



U.S. Department of Transportation  
Federal Aviation Administration  
Washington, DC

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## Master Minimum Equipment List (MMEL)

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Revision: 18  
Date: 04/13/2020

### **Embraer**

**ERJ-170-100/200, ERJ-190-100/200/300, ERJ-190-100 ECJ**  
**Commercial Designations: EMBRAER 170, EMBRAER 175,**  
**EMBRAER 190, EMBRAER 195, EMBRAER 190 E2, LINEAGE 1000**

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PAGE NO. I

AIRCRAFT:  
 ERJ-170, ERJ-190

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**LOG OF REVISIONS**

REV NO.	DATE	PAGE NO.
16	11/23/2018	All pages
17	02/15/2019	Cover Page, Table of Contents and Control Page, Log of Revisions, Highlights of Change, 30-1 thru 13
18	04/13/2020	Cover Page, Table of Contents and Control Page, Log of Revisions, Highlights of Change, 27-4.

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**HIGHLIGHTS OF CHANGE**

The following are the Highlights of Changes for **Revision 18**.

PAGE NO.	EXPLANATION OF CHANGE
General	Minor editorial corrections are made throughout the document that do not affect the reliefs and are not indicated with change bars. These editorial corrections may be adopted in minimum equipment lists (MEL) at the operator's discretion.
27-4	Removal of Item 27-43-02-01, Modification of 27-43-02-02.

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**DEFINITIONS**

Refer to the current FAA MMEL Policy Letter (PL) 25, MMEL and MEL Definitions, found on the FAA Flight Standards Information Management System (FSIMS) website.

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**PREAMBLE**

For the MMEL Preamble used for operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 121, 125, 129, and 135, refer to the current FAA PL-34, MMEL and MEL Preamble, or for the preamble used for 14 CFR part 91 operations, refer to MMEL PL-36, FAR Part 91 MEL Approval. Both preambles may be found on the FAA Flight Standards Information Management System (FSIMS) website.

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**GUIDELINES FOR (M) AND (O) PROCEDURES**

Guidance for (M) and (O) Procedures should be based on the Dispatch Deviation Procedures Manual. For EMBRAER 170, EMBRAER 175, EMBRAER 190, and EMBRAER 195, refer to DDPM-4600-001. For LINEAGE 1000, refer to MEL 3766-020. For EMBRAER 190 E2, refer to DDPM-6130-001.

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Environmental Control System Synoptic Displays (MFD ECS Page)	C	2	0	(O) MFD indications not addressed elsewhere in the MMEL may be inoperative.	
00-01	Air Management System (AMS) Channels					
-01	AMSC Channels (EMBRAER 170/175/190/195)	C	2	1	(M) Except for ER operations, one may be inoperative provided: a) AMS control channel is reverted to the operative one, and b) Flight is conducted at or below FL 310.	
-02	AMSC 1 Channels (EMBRAER 190-E2)					
-A		C	3	2	Channel A may be inoperative provided: a) Air Management System Controller 2 Channel A is operative, b) Emergency Ram Air Valve is considered inoperative, c) Recirculation Fan 1 is considered inoperative, d) One Forward Electronic Bay Compartment Fan is considered inoperative, and e) One CPCS Automatic Mode Channel is considered inoperative.	

(Continued)

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DATE: 11/23/2018

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-01	Air Management System (AMS) Channels (Cont'd)					
-02	AMSC 1 Channels (EMBRAER 190-E2) (Cont'd)					
-B		A	3	2	(O) Channel A may be inoperative provided: <ol style="list-style-type: none"> <li>a) Air Management System Controller 2 Channel A is considered inoperative,</li> <li>b) AMS CTRL 2 FAIL Caution EICAS message is not displayed,</li> <li>c) Emergency Ram Air Valve is considered inoperative,</li> <li>d) Both Recirculation Fans are considered inoperative,</li> <li>e) APU Pneumatic Bleed System is considered inoperative,</li> <li>f) One Forward Electronic Bay Compartment Fan is considered inoperative,</li> <li>g) One Middle Electronic Bay Compartment Fan is considered inoperative,</li> <li>h) Both CPCS Automatic Mode Channels are considered inoperative,</li> <li>i) Cockpit Temperature Control on Air Conditioning/ Pneumatic Panel is considered inoperative,</li> <li>j) Flight is conducted in an unpressurized configuration, and</li> <li>k) Repairs are made within 3 flight-days.</li> </ol>	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-01	Air Management System (AMS) Channels (Cont'd)					
-02	AMSC 1 Channels (EMBRAER 190-E2) (Cont'd)					
-C		C	3	2	Channel B may be inoperative provided: a) Air Management System Controller 2 Channel B is operative, and b) Forward Cargo Ventilation Fan is considered inoperative.  NOTE: BLEED LEAK DET FAIL Caution EICAS message and PRESN MAN FAIL Caution EICAS message must not be displayed.	
-D		C	3	2	(O) Channel B may be inoperative provided: a) Air Management System Controller 2 Channel B is considered inoperative, b) Crossbleed Valve is considered inoperative, c) Forward Cargo Ventilation Fan is considered inoperative, d) Both Engine Bleed Systems are not used, and e) Flight is conducted in an unpressurized configuration.	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-01	Air Management System (AMS) Channels (Cont'd)					
-02	AMSC 1 Channels (EMBRAER 190-E2) (Cont'd)					
-E		A	3	2	(O) Safety Channel may be inoperative provided: <ul style="list-style-type: none"> <li>a) Engine Bleed System 1 is not used,</li> <li>b) Wing Anti-Ice System is verified operative before each flight,</li> <li>c) Outflow Valve manual command is verified operative,</li> <li>d) Air Preparation System is considered inoperative,</li> <li>e) Air Management System Controller 2 Safety Channel is operative, and</li> <li>f) Repairs are made within 3 flight-days.</li> </ul> NOTE: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
-F		A	3	1	(M) Channels A and B may be inoperative provided: <ul style="list-style-type: none"> <li>a) AMSC 1 Safety Channel is verified operative,</li> <li>b) Air Management System Controller 2 Channels are operative,</li> <li>c) Air Management System Controller 1 is considered inoperative, and</li> <li>d) Repairs are made within 3 flight-days.</li> </ul>	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-01	Air Management System (AMS) Channels (Cont'd)					
-03	AMSC 2 Channels (EMBRAER 190-E2)					
-A		C	3	2	Channel A may be inoperative provided: <ol style="list-style-type: none"> <li>a) Air Management System Controller 1 Channel A is operative,</li> <li>b) Recirculation Fan 2 is considered inoperative,</li> <li>c) One Middle Electronic Bay Compartment Fan is considered inoperative, and</li> <li>d) One CPCS Automatic Mode Channel is considered inoperative.</li> </ol>	
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-01	Air Management System (AMS) Channels (Cont'd)					
-03	AMSC 2 Channels (EMBRAER 190-E2) (Cont'd)					
-B		A	3	2	(O) Channel A may be inoperative provided: <ol style="list-style-type: none"> <li>a) Air Management System Controller 1 Channel A is considered inoperative,</li> <li>b) AMS CTRL 1 FAIL Caution EICAS message is not displayed,</li> <li>c) Both Recirculation Fans are considered inoperative,</li> <li>d) APU Pneumatic Bleed System is considered inoperative,</li> <li>e) One Forward Electronic Bay Compartment Fan is considered inoperative,</li> <li>f) One Middle Electronic Bay Compartment Fan is considered inoperative,</li> <li>g) Both CPCS Automatic Mode Channels are considered inoperative,</li> <li>h) Cockpit Temperature Control on Air Conditioning/ Pneumatic Panel is considered inoperative,</li> <li>i) Flight is conducted in an unpressurized configuration, and</li> <li>j) Repairs are made within 3 flight-days.</li> </ol>	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-01	Air Management System (AMS) Channels (Cont'd)					
-03	AMSC 2 Channels (EMBRAER 190-E2) (Cont'd)					
-C		C	3	2	Channel B may be inoperative provided Air Management System Controller 1 Channel B is operative.  NOTE: BLEED LEAK DET FAIL Caution EICAS message and PRESN MAN FAIL Caution EICAS message must not be displayed.	
-D		C	3	2	(O) Channel B may be inoperative provided: a) Air Management System Controller 1 Channel B is considered inoperative, b) Crossbleed Valve is considered inoperative, c) Forward Cargo Ventilation Fan is considered inoperative, d) Both Engine Bleed Systems are not used, and e) Flight is conducted in an unpressurized configuration.	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-01	Air Management System (AMS) Channels (Cont'd)					
-03	AMSC 2 Channels (EMBRAER 190-E2) (Cont'd)					
-E		A	3	2	(O) Safety Channel may be inoperative provided: <ol style="list-style-type: none"> <li>a) Engine Bleed System 2 is not used,</li> <li>b) Wing Anti-Ice System is verified operative before each flight,</li> <li>c) Outflow Valve manual command is verified operative,</li> <li>d) Air Management System Controller 1 Safety Channel is operative, and</li> <li>e) Repairs are made within 3 flight-days.</li> </ol>	
-F		A	3	1	(M) Channels A and B may be inoperative provided: <ol style="list-style-type: none"> <li>a) AMSC 2 Safety Channel is verified operative,</li> <li>b) Air Management System Controller 1 Channels are operative,</li> <li>c) Air Management System Controller 2 is considered inoperative, and</li> <li>d) Repairs are made within 3 flight-days.</li> </ol>	

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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-02	Air Management System (AMS) Controllers (EMBRAER 190-E2)					
-A		A	2	1	(M)(O) AMSC 1 may be inoperative provided: a) AMSC 1 is deactivated, b) Air Management System Controller 2 Channels are operative, c) Engine Bleed System 1 is considered inoperative, d) Air Conditioning Pack 1 is considered inoperative, e) Air Preparation System is considered inoperative, f) Emergency Ram Air Valve is considered inoperative, g) One CPCS Automatic Mode Channel is considered inoperative, h) Wing Anti-Ice System is verified operative before each flight, i) Cockpit zone Trim Air Valve is considered inoperative, j) Cockpit zone Temperature Sensor is considered inoperative, k) Recirculation Fan 1 is considered inoperative, l) One Forward Electronic Bay Compartment Fan is considered inoperative, m) Forward Cargo Compartment Fan is considered inoperative, and n) Repairs are made within 3 flight-days.  NOTE: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
00-02	Air Management System (AMS) Controllers (EMBRAER 190-E2) (Cont'd)					
-B		A	2	1	(M)(O) AMSC 2 may be inoperative provided: a) AMSC 2 is deactivated, b) Air Management System Controller 1 Channels are operative, c) Engine Bleed System 2 is considered inoperative, d) Air Conditioning Pack 2 is considered inoperative, e) One CPCS Automatic Mode Channel is considered inoperative, f) Cabin zone 1 and 2 Trim Air Valves are considered inoperative, g) Wing Anti-Ice System is verified operative before each flight, h) Passenger Cabin Zone Temperature Sensors are considered inoperative, i) Recirculation Fan 2 is considered inoperative, j) One Middle Electronic Bay Compartment Fan is considered inoperative, and k) Repairs are made within 3 flight-days.  NOTE: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
21-04	Foot Warmer Shutoff Valves	C	2	0		
23-00	Gasper System	C	1	0		

<p>AIRCRAFT: ERJ-170, ERJ-190</p>	<p><b>TABLE KEY</b></p> <ol style="list-style-type: none"> <li>1. REPAIR CATEGORY</li> <li>2. NO. INSTALLED</li> <li>3. NO. REQUIRED FOR DISPATCH</li> <li>4. REMARKS OR EXCEPTIONS</li> </ol>
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
24-01	Recirculation Fans	C	2	0	(M) May be inoperative provided affected fan is deactivated.	
-01	Recirculation Fan Check Valves	C	2	0	(M) May be inoperative closed provided associated fan is deactivated.	
24-02	Recirculation Air Filters					
-A		C	2	0	May be inoperative or missing provided Recirculation Fans (RECIRC) remains selected off.	
-B		C	2	0	(M) May be inoperative or missing provided associated Recirculation Fan is deactivated.	
24-04	Recirculation System Smoke Detector				Deleted, Revision 15. (Included in item 26-16-00).	
24-06	Recirculation Fans Pushbutton	C	1	0	May be inoperative provided both Recirculation Fans are considered inoperative.	
-01	Recirculation Fan Pushbutton Illumination	C	1	0	(O) May be inoperative provided associated pushbutton is verified operative.	
25-01	Emergency Ram Air Valve	C	1	0	(M) Except for ER operations, may be inoperative provided: a) Valve is secured open, and b) Air Conditioning Pack 01 is considered inoperative.	
25-03	Emergency Ram Air Check Valve	C	1	0	Except for ER operations, may be inoperative open provided Air Conditioning Pack 02 is considered inoperative.	
25-06	Ram Air Inlet Door (EMBRAER 170/175 Post-Mod. SB-170-53-0107 and EMBRAER 190/195 Post-Mod. SB-190-53-0070)	C	2	0	(M) One or both may be inoperative provided: a) Both doors are secured open, and b) Both actuators are deactivated.	

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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
26-01	Forward Electronic Bay Compartment Fan (EMBRAER 190-E2)	C	2	1	(M) May be inoperative provided operative Fan is verified powered by ESS BUS.	
26-02	Forward Electronic Bay Temperature Sensor (EMBRAER 190-E2)	C	1	0	May be inoperative provided FWD EBAY SMK DET FAIL is not displayed on EICAS.	
26-05	Middle Electronic Bay Compartment Fan (EMBRAER 190-E2)	C	2	1	(M) May be inoperative provided operative Fan is verified powered by ESS BUS.	
26-06	Middle Electronic Bay Temperature Sensor (EMBRAER 190-E2)	C	1	0	May be inoperative provided MID EBAY SMK DET FAIL is not displayed on EICAS.	
26-08	Aft Electronic Bay Ventilation System (LINEAGE 1000)					
-01	Ventilation Fan 1	D	1	0	May be inoperative provided IFE is used in flight only.	
-02	Ventilation Fan 2	C	1	0	May be inoperative provided IFE is selected OFF.	
-03	Airflow Switch	C	1	0	May be inoperative provided IFE is selected OFF.	
26-11	Aft Electronic Bay Temperature Sensor (EMBRAER 190-E2)	C	1	0	May be inoperative provided AFT EBAY SMK DET FAIL is not displayed on EICAS.	
27-01 ***	Forward Cargo Compartment Fan	C	1	0	(M) May be inoperative provided: a) Fan is deactivated, b) Live animals are not carried in the cargo compartment, and c) Dry ice is not carried in the cargo compartment.	

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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
27-03 ***	Forward Cargo Compartment Check Valve					
-A		C	1	0	(M) May be inoperative closed provided: a) Fan is deactivated, b) Live animals are not carried in the cargo compartment, and c) Dry ice is not carried in the cargo compartment.	
-B		C	1	0	(O) May be inoperative open provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	

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**TABLE KEY**

1. REPAIR CATEGORY
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4. REMARKS OR EXCEPTIONS

**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
27-04 ***	Forward Cargo Compartment Shutoff Valve					
-A		C	1	0	(M) May be inoperative closed provided: a) Valve is secured closed, b) Fan is deactivated, c) Live animals are not carried in the cargo compartment, and d) Dry ice is not carried in the cargo compartment.	
-B		C	1	0	(O) May be inoperative open provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	
27-09	Aft Baggage Compartment Shutoff Valves (LINEAGE 1000)	C	2	0	(M) May be inoperative provided: a) Both valves are secured closed, and b) Live animals are not carried in the baggage compartment.	

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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
28-02 ***	In-Flight Entertainment System (IFE) (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-01	Ventilation Fan	D	1	0	(M)(O) May be inoperative provided: a) Ventilation system is reset, and b) IFE is used in flight only.	
-02	Airflow Switch	D	1	0	(M)(O) May be inoperative provided: a) Ventilation system is reset, and b) IFE is used in flight only.	
28-03 ***	In-Flight Entertainment System (IFE) Ground Shutoff Valve (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	1	0	(M)(O) May be inoperative provided: a) Affected valve is secured closed, b) Ventilation system is reset, and c) IFE is used in flight only.	
28-04 ***	In-Flight Entertainment System (IFE) Vent Shutoff Valve (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	1	0	(M) May be inoperative provided: a) Affected valve is secured closed, and b) IFE is deactivated.	
28-08 ***	Chiller Ventilation System (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-01	Ventilation-Fan	D	1	0	(M) May be inoperative provided: a) Ventilation Fan is deactivated, and b) Chiller is deactivated.	
-02	Airflow Switch	D	1	0	(M) May be inoperative provided: a) Ventilation Fan is deactivated, and b) Chiller is deactivated.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
28-09 ***	Chiller Ground Shutoff Valve (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	1	0	(M) May be inoperative provided: a) Affected valve is secured closed, and b) Chiller is deactivated.	
28-10 ***	Chiller Vent Shutoff Valve (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	1	0	(M) May be inoperative provided: a) Affected valve is secured closed, and b) Chiller is deactivated.	
28-12 ***	Chiller Maintenance Panel (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	1	0	(M) May be inoperative provided alternate procedures are established and used.  NOTE: Any portion of the system that operates normally may be used.	
29-02	Low Pressure Ground Connection Check Valve					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	2	1	Except for ER operations, may be inoperative open provided associated Air Conditioning Pack is considered inoperative.	
-B		C	2	0	(O) Except for ER operations, may be inoperative open provided: a) Both Air Conditioning Packs are considered inoperative, and b) Flight is conducted in an unpressurized configuration.	
-C		C	2	0	May be inoperative closed.	
-02	EMBRAER 190-E2	C	1	0	May be inoperative closed.	

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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
31-01	Cabin Pressure Control System (CPCS) Controller Channels					
-01	Automatic Mode					
-A		C	2	1	One may be inoperative provided PRESN MAN FAIL Caution message is not displayed on EICAS.	
-B		C	2	0	(O) Except for ER operations, may be inoperative provided: a) Outflow Valve Indication on MFD operates normally, b) Outflow Valve is verified open, c) Extended overwater flight is prohibited, and d) Both Air Conditioning Packs are considered inoperative.	
-02	Manual Mode					
-A		C	2	0	(O) Except for ER operations, may be inoperative provided: a) Outflow Valve Indication on MFD operates normally, b) Outflow Valve is verified open, c) Extended overwater flight is prohibited, and d) Both Air Conditioning Packs are considered inoperative.	
-B		C	2	0	(M)(O) Except for ER operations, may be inoperative provided: a) Outflow Valve is removed, b) Extended overwater flight is prohibited, and c) Both Air Conditioning Packs are considered inoperative.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
31-02	Outflow Valve					
-A		C	1	0	(O) Except for ER operations, may be inoperative provided: a) Outflow Valve Indication on MFD operates normally, b) Outflow Valve is verified open, c) Extended overwater flight is prohibited, and d) Both Air Conditioning Packs are considered inoperative.	
-B		C	1	0	(M)(O) Except for ER operations, may be inoperative provided: a) Outflow Valve is removed, b) Extended overwater flight is prohibited, and c) Both Air Conditioning Packs are considered inoperative.	
31-05	Outflow Valve Indication on MFD	C	2	0		
31-07	Cabin Rate of Climb Indication on EICAS					
-A		C	1	0	May be inoperative provided Automatic Mode on both channels operates normally.	
-B		C	1	0	Except for ER operations, may be inoperative provided Outflow Valve is considered inoperative.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
31-09	Cabin Differential Pressure Indication on EICAS					
-A		C	1	0	(O) May be inoperative provided: a) Cabin Altitude Indication operates normally, and b) A table is available to convert Cabin Altitude to Cabin Differential Pressure.	
-B		C	1	0	Except for ER operations, may be inoperative provided Outflow Valve is considered inoperative.	
31-11	Cabin Altitude Indication on EICAS					
-A		C	1	0	(O) May be inoperative provided: a) Cabin Differential Pressure Indication operates normally, and b) A table is available to convert Cabin Differential Pressure to Cabin Altitude.	
-B		C	1	0	Except for ER operations, may be inoperative provided Outflow Valve is considered inoperative.	
31-13	Landing Field Elevation (LFE) Indication on EICAS	C	1	0	Except for ER operations, may be inoperative provided Outflow Valve is considered inoperative.	
32-01	Positive Pressure Relief Valve (Including Static Port and Tubing)	C	1	0	Except for ER operations, may be inoperative provided Outflow Valve is considered inoperative.	
32-04	Negative Pressure Relief Valve	C	1	0	Except for ER operations, may be inoperative provided Outflow Valve is considered inoperative.	
32-14	Safety Valve Indication on MFD	C	2	0		

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
51-00	Air Conditioning Packs					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A	Airplanes with Ram Air Inlet Doors Installed	C	2	1	(O) Except for ER operations, one may be inoperative provided: a) Associated Air Conditioning Pack remains selected off, b) Flight is conducted at or below FL 310, and c) Both Ram Air Inlet Doors are considered inoperative.	
-B	Airplanes without Ram Air Inlet Doors Installed	C	2	1	(O) Except for ER operations, one may be inoperative provided: a) Associated Air Conditioning Pack remains selected off, and b) Flight is conducted at or below FL 310.	
-02	EMBRAER 170/175/190/195					
-A	Airplanes with Ram Air Inlet Doors Installed	C	2	0	(O) Except for ER operations, may be inoperative provided: a) Both Air Conditioning Packs remain selected off, b) Flight is conducted in an unpressurized configuration, and c) Both Ram Air Inlet Doors are considered inoperative.	
-B	Airplanes without Ram Air Inlet Doors Installed	C	2	0	(O) Except for ER operations, may be inoperative provided: a) Both Air Conditioning Packs remain selected off, and b) Flight is conducted in an unpressurized configuration.	

(Continued)

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
51-00	Air Conditioning Packs (Cont'd)					
-03	LINEAGE 1000					
-A	Airplanes with Ram Air Inlet Doors Installed	C	2	0	(O) Except for ER operations, may be inoperative provided: a) Both Air Conditioning Packs remain selected off, b) Flight is conducted in an unpressurized configuration, c) Both Ram Air Inlet Doors are considered inoperative, and d) The Auxiliary Fuel system is considered inoperative.	
-B	Airplanes without Ram Air Inlet Doors Installed	C	2	0	(O) Except for ER operations, may be inoperative provided: a) Both Air Conditioning Packs remain selected off, b) Flight is conducted in an unpressurized configuration, and c) The Auxiliary Fuel system is considered inoperative.	
-04	EMBRAER 190-E2					
-A		C	2	1	(O) One may be inoperative provided: a) Associated Air Conditioning Pack remains selected off, b) Wing Anti-Ice System is operative, and c) Flight is conducted at or below FL 310.	
-B		C	2	0	(O) Both may be inoperative provided: a) Both Air Conditioning Packs remain selected off, b) Wing Anti-Ice System is operative, and c) Flight is conducted in an unpressurized configuration.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
51-01	Pack Flow Control Valves					
-A		C	2	1	(M) Except for ER operations, one may be inoperative provided: a) Affected valve is secured closed, and b) Associated Air Conditioning Pack is considered inoperative.	
-B		C	2	1	(O) Except for ER operations, one may be inoperative provided: a) Affected valve is verified CLOSED, b) Flow Control Valve indication on MFD operates normally, and c) Associated Air Conditioning Pack is considered inoperative.	
-C		C	2	0	(M) May be inoperative provided: a) Affected valves are secured closed, and b) Both Air Conditioning Packs are considered inoperative.	
51-02	Flow Sensing Venturis					
-A		C	2	1	Except for ER operations, one may be inoperative provided Associated Air Conditioning Pack is considered inoperative.	
-B		C	2	0	Except for ER operations, may be inoperative open provided both Air Conditioning Packs are considered inoperative.	

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**TABLE KEY**

- 5. REPAIR CATEGORY
- 6. NO. INSTALLED
- 7. NO. REQUIRED FOR DISPATCH
- 8. REMARKS OR EXCEPTIONS

**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
51-08	Water Spray Nozzles					
-A		C	2	1	Except for ER operations, one may be inoperative provided associated Air Conditioning Pack is not used.	
-B		C	2	0	(M) May be inoperative provided affected Spray Nozzle is removed.	
-C		C	2	0	May be inoperative provided both Air Conditioning Packs are not used.	
51-23	Pack 1(2) Pushbutton Illumination	C	2	0	(O) May be inoperative provided associated pushbutton is verified operative.	
60-00	Temperature Control					
-01	Cockpit Temperature "SET" Indication on MFD ECS Page	C	2	0	May be inoperative provided Cockpit Temperature "ACTUAL" Indication on MFD ECS Page operates normally.	
-02	Cockpit Temperature "ACTUAL" Indication on MFD ECS Page	C	2	0	May be inoperative provided Cockpit Temperature "SET" Indication on MFD ECS Page operates normally.	
-03	Passenger Cabin Zone Temperature "SET" Indication on MFD ECS Page	C	4	0	May be inoperative provided passenger cabin temperature "ACTUAL" Indication on MFD ECS Page operates normally.	
-04	Passenger Cabin Zone Temperature "ACTUAL" Indication on MFD ECS Page	C	4	0	May be inoperative provided passenger Cabin Temperature "SET" Indication on MFD ECS Page operates normally.	

