(145) FMS (UNIVERSAL) COMPUTER / (135) DUAL FMS COMPUTER - REMOVAL/INSTALLATION

EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

1.   General

   A.   This section gives the procedures to remove and install the Flight Management System (FMS) computer.

   B.   The FMS computer is installed in the forward 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
34-62-01-000-801-A	DUAL FMS COMPUTER 1/2 - REMOVAL	AIRCRAFT WITH FMS UNIVERSAL
34-62-01-400-801-A	DUAL FMS COMPUTER 1/2 - INSTALLATION	AIRCRAFT WITH FMS UNIVERSAL
34-62-01-000-802-A	SINGLE FMS COMPUTER - REMOVAL	AIRCRAFT WITH FMS UNIVERSAL
34-62-01-400-802-A	SINGLE FMS COMPUTER - INSTALLATION	AIRCRAFT WITH FMS UNIVERSAL

TASK 34-62-01-000-801-A
EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

2. DUAL FMS COMPUTER 1/2 - REMOVAL

   A. General

   (1) This task gives the procedures to remove the FMS computers 1 and/or 2.

   B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL

   C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113CZ	Forward electronic compartment

   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	At the forward electronic compartment

   I. Preparation

   SUBTASK 841-003-A

   (1) On the circuit breaker panel, open the FMS 1 and/or FMS 2 circuit breaker(s) and attach a DO-NOT-CLOSE tag to it(them).

   (2) Make sure that the landing gear safety pin is installed to the NLG (AMM TASK 32-00-01-910-801-A/200).

   (3) Open access door 113CZ (AMM MPP 06-41-01/100).

   J. Removal (Figure 401)

   SUBTASK 020-003-A

   (1) Loosen the mounting tray hold-down knob (2).
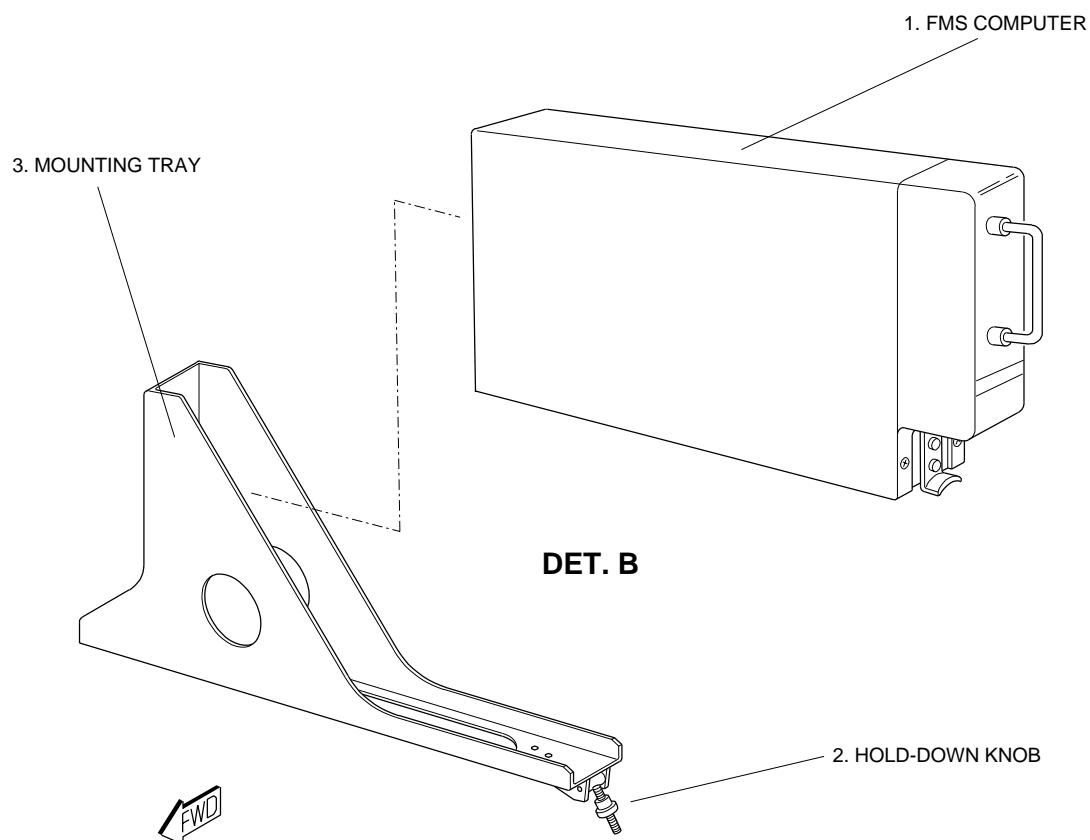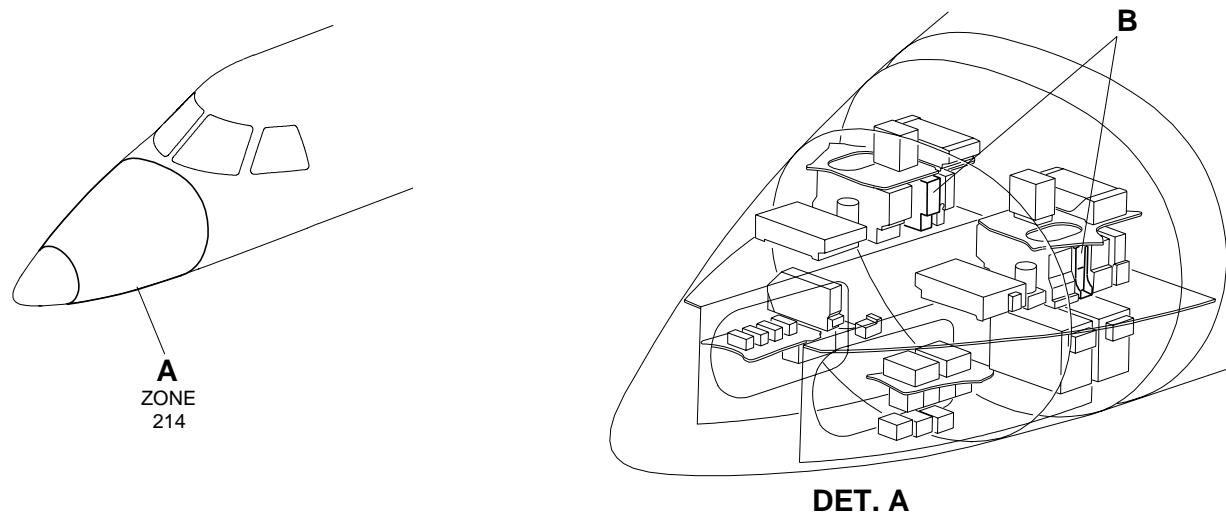
(2)   Slowly pull forward on the unit handle to separate the unit and tray connectors and slide the unit out of the tray (3).

