



AIRCRAFT MAINTENANCE MANUAL

(145) FMS (UNIVERSAL) CONFIGURATION MODULE / (135) DUAL FMS CONFIGURATION MODULE - REMOVAL/INSTALLATION

EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

1. General

- A. This section gives the procedures to remove and install the FMS configuration module.
- 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
34-62-03-000-803-A	DUAL FMS CONFIGURATION MODULE - REMOVAL	AIRCRAFT WITH FMS UNIVERSAL
34-62-03-400-803-A	DUAL FMS CONFIGURATION MODULE - INSTALLATION	AIRCRAFT WITH FMS UNIVERSAL
34-62-03-000-804-A	SINGLE FMS CONFIGURATION MODULE - REMOVAL	AIRCRAFT WITH FMS UNIVERSAL
34-62-03-400-804-A	SINGLE FMS CONFIGURATION MODULE - INSTALLATION	AIRCRAFT WITH FMS UNIVERSAL



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 34-62-03-000-803-A

EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

2. DUAL FMS CONFIGURATION MODULE - REMOVAL

A. General

This task gives the procedures to remove the dual FMS1(2) configuration module.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 23-22-01-000-801-A/400	ACARS UNIT - REMOVAL
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
AMM TASK 34-21-01-000-801-A/400	AHRS COMPUTER - REMOVAL
AMM TASK 34-62-01-000-801-A/400	-
S.B.145-32-0036	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
214	113CZ	Forward Electronic Compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
M81969/14-1	Inserter / Extractor	Pin insert / extract	

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	Forward Electronic Compartment



I. Preparation

SUBTASK 841-002-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 POS MOD [S.B.145-32-0036](#), install safety pin of the NLG doors solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (3) Open the 113CZ access door (AMM MPP 06-41-01/100).
- (4) On the circuit breaker panel, located on the cockpit ceiling, open the circuit breakers bellow and attach a DO NOT CLOSE tags to them:
 - (a) FMS1 (Location Tip: DC BUS 1/NAV/FMS1) or FMS2 (Location Tip: DC BUS 2/NAV/FMS2) related to the module that will be removed.
 - (b) AHRS1 (Location Tip: ESSENTIAL DC BUS 1/NAV/AHRS1) or AHRS2 (Location Tip: DC BUS 2/NAV/AHRS2) related to the module that will be removed.

