

## 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

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
<a href="#">AMM MPP 71-00-00/200</a>	- MAINTENANCE PRACTICES
<a href="#">AMM TASK 71-12-01-000-801-A/400</a>	ENGINE LOWER COWLING - OPENING
Rolls-Royce MM CSP 34022	-
<a href="#">S.B.145-28-0016</a>	-

### 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*

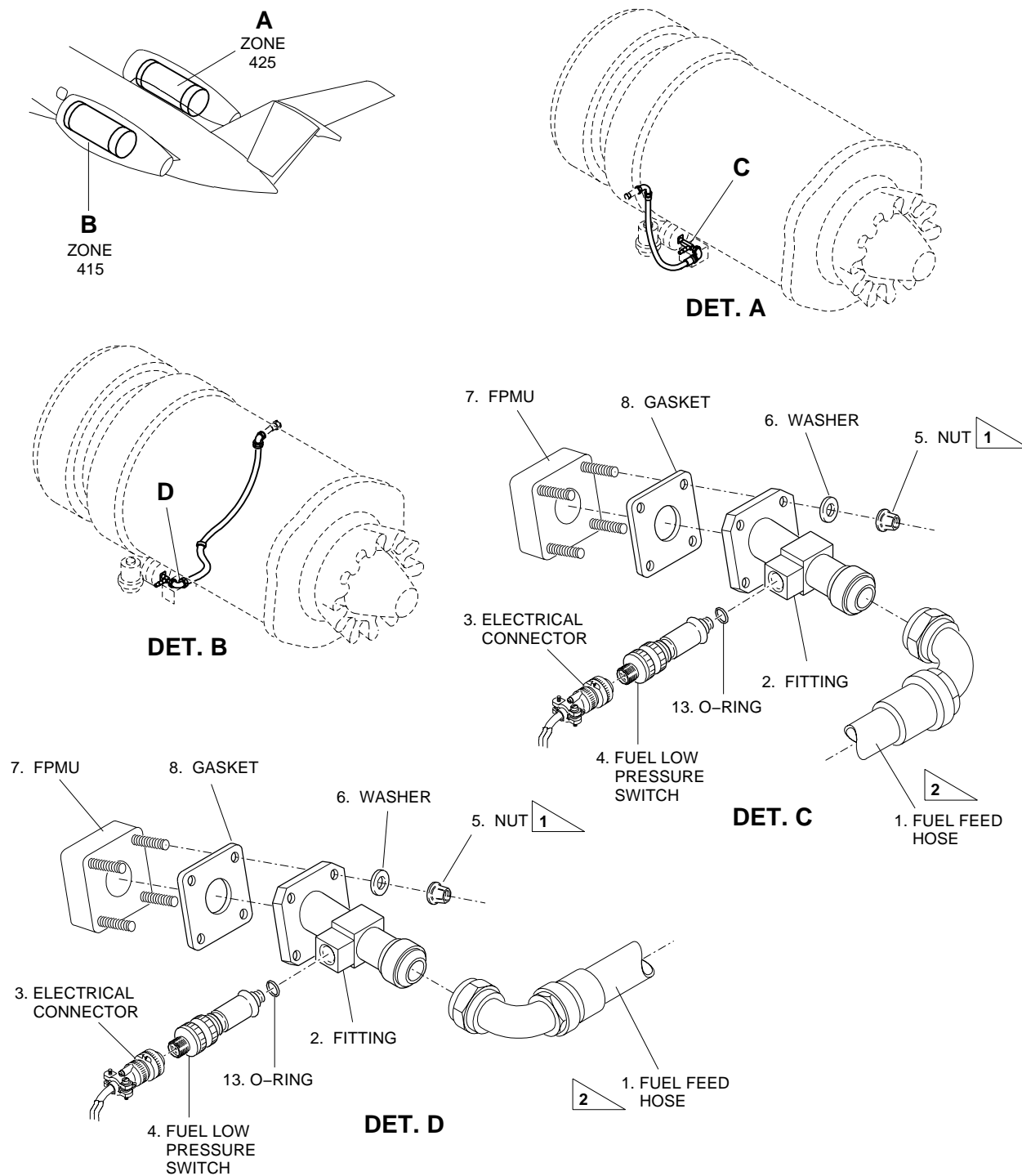
**CAUTION:** IMMEDIATELY AFTER YOU REMOVE THE FPMU, INSTALL A CAP ON THE FPMU FUEL INLET TO PREVENT INGESTION OF SMALL PARTS SUCH AS WASHERS, NUTS, BOLTS, SCREWS, ETC.

- (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

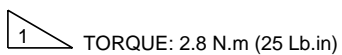


1 TORQUE: 2.8 N.m (25 lb. in)

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

EM145AMM730059A.DGN

Figure 402



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

#### 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.

