHINGS

25-12 - Third and Fourth Occupant Seats

Intentionally left blank

HDA A320/A321 FLEET MO-25-12 P 2/2 MEL 29 NOV 11



25-20 - Cabin Seats

25-20-03B	Cabin Attendant Seat

Ident.: MO-25-20-00009017.0001001 / 29 NOV 11

Applicable to: ALL

# **FLIGHT PREPARATION/LIMITATIONS**

Refer to Operations Manual Vol 7.5.1 Inoperative Cabin Attendant Seats for Cabin Crew Procedures.



25-20 - Cabin Seats

Intentionally left blank

HDA A320/A321 FLEET MO-25-20 P 2/2 MEL 29 NOV 11



25-35 - Galley Equipment

25-35-01A	Galley Waste Compartment Flapper Door
-----------	---------------------------------------

Ident.: MO-25-35-20801725.9001002 / 29 NOV 11

Applicable to: ALL

## **PRE-FLIGHT BRIEFING**

Ensure that the FA1 is aware to check that sufficient galley waste receptacles are available to accommodate all waste that may be generated on a flight.



25-35 - Galley Equipment

Intentionally left blank

HDA A320/A321 FLEET MO-25-35 P 2/2 MEL 29 NOV 11



25-40 - Lavatories

25-40-01A Toilet Waste Compartment Flapper Door

Ident.: MO-25-40-00009019.9001001 / 29 NOV 11

Applicable to: ALL

## **PRE-FLIGHT BRIEFING**

Ensure that the FA1 is aware to check that sufficient galley waste receptacles are available to accommodate all waste that may be generated on a flight.



25-40 - Lavatories

Intentionally left blank

HDA A320/A321 FLEET MO-25-40 P 2/2 MEL 29 NOV 11



**25 - EQUIPMENT/FURNISHINGS** 25-63 - Evacuation Signaling Equipment

Emergency Evacuation Signaling System (COMMAND pb-sw, HORN SHUT OFF pb, CAPT&PURS and CAPT sw)

Ident.: MO-25-63-00009020.0001001 / 29 NOV 11

Applicable to: ALL

25-63-01A

## **GENERAL INFORMATION**



25 - EQUIPMENT/FURNISHINGS

25-63 - Evacuation Signaling Equipment

Intentionally left blank

HDA A320/A321 FLEET MO-25-63 P 2/2 MEL 29 NOV 11



#### 26 - FIRE PROTECTION

26-15 - Avionics Compartment Smoke Detection

26-15-01A	Avionics Smoke Detection System
	<u>-</u>

Ident.: MO-26-15-00009025.0001001 / 19 JUL 12

Applicable to: ALL

1

## ON GROUND OR IN FLIGHT

## Disregard:

- on the VENTILATION overhead panel: the BLOWER pb-sw FAULT light, the EXTRACT pb-sw FAULT light, and the CAB FANS pb-sw FAULT light
- on the EMER ELEC PWR overhead panel: the GEN 1 LINE pb-sw SMOKE light

### IN FLIGHT

## In the case of an electrical smoke:

Apply the AVNCS SMOKE emergency procedure. *Refer to QRH/ABN-26-Fire Protection-A.SMOKE/FUMES/AVNCS SMOKE*.



26 - FIRE PROTECTION

26-15 - Avionics Compartment Smoke Detection

Intentionally left blank

 HDA A320/A321 FLEET
 MO-26-15 P 2/2

 MEL
 19 JUL 12



## 26 - FIRE PROTECTION

26-17 - Lavatory Smoke Detection

26-17-01A	Lauratama Comadra Data atlan Constant
26-17-01B	Lavatory Smoke Detection System

Ident.: MO-26-17-00009028.0001001 / 29 NOV 11

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

Refer to Operations Manual Volume 7.3.1 (Fire and Smoke Protection).



**26 - FIRE PROTECTION** 26-17 - Lavatory Smoke Detection

Intentionally left blank

HDA A320/A321 FLEET MO-26-17 P 2/2 MEL 29 NOV 11



## 26 - FIRE PROTECTION

26-25 - Lavatory Fire Extinguishing

26-25-01A Lavatory Waste Bin Fire Extinguishing System
--

Ident.: MO-26-25-20801703.9001001 / 29 NOV 11

Applicable to: ALL

# FLIGHT PREPARATION/LIMITATIONS

Refer to Operations Manual Volume 7.3.1 (Fire and Smoke Protection).



26 - FIRE PROTECTION

26-25 - Lavatory Fire Extinguishing

Intentionally left blank

HDA A320/A321 FLEET MO-26-25 P 2/2 MEL 29 NOV 11



#### 27 - FLIGHT CONTROLS

27-07 - Indications on SD pages

Allerent estates indication on the 17012 of page	27-07-02A	Aileron Position Indication on the F/CTL SD page
--	-----------	--

Ident.: MO-27-07-00009073.0001001 / 17 SEP 10

Applicable to: ALL

### **DURING COCKPIT PREPARATION**

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

## Check of the aileron control through the ELACs:

## Put the aircraft in the test configuration:

-	YELLOW ELEC PUMP pb-sw	ON
	PTU pb-sw	
	BLUE ELEC PUMP pb-sw	
	BLUE PUMP OVRD pb	
	ELAC 1 pb-sw	
	FLAC 2 nh-sw	

### Check of the aileron control through the ELAC 1:

- Move the CAPT stick from right stop to left stop.
- Visually check the full travel of the ailerons.

CAUTION	If the expected aileron movement does not occur, do not attempt any
	reset.
	Contact the maintenance.

# Check of the aileron control through the ELAC 2:

- ELAC 1 pb-sw......OFF
- Move the CAPT stick from right stop to left stop, then from forward stop to aft stop.
- Visually check the full travel of the ailerons.

CAUTION	If the expected aileron movement does not occur, do not attempt any
	reset.
	Contact the maintenance.

### Return to normal configuration:

Continued on the following page



## 27 - FLIGHT CONTROLS

27-07 - Indications on SD pages

- YELLOW ELEC PUMP pb-sw.....Off
- BLUE PUMP OVRD pb-sw.....Off
- ELAC 1 pb-sw.....On

27-07-04A

Elevator Position Indication on the F/CTL SD page

Ident.: MO-27-07-00009074.0001001 / 17 SEP 10

Applicable to: ALL

## **DURING COCKPIT PREPARATION**

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

- YELLOW ELEC PUMP pb-sw......ON

## Check of the elevator control:

-	PTU pb-sw	AUTO
-	BLUE ELEC PUMP pb-sw	AUTO
-	BLUE PUMP OVRD pb	ON
-	Establish communication with the ground crew.	
-	Move the CAPT or the F/O stick to the maximum nose down position.	
-	Visually check that both elevators move down.	
-	Move the CAPT or the F/O stick to the maximum nose up position.	
-	Visually check that both elevators move up.	
-	Move the CAPT or the F/O stick to the neutral position.	
-	Visually check that both elevators go back to the neutral position.	
-	YELLOW ELEC PUMP pb-sw	Off
	BLUE PUMP OVRD ph-sw	Off



#### 27 - FLIGHT CONTROLS

27-07 - Indications on SD pages

#### 27-07-05A

# Pitch Trim Position Indication on the F/CTL SD page

Ident.: MO-27-07-00009075.0001001 / 17 SEP 10

Applicable to: ALL

#### DURING COCKPIT PREPARATION

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

### Check of the stabilizer control:

- YELLOW ELEC PUMP pb-sw......ON
- Establish communication with the ground crew.
- Move the pitch trim handwheel to the full DN position.
- Visually check that the stabilizer moves to the full down position.
- Move the pitch trim handwheel to the full UP position.
- Visually check that the stabilizer moves to the full up position.
- Move the pitch trim handwheel to the required position.
- YELLOW ELEC PUMP pb-sw......Off

#### 27-07-06A

## Rudder Position Indication on the F/CTL SD page

Ident.: MO-27-07-00009076.0001001 / 29 NOV 11

Applicable to: ALL

#### DURING COCKPIT PREPARATION

If the Yellow Electric Pump is not available: Note:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

Continued on the following page



## 27 - FLIGHT CONTROLS

27-07 - Indications on SD pages

Continued from the previous page

Check	of	the	rudder	control:
-------	----	-----	--------	----------

- Establish communication with the ground crew.
- YELLOW ELEC PUMP pb-sw ......ON
- On the CAPT or the F/O side, apply left rudder.
- Visually check that the rudder moves to the left.
- On the CAPT or the F/O side, apply right rudder.
- Visually check that the rudder moves to the right.
- On the CAPT or the F/O side, release the pedals.
- Visually check that the rudder moves to the neutral position.
- YELLOW ELEC PUMP pb-sw .......Off

27-07-11A

## Spoilers/Speedbrakes Indication on the F/CTL SD page

Ident.: MO-27-07-00009077.0001001 / 17 SEP 10

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

# If surface 1 indication is inoperative:

CAUTION	The aircraft must be stopped during the check.	
- PTU pb-sw	LEC PUMP pb-sw	AUTO
<ul><li>Visually che</li><li>YELLOW E</li></ul>	eck that surface 1 slightly extends (approximately 6 LEC PUMP pb-sw	6°).
- BLUE ELEC	dication is inoperative:  C PUMP pb-sw P OVRD pb-sw	
<ul> <li>Move the st</li> <li>Visually che</li> </ul>	ick from left stop to right stop. ck the correct movement of surface 3.	
- BLUE PUN	P OVRD pb-sw	Off Continued on the following page



## 27 - FLIGHT CONTROLS

27-07 - Indications on SD pages

Continued from the previous page

27-07-12A

Spoilers/Speedbrakes Indication on the WHEEL SD page

Ident.: MO-27-07-00009078.0001001 / 17 SEP 10

Applicable to: ALL

## **DURING COCKPIT PREPARATION**

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

# If surface 1 indication is inoperative:

V ELEC PUMP pb-
V LLLO I OIVII PD
sw
BRAKES lever
V ELEC PUMP pb-
indication is ino
LEC PUMP pb-sw.
UMP OVRD pb-sw
e stick from left stop
check the correct n
UMP OVRD pb-sw
•
1 slightly extends (approximately sw

HDA A320/A321 FLEET MO-27-07 P 5/6
MEL ← E to F → 29 NOV 11



## 27 - FLIGHT CONTROLS

27-07 - Indications on SD pages

	Continued from the previous page
If surface 2, 4, or 5 indication is inoperative:	
- YELLOW ELEC PUMP pb-sw	
- PTU pb-sw	AUTC
<ul> <li>Move the stick from left stop to right stop and visually check the surfaces 2, 4 and 5.</li> </ul>	
- YELLOW ELEC PUMP pb-sw	Of



#### 27 - FLIGHT CONTROLS

27-14 - Aileron and Hydraulic Actuation

#### 27-14-01A

## Left Aileron Blue Servo-Control (Controlled by ELAC 1)

Ident.: MO-27-14-20802046.9001001 / 29 NOV 11

Applicable to: ALL

## **DURING COCKPIT PREPARATION**

Check that DC TIE contactor 1 is closed:

- Supply the electrical network from the APU or the external power.
- On the ELEC SD page, check the link between the DC BUS 1 and the DC BAT BUS.

27-14-03A

Right Aileron Green Servo-Control (Controlled by ELAC 1)

Ident.: MO-27-14-20802047.9001001 / 29 NOV 11

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

Check that DC TIE contactor 1 is closed:

- Supply the electrical network from the APU or the external power.
- On the ELEC SD page, check the link between the DC BUS 1 and the DC BAT BUS.



27-14 - Aileron and Hydraulic Actuation

Intentionally left blank

HDA A320/A321 FLEET MO-27-14 P 2/2 MEL 29 NOV 11



27-21 - Rudder Mechanical Control

27-21-01A	Rudder Pedal Adjustment System
-----------	--------------------------------

Ident.: MO-27-21-00009040.0001001 / 20 MAR 10

Applicable to: ALL

## **DURING COCKPIT PREPARATION**

Simultaneously apply loads on both pedals (in rudder control movement direction) to make sure that the secured position is reached. For that purpose, the effort shall be equivalent to a full rudder deflection.



27-21 - Rudder Mechanical Control

Intentionally left blank

HDA A320/A321 FLEET MO-27-21 P 2/2 MEL 29 NOV 11



27 - FLIGHT CONTROLS

27-22 - Rudder Trim Actuation

Ident.: MO-27-22-00009043.0001001 / 11 MAR 10

Applicable to: ALL

# FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.



27-22 - Rudder Trim Actuation

Intentionally left blank

HDA A320/A321 FLEET MO-27-22 P 2/2 MEL 29 NOV 11



27-40 - Trimmable Horizontal Stabilizer (THS)

27-40-02B	Stabilizer Actuator Electric Motor
-----------	------------------------------------

Ident.: MO-27-40-20801510.9001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.



27-40 - Trimmable Horizontal Stabilizer (THS)

Intentionally left blank

HDA A320/A321 FLEET MO-27-40 P 2/2 MEL 29 NOV 11



27 - FLIGHT CONTROLS

27-51 - Flaps Electrical Control and Monitoring

27-51-01A	SFCC Flap Channel
-----------	-------------------

Ident.: MO-27-51-00009044.0001001 / 11 MAR 10

Applicable to: ALL

### **GENERAL INFORMATION**

ENG 2 APPR IDLE ONLY message is displayed on the <u>STATUS</u> SD page.

FLAPS SLOW message is displayed on the STATUS SD page.

#### **DURING COCKPIT PREPARATION**

Disregard and clear the F/CTL FLAP SYS 2 FAULT alert displayed on the EWD.

27-51-02A	SFCC Slat Channel

Ident.: MO-27-51-00009045.0001001 / 29 NOV 11

Applicable to: ALL

#### **GENERAL INFORMATION**

SLATS SLOW message is displayed on the STATUS SD page.

Note: Takeoff in CONF 1 + F is not allowed.

#### **DURING COCKPIT PREPARATION**

Disregard and clear the F/CTL SLAT SYS 2 FAULT alert displayed on the EWD.



27-51 - Flaps Electrical Control and Monitoring

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HDA A320/A321 FLEET MO-27-51 P 2/2 MEL 29 NOV 11



#### 27 - FLIGHT CONTROLS

27-64 - Spoiler Hydraulic Actuation

27-64-01A	Spoiler 5
-----------	-----------

Ident.: MO-27-64-00009046.0001001 / 12 MAR 10

Applicable to: ALL

#### **AFTER ENGINE START**

On the HYD SD page, check the absence of amber data.

Note: No performance penalty applies when the pair of spoilers 5 is inoperative.

27-64-02A Spoiler 1 or 3

Ident.: MO-27-64-00009048.0013001 / 19 JUL 12

Applicable to: ALL

1

### FLIGHT PREPARATION/LIMITATIONS

After engines start, check on ECAM HYD SD page the absence of amber data.

Performance penalty with one pair of ground spoilers inoperative:

Takeoff performance:

Input ACARS RTOW MEL code: 27-64-02A

Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL01

or

Multiply the required landing distance by 1.05.

27-64-03A Spoiler 2 or 4

Ident.: MO-27-64-00009051.0001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

After engines start, check on ECAM HYD SD page the absence of amber data.

Performance penalty with one pair of ground spoilers inoperative:

Takeoff performance:

Input ACARS RTOW MEL code: 27-64-03A

Landing performance:



27-64 - Spoiler Hydraulic Actuation

Continued from the previous page

Input ACARS LANDING FAIL CODE: F/CTL01

or

Multiply the required landing distance by 1.10.

27-64-04A	Spoilers 1 and 2	
dent.: MO-27-64-00009055.0003001 / 19 JUL 12 Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI		
FLIGHT PREPARAT	ION/LIMITATIONS	
	OFF ROLS/SEC3/SPLY (121VU Q19) C/BPULL	
Performance penal	ty with two pairs of ground spoiler inoperative:	
Takeoff performand Input ACARS F	<u>ce:</u> RTOW MEL code: 27-64-04A	
Landing performan Input ACARS L	<u>ce:</u> ANDING FAIL CODE : F/CTL03	
or Multiply the red	quired landing distance by 1.10.	
In flight:		
• In the case of	further feiture of SEC 1 and SEC 2	

#### In the case of further failure of SEC 1 and SEC 2:

- AUTOLAND IS NOT ALLOWED.
- DISENGAGE AP at 500 ft RA before landing in DIRECT LAW.

<u>Note:</u> As soon as AP is disengaged when the three SECs are failed, it cannot be engaged again.

- Maximum landing capability is CAT 1



27 - FLIGHT CONTROLS

27-64 - Spoiler Hydraulic Actuation

27-64-04A Spoilers 1 and 2
----------------------------

Ident.: MO-27-64-00009055.0024001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

- SEC 3......OFF

- FLIGHT CONTROLS/SEC3/SPLY (121VU Q19) C/B ...... PULL

Performance penalty with two pairs of ground spoiler inoperative:

Takeoff performance:

Input ACARS RTOW MEL code: 27-64-04A

Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL03

or

Multiply the required landing distance by 1.10.

#### In flight:

5

- In the case of further failure of SEC 1 and SEC 2:
  - AUTOLAND IS NOT ALLOWED.
  - DISENGAGE AP at 500 ft RA before landing in DIRECT LAW.

<u>Note:</u> As soon as AP is disengaged when the three SECs are failed, it cannot be engaged again.

- Maximum landing capability is CAT 1

27-64-05A Spoilers 3 and 4	
----------------------------	--

Ident.: MO-27-64-00009058.0001001 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

DO NOT USE SPD BRK.

Takeoff performance:

Input ACARS RTOW MEL code: 27-64-05A

Landing performance:

Continued on the following page

HDA A320/A321 FLEET MO-27-64 P 3/4
MEL ← D to E → 19 JUL 12



#### 27 - FLIGHT CONTROLS

27-64 - Spoiler Hydraulic Actuation

Continued from the previous page

Input ACARS LANDING FAIL CODE: F/CTL03

or

Multiply the required landing distance by 1.10.

For DC TIE contactor 1 operation:

Check on ECAM ELEC SD page for the green link between DC BUS 1 and DC BAT BUS.

27-64-05A Spoilers 3 and 4

Ident.: MO-27-64-00009058.9001002 / 19 JUL 12

6 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### FLIGHT PREPARATION/LIMITATIONS

DO NOT USE SPD BRK.

Takeoff performance:

Input ACARS RTOW MEL code: 27-64-05A

Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL03

or

Multiply the required landing distance by 1.10.

For DC TIE contactor 1 operation:

Check on ECAM ELEC SD page for the green link between DC BUS 1 and DC BAT BUS.



27 - FLIGHT CONTROLS

27-92 - Electrical Flight Control System (EFCS) Control Inputs and Power Supply

27-92-01A

Speedbrake Control System (speedbrake control system inoperative)

Ident.: MO-27-92-00009063.0001001 / 19 JUL 12

Applicable to: ALL

1 FLIGHT PREPARATION/LIMITATIONS

Takeoff performance:

Input ACARS RTOW MEL code: 27-92-01A

Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL06

or

Multiply the required landing distance by 1.15.

27-92-01B

Speedbrake Control System (speedbrake 2 or speedbrakes 3 and 4 inoperative)

Ident.: MO-27-92-00009064.0001001 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### FLIGHT PREPARATION/LIMITATIONS

If speedbrake n°2 is inoperative:

Takeoff performance:

For performance penalties, Refer to OpsProc 27-64-03A Spoiler 2 or 4

Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL01

or

Multiply the required landing distance by 1.05.

If speedbrakes n°3 and n°4 are inoperative:

DO NOT USE SPD BRK.

Takeoff performance:

For performance penalties, Refer to OpsProc 27-64-05A Spoilers 3 and 4

Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL03

or

Continued on the following page

MEL A to B  $\rightarrow$ 



27-92 - Electrical Flight Control System (EFCS) Control Inputs and Power Supply

Continued from the previous page

Multiply the required landing distance by 1.10.

27-92-01B Speedbrake Control System (speedbrake 2 or speedbrakes 3 and 4 inoperative)

Ident.: MO-27-92-00009064.9001002 / 19 JUL 12

4 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 5 FLIGHT PREPARATION/LIMITATIONS

• If speedbrake n°2 is inoperative:

#### Takeoff performance:

For performance penalties, Refer to OpsProc 27-64-03A Spoiler 2 or 4

#### Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL01

or

Multiply the required landing distance by 1.05.

#### • If speedbrakes n°3 and n°4 are inoperative:

DO NOT USE SPD BRK.

#### Takeoff performance:

For performance penalties, Refer to OpsProc 27-64-05A Spoilers 3 and 4

#### Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL03

or

Multiply the required landing distance by 1.10.

27-92-02A	Ground Spoiler Control System (Ground
LI SE SEA	spoiler control system inoperative)

Ident.: MO-27-92-00009065.0002001 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### **GENERAL INFORMATION**

The autobrake function is not available. Refer to OpsProc 32-42-05A AUTO/BRK Function

Continued on the following page

HDA A320/A321 FLEET MO-27-92 P 2/4
MEL ← B to C → 19 JUL 12



27-92 - Electrical Flight Control System (EFCS) Control Inputs and Power Supply

Continued from the previous page

CAUTION	One or both thrust reversers may not deploy at landing. Consequently, for performance determination, do not take into account the credit of the thrust
	reversers.

#### FLIGHT PREPARATION/LIMITATIONS

Takeoff performance:

Input ACARS RTOW MEL code: 27-92-02A

Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL06

Multiply the required landing distance by 1.15.

27-92-02A	Ground Spoiler Control System (Ground
21-92-02A	spoiler control system inoperative)

Ident.: MO-27-92-00009065.0026001 / 19 JUL 12

7 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **GENERAL INFORMATION**

The autobrake function is not available. Refer to OpsProc 32-42-05A AUTO/BRK Function

CAUTION	One or both thrust reversers may not deploy at landing. Consequently, for
	performance determination, do not take into account the credit of the thrust
	reversers.

#### FLIGHT PREPARATION/LIMITATIONS

Takeoff performance:

Input ACARS RTOW MEL code: 27-92-02A

Landing performance:

Input ACARS LANDING FAIL CODE: F/CTL06

or

Multiply the required landing distance by 1.15.

MEL C



27-92 - Electrical Flight Control System (EFCS) Control Inputs and Power Supply

27-92-02B Ground Spoiler Control System (Pair of spoilers 5 inoperative)

Ident.: MO-27-92-00009066.0001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

For performance penalties, Refer to OpsProc 27-64-01A Spoiler 5

27-92-02C	Ground Spoiler Control System (Pairs of spoilers
21-92-02C	1 and 2 or pairs of spoilers 3 and 4 inoperative)

Ident.: MO-27-92-00009067.0001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

● If the pairs of spoilers 1 and 2 are inoperative:

For performance penalties, Refer to OpsProc 27-64-04A 04 - Spoilers 1 and 2

• If the pairs of spoilers 3 and 4 are inoperative:

For performance penalties, Refer to OpsProc 27-64-05A Spoilers 3 and 4



27 - FLIGHT CONTROLS
27-93 - ELAC System (Elevator Aileron Computer)

27-93-01A ELAC 1

Ident.: MO-27-93-00009068.0002001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

■ If the AP 1 is engaged for landing:

Maximum landing capability is CAT 1.

■ If the AP 2 is engaged for landing:

Maximum landing capability is CAT 3 SINGLE.

#### **DURING COCKPIT PREPARATION**

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.
- If the F/CTL ELAC 1 FAULT alert is displayed on the EWD:

Note: 1. After application of the maintenance procedure, the following ECAM alerts remain displayed on the EWD:

- C/B TRIPPED R ELEC BAY alert, and
- C/B TRIPPED ON OVHD PNL alert, and
- F/CTL ELAC 1 FAULT alert.
- After first engine start, the <u>F/CTL</u> ALTN LAW alert may be spuriously displayed. It normally disappears after second engine start.

Check of the elevator and the roll spoilers control through the SECs:

Put the aircraft in the test configuration:



27-93 - ELAC System (Elevator Aileron Computer)

			Continued from the previous page
-	YELLOW E	ELEC PUMP pb-sw	ON
	Hy	the Yellow Electric Pump is not availabl ydraulic System with a Ground Cart or v ith the Engine 2 running.	•
- - - - -	BLUE ELE BLUE PUM ELAC 2 pb SEC 1 pb- SEC 2 pb-	v	
	k of the eleva I the SEC 3:	ator control through the SEC 1 and the	spoilers control through the SEC
- - - - - -	Wait for hydon the F/C Wait 5 s BLUE PUMELAC 2 pb SEC 2 pb Move the COn the F/C and 4 and 1 Move the FOn the F/C ON the F/C ON the F	MP OVRD pb-sw	ONOFF
	CAUTION	If an expected spoiler or elevator mov attempt any reset. Contact the maintenance.	ement does not occur, do not

Check of the elevator control through the SEC 2 and of the spoilers control through the SEC 2 and the SEC 3:



27-93 - ELAC System (Elevator Aileron Computer)

Continued from the previous page

- ELAC 2 pb-sw.....On SEC 2 pb-sw......On Wait 5 s - YELLOW ELEC PUMP pb-sw......Off - Wait for hydraulic circuits depressurization. - On the F/CTL SD page, check that the yellow and the green elevator actuators symbols become amber. - Wait 5 s - YELLOW ELEC PUMP pb-sw.....ON - ELAC 2 pb-sw......OFF - SEC 1 pb-sw......OFF - Move the CAPT stick from right stop to left stop, then from forward stop to aft stop. - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators. - Move the F/O stick from right stop to left stop, then from forward stop to aft stop. - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators. CAUTION If an expected spoiler or elevator movement does not occur, do not attempt any reset. Contact the maintenance. Return to normal configuration:

_	YELLOW ELEC PUMP pb-sw	. Off
_	BLUE PUMP OVRD pb-sw	.Off
	ELAC 1 pb-sw	
	ELAC 2 pb-sw	
	SEC 1 pb-sw.	

#### Check that the DC TIE contactor 1 is closed:

- Supply the electrical network from the APU or the external power.
- On the ELEC SD page, check the link between the DC BUS 1 and the DC BAT BUS.

#### ■ If the <u>F/CTL</u> ELAC 1 PITCH FAULT alert is displayed on the **EWD**:

After first engine start, the F/CTL ALTN LAW alert may be spuriously displayed Note: on the EWD. It normally disappears after few seconds when ELAC 2 auto test is accomplished.

Check of the elevator and the roll spoilers control through the SECs:



27-93 - ELAC System (Elevator Aileron Computer)

Continued from the previous page

Put the aircraft in the test configuration:
---

-	YELLOW ELEC PUMP pb-sw	0
-	PTU pb-sw	AUTC
	BLUE ELEC PUMP pb-sw	
	BLUE PUMP OVRD pb	
	ELAC 1 pb-sw	
	ELAC 2 pb-sw	
-	SEC 1 pb-sw	Or
	SEC 2 pb-sw	
	SEC 3 pb-sw	
	Wait 5 s	

Check of the elevator control through the SEC 1 and of the spoilers control through the SEC 1 and the SEC 3:

- BLUE PUMP OVRD pb-sw......Off
- Wait for hydraulic circuit depressurization.
- On the F/CTL SD page, check that blue elevator actuator symbol becomes amber.
- Wait 5 s
- BLUE PUMP OVRD pb-sw.....ON
- ELAC 1 pb-sw......OFF
- ELAC 2 pb-sw......OFF - SEC 2 pb-sw.....OFF
- Move the CAPT stick from right stop to left stop, then from forward stop to aft stop.
- On the <u>F/CTL</u> SD page, check the correct movement of the pairs of spoilers 2, 3, and 4 and the full travel of both elevators.
- Move the F/O stick from right stop to left stop, then from forward stop to aft stop.
- On the <u>F/CTL</u> SD page, check the correct movement of the pairs of spoilers 2, 3, and 4 and the full travel of both elevators.

