



AIRCRAFT MAINTENANCE MANUAL

ICE AND RAIN PROTECTION - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the check of the anti-icing system messages on the EICAS display and an operational test of the anti-icing system with the bleed open.
- B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
30-00-00-700-801-A ♦	ANTI-ICING SYSTEM MESSAGES - OPERATIONAL CHECK	ALL
30-00-00-700-802-A	ANTI-ICING SYSTEM - OPERATIONAL TEST	ALL
30-00-00-700-803-A	ANTI-ICING VALVES - OPERATIONAL TEST	ALL
30-00-00-700-804-A	ANTI-ICING SYSTEM - FUNCTIONAL TEST	ALL



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TASK 30-00-00-700-801-A

EFFECTIVITY: ALL

2. ANTI-ICING SYSTEM MESSAGES - OPERATIONAL CHECK

A. General

(1) This task permits you to make sure that these messages come into view on the EICAS:

- BLD 1(2) LOW TEMP.
- ICE CONDITION.
- ICE DET 1(2) FAIL.
- STAB A/ICE FAIL.
- ICE COND - A/I INOP.
- ICE DET 1-2 FAIL.
- ICE DETECTORS FAIL.

• WG 1-2 A/ICE FAIL.

Except for aircraft with these components installed: integrated computer #1 -82426 and on, integrated computer #2 -83426 and on, and data acquisition units -935 and on or; integrated computer #1 -82426 and on, integrated computer #2 -82426 and on, and data acquisition units -935 and on.

• WG A/ICE FAIL.

Aircraft with these components installed: integrated computer #1 -82426 and on, integrated computer #2 -83426 and on, and data acquisition units -935 and on or; integrated computer #1 -82426 and on, integrated computer #2 -82426 and on, and data acquisition units -935 and on.

B. References

REFERENCE	DESIGNATION
AMM SDS 24-60-00/1	
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
SB145-31-0054	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable



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F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
-	Freeze spray	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Cockpit

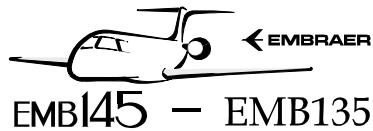
I. Preparation

SUBTASK 841-002-A

- (1) Energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

**WARNING: MAKE SURE THAT THE LANDING GEAR SAFETY PINS ARE INSTALLED
(AMM TASK 32-00-01-910-801-A/200).**

- (2) Set these pushbuttons and knob as follows:
 - (a) BLEED 1 pushbutton - OFF.
 - (b) BLEED 2 pushbutton - OFF.
 - (c) XBLEED - AUTO.
 - (d) APU BLEED pushbutton - OFF.
 - (e) WING pushbutton - ON.
 - (f) STAB pushbutton - ON.
 - (g) OVERRIDE knob - ALL.
 - (h) ENG AIR INLET pushbutton - ON
 - (i) SENSORS pushbutton - ON
- (3) Make sure that the circuit breaker(s) on the circuit breaker panel is (are) in closed position:
 - AIR/GND A (Location tip: DC BUS 1 / LDG GEAR / AIR/GND A).
 - AIR/GND B (Location tip: ESSENTIAL DC BUS 1 / LDG GEAR / AIR/GND B).
 - AIR/GND C (Location tip: DC BUS 2 / LDG GEAR / AIR/GND C).
 - AIR/GND D (Location tip: ESSENTIAL DC BUS 2 / LDG GEAR / AIR/GND D).



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J. Operationally Check Anti-Icing System Messages ([Figure 501](#)) ([Figure 502](#))

SUBTASK 710-002-A

CAUTION: MAKE SURE THAT THE BLEED 1, BLEED 2, AND APU BLEED PUSHBUTTONS ARE OFF OR THAT THERE IS NO ENGINE OR APU IN OPERATION.

(1) Do the check as follows:

- (a) On the overhead panel, set the TEST switch to 1 and hold it for 15 seconds approximately.

Result:

- 1 The EICAS display shows these messages:

- BLD 1 LOW TEMP (caution).
- ICE CONDITION (advisory).
- ICE DET 1 FAIL (caution).
- WG 1-2 A/ICE FAIL (caution).

Except for aircraft with these components installed: integrated computer #1 -82426 and on, integrated computer #2 -83426 and on, and data acquisition units -935 and on or; integrated computer #1 -82426 and on, integrated computer #2 -82426 and on, and data acquisition units -935 and on.

- WG A/ICE FAIL (caution).
Aircraft with these components installed: integrated computer #1 -82426 and on, integrated computer #2 -83426 and on, and data acquisition units -935 and on or; integrated computer #1 -82426 and on, integrated computer #2 -82426 and on, and data acquisition units -935 and on.
- STAB A/ICE FAIL (caution).

- 2 The master CAUTION lights flash.

- (b) Push one of the master CAUTION lights.

Result:

- 1 The master CAUTION lights go off.

- (c) Release the TEST switch.

Result:

- 1 On the EICAS display, the messages go out of view.

- (d) On the overhead Circuit Breaker Panel, open the ENG AIR INLET 1 circuit breaker.

Result:

- 1 After 10 seconds approximately, the E1 A/ICE FAIL caution message comes into view on the EICAS.

- (e) On the overhead Circuit Breaker Panel, close the ENG AIR INLET 1 circuit breaker.

Result:

- 1 The E1 A/ICE FAIL caution message goes out of view on the EICAS.

- (f) On the overhead panel, set the TEST switch to 2 and hold it for 15 seconds approximately.

Result:

- 1 The EICAS display shows these messages:

- BLD 2 LOW TEMP (caution).
- ICE CONDITION (advisory).
- ICE DET 2 FAIL (caution).
- WG 1-2 A/ICE FAIL (caution).

Except for aircraft with these components installed: integrated computer #1 -82426 and on, integrated computer #2 -83426 and on, and data acquisition units -935 and on or; integrated computer #1 -82426 and on, integrated computer #2 -82426 and on, and data acquisition units -935 and on.

- WG A/ICE FAIL (caution).
Aircraft with these components installed: integrated computer #1 -82426 and on, integrated computer #2 -83426 and on, and data acquisition units -935 and on or; integrated computer #1 -82426 and on, integrated computer #2 -82426 and on, and data acquisition units -935 and on.
- STAB A/ICE FAIL (caution).

- 2 The master CAUTION lights flash.

- (g) Push one of the master CAUTION lights.

Result:

- 1 The master CAUTION lights go off.

- (h) Release the TEST switch.

Result:

- 1 On the EICAS display, the messages go out of view.

- (i) On the overhead Circuit Breaker Panel, open the ENG AIR INLET 2 circuit breaker.

Result:

- 1 After 10 seconds approximately, the E2 A/ICE FAIL caution message comes into view on the EICAS.

- (j) On the overhead Circuit Breaker Panel, close the ENG AIR INLET 2 circuit breaker.

Result:

- 1 The E2 A/ICE FAIL caution message goes out of view on the EICAS.

- (k) Open the ICE DETECTOR 1 circuit breaker, on the LH electrical-power control/distribution box ([AMM SDS 24-60-00/1](#)), and open the ICE DETECTOR 2 circuit breaker, on the RH electrical-power control/distribution box ([AMM SDS 24-60-00/1](#)).

Result:

- 1 The EICAS display shows the ICE DETECTORS FAIL, ICE DET 1-2 FAIL caution messages.

- 2 The master CAUTION lights flash.
- (l) Push a master CAUTION light.
Result:
1 The master CAUTION lights go off.
- (m) Close the ICE DETECTOR 1 and ICE DETECTOR 2 circuit breakers.
Result:
1 On the EICAS display, the ICE DETECTORS FAIL and ICE DET 1-2 FAIL caution messages go out of view.
- (n) Set the OVERRIDE knob to AUTO.
- WARNING:** • BE CAREFUL WHILE YOU DO THE TEST ON THE ICE DETECTOR PROBES BECAUSE THEY WILL HAVE THEIR INTERNAL HEATERS STARTED AS SOON AS A MASS ON THE PROBES IS SENSED. DO NOT TOUCH THE PROBE, EXCEPT AS INDICATED IN STEPS P AND R.
- DO NOT TOUCH THE ICE DETECTOR PROBE FOR MORE THAN 3 SECONDS. IF YOU TOUCH THE PROBE FOR MORE THAN 3 SECONDS, IT WILL CAUSE AN INJURY TO YOU.

