



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

FUEL PUMP&METERING UNIT (FPMU) - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the Fuel Pump & Metering Unit (FPMU).
- 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
73-21-01-000-801-A	FPMU - REMOVAL	ALL
73-21-01-400-801-A	FPMU - INSTALLATION	ALL



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MAINTENANCE MANUAL

TASK 73-21-01-000-801-A

EFFECTIVITY: ALL

2. FPMU - REMOVAL

A. General

- (1) To do the removal procedure, obey the instructions given in Rolls-Royce MM CSP 34022.
- (2) This procedure is applicable to the left and right engines.

B. References

REFERENCE	DESIGNATION
AMM MPP 71-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 71-12-01-000-801-A/400	ENGINE LOWER COWLING - OPENING
Rolls-Royce MM CSP 34022	-
S.B.145-28-0016	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
413		LH Engine lower cowling
423		RH Engine lower cowling

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the engine	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Engine

I. Preparation ([Figure 401](#)) ([Figure 402](#))

SUBTASK 841-002-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN ([AMM MPP 71-00-00/200](#)) TO PREVENT INJURY TO THE PERSONS AND DAMAGE TO THE MATERIAL.

- (1) On the circuit breaker panel, open these circuit breakers and attach a DO-NOT-CLOSE tag to them:
 - START 1/2.
 - PUMPS 1A/1B/1C.
 - PUMPS 2A/2B/2C.
- (2) Put the workstand in the work area.
- (3) Open the lower cowling ([AMM TASK 71-12-01-000-801-A/400](#)) to get access to the engine.

CAUTION: DRAIN THE FUEL BEFORE YOU DISCONNECT THE FUEL HOSE TO PREVENT FPMU HEATSHIELD CAVITY CONTAMINATION (REFER TO ROLLS-ROYCE MAINTENANCE MANUAL 73-21-10).

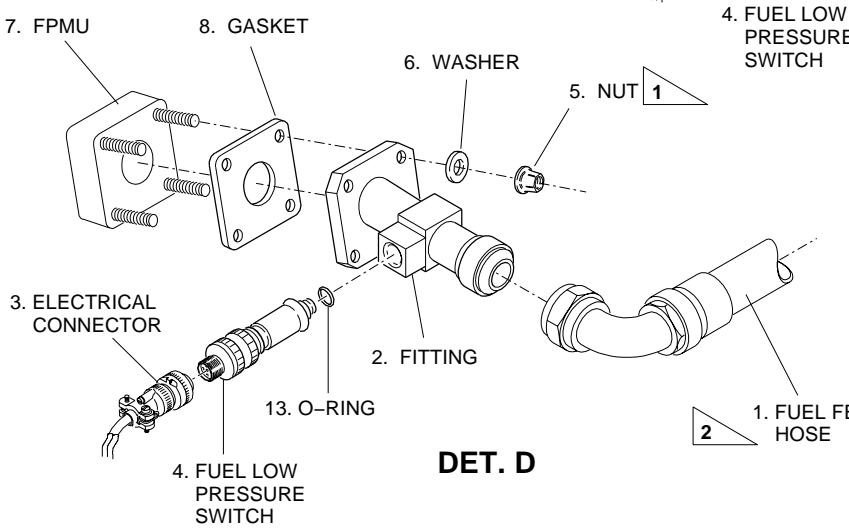
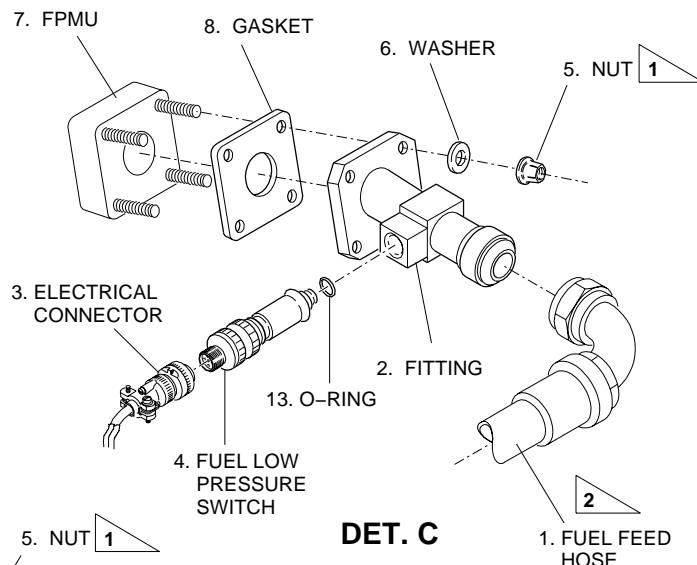
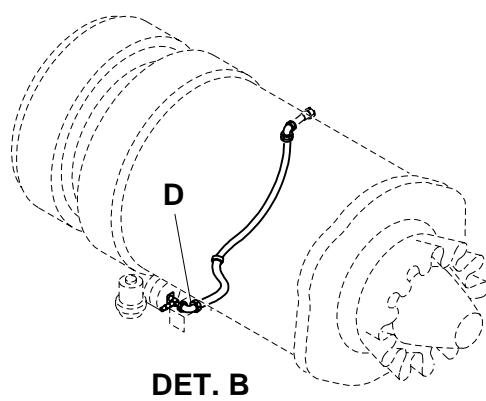
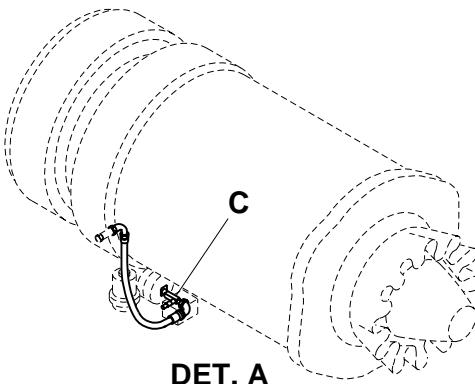
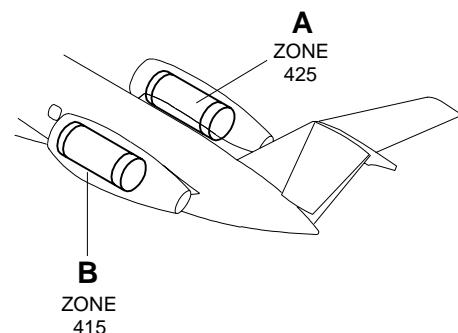
- (4) On aircraft PRE-MOD. [S.B.145-28-0016](#), disconnect the fuel feed hose (1) from the fitting (2).
- (5) On aircraft POST-MOD. [S.B.145-28-0016](#), remove the bolts (9), washers (10), and nuts (11) that connect the hose (1) to the fitting (2). Discard the gasket (12).
- (6) Disconnect the electrical connector (3) from the fuel low pressure switch (4).
- (7) Disconnect the fuel low pressure switch (4) from the fitting (2). Discard the O-ring (13).
- (8) Remove the nuts (5) and washers (6) to remove the fitting (2) from the FPMU (7). Discard the gasket (8).