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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
61-00	Cockpit Temperature Control on Air Conditioning/Pneumatic Panel					
-A		C	1	0	May be inoperative provided Cockpit Temperature "SET" Indication on MFD ECS Page is acceptable by the flightcrew.	
-B		C	1	0	Except for ER operations, may be inoperative provided Air Conditioning Pack 01 is not used.	
61-01	Cockpit Zone Temperature Sensor					
-A		C	1	0	May be inoperative provided Cockpit Temperature "SET" Indication on MFD ECS Page operates normally.	
-B		C	1	0	Except for ER operations, may be inoperative provided Air Conditioning Pack 01 is not used.	
62-00	Passenger Cabin Zone Temperature Control					
-01	On Air Conditioning/Pneumatic Panel					
-A		C	1	0	May be inoperative provided: a) PAX/CABIN knob on the AIR COND/PNEUMATIC Panel is set to ATTND position, and b) Temperature Control knob on the FAP is used to control the Passenger Cabin Zone Temperature.	

(Continued)

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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
62-00	Passenger Cabin Zone Temperature Control (Cont'd)					
-01	On Air Conditioning/ Pneumatic Panel (Cont'd)					
-B		C	1	0	May be inoperative provided Cabin Temperature "SET" Indication on MFD ECS Page is considered inoperative.  NOTE: This failure mode is recognized when the "SET" indication is dashed.	
-C		C	1	0	May be inoperative provided "SET" Indication on MFD ECS Page is in a range of temperature acceptable by the flightcrew.	
-D		C	1	0	Except for ER operations, may be inoperative provided Air Conditioning Pack 02 is not used.	
-02	On Flight Attendant Panel/CMS					
-A		C	-	0	May be inoperative provided Temperature Control knob on the AIR COND/PNEUMATIC Panel is used.	
-B		C	-	0	Except for ER operations, may be inoperative provided Air Conditioning Pack 02 is not used.	

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**21. Air Conditioning**

Sequence No.	Item	1	2	3	4	Change Bar
62-01	Passenger-Cabin-Zone Temperature Sensor					
-A		C	-	0	May be inoperative provided Passenger Cabin Zone Temperature "SET" Indication on MFD ECS Page operates normally.	
-B		C	-	0	Except for ER operations, may be inoperative provided Air Conditioning Pack 02 is not used.	
62-03	Trim Air Pressure Regulating Valve (EMBRAER 190-E2)	C	1	0	(M) May be inoperative provided valve is secured closed.	
62-05 ***	Trim Air Modulating Valve					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	C	2	0	(M) May be inoperative provided affected valve is secured closed.	
-02	EMBRAER 190-E2					
-A		C	3	0	May be inoperative provided Trim Air Pressure Regulating Valve is operative.	
-B		C	3	0	May be inoperative provided Trim Air Pressure Regulating Valve is considered inoperative.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**22. Autoflight**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Autopilot System	B	1	0	May be dispatched with AP FAIL Caution EICAS message provided procedures do not require its use.	
-01	System Faults (EMBRAER 190-E2)	A	-	-	(O) May be dispatched with AP FAULT Advisory EICAS message provided: a) Both AP DISC buttons are verified to operate normally, and b) Repairs are made within 10 calendar-days.  NOTE: If one AP DISC button is inoperative, refer to item 22-11-04, Autopilot Disconnect (AP DISC) Buttons.	
10-00	Autopilot Channels (EMBRAER 170/175/190/195/ LINEAGE 1000)	A	2	1	(M) May be dispatched with AP FAULT Advisory EICAS message provided: a) Both AP/TRIM DISC buttons are verified to operate normally, and b) Repairs are made within 10 calendar-days.	
10-01 ***	Autoland 1 (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided operations do not require its use.	
10-02 ***	Autoland 2 (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided operations do not require its use.	
10-12	Mach Trim Channels (EMBRAER 190/195/ LINEAGE 1000)	B	2	1		
10-14	Yaw Damper Channels (EMBRAER 170/175/190/195/ LINEAGE 1000)	B	2	1		

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**22. Autoflight**

Sequence No.	Item	1	2	3	4	Change Bar
10-16	Flight Director Channels	B	2	1	One channel may be inoperative provided operations do not require its use.	
10-20	Takeoff/Go-Around (TO/GA) Buttons	C	2	1	(O) One may be inoperative provided: a) Approach minimums do not require its use, and b) Alternate procedures are established and used.	
11-01	Guidance Panel (GP)					
-01	GP Channels					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	C	2	1	(O) Except for ER operations, one may be inoperative provided: a) Associated side TO/GA, AP/TRIM DISC, and AP/FD TCS buttons are considered inoperative, and b) Alternate procedures are established and used.	
-B	EMBRAER 190-E2	C	2	1	(O) One may be inoperative provided: a) Associated side TO/GA and AP DISC buttons are considered inoperative, and b) Alternate procedures are established and used.	
-02	Flight Director (FD) Buttons	C	2	0		
-03	Autopilot Button					
-A	AP Button (EMBRAER 170/175/190/195/ LINEAGE 1000)	B	1	0	May be inoperative provided operations do not require its use.	
-B	AUTOPILOT Button (EMBRAER 190-E2)	B	1	0	May be inoperative provided operations do not require its use.	

(Continued)

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**22. Autoflight**

Sequence No.	Item	1	2	3	4	Change Bar
11-01	Guidance Panel (GP) (Cont'd)					
-04	Yaw Damper (YD) Button				Deleted, Revision 16.	
-05	Source (SRC) Button	C	1	0	May be inoperative provided operations do not require its use.	
-06	Airspeed to Mach (PUSH IAS-MACH) Change Button	C	1	0		
-07	Lateral Navigation Mode Button					
-A	NAV Button (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided operations do not require its use.	
-B	LNAV Button (EMBRAER 190-E2)	C	1	0	May be inoperative provided operations do not require its use.	
-08	Heading (HDG) Mode Button	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-09	Approach Mode Button					
-A	APP Button (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided operations do not require its use.	
-B	APPR Button (EMBRAER 190-E2)	C	1	0	May be inoperative provided operations do not require its use.	
-10	Bank Limiter (BANK) Button	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**22. Autoflight**

Sequence No.	Item	1	2	3	4	Change Bar
11-01	Guidance Panel (GP) (Cont'd)					
-11	Heading Selector (HDG SEL) Knob	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-12	Heading Synchronization (PUSH SYNC) Button	C	1	0		
-13	Flight Level Change (FLCH) Mode Button	C	1	0	May be inoperative provided operations do not require its use.	
-14	Vertical Navigation (VNAV) Mode Button	C	1	0	May be inoperative provided operations do not require its use.	
-15	Altitude Hold (ALT) Mode Button	C	1	0	May be inoperative provided operations do not require its use.	
-16	Feet to Meter (PUSH FT-M) Change Button	C	1	0	May be inoperative provided operations do not require its use.	
-17	Flight Path Angle (FPA) Mode Button	C	1	0	May be inoperative provided operations do not require its use.	
-18	Flight Path Angle Selector (FPA SEL) Knob (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided operations do not require its use.	
-19	Vertical Speed (VS) Mode Button	C	1	0	May be inoperative provided operations do not require its use.	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**22. Autoflight**

Sequence No.	Item	1	2	3	4	Change Bar
11-01	Guidance Panel (GP) (Cont'd)					
-20	Selector Thumb Wheel					
-A	Vertical Speed (VS DN/UP) Selector Thumb Wheel (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided operations do not require its use.	
-B	Vertical Speed and Flight Path Angle (VS/FPA DN/UP) Selector Thumb Wheel (EMBRAER 190-E2)	C	1	0	May be inoperative provided operations do not require its use.	
-21	Autothrottle (A/T) Button	B	1	0	May be inoperative provided Autothrottle Channels are considered inoperative.	
11-02	Autopilot/Trim Disengage (AP/TRIM DISC) Buttons (EMBRAER 170/175/190/195/ LINEAGE 1000)				Deleted, Revision 16.	
11-03	Autopilot/Flight Director Touch Control Steering (AP/FD TCS) Buttons	C	2	0		

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**22. Autoflight**

Sequence No.	Item	1	2	3	4	Change Bar
11-04	Autopilot Disconnect (AP DISC) Buttons (EMBRAER 190-E2)					
-A		C	2	1	One may be inoperative on pilot monitoring side provided: a) Autopilot is not used below 1,500 ft AGL, and b) Approach minimums do not require the use of the autopilot.	
-B		B	2	0	May be inoperative provided autopilot is not used.	
30-00	Autothrottle Channels					
-A		C	2	1		
-B		B	2	0	May be inoperative provided AT is not used.	
30-12	Autothrottle Disconnect Buttons					
-A		C	2	1		
-B		B	2	0	May be inoperative provided Autothrottle Channels are considered inoperative.	
30-15	Electronic Thrust Trim System (ETTS)					
		B	1	0	May be inoperative provided both Autothrottle Channels are considered inoperative.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**23. Communications**

Sequence No.	Item	1	2	3	4	Change Bar
11-00 ***	High Frequency (HF) Communication System					
-A		D	-	-	Any in excess of those required by 14 CFR may be inoperative.	
-B		C	-	1	(O) May be inoperative while conducting operations that require two LRCS provided: a) Aircraft SATVOICE system operates normally, b) SATVOICE services are available as an LRCS over the intended route of flight, c) The ICAO Flight Plan is updated (as required) to notify ATC of the communications equipment status of the aircraft, and d) Alternate procedures are established and used.	
12-00	Very High Frequency (VHF) Communication System	D	-	-	Any in excess of those required by 14 CFR may be inoperative provided: a) VHF 1 is operative, and b) Procedures do not require its use.	
15-00 ***	Satellite Communication System (SATCOM)					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	
21-00 ***	Selective Call System (SELCAL)					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**23. Communications**

Sequence No.	Item	1	2	3	4	Change Bar
23-00 ***	Wireless Gatelink System (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-A		C	1	0	(M) May be inoperative provided alternate procedures are established and used.	
-B		D	1	0	May be inoperative provided procedures do not require its use.	
24-00 ***	Communication Management Function (CMF)					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	
24-01 ***	Printer					
-A		C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	1	0	May be inoperative provided procedures do not require its use.	

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**23. Communications**

Sequence No.	Item	1	2	3	4	Change Bar
25-00 ***	Controller-Pilot Data Link Communication System (CPDLC)					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	2	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	2	0	May be inoperative provided procedures do not require its use.	
-02	EMBRAER 190-E2					
-A		C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	1	0	May be inoperative provided procedures do not require its use.	
51-00	Cockpit/Cabin Service Interphone System					
-01	Flight Deck to Cabin, Cabin to Flight Deck Functions (EMBRAER 170/175/190/195/ 190-E2)	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 handsets, and b) Alternate communication procedures between the affected flight attendant station(s) are established and used.	
					NOTE: Any station function(s) that operates normally may be used.	
					(Continued)	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**23. Communications**

Sequence No.	Item	1	2	3	4	Change Bar
51-00	Cockpit/Cabin Service Interphone System (Cont'd)					
-02	Flight Deck to Cabin, Cabin to Flight Deck Functions (LINEAGE 1000)	D	-	-	(O) May be inoperative provided operating rules do not require its use.  NOTE: Any station function(s) that operates normally may be used.	
51-01	Cockpit Alerting System (Chime/Light)					
-01	Flight Deck Call Lights (CAB/EMER) on Digital Audio Panels	B	6	0	May be inoperative provided: a) Flight deck call chime operates normally, and b) Flight deck call chime differentiates between normal and emergency calls.	
51-02	Cockpit Speakers	C	2	0	May be inoperative provided: a) Procedures do not require its use, and b) Associated headset earphones or headphones are installed and operate normally.	

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**23. Communications**

Sequence No.	Item	1	2	3	4	Change Bar
51-03	Push to Talk (PTT) Switches					
-01	PTT MIC Switch on Glareshield Panel					
-A		C	2	0	(O) May be inoperative provided: a) Associated PTT/HOT MIC Switch on Yoke operates normally, and b) Affected switch is verified failed open (non-transmitting position).	
-B		C	2	0	(M) May be inoperative provided: a) Associated PTT/HOT MIC Switch on Yoke operates normally, and b) Affected switch is deactivated.	
-02	PTT/HOT MIC Switch on Yoke					
-A		C	2	0	(O) May be inoperative provided: a) Associated PTT MIC Switch on Glareshield Panel operates normally, and b) Affected switch is verified failed open (non-transmitting position).	
-B		C	2	0	(M) May be inoperative provided: a) Associated PTT MIC Switch on Glareshield Panel operates normally, and b) Affected switch is deactivated.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**23. Communications**

Sequence No.	Item	1	2	3	4	Change Bar
51-08	Flight Deck Headsets/Headphones	D	-	-	Any in excess of those required by 14 CFR may be inoperative.	
-01	Headset Boom Microphones					
-A	Airplanes Operating Under 14 CFR Part 121	A	-	0	May be inoperative provided: a) Associated hand microphone is installed and operates normally, and b) Repairs are made within 3 flight-days.	
-B	All Other Operations	A	-	0	May be inoperative provided: a) Associated hand microphone is installed and operates normally, and b) Repairs are made in accordance with applicable regulations.	
-02	Headset Earphones/Headphones	C	-	1	May be inoperative provided associated flight deck speaker operates normally.	
-03	Active Noise Cancelling/Reduction Function	D	-	0	May be inoperative provided normal audio function of headset is operative.	
51-11	Cockpit Hand Microphones					
-A		C	-	0	May be inoperative or missing provided associated boom microphones operate normally.	
-B		D	-	0	Any in excess of those required by 14 CFR may be inoperative.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**23. Communications**

Sequence No.	Item	1	2	3	4	Change Bar
52-00	Ramp Service Interphone System					
-01	Flight Deck to Ground Function (Airplanes Operating Under 14 CFR Part 121) (Interphone Jack, CALL Pushbutton, Horn)					
-A		C	-	0	(O) Flight interphone flight deck to ground/ground to flight deck function may be inoperative provided: a) Alternate procedures are established and used, and b) Nose gear/forward fuselage service interphone jack operates normally.	
					NOTE: Any portion of system which operates normally may be used.	
-B		C	1	0	(O) Service interphone flight deck to ground/ground to flight deck function may be inoperative provided: a) Alternate procedures are established and used, and b) Nose gear/forward fuselage flight interphone jack operates normally.	
-C		B	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-02	All Other Operations					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**23. Communications**

Sequence No.	Item	1	2	3	4	Change Bar
54-03 ***	Iridium System (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	-	0	(M) May be inoperative provided it is deactivated.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**24. Electrical Power**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Electrical Synoptic Displays (MFD Electrical Page)	C	2	0	(O) MFD indications not addressed elsewhere in the MMEL may be inoperative.	
00-01	IDG Disconnect LED (Overhead Panel)	C	2	0		
00-05	Batteries 1 and 2 Voltage Indication on MFD Status Page					
-A		C	4	2	One indication per battery may be inoperative.	
-B		C	4	0	(M) May be inoperative provided: a) Battery voltage indication is available on MFD Electrical Page, and b) Affected battery voltage is checked before each power up.	
21-01	Engine Driven Generator (IDG, GCU, GLC)					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	A	2	1	(O) Except for ER operations, one may be inoperative provided: a) APU generator operates normally and is used throughout the flight, b) Affected IDG is disconnected and remains selected OFF, c) Flight is conducted at or below FL 330, and d) Repairs are made within 2 flight-days.	
-02	EMBRAER 190-E2	B	2	1	(O) One may be inoperative provided: a) APU generator operates normally and is used throughout the flight, b) Affected IDG is disconnected and remains selected OFF, and c) Flight is conducted at or below FL 390.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
-------------------------------	--

**24. Electrical Power**

Sequence No.	Item	1	2	3	4	Change Bar
22-01	APU Generator	C	1	0	Except for ER operations, may be inoperative provided APU generator remains selected off.	
24-00	Static Inverter (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0		
36-10	Batteries 1 and 2 Temperature Sensors	C	4	2	One sensor per battery may be inoperative provided at least one temperature of associated battery on Electrical Synoptic Display (MFD Electrical Page) is verified to operate normally before each flight.	
41-00 ***	DC External Power System	D	1	0		
-01	DC GPU AVAIL Pushbutton Light on DC GPU Panel	D	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-02	DC GPU IN USE Pushbutton Light on DC GPU Panel	D	1	0	(O) May be inoperative provided alternate procedures are established and used.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**24. Electrical Power**

Sequence No.	Item	1	2	3	4	Change Bar
42-00	AC External Power System					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	C	1	0	(M) May be inoperative provided the system is deactivated.	
-B	EMBRAER 190-E2	C	1	0		
-01	AC GPU AVAIL Pushbutton Lights on Overhead Panel	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-02	AC GPU IN USE Pushbutton Lights on Overhead Panel	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-03	AC GPU AVAIL Light on Galley AC GPU Panel	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-04	AC GPU IN USE Light on Galley AC GPU Panel	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-05	AC GPU AVAIL Light on GPU Panel	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-06	AC GPU IN USE Light on GPU Panel	C	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-07	External AC Power Receptacle Shield	C	1	0	(M) May be cracked or damaged provided remaining shield prevents misaligned GPU connection.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
-------------------------------	--

**24. Electrical Power**

Sequence No.	Item	1	2	3	4	Change Bar
42-01	External Power Module (EMBRAER 190-E2)					
-A		C	1	0	May be inoperative or missing provided AC External Power System is considered inoperative.	
-B		C	1	0	(M) May be inoperative provided: a) External Power Module is removed, and b) AC External Power System is considered inoperative.	
52-01	Circuit Breaker Monitoring System	B	1	0	(M) May be inoperative provided: a) If a thermal Circuit Breaker is affected, its monitor is verified to be inoperative, b) System associated with the Circuit Breaker is verified to operate normally or deferred according to the applicable MMEL entry, and c) A visual inspection of the affected Circuit Breaker is performed prior to the first flight of each day.	
52-03 ***	In-Flight Entertainment System (IFE) Auto Shutdown (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	(O) May be inoperative provided IFE RACK Power Switch is verified to operate normally before each flight.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**24. Electrical Power**

Sequence No.	Item	1	2	3	4	Change Bar
54-00 ***	Electrical Outlets					
-01	Cockpit AC Electrical Outlet					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided operations do not require its use.	
-02	Avionics Compartment Electrical Outlet	D	-	0		
-03	Galley/Wardrobe Electrical Outlet	D	-	0		
-04	Aft Baggage Compartment Electrical Outlet (LINEAGE 1000)	D	-	0		
-05	Cabin AC Electrical Outlets	D	-	0		
61-02	Secondary Power Distribution Assembly (EMBRAER 190-E2)					
-01	System Faults	B	-	-	May be dispatched with SPDA FAULT Advisory EICAS message displayed.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
10-05	Eye Position Indicator	C	1	0	May be inoperative or missing.	
11-01	Pilot Seats					
-01	Vertical Power Seat Adjustment Systems	C	2	0	(M) May be inoperative provided: a) Affected system is deactivated, and b) Vertical Manual Seat Adjustment System operates normally.	
-02	Vertical Manual Seat Adjustment Systems					
-A		C	2	0	May be inoperative provided Vertical Power Seat Adjustment System operates normally.	
-B		C	2	0	May be inoperative provided: a) Affected seat has failed in a position that permits normal pilot's visibility, b) Full flight control movement is available, and c) Position of seat is acceptable to flightcrew.	
-03	Longitudinal Seat Adjustment Systems (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	0	May be inoperative provided backup system operates normally.	
					(Continued)	

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**TABLE KEY**

- 5. REPAIR CATEGORY
- 6. NO. INSTALLED
- 7. NO. REQUIRED FOR DISPATCH
- 8. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
11-01	Pilot Seats (Cont'd)					
-04	Lateral Seat Adjustment Systems (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	0	May be inoperative provided backup system operates normally.	
-05	Lumbar Supports Adjustments	C	2	0	May be inoperative provided seat is acceptable to affected crewmember.	
-06	Armrests	C	4	0	(M) May be inoperative provided: a) Affected armrest is stowed in the retracted position, and b) Seat is acceptable to affected crewmember.	
-07	Recline Functions	C	2	0	May be inoperative provided seat is acceptable to affected crewmember.	
-08	Headrests Adjustments	C	2	0	May be inoperative provided seat is acceptable to affected crewmember.	
-09	Thigh Supports Adjustments	C	4	0	May be inoperative provided seat is acceptable to affected crewmember.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
11-02	Observer Seat (Including Associated Equipment)					
-A		A	1	0	May be inoperative provided: <ol style="list-style-type: none"> <li>a) A passenger seat in the passenger cabin is made available to an FAA inspector for the performance of official duties, and</li> <li>b) Repairs are made within 2 flight-days.</li> </ol>	
-B		A	1	0	May be inoperative provided: <ol style="list-style-type: none"> <li>a) Required minimum safety equipment (oxygen and safety belt) is available,</li> <li>b) Seat is acceptable to an FAA inspector for the performance of official duties, and</li> <li>c) Repairs are made within 2 flight-days.</li> </ol> <p>NOTE 1: These provisos are intended to provide for occupancy of the above seat by an FAA inspector when the minimum safety equipment (oxygen and safety belt) is functional and the inspector determines the conditions to be acceptable.</p> <p>NOTE 2: The pilot in command will determine if the minimum safety equipment is functional for other persons authorized to occupy observer seat.</p>	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
11-02	Observer Seat (Including Associated Equipment) (Cont'd)					
-C		D	1	0	May be inoperative provided it is not required by 14 CFR.  NOTE: The pilot in command will determine if the minimum safety equipment is functional for other persons authorized to occupy any observer seat(s).	
12-15	Sun Visors	C	2	0	May be inoperative or missing provided there are no visual restrictions to affected crewmember.	
12-17	Direct Vision Window Sunshades	C	2	0	May be inoperative or missing provided there are no visual restrictions to affected crewmember.	
13-03 ***	Crew Baggage Stowage Straps in the Cockpit	D	-	0	May be inoperative or missing provided crew baggage is stowed in an alternate location.	



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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
20-02	Overhead Storage Bin(s)/Cabin and Galley Storage Compartments/Closets					
-B		C	-	-	(M)(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) For non-retractable doors, affected door is removed,</li> <li>b) For retractable doors, affected door is removed or secured in the retracted (fully open) position,</li> <li>c) Affected bin, compartment, or closet is not used for storage of any items except for those permanently affixed,</li> <li>d) Affected bin, compartment, or closet is prominently placarded "DO NOT USE",</li> <li>e) Procedures are established and used to alert crewmembers and passengers of inoperative bins, compartments, or closets, and</li> <li>f) Passengers are briefed that affected bin, compartment, or closet is not used.</li> </ol> <p>NOTE 1: For overhead bins, if no partitions are installed, the entire overhead bin is considered inoperative.</p> <p>NOTE 2: Any emergency equipment located in the affected bin, compartment, or closet (permanently affixed) is available for use.</p>	
-01 ***	Storage Compartment Key Locks	D	-	0	(M) May be inoperative in the unlocked position provided doors can be secured by other means.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
20-03	Cabin/Galley Storage Latches (Dual Latch Installations)	C	-	-	One latch per compartment may be inoperative.	
20-05	"Fasten Seat Belt While Seated" Signs or Placards	C	-	-	One or more signs or placards may be illegible or missing provided a legible sign or placard is readable from each occupied passenger seat.	
20-07	Nonessential Equipment and 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 flightcrew and included in the operator's appropriate document.  NOTE: Exterior Lavatory Door Ashtrays are not considered NEF Items.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
21-10	Passenger Seat(s)	D	-	-	May be inoperative provided: <ol style="list-style-type: none"> <li>a) Seat does not restrict access to any emergency exit, egress route, or main aisle, and</li> <li>b) The affected seat(s) is blocked and placarded "DO NOT OCCUPY".</li> </ol> NOTE 1: A seat with an inoperative seat belt or shoulder harness is considered inoperative.  NOTE 2: Affected seat(s) may include the seat(s) behind and/or adjacent outboard seats.  NOTE 3: Inoperative seats do not affect the required number of Flight Attendants.	
-01	Positioning Controls for Taxi, Takeoff, and Landing (TTL) (Mechanical and/or Electrical)					
-A		D	-	-	(M) May be inoperative and seat occupied provided seat is secured in the taxi, takeoff, and landing (TTL) position.	
-B		D	-	-	May be inoperative and seat occupied provided seat is immovable in the taxi, takeoff, and landing (TTL) position.	

