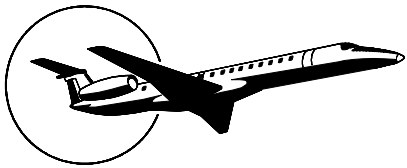
EMB145

EMBRAER



BRAZILIAN MASTER MINIMUM EQUIPMENT LIST

EMBRAER S.A.

THIS DOCUMENT IS APPLICABLE TO ALL EMB-145 MODELS (EXCEPT EMB-145RS AND EMB-145SA MODELS) CERTIFIED FOR OPERATION UNDER ANAC AIRWORTHINESS REQUIREMENTS.
COMMERCIAL DESIGNATIONS: ERJ-135/140/145/135BJ.

ANAC APPROVAL:

LUIZ ALBERTO COCENTINO MUNARETTO - Maj. Av.
CHEFE DA DIVISÃO DE HOMOLOGAÇÃO AERONÁUTICA

DATE: 01 de Agosto de 1997

REGISTRATION NUMBER:_____

SERIAL NUMBER:_____

MMEL–145/1113

AUGUST 01, 1997
REVISION 14 – NOVEMBER 20, 2019

MMEL–145/1113

HIGHLIGHTS OF CHANGE

REVISION 14 – NOVEMBER 20, 2019

22-11-01 – Included subitem for Autothrottle Button and new relief applicable to Legacy 650.

22-30-00 – Included new item applicable to Legacy 650.

22-31-05 – Included new item applicable to Legacy 650.

23-24-00 – Included new item applicable to EMB-135BJ.

24-20-03 – Updated item title and remarks and included a new relief applicable to EMB-135BJ.

25-50-01 – Included a new relief applicable to EMB-135BJ.

25-60-04 – Included new item.

25-61-01 – Updated remarks.

27-70-00 – Included new subitem for Gust Lock Lever Movable Stop.

30-41-04 – Included new item.

31-62-00 – Included new item applicable to Legacy 650.

34-24-02 – Included new item.

34-31-00 – Updated remarks.

34-54-00 – Included new item.

35-11-03 – Included new item.

CTA APPROVED MASTER MINIMUM EQUIPMENT LIST (MMEL-145/1113)

LOG OF REVISIONS

REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
1 MAR 26, 98	73-1	Replaces the message E1 (2) CTL A (B) FAIL by the message E1 (2) CTL A (B) DEGRAD on item 73-22-01.	MAR 26, 98	
2 MAY 07, 99	21-1 25-6 and 25-7 27-2 27-3	Includes Baggage Compartment Ventilation System. Remove Main Door Acoustic Curtain. Include Cargo/Anti-Blockage Nets. Update items 25-60-02 and 25-60-06. Include "Fasten Seat Belts While Seated" Signs or Placards. Includes SPS/ICE SPEEDS Advisory Message and updates item 27-36-03. Updates item 27-53-00.	MAY 07, 99	

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MASTER MINIMUM EQUIPMENT LIST

LOG OF REVISIONS

REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
2 MAY 07, 99	28-2	Updates item 28-42-01.	MAY 07, 99	
	29-2	Includes Engine-Driven and Electric Pumps Pressure Switches.		
	30-2	Updates item 30-21-01.		
	32-1	Updates item 32-41-08.		
	33-4	Updates item 33-50-00.		
	34-2	Updates item 34-31-01.		
	38-1	Includes Potable Water and Lavatory Systems.		
	45-1	Updates item 45-45-01.		
	73-1 and 73-2	Update items 73-22-01 and 73-33-01.		
	74-1	Includes Ignition Systems.		
	79-1	Updates item 79-35-01.		

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MASTER MINIMUM EQUIPMENT LIST

LOG OF REVISIONS

REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
3 APR 25, 00	3	Amends editorial error.	APRIL 25, 2000	
	7	Adds definition.		
	22-1	Updates item 22-10-00.		
	23-2	Expands and clarifies item 23-31-02.		
	26-1	Expands and clarifies item 26-15-00.		
	26-2 and 26-3	Includes new item 26-23-00.		
	28-1	Amends item 28-11-02.		
	30-2	Updates item 30-21-01 and includes new item 30-31-00.		
	31-1 and 31-2	Includes new item 31-42-02.		
	33-3	Expands and clarifies item 33-43-00.		

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MASTER MINIMUM EQUIPMENT LIST

LOG OF REVISIONS

REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
3 APR 25, 00	33-4	Amends item 33-50-00.	APRIL 25, 2000	
	34-3	Includes sub item on item 34-42-00.		
	34-5	Amends item 34-56-00 and includes two sub items on item 34-60-00.		
	49-1	Includes new item 49-74-01.		
	73-1	Updates item 73-22-01.		
	73-2	Includes new item 73-22-02.		
	73-3	Updates item 73-33-01.		
	78-1	Amends editorial error on item 78-34-00.		
	79-1 and 79-2	Updates item 79-35-01.		
	80-1	Amends item 80-10-01.		

LOG OF REVISIONS

REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
4 NOV 08, 00	26-2, 26-3 and 26-4	Expands and clarifies item 26-21-02.	November 8, 2000	
5 APR 12, 01	24-1	Updates item 24-31-01 to include APU Model T-62T-40C14 in-flight start limitation.	April 12, 2001	
6 NOV 20, 01	21-1 to 21-8	Includes relief for airplanes equipped with ISIS on items 21-24-01 and 21-51-00. Changes repair intervals on items 21-60-04, 21-60-05, 21-60-06 and 21-61-02.	November 20, 2001	

LOG OF REVISIONS

REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
6 NOV 20, 01	22-1	Amends sub item 3) on item 22-10-00.	NOVEMBER 20, 2001	
	23-4	Amends and expands item 23-51-12.		
	24-1 and 24-2	Updates item 24-31-02 to allow dispatching only airplanes equipped with Generator Model 30086-11. Changes repair intervals on item 24-34-01.		
	25-1 to 25-5	Expands and amends items 25-11-01, 25-11-02, 25-11-04, 25-12-01, 25-12-04 and 25-21-05.		
	25-6 to 25-9	Includes items 25-26-07 and 25-27-02. Amends item 25-50-01 and includes items 25-50-02 and 25-50-03.		

LOG OF REVISIONS

REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
6 NOV 20, 01	26-1 to 26-3	Expands and clarifies items 26-15-00 and 26-23-00.	NOVEMBER 20, 2001	
	27-3	Expands item 27-70-00 to include Electromechanical Gust Lock system.		
	28-1	Amends item 28-21-01.		
	30-3	Includes sub item 4) on item 30-41-00.		
	31-1 and 31-2	Changes repair interval on item 31-21-01. Includes item 31-35-01.		
	32-2	Updates item 32-60-00.		
	33-4	Amends item 33-47-05.		

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REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
6 NOV 20, 01	34-1 to 34-7	Updates item 34-24-01. Includes items 34-25-00 and 34-27-00. Amends items 34-31-00, 34-32-00 and 34-60-00.	NOVEMBER 20, 2001	for Jung Bleu
	36-1 and 36-2	Amends and updates item 36-11-05.		
	49-1	Changes repair interval on items 49-00-00 and 49-52-02.		
	73-2	Amends items 73-22-02 and 73-32-01.		
	78-1	Amends and changes repair intervals on items 78-30-00 and 78-34-00.		
	AM-i, AM-1 to AM-6	Includes MMEL Amendments for Special Operations.		

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REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL	
			DATE	SIGNATURE
	7	Includes Legacy definition.		
	25-5, 25-6, 25-7, 26-1, 26-4, 28-1 to 28-11, 28-13, 28-14, 28-15, 28-17 to 28-28, 30-4, 33-5, 35-1 and 52-1	Include items applicable to the EMB-135BJ.		
7 AUG 30, 02	21-6, 28-1, 28-2, 28-11 to 28-16, 28-29, 28-30, 30-4, 33-4 and 33-5	Include items applicable to the EMB-145XR.	Aug 30, 2002	Paulo
	23-1, 24-2, 25-8, 25-9, 27-3, 30-2, 30-3, 32-2 and 33-3	General items updating.		

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REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL
8 JUL 18, 03	21-2, 25-7, 30-4, 32-2, 52-1 21-1, 21-3, 21-4, 21-5, 24-1, 25-8, 25-9, 25-10, 28-12, 28-13, 30-3, 33-1, 33-2, 33-3, 33-4, 33-5, 34-1, 34-2, 34-3, 34-4, 34-5, 34-6, 34-7, 52-2, 56-1, 78-1, 78-2, AM-1, AM-2	Items included. General items updating.	**MMEL-145/1113 Revision 8 approved by CTA on July 18, 2003.**
9 NOV 28, 03	25-2, 27-1, 34-4, 34-6, 73-3, 79-2 and AM-7 24-1, 25-1 to 25-12, 27-2, 30-3, 30-4, 31-1, 33-2, 34-3, 34-5, 34-7, 34-8, 34-9, 36-1, 36-2, 36-3, 38-1, 38-2, 56-1, 73-3, 73-4, 79-2 and AM-i	Items included. General items updating.	**MMEL-145/1113 Revision 9 approved by CTA on November 28, 2003.**

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REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	CTA APPROVAL
10 MAR 24, 06	21-6, 21-7, 21-10, 22-1, 22-4, 23-4, 24-1, 25-1, 25-3, 25-7 to 25-9, 26-2 to 26-5, 27-2, 28-16, 29-1, 29-2, 30-2, 30-3, 31-1, 31-2, 32-1, 32-2, 33-4, 33-5, 34-1, 34-3, 34-4, 34-6, 34-9, 35-3, 36-3, 38-1, 49-1, 52-1, 56-1, 73-1 to 73-3, 78-2 and 79-1	General items updating.	**MMEL-145/1113 Revision 10 approved by CTA on March 24, 2006.**
	21-8, 21-9, 22-2, 22-3, 23-3, 33-5, 34-2, 35-2, 36-3, 78-3 and 80-1	Items included.	

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REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	ANAC APPROVAL
11 APR 18, 08	3 to 9, 21-4, 21-5, 22-2 to 22-4, 23-2 to 23-4, 25-6, 25-7, 25-11 to 25-14, 26-1, 26-3 to 26-5, 27-2, 28-13, 29-1, 30-2 to 30-4, 31-1 to 31-3, 32-1, 33-4, 34-2, 34-4, 35-2, 36-3, 56-1, 78-2 and 78-3	General items updating.	**MMEL-145/1113 Revision 11 approved by ANAC on April 18, 2008.**
	23-3, 23-5, 24-2, 26-3, 32-2 and 46-1	Items included.	
	AM-i, AM-1 to AM-7	Items deleted.	

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REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	ANAC APPROVAL
12 SEP 10, 10	All	Revision 12 is a full reissue of this manual.	**MMEL-145/1113 Revision 12 approved by ANAC on September 10, 2010.**
	Cover page and definitions	Inclusion of Legacy 650 applicability and general updating.	
	21-1, 21-4, 23-1, 23-2, 23-3, 23-4, 23-5, 23-6, 23-7, 25-2, 25-3, 25-7, 25-8, 25-9, 25-10, 26-4, 27-3, 28-1, 28-3, 28-4, 28-8, 28-12, 28-13, 28-14, 28-15, 28-16, 28-17, 28-18, 28-19, 28-21, 28-27, 28-28, 28-31, 28-32, 28-33, 28-34, 30-3, 30-4, 32-2, 34-1, 34-2, 34-3, 34-4, 34-5, 34-6, 34-7, 34-8, 34-9, 34-10, 35-2	General updated.	
	28-2, 28-35, 28-36, 76-1	Items included.	
	23-7, 56-1	Items deleted.	

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REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	ANAC APPROVAL NUMBER
13 MAR 13, 14	23-3 21-4, 23-1, 23-2, 23-7, 24-1, 24-2, 25-11, 25-15, 28-2, 28-3, 28-6, 28-9, 28-15, 28-22, 28-33, 28-36, 28-37, 28-38, 29-1, 32-2, 34-3, 34-4	Item included. General items updating.	MMEL-145/1113 Revision 13 approved by ANAC on March 13, 2014.
14 NOV 20, 19	22-3 to 22-5 23-3 to 23-6 24-1 to 24-2 25-11, 25-13 to 25-16 27-3 to 27-4	Included items applicable to Legacy 650E. Included item 23-24-00. Updated item 24-20-03. Updated items 25-50-01, 25-61-01 and included item 25-60-04. Updated item 27-70-00.	1235/2019/GCPR/ GGCP/SAR-ANAC

LOG OF REVISIONS

REVISION NUMBER AND DATE	REVISED PAGES	DESCRIPTION OF REVISION	ANAC APPROVAL NUMBER
14 NOV 20, 19	30-4 to 30-5	Updated item 30-41-04.	1235/2019/GCPR/ GGCP/SAR-ANAC
	31-3	Included item 31-62-00 applicable to Legacy 650E.	
	34-1, 34-3 to 34-4, 34-10	Updated item 34-31-00 and included items 34-24-02 and 34-54-00.	
	35-1	Included item 35-11-03.	

LIST OF EFFECTIVE PAGES

ORIGINAL ..... 0 ..... AUG 01, 1997
REVISION ..... 1 ..... MAR 26, 1998
REVISION ..... 2 ..... MAY 07, 1999
REVISION ..... 3 ..... APR 25, 2000
REVISION ..... 4 ..... NOV 08, 2000
REVISION ..... 5 ..... APR 12, 2001
REVISION ..... 6 ..... NOV 20, 2001
REVISION ..... 7 ..... AUG 30, 2002
REVISION ..... 8 ..... JUL 18, 2003
REVISION ..... 9 ..... NOV 28, 2003
REVISION ..... 10 ..... MAR 24, 2006
REVISION ..... 11 ..... APR 18, 2008
REVISION ..... 12 ..... SEP 10, 2010
REVISION ..... 13 ..... MAR 13, 2014
REVISION ..... 14 ..... NOV 20, 2019

* Asterisk indicates pages revised, added or deleted by the current revision.

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MASTER MINIMUM EQUIPMENT LIST

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MASTER MINIMUM EQUIPMENT LIST PREAMBLE

The Airworthiness Regulations require that all equipment installed on an airplane in compliance with the Airworthiness Standards and the Operating Rules must be operative. However, the Rules also permit the publication of a Minimum Equipment List (MEL) where compliance with certain equipment requirements is not necessary in the interests of safety under all operating conditions. Experience has shown that with the various levels of redundancy designed into airplane, operation of every system or installed component may not be necessary when the remaining operative equipment can provide an acceptable level of safety. A Master Minimum Equipment List (MMEL) is developed by the Airworthiness Authority, with participation by the aviation industry, to improve airplane utilization and thereby provide more convenient and economic air transportation for the public. The Airworthiness Authority approved MMEL includes those items of equipment related to airworthiness and operating regulations and other items of equipment which the Administrator finds may be inoperative and yet maintain an acceptable level of safety by appropriate conditions and limitations; it does not contain obviously required items such as wings, flaps, and rudders. The MMEL is the basis for development of individual operator MELs which take into consideration the operator's particular airplane equipment configuration and operational conditions. Operator MELS, for administrative control, may include items not contained in the MMEL; however, relief for administrative control items must be approved by the Administrator. An operator's MEL may differ in format from the MMEL, but cannot be less restrictive than the MMEL. The individual operator's MEL, when approved and authorized, permits operation of the airplane with inoperative equipment.

Equipment not required by the operation being conducted and equipment in excess of Airworthiness Regulations requirements are included in the MEL with appropriate conditions and limitations. The MEL must not deviate from the Airplane Flight Manual Limitations, Emergency Procedures or with Airworthiness Directives. It is important to remember that all equipment related to the airworthiness and the operating regulations of the airplane not listed on the MMEL must be operative.

Suitable conditions and limitations in the form of placards, maintenance procedures, crew operating procedures and other restrictions as necessary are specified in the MEL to ensure that an acceptable level of safety is maintained.

The MEL is intended to permit operation with inoperative items of equipment for a period of time until repairs can be accomplished. It is important that repairs be accomplished at the earliest opportunity. In order to maintain an acceptable level of safety and reliability the MMEL establishes limitations on the duration of and conditions for operation with inoperative equipment. The MEL provides for release of the airplane for flight with inoperative equipment. When an item of equipment is discovered to be inoperative, it is reported by making an entry in the Airplane Maintenance Record/Logbook as prescribed by Airworthiness Regulations. The item is then either repaired or may be deferred per the MEL or other approved means acceptable to the Administrator prior to further operation. MEL conditions and limitations do not relieve the operator from determining that the airplane is in condition for safe operation with items of equipment inoperative.

When these requirements are met, an Airworthiness Release, Airplane Maintenance Record/Logbook entry, or other approved documentation is issued as prescribed by Airworthiness Regulations. Such documentation is required prior to operation with any item of equipment inoperative.

Operators are responsible for exercising the necessary operational control to ensure that an acceptable level of safety is maintained. When operating with multiple inoperative items, the interrelationships between those items and the effect on airplane operation and crew workload will be considered.

Operators are to establish a controlled and sound repair program including the parts, personnel, facilities, procedures, and schedules to ensure timely repair.

WHEN USING THE MEL, COMPLIANCE WITH THE STATED INTENT OF THE PREAMBLE, DEFINITIONS, AND THE CONDITIONS AND LIMITATIONS SPECIFIED IN THE MEL IS REQUIRED.

DEFINITIONS AND SYMBOLOGY

1) System definitions.