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

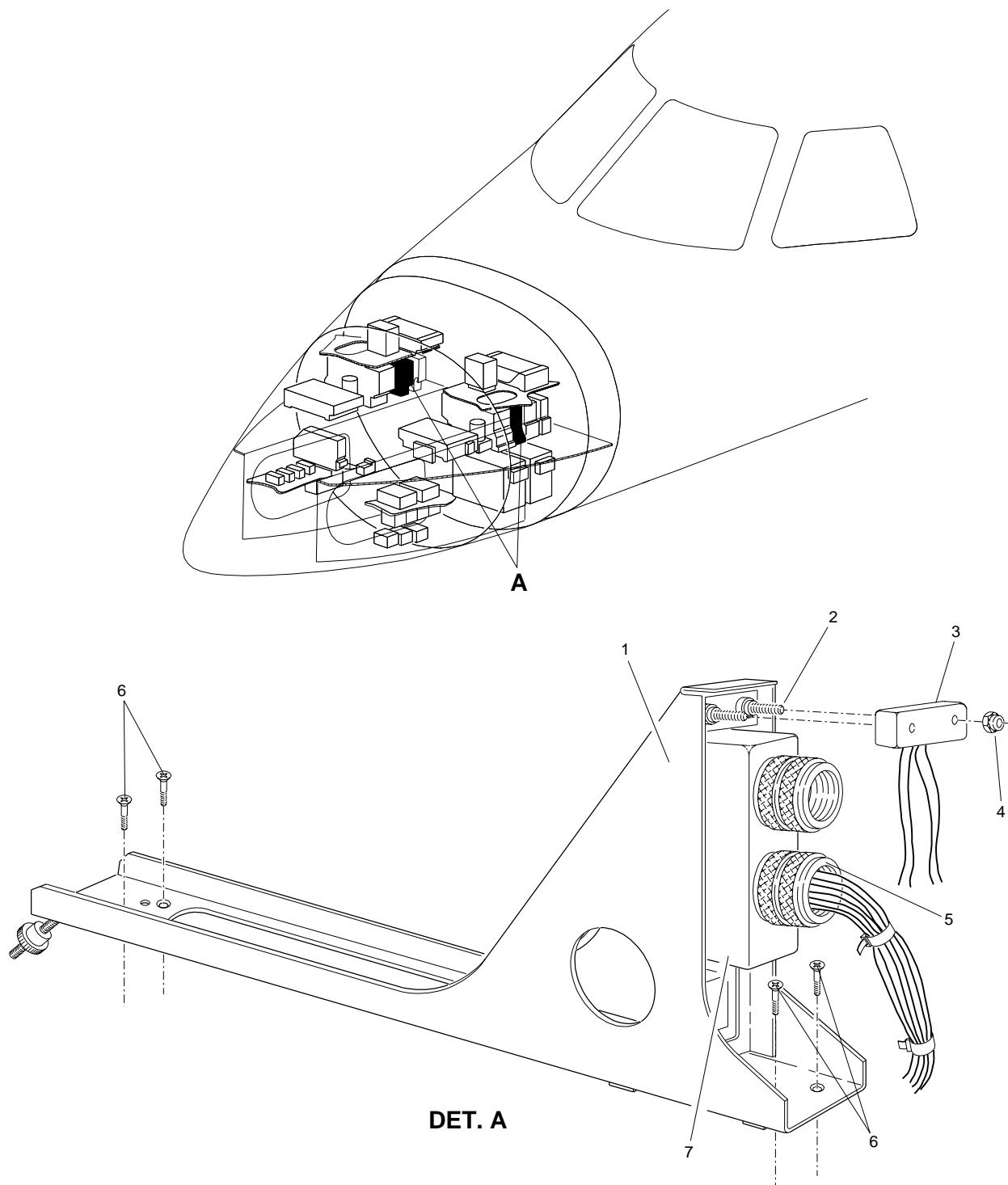
SUBTASK 020-002-A

- (1) Remove the AHRS computer ([AMM TASK 34-21-01-000-801-A/400](#)).
- (2) Remove the ACARS unit only if you will remove the FMS2 configuration module ([AMM TASK 23-22-01-000-801-A/400](#)).
- (3) Remove the FMS computer from the mounting tray (1) ([AMM TASK 34-62-01-000-801-A/400](#)).
- (4) Remove the screws that attach the electrical connector (7) to the mounting tray (1).
- (5) Remove the screws (6) that attach the mounting tray (1) to the structure.
- (6) Carefully pull and turn the mounting tray (1) to get access to the configuration module (3).
- (7) Remove the nuts (4) from the screws (2) to remove the configuration module (3).
- (8) Use the Pin extractor to remove the configuration module (3) pins from the electrical connector middle plug (5).
- (9) Remove the configuration module (3).

