



AIRCRAFT MAINTENANCE MANUAL

STALL PROTECTION SYSTEM - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the necessary data to do the check of the stall protection system and to do the functional test of the ICE/SPS advanced interface circuit.
- 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
27-36-00-700-801-A ♦	STALL PROTECTION SYSTEM - OPERATIONAL CHECK	ALL
27-36-00-700-802-A ♦	ICE/SPS INTERFACE CIRCUIT - FUNCTIONAL CHECK	ALL



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 27-36-00-700-801-A

EFFECTIVITY: ALL

2. STALL PROTECTION SYSTEM - OPERATIONAL CHECK

A. General

- (1) This task gives the procedures to do the check of all functions of the stall protection system such as the shaker, pusher, cutout switches and relays, and alarms.

B. References

REFERENCE	DESIGNATION
AMM SDS 27-50-00/1	
AMM SDS 31-51-00/1	
AMM SDS 32-00-00/1	
AMM SDS 32-63-00/1	
AMM SDS 34-10-00/1	
AMM SDS 34-21-00/1	
AMM SDS 34-27-00/1	
AMM SDS 34-31-00/1	
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
IPC 31-42-01	INTEGRATED COMPUTER

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	Does the task	Cockpit

I. Preparation

SUBTASK 841-002-A

WARNING: MAKE SURE THAT THE ELEVATOR AND HORIZONTAL STABILIZER TRAVEL AREA IS FREE, WITH NO PERSONNEL AND OBJECTS AROUND IT.

- (1) Energize the aircraft with an External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).
- (2) Set the gust lock system to the unlocked position.
- (3) Make sure that the elevator surface freely moves.
- (4) Make sure that these systems are operational and on:
 - Air Ground System ([AMM SDS 32-63-00/1](#)).
 - Landing Gear System ([AMM SDS 32-00-00/1](#)).
 - Air Data System ([AMM SDS 34-10-00/1](#)).
 - AHRS ([AMM SDS 34-21-00/1](#)), as applicable.
 - IRS ([AMM SDS 34-27-00/1](#)), as applicable.
 - Radio Altimeter System ([AMM SDS 34-31-00/1](#)).
 - EICAS (IPC 31-42-01).
 - FLAP System ([AMM SDS 27-50-00/1](#)).
 - Aural Warning System ([AMM SDS 31-51-00/1](#)).
- (5) Make sure that the aircraft is in the on-ground condition and that on the overhead circuit breaker panel, the circuit breakers AIR/GND A, B, C, D are closed. If not, close them and wait 30 seconds at least.
- (6) The landing gear is down and locked, airspeed is less than 70 Kias, and radio altimeter shows less than 200 ft AGL.
- (7) Make sure that the right and left AOA vanes are aligned.
- (8) Make sure that the CUTOUT 1 and CUTOUT 2 lights are OFF.
- (9) Make sure that these circuit breakers are closed on the overhead circuit breaker panel :
 - PUSHER CLUTCH: (Location tip: DC BUS2/STALL PROT/PUSHER CLUTCH).
 - SHAKER 2: (Location tip: DC BUS2/STALL PROT/SHAKER2).
 - CHANNEL 2: (Location tip: DC BUS2/STALL PROT/CHANNEL2).
 - SHAKER 1: (Location tip: ESSENTIAL DC BUS1/STALL PROT/SHAKER1).
 - CHANNEL 1: (Location tip: ESSENTIAL DC BUS1/STALL PROT/CHANNEL1).
- (10) Make sure that the PUSHER MOTOR circuit breaker is closed on the right electrical power control/distribution box
- (11) Open and close the circuit breakers CHANNEL 1 and CHANNEL 2, to reset the Stall Protection System.
- (12) Wait for 40 seconds at least, to do the test.

- (13) Make sure that either the AHRS or IRS are aligned as applicable.

J. Operationally Check Stall Protection System ([Figure 501](#))

SUBTASK 710-002-A

WARNING: FOR THIS TEST, THE PUSHER WILL BE OPERATED. MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT NEAR THE ELEVATOR SURFACES.

- (1) This NOTE refers to the task that follows it:

NOTE: When the TEST pushbutton is pushed:

1. Push the TEST pushbutton only until the shakers start. If not, the TEST pushbutton light will not go off at the end of the test and the system will not react to a new test.
2. If the system does not react to a new test, on the overhead circuit breaker panel, open and close the circuit breakers CHANNEL 1 and CHANNEL 2 to reset the Stall Protection System.
3. If the Stall Protection System is reset or the aircraft is energized again, the system must wait for 40 seconds at least, for you to do a new test.

- (2) On the SPS control panel, make sure that the TEST pushbutton light is on.

- (3) Do the check as follows:

- (a) Set the control column to the nose-up position.

- (b) On the SPS control pane, push the TEST pushbutton until the shakers start.

Result:

- 1 Lightly counteract the tendency of the control column to move forward.
- 2 Shakers 1 and 2 start.
- 3 The pusher starts and controls the elevator nose down, and the AURAL clacker sound occurs.
- 4 On the Glareshield Panel, the master WARNING and the master CAUTION lights flash.