EMBRAER logo

Dual FMS Computer 1/2 - Removal/Installation
Figure 401

A
ZONE
214

DET. A

1. FMS COMPUTER

3. MOUNTING TRAY

DET. B

2. HOLD-DOWN KNOB

FWD

145AMM340249.MCE A

TASK 34-62-01-400-801-A
EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

3. DUAL FMS COMPUTER 1/2 - INSTALLATION

    A. General

        (1) This task gives the procedures to install the FMS computer 1 and/or 2.

    B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-04/100	-
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 34-62-00-400-801-A/200	DUAL FMS NAVIGATION DATA BASE - LOADING
AMM TASK 34-62-00-700-801-A/500	-

    C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113CZ	Forward electronic compartment

    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	At the forward electronic compartment

    I. Installation (Figure 401)

        SUBTASK 420-003-A

        (1) Slide the unit (1) into the mounting tray (3).

        CAUTION: WHEN PLACING THE UNIT ON THE MOUNTING TRAY, DO NOT FORCE FIT.
                 IF MATING IS DIFFICULT, REMOVE THE UNIT AND CHECK FOR
                 CONNECTOR PINS THAT MAY BE BENT OR OUT OF ALIGNMENT OF THE
                 RECEPTACLE ON THE MOUTING TRAY.

        (2) Slide the unit backwards until its connectors are fully engaged with the mating
             connectors of the mounting tray.
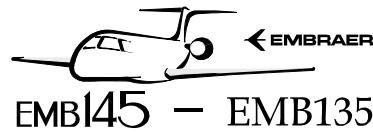
(3) If necessary, gently lift the front of the unit to make sure that the hold-down assembly mates properly with the tray hold-down hooks.

(4) Tighten the hold-down knob (2).

J. Follow-on

SUBTASK 842-003-A

(1) Do the load of the Navigation Database to the FMS (AMM TASK 34-62-00-400-801-A/ 200).

(2) On the circuit breaker panel, close the FMS 1 and/or FMS 2 circuit breaker(s) and remove the DO-NOT-CLOSE tag(s) from it(them).

