



## AIRCRAFT MAINTENANCE MANUAL

### FADEC - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedure to remove/install the FADEC. There are two FADECs for each engine.
- B. The procedures to remove/install the FADECs are the same. Figure 401 shows the location of the FADECs in the rear electronic compartment.
- C. 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
73-22-01-000-801-A	FADEC - REMOVAL	ALL
73-22-01-400-801-A	FADEC - INSTALLATION	ALL



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 73-22-01-000-801-A

EFFECTIVITY: ALL

2. FADEC - REMOVAL

A. General

- (1) Obey the instructions below to remove the FADEC.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272DR	Rear electronic compartment

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Ladder	To get access to the rear electronic compartment	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

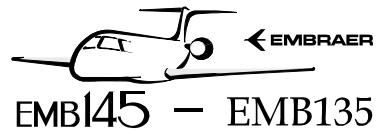
H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Rear electronic compartment

I. Preparation

SUBTASK 841-002-A

- (1) Make sure that the aircraft is safe for maintenance.
- (2) On the circuit breaker panel, open these circuit breakers and attach DO-NOT-CLOSE tags to them:
  - FADECs 1A, 1B (LH Engine).
  - FADECs 2A, 2B (RH Engine).
- (3) Put the ladder in position and open the rear electronic compartment access door 272DR (AMM MPP 06-41-01/100).