CAUTION	If an expected spoiler or elevator movement does not occur, do not	
	attempt any reset.	
	Contact the maintenance.	

Check of the elevator control through the SEC 2 and of the spoilers control through the SEC 2 and the SEC 3:



27-93 - ELAC System (Elevator Aileron Computer)

Continued from the previous page - ELAC 1 pb-sw......On - ELAC 2 pb-sw......On - SEC 2 pb-sw.....On - Wait 5 s - YELLOW ELEC PUMP pb-sw......Off - Wait for hydraulic circuits depressurization. - On the F/CTL SD page, check that the yellow and the green elevator actuators symbols become amber. - Wait 5 s - YELLOW ELEC PUMP pb-sw.....ON - ELAC 1 pb-sw......OFF - ELAC 2 pb-sw......OFF - SEC 1 pb-sw......OFF - Move the CAPT stick from right stop to left stop, then from forward stop to aft stop. - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators. - Move the F/O stick from right stop to left stop, then from forward stop to aft stop. - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators. CAUTION If an expected spoiler or elevator movement does not occur, do not attempt any reset. Contact the maintenance. Return to normal configuration: - YELLOW ELEC PUMP pb-sw......Off - BLUE PUMP OVRD pb-sw......Off - ELAC 1 pb-sw......On - ELAC 2 pb-sw.....On - SEC 1 pb-sw......On Check that the DC TIE contactor 1 is closed: - Supply the electrical network from the APU or the external power. - On the ELEC SD page, check the link between the DC BUS 1 and the DC BAT BUS. **BEFORE ENGINE START** - AP 1 pb......On - CAPT take-over pb......Press - Check that the AP OFF message is displayed on the EWD. Continued on the following page



27 - FLIGHT CONTROLS 27-93 - ELAC System (Elevator Aileron Computer)

Continued from the previous page

Note: Due to the fact that the ELAC 1 is not electrically supplied, the F/O take-over pb cannot disengage the AP 1.

### **APPROACH**

• If the AP 1 is used for the approach:

The captain must be the PF.



MINIMUM EQUIPMENT LIST

### MEL OPERATIONAL PROCEDURES 27 - FLIGHT CONTROLS

27-94 - SEC System (Spoiler and Elevator Computer)

27-94-01A	SEC 1
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Ident.: MO-27-94-00009069.0001001 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Takeoff performance

For performance penalties, Refer to OpsProc 27-64-05A Spoilers 3 and 4

Landing performance

Input ACARS LANDING FAIL CODE: F/CTL03

or

Multiply the required landing distance by 1.10.

#### DURING COCKPIT PREPARATION

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

Note: After application of the maintenance procedure, the <u>C/B</u> TRIPPED R ELEC BAY and the C/B TRIPPED ON OVHD PNL alerts are displayed on the EWD.

Before each flight, check of the elevator control through the operative computers:

#### Put the aircraft in the test configuration:

- YELLOW ELEC PUMP pb-sw	ON
- PTU pb-sw	
- BLUE ELEC PUMP pb-sw	
- BLUE PUMP OVRD pb	
- ELAC 1 pb-sw	On
- ELAC 2 pb-sw	On
- SEC 2 pb-sw	
- SEC 3 pb-sw	
- Wait 5 s	

Check of the elevator control through the ELAC 1:



27-94 - SEC System (Spoiler and Elevator Computer)

Continued from the previous page - BLUE PUMP OVRD pb-sw ......Off - Wait for hydraulic circuit depressurization. - On the F/CTL SD page, check that blue elevator actuator symbol becomes amber. - Wait 5 s - BLUE PUMP OVRD pb-sw ......ON - ELAC 2 pb-sw ......OFF - Move the CAPT stick from forward stop to aft stop. - On the F/CTL SD page, check the full travel of both elevators. CAUTION If an expected elevator movement does not occur, do not attempt any reset Contact the maintenance. Check of the elevator control through the SEC 2: - ELAC 2 pb-sw ......On - SEC 2 pb-sw ......On - Wait 5 s - YELLOW ELEC PUMP pb-sw ...... Off - Wait for hydraulic circuits depressurization. - On the F/CTL SD page, check that the yellow and the green elevator actuators symbols become amber. - Wait 5 s - YELLOW ELEC PUMP pb-sw ......ON - ELAC 1 pb-sw ......OFF - ELAC 2 pb-sw ......OFF - Move the CAPT stick from right stop to left stop, then from forward stop to aft stop. Each stop must be applied during 3 s - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators. - Move the F/O stick from right stop to left stop, then from forward stop to aft stop. Each stop must be applied during 3 s - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators. CAUTION If an expected spoiler or elevator movement does not occur, do not attempt any reset. Contact the maintenance.



MINIMUM EQUIPMENT LIST

### MEL OPERATIONAL PROCEDURES 27 - FLIGHT CONTROLS

27-94 - SEC System (Spoiler and Elevator Computer)

Continued from the previous page

### Return to normal configuration:

-	YELLOW ELEC PUMP pb-sw	Of
	BLUE PUMP OVRD pb-sw	
	ELAC 1 pb-sw	
	•	Ô٢

#### Check that the DC TIE contactor 1 is closed:

- Supply the electrical network from the APU or the external power.
- On the ELEC SD page, check the link between the DC BUS 1 and the DC BAT BUS.

#### IN FLIGHT

Do not use the speedbrakes.

• If the SEC 2 and the SEC 3 fail during the flight:

Autoland is not permitted.

Maximum landing capability is CAT 1

Disengage the AP at 500 ft RA before landing in direct law.

When the AP is disengaged with the three SEC s failed, it cannot be engaged again.

27-94-01A	SEC 1

Ident : MO-27-94-00009069 9001002 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Takeoff performance

For performance penalties, Refer to OpsProc 27-64-05A Spoilers 3 and 4

Landing performance

Input ACARS LANDING FAIL CODE: F/CTL03

or

Multiply the required landing distance by 1.10.



27-94 - SEC System (Spoiler and Elevator Computer)

Continued from the previous page

#### DURING COCKPIT PREPARATION

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

Note: After application of the maintenance procedure, the <u>C/B</u> TRIPPED R ELEC BAY and the C/B TRIPPED ON OVHD PNL alerts are displayed on the EWD.

Before each flight, check of the elevator control through the operative computers:

### Put the aircraft in the test configuration:

	-	
- YELLOW E	ELEC PUMP pb-swv	ON
- PILIE ELEC	C PUMP pb-sw	
	MP OVRD pb	
	D-SW	
	o-sw	
- SEC 2 pb-s	sw	On
	sw	On
- Wait 5 s		
Check of the eleva	ator control through the ELAC 1:	
- BLUE PUM	MP OVRD pb-sw	Off
	draulic circuit depressurization.	
•	TL SD page , check that blue elevator actuator symbol be	ecomes amber.
- Wait 5 s		
- BLUE PUM	MP OVRD pb-sw	ON
	D-SW	
- SEC 2 pb-swOFF		
- Move the CAPT stick from forward stop to aft stop.		
- On the <u>F/CTL</u> SD page, check the full travel of both elevators.		
- On the <u>F/O</u>	page, check the full travel of both elevators.	
CAUTION	If an expected elevator movement does not occur, do no	ot attempt any

Check of the elevator control through the SEC 2:

Contact the maintenance.

reset.



27-94 - SEC System (Spoiler and Elevator Computer)

FI 40 0	Continued from the previous page		
	On		
•	On		
- Wait 5 s			
<ul> <li>YELLOW ELEC</li> </ul>	PUMP pb-sw Off		
<ul> <li>Wait for hydraulic</li> </ul>	ic circuits depressurization.		
	- On the <u>F/CTL</u> SD page , check that the yellow and the green elevator actuators symbols become amber.		
	DUMD about		
	PUMP pb-swON		
	OFF		
•	OFF		
- Move the CAPT	stick from right stop to left stop, then from forward stop to aft stop.		
Each stop must l	be applied during 3 s		
<ul> <li>On the <u>F/CTL</u> SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators.</li> </ul>			
- Move the F/O stick from right stop to left stop, then from forward stop to aft stop.			
Each stop must be applied during 3 s			
<ul> <li>On the <u>F/CTL</u> SD page, check the correct movement of the pairs of spoilers 2 and 5 and the full travel of both elevators.</li> </ul>			
CAUTION If an	n expected spoiler or elevator movement does not occur, do not		
	mpt any reset.		
	ntact the maintenance.		

### Return to normal configuration:

-	YELLOW ELEC PUMP pb-sw	Off
	BLUE PUMP OVRD pb-sw	
	ELAC 1 pb-sw	
	ELAC 2 pb-sw	

#### Check that the DC TIE contactor 1 is closed:

- Supply the electrical network from the APU or the external power.
- On the ELEC SD page, check the link between the DC BUS 1 and the DC BAT BUS.

#### IN FLIGHT

Do not use the speedbrakes.

• If the SEC 2 and the SEC 3 fail during the flight:

Autoland is not permitted.



27-94 - SEC System (Spoiler and Elevator Computer)

Continued from the previous page

Maximum landing capability is CAT 1

Disengage the AP at 500 ft RA before landing in direct law.

When the AP is disengaged with the three SEC s failed, it cannot be engaged again.

	27-94-02A	SEC 2
--	-----------	-------

Ident.: MO-27-94-00009070.0001001 / 29 NOV 11

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

Note: After application of the maintenance procedure, the <u>C/B</u> TRIPPED REAR PNL N-R alert is displayed on the EWD.

Before each flight, check of the elevator control through the operative computers:

### Put the aircraft in the test configuration:

-	YELLOW ELEC PUMP pb-sw	ON
	PTU pb-sw	
	BLUE ELEC PUMP pb-sw	
	BLUE PUMP OVRD pb	
	ELAC 1 pb-sw	
	ELAC 2 pb-sw	
	SEC 1 pb-sw	
	SEC 3 pb-sw	
	Wait 5 s	

Check of the elevator control through the ELAC 1:



27-94 - SEC System (Spoiler and Elevator Computer)

Continued from the previous page

- BLUE PUMP OVRD pb-sw ......Off - Wait for hydraulic circuit depressurization. - On the F/CTL SD page, check that blue elevator actuator symbol becomes amber. - Wait 5 s - BLUE PUMP OVRD pb-sw ......ON - ELAC 2 pb-sw ......OFF - Move the CAPT stick from forward stop to aft stop. - On the F/CTL SD page, check the full travel of both elevators. CAUTION If an expected elevator movement does not occur, do not attempt any reset Contact the maintenance. Check of the elevator control through the SEC 1: - ELAC 2 pb-sw ......On - SEC 1 pb-sw ......On - Wait 5 s - BLUE PUMP OVRD pb-sw ......Off - Wait for hydraulic circuits depressurization. - On the F/CTL SD page, check that the blue elevator actuator symbols becomes amber. - Wait 5 s - BLUE PUMP OVRD pb-sw ......ON - ELAC 1 pb-sw ......OFF - ELAC 2 pb-sw ......OFF - Move the CAPT stick from right stop to left stop, then from forward stop to aft stop. Each stop must be applied during 3 s - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2, 3, and 4 and the full travel of both elevators - Move the F/O stick from right stop to left stop, then from forward stop to aft stop. Each stop must be applied during 3 s - On the F/CTL SD page, check the correct movement of the pairs of spoilers 2, 3, and 4 and the full travel of both elevators. CAUTION If an expected spoiler or elevator movement does not occur, do not attempt any reset. Contact the maintenance.

HDA A320/A321 FLEET MO-27-94 P 7/10 ← B →

Return to normal configuration:



or

### MEL OPERATIONAL PROCEDURES 27 - FLIGHT CONTROLS

27-94 - SEC System (Spoiler and Elevator Computer)

Continued from the previous page - YELLOW ELEC PUMP pb-sw ...... Off - BLUE PUMP OVRD pb-sw ......Off - ELAC 1 pb-sw ......On - ELAC 2 pb-sw ......On AFTER ENGINE START The F/CTL ELEV SERVO FAULT alert may be displayed on the EWD if the PTU is Note: inhibited and only one engine is operating. This alert must disappear when the PTU or the second engine is started. IN FLIGHT • If the SEC 1 and the SEC 3 fail during the flight: Autoland is not permitted. Maximum landing capability is CAT 1 Disengage the AP at 500 ft RA before landing in direct law. When the AP is disengaged with the three SECs failed, it cannot be engaged again. 27-94-03A SEC<sub>3</sub> Ident.: MO-27-94-00009071.0001001 / 19 JUL 12 Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI FLIGHT PREPARATION/LIMITATIONS Takeoff performance For performance penalties, Refer to OpsProc 27-64-04A 04 - Spoilers 1 and 2 Landing performance Input ACARS LANDING FAIL CODE: F/CTL03 Multiply the required landing distance by 1.10. **DURING COCKPIT PREPARATION** Deactivation of the SEC 3: - SEC 3 pb-sw ......OFF - FLIGHT CONTROLS/SEC3/SPLY (121VU Q19) C/B ......Pull Continued on the following page



MINIMUM EQUIPMENT LIST

### MEL OPERATIONAL PROCEDURES 27 - FLIGHT CONTROLS

27-94 - SEC System (Spoiler and Elevator Computer)

Continued from the previous page

#### IN FLIGHT

• If the SEC 1 and the SEC 2 fail during the flight:

Autoland is not permitted.

Maximum landing capability is CAT 1

Disengage the AP at 500 ft RA before landing in direct law.

When the AP is disengaged with the three SEC s failed, it cannot be engaged again.

27-94-03A	SEC 3

Ident.: MO-27-94-00009071.9001002 / 19 JUL 12

5 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Takeoff performance

For performance penalties, Refer to OpsProc 27-64-04A 04 - Spoilers 1 and 2

Landing performance

Input ACARS LANDING FAIL CODE: F/CTL03

or

Multiply the required landing distance by 1.10.

### DURING COCKPIT PREPARATION

Deactivation of the SEC 3:

- SEC 3 pb-sw ......OFF
- FLIGHT CONTROLS/SEC3/SPLY (121VU Q19) C/B ......Pull

#### IN FLIGHT

### If the SEC 1 and the SEC 2 fail during the flight:

Autoland is not permitted.

Maximum landing capability is CAT 1

Disengage the AP at 500 ft RA before landing in direct law.

When the AP is disengaged with the three SEC s failed, it cannot be engaged again.

MEL C



27-94 - SEC System (Spoiler and Elevator Computer)

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HDA A320/A321 FLEET MO-27-94 P 10/10 MEL 19 JUL 12



27 - FLIGHT CONTROLS

27-95 - FCDC System (Flight Control Data Concentrator)

27-95-02A	FCDC 2
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Ident.: MO-27-95-00009072.0001001 / 11 MAR 10

Applicable to: ALL

### **DURING COCKPIT PREPARATION**

FLIGHT CONTROLS/FCDC2/SPLY (121VU Q20) C/B.....Pull



27 - FLIGHT CONTROLS

27-95 - FCDC System (Flight Control Data Concentrator)

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HDA A320/A321 FLEET MO-27-95 P 2/2 MEL 29 NOV 11



28 - FUFI

28-01 - Overhead Panels 28-01-01 - FUEL Overhead Panel

28-01-01-07A	FUEL MODE SEL pb-sw FAULT light
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Ident.: MO-28-01-01-00009079.0003001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### AFTER ENGINE START

If there is fuel in the center tank and with the slats retracted:

On the FUEL SD page, check that the center tank pumps indications are in line.

With the slats extended:

On the FUEL SD page, check that the center tank pumps indications are cross line.

#### **AFTER TAKEOFF**

If there is fuel in the center tank and with the slats retracted: On the FUEL SD page, check that the center tank pumps indications are in line.

28-01-01-08A ACT pb-sw FAULT light	
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Ident.: MO-28-01-01-00009080.0001001 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

2

#### IN FLIGHT

- If a manual transfer from the ACT to the CTR tank is necessary:
  - FCOML/PRO-ABN-28 R FUEL ACT XFR FAULT (IF INSTALLED)
  - On the FUEL SD page, monitor the fuel transfer.



28 - FUEL

28-01 - Overhead Panels 28-01-01 - FUEL Overhead Panel

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HDA A320/A321 FLEET MEL



MINIMUM EQUIPMENT LIST

### MEL OPERATIONAL PROCEDURES

28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

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28	Λ7	Λ1	Λ1	Λ
20.	·u/·	·U I	-U I	А

Fuel On Board (FOB) Indication on the FUEL SD page

Ident.: MO-28-07-01-00009109.0001001 / 04 APR 12

Applicable to: ALL

### **AFTER ENGINE START**

Check that /FF is selected on the MCDU FUEL PRED page.

### • If /FF is not selected on the MCDU FUEL PRED page:

Insert the FOB.

The FOB may be calculated either using the indications on the refuel control panel (if available) or by using the Manual Magnetic Indicators (MMIs):Refer to FCOM/PER-LOD-FUL-FUEL-C.USE OF MANUAL MAGNETIC INDICATORS (MMI).

28-07-01-02A	Fuel Quantity Indication (FQI) in Degraded Mode on the <u>FUEL</u> SD pag
20-01-01-02A	ruei Qualitity iliulcation (FQI) ili Degladed Mode oli tile <u>FOLL</u> 3D pa

Ident.: MO-28-07-01-00009110.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### ON GROUND

The FQI is in degraded mode when the FOB indication is displayed with two dashes across the two last digits on the EWD.

#### When the FQI is in degraded mode:

On the FUEL SD page, determine which tank is affected.

The resulting loss of accuracy must be taken into account by using the two following parameters:

- 1. Fq: The extra fuel quantity to be loaded.
- 2. W: The weight to be added to the total fuel weight for TOW calculation only.

Fg and W parameters are given as follows:

LOSS OF ACCURACY DUE TO THE FUEL QUANTITY INDICATION IN DEGRADED MODE (Values in kg)			
Fq (kg) W (kg)			
OUTER TANK	20	200	
INNER TANK	110	110	
CENTER TANK	130	130	
ALL TANKS	390	750	



28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

Continued from the previous page

#### When the auto refuel stops:

- Preselect the fuel quantity required for the mission : Fm
- Enter the table and determine Fg and W values for the affected tank.
- Start again the auto refuel with the new preselected quantity which corresponds to the total FOB: Fm+Fq

<u>Note:</u> If all tanks reach high level before having loaded the complete Fq value, this shows that all tanks are volumetrically full but the necessary fuel mass for the mission is not guaranteed since the fuel quantity indication varies with the fuel density. Therefore the mission or the aircraft load must be amended to match the minimum fuel quantity known to be onboard.

#### When the auto refuel stops again:

The FOB value to be considered for TOW calculation is: FOB = Fm+Fq+W

- If all tanks reach high level before having loaded Fq value:
  - The extra fuel quantity known to be onboard is Fq\* with: Fq\* < Fq
  - The FOB value to be considered for TOW calculation is: FOB = Fm+Fq \*+W

### • If the resulting TOW is higher than the MTOW:

The aircraft load must be reduced.

28-07-01-02A

Fuel Quantity Indication (FQI) in Degraded Mode on the FUEL SD page

Ident.: MO-28-07-01-00009110.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### ON GROUND

The FQI is in degraded mode when the FOB indication is displayed with two dashes across the two last digits on the EWD.

### When the FQI is in degraded mode:

On the FUEL SD page, determine which tank is affected.

The resulting loss of accuracy must be taken into account by using the two following parameters:

- 1. Fq: The extra fuel quantity to be loaded.
- 2. W: The weight to be added to the total fuel weight for TOW calculation only.

Fq and W parameters are given as follows:



MINIMUM EQUIPMENT LIST

#### MEL OPERATIONAL PROCEDURES

28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

Continued from the previous page

LOSS OF ACCURACY DUE TO THE FUEL QUANTITY INDICATION IN DEGRADED MODE (Values in kg)		
Fq (kg) W (kg)		
WING TANK	130	310
CENTER TANK	130	130
ALL TANKS	390	750

### When the auto refuel stops:

- Preselect the fuel quantity required for the mission: Fm
- Enter the table and determine Fq and W values for the affected tank.
- Start again the auto refuel with the new preselected quantity which corresponds to the total FOB: Fm+Fa

Note:

If all tanks reach high level before having loaded the complete Fg value, this shows that all tanks are volumetrically full but the necessary fuel mass for the mission is not guaranteed since the fuel quantity indication varies with the fuel density. Therefore the mission or the aircraft load must be amended to match the minimum fuel quantity known to be onboard.

#### When the auto refuel stops again:

The FOB value to be considered for TOW calculation is: FOB = Fm+Fq+W

- If all tanks reach high level before having loaded Fg value:
  - The extra fuel quantity known to be onboard is Fq\* with: Fq\* < Fq
  - The FOB value to be considered for TOW calculation is: FOB = Fm+Fq \*+W

### • If the resulting TOW is higher than the MTOW:

The aircraft load must be reduced.

28-07-01-03A 28-07-01-03C	Outer Tank Fuel Quantity Indication on the <u>FUEL</u> SD page
------------------------------	--

Ident.: MO-28-07-01-00009111.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### AFTER REFUELING

To check the fuel quantity in the associated tank: Refer to FCOM/PFR-LOD-FUL-FUFL-A GENERAL INFORMATION



28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

28-07-01-04A

Inner Tank Fuel Quantity Indication on the FUEL SD page

Ident.: MO-28-07-01-00009112.0001001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSN, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### AFTER ENGINE START

Check that /FF is selected on the MCDU FUEL PRED page.

• If /FF is not selected on the MCDU FUEL PRED page:

Insert the FOB.

The FOB may be calculated either using the indications on the refuel control panel (if available) or by using the Manual Magnetic Indicators (MMIs): Refer to FCOM/PER-LOD-FUL-FUEL-C.USE OF MANUAL MAGNETIC INDICATORS (MMI).

28-07-01-04A

Wing Tank Fuel Quantity Indication on the FUEL SD page

Ident.: MO-28-07-01-00009112.0004001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### AFTER ENGINE START

Check that /FF is selected on the MCDU FUEL PRED page.

• If /FF is not selected on the MCDU FUEL PRED page:

Insert the FOB.

The FOB may be calculated either using the indications on the refuel control panel (if available) or by using the Manual Magnetic Indicators (MMIs): Refer to FCOM/PER-LOD-FUL-FUEL-C.USE OF MANUAL MAGNETIC INDICATORS (MMI).

28-07-01-05A

Center Tank Fuel Quantity Indication on the FUEL SD page

Ident.: MO-28-07-01-00009113.0002001 / 19 JUL 12

4 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **AFTER REFUELING**

To check the fuel quantity in the associated tank: Refer to FCOM/PER-LOD-FUL-FUEL-A.GENERAL INFORMATION.



A320/A321 MINIMUM EQUIPMENT LIST

# MEL OPERATIONAL PROCEDURES

28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

### 28-07-01-05A

# Center Tank Fuel Quantity Indication on the FUEL SD page

Ident.: MO-28-07-01-00009113.0006001 / 04 APR 12 Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### AFTER REFUELING

To check the fuel quantity in the associated tank: Refer to FCOM/PFR-LOD-FUL-FUFL-A GENERAL INFORMATION

#### AT TOP OF CLIMB

- Check on the FUEL SD page that the fuel is transferred from ACT to the center tank.
- Check that the fuel quantity in one additional center tank has decreased (from ACT 2 if ACT 2 is installed and not empty).
- If the automatic transfer has not started:
  - After 30 minutes of flight:
    - ACT pb-sw ......FWD
    - If necessary perform a descent to FL 270.
- When ACT (both ACTs if two ACTs installed) empty:

ACT pb-sw ...... AUTO

#### 28-07-01-06B

# ACT Fuel Quantity Indication on the FUEL SD page

Ident.: MO-28-07-01-00009114.0001001 / 29 NOV 11 Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### AT TOP OF CLIMB

Check of the fuel transfer from ACT to the center tank:

On the FUEL SD page, check that the transfer indication (arrow) is displayed or check that the total fuel indicated is above the actual fuel indicated after refuel minus FU.

- If the automatic transfer has not started:
  - After 30 minutes of flight:
    - ACT pb-sw ......FWD
    - If necessary perform a descent to FL 270.
- When ACT (both ACTs if two ACTs installed) is empty:

ACT pb-sw ......AUTO



28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-01 - Fuel Quantity Indications on the FUEL SD page

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HDA A320/A321 FLEET MO-28-07-01 P 6/6 MEL 19 JUL 12



28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-04 - Valve Indications on the FUEL SD page

28-07-04-04A

Wing Transfer Valve Indication on the FUEL SD page

Ident.: MO-28-07-04-00009115.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### IN FLIGHT

• When any inner tank fuel quantity reaches 750 kg of fuel:

On the FUEL SD page, check the associated outer tank transfer.



28 - FUEL

28-07 - Indications on the FUEL SD page 28-07-04 - Valve Indications on the FUEL SD page

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HDA A320/A321 FLEET MO-28-07-04 P 2/2 MEL 19 JUL 12



**28 - FUEL** 28-09 - ECAM Alerts

28-09-01A 28-09-01B	<u>FUEL</u> L(R) INNER(OUTER) TK HI TEMP Alert

Ident.: MO-28-09-00009116.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### ON GROUND OR IN FLIGHT

On the <u>FUEL</u> SD page, monitor the fuel temperature before takeoff and periodically during the flight.

Note: For fuel temperature limits, Refer to FCOM/ Fuel and Additive Specifications

#### If fuel temperature reaches limits:

#### Before takeoff:

Delay takeoff and shut down the engine on the affected side.

#### In flight:

- Increase the engine fuel flow on the affected side.
- If necessary use the APU GEN and switch off the IDG on the affected side (if the opposite GEN is available).

28-09-01A 28-09-01B	FUEL L(R) WING TK HI TEMP Alert

Ident.: MO-28-09-00009116.0004001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### ON GROUND OR IN FLIGHT

On the <u>FUEL</u> SD page, monitor the fuel temperature before takeoff and periodically during the flight.

Note: For fuel temperature limits, Refer to FCOM/ Fuel and Additive Specifications

#### If fuel temperature reaches limits:

#### Before takeoff:

Delay takeoff and shut down the engine on the affected side.

#### In flight:

- Increase the engine fuel flow on the affected side.
- If necessary use the APU GEN and switch off the IDG on the affected side (if the opposite GEN is available).



28 - FUEL

28-09 - ECAM Alerts

28-09-02A	FUEL L/D\ INNED/OUTED\ TV LO TEMP Alori
28-09-02B	FUEL L(R) INNER(OUTER) TK LO TEMP Alert

Ident.: MO-28-09-00009117.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### ON GROUND OR IN FLIGHT

On the <u>FUEL</u> SD page, monitor the fuel temperature before takeoff and periodically during the flight.