(3) Do the Dual FMS Operational Test (AMM TASK 34-62-00-700-801-A/500).

(4) Close access door 113CZ (AMM MPP 06-41-04/100).

(5) Remove the landing gear safety pin is installed to the NLG (AMM TASK 32-00-01-910-801-A/200).

TASK 34-62-01-000-802-A
EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

4. SINGLE FMS COMPUTER - REMOVAL

    A. General

        (1) This task gives the procedures to remove the FMS computer.

    B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
S.B.145-32-0036	-

    C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113CZ	Forward electronic compartment

    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	At the forward electronic compartment

    I. Preparation

    SUBTASK 841-004-A

        (1) For aircraft PRE-MOD. S.B.145-32-0036, make sure that the pressure in hydraulic system 1 is fully released (AMM TASK 29-10-00-860-802-A/200).

        (2) For aircraft POST-MOD. S.B.145-32-0036, install safety pin of the NLG door solenoid valve (AMM TASK 32-00-02-910-801-A/200).

        (3) Open access door 113CZ (AMM MPP 06-41-01/100).
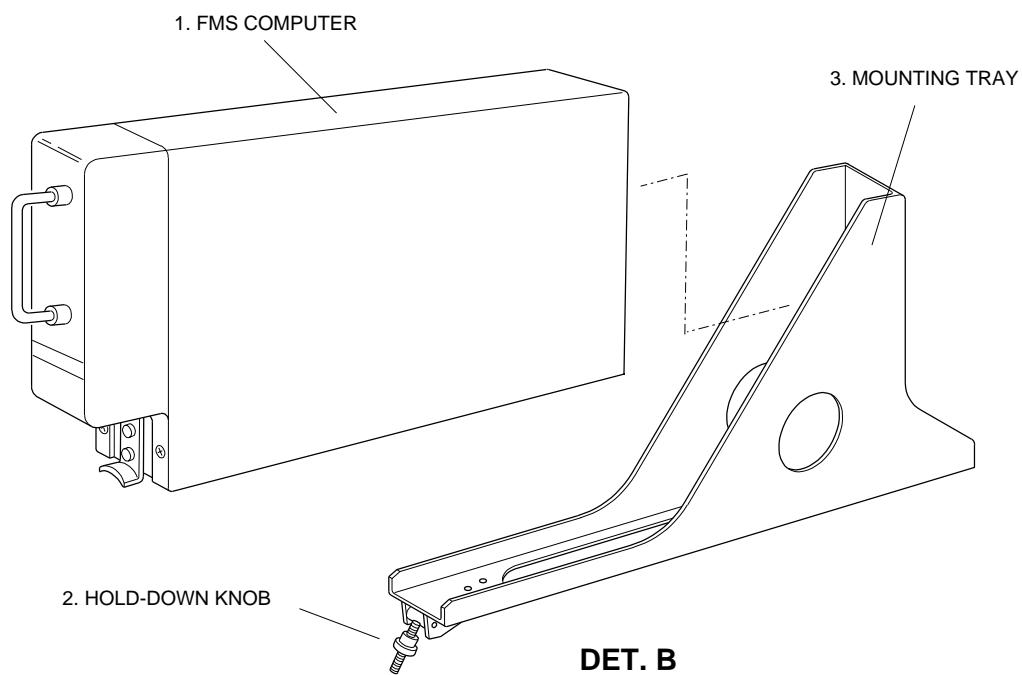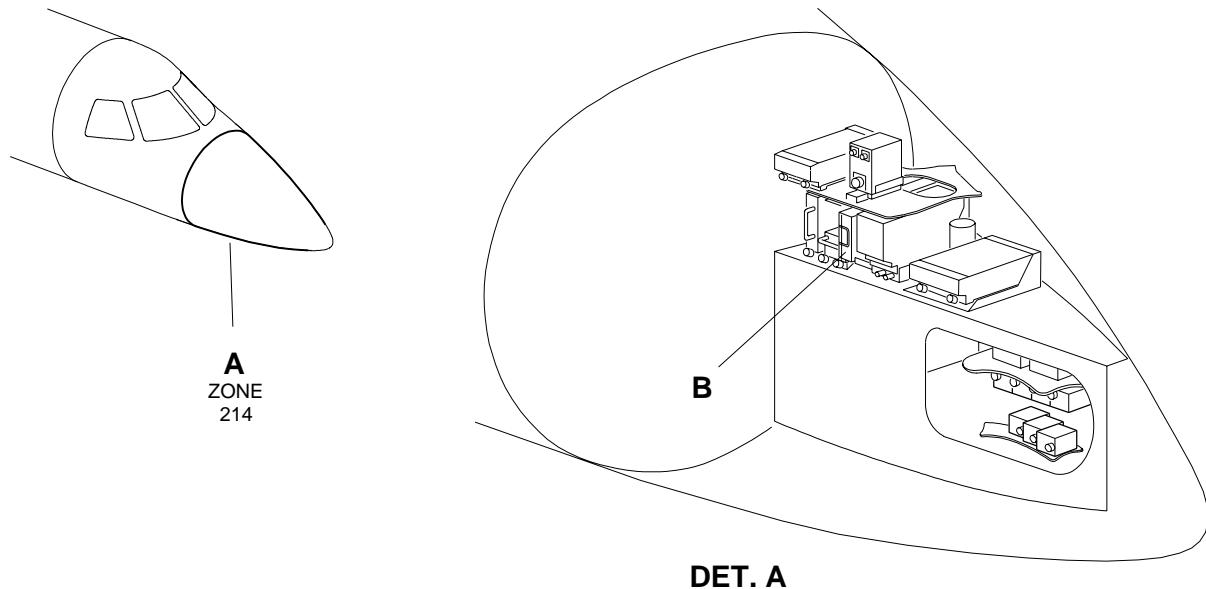
    (4)   On the circuit breaker panel, open the FMS 1 circuit breaker (Location Tip: DC BUS 1/NAV/FMS1) and attach a DO-NOT-CLOSE tag to it.