- (c) Push a master WARNING and a master CAUTION lights.

Result:

- 1 The master WARNING and the master CAUTION lights go off.

- (d) After approximately 5 seconds, make sure that:

Result:

- 1 Shakers 1 and 2 stop.
- 2 The pusher and clacker sound stop.
- 3 The TEST pushbutton light goes off.

- (4) Do the CUTOUT 1 check as follows:

- (a) On the SPS control panel, push the CUTOUT 1 pushbutton.

Result:

- 1 The CUTOUT 1 pushbutton light comes on.
- 2 The EICAS shows the messages:
 - SPS 1-2 INOP (Warning)
 - SPS ADVANCED (Caution)
 - STICK PUSHER FAIL (Caution)
- 3 On the Glareshield Panel, the master WARNING and the master CAUTION lights flash.

- (b) Push the master WARNING and a master CAUTION lights.

Result:

- 1 The master WARNING and the master CAUTION lights go off.

- (c) Push the TEST pushbutton until the shakers start.

Result:

- 1 The TEST pushbutton light comes on.
- 2 Shaker 2 starts.
- 3 The clacker sound occurs.
- 4 On the EICAS display, these messages stay in view:
 - SPS 1-2 INOP (Warning)
 - STICK PUSHER FAIL (Caution)
 - SPS ADVANCED (Caution)

- 5 On the Glareshield Panel, the master WARNING and the master CAUTION lights flash.

- 6 After 5 seconds, approximately, shaker 2 stops.

- 7 The TEST pushbutton stays on.

- (d) Push the CUTOUT 1 pushbutton.

Result:

- 1 The CUTOUT 1 pushbutton light goes off.

- (e) On the Glareshield Panel, push the master WARNING and a master CAUTION lights.

Result:

- 1 The master WARNING and the master CAUTION lights go off.

- (5) Do item (3) again to remove the EICAS messages.

- (6) Do the CUTOUT 2 check as follows:

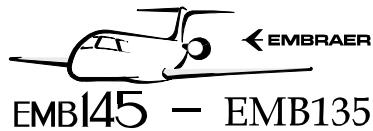
- (a) On the SPS control panel, push the CUTOUT 2 pushbutton.

Result:

- 1 The CUTOUT 2 pushbutton light comes on.

- 2 The EICAS shows the messages:
- SPS 1-2 INOP (Warning)
 - STICK PUSHER FAIL (Caution)
 - SPS ADVANCED (Caution)
- 3 On the Glareshield Panel, the master WARNING and the master CAUTION lights flash.
- (b) Push the master WARNING and a master CAUTION lights.
Result:
1 The master WARNING and the master CAUTION lights go off.
- (c) Push the TEST pushbutton until the shakers start.
Result:
1 The TEST pushbutton light comes on.
2 Shaker 1 starts.
3 The clacker sound occurs.
4 On the EICAS display, these messages stay in view:
 - SPS 1-2 INOP (Warning)
 - STICK PUSHER FAIL (Caution)
 - SPS ADVANCED (Caution)5 On the Glareshield Panel, the master WARNING and the master CAUTION lights flash.
6 After 5 seconds, approximately, Shaker 1 stops.
7 The TEST pushbutton stays on.
- (d) Push the CUTOUT 2 pushbutton.
Result:
1 The CUTOUT 2 pushbutton light goes off.
- (e) On the Glareshield Panel, push the master WARNING and a master CAUTION lights.
Result:
1 The master WARNING and the master CAUTION lights go off.
- (7) Do item (3) again to remove the EICAS messages.
- (8) Do a check of the BUS X FER relay as follows:
- (a) Open the SHAKER 1 circuit breaker.
 - (b) Push the CUTOUT 1 pushbutton.
Result:
1 The CUTOUT 1 pushbutton light comes on.

- 2 The EICAS shows the messages:
- SPS 1-2 INOP (Warning)
 - STICK PUSHER FAIL (Caution)
 - SPS ADVANCED (Caution)
- 3 On the Glareshield Panel, the master WARNING and the master CAUTION lights flash.
- (c) Push the master WARNING and a master CAUTION lights.
Result:
1 The master WARNING and the master CAUTION lights go off.
- (d) Push the CUTOUT 1 pushbutton.
Result:
1 The CUTOUT 1 pushbutton light goes off.
2 On the EICAS display, these messages go out of view:
 - SPS 1-2 INOP (Warning)
 - STICK PUSHER FAIL (Caution)
 - SPS ADVANCED (Caution)
- (e) Close the SHAKER 1 circuit breaker and open the SHAKER 2 circuit breaker.
- (f) Push the CUTOUT 2 pushbutton.
Result:
1 The CUTOUT 2 pushbutton light comes on.
2 The EICAS shows the messages:
 - SPS 1-2 INOP (Warning)
 - STICK PUSHER FAIL (Caution)
 - SPS ADVANCED (Caution)
- 3 On the Glareshield Panel, the master WARNING and the master CAUTION lights flash.
- (g) Push the master WARNING and a master CAUTION lights.
Result:
1 The master WARNING and the master CAUTION lights go off.
- (h) Push the CUTOUT 2 pushbutton.
Result:
1 The CUTOUT 2 pushbutton light goes off.
2 On the EICAS display, these messages go out of view:
 - SPS 1-2 INOP (Warning)
 - STICK PUSHER FAIL (Caution)
 - SPS ADVANCED (Caution)