CAUTION: DO NOT USE TOOLS TO TOUCH THE ICE DETECTOR PROBES. IF YOU USE TOOLS, YOU CAN CAUSE DAMAGE TO THE PROBES.

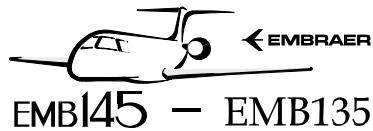
- (o) (For spray procedure only) To test the EICAS messages ICE CONDITION and ICE COND - A/I INOP related to ICE DETECTOR 1 probe do as follows:
Result:
1 On aircraft PRE-MOD [SB145-31-0054](#) do the check as follows:
First apply Freeze Spray (2) to the ICE DETECTOR 1 probe, then spray water (3) ([Figure 502](#))
The EICAS display shows:
 - The ICE CONDITION advisory message and, after approximately 35 seconds,
 - The ICE COND - A/I INOP warning message.After approximately 60 seconds, the messages goes out of view.
1. Push a WARNING CAUTION light.
The master WARNING lights go off

- 2 On aircraft POST-MOD [SB145-31-0054](#) do the check as follows:
1. On the overhead circuit breaker panel, open the N2 SIGNAL 1A, 2A, 1B, and 2B circuit breaker.
 2. Set the BATT 1 and BATT 2 switches to OFF position.
 3. During this test, the warning messages ELEC ESS XFR FAIL, MAIN DOOR OPN, and SPS 1(2) INOP and the caution messages TAT 1(2) HEAT INOP, PITOT 3 INOP, HYD SYS 1(2) FAIL, AOA 1-2 HEAT INOP, IC 1(2) WOW INOP, BKUP BATT OFF BUS, and LG AIR/GND FAIL can be displayed on the EICAS.
 4. On the overhead circuit breaker panel, open the AIR/GROUND A, B, C, D circuit breakers
 5. Apply Freeze Spray (2) to the ICE DETECTOR 1 probe, then spray water (3) ([Figure 502](#))
 6. The EICAS display shows:
 - The WG A/ICE FAIL caution message.
 - The STAB A/ICE FAIL caution message.
 - The ICE CONDITION advisory message and, after approximately 35 seconds,
 - ICE COND - A/I INOP warning message.After approximately 60 seconds, the messages goes out of view.
 7. Push a master WARNING light.
The master WARNING lights go off.
 8. On the overhead circuit breaker panel, close the AIR/GROUND A, B, C, and D circuit breakers.
 9. Set the BATT 1 and BATT 2 switches to AUTO position.
 10. On the overhead circuit breaker panel, close the N2 SIGNAL 1A, 2A, 1B, and 2B circuit breakers.

WARNING: DO NOT TOUCH THE ICE DETECTOR PROBE FOR MORE THAN 3 SECONDS. IF YOU TOUCH THE PROBE FOR MORE THAN 3 SECONDS, IT WILL CAUSE AN INJURY TO YOU.

- (p) (For hand procedure only) To test the EICAS messages ICE CONDITION and ICE COND - A/I INOP related to ICE DETECTOR 1 probe do as follows:

- NOTE:
- When you work with the ice detector, your hands must be clean.
 - Make sure that the ice detector probe heats when you hold it. If you only touch the ice detector, it is possible that the message ICE CONDITION does not show. You must apply a medium pressure to have the correct result.



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Result:

- 1 On aircraft PRE-MOD [SB145-31-0054](#) do the check as follows:

With bare fingers (1), firmly hold the ICE DETECTOR 1 probe for approximately 3 seconds ([Figure 502](#)).

The EICAS display shows:

- The ICE CONDITION advisory message and, after approximately 35 seconds,
- The ICE COND - A/I INOP warning message.

After approximately 60 seconds, the messages goes out of view.

1. Push a master WARNING light.
The master WARNING lights go off

2 On aircraft POST-MOD [SB145-31-0054](#) do the check as follows:

NOTE: • Make sure that the OVERRIDE knob is set to "AUTO" and the aircraft simulates the in-flight condition (AIR).

• The message ICE CONDITION shows when icing condition is sensed in flight.

1. On the overhead circuit breaker panel, open the N2 SIGNAL 1A, 2A, 1B, and 2B circuit breaker.
2. Set the BATT 1 and BATT 2 switches to OFF position.
3. During this test, the warning messages ELEC ESS XFR FAIL, MAIN DOOR OPN, and SPS 1(2) INOP and the caution messages TAT 1(2) HEAT INOP, PITOT 3 INOP, HYD SYS 1(2) FAIL, AOA 1-2 HEAT INOP, IC 1(2) WOW INOP, BKUP BATT OFF BUS, and LG AIR/GND FAIL can be displayed on the EICAS.
4. On the overhead circuit breaker panel, open the AIR/GROUND A, B, C, D circuit breakers
5. With bare fingers (1), firmly hold the ICE DETECTOR 1 probe for approximately 3 seconds ([Figure 502](#)).
6. The EICAS display shows:
 - The WG A/ICE FAIL caution message.
 - The STAB A/ICE FAIL caution message.
 - The ICE CONDITION advisory message and, after approximately 35 seconds;
 - ICE COND - A/I INOP warning message.
After approximately 60 seconds, the messages goes out of view.
7. Push a master WARNING light.
The master WARNING lights go off.
8. On the overhead circuit breaker panel, close the AIR/GROUND A, B, C, and D circuit breakers.
9. Set the BATT 1 and BATT 2 switches to AUTO position.
10. On the overhead circuit breaker panel, close the N2 SIGNAL 1A, 2A, 1B, and 2B circuit breakers.

WARNING: DO NOT TOUCH THE ICE DETECTOR PROBE FOR MORE THAN 3 SECONDS. IF YOU TOUCH THE PROBE FOR MORE THAN 3 SECONDS, IT WILL CAUSE AN INJURY TO YOU.

- (q) (For spray procedure only) To test the EICAS messages ICE CONDITION and ICE COND - A/I INOP related to ICE DETECTOR 2 probe do as follows:

Result:

- 1 On aircraft PRE-MOD [SB145-31-0054](#) do the check as follows:

First apply Freeze Spray (2) to the ICE DETECTOR 2 probe, then spray water (3) ([Figure 502](#))

The EICAS display shows:

- The ICE CONDITION advisory message and, after approximately 35 seconds,
- The ICE COND - A/I INOP warning message.

After approximately 60 seconds, the messages goes out of view.

1. Push a master WARNING light.

The master WARNING lights go off.

- 2 On aircraft POST-MOD [SB145-31-0054](#) do the check as follows:

1. On the overhead circuit breaker panel, open the N2 SIGNAL 1A, 2A, 1B, and 2B circuit breaker.

2. Set the BATT 1 and BATT 2 switches to OFF position.

3. During this test, the warning messages ELEC ESS XFR FAIL, MAIN DOOR OPN, and SPS 1(2) INOP and the caution messages TAT 1(2) HEAT INOP, PITOT 3 INOP, HYD SYS 1(2) FAIL, AOA 1-2 HEAT INOP, IC 1(2) WOW INOP, BKUP BATT OFF BUS, and LG AIR/GND FAIL can be displayed on the EICAS.

4. On the overhead circuit breaker panel, open the AIR/GROUND A, B, C, D circuit breakers

5. Apply Freeze Spray (2) to the ICE DETECTOR 2 probe, then spray water (3) ([Figure 502](#))

6. The EICAS display shows:

- The WG A/ICE FAIL caution message.
- The STAB A/ICE FAIL caution message.
- The ICE CONDITION advisory message and, after approximately 35 seconds,
- ICE COND - A/I INOP warning message.

After approximately 60 seconds, the messages goes out of view.