J.   Removal (Figure 402)

*SUBTASK 020-004-A*

    (1)   Loosen the mounting tray hold-down knob (2).

    (2)   Slowly pull forward on the unit handle to separate the unit and tray connectors and slide the unit out of the tray (3).

EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL
Single FMS Computer - Removal/Installation
Figure 402

A
ZONE
214

B

DET. A

1. FMS COMPUTER

3. MOUNTING TRAY

2. HOLD-DOWN KNOB

DET. B

145AMM340300.MCE

TASK 34-62-01-400-802-A
EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

5. <u>SINGLE FMS COMPUTER - INSTALLATION</u>

    A. General

        (1) This task gives the procedures to install the FMS computer.

    B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-04/100	-
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 34-62-00-400-802-A/200	SINGLE FMS NAVIGATION DATA BASE - LOADING
AMM TASK 34-62-00-700-802-A/500	SINGLE FMS - OPERATIONAL TEST
SB145-32-0036	-

    C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113CZ	Forward electronic compartment

    D. Tools and Equipment

    Not Applicable

    E. Auxiliary Items

    Not Applicable

    F. Consumable Materials

    Not Applicable

    G. Expandable Parts

    Not Applicable

    H. Persons Recommended
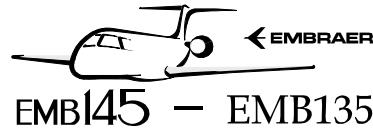
QTY	FUNCTION	PLACE
1	Does the task	At the forward electronic compartment

    I. Installation (Figure 402)

    SUBTASK 420-004-A

        (1) Slide the unit (1) into the mounting tray (3).

        <u>CAUTION:</u> WHEN YOU PUT THE UNIT ON THE MOUNTING TRAY, DO NOT USE FORCE TO FIT IT. IF MATING IS DIFFICULT, REMOVE THE UNIT AND CHECK FOR CONNECTOR PINS THAT MAY BE BENT OR OUT OF ALIGNMENT OF THE RECEPTACLE ON THE MOUNTING TRAY.

(2)   Slide the unit backwards until its connectors are fully engaged with the mating connectors of the mounting tray.

(3)   If necessary, carefully lift the front of the unit to make sure that the hold-down assembly mates properly with the tray hold-down hooks.

(4)   Tighten the hold-down knob (2).

J.   Follow-on

SUBTASK 842-004-A

(1)   Do the load of the Navigation Database to the FMS (AMM TASK 34-62-00-400-802-A/200).

(2)   Close access door 113CZ (AMM MPP 06-41-04/100).

(3)   For aircraft POST-MOD SB145-32-0036, remove safety pin of the NLG door solenoid valve (AMM TASK 32-00-02-910-801-A/200).

(4)   On the circuit breaker panel, close the FMS 1 circuit breaker (Location Tip: DC BUS 1/NAV/FMS1) and remove the DO-NOT-CLOSE tag from it.

(5)   Do the Single FMS Operational Test (AMM TASK 34-62-00-700-802-A/500).