EFFECTIVITY: CONFIGURATION MODULE AT MOUNTING TRAY TOP

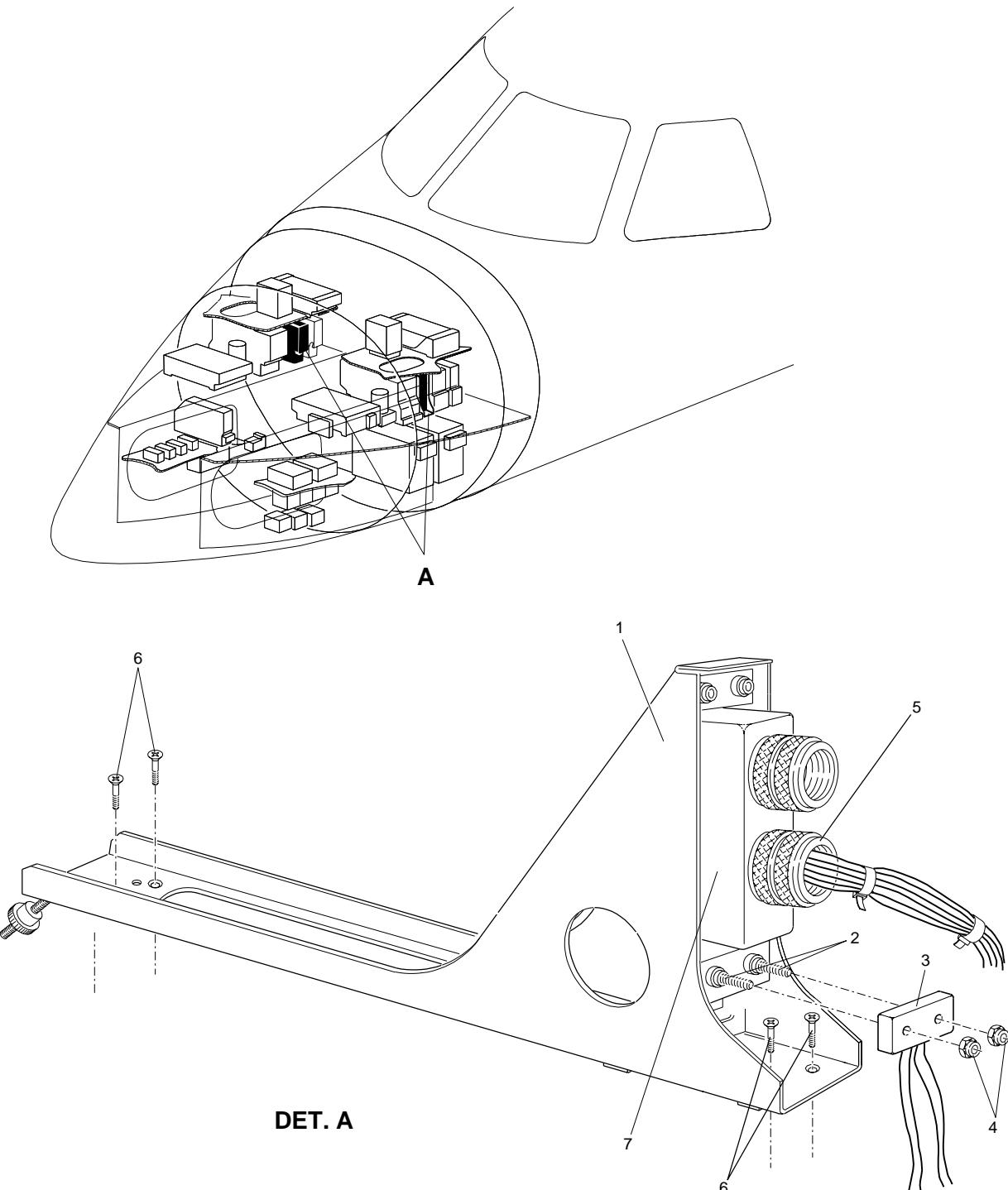
Dual FMS Configuration Module - Removal/Installation

Figure 401



145AMM340243.MCE B

EFFECTIVITY: CONFIGURATION MODULE AT MOUNTING TRAY BOTTOM
Dual FMS Configuration Module - Removal/Installation
Figure 402