(Continued)

<p>AIRCRAFT: ERJ-170, ERJ-190</p>	<p><b>TABLE KEY</b></p> <ol style="list-style-type: none"> <li>1. REPAIR CATEGORY</li> <li>2. NO. INSTALLED</li> <li>3. NO. REQUIRED FOR DISPATCH</li> <li>4. REMARKS OR EXCEPTIONS</li> </ol>
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**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
21-10	Passenger Seat(s) (Cont'd)					
-02	Underseat Baggage Restraining System	C	-	-	(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Baggage is not stowed under seat with inoperative restraining system,</li> <li>b) Associated seat is placarded "DO NOT STOW BAGGAGE UNDER THIS SEAT", and</li> <li>c) Procedures are established to alert Cabin Crew of inoperative restraining system.</li> </ol>	
-03	Armrest					
-A	With Seat Positioning Controls for Taxi, Takeoff, and Landing (TTL) and/or Other Controls	D	-	-	(M) May be inoperative or missing and seat occupied provided: <ol style="list-style-type: none"> <li>a) Armrest does not restrict access to any emergency exit, egress route, or main aisle, and</li> <li>b) If Armrest with seat control is missing or removed, seat is secured in taxi, takeoff, and landing (TTL) position.</li> </ol>	
-B	Without Seat Positioning Controls for Taxi, Takeoff, and Landing (TTL) and/or Other Controls	D	-	-	May be inoperative or missing and seat occupied provided it does not restrict access to any emergency exit, egress route, or main aisle.	
-04	Seat Translation Mechanism (LINEAGE 1000)	C	-	0	(M) May be inoperative provided seat is positioned and secured in the appropriate position for taxi, takeoff, and landing.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
21-20	Flight Attendant Seat Assembly (Single or Dual Position)	C	-	0	(M)(O) May be missing or inoperative provided: <ol style="list-style-type: none"> <li>a) No passengers are carried,</li> <li>b) A maximum of 19 persons are carried as authorized by 14 CFR for non-passenger-carrying operations,</li> <li>c) Inoperative folding type seat stows automatically or is secured in the retracted position, and</li> <li>d) Alternate procedures are established and used.</li> </ol>	
-01	Required Flight Attendant Seats	B	-	-	(M)(O) One seat position or assembly (dual position) may be inoperative provided: <ol style="list-style-type: none"> <li>a) Affected seat position or seat assembly is not occupied,</li> <li>b) Flight attendant(s) displaced by inoperative seat(s) occupies either an adjacent flight attendant seat or the passenger seat which is most accessible to the inoperative seat(s) so as to most effectively perform assigned duties,</li> <li>c) Alternate procedures are established and used as published in crewmember manuals,</li> <li>d) Folding type seat stows automatically or is secured in the retracted position, and</li> <li>e) Passenger seat assigned to flight attendant is placarded "FOR FLIGHT ATTENDANT USE ONLY".</li> </ol>	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
21-20	Flight Attendant Seat Assembly (Single or Dual Position) (Cont'd)					
-01	Required Flight Attendant Seats (Cont'd)				<p>NOTE 1: An automatic folding seat that will not stow automatically is considered inoperative.</p> <p>NOTE 2: A seat position with an inoperative or missing restraint system is considered inoperative.</p> <p>NOTE 3: Individual operators, when operating with inoperative seats, will consider the locations and combinations of seats to ensure that the proximity to exits and distribution requirements of the applicable 14 CFR are met.</p> <p>NOTE 4: If one side of a dual seat assembly is inoperative and a flight attendant is displaced to the adjacent seat, the adjacent seat must operate normally.</p> <p>(Continued)</p>	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
21-20	Flight Attendant Seat Assembly (Single or Dual Position) (Cont'd)					
-02	Excess Flight Attendant Seats	C	-	-	(M) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Affected seat position or seat assembly is not occupied, and</li> <li>b) Folding type seat stows automatically or is secured in the retracted position.</li> </ol> NOTE 1: An automatic folding seat that will not stow automatically is considered inoperative.  NOTE 2: A seat position with an inoperative or missing restraint system is considered inoperative.	
22-04	Passenger Service Unit (PSU) Test/Reset Function (EMBRAER 170/175/190/195/190-E2)	C	2	0	(O) May be inoperative provided alternate procedures are established and used.	
23-16	Powered Window Shades (LINEAGE 1000)	D	-	0	(M) May be inoperative provided: <ol style="list-style-type: none"> <li>a) The window shade of overwing exit is moved to open position, and</li> <li>b) System is deactivated.</li> </ol>	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
25-00	Flight Attendant Panels (FAP)					
-01	Forward FAP					
-A	EMBRAER 170/175/190/195	B	1	0	(O) May be inoperative provided: a) Aft FAP is operative, b) Passenger Service Unit (PSU) Test/Reset Switches are considered inoperative, and c) Lavatory Smoke Test Switches are considered inoperative.  NOTE: Any function on the FAP which operates normally may be used.	
-B	EMBRAER 190-E2	C	1	0	May be inoperative.  NOTE: Any function on the FAP which operates normally may be used.	
-02	Aft FAP					
-A	EMBRAER 170/175/190/195	B	1	0	(O) May be inoperative provided: a) Forward FAP is operative, and b) Water and Waste System indications are considered inoperative.  NOTE: Any function on the FAP which operates normally may be used.	
-B	EMBRAER 190-E2	C	1	0	May be inoperative provided alternate procedures are established and used for servicing of water and waste systems.  NOTE: Any function on the FAP which operates normally may be used.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
27-01	Drop-Down Window on Aft Cabin Divider (EMBRAER 170/175/190/195/190-E2)	D	-	0	(M) May be inoperative provided Drop-Down Window is removed or secured in the down position.	
30-03	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.	
34-03 ***	Wheelchair Restraint System	D	-	-	Any in excess of those required by 14 CFR may be inoperative or missing.	
40-03	Exterior Lavatory Door Ashtrays					
-01	Airplanes with More Than One Exterior Lavatory Door Ashtray Installed	A	-	-	One may be missing provided it is replaced within 10 consecutive calendar-days.	
-02	Airplanes with Only One Exterior Lavatory Door Ashtray Installed	A	1	0	May be missing provided it is replaced within 3 consecutive calendar-days.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
45-01	Lavatory Waste Receptacle Access Door	C	-	-	(M)(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Associated lavatory waste container is empty,</li> <li>b) Associated lavatory is used only by crewmembers, and</li> <li>c) Associated lavatory entrance door is locked closed and placarded "INOPERATIVE - DO NOT ENTER".</li> </ol> <p>NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers.</p>	
45-02	Lavatory Waste Container	C	-	0	(M)(O) For each lavatory, the lavatory waste bin may be inoperative or missing provided: <ol style="list-style-type: none"> <li>a) Crewmembers are briefed and do not use the lavatory waste receptacle, and</li> <li>b) Associated lavatory door is secured closed and placarded "INOPERATIVE - DO NOT ENTER".</li> </ol> <p>NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers.</p>	
60-00	Crash Axe/Crow Bar	D	-	-	Any in excess of those required by 14 CFR may be inoperative or missing.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
61-00	Emergency Locator Transmitter (ELT)					
-01 ***	Survival Type ELTs	D	-	-	Any in excess of those required by 14 CFR may be inoperative or missing.	
-02	Fixed ELTs					
-A		A	-	0	(M) May be inoperative provided: a) System is deactivated, and b) Repairs are made within 90 days.	
-B		A	-	0	May be missing provided: a) Repairs are made within 90 days, and b) A placard stating "ELT not installed" is placed in view of the pilot.	
-C		D	-	-	(M) Any in excess of those required by 14 CFR may be inoperative provided system is deactivated.	
-D		D	-	-	Any in excess of those required by 14 CFR may be missing.	
-03	ELT Indicator Light	D	-	0		
-04	ELT Aural Alarm	D	-	0		

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
62-01	Emergency Medical Equipment					
-01	Automatic External Defibrillator (AED) and/or Associated Equipment					
-A		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 cannot be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within one flight.	
-B		D	-	0	Any in excess of those required by 14 CFR may be incomplete, missing, or inoperative.	
-02	Emergency Medical Kit (EMK) and/or Associated Equipment					
-A		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 cannot be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within one flight.	
-B		D	-	0	Any in excess of those required by 14 CFR may be incomplete, missing, or inoperative.	

(Continued)

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
62-01	Emergency Medical Equipment (Cont'd)					
-03	First Aid Kit (FAK) and/or Associated Equipment					
-A		A	-	-	(O) If more than one is required by 14 CFR, 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 cannot be mistaken for a fully serviceable unit, and b) Repairs or replacements are made within one flight.	
-B		D	-	-		Any in excess of those required by 14 CFR may be incomplete, missing, or inoperative.
62-02	Flotation Equipment (Crew and Passenger)	D	-	-	Deleted, Revision 16.	
62-03	Megaphones					
-A		D	-	-	Any in excess of those required by 14 CFR may be inoperative or missing provided: a) Inoperative megaphone is removed from the passenger cabin, b) Associated placard is removed or obscured, and c) Required distribution is maintained.	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
62-03	Megaphones (Cont'd)					
-B		C	-	0	(O) May be missing or inoperative provided: a) No passengers are carried, b) A maximum of 19 persons are carried as authorized by 14 CFR for non-passenger-carrying operations, and c) Alternate procedures are established and used.	
62-05	Pyrotechnic Signal Devices	D	-	-	Any in excess of those required by 14 CFR may be inoperative or missing.	
62-07	Flight Deck/Attendant Flashlight and Holder Assemblies					
-01	Flashlight					
-A		C	-	-	May be inoperative or missing provided crewmember assigned to associated seat has a flashlight of equivalent characteristics readily available.	
-B		C	-	0	(O) May be missing or inoperative provided: a) No passengers are carried, b) A maximum of 19 persons are carried as authorized by 14 CFR for non-passenger-carrying operations, and c) Alternate procedures are established and used.	
-02	Holder Assembly	C	-	-	May be inoperative or missing provided associated flashlight is stowed and its battery charged by alternate means.	

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**25. Equipment/Furnishings**

Sequence No.	Item	1	2	3	4	Change Bar
62-09 ***	Overwing Escape Hatch Lifeline	D	-	0	May be inoperative or missing provided airplane is not operated on extended overwater flights.	
66-00	Life Jackets	D	-	-	(M)(O) Any in excess of those required may be inoperative or missing provided: a) Required distribution is maintained, b) Inoperative life jacket and its installed location are placarded inoperative, c) Inoperative life jackets are secured out of sight, and d) Procedures are established and used to alert crewmembers of inoperative or missing equipment.	
66-01 ***	Life Raft					
-A		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 crewmembers of inoperative or missing equipment.	
-B		D	-	-	(O) May be inoperative or missing provided: a) Extended overwater flights are not conducted, and b) Procedures are established and used to alert crewmembers of inoperative or missing equipment.	

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-------------------------------	--

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
10-01	Lavatory Smoke Detection System (LINEAGE 1000)					
-01	Fwd and Mid Cabin Lavatory					
-A		C	-	-	(M)(O) May be inoperative provided: a) Lavatory waste receptacle is empty, and b) Lavatory door is locked closed and placarded "INOPERATIVE - DO NOT ENTER".	
-B		C	-	-	For each lavatory, the lavatory smoke detection system may be inoperative provided: a) Lavatory waste compartment fire extinguisher is operative and b) Operating rules do not require a smoke detector.	
-02	VIP Cabin Lavatory	C	-	-	(M)(O) May be inoperative provided: a) Lavatory waste receptacle is empty, and b) Lavatory door is locked closed and placarded "INOPERATIVE - DO NOT ENTER".	
					NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers.	
10-02	Mid Cabin (IFE) Rack Smoke Detection System (LINEAGE 1000)	C	-	0	(M) May be inoperative provided: a) The IFE system is deactivated, and b) The SATCOM system is deactivated.	
12-00	APU Fire/Overheat Detection Loops	C	2	0	Except for ER operations, one or two loops may be inoperative provided APU is not used.	

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DATE: 11/23/2018

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
14-00	Lavatory Smoke Detection System (EMBRAER 170/175/190/195/190-E2)	C	-	-	(M)(O) For each lavatory, the lavatory smoke detection system may be inoperative provided: <ol style="list-style-type: none"> <li>a) Lavatory waste receptacle is empty,</li> <li>b) Lavatory door is locked closed and placarded "INOPERATIVE - DO NOT ENTER", and</li> <li>c) Lavatory is used only by crewmembers.</li> </ol> <p>NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers.</p>	
14-01	Lavatory Smoke Test Switches on Flight Attendant Panel (EMBRAER 170/175/190/195)	C	-	0	(O) May be inoperative provided Lavatory Smoke Detector is tested once each flight-day.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
15-00	Cargo Compartment Smoke Detection System					
-01	Forward Cargo Compartment Smoke Detectors					
-A	EMBRAER 170/175/190/195/190-E2/ LINEAGE 1000	C	-	0	(O) May be inoperative provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	
-B	EMBRAER 170/175	C	3	1	May be inoperative provided live animals are not carried in the forward cargo compartment.	
-C	EMBRAER 190/195	C	4	2	May be inoperative provided live animals are not carried in the forward cargo compartment.	
-D	EMBRAER 190-E2	C	3	2	One may be inoperative provided live animals are not carried in the forward cargo compartment.	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar	
15-00	Cargo Compartment Smoke Detection System (Cont'd)						
-02	Aft Cargo Compartment Smoke Detectors						
-A	EMBRAER 170/175/190/195/190-E2/ LINEAGE 1000	C	-	0	(O) May be inoperative provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.		
-B	EMBRAER 170/175	C	2	1			
-C	EMBRAER 190/195	C	3	2			
-D	EMBRAER 190-E2	C	4	2		Up to two non-adjacent Cargo Smoke Detectors may be inoperative.	

<p>AIRCRAFT: ERJ-170, ERJ-190</p>	<p><b>TABLE KEY</b></p> <ol style="list-style-type: none"> <li>1. REPAIR CATEGORY</li> <li>2. NO. INSTALLED</li> <li>3. NO. REQUIRED FOR DISPATCH</li> <li>4. REMARKS OR EXCEPTIONS</li> </ol>
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**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
16-00	Recirculation System Smoke Detector					
-A	EMBRAER 170/175/190/195	B	1	0	(O) Except for ER operations, may be inoperative or missing provided: a) Recirculation Fans (RECIRC) remain selected off, b) Both Air Conditioning Packs are operating normally, and c) Live animals are not carried in the forward cargo compartment.	
-B	EMBRAER 170/175	B	1	0	(M)(O) May be inoperative provided: a) Recirculation Fans (RECIRC) remain selected off, b) One Air Conditioning Pack is operating normally, c) Live animals are not carried in the forward cargo compartment, and d) Both Engine ITT margins are verified to be within limits.	
-C	EMBRAER 190/195	B	1	0	(O) Except for ER operations, may be inoperative or missing provided: a) Recirculation Fans (RECIRC) remain selected off, b) One Air Conditioning Pack is operating normally, and c) Live animals are not carried in the forward cargo compartment.	
16-01	Electronic Bay Backup Smoke Detector (EMBRAER 190-E2)	C	1	0		
16-05	Forward Electronic Bay Smoke Detector (EMBRAER 190-E2)	C	1	0	May be inoperative provided FWD EBAY SMK DET FAIL is not displayed on EICAS.	
16-07	Middle Electronic Bay Smoke Detector (EMBRAER 190-E2)	C	1	0	May be inoperative provided CTR EBAY SMK DET FAIL is not displayed on EICAS.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
16-09	Aft Electronic Bay Smoke Detector (EMBRAER 190-E2)	C	1	0	May be inoperative provided AFT EBAY SMK DET FAIL is not displayed on EICAS.	
18-01 ***	In-Flight Entertainment System (IFE) Smoke Detector (EMBRAER 170/175/190/195)	D	1	0	(M) May be inoperative provided IFE system is deactivated.	
22-00	APU Fire Extinguishing System	C	1	0	Except for ER operations, may be inoperative provided APU is not used.	
22-09	APU Fire Extinguisher Button Illumination	C	1	0	Except for ER operations, may be inoperative provided APU is not used.	
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	C	1	0	(O) May be inoperative provided APU FIRE Warning EICAS Message, Master Warning lights, APU Emergency Stop Button Illumination, and Aural Warning are verified to operate normally.	
-02	EMBRAER 190-E2	C	1	0	(O) May be inoperative provided APU Emergency Stop Button and Engine 1 fire handle illuminations are verified to operate normally.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
23-00	Cargo Compartment Fire Extinguishing System					
-01	Forward Cargo Compartment Fire Extinguishing System	C	1	0	(O) May be inoperative provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	
-02	Aft Cargo/Baggage Compartment Fire Extinguishing System	C	1	0	(O) May be inoperative provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	
23-03	Cargo Compartment Fire Extinguishing Bottle Cartridge (EMBRAER 190-E2)					
-01	Forward Cargo Fire Extinguishing Bottle Cartridge EED	C	4	2	One EED of each bottle may be inoperative.	
-02	Aft Cargo Fire Extinguishing Bottle Cartridge EED	C	4	2	One EED of each bottle may be inoperative.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
23-13	Cargo Compartment Fire Extinguishing Buttons Illumination					
-01	Forward Cargo Compartment Fire Extinguishing Button Illumination	C	1	0	(O) May be inoperative provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	
-02	Aft Cargo/Baggage Compartment Fire Extinguishing Button Illumination	C	1	0	(O) May be inoperative provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
24-01	Portable Fire Extinguishers					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	D	-	-	Any in excess of those required by 14 CFR may be inoperative or missing provided: <ol style="list-style-type: none"> <li>a) The inoperative fire extinguisher is tagged inoperative, removed from the installed location, and placed out of sight so it cannot be mistaken for a functional unit, and</li> <li>b) Required distribution is maintained.</li> </ol>	
-02	EMBRAER 190-E2	D	-	4	Any in excess of four may be inoperative or missing provided: <ol style="list-style-type: none"> <li>a) The inoperative fire extinguisher is tagged inoperative, removed from the installed location, and placed out of sight so it cannot be mistaken for a functional unit, and</li> <li>b) Required distribution is maintained.</li> </ol>	
25-00	Lavatory Fire Extinguisher Systems (EMBRAER 170/175/190/195/190-E2)	C	-	-		
-01	Passenger Configuration					
-A		C	-	0	For each lavatory, the lavatory fire extinguisher system may be inoperative provided Lavatory Smoke Detector system operates normally.	

(Continued)

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
25-00	Lavatory Fire Extinguisher Systems (EMBRAER 170/175/190/195/190-E2)	C	-	-		
-01	Passenger Configuration					
-B		C	-	0	(M)(O) For each lavatory, the lavatory fire extinguisher system may be inoperative provided: <ol style="list-style-type: none"> <li>a) Lavatory waste receptacle is empty,</li> <li>b) Lavatory door is locked closed and placarded "INOPERATIVE - DO NOT ENTER", and</li> <li>c) Lavatory is used only by crewmembers.</li> </ol>	
					NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**26. Fire Protection**

Sequence No.	Item	1	2	3	4	Change Bar
27-01	Lavatory Fire Extinguishing System (LINEAGE 1000)					
-01	Fwd and Mid Cabin Lavatory					
-A		C	-	-	(M)(O) May be inoperative provided: a) Lavatory waste receptacle is empty, and b) Lavatory door is locked closed and placarded "INOPERATIVE - DO NOT ENTER".	
-B		C	-	-	(M)(O) For each lavatory, the lavatory fire extinguishing system may be inoperative provided: a) Lavatory smoke detection system operates normally, and b) Operating rules do not require a fire detection system.	
-02	VIP Cabin Lavatory	C	-	-	(M)(O) May be inoperative provided: a) Lavatory waste receptacle is empty, and b) Lavatory door is locked closed and placarded "INOPERATIVE - DO NOT ENTER".	
NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers.						

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DATE: 04/13/2020

<p>AIRCRAFT: ERJ-170, ERJ-190</p>	<p><b>TABLE KEY</b></p> <ol style="list-style-type: none"> <li>1. REPAIR CATEGORY</li> <li>2. NO. INSTALLED</li> <li>3. NO. REQUIRED FOR DISPATCH</li> <li>4. REMARKS OR EXCEPTIONS</li> </ol>
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**27. Flight Controls**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Flight Controls System					
-01	System Faults (EMBRAER 170/175/190/195/ LINEAGE 1000) (Post-Mod Epic Load 25.3, 25.4, and on)	A	1	0	May be dispatched with FLT CTRL FAULT Advisory EICAS message provided repairs are made within 48 hours.	
03-01	Flight Controls Panel					
-01	Flight Control Mode Button Illumination					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	C	3	0	(O) May be inoperative provided: a) The associated button is verified operative, and b) ELEVATOR FAULT, RUDDER FAULT or SPOILER FAULT Caution EICAS message is not displayed on EICAS.	
-B	EMBRAER 190-E2	C	1	0	(O) May be inoperative provided: a) The associated button is verified operative, and b) FLT CTRL N-MODE FAIL Warning EICAS message is not displayed on EICAS.	
-02	Stick Shaker System Cutout Button Illumination	C	2	0	(O) May be inoperative provided: a) The associated button is verified operative, and b) SHAKER 1(2) FAIL Advisory EICAS message is not displayed on EICAS.	
03-04	Pitch Trim System Channel Cutout Pushbutton Illumination (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	0	(M) May be inoperative provided the pitch trim channels are verified operative.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**27. Flight Controls**

Sequence No.	Item	1	2	3	4	Change Bar
11-01	Breakout-Increase Device (BOID) System (EMBRAER 190-E2)					
-01	Control Wheel BOID					
-A		C	2	1	(M) One may be inoperative provided: a) The opposite control wheel BOID is verified operative before each flight, and b) Affected control wheel is verified free to move.	
-B		B	2	0	May be inoperative provided autopilot is not used.	
-02	Control Column BOID					
-A		C	2	1	(M) One may be inoperative provided: a) The opposite control column BOID is verified operative before each flight, and b) Affected control column is verified free to move.	
-B		B	2	0	May be inoperative provided autopilot is not used.	
-03	BOID Module					
-A		C	2	1	(M) One may be inoperative provided the opposite Control Wheel BOID and Control Column BOID are verified operative before each flight.	
-B		B	2	0	May be inoperative provided autopilot is not used.	
11-12	ROLL CONTROL DISC Advisory EICAS Message (EMBRAER 170/175/190/195/ LINEAGE 1000)	B	1	0	(O) May be inoperative provided: a) Both control wheels are verified to be connected before each flight, and b) Autopilot System is considered inoperative.	

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DATE: 04/13/2020

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**27. Flight Controls**

Sequence No.	Item	1	2	3	4	Change Bar
14-01	Roll Trim Position Indication on EICAS (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	(O) May be inoperative provided Ailerons are verified centered before each flight.	
14-02	Aileron Trim System (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	(M) May be inoperative provided roll trim actuator is deactivated at neutral position.  NOTE: Roll Trim position indication on EICAS will be inoperative.	
23-03	Rudder Pedal Adjustment System					
-A		C	2	0	May be inoperative provided Rudder Pedals position is acceptable to the affected flightcrew member.	
-B		C	2	0	(M) May be inoperative provided Rudder Pedals may be adjusted to suit individual pilot requirements.	
24-01	Yaw Trim Position Indication on EICAS (EMBRAER 170/175/190/195/ LINEAGE 1000)	B	1	0	(O) May be inoperative provided Rudder is verified centered before each flight.	
31-06	PITCH CONTROL DISC Advisory EICAS Message (EMBRAER 170/175/190/195/ LINEAGE 1000)	B	1	0	(O) May be inoperative provided: a) Both control columns are verified to be connected before each flight, and b) Autopilot System is considered inoperative.	

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DATE: 04/13/2020

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**27. Flight Controls**

Sequence No.	Item	1	2	3	4	Change Bar
33-06 ***	Tail Strike Avoidance (EMBRAER 190/195)	C	1	0	(O) May be inoperative provided tail strike avoidance procedures are established and used.	
36-01	Stick Shakers	B	2	1	(O) One may be inoperative provided Stall Warning System is verified to operate normally before each flight.	
41-01	Pitch Trim Position Indication on EICAS	B	1	0	(M)(O) May be inoperative provided horizontal stabilizer position is set by means of markings on tail cone before each flight.	
43-02	Pitch Trim Switches					
-01					Deleted Rev. 18	
-02	Backup Trim Switch on the Control Pedestal	C	1	0	May be inoperative.	

REVISION NO. 18

PAGE NO. 27-5

DATE: 04/13/2020

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**27. Flight Controls**

Sequence No.	Item	1	2	3	4	Change Bar
53-00	Slat/Flap Electrical System (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-01	System Faults					
-A		B	-	-	(O) May be dispatched with FLAP LO RATE Advisory EICAS message provided: <ol style="list-style-type: none"> <li>a) APU generator is operative,</li> <li>b) Both Engine Driven Generators are operative,</li> <li>c) Both Slat Channels are operative, and</li> <li>d) There are no obstacles in the Net Takeoff Flight Path above Level Off Height.</li> </ol> NOTE: Flaps will operate at half extension and retraction rates.	
-B		B	-	-	(O) May be dispatched with FLAP LO RATE Advisory EICAS message provided: <ol style="list-style-type: none"> <li>a) Flap Channel 01 is verified operative,</li> <li>b) Both Slat Channels are operative, and</li> <li>c) There are no obstacles in the Net Takeoff Flight Path above Level Off Height.</li> </ol> NOTE: Flaps will operate at half extension and retraction rates.	