Note: For fuel temperature limits, refer to Refer to FCOM/ Fuel and Additive Specifications

- If fuel temperature reaches limits:
  - Before takeoff:

Delay takeoff.

• In flight:

Consider descending to a lower altitude and/or increasing the mach to increase the TAT.

28-09-02A 28-09-02B <u>FUEL</u> L(R) WING TK LO TEMP Alert	
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Ident.: MO-28-09-00009117.0004001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### ON GROUND OR IN FLIGHT

On the <u>FUEL</u> SD page, monitor the fuel temperature before takeoff and periodically during the flight.

Note: For fuel temperature limits, refer to Refer to FCOM/ Fuel and Additive Specifications

- If fuel temperature reaches limits:
  - Before takeoff:

Delay takeoff.

In flight:

Consider descending to a lower altitude and/or increasing the mach to increase the TAT.



**28 - FUEL** 28-09 - ECAM Alerts

28-09-03B	FUEL ACT XFR FAULT Alert

Ident.: MO-28-09-00009118.0001001 / 11 MAR 10

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

Refer to OpsProc 28-07-01-05A Center Tank Fuel Quantity Indication on the FUEL SD page



28 - FUEL 28-09 - ECAM Alerts

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 HDA A320/A321 FLEET
 MO-28-09 P 4/4

 MEL
 19 JUL 12



MINIMUM EQUIPMENT LIST

#### MEL OPERATIONAL PROCEDURES

28 - FUEL

28-12 - Tank Venting System

28-1	12.	.01	Δ

Overpressure Protector Between the Inner and the Outer Tank (Inner tank fuel temperature monitored)

Ident.: MO-28-12-00009085.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### GENERAL INFORMATION

The dispatch condition results in an unusual distribution of the fuel quantity: the outer tank of the affected wing will be partially empty with the transfer valves normally closed.

#### FLIGHT PREPARATION/LIMITATIONS

Fuel management should be performed with care.

#### ON GROUND AND IN FLIGHT

 After a long taxi or if the outside air temperature is high, with the outer tank of the affected wing empty:

The FUEL L(R) OUTER TK HI TEMP alert may be displayed on the EWD.

- If the FUEL L(R) OUTER TK HI TEMP alert is displayed on the EWD:
  - Disregard the FUEL L(R) OUTER TK HI TEMP alert.
  - Monitor the inner tank fuel temperature during taxi and in flight to ensure that it decreases and remains within the temperature limitations.

For fuel temperature limitations, refer to FCOM/LIM-28. Note:

- If the inner tank fuel temperature exceeds the temperature limitations, apply the FUEL L(R) INNER TK HI TEMP procedure: Refer to OpsProc 28-09-01A(B) FUEL L(R) INNER(OUTER)/WING TK HI TEMP Alert.

28-12-01B	Overpressure Protector Between the Inner
	and the Outer Tank (Transfer valves opened)

Ident.: MO-28-12-00009086.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### GENERAL INFORMATION

The dispatch condition results in an unusual distribution of the fuel quantity: the fuel in the outer tank on the affected side will transfer to the inner tank even when the inner tank is not empty.

Continued on the following page



28 - FUEL

28-12 - Tank Venting System

Continued from the previous page

#### ON GROUND

Do not re-select the refuel power or open the refuel door.

<u>Note:</u> The transfer valve latch circuit will send order to de-latch them and the valves will close again (they will then operate normally and open at low level).

28-12-02A Overpressure Protector in the Vent Surge Tank

Ident.: MO-28-12-00009087.0001001 / 29 NOV 11

Applicable to: ALL

#### ON GROUND AND IN FLIGHT

- Avoid lateral accelerations in order to reduce the possibility of fuel spill during taxi and climb out.
- In cruise check fuel status.
- Check that the FOB is sufficient to reach the destination with the adequate reserve.



MINIMUM EQUIPMENT LIST

#### MEL OPERATIONAL PROCEDURES

28 - FUFI

28-15 - Intercell Transfer System

28-15-01A	
28-15-01C	

LH Wing Transfer Valve (At least one transfer valve open)

Ident.: MO-28-15-00009088.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **GENERAL INFORMATION**

#### ■ If one or both wing transfer valves are inoperative in the open position:

The dispatch condition results in an unusual distribution of the fuel quantity; the fuel in the outer tank on the affected side will transfer to the inner tank even when the inner tank is not emptv.

# ■ If one wing transfer valve is secured in the open position:

The dispatch condition results in an unusual distribution of the fuel quantity: the fuel in both outer tanks will transfer to the inner tanks even when the inner tanks are not empty.

28-15-01B LH Wing Transfer Valve (At least one transfer valve failed closed)

Ident.: MO-28-15-00009089.0001001 / 11 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

The fuel in the affected outer tank should be considered as not usable for the flight planning.

28-15-02A	DH Wing Transfer Valve (At least one transfer valve ones)
28-15-02C	RH Wing Transfer Valve (At least one transfer valve open)

Ident.: MO-28-15-00009090.0001001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST

#### GENERAL INFORMATION

# ■ If one or both wing transfer valves are inoperative in the open position:

The dispatch condition results in an unusual distribution of the fuel quantity: the fuel in the outer tank on the affected side will transfer to the inner tank even when the inner tank is not empty.

# ■ If one wing transfer valve is secured in the open position:

The dispatch condition results in an unusual distribution of the fuel quantity: the fuel in both outer tanks will transfer to the inner tanks even when the inner tanks are not empty.



28 - FUEL

28-15 - Intercell Transfer System

28-15-02B

RH Wing Transfer Valve (At least one transfer valve failed closed)

Ident.: MO-28-15-00009091.0001001 / 11 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# FLIGHT PREPARATION/LIMITATIONS

The fuel in the affected outer tank should be considered as not usable for the flight planning.



MINIMUM EQUIPMENT LIST

#### MEL OPERATIONAL PROCEDURES

28 - FUEL

28-20 - Distribution

28-20-01A	Automatic Fuel Feed System

Ident.: MO-28-20-00009092.0003001 / 19 JUL 12 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU 3 **ON GROUND** ■ If the center tank is empty for the flight: - CTR TK PUMP 1 and 2 pb-sw ......OFF ■ If the center tank is not empty for the flight: Before engine start: MODE SEL pb-sw ......MAN 3 min after engine start: CTR TK PUMP 1 and 2 pb-sw ......OFF IN FLIGHT If the center tank is not empty for the flight: • After slat retraction and when the fuel in one wing is less than 5 000 kg (11 000 lb): CTR TK PUMP 1 and 2 pb-sw ......On • When the FUEL CTR TK PUMPS LO PR alert is displayed on the EWD: CTR TK PUMP 1 and 2 pb-sw ...... OFF



28 - FUEL

28-20 - Distribution

Intentionally left blank

 HDA A320/A321 FLEET
 MO-28-20 P 2/2

 MEL
 19 JUL 12



28 - FUEL

28-21 - Main Fuel Pump System

Center Tank Pump (One inoperative)

Ident.: MO-28-21-00009096.0003001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

In the case of dispatch with fuel in the center tank, the remaining center tank pump failure must be considered for the flight planning. Operator has to ensure that, from any point of the first part of the route where the center tank is not empty the aircraft may reach a suitable airport considering the fuel quantity (FQ) contained in the center tank as definitely not usable for the flight planning (as a consequence of the failure of the remaining center tank pump).

#### **DURING COCKPIT PREPARATION**

- X FEED pb-sw - Affected CTR TK PUMP pb-sw	OFF
<u>IN FLIGHT</u>	•
■ If the fuel quantity in the center tank is less than 200 kg:	
Operative CTR TK PUMP pb-sw	Maintain OFF

■ If the fuel quantity in the center tank is more than 200 kg:

The fuel in the center tank can be completely used if the operative center tank pump does not fail before the center tank is empty. If the operative center tank pump fails before the center tank is empty, consider the fuel quantity remaining and the time to destination to decide either to continue the flight or to divert

to continue the hight of to divert.	
● When the fuel quantity in one wing inner tank is less than 4 500 kg:	
Operative CTR TK PUMP pb-sw	ON
X FEED pb-sw	ON

•	When the fuel quantity in one wing inner tank increases above 5 500 kg:	
	X FEED pb-sw	.OFF
	Operative CTR TK PUMP pb-sw	OFF

Repeat the previous two steps as many times as necessary until the center tank is empty. The operative center tank pump will switch off automatically

■ When the fuel quantity in the center tank is less than 250 kg: X FEED pb-sw ......OFF



28 - FUEL

28-21 - Main Fuel Pump System

28-21-02D	Center Tank Pump (Both inoperative)

Ident.: MO-28-21-00009095.0003001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# FLIGHT PREPARATION/LIMITATIONS

CTR TK PUMP 1 and 2 pb-sw......OFF



28 - FUEL

28-22 - APU Fuel Pump System

28-22-01A	APU Fuel Pump
	<u> </u>

Ident.: MO-28-22-00009097.0001001 / 11 MAR 10

Applicable to: ALL

# **FOR APU START OPERATION**

Pressurize the LH fuel manifold with at least one fuel tank pump.



28 - FUEL

28-22 - APU Fuel Pump System

Intentionally left blank

HDA A320/A321 FLEET MO-28-22 P 2/2 MEL 29 NOV 11



Until the fuel is balanced:

# **MEL OPERATIONAL PROCEDURES**

# 28 - FUEL

28-26 - Main Transfer System

28-26-01B	Center Tank Transfer Valve	
Ident.: MO-28-26-00013913.000300 Applicable to: B-HTD, B-HTE, B-H	- · · · · · · · · · · <del>-</del>	
<u>IN FLIGHT</u>		
<ul><li>MODE SEL pb-sv</li><li>Operative CTR The</li></ul>	K L(R) XFR pb-sw	Auto On OFF
<ul> <li>When differences between fuel quantities in two wings is above 1 500 kg:</li> <li>Monitor the fuel imbalance.</li> </ul>		
	ne FUEL IMBALANCE FCOM procedure as required provided that no fuel suspected. Refer to FCOM/ FUEL IMBALANCE	

L(R) TK PUMPS (on the lighter side) pb-sw ...... OFF



28 - FUEL

28-26 - Main Transfer System

Intentionally left blank

HDA A320/A321 FLEET MEL



MINIMUM EQUIPMENT LIST

# MEL OPERATIONAL PROCEDURES

28 - FUEL

28-28 - Additional Center Tank Transfer System

28-28-01B

ACT Auto Transfer System (Manual transfer from the ACT(s) to the center tank operative)

Ident.: MO-28-28-00009098.0002001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### DURING COCKPIT PREPARATION

- 1. The refuel panel door must be open to check the operation of the manual transfer on the ground using the <u>FUEL</u> SD page. Establish ground communications and ensure that the refuel panel door is open during following check and closed after the check is done.
- 2. The manual transfer may be performed only if the center tank is not full (center tank high level sensor dry). If the center tank is full, the high level sensor may be overridden by keeping pressed in the HI LVL pb test of the refuel panel. When the high level sensor is overridden, take care to not overfill the center tank. Otherwise, fuel may spill out from the surge tanks.
- ACT pb-sw.....FWD
- On the <u>FUEL</u> SD page, check that the fuel is transferred from one ACT (from ACT 2 if ACT 2 is installed and not empty) to the center tank.
- ACT pb-sw.....AUTO

#### 30 MIN AFTER TAKEOFF

- ACT pb-sw.....FWD
- On the FUEL SD page, check that the fuel is transferred from the ACTs to the center tank.
- If necessary perform a descent to FL 270.
- When ACT (both ACTs if two ACTs installed) is empty:

ACT pb-sw......AUTO

28-28-01C	ACT Auto Transfer System (Fuel in
20-20-010	the ACT(s) considered as not usable)

Ident.: MO-28-28-00009099.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### ON GROUND OR IN FLIGHT

When there is less than 3 000 kg of fuel in the center tank:

Disregard and clear the FUEL ACT XFR FAULT alert displayed on the EWD.



28 - FUEL

28-28 - Additional Center Tank Transfer System

28-28-02C	ACT Transfer Valve
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Ident.: MO-28-28-00009100.0002001 / 29 NOV 11
Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# ON GROUND OR IN FLIGHT

• When there is less than 3 000 kg of fuel in the center tank:

Disregard and clear the FUEL ACT XFR FAULT alert displayed on the EWD.

28-28-05A	ACT Inward Pressure Relief Valve
Ident.: MO-28-28-00009102.00010 Applicable to: B-HTD, B-HTE, B-I	- · · · <del>-</del> · · · · · · ·
<b>DURING COCKPIT PR</b>	REPARATION
using the FUEL SI door is open durin 2. The manual transt level sensor dry). pressed in the HI	oor must be open to check the operation of the manual transfer on the ground D page. Establish ground communications and ensure that the refuel panel g following check and closed after the check is done. For may be performed only if the center tank is not full (center tank high lift the center tank is full, the high level sensor may be overridden by keeping LVL pb test of the refuel panel. When the high level sensor is overridden, take the center tank. Otherwise, fuel may spill out from the surge tanks.
<ul> <li>On the <u>FUEL</u> SD ACT 2 is installed</li> </ul>	page, check that the fuel is transferred from one ACT (from the ACT 2 if the and not empty) to the center tank.  AUTC
AT TOP OF CLIMB	
Check that the fuel is	s transferred from the ACTs to the center tank.
<ul><li>If the automatic</li></ul>	transfer has not started:
	n of flight: swFWD ary perform a descent to FL 270.
● When ACT (bot	h ACTs if two ACTs installed) is empty:

ACT pb-sw.....AUTO



28 - FUEL

28-28 - Additional Center Tank Transfer System

28-28-06A

ACT Vent Valve (Manual transfer from the ACT (s) to the center tank operative)

Ident.: MO-28-28-00009103.0001001 / 11 MAR 10

Applicable to: B-HTG, B-HTH, B-HTI

Refer to OpsProc 28-28-01B ACT Auto Transfer System (Manual transfer from the ACT(s) to the center tank operative)

28-28-06B

ACT Vent Valve (Fuel in the ACT(s) considered as not usable)

Ident.: MO-28-28-00009104.0001001 / 29 NOV 11

Applicable to: B-HTG, B-HTH, B-HTI

#### ON GROUND OR IN FLIGHT

When there is less than 3 000 kg of fuel in the center tank:

Disregard and clear the FUEL ACT XFR FAULT alert displayed on the EWD.

28-28-09C ACT 1 Inlet Valve

Ident.: MO-28-28-00009105.0001001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### ON GROUND OR IN FLIGHT

When there is less than 3 000 kg of fuel in the center tank:

Disregard and clear the <u>FUEL</u> ACT XFR FAULT alert displayed on the EWD.



28 - FUEL

28-28 - Additional Center Tank Transfer System

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 HDA A320/A321 FLEET
 MO-28-28 P 4/4

 MEL
 29 NOV 11



28 - FUEL

28-29 - APU LP Fuel Shutoff

28-29-01A	APU LP Fuel Valve

Ident.: MO-28-29-00009107.0001001 / 04 APR 12

Applicable to: ALL

# **BEFORE ENGINE START**

The APU is not available.

APU MASTER SW pb-sw ......Off

Note:

- 1. No APU bleed air will be available for the Main Engine Start (MES) or the air conditioning.
- 2. No electrical power will be available from the APU generator.

On the <u>FUEL</u> SD page, check that the APU LP valve is indicated closed: *Refer to FCOM/FCOM/DSC-28-20 ECAM Fuel Page*.



28 - FUEL 28-29 - APU LP Fuel Shutoff

Intentionally left blank

HDA A320/A321 FLEET
MEL



28 - FUEL

28-50 - Fuel Management

28-50-01A	Fuel Quantity Indicating Computer (FQIC) Channel
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Ident.: MO-28-50-00009108.0003001 / 11 MAR 10

Applicable to: ALL

# FLIGHT PREPARATION/LIMITATIONS

- Ensure that correct weights are entered in the FMGC associated with the affected FQIC channel.
- 2. In the case of failure in-flight of the remaining FQIC channel, all fuel quantities indications on the EWD are lost.



28 - FUEL

28-50 - Fuel Management

Intentionally left blank

HDA A320/A321 FLEET MEL



29-07 - Indications on the HYD SD page

29-07-07A

# System Label Indication on the HYD SD page

Ident.: MO-29-07-00009122.0001001 / 17 SEP 10

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

-	YELLOW ELEC PUMP pb-sw	ON
	BLUE ELEC PUMP pb-sw	
	BLUE PUMP OVRD pb-sw	
	PTU pb-sw	
	Move the CAPT stick left or right.	
-	On the F/CTL SD page, check the pairs of spoilers movement.	
-	YELLOW ELEC PUMP pb-sw	Off
	BLUE PUMP OVRD pb-sw	

#### 29-07-08A

#### System Pressure Indication on the HYD SD page

Ident.: MO-29-07-00009123.0001001 / 17 SEP 10

Applicable to: ALL

#### DURING COCKPIT PREPARATION

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

Continued on the following page



29-07 - Indications on the HYD SD page

Continued from the previous page

I If the blue system pressure indication is inoperative:	
Check of the system label:	
<ul> <li>On the HYD SD page, check that the BLUE system label is amber.</li> <li>BLUE ELEC PUMP pb-swAU</li> <li>BLUE PUMP OVRD pb-swAU</li> <li>On the HYD SD page, check that the BLUE system label is white and that the arrow is green.</li> <li>BLUE PUMP OVRD pb-sw</li></ul>	ON
I If the yellow system pressure indication is inoperative:	
Check of the system label:	
<ul> <li>YELLOW ELEC PUMP pb-sw</li> <li>On the HYD SD page, check that the YELLOW system label is amber.</li> <li>YELLOW ELEC PUMP pb-sw</li> <li>On the HYD SD page, check that the YELLOW system label is white and that the arrow i green.</li> <li>YELLOW ELEC PUMP pb-sw</li> </ul>	.ON is
I If the green system pressure indication is inoperative:	
Check of the system label:	
- On the HYD SD page, check that the GREEN system label is amber YELLOW ELEC PUMP pb-sw	JTO
green YELLOW ELEC PUMP pb-sw	. Off



29-09 - ECAM Alerts

29-09-03A <u>HYD</u> G(Y) ENG 1(2) PUMP LO PR Alert

Ident.: MO-29-09-00009124.0001001 / 04 APR 12 Applicable to: B-HSE, B-HSN, B-HTF

#### **AFTER ENGINE START**

Check of the engines pumps:

- PTU pb-sw ......OFF

 On the <u>HYD</u> SD page, check that the green and the yellow hydraulic systems pressures are correct.

A correct pressure is 3 000 PSI (± 200 PSI).

- PTU pb-sw ......AUTO

Note: On the HYD SD page, the PTU remains indicated running.

29-09-03A	HYD G(Y) ENG 1(2) PUMP LO PR Alert

Ident : MO-29-09-00009124 0002001 / 04 APR 12

Applicable to: B-HSD, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSO, B-HSP, B-HSQ, B-HSR, B-HTD, B-HTE, B-HTG, B-HTH, B-HTI

#### AFTER ENGINE START

Check of the engines pumps:

- PTU pb-sw ......OFF

 On the <u>HYD</u> SD page, check that the green and the yellow hydraulic systems pressures are correct.

A correct pressure is 3 000 PSI (± 200 PSI).

- PTU pb-sw .......AUTO

Note: On the HYD SD page, the PTU remains indicated running.

#### TAXI

Note: Due to a false HYD G(Y) ENG 1(2) PUMP LO PR alert displayed on the EWD, the "T.O"

CONFIG NORMAL" line will not replace the "T.O CONFIG . . TEST" line in the T.O

МЕМО.

Consider normal configuration for takeoff provided that no alert was displayed during the T.O CONFIG TEST except a false HYD G(Y) ENG 1(2) PUMP LO PR alert.

Continued on the following page



29-09 - ECAM Alerts

Continued from the previous page

CAUTION The T.O CONFIG TEST pb must be maintained pressed to check that there is no alert except a false HYD G(Y) ENG 1(2) PUMP LO PR alert.

29-09-07A <u>HYD</u> PTU FAULT Alert

# **DURING COCKPIT PREPARATION**

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

# Check of the PTU:

Applicable to: ALL

-	YELLOW ELEC PUMP pb-swON
_	PTU pb-swAUTC
	On the <u>HYD</u> SD page, check that the green hydraulic system pressure indication is green.
	If the green hydraulic system pressure indication is not available, check on the HYD SD page
	that the GREEN system label is white and the arrow is green.
_	YELLOW ELEC PUMP pb-sw

29-09-09A HYD G(B)(Y)(B+G)(G+Y)(B+Y) SYS LO PR Alert

Ident.: MO-29-09-00009126.0001001 / 29 NOV 11 Applicable to: ALL

# DURING COCKPIT PREPARATION

Note: If the Yellow Electric Pump is not available:

- Pressurize the Yellow Hydraulic System with:
  - · A Ground cart, or with
  - The Yellow Engine 2 Pump with the Engine 2 running.
- Replace any action on the YELLOW ELEC PUMP pb-sw by a similar action on the Ground Cart or on the YELLOW ENG 2 PUMP pb-sw in the following procedure.

Continued on the following page



29-09 - ECAM Alerts

		Continued from the previous page
-	YELLOW ELEC PUMP pb-sw	
-	BLUE ELEC PUMP pb-sw	AUTO
	BLUE PUMP OVRD pb-sw	
	PTU pb-sw	
-	On the CAPT or the F/O side, move the stick left or right.	
-	On the <u>F/CTL</u> SD page, check the pairs of spoilers movement.	
-	YELLOW ELEC PUMP pb-sw	Off
-	BLUE PUMP OVRD pb-sw	Off



29-09 - ECAM Alerts

Intentionally left blank

HDA A320/A321 FLEET MEL



29-10 - Main Hydraulic Power

29-10-03A	Blue System Electric Pump	
Ident.: MO-29-10-00009119.0001001 / 20 MAR 10  Applicable to: ALL		
DURING PRELIMINARY COCKPIT PREPARATION		
If the blue electric pump continuously runs:		
At electrical power supply application:		
BLUE ELEC PUMP pb-swOF		
AFTER ENGINE START		
BLUE ELEC PUMP	pb-swAUTC	
- BLUE PUMP	ric pump does not automatically start:  OVRD pb-swON D page, check that the blue hydraulic circuit pressure is available.	
AFTER ENGINE SHUTDOWN		
BLUE ELEC PUMP	pb-swOFF	



29-10 - Main Hydraulic Power

Intentionally left blank

HDA A320/A321 FLEET MO-29-10 P 2/2 MEL 29 NOV 11



29-23 - Power Transfer

29-23-01A	Power Transfer Unit (PTU)

Ident.: MO-29-23-00009120.0001001 / 19 JUL 12

Applicable to: ALL

### **AFTER ENGINE START**

|--|

- YELLOW ELEC PUMP pb-sw ......OFF
   Let the pressure in the yellow hydraulic system decrease to 200 PSI or less.
- On the <u>HYD</u> SD page, check that the yellow system pressure is correct. A correct pressure is 3 000 PSI (± 200 PSI).
- Check the PTU arrow indication.
- YELLOW ENG 2 PUMP pb-sw ......ON

Note: 1. The PTU pressurizes the system to a nominal value of 3 000 PSI (± 200 PSI), but if no consumers are operated the pressure is not constant. The PTU operates in a cycle which keeps the pressure in the hydraulic systems between 2 100 PSI and 3 200 PSI.

2. For passengers comfort, the PTU may be set to OFF during the taxi after landing provided that both engines hydraulic pumps are operative and running. The PTU must be set back to AUTO before leaving the aircraft.



29-23 - Power Transfer

Intentionally left blank

 HDA A320/A321 FLEET
 MO-29-23 P 2/2

 MEL
 19 JUL 12



29-24 - Yellow Auxiliary Hydraulic Power

29-24-01A Yellow System Electric Pump
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Ident.: MO-29-24-00009121.0001001 / 29 NOV 11

Applicable to: ALL

### **ON GROUND**

	pump continuously runs and does not stop when set to off: RS/CARGO (122VU T12) C/B	Pull
● If	f unsuccessful:	
-	Y HYD/ELEC PUMP/NORM (123VU AB03) C/B	Pull
-	Y HYD/ELEC/PUMP (123VU AB06) C/B	Pull
<u>Note:</u>	1. If the pump continuously runs on the ground, there is a potential overheat situation.	
	<ol><li>The reset of the C/Bs must be limited to the time required to open or close the cargo doors.</li></ol>	9



29-24 - Yellow Auxiliary Hydraulic Power

Intentionally left blank

 HDA A320/A321 FLEET
 MO-29-24 P 2/2

 MEL
 29 NOV 11



30-01 - Overhead Panels 30-01-01 - ANTI ICE Overhead Panel

30-01-01-03A	ANTI ICE WING pb-sw FAULT light
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Ident.: MO-30-01-01-00009042.0001001 / 29 NOV 11

Applicable to: ALL

DITIDING	COCKPIT	DDED	A D A TION
DURING	CUCKPII	PREP!	ARAHUN

Check of the anti-ice	"arrow" :	symbol:
-----------------------	-----------	---------

-	≟nsure engine bleed air supply system is avallable.	
-	ANTI ICE WING pb-swON	١

- On the <u>BLEED</u> SD page, check that the anti-ice "arrow" symbols are displayed amber and disappear after 30 s.
- ANTI ICE WING pb-sw ......Off



30-01 - Overhead Panels 30-01-01 - ANTI ICE Overhead Panel

Intentionally left blank

HDA A320/A321 FLEET MO-30-01-01 P 2/2 MEL 29 NOV 11



30-11 - Wing Ice Protection

30-11-01A Wing An	ti-Ice Control Valve
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Ident.: MO-30-11-00009047.0008001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Flight planning:

Increase fuel consumption by:

Zp (ft)	5 000	10 000	15 000	20 000	25 000	30 000	35 000	40 000
Fuel penalties	3.0 %	3.0 %	3.0 %	3.0 %	3.5 %	3.5 %	3.5 %	3.5 %

### Single engine cruise:

Decrease drift down ceilings by:

1 200 ft when OAT < ISA + 15 °C

4 200 ft when OAT>ISA + 15 °C

### Approach climb performance:

■ When the engine bleed air supply system is closed:

No penalty.

■ When the engine bleed air supply system is open:

Input ACARS LANDING CDL: 2200.

or

Decrease maximum climb limiting weight by:

2 200 kg.

### **DURING COCKPIT PREPARATION**

• After application of the maintenance procedure:

On the BLEED SD page, check that the anti-ice arrow symbol is displayed.

The anti-ice arrow symbol may be displayed amber or green.

The WING ANTI ICE L(R) HI PR alert must not be displayed on the EWD.

Continued on the following page



30-11 - Wing Ice Protection

Continued from the previous page

#### **BEFORE ENGINE START**

- Maintain the X BLEED selector at SHUT before engine start when the APU bleed is used.
- Start the engine 1.
  - Maintain the X BLEED selector at SHUT during the start of engine 1.
- Use the CROSS BLEED ENGINE START (*Refer to FCOM/ Crossbleed Engine Start*) procedure to start the engine 2.
- Apply the procedure associated with the <u>WING ANTI ICE</u> R VALVE OPEN alert displayed on the EWD.

