



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

COCKPIT DOOR - ADJUSTMENT/TEST

EFFECTIVITY: FOR AIRCRAFT WITH REINFORCED COCKPIT DOOR

1. General

- A. This section gives the procedures to do checks on the reinforced cockpit door.
- 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
52-51-01-700-801-A	COCKPIT DOOR - ADJUSTMENT TEST	FOR AIRCRAFT WITH REINFORCED COCKPIT DOOR
52-51-01-700-802-A ♦	REINFORCED COCKPIT DOOR - ADJUSTMENT TEST	FOR AIRCRAFT WITH REINFORCED COCKPIT DOOR



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TASK 52-51-01-700-801-A

EFFECTIVITY: FOR AIRCRAFT WITH REINFORCED COCKPIT DOOR

2. COCKPIT DOOR - ADJUSTMENT TEST

A. General

- (1) This task gives the procedures to do an operational check on the reinforced cockpit door to make sure that it operates correctly.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
2	Do the task	Passenger cabin and cockpit

H. Preparation ([Figure 501](#))

SUBTASK 841-002-A

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

I. Operational Test ([Figure 501](#))

SUBTASK 710-002-A

- (1) To do this operational test, its is necessary that one person stay in the cockpit and other one on the passenger side.

- (2) On the passenger cabin side, do the test of the cockpit door (1) as follows:

- (a) Close the cockpit door (1).

NOTE: • On the cockpit side, make sure that the deadbolt split lever (3) and the latch (4) are in the unlocked key position. Refer to VIEW B and DET. C.
• The red dots must be visible. Refer to VIEW B and DET. C.

- (b) Turn the key 90 degrees counterclockwise to engage the deadbolt (2).

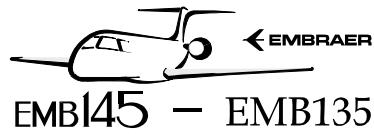
- (c) Make sure that the deadbolt split lever (3) is in the locked-key operable position. Refer to VIEW B and DET. C.