(Continued)

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**27. Flight Controls**

Sequence No.	Item	1	2	3	4	Change Bar
53-00	Slat/Flap Electrical System (EMBRAER 170/175/190/195/ LINEAGE 1000) (Cont'd)					
-01	System Faults (Cont'd)					
-C		B	-	-	(O) May be dispatched with SLAT LO RATE Advisory EICAS message provided: <ol style="list-style-type: none"> <li>a) APU generator is operative,</li> <li>b) Both Engine Driven Generators are operative,</li> <li>c) Both Flap Channels are operative, and</li> <li>d) There are no obstacles in the Net Takeoff Flight Path above Level Off Height.</li> </ol> NOTE: Slats will operate at half extension and retraction rates.	
-D		B	-	-	(O) May be dispatched with SLAT LO RATE Advisory EICAS message provided: <ol style="list-style-type: none"> <li>a) Slat Channel 02 is verified operative,</li> <li>b) Both Flap Channels are operative, and</li> <li>c) There are no obstacles in the Net Takeoff Flight Path above Level Off Height.</li> </ol> NOTE: Slats will operate at half extension and retraction rates.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Fuel System Synoptic Displays (MFD Fuel Page)	C	2	0	(O) MFD indications not addressed elsewhere in the MMEL may be inoperative.	
11-02	Fuel Tanks Drain/Dump Valves (EMBRAER 190-E2)					
-01	Drain Function					
-A		C	4	3	(M) One center tank valve may be inoperative provided: a) Affected valve is checked for no leaks, and b) No water is found at opposite center tank drainage point before each flight-day.	
-B		C	4	2	(M) One or both center tank valves may be inoperative provided: a) Affected valves are checked for no leaks, and b) Center Fuel Transfer System is considered inoperative.	
-02	Dump Function	D	4	0	(M) May be inoperative provided the affected valve is checked for no leakage.	
11-05	Drain Valves					
-A	EMBRAER 170/175	C	4	3	(M) One may be inoperative provided there is no evidence of leakage.	
-B	EMBRAER 170/175	B	4	2	(M) One Inner Drain Valve and one Outer Drain Valve on the opposite side may be inoperative provided there is no evidence of leakage.	
13-00	Auxiliary Fuel System (LINEAGE 1000)	C	1	0	(M)(O) May be inoperative provided: a) Both auxiliary tanks are empty, b) Fuel Transfer Mode is selected OFF, and c) Isolation pushbutton is pushed in.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
14-03	Fwd and Aft Auxiliary Tank Vent Shutoff Valves (LINEAGE 1000)	C	2	0	(M) May be inoperative if affected valves are verified open during refueling and are closed after refueling panel is closed.	
21-05	AC Wing Fuel Pump Pressure Switch					
-A		C	2	0	(M) One or both may be inoperative provided associated pump is verified to operate normally before each flight.	
-B		C	2	0	(O) One or both may be inoperative provided associated pump is verified to operate normally before each flight.	
21-10	Wing Scavenge Ejector Pump System (EMBRAER 190-E2)	A	2	1	Scavenge system of one wing may be inoperative provided: a) Associated AC Wing Fuel Pump Pressure Switch is operative, b) Associated Engine Fuel Filter Differential Pressure Sensor is operative, c) Associated FUEL FEED 1(2) FAULT EICAS message is not displayed with engine running, and d) Repairs are made within 3 flight-days.	
21-16 ***	Crossfeed Override Function (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	Except for ER operations, may be inoperative.	
21-33	FUEL AC PUMP 1(2) FAIL Advisory EICAS Messages				Deleted, Revision 16. (Included in item 28-21-05.)	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
22-01	DC Pump	C	1	0	(M) May be inoperative provided: a) DC Pump is deactivated, b) DC Pump remains selected OFF, and c) AC power is available.	
22-07	APU Fuel Shutoff Valve	C	1	0	(M) Except for ER operations, may be inoperative provided: a) APU is not used, and b) Valve is deactivated closed.	
-01	Position Indication					
-A		C	1	0	(M) Except for ER operations, may be inoperative provided: a) APU is used only on ground, and b) APU Fuel Shutoff Valve is verified closed after APU shutdown.	
-B		C	1	0	May be inoperative provided APU is not used.	
22-08	APU Fuel Feed Line (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	(M) Except for ER operations, may be inoperative provided: a) APU fuel feed line is drained, b) APU fuel SOV is secured closed, and c) APU is not used.	
22-17	APU FUEL SOV CLOSED Status EICAS Message				Deleted, Revision 16. (Included in item 28-22-07.)	
22-19	APU FUEL SOV FAIL Caution EICAS Message				Deleted, Revision 16. (Included in item 28-22-07.)	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
23-00	Pressure Refueling/Defueling System					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	1	0	(M) May be inoperative provided airplane is refueled by gravity.	
-B	Automatic Mode	C	1	0	(M) May be inoperative provided airplane is refueled by pressure manual mode or by gravity.	
-02	EMBRAER 190-E2					
-A		C	1	0	(M) May be inoperative provided aircraft is refueled by gravity.  NOTE: EMBRAER 190-E2 center tank cannot be refueled by gravity.	
-B		C	1	0	(M) May be inoperative provided: a) Refueling shutoff valves are operated manually, and b) Aircraft is refueled by pressure.	
-C	Automatic Mode	C	1	0	(M) May be inoperative provided aircraft is refueled by pressure manual mode or by gravity.  NOTE: EMBRAER 190-E2 center tank cannot be refueled by gravity.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
23-01	Refueling/Defueling Control Panel (EMBRAER 190-E2)					
-01	Tanks Fuel Quantity Indication	C	1	0	(M) May be inoperative provided aircraft is refueled by pressure manual mode or by gravity.  NOTE: EMBRAER 190-E2 center tank cannot be refueled by gravity.	
-02	Selected Fuel Quantity Indication	C	1	0	(M) May be inoperative provided aircraft is refueled by pressure manual mode or by gravity.  NOTE: EMBRAER 190-E2 center tank cannot be refueled by gravity.	
-03	RH/LH/Center Tank Refueling Shutoff Valve Closed Indication Light	C	3	0	May be inoperative provided no failure is indicated by FAIL light and by panel display prior to each refueling.	
-04	Defuel Valve Open Indication Light	D	1	0	(M) May be inoperative provided valve position is visually checked closed after defueling operations.	
23-02	Refueling Shutoff Valves (EMBRAER 190-E2)					
-A		C	3	0	(M) May be inoperative provided: a) Aircraft is refueled by gravity, and b) Shutoff valves are deactivated closed after refueling.  NOTE: EMBRAER 190-E2 center tank cannot be refueled by gravity.	

(Continued)

REVISION NO. 16

PAGE NO. 28-6

DATE: 11/23/2018

AIRCRAFT:  
ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
23-02	Refueling Shutoff Valves (EMBRAER 190-E2) (Cont'd)					
-B		C	3	0	(M) May be inoperative provided: a) Refueling shutoff valves are operated manually, b) Aircraft is refueled by pressure, and c) Shutoff valves are deactivated closed after refueling.	
23-09	Fuel Quantity Indication on Refueling Panel (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	(M) May be inoperative provided airplane is refueled by pressure manual mode or by gravity.	
23-13	Pressure Refueling/Defueling Adapter Cap	D	1	0	(M) May be inoperative or missing provided: a) Refueling receptacle is visually checked for contamination before each refueling, and b) No leakage can be detected after refueling is completed.	
23-21	Defueling Shutoff Valve	C	1	0	(M) May be inoperative provided shutoff valve is deactivated closed.	
-01	Position Indication					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	C	1	0	(M) May be dispatched with DEFUEL SOV OPEN Advisory EICAS message provided shutoff valve is secured closed except for defueling.	
-B	EMBRAER 190-E2	C	1	0	(M) May be dispatched with DEFUEL SOV OPEN Advisory EICAS message provided shutoff valve is deactivated closed.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
23-27	RH/LH Tank Refueling Shutoff Valve Closed Indication Light on the Refueling Panel (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	0	(M) May be inoperative provided valve is confirmed closed prior to each refueling.	
23-29	Defueling Shutoff Valve Open Indication Light on the Refueling Panel (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	(M) May be inoperative provided shutoff valve is verified closed and then after each subsequent defueling.	
23-31	DEFUEL SOV OPEN Advisory EICAS Message				Deleted, Revision 16. (Included in item 28-23-21.)	
25-00	Center Fuel Transfer System (EMBRAER 190-E2)					
-A		C	1	0	(M)(O) May be inoperative provided: a) System is deactivated, b) Center fuel quantity indication is operative, c) Wing tanks are refueled by pressure manual mode or by gravity, and d) Aircraft center of gravity is calculated by alternate means.  NOTE: Center tank fuel is unavailable. Maximum fuel available is limited to about 4,500 kg (9,920 lb).	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
25-00	Center Fuel Transfer System (EMBRAER 190-E2) (Cont'd)					
-B		C	1	0	(M) May be inoperative provided: a) System is deactivated, b) Center tank is fully drained, and c) Wing tanks are refueled by pressure manual mode or by gravity.  NOTE: Maximum fuel available is limited to about 4,500 kg (9,920 lb).	
25-01	AC Center Fuel Transfer Pump (EMBRAER 190-E2)					
-A		C	2	0	One or both may be inoperative provided Center Fuel Transfer System is considered inoperative.	
-B		C	2	1	(M)(O) One may be inoperative provided: a) Affected pump is deactivated, and b) AC Center Fuel Transfer Pump Pressure Switch of opposite pump is verified operative before first flight of each flight-day.	

REVISION NO. 16

PAGE NO. 28-9

DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
25-03	AC Center Fuel Transfer Pump Pressure Switch (EMBRAER 190-E2)					
-A		C	2	0	One or both may be inoperative provided Center Fuel Transfer System is considered inoperative.	
-B		C	2	1	(M)(O) One may be inoperative provided: <ol style="list-style-type: none"> <li>a) Associated AC Transfer Pump is deactivated, and</li> <li>b) Opposite AC Transfer Pump is verified operative before the first flight of each flight-day.</li> </ol>	
25-04	Center Fuel Transfer Valve (EMBRAER 190-E2)	C	1	0	(M) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Center Fuel Transfer System is considered inoperative, and</li> <li>b) Center Fuel Transfer Valve is deactivated closed.</li> </ol>	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
41-00	Fuel Quantity Indicating					
-01	Wing Fuel Quantity Indication on EICAS and MFD					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	A	6	3	(M)(O) Except for ER operations, indications for one wing tank may be inoperative provided: <ul style="list-style-type: none"> <li>a) Fuel quantity in associated tank is verified by an alternate means,</li> <li>b) Fuel flow and fuel used indications are available and are monitored throughout flight,</li> <li>c) Associated FUEL 1(2) LO LEVEL Warning EICAS message is operative, and</li> <li>d) Repairs are made within 3 flight-days.</li> </ul>	
-B	EMBRAER 190-E2	A	6	3	(M)(O) Indications for one wing tank may be inoperative provided: <ul style="list-style-type: none"> <li>a) Both wing tanks are fully refueled,</li> <li>b) Fuel flow and fuel used indications are available and are monitored throughout flight,</li> <li>c) Both Low Level Sensors are operative,</li> <li>d) Center Fuel Transfer System is considered inoperative, and</li> <li>e) Repairs are made within 3 flight-days.</li> </ul>	
-02	Center Fuel Quantity Indication on EICAS and MFD (EMBRAER 190-E2)	C	3	0	May be inoperative provided Center Fuel Transfer System is considered inoperative.	

<p>AIRCRAFT: ERJ-170, ERJ-190</p>	<p><b>TABLE KEY</b></p> <ol style="list-style-type: none"> <li>1. REPAIR CATEGORY</li> <li>2. NO. INSTALLED</li> <li>3. NO. REQUIRED FOR DISPATCH</li> <li>4. REMARKS OR EXCEPTIONS</li> </ol>
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**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
41-01	Fuel Quantity Probes (EMBRAER 190-E2)					
-01	Wing Tank Probes	C	22	20	(O) One per wing tank may be inoperative provided loss of accuracy is taken into account for flight planning.  NOTE: For more than one inoperative per wing tank, refer to item 28-41-00.	
-02	Center Tank Probes	C	11	10	(O) One center tank probe may be inoperative provided loss of accuracy is taken into account for flight planning.  NOTE: For more than one inoperative, refer to item 28-41-00.	
41-02	Tank High Level Sensors (EMBRAER 190-E2)	C	4	0	May be inoperative provided the Pressure Refueling/Defueling System is considered inoperative.	
41-03	Fuel Quantity and Management Computer (FQMC) (EMBRAER 190-E2)					
-01	Channels	A	2	1	(M) One channel may be inoperative provided: a) Affected channel is deactivated, b) Both Low Level Sensors are operative, c) Pressure Refueling System is considered inoperative, and d) Repairs are made within 3 flight-days.	
-02	Level Sensing Board	C	1	0	May be inoperative provided: a) Pressure Refueling/Defueling System is considered inoperative, and b) Fuel Low Level Sensors are considered inoperative.	

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PAGE NO. 28-12

DATE: 11/23/2018

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**28. Fuel**

Sequence No.	Item	1	2	3	4	Change Bar
42-00	Magnetic Level Indicators (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	6	0	May be inoperative provided Fuel Quantity Indication on EICAS and MFD operates normally.	
43-00	Fuel Temperature Indicating System	C	1	0	(O) May be inoperative provided: a) Total Air Temperature (TAT) is used as an indication of fuel temperature, and b) Total Air Temperature (TAT) is equal to or above -37 °C.	
44-00	FUEL 1(2) LO LEVEL Warning EICAS Message				Deleted, Revision 16. (Included in item 28-44-01.)	
44-01	Fuel Low Level Sensor					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	2	1	(O) One may be inoperative provided associated fuel quantity indications on EICAS and MFD are available and are monitored throughout flight.	
-B		C	2	0	(O) Both may be inoperative provided fuel quantity indications on EICAS and MFD are available on both sides and are monitored throughout flight.	
-02	EMBRAER 190-E2	C	2	1	One may be inoperative provided both wing fuel quantity indications are operative.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**29. Hydraulic Power**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Hydraulic System Synoptic Displays (MFD Hydraulic Page)	C	-	0	(O) MFD indications not addressed elsewhere in the MMEL may be inoperative.	
11-01	Engine Driven Pumps (EDP)					
-01	Depressurization Function					
-A		C	2	1	May be inoperative on EDP 1 provided: a) Both Starter Control Valves (SCV) operate normally, b) Engine Bleed System 2 operates normally, and c) Crossbleed Valve operates normally.	
-B		C	2	1	May be inoperative on EDP 2 provided: a) Both Starter Control Valves (SCV) operate normally, b) Engine Bleed System 1 operates normally, and c) Crossbleed Valve operates normally.	
-C		C	2	1	One may be inoperative provided: a) Both Starter Control Valves (SCV) operate normally, b) APU Pneumatic Bleed System operates normally, and c) Crossbleed Valve operates normally.	
-02	ENG PUMP SHUTOFF Pushbutton Illumination on Hydraulic Control Panel	C	2	0	(O) May be inoperative provided ENG PUMP SHUTOFF pushbutton is verified operative.	

REVISION NO. 16

PAGE NO. 29-2

DATE: 11/23/2018

AIRCRAFT:  
ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**29. Hydraulic Power**

Sequence No.	Item	1	2	3	4	Change Bar
11-03	Power Transfer Unit (PTU)					
-01	Automatic Activation Function					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	A	1	0	(O) May be inoperative provided: a) PTU is selected on before takeoff and landing, and b) Repairs are made within 3 flight-days.	
					NOTE: The HYD PTU NOT AUTO Advisory EICAS message is displayed.	
-B	EMBRAER 190-E2	A	1	0	(O) May be inoperative provided: a) PTU is selected on before takeoff, and b) Repairs are made within 3 flight-days.	
					NOTE: The HYD PTU NOT AUTO Advisory EICAS message is displayed.	
11-04	Systems 1 and 2 Filter Manifold Differential Pressure Indicators (DPI)	A	6	4	One per system may be inoperative provided repairs are made within 3 flight-days.	
11-06	Systems 1 and 2 Case Drain Differential Pressure Indicators	A	2	0	May be inoperative provided repairs are made within 3 flight-days.	
11-10	Systems 1 and 2 Reservoirs Relief Bleed Valves	B	2	0	(M) Bleed function may be inoperative provided: a) Affected valve is verified for no evidence of leakage, and b) Associated reservoir quantity is verified once each flight-day.	

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PAGE NO. 29-3

DATE: 11/23/2018

<p>AIRCRAFT: ERJ-170, ERJ-190</p>	<p><b>TABLE KEY</b></p> <ol style="list-style-type: none"> <li>1. REPAIR CATEGORY</li> <li>2. NO. INSTALLED</li> <li>3. NO. REQUIRED FOR DISPATCH</li> <li>4. REMARKS OR EXCEPTIONS</li> </ol>
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**29. Hydraulic Power**

Sequence No.	Item	1	2	3	4	Change Bar
11-21	Systems 1 and 2 Electrical Pumps Shock Mounts (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	8	6	One shock mount per pump may be inoperative.	
11-30	Systems 1 and 2 Accumulators Pressure Indicators	C	2	0	(M) May be inoperative provided affected accumulator pre-charge pressure is verified adequate once each flight-day.	
12-01	System 3 Electrical Pumps	C	2	1	Pump 3B may be inoperative provided it remains selected OFF.	
12-02	System 3 Filter Manifold Differential Pressure Indicators	A	2	1	One may be inoperative provided repairs are made within 3 flight-days.	
12-04	System 3 Case Drain Differential Pressure Indicator	A	1	0	May be inoperative provided repairs are made within 3 flight-days.	
12-07	System 3 Reservoir Relief Bleed Valve	B	1	0	(M) Bleed Function may be inoperative provided: a) Affective valve is verified for no evidence of leakage, and b) Associated reservoir quantity is verified once each flight-day.	
12-11	System 3 Electrical Pumps Shock Mounts (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	8	6	One shock mount per pump may be inoperative.	
12-17	System 3 Electrical Pumps Pressure Attenuator (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	(M) May be missing provided affected attenuator connection remains capped.	

REVISION NO. 16

PAGE NO. 29-4

DATE: 11/23/2018

AIRCRAFT:  
ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**29. Hydraulic Power**

Sequence No.	Item	1	2	3	4	Change Bar
12-18	System 3 Accumulator Pressure Indicator	C	1	0	(M) May be inoperative provided affected accumulator pre-charge pressure is verified adequate once each flight-day.	
13-00	Systems 1, 2, and 3 Ground Service Connections	C	9	0	(M) May be inoperative closed provided: a) Affected connection is verified for no evidence of leakage, and b) Associated Reservoir quantity is verified once each flight-day.	
31-01	Systems 1, 2, and 3 Pressure Indications on MFD	C	6	0	May be inoperative provided HYD 1(2)(3) LO PRESS Caution message is not displayed on EICAS.	
31-07	Alternating Current Motor Pump (ACMP) Pressure Switch (EMBRAER 190-E2)					
-01	ACMP 1B and ACMP 2B Pressure Switch	C	2	0	(O) May be inoperative provided associated ACMP is verified operative before each flight.	
-02	ACMP 3B Pressure Switch					
-A		C	1	0	(O) May be inoperative provided ACMP 3B is verified operative before each flight.	
-B		C	1	0	May be inoperative provided ACMP 3B is considered inoperative.	
32-00	Systems 1 and 3 Quantity Indications on MFD	C	4	0	(M) May be inoperative provided quantity is verified on associated Reservoir Quantity Indicator once each flight-day.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**29. Hydraulic Power**

Sequence No.	Item	1	2	3	4	Change Bar
32-01	Systems 2 Quantity Indication on MFD	C	2	0	(M)(O) May be inoperative provided: a) Quantity is verified on Reservoir 2 Quantity Indicator once each flight-day, b) Takeoffs are accomplished with PTU turned on, and c) Takeoff and landings are accomplished with Electrical Pump 2 turned ON.	
33-01	Systems 1, 2, and 3 Temperature Indications on MFD					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	C	6	0	(O) May be inoperative provided: a) HYD TEMP SENS FAIL Advisory message is not displayed on EICAS, and b) Alternate procedures are established and used.	
-02	EMBRAER 190-E2	C	6	0	May be inoperative provided: a) HYD TEMP SENS FAIL Advisory EICAS message is not displayed on EICAS, and b) OAT remains at or above -18 °C (0 °F).	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Anti-Ice System Synoptic Displays (MFD Anti-Ice Page)	C	2	0	(O) MFD indications not addressed elsewhere in the MMEL may be inoperative.	
00-01	Ice Protection Control Panel					
-01	Windshield Heating Pushbuttons	C	2	1	May be inoperative provided associated windshield heating system is considered inoperative.	
-02	WING Pushbutton	C	1	0	May be inoperative provided Wing Anti-Ice System is considered inoperative.	
-03	TEST Knob	C	1	0		
11-00	Wing Anti-Ice System					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	C	1	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.	
-02	EMBRAER 190-E2	C	1	0	May be inoperative provided: a) Airplane is not operated in known or forecast icing conditions, and b) Both Flow Control Valves are operative.	
11-01	Wing Anti-Ice Valves	C	2	0	(M) May be inoperative provided: a) Affected valve is secured closed, and b) Wing Anti-Ice System is considered inoperative.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
11-09	Wing Anti-Ice Overheat Detection System					
-01	EMBRAER 170/175/190/195/ 190-E2/LINEAGE 1000	C	2	1	Except for ER operations, one may be inoperative provided: a) Associated Wing Anti-Ice Valve is considered inoperative, and b) Wing Anti-Ice System is considered inoperative.	
-02	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	2	1	(O) Except for ER operations, Wing Anti-Ice System 1 ODS may be inoperative provided: a) Crossbleed Valve remains closed, except for engine start, b) Engine Bleed System 1 is considered inoperative, c) APU Pneumatic Bleed System is considered inoperative, d) Wing Anti-Ice System is considered inoperative, and e) Live animals are not carried in the cargo/baggage compartment.  NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: For Engine Bleed System inoperative dispatch, do not consider Crossbleed Valve operating normally.	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
11-09	Wing Anti-Ice Overheat Detection System (Cont'd)					
-02	EMBRAER 170/175/190/195/ LINEAGE 1000 (Cont'd)					
-B		C	2	1	(O) Except for ER operations, Wing Anti-Ice System 2 ODS may be inoperative provided: <ul style="list-style-type: none"> <li>a) Crossbleed Valve remains CLOSED, except for engine start,</li> <li>b) Engine Bleed System 2 is considered inoperative, and</li> <li>c) Wing Anti-Ice System is considered inoperative.</li> </ul> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: For Engine Bleed System inoperative dispatch, do not consider Crossbleed Valve operating normally.	
-C		C	2	0	Except for ER operations, both may be inoperative provided: <ul style="list-style-type: none"> <li>a) Both Engine Bleed Systems are considered inoperative, and</li> <li>b) Wing Anti-Ice System is considered inoperative.</li> </ul> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	

(Continued)

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DATE: 02/15/2019

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
11-09	Wing Anti-Ice Overheat Detection System (Cont'd)					
-03	EMBRAER 190-E2					
-A		A	2	1	(O) Wing Anti-Ice System 1 ODS may be inoperative provided: <ol style="list-style-type: none"> <li>a) Crossbleed Valve remains CLOSED, except for engine start,</li> <li>b) Engine Bleed System 1 is considered inoperative,</li> <li>c) APU Pneumatic Bleed System is considered inoperative,</li> <li>d) Wing Anti-Ice System is considered inoperative,</li> <li>e) Live animals are not carried in the cargo/baggage compartment, and</li> <li>f) Repairs are made within 10 flight-days.</li> </ol> <p>NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).</p> <p>NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.</p> <p>NOTE 3: For Engine Bleed System inoperative dispatch, do not consider Crossbleed Valve operating normally.</p>	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
11-09	Wing Anti-Ice Overheat Detection System (Cont'd)					
-03	EMBRAER 190-E2 (Cont'd)					
-B		A	2	1	(O) Wing Anti-Ice System 2 ODS may be inoperative provided: <ul style="list-style-type: none"> <li>a) Crossbleed Valve remains CLOSED, except for engine start,</li> <li>b) Engine Bleed System 2 is considered inoperative,</li> <li>c) Wing Anti-Ice System is considered inoperative, and</li> <li>d) Repairs are made within 10 flight-days.</li> </ul> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.  NOTE 3: For Engine Bleed System inoperative dispatch, do not consider Crossbleed Valve operating normally.	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
11-09	Wing Anti-Ice Overheat Detection System (Cont'd)					
-03	EMBRAER 190-E2 (Cont'd)					
-C		A	2	0	Both may be inoperative provided: a) Both Engine Bleed Systems are considered inoperative, b) Wing Anti-Ice System is considered inoperative, and c) Repairs are made within 10 flight-days.  NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
11-11	A-I WING VLV OPEN Status EICAS Message					
-01	EMBRAER 170/175/190/195/190-E2/LINEAGE 1000	C	1	0	May be dispatched with A-I WING VLV OPEN Status EICAS message provided affected Wing Anti-Ice Valve is considered inoperative.	
-02	EMBRAER 170/175/190/195/LINEAGE 1000	C	1	0	(O) May be dispatched with A-I WING VLV OPEN Status EICAS message provided Wing Anti-Ice Valves are verified to operate normally before each flight.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
11-13	A-I WING NO DISPATCH Caution EICAS Message					
-01	EMBRAER 170/175/190/195/190-E2/LINEAGE 1000	C	1	0	May be dispatched with A-I WING NO DISPATCH Caution EICAS message provided affected Wing Anti-Ice Valve is considered inoperative.  NOTE: After Wing Anti-Ice Valve deactivation, the A-I WING NO DISPATCH Caution EICAS message must not be displayed.	
-02	EMBRAER 170/175/190/195/ LINEAGE 1000	C	1	0	(O) May be inoperative provided Wing Anti-Ice Valves are verified to operate normally before each flight.  NOTE: During Wing Anti-Ice Valve test, the A-I WING NO DISPATCH Caution EICAS message must not be displayed.	
21-00	Engine Anti-Ice Systems (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	1	Except for ER operations, may be inoperative provided airplane is not operated in known or forecast icing conditions.	