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- (i) Close the SHAKER 2 circuit breaker.
- (9) Do a check on the command TEST pushbutton light of the Stall Protection System as follows:
 - (a) On the overhead circuit breaker panel, open the CHANNEL 1 and 2 circuit breakers.
 - CHANNEL 1 (Location tip: ESSENTIAL DC BUS 1/STALL PROT/CHANNEL 1).
 - CHANNEL 2 (Location tip: DC BUS 2/STALL PROT/CHANNEL 2).
 - Result:
 - 1 The TEST pushbutton light goes off.
 - 2 The EICAS shows the message:
 - SPS 1-2 INOP (Warning)
 - WINDSHEAR INOP (Caution)
 - AOA 1-2 HEAT INOP (Caution)
 - 3 On the Glareshield Panel, the master CAUTION and master WARNING lights flash.
 - (b) Push the master CAUTION and master WARNING lights.
Result:
 - 1 The master CAUTION and master WARNING lights go off.
 - (c) On the overhead circuit breaker panel, close the STALL PROT/CHANNEL1 circuit breaker.
Result:
 - 1 The TEST pushbutton light comes on.
 - 2 On the EICAS display:
 - The SPS 1-2 INOP warning message goes out of view.
 - The WINDSHEAR INOP caution message goes out of view.
 - The SPS 2 INOP warning message comes into view.
 - The SPS ADVANCED caution message comes into view.
 - The AOA 2 HEAT INOP caution message comes into view.
 - 3 On the Glareshield Panel, the master CAUTION light flashes.
 - (d) Push the master CAUTION light.
Result:
 - 1 The master CAUTION lights go off.
 - (e) On the overhead circuit breaker panel, close the STALL PROT/CHANNEL2 circuit breaker and open the STALL PROT/CHANNEL1 circuit breaker.
Result:
 - 1 The TEST pushbutton light stays on.

2 On the EICAS display:

- The SPS 2 INOP warning message goes out of view.
- The SPS 1 INOP warning message comes into view.
- The SPS ADVANCED caution message stays on view.
- The AOA 2 HEAT INOP caution message goes out of view.
- The AOA 1 HEAT INOP caution message comes into view.
- The WINDSHEAR INOP caution message stays out of view.

3 On the Glareshield Panel, the master WARNING and the master CAUTION lights flash.

(f) Push the master WARNING and a master CAUTION lights.

Result:

- 1 The master WARNING and the master CAUTION lights go off.

(g) On the overhead circuit breaker panel, close the STALL PROT/CHANNEL1 circuit breaker.

Result:

- 1 The TEST pushbutton light stays on.

2 On the EICAS display:

- The SPS 1 INOP warning message goes out of view.
- The SPS ADVANCED caution message goes out of view.
- The AOA 1 HEAT INOP caution message goes out of view.

(10) (For the CTA/FAA/IAC-AR - certified models) Do a check on the AP/TRIM/PUSHER DISC switch of the pilot's control wheel as follows:

(a) Open and close the circuit breakers CHANNEL 1 and CHANNEL 2 to reset the Stall Protection System.

(b) Make sure that the TEST pushbutton light is on.

(c) Wait at least 40 seconds to do the test.

(d) Continue the operational check as follows:

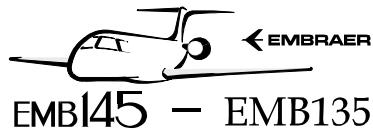
1. Set the control column to the nose-up position.

2. On the SPS control panel, push the TEST pushbutton until the shakers start.

3. Press the AP/TRIM/PUSHER DISC switch at the pilot's control wheel and keep it pressed until the shakers stop.

Result:

- 1 On the Glareshield Panel, the master WARNING and the CAUTION lights flash.



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

2 After approximately 5 seconds:

- Shakers 1 and 2 stop.
- Clacker sound stops.
- The TEST pushbutton light stays on.
- Make sure that the Stick Pusher did not actuate.

(e) Push the master WARNING and the master CAUTION lights.

Result:

1 The master WARNING and the master CAUTION lights go off.

(11) (For the CTA/FAA/IAC-AR - certified models) Repeat all the process shown in step (10) and press the AP/TRIM/PUSHER switch at the copilot's control wheel.