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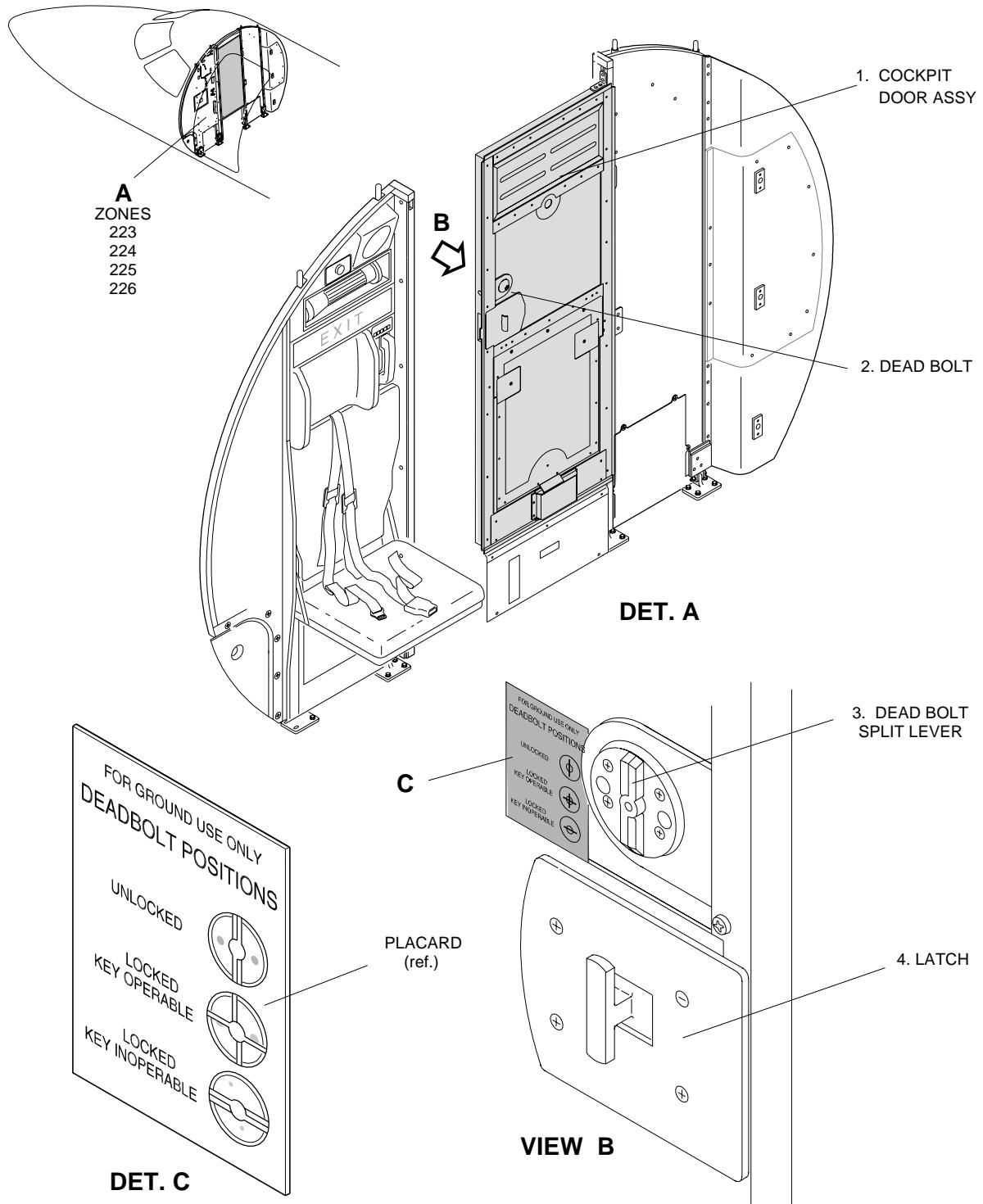
- (d) Make sure that the deadbolt (2) operates smoothly and is positively kept at the lock position.
 - (e) Turn the key 90 degrees clockwise to disengage the deadbolt (2).
 - (f) Make sure that the deadbolt split lever (3) is in the unlocked position. Refer to VIEW B and DET. C.
 - (g) Make sure that the deadbolt (2) operates smoothly.
- (3) On the cockpit side, do the test of the cockpit door (1) as follows:
- (a) Close the cockpit door (1).
- NOTE: • On the cockpit side, make sure that the deadbolt split lever (3) and the latch (4) are in the unlocked key position. Refer to VIEW B and DET. C.
- The red dots must be visible. Refer to VIEW B and DET. C.
- (b) Turn the deadbolt split lever (3) 90 degrees clockwise to engage the deadbolt (2) and lock the door.
 - (c) Make sure that the deadbolt split lever (3) is in the locked-key operable position. Refer to VIEW B and DET. C.
 - (d) Tell the person on the passenger cabin side to turn the key 90 degrees clockwise to unlock the door.
 - (e) Make sure that the deadbolt split lever (3) moved to the unlocked position. Refer to VIEW B and DET. C.
- NOTE: The red dots must be visible.
- (f) Turn the deadbolt split lever (3) 90 degrees clockwise to engage the deadbolt (2) and lock the door.
 - (g) Make sure that the deadbolt split lever (3) is in the locked-key inoperable position. Refer to VIEW B and DET. C.
- NOTE: The green dots must be visible.
- (h) Make sure that the deadbolt (2) operates smoothly and is positively kept at the lock position.
 - (i) On the passenger cabin side, make sure that the key has no effect to lock and unlock the deadbolt (2).
 - (j) Turn the deadbolt split lever (3) 90 degrees counterclockwise to disengage the deadbolt (2) and unlock the cockpit door (1).
 - (k) Make sure that the deadbolt split lever (3) is in the unlocked position. Refer to VIEW B and DET. C.
- NOTE: The red dots must be visible.



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- (I) Make sure that the deadbolt (2) operates smoothly and is positively kept at the unlock position.

EFFECTIVITY: FOR AIRCRAFT WITH REINFORCED COCKPIT DOOR
Cockpit Door - Operational Test
Figure 501



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TASK 52-51-01-700-802-A

EFFECTIVITY: FOR AIRCRAFT WITH REINFORCED COCKPIT DOOR

3. REINFORCED COCKPIT DOOR - ADJUSTMENT TEST

A. General

- (1) This task gives the procedures to do a functional test on the reinforced cockpit door to make sure that it operates correctly.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 430	Latch Tester	For the test of the pressure relief latch of the reinforced cockpit door	
GSE 431	Bolt Rotation Tool	For test of the latch bolt of the reinforced cockpit door	

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
2	Do the task	Passenger cabin and Cockpit

H. Preparation ([Figure 502](#))

SUBTASK 841-003-A

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

I. Functional Test of the Reinforced Cockpit Door Blow-out Panel ([Figure 502](#))

SUBTASK 720-002-A

- (1) Open the cockpit door.