7. Push a master WARNING light.

The master WARNING lights go off.

8. On the overhead circuit breaker panel, close the AIR/GROUND A, B, C, and D circuit breakers.

9. Set the BATT 1 and BATT 2 switches to AUTO position.

10. On the overhead circuit breaker panel, close the N2 SIGNAL 1A, 2A, 1B, and 2B circuit breakers.

WARNING: DO NOT TOUCH THE ICE DETECTOR PROBE FOR MORE THAN 3 SECONDS. IF YOU TOUCH THE PROBE FOR MORE THAN 3 SECONDS, IT WILL CAUSE AN INJURY TO YOU.

- (r) (For hand procedure only) To test the EICAS messages ICE CONDITION and ICE COND - A/I INOP related to ICE DETECTOR 2 probe do as follows:

- NOTE:
- When you work with the ice detector, your hands must be clean.
 - Make sure that the ice detector probe heats when you hold it. If you only touch the ice detector, it is possible that the message ICE CONDITION does not show. You must apply a medium pressure to have the correct result.

Result:

- 1 On aircraft PRE-MOD [SB145-31-0054](#) do the check as follows:

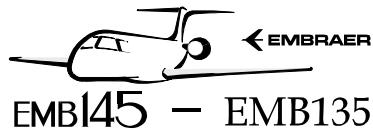
With bare fingers (1), firmly hold the ICE DETECTOR 2 probe for approximately 3 seconds ([Figure 502](#)).

The EICAS display shows:

- The ICE CONDITION advisory message and, after approximately 35 seconds,
- The ICE COND - A/I INOP warning message.

After approximately 60 seconds, the messages goes out of view.

1. Push a master WARNING light.
The master WARNING lights go off.



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2 On aircraft POST-MOD [SB145-31-0054](#) do the check as follows:

NOTE: • Make sure that the OVERRIDE knob is set to "AUTO" and the aircraft simulates the in-flight condition (AIR).

• The message ICE CONDITION shows when icing condition is sensed in flight.

1. On the overhead circuit breaker panel, open the N2 SIGNAL 1A, 2A, 1B, and 2B circuit breaker.
2. Set the BATT 1 and BATT 2 switches to OFF position.
3. During this test, the warning messages ELEC ESS XFR FAIL, MAIN DOOR OPN, and SPS 1(2) INOP and the caution messages TAT 1(2) HEAT INOP, PITOT 3 INOP, HYD SYS 1(2) FAIL, AOA 1-2 HEAT INOP, IC 1(2) WOW INOP, BKUP BATT OFF BUS, and LG AIR/GND FAIL can be displayed on the EICAS.
4. On the overhead circuit breaker panel, open the AIR/GROUND A, B, C, D circuit breakers
5. With bare fingers (1), firmly hold the ICE DETECTOR 2 probe for approximately 3 seconds ([Figure 502](#)).
6. The EICAS display shows:
 - The WG A/ICE FAIL caution message.
 - The STAB A/ICE FAIL caution message.
 - The ICE CONDITION advisory message and, after approximately 35 seconds,
 - ICE COND - A/I INOP warning message.After approximately 60 seconds, the messages goes out of view.
7. Push a master WARNING light.
The master WARNING lights go off.
8. On the overhead circuit breaker panel, close the AIR/GROUND A, B, C, and D circuit breakers.
9. Set the BATT 1 and BATT 2 switches to AUTO position.
10. On the overhead circuit breaker panel, close the N2 SIGNAL 1A, 2A, 1B, and 2B circuit breakers.

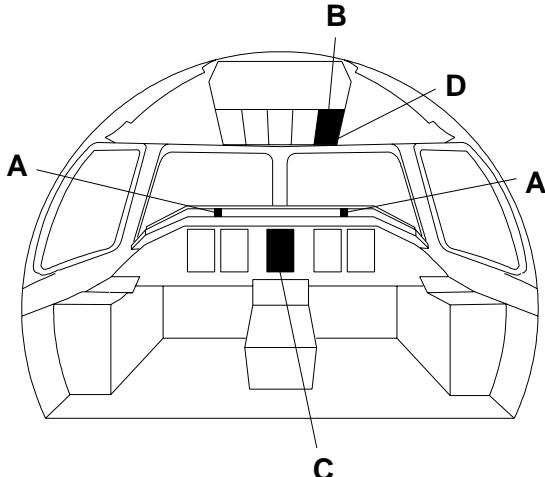
K. Follow-on

SUBTASK 842-002-A

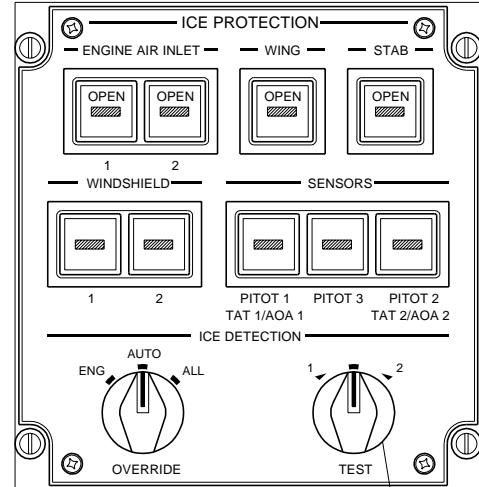
- (1) Set these pushbutton as follows:
 - (a) WING pushbutton - OFF.
 - (b) STAB pushbutton - OFF.
- (2) De-energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