### **AFTER TAKEOFF**

When above 1 500 ft:

Apply the automatic recall of the <u>WING ANTI ICE</u> R VALVE OPEN procedure displayed on the FWD

### IN FLIGHT

• In the case of failure of a Bleed Air Supply System:

PACK (affected side) pb-sw ...... OFF

### AFTER LANDING

Apply the automatic recall of the <u>WING ANTI ICE</u> R VALVE OPEN procedure displayed on the EWD.

30-11-01A	Wing Anti-Ice Control Valve

Ident.: MO-30-11-00009047.0006001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### FLIGHT PREPARATION/LIMITATIONS

### Flight planning:

Increase fuel consumption by:

Zp (ft)	5 000	10 000	15 000	20 000	25 000	30 000	35 000	40 000
Fuel penalties	4.0 %	3.5 %	2.5 %	3.0 %	3.5 %	3.5 %	3.5 %	3.5 %

### Single engine cruise:

Decrease drift down ceilings by:

1 200 ft when OAT ≤ ISA + 15 °C

2 200 ft when OAT>ISA + 15 °C

Continued on the following page



30-11 - Wing Ice Protection

Continued from the previous page

### Approach climb performance:

■ When the engine bleed air supply system is closed:

No penalty.

■ When the engine bleed air supply system is open:

Input ACARS LANDING CDL: 2200.

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Decrease maximum climb limiting weight by:

2 200 kg.

### **DURING COCKPIT PREPARATION**

• After application of the maintenance procedure:

On the BLEED SD page, check that the anti-ice arrow symbol is displayed.

The anti-ice arrow symbol may be displayed amber or green.

The WING ANTI ICE L(R) HI PR alert must not be displayed on the EWD.

### **BEFORE ENGINE START**

- Maintain the X BLEED selector at SHUT before engine start when the APU bleed is used.
- Start the engine 1.
  - Maintain the X BLEED selector at SHUT during the start of engine 1.
- Use the CROSS BLEED ENGINE START (Refer to FCOM/ Crossbleed Engine Start) procedure to start the engine 2.
- Apply the procedure associated with the WING ANTI ICE R VALVE OPEN alert displayed on the EWD.

### AFTER TAKEOFF

When above 1 500 ft:

Apply the automatic recall of the WING ANTI ICE R VALVE OPEN procedure displayed on the EWD.

### IN FLIGHT

In the case of failure of a Bleed Air Supply System:

Continued on the following page

HDA A320/A321 FLEET MO-30-11 P 3/4 19 JUL 12



30-11 - Wing Ice Protection

Continued from the previous page

### **AFTER LANDING**

Apply the automatic recall of the <u>WING ANTI ICE</u> R VALVE OPEN procedure displayed on the EWD.



### 30 - ICE AND RAIN PROTECTION

30-21 - Engine Air Intake Ice Protection

30-21-01C	Engine Anti-Ice Valve

Ident.: MO-30-21-00009049.0005001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### GENERAL INFORMATION

An higher idle speed is set on both engines when an engine anti-ice valve is inoperative in the open position.

#### FLIGHT PREPARATION/LIMITATIONS

### Takeoff performance:

Input ACARS RTOW MEL code: 30-21-01C

Note: Performance penalties apply whenever one or both valves are inoperative.

### Flight planning:

Increase fuel consumption by:

Zp (ft)	Two (2) Valves OPEN	One (1) Valve OPEN
<40 000	3.5 %	2.0 %
>=40 000	3.0 %	1.5 %

#### Single engine cruise:

Decrease drift down ceilings by:

900 ft when OAT ≤ ISA + 15 °C

4 000 ft when OAT > ISA + 15 °C

#### Approach climb performance:

Decrease maximum climb limiting weight by:

No penalty when OAT ≤ ISA + 20 °C

4 300 kg when OAT > ISA + 20 °C

or

Input ACARS LANDING CDL: 4300 (when OAT > ISA + 20 °C)

### Landing performance:

No penalty.

### **DURING COCKPIT PREPARATION**

ANTI ICE ENG (affected) pb-sw .....ON

Continued on the following page



30-21 - Engine Air Intake Ice Protection

Continued from the previous page

### AFTER ENGINE START

The FADEC commands the continuous ignition on the affected engine.

30-21-01C	Engine Anti-Ice Valve

Ident.: MO-30-21-00009049.0007001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### GENERAL INFORMATION

An higher idle speed is set on both engines when an engine anti-ice valve is inoperative in the open position.

### FLIGHT PREPARATION/LIMITATIONS

### Takeoff performance:

Input ACARS RTOW MEL code: 30-21-01C

Note: Performance penalties apply whenever one or both valves are inoperative.

### Flight planning:

Increase fuel consumption by:

Zp (ft)	Two (2) Valves OPEN	One (1) Valve OPEN
<=10 000	4.0 %	2.0 %
>10 000	3.5 %	2.0 %

### Single engine cruise:

Decrease drift down ceilings by:

1 100 ft when OAT ≤ ISA + 15 °C

3 300 ft when OAT > ISA + 15 °C

#### Approach climb performance:

Decrease maximum climb limiting weight by:

No penalty when OAT ≤ ISA + 10 °C

4 800 kg when OAT > ISA + 10 °C

or

Input ACARS LANDING CDL: 4800 (when OAT > ISA + 10 °C)

Landing performance:

Continued on the following page



### 30 - ICE AND RAIN PROTECTION

30-21 - Engine Air Intake Ice Protection

Continued from the previous page

No penalty.

### **DURING COCKPIT PREPARATION**

ANTI ICE ENG (affected) pb-sw ......ON

### **AFTER ENGINE START**

The FADEC commands the continuous ignition on the affected engine.



30-21 - Engine Air Intake Ice Protection

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HDA A320/A321 FLEET MO-30-21 P 4/4
MEL 19 JUL 12



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### **MEL OPERATIONAL PROCEDURES**

#### 30 - ICE AND RAIN PROTECTION

30-31 - Probe Ice Protection

30-31-01B	Probe Heat Computer (PHC)
Ident.: MO-30-31-00009050.00010	01 / 19 JUL 12 HSG, B-HSI, B-HSJ, B-HTD, B-HTE, B-HTF
DURING COCKPIT PF	
AIR DATA selector	F/O 3
<u>IN FLIGHT</u>	
_	ns are encountered:
ADR 2 pb-sw	OFF
	When ADR 2 is set to OFF,
	takeoff in CONF 1+F is not permitted, and maximum landing capability is CAT 3 SINGLE, and
	RVSM operations are not permitted.
The ADR 2 pb-s	w must remain set to OFF for the remainder of the flight.
-	•
30-31-01B	Probe Heat Computer (PHC)
Ident.: MO-30-31-00009050.0002001 / 19 JUL 12	
<sup>2</sup> Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI	
DURING COCKPIT PREPARATION	

### **IN FLIGHT**

• If icing conditions are encountered:

ADR 2 pb-sw.....OFF

AIR DATA selector......F/O 3

CAUTION When ADR 2 is set to OFF,
- takeoff in CONF 1+F is not permitted, and
- maximum landing capability is CAT 3 SINGLE.

The ADR 2 pb-sw must remain set to OFF for the remainder of the flight.

30-31-02A	Pitot Heater

Ident.: MO-30-31-00009052.0001001 / 11 MAR 10

Applicable to: ALL

Refer to OpsProc 30-31-01B Probe Heat Computer (PHC)



30-31 - Probe Ice Protection

30-31-03C	Static Ports Heater

Ident.: MO-30-31-00009053.0001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 30-31-01B Probe Heat Computer (PHC)

30-31-04A	Angle of Attack (AOA) Probes Heating (F/O inoperative)

Ident.: MO-30-31-00009054.0001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

• If icing conditions are encountered during the flight:

Maximum landing capability may be downgraded to CAT 3 SINGLE. RVSM operations are not permitted.

### **DURING COCKPIT PREPARATION**

AIR DATA selector......F/O 3

30-31-04B 30-31-04C	Angle of Attack (AOA) Probes Heating (CAPT or STBY inoperative)
30-31-0 <del>4</del> 0	

Ident.: MO-30-31-00009198.0001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

• If icing conditions are encountered during the flight:

Maximum landing capability may be downgraded to CAT 3 SINGLE.



30 - ICE AND RAIN PROTECTION

30-42 - Windshield Anti-Icing and Defogging

30-42-01A	Window Heat Computer

Ident.: MO-30-42-00009056.0001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

■ When the PF side is inoperative: Maximum landing capability is CAT 1.

■ When the PM side is inoperative:

Maximum landing capability is CAT 3 DUAL.

30-42-03A	Windshield Heating

Ident.: MO-30-42-00009057.0001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

■ When the PF side is inoperative: Maximum landing capability is CAT 1.

■ When the PM side is inoperative:

Maximum landing capability is CAT 3 DUAL.



30-42 - Windshield Anti-Icing and Defogging

Intentionally left blank

HDA A320/A321 FLEET MO-30-42 P 2/2 MEL 29 NOV 11



30 - ICE AND RAIN PROTECTION

30-45 - Windshield Rain Protection

30-45-01B	Windshield Wiper
	-

Ident.: MO-30-45-00009059.0001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

When the wiper and the rain repellent are inoperative or deactivated on the PF side:
 Maximum landing capability is CAT 1.



# MEL OPERATIONAL PROCEDURES 30 - ICE AND RAIN PROTECTION 30-45 - Windshield Rain Protection

Intentionally left blank

HDA A320/A321 FLEET MO-30-45 P 2/2 MEL 29 NOV 11



30-81 - Ice Detection

30-81-03A	Lighting of External Visual Icing Indicator

Ident.: MO-30-81-00009062.0001001 / 04 APR 12

Applicable to: ALL

### **IN FLIGHT**

• If icing conditions are expected during night operations:

Refer to FCOM/PRO-SUP-30 Operations in Icing Conditions.



30-81 - Ice Detection

Intentionally left blank

HDA A320/A321 FLEET MO-30-81 P 2/2 MEL 04 APR 12



31 - INDICATING/RECORDING SYSTEMS

31-07 - Indications on the System Display (SD)

31-07-02A

Permanent Data (TAT, SAT, GLOAD -ALT SEL. UTC. GW) Indications on the SD

Ident.: MO-31-07-00009041.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG

### DURING COCKPIT PREPARATION

Check that the TAT value is operative on the SD permanent data.

### • If the TAT value is not operative:

Check that the TAT value is available through the ADR 3.

Use the AIR DATA SWITCHING selector to display temporarily the TAT value on the Note: SD.

### IN FLIGHT

#### If needed:

The TAT value may be displayed through the same action on the AIR DATA SWITCHING selector.

31-07-02A

Permanent Data (TAT, SAT, GLOAD, UTC, GW) Indications on the SD

Ident.: MO-31-07-00009041.0002001 / 19 JUL 12 Applicable to: B-HST, B-HSU, B-HTH, B-HTI

### DURING COCKPIT PREPARATION

Check that the TAT value is operative on the SD permanent data.

### If the TAT value is not operative:

Check that the TAT value is available through the ADR 3.

Use the AIR DATA SWITCHING selector to display temporarily the TAT value on the Note: SD.

### **IN FLIGHT**

#### If needed:

The TAT value may be displayed through the same action on the AIR DATA SWITCHING selector.



### 31 - INDICATING/RECORDING SYSTEMS

31-07 - Indications on the System Display (SD)

Permanent Data (TAT, SAT, ISA, GLOAD, UTC, GW) Indications on the SD

Ident.: MO-31-07-00009041.0004001 / 19 JUL 12

<sup>2</sup> Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR

### **DURING COCKPIT PREPARATION**

Check that the TAT value is operative on the SD permanent data.

### • If the TAT value is not operative:

Check that the TAT value is available through the ADR 3.

<u>Note:</u> Use the AIR DATA SWITCHING selector to display temporarily the TAT value on the SD.

### **IN FLIGHT**

#### If needed:

The TAT value may be displayed through the same action on the AIR DATA SWITCHING selector.



31 - INDICATING/RECORDING SYSTEMS

31-20 - Independent Instruments

Ident.: MO-31-20-00009031.0001001 / 04 APR 12

Applicable to: ALL

### ON GROUND OR IN FLIGHT

After any electrical power interruption resulting in the loss of the UTC on the SD:
 Initialize the UTC and the date using the MCDU: Refer to FCOM/ GMT/Date Initialization



# MEL OPERATIONAL PROCEDURES 31 - INDICATING/RECORDING SYSTEMS

31-20 - Independent Instruments

Intentionally left blank

HDA A320/A321 FLEET MO-31-20 P 2/2 MEL 04 APR 12



### MEL OPERATIONAL PROCEDURES 31 - INDICATING/RECORDING SYSTEMS

31-53 - Flight Warning Computer (FWC)

FLIGHT WARNING COMPUTER (FWC)

Ident.: MO-31-53-00009032.0001001 / 11 MAR 10

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

31-53-06A	Altitude Alert
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Ident.: MO-31-53-00009462.0001001 / 11 MAR 10

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

• When both altitude alert functions are inoperative:

RVSM operations are not permitted.



31 - INDICATING/RECORDING SYSTEMS

31-53 - Flight Warning Computer (FWC)

Intentionally left blank

HDA A320/A321 FLEET MO-31-53 P 2/2 MEL 29 NOV 11



### MEL OPERATIONAL PROCEDURES 31 - INDICATING/RECORDING SYSTEMS

31-56 - ECAM Control Panel (ECP)

31-56-07A	T.O CONFIG pb on the ECP

Ident.: MO-31-56-00009033.0001001 / 19 JUL 12

Applicable to: ALL

#### BEFORE TAKEOFF

Check that the aircraft is in the correct takeoff configuration:

- SIDESTICK PRIORITY light ......CHECK NO RED
- On the WHEEL SD page, check that the brakes temperature is below 300 °C.
- DOORS......CHECK
- On the DOOR/OXY SD page, check that all doors are indicated closed.
- Deselect the DOOR/OXY SD page after the check.



# MEL OPERATIONAL PROCEDURES 31 - INDICATING/RECORDING SYSTEMS

31-56 - ECAM Control Panel (ECP)

Intentionally left blank

HDA A320/A321 FLEET MO-31-56 P 2/2 MEL 19 JUL 12



31 - INDICATING/RECORDING SYSTEMS 31-62 - Display Management Computer (DMC)

31-62-01B	DMC 1

Ident.: MO-31-62-00010598.0002001 / 19 JUL 12

Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### ON GROUND OR IN FLIGHT

● In the case of multiple undue ECAM alerts concerning ENG 1(2) N1(N2) (EGT)(FF) OVER LIMIT

or

ENG 1(2) N1(N2)(EGT)(EPR)(FF) DISCREPANCY

NAV ATT(ALT1)(HDG) DISCREPANCY

NAV FM/GPS POS DISAGREE

FUEL F.USED/FOB DISAGREE

### MINIMUM or HUNDRED ABOVE callouts, possibly associated with EFIS red flags, apply the below procedure:

- Crosscheck the affected parameters on the EWD, PFD, ND, or on the related SD page to confirm that the alerts are undue.
- EIS DMC SWITCHING selector......NORM

Note: CAPT PFD and ND ae lost when EIS DMC SWITCHING selector is set to NORM.

### ■ If the undue ECAM alerts stop:

- Pull EIS/DMC3/SPLY (121 VU Q09) C/B and EIS/DMC3/STBY/SPLY (49 VU E10) C/B for more than 5 s and push them back.

### ■ If the undue ECAM alerts continue:

- Wait for CAPT PFD and ND recovery.
- Pull EIS/DMC2/SPLY (121 VU Q08) C/B for more than 5 s and push it back.



#### 31 - INDICATING/RECORDING SYSTEMS

31-62 - Display Management Computer (DMC)

Ident.: MO-31-62-00009034.0004001 / 19 JUL 12

2 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### ON GROUND OR IN FLIGHT

 In the case of multiple undue ECAM alerts concerning ENG 1(2) N1(N2) (EGT)(FF) OVER LIMIT

or

ENG 1(2) N1(N2)(EGT)(EPR)(FF) DISCREPANCY

or

NAV ATT(ALT1)(HDG) DISCREPANCY

or

NAV FM/GPS POS DISAGREE

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FUEL F.USED/FOB DISAGREE

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### MINIMUM or HUNDRED ABOVE callouts, possibly associated with EFIS red flags, apply the below procedure:

- Crosscheck the affected parameters on the EWD, PFD, ND, or on the related SD page to confirm that the alerts are undue.
- EIS DMC SWITCHING selector ......NORM

Note: F/O PFD and ND are lost when EIS DMC SWITCHING selector is set to NORM.

### ■ If the undue ECAM alerts stop:

- Pull EIS/DMC3/SPLY (121 VU Q09) C/B and EIS/DMC3/STBY/SPLY (49 VU E10) C/B for more than 5 s and push them back.

### ■ If the undue ECAM alerts continue:

- Wait for F/O PFD and ND recovery.
- Pull EIS/DMC1/SPLY (49 VU E11) C/B for more than 5 s and push it back.



#### 31 - INDICATING/RECORDING SYSTEMS

31-62 - Display Management Computer (DMC)

31-62-03B	DMC 3
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Ident.: MO-31-62-00010599.0001001 / 19 JUL 12

Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### ON GROUND OR IN FLIGHT

 In the case of multiple undue ECAM alerts concerning ENG 1(2) N1(N2) (EGT)(FF) OVER LIMIT

or

ENG 1(2) N1(N2)(EGT)(EPR)(FF) DISCREPANCY

or

NAV ATT(ALT1)(HDG) DISCREPANCY

or

NAV FM/GPS POS DISAGREE

or

FUEL F.USED/FOB DISAGREE

or

## MINIMUM or HUNDRED ABOVE callouts, possibly associated with EFIS red flags, apply the below procedure:

- Crosscheck the affected parameters on the EWD, PFD, ND, or on the related SD page to confirm that the alerts are undue.
- EIS DMC SWITCHING selector.......CAPT 3

Note: CAPT PFD and ND are lost when EIS DMC SWITCHING selector is set to CAPT 3.

### ■ If the undue ECAM alerts stop:

- Pull EIS/DMC1/SPLY (49 VU E11) C/B a for more than 5 s and push it back.
- EIS DMC SWITCHING selector ......NORM

### ■ If the undue ECAM alerts continue:

- EIS DMC SWITCHING selector.....NORM
- Wait for CAPT PFD and ND recovery.
- Pull EIS/DMC2/SPLY (121 VU Q08) C/B for more than 5 s and push it back.



31 - INDICATING/RECORDING SYSTEMS

31-62 - Display Management Computer (DMC)

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HDA A320/A321 FLEET MO-31-62 P 4/4
MEL 19 JUL 12



# MEL OPERATIONAL PROCEDURES 31 - INDICATING/RECORDING SYSTEMS

31-63 - Display Unit (DU)

31-63-02A	PFDU 2
Ident.: MO-31-63-00009035.0 Applicable to: ALL	001001 / 11 MAR 10
FLIGHT PREPARA	ATION/LIMITATIONS
Maximum landin	g capability is CAT 2.
ON GROUND OR	N FLIGHT
PFDU 2 knob	OFF
31-63-03A	NDU 1
Ident.: MO-31-63-00009036.0 <b>Applicable to: ALL</b>	001001 / 11 MAR 10
FLIGHT PREPARA	ATION/LIMITATIONS
Maximum landin	g capability is CAT 2.
ON GROUND OR	N FLIGHT
NDU 1 knob	OFF
31-63-04A	NDU 2
Ident.: MO-31-63-00009037.0 Applicable to: ALL	001001 / 11 MAR 10
FLIGHT PREPARA	ATION/LIMITATIONS
Maximum landin	g capability is CAT 2.
ON GROUND OR	N FLIGHT
NDU 2 knob	OFF
31-63-05A	SDU
Ident.: MO-31-63-00009038.0 Applicable to: ALL	001001 / 04 APR 12
ON GROUND OR	<u>N FLIGHT</u>
SDU knob	OFF
	of alerts being displayed on the EWD:
Use the ECA	M/ND SWITCHING selector to display the system page on the selected NDU.

Continued on the following page



### MEL OPERATIONAL PROCEDURES 31 - INDICATING/RECORDING SYSTEMS

31-63 - Display Unit (DU)

Continued from the previous page

- In the case of failure of the AC BUS 1:
  - If all the Display Units are lost:

Apply the <u>ELEC</u> AC ESS BUS FAULT alert procedure: *Refer to FCOM/PRO-ABN-24-ELECTRICAL-ELEC AC ESS BUS FAULT.* 

Note: The AC ESS BUS is recovered when the AC ESS FEED pb-sw is set to ALTN.



### **MEL OPERATIONAL PROCEDURES** 31 - INDICATING/RECORDING SYSTEMS

31-68 - Switching Panel

31-68-05A	PFD/ND XFR pb on the Lateral Instrument Panel
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Ident.: MO-31-68-00009039.0001001 / 11 MAR 10 App

oplicable to: ALL	
DURING COCKPIT PREPARATION	
On the side where the PFD/ND XFR pb is inoperative:  PFD brightness control knob  Check that the PFD image is automatically displayed on the NDU.  PFD brightness control knob	
If the PFD image is not automatically displayed on the NDU:	
The affected side cannot be used by the Pilot Flying.	
On the side where the PFD to ND automatic switching is inoperative:  PFD brightness control knob	APT 3 (F/O 3)
<u>IN FLIGHT</u>	
<ul> <li>If a PFDU fails with no automatic transfer to the associated NDU:</li> <li>PFD brightness control knob</li></ul>	



## MEL OPERATIONAL PROCEDURES 31 - INDICATING/RECORDING SYSTEMS

31-68 - Switching Panel

Intentionally left blank

HDA A320/A321 FLEET MO-31-68 P 2/2 MEL 29 NOV 11



32-07 - Indications on the WHEEL SD page

32-07-01A	
32-07-01B	

### Brakes Temperature Indication on the WHEEL SD page

Ident.: MO-32-07-00009012.0003001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

The brake energy graph and the brake cooling time table given hereafter permit to determine the ground brake cooling time.

#### BRAKE ENERGY GRAPH

- If MAX reverser thrust was selected for all reversers during the braking phase: Enter the brake energy graph: WITH THRUST REVERSERS USE.
- If MAX reverser thrust was NOT selected for all reversers during the braking phase: Enter the brake energy graph: WITHOUT THRUST REVERSERS USE.

Determination of the brake energy accumulated during a REJECTED TAKEOFF (RTO):

- Enter with the aircraft takeoff weight ( TOW ) and with the rejected takeoff speed in kt IAS ).
- Apply airport pressure altitude, temperature, wind and runway slope corrections.

Determination of the brake energy accumulated during a LANDING:

- Enter with the aircraft landing weight, and
- Enter with the touch down speed in kt IAS if the autobrake was selected and applied or with the manual braking speed in kt IAS in the other cases.
- Apply airport pressure altitude, temperature, wind and runway slope corrections.
- Correct for brake setting with a preselected autobrake setting (LO, MED) or with MAX PEDAL braking in the other cases.

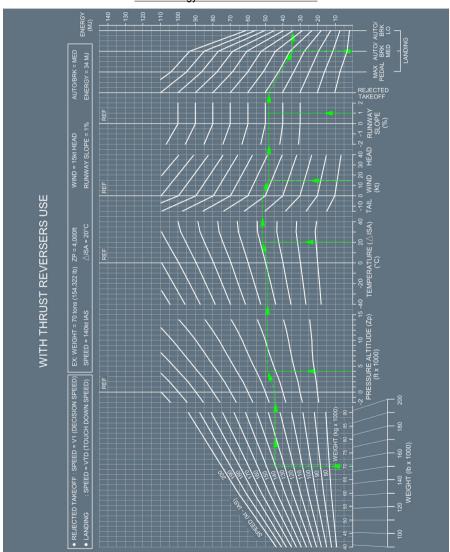
In the case of a dispatch with one brake inoperative ( Refer to Item 32-42-01 Main Note: Wheel Brake or Refer to Item 32-42-02 Green System Brake ), the brake energy accumulated is increased by 34 %.



32-07 - Indications on the WHEEL SD page

Continued from the previous page

## Brake Energy with Thrust Reverser Use

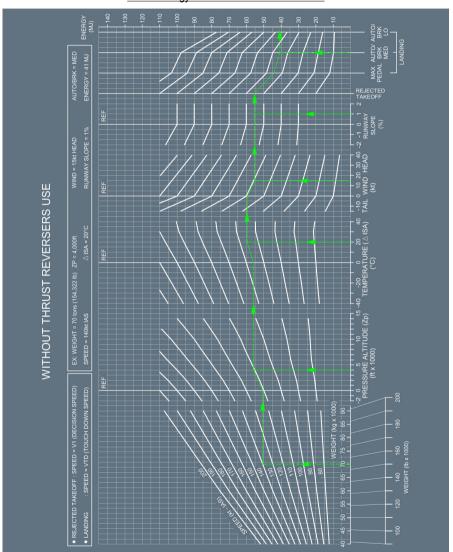




32-07 - Indications on the WHEEL SD page

Continued from the previous page

## Brake Energy without Thrust Reverser Use





32-07 - Indications on the WHEEL SD page

Continued from the previous page

### BRAKE COOLING TIME TABLE

Determination of the brake cooling time:

#### EXAMPLE:

55	152	153	154	155	155	====> TIME (min) WITHOUT BRAKE COOLING FAN
	46	46	46	46	47	====> TIME (min) WITH BRAKE COOLING FAN

If the Energy and the OAT are not given in the table, use the values given in the next adjacent column/row.

For Example, with Energy = 78 MJ, and  $OAT = 15 ^{\circ}\text{C}$ , entering the next adjacent column/row (Energy = 80 MJ,  $OAT = 20 ^{\circ}\text{C}$ ) gives the following results:

- Without brake cooling fan: 189 min

- With brake cooling fan: 57 min

Enter the following table with the energy and the OAT to determine the ground brake cooling time.