- (2) Do a test on the blow-out panel (4) as an escape panel, as follow (refer to Figure 502, DET. A, sheet 1):

- (a) Remove the latch cover (2) to get access to the bottom retainer (3).

- (b) Rotate the bottom retainer (3) counterclockwise to release the blow-out panel (4). Refer to DET. C.

- (c) Carefully, pull the blow-out panel (4) to make sure that its opens smoothly.

- (d) Fit the blow-out panel (4) in its original position.
 - (e) Turn the bottom retainer (3) clockwise to close the blow-out panel (4).
 - (f) Do steps (a) thru (e) two or three times to make sure that the blow-out panel (4) operates correctly as an escape panel.
- (3) Do a functional test on the pressure relief latch (5), as follows (refer to Figure 502, sheet 2):
- (a) Close the cockpit door (1).

CAUTION: BEFORE YOU DO THE FUNCTIONAL TEST OF THE PRESSURE RELIEF LATCH, MAKE SURE THAT 0.635 mm (0.025 in) IS THE MAXIMUM PRELOAD POSITION OF THE LATCH BOLT. THIS WILL PREVENT DAMAGE TO THE LATCH AIR CYLINDER LOCKING PIN.

- (b) Use adhesive tape (8) to cover two or three pressure sense holes on the pressure relief latch (5). Refer to DET. C and D, sheet 2.

NOTE: Before you use GSE 430 for the first time, trim the tip of the tool as necessary.

- (c) On the pressure relief latch (5), put the vacuum tip of GSE 430 in the remaining open pressure sense hole. Refer to DET. D.

NOTE: During the functional test, the vacuum tip of GSE 430 must be in full contact with the pressure sense hole for an accurate test of the pressure relief latch (5).

- (d) Squeeze the handle of the GSE 430 to get a vacuum of between 80 kPa (11.60 lbf/in) and 40 kPa (5.80 lbf/in)

- (e) Let the gauge bleed off the vacuum slowly by itself until it gets the range between 40 kPa (5.80 lbf/in) and 10 kPa (1.45 lbf/in).

- (f) When the gauge of GSE 430 gets the range between 40 kPa (5.80 lbf/in) and 10 kPa (1.45 lbf/in), use GSE 431 to open the latch bolt as follows:

CAUTION: WHEN YOU USE GSE 431, MAKE SURE THAT THERE IS A MINIMUM OF 10 kPa (1.45 lbf/in) ON THE VACUUM GAUGE. THIS PREVENT DAMAGE TO THE LATCH-AIR-CYLINDER LOCKING PIN.

- 1 Fit GSE 431 into the hole in the latch bolt. Refer to DET. D.

CAUTION: MAKE SURE THAT THE VACUUM TIP OF GSE 430 IS IN FULL CONTACT WITH THE HOLE.

- 2 Use GSE 431 to turn the latch 90° from the closed position to the open position.

- 3 If the latch bolt opens in the range of 40 kPa (5.80 lbf/in) and 10 kPa (1.45 lbf/in), the latch bolt is serviceable.



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- 4 If the latch bolt does not open in the range of 40 kPa (5.80 lbf/in) and 10 kPa (1.45 lbf/in), the latch bolt is not serviceable.

- (g) Put the latch bolt back to its closed position.
- (h) Remove GSE 431.
- (i) Do steps (d) thru (h) two or three times to make sure that the pressure relief latch (5) operates correctly and the latch bolt opens.
- (j) Remove GSE 430 from the pressure sense holes.
- (k) Go to step (4).