J. Removal

SUBTASK 020-002-A

CAUTION: IMMEDIATELY AFTER YOU REMOVE THE FPMU, INSTALL A CAP ON THE FPMU FUEL INLET TO PREVENT INGESTION OF SMALL PARTS SUCH AS WASHERS, NUTS, BOLTS, SCREWS, ETC.

- (1) Remove the FPMU. Refer to the latest revision of Rolls-Royce MM CSP 34022.

EFFECTIVITY: PRE-MOD. S.B. 145-28-0016
FPMU - Removal/Installation
Figure 401


1 TORQUE: 2.8 N.m (25 lb. in)

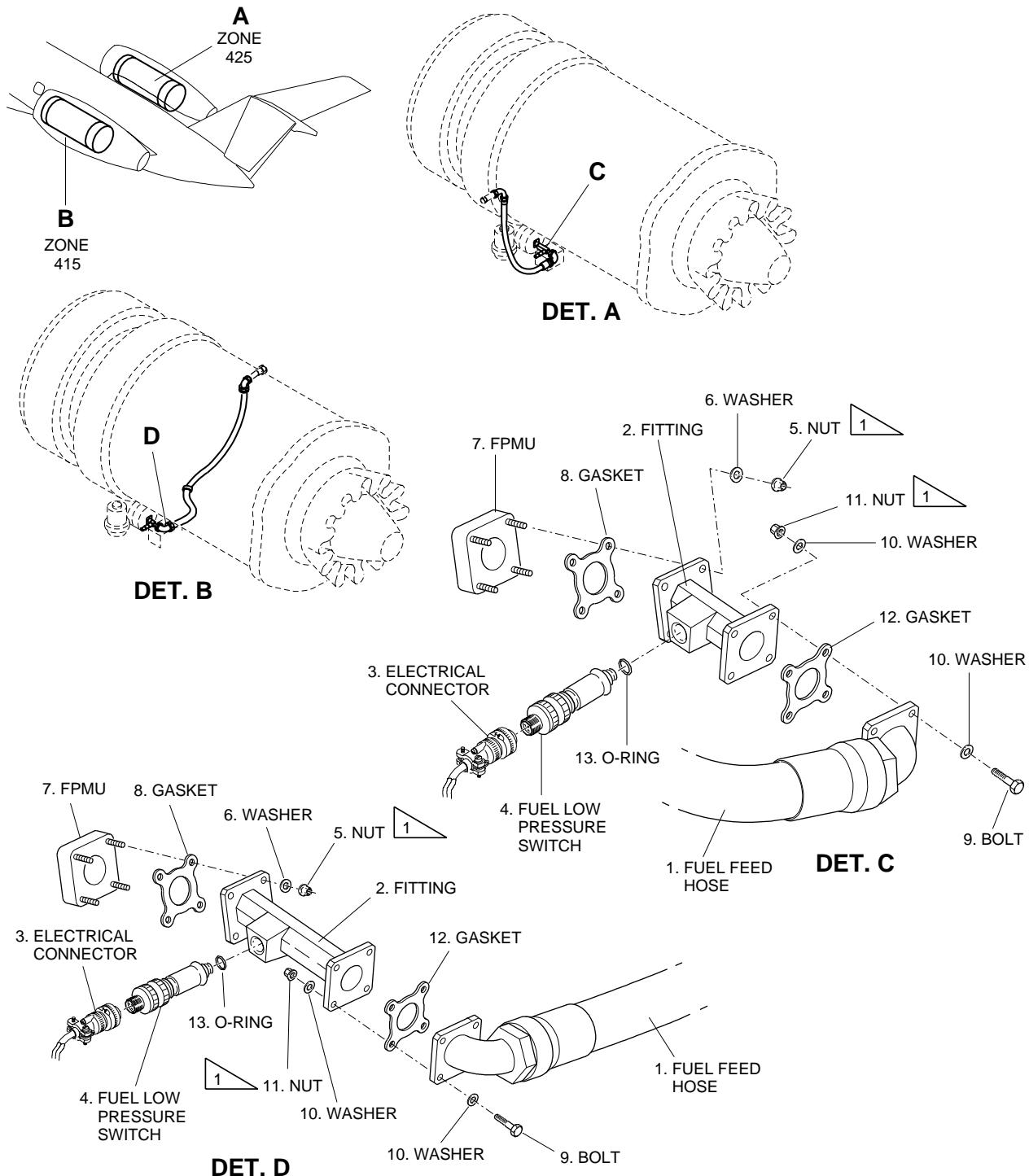
2 TORQUE: 56.5 to 79 N.m (500 to 700 lb. in)

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EFFECTIVITY: POST-MOD. S.B. 145-28-0016

FPMU - Removal/Installation

Figure 402



TORQUE: 2.8 N.m (25 Lb.in)

145AMM730050.MCE



AIRCRAFT MAINTENANCE MANUAL

TASK 73-21-01-400-801-A

EFFECTIVITY: ALL

3. FPMU - INSTALLATION

A. General

- (1) To do the installation procedure, obey the instructions given in Rolls-Royce MM CSP 34022.
- (2) This procedure is applicable to the left and right engines.

B. References

REFERENCE	DESIGNATION
AMM MPP 71-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 71-12-01-400-801-A/400	ENGINE LOWER COWLING - CLOSING
IPC 28-21-00	SUPPLY SYSTEM
Rolls-Royce MM CSP 34022	-
<u>S.B.145-28-0016</u>	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
413		LH engine lower cowling
423		RH engine lower cowling

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Workstand	To get access to the engine	1

F. Consumable Materials

Not Applicable

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Gasket	IPC 28-21-00	02