EFFECTIVITY: ALL

Anti-Icing System Messages - Operational Check
Figure 501

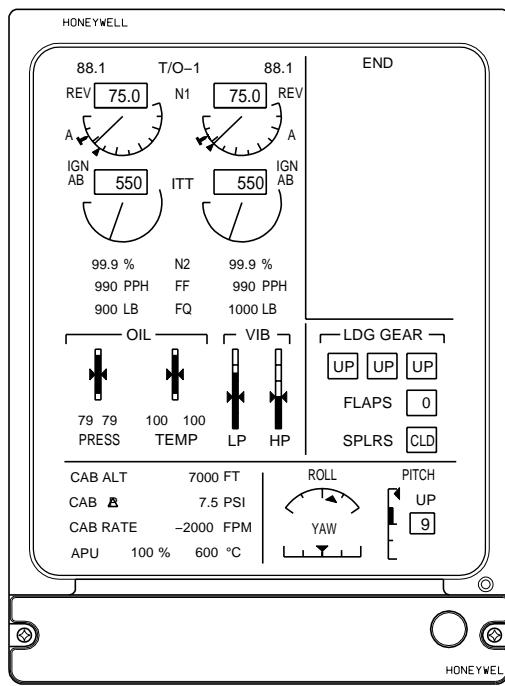


DET. A
MASTER AND CAUTION
LIGHTS

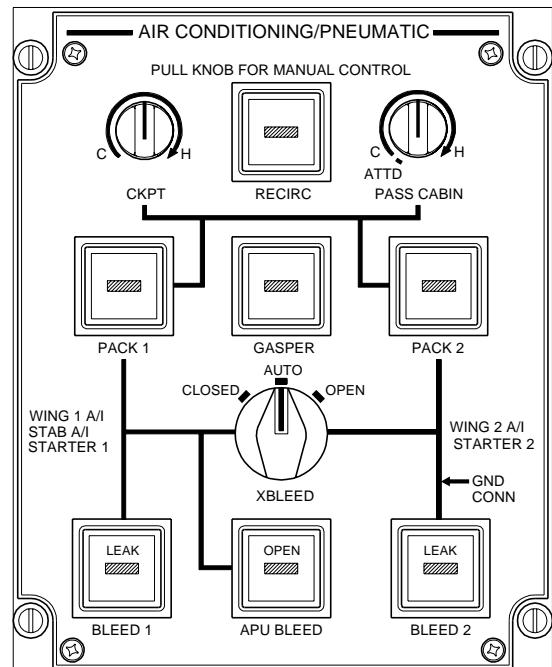


DET. B
ICE PROTECTION
PANEL

ICE DETECTION
TEST SWITCH



DET. C
EICAS DISPLAY



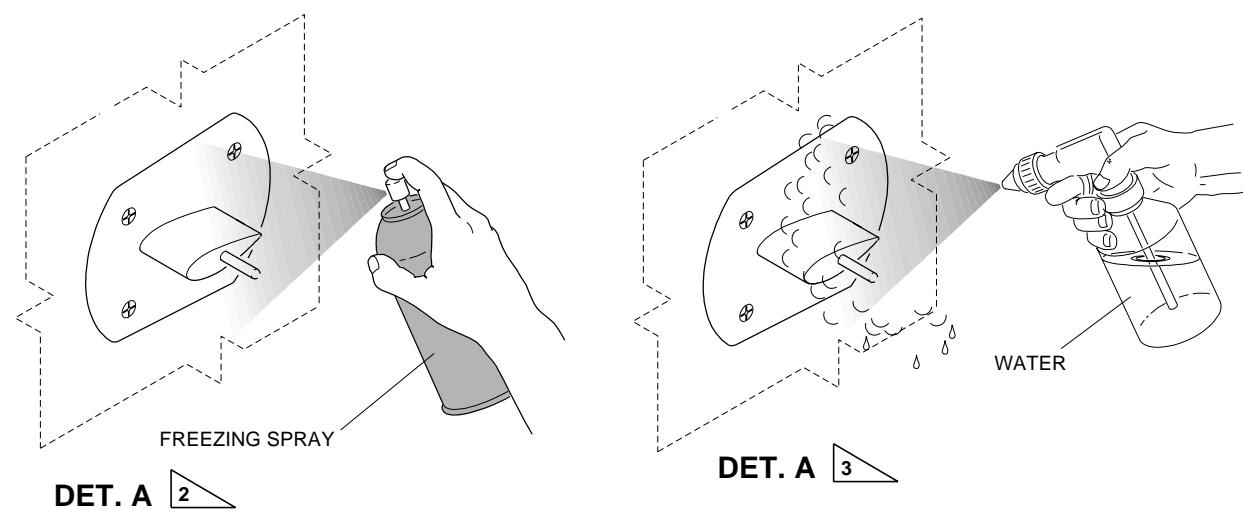
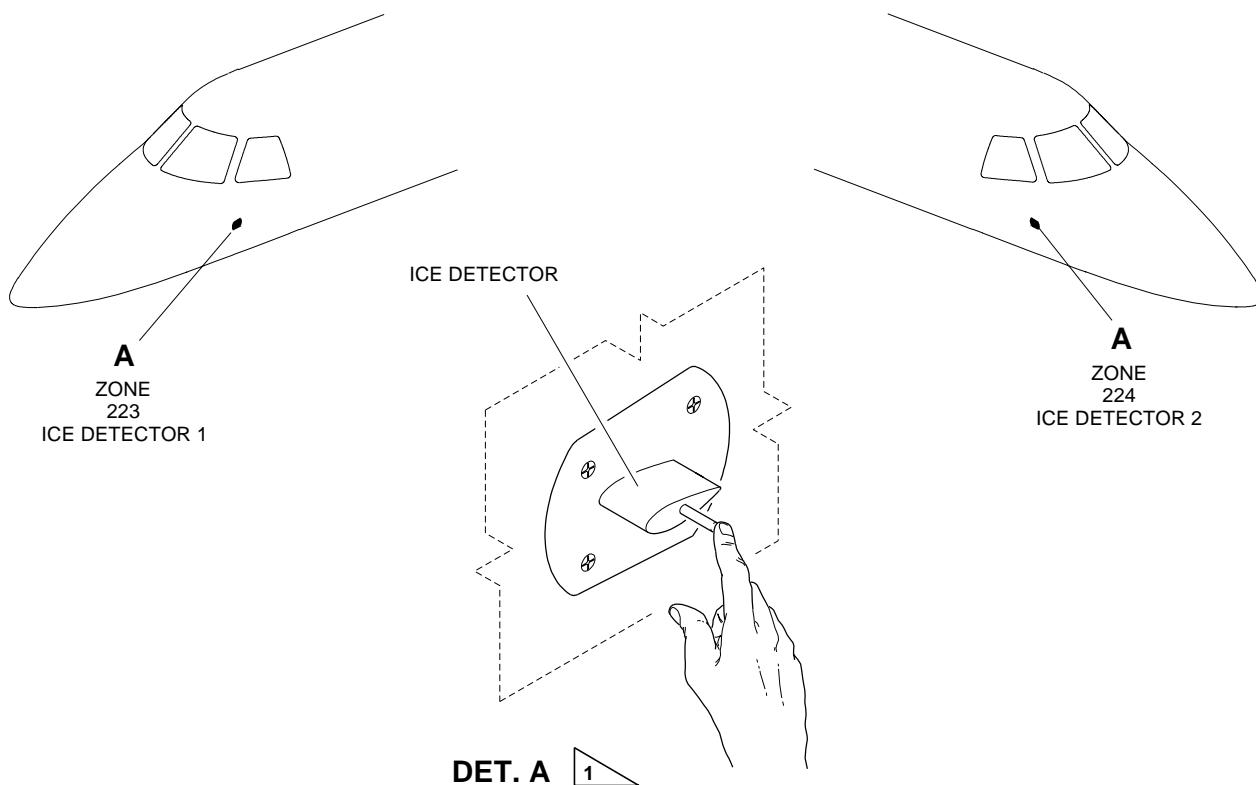
DET. D
AIR CONDITIONING/PNEUMATIC
PANEL

EM145AMM300401A.DGN

EFFECTIVITY: ALL

Anti-Icing System Messages - Operational Check

Figure 502

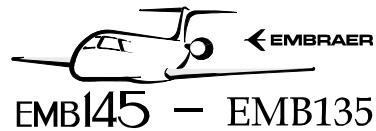


1 HAND PROCEDURE.

2 SPRAY PROCEDURE, STEP 1.

3 SPRAY PROCEDURE, STEP 2.

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TASK 30-00-00-700-802-A

EFFECTIVITY: ALL

3. ANTI-ICING SYSTEM - OPERATIONAL TEST

A. General

- (1) This test is done to make sure that the anti-icing system operates correctly.

B. References

REFERENCE	DESIGNATION
AMM TASK 71-00-01-910-801-A/200	ENGINE START PROCEDURE (NORMAL)
AMM TASK 71-00-01-910-804-A/200	ENGINE STOP PROCEDURE
S.B.145-36-0028	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	A - Does the task	Cockpit
1	B - Helps technician A	Cockpit

I. Preparation

SUBTASK 841-003-A

- (1) You have two manners to get the value of % of N2 to be set to the thrust levers to do the operational test:

NOTE: The % of N2 considers the Barometric Altitude and Static Air Temperature (SAT) displayed on MFD.

- (a) You can find the value on the table. Refer to ([Figure 503](#)), ([Figure 504](#)) and ([Figure 505](#)).
- (b) You can calculate the % of N2 to be set for thrust lever. Use ([Table 501](#)).

1

Table 501 - EQUATIONS FOR DEFINITION OF % OF N2

Barometric Altitude [ft]	SAT = T [°F] Equations for Fahrenheit degrees	SAT = T [°C] Equations for Celsius degrees
0 - 1500	X = 0.0865 * T + 75.84	X = 0.1557 * T + 78.61
1501 - 3000	X = 0.0893 * T + 76.36	X = 0.1607 * T + 79.22
3001 - 4500	X = 0.0881 * T + 77.24	X = 0.1586 * T + 80.06
4501 - 6000	X = 0.0876 * T + 77.08	X = 0.1576 * T + 80.90

NOTE: X = Calculated % of N2.

2 Write the acquired values. Use ([Table 502](#)).

Table 502 - ACQUIRED VALUES

Barometric Altitude [ft]:	
T [°F] or T [°C]:	
Calculated % of N2:	
Range of Calculated % of N2 (-0.2 / +0.4 %) :	

NOTE: Make sure you chose the correct equation for T [°F] or T [°C].

3 ([Table 503](#)) can be used as an example.