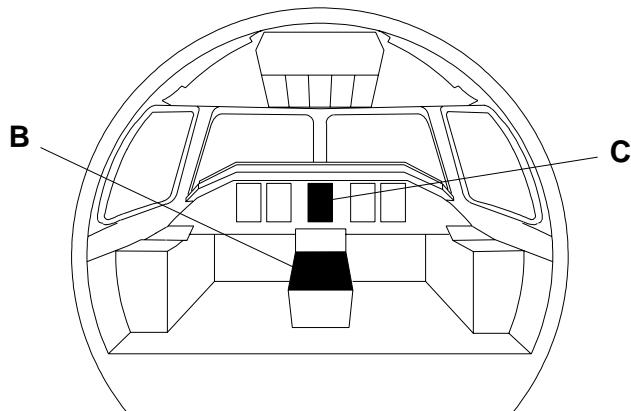
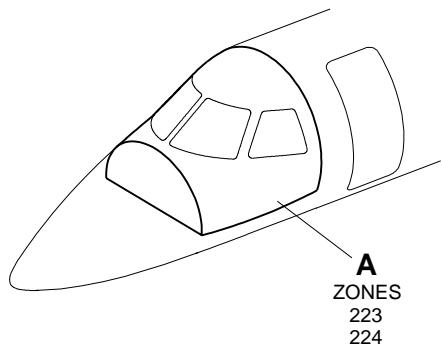
(12) Reset the CMC with the CMC switch on the Maintenance panel.

K. Follow-on

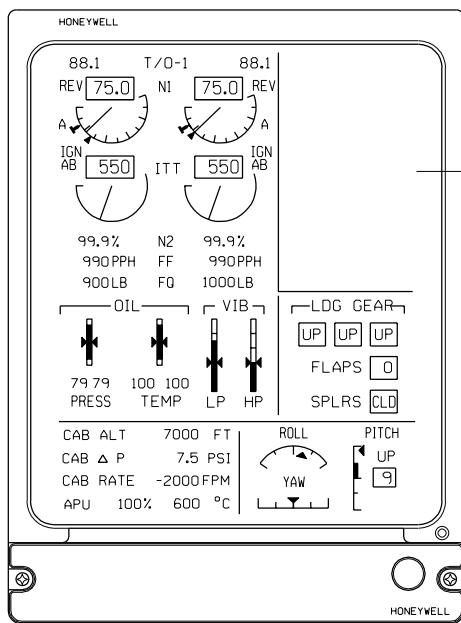
SUBTASK 842-002-A

- (1) Move the gust lock lever to the locked position.
- (2) De-energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

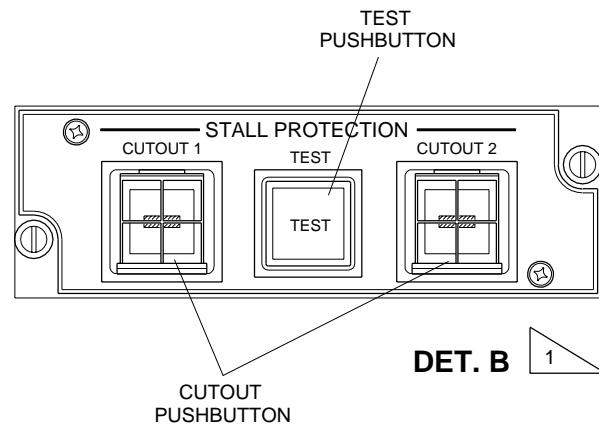
EFFECTIVITY: ALL
Stall Protection System
Figure 501



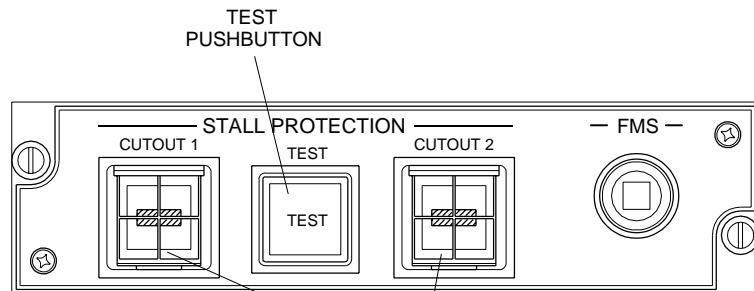
DET. A



DET. C



DET. B 1



DET. B 2

1 APPLICABLE TO AIRCRAFT WITH SINGLE FMS INSTALLED.

2 APPLICABLE TO AIRCRAFT WITH DUAL FMS INSTALLED.

145AMM270093.MCE B



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 27-36-00-700-802-A

EFFECTIVITY: ALL

3. ICE/SPS INTERFACE CIRCUIT - FUNCTIONAL CHECK

A. General

- (1) This task gives the necessary procedures to do the functional test of the ICE/SPS interface circuit.

B. References

REFERENCE	DESIGNATION
AMM SDS 34-21-00/1	
AMM SDS 34-27-00/1	
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
S.B. 145-22-0001	-
S.B. 145-22-0004	-
S.B. 145-27-0023	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Stopwatch	To measure the actuation time	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Cockpit

I. Preparation

SUBTASK 841-003-A

- (1) Make sure that the aircraft is safe for maintenance.