System numbers are based on Air Transport Association (ATA) Specification Number 100 and items are numbered sequentially.

a. "Item" (Column 1) means the equipment, system, component, or function listed in the "Item" Column.

b. "Number Installed" (Column 2) is the number (quantity) of items normally installed in the aircraft. This number represents the aircraft configuration considered in developing this MMEL. Should the number be a variable (e.g., passenger cabin items) a number is not required.

c. "Number Required for Dispatch" (Column 3) is the minimum number (quantity) of items required for operation provided the conditions specified in the column 4 are met.

NOTE: Where the MMEL shows a variable number required for dispatch, the MEL must reflect the actual number required for dispatch or an alternate means of configuration control approved by the administrator.

d. "Remarks or Exceptions" (Column 4) in this column includes a statement either prohibiting or permitting operation with a specific numbers of items inoperative, provisos (conditions and limitations) for such operation, and appropriate notes.

e. A vertical bar (change bar) in the margin indicates a change, addition or deletion in the adjacent text for current revision of that page only. The change bar is dropped at the next revision of that page.

2) "Airplane/Rotorcraft Flight Manual" (AFM/RFM) is the document required for the type certification and approved by the responsible ANAC Aircraft Certification Office. The ANAC approved AFM/RFM for the specific aircraft is listed on the applicable Type Certificate Data Sheet.

3) "As required by local regulations" means that the listed item is subject to certain provisions (restrictive or permissive) expressed in the RBAC/RBHA must be operative. When the listed item is not required by RBAC/RBHA it may be inoperative for time specified by repair category.

4) Each inoperative item must be placarded to inform and remind the crewmembers and maintenance personnel of the equipment condition.

NOTE: To the extent practical, placards should be located adjacent to the control or indicator for the item affected; however, unless otherwise specified, placard wording and location will be determined by the operator.

5) "-" symbol in Column 2 and/or Column 3 indicates a variable number (quantity) of the item installed.

6) "Deleted" in the remarks column after a sequence item indicates that the item was previously listed but is now required to be operative if installed in the aircraft.

7) Reserved.

8) "Regulamento Brasileiro de Homologação Aeronáutica" (RBHA) or "Regulamentos Brasileiros de Aviação Civil" (RBAC) means the applicable requirement for the certified airplane.

9) "Flight Day" means a 24 hour period (from midnight to midnight) either Universal Time Coordinated (UTC) or local time, as established by the operator, during which at least one flight is initiated for the affected aircraft.

10) "Icing Conditions" means an atmospheric environment that may cause ice to form on the aircraft (structural) or in the engine(s) (induction).

11) Alphabetical symbol in Column 4 indicates a proviso (condition or limitation) that must be complied with for operation with the listed item inoperative.

12) "Inoperative" means a system and/or component malfunctions to the extent that it does not accomplish its intended purpose and/or is not consistently functioning normally within its approved operating limit(s) or tolerance(s).

13) "Notes:" in Column 4 provides additional information for crewmember or maintenance consideration. Notes are used to identify applicable material which is intended to assist with compliance, but do not relieve the operator of the responsibility for compliance with all applicable requirements. Notes are not a part of the provisos.

14) Inoperative components of an inoperative system: Inoperative items which are components of a system which is inoperative are usually considered components directly associated with and having no other function than to support that system (Warning/Caution systems associated with the inoperative system must be operative unless relief is specifically authorized per the MMEL).

15) "(M)" symbol indicates a requirement for a specific maintenance procedure which must be accomplished prior to operation with the listed item inoperative. Normally these procedures are accomplished by maintenance personnel; however, other personnel may be qualified and authorized to perform certain functions. Procedures requiring specialized 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. Appropriate procedures are required to be published as part of the operator's manual or MEL.

16) "(O)" symbol indicates a requirement for a specific operations procedure which must be accomplished in planning for and/or operating with the listed item inoperative. Normally these procedures are accomplished by the flight crew; however, other personnel may be qualified and authorized to perform certain functions. The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the operator. Appropriate procedures are required to be published as a part of the operator's manual or MEL.

NOTE: The (M) and (O) symbols are required in the operator's MEL unless otherwise authorized by the Administrator.

17) "Deactivated" and "Secured" means that the specified component must be put into an acceptable condition for safe flight. An acceptable method of securing or deactivating will be established by the operator.

18) "Visual Flight Rules" (VFR) is as defined in RBAC/RBHA Part 91. This precludes a pilot from filing an Instrument Flight Rules (IFR) flight plan.

19) "Visual Meteorological Conditions" (VMC) means the atmospheric environment is such that would allow a flight to proceed under the visual flight rules applicable to the flight. This does not preclude operating under Instrument Flight Rules.

20)"Visible Moisture" means an atmospheric environment containing water in any form that can be seen in natural or artificial light; for example, clouds, fog, rain, sleet, hail, or snow.

21)"Passenger Convenience Items" means those items related to passenger convenience, comfort or entertainment such as, but not limited to, galley equipment, movie equipment, ash trays, stereo equipment, overhead reading lamps, etc.

22) Repair Intervals: All users of an MEL approved under RBAC/RBHA 91, 121, 129 and 135 must effect repairs of inoperative systems or components, deferred in accordance with the MEL, at or prior to the repair times established by the following letter designators:

Category A: Items in this category shall be repaired within the time interval specified in the remarks column of the operator's approved MEL.

Category B: Items in this category shall be repaired within three (3) consecutive calendar days (72 hours), excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it was recorded at 10 a.m. on January 26th, the three day interval would begin at midnight the 26th and end at midnight the 29th.

Category C: Items in this category shall be repaired within ten (10) consecutive calendar days (240 hours), excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it was recorded at 10 a.m. on January 26th, the 10 day interval would begin at midnight the 26th and end at midnight February 5th.

Category D: Items in this category shall be repaired within one hundred and twenty (120) consecutive calendar days (2880 hours), excluding the day the malfunction was recorded in the aircraft maintenance log and/or record. The letter designators are inserted adjacent to Column 2.

23) Electronic fault alerting system – General New Generation Aircraft Display System fault indications to the flight crew by use of computerized display systems. Each aircraft manufacturer has incorporated individual design philosophies in determining the data that would be represented.

The following are customized definitions (specific to each manufacturer) to help determine the level of messages affecting the aircraft's dispatch status. When preparing the MEL document, operators are to select the proper Definition No. 23 for their aircraft, if appropriate.

The EMB-135/145 is equipped with an Engine Indicating and Crew Alerting System (EICAS) that provides three different message levels: WARNING, CAUTION, and ADVISORY. Failures that effect dispatchability are presented to the flight crew at one of these levels. Other failures may be presented only to the maintenance personnel on the Multi Function Display (MFD) maintenance pages or through the download of the Central Maintenance Computer (CMC). System conditions that result only in a maintenance level message, i.e. no correlation with a higher level EICAS message, do not affect dispatch and do not require action other than as addressed within an operator's standard maintenance program.

24) "Administrative control item" means an item listed by the operator in the MEL for tracking and informational purposes. It may be added to an operator's MEL by approval of the Principal Operations Inspector provided no relief is granted, or provided conditions and limitations are contained in an approved document (i.e. Structural Repair Manual, airworthiness directive, etc.). If relief other than that granted by an approved document is sought for an administrative control item, a request must be submitted to the Administrator. If the request results in review and approval by the ANAC, the item becomes an MMEL item rather than an administrative control item. A change bar adjacent to the page number indicates that the page was renumbered only and that no change was made in the text.

25) "***" symbol in Column 1 indicates an item which is not required by regulation but which may have been installed on some models of aircraft covered by this MMEL. This item may be included on the operator's MEL after the approving office has determined that the item has been installed on one or more of the operator's aircraft. The symbol, however, shall not be carried forward into the operator's MEL. It should be noted that neither this policy nor the use of this symbol provides authority to install or remove an item from an aircraft.

26) "Excess Items" means those items that have been installed that are redundant to the requirements of the RBAC's/RBHA's.

27) "Day of Discovery" is the calendar day an equipment/instrument malfunction was recorded in the aircraft maintenance log and or record. This day is excluded from the calendar days or flight days specified in the MMEL for the repair of an inoperative item of equipment. This provision is applicable to all MMEL items, i.e., categories "A, B, C, and D".

28) "Considered Inoperative", as used in the provisos means that item must be treated for dispatch, taxi and flight purposes as though it were inoperative. The item shall not be used or operated until the original deferred item is repaired. Additional actions include: documenting the item on the dispatch release (if applicable), placarding, and complying with all remarks, exceptions, and related MMEL provisions, including any (M) and (O) procedures and observing the repair category.

29) "Is not used" in the provisos, remarks or exceptions for an MMEL item may specify that another item relieved in the MMEL "is not used". In such cases, crewmembers should not activate, actuate, or otherwise utilize that component or system under normal operations. It is not necessary for the operators to accomplish the (M) procedures associated with the item. However, operational requirements must be complied with, and an additional placard must be affixed, to the extent practical, adjacent to the control or indicator for the item that is not used to inform crewmembers that a component or system is not to be used under normal operations.

30) Nonessential equipment and furnishings (NEF) are those items installed on the aircraft as part of the original certification, supplemental type certificate, or engineering order that have no effect on the safe operation of flight and would not be required by the applicable certification rules or operational rules. They are those items that if inoperative, damaged or missing have no effect on the aircraft's ability to be operated safely under all operational conditions. These nonessential items may be installed in areas including, but not limited to, the passenger compartment, flight deck area, service areas, cargo areas, crew rest areas, lavatories, and galley areas. NEF items are not items already identified in the MEL or CDL of the applicable aircraft. They do not include items that are functionally required to meet the certification rule or for compliance with any operational rule. Operator's NEF process shall not provide for deferral of items within serviceable limits identified in the manufacture's maintenance manual or operator's approved maintenance program such as wear limits, fuel/hydraulic leak rates, oil consumption, etc. Cosmetic items that are fully serviceable but worn or soiled may be deferred under an operator's NEF process.

31) "Combustible material" is defined as being a material which is capable of catching fire and burning.

NOTE: When the MMEL item specifies that only non-combustible materials shall be carried, it is operator's responsibility to determine that all material (including packages, containers, contents, etc.) in the compartment is of a non-combustible nature. If it cannot be determined whether any proposed cargo is non-combustible, it must be loaded in the compartment.

32) EMBRAER corporate airplanes are commercially designated as "LEGACY 600" or "LEGACY 650".
For all other "LEGACY", equipped with personalized interior arrangement but no equipped with winglets or auxiliary fuel tanks, they should be considered as standard EMB-135 airplanes for the purpose of this document.
The EMB-135BJ airplanes mentioned in this MMEL are related to those airplanes equipped with:
LEGACY 600: EMB-135BJ equipped with FUS 1 and FUS 2 fuselage auxiliary fuel tanks, winglets, personalized interior arrangement and AE3007A1P or AE3007A1E engines.
LEGACY 650: EMB-135BJ equipped with FUS 1, FUS 2 and VTRL fuselage auxiliary tanks, winglets, personalized interior arrangement and AE3007A2 engines.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING				
-22-04 External Ground Connector Check Valve	B	1	0	(M)(O) May be inoperative open provided the flight is conducted in an unpressurized configuration.
	D	1	0	May be inoperative closed.
-22-06 Baggage *** Compartment Ventilation System	C	1	0	(M) May be inoperative provided: a) Ventilation system remains closed, and b) Live animals are not carried in the cargo compartment.
-23-03 Gasper Fan	C	1	0	(M) May be inoperative on ground with the avionics buses energized provided: a) If doors are open: both packs operate normally, and the ambient temperature on the ground is below ISA+25°C, or b) If doors are closed: at least one pack operates normally, and the ambient temperature on the ground is below ISA+32°C, and c) Gasper fan is deactivated. **NOTE 1:** Avionics buses energized on the ground are limited to 10 minutes if doors are open and both packs are de-energized. **NOTE 2:** Conditions above are applicable to ground operation only. There is no restriction to in flight operation with gasper fan inoperative. (Continued)

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING					
-23-03 Gasper Fan (Continued)					**NOTE 3:** Doors referred above include main, service and cargo compartment doors.
-24-01 Recirculation Fans					
1) Airplanes equipped with conventional electro-mechanical stand-by instruments		C	2	0	(M) May be inoperative provided the failed fan is deactivated.
2) Airplanes equipped with Integrated Standby Instrument System (ISIS)		C	2	1	(M) Any Recirculation Fan may be inoperative provided: a) The failed fan is deactivated, b) The remaining Fan and its associated Pack operate normally, and c) Ambient temperature on the ground is below ISA+25°C.
		C	2	0	(M) May be inoperative provided: a) Failed fans are deactivated, and b) At least pack 1 is in operation on the ground.
-24-02 Recirculation Fan Valves		C	2	0	(M) May be inoperative open provided associated recirculation fan is verified to operate normally.
		C	2	0	(M) May be inoperative closed provided associated recirculation fan is deactivated.
-24-03 Air Distribution Valves		C	2	1	(M) One may be inoperative provided remaining valve is deactivated in open position.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING				
-25-01 Ram Air Valves				
1) Airplanes equipped with conventional electro-mechanical standby instruments	C	2	1	(M)(O) One may be inoperative provided: a) Associated air conditioning pack remains off, b) Affected ram air valve is verified to be in the emergency ram air position, and c) Flight is conducted at or below FL 250, and
	C	2	0	(M)(O) Both may be inoperative provided: a) Both air conditioning packs remains off, b) Flight is conducted in an unpressurized configuration, c) Ram air valves are verified to be in the emergency ram air position, and d) Ambient temperature on the ground is below ISA+21°C.
2) Airplanes equipped with Integrated Standby Instrument System (ISIS)	C	2	1	(M)(O) Any ram air valve may be inoperative provided: a) Associated air conditioning packs remain off, b) Remaining air conditioning pack and its associated recirculation fan are operative on the ground, c) Affected ram air valve is verified to be in emergency ram air position, d) Flight is conducted at or below FL 250, and e) Ambient temperature on the ground is below ISA+25°C.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING				
-25-02 Ram Air Check Valves	C	2	0	(O) One or both may be inoperative open provided flight is conducted in an unpressurized configuration.
-26-00 Forward Electronic Compartment Ventilation System				
1) Exhaust Fans/Air Shutoff Valves (all except EMB-135BJ)	C	2	1	One exhaust fan or one shutoff valve may be inoperative.
2) Exhaust Fans/Air Shutoff Valves or Exhaust Fans/ NACA Cover Linear Actuators (EMB-135BJ)	C	2	1	One exhaust fan or one shutoff valve/NACA Cover Linear Actuator may be inoperative.
3) Forward Electronic Bay Recirculation Fan	C	2	1	One recirculation fan may be inoperative.
-30-00 Pressurization Control System				
1) Automatic Mode	C	1	0	(M)(O) May be inoperative provided: a) Manual mode operates normally, b) Electropneumatic outflow valve is secured closed, and c) Cabin differential pressure indication operates normally.

(Continued)

System & Sequence Number	1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING					
-30-00 Pressurization Control System (Continued)					
	2) Manual Mode	C	1	0	(M)(O) May be inoperative provided: a) Automatic mode operates normally, b) Pneumatic outflow valve is secured closed, and c) Cabin differential pressure indication operates normally.
	3) Automatic and Manual Modes	C	2	0	(M)(O) May be inoperative provided: a) Flight is conducted in an unpressurized configuration, and b) Both outflow valves are secured open.
-31-03 Outflow Valves					
	1) Electropneumatic	C	1	0	(M)(O) May be inoperative provided: a) Valve is secured closed, b) Manual pressurization control mode operates normally, and c) Cabin differential pressure indication operates normally.
	2) Pneumatic	C	1	0	(M)(O) May be inoperative provided: a) Valve is secured closed, b) Automatic pressurization control mode operates normally, and c) Cabin differential pressure indication operates normally.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING				
-31-03 Outflow Valves (Continued)				
3) Electropneumatic and Pneumatic	C	2	0	(M)(O) May be inoperative provided: a) Flight is conducted in an unpressurized configuration, and b) Both outflow valves are secured open.
-32-01 Cabin Pressure Acquisition Module	C	1	0	(O) May be inoperative provided flight is conducted in an unpressurized configuration.
1) 10000 ft warning	C	1	0	(O) May be inoperative provided flight is conducted at or below 10000 ft MSL.
2) Cabin Differential Pressure Indication	C	1	0	(O) May be inoperative provided: a) Cabin altitude and cabin rate of change indications operate normally, and b) A chart is provided to convert cabin altitude into differential pressure.
3) Cabin Rate of Change Indication	C	1	0	May be inoperative provided: a) Automatic pressurization control mode operates normally, and b) Cabin differential pressure indication and cabin altitude indication are operating normally.