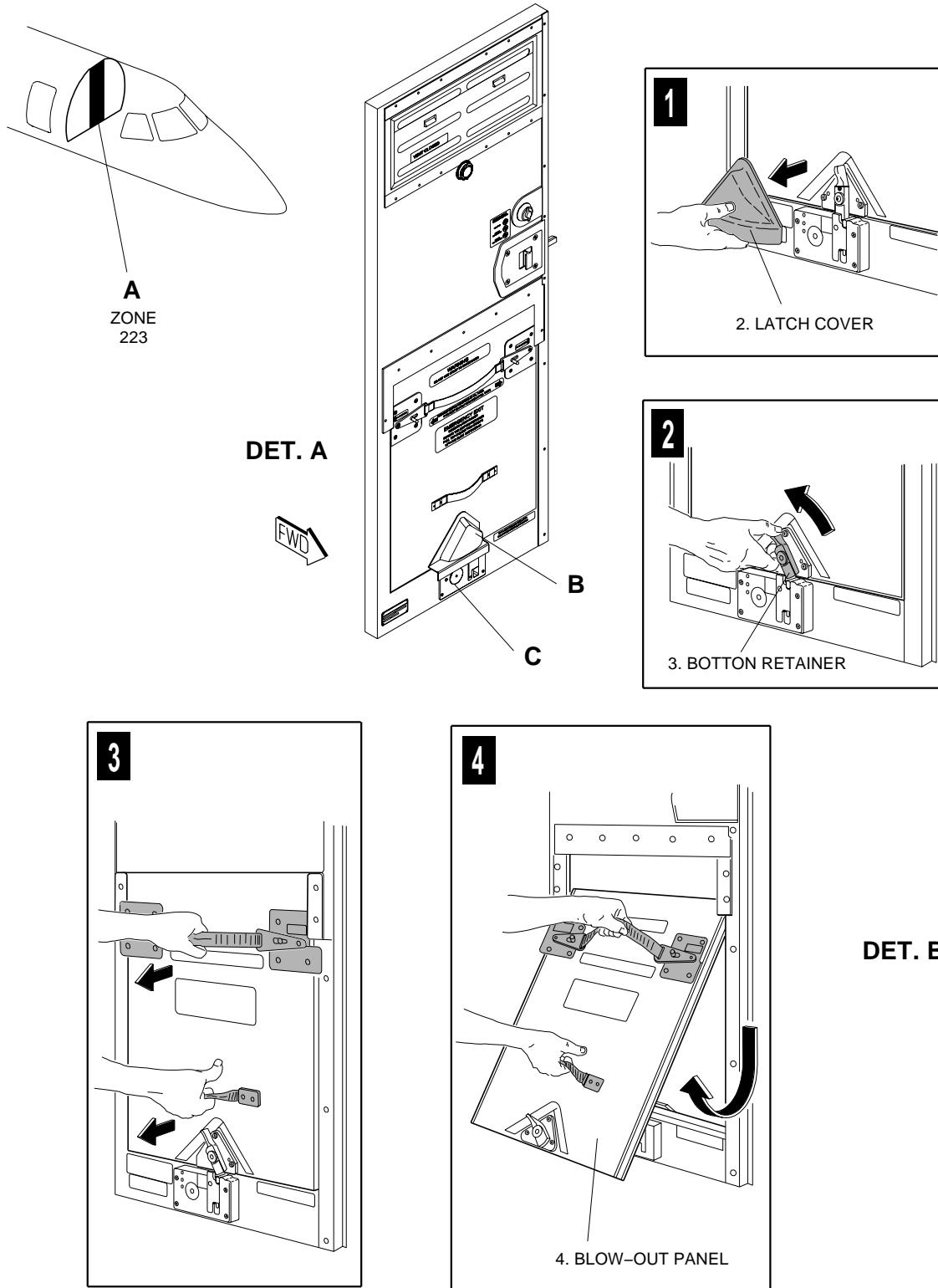
CAUTION: MAKE SURE THAT GSE 430 IS REMOVED FROM THE PRESSURE RELIEF LATCH (5).

- (4) Fit GSE 431 into the hole in the latch bolt. Refer to DET. D.

CAUTION: DO NOT USE FORCE TO OPEN THE LATCH BOLT.

- (a) Try to turn the latch bolt to the open position to make sure that the locking mechanism is fully engaged.
 - 1 The latch bolt must turn maximum 5° before a solid stop is felt as the latch bolt finds the locking mechanism.
- (5) Remove GSE 431 from the latch bolt.
- (6) Remove the adhesive tape (8).

EFFECTIVITY: FOR AIRCRAFT WITH REINFORCED COCKPIT DOOR
Cockpit Door - Operational Test
Figure 502 - Sheet 1



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EFFECTIVITY: FOR AIRCRAFT WITH REINFORCED COCKPIT DOOR

Cockpit Door - Operational Test

Figure 502 - Sheet 2