- (2) Make sure that these CBs are closed:

– N2 1A

- N2 2A
- N2 1B
- N2 2B
- AIR/GND A, B, C, D

NOTE: • When you open a circuit breaker, on the Circuit Breaker Panel, the MASTER CAUTION lights and/or WARNING CAUTION lights on the glareshield panel, can flash. When it occurs, push one of the MASTER CAUTION lights and/or one of the WARNING CAUTION lights to turn them off.

- When you open/close a circuit breaker on the Circuit Breaker Panel, messages not related with this task can come into view/go out of view on the EICAS display. Ignore them.

- (3) On the ice protection panel ([Figure 504](#)), make sure that the PITOT 1/TAT 1/AOA 1 and PITOT 2/TAT 2/AOA 2 pushbuttons are off.
- (4) Energize the aircraft with an external DC power supply ([AMM TASK 20-40-01-860-801-A/200](#)).

NOTE: Wait until the AHRS or IRS, as applicable, stabilizes ([AMM SDS 34-21-00/1](#)) ([AMM SDS 34-27-00/1](#)).

- (5) On the overhead panel, set the BATT 1 switch to OFF and make sure that the BATT 2 switch is set to OFF.

NOTE: The switches of batteries 1 and 2 must be set to the OFF position to permit the external power to energize the electrical systems when the aircraft is in the AIR condition.

J. Functionally Check ICE/SPS Interface Circuit

SUBTASK 720-002-A

WARNING: • **FOR THIS TEST, THE PUSHER WILL BE OPERATED.**

- **MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT NEAR THE ELEVATOR SURFACES.**

CAUTION: THE TEST PUSHBUTTON, ON THE STALL PROTECTION PANEL, MUST BE RELEASED BEFORE THE STALL PROTECTION SYSTEM TEST IS COMPLETED UNTIL THE SHAKERS START. IF NOT, THE TEST PUSHBUTTON LIGHT WILL COME ON AND THE STALL PROTECTION COMPUTER WILL INHIBIT THE PERFORMANCE OF OTHER TESTS. IF IT OCCURS, IT WILL BE NECESSARY TO RESET THE STALL PROT CHANNEL 1 AND 2 CIRCUIT BREAKERS.

- (1) Do this step only for aircraft PRE-MOD. S.B. 145-22-0001 or PRE-MOD. S.B. [145-22-0004](#) as applicable.
 - (a) Make sure that the TEST pushbutton light, on the stall protection panel, is on.
 - (b) Push and hold the TEST pushbutton, on the stall protection panel ([Figure 502](#)).

- Make sure that the ICE/SPS ADV annunciator light comes on, on the glareshield panel.
- (c) Release the TEST pushbutton, on the stall protection panel, when the shakers are activated, and make sure that the ICE/SPS ADV annunciator light goes off, on the glareshield panel, and that:
- Pusher is actuated and the clacker operates.
 - On the stall protection panel, the TEST pushbutton light is off, when the pusher stops, at the end of the test.
- (d) On the ice detection panel ([Figure 504](#)), momentarily set the Ice Detection TEST switch to position 1.
- Make sure that the ICE/SPS ADV annunciator light stays off.
 - On the EICAS display, the ICE CONDITION advisory message and ICE DET1 FAIL caution message come into view momentarily and then go out.
- (e) Move the TEST switch back to the center position.

WARNING: MAKE SURE THAT THE SENSORS PITOT 1 - TAT 1/AOA 1, PITOT 3, AND PITOT 2 - TAT 2/AOA 2 HAVE NO COVERS ON THEM BEFORE YOU DO THE MAINTENANCE PROCEDURE. THESE COMPONENTS BECOME HOT DURING THE MAINTENANCE PROCEDURE. AS A RESULT, DAMAGE TO THEM WILL OCCUR IF YOU DO NOT REMOVE THE COVERS.

- (f) On the circuit breaker panel:
- Open the N2 1A, 2A, 1B, 2B circuit breakers.
 - Open the AIR/GND A, B, C, D circuit breakers. Start the stopwatch.
- NOTE:** Do not stop this procedure until you complete step (g).
- (g) Momentarily set the Ice Detection TEST switch to position 1.
- Make sure that the ICE/SPS ADV annunciator light stays off.
- (h) Move the TEST switch back to the center position and make sure that the ICE/SPS ADV annunciator light comes on, and that:
- On the EICAS display, the ICE CONDITION advisory message and ICE DET1 FAIL caution message come into view momentarily and then go out.
 - The time for the ICE/SPS ADV annunciator light to come on is approximately 2.5 minutes for all aircraft PRE-MOD. [S.B. 145-27-0023](#).
 - The time for the ICE/SPS ADV annunciator light to come on is approximately 5 minutes for all aircraft POST-MOD. [S.B. 145-27-0023](#).
- (i) Push the TEST pushbutton, on the stall protection panel.
- Make sure that the SPS TEST does not occur and the ICE/SPS ADV annunciator light stays on.