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING				
-32-01 Cabin Pressure Acquisition Module (Continued)				
4) Cabin Altitude Indication	C	1	0	(O) May be inoperative provided: a) Cabin differential pressure and rate of change indication operate normally, b) A chart is provided to convert cabin differential pressure into cabin altitude indication, and c) Automatic pressurization control mode operates normally.
-32-02 Cabin Pressure Control System High Altitude Mode ***	D	1	0	(O) May be inoperative provided takeoff and landing is limited to airports below 10000 ft.
-51-00 Air Conditioning Pack Systems				
1) Airplanes equipped with conventional electro-mechanical standby instruments	C	2	1	One may be inoperative provided flight is conduct at or below FL 250.
	C	2	0	(M)(O) May be inoperative provided: a) Both ram air valves operate normally, b) Flight is conducted in an unpressurized configuration, and c) Ambient temperature on the ground is below ISA +21°C.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING				
-51-00 Air Conditioning Pack Systems (Continued)				
2) Airplanes equipped with Integrated Standby Instrument System (ISIS)	C	2	1	(O) Any Pack may be inoperative provided: a) The remaining Pack and its associated Recirculation Fan operate normally, b) Ambient temperature on the ground is below ISA +25°C, and c) Flight is conducted at or below FL 250.
-60-02 Cockpit Automatic and Manual Temperature Control Systems				
1) Airplanes equipped with conventional electro-mechanical standby instruments	C	2	0	May be inoperative provided: a) Pack 1 remains OFF, and b) Flight is conducted at or below FL 250.
2) Airplanes equipped with Integrated Standby Instrument System (ISIS)	C	2	0	(O) May be inoperative provided: a) Pack 1 remains OFF, b) Pack 2 and its associated Recirculation Fan operate normally, c) Ambient temperature on ground is below ISA +25°C, and d) Flight is conducted at or below FL 250.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING				
-60-03 Cabin Automatic and Manual Temperature Control Systems				
1) Airplanes equipped with conventional electro-mechanical standby instruments	C	2	0	May be inoperative provided: a) Pack 2 remains OFF, and b) Flight is conducted at or below FL 250.
2) Airplanes equipped with Integrated Standby Instrument System (ISIS)	C	2	0	(O) May be inoperative provided: a) Pack 2 remains OFF, b) Pack 1 and its associated Recirculation Fan operate normally, c) Ambient temperature on ground is below ISA +25°C, and d) Flight is conducted at or below FL 250.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
21 AIR CONDITIONING				
-60-04 Cockpit and Cabin Automatic Temperature Control Systems	A	2	0	(O) May be inoperative provided: a) Associated manual temperature control mode operates normally, and b) Repairs are made within 30 flight days.
-60-05 Cockpit and Cabin Manual Temperature Control Systems	A	2	0	May be inoperative provided: a) The associated automatic temperature control mode operates normally, and b) Repairs are made within 30 flight days.
-60-06 Attendant's Temperature Control	A	1	0	May be inoperative provided: a) Passenger Cabin Temperature and Mode Selector Knob operates normally, and b) Repairs are made within 30 flight days.
-61-02 Cockpit and Cabin Temperature Indication Systems	A	2	0	May be inoperative provided repairs are made within 30 flight days.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
22 AUTOPILOT				
-10-00 Autopilot/Flight Director Functions				
1) Autopilot Function	C	1	0	May be inoperative provided enroute or approach procedures do not require its use.
2) Flight Director Systems	C	2	1	One may be inoperative provided approach minimums do not require its use. **NOTE 1:** Windshear escape guidance function will be available from remaining flight director. **NOTE 2:** Either Go-Around Button will be operative.
	C	2	0	Both may inoperative provided: a) Enroute or Approach procedures do not require their use, b) Autopilot is considered inoperative, c) Windshear Escape Guidance is considered inoperative, and d) Go-Around Buttons are considered inoperative.
3) Yaw Damper Function	C	1	0	May be inoperative provided enroute or approach procedures do not require its use. **NOTE:** Autopilot will not engage with yaw damper inoperative.

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
22 AUTOPILOT					
-11-01	Flight Guidance Controller Panel				
	1) Flight Director (FD) Buttons	C	2	0	(O) Both may be inoperative.
		C	2	1	
	2) Course Selector Knob	C	2	0	May be inoperative provided procedures do not require its use.
		C	2	1	
	3) (CRS PUSH SYNC) Button	C	2	0	
	4) Autopilot (AP) Engage Button	C	1	0	May be inoperative provided autopilot function is considered inoperative.
	5) Autopilot Couple (CPL) Button	C	1	0	
	6) Yaw Damper (YD) Engage Button	C	1	0	(O) May be inoperative provided yaw damper is verified to operate normally.
	7) Heading (HDG) Select Button	C	1	0	May be inoperative provided procedures do not require its use.
	8) Navigation (NAV) Mode Button	C	1	0	May be inoperative provided procedures do not require its use.
	9) Approach (APR) Mode Button	C	1	0	May be inoperative provided procedures do not require its use.
	10) Low Bank (BNK) Mode Button	C	1	0	May be inoperative provided procedures do not require its use.

(Continued)

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
22 AUTOPILOT					
-11-01	Flight Guidance Controller Panel (Continued)				
	11) Heading Select Knob	C	1	0	May be inoperative provided procedures do not require its use.
	12) Heading Synchronization Button (PUSH SYNC)	C	1	0	May be inoperative provided procedures do not require its use.
	13) Speed Hold (SPD) Mode Button	C	1	0	May be inoperative provided procedures do not require its use.
	14) Flight Level Change (FLC) Mode Button	C	1	0	May be inoperative provided procedures do not require its use.
	15) Vertical Speed Hold (VS) Mode Button	C	1	0	May be inoperative provided procedures do not require its use.
	16) Speed Selector Control Knob	C	1	0	May be inoperative provided procedures do not require its use.
	(EMB-135BJ) (only for Legacy 650 airplanes equipped with Autothrottle)	C	2	0	One or both may be inoperative provided: a) Autothrottle System is not used, and b) Procedures do not require their use.
	17) IAS/M Selector Button (PUSH IAS/M)	C	1	0	
	18) Altitude Hold (ALT) Mode Button	C	1	0	(O) May be inoperative provided: a) Altitude Preselect Knob operates normally, and b) Procedures do not require its use. (Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
22 AUTOPILOT				
-11-01 Flight Guidance Controller Panel (Continued)				
19) Altitude Preselect Knob (ASEL)	A	1	0	May be inoperative provided: a) Altitude Preselect Function is considered inoperative, b) Procedures do not require its use, and c) Repairs are made within 3 flight days.
*** 20) Autothrottle (A/T) Button (EMB-135BJ) (only for Legacy 650)	C	1	0	May be inoperative provided Autothrottle is not used.
-11-08 Touch Control Steering Buttons (TCS Sync Buttons)	C	2	0	May be inoperative in the deactivated condition.
-11-09 Go-Around Buttons	C	2	0	May be inoperative provided: a) Approach procedures do not require its use, and b) Affected button is failed in the deactivated condition. **NOTE:** In case of dual failure, only the automatic engagement of the Windshear Escape Guidance Mode by positioning the TLA above 78° is operative.
-30-00 Autothrottle *** System (EMB-135BJ) (only for Legacy 650)	C	1	0	

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
22 AUTOPILOT				
-31-05 *** Autothrottle Quick Disconnect (A/T DISC) Buttons (EMB-135BJ) (only for Legacy 650)	C	2	1	
	C	2	0	Both may be inoperative provided Autothrottle is not used.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-00-00 Communications Systems (VHF, HF, UHF)				
1) Very High Frequency (VHF) Communication System	D	-	-	Any in excess of those required by local regulations may be inoperative provided it is not powered by the Emergency AC Bus, Emergency DC Bus, Battery Direct Bus, or the DC Transfer Bus and not required for emergency procedures.
2) High Frequency (HF) Communication System	D	-	-	Any in excess of those required by local regulations may be inoperative.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-00-00 Communications Systems (VHF, HF, UHF) (Continued)				
2) High Frequency (HF) Communication System (Continued)	C	-	1	(O) May be inoperative while conducting operations that require two Long Range Communication Systems (LRCS) provided: a) SATCOM (High or Low Gain) Voice operates normally, b) Alternate procedures are established and used, c) SATCOM Voice coverage is available over the intended route of flight, and d) If SATCOM Voice is to be used over the intended route of flight, SATCOM Voice short codes (INMARSAT) or direct dial commercial numbers (IRIDIUM) must be available. If not available, prior coordination with appropriate ATS (FIR) facility is required. **NOTE:** SATCOM Voice is to be used only as a backup to normal HF communications.
3) Ultra High Frequency (UHF) Communication System	D	-	-	Any in excess of those required by local regulations may be inoperative provided it is not powered by an essential bus and not required for emergency procedures.

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS					
-15-00 Satellite Communication System (SATCOM) ***		C	-	0	(O) May be inoperative provided alternate procedures are established and used.
		D	-	0	(O) May be inoperative provided procedures do not require its use.
-20-01 ACARS System ***		C	-	0	May be inoperative provided alternate procedures are established and used.
		D	-	0	May be inoperative provided procedures do not require its use.
-20-02 ACARS Printer ***		C	-	0	May be inoperative provided alternate procedures are established and used.
		D	-	0	May be inoperative provided procedures do not require its use.
-21-01 Selective Call System (SELCAL) ***		C	-	0	(O) May be inoperative provided alternate procedures are established and used.
		D	-	0	May be inoperative provided procedures do not require its use.
-24-00 Controller-to-Pilot Data Link Communication (CPDLC) System (EMB-135BJ) ***					
	1) Future Air Navigation System (FANS 1/A)	C	-	0	(O) May be inoperative provided that alternate procedures are established and used.
		D	-	0	May be inoperative provided that procedures do not require its use.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-30-01 Passenger Address System (PA)	B	1	0	(O) May be inoperative provided: a) Alternate normal and emergency procedures and/or operating restrictions are established and used, and b) Flight attendant alerting system (audio and visual) operates normally. **NOTE:** Any station function(s) that operate normally may be used.
	C	1	0	(O) May be inoperative provided: a) PA not required by local regulations, and b) Alternate normal and emergency procedures and/or operating restrictions are established and used. **NOTE:** Any station function(s) that operate normally may be used.
a) Lavatory Speakers	C	1	0	(O) May be inoperative provided alternate procedures are established and used.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-31-01 Crewmember Interphone System(s)				
a) Flight Deck to Cabin, Cabin to Flight Deck Function	B	-	-	(O) May be inoperative provided: a) Flight deck to cabin and cabin to flight deck interphone functions operate normally on at least 50% of the cabin headsets, and b) Alternate communication procedures between the affected flight attendant stations are established and used. **NOTE:** Any station function(s) that operate normally may be used.
b) Cabin to Cabin Function	B	2	0	(O) May be inoperative provided alternate communication procedures between the affected flight attendant stations are established and used. **NOTE:** Any station function(s) that operate normally may be used.
c) Flight Deck to Ground Function	C	2	0	(O) May be inoperative provided alternate procedures are established and used.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-31-02 Alerting Systems (Audio/Visual)				
1) Flight Deck Call Visual Alerting System	B	1	0	May be inoperative provided the flight deck audio alerting system operates normally. **NOTE:** The flight deck audio alerting must always be operative.
2) Flight Attendant Visual Alerting System	B	1	0	(O) May be inoperative provided: a) PA system operates normally, b) If affected light is used for lavatory smoke detector alerting, an alternate lavatory smoke alert (audio or visual) is installed and operates normally, and c) Alternate procedures for contacting flight attendants are established and used. **NOTE 1:** Passenger to Attendant Call System is considered Non-Essential Equipment and Furnishings (NEF). **NOTE 2:** Any visual alerting system function(s) that operates normally may be used.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-31-02 Alerting Systems (Audio/Visual) (Continued)				
3) Flight Attendant Audio Alerting System	B	1	0	(O) May be inoperative provided: a) PA system operates normally, b) If affected audio alerting system is used for lavatory smoke detector alerting, an alternate lavatory smoke alert (visual or audio) is installed and operates normally, and c) Alternate procedures for contacting flight attendants are established and used. **NOTE 1:** Passenger to Attendant Call System is considered Non-Essential Equipment and Furnishing (NEF). **NOTE 2:** Any audio alerting system function(s) that operates normally may be used.
-31-03 Handset System(s)				
1) Flight Deck	C	-	0	(O) May be inoperative provided: a) Flight deck to cabin communication operates normally, and b) Alternate procedures are established and used.
	D	-	0	May be inoperative provided procedures do not require its use.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-31-03 Handset System(s) (Continued)				
2) Cabin	B	-	-	(O) May be inoperative provided: a) 50% of cabin handsets operate normally, and b) Alternate communications procedures between the affected flight attendants station(s) are established and used. **NOTE 1:** An operative handset at an inoperative flight attendant seat shall not be counted to satisfy the 50% requirement. **NOTE 2:** Any handset(s) function(s) that operate normally, may be used.
-32-02 Prerecorded *** Passenger Announcement System	D	1	0	(O) May be inoperative provided alternate procedures are established and used.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-33-01 Passenger Cabin Speakers	C	-	-	May be inoperative provided any seat from which a passenger cannot clearly hear a passenger address announcement is not occupied.
	B	-	-	May be inoperative provided Passenger Address is considered inoperative.
-33-02 Lavatory Speakers				Deleted, Rev 12. **NOTE:** Refer to item 23-30-01
-51-03 Push To Talk (PTT) Buttons on Glareshield Panel/ Control Wheel	C	4	2	One button at each station must be operative.
-51-04 Flight Deck Speakers	C	2	0	May be inoperative provided headsets operate normally and is used throughout the flight.
-51-05 Cockpit Headsets	D	-	-	Any in excess of those required for each person on flight compartment duty may be inoperative.
-51-07 Hand Microphones	D	-	0	
-51-10 Interphone System Cockpit to Ramp/ Ramp to Cockpit				Deleted, Rev 12. **NOTE:** Refer to item 23-31-01

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-51-12 Boom Microphones				
1) Pilot and copilot's boom microphones	A	-	0	May be inoperative provided: a) Hand microphones are installed and operate normally, b) Flight Data Recorder operates normally, and c) Repairs are made within 3 flight days.
2) Third crew member's boom microphone	D	-	0	May be inoperative provided observer seat is not occupied.
3) Boom microphone(s) in excess of those required by regulations	D	-	0	May be inoperative.
-71-00 Cockpit Voice Recorder System	A	1	0	May be inoperative provided: a) Flight Data Recorder (FDR) operates normally, and b) Repairs are made within 3 flight days.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
23 COMMUNICATIONS				
-73-00 Video Surveillance System (VSS) ***	D	1	0	(M) May be inoperative provided: a) System is deactivated, and b) VSS is not required by local regulations. **NOTE:** Any portion of the system that operates normally may be used.
1) Video Unit	D	1	0	May be inoperative provided it is not required by local regulations.
2) Video Camera	D	3	0	May be inoperative provided it is not required by local regulations.
-80-00 Radio Management Units (RMU's)				
1) NAV/Comm Tuning Function	C	2	1	
2) Memory Function	C	2	0	May be inoperative provided tuning function operates normally.
-81-02 Tuning Backup Control Head	C	1	0	May be inoperative provided both Radio Management Units operate normally.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
24 ELECTRICAL POWER				
-20-01 Generator Current Indications	C	4	2	One may be inoperative on each side provided: a) The associated voltage indication is operative, and b) The remaining generator of the same side or APU generator is fully operative.
-20-02 Generator Voltage Indications	C	4	2	One may be inoperative on each side provided the associated current indication is operative.
-20-03 AC Static Inverter ***				
(only for airplanes equipped with GPWS and TCAS powered by 115 V AC)	A	1	0	May be inoperative provided: a) GPWS/Windshear is considered inoperative, b) TCAS is considered inoperative, and c) Repairs are made within 2 flight days. **NOTE:** The Pax AC Static Inverter installed in the entertainment cabinet is considered Passenger Convenience Item.
(EMB-135BJ) (only for airplanes equipped with GPWS powered by 115 V AC)	A	1	0	May be inoperative provided: a) GPWS/Windshear is considered inoperative, and b) Repairs are made within 2 flight days. **NOTE:** The Pax AC Static Inverter installed in the entertainment cabinet is considered Passenger Convenience Item.

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
24 ELECTRICAL POWER					
-31-01 Engine Driven Generators		C	4	3	(M) One may be inoperative provided APU generator operates normally and is used to replace the affected generator during takeoff and landing.
-31-02 Engine Driven Generator Bearings (Only for Generator Model 30086-011)		A	4	3	Advisory message GEN BRG FAIL may be presented for one generator provided: a) Caution message GEN OFF BUS for the affected generator was not presented during the previous flight, and b) Repairs are made within 20 flight hours.
-34-01 APU Starter Generator					
	1) Starter Function	D	1	0	May be inoperative provided APU is considered inoperative.
	2) Generator Function	D	1	0	May be inoperative provided engine driven generators operate normally.
-37-00 *** DC/DC Power Conversion System		D	1	0	May be inoperative provided: a) Protective cover is used to cover the 12 V DC plug receptacle during the flight, and b) 12 V DC plug receptacle is placarded "DO NOT USE DURING FLIGHT".
-40-00 External Power System		C	1	0	
	1) GPU AVAIL Lights	C	2	0	

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-11-00 Eye Locator	C	1	0	
-11-01 Flight Crew Seats				
1) Vertical Adjustments	D	2	0	(M)(O) Power seat adjustment may be inoperative provided: a) System is deactivated, and b) Manual seat adjustment operates normally.
	D	2	0	(O) Manual seat adjustment may be inoperative provided Power seat adjustment operates normally.
	C	2	0	(M)(O) Power and Manual seat adjustments may be inoperative provided: a) Seat(s) are locked in a position that permits normal pilots visibility, b) Full flight control movement is available, and c) Position of seat is acceptable to flight crew.
2) Lumbar Supports	D	2	0	May be inoperative provided seat is acceptable to the affected crewmember.
3) Armrests	D	4	0	
4) Recline Functions	D	2	0	May be inoperative provided seat is acceptable to the affected crewmember.
5) Lateral Adjustments	D	2	0	May be inoperative with the seat at central position provided fore/aft adjustments are operative or seat is acceptable to the affected crewmember.