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

J. FADEC - Removal ([Figure 401](#)) ([Figure 402](#))

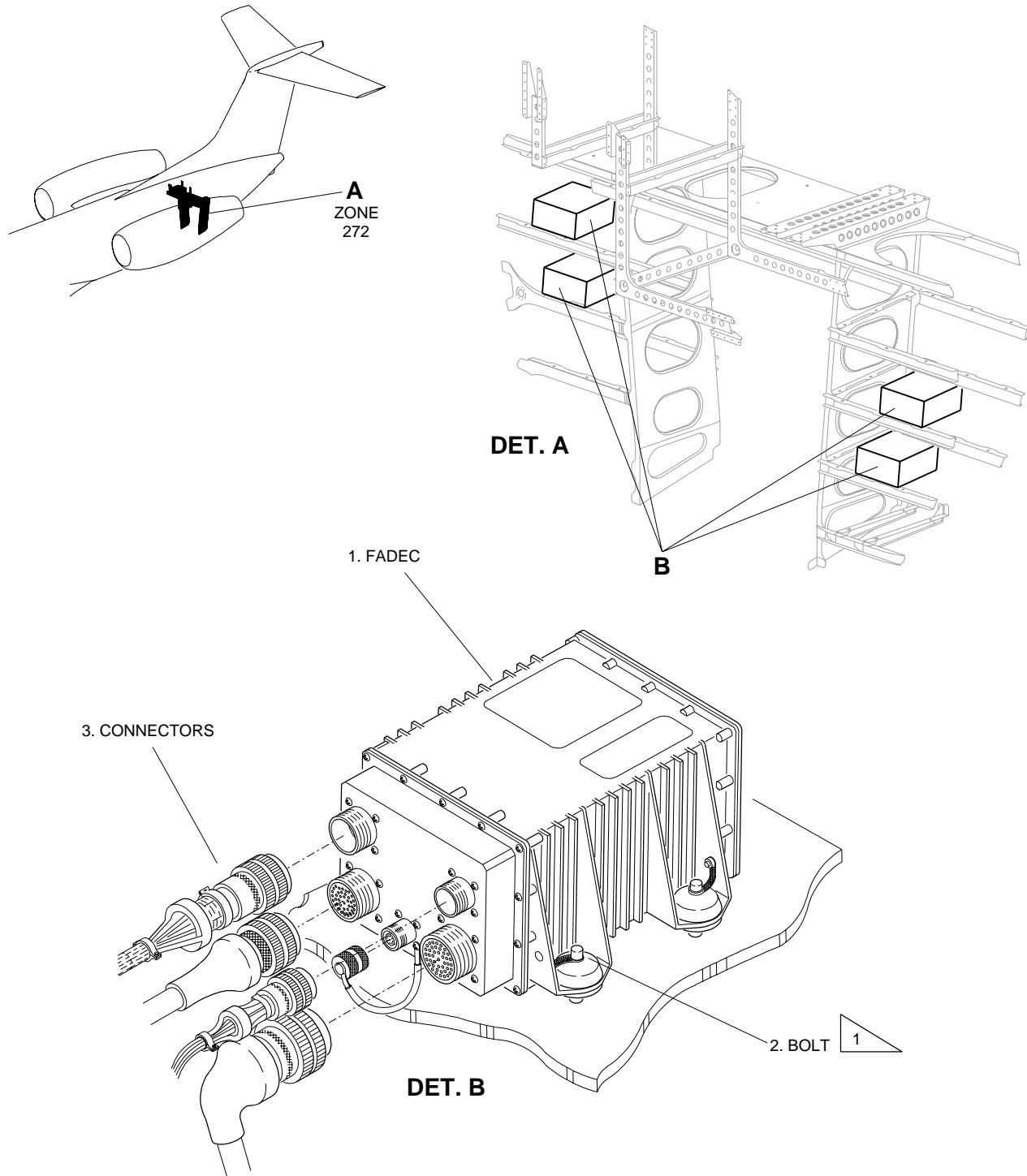
SUBTASK 020-002-A

- (1) Disconnect the FADEC electrical connectors (3).

NOTE: For FADEC post-mod. SB AE3007A-73-073 do not remove the diode adapter (4) from the J4 connector.

- (2) Remove bolts (2).
- (3) Remove the FADEC (1) from the tray.
- (4) Install plugs and caps to the disconnected points.

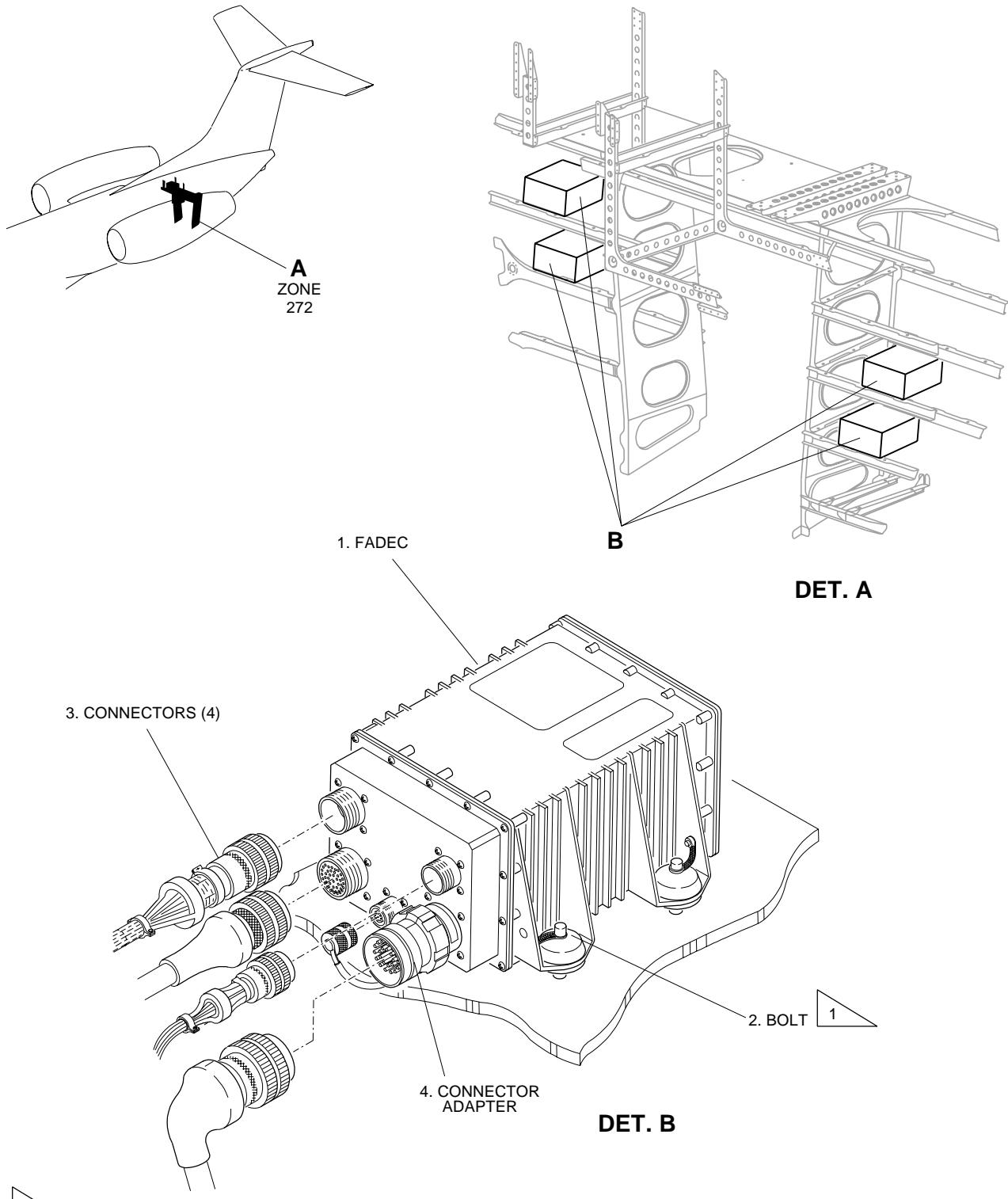
**EFFECTIVITY: PRE-MOD. S.B. AE3007A 73-073**  
**FADEC - Removal/Installation**  
**Figure 401**