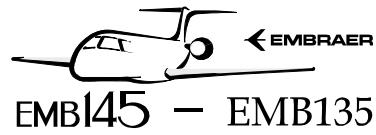
- (j) On the circuit breaker panel, close the N2 1A, 2A, 1B, 2B and AIR/GND A, B, C, D circuit breakers and wait for approximately 30 seconds before you do the subsequent step.
 - (k) Push and hold the stall protection TEST pushbutton to reset the alarm and make sure that:
 - Shakers 1 and 2 are started.
 - Pusher and clacker operate.
 - The ICE/SPS ADV annunciator light goes off when the TEST pushbutton is released.

NOTE:

 - Before you do this step, the stall protection TEST pushbutton light is off.
 - While the shaker operates, the stall protection TEST pushbutton light comes on.
 - When the pusher stops, the stall protection TEST pushbutton light goes off.
 - (l) Do steps (d) through (k) again for Ice Detection TEST switch position 2.
- (2) Do this step only for aircraft POST-MOD. S.B. 145-22-0001 or POST-MOD. S.B. 145-22-0004 as applicable.
- (a) Make sure that the TEST pushbutton light, on the stall protection panel, is on.
 - (b) Push and hold the TEST pushbutton, on the stall protection panel ([Figure 503](#)).
 - Release the TEST pushbutton, on the stall protection panel, when the shakers are activated.
 - (c) Make sure that:
 - On the EICAS display, the ICE/SPS ADVANCED (for aircraft with EICAS versions up to 14A) or SPS/ICE SPEEDS (for aircraft with EICAS versions 15A and on), advisory message is out of view.
 - The pusher is actuated and the clacker operates.
 - On the stall protection panel, the TEST pushbutton light goes off, when the pusher stops at the end of the test.
 - (d) On the ice detection panel ([Figure 504](#)), momentarily set the Ice Detection TEST switch to position 1 and then move it back to the center position.
 - On the EICAS display, the ICE/SPS ADVANCED (for aircraft with EICAS versions up to 14A) or SPS/ICE SPEEDS (for aircraft with EICAS versions 15A and on), advisory message stays out of view.
 - On the EICAS display, the ICE CONDITION advisory message and ICE DET1 FAIL caution message come into view momentarily and then go out.

WARNING: MAKE SURE THAT THE SENSORS PITOT 1 - TAT 1/AOA 1, PITOT 3, AND PITOT 2 - TAT 2/AOA 2 HAVE NO COVERS ON THEM BEFORE YOU DO THE MAINTENANCE PROCEDURE. THESE COMPONENTS BECOME HOT DURING THE MAINTENANCE PROCEDURE. AS A RESULT, DAMAGE TO THEM WILL OCCUR IF YOU DO NOT REMOVE THE COVERS.

- (e) On the circuit breaker panel:
- Open the N2 1A, 2A, 1B, 2B circuit breakers.
 - Open the AIR/GND A, B, C, D circuit breakers. Start the stopwatch.
- NOTE:** Do not stop this procedure until you complete step (f).
- (f) On the ice detection panel (Figure 504), momentarily set the Ice Detection TEST switch to position 1 and then move it back to the center position.
- On the EICAS display, the ICE CONDITION advisory message and ICE DET1 FAIL caution message come into view momentarily and then go out.
 - Make sure that, on the EICAS display, the ICE/SPS ADVANCED (for aircraft with EICAS versions up to 14A) or SPS/ICE SPEEDS (for aircraft with EICAS versions 15A and on) advisory message comes into view in 2.5 minutes approximately for all aircraft PRE-MOD. [S.B. 145-27-0023](#).
 - Make sure that, on the EICAS display, the ICE/SPS ADVANCED (for aircraft with EICAS versions up to 14A) or SPS/ICE SPEEDS (for aircraft with EICAS versions 15A and on) advisory message comes into view in 5 minutes approximately for all aircraft POST-MOD. [S.B. 145-27-0023](#).
- (g) Push the TEST pushbutton, on the stall protection panel.
- Make sure that the SPS TEST advisory message does not come into view and, on the EICAS display, the ICE/SPS ADVANCED (for aircraft with EICAS versions up to 14A) or SPS/ICE SPEEDS (for aircraft with EICAS versions 15A and on) advisory message stays in view.
- (h) Close the N2 1A, 2A, 1B, 2B and AIR/GND A, B, C, D circuit breakers and wait for approximately 30 seconds before you do the subsequent step.
- (i) Push and hold the stall protection TEST pushbutton to remove the EICAS message and make sure that:
- Shakers 1 and 2 start.
 - Pusher and clacker operate.
 - On the EICAS display, the ICE/SPS ADVANCED (for aircraft with EICAS versions up to 14A) or SPS/ICE SPEEDS (for aircraft with EICAS versions 15A and on) advisory message goes out of view.
- NOTE:**
- Before you do this step, the stall protection TEST pushbutton light is off.
 - While the shaker operates, the stall protection TEST pushbutton light comes on.



AIRCRAFT MAINTENANCE MANUAL

- When the pusher stops, the stall protection TEST pushbutton light goes off.