O-ring	IPC 28-21-00	01

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Engine



I. Installation

SUBTASK 420-002-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN (AMM MPP 71-00-00/200) TO PREVENT INJURY TO THE PERSONS AND DAMAGE TO THE MATERIAL.

- (1) Remove the protective cap from the FPMU fuel inlet.
- (2) Install the FPMU. Refer to the latest revision of Rolls-Royce MM CSP 34022.

J. Follow-on (Figure 401) (Figure 402)

SUBTASK 842-002-A

- (1) Refer to the Rolls-Royce MM CSP 34022 to do the related check procedures after an engine LRU maintenance procedure, as applicable.
- (2) Put the gasket (8) in the FPMU (7). Install the washers (6) and nuts (5) to attach the fitting (2) to the FPMU (7). Torque the nuts (5).
- (3) On aircraft PRE-MOD. [S.B.145-28-0016](#), connect the fuel hose (1) to the fitting (2). Torque the nut.
- (4) On aircraft POST-MOD. [S.B.145-28-0016](#), put the gasket (12) in the fitting (2). Install the washers (10), nuts (11), and bolts (9) to attach the fitting (2) to the hose (1).
- (5) Put the O-ring (13) in position and connect the fuel low pressure switch (4) to the fitting (2).
- (6) Connect the electrical connector (3) to the fuel low pressure switch (4).
- (7) On the circuit breaker panel, close these circuit breakers and remove the DO-NOT-CLOSE tag from them:
 - START 1/2.
 - PUMPS 1A/1B/1C.
 - PUMPS 2A/2B/2C.
- (8) Close the lower cowling ([AMM TASK 71-12-01-400-801-A/400](#)).
- (9) Remove the workstand from the work area.