(Continued)

System & Sequence Number	1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS					
-11-01 Flight Crew Seats (Continued)					
	6) Aft/Fore Adjustment Levers (Airplanes equipped with 2 adjustment levers per seat)	D	2	1	One lever per seat may be inoperative or broken provided: a) The remaining lever on seat operates normally, and b) The inoperative or broken lever on affected seat does not pose a hazard to the crew or interfere with proper seat operation.
	7) Thigh Support	D	4	0	May be inoperative provided seat is acceptable to the affected crewmember.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-11-02 Observer's Seat (Including associated equipment)	A	1	0	May be inoperative provided: a) A passenger seat in the passenger cabin is made available to an ANAC inspector for the performance of official duties, and b) Repairs are made within 2 flight days.
	A	1	0	May be inoperative provided: a) Required minimum safety equipment (safety belt and oxygen) is available, b) Seat is acceptable to an ANAC inspector for the performance of official duties, and c) Repairs are made within 2 flight days. **NOTE 1:** These provisos are intended to provide for occupancy of the above seat by an ANAC inspector when the minimum safety equipment (oxygen and safety belt) is functional and the inspector determines the conditions to be acceptable. **NOTE 2:** The pilot-in-command will determine if the minimum safety equipment is functional for other persons authorized to occupy observer seat.

System & Sequence Number / 1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-11-04 Cabin Attendant Seat				
1) Standard Cabin Attendant Seat	C	1	-	(M)(O) May be inoperative provided: a) Associated seat position is not occupied, b) Cabin Attendant displaced by inoperative seat occupies the passenger seat closest to his/her duty station, c) Alternate procedures are established for displaced flight attendant, d) Folding type seat is stowed or secured in the retracted position, and e) Passenger seat assigned to flight attendant is placarded "FOR CABIN ATTENDANT USE ONLY". **NOTE 1:** A folding seat that will not stow automatically is considered inoperative. **NOTE 2:** A seat with a missing or inoperative lap belt and/or shoulder harness is considered inoperative. **NOTE 3:** The above provisos apply only to required cabin attendants. Seat positions in excess of those required may be inoperative provided they are properly stowed or secured in the retracted position. (Continued)

System & Sequence Number	1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS					
-11-04	Cabin Attendant Seat (Continued)				
***	2) Second Cabin Attendant Seat	D	1	0	(M)(O) May be inoperative provided: a) Associated seat position is not occupied, and b) Folding type seat is stowed or secured in the retracted position. **NOTE 1:** A folding seat that will not stow automatically is considered inoperative. **NOTE 2:** A seat with a missing or inoperative lap belt and/or shoulder harness is considered inoperative.
-12-01	Sunvisors	D	2	0	May be inoperative or missing provided there are no visual restrictions to the flight crew.
-12-02	Cockpit Convenience Items	D	-	0	Cockpit convenience items, as expressed in this MMEL are those items related to crewmember convenience, or comfort such as, but not limited to: cap holders, ash trays, footrests, etc. Items addressed elsewhere in this document shall not be included.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-12-03 Lighted/Mechanical Checklist ***	C	-	0	
-12-04 Chart Holders	D	4	0	May be inoperative or missing at each pilot station.
-21-05 Passenger Seats	D	-	-	May be inoperative provided: a) Seat does not block an Emergency Exit, b) Seat does not restrict any passenger from access to the main airplane aisle, and c) The affected seat(s) are blocked and placarded "DO NOT OCCUPY". **NOTE 1:** A seat with an inoperative seat belt is considered inoperative. **NOTE 2:** Inoperative seats do not affect the required number of flight attendants. **NOTE 3:** Affected seat(s) may include the seat(s) behind and/or adjacent outboard seats.
1) Recline Mechanism	D	-	-	(M) May be inoperative and seat occupied provided seat is secured in the full upright position.
	C	-	-	(M) May be inoperative and seat occupied provided seat back is immovable in full upright position.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-21-05 Passenger Seats (Continued)				
2) Underseat Baggage Restraining Bars	C	-	-	(O) May be inoperative provided: a) Baggage is not stowed under seat with inoperative restraining bar, b) Associated seat is placarded "DO NOT STOW BAGGAGE UNDER THIS SEAT", and c) Procedures are established to alert Cabin Crew of inoperative restraining bar.
3) Armrest	C	-	-	(M) May be inoperative or missing and seat occupied provided: a) Armrest does not block an Emergency Exit, b) Armrest does not restrict any passenger from access to the main airplane aisle, and c) For an armrest with a recline mechanism, seat is secured in the full upright position.
4) Rear Facing Executive (Single and/or Double) Seat Headrests (EMB-135BJ)	D	-	-	(M) Shall be considered inoperative and placarded "DO NOT OCCUPY" if headrest can not be extended and secured to the required passenger head position.
5) Forward Facing Executive Double Seat (in front of Conference Table) (EMB-135BJ)	D	-	-	Shall be considered inoperative and placarded "DO NOT OCCUPY" if Conference Table mechanism is inoperative and table cannot be secured in the stowed position.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-22-00 Overhead Storage Bin(s)/Cabin and Galley Storage Compartment/ Closets (all except EMB-135BJ)	C	-	-	(M) May be inoperative provided: a) Procedures are established to secure compartment CLOSED, b) Associated bin or compartment is prominently placarded DO NOT USE, c) Any emergency equipment located in affected compartment is considered inoperative, and d) Affected bin or compartment is not used for storage of any item(s) except for those permanently affixed. **NOTE:** If no partitions are installed, the entire overhead storage compartment is considered one bin. (Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-22-00 Overhead Storage Bin(s)/Cabin and Galley Storage Compartment/ Closets (all except EMB-135BJ) (Continued)	C	-	-	(M) May be inoperative provided: a) Procedures are established to secure compartment OPEN or affected door(s) is removed, b) Associated bin or compartment is prominently placarded DO NOT USE, c) Affected bin or compartment is not used for storage of any item(s) except for those permanently affixed. d) Procedures are established and used to alert crewmembers and passengers of inoperative bins, and e) Passenger are briefed that associated bin or compartment is not used. **NOTE 1:** If no partitions are installed, the entire overhead storage compartment is considered one bin. **NOTE 2:** Any emergency equipment located in associated compartment (permanently affixed) may be available for use.
-26-07 Baggage Compartment Partition Door (EMB-135/140/145)	C	1	0	Door frame may be damaged and/or sealing fitness may be impaired to any extent provided cargo compartment remains empty or only non combustible materials are carried and tied down.

System & Sequence Number	1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS					
-26-08	Internal Baggage Access Door (EMB-135BJ)	C	1	0	Door frame may be damaged, and/or lock may be inoperative to keep door closed, and/or sealing fitness may be impaired to any extent provided cargo compartment remains empty or only non combustible materials are carried and tied down.
-27-02 ***	Lavatory Bulkhead Peephole	D	1	0	May be inoperative provided only view capability is obstructed. **NOTE:** The lavatory bulkhead peephole must be in place and not broken.
		C	1	0	(M) May be broken, missing or removed provided: a) The baggage compartment remains empty or, b) The hole is blocked by an approved means.
-27-09	Forward Attendant Control Panel Cover	D	1	0	May be inoperative with no penalty provided the cover is removed.
-30-01	Galley Waste Receptacles Access Doors/Covers	C	-	-	(M)(O) May be inoperative provided: a) The container is empty and the access is secured to prevent waste introduction into the compartment, and b) Procedures are established to ensure that sufficient galley waste receptacles are available to accommodate all waste that may be generated on a flight.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-40-00 Exterior Lavatory Door Ashtrays				
1) Airplanes with only one exterior lavatory door ashtrays installed	A	1	0	May be missing or inoperative for 10 days.
-50-01 Cargo Restraint Systems	D	-	-	May be missing or removed provided baggage compartment remains empty.
1) Horizontal Net (all except EMB-135BJ)	C	1	0	May be missing or removed provided alternate or approved means to avoid cargo shifting are installed. **NOTE 1:** Baggage compartment loaded up to 990 kg does not require the use of horizontal net. **NOTE 2:** Baggage compartment equipped with reinforced liners (airplanes Post-Mod. SB 145-25-0261 or equipped with an equivalent factory modification incorporated) does not require the use of horizontal net.
(EMB-135BJ)	D	1	0	May be missing or removed.
*** 2) Vertical Net	D	-	0	**NOTE:** The vertical net(s) and attachments are optional and may be removed or installed by the operator at their discretion.
3) Door Safety Net	C	1	0	May be missing or removed provided cargo restraint net (horizontal net) is available and used.

System & Sequence Number / 1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS			
-60-02 Passenger Convenience/NEF Item(s)			
1) Passenger Convenience Items	-	0	Passenger convenience items, as expressed in this MMEL are those related to passenger convenience, comfort or entertainment such as, but not limited to: galley equipment, movie equipment, ash trays, stereo equipment, overhead reading lamps. Items addressed elsewhere in this document shall not be included. (M) or (O) procedures, if required, must be available to the flight crew and included in the operator's appropriate document. **NOTE:** Exterior lavatory door ash trays are not considered passenger convenience items.
2) Non-Essential Equipment & Furnishings (NEF)	-	0	May be inoperative, damaged or missing provided that the item(s) is deferred in accordance with the operator's NEF deferral program. The NEF program, procedures and processes are outlined in the operator's (insert name) manual. (M) and (O) procedures, if required, must be available to the flight crew and included in the operator's appropriate document. **NOTE:** Exterior lavatory door ash trays are not considered NEF items.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-60-04 Life Raft ***	D	-	-	(O) May be inoperative or missing provided a) Extended overwater flights are not conducted, and b) Procedures are established and used to alert the crew members of inoperative or missing equipment.
	C	-	-	(M)(O) Any in excess of those required for the intended flight may be inoperative or missing for extended overwater flights, provided: a) Required distribution is maintained, b) Inoperative life raft and its installed location are placarded inoperative c) When practical, the inoperative life raft is secured out of sight, and d) Procedures are established and used to alert the crew members of inoperative of missing equipment.
-60-05 Flight Deck/ Attendant Flashlight and Holder Assemblies	C	-	-	May be inoperative or missing provided affected crewmember has a flashlight of equivalent characteristics readily available.
-60-06 Megaphone	D	-	0	Any in excess of those required by local regulations may be inoperative provided: a) Inoperative megaphone is removed from the passenger cabin. b) Required distribution is maintained.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-60-07 Pyrotechnic Signal Devices	D	-	-	Any in excess of that required by local regulations may be inoperative or missing.
-60-09 Emergency Medical Equipment				
*** 1) Automatic External Defibrillator (AED) and/or Associated Equipment	A	-	0	(O) May be incomplete, missing or inoperative provided: a) AED is resealed in a manner that will identify it as a unit that can not be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within 3 flight cycles.
	D	-	-	Any in excess of those required by local regulations may be incomplete, missing or inoperative.
*** 2) Emergency Medical Kit (EMK) and/or Associated Equipment	A	-	0	(O) May be incomplete, missing or inoperative provided: a) EMK is resealed in a manner that will identify it as a unit that can not be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within 3 flight cycles.
	D	-	-	Any in excess of those required by local regulations may be incomplete, missing or inoperative.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-60-09 Emergency Medical Equipment (Continued)				
3) First Aid kit (FAK) and/or Associated Equipment	A	-	-	(O) If more than one is required by local regulations, only one of the required first aid kits may be incomplete, missing or inoperative provided: a) FAK is resealed in a manner that will identify it as a unit that can not be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within 3 flight cycles.
	D	-	-	Any in excess of those required by local regulations may be incomplete, missing or inoperative.
-60-10 "Fasten Seat Belts While Seated" Signs or Placards	C	-	-	May be illegible or missing provided a legible sign or placard is readable from each occupied passenger seat.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
25 EQUIPMENT AND FURNISHINGS				
-61-01 Emergency Locator Transmitter (ELT)				
*** Survival Type ELTs	D	-	-	Any in excess of that required by local regulations may be inoperative or missing.
Fixed ELTs	A	-	0	(M) May be inoperative provided: a) System is deactivated, and b) Repairs are made within 90 days.
	A	-	0	May be missing provided: a) Placarding "ELT not installed" is placed in view of the pilot, and b) Repairs are made within 90 days.
	D	-	-	(M) Any in excess of those required by local regulations may be inoperative provided system is deactivated.
	D	-	-	Any in excess of those required by local regulations may be missing.
-64-02 Flotation Equipment (Crew and Passenger)	D	-	-	Any in excess of that required by local regulations may be inoperative or missing.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
26 FIRE PROTECTION				
-12-00 APU Fire Detection System	C	1	0	May be inoperative provided APU is not used.
-14-00 Lavatory Smoke Detection System				
1) EMB-135/140/145	C	-	-	(M) For each lavatory, the lavatory smoke detection system may be inoperative provided lavatory fire extinguisher system operates normally.
	C	-	-	(M)(O) For each lavatory, the lavatory smoke detection system may be inoperative provided: a) Lavatory waste receptacle is empty, b) Lavatory door is locked, closed and placarded "INOPERATIVE - DO NOT ENTER", and c) Lavatory is not used for any purpose. **NOTE:** These provisos are not intended to prohibit lavatory inspections by crewmembers.
2) EMB-135BJ	C	-	-	
-15-00 *** Baggage Compartment Smoke Detection System				
1) Airplanes equipped with Class D Baggage Compartment	C	1	0	May be inoperative.

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
26 FIRE PROTECTION				
-15-00 Baggage *** Compartment Smoke Detection System (Continued)				
2) Airplanes equipped with Class C Baggage Compartment	C	1	0	May be inoperative provided cargo compartment remains empty.
	C	1	0	(M) May be inoperative provided: a) Ventilation system remains closed, b) Live animals are not carried in the cargo compartment, and c) Only non-combustible materials are carried. **NOTE:** Does not preclude the carriage of empty cargo containers, pallets, ballast, etc.
3) Airplanes equipped with Class B Baggage Compartment	C	1	0	May be inoperative provided: a) Cabin to baggage compartment door remains OPEN, and b) Procedures are established and used to ensure the cargo compartment remains empty, or is verified to contain only empty cargo handling equipment, ballast (ballast may be loaded in ULDs), and/or Fly Away Kits. **NOTE:** Operator MEL must define which items are approved for inclusion in the Fly Away Kits which materials can be used as ballast.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
26 FIRE PROTECTION				
-15-10 Baggage Compartment Smoke Detector Protective Bar	B	2	0	May be damaged provided: a) Protection bar that does not contact the smoke detector, b) Baggage compartment smoke detector is checked before each flight, and c) The higher horizontal net is installed and no load is over the net.
-21-01 Engine Fire Illumination Handle	C	2	0	(O) May be inoperative provided associated EICAS fire message, Master Warning lights and Aural warning are checked and operate normally.
-21-02 E1 (2) EXTBTLA (B) INOP Caution Messages	B	4	2	(M) One or two message(s) may be inoperative provided fire protection systems A and B are verified operational once each flight day.
-22-00 APU Fire Extinguishing System	C	1	0	May be inoperative provided APU is not used.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
26 FIRE PROTECTION				
-22-01 APU EXTBTL INOP Caution Message	C	1	0	(M) May be inoperative provided an alternate procedure is performed once each flight day to verify that the APU extinguishing bottle is operational.
	C	1	0	May be inoperative provided APU is not used.
-23-00 Baggage *** Compartment Fire Extinguisher System	C	1	0	(M) May be inoperative provided cargo compartment remains empty.
	C	1	0	(M) May be inoperative provided: a) Ventilation system remains closed, b) Live animals are not carried in the cargo compartment, and c) Only non-combustible materials are carried. **NOTE:** Does not preclude the carriage of empty cargo containers, pallets, ballast, etc.
-23-01 Portable Fire Extinguisher	D	2	-	Any in excess of those required by local regulations may be inoperative or missing provided: a) The inoperative fire extinguisher is tagged inoperative, removed from the installed location, and placed out of sight so it can not be mistaken for a functional unit, and b) Required distribution is maintained.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
26 FIRE PROTECTION				
-25-00 Lavatory Fire Extinguisher System	C	-	-	(O) For each lavatory, the lavatory fire extinguisher system may be inoperative provided lavatory smoke detector system operates normally.
	C	-	-	(M)(O) For each lavatory, the lavatory fire extinguisher system may be inoperative provided: a) Lavatory waste receptacle is empty, and b) Lavatory door is locked, closed and placarded "INOPERATIVE - DO NOT ENTER", and c) Lavatory is not used for any purpose. **NOTE:** These provisos are not intended to prohibit lavatory inspections by crewmembers.
-25-01 *** Galley Fire Extinguisher System (EMB-135BJ)	C	1	0	