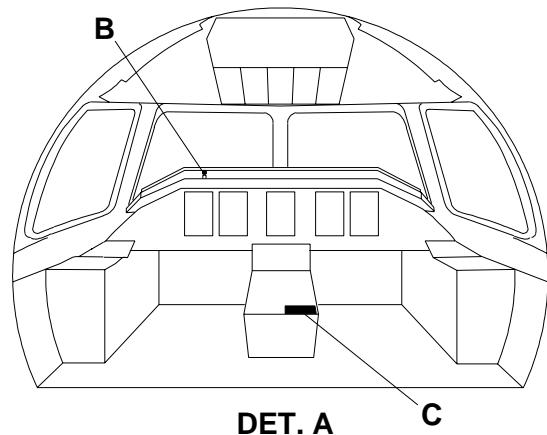
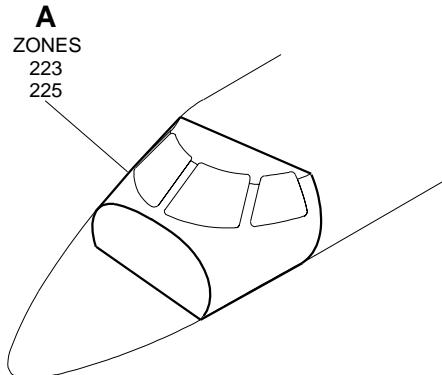
(j) Do steps (d) through (i) again for Ice Detection TEST switch position 2.

K. Follow-on

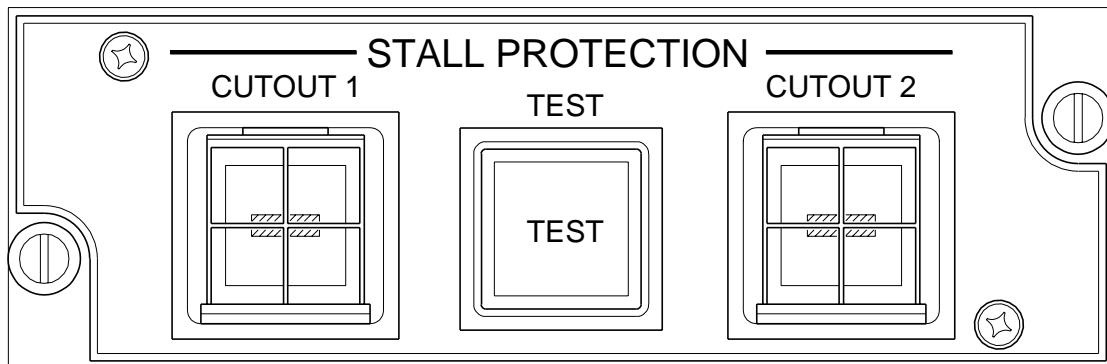
SUBTASK 842-003-A

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

EFFECTIVITY: PRE-MOD SB 145-22-0001
 Stall Protection System Test Panel - Location
 Figure 502



DET. B

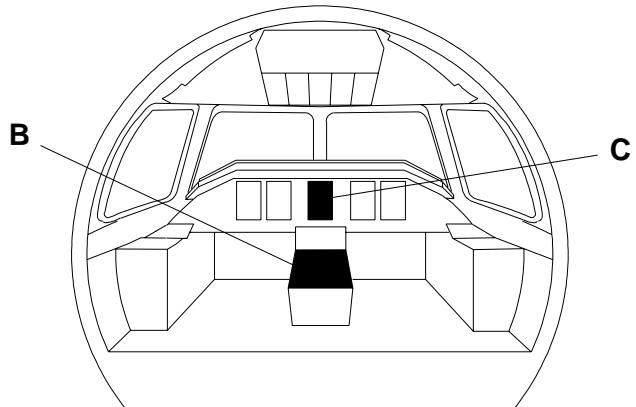
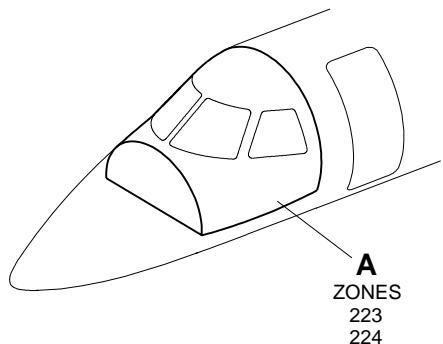


DET. C

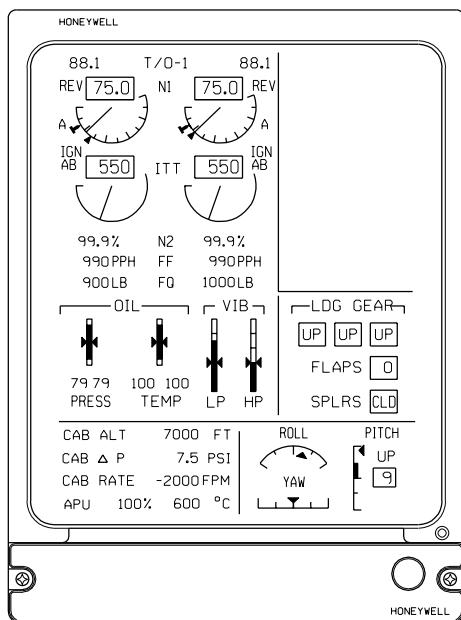
145AMM270242.MCE A

EFFECTIVITY: ALL

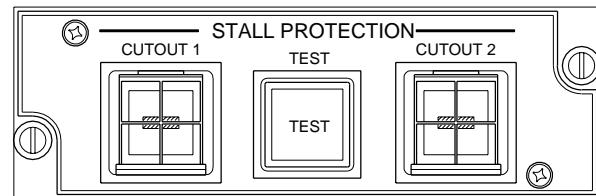
Stall Protection System Test Panel - Location
Figure 503