145AMM340297.MCE A



AIRCRAFT MAINTENANCE MANUAL

EMB145 – EMB135

TASK 34-62-03-400-803-A

EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

3. DUAL FMS CONFIGURATION MODULE - INSTALLATION

A. General

This section gives the procedures to install the dual FMS configuration module.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 23-22-01-000-801-A/400	ACARS UNIT - REMOVAL
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 34-21-01-400-801-A/400	AHRS COMPUTER - INSTALLATION
AMM TASK 34-62-01-400-801-A/400	-
AMM TASK 34-62-03-400-801-A/200	DUAL FMS CONFIGURATION MODULE - PROGRAMMING
S.B.145-32-0036	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
214	113CZ	Forward Electronic Compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
M81969/14-1	Inserter / Extractor	Pin insert / extract	

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	Forward Electronic Compartment

I. Installation (Figure 401) (Figure 402)

SUBTASK 420-002-A

NOTE: The configuration module green and the white wires are not used. They must be isolated.

- (1) Use the Pin inserter to insert the configuration module pins in the electrical connector middle plug (5), as shown in the table below.

Table 401

CABLE COLOR	MIDDLE PLUG PIN
Brown	14G
Red	14H
Yellow	14J
Blue	14K

- (2) Install the configuration module (3) on the mounting tray (1).
- (3) Tighten the nuts (4) that attach the configuration module (3) to the mounting tray (1).
- (4) Tighten the screws that attach the electrical connector (7) to the mounting tray (1).
- (5) Tighten the screws (6) that attach the mounting tray (1) to the structure.
- (6) Install the ACARS unit if you removed it ([AMM TASK 23-22-01-000-801-A/400](#)).
- (7) Install the FMS computer into the mounting tray (1) (AMM TASK 34-62-01-400-801-A/400).
- (8) Install the AHRS into the mounting tray (1) ([AMM TASK 34-21-01-400-801-A/400](#)).

J. Follow-on

SUBTASK 842-002-A

- (1) Close the 113CZ access door (AMM MPP 06-41-01/100).
- (2) For aircraft POS MOD [S.B.145-32-0036](#), remove safety pin of the NLG doors solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (3) On the circuit breaker panel, located on the cockpit ceiling, close the FMS and AHRS circuit breakers and remove a DO NOT CLOSE tags from them.
- (4) Do the programming of the dual FMS configuration module ([AMM TASK 34-62-03-400-801-A/200](#)).



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 34-62-03-000-804-A

EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

4. SINGLE FMS CONFIGURATION MODULE - REMOVAL

A. General

This task gives the procedures to remove the FMS configuration module.

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
AMM TASK 34-21-01-000-801-A/400	AHRS COMPUTER - REMOVAL
AMM TASK 34-62-01-000-802-A/400	SINGLE FMS COMPUTER - REMOVAL
S.B.145-32-0036	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
214	113CZ	Forward electronic compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
M81969/14-1	Inserter/Extractor	To insert and remove the pin	

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	Forward electronic compartment

I. Preparation

SUBTASK 841-003-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).



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- (2) For aircraft POST-MOD [S.B.145-32-0036](#), install safety pin of the NLG doors 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, located on the cockpit ceiling, open the circuit breakers bellow and attach DO-NOT-CLOSE tags to them:
 - (a) FMS1 (Location Tip: DC BUS 1/NAV/FMS1).
 - (b) AHRS1 (Location Tip: ESSENTIAL DC BUS 1/NAV/AHRS1).