Table 503 - EXAMPLE OF ACQUIRED VALUES

Barometric Altitude [ft]:	1501 ft
T [°F] or T [°C] :	20 °C
Calculated % of N2:	82.43
Range of Calculated % of N2 (-0.2 / +0.4 %):	82.23 - 82.83 % of N2

NOTE: The values of Table 503 is an example only.

(2) Start the engines [AMM TASK 71-00-01-910-801-A/200](#).

(3) Set these pushbuttons and knob as follows:

- (a) BLEED 1 and 2 pushbuttons - ON.
- (b) PACK 1 and PACK 2 pushbuttons - ON.
- (c) XBLEED pushbutton - AUTO.
- (d) WING pushbutton - ON.
- (e) STAB pushbutton - ON.
- (f) ENGINE AIR INLET pushbuttons - ON.

J. Operationally Test Anti-Icing System (Figure 501)

SUBTASK 710-003-A

(1) If you calculated % of N2:

- (a) Set the thrust levers to the calculated % of N2 of to the ([Table 502](#)).

NOTE: • The value of % of N2 can be within range of calculated of % of N2 (-0.2 / +0.4%). Refer to [Table 502](#).
• You can refer to [Table 503](#) as an example.

- (2) If you found the value on the table:

- (a) Set the thrust levers to the value you found on ([Figure 503](#)), ([Figure 504](#)) and ([Figure 505](#)).

NOTE: • The value of % of N2 can be within range of N2 (-0.2 / +0.4%).

- (3) OVERRIDE switch - ALL.

- The OPEN inscriptions in the engine anti-icing pushbuttons will come on.

CAUTION: • DO NOT HOLD THE ICE DETECTION/TEST SWITCH AT POSITIONS 1 OR 2 FOR MORE THAN 15 SECONDS.

- DO NOT DO THIS TEST MORE THAN TWO TIMES TO PREVENT AN OVERHEATING CONDITION AT THE WING AND EMPENNAGE LEADING EDGES. IF IT IS NECESSARY TO DO THE TEST AGAIN, STOP UNTIL THE LEADING EDGES GET THE AMBIENT TEMPERATURE AGAIN.

- (4) Do the check as follows:

- (a) Set the TEST switch, on the overhead panel, to 1 and hold it for 15 seconds.

Make sure that:

Result:

- 1 The EICAS display shows these messages:

- BLD 1 LOW TEMP (caution).
- ICE DET 1 FAIL (caution).
- ICE CONDITION (advisory).
- CROSS BLEED OPEN (advisory) (This message will be shown for aircraft PRE-MOD. [S.B.145-36-0028](#) only).

- 2 The OPEN inscriptions in the anti-icing pushbuttons are on.

- (b) Push one of the master CAUTION lights.

Result:

- 1 The master CAUTION lights go off.

- (c) Release the TEST switch.

Result:

- 1 On the EICAS display, the messages go out of view.

- 2 The OPEN inscriptions in the wing and stab anti-icing pushbuttons go off.

- (d) Set the TEST switch, on the overhead panel, to 2 and hold it for 15 seconds.
- Make sure that:
- Result:
- 1 The EICAS display shows these messages:
 - BLD 2 LOW TEMP (caution).
 - ICE DET 2 FAIL (caution).
 - ICE CONDITION (advisory).
 - CROSS BLEED OPEN (advisory) (This message will be shown for aircraft PRE-MOD. [S.B.145-36-0028](#) only).
 - 2 The OPEN inscriptions in the anti-icing pushbuttons are on.
- (e) Push one of the master CAUTION lights.
- Result:
- 1 The master CAUTION lights go off.
- (f) Release the TEST switch.
- Result:
- 1 On the EICAS display, the messages go out of view.
 - 2 The OPEN inscriptions in the wing and stab anti-icing pushbuttons go off.
- (g) OVERRIDE knob - AUTO.
- Result:
- 1 The OPEN inscriptions in the engine anti-icing pushbuttons go off.
- (h) Set the engines to idle.

K. Follow-on

SUBTASK 842-003-A

- (1) Stop the engines ([AMM TASK 71-00-01-910-804-A/200](#)).

EFFECTIVITY: ALL

N2% required for A/ICE System Operational Test

Figure 503

Barometric Altitude 0–1500 ft ; N2% required for A/ICE System Operational Test on ground.											
SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2
50	122	86,4	27	80,6	82,8	4	39,2	79,2	-19	-2,2	75,6
49	120,2	86,2	26	78,8	82,7	3	37,4	79,1	-20	-4	75,5
48	118,4	86,1	25	77	82,5	2	35,6	78,9	-21	-5,8	75,3
47	116,6	85,9	24	75,2	82,3	1	33,8	78,8	-22	-7,6	75,2
46	114,8	85,8	23	73,4	82,2	0	32	78,6	-23	-9,4	75,0
45	113	85,6	22	71,6	82,0	-1	30,2	78,5	-24	-11,2	74,9
44	111,2	85,5	21	69,8	81,9	-2	28,4	78,3	-25	-13	74,7
43	109,4	85,3	20	68	81,7	-3	26,6	78,1	-26	-14,8	74,6
42	107,6	85,1	19	66,2	81,6	-4	24,8	78,0	-27	-16,6	74,4
41	105,8	85,0	18	64,4	81,4	-5	23	77,8	-28	-18,4	74,2
40	104	84,8	17	62,6	81,3	-6	21,2	77,7	-29	-20,2	74,1
39	102,2	84,7	16	60,8	81,1	-7	19,4	77,5	-30	-22	73,9
38	100,4	84,5	15	59	80,9	-8	17,6	77,4	-31	-23,8	73,8
37	98,6	84,4	14	57,2	80,8	-9	15,8	77,2	-32	-25,6	73,6
36	96,8	84,2	13	55,4	80,6	-10	14	77,1	-33	-27,4	73,5
35	95	84,1	12	53,6	80,5	-11	12,2	76,9	-34	-29,2	73,3
34	93,2	83,9	11	51,8	80,3	-12	10,4	76,7	-35	-31	73,2
33	91,4	83,7	10	50	80,2	-13	8,6	76,6	-36	-32,8	73,0
32	89,6	83,6	9	48,2	80,0	-14	6,8	76,4	-37	-34,6	72,8
31	87,8	83,4	8	46,4	79,9	-15	5	76,3	-38	-36,4	72,7
30	86	83,3	7	44,6	79,7	-16	3,2	76,1	-39	-38,2	72,5
29	84,2	83,1	6	42,8	79,5	-17	1,4	76,0	-40	-40	72,4
28	82,4	83,0	5	41	79,4	-18	-0,4	75,8	--	--	--

Barometric Altitude 1501–3000 ft ; N2% required for A/ICE System Operational Test on ground.											
SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2
50	122	87,3	27	80,6	83,6	4	39,2	79,9	-19	-2,2	76,2
49	120,2	87,1	26	78,8	83,4	3	37,4	79,7	-20	-4	76,0
48	118,4	86,9	25	77	83,2	2	35,6	79,5	-21	-5,8	75,8
47	116,6	86,8	24	75,2	83,1	1	33,8	79,4	-22	-7,6	75,7
46	114,8	86,6	23	73,4	82,9	0	32	79,2	-23	-9,4	75,5
45	113	86,4	22	71,6	82,8	-1	30,2	79,1	-24	-11,2	75,4
44	111,2	86,3	21	69,8	82,6	-2	28,4	78,9	-25	-13	75,2
43	109,4	86,1	20	68	82,4	-3	26,6	78,7	-26	-14,8	75,0
42	107,6	86,0	19	66,2	82,3	-4	24,8	78,6	-27	-16,6	74,9
41	105,8	85,8	18	64,4	82,1	-5	23	78,4	-28	-18,4	74,7
40	104	85,6	17	62,6	81,9	-6	21,2	78,3	-29	-20,2	74,6
39	102,2	85,5	16	60,8	81,8	-7	19,4	78,1	-30	-22	74,4
38	100,4	85,3	15	59	81,6	-8	17,6	77,9	-31	-23,8	74,2
37	98,6	85,2	14	57,2	81,5	-9	15,8	77,8	-32	-25,6	74,1
36	96,8	85,0	13	55,4	81,3	-10	14	77,6	-33	-27,4	73,9
35	95	84,8	12	53,6	81,1	-11	12,2	77,4	-34	-29,2	73,8
34	93,2	84,7	11	51,8	81,0	-12	10,4	77,3	-35	-31	73,6
33	91,4	84,5	10	50	80,8	-13	8,6	77,1	-36	-32,8	73,4
32	89,6	84,4	9	48,2	80,7	-14	6,8	77,0	-37	-34,6	73,3
31	87,8	84,2	8	46,4	80,5	-15	5	76,8	-38	-36,4	73,1
30	86	84,0	7	44,6	80,3	-16	3,2	76,6	-39	-38,2	72,9
29	84,2	83,9	6	42,8	80,2	-17	1,4	76,5	-40	-40	72,8
28	82,4	83,7	5	41	80,0	-18	-0,4	76,3	--	--	--