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DATE: 02/15/2019

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
21-01	Engine Anti-Ice Valves					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	2	1	(M) Except for ER operations, one may be inoperative provided: a) Affected valve is secured closed, and b) Airplane is not operated in known or forecast icing conditions.	
-B		C	2	0	(M)(O) May be inoperative provided: a) Affected valve is secured open, and b) Appropriate performance penalties are applied.	
-02	EMBRAER 190-E2	C	2	0	(M)(O) Pressure Regulation Modules may be inoperative provided: a) Affected Pressure Regulation Module is secured open, b) Associated Shutoff Module is verified operative, and c) Aircraft is not operated in known or forecast icing conditions.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
-------------------------------	--

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
21-09	A-I ENG 1(2) VLV OPEN Status EICAS Message					
-A		C	2	1	(M)(O) Except for ER operations, one may be inoperative provided: a) Associated valve is secured closed, b) Airplane is not operated in known or forecast icing conditions, and c) Appropriate performance penalties are applied.	
-B		C	2	0	(M)(O) May be inoperative provided: a) Associated valve is secured open, and b) Appropriate performance penalties are applied.	
-C		C	2	0	(O) May be inoperative provided: a) Associated Engine Anti-Ice Valve is verified to operate normally before each flight, and b) Appropriate performance penalties are applied.	
31-00	Air Data Smart Probe (ADSP) Heater Controllers (EMBRAER 170/175/190/195/ LINEAGE 1000)	B	8	4	One Heater Controller per ADSP may be inoperative.	
31-02	Air Data Smart Probes (ADSP) Sense Line Heater (EMBRAER 190-E2)	B	4	3	One sense line heater of one ADSP may be inoperative.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
33-00	Total Air Temperature (TAT) Heaters					
-A		B	2	1	(O) May be inoperative provided: a) Autopilot and Autothrottle are not coupled to the affected Air Data System, and b) TAT indications are displayed normally.	
-B		B	2	0	(O) Except for ER operations, may be inoperative provided: a) TAT indications are displayed normally, b) Airplane is not operated in visible moisture or in known or forecast icing conditions, c) Autopilot is considered inoperative, and d) Autothrottle is considered inoperative.	
41-00	Windshield Wiper Systems					
-01	Low Speed Mode	C	2	0	May be inoperative provided associated High Speed Mode operates normally.	
-02	High Speed Mode	C	2	0	May be inoperative provided associated Low Speed Mode operates normally.	
-03	Timer Mode	C	2	0		
-04	Parking Mode	C	2	0	(M) May be inoperative provided blades are positioned to provide an acceptable field of vision to flightcrew.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
42-00	Windshield Heating Systems	C	2	1	Except for ER operations, one may be inoperative provided airplane is not operated in known or forecast icing conditions.	
43-01 ***	Door Sill Heater (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	-	0	(M) May be inoperative provided system is deactivated.	
71-02	Drain Mast Heaters	C	-	0	(M)(O) May be inoperative provided: a) Water supply to the associated galley and lavatory is secured off, and b) Procedures are established and used to ensure that the associated galley sink drain is not used.  NOTE: Potable water in-flight drainage system will be inhibited.	
71-03 ***	Drain Port Heater	D	1	0	(O) May be inoperative provided the forward lavatory and galley sink drain are not used on ground if OAT is below 0 °C (32 °F).  NOTE 1: The forward lavatory and galley sinks may be used on ground if OAT is greater than the limit above.  NOTE 2: Potable water drainage system will be inhibited.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
-------------------------------	--

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
71-04 ***	Potable Water Fill/Drain Nipple Heater (EMBRAER 190-E2)					
-A		C	1	0	(M) May be inoperative provided alternate procedures are established and used.	
-B		D	1	0	May be inoperative provided operations do not require its use.	
71-09	Lavatory Thermostat Unit (EMBRAER 190-E2)					
-01	Water Temperature Control Function	C	-	0	(M) May be inoperative provided Water Heater is deactivated.	
-02	Faucet Timer Function					
-A		C	-	0	(M) May be inoperative provided: a) Associated Thermostat Unit is deactivated, and b) Alternate procedures are established and used.	
-B		C	-	0	(M) May be inoperative provided: a) Associated manual shutoff valve is deactivated closed, and b) Associated lavatory is considered inoperative.	
71-11	Fill/Drain Valve Heater (EMBRAER 190-E2)	C	1	0	May be inoperative provided Fill/Drain Valve is considered inoperative.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**30. Ice and Rain Protection**

Sequence No.	Item	1	2	3	4	Change Bar
71-50 ***	Freeze Protection Kit (FPK)					
-A		C	1	0	(M) Individual components may be inoperative provided: a) FPK is tested operational once each flight-day, and b) Potable water system is drained when parking at or below water freezing conditions.  NOTE 1: Any portion of the system which operates normally may be used.  NOTE 2: Water system may be serviced and used.	
-B		C	1	0	(M) May be inoperative provided: a) Water system is drained and not used, and b) Procedures are established and used to ensure that water system is not serviced.	
81-02	Ice Detector Systems					
-A		C	2	0	May be inoperative provided airplane is not operated in known or forecast icing conditions.	
-B		C	2	0	(O) May be inoperative provided: a) Ice Protection MODE knob is tested before each flight, and b) Engine and Wing Anti-Ice Systems are operated manually.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Status Synoptic Display (MFD Status Page)	C	2	0	(O) MFD indications not addressed elsewhere in the MMEL may be inoperative.	
16-01	CB Monitor System				Deleted, Revision 16. (Included in item 24-52-01.)	
21-00	Clock System					
-01	Time Function on Digital Clock (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided at least one Time Function on MFD Status Page operates normally.	
-02	Time Function on MFD Status Page					
-A	EMBRAER 170/175/190/195/ 190-E2/LINEAGE 1000	C	2	1		
-B	EMBRAER 170/175/190/195/ LINEAGE 1000	A	2	0	May be inoperative provided: a) Time Function on Digital Clock operates normally, b) At least one Cockpit Voice Recorder (CVR) operates normally, and c) Repairs are made within 3 flight-days.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar
22-00	Chronometer System					
-01	Chronometer Function on Digital Clock (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided at least one Chronometer Function on PFD operates normally.	
-02	Elapsed Time Function on Digital Clock (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0		
-03	Chronometer Function on PFD					
-A	EMBRAER 170/175/190/195/ 190-E2/LINEAGE 1000	C	2	1		
-B	EMBRAER 170/175/190/195/ LINEAGE 1000	C	2	0	May be inoperative provided Chronometer Function on Digital Clock operates normally.	
31-00	Digital Voice Data Recorder (DVDR) System					
-01	Cockpit Voice Recorder (CVR) Functions					
-A		C	2	1		
-B		A	2	0	May be inoperative provided: a) At least one Flight Data Recorder (FDR) Function operates normally, and b) Repairs are made within 3 flight-days.	

(Continued)

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar
31-00	Digital Voice Data Recorder (DVDR) System (Cont'd)					
-02	Flight Data Recorder (FDR) Functions					
-A		C	2	1		
-B		A	2	0	May be inoperative provided: <ul style="list-style-type: none"> <li>a) At least one Cockpit Voice Recorder (CVR) Function operates normally,</li> <li>b) Airplane is not dispatched from a designated airport as listed in the operator's MEL unless:                             <ul style="list-style-type: none"> <li>1) The FDR failure occurs after pushback but prior to takeoff, or</li> <li>2) The FDR repair was attempted but was not successful.</li> </ul> </li> <li>c) In those cases where repair is attempted but not successful, the aircraft may be dispatched on a flight or series of flights until the next designated airport where repair must be accomplished prior to dispatch, and</li> <li>d) Repairs are made within 3 flight-days.</li> </ul>	
-C	Airplanes Not Operating Under 14 CFR Part 121	A	2	0	May be inoperative provided repairs are made in accordance with applicable regulations.	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
-------------------------------	--

**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar	
31-00	Digital Voice Data Recorder (DVDR) System (Cont'd)						
-02	Flight Data Recorder (FDR) Functions (Cont'd)						
-D	DFDR Recording Parameters Required by 14 CFR	A	-	-	Up to three recording parameters may be inoperative provided: a) At least one Cockpit Voice Recorder (CVR) operates normally, and b) Repairs are made within 20 consecutive calendar-days.		
-E	DFDR Recording Parameters Not Required by 14 CFR	A	-	-		May be inoperative provided repairs are made prior to the completion of the next heavy maintenance visit.	
-03 ***	CVR Independent Power Supply	C	-	0			
32-00 ***	Quick Access Recorder (QAR)	D	1	0			
41-03	Aircraft Personality Module (APM)	C	4	2			
41-08	Modular Avionics Unit (MAU) Fans						
-01	MAU 1 Fans						
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	C	4	3			
-B	EMBRAER 190-E2	C	3	2			
-02	MAU 2 Fans	C	3	2			
-03	MAU 3 Fans (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	3	2			

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
-------------------------------	--

**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar
41-30	Configuration Monitor System (CMS)	C	2	1		
51-00	Aural Warning System					
-01	Channels	C	2	1	May be inoperative provided all Master Warning/Caution Pushbuttons/Annunciators are operative.	
51-01	Takeoff Configuration (T/O CONFIG) Button	C	1	0	(O) May be inoperative provided Takeoff Configuration Warning is verified to be operative before each flight.	
52-01	Master Warning/Caution Pushbuttons/Annunciators					
-01	Warning Lights	C	2	1		
-02	Warning Alarm Cancel Function	C	2	1		
-03	Caution Lights	C	2	1		
-04	Caution Alarm Cancel Function	C	2	1		
60-00	Electronic Checklist (ECL)					
*** -A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
-------------------------------	--

**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar
61-01	Display Units (DU)					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	A	5	4	(M)(O) RH MFD, RH PFD, or LH PFD may be inoperative provided: a) Associated Display Unit is deactivated, b) All CCD buttons, knobs, and touchpads operate normally on the associated side, c) Reversionary Buttons are verified to operate normally, d) IESS operates normally, and e) Repairs are made within 3 flight-days.	
-02	EMBRAER 190-E2	A	4	3	(O) LH MFD or RH MFD may be inoperative provided: a) All CCD buttons, knobs, and touchpads operate normally on the associated side, b) Reversionary Buttons are verified to operate normally, c) IESS operates normally, and d) Repairs are made within 3 flight-days.	
61-02	Reversionary Panel (ADS/IRS) Pushbutton Illumination	C	4	0	(O) May be inoperative provided associated pushbutton is verified operative.	
61-03	Display Unit Advanced Graphics Module (DU AGM) (EMBRAER 190-E2)	A	4	3	(O) LH MFD AGM or RH MFD AGM may be inoperative provided: a) Affected AGM is deactivated, b) Associated DU is considered inoperative, and c) Repairs are made within 3 flight-days.	
61-04	EICAS Declutter Override (EICAS FULL) Button	D	1	0		

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar
61-10	Display Controller Panels					
-01	Horizontal Situation Indicator (HSI) Mode Selector Buttons					
-A		C	2	0		
-B		D	2	1		
-02	Weather Radar (WX) Buttons	D	2	0		
-03	FMS Source Selector Buttons					
-A		C	2	1		
-B		C	2	0	May be inoperative provided procedures do not require their use.	
					NOTE: FMS may be used for navigation information but not as an Autopilot source.	
-04	RA/BARO Selector Knobs	C	2	0	May be inoperative provided the setting required for the intended approach is available.	
-05	Decision Height/ Minimum Descent Altitude (MINIMUMS) Selector Knobs					
-A		C	2	1	May be inoperative provided approach minimums do not require their use.	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar
61-10	Display Controller Panels (Cont'd)					
-05	Decision Height/ Minimum Descent Altitude (MINIMUMS) Selector Knobs (Cont'd)					
-B		A	2	0	(O) May be inoperative provided: a) EGPWS is considered inoperative, b) Operations do not require its use, and c) Repairs are made within 2 flight-days.	
-06	Navigation Source Selector Buttons					
-A	V/L Source Selector Buttons (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	-	May be inoperative provided procedures do not require their use.	
-B	NAV Source Selector Buttons (EMBRAER 190-E2)	C	2	-	May be inoperative provided procedures do not require their use.	
-07	Preview (PREV) Buttons	D	2	0		
-08	Flight Path Reference (FPR) Buttons	C	2	0		
-09	ADF/VOR/FMS Bearings (Circle/Diamond) Selector Buttons	C	4	-	May be inoperative provided procedures do not require their use.	
-10	Standard Barometric Pressure (PUSH STD) Buttons	D	2	0		
-11	IN/hPa Selector Knobs	C	2	0	May be inoperative provided required units for the intended flights are available.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**31. Indicating/Recording Systems**

Sequence No.	Item	1	2	3	4	Change Bar
62-01	Cursor Control Device (CCD)					
-01	Display Selection Buttons					
-A	EMBRAER 170/175/190/195/190-E2/LINEAGE 1000	B	6	5	One MFD or PFD button may be inoperative provided all remaining CCD buttons, knobs, and touchpads operate normally on both sides.	
-B	EMBRAER 190-E2	B	6	4	MFD buttons may be inoperative provided buttons associated with the same MFD on opposite CCD are verified operative.	
-02	Enter Buttons	B	4	3	One may be inoperative provided all remaining CCD buttons, knobs, and touchpads operate normally on both sides.	
-03	Inner Tuning Knobs	B	2	1	One may be inoperative provided all remaining CCD buttons, knobs, and touchpads operate normally on both sides.	
-04	Touchpads	B	2	1	One may be inoperative provided all remaining CCD buttons and knobs operate normally on both sides.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**32. Landing Gear**

Sequence No.	Item	1	2	3	4	Change Bar
00-00 ***	A-BRK RTO/HI/MED/LO Indication on EICAS	C	1	0	May be inoperative provided Autobrake System is considered inoperative.	
33-01	Landing Gear Control Lever Lock Solenoid	B	1	0	(O) May be inoperative provided: a) EICAS message LG WOW SYS FAIL is not displayed, and b) The downlock release button is verified to operate normally.	
41-01	Wheel Tie Bolts (EMBRAER 190-E2)	A	46	45	(M) One bolt may be damaged or missing provided: a) Affected wheel is checked for broken parts or damage and replaced if broken parts or damage is found, b) For a main landing gear wheel, associated brake is checked for broken parts or damage and is replaced if broken parts or damage is found, c) After each landing, affected wheel is inspected for additional broken or missing tie bolts, and d) Affected wheel is replaced within 10 flights.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**32. Landing Gear**

Sequence No.	Item	1	2	3	4	Change Bar
41-02	Autobrake System					
-01 ***	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	1	0	(M)(O) May be inoperative provided: a) Autobrake control knob is selected OFF and deactivated, b) Brake Temperature Sensors and Indications operate normally, and c) Alternate procedures are established and used.	
-B		D	1	0	(M) May be inoperative provided: a) Autobrake Control Module is removed, and b) Procedures do not require its use.	
-02	EMBRAER 190-E2	C	1	0	(O) May be inoperative provided: a) Autobrake Control Knob is selected OFF, b) Brake Temperature Sensors and Indications operate normally, and c) Alternate procedures are established and used.	
44-17	Emergency/Parking Brake Accumulators Pressure Transducers	C	2	0	(M) May be inoperative provided associated accumulator charge is verified within limits once each flight-day.	
44-30	Emergency/Parking Brake Accumulators Pressure Indication on MFD	C	4	0	(M) May be inoperative provided associated accumulator charge is verified within limits once each flight-day.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**32. Landing Gear**

Sequence No.	Item	1	2	3	4	Change Bar
47-01	Brake Temperature Sensors					
-A		C	4	3	One may be inoperative provided Landing Gear remains extended for seven minutes after takeoff.  NOTE: In case of engine failure after V <sub>1</sub> , retract the landing gear.	
-B		C	4	0	May be inoperative provided: a) Landing Gear remains extended for 7 minutes after takeoff, and b) Brake cooling time according to AFM Quick Turn Around Weight limitations is complied with.  NOTE: In case of engine failure after V <sub>1</sub> , retract the landing gear.	
47-15	Brake Temperature Indication on MFD					
-A		C	8	6	May be inoperative provided Landing Gear remains extended for 7 minutes after takeoff.  NOTE: In case of engine failure after V <sub>1</sub> , retract the landing gear.	
-B		C	8	0	May be inoperative provided: a) Landing Gear remains extended for 7 minutes after takeoff, and b) Brake cooling time according to AFM Quick Turn Around Weight limitations is complied with.  NOTE: In case of engine failure after V <sub>1</sub> , retract the landing gear.	

<p>AIRCRAFT: ERJ-170, ERJ-190</p>	<p><b>TABLE KEY</b></p> <ol style="list-style-type: none"> <li>1. REPAIR CATEGORY</li> <li>2. NO. INSTALLED</li> <li>3. NO. REQUIRED FOR DISPATCH</li> <li>4. REMARKS OR EXCEPTIONS</li> </ol>
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**32. Landing Gear**

Sequence No.	Item	1	2	3	4	Change Bar
49-11	Brake Assembly Wear Indicators					
-A		A	8	7	One may be inoperative or missing provided repairs are made within 30 calendar-days.	
-B		C	8	4	One per brake assembly may be inoperative or missing.	
49-13	Nose Wheel Spinbrakes	C	2	0	(M) May be missing or removed.	
49-15 ***	Tire Pressure Indicators	D	-	0		
53-03	Rudder Pedals Nose Wheel Steering System	C	2	0	May be inoperative provided Handwheel Nose Wheel Steering System operates normally.	
53-07	Nose Wheel Steering Disengage Switches					
-01	Steering Disengage Switches on Yoke (EMBRAER 190-E2)	C	2	1		
-02	External Steering Disengage Switch					
-A		C	1	0	(O) May be inoperative provided: a) Affected switch is verified in ENGAGE position, b) Disengage Switch on yoke is pressed before towing the airplane, and c) Parking brake and steering status are verified before towing the airplane.	
-B		C	1	0	(M)(O) May be inoperative provided: a) Affected switch is deactivated, b) Disengage Switch on yoke is pressed before towing the airplane, and c) Parking brake and steering status are verified before towing the airplane.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**32. Landing Gear**

Sequence No.	Item	1	2	3	4	Change Bar
61-11	Towing Indication Lights	C	2	0	(O) May be inoperative provided parking brake and steering status are verified before towing the airplane.	

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1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
10-00	Cockpit/Flight Deck/ Flight Compartment and Instrument Lighting Systems	C	-	-	Individual lights may be inoperative provided: <ol style="list-style-type: none"> <li>a) Remaining Lighting System lights are sufficient to clearly illuminate all required instruments, controls, and other devices for which they are provided,</li> <li>b) Remaining Lighting System lights are positioned so that direct rays are shielded from flightcrew members' eyes,</li> <li>c) Lighting configuration and intensity is acceptable to the flightcrew, and</li> <li>d) Flight Deck emergency lights operate normally.</li> </ol> <p>NOTE 1: Individual button/switch lights and/or annunciations/indications are excluded from this relief.</p> <p>NOTE 2: Unaided operation (without NVGs) may be permitted with inoperative NVG supplemental lights; cracked or missing filters.</p>	

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2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
12-01	Multi-Channel Dimmer					
-01	Cockpit Lights OFF/BRT Knob	C	3	0	May be inoperative provided lighting configuration and intensity is acceptable to the flightcrew.	
-02	Glareshield Lights DIM/BRT Knob	C	4	0	May be inoperative provided lighting configuration and intensity is acceptable to the flightcrew.	
-03	Display Units DIM/BRT Knob					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	B	5	4	One of LH PFD, RH MFD or RH PFD DIM/BRT knobs may be inoperative.	
-B	EMBRAER 190-E2	B	4	3	One of LH MFD or RH MFD DIM/BRT knobs may be inoperative.	
-04	Annunciators Test Button	B	1	0		

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**TABLE KEY**

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2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
21-00	Cabin Interior Illumination System					
-01	EMBRAER 170/175/190/195					
-A		C	-	-	May be inoperative provided: <ol style="list-style-type: none"> <li>a) No more than 10% of the ceiling lights are inoperative,</li> <li>b) No more than two adjacent ceiling lights in the longitudinal or lateral direction are inoperative,</li> <li>c) At least one light operates normally in the forward entrance area, aft entrance area, and forward galley area,</li> <li>d) Remaining operative lights in the forward entrance area, forward galley area, aft entrance area, and ceiling area operate in BRIGHT setting,</li> <li>e) Adequate cabin illumination remains for flight attendants to perform their assigned duties, and</li> <li>f) Cabin emergency lights operate normally.</li> </ol>	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
21-00	Cabin Interior Illumination System (Cont'd)					
-01	EMBRAER 170/175/190/195 (Cont'd)					
-B		C	-	-	(O) May be inoperative provided: a) No more than 10% of the ceiling lights are inoperative, b) No more than two adjacent ceiling lights in the longitudinal or lateral direction are inoperative, c) Photoluminescent Escape Route Marking System is charged 30 minutes each flight-day before the first flight of each day, d) Remaining operative ceiling lights operate in BRIGHT setting, e) Adequate cabin illumination remains for flight attendants to perform their assigned duties, and f) Cabin emergency lights operate normally.	
-02	LINEAGE 1000	C	-	-	Individual lights may be inoperative provided: a) No more than 10% of the ceiling lights are inoperative, b) No more than two adjacent ceiling lights in the longitudinal or lateral direction are inoperative, and c) Cabin emergency lights operate normally.	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
21-00	Cabin Interior Illumination System (Cont'd)					
-03	EMBRAER 170/175/190/195 with STC ST03523NY or ST03522NY	C	-	-	Individual light modules may be inoperative provided: <ol style="list-style-type: none"> <li>a) All adjacent ceiling and sidewall light modules are operative,</li> <li>b) Either FWD ENTRANCE light or FWD GALLEY AREA light may be inoperative, and</li> <li>c) One light of the AFT ENTRANCE light may be inoperative.</li> </ol>	
-04	EMBRAER 190-E2	C	-	-	May be inoperative provided: <ol style="list-style-type: none"> <li>a) No more than one ceiling light is inoperative per ceiling light panel,</li> <li>b) Ceiling light panels with inoperative lights are separated by at least two ceiling light panels with all lights operative,</li> <li>c) Adequate cabin illumination remains for flight attendants to perform their assigned duties, and</li> <li>d) Cabin emergency lights operate normally.</li> </ol>	
21-01	Interior Emergency Lights	C	-	0	(O) May be missing or inoperative provided: <ol style="list-style-type: none"> <li>a) No passengers are carried,</li> <li>b) A maximum of 19 persons are carried as authorized by 14 CFR for non-passenger-carrying operations, and</li> <li>c) Alternate procedures are established and used.</li> </ol>	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
21-10	Cabin Sidewall Lights	C	-	-	May be inoperative provided sufficient lighting is available for flight attendants to perform their assigned duties.	
23-00	Passenger Signs					
-A		C	-	-	(M) May be inoperative provided: a) Associated passenger seat or lavatory is not occupied from which a passenger lighted information sign is not readily legible, and b) Associated seat or lavatory is blocked and placarded "DO NOT OCCUPY".  NOTE: These conditions are not intended to prohibit lavatory use or inspections by crewmembers.	
-B		C	-	-	(O) May be inoperative and associated passenger seat or lavatory occupied provided: a) PA system operates normally, and b) PA system is used to notify passengers and cabin crew when associated sign(s) is placed on or off.	
23-03	Lavatory Occupied Sign (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	0		
23-09	Cockpit Sterile Light (EMBRAER 170/175/190/195/ 190-E2)	C	2	0	(O) May be inoperative provided alternate procedures are established and used.	