			G	ROUND	BRAKE	COOLIN	G TIME (I	min)				
ENERGY						OAT	(°C)					
(MJ)	-50	-40	-30	-20	-10	0	10	20	30	40	50	55
0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	4	9	14	19	23	27	31	35	37
	0	0	0	1	3	4	6	7	8	9	10	11
15	31	35	38	42	45	48	51	54	57	60	62	64
	9	10	11	12	13	14	15	16	17	18	19	19
20	59	62	65	67	70	72	74	77	79	81	83	84
	18	19	19	20	21	22	22	23	24	24	25	25
25	81	83	85	87	89	91	92	94	96	98	99	100
	24	25	25	26	27	27	28	28	29	29	30	30
30	98	99	101	103	104	106	107	109	110	112	113	114
	29	30	30	31	31	32	32	33	33	34	34	34
35	112	113	115	116	117	119	120	121	123	124	125	126
	34	34	34	35	35	36	36	36	37	37	38	38
40	124	125	126	127	129	130	131	132	133	134	135	136
	37	37	38	38	39	39	39	40	40	40	41	41
45	134	135	136	137	139	140	141	142	143	144	145	145
	40	41	41	41	42	42	42	42	43	43	43	44
50	144	145	146	146	147	148	149	150	151	152	153	153
	43	43	44	44	44	45	45	45	45	46	46	46



MINIMUM EQUIPMENT LIST

### **MEL OPERATIONAL PROCEDURES** 32 - LANDING GEAR

32-07 - Indications on the WHEEL SD page

Continued from the previous page

			G	ROUND	BRAKE	COOLIN	G TIME (	min)			uio piovi	
ENERGY		-				OAT	(°C)	-				
(MJ)	-50	-40	-30	-20	-10	0	10	20	30	40	50	55
55	152	153	154	155	155	156	157	158	159	160	160	161
	46	46	46	46	47	47	47	47	48	48	48	48
60	160	160	161	162	163	164	164	165	166	167	167	168
	48	48	48	49	49	49	49	50	50	50	50	50
65	167	167	168	169	170	170	171	172	172	173	174	174
	50	50	50	51	51	51	51	52	52	52	52	52
70	173	174	174	175	176	176	177	178	178	179	180	180
	52	52	52	53	53	53	53	53	54	54	54	54
75	179	180	180	181	182	182	183	183	184	185	185	186
	54	54	54	54	54	55	55	55	55	55	56	56
80	185	185	186	186	187	188	188	189	189	190	190	191
	55	56	56	56	56	56	56	57	57	57	57	57
85	190	190	191	191	192	193	193	194	194	195	195	196
	57	57	57	57	58	58	58	58	58	58	59	59
90	195	195	196	196	197	197	198	198	199	199	200	200
	58	59	59	59	59	59	59	60	60	60	60	60
95	199	200	200	201	201	202	202	203	203	204	204	205
	60	60	60	60	60	61	61	61	61	61	61	61
100	204	204	205	205	206	206	207	207	208	208	208	209
	61	61	61	62	62	62	62	62	62	62	63	63
105	208	208	209	209	210	210	211	211	212	212	212	213
	62	63	63	63	63	63	63	63	63	64	64	64
110	212	212	213	213	214	214	215	215	215	216	216	216
	64	64	64	64	64	64	64	64	65	65	65	65
115	216	216	217	217	217	218	218	219	219	219	220	220
	65	65	65	65	65	65	65	66	66	66	66	66
120	219	220	220	221	221	221	222	222	222	223	223	223
	66	66	66	66	66	66	67	67	67	67	67	67
A320	Messier/Goodrich - 03.01.05 - F476021.txt											

### **AFTER ENGINE START**

• In the case of a false BRAKES HOT alert displayed on the EWD : EMER CANC pb ......Press

In the case of a false BRAKES HOT alert due to a faulty BTMU or a faulty BSCU, Note: the "T.O CONFIG NORMAL" line will not replace the "T.O CONFIG . . TEST" line in the T.O MEMO. Consider normal configuration for takeoff provided that no alert was displayed during the T.O CONFIG TEST.

Continued on the following page

19 JUL 12  $\leftarrow A \rightarrow$ 



32-07 - Indications on the WHEEL SD page

Continued from the previous page

CAUTION	The T.O CONFIG TEST pb must be maintained pressed to check that there is
	no alert.

32-07-01A 32-07-01B

Brakes Temperature Indication on the WHEEL SD page

Ident.: MO-32-07-00009012.0006001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### FLIGHT PREPARATION/LIMITATIONS

The brake energy graph and the brake cooling time table given hereafter permit to determine the ground brake cooling time.

#### BRAKE ENERGY GRAPH

- If MAX reverser thrust was selected for all reversers during the braking phase: Enter the brake energy graph: WITH THRUST REVERSERS USE.
- If MAX reverser thrust was NOT selected for all reversers during the braking phase: Enter the brake energy graph: WITHOUT THRUST REVERSERS USE.

Determination of the brake energy accumulated during a REJECTED TAKEOFF (RTO):

- Enter with the aircraft takeoff weight ( TOW ) and with the rejected takeoff speed in kt IAS .
- Apply airport pressure altitude, temperature, wind and runway slope corrections.

Determination of the brake energy accumulated during a LANDING:

- Enter with the aircraft landing weight, and
- Enter with the touch down speed in kt IAS if the autobrake was selected and applied or with the manual braking speed in kt IAS in the other cases.
- Apply airport pressure altitude, temperature, wind and runway slope corrections.
- Correct for brake setting with a preselected autobrake setting (LO, MED) or with MAX PEDAL braking in the other cases.

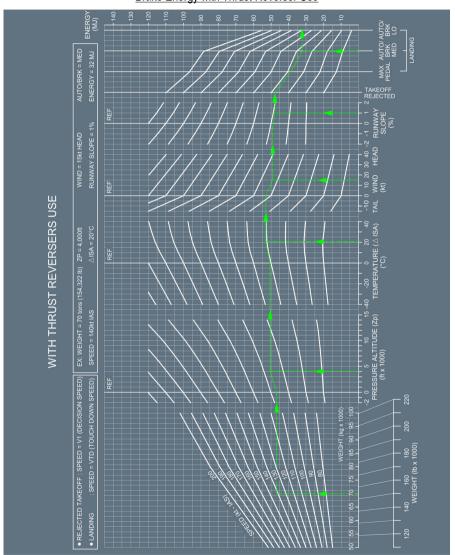
<u>Note:</u> In the case of a dispatch with one brake inoperative ( Refer to Item 32-42-01 Main Wheel Brake or Refer to Item 32-42-02 Green System Brake ), the brake energy accumulated is increased by 34 %.



32-07 - Indications on the WHEEL SD page

Continued from the previous page

### Brake Energy with Thrust Reverser Use

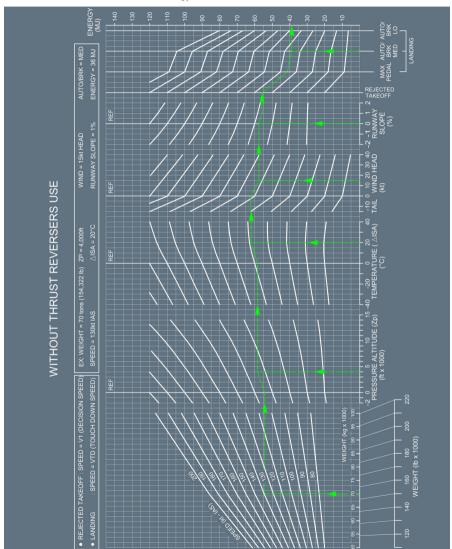




32-07 - Indications on the WHEEL SD page

Continued from the previous page

## Brake Energy without Thrust Reverser Use





32-07 - Indications on the WHEEL SD page

Continued from the previous page

### BRAKE COOLING TIME TABLE

Determination of the brake cooling time:

#### **EXAMPLE**:

Г	55	152	153	154	155	155	====> TIME (MN) WITHOUT BRAKE COOLING FAN
		46	46	46	46	47	====> TIME (MN) WITH BRAKE COOLING FAN

If the Energy and the OAT are not given in the table, use the values given in the next adjacent column/row.

For Example, with Energy = 78 MJ, and OAT =  $15 \,^{\circ}\text{C}$ , entering the next adjacent column/row (Energy =  $80 \,\text{MJ}$ , OAT =  $20 \,^{\circ}\text{C}$ ) gives the following results:

- Without brake cooling fan: 189 min
- With brake cooling fan: 57 min

Enter the following table with the energy and the OAT to determine the ground brake cooling time.

			G	ROUND	BRAKE	COOLIN	G TIME (	min)				
ENERGY						OAT	(°C)					
(MJ)	-50	-40	-30	-20	-10	0	10	20	30	40	50	55
0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	4	9	14	19	23	27	31	35	37
	0	0	0	1	3	4	6	7	8	9	10	11
15	31	35	38	42	45	48	51	54	57	60	62	64
	9	10	11	12	13	14	15	16	17	18	19	19
20	59	62	65	67	70	72	74	77	79	81	83	84
	18	19	19	20	21	22	22	23	24	24	25	25
25	81	83	85	87	89	91	92	94	96	98	99	100
	24	25	25	26	27	27	28	28	29	29	30	30
30	98	99	101	103	104	106	107	109	110	112	113	114
	29	30	30	31	31	32	32	33	33	34	34	34
35	112	113	115	116	117	119	120	121	123	124	125	126
	34	34	34	35	35	36	36	36	37	37	38	38
40	124	125	126	127	129	130	131	132	133	134	135	136
	37	37	38	38	39	39	39	40	40	40	41	41
45	134	135	136	137	139	140	141	142	143	144	145	145
	40	41	41	41	42	42	42	42	43	43	43	44
50	144	145	146	146	147	148	149	150	151	152	153	153
	43	43	44	44	44	45	45	45	45	46	46	46



32 - LANDING GEAR

32-07 - Indications on the WHEEL SD page

Continued from the previous page

			G	ROUND	BRAKE	COOLIN	G TIME (	min)			ino provi	
ENERGY		-				OAT	(°C)					
(MJ)	-50	-40	-30	-20	-10	0	10	20	30	40	50	55
55	152	153	154	155	155	156	157	158	159	160	160	161
	46	46	46	46	47	47	47	47	48	48	48	48
60	160	160	161	162	163	164	164	165	166	167	167	168
	48	48	48	49	49	49	49	50	50	50	50	50
65	167	167	168	169	170	170	171	172	172	173	174	174
	50	50	50	51	51	51	51	52	52	52	52	52
70	173	174	174	175	176	176	177	178	178	179	180	180
	52	52	52	53	53	53	53	53	54	54	54	54
75	179	180	180	181	182	182	183	183	184	185	185	186
	54	54	54	54	54	55	55	55	55	55	56	56
80	185	185	186	186	187	188	188	189	189	190	190	191
	55	56	56	56	56	56	56	57	57	57	57	57
85	190	190	191	191	192	193	193	194	194	195	195	196
	57	57	57	57	58	58	58	58	58	58	59	59
90	195	195	196	196	197	197	198	198	199	199	200	200
	58	59	59	59	59	59	59	60	60	60	60	60
95	199	200	200	201	201	202	202	203	203	204	204	205
	60	60	60	60	60	61	61	61	61	61	61	61
100	204	204	205	205	206	206	207	207	208	208	208	209
	61	61	61	62	62	62	62	62	62	62	63	63
105	208	208	209	209	210	210	211	211	212	212	212	213
	62	63	63	63	63	63	63	63	63	64	64	64
110	212	212	213	213	214	214	215	215	215	216	216	216
	64	64	64	64	64	64	64	64	65	65	65	65
115	216	216	217	217	217	218	218	219	219	219	220	220
	65	65	65	65	65	65	65	66	66	66	66	66
120	219	220	220	221	221	221	222	222	222	223	223	223
	66	66	66	66	66	66	67	67	67	67	67	67
A320	Messier/Goodrich - 03.01.05 - F476021.txt											

### **AFTER ENGINE START**

Note: In the case of a false <u>BRAKES</u> HOT alert due to a faulty BTMU or a faulty BSCU, the "T.O CONFIG NORMAL" line will not replace the "T.O CONFIG... TEST" line in the T.O MEMO. Consider normal configuration for takeoff provided that no alert was displayed during the T.O CONFIG TEST.



32-07-03A

## MEL OPERATIONAL PROCEDURES 32 - LANDING GEAR

32-07 - Indications on the WHEEL SD page

L/G Doors Position Indication on the WHEEL SD page

Continued from the previous page

CAUTION	The T.O CONFIG TEST pb must be maintained pressed to check that there is
	no alert.



32-07 - Indications on the WHEEL SD page

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 HDA A320/A321 FLEET
 MO-32-07 P 12/12

 MEL
 19 JUL 12



32 - LANDING GEAR

32-09 - ECAM Alerts

32-09-01C

BRAKES-N/WS MINOR FAULT Alert (Alternate braking checked operative)

Ident.: MO-32-09-00009197.0001001 / 19 JUL 12

1 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### **DURING COCKPIT PREPARATION**

The ACCU PRESS indication must be in the green band.

, , , <del>, _ , , , , , , , , , , , , , , ,</del>	
CU PRESS indication not in the green band:	•
EC PUMP pb-swON then OFF	
KSCHECK IN PLACE	- (
NG BRAKE handleOFF	- 1
NG PEDALSPRESS	-
naximum pressure on both pedals.	,
PRESSURE (on BRAKES pressure indicators)CHECK	- [
re must increase without delay symmetrically on left and right sides for the same tion simultaneously applied on left and right pedals. With full pedal deflection, the re must be between 900 and 1100 psi.	á
S PEDALSRELEASE	- [
that no residual pressure in the brakes remains.  NG BRAKE handleON	



32-09 - ECAM Alerts

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 HDA A320/A321 FLEET
 MO-32-09 P 2/2

 MEL
 19 JUL 12



32-31 - Normal Extension and Retraction

32-31-01A	Landing Gear Control and Interface Unit ( LGCIU )

Ident.: MO-32-31-00008975.0002001 / 04 APR 12

Applicable to: ALL

### **DURING COCKPIT PREPARATION**

HYDRAULIC/LGCIU/SYS2 (121VU Q35) C/B C/B ......PULL

#### Takeoff performance

- No penalty.
- Perform takeoff using TOGA.

The following table gives the consequences on the systems affected when the LGCIU 2 is inoperative and above mentioned C/B is pulled.

Note: When the LGCIU 2 is inoperative, the FADEC switches over to flight configuration, where the EPR Rating limit displayed on ECAM depends on the TLA position.

During taxi, the EPR RATING limit displayed is CLB, however once thrust levers are set to TOGA. TOGA is displayed on ECAM.

SYSTEMS	CONSEQUENCES	PROCEDURE
	The system remains in closed circuit configuration.	Time limitations on ground for ELEC PWR supply:
AVNCS VENT (on ground)		- OAT ≤ 43 °C : No Limitation - 44 °C ≤ OAT ≤ 52 °C : 3 h - OAT ≥ 53 °C : 30 min
		Check that the air conditioning system is operative.
HYD	The PTU runs after the first engine start until the second engine is started.	
(on ground)	The BLUE ELEC PUMP FAULT light and the YELLOW ENG 2 PUMP FAULT light come on when engines are off.	
ATC 2 (on ground)	The ATC 2 is not inhibited.	On ground, set the ATC selector to SYS 1.
	The strobe lights are not inhibited on ground when set to AUTO.	On ground, set the STROBE sw to OFF.
LIGHTS	On ground, with flaps retracted, logo lights do not come on.	
	The taxi light , the runway turn-off light , and the takeoff light are inoperative on ground and in flight.	



32-31 - Normal Extension and Retraction

Continued from the previous page

		Continued from the previous page
SYSTEMS	CONSEQUENCES	PROCEDURE
ELEC	When only the APU generator or the GPU	
(on ground)	supplies the aircraft, the main galleys are not	
(=== 3=====,	supplied.	
	The FADEC supply is continuously on.	LI II MANI OTA PT
ENG 2	The automatic start abort is inoperative.	Use the MAN START procedure.
	The minimum idle is inoperative when	Refer to OpsProc 73-20-05A Minimum Idle on Ground
(on ground)	slats/flaps are extended.	Use the TOGA for takeoff.
	When FLX TO is selected, MCT thrust is set.	
01.470	The thrust reverser is inoperative.  The slats are slow from 1 to 0.	Refer to OpsProc 78-30-01A Thrust Reverser
SLATS	The stats are slow from 1 to 0.	
(on ground)		
AIR COND	Both air conditioning packs ram air inlet do not	
(on ground)	close.	
	On ground, when set to ON, the WING A	
WING A ICE	ICE valve do not close at the end of the test	
	sequence ( 30 s ).	
(on ground)	The WING A.ICE OPEN ON GND alert will be	
	displayed on the EWD .	
ADIRU and	The horn and the light are inoperative.	
AVNCS VENTalert		
WATER	The preselect water servicing is inoperative.	
SERVICING		
(on ground)		
CARGO DOOR	Only the manual control is operative.	
( FWD and AFT)	Company and manual common to specialize	
( I WD allu AFT)	The CVR test and the CVR erase functions are	
RECORDERS	inoperative.	
(on ground)	The CVR and the DFDR do not stop after	
(on ground)	engine shutdown.	
BRAKES	The brakes cooling is inoperative.	
(on ground)	<b>,</b>	
ECAM		
	On the <u>WHEEL</u> SD page , the landing gear	
(in flight and on	position indications associated with the	
ground)	LGCIU 2 are displayed XX.	
	The <u>L/G</u> LGCIU 2 FAULT alert is diplayed	
	on the EWD .	



32-31 - Normal Extension and Retraction

Continued from the previous page

### **IN FLIGHT**

In the case of loss of the LGCIU 1:

AP and FD are lost.

Maximum landing capability is CAT 1.

32-31-02A	Landing Gear Retracting System
-----------	--------------------------------

Ident.: MO-32-31-00008977.0001001 / 04 APR 12

Applicable to: ALL

Refer to FCOM/PRO-SPO-25-FLIGHT WITH GEAR DOWN.

Takeoff performance

Input ACARS RTOW MEL code: 32-31-02A



32-31 - Normal Extension and Retraction

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HDA A320/A321 FLEET MO-32-31 P 4/4
MEL 04 APR 12



32-32 - Proximity Detector System

32-32-02A

## LGCIU 2 RH L/G Shock Absorber Proximity Detector

Ident.: MO-32-32-00008978.0002001 / 04 APR 12

Applicable to: ALL

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
PITOTS (on ground)	The F/O pitot is set to high heating level when the EXT PWR pb-sw is set to OFF.	Keep the EXT PWR pb-sw set to ON until the engine start.
	The system remains in the closed circuit configuration.	Time limitations on ground for ELEC PWR supply:
AVNCS VENT (on ground)		- OAT ≤ 43 °C : No limitation - OAT = 52 °C : 3 h - OAT = 61 °C : 30 min
		Check that the air conditioning system is operative.
ADIRU and AVNCS VENT alert (on ground)	The horn and the light are inoperative.	
HYD alerts (on ground)	The BLUE ELEC PUMP FAULT light and the YELLOW ENG 2 PUMP FAULT light come on when engines are off.	
WING A/ICE (on ground)	The wing anti-ice is not inhibited.	On ground, do not set the WING ANTI ICE pb-sw to ON for more that 30 s . If required, set it to ON just before takeoff.
ATC 2 (on ground)	The ATC 2 is not inhibited.	On ground, set the ATC selector to SYS 1.
LIGHTS	The strobe lights are not inhibited.	On ground, set the STROBE sw to OFF.
(on ground)	On ground, with flaps retracted, the logo lights do not come on.	
ELEC (on ground)	When only the APU generator or GPU supplies the aircraft, the main galleys are not supplied.	
	The FADEC supply is continuously on.	
	The automatic start abort is inoperative.	Use the MAN START procedure.
ENG 2 (on ground)	The minimum idle is inoperative.	Refer to OpsProc 73-20-05A Minimum Idle on Ground
	When FLX TO is selected, MCT thrust is set.	Use the TOGA for takeoff.
	The thrust Reverser is inoperative.	Refer to OpsProc 78-30-01A Thrust Reverser
SLATS	The slats are slow from 1 to 0.	
(on ground)		



32-32 - Proximity Detector System

Continued from the previous page

CVCTEMC	CONCEOUENCEC	DDOCEDUDEO
SYSTEMS	CONSEQUENCES	PROCEDURES
CARGO DOOR	Only the manual control is operative.	
(on ground)		
AIR COND	The air conditioning pack 2 ram air inlet does	
(on ground)	not close.	
WATER	The preselect water servicing is inoperative.	
SERVICING		
(on ground)		
RECORDERS (on ground)	The CVR test and the CVR erase functions are inoperative. The CVR and the DFDR do not stop after engine shutdown.	
ECAM (in flight and on ground)	On the WHEEL SD page, the landing gear position indications associated with the LGCIU 2 are displayed XX. The L/G LGCIU 2 FAULT alert is displayed on the EWD.	

32-32-03A	LGCIU 2 LH L/G Shock Absorber Proximity Detector
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Ident.: MO-32-32-00008988.0006001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
PITOTS (on ground)	The CAPT pitot is set to the high heating level when the EXT PWR pb-sw is set to OFF.	Keep the EXT PWR pb-sw set to ON until engine start.
AVNCS VENT (on ground)	The system remains in the closed circuit configuration.	<ul> <li>Time limitations on ground for ELEC PWR supply:         <ul> <li>OAT ≤ 42 °C : No limitation</li> <li>OAT = 53 °C : 3 h</li> <li>OAT = 61 °C : 30 min</li> </ul> </li> <li>Check that the air conditioning system is operative.</li> </ul>
ADIRU and AVNCS VENT alert (on ground)	The horn and the light are inoperative.	



32-32 - Proximity Detector System

Continued from the previous page

SYSTEMS	CONSEQUENCES	PROCEDURES
HYD alerts	The BLUE ELEC PUMP FAULT light and the	
(on ground)	YELLOW ENG 2 PUMP FAULT light come on	
(5.1. 9. 5)	when engines are off.	
LIGHTS	The strobe lights are not inhibited.	On ground, set the STROBE sw to OFF.
(on ground)	On ground, with flaps retracted, the logo lights	
	do not come on.	
ELEC	When only the APU generator or GPU supplies	
(on ground)	the aircraft, the main galleys are not supplied.	
	The FADEC supply is continuously on.	
	The automatic start abort is inoperative.	Use the MAN START procedure.
ENG 2	The minimum idle is inoperative.	Refer to OpsProc 73-20-05A Minimum Idle on
(on ground)		Ground
	When FLX TO selected, MCT thrust is set.	Use the TOGA for takeoff.
	The thrust Reverser is inoperative.	Refer to OpsProc 78-30-01A Thrust Reverser
SLATS	The slats are slow from 1 to 0.	
(on ground)		
AIR COND	The air conditioning pack 1 ram air inlet does not	
(on ground)	close.	
CARGO DOOR	Only the manual control is operative.	
WATER	The preselect water servicing is inoperative.	
SERVICING		
(on ground)		
RECORDERS	The CVR test and the CVR erase functions are	
(on ground)	inoperative.	
`	The CVR and the DFDR do not stop after engine	
	shutdown.	
ECAM	On the <u>WHEEL</u> SD page , the landing gear	
(in flight and	position indications associated with the	
on ground)	LGCIU 2 are displayed XX.	
	The <u>L/G</u> LGCIU 2 FAULT alert is displayed on	
	the EWD .	



32-32-03A

## MEL OPERATIONAL PROCEDURES 32 - LANDING GEAR

32-32 - Proximity Detector System

LGCIU 2 LH L/G Shock Absorber Proximity Detector

Ident.: MO-32-32-00008988.0016001 / 19 JUL 12

1 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
PITOTS	The CAPT pitot is set to the high heating level	Keep the EXT PWR pb-sw set to ON until
(on ground)	when the EXT PWR pb-sw is set to OFF.	engine start.
	The system remains in the closed circuit configuration.	Time limitations on ground for ELEC PWR supply:
AVNCS VENT (on ground)		- OAT ≤ 42 °C : No limitation - OAT = 53 °C : 3 h - OAT = 61 °C : 30 min
		Check that the air conditioning system is operative.
ADIRU and	The horn and the light are inoperative.	
<b>AVNCS VENT alert</b>		
(on ground)		
HYD alerts	The BLUE ELEC PUMP FAULT light and the	
(on ground)	YELLOW ENG 2 PUMP FAULT light come on	
	when engines are off.	
LIGHTS	The strobe lights are not inhibited.	On ground, set the STROBE sw to OFF.
(on ground)	On ground, with flaps retracted, the logo lights do not come on.	
ELEC	When only the APU generator or GPU supplies	
(on ground)	the aircraft, the main galleys are not supplied.	
	The FADEC supply is continuously on.	
	The automatic start abort is inoperative.	Use the MAN START procedure.
ENG 2 (on ground)	The minimum idle is inoperative.	Refer to OpsProc 73-20-05A Minimum Idle on Ground
`	When FLX TO selected, MCT thrust is set.	Use the TOGA for takeoff.
	The thrust reverser is inoperative.	Refer to OpsProc 78-30-01A Thrust Reverser
SLATS	The slats are slow from 1 to 0.	
(on ground)		
AIR COND	The air conditioning pack 1 ram air inlet does not	
(on ground)	close.	
CARGO DOOR	Only the manual control is operative.	



32-32 - Proximity Detector System

Continued from the previous page

SYSTEMS	CONSEQUENCES	PROCEDURES
WATER SERVICING (on ground)	The preselect water servicing is inoperative.	
RECORDERS (on ground)	The CVR test and the CVR erase functions are inoperative. The CVR and the DFDR do not stop after engine shutdown.	
ECAM (in flight and on ground)	On the WHEEL SD page, the landing gear position indications associated with the LGCIU 2 are displayed XX. The L/G LGCIU 2 FAULT alert is displayed on the EWD.	

Ident.: MO-32-32-00008989.0001001 / 29 NOV 11

Applicable to: ALL

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
PITOTS (on ground)	The STBY pitot is set to the high heating level when the EXT PWR pb-sw is set to OFF.  If displayed, disregard the <u>ANTI ICE</u> CAPT(F/O) PITOT alert on the EWD when EXT PWR pb-sw is set to OFF.	Keep the EXT PWR pb-sw set to ON until the engine start.
HYD	The PTU runs after the first engine start until the	
(on ground)	second engine is started.	
ENG 2	The minimum idle is inoperative when	Refer to OpsProc 73-20-05A Minimum Idle on
(on ground)	slats/flaps are extended.	Ground
ECAM	For WHEEL SD page and ECAM alert Refer to C	psProc 32-32-03A LGCIU 2 LH L/G Shock
(in flight and	Absorber Proximity Detector " ECAM " line.	
on ground)		



32-32 - Proximity Detector System

32-32-05A	LGCIU 2 RH L/G Down Lock Proximity Detector
-----------	---

Ident.: MO-32-32-00008990.0004001 / 29 NOV 11

Applicable to: ALL

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
	REVERSER 2 is displayed in the INOP SYS	The REVERSER 2 is still operative.
ENG 2	column on the <u>STATUS</u> SD page.	
(on ground)	The minimum idle is inoperative when	Refer to OpsProc 73-20-05A Minimum Idle on
` • ′	slats/flaps are extended.	Ground
ECAM	For WHEEL SD page and ECAM alert Refer to C	DpsProc 32-32-03A LGCIU 2 LH L/G Shock
(in flight and	Absorber Proximity Detector " ECAM " line.	
on ground)		

32-32-06A	LGCIU 2 LH L/G Down Lock Proximity Detector

Ident.: MO-32-32-00008991.0010001 / 29 NOV 11

Applicable to: ALL

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
BRAKES	The brakes cooling is inoperative.	
ENG 2	REVERSER 2 is displayed in the INOP SYS column on the <u>STATUS</u> SD page .	The REVERSER 2 is still operative.
(on ground)	The minimum idle is inoperative when slats/flaps are extended.	Refer to OpsProc 73-20-05A Minimum Idle on Ground
ECAM (in flight and on ground)	For <u>WHEEL</u> SD page and ECAM alert <i>Refer to C</i> Absorber Proximity Detector " ECAM " line.	ÖpsProc 32-32-03A LGCIU 2 LH L/G Shock



32-32 - Proximity Detector System

32-32-07A	LGCIU 2 Nose L/G Down Lock Proximity Detector
-----------	---

Ident.: MO-32-32-00008992.0001001 / 29 NOV 11

Applicable to: ALL

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES
LIGHTS	The Taxi light and the takeoff light are inoperative.
(in flight and on ground)	
ECAM	For WHEEL SD page and ECAM alert Refer to Item 32-31-01 Landing Gear
(in flight and on ground)	Control and Interface Unit (LGCIU) " ECAM " line.