J. Removal ([Figure 403](#)) ([Figure 404](#))

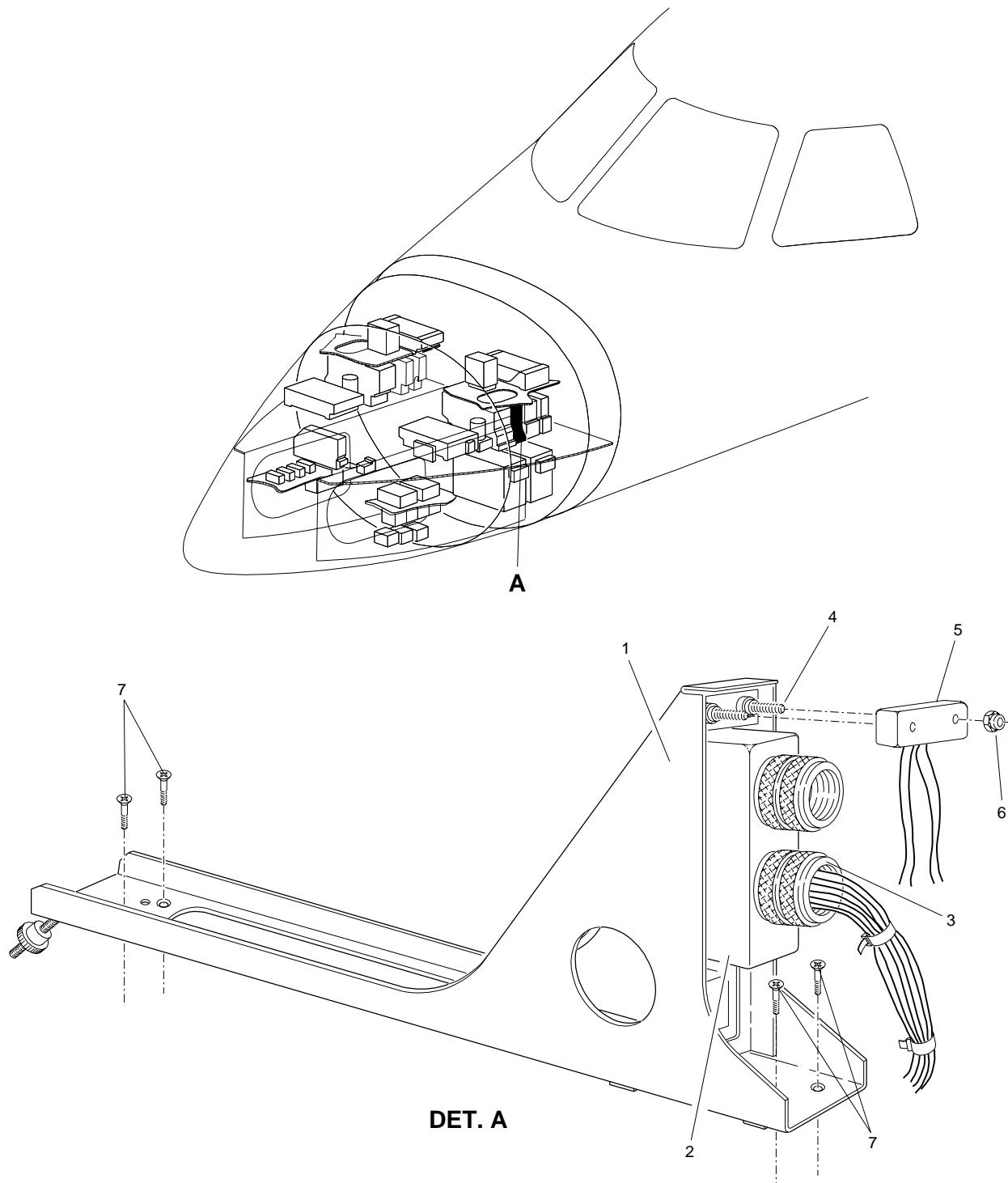
SUBTASK 020-003-A

- (1) Remove the AHRS computer ([AMM TASK 34-21-01-000-801-A/400](#)).
- (2) Remove the FMS computer from the mounting tray (1) ([AMM TASK 34-62-01-000-802-A/400](#)).
- (3) Remove the screws that attach the electrical connector (2) to the mounting tray (1).
- (4) Remove the screws (7) that attach the mounting tray (1) to the structure.
- (5) Carefully pull and turn the mounting tray (1) to get access to the configuration module (5).
- (6) Remove the nuts (6) from the screws (4) to remove the configuration module (5).
- (7) Use the Pin extractor to remove the configuration module (5) pins from the electrical connector middle plug (3).
- (8) Remove the configuration module (5).