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
27 FLIGHT CONTROLS					
10-01 Aileron Damper		C	2	0	(M) May be inoperative provided: a) The affected damper(s) is deactivated and, b) Visual inspection of the affected PCA rod ends and fittings are performed according to the latest approved revision of the AD 1999-02-01.
14-00 Roll Trim Position Indication		C	1	0	(O) May be inoperative provided: a) Roll trim is verified to be centered before each departure, and b) Yaw trim position indication operates normally.
-15-00 Aileron Disconnection Light		C	1	0	(O) May be inoperative provided a check is made before each takeoff to verify that both ailerons are connected.
-21-03 Pedal Adjustment Mechanisms		C	2	0	(M)(O) May be inoperative provided rudder pedals can be adjusted to suit individual pilot requirements and is acceptable to the flight crewmember.
-24-01 Yaw Trim Position Indication		C	1	0	(O) May be inoperative provided: a) Yaw trim is verified to be centered before each departure, and b) Roll trim position indication operates normally.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
27 FLIGHT CONTROLS				
-35-00 Elevator Disconnection Light	C	1	0	(O) May be inoperative provided a check is made before each takeoff to verify that both elevators are connected.
-36-01 SPS/ICE SPEEDS Advisory Message	C	1	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.
	C	1	0	May be inoperative provided AFM abnormal procedure "ADVANCED STALL PROTECTION" is followed.
-36-03 Stick Shaker	B	2	1	May be inoperative provided the airspeed is monitored to avoid operation in the white range.
-40-00 Main Pitch Trim Switches	C	2	1	May be inoperative provided: a) Back Up Pitch Trim Channel is completely operational, and b) Pilot in command must be in the same side of the operational switch. **NOTE:** The message PTRIM CPT SW FAIL or PTRIM F/O SW FAIL may be present.
-40-01 Pitch Trim Position Indication	B	1	0	(O) May be inoperative provided the stabilizer is set by means of markings on vertical stabilizer and Takeoff Configuration Warning is checked prior to each departure.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
27 FLIGHT CONTROLS				
-53-00 Flap Channels	B	2	1	(M)(O) One channel may be inoperative provided: a) There are no obstacles in the Takeoff Flight Path above Level off Height, and b) Motor and brakes of failed channel are deactivated. **NOTE:** Flaps will operate at half speed with FLAP LOW SPEED advisory message being presented.
-70-00 Gust Lock System				
1) Mechanical Gust Lock System	C	1	0	(M)(O) May be inoperative provided system is secured unlocked. **NOTE:** Appropriate measures should be taken to prevent damage from gusts while on the ground.
2) Electro-Mechanical Gust Lock System	C	1	0	(M)(O) May be inoperative provided: a) System is deactivated unlocked such that locking pins cannot engage the elevator, and b) GUST LOCK amber lights are masked. **NOTE:** Appropriate measures should be taken to prevent damage from gusts while on the ground.
a) GUST LOCK Amber Lights	C	2	1	

(Continued)

System & Sequence Number	1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
27 FLIGHT CONTROLS					
-70-00 Gust Lock System (Continued)					
***	3) Gust Lock Lever Movable Stop (Airplanes with SB 145-27-0126)	C	1	0	(M) May be inoperative provided it is secured immovable in one of the edges of the crossbar.
		C	1	0	May be inoperative provided it has failed immovable in one of the edges of the crossbar.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-11-02 Sump Drain Valves (EMB-135/140/145)	C	-	-	(M) One may be inoperative provided: a) There is no evidence of leakage, and b) No water contamination in the other tank is verified before the first flight of each day.
(EMB-135BJ) (only for Legacy 600)	C	-	-	(M) One per fuel tank system (WING or FUS 1 or FUS 2) may be inoperative provided: a) There is no evidence of leakage, and b) No water contamination in the other associated tank is verified before the first flight of each day.
(EMB-135BJ) (only for Legacy 650)	C	-	-	(M) One per fuel tank system (WING or FUS 1 or FUS 2 or VENTRAL) may be inoperative provided: a) There is no evidence of leakage, and b) No water contamination in the other associated tank is verified before the first flight of each day.
(EMB-145XR)	C	-	-	(M) One per fuel tank system (WING or VENTRAL) may be inoperative provided: a) There is no evidence of leakage, and b) No water contamination in the other tanks is verified before the first flight of each day.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-11-05 Fueling Receptacle Cap	C	1	0	(M) May be inoperative (missing) provided: a) Refueling receptacle is visually checked for contamination before each refueling, and b) No leakage can be detected after refueling is completed.
-14-00 FUEL TK VENT OPEN Message (EMB-135BJ) (only for Legacy 600)	B	1	0	(M) May be inoperative provided Aft and Forward vent valves are secured closed. **NOTE:** Only wing tanks will be available to refueling.
(EMB-135BJ) (only for Legacy 650)	B	1	0	(M) May be inoperative provided Ventral, Aft and Forward vent valve are secured closed. **NOTE:** Only wing tanks will be available to refueling.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-01 Wing Tank Electric Fuel Booster Pumps (all except Legacy 650)	C	6	4	(M)(O) One pump per tank may be inoperative provided: a) Remaining two pumps and associated indication operate normally, b) If the pumps 1C and 2C are inoperative, the message ELEC EMERG ABNORMAL must be verified to operate normally before departure, c) Affected electric fuel booster pump is deactivated, and d) AFM limitations regarding unusable fuel are accounted for.
(EMB-135BJ) (only for Legacy 650)	C	6	4	(M)(O) One pump per tank may be inoperative provided: a) Remaining two pumps and associated indication operate normally, b) If the pumps 1C and 2C are inoperative, the message ELEC EMERG ABNORMAL must be verified to operate normally before departure, c) Affected electric fuel booster pump is deactivated, d) AFM limitations regarding unusable fuel are accounted for, and e) For operation with diversion time greater than 60 minutes pumps 1B and 2B must be operative.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-02 Wing Tank Electric Fuel Booster Pumps Operating Indications	C	6	4	(O) One per side may be inoperative provided associated pump is verified to operate normally before departure.
-21-03 Forward Auxiliary Tank Electric Fuel Transfer Pumps (EMB-135BJ)	A	4	2	(M)(O) One pump per tank may be inoperative provided: a) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel System (forward plus aft tank), b) Remaining pump and associated indication operate normally, c) Affected electric fuel transfer pump is deactivated, d) Fuel quantity in WING tanks (and remaining FUS tanks, if applicable) is adequate to reach a suitable airport if remaining pump fails at any time, e) Repairs are made within 1 flight day.

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-03 Forward Auxiliary Tank Electric Fuel Transfer Pumps (EMB-135BJ) (Continued)	B	4	2	(M)(O) Two pumps in one forward tank may be inoperative provided: a) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel System (forward plus aft tank), b) Any fuel in the affected FUS Auxiliary Fuel System is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff, and c) Affected electric fuel transfer pumps are deactivated.
	B	4	0	(M)(O) May be inoperative provided: a) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel Systems (both forward plus both aft tanks), b) Any fuel in the affected FUS Auxiliary Fuel Systems is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff, and c) Affected electric fuel transfer pumps are deactivated.

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-03 Forward Auxiliary Tank Electric Fuel Transfer Pumps (EMB-135BJ) (Continued)	D	4	0	(M) May be inoperative provided: a) Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty, and b) Affected electric fuel transfer pump is deactivated.
-21-04 Forward Auxiliary Tank Electric Fuel Transfer Pumps Operating Indications (EMB-135BJ)	C	4	0	(M)(O) May be inoperative provided: a) Associated pump is verified to operate normally before departure, and b) EICAS messages FUEL XFER INOP and FUSELAGE FUEL IMB are verified to operate normally.
	D	4	0	(M) May be inoperative provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-05 Aft Auxiliary Tank Electric Fuel Transfer Pumps (EMB-135BJ)	B	2	1	(M)(O) One Pump in one aft tank may be inoperative provided: a) Affected FUS Auxiliary Fuel System is not used, b) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel System (forward plus aft tank), c) Any fuel in the affected FUS Auxiliary Fuel System is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff, and d) Affected electric fuel transfer pump is deactivated.

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-05 Aft Auxiliary Tank Electric Fuel Transfer Pumps (EMB-135BJ) (Continued)	B	2	0	(M)(O) May be inoperative provided: a) Affected FUS Auxiliary Fuel Systems are not used, b) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel Systems (both forward plus both aft tanks), c) Any fuel in the affected FUS Auxiliary Fuel Systems is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff, and d) Affected electric fuel transfer pumps are deactivated.
	D	2	0	(M) May be inoperative provided: a) Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty, and b) Affected electric fuel transfer pump is deactivated.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-06 Aft Auxiliary Tank Electric Fuel Transfer Pumps Operating Indications (EMB-135BJ)	C	2	0	(M)(O) May be inoperative provided: a) Associated pump is verified to operate normally before departure, and b) EICAS messages FUEL XFER INOP and FUSELAGE FUEL IMB are verified to operate normally.
	D	2	0	(M) May be inoperative provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.
-21-07 Aft Auxiliary Tank Pressurized Fuel Transfer System (EMB-135BJ)	A	2	0	(O) May be inoperative provided: a) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel System (forward plus aft tank), b) Aft Auxiliary Tank Electric Fuel Transfer Pump and associated indication operate normally, c) Flight is conducted in an unpressurized configuration, at or below FL 100, d) Fuel quantity in WING tanks (and remaining FUS tanks, if applicable) is adequate to reach a suitable airport if transfer pump fails at any time, and e) Repairs are made within 1 flight day. (Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-07 Aft Auxiliary Tank Pressurized Fuel Transfer System (EMB-135BJ) (Continued)	B	2	1	(M)(O) Pressurized transfer system in one aft tank may be inoperative provided: a) Affected FUS Auxiliary Fuel System is not used, b) Flight is conducted in an unpressurized configuration, at or below FL 100, c) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel System (forward plus aft tank), and d) Any fuel in the affected FUS Auxiliary Fuel System is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff. (Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-07 Aft Auxiliary Tank Pressurized Fuel Transfer System (EMB-135BJ) (Continued)	B	2	0	(M)(O) May be inoperative provided: a) Affected FUS Auxiliary Fuel Systems are not used, b) Flight is conducted in an unpressurized configuration, at or below FL 100, c) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel Systems (both forward plus both aft tanks), and d) Any fuel in the affected FUS Auxiliary Fuel Systems is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff.
	D	2	0	(M)(O) May be inoperative provided: a) Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty, and b) Flight is conducted in an unpressurized configuration, at or below FL 100.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-08 Aft Auxiliary Tank Pressurized Fuel Transfer System Operating Indications (EMB-135BJ)	C	2	0	(M)(O) May be inoperative provided: a) Associated aft vent/relief shutoff valve operates normally, b) Both Air Conditioning Packs operate normally, and c) EICAS messages FUEL XFER INOP and FUSELAGE FUEL IMB are verified to operate normally.
	D	2	0	(M) May be inoperative provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.
-21-09 Forward Auxiliary Tank Fuel Transfer Operating Indications (EMB-135BJ)	C	2	0	(O) May be inoperative provided: a) Associated Forward Auxiliary Tank fuel quantity indicator operates normally, b) Associated Fuel Transfer System operates normally, and c) EICAS messages FUEL XFER INOP and FUSELAGE FUEL IMB are verified to operate normally.
	D	2	0	(M) May be inoperative provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-10 Aft Auxiliary Tank Fuel Transfer System Operating Indications (EMB-135BJ)	C	2	0	(O) May be inoperative provided: a) Associated Aft Auxiliary Tank fuel quantity indicator operates normally, and b) Associated Fuel Transfer System operates normally, c) EICAS messages FUEL XFER INOP and FUSELAGE FUEL IMB are verified to operate normally.
	D	2	0	(M) May be inoperative provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.
-21-11 Ventral Tank Electric Fuel Transfer Pumps (EMB-145XR)	A	2	1	(M)(O) One may be inoperative provided: a) No more than 800 kg is maintained in the affected tank, b) Remaining pump and associated indication operate normally, c) Affected electric fuel transfer pump is deactivated, d) Fuel quantity in wing tanks is adequate to reach a suitable airport if remaining ventral pump fails at any time, e) Repairs are made within 1 flight day. (Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-11 Ventral Tank Electric Fuel Transfer Pumps (EMB-145XR) (Continued)	C	2	0	(M) May be inoperative provided ventral tank remains empty and electric fuel transfer pumps are deactivated.
	D	2	0	(M) May be inoperative provided airplane fuel system is configured to LR mode.
(EMB-135BJ) (only for Legacy 650)	A	2	1	(M)(O) One may be inoperative provided: a) No more than 800 kg is maintained in the affected tank, b) Remaining pump and associated indication operate normally, c) Affected electric fuel transfer pump is deactivated, d) Fuel quantity in wing tanks is adequate to reach a suitable airport if remaining ventral pump fails at any time, and e) Repairs are made within 1 flight day.
	C	2	0	(M) May be inoperative provided ventral tank remains empty and electric fuel transfer pumps are deactivated.
-21-12 Ventral Tank Electric Fuel Transfer Pumps Operating Indications (EMB-145XR)	C	2	1	(O) May be inoperative provided: a) Both pumps operate normally, b) One pump indication operates normally, and c) EICAS messages FUEL XFER INOP is verified to operate normally. (Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-21-12 Ventral Tank Electric Fuel Transfer Pumps Operating Indications (EMB-145XR) (Continued)	C	2	0	(M) May be inoperative provided ventral tank remains empty and electric fuel transfer pumps are deactivated.
	D	2	0	(M) May be inoperative provided airplane fuel system is configured to LR mode.
(EMB-135BJ) (only for Legacy 650)	C	2	1	(O) May be inoperative provided: a) Both pumps operate normally, b) One pump indication operates normally, and c) EICAS message FUEL XFR VTR INOP is verified to operate normally.
	C	2	0	(M) May be inoperative provided ventral tank remains empty.
-22-01 APU FUEL Shutoff Valve	C	1	0	(M)(O) May be inoperative provided: a) APU is considered inoperative, and b) Valve is secured closed.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-23-00 Pressure Defueling/ Refueling System	C	1	0	(M)(O) May be inoperative provided: a) Airplane is defueled/ refueled by gravity, b) If an overfilling condition occurs, it must be corrected before departure, and c) There is no fuel leakage at refueling/defueling adapter. **NOTE:** Does not preclude the ventral or auxiliary tanks refueling by fuel transfer procedures on the ground.
-23-07 Defueling Shutoff Valve (EMB-135/140/145/ 135BJ)	C	1	0	(M) May be inoperative provided valve is secured closed.
(EMB-145XR)	C	2	0	(M) May be inoperative provided both valve are secured closed.
-23-08 Fuel Quantity Indicator (Refueling Panel)	C	1	0	(M)(O) May be inoperative provided: a) Airplane is refueled by gravity, and b) Pilot or copilot monitors the refueling from the cockpit. **NOTE:** Does not preclude the ventral or auxiliary tanks refueling by fuel transfer procedures on the ground.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-40-00 Wing Tank Fuel Quantity Indications (EICAS and MFD) (EMB-135/140/145)	B	4	2	(O) Indications for one tank may be inoperative provided: a) Fuel quantity in associated tank is verified by an alternate means, and b) Both fuel flow indications and fuel used indications are available, and are monitored throughout flight.
(EMB-135BJ) (only for Legacy 600)	B	4	2	(M)(O) Indications for one tank may be inoperative provided: a) Fuel quantity in associated wing tank is verified by an alternate means, b) Both fuel flow indications and fuel used indications are available, and are monitored throughout flight, and c) Forward and Aft Tanks of both FUS 1 and FUS 2 Auxiliary Fuel Systems remain empty.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-40-00 Wing Tank Fuel Quantity Indications (EICAS and MFD) (Continued)				
(EMB-135BJ) (only for Legacy 650)	B	4	2	(M)(O) Indications for one tank may be inoperative provided: a) Fuel quantity in associated wing tank is verified by an alternate means, b) Both fuel flow indications and fuel used indications are available, and are monitored throughout flight, and c) Ventral tank and Forward and Aft Tanks of both FUS 1 and FUS 2 Auxiliary Fuel Systems remain empty.
(EMB-145XR)	B	4	2	(M)(O) Indications for one tank may be inoperative provided: a) Fuel quantity in associated wing tank is verified by an alternate means, and b) Both fuel flow indications and fuel used indications are available, and are monitored throughout flight.
-40-01 Forward Auxiliary Tank Fuel Quantity Indications (EICAS and MFD) (EMB-135BJ)	B	4	0	(M) May be inoperative provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-40-02 Aft Auxiliary Tank Fuel Quantity Indications (EICAS and MFD) (EMB-135BJ)	B	4	0	(M) May be inoperative provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.
-40-03 Ventral Tank Fuel Quantity Indications (EICAS and MFD) (EMB-145XR)	B	2	0	(M)(O) May be inoperative provided: a) Ventral Tank Electric Fuel Transfer pumps and associated indication operate normally, b) Ventral Tank Fuel Transfer system (AUTO and OVRD) operate normally, and c) Fuel transfer is monitored through EICAS and/or MFD Fuel Page during the flight.
	C	2	0	(M) May be inoperative provided ventral tank remains empty and electric fuel transfer pumps are deactivated.
	D	2	0	(M) May be inoperative provided airplane fuel system is configured to LR mode.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-40-03 Ventral Tank Fuel Quantity Indications (EICAS and MFD) (Continued)				
(EMB-135BJ) (only for Legacy 650)	B	2	0	(M)(O) May be inoperative provided: a) Ventral Tank Electric Fuel Transfer pumps and associated indication operate normally, b) Ventral tank transfer system is operative when selected on fuel transfer master switch, and c) Fuel transfer is monitored through EICAS and/or MFD Fuel Page during the flight.
	C	2	0	(M) May be inoperative provided ventral tank remains empty and electric fuel transfer pumps are deactivated.
-41-01 Ventral Tank FCU (EMB-145XR)	C	1	0	(M) May be inoperative provided ventral tank remains empty and electric fuel transfer pumps are deactivated.
	D	1	0	(M) May be inoperative provided airplane fuel system is configured to LR mode.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-42-01 Direct Quantity Measuring Sticks	C	-	0	(O) May be inoperative provided fuel quantity is determined by other means.
-43-00 Fuel Tank Temperature System	C	1	0	May be inoperative provided Total Air Temperature (TAT) is used as an indication of fuel temperature and is limited to -40°C.
-44-00 FUEL 1 (or 2) LO LEVEL Messages	B	2	0	(O) May be inoperative provided fuel quantity indication is available and is monitored throughout the flight.
-45-01 E1 (or E2) FUEL LO PRESS Messages	B	2	0	(O) May be inoperative provided: a) Associated fuel pump automatic function operates normally and, b) All fuel pumps operate normally.
-45-02 APU Fuel Low Press Switch	C	1	0	(O) May be inoperative provided APU is considered inoperative.
	C	1	0	May be inoperative provided engine 2 fuel low pressure indication is operating normally and is used as indication of APU fuel low pressure.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-03 FUEL 1 (2) XFER INOP Messages (EMB-135BJ)	B	2	0	(M)(O) May be inoperative provided: a) Affected FUS Auxiliary Fuel Systems are verified to operate normally, b) EICAS message CHECK ACFT LOAD or FUEL XFER CRITICAL is verified to operate normally, and c) Fuel transfer is monitored through EICAS and/or MFD Fuel Page during the flight.
	D	2	0	(M) May be inoperative provided Forward and Aft Tanks of both FUS Auxiliary Fuel System remain empty.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-04 Aft Auxiliary Tank Relief Valve (EMB-135BJ)	B	2	1	(O) One valve may be inoperative, in case it has failed at closed position, and both FUS Auxiliary Fuel Systems may be used provided, while transferring fuel from the affected FUS Auxiliary Fuel System: a) Flight is conducted at or below FL 250, and b) Airspeed is maintained at or below 300 KIAS.
	B	2	1	(M)(O) One valve may be inoperative, in case it has failed at open position, and both FUS Auxiliary Fuel Systems may be used provided, while transferring fuel from the affected FUS Auxiliary Fuel System: a) Valve is secured closed, b) Flight is conducted at or below FL 250, and c) Airspeed is maintained at or below 300 KIAS.
	B	2	1	(M) One valve may be inoperative, failed at any position, and one FUS Auxiliary Fuel Systems may be used provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-04 Aft Auxiliary Tank Relief Valve (EMB-135BJ) (Continued)	B	2	0	(O) Both valves may be inoperative, in case they have failed at closed position, and both FUS Auxiliary Fuel Systems may be used provided: a) Flight is conducted at or below FL 250, and b) Airspeed is maintained at or below 300 KIAS.
	B	2	0	(M)(O) Both valves may be inoperative, in case they have failed at open position, and both FUS Auxiliary Fuel Systems may be used provided: a) Valves are secured closed, b) Flight is conducted at or below FL 250, and c) Airspeed is maintained at or below 300 KIAS.
	D	2	0	(M) Both valves may be inoperative, failed at any position, provided Forward and Aft Tanks of both FUS Auxiliary Fuel Systems remain empty.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-05 FUSELAGE FUEL IMB Message (EMB-135BJ)	B	1	0	(M)(O) May be inoperative provided: a) Only one FUS Auxiliary Fuel Systems is used, b) No more than 540 kg is carried in the operative FUS Auxiliary Fuel System (forward plus aft tank), and c) Forward and aft tanks of the inoperative FUS Auxiliary Fuel System remain empty.
	B	1	0	(M)(O) May be inoperative and both FUS Auxiliary Fuel Systems may be used provided no more than 680 kg is carried in both FUS Auxiliary Fuel Systems (forward plus aft tanks).