Ident.: MO-32-32-00008993.0004001 / 29 NOV 11

Applicable to: ALL

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
ENG 2	REVERSER 2 is displayed in the INOP SYS column on the <u>STATUS</u> SD page.	The thrust Reverser 2 is still operative.
	The minimum idle on ground is inoperative when slats/flaps are extended.	Refer to OpsProc 73-20-05A Minimum Idle on Ground
	For <u>WHEEL</u> SD page and ECAM alert <i>Refer to It</i> Interface Unit (LGCIU) " ECAM " line.	em 32-31-01 Landing Gear Control and



32-32 - Proximity Detector System

32-32-09A	LGCIU 2 LH L/G Up Lock Proximity Detector
-----------	---

Ident.: MO-32-32-00008994.0004001 / 29 NOV 11

Applicable to: ALL

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
	, ,	The thrust Reverser 2 is still operative.
ENG 2	column on the <u>STATUS</u> SD page .	
(on ground)	The minimum idle on ground is inoperative	Refer to OpsProc 73-20-05A Minimum Idle on
	when slats/flaps are extended.	Ground
ECAM	For WHEEL SD page and ECAM alert Refer to It	tem 32-31-01 Landing Gear Control and
(in flight and	Interface Unit (LGCIU) " ECAM " line.	
on ground)		

32-32-10A	LGCIU 2 Nose L/G Up Lock Proximity Detector
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Ident.: MO-32-32-00009002.0004001 / 29 NOV 11

Applicable to: ALL

### **GENERAL INFORMATION**

SYSTEMS	CONSEQUENCES	PROCEDURES
ENG 2	REVERSER 2 is displayed in the INOP SYS column on the <u>STATUS</u> SD page .	The thrust Reverser 2 is still operative.
(on ground)	The minimum idle on ground is inoperative when slats/flaps are extended.	Refer to OpsProc 73-20-05A Minimum Idle on Ground
ECAM (in flight and on ground)	For WHEEL SD page and ECAM alert Refer to Item 32-31-01 Landing Gear Control and Interface Unit (LGCIU) " ECAM " line.	

32-32-11A	LGCIU 2 RH L/G Doors Open Proximity Detector

Ident.: MO-32-32-20802058.9001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 32-32-08A LGCIU 2 RH L/G Up Lock Proximity Detector



32-32 - Proximity Detector System

32-32-12A LGCIU 2 LH L/G Doors Open Proximity Detector

Ident.: MO-32-32-20802065.9001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 32-32-09A LGCIU 2 LH L/G Up Lock Proximity Detector

32-32-13A LGCIU 2 Nose L/G Doors Open Proximity Detector

Ident.: MO-32-32-20802072.9001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 32-32-10A LGCIU 2 Nose L/G Up Lock Proximity Detector

32-32-14A LGCIU 2 RH L/G Doors Closed Proximity Detector

Ident.: MO-32-32-20802079.9001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 32-32-08A LGCIU 2 RH L/G Up Lock Proximity Detector

32-32-15A LGCIU 2 LH L/G Doors Closed Proximity Detector

Ident.: MO-32-32-20802086.9001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 32-32-09A LGCIU 2 LH L/G Up Lock Proximity Detector

32-32-16A LGCIU 2 Nose L/G Doors Closed Proximity Detector

Ident.: MO-32-32-20802093.9001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 32-32-10A LGCIU 2 Nose L/G Up Lock Proximity Detector



32 - LANDING GEAR

32-32 - Proximity Detector System

Intentionally left blank

HDA A320/A321 FLEET MEL



32 - LANDING GEAR

32-33 - Free Fall Extension

32-33-01A Landing Gear Gravity Extension System

Ident.: MO-32-33-00009003.0001001 / 04 APR 12

Applicable to: ALL

Refer to FCOM/PRO-SPO-25-FLIGHT WITH GEAR DOWN.

Takeoff performance

Input ACARS RTOW MEL code: 32-33-01A



32 - LANDING GEAR 32-33 - Free Fall Extension

Intentionally left blank

HDA A320/A321 FLEET MEL



32 - LANDING GEAR

32-42 - Normal Braking

32-42-01A	Main Wheel Brake

Ident.: MO-32-42-00009004.0029001 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 Single.

Takeoff performance:

Input ACARS RTOW MEL code: 32-42-01A

Landing performance:

Input ACARS LANDING FAIL CODE: BRK01

or

Multiply the required landing distance by 1.30.

#### FOR TAKEOFF

The autobrake function, even if available, must not be used.

• In the case of engine failure at takeoff:

Retract the landing gear when positive climb.

Vibrations may occur during 1 or 2 min after the retraction of the landing gear.

• If both engines are operative:

Keep the landing gear down for 1 min.

#### FOR LANDING

The autobrake function, even if available, must not be used.

32-42-01A	Main Wheel Brake
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Ident.: MO-32-42-00009004.0170001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### 3 FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 Single.

Takeoff performance:

Input ACARS RTOW MEL code: 32-42-01A

Landing performance:

Input ACARS LANDING FAIL CODE: BRK01



### 32 - LANDING GEAR

32-42 - Normal Braking

Continued from the previous page

or

Multiply the required landing distance by 1.25.

#### FOR TAKEOFF

The autobrake function, even if available, must not be used.

In the case of engine failure at takeoff:

Retract the landing gear when positive climb.

Vibrations may occur during 1 or 2 min after the retraction of the landing gear.

• If both engines are operative:

Keep the landing gear down for 1 min.

#### FOR LANDING

The autobrake function, even if available, must not be used.

32-42-02A Green System Brake
------------------------------

Ident.: MO-32-42-00009005.9001001 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### 4 FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 Single.

Takeoff performance:

Input ACARS RTOW MEL code: 32-42-02A

Landing performance:

Input ACARS LANDING FAIL CODE: BRK01

10

Multiply the required landing distance by 1.30.

#### FOR TAKEOFF

The autobrake function, even if available, must not be used.

• In the case of engine failure at takeoff:

Retract the landing gear when positive climb.

Vibrations may occur during 1 or 2 min after the retraction of the landing gear.



32 - LANDING GEAR

32-42 - Normal Braking

Continued from the previous page

If both engines are operative:

Keep the landing gear down for 1 min.

### **FOR LANDING**

The autobrake function, even if available, must not be used.

32-42-02A	Green System Brake
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Ident : MO-32-42-00009005 9001002 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST

### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 Single.

Takeoff performance:

Input ACARS RTOW MEL code: 32-42-02A

Landing performance:

Input ACARS LANDING FAIL CODE: BRK01

or

Multiply the required landing distance by 1.25.

### FOR TAKEOFF

The autobrake function, even if available, must not be used.

In the case of engine failure at takeoff:

Retract the landing gear when positive climb.

Vibrations may occur during 1 or 2 min after the retraction of the landing gear.

If both engines are operative:

Keep the landing gear down for 1 min.

#### **FOR LANDING**

The autobrake function, even if available, must not be used.



32 - LANDING GEAR

32-42 - Normal Braking

	32-42-03A	Braking/Steering Control Unit (BSCU) System 1
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Ident.: MO-32-42-20801704.9001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Check before each flight on MCDU/LAST LEG REPORT SD page that there is no fault message related to the L/G SYS DISAGREE caution.

32-42-04A Braking/Steering Control Unit (BSCU) System 2

Ident.: MO-32-42-20801705.9001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

Check before each flight on MCDU/LAST LEG REPORT SD page that there is no fault message related to the L/G SYS DISAGREE caution.

32-42-05A AUTO/BRK Function

Ident.: MO-32-42-00009006.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

#### **BEFORE TAKEOFF**



# MEL OPERATIONAL PROCEDURES 32 - LANDING GEAR

32-47 - Brake Temperature System

52-47-01A Brake reinperature Monitoring Offic ( B1MO )	32-47-01A	Brake Temperature Monitoring Unit ( BTMU )
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Ident.: MO-32-47-00009008.0001001 / 29 NOV 11

Applicable to: ALL

# **DURING PRELIMINARY COCKPIT PREPARATION**



32 - LANDING GEAR

32-47 - Brake Temperature System

Intentionally left blank

HDA A320/A321 FLEET MO-32-47 P 2/2 MEL 29 NOV 11



# MEL OPERATIONAL PROCEDURES 32 - LANDING GEAR

32-51 - Steering

32-51-01A Nose Wheel Steering Control System

Ident.: MO-32-51-20802048.9001001 / 04 APR 12

Applicable to: ALL

#### **GENERAL INFORMATION**

The electrical and hydraulic control of NWS is inoperative. Do not reset the WHEEL N/W STRG FAULT alert with A/SKID & N/W STRG selector. The WHEEL N/W STRG FAULTalert indicates that no hydraulic pressure is applied on the NWS actuator.

## FLIGHT PREPARATION/LIMITATIONS

Dispatch is not permitted from (or to) contaminated runways.

Maximum crosswind component for takeoff and landing: 20 kt.

Maximum landing capability is CAT 3 SINGLE.

Note: The automatic roll out is not permitted (Refer to QRH/OPS Required Equipment for CAT2 and CAT3).

# • For operations with crosswind component above 5 kt:

Reduce maximum takeoff performance limiting weight by 1 000 kg

#### **DURING TAXI**

# Taxiing Procedure:

- Avoid high thrust settings, taxi speed limited to 20 kt.
- Check brakes temperature (if available) before takeoff. If necessary, set the BRAKES FAN pb-sw to ON.
- Minimum speed of 5 kt is required to initiate a turn.
- Apply asymmetrical thrust in straight taxi to compensate crosswind and differential braking for taxi and line up as required.
- Avoid sharp turns and use maximum width of the runway.
- Do not apply too high asymmetrical thrust to avoid that nose landing gear get stuck to full travel (90°) (in that case release the aircraft by towing).

# **FOR TAKEOFF**

#### In the case of crosswind component above 5 kt:

- Set full nose down elevator till 80 kt regardless of the aircraft loading.
- Apply EPR = 1.05 on the brakes
- Release the brakes, and smoothly apply takeoff power
- Use asymmetric braking, if required, to keep on runway center-line until directional control is available by use of rudder.
- Release stick progressively to reach neutral at about 100 kt.

Continued on the following page



## 32 - LANDING GEAR

32-51 - Steering

Continued from the previous page

#### FOR LANDING

Do not use autobrake for landing.

- In the case of crosswing component above 5 kt:
  - Aircraft lateral control is achieved with the rudder until slowing to approximately 50 kt IAS.
  - Upon reaching 50 kt IAS use differential braking to achieve taxi speed as required.

## AFTER LANDING

Disengage AP at touchdown when autoland is performed.

32-51-02A	Rudder PEDALS DISC pb
Ident.: MO-32-51-00012799.00010	01 / 17 SEP 10
Applicable to: ALL	

The purpose of the procedure is to explain how to perform the flight control check with one or both PEDALS DISC pb failed in the released position.

## **GENERAL INFORMATION**

32-51-034

■ When the disconnection is not possible on one side:

The flight control check can be performed on the operative side.

■ When the disconnection is not possible on both sides:

The flight control check must be performed while aircraft is stopped.

Note: it is not necessary to set the A/SKID & N/W STRG sw to OFF.

	02-01-00A	available when the lever is in the TOWING position)	
	ldent.: MO-32-51-00009010.0001001 / 17 SEP 10 Applicable to: ALL		
	BEFORE CONVENTIONAL OR TOWLESS PUSHBACK		
	A/SKID & N/W STR	G selectorOFF	
AFTER PUSHBACK			
	A/SKID & N/W STR	G selectorON	

NWS Electrical Deactivation Box (towing mode is not



# MEL OPERATIONAL PROCEDURES 32 - LANDING GEAR

32-51 - Steering

32-51-03B NWS Electrical Deactivation Box (NWS Electrical Deactivation Box deactivated)

Ident.: MO-32-51-00012592.0001001 / 17 SEP 10

Applicable to: ALL

## BEFORE CONVENTIONAL OR TOWLESS PUSHBACK

A/SKID & N/W STRG selector......OFF

As a result of the NWS electrical box deactivation, the parking brake light on that box will not be available.

The parking brake setting must be verbally confirmed between the flight crew and the ground personnel before pushback.

## **AFTER PUSHBACK**

A/SKID & N/W STRG selector.....ON

32-51-04A PARKING BRAKE light on the NWS Electrical Deactivation Box

Ident.: MO-32-51-00009011.0001001 / 17 SEP 10

Applicable to: ALL

#### **BEFORE PUSHBACK**

The parking brake setting must be verbally confirmed between the flight crew and the ground personnel.



# MEL OPERATIONAL PROCEDURES 32 - LANDING GEAR

32-51 - Steering

Intentionally left blank

HDA A320/A321 FLEET MEL



33 - LIGHTS

33-20 - Cabin General Illumination

33-20-03A	Lauratamy Cimp (Datum to acat)
33-20-03A	Lavatory Sign (Return to seat)

Ident.: MO-33-20-00008956.0001001 / 11 MAR 10

Applicable to: ALL

# **DURING COCKPIT PREPARATION**

Check that the passenger address function is operative in the affected lavatory with the door closed.



33 - LIGHTS

33-20 - Cabin General Illumination

Intentionally left blank

HDA A320/A321 FLEET MEL



33 - LIGHTS

33-40 - Exterior Lighting

Ident.: MO-33-40-00008957.0001001 / 11 MAR 10

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

The fuel consumption is increased by 1 % per landing light extended.

33-40-08C	Donnen limbi
33-40-08D	Beacon light

Ident.: MO-33-40-00008958.0001001 / 04 APR 12

Applicable to: ALL

#### **BEFORE ENGINE START**

# • If the bottom light is inoperative:

If this light is used to alert the ground crew of the engine start, an alternate procedure must be established to alert the ground crew of the engine start.

Ground crews must ensure adequate measures are taken to prevent vehicles and or equipment passing behind the aircraft during engine running and or pushback.

33-40-09A	Wing Scan light
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Ident.: MO-33-40-20801571.9001001 / 29 NOV 11

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

For ice accretion use external visual ice indicator.



33 - LIGHTS

33-40 - Exterior Lighting

Intentionally left blank

HDA A320/A321 FLEET MEL



34 - NAVIGATION

34-01 - Overhead Panels 34-01-01 - ADIRS Overhead Panel

34-01-01-31A	ADR pb-sw
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Ident.: MO-34-01-01-00008926.0001001 / 17 SEP 10

Applicable to: ALL

# **IN FLIGHT**

If needed, the associated ADR can be set to OFF through the associated mode selector.

Note: • If the ADR is set to OFF:

The associated IR is also set to OFF.

The F/CTL MAINTENANCE message is displayed on the STATUS SD page.

34-01-01-32A	IR pb-sw
	•

Ident.: MO-34-01-01-00008927.0001001 / 19 JUL 12

Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## **IN FLIGHT**

If needed, the associated IR can be set to OFF through the associated mode selector.

## Note: • If the IR is set to OFF:

The associated ADR is also set to OFF.

The F/CTL MAINTENANCE message is displayed on the STATUS SD page.



34 - NAVIGATION

34-01 - Overhead Panels 34-01-01 - ADIRS Overhead Panel

Intentionally left blank

HDA A320/A321 FLEET MO-34-01-01 P 2/2 MEL 19 JUL 12



34 - NAVIGATION

34-05 - Indications on the Primary Flight Display (PFD)

34-05-07A Other Air Data Related Indications on the PFD

Ident.: MO-34-05-00008951.0001001 / 29 NOV 11

Applicable to: ALL

# **GENERAL INFORMATION**

For F, S, Green Dot determination, refer to *Refer to QRH/FPE-SPD Speeds*. For VAPP determination, refer to *Refer to QRH/FPE-IFL VAPP Determination*.

For VFE or VLE determination, refer to the corresponding placard in the cockpit.

34-05-08A Attitude Indication on the PFD

Ident.: MO-34-05-00008953.0001001 / 11 MAR 10

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 1.



34 - NAVIGATION

34-05 - Indications on the Primary Flight Display (PFD)

Intentionally left blank

HDA A320/A321 FLEET MO-34-05 P 2/2 MEL 29 NOV 11



MINIMUM EQUIPMENT LIST

# MEL OPERATIONAL PROCEDURES 34 - NAVIGATION

34-10 - Air Data/Inertial Reference System (ADIRS)

34-10-02B	ADR 2
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Ident.: MO-34-10-00008928.0001001 / 17 SEP 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HTD, B-HTE, B-HTF

## FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

RVSM operations are not permitted.

## **DURING COCKPIT PREPARATION**

- ADR 2 pb-sw	OFF
The F/CTL MAINTENANCE message is displayed on the STATUS SD page.	
- AIR DATA SWITCHING selector	F/O 3
- ADIRS/ADIRU/2/26VAC AND AOA (location 121VU N08 or N09) C/B	Pull

#### AFTER ENGINE START

- Use the RCL pb-sw on the ECAM control panel, in order to recall the NAV ADR 2 FAULT alert.
- On the EWD, check that the ADR 2...OFF procedure is not displayed.

#### FOR TAKEOFF

Takeoff in CONF 1+F is not permitted.

Note:

When the ADR 2 pb-sw is set to OFF, and if the aircraft is in CONF 1+F, the SFCS n°2 Flap channel is unable to crosscheck the airspeed coming from the ADR 1 with the ADR 2 airspeed coming from the SFCS n°2 Slat channel. This may lead to an uncommanded flap retraction during the takeoff. As a consequence, takeoff in CONF 1+F is not permitted when the ADR 2 pb-sw is set to OFF.

34-10-02B	ADR 2
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Ident.: MO-34-10-00008928.0003001 / 19 JUL 12

1 Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

#### **DURING COCKPIT PREPARATION**

ADH 2 pp-sw	UFF
The F/CTL MAINTENANCE message is displayed on the STATUS SD page.	
AIR DATA SWITCHING selector	F/O 3
ADIRS/ADIRU/2/26VAC AND AOA (location 121VU N08 or N09) C/B	Pull
	The F/CTL MAINTENANCE message is displayed on the STATUS SD page.  AIR DATA SWITCHING selector

Continued on the following page

HDA A320/A321 FLEET MO-34-10 P 1/8



34-10 - Air Data/Inertial Reference System (ADIRS)

Continued from the previous page

#### AFTER ENGINE START

- Use the RCL pb-sw on the ECAM control panel, in order to recall the NAV ADR 2 FAULT alert.
- On the EWD, check that the ADR 2...OFF procedure is not displayed.

## FOR TAKEOFF

Takeoff in CONF 1+F is not permitted.

Note:

When the ADR 2 pb-sw is set to OFF, and if the aircraft is in CONF 1+F, the SFCS n°2 Flap channel is unable to crosscheck the airspeed coming from the ADR 1 with the ADR 2 airspeed coming from the SFCS n°2 Slat channel. This may lead to an uncommanded flap retraction during the takeoff. As a consequence, takeoff in CONF 1+F is not permitted when the ADR 2 pb-sw is set to OFF.

34-10-03A	ADR 3
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Ident.: MO-34-10-00008929.0001001 / 17 SEP 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

## **DURING COCKPIT PREPARATION**

- ADR 3 pb-sw.....OFF

  The F/CTL MAINTENANCE message is displayed on the STATUS SD page.
- ADIRS/ADIRU/3/26VAC AND AOA (location 121VU N07 or N08) C/B......Pull

#### AFTER ENGINE START

- Use the RCL pb-sw on the ECAM control panel, in order to recall the NAV ADR 3 FAULT alert.
- On the EWD, check that the ADR 3...OFF procedure is not displayed.

34-10-04B 34-10-04C IR 1 (only NAV mode of IR 1 inoperative)	
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Ident.: MO-34-10-00008930.0001001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

Continued on the following page



MINIMUM EQUIPMENT LIST

# MEL OPERATIONAL PROCEDURES 34 - NAVIGATION

34-10 - Air Data/Inertial Reference System (ADIRS)

Continued from the previous page

# **DURING COCKPIT PREPARATION**

- The heading must be entered through the CDU keyboard for the IR 1 and has to be frequently reset (*Refer to FCOM/ IR ALIGNMENT IN ATT MODE*)

34-10-04B	
34-10-04C IR 1 (only NAV mode of IR 1 inoperative)	

Ident.: MO-34-10-00008930.0002001 / 19 JUL 12

2 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

## **DURING COCKPIT PREPARATION**

- The heading must be entered through the MCDU for the IR 1 and has to be frequently reset (Refer to FCOM/ IR ALIGNMENT IN ATT MODE)

34-10-05B	IR 2 (IR 2 totally inoperative)
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Ident.: MO-34-10-00008931.0001001 / 17 SEP 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HTD, B-HTE, B-HTF

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

RVSM operations are not permitted because the ADR 2 is set to OFF.

#### DURING COCKPIT PREPARATION

- IR 2 mode selectorOFF
<ul> <li>ADR 2 is consequently set to OFF.</li> <li>The F/CTL MAINTENANCE message is displayed on the STATUS SD page.</li> </ul>
- ATT HDG SWITCHING selectorF/O 3

Continued on the following page



34-10 - Air Data/Inertial Reference System (ADIRS)

Continued from the previous page

Continued on the following page

#### FOR TAKEOFF

Takeoff in CONF 1+F is not permitted.

Note: When the ADR 2 is set to OFF, and if the aircraft is in CONF 1+F, the SFCS n°2 Flap channel is unable to crosscheck the airspeed coming from the ADR 1 with the ADR 2 airspeed coming from the SFCS n°2 Slat channel. This may lead to an uncommanded flap retraction during the takeoff. As a consequence, takeoff in CONF 1+F is not permitted when the ADR 2 is set to OFF.

IR 2 (IR 2 totally inoperative) 34-10-05B Ident.: MO-34-10-00008931.0004001 / 19 JUL 12 3 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU FLIGHT PREPARATION/LIMITATIONS Maximum landing capability is CAT 3 SINGLE. DURING COCKPIT PREPARATION - IR 2 pb-sw......OFF The F/CTL MAINTENANCE message is displayed on the STATUS SD page. 34-10-05B IR 2 (IR 2 totally inoperative) Ident.: MO-34-10-00008931.0003001 / 29 NOV 11 Applicable to: B-HSK, B-HSL, B-HSM, B-HSN, B-HTG, B-HTH, B-HTI FLIGHT PREPARATION/LIMITATIONS Maximum landing capability is CAT 3 SINGLE. DURING COCKPIT PREPARATION - IR 2 mode selector.......OFF 1. ADR 2 is consequently set to OFF. Note: 2. The F/CTL MAINTENANCE message is displayed on the STATUS SD page. 



34-10 - Air Data/Inertial Reference System (ADIRS)

Continued from the previous page

#### FOR TAKEOFF

Takeoff in CONF 1+F is not permitted.

Note:

When the ADR 2 is set to OFF, and if the aircraft is in CONF 1+F, the SFCS n°2 Flap channel is unable to crosscheck the airspeed coming from the ADR 1 with the ADR 2 airspeed coming from the SFCS n°2 Slat channel. This may lead to an uncommanded flap retraction during the takeoff. As a consequence, takeoff in CONF 1+F is not permitted when the ADR 2 is set to OFF.

34-10-05C IR 2 (only NAV mode of IR 2 inoperative)

Ident.: MO-34-10-00008932.0001001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

## **DURING COCKPIT PREPARATION**

-	ATT HDG SWITCHING selector	F/O 3
_	IR 2 mode selector	ΔΤΤ

 The heading must be entered through the CDU keyboard for the IR 2 and has to be frequently reset (Refer to FCOM/ IR ALIGNMENT IN ATT MODE)

34-10-05C	IR 2 (only NAV mode of IR 2 inoperative)
-----------	--

Ident.: MO-34-10-00008932.0002001 / 19 JUL 12

<sup>4</sup> Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

#### **DURING COCKPIT PREPARATION**

-	ATT HDG SWITCHING selector	F/O 3
_	IR 2 mode selector	ΔΤΤ

- The heading must be entered through the MCDU keyboard for the IR 2 and has to be frequently reset (*Refer to FCOM/ IR ALIGNMENT IN ATT MODE*)

HDA A320/A321 FLEET MO-34-10 P 5/8



34-10 - Air Data/Inertial Reference System (ADIRS)

34-10-06A	IR 3 (for aircraft without Honeywell 10 MCU ADIRU with IR 3 totally inoperative)
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Ident.: MO-34-10-00008933.0001001 / 29 NOV 11

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

## **DURING COCKPIT PREPARATION**

IR 3 mode selector......OFF

Note: 1. The ADR 3 is consequently set to OFF.

2. The F/CTL MAINTENANCE message is displayed on the STATUS SD page.

24.10.064	IR 3 (for aircraft without Honeywell 10
34-10-06A	MCU ADIRU with IR 3 totally inoperative)

Ident.: MO-34-10-00008933.0002001 / 19 JUL 12

5 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

#### **DURING COCKPIT PREPARATION**

IR 3 pb-sw......OFF

The F/CTL  $\underline{\textit{MAINTENANCE}}$  is displayed on the  $\underline{\textit{STATUS}}$  SD page.

34-10-06B	IR 3 (for aircraft without Honeywell 10 MCU
34-10-00B	ADIRU with only NAV mode of IR 3 inoperative)

Ident.: MO-34-10-00008934.0001001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

## **DURING COCKPIT PREPARATION**

- The heading must be entered through the CDU keyboard for the IR 3 and has to be frequently reset (*Refer to FCOM/ IR ALIGNMENT IN ATT MODE*)



34-10 - Air Data/Inertial Reference System (ADIRS)

IR 3 (for aircraft without Honeywell 10 MCU 34-10-06B ADIRU with only NAV mode of IR 3 inoperative)

Ident.: MO-34-10-00008934.0002001 / 19 JUL 12

6 Applicable to: B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

## FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 3 SINGLE.

# **DURING COCKPIT PREPARATION**

- The heading must be entered through the MCDU for the IR 3 and has to be frequently reset (Refer to FCOM/ IR ALIGNMENT IN ATT MODE)



34-10 - Air Data/Inertial Reference System (ADIRS)

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 HDA A320/A321 FLEET
 MO-34-10 P 8/8

 MEL
 19 JUL 12



34-11 - Sensors

24 11 02 4	CAPT Total Air Temperature ( TAT )
34-11-02A	Sensor Element Connected to the ADR 1

Ident.: MO-34-11-00008937.0001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 31-07-02A Permanent Data Indications on the SD

24 11 024	CAPT Total Air Temperature (TAT)
34-11-03A	Sensor Element Connected to the ADR 3

Ident.: MO-34-11-00008938.0001001 / 29 NOV 11

Applicable to: ALL

# **DURING COCKPIT PREPARATION**

Check that the TAT is displayed on the SD permanent data.