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EFFECTIVITY: ALL

N2% required for A/ICE System Operational Test

Figure 504

Barometric Altitude 3001–4500 ft ; N2% required for A/ICE System Operational Test on ground.											
SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2
50	122	88,0	27	80,6	84,3	4	39,2	80,7	-19	-2,2	77,0
49	120,2	87,8	26	78,8	84,2	3	37,4	80,5	-20	-4	76,9
48	118,4	87,7	25	77	84,0	2	35,6	80,4	-21	-5,8	76,7
47	116,6	87,5	24	75,2	83,9	1	33,8	80,2	-22	-7,6	76,6
46	114,8	87,4	23	73,4	83,7	0	32	80,1	-23	-9,4	76,4
45	113	87,2	22	71,6	83,5	-1	30,2	79,9	-24	-11,2	76,3
44	111,2	87,0	21	69,8	83,4	-2	28,4	79,7	-25	-13	76,1
43	109,4	86,9	20	68	83,2	-3	26,6	79,6	-26	-14,8	75,9
42	107,6	86,7	19	66,2	83,1	-4	24,8	79,4	-27	-16,6	75,8
41	105,8	86,6	18	64,4	82,9	-5	23	79,3	-28	-18,4	75,6
40	104	86,4	17	62,6	82,8	-6	21,2	79,1	-29	-20,2	75,5
39	102,2	86,2	16	60,8	82,6	-7	19,4	78,9	-30	-22	75,3
38	100,4	86,1	15	59	82,4	-8	17,6	78,8	-31	-23,8	75,1
37	98,6	85,9	14	57,2	82,3	-9	15,8	78,6	-32	-25,6	75,0
36	96,8	85,8	13	55,4	82,1	-10	14	78,5	-33	-27,4	74,8
35	95	85,6	12	53,6	82,0	-11	12,2	78,3	-34	-29,2	74,7
34	93,2	85,5	11	51,8	81,8	-12	10,4	78,2	-35	-31	74,5
33	91,4	85,3	10	50	81,6	-13	8,6	78,0	-36	-32,8	74,4
32	89,6	85,1	9	48,2	81,5	-14	6,8	77,8	-37	-34,6	74,2
31	87,8	85,0	8	46,4	81,3	-15	5	77,7	-38	-36,4	74,0
30	86	84,8	7	44,6	81,2	-16	3,2	77,5	-39	-38,2	73,9
29	84,2	84,7	6	42,8	81,0	-17	1,4	77,4	-40	-40	73,7
28	82,4	84,5	5	41	80,9	-18	-0,4	77,2	--	--	--

Barometric Altitude 4501–6000 ft ; N2% required for A/ICE System Operational Test on ground.											
SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2
50	122	88,8	27	80,6	85,1	4	39,2	81,5	-19	-2,2	77,9
49	120,2	88,6	26	78,8	85,0	3	37,4	81,4	-20	-4	77,7
48	118,4	88,4	25	77	84,8	2	35,6	81,2	-21	-5,8	77,6
47	116,6	88,3	24	75,2	84,7	1	33,8	81,0	-22	-7,6	77,4
46	114,8	88,1	23	73,4	84,5	0	32	80,9	-23	-9,4	77,3
45	113	88,0	22	71,6	84,3	-1	30,2	80,7	-24	-11,2	77,1
44	111,2	87,8	21	69,8	84,2	-2	28,4	80,6	-25	-13	76,9
43	109,4	87,7	20	68	84,0	-3	26,6	80,4	-26	-14,8	76,8
42	107,6	87,5	19	66,2	83,9	-4	24,8	80,2	-27	-16,6	76,6
41	105,8	87,3	18	64,4	83,7	-5	23	80,1	-28	-18,4	76,5
40	104	87,2	17	62,6	83,6	-6	21,2	79,9	-29	-20,2	76,3
39	102,2	87,0	16	60,8	83,4	-7	19,4	79,8	-30	-22	76,2
38	100,4	86,9	15	59	83,2	-8	17,6	79,6	-31	-23,8	76,0
37	98,6	86,7	14	57,2	83,1	-9	15,8	79,5	-32	-25,6	75,8
36	96,8	86,6	13	55,4	82,9	-10	14	79,3	-33	-27,4	75,7
35	95	86,4	12	53,6	82,8	-11	12,2	79,1	-34	-29,2	75,5
34	93,2	86,2	11	51,8	82,6	-12	10,4	79,0	-35	-31	75,4
33	91,4	86,1	10	50	82,5	-13	8,6	78,8	-36	-32,8	75,2
32	89,6	85,9	9	48,2	82,3	-14	6,8	78,7	-37	-34,6	75,0
31	87,8	85,8	8	46,4	82,1	-15	5	78,5	-38	-36,4	74,9
30	86	85,6	7	44,6	82,0	-16	3,2	78,4	-39	-38,2	74,7
29	84,2	85,4	6	42,8	81,8	-17	1,4	78,2	-40	-40	74,6
28	82,4	85,3	5	41	81,7	-18	-0,4	78,0	--	--	--

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EFFECTIVITY: ALL

N2% required for A/ICE System Operational Test

Figure 505

Barometric Altitude 6001–10000 ft ; N2% required for A/ICE System Operational Test on ground.											
SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2
50	122	90,2	27	80,6	86,4	4	39,2	82,7	-19	-2,2	79,0
49	120,2	90,0	26	78,8	86,3	3	37,4	82,5	-20	-4	78,8
48	118,4	89,8	25	77	86,1	2	35,6	82,4	-21	-5,8	78,7
47	116,6	89,7	24	75,2	86,0	1	33,8	82,2	-22	-7,6	78,5
46	114,8	89,5	23	73,4	85,8	0	32	82,1	-23	-9,4	78,3
45	113	89,4	22	71,6	85,6	-1	30,2	81,9	-24	-11,2	78,2
44	111,2	89,2	21	69,8	85,5	-2	28,4	81,7	-25	-13	78,0
43	109,4	89,0	20	68	85,3	-3	26,6	81,6	-26	-14,8	77,9
42	107,6	88,9	19	66,2	85,1	-4	24,8	81,4	-27	-16,6	77,7
41	105,8	88,7	18	64,4	85,0	-5	23	81,3	-28	-18,4	77,5
40	104	88,5	17	62,6	84,8	-6	21,2	81,1	-29	-20,2	77,4
39	102,2	88,4	16	60,8	84,7	-7	19,4	80,9	-30	-22	77,2
38	100,4	88,2	15	59	84,5	-8	17,6	80,8	-31	-23,8	77,0
37	98,6	88,1	14	57,2	84,3	-9	15,8	80,6	-32	-25,6	76,9
36	96,8	87,9	13	55,4	84,2	-10	14	80,4	-33	-27,4	76,7
35	95	87,7	12	53,6	84,0	-11	12,2	80,3	-34	-29,2	76,6
34	93,2	87,6	11	51,8	83,8	-12	10,4	80,1	-35	-31	76,4
33	91,4	87,4	10	50	83,7	-13	8,6	80,0	-36	-32,8	76,2
32	89,6	87,2	9	48,2	83,5	-14	6,8	79,8	-37	-34,6	76,1
31	87,8	87,1	8	46,4	83,4	-15	5	79,6	-38	-36,4	75,9
30	86	86,9	7	44,6	83,2	-16	3,2	79,5	-39	-38,2	75,7
29	84,2	86,8	6	42,8	83,0	-17	1,4	79,3	-40	-40	75,6
28	82,4	86,6	5	41	82,9	-18	-0,4	79,1	--	--	--