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-05 FUSELAGE FUEL IMB Message (EMB-135BJ) (Continued)	B	1	0	(M)(O) May be inoperative provided: a) Only one FUS Auxiliary Fuel Systems is used, b) Forward and aft tanks of the inoperative FUS Auxiliary Fuel System remain empty, c) No more than 1460 kg is carried in the operative FUS Auxiliary Fuel System (forward plus aft tank), d) DELTA CORRECTION function (Automatic Balance Correction) is verified to operate normally, e) Selected FUS Auxiliary Fuel System is verified to operate normally, f) EICAS message FUEL XFER INOP is verified to operate normally, and g) Fuel transfer and fuselage fuel balance is monitored through EICAS and/or MFD Fuel Page. (Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-05 FUSELAGE FUEL IMB Message (EMB-135BJ) (Continued)	B	1	0	(M)(O) May be inoperative with both FUS Auxiliary Fuel system used provided: a) No more than 1460 kg is carried in both FUS Auxiliary Fuel Systems (forward plus aft tanks), b) DELTA CORRECTION function (Automatic Balance Correction) is verified to operate normally, c) Both FUS Auxiliary Fuel Systems are verified to operate normally, d) EICAS message FUEL XFER INOP is verified to operate normally, and e) Fuel transfer and fuselage fuel balance is monitored through EICAS and/or MFD Fuel Page.
	D	1	0	(M) May be inoperative provided Forward and Aft Tanks of both FUS Auxiliary Fuel Systems remain empty.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-06 CHECK ACFT LOAD Message (EMB-135BJ) (only for Legacy 600)	D	1	0	(M) May be inoperative provided Forward and Aft Tanks of both FUS Auxiliary Fuel System remain empty.
	B	1	0	(M)(O) May be inoperative provided: a) Both FUS Auxiliary Fuel Systems are not used, b) No more than 800 kg is maintained in both FUS Auxiliary Fuel Systems (forward plus aft tanks), and c) Any fuel in both FUS Auxiliary Fuel Systems is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff.

(Continued)

System & Sequence Number / 1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-06 CHECK ACFT LOAD Message (EMB-135BJ) (only for Legacy 600) (Continued)	B	1	0	(M)(O) May be inoperative provided: a) Both FUS Auxiliary Fuel Systems are not used, b) No more than 800 kg is maintained in one FUS Auxiliary Fuel System (forward plus aft tank), c) Forward and Aft Tanks of the other FUS Auxiliary Fuel System remain empty, and d) Any fuel in the FUS Auxiliary Fuel System is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-07 Aft Auxiliary Tank Transfer Isolation Valve (EMB-135BJ)	B	2	1	(M)(O) One may be inoperative and one FUS Auxiliary Fuel System may be used provided Forward and Aft Tanks of the affected FUS Auxiliary Fuel System remain empty.
	B	2	1	(M)(O) One may be inoperative provided: a) Affected FUS Auxiliary Fuel System is not used, b) No more than 800 kg is maintained in the affected FUS Auxiliary Fuel System (forward plus aft tank), c) Any fuel in the affected FUS Auxiliary Fuel System is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff, and d) Valve is secured closed.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-07 Aft Auxiliary Tank Transfer Isolation Valve (EMB-135BJ) (Continued)	B	2	0	(M)(O) May be inoperative provided: a) No more than 800 kg is maintained in both FUS Auxiliary Fuel System (forward plus aft tanks), b) Any fuel in the affected FUS Auxiliary Fuel System is considered unusable, is treated as ballast fuel, and is included in the calculation of Takeoff weight and C.G. position for takeoff, and c) Valve is secured closed.
	D	2	0	(M) May be inoperative provided Forward and Aft Tanks of both FUS Auxiliary Fuel Systems remain empty.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-08 Forward Auxiliary Tank Refueling Isolation Valve (EMB-135BJ) (only for Legacy 600)	A	1	0	(M)(O) May be inoperative and FUS Auxiliary Fuel Systems used provided: a) Fuel distribution between Forward and Aft tanks is verified to be correct, b) Valve is secured closed, and c) Repairs are made within 1 flight day. **NOTE:** Refueling of FUS Auxiliary Systems cannot be accomplished if this valve is inoperative secured closed.
	D	1	0	(M) May be inoperative provided forward and aft tanks of both FUS Auxiliary Fuel Systems remain empty.
-45-09 Aft Auxiliary Tank Refueling Isolation Valve (EMB-135BJ) (only for Legacy 600)	A	1	0	(M)(O) May be inoperative and FUS Auxiliary Fuel Systems used provided: a) Fuel distribution between Forward and Aft tanks is verified to be correct, b) Valve is secured closed, and c) Repairs are made within 1 flight day. **NOTE:** Refueling of FUS Auxiliary Systems cannot be accomplished if this valve is inoperative secured closed.
	D	1	0	(M) May be inoperative provided forward and aft tanks of both FUS Auxiliary Fuel Systems remain empty.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-10 Forward Auxiliary Tank Vent Valve (EMB-135BJ)	B	2	0	(M)(O) May be inoperative provided: a) Affected vent valve secured closed, and b) Associated Fuel tank transfer systems are verified to operate normally before departure. **NOTE:** Only wing tanks will be available to refueling.
	D	2	0	(M) May be inoperative provided Forward and Aft Tanks of both FUS Auxiliary Fuel System remain empty.
-45-11 Cross Transfer Shutoff Valve (EMB-135BJ)	D	1	0	(M) May be inoperative provided Forward and Aft Tanks of both FUS Auxiliary Fuel Systems remain empty.
	B	1	0	(M)(O) May be inoperative provided: a) Valve is secured closed, and b) Fuel transfer and wing fuel balance are monitored through EICAS and/or MFD Fuel Page.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-12 FUEL XFER INOP Message (EMB-145XR)	B	1	0	(M)(O) May be inoperative provided: a) Ventral Tank Electric Fuel Transfer pumps and associated indication operate normally, b) Ventral Tank Fuel Transfer System (AUTO and OVRD) operates normally, c) EICAS message FUEL XFER CRITICAL is verified to operate normally, and d) Fuel transfer is monitored through EICAS and/or MFD Fuel Page during the flight.
	C	1	0	(M) May be inoperative provided ventral tank remains empty and electric fuel transfer pumps are deactivated.
	D	1	0	(M) May be inoperative provided airplane fuel system is configured to LR mode.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-13 FUEL XFER CRITICAL Message (EMB-145XR)	C	1	0	(M) May be inoperative provided ventral tank remains empty and electric fuel transfer pumps are deactivated.
	D	1	0	(M) May be inoperative provided airplane fuel system is configured to LR mode.
(EMB-135BJ)	B	1	0	(M) May be inoperative provided: a) Ventral tank (only for Legacy 650) and both FUS Auxiliary Fuel Systems are not used, b) No more than 800 kg is maintained in ventral tank (only for Legacy 650) and both FUS Auxiliary Fuel Systems (forward plus aft tanks), and c) Any fuel in ventral tank (only for Legacy 650) and both FUS Auxiliary Fuel Systems is considered unusable, is treated as ballast fuel, and is included in the calculation of takeoff weight and C.G. position for takeoff.
	D	1	0	(M) May be inoperative provided Forward and Aft Tanks of both FUS Auxiliary Fuel System remain empty.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-14 Ventral Tank Fuel Transfer Isolation Valve (EMB-145XR)	B	1	0	(M) May be inoperative provided: a) Valve is secured closed b) Ventral tank remains empty, and c) Ventral Tank Electric Fuel Transfer Pumps are deactivated.
	D	1	0	May be inoperative provided airplane fuel system is configured to LR mode.
-45-15 FUEL XFR VTR INOP Message (EMB-135BJ) (only for Legacy 650)	B	1	0	(M)(O) May be inoperative provided: a) Ventral tank electric fuel transfer pumps and associated indication operates normally, b) Ventral tank transfer system is operative when selected on fuel transfer master switch, c) EICAS message FUEL XFER CRITICAL is verified to operate normally, and d) Fuel transfer is monitored through EICAS and/or MFD fuel page during the flight.
	D	1	0	(M) May be inoperative provided ventral tank remains empty.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-16 Aft Auxiliary Tank Vent Valve (EMB-135BJ)	B	2	0	(M)(O) May be inoperative provided: a) Affected vent valve is secured closed, b) Associated Fuel Tank Transfer System is verified to operate normally before departure, and c) Relief valve is verified to operate normally. **NOTE:** Only wing tanks will be available to refueling.
	D	2	0	(M)(O) May be inoperative provided Forward and Aft tank of both FUS Auxiliary Fuel System remain empty.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
28 FUEL				
-45-17 Ventral Tank Vent Valve (EMB-135BJ) (only for Legacy 650)	B	1	0	(M)(O) May be inoperative provided: a) Affected vent valve is secured closed, and b) Fuel Tank Transfer System is verified to operate normally before departure. **NOTE:** Only wing tanks will be available to refueling.
	D	1	0	(M)(O) May be inoperative provided Ventral tank remains empty.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
29 HYDRAULIC POWER				
-10-02 GSE Couplings (External)	D	4	0	(M) May be inoperative open provided the failed external coupling (or the associated plumbing) is isolated from the hydraulic system.
-10-05 Electric Hydraulic Pump Systems				
1) AUTO Functions	C	2	0	(O) May be inoperative provided: a) Manual function operates normally, b) Associated electric pump is selected ON during takeoff and landing, and OFF during flight.
2) Manual Functions	C	2	0	(O) May be inoperative provided the AUTO and OFF positions for the associated pump selector are verified to operate normally.
-10-14 Reservoir Refilling Check Valves	D	2	0	(M) May be inoperative open provided the failed valve is removed and plumbing plugged.
	D	2	0	May be inoperative closed.
-10-16 Pressure Ground Connection Check Valve	D	2	0	(M) May be inoperative open provided the failed valve is removed and plumbing plugged.
	D	2	0	May be inoperative closed.

System & Sequence Number	1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
29 HYDRAULIC POWER					
-10-19	Engine-Driven Pump Pressure Switch (Hydraulic System 1)	C	1	0	(M)(O) May be inoperative provided: a) Pressure indication and electric pump pressure switch operates normally, b) Electric pump is selected ON during takeoff and landing and OFF during flight, and c) Pressure switch is removed and pressure switch port is plugged in case of fluid leakage.
-30-00	Hydraulic Fluid Quantity Indications (including low level advisory message)	C	2	1	(M)(O) May be inoperative provided: a) Associated fluid quantity is verified to be normal prior to departure, and b) Hydraulic pressure indication is available and is monitored throughout flight.
-30-01	Reservoir Quantity Gages	C	2	0	(M) May be inoperative provided: a) Fluid quantity is verified by other means before each departure, and b) Pressure indication is operating normally.
-30-02	Hydraulic Pressure Indications	C	2	1	(O) One may be inoperative provided associated hydraulic fluid quantity indication is available and associated HYD SYS FAIL caution message operates normally.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
29 HYDRAULIC POWER				
-30-04 Electric Pump Pressure Switch (Hydraulic System 1)	C	1	0	(M)(O) May be inoperative provided: a) Pressure indication and engine-driven pump pressure switch operates normally, b) Pressure switch is removed and pressure switch port is plugged in case of fluid leakage.

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
30 ICE AND RAIN PROTECTION					
-11-00	Wing Anti-icing System	C	1	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.
-11-01	Wing Anti-icing Valves	C	2	0	(M) May be inoperative provided: a) Valve is secured closed, and b) Airplane is not operated in known or forecast icing conditions.
-11-02	Wing Anti-icing Valve OPEN Light	C	1	0	(M) May be inoperative provided system is verified to operate normally before departure.
		C	1	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.
-12-00	Stabilizer Anti-icing System	C	1	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.
-12-01	Stabilizer Anti-icing Valve	C	1	0	(M) May be inoperative provided: a) Valve is secured closed, and b) Airplane is not operated in known or forecast icing conditions.
-12-02	Stabilizer Anti-icing Valve OPEN Light	C	1	0	(M) May be inoperative provided system is verified to operate normally before departure.
		C	1	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
30 ICE AND RAIN PROTECTION				
-21-00 Engine Anti-icing Systems	C	2	1	May be inoperative provided: a) Affected A/I pushbutton is positioned to OFF prior to departure, and b) Airplane is not operated in known or forecast icing conditions. **NOTE:** The message ENG A/ICE OVERPRES may be present.
	B	2	0	May be inoperative for day VMC provided: a) Affected A/I pushbutton is positioned to OFF prior to departure, and b) Airplane is not operated in known or forecast icing conditions. **NOTE:** The message ENG A/ICE OVERPRES may be present.
-21-01 Engine Anti-icing Valves	C	2	0	(M)(O) One or both may be inoperative provided: a) Valve is secured open, and b) Performance penalties are applied. **NOTE:** On airplanes equipped with EICAS version 16.5 and on, the message ENG A/ICE OVERPRES may be present.
-21-02 Engine Anti-icing Valve OPEN Lights	C	2	1	(M) One may be inoperative provided system is verified to operate normally before departure.
	C	2	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
30 ICE AND RAIN PROTECTION				
-31-00 Pitot/Static Heating Systems	C	3	2	(M) One may be inoperative provided: a) Standby and remaining Pitot/Static Heating systems operate normally, and b) Airplane is not operated in visible moisture, or in known or forecast icing/rain conditions.
-32-01 AOA Sensor Heating Systems	B	2	1	May be inoperative provided airplane is not operated in known or forecast icing conditions.
-33-01 TAT Probe Heating Systems	C	2	1	May be inoperative provided airplane is not operated in known or forecast icing conditions.
-41-00 Windshield Wipers	C	2	0	May be inoperative provided airplane is not operated in precipitation within 5 nautical miles of the airport of takeoff or intended landing. **NOTE:** For airplanes equipped with Rain Repellent Coating (RRC) the use of windshield wipers are not required.
1) Low Speed	C	2	0	May be inoperative provided high speed operates normally.
2) High Speed	C	2	0	May be inoperative provided low speed operates normally.
3) Parking Mode	C	2	0	(O) May be inoperative provided the blades can be positioned providing an acceptable field of vision to the flight crew.
4) Timer Mode	C	2	0	

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
30 ICE AND RAIN PROTECTION				
-41-04 Rain Repellent Coating ***	C	2	0	May be inoperative provided: a) No precipitation is forecasted during a period from one hour before until one hour after the estimated time of departure and arrival at the takeoff and destination aerodromes, and b) Affected system is not part of the equipment required for the intended operation. **NOTE:** Takeoff destination aerodromes include any takeoff and destination alternate aerodromes required by the operational rules.
	C	2	1	One may be degraded on pilot monitoring side provided: a) Visibility for the flight crew is acceptable, and b) Affected system is not part of the equipment required for the intended operation.
-42-02 Windshield Heating Systems	C	2	1	(M) May be inoperative provided: a) Affected windshield heating system is deactivated, and b) Airplane is not operated in known or forecast icing conditions.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
30 ICE AND RAIN PROTECTION				
-80-00 Ice Detector	C	2	1	(O) One may be inoperative provided the AFM procedure ICE DETECTOR FAIL is used.
	C	2	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.
-81-01 Clear Ice Detector System (EMB-135BJ/ EMB-145XR)	C	1	0	(M) May be inoperative provided the wing upper surface is checked to be free of clear ice before takeoff.
-81-02 Clear Ice Indication Lamps (EMB-135BJ/ EMB-145XR)	C	2	0	(O) May be inoperative provided the EICAS clear ice messages operate normally before each flight.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
31 INSTRUMENTS				
-21-01 Clocks				
1) Copilot's Clock	D	1	0	May be inoperative provided pilot's clock operates normally.
2) Pilot's Clock	A	1	0	May be inoperative provided: a) FDR is considered inoperative, and b) Repairs are made within 3 flight days.
3) Both Clocks	A	2	0	May be inoperative provided: a) Both pilot and copilot have ready access to reliable timepiece which display seconds (a wrist watch is acceptable). b) Approach procedures do not require timing, c) FDR is considered inoperative, and d) Repair are made within 3 flight days.
-30-00 Digital Flight Data Recorder System (DFDRS)	C	-	-	Any in excess of those required by regulations may be inoperative.