34-11-04A	F/O Total Air Temperature ( TAT )
34-11-04A	Sensor Element Connected to the ADR 2

Ident.: MO-34-11-00008939.0001001 / 29 NOV 11

Applicable to: ALL

Refer to OpsProc 31-07-02A Permanent Data Indications on the SD



34-11 - Sensors

Intentionally left blank

HDA A320/A321 FLEET MO-34-11 P 2/2 MEL 29 NOV 11



34-21 - Altitude and Airspeed Standby Data

34-21-03A Standby IAS Indicator

Ident.: MO-34-21-00008940.0001001 / 11 MAR 10 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# **DURING COCKPIT PREPARATION**

# Check of the AIR DATA, PFD/ND, and EIS DMC switching:

Check of the AIR DATA, PFD/ND, and EIS DING Switching:	
- AIR DATA SWITCHING selector	CAPT 3
- Check that the display is normal on the CAPT PFD and the CAPT ND.	
- AIR DATA SWITCHING selector	F/O 3
- Check that the display is normal on the F/O PFD and the F/O ND.	
- AIR DATA SWITCHING selector	NORM
- EIS DMC SWITCHING selector	CAPT 3
- Check that the display is normal on the CAPT PFD and the CAPT ND.	
- EIS DMC SWITCHING selector	F/O 3
- Check that the display is normal on the F/O PFD and the F/O ND.	
- EIS DMC SWITCHING selector	NORM
- CAPT PFD/ND XFR pb	Press
- Check that the CAPT PFD and the CAPT ND images are exchanged.	
- CAPT PFD/ND XFR pb	Press
- F/O PFD/ND XFR pb	Press
- Check that the F/O PFD and the F/O ND images are exchanged.	
- F/O PFD/ND XFR pb	Press



34-21 - Altitude and Airspeed Standby Data

Intentionally left blank

HDA A320/A321 FLEET MO-34-21 P 2/2 MEL 29 NOV 11



34-22 - Attitude and Heading Standby Data

Standby Compass indicator	34-22-01B	Standby Compass Indicator
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Ident.: MO-34-22-00008941.0001001 / 11 MAR 10

Applicable to: ALL

#### **DURING COCKPIT PREPARATION**

- Check that the display is normal on the F/O PFD and the F/O ND.

- ATT HDG SWITCHING selector......NORM
- EIS DMC SWITCHING selector......CAPT 3

- Check that the display is normal on the CAPT PFD and the CAPT ND.

- EIS DMC SWITCHING selector......F/O 3

- Check that the display is normal on the F/O PFD and the F/O ND.

- EIS DMC SWITCHING selector.....NORM

- CAPT PFD/ND XFR pb......Press
- Check that the CAPT PFD and the CAPT ND images are exchanged.

- CAPT PFD/ND XFR pb......Press

- F/O PFD/ND XFR pb......Press
- Check that the F/O PFD and the F/O ND images are exchanged.

- F/O PFD/ND XFR pb......Press

34-22-03B Standby Horizon Indicator

Ident : MO-34-22-00008942 0001001 / 11 MAR 10

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 1.



34-22 - Attitude and Heading Standby Data

Intentionally left blank

HDA A320/A321 FLEET MO-34-22 P 2/2 MEL 29 NOV 11



34 - NAVIGATION

34-23 - Integrated Standby Instrument System (ISIS)

34-23-04B	ISIS Attitude Indication
04 20 04B	Total Attitude maloution

Ident.: MO-34-23-00008943.0002001 / 19 JUL 12

1 Applicable to: B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

# FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 1.



34-23 - Integrated Standby Instrument System (ISIS)

Intentionally left blank

 HDA A320/A321 FLEET
 MO-34-23 P 2/2

 MEL
 19 JUL 12



34 - NAVIGATION

34-30 - Landing and Taxiing Aid

34-30-04A Instrument Landing System (ILS)
---

Ident.: MO-34-30-00008944.0001001 / 11 MAR 10

Applicable to: ALL

# FLIGHT PREPARATION/LIMITATIONS

■ When one ILS is inoperative:

Maximum landing capability is ILS CAT 1.

■ When both ILS are inoperative:

CAT 1 ILS approaches are not permitted.



34 - NAVIGATION

34-30 - Landing and Taxiing Aid

Intentionally left blank

HDA A320/A321 FLEET MEL



MINIMUM EQUIPMENT LIST

# MEL OPERATIONAL PROCEDURES

34 - NAVIGATION

34-40 - GPWS/TAWS. Radio Altimeter, TCAS, Weather Radar

34-40-02A	Radio Altimeter Automatic Callout
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Ident.: MO-34-40-00008946.0001001 / 17 SEP 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 2 without autoland.

34-40-03A	Radio Altimeter System
-----------	------------------------

Ident.: MO-34-40-00008947.0001001 / 11 MAR 10

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Maximum landing capability is CAT 2.

The F/CTL MAINTENANCE message is displayed on the STATUS SD page.

## **DURING COCKPIT PREPARATION**

■ If RA 1 is inoperative:

COM NAV/RAD ALTM/1 (121VU K11) C/B.....Pull

■ If RA 2 is inoperative:

COM NAV/RAD ALTM/2 (121VU K12) C/B......Pull

34-40-07A PULL UP-GPWS pb-sw

Ident.: MO-34-40-00008949.0002001 / 04 APR 12

Applicable to: ALL

# **DURING COCKPIT PREPARATION**

Check of the GPWS (or TAWS) aural and visual warnings:

- PULL UP - GPWS pb-sw (operative)......Press

 Check that the GPWS (or the TAWS) aural and visual warnings are operative. Refer to FCOM/DSC-34-70 GPWS.



34-40 - GPWS/TAWS, Radio Altimeter, TCAS, Weather Radar

Intentionally left blank

HDA A320/A321 FLEET MO-34-40 P 2/2 MEL 04 APR 12



# MEL OPERATIONAL PROCEDURES 35 - OXYGEN

35-07 - Indications on the DOOR/OXY SD page

35-07-01A

Crew OXY High Pressure Indication on the DOOR/OXY SD page

Ident.: MO-35-07-20802049.9001001 / 04 APR 12

Applicable to: ALL

# **DURING COCKPIT PREPARATION**

• After application of the maintenance procedure:

Check that the oxygen pressure is sufficient for the intended flight. Refer to FCOM/ Cockpit Fixed Oxygen System

35-07-02A

Crew Oxygen REGUL LO PR Indication on the DOOR/OXY SD page

Ident.: MO-35-07-00008924.0001001 / 11 MAR 10

Applicable to: ALL

#### **GENERAL INFORMATION**

On the <u>DOOR/OXY</u> SD page, disregard the REGUL LO PR indication and the associated OXY indication.



35 - OXYGEN

35-07 - Indications on the DOOR/OXY SD page

Intentionally left blank

HDA A320/A321 FLEET MO-35-07 P 2/2 MEL 04 APR 12



35 - OXYGEN

35-10 - Crew Oxygen

35-10-03A

**Exterior Crew Oxygen Overpressure Indicator Disc (Green Disc)** 

Ident.: MO-35-10-00008910.0001001 / 11 MAR 10

Applicable to: ALL

## **DURING COCKPIT PREPARATION**

Before the first flight of each day, check that the oxygen pressure does not decrease:

On the DOOR/OXY SD page, check the OXY pressure indication twice.

A 15 min interval must be applied between both checks.



**35 - OXYGEN** 35-10 - Crew Oxygen

Intentionally left blank

 HDA A320/A321 FLEET
 MO-35-10 P 2/2

 MEL
 29 NOV 11



35 - OXYGEN

35-20 - Passenger Oxygen

35-20-01B	Passenger Oxygen Unit

Ident.: MO-35-20-00008911.0001001 / 29 NOV 11

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

The system must be operative on the HKG-KTM/DAC-HKG route, however, individual modules may be inoperative on this route provided that the seats are:

- a. not occupied and
- b. placarded.



35 - OXYGEN

35-20 - Passenger Oxygen

Intentionally left blank

HDA A320/A321 FLEET MEL



MINIMUM EQUIPMENT LIST

## **MEL OPERATIONAL PROCEDURES**

36 - PNEUMATIC

36-00 - MAINTENANCE Message on the STATUS SD page

36-00-01B 36-00-01C

# AIR BLEED MAINTENANCE Message

Ident.: MO-36-00-00008866.0002001 / 04 APR 12

Applicable to: ALL

## **DURING COCKPIT PREPARATION**

-	ENG (affected side) BLEED pb-sw	OFF
	PACK (affected side) pb-sw	
	X BLEED selector	
•	If the LH side is affected:     APU BLEED pb-sw	OFF

The use of the APU bleed air supply system for Main Engine Start is permitted.

# **IN FLIGHT**

Note:

- In the case of failure of the remaining engine bleed air supply system, or in the case of failure of the associated engine:
  - Apply the associated ECAM procedure, then
  - Refer to QRH/ AIR DUAL BLEED FAULT



36 - PNEUMATIC

36-00 - MAINTENANCE Message on the STATUS SD page

Intentionally left blank

HDA A320/A321 FLEET MO-36-00 P 2/2 MEL 04 APR 12



36 - PNEUMATIC

36-11 - Engine Bleed Air Supply System

Ident.: MO-36-11-20802050.9001001 / 04 APR 12

Applicable to: ALL

#### AFTER ENGINE START

Refer to FCOM/OEB 40 (AIR ENG1(2) BLEED ABNORMAL PR or AIR ENG1(2) BLEED FAULT).

- Consider the severity of forecast icing conditions, if any (The wing anti-ice will be lost if the remaining engine bleed air supply system becomes inoperative).

#### FOR TAKEOFF

Select the Air Conditioning Packs OFF.

Takeoff performance:

Input ACARS RTOW MEL code 36-11-01E.

#### AFTER TAKEOFF

If the APU has been used to supply the air conditioning during the takeoff, set the APU BLEED pb-sw to OFF.

#### IN FLIGHT

• If Wing Anti-Ice is required: PACK (affected side) pb-sw .......OFF

- In the case of failure of the remaining engine bleed air supply system, or in the case of failure of the associated engine:
  - Apply the associated ECAM procedure, then
  - Refer to ORH/ABN-36 AIR DUAL BLEED FAULT

36-11-01F Engine Bleed Air Supply System (ETOPS flights)
--

Ident.: MO-36-11-20802051.9001001 / 04 APR 12

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

APU fuel consumption with the APU ON (APU GEN OFF and APU BLEED OFF):

	APU ON (IDLE)						
FL	GND	100	200	315	354	370	390
KG/H	80	60	42	28	24	22	20
LB/H	176	132	93	62	53	49	44

Continued on the following page



36 - PNEUMATIC

36-11 - Engine Bleed Air Supply System

Continued from the previous page

#### AFTER ENGINE START

Refer to FCOM/OEB 40 ( AIR ENG1(2)BLEED ABNORMAL PR or AIR ENG1(2) BLEED FAULT).

- Consider the severity of forecast icing conditions, if any (The wing anti-ice will be lost if the remaining engine bleed air supply system becomes inoperative).

#### **BEFORE TAKEOFF**

APU MASTER SW pb-sw ......ON

#### FOR TAKEOFF

Select the Air Conditioning Packs OFF.

Takeoff performance:

Input ACARS RTOW MEL code 36-11-01F.

#### AFTER TAKEOFF

If the APU has been used to supply the air conditioning during the takeoff, set the APU BLEED pb-sw to OFF.

## IN FLIGHT

- In the case of failure of the remaining engine bleed air supply system, or in the case of failure of the associated engine:
  - Apply the associated ECAM procedure, then
  - Refer to QRH/ABN-36 AIR DUAL BLEED FAULT

36-11-06B	Engine Bleed IP Check Valve		
Ident.: MO-36-11-00008870.00010 Applicable to: ALL	dent.: MO-36-11-00008870.0001001 / 11 MAR 10 Applicable to: ALL		
<b>DURING TAXI</b>			
When the engines of	perate in idle thrust:		
- ENG (affected side) BLEED pb-sw			
● If wing anti-ice One PACK pb-s	is required: wOFF		
2	Continued on the following page		



## 36 - PNEUMATIC

36-11 - Engine Bleed Air Supply System

Continued from the previous page

<b>DURING TAKEOFF, C</b>	LIMB, AND CRUISE	Communication are previous page
		Or
<b>DURING DESCENT</b>		
When the engines or	perate in idle thrust:	
<ul><li>ENG (affected sign</li><li>X BLEED selector</li></ul>	e) BLEED pb-swr.	OFF
<ul> <li>If wing anti-ice</li> <li>One PACK pb-s</li> </ul>	•	OFF
36-11-07B	Engi	ne Bleed HP Valve
Ident.: MO-36-11-00008872.000100	01 / 29 NOV 11	

Refer to OpsProc 36-11-06B Engine Bleed IP Check Valve

Note: When APU bleed is not available, start engine with serviceable HP bleed first.



36 - PNEUMATIC

36-11 - Engine Bleed Air Supply System

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HDA A320/A321 FLEET MO-36-11 P 4/4
MEL 04 APR 12



#### 36 - PNEUMATIC

36-12 - APU Bleed Air Supply and Crossbleed Systems

AULU/AUL I		
MINIMUM FOLIDMENT LICT		
MINIMUM EQUIPMENT LIST		

36-12-02B	APU Bleed Valve

Ident.: MO-36-12-00008878.0001001 / 11 MAR 10

Applicable to: ALL

## ON GROUND OR IN FLIGHT

When the APU runs:

APU BLEED pb-sw.....ON

After APU shutdown:

APU BLEED pb-sw.....Off

36-12-04A Automatic control of the X Bleed Valve

Ident.: MO-36-12-00008879.0001001 / 12 MAR 10

Applicable to: ALL

# **DURING COCKPIT PREPARATION**

Check of the manual control of the X BLEED valve:

- X BLEED selector......OPEN
- On the <u>BLEED</u>, check that the cross bleed valve is indicated open.
- X BLEED selector.....SHUT
- On the BLEED, check that the cross bleed valve is indicated closed.



36 - PNEUMATIC

36-12 - APU Bleed Air Supply and Crossbleed Systems

Intentionally left blank

HDA A320/A321 FLEET MO-36-12 P 2/2 MEL 29 NOV 11



36 - PNEUMATIC

36-22 - Leak Detection Loop

	,
36-22-01B	Pylon Leak Detection System

Ident.: MO-36-22-00008881.0001001 / 04 APR 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## **DURING COCKPIT PREPARATION**

affected side) BLEED pb-sw	
ED selector	
 LH side is affected: BLEED pb-sw	OFF

<u>Note:</u> The use of the APU bleed air supply system for Main Engine Start is permitted.

## IN FLIGHT

- In the case of failure of the remaining engine bleed air supply system, or in the case of failure of the associated engine:
  - Apply the associated ECAM procedure, then
  - Refer to QRH/ AIR DUAL BLEED FAULT



36 - PNEUMATIC

36-22 - Leak Detection Loop

Intentionally left blank

HDA A320/A321 FLEET MO-36-22 P 2/2 MEL 04 APR 12



# MEL OPERATIONAL PROCEDURES 49 - AIRBORNE AUXILIARY POWER

49-10 - Power Plant

49-10-01A 49-10-01B 49-10-01C	Power Plant (APU)
-------------------------------------	-------------------

Ident.: MO-49-10-00008864.0001001 / 11 MAR 10

Applicable to: ALL

# **GENERAL INFORMATION**

No APU bleed air will be available for Main Engine Start (MES) or air conditioning. No electrical power will be available from the APU generator.

# **DURING COCKPIT PREPARATION**

APU MASTER SW pb-swOff
------------------------



# MEL OPERATIONAL PROCEDURES 49 - AIRBORNE AUXILIARY POWER

49-10 - Power Plant

Intentionally left blank

 HDA A320/A321 FLEET
 MO-49-10 P 2/2

 MEL
 29 NOV 11



52 - DOORS

52-01 - Overhead Panels 52-01-01 - CKPT DOOR CONT Normal Overhead Panel

52-01-01-01A 52-01-01-02A

LEDs on the CKPT DOOR CONT Overhead Panel

Ident.: MO-52-01-01-20801635.9001001 / 29 NOV 11

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

Check that the FAULT light on Cockpit Door panel comes on when lamp test is performed by setting the ANN LT switch on the TEST position.

52-01-01-03A 52-01-01-03B

Pressure Rate Sensor on the CKPT DOOR CONT Overhead Panel

Ident.: MO-52-01-01-20801726.9001001 / 29 NOV 11

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

Any part of the CDLS may be inoperative provided the complete system is deactivated in the unlocked position and the Deadbolt is used



52 - DOORS

52-01 - Overhead Panels 52-01-01 - CKPT DOOR CONT Normal Overhead Panel

Intentionally left blank

HDA A320/A321 FLEET MO-52-01-01 P 2/2 MEL 29 NOV 11



# A320/A321 MINIMUM EQUIPMENT LIST

# MEL OPERATIONAL PROCEDURES 52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

52-07-01A

Passenger Door Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light operative)

Ident.: MO-52-07-00008846.0001001 / 19 JUL 12

1 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **GENERAL INFORMATION**

If passenger doors are affected, indications on the PTP or the FAP may be affected.

If passenger doors are affected, the time recorded in the ACARS movement report may be wrong.

## AFTER ENGINE START

In the case of false door alert:

EMER CANC pb ......Press

Note: The limitation MAX FL: 100/MEA remains displayed on the <u>STATUS</u> SD page.

#### **BEFORE TAKEOFF**

**CAUTION** The T.O CONFIG pb must be maintained pressed to check that there is no alert.

- Consider normal configuration for takeoff provided that no alert was displayed during the T.O CONFIG TEST.

52-07-01A

Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light operative)

Ident.: MO-52-07-00008846.0004001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### **GENERAL INFORMATION**

If passenger doors/emergency exits are affected, indications on the PTP or the FAP may be affected.

If passenger doors are affected, the time recorded in the ACARS movement report may be wrong.

#### AFTER ENGINE START

In the case of false door alert:

EMER CANC pb ......Press

Note: The limitation MAX FL: 100/MEA remains displayed on the STATUS SD page.

Continued on the following page



52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

Continued from the previous page

#### BEFORE TAKEOFF

The T.O CONFIG pb must be maintained pressed to check that there is no alert. CAUTION - T.O CONFIG pb ......Press In the T.O MEMO, the "T.O CONFIG NORMAL" line will not replace the "T.O CONFIG... TEST"

 Consider normal configuration for takeoff provided that no alert was displayed during the T.O. CONFIG TEST.

52-07-01B 52-07-01C 52-07-01D

Passenger Door Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light may be permanently illuminated)

Ident.: MO-52-07-00008847.0001001 / 19 JUL 12

2 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR. B-HST. B-HSU

#### GENERAL INFORMATION

If passenger doors are affected, indications on the PTP or the FAP may be affected.

If passenger doors are affected, the time recorded in the ACARS movement report may be wrong. The SLIDE ARMED light on passenger doors may be permanently illuminated.

#### AFTER ENGINE START

In the case of false door alert:

EMER CANC pb ......Press

The limitation MAX FL: 100/MEA remains displayed on the STATUS SD page.

#### **BEFORE TAKEOFF**

The T.O CONFIG pb must be maintained pressed to check that there is no alert. CAUTION

- T.O CONFIG pb ......Press In the T.O MEMO, the "T.O CONFIG NORMAL" line will not replace the "T.O CONFIG . . TEST"
- Consider normal configuration for takeoff provided that no alert was displayed during the T.O CONFIG TEST



MINIMUM EQUIPMENT LIST

# MEL OPERATIONAL PROCEDURES

52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

52-07-01B 52-07-01C 52-07-01D	
52-07-01C	
52-07-01D	

Passenger Door/Emergency Exit Permanently Indicated Open on the DOOR/OXY SD page (SLIDE ARMED light may be permanently illuminated)

Ident.: MO-52-07-00008847.0004001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

## GENERAL INFORMATION

If passenger doors/emergency exits are affected, indications on the PTP or the FAP may be affected.

If passenger doors are affected, the time recorded in the ACARS movement report may be wrong. The SLIDE ARMED light on passenger doors/emergency exit may be permanently illuminated.

#### AFTER ENGINE START

In the case of false door alert:

EMER CANC pb Press

The limitation MAX FL: 100/MEA remains displayed on the STATUS SD page. Note:

## **BEFORE TAKEOFF**

The T.O CONFIG pb must be maintained pressed to check that there is no alert. CAUTION

- T.O CONFIG pb ......Press In the T.O MEMO, the "T.O CONFIG NORMAL" line will not replace the "T.O CONFIG . . TEST" line.
- Consider normal configuration for takeoff provided that no alert was displayed during the T.O CONFIG TEST.

52-07-02A	Passenger Door Permanently Indicated
52-07-02B	Closed on the <u>DOOR/OXY</u> SD page

Ident.: MO-52-07-00008848.0001001 / 19 JUL 12

3 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### GENERAL INFORMATION

If passenger doors are affected, indications on the PTP or the FAP may be affected.

If passenger doors are affected, the time recorded in the ACARS movement report may be wrong.



52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

52-07-02A 52-07-02B	Passenger Door/Emergency Exit Permanently Indicated Closed on the DOOR/OXY SD page	
------------------------	--	--

Ident.: MO-52-07-00008848.0004001 / 29 NOV 11

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### **GENERAL INFORMATION**

If passenger doors/emergency exits are affected, indications on the PTP or the FAP may be affected.

If passenger doors are affected, the time recorded in the ACARS movement report may be wrong.

52-07-03A	
52-07-03B	Overwing Emergency Exit Permanently
52-07-03C	Indicated Open on the <u>DOOR/OXY</u> SD page
52-07-03D	

Ident.: MO-52-07-00008849.0001001 / 19 JUL 12

4 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### **GENERAL INFORMATION**

Indications on the PTP or the FAP may be affected.

## AFTER ENGINE START

In the case of false door alert:

EMER CANC pb ......Press

Note: The limitation MAX FL: 100/MEA remains displayed on the STATUS SD page.

#### **BEFORE TAKEOFF**

# **CAUTION** The T.O CONFIG pb must be maintained pressed to check that there is no alert.

- Consider normal configuration for takeoff provided that no alert was displayed during the T.O CONFIG TEST.



52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

A320/A321	
MINIMUM EQUIPMENT LIST	

52-07-04A	Overwing Emergency Exit Permanently
52-07-04B	Indicated Closed on the <u>DOOR/OXY</u> SD page

Ident.: MO-52-07-00008850.0001001 / 19 JUL 12

5 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### GENERAL INFORMATION

Indications on the PTP or the FAP may be affected.

52-07-05A	Cargo Door Indication on the <u>DOOR/OXY</u> SD page

Ident.: MO-52-07-00008851.0001001 / 04 APR 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

#### **GENERAL INFORMATION**

• If cargo indication is inoperative due to a proximity switch failure:

The relevant cargo heating is inhibited. For livestock transportation refer to Part A 8.1.7.4. Notify IOC that cargo heat is inoperative.

## AFTER ENGINE START

In the case of false door alert:

EMER CANC pb ......Press

The limitation MAX FL: 100/MEA remains displayed on the STATUS SD page. Note:

#### **BEFORE TAKEOFF**

The T.O CONFIG pb must be maintained pressed to check that there is no alert. CAUTION

- T.O CONFIG pb Press In the T.O MEMO, the "T.O CONFIG NORMAL" line will not replace the "T.O CONFIG . . TEST"
- Consider normal configuration for takeoff provided that no alert was displayed during the T.O CONFIG TEST.



## 52 - DOORS

52-07 - Indications on the DOOR/OXY SD page

	-		
52-07-05A		Cargo Door Indication on the DOOR/O)	(Y SD page
Ident.: MO-52-07-00008851.9 Applicable to: B-HSD, B-HS		APR 12 3-HSI, B-HSJ, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HST	
AFTER ENGINE S	<u>START</u>		
<ul><li>In the case EMER CAN</li></ul>		door alert:	Press
<u>Note:</u> The	e limitatio	n MAX FL : 100/MEA remains displayed on the $\underline{S}$	<u>TATUS</u> SD page.
BEFORE TAKEOR	<u>FF</u>		
CAUTION	The T.O C	ONFIG pb must be maintained pressed to check	that there is no alert.
In the T.O MI line.	EMO, the mal config	"T.O CONFIG NORMAL" line will not replace the	"T.O CONFIG TEST"
52-07-06A		Avionics Compartment Access I Indication on the <u>DOOR/OXY</u> SD	
52-07-06A  Ident.: MO-52-07-00008852.0  Applicable to: ALL	0001001 / 04	Indication on the DOOR/OXY SD	
Ident.: MO-52-07-00008852.0		Indication on the DOOR/OXY SD	
Ident.: MO-52-07-00008852.0 Applicable to: ALL  AFTER ENGINE S  In the case  EMER CAN	START of false of IC pb	Indication on the DOOR/OXY SD  APR 12  door alert:	page Press
Ident.: MO-52-07-00008852.0 Applicable to: ALL  AFTER ENGINE S  In the case EMER CAN  Note: The	START  of false of fa	Indication on the DOOR/OXY SD  APR 12  door alert:	page Press
Ident.: MO-52-07-00008852.0 Applicable to: ALL  AFTER ENGINE S  In the case EMER CAN Note: The	of false of	Indication on the DOOR/OXY SD  APR 12  door alert:	Page Press Press Press



52 - DOORS

52-10 - Passenger/Crew Door

52-10-01A	Cabin Passenger Door
-----------	----------------------

Ident.: MO-52-10-20801657.9001001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

#### 1 1 **GENERAL**

Use the following table for seating restrictions when operating with a passenger door exit or escape slide inoperative:

Table for Restricted Passenger Seating A320 (8/150 Config.).

Inoperative Exit	Fwd Door	Fwd <u>OR</u> Aft Overwing Exit	Fwd <u>AND</u> Aft Overwing Exit (Note 1)	Aft Door
Max Pax Load	125	145	110	125
Pax capacity of Zone X	29"	62 <sup>°</sup>	55 <sup>-</sup>	62
Pax capacity of Zone Z	96	83***	55***	63 <sup>"</sup>
Seats Blocked	33 seats in Zone X	13 seats in Zone Z	7 seats in Zone X 41 seats in Zone Z	33 seats in Zone Z

Note:

- 1. When a Dual Lane Offwing Slide is inoperative, both Overwing Exits on that side must be considered inoperative and the passenger load further reduced to that shown in this column.
- 2. For the purpose of seating restrictions the cabin is divided into the following zones:

Zone X Passenger seats located on and forward of Overwing Exits at row 29

and 30.

Zone Y Not applicable.

Passenger seats located aft of Overwing Exits from and including row Zone Z

3. Cabin Crew should modify evacuation instructions by nominating the following exits for passenger egress from the affected zones:

\*Fwd Doors; \*\*Overwing Exits; \*\*\*Aft Doors.



52 - DOORS

52-10 - Passenger/Crew Door

52-10-01A	Cabin Passenger Door
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ldent.: MO-52-10-20801657.9001003 / 19 JUL 12 2 Applicable to: B-HSQ, B-HSR, B-HST, B-HSU

#### **GENERAL**

Use the following table for passenger seating restrictions when operating with passenger doors, emergency exits or escape slides inoperative.