Barometric Altitude 10001–13800 ft ; N2% required for A/ICE System Operational Test on ground.											
SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2	SAT (°C)	SAT (°F)	%N2
50	122	92,5	27	80,6	88,6	4	39,2	84,7	-19	-2,2	80,9
49	120,2	92,3	26	78,8	88,4	3	37,4	84,6	-20	-4	80,7
48	118,4	92,1	25	77	88,3	2	35,6	84,4	-21	-5,8	80,5
47	116,6	92,0	24	75,2	88,1	1	33,8	84,2	-22	-7,6	80,3
46	114,8	91,8	23	73,4	87,9	0	32	84,1	-23	-9,4	80,2
45	113	91,6	22	71,6	87,8	-1	30,2	83,9	-24	-11,2	80,0
44	111,2	91,5	21	69,8	87,6	-2	28,4	83,7	-25	-13	79,8
43	109,4	91,3	20	68	87,4	-3	26,6	83,6	-26	-14,8	79,7
42	107,6	91,1	19	66,2	87,3	-4	24,8	83,4	-27	-16,6	79,5
41	105,8	91,0	18	64,4	87,1	-5	23	83,2	-28	-18,4	79,3
40	104	90,8	17	62,6	86,9	-6	21,2	83,0	-29	-20,2	79,2
39	102,2	90,6	16	60,8	86,8	-7	19,4	82,9	-30	-22	79,0
38	100,4	90,5	15	59	86,6	-8	17,6	82,7	-31	-23,8	78,8
37	98,6	90,3	14	57,2	86,4	-9	15,8	82,5	-32	-25,6	78,7
36	96,8	90,1	13	55,4	86,2	-10	14	82,4	-33	-27,4	78,5
35	95	90,0	12	53,6	86,1	-11	12,2	82,2	-34	-29,2	78,3
34	93,2	89,8	11	51,8	85,9	-12	10,4	82,0	-35	-31	78,2
33	91,4	89,6	10	50	85,7	-13	8,6	81,9	-36	-32,8	78,0
32	89,6	89,5	9	48,2	85,6	-14	6,8	81,7	-37	-34,6	77,8
31	87,8	89,3	8	46,4	85,4	-15	5	81,5	-38	-36,4	77,7
30	86	89,1	7	44,6	85,2	-16	3,2	81,4	-39	-38,2	77,5
29	84,2	88,9	6	42,8	85,1	-17	1,4	81,2	-40	-40	77,3
28	82,4	88,8	5	41	84,9	-18	-0,4	81,0	--	--	--

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EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 30-00-00-700-803-A

EFFECTIVITY: ALL

4. ANTI-ICING VALVES - OPERATIONAL TEST

A. General

- (1) This test is done to make sure that the anti-icing valves operate correctly.

B. References

REFERENCE	DESIGNATION
AMM TASK 71-00-01-910-801-A/200	ENGINE START PROCEDURE (NORMAL)
AMM TASK 71-00-01-910-804-A/200	ENGINE STOP PROCEDURE

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	A - Does the task	Cockpit
1	B - Helps technician A	Cockpit

I. Preparation

SUBTASK 841-004-A

- (1) Start the engines ([AMM TASK 71-00-01-910-801-A/200](#)).
- (2) Set these pushbuttons and knob as follows:
 - (a) BLEED 1 and 2 pushbuttons - ON.
 - (b) XBLEED pushbutton - AUTO.
 - (c) WING pushbutton - ON.
 - (d) STAB pushbutton - ON.
 - (e) ENGINE AIR INLET pushbuttons - ON.

J. Operationally Test Anti-Icing Valves (Figure 501)

SUBTASK 710-004-A

- (1) Set the thrust lever to IDLE position.
- (2) OVERRIDE switch - AUTO.

CAUTION: • DO NOT HOLD THE ICE DETECTION/TEST SWITCH AT POSITIONS 1 OR 2 FOR MORE THAN 15 SECONDS.

• DO NOT DO THIS TEST MORE THAN TWO TIMES TO PREVENT AN OVERHEATING CONDITION AT THE WING AND EMPENNAGE LEADING EDGES. IF IT IS NECESSARY TO DO THE TEST AGAIN, STOP UNTIL THE LEADING EDGES GET THE AMBIENT TEMPERATURE AGAIN.

(3) Do the check as follows:

- (a) Set the TEST switch, on the overhead panel, to 1 and hold it for 5 (five) seconds.

Make sure that:

Result:

- 1 The EICAS display shows these messages:

- ICE DET 1 FAIL (caution).
- ICE CONDITION (advisory).

- 2 Make sure that: the OPEN inscriptions in the engine, wing and stab anti-icing pushbuttons flash.

- (b) Push one of the master CAUTION lights.

Result:

- 1 The master CAUTION lights go off.

- (c) Release the TEST switch.

Result:

- 1 On the EICAS display, the messages go out of view.

- 2 Make sure that: the OPEN inscriptions in the engine, wing and stab anti-icing pushbutton flashing stops.

- (d) Set the TEST switch, on the overhead panel, to 2 and hold it for 5 (five) seconds.

Make sure that:

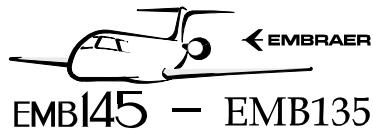
Result:

- 1 The EICAS display shows these messages:

- ICE DET 2 FAIL (caution).
- ICE CONDITION (advisory).

- 2 Make sure that the OPEN inscriptions in the engine, wing and stab anti-icing pushbuttons flash.

- (e) Push one of the master CAUTION lights.



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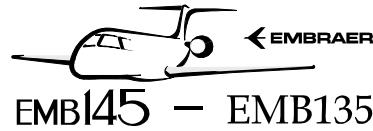
Result:

- 1 The master CAUTION lights go off.
- (f) Release the TEST switch.
Result:
 - 1 On the EICAS display, the messages go out of view.
 - 2 Make sure that the OPEN inscriptions in the engine, wing and stab anti-icing pushbutton flashing stops.

K. Follow-on

SUBTASK 842-004-A

- (1) Stop the engines ([AMM TASK 71-00-01-910-804-A/200](#)).



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 30-00-00-700-804-A

EFFECTIVITY: ALL

5. ANTI-ICING SYSTEM - FUNCTIONAL TEST

A. General

- (1) This test is done to make sure that the anti-icing system operates correctly.
- (2) This task is done to help a technician check if the differential pressure value is into the correct range.

B. References

REFERENCE	DESIGNATION
AMM TASK 49-10-00-910-802-A/200	APU - START
AMM TASK 49-10-00-910-803-A/200	APU - SHUTDOWN
AMM TASK 49-13-00-910-802-A/200	APU - START
AMM TASK 49-13-00-910-803-A/200	APU - SHUTDOWN

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
191	191EL	LH wing stub
191	191FR	RH wing stub

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially Available	Pressure Gauge (30 psi)	Used for taking wing anti-ice valve pressure readings	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

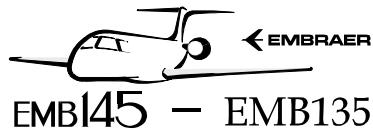
Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	A - Does the task	Cockpit
1	B - Helps technician A	Cockpit



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

I. Preparation

SUBTASK 841-005-A

WARNING: DO NOT TOUCH ANTI-ICING COMPONENTS IMMEDIATELY AFTER SYSTEM IS TURNED OFF. HIGH AIR TEMPERATURE CAN INJURE YOU.