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
31 INSTRUMENTS				
-30-00 Digital Flight Data Recorder System (DFDRS) (Continued)				
	A	-	0	May be inoperative provided: a) Cockpit Voice Recorder (CVR) operates normally, b) Airplane is not dispatched from a designated airport as listed in the operator's MEL unless: (1) The FDR failure occurs after pushback but prior to takeoff, and (2) The FDR repair was attempted but not successful. c) In those cases where repair is attempted but not successful, the airplane may be dispatched on a flight or series of flights until the next designated airport where repair must be accomplished prior to dispatch, and d) Repairs are made within 3 flight days.
1) DFDRS Recording Parameters required by regulations	A	-	-	May be inoperative provided: a) Cockpit Voice Recorder (CVR) operates normally, and b) Repairs are made within 20 calendars days.
2) DFDRS Recording Parameters not required by regulations	A	-	-	May be inoperative provided repairs are made prior to the completion of the next heavy maintenance visit.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
31 INSTRUMENTS				
-35-01 Quick Access Recorder ***	D	1	0	
-42-02 Integrated Computer Configuration Modules (IM-600)	B	2	1	One may be inoperative with the EICAS message IC 1 (2) CONFIG FAIL displayed provided the EICAS messages CONFIG MISMATCH or CHK IC CONFIG are not displayed.
-51-00 Aural Warning Unit				
1) Channels	C	2	1	
-51-02 MASTER Warning Lights/Buttons				
1) Lights	B	2	1	May be inoperative provided master warning aural alert operates normally.
2) Alarm Cancel Functions	C	2	1	
-51-03 MASTER Caution Lights/Buttons				
1) Lights	B	2	1	One may be inoperative provided master caution aural alert operates normally.
2) Alarm Cancel Functions	C	2	1	
-62-00 Synthetic Vision System (SVS) (EMB-135BJ) (only for Legacy 650) ***	D	1	0	(O) May be inoperative provided SVS is selected OFF.
-70-01 Weight and Balance Computer ***	D	1	0	

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
32 LANDING GEAR					
-32-02	Landing Gear Control Lever Latch System	B	1	0	(M)(O) May be inoperative in the latched position provided: a) The downlock release mechanism operates normally, and b) LG AIR/GND FAIL message is not present.
-40-01	Brake Temperature Monitoring Indications	D	4	3	(M) One may be inoperative provided the affected Brake Temperature Sensor is deactivated.
		C	4	0	(M)(O) May be inoperative provided: a) Affected Brake Temperature Sensors are deactivated, and b) Quick Turn Around Chart is used.
-41-08	Brake Pressure Transducers	B	4	3	(M) May be inoperative with the BRAKE DEGRADED caution message present provided: a) Only the respective PRESS TRANSDUCER FAIL message is presented on the brake system portion of the CMC, b) External leakage is not present, and c) Affected brake pressure transducer is deactivated.
-44-05	Accumulator Low Pressure Switch	C	1	0	(M) May be inoperative provided accumulator charge is verified to be normal once each flight day.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
32 LANDING GEAR				
-44-07 BRAKE ON Lights				
1) Cockpit light	B	1	0	(M) May be inoperative provided emergency/parking brake system operates normally.
2) Ramp light	C	1	0	
-49-00 Brake Assembly Wear Indicator	C	8	4	(M) One per brake assembly may be missing provided remaining brake wear indicator is checked each flight day.
-50-01 Nosewheel Steering Handle	A	1	0	(O) May be inoperative provided: a) Steering command through pedals operates normally, and b) Repairs are made within 3 flights.
-50-02 Control Wheel Steering Disengage Button	C	2	1	(M) Pilot flying disengage button may be inoperative provided pilot not flying disengage button operates normally.
-60-00 Landing Gear Proximity Switches	B	19	13	(M) One up lock proximity switch and one down lock proximity switch may be inoperative in each landing gear leg, provided the remaining proximity switches operate normally. **NOTE:** Proximity switch includes air/ground, up lock, down lock, 7° steering and nose-landing-gear door sequence.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
33 LIGHTS				
-10-00 Cockpit/Flight Deck/Flight Compartment and Instrument Panel Lighting Systems	C	-	0	May be inoperative for day light operations.
	C	-	-	Individual lights may be inoperative for night operations provided remaining lights are: a) Sufficient to clearly illuminate all required instruments and controls for which it is provided, b) Positioned so that direct rays are shielded from flight crewmember's eyes, and c) Lighting configuration and intensity is acceptable to the flight crew.
-20-00 Cabin Interior Illumination System				
1) Airplane Without Photoluminescent Emergency Escape Path Marking System	C	-	0	May be inoperative for day light operations.
	C	-	-	Individual lights may be inoperative for night operations provided remaining lighting is sufficient for cabin attendant to perform assigned duties.

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
33 LIGHTS				
-20-00 Cabin Interior Illumination System (Continued)				
2) Airplane With Photoluminescent Emergency Escape Path Marking System	C	-	-	(M)(O) Individual lights including up to 10% of the ceiling and sidewall lamps may be inoperative provided: a) Remaining lighting is sufficient for cabin attendant to perform assigned duties, b) No more than 2 adjacent ceiling and sidewall lamps in the longitudinal or lateral direction are inoperative, c) Ceiling and sidewall lamps in the region of the galley, cabinets and life-raft stowage areas are operative, and d) Attendant's panel cabin lighting control buttons must operate in ON and BRIGHT setting.
-21-02 Cockpit Sterile Light ***	D	-	0	(O) Alternate procedures are established and used.
-23-00 Passenger Signs	C	-	-	(M)(O) No passenger, lavatory or attendant seat may be occupied from which a "No Smoking/Fasten Seat Belt/Return to Seat" sign is not readily legible, or that seat must be blocked and placarded "DO NOT OCCUPY".

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
33 LIGHTS				
-23-00 Passenger Signs (Continued)	C	-	-	(O) If one or more "No Smoking/Fasten Seat Belt/ Return to Seat" signs are inoperative, the affected passenger seat(s), lavatory seat or cabin attendant's seat may be occupied provided: a) The passenger address system operates normally and can be clearly heard throughout the cabin during flight, and b) The passenger address system is used to notify the cabin attendant and passengers when seat belts should be fastened and when smoking is prohibited.
-26-00 Courtesy and Stairs Lighting System	C	1	0	
-30-00 Compartment Lights (Nose, Tail, Baggage, etc)	C	-	0	
-41-00 Landing Light	C	3	2	One may be inoperative for night operations.
	C	3	0	May be inoperative for day light operations.
1) Nose Landing Gear Automatic Extinguishing Function	D	1	0	(O) May be inoperative provided light is manually turned off on gear retraction.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
33 LIGHTS				
-42-00 Taxi Light	C	2	1	
	C	2	0	May be inoperative provided nose landing light is operating normally.
	C	2	0	May be inoperative for daylight operation.
1) Automatic Extinguishing Function	D	2	0	(O) May be inoperative provided the light is manually turned off on gear retraction.
-43-00 Navigation Light System	C	-	0	May be inoperative for daylight operations.
	C	-	4	(O) Any light may be inoperative provided one green light, one red light and two white lights operate normally. **NOTE:** Tail Strobe light may be used in place of the inoperative tail white light.
-44-00 Wing Inspection Lights	C	2	0	
-46-00 Logo Lights	D	2	0	
***				
-47-03 Strobe Lights (EMB-135/140/145 and 135BJ)	C	3	0	May be inoperative for daylight operations.
(EMB-135/140/145)	C	3	0	May be inoperative provided both red beacon lights operate normally.
(EMB-145XR)	C	2	0	May be inoperative for daylight operations.
	C	2	0	May be inoperative provided both red beacon lights operate normally.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
33 LIGHTS				
-47-05 Red Beacon Lights	C	-	0	(O) May be inoperative provided: a) Beacon switch is positioned to ON prior to engine start, and b) Strobe lights operate normally.
	C	-	0	May be inoperative for day operations provided beacon switch is positioned to ON prior to engine start. **NOTE:** The rotating beacon switch should be positioned to ON before engine starting to turn the FDR on.
-48-00 Baggage Door *** External Light	D	1	0	
-50-00 Emergency Lighting System (Battery-Powered)				
1) External Lights	C	-	0	May be inoperative for daylight operations.
2) Floor Proximity Strips	C	-	-	Up to two individual strips may be inoperative provided not adjacent and not used as exit locators (amber light).
-50-01 Photoluminescent Floor Proximity Emergency Escape Path Marking System	C	-	-	Up to 10% of any 1.22 meters section may be damaged or missing, except red indicators used as exit locators.

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION					
-22-01	Main Panel Displays	B	5	4	(M)(O) Non-flying pilot's MFD may be inoperative.
	1) MFD Bezel	C	2	1	One may be inoperative provided opposite MFD works normally.
	2) Charts and Maps Databases (only for DU-875)	C	-	-	May be out of currency provided: a) Use charts and maps function as primary navigation source is prohibited, and b) Paperless cockpit approval/application is prohibited.
-22-02	TAT Indication	C	2	1	May be inoperative provided remaining TAT indication is operative.
-22-03	SAT Indication	C	2	1	May be inoperative provided remaining SAT indication is operative.
-22-04	Slip Indicators	C	2	1	
-24-01	Standby Attitude Indication (on Integrated Standby Instrument System (ISIS) or on dedicated Instrument)	B	1	0	May be inoperative for day VMC operations only.
-24-02 ***	Standard Barometric Pressure (STD) Button on ISIS	C	1	0	May be inoperative provided BARO knob is manually used to set barometric pressure.
-25-00 ***	Head-Up Guidance System (HGS)	D	-	0	May be inoperative provided approach minimums or operating procedures do not require its use. **NOTE:** Any mode which operates normally may be used.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION				
-25-01 Standby Magnetic Compass	B	1	0	May be inoperative provided: a) Any combination of two gyro or INS (IRS) stabilized compass systems are operating normally, and b) Airplane is operating with dual navigation capability and under positive radar control by ATC on the enroute portion of the flight.
	C	1	0	May be inoperative for flights that are entirely within areas of magnetic unreliability provided at least two stabilized directional gyro systems operate normally and are used in conjunction with approved free gyro navigation techniques.
-27-00 *** Inertial Reference System (Only for airplanes equipped with two AHRS and one additional IRS dedicated to HGS)	D	1	0	May be inoperative provided the HGS is considered inoperative.
-27-05 *** IRS MSU Annunciators Lights				
1) ALIGN annunciator	C	2	0	
2) FAULT annunciator	C	2	0	
3) ON BATT annunciator	C	2	0	
4) NO AIR annunciator	C	2	0	

(Continued)

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION				
-27-05 IRS MSU				
*** Annunciators Lights (Continued)				
5) NAV RDY annunciator	C	2	0	(O) May be inoperative provided IRS is checked available for NAV mode.
6) BATT FAIL annunciator	C	2	0	(O) May be inoperative provided IRS battery is checked supplying power.
-31-00 Radio Altimeter System				
1) Single radio altimeter installation	A	1	0	(M)(O) May be inoperative provided: a) Approach minimums or operating procedures do not require its use, b) GPWS/EGPWS is considered inoperative, c) TCAS is considered inoperative, d) Affected Radio Altimeter is deactivated, and e) Repairs are made within 2 flight days.
2) Dual radio altimeter installation (Pre-Mod. SB 145-34-0083 or Pre-Mod. SB 145LEG-34-0010)	A	2	0	(M)(O) Radio Altimeter 1 or both may be inoperative provided: a) Approach minimums or operating procedures do not require its use, b) GPWS/EGPWS is considered inoperative, c) TCAS is considered inoperative if both Radio Altimeter are inoperative, d) Affected Radio Altimeter is deactivated, and e) Repairs are made within 2 flight days. (Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION				
-31-00 Radio Altimeter System (Continued)				
	D	2	1	(M)(O) Radio Altimeter 2 may be inoperative provided: a) Approach minimums or operating procedures do not require its use, and b) Radio altimeter 2 is deactivated.
3) Dual Radio Altimeter installation (Post-Mod. SB 145-34-0083 or Post-Mod. SB 145LEG-34-0010)	A	2	0	(M)(O) May be inoperative provided: a) Approach minimums or operating procedures do not require its use, b) GPWS/EGPWS is considered inoperative, c) TCAS is considered inoperative, d) Radio Altimeters are deactivated, and e) Repairs are made within 2 flight days.
	D	2	1	(M)(O) May be inoperative provided: a) Approach minimums or operating procedures do not require its use, and b) Affected radio Altimeter is deactivated.
-31-01 Altitude Alerter Function	A	1	0	(O) Except where enroute operations require its use, may be inoperative provided: a) Autopilot altitude hold operates normally, and b) Repairs are made within 3 flight days.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION				
-31-02 Altitude Preselect Function	A	1	0	(O) May be inoperative provided: a) Autopilot altitude hold operates normally, b) Enroute operations do not require its use, c) Alternate procedures are established and used, d) Flight Level Change (FLC) mode is considered inoperative, e) Go Around buttons on the thrust levers are considered inoperative, f) Altitude alerter function is considered inoperative, and g) Repairs are made within 3 flight days.
-32-00 VOR/ILS System	C	2	-	As required by regulations.
1) Instrumental Landing System (ILS)	C	2	-	May be inoperative provided approach minimums do not require its use.
2) Marker Beacon Systems	C	2	-	May be inoperative provided approach minimums do not require its use.
3) Third VHF/NAV	D	-	-	May be inoperative provided the HGS is considered inoperative.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION				
-41-00 Enhanced Ground Proximity Warning System (EGPWS)				
1) GPWS	A	1	0	(O) May be inoperative provided: a) Alternate procedures are established and used, and b) Repairs are made within 2 flight days.
a) Modes 1 to 4	A	4	0	(O) May be inoperative provided: a) Alternate procedures are established and used, and b) Repairs are made within 2 flight days.
b) Test Mode	A	1	0	May be inoperative provided: a) GPWS is considered inoperative, and b) Repairs are made within 2 flight days.
c) Glide Slope Deviation (Mode 5)	C	2	1	
	B	2	0	
d) Advisory Callouts	B	-	0	(O) May be inoperative provided alternate procedures are established and used.
	C	-	0	(O) May be inoperative provided: a) Advisory callout not required by local regulations, and b) Alternate procedures are established and used.

(Continued)

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION					
-41-00	Enhanced Ground Proximity Warning System (EGPWS) (Continued)				
	e) Windshear Mode (Reactive)	B	1	0	(O) May be inoperative provided alternate procedures are established and used. **NOTE:** Operator's alternate procedures should include reviewing windshear avoidance and windshear recovery procedures.
	2) Terrain System – Forward Looking Terrain Avoidance (FLTA and Premature Descent Alert (PDA) Functions	B	1	0	(O) May be inoperative provided alternate procedures are established and used.
	3) Terrain Displays	C	-	1	
		B	-	0	
***	4) Runway Awareness & Advisory System (RAAS)	C	1	0	
-41-01	Windshear Escape Guidance System	C	1	0	(O) May be inoperative provided alternate procedures are established and used.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION				
-41-02 Steep Approach Function ***	D	1	0	(M) May be inoperative provided: a) The steep approach mode is deactivated, and b) The steep approach procedure is not performed.
-42-00 Weather Radar System	C	1	-	As required by local regulations.
1) Stabilization Function	B	1	0	(M) May be inoperative provided: a) Antenna sweep is parallel to airplane pitch axis, and b) Antenna tilt operates normally.
*** 2) Lightning Sensor System	C	-	0	
*** 3) Control Panel (Only to airplanes equipped with two panels)	D	2	1	Flying pilot's control panel may be inoperative provided the other panel operates normally.

