

EMDP PRESSURE SWITCH - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove/install the EMDP (electrical motor-driven pump) pressure switch.
- B. This section gives the procedures to deactivate/reactivate the EMDP pressure switch of hydraulic system 1, when the aircraft is in service.
- C. The EMDP pressure switch is installed in each hydraulic manifold.
- D. You can get access to the EMDP pressure switch of hydraulic system 1 through access panel 193BL (AMM MPP 06-41-01/100).
- E. You can get access to the EMDP pressure switch of hydraulic system 2 through access panel 193CR (AMM MPP 06-41-01/100).
- F. 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
29-30-04-000-801-A	EMDP PRESSURE SWITCH - REMOVAL	ALL
29-30-04-400-801-A	EMDP PRESSURE SWITCH - INSTALLATION	ALL
29-30-04-040-801-A	EMDP PRESSURE SWITCH - DEACTIVATION PROCEDURES	ALL
29-30-04-440-801-A	EMDP PRESSURE SWITCH - REACTIVATION PROCEDURES	ALL

TASK 29-30-04-000-801-A

EFFECTIVITY: ALL

2. EMDP PRESSURE SWITCH - REMOVAL

A. General

(1) This task gives the procedures to remove the EMDP pressure switch.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
193	193BL	Hydraulic system 1 compartment
193	193CR	Hydraulic system 2 compartment

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	Protection for the hands	1
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	Protection for the eyes	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Hydraulic System 1 and Hydraulic System 2 compartments

I. Preparation

SUBTASK 841-002-A

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

(2) Depressurize the related hydraulic system ([AMM TASK 29-10-00-860-802-A/200](#)).

- (3) Remove access panels 193BL and (or) 193CR (AMM MPP 06-41-01/100).

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

SUBTASK 020-002-A

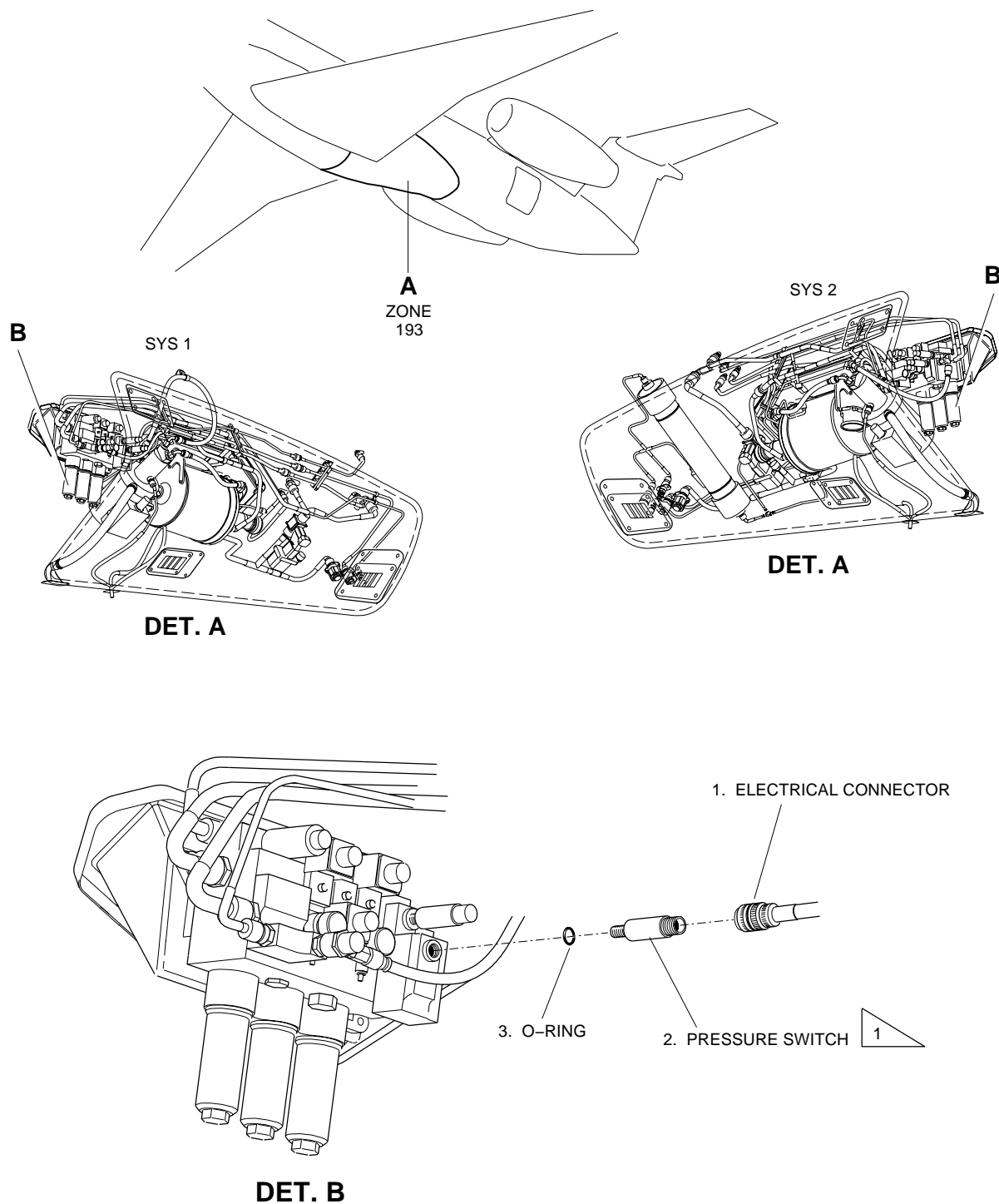
WARNING: THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE THE APPLICABLE GOGGLES AND RUBBER GLOVES. IF THE FLUID TOUCHES YOU, FLUSH YOUR SKIN WITH WATER. IF IT GETS IN YOUR EYES, FLUSH THEM WITH WATER AND GET MEDICAL HELP.