- (1) Open access panel LH 191EL and RH 191FR.
- (2) Set these pushbuttons and knob as follows:
 - (a) WING pushbutton - ON.
 - (b) BLEED 1 and 2 pushbuttons - OFF.
 - (c) XBLEED knob to OPEN position.
 - (d) PACK 1 and PACK 2 pushbuttons - OFF.
 - (e) STAB pushbutton - OFF.
 - (f) ENGINE AIR INLET pushbuttons - OFF.

J. Functional Test (Figure 503)

SUBTASK 710-005-A

- (1) Disconnect electrical connectors P0981 or P1043 from the LH wing anti-icing valve to check pressure on the RH wing anti-icing valve.
- (2) Connect the pressure gauge to the RH wing anti-icing valve at the bleed duct fitting. Refer to (Figure 503).
- (3) Start the APU ([AMM TASK 49-10-00-910-802-A/200](#) for APU T-62T-40C11 or [AMM TASK 49-13-00-910-802-A/200](#) for APU T-62T-40C14).
- (4) Set APU BLEED pushbutton to ON.

WARNING: DO NOT TOUCH ANTI-ICING COMPONENTS IMMEDIATELY AFTER SYSTEM IS TURNED OFF. HIGH AIR TEMPERATURE CAN INJURE YOU.

CAUTION: DO NOT HOLD TEST SWITCH IN POSITION 1 OR 2 FOR MORE THAN 15 SECONDS.

- (5) Set TEST switch to 1 or 2, and hold it for 15 seconds.
- (6) Write the RH pressure value in [Table 504](#).
- (7) Set these pushbuttons and knob as follows:
 - (a) APU BLEED pushbutton - OFF.
 - (b) XBLEED knob to CLOSED position.
- (8) Connect electrical connectors P0981 or P1043 to the LH wing anti-icing valve.

WARNING: DO NOT TOUCH ANTI-ICING COMPONENTS IMMEDIATELY AFTER SYSTEM IS TURNED OFF. HIGH AIR TEMPERATURE CAN INJURE YOU.

- (9) Disconnect electrical connectors P0980 from the RH wing anti-icing valve to check pressure on the LH wing anti-icing valve.

- (10) Connect the pressure gauge to the LH wing anti-icing valve at the bleed duct fitting. Refer to (Figure 503).

- (11) Set APU BLEED pushbuttons - ON.

WARNING: DO NOT TOUCH ANTI-ICING COMPONENTS IMMEDIATELY AFTER SYSTEM IS TURNED OFF. HIGH AIR TEMPERATURE CAN INJURE YOU.

CAUTION: DO NOT HOLD TEST SWITCH IN POSITION 1 OR 2 FOR MORE THAN 15 SECONDS.

- (12) Set TEST switch to 1 or 2, and hold it for 15 seconds.

- (13) Write the LH pressure value in [Table 504](#).

- (14) Calculate the difference between the pressure found and write the difference in [Table 504](#).

Table 504 - PRESSURE VALUES

LH Pressure Value	RH Pressure Value	ΔLR (LH - RH)	Comparative Value
			ΔP < 2.5 psid

NOTE: If the difference is negative, disregard the sign.

- (15) The resulting value (ΔLR) must be in the range of comparative value.

If the value is not in this range, it is necessary to adjust the system against leakages or bad connections.

K. Follow-on

SUBTASK 842-005-A

- (1) Set these pushbuttons and knob as follows:

- (a) APU BLEED pushbutton - OFF.
- (b) XBLEED knob to AUTO position.

- (2) Shut down the APU ([AMM TASK 49-10-00-910-803-A/200](#) for APU T-62T-40C11 or [AMM TASK 49-13-00-910-803-A/200](#) for APU T-62T-40C14).

WARNING: DO NOT TOUCH ANTI-ICING COMPONENTS IMMEDIATELY AFTER SYSTEM IS TURNED OFF. HIGH AIR TEMPERATURE CAN INJURE YOU.

- (3) Connect connector P0980 to the RH wing anti-icing valve.

- (4) Disconnect the pressure gauge from the LH wing anti-icing valve and connect the bleed duct fitting.

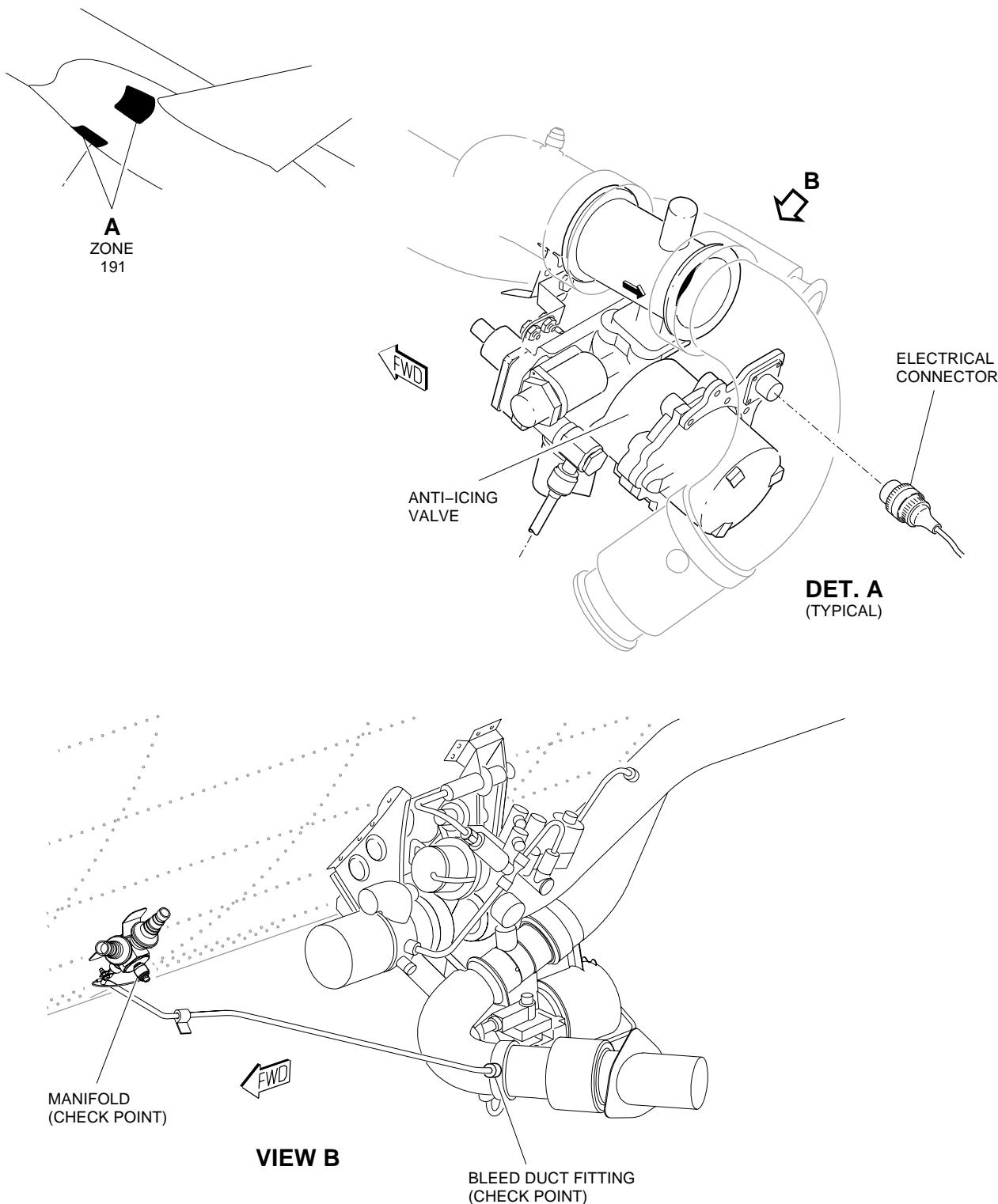
- (5) Close access panel LH 191EL and RH 191FR.

- (6) Make sure that there are no tools in the work place.

EFFECTIVITY: ALL

Check Point

Figure 506



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