EFFECTIVITY: CONFIGURATION MODULE AT MOUNTING TRAY TOP

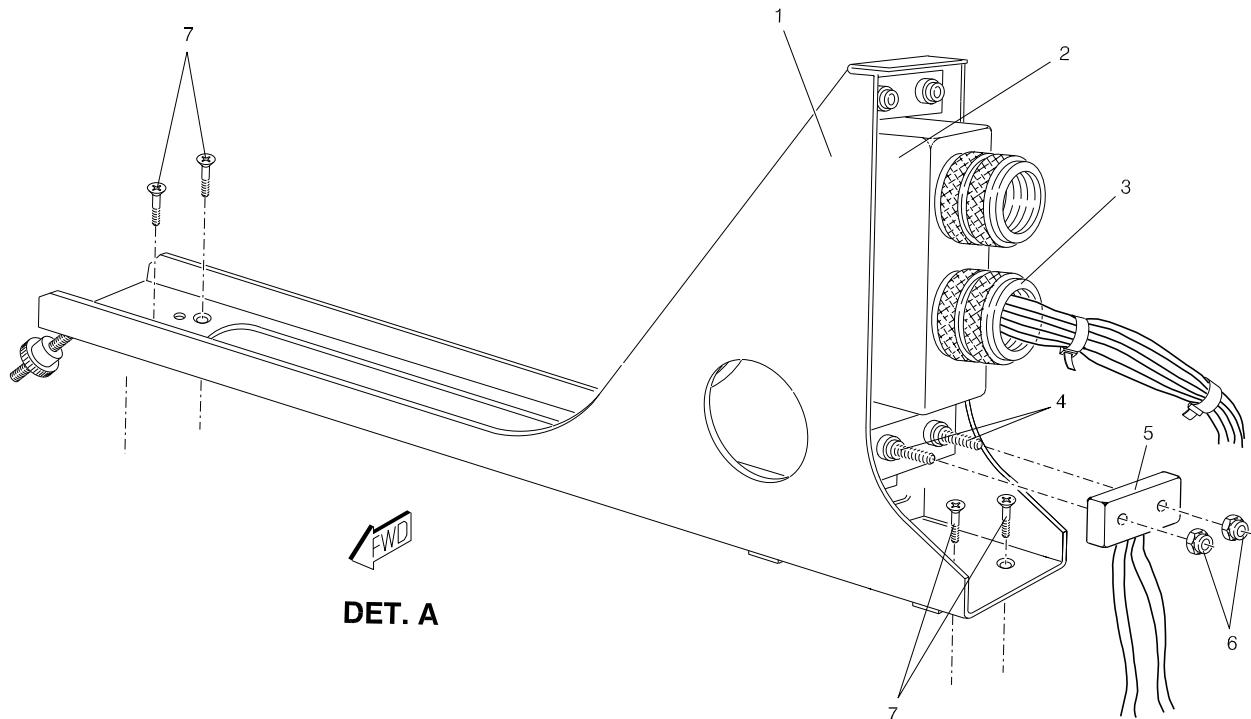
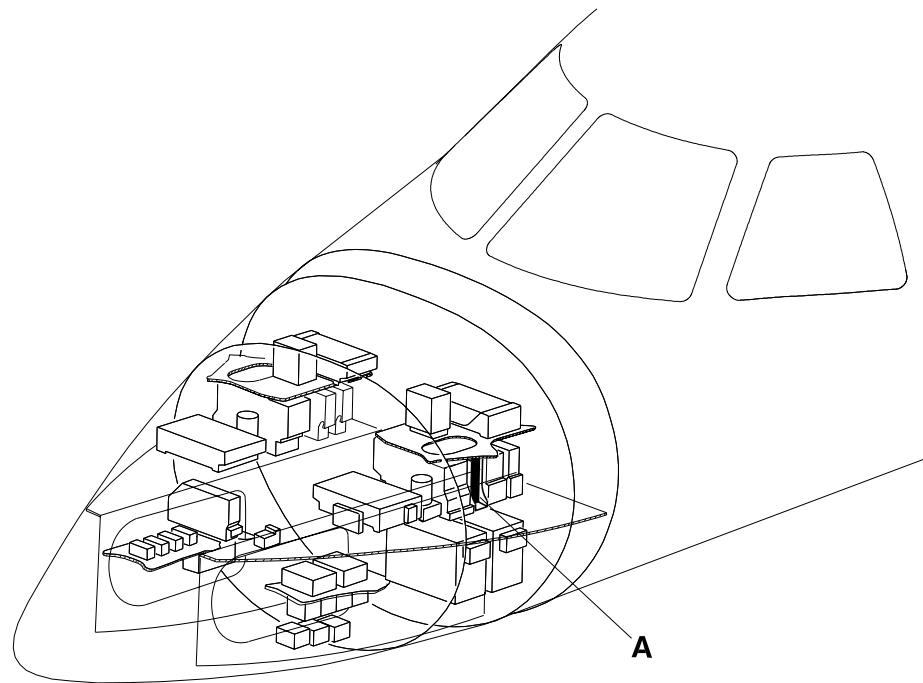
Single FMS Configuration Module - Removal/Installation