<p>AIRCRAFT: ERJ-170, ERJ-190</p>	<p><b>TABLE KEY</b></p> <ol style="list-style-type: none"> <li>1. REPAIR CATEGORY</li> <li>2. NO. INSTALLED</li> <li>3. NO. REQUIRED FOR DISPATCH</li> <li>4. REMARKS OR EXCEPTIONS</li> </ol>
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**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
26-00	Courtesy Lights System	C	1	0	May be inoperative provided sufficient light is available at passenger entry area.	
28-00	Lavatory Light System (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	0	(O) May be inoperative provided affected lavatory door is locked and placarded "INOPERATIVE - DO NOT ENTER".  NOTE: This proviso is not intended to prohibit lavatory use or inspections by crewmembers.	
28-01	Lavatory Dome Light (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	2	0	May be inoperative provided the associated fluorescent lights operate normally.	
28-03	Lavatory Fluorescent Lights (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	4	0	(O) May be inoperative provided: a) Associated dome light operates normally, and b) Associated lavatory manual switch is activated before each flight.	
28-07	Lavatory Door Latch Engage Micro Switch (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	0	(O) May be inoperative provided: a) Lavatory Manual Switch is verified operative, and b) Lavatory Manual Switch is used to operate the lavatory internal lights.	
28-09	Lavatory Manual Switch (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	2	1		
31-00	Forward and Aft Cargo/Baggage Compartment Lights	C	9	0		
31-02	Cargo Compartment Light Cages (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	9	0	Any number of light cages may be damaged or missing provided the affected light lens is checked not cracked or broken after each cargo unloading.	

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**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
32-00	Service Compartment Lights	C	-	0		
41-00	Landing Lights					
-A		C	3	2	NOTE: The Landing Lights are considered inoperative when any individual LED light bulbs are inoperative.	
-B		C	3	0		May be inoperative provided operations are not conducted at night.  NOTE: The Landing Lights are considered inoperative when any individual LED light bulbs are inoperative.
42-00	Taxi Lights	C	3	0		
43-00	Navigation Lights					
-01	Aircraft Equipped with Two Navigation Lights System	C	8	4	Any light may be inoperative provided the following minimum configuration is complied with: a) One green light at the right forward wingtip position, b) One red light at the left forward wingtip position, and c) One white light at each aft wingtip position.	
-02	All Configurations	C	-	0		Must be operative between sunset and sunrise.

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3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
44-00	Wing Inspection Lights	C	2	0	May be inoperative provided ground deicing procedures do not require their use.	
45-00	Red Beacon Lights	C	2	0	May be inoperative provided Strobe Lights operate normally.	
46-00	Logo Lights	D	2	0		
47-00	Strobe Lights					
-01	Airplanes with Halogen Red Beacon Lights	C	4	0	(M) May be inoperative provided Red Beacon Lights operate normally.	
50-21	Photoluminescent Escape Route Marking System					
-01	EMBRAER 170/175/190/195					
-A		C	-	-	Up to 10% of any Photoluminescent Escape Route Marking section may be damaged or missing.	

(Continued)

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**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
50-21	Photoluminescent Escape Route Marking System (Cont'd)					
-01	EMBRAER 170/175/190/195 (Cont'd)					
-B		C	-	0	(O) May be missing or inoperative provided: a) No passengers are carried, b) A maximum of 19 persons are carried as authorized by 14 CFR for non-passenger-carrying operations, and c) Alternate procedures are established and used.	
-02	EMBRAER 170/175/190/195 with STC ST03523NY or ST03522NY	C	-	-	May be inoperative or missing provided: a) No more than a length of 0.25 meters (10 inches) of inoperative or missing strips in an aisle of the photoluminescent strips are directly opposite each other and are not closer together than 2.0 meters (78.74 inches), and b) No more than four such parts may be inoperative or missing.	

(Continued)

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**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
50-21	Photoluminescent Escape Route Marking System (Cont'd)					
-03	EMBRAER 190-E2					
-A		C	-	-	May be inoperative or missing provided: a) All strips marking inclined or right angle intersections, including cross aisles and overwing exits, are operative, b) The sections of inoperative or missing strips have a maximum length of 0.25 meters (10 inches), c) Two sections of inoperative or missing strips are separated by at least 2.0 meters (78.74 inches), and d) Along each aisle axis, all strips within 1.0 meter of strips marking angled intersections are operative.	
-B		C	-	-	(O) May be inoperative or missing provided: a) No passengers are carried, b) A maximum of 19 persons are carried as authorized by local regulations for non-passenger-carrying operations, and c) Alternate procedures are established and used.	

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**TABLE KEY**

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3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**33. Lights**

Sequence No.	Item	1	2	3	4	Change Bar
50-25	External Emergency Lights					
-01	EMBRAER 190/195/ 190-E2/LINEAGE 1000	C	-	0	May be inoperative provided operations are not conducted at night.	
-02	EMBRAER 190/195/ 190-E2	C	-	0	(O) May be missing or inoperative provided: a) No passengers are carried, b) A maximum of 19 persons are carried as authorized by 14 CFR for non-passengers-carrying operations, and c) Alternate procedures are established and used.	
50-29	External Exit Door Emergency Lights (EMBRAER190-E2)	B	4	0	May be inoperative provided aircraft is not operated at night.	
50-30	Exit Markings	C	-	0	(O) May be missing or inoperative provided: a) No passengers are carried, b) A maximum of 19 persons are carried as authorized by 14 CFR for non-passenger-carrying operations, and c) Alternate procedures are established and used.	

AIRCRAFT:  
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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
11-00	Integrated Electronic Standby System (IESS)					
-01	Standby Attitude Indication					
-A		C	1	0	May be inoperative provided not required by 14 CFR.	
-B		B	1	0	May be inoperative provided: a) Operations are conducted in Day VMC only, and b) Operations are not conducted into known or forecast over-the-top conditions.	
-02	STD Baro Button	C	1	0	May be inoperative provided BARO knob on the IESS operates normally.	
-03	Brightness Buttons	C	2	0	May be inoperative provided brightness level is acceptable to the crew.	
-04	CAGE Button					
-A		B	1	0	(O) May be inoperative provided IESS is reinitialized before each flight.	
-B		B	1	0	May be inoperative provided IESS attitude indication is considered inoperative.	
-05	V <sub>MO</sub> /M <sub>MO</sub> Barber Pole	C	1	0	May be inoperative provided V <sub>MO</sub> Flag is displayed.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
15-03	Total Air Temperature (TAT) Sensors					
-A		B	2	1	(O) May be inoperative provided: a) Autopilot and Autothrottle are not coupled to the affected Air Data System, and b) TAT Heater associated with operative TAT sensor is operative.	
-B		B	2	1	(O) May be inoperative provided: a) Autopilot and Autothrottle are not coupled to the affected Air Data System, and b) Airplane is not operated in visible moisture or in known or forecast icing conditions.	
15-07	Static Air Temperature (SAT) Indications					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	C	6	0	May be inoperative provided one FMS is operative.	
-02	EMBRAER 190-E2					
-A	MFD Status Page SAT Indications	C	2	0	May be inoperative provided MFD Map/Plan Display SAT indications are operative.	
-B	MFD Map/Plan Display SAT Indications	C	2	0	May be inoperative provided MFD Status Page SAT indications are operative.	
-C	SAT Indications on MCDU Air Data Menu	C	2	0		
15-09	True Airspeed (TAS) Indications on MFD	C	4	0		

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**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
23-00	Standby Magnetic Compass System					
-A		B	1	0	(O) May be inoperative provided: a) Two IRS stabilized Compass Systems operate normally, and b) Airplane is operated with Dual Independent Navigation Capability and under Positive Radar Control by ATC on the enroute portion of the flight.	
-B		C	1	0	(O) May be inoperative provided: a) Two IRS stabilized Compass Systems operate normally, b) Airplane is operated with Dual Independent Navigation Capability, and c) Two Global Positioning Systems operate normally.	
25-00 ***	Head-Up Guidance System (HGS) (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-A		C	2	1	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided operating procedures do not require its use.	
-01	LVTO Mode	D	-	0	May be inoperative provided operations do not require its use.  NOTE: Any mode which operates normally may be used.	
-02	HUD A3 Mode	D	-	0	May be inoperative provided operations do not require its use.  NOTE: Any mode which operates normally may be used.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
27-00 ***	Enhanced Flight Vision System (EFVS) (LINEAGE 1000)	D	1	0	(M) May be inoperative provided: a) System is deactivated, and b) Approach minimums or operating procedures do not require its use.  NOTE: The EICAS message HUD FAIL is displayed after system deactivation.	
31-00	Radar Altimeter System					
-01	EMBRAER 170/175/190/195/190-E2/LINEAGE 1000	C	2	1	(M)(O) May be inoperative provided: a) System is deactivated, and b) Approach minimums or operating procedures do not require its use.	
-02	EMBRAER 170/175/190/195					
-A	Airplanes with Iridium System Installed	A	-	0	(M)(O) May be inoperative provided: a) System is deactivated, b) Approach minimums or operating procedures do not require its use, c) Ground Proximity Warning System (GPWS) Modes 1–4, Mode 5, Advisory Callouts, and Windshear Mode are considered inoperative, d) Traffic Alert and Collision Avoidance System (TCAS) is considered inoperative, e) The Iridium System is considered inoperative, and f) Repairs are made within 2 flight-days.	
(Continued)						

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PAGE NO. 34-5

DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
31-00	Radar Altimeter System (Cont'd)					
-02	EMBRAER 170/175/190/195 (Cont'd)					
-B	Airplanes without Iridium System Installed	A	-	0	(M)(O) May be inoperative provided: a) System is deactivated, b) Approach minimums or operating procedures do not require its use, c) Ground Proximity Warning System (GPWS) Modes 1–4, Mode 5, Advisory Callouts, and Windshear Mode are considered inoperative, d) Traffic Alert and Collision Avoidance System (TCAS) is considered inoperative, and e) Repairs are made within 2 flight-days.	
-03	LINEAGE 1000					
-A	Airplanes with Iridium System Installed	A	-	0	(M)(O) May be inoperative provided: a) System is deactivated, b) Approach minimums or operating procedures do not require its use, c) Ground Proximity Warning System (GPWS) Modes 1–4, Mode 5, Advisory Callouts, and Windshear Mode are considered inoperative, d) Traffic Alert and Collision Avoidance System (TCAS) is considered inoperative, e) The Internal Door Warning System is considered inoperative, f) The Iridium System is considered inoperative, and g) Repairs are made within 2 flight-days.	

(Continued)

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DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
31-00	Radar Altimeter System (Cont'd)					
-03	LINEAGE 1000 (Cont'd)					
-B	Airplanes without Iridium System Installed	A	-	0	(M)(O) May be inoperative provided: a) System is deactivated, b) Approach minimums or operating procedures do not require its use, c) Ground Proximity Warning System (GPWS) Modes 1-4, Mode 5, Advisory Callouts, and Windshear Mode are considered inoperative, d) Traffic Alert and Collision Avoidance System (TCAS) is considered inoperative, e) The Internal Door Warning System is considered inoperative, and f) Repairs are made within 2 flight-days.	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
31-00	Radar Altimeter System (Cont'd)					
-04	EMBRAER 190-E2	A	2	0	(M)(O) May be inoperative provided: a) System is deactivated, b) Approach minimums or operating procedures do not require its use, c) Ground Proximity Warning System (GPWS) Modes 1–4, Mode 5, Advisory Callouts, and Windshear Mode are considered inoperative, d) Traffic Alert and Collision Avoidance System (TCAS) is considered inoperative, e) RAAS is considered inoperative, f) Predictive Windshear Mode is considered inoperative, and g) Repairs are made within 2 flight-days.  NOTE: FLT CTRL FAULT Advisory EICAS message will be displayed.	
32-00	Very High Frequency Navigation Systems (VHF NAV)					
-01	VOR Systems	C	2	-	Any in excess of those required by 14 CFR may be inoperative.	
-02	ILSs	C	2	-	Any in excess of those required by 14 CFR may be inoperative.	
-03	Marker Beacon Systems	C	2	-	May be inoperative provided approach minimums do not require its use.	
32-01	GPS Landing Systems (EMBRAER 190-E2)	C	2	-	May be inoperative provided approach minimums do not require its use.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
41-00	Enhanced Ground Proximity Warning System (EGPWS)					
-01	Ground Proximity Warning System (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 1-4	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	Glideslope Deviation(s) (Mode 5)	C	-	1		
		B	-	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 14 CFR, and b) Alternate procedures are established and used.	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
41-00	Enhanced Ground Proximity Warning System (EGPWS) (Cont'd)					
-01	Ground Proximity Warning System (GPWS) (Cont'd)					
-E	Windshear Warning and Flight Guidance System (Windshear Mode)					
-E1		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.	
-E2		C	1	0	(O) May be inoperative provided: a) Alternate procedures are established and used, and b) Windshear Detection and Avoidance System (Predictive) operates normally.	
-02	Terrain System – Forward Looking Terrain Avoidance (FLTA) and Terrain Clearance Floor (TCF) Functions	B	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-03 ***	Runway Awareness and Advisory System (RAAS)	C	1	0		
41-05 ***	Steep Approach Mode	D	1	0	May be inoperative provided operations do not require its use.	

AIRCRAFT:  
ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
42-00	Weather Radar System	C	-	-	Any in excess of those required by 14 CFR may be inoperative.	
-01	Stabilization Function	B	1	0	(M) May be inoperative provided: a) Antenna sweep is verified parallel to aircraft horizontal plane, and b) Antenna tilt is operated manually.	
42-04 ***	Predictive Windshear Function (EMBRAER 190-E2)					
-A		B	-	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.	
-B		C	-	0	(O) May be inoperative provided: a) Alternate procedures are established and used, and b) Windshear Warning and Guidance System (Reactive) operates normally.	
43-00	Traffic Alert and Collision Avoidance System II (TCAS II)					
-A		B	-	0	(M) May be inoperative provided: a) System is deactivated and secured, and b) Enroute or approach procedures do not require its use.	

(Continued)

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DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
43-00	Traffic Alert and Collision Avoidance System II (TCAS II) (Cont'd)					
-B		C	-	0	(M)(O) May be inoperative provided: a) Not required by 14 CFR, b) System is deactivated and secured, and c) Enroute or approach procedures do not require its use.	
-01	Resolution Advisory (RA) Display System(s)					
-A		C	2	1	May be inoperative on pilot monitoring side.	
-B		C	-	0	(O) May be inoperative provided: a) Traffic Alert (TA) visual display and audio functions are operative, b) TA only mode is selected by the crew, and c) Enroute or approach procedures do not require its use.	
-02	Traffic Alert Display System(s)	C	-	0	(O) May be inoperative provided: a) RA visual display and audio functions are operative, and b) Enroute or approach procedures do not require its use.	
-03	Audio Functions	B	1	0	May be inoperative provided enroute or approach procedures do not require use of TCAS.	
-04 ***	Airspace Selection Function				Deleted, Revision 16.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
43-10 ***	ADS-B In Transmissions (EMBRAER 190-E2)					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.  NOTE: Any ADS-B In function that operates normally may be used.	
-B		D	-	0	May be inoperative provided operations do not require its use.  NOTE: Any ADS-B In function that operates normally may be used.	
44-00 ***	Lightning Sensor System (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	-	0		
51-00	Distance Measuring Equipment (DME) Systems	D	2	-	Any in excess of those required by 14 CFR may be inoperative.	
52-00	ATC Transponders and Automatic Altitude Reporting Systems					
-A		B	2	0	May be inoperative provided: a) Operations do not require its use, and b) Prior to flight, approval is obtained from ATC facilities having jurisdiction over the planned route of flight.	
-B		D	-	1	Any in excess of those required by 14 CFR may be inoperative.	
(Continued)						

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AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
52-00	ATC Transponders and Automatic Altitude Reporting Systems (Cont'd)					
-01 ***	Elementary and Enhanced Downlink Aircraft Reportable Parameters Not Required by 14 CFR	A	-	0	May be inoperative provided: a) Operations do not require its use, and b) Repairs are made prior to the completion of the next heavy maintenance visit.	
-02 ***	ADS-B Out Extended Squitter Transmissions					
-A		C	-	0	(O) May be inoperative provided: a) Alternate procedures are established and used, b) Authorization is obtained from ATC facilities having jurisdiction over planned route of flight, and c) It is not required by 14 CFR.  NOTE: Any ADS-B function that operates normally may be used.	
-B		C	-	1	One must be operative as required by 14 CFR.  NOTE: Any ADS-B function that operates normally may be used.	
53-00 ***	Automatic Direction Finder (ADF) System	D	-	-	Any in excess of those required by 14 CFR may be inoperative.	

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DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
56-00	Global Positioning System					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	-	0	(O) May be inoperative provided: a) Procedures do not require its use, b) RAAS is considered inoperative, and c) Clock is set manually.  NOTE: RNP AR, LPV ,and GLS approaches are not available.	
-B		D	2	1	May be inoperative provided operations do not require its use.  NOTE: RNP AR approaches with less than 0.3 nautical mile precision are not available.	
-02	EMBRAER 190-E2					
-A		C	-	0	(O) May be inoperative provided: a) Procedures do not require its use, b) RAAS is considered inoperative, and c) Clock is set manually.  NOTE: RNP AR, LPV, and GLS approaches are not available.	
-B		C	2	1	May be inoperative provided operations do not require its use.  NOTE: RNP AR approaches with less than 0.3 nautical mile precision are not available.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
61-00	Flight Management System (FMS)					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	2	1	(O) May be inoperative provided procedures do not require its use.	
-01	Navigation Databases	A	-	0	(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Operations do not require its use,</li> <li>b) It is not used in a primary navigation system required by 14 CFR,</li> <li>c) Alternate procedures are developed and used,</li> <li>d) The ICAO Flight Plan is updated (as required) to notify ATC of the navigation equipment status of the aircraft, and</li> <li>e) It is repaired within 10 flight-days.</li> </ol> NOTE: An out-of-currency or out-of-date navigation database is not authorized MMEL relief per 14 CFR.	
61-02	Multifunction Control Display Unit (MCDU)	B	2	1	(O) MCDU 1 may be inoperative provided: <ol style="list-style-type: none"> <li>a) VHF COMM 1 and 2 operate normally,</li> <li>b) VHF NAV 1 and 2 operate normally,</li> <li>c) All CCD buttons, knobs, and touchpads operate normally on both sides,</li> <li>d) All display units operate normally, and</li> <li>e) Approach minimums or operating procedures do not require its use.</li> </ol>	

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 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**34. Navigation**

Sequence No.	Item	1	2	3	4	Change Bar
61-03 ***	FMS TOLD Computations Function					
-A		C	2	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	2	0	May be inoperative provided procedures do not require its use.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**35. Oxygen**

Sequence No.	Item	1	2	3	4	Change Bar
10-08	Crew Oxygen Cylinder Charging Valve	C	1	0	(M) May be inoperative provided: a) There is no evidence of leakage, and b) Crew Oxygen Cylinder is removed for refilling or is replaced with a full one, if necessary.	
11-01	Pressure Gauge					
-01	Crew Oxygen Indication on MFD	C	2	0	(M)(O) May be inoperative provided: a) Crew Oxygen Pressure is checked within limits before each flight, b) Crew Oxygen masks are tested to operate normally before each flight, c) Both Air Management System (AMS) channels operate normally, d) Both Cabin Pressure Control System (CPCS) controller channels operate normally, e) Both Air Conditioning Packs operate normally, f) Flight is not conducted over an area where the Minimum Enroute Altitude is above 10,000 ft MSL, and g) Flight is conducted at or below FL 250.	
-02	Crew Oxygen Pressure Indication on Pressure Gauge Outside Airplane	C	1	0	(O) May be inoperative provided Crew Oxygen Pressure Indication on MFD is checked before each flight.	
11-03	Oxygen Cylinder Pressure Relief Disc (Green Disc)	C	-	0	May be inoperative or missing	
11-04	Oxygen Cylinder Bay Temperature Sensor	C	1	0		

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**35. Oxygen**

Sequence No.	Item	1	2	3	4	Change Bar
20-00	Passenger Oxygen System					
-A		B	1	0	(O) May be inoperative provided: a) Flight is not conducted over an area where the Minimum Enroute Altitude is above 14,000 ft MSL, b) Both air conditioning packs operate normally, c) Pressurization system operates normally, d) Flight is conducted at or below FL 250, e) Portable Oxygen Cylinders and Masks are provided for all cabin crewmembers and for a 30-minute period for 10% of the passengers, and f) Passengers are appropriately briefed.	
-B		B	1	0	May be inoperative provided flight is conducted at or below 10,000 ft MSL.	
-01	Automatic Deployment System					
-A		C	1	0	(M) May be inoperative provided: a) The manual deployment from the flightcrew compartment is verified operative, and b) Flight is conducted at or below FL 300.	
-B		C	1	0	May be inoperative provided Passenger Oxygen System is considered inoperative.	
(Continued)						

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AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**35. Oxygen**

Sequence No.	Item	1	2	3	4	Change Bar
20-00	Passenger Oxygen System (Cont'd)					
-02	Passenger Oxygen Dispensing Unit					
-A		C	-	0	(M) Individual modules may be inoperative with no flight altitude restriction provided affected seats are placarded and blocked to prevent occupancy.	
-B		B	-	0	Individual modules may be inoperative provided Passenger Oxygen System is considered inoperative.	
-03	Flight Attendant Oxygen Module (EMBRAER 190-E2)	B	-	-	May be inoperative provided associated flight attendant seat is considered inoperative.	

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 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**35. Oxygen**

Sequence No.	Item	1	2	3	4	Change Bar
20-02	Passenger Oxygen Box Door Electrical Latches (EMBRAER 170/175/190/195/190-E2)					
-A		C	-	0	(M)(O) Automatic opening feature of the door latch(es) may be inoperative provided: <ul style="list-style-type: none"> <li>a) Associated Passenger Oxygen Dispensing Unit operates normally,</li> <li>b) Flight is conducted at or below FL 300, and</li> <li>c) Passenger(s) occupying the associated seat(s) is briefed on oxygen mask procedure.</li> </ul>	
-B		C	-	-	(M) Individual modules may be inoperative provided affected seats are considered inoperative.	
20-03	Passenger Oxygen Box Deploy Tool (EMBRAER 170/175/190/195/190-E2)	D	-	0	(O) May be missing provided an alternative tool is available.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**35. Oxygen**

Sequence No.	Item	1	2	3	4	Change Bar
20-04	Passenger Cabin Oxygen Mask					
-A		C	-	0	Individual masks may be inoperative or missing provided affected seats are considered inoperative.	
-B		C	-	-	(M) Individual masks may be inoperative or missing provided: <ol style="list-style-type: none"> <li>a) At least one oxygen mask is available for each seat,</li> <li>b) The total number of oxygen masks exceed the number of seats by at least 10%,</li> <li>c) The supernumerary units are uniformly distributed throughout the cabin,</li> <li>d) Units operate normally at all usable lavatory and flight attendant locations, and</li> <li>e) Inoperative masks are removed from the aircraft.</li> </ol>	
20-09	Lavatory Oxygen System (EMBRAER 170/175/190/195/ 190-E2)					
-A		C	-	0	(O) May be inoperative provided lavatory door is locked and placarded "INOPERATIVE - DO NOT ENTER".	
-B		C	-	0	May be inoperative provided flight is conducted at or below FL 250.	
					NOTE: These provisos are not intended to prohibit lavatory use or inspections by crewmembers.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**35. Oxygen**

Sequence No.	Item	1	2	3	4	Change Bar
21-02	Altitude Pressure Switch (EMBRAER 190-E2)	C	1	0		
21-03	"MASKS DEPLOY" Knob on Passenger Oxygen Panel	B	1	0	(O) May be inoperative provided Passenger Cabin Oxygen System is considered inoperative.	
21-04	Passenger Oxygen Masks Deployed ON Indication Light	C	1	0		
30-01	Portable Oxygen Cylinder and Masks	D	-	-	(M) Any in excess of those required by 14 CFR may be inoperative provided: <ol style="list-style-type: none"> <li>a) Required distribution of serviceable cylinders is maintained throughout airplane, and</li> <li>b) Cylinders not properly serviced are replaced, serviced, or removed at the next available maintenance facility.</li> </ol>	
30-03	Protective Breathing Equipment (PBE)	D	-	-	Any in excess of those required by 14 CFR may be inoperative or missing provided: <ol style="list-style-type: none"> <li>a) Inoperative PBE remains in a certified location or is removed from the aircraft,</li> <li>b) Location placarding is removed or obscured, and</li> <li>c) Required distribution is maintained.</li> </ol> <p>NOTE: Inoperative PBE units removed from a certified location, or removed from the aircraft, are subject to 49 CFR dangerous goods regulations.</p>	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Engine Bleed Systems					
-01	EMBRAER 170/175/190/195/ 190-E2/LINEAGE 1000	C	2	1	(O) Except for ER operations, one may be inoperative provided: a) Associated engine bleed remains selected off, b) Crossbleed Valve operates normally, and c) Flight is conducted at or below FL 310.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-02	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A	Airplanes without Forward Cargo Compartment Ventilation Installed or with Cargo Shutoff Valve (P/N 1001497-2)	C	2	1	(O) Except for ER operations, one may be inoperative provided: a) Associated engine bleed remains selected off, b) Airplane is not operated in known or forecast icing conditions, c) If Bleed 1 is affected, live animals are not carried in the cargo/baggage compartment, and d) Flight is conducted at or below FL 310.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	

(Continued)