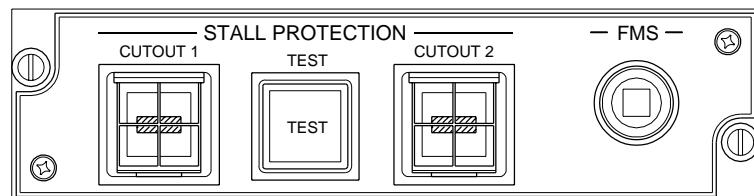
DET. A



DET. C



DET. B 1



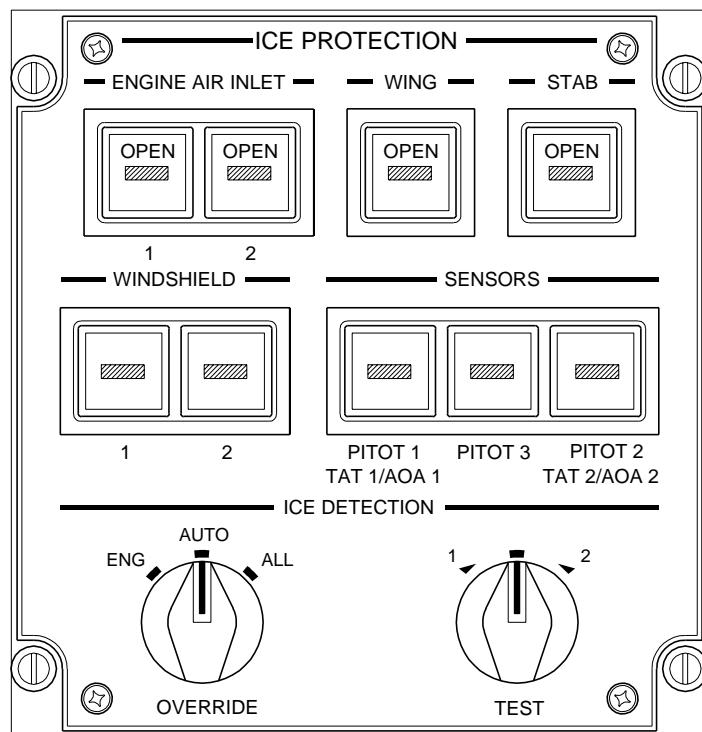
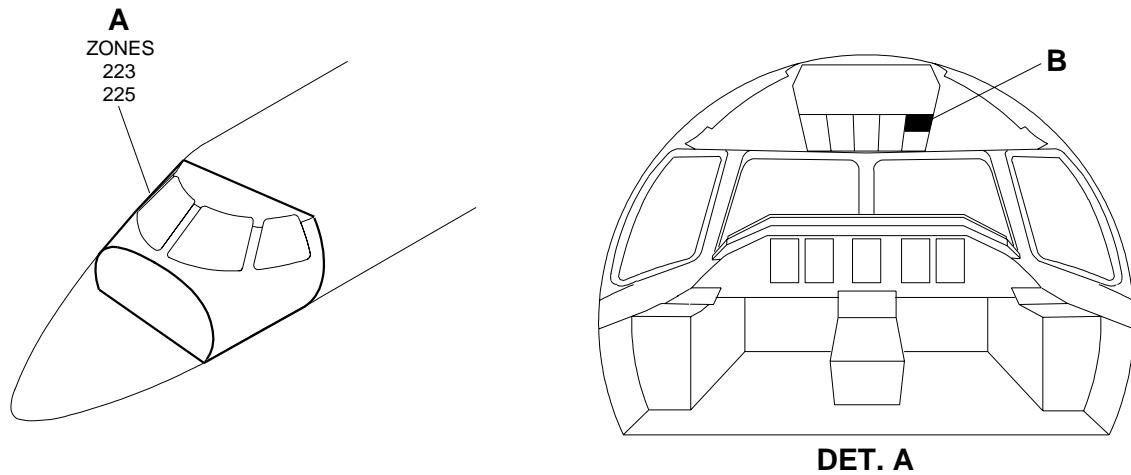
DET. B 2

1 APPLICABLE TO AIRCRAFT WITH SINGLE FMS INSTALLED.

2 APPLICABLE TO AIRCRAFT WITH DUAL FMS INSTALLED.

145AMM270430.MCE C

EFFECTIVITY: ALL
 Ice Detection Panel - Location
 Figure 504



DET. B

145AMM270241.MCE A