TORQUE: 2.26 N.m TO 2.82 N.m (20 lb.in TO 25 lb.in)

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**EFFECTIVITY: POST-MOD. S.B. AE3007A 73-073**  
**FADEC - Removal/Installation**  
**Figure 402**



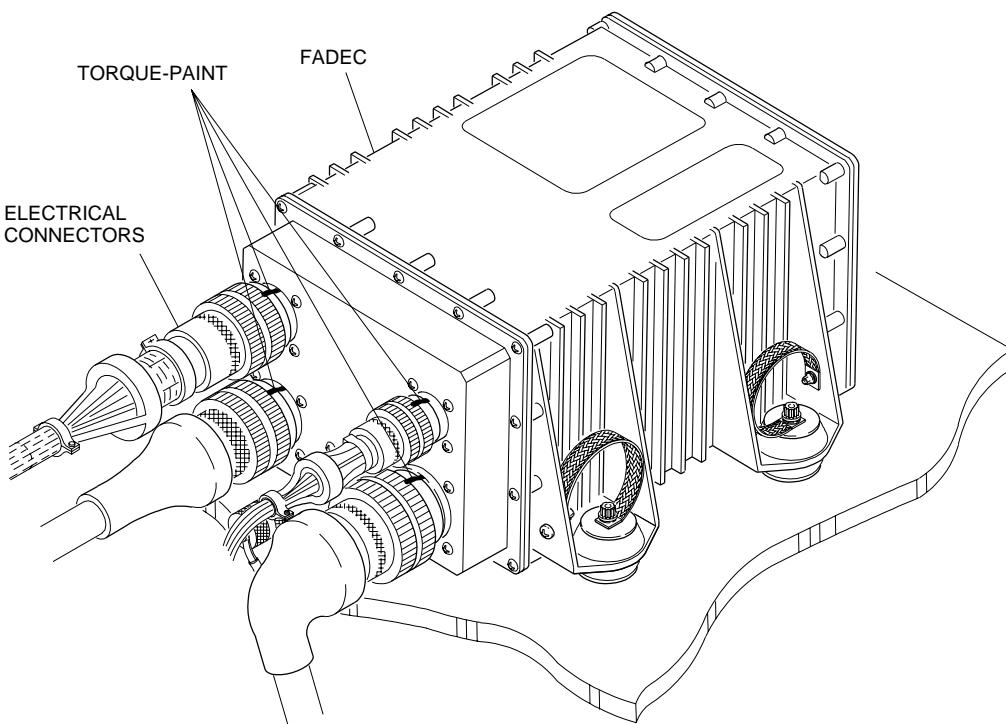
TORQUE: 2.26 N.m TO 2.82 N.m (20 lb.in TO 25 lb.in)

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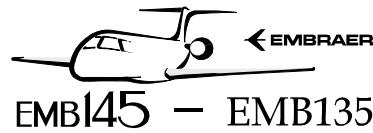
**EFFECTIVITY: ALL**