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Engine Bleed Systems (Cont'd)					
-02	EMBRAER 170/175/190/195/ LINEAGE 1000 (Cont'd)					
-B	Airplanes with Cargo Shutoff Valve (P/N 1001497-1)	C	2	1	(O) Except for ER operations, one may be inoperative provided: <ul style="list-style-type: none"> <li>a) Associated engine bleed remains selected off,</li> <li>b) Airplane is not operated in known or forecast icing conditions,</li> <li>c) If Bleed 1 is affected, the forward cargo/aft baggage shutoff valves are considered inoperative, and</li> <li>d) Flight is conducted at or below FL 310.</li> </ul> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-C		C	2	0	(O) Except for ER operations, may be inoperative provided: <ul style="list-style-type: none"> <li>a) Both engine bleeds remain selected off,</li> <li>b) APU Pneumatic Bleed System operates normally,</li> <li>c) Flight is conducted at or below FL 150, and</li> <li>d) Airplane is not operated in known or forecast icing conditions.</li> </ul> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Engine Bleed Systems (Cont'd)					
-03	EMBRAER 170/175/190/195					
-A	Airplanes without Forward Cargo Compartment Ventilation Installed or with Cargo Shutoff Valve (P/N 1001497-2)	C	2	0	(O) Except for ER operations, may be inoperative provided: a) Both engine bleeds remain selected off, b) Live animals are not carried in the cargo compartment, c) Flight is conducted in an unpressurized configuration, and d) Airplane is not operated in known or forecast icing conditions.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B	Airplanes with Cargo Shutoff Valve (P/N 1001497-1)	C	2	0	(O) Except for ER operations, may be inoperative provided: a) Both engine bleeds remain selected off, b) The forward cargo/aft baggage compartment shutoff valve is considered inoperative, c) Flight is conducted in an unpressurized configuration, and d) Airplane is not operated in known or forecast icing conditions.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Engine Bleed Systems (Cont'd)					
-04	LINEAGE 1000					
-A	Airplanes with Cargo Shutoff Valve (P/N 1001497-2)	C	2	0	(O) Except for ER operations, may be inoperative provided: <ol style="list-style-type: none"> <li>a) Both engine bleeds remain selected off,</li> <li>b) Live animals are not carried in the aft baggage compartment,</li> <li>c) Flight is conducted in an unpressurized configuration,</li> <li>d) Airplane is not operated in known or forecast icing conditions, and</li> <li>e) The Auxiliary Fuel system is considered inoperative.</li> </ol> <p>NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).</p>	
-B	Airplanes with Cargo Shutoff Valve (P/N 1001497-1)	C	2	0	(O) Except for ER operations, may be inoperative provided: <ol style="list-style-type: none"> <li>a) Both engine bleeds remain selected off,</li> <li>b) The aft baggage compartment shutoff valves are considered inoperative,</li> <li>c) Flight is conducted in an unpressurized configuration,</li> <li>d) Airplane is not operated in known or forecast icing conditions, and</li> <li>e) The Auxiliary Fuel system is considered inoperative.</li> </ol> <p>NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).</p>	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Engine Bleed Systems (Cont'd)					
-05	EMBRAER 190-E2					
-A		A	2	1	(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Associated engine bleed remains selected off,</li> <li>b) Airplane is not operated in known or forecast icing conditions,</li> <li>c) Flight is conducted at or below FL 310, and</li> <li>d) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope). NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
-B		C	2	0	(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Both engine bleeds remain selected off,</li> <li>b) Crossbleed Valve operates normally,</li> <li>c) APU Pneumatic Bleed System operates normally,</li> <li>d) Flight is conducted at or below FL 150, and</li> <li>e) Airplane is not operated in known or forecast icing conditions.</li> </ol> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	

(Continued)

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Engine Bleed Systems (Cont'd)					
-05	EMBRAER 190-E2 (Cont'd)					
-C		A	2	0	(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Both engine bleeds remain selected off,</li> <li>b) APU Pneumatic Bleed System operates normally,</li> <li>c) Flight is conducted at or below FL 150,</li> <li>d) Airplane is not operated in known or forecast icing conditions, and</li> <li>e) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope). NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
-D		A	2	0	(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Both engine bleeds remain selected off,</li> <li>b) Flight is conducted in an unpressurized configuration,</li> <li>c) Airplane is not operated in known or forecast icing conditions, and</li> <li>d) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope). NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
00-01	Bleed Air Manifold Pressure Indication on MFD					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	C	4	0	(O) May be inoperative provided alternate procedures are established and used.	
-02	EMBRAER 190-E2	C	4	0		
10-01	Crossbleed Valve					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	1	0	(M)(O) Except for ER operations, may be inoperative provided valve is verified CLOSED and remains closed except for engine starting.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B		C	1	0	(O) Except for ER operations, may be inoperative provided: a) Flight is conducted in an unpressurized configuration, b) Both Engine Bleed Systems are considered inoperative, and c) APU Pneumatic Bleed System is considered inoperative.  NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: APU Pneumatic Bleed System may be used for engine starting.	

(Continued)

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
10-01	Crossbleed Valve (Cont'd)					
-02	EMBRAER 190-E2					
-A		C	1	0	(M)(O) May be inoperative provided valve is deactivated closed and remains CLOSED except for engine starting.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B		A	1	0	(O) May be inoperative provided: a) Flight is conducted in an unpressurized configuration, b) Both Engine Bleed Systems are considered inoperative, c) APU Pneumatic Bleed System is considered inoperative, and d) Repairs are made within 10 flight-days.  NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.  NOTE 3: APU Pneumatic Bleed System may be used for engine starting.	

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DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
11-01	High Stage Bleed Valves					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	2	1	(M) Except for ER operations, one may be inoperative provided: <ol style="list-style-type: none"> <li>a) Affected High Stage Bleed Valve is secured closed, and</li> <li>b) Associated Engine Bleed System is considered inoperative.</li> </ol> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B		C	2	0	(M) Except for ER operations, may be inoperative provided: <ol style="list-style-type: none"> <li>a) Both High Stage Bleed Valves are secured closed, and</li> <li>b) Both Engine Bleed Systems are considered inoperative.</li> </ol> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
11-01	High Stage Bleed Valves (Cont'd)					
-02	EMBRAER 190-E2					
-A		C	2	1	(M) One may be inoperative provided: a) Cross Bleed Valve is operative, b) Affected High Stage Bleed Valve is secured closed, and c) Associated Engine Bleed System is considered inoperative.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B		A	2	1	(M) One may be inoperative provided: a) Affected High Stage Bleed Valve is secured closed, b) Associated Engine Bleed System is considered inoperative, c) Airplane is not operated in known or forecast icing conditions, and d) Repairs are made within 10 flight-days.  NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to MMEL 47-00-00.	
(Continued)						

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PAGE NO. 36-11

DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
11-01	High Stage Bleed Valves (Cont'd)					
-02	EMBRAER 190-E2 (Cont'd)					
-C		A	2	0	(M) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Both High Stage Bleed Valves are secured closed,</li> <li>b) Both Engine Bleed Systems are considered inoperative, and</li> <li>c) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to MMEL 47-00-00.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
11-03	Engine Bleed Valves					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	2	1	(M) Except for ER operations, one may be inoperative provided: a) Affected Engine Bleed Valve is secured closed, and b) Associated Engine Bleed System is considered inoperative.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B		C	2	0	(M)(O) Except for ER operations, may be inoperative provided: a) Both Engine Bleed Valves are secured closed, and b) Both Engine Bleed Systems are considered inoperative.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
11-03	Engine Bleed Valves (Cont'd)					
-02	EMBRAER 190-E2					
-A		C	2	1	(M) One may be inoperative provided: a) Crossbleed Valve is operative, b) Affected Engine Bleed Valve is secured closed, and c) Associated Engine Bleed System is considered inoperative.  NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B		A	2	1	(M) One may be inoperative provided: a) Affected Engine Bleed Valve is secured closed, b) Associated Engine Bleed System is considered inoperative, c) Airplane is not operated in known or forecast icing conditions, and d) Repairs are made within 10 flight-days.  NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
(Continued)						

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PAGE NO. 36-14

DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
11-03	Engine Bleed Valves (Cont'd)					
-02	EMBRAER 190-E2 (Cont'd)					
-C		A	2	0	(M) May be inoperative provided: <ol style="list-style-type: none"> <li>a) Both Engine Bleed Valves are secured closed,</li> <li>b) Both Engine Bleed Systems are considered inoperative, and</li> <li>c) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
11-09	Fan Air Valves (EMBRAER 190-E2)					
-A		C	2	1	(M) One may be inoperative provided: <ol style="list-style-type: none"> <li>a) Crossbleed Valve is operative,</li> <li>b) Affected Fan Air Valve is secured closed, and</li> <li>c) Associated Engine Bleed System is considered inoperative.</li> </ol> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B		A	2	1	(M) One may be inoperative provided: <ol style="list-style-type: none"> <li>a) Affected Fan Air Valve is secured closed,</li> <li>b) Associated Engine Bleed System is considered inoperative,</li> <li>c) Airplane is not operated in known or forecast icing conditions, and</li> <li>d) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
(Continued)						

AIRCRAFT:  
ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
11-09	Fan Air Valves (EMBRAER 190-E2) (Cont'd)					
-C		A	2	0	(M) May be inoperative provided: a) Both Fan Air Valves are secured closed, b) Both Engine Bleed Systems are considered inoperative, and c) Repairs are made within 10 flight-days.  NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
11-12	Fan Air Inlet Doors (EMBRAER 170/175) (Pre-Mod SB 170-36-0008 or Post-Mod SB 170-54-0010)	C	2	0	(M)(O) May be inoperative provided: a) Affected door is secured open, and b) Appropriate performance penalties are applied.	
12-00	APU Pneumatic Bleed System	C	1	0	Except for ER operations, may be inoperative provided APU Bleed remains selected off.	
12-01	APU Bleed Shutoff Valve	C	1	0	(M) Except for ER operations, may be inoperative provided: a) Valve is secured closed, and b) APU Bleed remains selected off.	
12-02	APU Bleed Check Valve	C	1	0	Except for ER operations, may be inoperative provided APU Bleed remains selected off.	
13-01	High Pressure Ground Connection Check Valve	C	1	0	May be inoperative closed provided APU Pneumatic Bleed System operates normally.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
21-00	BLEED 1(2) LEAK Caution EICAS Message				Deleted, Revision 16. (Included in item 36-21-02.)	
21-02	Engine Bleed Overheat Detection System (ODS)					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A		C	2	1	(O) Except for ER operations, Engine Bleed System 1 ODS may be inoperative provided: <ul style="list-style-type: none"> <li>a) Associated Engine Bleed System is considered inoperative,</li> <li>b) Crossbleed Valve remains CLOSED except for engine start,</li> <li>c) APU Pneumatic Bleed System is considered inoperative, and</li> <li>d) Airplane is not operated in known or forecast icing conditions.</li> </ul> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-B		C	2	1	(O) Except for ER operations, Engine Bleed System 2 ODS may be inoperative provided: <ul style="list-style-type: none"> <li>a) Associated Engine Bleed System is considered inoperative,</li> <li>b) Crossbleed Valve remains CLOSED except for engine start, and</li> <li>c) Airplane is not operated in known or forecast icing conditions.</li> </ul> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	

(Continued)

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DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
21-02	Engine Bleed Overheat Detection System (ODS) (Cont'd)					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000 (Cont'd)					
-C		C	2	0	(O) Except for ER operations, may be inoperative provided: <ol style="list-style-type: none"> <li>a) Both Engine Bleed Systems are considered inoperative, and</li> <li>b) APU Pneumatic Bleed System is considered inoperative.</li> </ol> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
(Continued)						

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DATE: 11/23/2018

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
21-02	Engine Bleed Overheat Detection System (ODS) (Cont'd)					
-02	EMBRAER 190-E2					
-A		A	2	1	(O) Engine Bleed System 1 ODS may be inoperative provided: <ol style="list-style-type: none"> <li>a) Engine Bleed System 1 is                              considered inoperative,</li> <li>b) Crossbleed Valve remains                              CLOSED except for engine                              start,</li> <li>c) APU Pneumatic Bleed                              System is considered                              inoperative,</li> <li>d) Airplane is not operated in                              known or forecast icing                              conditions, and</li> <li>e) Repairs are made within                              10 flight-days.</li> </ol> <p>NOTE 1: See AFM for Engine Airstart                              – Windmilling (Engine                              Airstart Envelope).</p> <p>NOTE 2: Fuel Tank Inerting System                              is inoperative. Refer to                              item 47-00-00.</p> <p>(Continued)</p>	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
21-02	Engine Bleed Overheat Detection System (ODS) (Cont'd)					
-02	EMBRAER 190-E2 (Cont'd)					
-B		A	2	1	(O) Engine Bleed System 2 ODS may be inoperative provided: <ol style="list-style-type: none"> <li>a) Engine Bleed System 2 is considered inoperative,</li> <li>b) Crossbleed Valve remains CLOSED except for engine start,</li> <li>c) Airplane is not operated in known or forecast icing conditions, and</li> <li>d) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope). NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	
-C		A	2	0	(O) Both may be inoperative provided: <ol style="list-style-type: none"> <li>a) Both Engine Bleed Systems are considered inoperative,</li> <li>b) APU Pneumatic Bleed System is considered inoperative, and</li> <li>c) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope). NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**36. Pneumatic**

Sequence No.	Item	1	2	3	4	Change Bar
21-03	APU Overheat Detection System (ODS)					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000	C	1	0	(O) APU ODS may be inoperative provided: <ol style="list-style-type: none"> <li>a) Engine Bleed System 1 is considered inoperative,</li> <li>b) Crossbleed Valve remains CLOSED except for engine start,</li> <li>c) APU Pneumatic Bleed System is considered inoperative, and</li> <li>d) Airplane is not operated in known or forecast icing conditions.</li> </ol> NOTE: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).	
-02	EMBRAER 190-E2	A	1	0	(O) APU ODS may be inoperative provided: <ol style="list-style-type: none"> <li>a) Engine Bleed System 1 is considered inoperative,</li> <li>b) Crossbleed Valve remains CLOSED except for engine start,</li> <li>c) APU Pneumatic Bleed System is considered inoperative,</li> <li>d) Airplane is not operated in known or forecast icing conditions, and</li> <li>e) Repairs are made within 10 flight-days.</li> </ol> NOTE 1: See AFM for Engine Airstart – Windmilling (Engine Airstart Envelope).  NOTE 2: Fuel Tank Inerting System is inoperative. Refer to item 47-00-00.	

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**38. Water/Waste**

Sequence No.	Item	1	2	3	4	Change Bar
00-02	Water and Waste System Indications on Flight Attendant Panel (EMBRAER 170/175/190/195)	D	11	0	(M) May be inoperative provided alternate procedures are established and used.	
00-03	Water and Waste Indications on CMS (EMBRAER 190-E2)					
-01	Potable Water Indications					
-A		C	-	0	(M) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	
-02	Waste Tank Indications					
-A		C	-	0	(M) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	
-03	Lavatory Gray Water Interface Valve Indications					
-A		C	-	0	(M) May be inoperative provided associated valve is verified operative.	
-B		C	-	0	May be inoperative provided associated valve is considered inoperative.	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**38. Water/Waste**

Sequence No.	Item	1	2	3	4	Change Bar
00-03	Water and Waste Indications on CMS (EMBRAER 190-E2) (Cont'd)					
-04	Galley Gray Water Interface Valve Indications					
-A		C	-	0	(M) May be inoperative provided associated valve is verified operative.	
-B		C	-	0	May be inoperative provided associated valve is considered inoperative.	
10-00	Potable Water System					
-A		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.	
-B		C	-	-	(M) May be inoperative provided: a) System is drained, and b) Procedures are established to ensure that system is not serviced.	
11-03	Lavatory Infrared Sensors (LINEAGE 1000)	C	-	0	(M) May be inoperative provided associated lavatory door(s) is secured closed and placarded "INOPERATIVE – DO NOT ENTER".	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**38. Water/Waste**

Sequence No.	Item	1	2	3	4	Change Bar
11-04	Fill/Drain Valve (EMBRAER 190-E2)					
-A		C	1	0	(M) May be inoperative provided: a) Valve is verified in closed position, b) Valve is verified not to have leaks, and c) Alternate procedures are established and used.	
-B		C	1	0	May be inoperative provided Potable Water System is considered inoperative.	
11-05	Fill/Drain Switch (EMBRAER 190-E2)	C	1	0	(M) May be inoperative provided alternate procedures are established and used.	
11-06	Fill/Drain Nipple (EMBRAER 190-E2)					
-01	Fill/Drain Nipple Cap	C	1	0	(M) May be inoperative or missing provided Fill/Drain Cap Nipple is verified not to have leaks.	
11-09	Fwd Drain Valve (EMBRAER 190-E2)	C	1	0	(M) May be inoperative provided: a) Valve is secured in closed position, and b) Alternate procedures are established and used to drain the Potable Water System lines.  NOTE: Potable water in-flight drainage system will be inoperative.	
11-14 ***	Cockpit In-Flight Drainage System	D	1	0	(M) May be inoperative provided: a) Aft Drain Valve is deactivated, and b) Alternate procedures are established and used.	

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**38. Water/Waste**

Sequence No.	Item	1	2	3	4	Change Bar
11-18 ***	UV Water Treatment Module (EMBRAER 190-E2)	D	1	0		
11-19 ***	UV Solenoid Valve (EMBRAER 190-E2)	D	1	0	(M) May be inoperative provided valve is secured in open position.	
13-04	Water Tank Quantity Indication Panel (EMBRAER 190-E2)					
-01	Water Quantity Indication LEDs	C	5	0	(M) May be inoperative provided alternate procedures are established and used.	
-02	“READY” Indication	C	1	0	May be inoperative provided “WAIT” indication on Water and Waste Service Panel operates normally.	
-03	“WAIT” Indication	C	1	0	May be inoperative provided “READY” indication on Water and Waste Service Panel operates normally.	
31-01 ***	Gray Water Holding Unit (EMBRAER 190-E2)	D	1	0	(M) May be inoperative provided Gray Water Drain Valve is secured in open position.	
31-04	Auto Drain Valve (EMBRAER 190-E2)					
-A		C	-	0	(M) May be inoperative provided: a) Valve is secured closed, and b) Affected galley/lavatory sink is not used.	
-B		C	-	0	(M) May be inoperative provided associated galley/lavatory is not used.	

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**TABLE KEY**

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2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**38. Water/Waste**

Sequence No.	Item	1	2	3	4	Change Bar
31-09	Gray Water Interface Valve (EMBRAER 190-E2)					
-A		C	-	0	(M) May be inoperative provided: a) Valve is secured closed, and b) Affected galley/lavatory sink is not used.	
-B		C	-	0	(M) May be inoperative provided associated galley/lavatory is not used.	
32-00	Vacuum Waste Systems					
-A		C	-	-	(M) Individual components may be inoperative provided: a) Associated components are deactivated or isolated, and b) Associated system components are verified not to have leaks.  NOTE: Any portion of the system which operates normally may be used.	
-B		C	-	-	(M) Associated lavatory system(s) may be inoperative provided: a) Associated components are deactivated or isolated to prevent leaks, and b) Associated lavatory door(s) is secured closed and placarded "INOPERATIVE – DO NOT ENTER".  NOTE: These provisos are not intended to prohibit inspections by crewmembers.	

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-------------------------------	--

**38. Water/Waste**

Sequence No.	Item	1	2	3	4	Change Bar
32-03	Flush Switch (EMBRAER 190-E2)	C	-	0	May be inoperative provided associated vacuum waste system is not used.	
-01 ***	Touchless Activation Function	D	-	0		
32-09	Vacuum Generator					
-A		A	1	0	May be inoperative powered on (running) continuously provided repairs are made within 1 flight-day.	
-B		C	1	0	(M) May be inoperative provided: a) Vacuum generator is deactivated, and b) Associated lavatory door(s) is secured closed and placarded "INOPERATIVE – DO NOT ENTER".  NOTE: These provisos are not intended to prohibit inspections by crewmembers.	
-C		C	1	0	(M)(O) May be inoperative provided: a) Vacuum generator is deactivated, and b) Procedures are established and used to only allow use of the lavatory at or above 18,000 ft MSL.	
34-01 ***	Floor Drain System (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	-	0	(M) May be inoperative provided the associated lavatory door(s) is secured closed and placarded "INOPERATIVE – DO NOT ENTER".  NOTE: These provisos are not intended to prohibit inspections by crewmembers.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**44. Cabin Systems**

Sequence No.	Item	1	2	3	4	Change Bar
11-00	Passenger Address (PA) System					
-A		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 operates normally may be used.	
-B		C	1	0	(O) May be inoperative provided: a) PA not required by 14 CFR, and b) Alternate, normal, and emergency procedures and/or operating restrictions are established and used.  NOTE: Any station function(s) that operates normally may be used.	
12-01	Passenger Cabin Speakers					
-A		C	-	-	(M) Individual speakers may be inoperative provided any seat from which a passenger cannot clearly hear a passenger address announcement is blocked and placarded "DO NOT OCCUPY".	
-B		C	-	-	May be inoperative provided Passenger Address System is considered inoperative.	
12-02	Lavatory Speakers (EMBRAER 170/175/190/195/ 190-E2)	C	-	0	(O) May be inoperative provided alternate procedures are established and used.	

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3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**44. Cabin Systems**

Sequence No.	Item	1	2	3	4	Change Bar
13-00	Cabin Service Interphone System					
-01	Cabin to Cabin Function					
-A		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 operates normally may be used.	
-B		B	-	-	(O) May be inoperative provided: a) Cabin to cabin interphone functions operate normally on at least 50% of the cabin handsets, and b) Alternate communication procedures between the affected flight attendant stations are established and used.  NOTE: Any station function(s) that operates normally may be used.	

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4. REMARKS OR EXCEPTIONS

**44. Cabin Systems**

Sequence No.	Item	1	2	3	4	Change Bar
13-01	Flight Attendant Handsets					
-A	EMBRAER 170/175/190/195/ 190-E2	B	-	-	(O) May be inoperative provided: a) 50% of cabin handsets operate normally, and b) Alternate communication procedures between the affected flight attendant 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 function(s) that operates normally may be used.	
-B	LINEAGE 1000	D	-	-	Any in excess of those required by 14 CFR may be inoperative.	

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**TABLE KEY**

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4. REMARKS OR EXCEPTIONS

**44. Cabin Systems**

Sequence No.	Item	1	2	3	4	Change Bar
13-07	Flight Attendant Alerting System (EMBRAER 170/175/190/195/190-E2)					
-01	Flight Attendant Call Lights (Rainbow Lights)	B	-	0	(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) PA system operates normally,</li> <li>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</li> <li>c) Alternate procedures for contacting flight attendants are established and used.</li> </ol> NOTE 1: Passenger to attendant call system is considered Nonessential Equipment and Furnishing (NEF). NOTE 2: Any visual alerting system function(s) that operates normally may be used.	
-02	Flight Attendant Chime	B	-	0	(O) May be inoperative provided: <ol style="list-style-type: none"> <li>a) PA system operates normally,</li> <li>b) If affected chime is used for lavatory smoke detector alerting, an alternate lavatory smoke alert (audio or visual) is installed and operates normally, and</li> <li>c) Alternate procedures for contacting flight attendants are established and used.</li> </ol> NOTE 1: Passenger to attendant call system is considered Nonessential Equipment and Furnishing (NEF). NOTE 2: Any visual alerting system function(s) that operates normally may be used.	

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**44. Cabin Systems**

Sequence No.	Item	1	2	3	4	Change Bar
15-00	Cabin Management System (EMBRAER 190-E2)					
-A		C	1	0	(M)(O) May be inoperative provided: a) Alternate procedures are established and used, and b) System is turned OFF.  NOTE: Any portion of the system that operates normally may be used.	
-B		D	1	0	May be inoperative provided procedures do not require its use.	
15-01	Input-Output Distribution Node (IODN) (EMBRAER 190-E2)	C	2	0	One or both may be inoperative.  NOTE: With one IODN inoperative, the sidewall lights or ceiling lights operate in standard mode.	
20-01 ***	In-Flight Entertainment System (IFE) Maintenance Panels (EMBRAER 170/175/190/195)	D	2	0	(M) May be inoperative provided alternate procedures are established and used.  NOTE: Any portion of the system which operates normally may be used.	
20-03 ***	In-Flight Entertainment System (IFE) Reset Switch on IFE Flight Attendant Control Panel (EMBRAER 170/175/190/195)	D	1	0	(M) May be inoperative provided alternate procedures are established and used.	

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**TABLE KEY**

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3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**44. Cabin Systems**

Sequence No.	Item	1	2	3	4	Change Bar
20-10 ***	GoGo ABS WiFi Connectivity System (Airplanes with STC ST03904AT, ST04216AT)					
-A		C	1	0	(M)(O) May be inoperative for flightcrew operations provided: a) System is deactivated, and b) Alternate procedures are established and used.	
-B		D	1	0	(M) May be inoperative provided system is deactivated.	
-01	Cabin Wireless Access Points (CWAP)					
-A	Forward Cabin Wireless Access Points	C	1	0	(O) May be inoperative for flightcrew operations provided alternate procedures are established and used.	
-B	Aft Cabin Wireless Access Points	D	-	0		
-02	Air-to-Ground (ATG) Antenna	D	2	1	(M) One may be inoperative provided the Side Fractal Antennas (ATG-4 Installations Only) operates normally.	
-03	Side Fractal Antennas (ATG-4 Installations Only)	D	2	1	(M) One may be inoperative provided Air-to-Ground (ATG) Antenna operates normally.	
-04	Internal PCS Antennas (ATG-4 Installations Only)	D	2	0		
-05	Content Loader (SAVCL)	D	1	0	NOTE: If inoperative, media content is unavailable to the passengers, but WiFi access is operative.	