Figure 403



145AMM340758.MCE

EFFECTIVITY: CONFIGURATION MODULE AT MOUNTING TRAY BOTTOM
 Single FMS Configuration Module - Removal/Installation
 Figure 404



AMM340695.MCE



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 34-62-03-400-804-A

EFFECTIVITY: AIRCRAFT WITH FMS UNIVERSAL

5. SINGLE FMS CONFIGURATION MODULE - INSTALLATION

A. General

This section gives the procedures to install the FMS configuration module.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 34-21-01-400-801-A/400	AHRS COMPUTER - INSTALLATION
AMM TASK 34-62-01-400-802-A/400	SINGLE FMS COMPUTER - INSTALLATION
AMM TASK 34-62-03-400-802-A/200	SINGLE FMS CONFIGURATION MODULE - PROGRAMMING
S.B.145-32-0036	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
214	113CZ	Forward electronic compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
M81969/14-1	Inserter/Extractor	To insert and remove the pin	

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	Forward electronic compartment

I. Installation (Figure 403) (Figure 404)

SUBTASK 420-003-A

NOTE: The configuration module green and white wires are not used. They must be isolated.

- (1) Use the Pin inserter to insert the configuration module pins in the electrical connector middle plug (5), as shown in the table below.

Table 402

CABLE COLOR	MIDDLE PLUG PIN
Brown	14G
Red	14H
Yellow	14J
Blue	14K

- (2) Install the configuration module (5) on the mounting tray (1).
- (3) Tighten the nuts (6) that attach the configuration module (5) to the mounting tray (1).
- (4) Tighten the screws that attach the electrical connector (2) to the mounting tray (1).
- (5) Tighten the screws (7) that attach the mounting tray (1) to the structure.
- (6) Install the FMS computer into the mounting tray (1) ([AMM TASK 34-62-01-400-802-A/400](#)).
- (7) Install the AHRS into the mounting tray ([AMM TASK 34-21-01-400-801-A/400](#)).

J. Follow-on

SUBTASK 842-003-A

- (1) Close access door 113CZ (AMM MPP 06-41-01/100).
- (2) For aircraft POST-MOD [S.B.145-32-0036](#), remove safety pin of the NLG doors solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (3) On the circuit breaker panel, located on the cockpit ceiling, close the circuit breakers bellow and remove DO NOT CLOSE tags from them:
- (a) FMS1 (Location Tip: DC BUS 1/NAV/FMS1).
 - (b) AHRS1 (Location Tip: ESSENTIAL DC BUS 1/NAV/AHRS1).
- (4) Do the programming of the Single FMS configuration module ([AMM TASK 34-62-03-400-802-A/200](#)).