FADEC Connectors Torque-paint

Figure 403



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AIRCRAFT  
MAINTENANCE MANUAL

TASK 73-22-01-400-801-A

EFFECTIVITY: ALL

3. FADEC - INSTALLATION

A. General

- (1) Obey the instructions below to install the FADEC.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 73-22-01-700-801-A/500	FADEC DISCRETE LABELS - INSPECTION
IPC ADDITIONAL CROSS-REFERENCE TABLE	-
WM 34-90-00	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272DR	Rear electronic compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque Wrench	To torque the bolts	
GSE 299	Soft-jawed Pliers	To tight the connectors	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Ladder	To get access to the rear electronic compartment	1

F. Consumable Materials

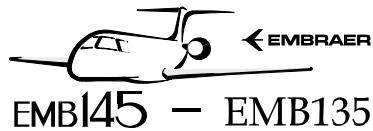
SPECIFICATION (BRAND)	DESCRIPTION	QTY
-	Inspection Torque Seal	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Rear electronic compartment



EMB145 – EMB135

AIRCRAFT  
MAINTENANCE MANUAL

I. FADEC - Installation (Figure 401) (Figure 402) (Figure 403)

SUBTASK 420-002-A

**CAUTION:** BEFORE INSTALLATION OF THE ENGINE, MAKE SURE THAT THE P/Ns OF THE FADECs ARE THE SAME AND AGREE WITH THE P/N OF THE ENGINE ACCORDING TO IPC ADDITIONAL CROSS-REFERENCE TABLE.

**NOTE:** Make sure that the indicating system straps related to the engine models are configured correctly (WM 34-90-00), to prevent incorrect engine indication on the EICAS.

- (1) Remove the protective plugs and caps from FADEC connectors.
- (2) Put the FADEC (1) on its tray.
- (3) Install the bolts (2). Apply torque to bolts (2).

**CAUTION:** • USE THE CORRECT TOOLS WHEN YOU ARE TIGHTEN THE CONNECTORS, OR YOU CAN CAUSE DAMAGE TO THE CONNECTORS.  
• DO NOT OVER-TIGHTEN THE CONNECTOR, OR YOU CAN CAUSE DAMAGE TO THE CONNECTOR AND ITS PARTS.

- (4) Connect the electrical connectors (3) to the FADEC. Carefully use soft-jawed pliers to tight the connectors until they are fully engaged (mechanically mated) and you cannot see the red band.
- (5) Torque-paint the connector, as shown in (Figure 403) (use inspection torque seal).

**NOTE:** For aircraft POST-MOD. S.B. AE3007A 73-073, it is not necessary to torque-paint the J4 connector, which has the diode adapter installed.

J. Follow-on

SUBTASK 842-002-A

- (1) Close rear electronic compartment access door 272DR (AMM MPP 06-41-01/100) and remove the ladder.
- (2) Remove the DO-NOT-CLOSE tags and close these circuit breakers:
  - FADECs 1A, 1B (LH Engine).
  - FADECs 2A, 2B (RH Engine).
- (3) Cycle these circuit breakers two times:
  - FADECs 1A, 1B (LH Engine).
  - FADECs 2A, 2B (RH Engine).
- (4) Reset the FADECs with the reset switch, on the overhead panel.
- (5) (For aircraft with EICAS 16 and on) Make sure that the message FADEC ID NO DISP is not shown on the EICAS when the aircraft is on the ground.

- (6) (For aircraft with EICAS 16 and on ) Make sure that the message below is shown on the EICAS, to confirm the FADEC application installed.

Table 401 - FADEC APPLICATION

EICAS ADVISORY MESSAGE <sup>[1]</sup>	ENGINE
CHECK A PERF	AE3007A
	AE3007A1/1
CHECK A1/2 PERF	AE3007A1/2
CHECK A1 PERF	AE3007A1
CHECK A1/3 PERF	AE3007A1/3
CHECK A1P PERF	AE3007A1P
CHECK A3 PERF	AE3007A3
CHECK A1E PERF	AE3007A1E

[1] If the aircraft is on the ground, the parking brake is on, and the flap is at the 0° position.

- (7) Do the FADEC inspection ( [AMM TASK 73-22-01-700-801-A/500](#)).