- (1) Disconnect the electrical connector (1).
- (2) Remove the pressure switch (2) with the related O-ring (3).
- (3) Discard the O-ring (3) removed in step (2).

EFFECTIVITY: ALL

Pressure Switch of EMDP - Removal/Installation

Figure 401



1 FOR PN 368192-103 APPLY TORQUE: 9 – 11.29 N.m (80 – 100 lb.in)
FOR PN 368192-111 APPLY TORQUE: 15.25 – 17.50 N.m (135 – 155 lb.in)

EM145AMM290057B.DGN

TASK 29-30-04-400-801-A
EFFECTIVITY: ALL

3. EMDP PRESSURE SWITCH - INSTALLATION

A. General

(1) This task gives the procedures to install the EMDP pressure switch.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS
AMM TASK 29-10-00-860-803-A/200	HYDRAULIC SYSTEM - BLEED OF AIR
IPC 29-30-04	EMDP PRESSURE SWITCH

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
193	193BL	Hydraulic system 1 compartment
193	193CR	Hydraulic system 2 compartment

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	Protection for the hands	1
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	Protection for the eyes	1

F. Consumable Materials

Not Applicable

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	IPC 29-30-04	1/LRU

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Hydraulic system 1 and hydraulic system 2 compartments

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Install the pressure switch (2) with the related new O-ring (3).
- (2) Connect the electrical connector (1).

J. Follow-on

SUBTASK 842-002-A

- (1) On the circuit breaker panel, close the ELEC PUMP 1 and (or) ELEC PUMP 2 circuit breaker(s) and remove the DO-NOT-CLOSE tag from it (them).
- (2) Pressurize the related hydraulic system ([AMM TASK 29-10-00-860-801-A/200](#)) and make sure that there are no leaks in the pressure switch.
- (3) Bleed the air from the hydraulic system lines ([AMM TASK 29-10-00-860-803-A/200](#)).
- (4) Install access panels 193BL and (or) 193CR back (AMM MPP 06-41-01/100).