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4. REMARKS OR EXCEPTIONS

**44. Cabin Systems**

Sequence No.	Item	1	2	3	4	Change Bar
32-08 ***	In-Flight Connectivity System Reset Switch (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	1	0	(O) May be inoperative provided alternate procedures are established and used.	
51-00 ***	Cabin Surveillance System (CSS)	A	1	0	(O) May be inoperative provided: a) Alternate procedures are established and used, and b) Repairs are made within 3 flight-days.	
		C	1	0	(O) May be inoperative provided: a) A peephole is installed and operates normally, and b) Alternate procedures are established and used.	
		D	1	0	(M) May be inoperative provided: a) System is deactivated, and b) Procedures do not require its use.	

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**45. Central Maintenance System**

Sequence No.	Item	1	2	3	4	Change Bar
45-01	Central Maintenance Computer (CMC)	C	1	0	May be inoperative provided procedures do not require its use.	
45-02	Wireless Data LAN Management Unit (DLMU-W) (EMBRAER 190-E2)					
-A		C	1	0	(M) May be inoperative provided alternate procedures are established and used.	
-B		D	1	0	May be inoperative provided procedures do not require its use.	
45-03 ***	Data Loader Management Unit (DMU) (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-A		C	1	0	(M) May be inoperative provided alternate procedures are established and used.	
-B		D	1	0	May be inoperative provided procedures do not require its use.	
45-04	Database (DB) Module (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-A		C	1	0	(M) May be inoperative provided alternate procedures are established and used.	
-B		D	1	0	May be inoperative provided procedures do not require its use.	

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**45. Central Maintenance System**

Sequence No.	Item	1	2	3	4	Change Bar
45-05	Local Area Network (LAN) (EMBRAER 170/175/190/195/ LINEAGE 1000)	C	1	0	May be inoperative provided procedures do not require its use.  NOTE: Loading, installing, or restoring a software application or database will not be available to the maintenance personnel.	
45-06 ***	Wireless Server Unit (WSU) (EMBRAER 190-E2)					
-A		C	1	0	(M) May be inoperative provided alternate procedures are established and used.	
-B		D	1	0	May be inoperative provided procedures do not require its use.	

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**TABLE KEY**

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**46. Information Systems**

Sequence No.	Item	1	2	3	4	Change Bar
21-00 ***	Electronic Flight Bag (EFB) Systems					
-01 ***	Data Connectivity (Class 2)					
-A		C	-	-	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	
-02 ***	Power Connection (Class 1 and 2)					
-A		C	-	-	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	
-03 ***	Mounting Device (Class 2)					
-A		C	-	0	(M)(O) May be inoperative provided: a) Associated EFB and hardware is secured by an alternate means or removed from the aircraft, and b) Alternate procedures are established and used.	
-B		D	-	0	(M) May be inoperative provided: a) Associated EFB and hardware is secured by an alternate means or removed from the aircraft, and b) Procedures do not require its use.	

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**TABLE KEY**

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4. REMARKS OR EXCEPTIONS

**46. Information Systems**

Sequence No.	Item	1	2	3	4	Change Bar
21-02 ***	USB Panel (EMBRAER 190-E2)					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.  NOTE: Any portion of the system that operates normally may be used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.  NOTE: Any portion of the system that operates normally may be used.	
-01	USB Port					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.  NOTE: Any portion of the system that operates normally may be used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.  NOTE: Any portion of the system that operates normally may be used.	
41-00 ***	Prerecorded Passenger Announcement System (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-A		C	-	0	(O) May be inoperative provided alternate procedures are established and used.	
-B		D	-	0	May be inoperative provided procedures do not require its use.	

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4. REMARKS OR EXCEPTIONS

**47. Inert Gas System**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Fuel Tank Inerting System (EMBRAER 190-E2)	A	1	0	(M) May be dispatched inoperative provided: <ul style="list-style-type: none"> <li>a) FTIS Dispatch Valve is secured closed,</li> <li>b) APS PRSOV is secured closed, and</li> <li>c) Repairs are made within 10 flight-days.</li> </ul>	

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**49. Airborne Auxiliary Power**

Sequence No.	Item	1	2	3	4	Change Bar
00-00	Auxiliary Power Unit (APU)	C	1	0	(M)(O) Except for ER operations, may be inoperative provided: a) APU is deactivated, and b) Procedures are not dependent on its use.	
16-04	APU Air Inlet Door System (EMBRAER 190-E2)					
-A		C	1	0	(M) May be inoperative provided: a) APU Air Inlet Door is deactivated closed, and b) APU is considered inoperative.	
-B		C	1	0	(M)(O) May be inoperative and APU used provided: a) APU Air Inlet Door is deactivated in open position, and b) Appropriate performance penalties are applied.	
61-00	APU Master Knob					
-01	Knob Detents	C	2	0	(O) Except for ER operations, knob detents may be inoperative provided the APU is used on ground only.	
71-00	APU RPM Indication on EICAS	C	1	0	May be inoperative or dashed provided APU is considered inoperative.	
72-00	APU EGT Indication on EICAS	C	1	0	May be inoperative or dashed provided APU is considered inoperative.	

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**50. Cargo and Accessory Compartments**

Sequence No.	Item	1	2	3	4	Change Bar
22-01	Cargo/Baggage Door Nets					
-A		C	2	0	May be inoperative or missing provided adjacent Cargo Nets are installed and the associated section remains empty.	
-B		C	2	0	May be inoperative or missing provided associated cargo compartment remains empty.	
22-02	Cargo/Baggage Net					
*** -01	EMBRAER 170/175/190/195/ 190-E2/LINEAGE 1000	D	-	0	May be inoperative or missing provided associated cargo/baggage compartment remains empty.	
-02	EMBRAER 170/175/190/195/ 190-E2	A	-	-	May be inoperative or missing provided: a) Acceptable cargo loading limits from an approved source (i.e., an Approved Cargo Loading Manual, Cargo Handling Manual or Weight and Balance Document) are observed, and b) Repairs are made prior to the completion of the next Heavy Maintenance Visit.	
31-00	Cargo Compartment Linings	C	-	0	May be damaged or missing provided associated cargo compartment remains empty.	

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4. REMARKS OR EXCEPTIONS

**50. Cargo and Accessory Compartments**

Sequence No.	Item	1	2	3	4	Change Bar
32-06	Blow-Out Panels	C	-	0	(O) May be damaged or missing provided procedures are established and used to ensure the associated 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 MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	
61-06	Forward Cargo Door Insulation Blankets (EMBRAER 190-E2)	D	-	0	(O) May be damaged or missing provided live animals are not carried in the forward cargo compartment.	

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**52. Doors**

Sequence No.	Item	1	2	3	4	Change Bar
00-31	Aft Baggage Door Emergency Opening System (LINEAGE 1000)	C	1	0		
30-00	Cargo Compartment Doors	C	2	0	(M)(O) May be inoperative provided: a) Associated cargo compartment is empty or is verified to contain only empty cargo handling equipment, ballast (ballast may be loaded in ULDs), and/or Fly Away Kits, and b) Affected cargo door is verified closed, latched, and locked before each flight.  NOTE: Operator MELs must define which items are approved for inclusion in the Fly Away Kits and which materials can be used as ballast.	
30-20	Forward and Aft Cargo Compartment Door Gas Spring Actuators					
-A		C	4	2	One Gas Spring Actuator per door may be inoperative or missing provided opposite Actuator Bellcrank and Actuator Rod operate normally.	
-B		B	4	0	(M) May be inoperative or missing provided: a) Door is verified capable of being held open, and b) Alternate procedures are established and used to operate the affected Cargo Compartment Door.	
-C		C	4	0	May be inoperative provided affected cargo compartment door is not used.	

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**52. Doors**

Sequence No.	Item	1	2	3	4	Change Bar
30-22	Forward and Aft Cargo Compartment Door Actuator Bellcranks	C	4	2	One Actuator Bellcrank per door may be damaged or missing provided opposite Gas Spring Actuator and Actuator Rod operates normally.	
30-24	Forward and Aft Cargo Compartment Door Actuator Rods	C	4	2	One Actuator Rod per door may be damaged or missing.	
31-20	Fwd (Aft) Cargo Door Green Indicators					
-A		C	8	0	(O) Green latch and lock indicators may be missing provided: a) Affected door and its handle are verified completely flush with fuselage skin before each flight, and b) EICAS message DOOR CRG FWD (AFT) OPEN is operative.	
-B		C	4	0	(O) Green latch indicators may be missing provided: a) Affected door and its handle are verified completely flush with fuselage skin before each flight, and b) Associated lock (inner markings) indicators are present and checked green before each flight.	
31-28	Forward and Aft Cargo Door Closing Rods	D	2	0	(M) May be inoperative or missing provided alternate procedures are established and used.	

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3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**52. Doors**

Sequence No.	Item	1	2	3	4	Change Bar
51-00 ***	Cockpit Security Door Automatic Locking System	A	1	0	(M)(O) May be inoperative provided: a) Automatic locking system is deactivated, b) Mechanical Latch operates normally and is used to lock the door, c) Alternate procedures are established and used for locking and unlocking the flight deck door using the Mechanical Latch, and d) Repairs are made within 2 flight-days.	
-01	Mechanical Latch	C	1	0	May be inoperative provided automatic locking system operates normally.	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
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**52. Doors**

Sequence No.	Item	1	2	3	4	Change Bar
51-00 ***	Cockpit Security Door Automatic Locking System (Cont'd)					
-02	Cockpit Door Control Panel					
-A	LOCK Pushbutton	A	1	0	May be inoperative provided: a) Cockpit Security Door Automatic Locking System is considered inoperative, and b) Repairs are made within 2 flight-days.	
-B	LOCK Pushbutton Light	B	1	0	(O) May be inoperative provided the LOCK pushbutton is verified to operate normally.	
-C	INHIB Pushbutton	A	1	0	May be inoperative provided: a) Cockpit Security Door Automatic Locking System is considered inoperative, and b) Repairs are made within 2 flight-days.	
-D	INHIB Pushbutton Light	B	1	0	(O) May be inoperative provided the INHIBIT pushbutton is verified to operate normally.	
-E	UNLOCKED Annunciator ON Light	C	1	0	(O) May be inoperative provided: a) Door Chime operates normally, and b) The LOCK and INHIBIT pushbuttons are verified to operate normally.	
(Continued)						

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**52. Doors**

Sequence No.	Item	1	2	3	4	Change Bar
51-00 ***	Cockpit Security Door Automatic Locking System (Cont'd)					
-03	Flight Attendant Cockpit Door Control Panel					
-A	Emergency Entry Pushbutton	B	1	0	(M)(O) May be inoperative provided: a) Automatic locking system is deactivated, b) The cockpit door is secured closed for takeoff and landing, and c) Alternate procedures are established and used to secure and to access the cockpit during the flight in accordance with the Operator's security policy.	
-B	Emergency Entry Pushbutton Light	B	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-C	Door Opening Sequence Requested White Light	B	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-D	Door Opening Sequence Inhibited Red Light	B	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-E	Door Unlocked Green Light	B	1	0	(O) May be inoperative provided alternate procedures are established and used.	
-04	Maintenance Lock	D	1	0		

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**52. Doors**

Sequence No.	Item	1	2	3	4	Change Bar
51-01	Cockpit Door Peephole					
-A		A	1	0	(O) May be inoperative provided: a) Alternate procedures are established and used, and b) Repairs are made within 3 flight-days.	
-B		C	1	0	(O) May be inoperative provided: a) Cabin Surveillance System (CCS) is installed and operates normally, and b) Alternate procedures are established and used.	
60-00 ***	Airstair (EMBRAER 170/175/190/195/ LINEAGE 1000)	D	1	0	May be inoperative provided it is correctly stowed and locked for flight.  NOTE: Any mode that operates normally may be used.	
70-00	Door Position Indications on MFD and Associated EICAS Messages	C	-	0	(M)(O) May be inoperative provided: a) Affected door is verified closed, latched, and locked before each flight, and b) Push against inward opening access doors to verify that they are closed and locked.	

AIRCRAFT: ERJ-170, ERJ-190	<b>TABLE KEY</b> 1. REPAIR CATEGORY 2. NO. INSTALLED 3. NO. REQUIRED FOR DISPATCH 4. REMARKS OR EXCEPTIONS
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**52. Doors**

Sequence No.	Item	1	2	3	4	Change Bar
70-01	Passenger and Service Doors Indicators (EMBRAER 170/175/190/195/ LINEAGE 1000)					
-01	Door Latch Visual Indicators	C	4	3	(M)(O) May be inoperative provided: a) Affected door is verified closed, latched, and locked before each flight, b) Latch mechanism is verified to operate normally, and c) Both door locked visual indicators on the affected door operate normally.  NOTE: The DOOR PAX (SERV) FWD (AFT) OPEN Warning EICAS message may be displayed.	
-02	Door Locked Visual Indicators	C	8	4	(M)(O) One on each door may be inoperative provided: a) Affected door is verified closed, latched, and locked before each flight, b) Door latch visual indicator on the affected door operates normally, and c) Latch mechanism is verified to operate normally.  NOTE: The DOOR PAX (SERV) FWD (AFT) OPEN Warning EICAS message may be displayed.	
(Continued)						

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**52. Doors**

Sequence No.	Item	1	2	3	4	Change Bar
70-01	Passenger and Service Doors Indicators (EMBRAER 170/175/190/195/ LINEAGE 1000) (Cont'd)					
-03	Escape Slide ARMED/DISARMED Indicators	C	4	3	(M)(O) May be inoperative provided: a) Indicator is covered to obscure ARMED/DISARMED sign, b) Girt bar indication is verified to operate normally, and c) Alternate procedures are established and used to indicate the Escape Slide status to the crew.	
-04	Girt Bar Escape Slide Indicators	C	4	3	(M)(O) May be inoperative provided: a) Escape Slide ARMED/DISARMED indication is verified to operate normally, and b) Girt bar is verified to operate normally.	
70-02	Internal Door Warning System (LINEAGE 1000)	C	1	0	(M) May be inoperative provided the internal doors are secured open.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**71. Powerplant**

Sequence No.	Item	1	2	3	4	Change Bar
11-02	Fan Cowl Latches (EMBRAER 190-E2)					
-01	Position Sensors	C	6	0	(M) May be inoperative provided Fan Cowl Latches are verified closed before each flight.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**73. Engine Fuel and Control**

Sequence No.	Item	1	2	3	4	Change Bar
21-01	Engine Full Authority Digital Electronic Control (FADEC) System					
-01	System Faults					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	A	-	-	May be dispatched with ENG 1(2) SHORT DISPATCH faults provided repairs are made in accordance with times established by the engine manufacturer in the airworthiness section of the Engine Manual GEK 112031 (EMBRAER 170/175) or GEK 112081 (EMBRAER 190/195). No Extensions are authorized.	
-B	EMBRAER 190-E2	A	-	-	May be dispatched with ENG 1(2) SHORT DISPATCH faults provided repairs are made in accordance with times established by the engine manufacturer in the airworthiness section of the Engine Manual. No extensions are authorized.	
-C	EMBRAER 190-E2	C	2	1	May be dispatched with ENG 1 FADEC FAULT faults provided ENG 2 FADEC FAULT is not displayed on the EICAS.	
-D	EMBRAER 190-E2	C	2	1	May be dispatched with ENG 2 FADEC FAULT faults provided ENG 1 FADEC FAULT is not displayed on the EICAS.	
21-15	ENG 1(2) FUEL IMP BYPASS Caution EICAS Messages				Deleted, Revision 16. (Included in item 73-34-21.)	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**73. Engine Fuel and Control**

Sequence No.	Item	1	2	3	4	Change Bar
21-17	T2 Sensor Heaters (EMBRAER 170/175)	B	2	1	One may be inoperative provided: a) One Ice Detection System is operative, and b) Airplane is not operated in known or forecast icing conditions.	
21-21	P2T2 Heater (EMBRAER 190-E2)	C	2	1	One may be inoperative provided aircraft is not operated in known or forecast icing conditions.	
31-01	Fuel Low Pressure Switches	C	2	0	(O) May be inoperative provided associated Fuel AC Pump remains selected ON during the entire flight except when fuel crossfeed operations are required.	
31-07	ENG 1(2) FUEL LO PRESS Caution EICAS Messages				Deleted, Revision 16. (Included in item 73-31-01.)	
34-21	Engine Fuel Filter Differential Pressure Sensor					
-A	EMBRAER 170/175	C	2	1	(M) One may be inoperative provided visual inspection is performed before each flight to ensure that there is no fuel bypass.	
-B	EMBRAER 190/195/190-E2/ LINEAGE 1000	C	2	1	(M) One may be inoperative provided associated fuel filter is changed before the first flight of each flight-day.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**75. Bleed Air**

Sequence No.	Item	1	2	3	4	Change Bar
24-01	Engine Turbine Active Clearance Control (ACC) Air Valve (EMBRAER 190-E2)					
-01	System Faults	C	2	0	(O) May be dispatched with ENG 1(2) FUEL FLOW INCR Advisory EICAS Message provided appropriate fuel consumption penalties are applied.	
26-02	Engine Buffer Air System (EMBRAER 190-E2)					
-01	System Faults	A	2	1	(M) One may be dispatched for one flight with ENG 1(2) BACV VLV FAIL Caution EICAS Message provided: <ol style="list-style-type: none"> <li>a) Associated Engine Bleed System is considered inoperative for the intended flight,</li> <li>b) Aircraft is not operated in known or forecast icing conditions, and</li> <li>c) Oil quantity is serviced before the flight.</li> </ol>	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**77. Engine Indicating**

Sequence No.	Item	1	2	3	4	Change Bar
31-00	Engine Vibration Indication on EICAS					
-01	EMBRAER 170/175/190/195/ LINEAGE 1000					
-A	HP Vibration Indication on EICAS	C	2	1		
-02	EMBRAER 190-E2					
-A	Fan Vibration Indication	B	2	1	May be inoperative provided: a) There are no reports of vibration above field advisory limits on last flight or engine start-up, b) All vibration indications from opposite engine are operative, and c) Aircraft is not operated into known or forecast icing conditions.	
-B	HP Vibration Indication on EICAS	C	2	1	May be inoperative provided: a) There are no reports of vibration above the field advisory limits on last flight or engine start-up, and b) All vibration indications from opposite engine are operative.	
-C	LP Vibration Indications on EICAS	C	2	1	May be inoperative provided: a) There are no reports of vibration above the field advisory limits on last flight or engine start-up, and b) All vibration indications from opposite engine are operative.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**78. Engine Exhaust**

Sequence No.	Item	1	2	3	4	Change Bar
30-00	Thrust Reverser Systems	C	2	1	(M)(O) One may be inoperative provided: a) Affected thrust reverser is locked in the forward thrust position, and b) Appropriate performance penalties are applied.	
-01	System Faults					
-A		C	2	1	(M)(O) One may be dispatched with the ENG 1(2) REV DEPLOYED Warning EICAS Message provided: a) Affected thrust reverser is locked in the forward thrust position, b) Opposite Thrust Reverser System is operative, and c) Appropriate performance penalties are applied.	
-B		C	2	1	(M)(O) One may be dispatched with the ENG 1(2) REV PROT FAULT EICAS Message provided: a) Affected thrust reverser is locked in the forward thrust position, b) Opposite Thrust Reverser System is operative, and c) Appropriate performance penalties are applied.	
-C		C	2	1	(M)(O) One may be dispatched with the ENG 1(2) REV FAIL Caution EICAS Message provided: a) Affected thrust reverser is locked in the forward thrust position, b) Opposite Thrust Reverser System is operative, and c) Appropriate performance penalties are applied.	
(Continued)						

AIRCRAFT:  
 ERJ-170, ERJ-190

**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**78. Engine Exhaust**

Sequence No.	Item	1	2	3	4	Change Bar
30-00	Thrust Reverser Systems (Cont'd)					
-01	System Faults (Cont'd)					
-D		C	2	1	(M)(O) One may be dispatched with the ENG 1(2) REV TLA FAIL Caution EICAS Message provided: a) Affected thrust reverser is locked in the forward thrust position, b) Opposite Thrust Reverser System is operative, and c) Appropriate performance penalties are applied.	
-E		C	2	1	(M)(O) One may be dispatched with the ENG 1(2) REV INHIBIT Status EICAS Message provided: a) Affected thrust reverser is locked in the forward thrust position, b) Opposite Thrust Reverser System is operative, and c) Appropriate performance penalties are applied.	
34-04	ENG 1(2) REV DEPLOYED Warning EICAS Message				Deleted, Revision 16. (Included in item 78-30-00.)	
34-06	ENG 1(2) REV PROT FAULT Caution EICAS Message				Deleted, Revision 16. (Included in item 78-30-00.)	
34-08	ENG 1(2) REV FAIL Caution EICAS Message				Deleted, Revision 16. (Included in item 78-30-00.)	
34-10	ENG 1(2) REV TLA FAIL Caution EICAS Message				Deleted, Revision 16. (Included in item 78-30-00.)	
34-12	ENG 1(2) REV INHIBIT Status EICAS Message				Deleted, Revision 16. (Included in item 78-30-00.)	

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**TABLE KEY**

1. REPAIR CATEGORY
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3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**79. Engine Oil**

Sequence No.	Item	1	2	3	4	Change Bar
21-00	Oil Supply System (EMBRAER 190-E2)					
-01	System Faults	C	2	1	(M) One may be dispatched with ENG 1(2) OIL SEAL FAULT Caution EICAS Message provided: a) Associated Engine Bleed System is considered inoperative, and b) Oil quantity is serviced before the first flight of each flight-day.	
31-00	Oil Quantity Indications on MFD				Deleted, Revision 16. (Included in item 79-31-21.)	
31-03	Oil Tank Oil Level Indicator	C	2	0	(M) May be inoperative provided alternate procedures are established and used to verify oil level when servicing is performed.	
31-07	ENG 1(2) OIL LO LEVEL Caution EICAS Message				Deleted, Revision 16. (Included in item 79-31-21.)	
31-21	Engine Oil Quantity Sensor	C	2	1	(M)(O) Except for ER operations, one may be inoperative provided: a) Oil quantity is serviced before each flight, and b) Oil Pressure Indication is available and is monitored throughout the flight.	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**79. Engine Oil**

Sequence No.	Item	1	2	3	4	Change Bar
33-01 ***	Low Oil Pressure Switch					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000 Pre-Mod. Load 21.2	C	2	1	(O) One may be inoperative provided: a) Oil Pressure Indication is available and is monitored throughout the flight, and b) ENG 1(2) OIL LO PRESS Warning EICAS Message on opposite engine operates normally.	
-B	EMBRAER 170/175/190/195/ LINEAGE 1000 Load 25.3 and on, Except Load 25.4	C	2	0	May be inoperative provided oil pressure indication is available.	
33-09	ENG 1(2) OIL LO PRESS Warning EICAS Message (EMBRAER 170/175/190/195/ LINEAGE 1000 Pre-Mod. Load 21.2)				Deleted, Revision 16. (Included in item 79-33-01.)	

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**TABLE KEY**

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2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**79. Engine Oil**

Sequence No.	Item	1	2	3	4	Change Bar
33-23	Engine Oil Filter Differential Pressure Sensor					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	C	2	1	(M) One may be inoperative provided: a) Associated ENG 1(2) CHIP DETECTED Maintenance Message is confirmed not present on MFD Engine Maintenance Page before each flight, and b) Oil filter is inspected for presence of contaminants before the first flight of each flight-day.	
-B	EMBRAER 190-E2	C	2	1	(M) May be inoperative provided: a) Associated ENG 1(2) CHIP DETECTED Advisory EICAS Message is not displayed before each flight, b) Oil filter is changed before the next flight and then before the first flight in every 3 flight-days, and c) Associated engine is not under monitoring for chip detection events.	
34-07	ENG 1(2) OIL IMP BYPASS Advisory EICAS Message				Deleted, Revision 16. (Included in item 79-33-23.)	

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**TABLE KEY**

1. REPAIR CATEGORY
2. NO. INSTALLED
3. NO. REQUIRED FOR DISPATCH
4. REMARKS OR EXCEPTIONS

**80. Starting**

Sequence No.	Item	1	2	3	4	Change Bar
10-01	Starter Control Valve (SCV)					
-A	EMBRAER 170/175/190/195/ LINEAGE 1000	C	2	1	(M)(O) One may be inoperative provided manual override starting procedures are used.  NOTE: See AFM for Windmilling starts on associated engine.	
-B	EMBRAER 190-E2	A	2	1	(M) One may be inoperative provided: a) Manual override starting procedures are used, and b) Repairs are made within 3 flight-days.  NOTE: See AFM for Windmilling starts on associated engine.	
10-05	Engine Start/Stop Switch Cover	C	2	0	May be inoperative or missing.	