This table is applicable to A320 in 168 config (72 zone X, + 96 zone Z)

Inoperative Exit	Fwd Door	Aft Overwing Emerg Exit	BOTH Overwing Emerg Exits	Fwd Overwing Emerg Exit	Aft Door
Max Pax Load (MPAC)*	125	145	110	145	125
Pax capacity of Zone X	29	72	55	55	72
Pax capacity of Zone Z	96	73	55	90	53
Total Seats Blocked	43 seats in Zone X	23 seats in Zone Z	17 seats in Zone X 41 seats in Zone Z	17 seats in Zone X 6 seat in Zone Z	43 seats in Zone Z

<u>Note:</u> \* MPAC = Maximum Permitted Aeroplane Capacity. MPAC is the sum of the capacity of the remaining operative exits.

1. For the purpose of seating restrictions the cabin is divided into the following zones:

Zone X : Passenger seats located on and forward of the Overwing Exits in row

32 and 33.

Zone Y: Not applicable.

Zone Z : Passenger seats located aft of Overwing Exits from and including row

34.

- 2. The configuration with both overwing exits treated as inoperative corresponds to an inoperative wing escape slide.
- 3. Cabin Crew should modify evacuation instructions by nominating the appropriate exits to be used for passenger egress.



52 - DOORS

52-10 - Passenger/Crew Door

Ident.: MO-52-10-20801657.9001002 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

4

## **GENERAL**

Use the following table for seating restrictions when operating with a passenger door exit or escape slide inoperative:

Table for Restricted Passenger Seating A321 (24/148 Config.).

Inoperative Exit	Door 1	Door 2	Door 3	Door 4
Max Pax Load	165	134	134	134
Pax capacity of Zone X	17"	24.	24	24
Pax capacity of Zone Y	70	32***	55 <sup></sup>	70
Pax capacity of Zone Z	78	78	55***	40***
Seats Blocked	7 seats in Zone X	33 seats in Zone Y	15 seats in Zone Y 18 seats in Zone Z	38 seats in Zone Z

Note: 1. For the purpose of seating restrictions the cabin is divided into the following zones:

Zone X : Passenger seats located forward of Doors 2.

Zone Y : Passenger seats located between Doors 2 and Doors 3.

Zone Z : Passenger seats located aft of Doors 3.

2. Cabin Crew should modify evacuation instructions by nominating the following exits for passenger egress from the affected zones:

\*Doors 1; \*\*Doors 2; \*\*\*Doors 3; \*\*\*\*Doors 4;

52-10-06A	DOOR PRESS LOW/CHECK DOOR PRESSURE Message on the PTP/FAP

Ident.: MO-52-10-20801659.9001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Check pressure by direct reading on the emergency opening pressure bottle gauge. The pointer must be located in green, or yellow zone. If the pointer is located in the yellow zone, pressure assisted door emergency opening is still operative, but servicing must be envisaged at short notice.

Continued on the following page



52 - DOORS

52-10 - Passenger/Crew Door

Continued from the previous page

If the pointer is located in the red zone, servicing is mandatory except if the associated door is considered inoperative, *Refer to OpsProc 52-10-01A Cabin Passenger Door*.



52 - DOORS

52-30 - Cargo Door

52-30-07A	Cargo Door Open/Locked Indicator light
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Ident.: MO-52-30-00009614.0001001 / 11 MAR 10

Applicable to: ALL

## **ON GROUND**

- When the Cargo Door Open/Locked Indicator light is inoperative, it is necessary to inform the ground personnel:
  - To visually check that the affected cargo door is in the fully open position, with no downward movement after releasing the lever of the manual selector valve.
  - To visually check that the lever of the manual selector valve stays in the neutral position.



52 - DOORS

52-30 - Cargo Door

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HDA A320/A321 FLEET MEL



52 - DOORS

52-51 - Reinforced Cockpit Door (CDLS)

52-51-03A	CDLS Buzzer

Ident.: MO-52-51-20801671.9001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

Establish a protocol for cockpit access via the interphone system. Two persons must be permanently present in the cockpit throughout the flight.

52-51-04A	CDLS Keypad
-----------	-------------

Ident.: MO-52-51-00008845.0001001 / 04 APR 12

Applicable to: ALL

#### **BEFORE FLIGHT**

Cockpit crew will brief cabin crew that the keypad is inoperative. Alternate normal procedures will be established before departure in order to remind the cabin crew to use the cabin interphone to communicate with cockpit crew to request access to the cockpit.

#### IN FLIGHT

Two persons must be permanently present in the cockpit throughout the flight.

52-51-05A	CDLS Keypad Green and Red LEDs

Ident.: MO-52-51-20801673.9001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Push the door manually to confirm that the door is locked or unlocked.

52-51-06C CDLS Door Release Strike (Catch, Spring, Solenoid, Bolt)	
--	--

Ident.: MO-52-51-20801682.9001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

An additional authorised person must be carried in the cockpit to assist with the door operation. Use Deadbolt to secure door and refer Vol.7.1.15 Cockpit Door Security. The initial return flight to Hong Kong may be made with the requirement for an additional person in the cockpit waived.



52 - DOORS

52-51 - Reinforced Cockpit Door (CDLS)

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HDA A320/A321 FLEET MO-52-51 P 2/2 MEL 04 APR 12



52 - DOORS

52-53 - COCKPIT DOOR Panel on the Center Pedestal

Ident.: MO-52-53-20801685.9001001 / 29 NOV 11

Applicable to: ALL

### FLIGHT PREPARATION/LIMITATIONS

Before the first flight under this item, check that with the COCKPIT DOOR toggle switch in the NORM position the three latches of the door are maintained in the lock position by visual check of the STRIKE LED's on the CKPT DOOR CONT panel.

Ident.: MO-52-53-20801687.9001001 / 29 NOV 11

Applicable to: ALL

## FLIGHT PREPARATION/LIMITATIONS

Check that the three STRIKE LED's are not illuminated on the CKPT DOOR CONT panel to ensure the door is closed and locked.

52-53-03B	LOCK Function of the COCKPIT DOOR sw
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Ident.: MO-52-53-20801690.9001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Establish a protocol for cockpit access via the interphone. Two persons must be permanently present in the cockpit throughout the flight.

52-53-04B	UNLOCK Function of the COCKPIT DOOR sw

Ident.: MO-52-53-20801691.9001001 / 29 NOV 11

Applicable to: ALL

#### FLIGHT PREPARATION/LIMITATIONS

Establish a protocol for cockpit access via the interphone. Two persons must be permanently present in the cockpit throughout the flight.



52 - DOORS

52-53 - COCKPIT DOOR Panel on the Center Pedestal

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HDA A320/A321 FLEET MO-52-53 P 2/2 MEL 29 NOV 11



**56 - WINDOWS** 56-10 - Cockpit

56-10-01A	Front Windshield
56-10-01B	
56-10-01C	
56-10-01D	

Ident.: MO-56-10-00008835.0001001 / 29 NOV 11

Applicable to: ALL

# FLIGHT PREPARATION/LIMITATIONS

■ When PF side is affected:

Maximum landing capability is CAT 1

■ When PM side is affected:

Maximum landing capability is not affected and is still CAT 3 DUAL.



**56 - WINDOWS** 56-10 - Cockpit

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 HDA A320/A321 FLEET
 MO-56-10 P 2/2

 MEL
 29 NOV 11



73-20 - Controlling

73-20-04A	EPR Control Mode
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Ident.: MO-73-20-20802096.9001001 / 04 APR 12 Applicable to: B-HSD, B-HSE, B-HSG, B-HSI

#### **GENERAL INFORMATION**

The autothrust function is inoperative.

 $\alpha$  floor is not available.

β target is not available.

# FLIGHT PREPARATION/LIMITATIONS

# Takeoff performance:

- Input ACARS RTOW MEL code: 73-20-04A
- Perform takeoff using TOGA.

# Single engine cruise:

See "N1 MODE THRUST CONTROL" in Refer to FCOM/PER-THR-N1 MODE THRUST CONTROL

# Landing Performance:

Maximum landing capability is CAT2 (Due Autothrust function is inoperative).

# Go-Around performance:

See "N1 MODE THRUST CONTROL" in Refer to FCOM/PER-THR-N1 MODE THRUST CONTROL

# **BEFORE ENGINE START**

-	ENG 1 N1 MODE pb-sw	ON
_	ENG 2 N1 MODE pb-sw	ON

#### FOR TAKEOFF

Flexible takeoff is not permitted.

73-20-04A	EPR Control Mode
-----------	------------------

Ident.: MO-73-20-20802096.9001002 / 04 APR 12 Applicable to: B-HTD, B-HTE, B-HTF

#### GENERAL INFORMATION

The autothrust function is inoperative.  $\alpha$  floor is not available.



73-20 - Controlling

Continued from the previous page

β target is not available.

#### FLIGHT PREPARATION/LIMITATIONS

# Takeoff performance:

- Input ACARS RTOW MEL code: 73-20-04A
- Perform takeoff using TOGA.

# Single engine cruise:

See "N1 MODE THRUST CONTROL" in Refer to FCOM/PER-THR-N1 MODE THRUST CONTROL

# **Landing Performance:**

Maximum landing capability is CAT2 (Due Autothrust function is inoperative).

# Go-Around performance:

See "N1 MODE THRUST CONTROL" in Refer to FCOM/PER-THR-N1 MODE THRUST CONTROL.

# **BEFORE ENGINE START**

-	NG 1 N1 MODE pb-sw	Ŋ٢	١
_	NG 2 N1 MODE ph-sw	٦ſ	V

#### FOR TAKEOFF

Flexible takeoff is not permitted.

73-20-04A	EPR Control Mode

Ident.: MO-73-20-20802096.9001003 / 04 APR 12 Applicable to: B-HTG, B-HTH, B-HTI

# **GENERAL INFORMATION**

The autothrust function is inoperative.

 $\alpha$  floor is not available.

β target is not available.

# FLIGHT PREPARATION/LIMITATIONS

Takeoff performance:



73-20 - Controlling

Continued from the previous page

- Input ACARS RTOW MEL code: 73-20-04A
- Perform takeoff using TOGA.

# Single engine cruise:

See "N1 MODE THRUST CONTROL" in Refer to FCOM/PER-THR-N1 MODE THRUST CONTROL.

# Landing Performance:

The maximum landing capability is CAT1 (due to FCOM OEB 36/1).

# Go-Around performance:

See "N1 MODE THRUST CONTROL" in Refer to FCOM/PER-THR-N1 MODE THRUST CONTROL.

#### BEFORE ENGINE START

-	ENG 1 N1 MODE pb-sw	O	ľ
	FNG 2 N1 MODE ph-sw	O	ľ

# **FOR TAKEOFF**

Flexible takeoff is not permitted.

The takeoff must be performed without FDs as follows:

- Set both FDs to OFF
- Select V2 on the FCU.
- Acquire pitch attitude about 15 ° to maintain the speed target with two engines operative, about 12.5 ° in the case of an engine failure.

# Above 100 ft AGL, when appropriate:

- Set both FDs to ON (basic guidance modes engage)
- Engage OP CLB and select appropriate speed and lateral mode
- AP use as required.

# When reaching the thrust reduction altitude:

Set both thrust levers to CL detent.

# When reaching the acceleration altitude:

Resume normal acceleration and climb procedures.

CLB or LVR CLB will not flash on the FMA as the A/THR is not available. Note:



73-20 - Controlling

Continued from the previous page

#### **GO-AROUND**

<u>Note:</u> To perform a manual Go-Around with no FD, the PF simultaneously announces his/her intention, disengages the AP, applies TOGA and initiates the rotation.

The Go-Around must be performed without FDs as follows:

- Set AP (if engaged) to OFF
- Set both FDs (if engaged) to OFF
- Acquire pitch attitude about 15 ° to maintain the speed target with two engines operative, about 12.5 ° in the case of an engine failure.
- Adjust pitch to maintain VAPP.

## When appropriate:

- Set both FDs to ON (basic guidance modes engage)
- Engage OP CLB and select appropriate speed and lateral mode
- AP use as required.

# When reaching the thrust reduction altitude:

Set both thrust levers to CL detent.

# When reaching the acceleration altitude:

Resume normal acceleration and climb procedures.

Note: CLB or LVR CLB will not flash on the FMA as the A/THR is not available. FMS does not engage the GO AROUND phase.

Ident.: MO-73-20-20802096.9001004 / 19 JUL 12

1 Applicable to: B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP, B-HSQ, B-HSR, B-HST, B-HSU

#### GENERAL INFORMATION

The autothrust function is inoperative.

 $\alpha$  floor is not available.

β target is not available.

#### FLIGHT PREPARATION/LIMITATIONS

Takeoff performance:

- Input ACARS RTOW MEL code: 73-20-04A
- Perform takeoff using TOGA.



73-20 - Controlling

Continued from the previous page

# Single engine cruise:

See "N1 MODE THRUST CONTROL" in Refer to FCOM/PER-THR-N1 MODE THRUST CONTROL.

# Landing Performance:

The maximum landing capability is CAT1 (due to FCOM OEB 36/1).

### Go-Around performance:

See "N1 MODE THRUST CONTROL" in Refer to FCOM/PER-THR-N1 MODE THRUST CONTROL.

### **BEFORE ENGINE START**

-	ENG 1 N1 MODE pb-sw	ON
_	ENG 2 N1 MODE pb-sw	ON

#### FOR TAKEOFF

Flexible takeoff is not permitted.

The takeoff must be performed without FDs as follows:

- Set both FDs to OFF
- Select V2 on the FCU
- Acquire pitch attitude about 15 ° to maintain the speed target with two engines operative, about 12.5 ° in the case of an engine failure.

# Above 100 ft AGL, when appropriate:

- Set both FDs to ON (basic guidance modes engage)
- Engage OP CLB and select appropriate speed and lateral mode
- AP use as required.

# When reaching the thrust reduction altitude:

Set both thrust levers to CL detent.

# When reaching the acceleration altitude:

Resume normal acceleration and climb procedures.

CLB or LVR CLB will not flash on the FMA as the A/THR is not available. Note:

#### **GO-AROUND**

Note: To perform a manual Go-Around with no FD, the PF simultaneously announces his/her intention, disengages the AP, applies TOGA and initiates the rotation.



73-20 - Controlling

Continued from the previous page

## The Go-Around must be performed without FDs as follows:

- Set AP (if engaged) to OFF
- Set both FDs (ifengaged) to OFF
- Acquire pitch attitude about 15 ° to maintain the speed target with two engines operative, about 12.5 ° in the case of an engine failure.
- Adjust pitch to maintain VAPP.

# When appropriate:

- Set both FDs to ON (basic guidance modes engage)
- Engage OP CLB and select appropriate speed and lateral mode
- AP use as required.

# When reaching the thrust reduction altitude:

Set both thrust levers to CL detent.

# When reaching the acceleration altitude:

Resume normal acceleration and climb procedures.

Note: CLB or LVR CLB will not flash on the FMA as the A/THR is not available. FMS does not engage the GO AROUND phase.

73-20-05A Minimum Idle on Ground

Ident.: MO-73-20-00008834.0008001 / 29 NOV 11

Applicable to: ALL

#### **GENERAL INFORMATION**

Continuous ignition is permanently ON.

Takeoff performance:

Input ACARS RTOW MEL code: 73-20-05A

Landing performance:

No penalty.



**74 - IGNITION** 74-07 - Indications on the ENGINE SD page

74-07-01A

# Selected Igniter Indication on the **ENGINE** SD page

Ident.: MO-74-07-00008832.0001001 / 18 MAR 10

Applicable to: ALL

# **AFTER ENGINE START**

ALTER ENGINE STATE
● If engine 1 is affected:  - ENGINE/1 AND 2/IGN/SYS A (49VU A03) C/B
● If engine 2 is affected:  - ENGINE/1 AND 2/IGN/SYS A (49VU A03) C/B
On the EWD, check that the ENG 1(2) A+B IGN FAULT alert is displayed.
● If engine 1 is affected:  - ENGINE/1 AND 2/IGN/SYS A (49VU A03) C/B
● If engine 2 is affected:  - ENGINE/1 AND 2/IGN/SYS A (49VU A03) C/B



74 - IGNITION

74-07 - Indications on the ENGINE SD page

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HDA A320/A321 FLEET MO-74-07 P 2/2 MEL 29 NOV 11



# 74 - IGNITION

74-31 - Ignition Starting and Continuous Relight

74-31-01A	Ignition System A

Ident.: MO-74-31-00008828.0002001 / 29 NOV 11

Applicable to: ALL

# **BEFORE ENGINE START**

Manual engine start is recommended.

74-31-02A	Ignition System B
1	- <b>9</b>

Ident.: MO-74-31-00008829.0004001 / 29 NOV 11

Applicable to: ALL

# **BEFORE ENGINE START**

Manual engine start is recommended.



74 - IGNITION

74-31 - Ignition Starting and Continuous Relight

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HDA A320/A321 FLEET MO-74-31 P 2/2 MEL 29 NOV 11



78 - EXHAUST

78-30 - Thrust Reversers

78-30-01A	Thrust Reverser
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Ident.: MO-78-30-20802101.9001003 / 19 JUL 12 <sup>1</sup> Applicable to: B-HSQ, B-HSR, B-HST, B-HSU

#### FLIGHT PREPARATION/LIMITATIONS

Performance Adjustments:

See table below if ACARS performance data is unavailable simplified charts are valid Note: with thrust reverser inoperative on dry & wet runways.

	Runway State	Performance Adjustments
One Thrust Reverser Inoperative Landing Dry, Landing Wet Takeoff Wet, Takeoff Conta	Landing Dry, or	No performance adjustments necessary (basic performance data is computed without thrust reversers).
	Takeoff Wet, or Takeoff Contaminated, or Landing Contaminated	Use performance data computed with either:  - All thrust reversers inoperative, or  - One thrust reverser inoperative.

	Runway State	Performance Adjustments
Both Thrust Reversers Inoperative	II anding Lin/ or	No performance adjustments necessary (basic performance data is computed without thrust reversers).
	Llakeoff Contaminated or	Use performance data computed with all thrust reversers inoperative.

# **DURING COCKPIT PREPARATION**

- If the affected engine is fitted with the EEC Software standard SCN21:
  - After application of the maintenance procedure and

When the FADEC have power:

Check that the ENG (AFFECTED SIDE) REVERSER FAULT alert is displayed on the EWD.

# FOR TAKEOFF

Input ACARS RTOW MEL code: 78-30-01A

# During the takeoff briefing, the flight crew must review:

- The status of the thrust reversers, and
- The use of the thrust reversers



#### 78 - EXHAUST

78-30 - Thrust Reversers

Continued from the previous page

#### REJECTED TAKEOFF

Ensure that both engine thrust levers are set to IDLE detent, then:

• If one thrust reverser is inoperative:

Use both thrust levers when applying reverse thrust.

Note:

• If the affected engine is not fitted with the EEC Software standard SCN21:

<u>ENG (AFFECTED SIDE)</u> REVERSER FAULT alert is displayed on the EWD after selection of the reverse thrust.

• If both thrust reversers are inoperative:

Do not move the thrust levers to reverse.

# 2 IN FLIGHT

 Should a failure occur with "LDG DIST PROC......APPLY" message displayed on the STATUS SD page,

and

Whatever the actual thrust reversers selection at landing:

To calculate the LDG DIST with the in-flight failure, use, do not take credit of the inoperative thrust reversers (Refer to QRH FPE-IFL).

#### **DURING APPROACH**

#### During the approach briefing, the flight crew must review:

- The status of the thrust reversers, and
- The use of the thrust reversers

#### **FOR LANDING**

Input ACARS Landing with REV=N.

Before the touchdown, ensure that both engine thrust levers are set to IDLE detent for the flare.

• After touchdown, if one thrust reverser is inoperative:

Use both thrust levers when applying reverse thrust.

Note:

• If the affected engine is not fitted with the EEC Software standard SCN21:

ENG (AFFECTED SIDE) REVERSER FAULT alert is displayed on the EWD after selection of the reverse thrust.

Note: Upon selection of the thrust reverser a temporary increased thrust idle is commanded by the FADEC on the affected side.



78 - EXHAUST

78-30 - Thrust Reversers

Continued from the previous page

After touchdown, if both thrust reversers are inoperative:

Do not move the thrust levers to reverse.

78-30-01A	Thrust Reverser

Ident.: MO-78-30-20802101.9001001 / 19 JUL 12

Applicable to: B-HSD, B-HSE, B-HSG, B-HSI, B-HSJ, B-HSK, B-HSL, B-HSM, B-HSN, B-HSO, B-HSP

# FLIGHT PREPARATION/LIMITATIONS

Performance Adjustments:

See table below if ACARS Performance Data is unavailable. Note:

Simplified Charts are valid with Thrust Reverser inoperative on dry and wet runways.

	Runway State	Performance Adjustments
One Thrust Reverser		No performance adjustments necessary (basic performance data is computed without thrust reversers).
Inoperative	Takeoff Wet, or Takeoff Contaminated, or Landing Contaminated	Use performance data computed with either:  - All thrust reversers inoperative, or  - One thrust reverser inoperative.

	Runway State	Performance Adjustments
Both Thrust Reversers Inoperative		No performance adjustments necessary (basic performance data is computed without thrust reversers).
	Llakeoff Contaminated or	Use performance data computed with all thrust reversers inoperative.

#### FOR TAKEOFF

Input ACARS RTOW MEL code: 78-30-01A

# During the takeoff briefing, the flight crew must review:

- The status of the thrust reversers, and
- The use of the thrust reversers

# **REJECTED TAKEOFF**

Ensure that both engine thrust levers are set to IDLE detent, then:

If one thrust reverser is inoperative:

Use both thrust levers when applying reverse thrust.

Continued on the following page

HDA A320/A321 FLEET MO-78-30 P 3/6 MEL 19 JUL 12  $\leftarrow A \rightarrow$ 



#### 78 - EXHAUST

78-30 - Thrust Reversers

Continued from the previous page

Note: ENG (AFFECTED SIDE) REVERSER FAULT alert is displayed on the EWD after selection of the reverse thrust.

If both thrust reversers are inoperative:

Do not move the thrust levers to reverse.

## IN FLIGHT

 Should a failure occur with "LDG DIST PROC......APPLY" message displayed on the STATUS SD page,

and

Whatever the actual thrust reversers selection at landing:

To calculate the LDG DIST with the in-flight failure, use, do not take credit of the inoperative thrust reversers (Refer to QRH FPE-IFL).

# **DURING APPROACH**

# During the approach briefing, the flight crew must review:

- The status of the thrust reversers, and
- The use of the thrust reversers

#### FOR LANDING

Input ACARS Landing with REV = N.

Before the touchdown, ensure that both engine thrust levers are set to IDLE detent for the flare.

• After touchdown, if one thrust reverser is inoperative:

Use both thrust levers when applying reverse thrust.

Note: ENG (AFFECTED SIDE) REVERSER FAULT alert is displayed on the EWD after

selection of the reverse thrust.

Note: Upon selection of the Thrust Reverser a temporary increased Thrust IDLE is

commanded by the FADEC on the affected side.

• After touchdown, if both thrust reversers are inoperative:

Do not move the thrust levers to reverse.



78 - EXHAUST

78-30 - Thrust Reversers

78-30-01A	Thrust Reverser

Ident.: MO-78-30-20802101.9001002 / 19 JUL 12

Applicable to: B-HTD, B-HTE, B-HTF, B-HTG, B-HTH, B-HTI

# FLIGHT PREPARATION/LIMITATIONS

Performance Adjustments:

Note: See table below if ACARS Performance Data is unavailable.

Simplified Charts are valid with Thrust Reverser inoperative on dry and wet runways.

	Runway State	Performance Adjustments
One Thrust Reverser		No performance adjustments necessary (basic performance data is computed without thrust reversers).
Take	Takeoff Wet, or Takeoff Contaminated, or Landing Contaminated	Use performance data computed with either:  - All thrust reversers inoperative, or  - One thrust reverser inoperative.

	Runway State	Performance Adjustments
Both Thrust Reversers Inoperative		No performance adjustments necessary (basic performance data is computed without thrust reversers).
	I lakeoff Contaminated or	Use performance data computed with all thrust reversers inoperative.

#### FOR TAKEOFF

Input ACARS RTOW MEL code: 78-30-01A

# During the takeoff briefing, the flight crew must review:

- The status of the thrust reversers, and
- The use of the thrust reversers

# REJECTED TAKEOFF

Ensure that both engine thrust levers are set to IDLE detent, then:

# • If one thrust reverser is inoperative:

Use both thrust levers when applying reverse thrust.

ENG (AFFECTED SIDE) REVERSER FAULT alert is displayed on the EWD after Note: selection of the reverse thrust.

# If both thrust reversers are inoperative:

Do not move the thrust levers to reverse.



#### 78 - EXHAUST

78-30 - Thrust Reversers

Continued from the previous page

#### IN FLIGHT

 Should a failure occur with "LDG DIST PROC......APPLY" message displayed on the STATUS SD page,

and

Whatever the actual thrust reversers selection at landing:

To calculate the LDG DIST with the in-flight failure, use, do not take credit of the inoperative thrust reversers (Refer to QRH FPE-IFL).

# **DURING APPROACH**

# During the approach briefing, the flight crew must review:

- The status of the thrust reversers, and
- The use of the thrust reversers

# FOR LANDING

Input ACARS Landing with REV = N.

Before the touchdown, ensure that both engine thrust levers are set to IDLE detent for the flare.

• After touchdown, if one thrust reverser is inoperative:

Use both thrust levers when applying reverse thrust.

For automatic roll-out with one thrust reverser inoperative, *Refer to FCOM/LIM 22-20 AUTOMATIC LANDING.* 

Note: ENG (AFFECTED SIDE) REVERSER FAULT alert is displayed on the EWD after

selection of the reverse thrust.

Note: Upon selection of the Thrust Reverser a temporary increased Thrust IDLE is

commanded by the FADEC on the affected side.

• After touchdown, if both thrust reversers are inoperative:

Do not move the thrust levers to reverse



**79 - OIL** 79-09 - ECAM Alerts

79-09-01A <u>ENG 1(2)</u> OIL LO PR Alert
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Ident.: MO-79-09-00008824.0001001 / 11 MAR 10

Applicable to: ALL

# **AFTER ENGINE START**

● If both engines are affected:

RCDR GND CTL pb-sw......CHECK ON



**79 - OIL** 79-09 - ECAM Alerts

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 HDA A320/A321 FLEET
 MO-79-09 P 2/2

 MEL
 29 NOV 11



**79 - OIL** 79-20 - Distribution

79-20-01A Air Cooled Oil Cooler (ACOC) Modulating Valve

Ident.: MO-79-20-00008822.0001001 / 11 MAR 10

Applicable to: ALL

# **BEFORE TAKEOFF**

On the <u>FUEL</u> SD page, check that the fuel temperature in the inner tank is above -20 °C.



79 - OIL

79-20 - Distribution

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HDA A320/A321 FLEET MEL



80 - STARTING

80-11 - Pneumatic Starter and Valve System

80-11-01A	Start Valve
00-11-01A	Start valve

Ident.: MO-80-11-00008815.0001001 / 04 APR 12

Applicable to: ALL

# **BEFORE ENGINE START**

Refer to FCOM/ Start Valve Manual Operation

Note: Starter assisted engine relight is not possible.



# MEL OPERATIONAL PROCEDURES 80 - STARTING

80-11 - Pneumatic Starter and Valve System

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HDA A320/A321 FLEET MO-80-11 P 2/2 MEL 04 APR 12