TASK 29-30-04-040-801-A

EFFECTIVITY: ALL

4. EMDP PRESSURE SWITCH - DEACTIVATION PROCEDURES

A. General

- (1) This task refers to item 29-30-04 - HYDRAULIC PUMP PRESSURE SWITCH (HYDRAULIC SYSTEM 1) of the DDPM.
- (2) The airplane can be dispatched with the EMDP pressure switch inoperative provided:
 - (a) The pressure indication and the EDP (engine-driven pump) switch operates normally.
 - (b) The failed pressure switch is removed and the pressure switch port is plugged in case of fluid leakage.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS
AMM TASK 29-10-00-860-803-A/200	HYDRAULIC SYSTEM - BLEED OF AIR
AMM TASK 29-30-04-000-801-A/400	EMDP PRESSURE SWITCH - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
193	193BL	Hydraulic System 1 compartment

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MS3367-5-9	Tiedown Strap	AR
DR-25-1	Heat-Shrinkable Spaghetti	350 mm
AS5168-W-06	Hydraulic Plug	1

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Hydraulic System 1

I. Deactivation Procedures

SUBTASK 040-002-A

- (1) Remove the EMDP pressure switch ([AMM TASK 29-30-04-000-801-A/400](#)).
- (2) Plug the pressure switch port on the manifold with plug AS5168-W-06. Torque the plug to 14.1 - 15.3 N.m (125 - 135 lb.in).
- (3) Fasten and protect the electrical connector as follows:
NOTE: This procedure prevents friction between the connector and adjacent parts.
 - (a) Cut a 350 mm-long piece of heat-shrinkable spaghetti (P/N DR-25-1).
 - (b) Slide half of the spaghetti covering to over all of the connector head.
 - (c) Fold the other half and attach the two ends of the spaghetti with tiedown strap P/N MS3367-5-9.
 - (d) Attach the connector head to the adjacent harness with tiedown straps. The connector must face down.
 - (e) Make sure that the connector is correctly attached and will not slide during operation.
- (4) Attach a "PRESSURE SWITCH REMOVED" placard to the affected plumbing.
- (5) Make an entry in the aircraft logbook to show that you did the Deactivation Procedure for the EMDP pressure switch.

J. Follow-on

SUBTASK 842-003-A

- (1) On the circuit breaker panel, close the ELEC PUMP 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (2) Pressurize hydraulic system 1 ([AMM TASK 29-10-00-860-801-A/200](#)) and make sure that there are no leaks in the plug.
- (3) Bleed the air from the hydraulic system lines ([AMM TASK 29-10-00-860-803-A/200](#)).
- (4) Install access panel 193BL back (AMM MPP 06-41-01/100).

TASK 29-30-04-440-801-A

EFFECTIVITY: ALL

5. EMDP PRESSURE SWITCH - REACTIVATION PROCEDURES

A. General

- (1) This task refers to item 29-30-04 - HYDRAULIC PUMP PRESSURE SWITCH (HYDRAULIC SYSTEM 1) of the DDPM.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-700-801-A/500	INTERNAL LEAKAGE OF HYDRAULIC SYSTEM - FUNCTIONAL CHECK
AMM TASK 29-10-00-700-804-A/500	ELECTRIC MOTOR-DRIVEN PUMP INPUT SIGNALS - OPERATIONAL CHECK
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 29-30-04-400-801-A/400	EMDP PRESSURE SWITCH - INSTALLATION

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
193	193BL	Hydraulic System 1 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	Hydraulic System 1

I. Preparation

SUBTASK 841-003-A

- (1) On the circuit breaker panel, open the ELEC PUMP 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (2) Depressurize hydraulic system 1 ([AMM TASK 29-10-00-860-802-A/200](#)).

- (3) Remove access panels 193BL (AMM MPP 06-41-01/100).
- (4) Remove the protective plug.
- (5) Unfasten the protection of the electrical connector.

J. Reactivation Procedures

SUBTASK 420-003-A

- (1) Install an EMDP pressure switch that you know that is in good condition ([AMM TASK 29-30-04-400-801-A/400](#)).
- (2) Test the overall system functioning ([AMM TASK 29-10-00-700-801-A/500](#) and [AMM TASK 29-10-00-700-804-A/500](#)).
- (3) Make an entry in the aircraft technical logbook to show that you did the Reactivation Procedure for the EMDP pressure switch.