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION					
-43-00	Traffic and Collision Avoidance System (TCAS)	C	1	-	As required by local regulations.
		C	-	0	(M) May be inoperative provided the system is deactivated and secured.
	1) Combined Traffic Alert (TA) and Resolution Advisory (RA) Dual Display	C	2	1	(O) May be inoperative on the non-flying pilot side provided: a) TA and RA elements and audio functions are operative on the flying pilot side, and b) TA and RA display indications are visible to the non-flying pilot.
	2) Resolution Advisory (RA) Display System(s)	C	2	1	(O) One may be inoperative on the non-flying pilot side.
		C	-	0	(O) May be inoperative provided: a) All Traffic Alert (TA) display elements and voice command audio functions are operative, and b) TA only mode is selected by the crew.
	3) Traffic Alert (TA) Display System(s)	C	-	0	(O) May be inoperative provided all installed RA display and audio functions are operative.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION				
-51-00 DME System	C	-	-	As required by local regulations.
-52-00 ATC Transponder and Automatic Altitude Reporting System	C	-	-	As required by local regulations.
	D	-	-	Any in excess of those required by regulations may be inoperative.
-53-00 ADF System	C	-	-	As required by local regulations.
-54-00 *** XM Weather System	D	1	0	May be inoperative.
-56-00 *** Global Positioning System	C	-	0	(O) May be inoperative provided alternate procedures are established and used.
	D	-	0	May be inoperative provided procedures do not require its use.

System & Sequence Number	ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
34 NAVIGATION					
-60-00 Flight Management System	***	C	-	1	One is required if IRS is used as primary navigation and attitude source.
		C	-	0	(O) May be inoperative provided alternate procedures are established and used.
		D	-	0	May be inoperative provided procedures do not require its use. **NOTE:** Airplanes equipped with EGPWS and operating without FMS will loss the Terrain Clearance Floor mode. A TERRAIN INOP message will be presented on the EICAS.
1) Navigation Databases		C	-	-	(O) May be out of currency provided: a) Current Aeronautical Charts are used to verify Navigations Fixes prior to dispatch, b) Procedures are established and used to verify status and suitability of Navigation Facilities used to define route of flight, and c) Approach Navigation Radios are manually tuned and identified.
2) Joystick Controller	***	C	-	-	

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
35 OXYGEN				
-10-01 Crew Mask Stowage Box				
1) Doors	B	4	0	(M) May be inoperative or missing provided: a) Associated mask is secured in the stowage box, and b) The quick donning capability is not affected.
-11-00 Oxygen Pressure Indication Systems (EMB-135/140/145)	B	2	1	(O) One may be inoperative provided an approved procedure is used before each departure to ensure that the oxygen supply is at or above the minimum required for flight.
(EMB-135BJ)				
1) Crew Oxygen Pressure Indication System	B	2	1	(O) One may be inoperative provided an approved procedure is used before each departure to ensure that the oxygen supply is at or above the minimum required for flight.
2) Passenger Oxygen Pressure Indication System	B	2	1	(O) One may be inoperative provided an approved procedure is used before each departure to ensure that the oxygen supply is at or above the minimum required for flight.
-11-03 Oxygen-Cylinder Pressure Relief Disc (Green Disc)	C	1	0	May be missing or broken provided flight crew oxygen system operates normally.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
35 OXYGEN				
-20-00 Passenger Oxygen System	B	1	0	(O) May be inoperative provided: a) Altitude limitations and portable oxygen supplies comply with local regulations, b) All air conditioning packs operate normally, c) Pressurization system operates normally, and d) Passengers are appropriately briefed.
	B	1	0	May be inoperative provided flight is conducted at or below 10000 ft MSL.
1) Automatic Presentation System	C	1	0	(M)(O) May be inoperative provided: a) Manual deployment system operates normally, and b) Flight is conducted at or below FL 300.
2) Passenger Dispensing Units	C	-	-	(M)(O) May be inoperative without flight altitude restriction provided: a) Affected seats are placarded and blocked to prevent occupancy, and b) Units operate normally at all usable lavatory and flight attendant locations.
-20-05 *** Passenger Oxygen System Door - Manual Opening Tool	D	-	1	
	C	-	0	(O) May be inoperative or missing provided an alternate mean is available to open the dispenser.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
35 OXYGEN				
-30-01	Portable Oxygen Units (Bottle and Mask) C	-	-	(M) Any in excess of those required by the local regulations may be unserviceable or missing provided: a) Required distribution of serviceable bottles is maintained throughout airplane, and b) Bottles not properly serviced are replaced, serviced, or removed at the next available maintenance facility.
-30-03	Protective Breathing Equipment (PBE) D	-	-	(M) Any in excess of those required by the local regulations may be inoperative provided: a) Inoperative unit is placarded inoperative, removed from the installed location and placed out of sight so it can not be mistaken for a function unit, and b) Required distribution is maintained.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
36 PNEUMATIC				
-11-05 Engine Bleed System	C	2	1	(M)(O) Left engine bleed system may be inoperative provided: a) Left engine bleed valve is secured closed, b) APU bleed is operating normally and supplying bleed air, c) Crossbleed valve is closed, and d) Airplane is not operated in known or forecast icing conditions.
	C	2	1	(M)(O) Left engine bleed system may be inoperative provided: a) Left engine bleed valve is secured closed, b) Flight is conducted at or below FL 250, and c) Airplane is not operated in known or forecast icing conditions.
	C	2	1	(M)(O) Right engine bleed system may be inoperative provided: a) Right engine bleed valve is secured closed, b) Flight is conducted at or below FL 250, and c) Airplane is not operated in known or forecast icing conditions.

(Continued)

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
36 PNEUMATIC				
-11-05 Engine Bleed System (Continued)	C	2	0	(M)(O) May be inoperative provided: a) Engine bleed valves are secured closed, b) APU bleed is operating normally and supplying bleed air, c) Flight is conducted at or below 18000 ft MSL, d) Airplane is not operated in known or forecast icing conditions, and e) Ambient temperature on the ground is below ISA + 21ºC. **NOTE:** For airplanes with ISIS incorporated at least one Pack and associated Recirculation Fan must be operative on the ground.
	C	2	0	(M)(O) May be inoperative with APU bleed not supplying bleed air provided: a) Engine bleed valves are secured closed, b) Flight is conducted in an unpressurized configuration, c) Airplane is not operated in known or forecast icing conditions, and d) Ambient temperature on the ground is below ISA + 21ºC. **NOTE:** This item is not applicable for airplanes with ISIS incorporated.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
36 PNEUMATIC				
-11-10 *** Air Conditioning Panel Bleed Air Button Red Leak Indication	B	2	0	(M) May be inoperative provided associated BLD LEAK EICAS message operates normally.
-12-01 APU Bleed Shutoff Valve	D	1	0	(M) May be inoperative provided: a) Valve is secured closed, and b) APU bleed is selected OFF and not used.
-20-00 BLD APU LEAK Warning Message	C	1	0	May be inoperative provided APU is not used.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
38 WATER/WASTE				
-10-00 Water System	C	-	-	(M) Individual components may be inoperative provided: a) Associated components are deactivated or isolated, and b) Associated components are verified not to have leaks. **NOTE:** Any portion of the system, which operates normally, may be used.
	C	-	-	(M) May be inoperative provided: a) System is drained, and b) Procedures are established to ensure that system is not serviced.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
38 WATER/WASTE				
-30-00 Lavatory Waste Systems	C	-	-	(M) Individual components may be inoperative provided: a) Associated components are deactivated or isolated, and b) Associated components are verified not to have leaks. **NOTE:** Any portion of the system, which operates normally, may be used.
	C	-	-	(M)(O) Associated lavatory system may be inoperative provided: a) Associated components are deactivated or isolated to prevent leaks, and b) Associated lavatory door is secured closed and placard inoperative. **NOTE:** These provisions are not intended to prohibit inspections by crewmembers.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
45 CENTRAL MAINTENANCE COMPUTER				
-45-01 Central Maintenance Computer (CMC)	C	1	0	(M) May be inoperative provided maintenance procedures do not require its use.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
46 INFORMATION SYSTEMS				
-20-01 Electronic Flight Bag Systems (EFBs)				
*** 1) Data Connectivity (Class 2)	C	-	-	(O) May be inoperative provided alternate procedures are established and used.
	D	-	0	May be inoperative provided procedures do not require its use.
*** 2) Power Connection (Class 1 and 2)	C	-	-	(O) May be inoperative provided alternate procedures are established and used.
	D	-	0	May be inoperative provided procedures do not require its use.
*** 3) Mounting Device (Class 2)	C	-	0	(M)(O) May be inoperative provided: a) Associated EFB and hardware is secured by an alternate means or removed from the airplane, and b) Alternate procedures are established and used.
	D	-	0	(M) May be inoperative provided: a) Associated EFB and hardware is secured by an alternate means or removed from the airplane, and b) Procedures do not require its use.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
49 AUXILIARY POWER UNIT				
-00-00 Auxiliary Power Unit (APU)	D	1	0	(M)(O) May be inoperative provided: a) APU is deactivated, and b) Procedures are not dependent upon its use.
-70-01 APU OIL LO PRESS Caution Message	C	1	0	May be inoperative provided APU is used on ground only.
-70-02 APU OIL HI TEMP Caution Message	C	1	0	May be inoperative provided APU is used on ground only.
-70-03 APU FAIL Caution Message	C	1	0	May be inoperative provided APU is used on ground only.
-74-01 APU Hourmeter Function	C	1	0	(M) May be inoperative provided alternate procedures are used to accomplish hourmeter function.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
52 DOORS				
-12-00 Main Door Hydraulic Actuation System	B	1	0	(M) May be inoperative provided damping function operates normally.
-21-01 Overwing Emergency Exit	B	2	1	(M)(O) One overwing emergency exit may be inoperative provided: a) Passenger number is limited to 19 or as established and agreed by the Local Authority, b) Affected emergency exit is verified CLOSED, LATCHED and LOCKED before each departure, c) A conspicuous barrier strap and a placard stating that the door is inoperative shall be placed across the inoperative door, d) Emergency exit sign associated with the inoperative exit must be covered to obscure the sign, and e) Crew must be briefed not to use the affected exit. **NOTE:** Overwater operation is not permitted.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
52 DOORS				
-51-00 C&D Aerospace				
*** Flight Deck Security Door				
1) Door Latch	A	1	0	May be inoperative provided: a) Door Dead Bolt is operative, b) Door Dead Bolt is used to lock and unlock the door, and c) Repairs are made within 2 flight days.
2) Flight Deck Door Panel Pressure Relief Latch	A	1	0	May be inoperative provided in the latch position provided repairs are made within 2 flight days.
3) Dead Bolt	C	1	0	

System & Sequence Number	1. ITEM		2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
52 DOORS					
-70-00	Doors Warning System (Door Position Indication on MFD and EICAS)				
	1) Main/Service Doors (cabin)	C	2	0	(O) May be inoperative provided door is verified closed and locked before each departure.
	2) Baggage Door	C	1	0	(O) May be inoperative provided door is verified closed and locked before each departure.
	3) Emergency Access Hatches	C	2	0	(M) May be inoperative provided hatches are verified closed and latched before each departure.
	4) Access Hatches	C	3	0	(M) May be inoperative provided hatches are verified closed and latched before each departure.
	5) Fueling Door	C	1	0	(M) May be inoperative provided door is verified closed and latched before each departure.
	6) Internal Baggage Access Door (EMB-135BJ)	C	1	0	(O) May be inoperative provided door is verified closed and remains latched during the entire flight.

System & Sequence Number / 1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
56 WINDOWS			
-10-01 Cockpit Windshield			Deleted, rev 12 **NOTE:** Refer to Aircraft Maintenance Manual (AMM) or Structural Repair Manual (SRM).

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
73 ENGINE FUEL AND CONTROL				
-22-01 FADEC	A	4	-	(M) May be dispatched with FADEC faults provided repairs are made in accordance with times established by engine manufacturer (refer to Rolls Royce AE3007A Series Maintenance Manual). No extensions are authorized. **NOTE:** The intent of the "-" in the number required for dispatch column is to show that dispatch is allowed with some faults present in all four FADEC's.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
73 ENGINE FUEL AND CONTROL				
-22-02 Automatic Takeoff Thrust Control System (ATTCS) (Airplanes equipped with A, A1, A1/1 and A3 engines only)	C	1	0	(O) May be inoperative provided T/O-1 thrust mode can be selected and used through the Takeoff Data Setting.
-32-01 Engine Fuel Temperature Sensors (at Fuel Cooled Oil Cooler)	C	2	0	(O) May be inoperative provided: a) Fuel tank temperature indication is operative, and b) Temperature of fuel in the tank remains above 4°C throughout the flight.
	C	2	0	(O) May be inoperative with fuel tank temperature below 4°C provided icing inhibitor is added to the fuel.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
73 ENGINE FUEL AND CONTROL				
-33-01 E1 (2) FUEL IMP BYP Advisory Messages	B	2	1	(M) May be inoperative provided: a) Associated engine fuel temperature sensor is operative, b) Malfunction is verified to be in the fuel-filter electrical/mechanical impending-bypass indicator or its associated wiring, c) Fuel filter electrical/mechanical impending by-pass visual indicator is checked not extended within periods shorter than 10 flight hours, and d) Fuel-filter mechanical actual-bypass indicator is checked not extended within periods shorter than 10 flight hours.
-33-02 Fuel Filter	A	2	1	(M) One message E1 (2) FUEL IMP BYP may be displayed for one engine provided: a) Associated fuel-filter mechanical actual-bypass indicator is checked not extended before each flight, and b) Fuel filter is replaced within 10 flight hours.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
73 ENGINE FUEL AND CONTROL				
-40-03 Fuel Flow Indications	C	2	1	(O) May be inoperative provided: a) Associated engine parameters are monitored throughout the flight, and b) Associated fuel quantity indications operate normally.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
74 IGNITION				
-20-00 Ignition Systems	B	4	3	(O) One may be inoperative provided the affected engine is started by positioning the ignition knob to ON.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
76 ENGINE CONTROLS				
-12-00 Engine Takeoff Data Setting Knob Spring	B	1	0	(O) May be inoperative provided flight crewmember check MFD takeoff data before takeoff.

System & Sequence Number / ITEM	1.	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
77 ENGINE INDICATION				
-41-02 HP Vibration Indication	C	2	1	

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
78 ENGINE EXHAUST				
-30-00 Thrust Reversers ***	A	2	1	(M)(O) Any door actuation, lock or control on one thrust reverser may be inoperative provided: a) Affected thrust reverser is not used, b) Affected system is deactivated and secured stowed, and c) Repairs are made within 30 flight days. **NOTE:** Thrust reverse operation with one thrust reverser secured stowed will be accomplished only if the reverse Thrust Lever operative side is set to reverse range and reverse Thrust Lever affected side is set to idle.
	C	2	0	(M) Any door actuation, lock or control on both thrust reversers may be inoperative provided: a) Thrust reversers are not used, and b) Systems are deactivated and secured stowed.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
78 ENGINE EXHAUST				
-34-00 ENG1 (2) REV *** DISAGREE Messages	A	2	1	(M)(O) May be inoperative provided: a) Affected thrust reverser is considered inoperative, b) Affected system is deactivated and secured stowed, and c) Repairs are made within 30 flight days. **NOTE:** Thrust reverse operation with one thrust reverser secured stowed will be accomplished only if reverse Thrust Lever operative side is set to reverse range and reverse Thrust Lever affected side is set to idle.
	C	2	0	(M) May be inoperative provided: a) Thrust reversers are considered inoperative, and b) Systems are deactivated and secured stowed.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
78 ENGINE EXHAUST				
-34-05 Idle Stop (Solenoid)	A	2	1	(M)(O) May be inoperative provided: a) Affected thrust reverser is considered inoperative, b) Affected system is deactivated and secured stowed, and c) Repairs are made within 30 flight days. **NOTE 1:** Thrust reverse operation with one thrust reverser secured stowed will be accomplished only if the reverse Thrust Lever operative side is set to reverse range and reverse Thrust Lever affected side is set to idle. **NOTE 2:** The message E1 (2) IDL STP FAIL may be present.
	C	2	0	(M) May be inoperative provided: a) Thrust reversers are considered inoperative, and b) Systems are deactivated and secured stowed. **NOTE:** The message E1 (2) IDL STP FAIL may be present.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
79 ENGINE OIL				
-32-01 Low Oil Pressure Switches	C	2	1	(O) May be inoperative provided associated oil pressure, temperature and quantity indications operate normally and are monitored throughout the flight.
-33-01 Oil Level Indication Systems	C	2	1	(M) May be inoperative provided: a) Associated oil temperature and pressure indications, and OIL LOW PRESS message operate normally, and b) Oil quantity is serviced each flight day.
-34-01 Oil Particle Sensors	C	2	1	(M) May be inoperative provided the oil tank magnetic plug is visually checked each flight day.

System & Sequence Number / 1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
79 ENGINE OIL			
-35-01 E1 (2) OIL IMP BYP Messages C	2	0	(M) May be inoperative provided: a) Affected engine impending bypass visual indicator operates normally, b) Visual indicator(s) is checked before each flight and is not found extended, and c) The ENG OIL DEBRIS maintenance message is not presented on CMC before each flight. **NOTE:** The affected message E1 (2) OIL IMP BYP may be present.
-35-02 Oil Filter Element A	2	1	(M) One message E1 (2) OIL IMP BYP may be displayed for one engine provided: a) Maintenance procedures do not require its replacement, and b) Oil filter element is replaced in less than 20 flight hours.

System & Sequence Number	1. ITEM	2. Number installed	3. Number required for dispatch	4. Remarks and/or exceptions
80 STARTING				
-00-00 Engine Start/Stop Switch Protection Guard	C	2	0	
-10-01 Starter Control Valve	B	2	1	(M)(O) One may be inoperative closed provided: a) The associated EICAS Caution message E1 (2) ATS SOV OPN operates normally, and b) Manual override start procedures are used.