



HYDRAULIC FILTERS DIFFERENTIAL PRESSURE INDICATORS (DPIS) - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove/install the DPI (Differential Pressure Indicator).
- B. There are three DPIs installed in each hydraulic manifold. The removal/installation procedures are equivalent for all of them.
- C. The DPIS are installed in each Hydraulic Manifold as follows:
 - (1) One DPI is installed in the pressure line of the pumps (Electric Pump and Engine Pump).
 - (2) One DPI is installed in the return line.
 - (3) One DPI is installed in the case drain line of the pumps (Electric Pump and Engine Pump).
- D. If the red pin is moved out of the DPI, you must do an inspection on the DPI for contamination.
- E. You can get access to the DPI of system 1 through access panel 193BL (AMM MPP 06-41-01/100).
- F. You can get access to the DPI of system 2 through access panel 193CR (AMM MPP 06-41-01/100).
- G. 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
29-30-03-000-801-A	DPI - REMOVAL	ALL
29-30-03-400-801-A	DPI - INSTALLATION	ALL



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 29-30-03-000-801-A

EFFECTIVITY: ALL

2. DPI - REMOVAL

A. General

(1) This task gives the procedures to remove the DPI.

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 compartment of system 1
193	193CR	Hydraulic compartment of system 2

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
Commercially available	Drip Pan	To collect the hydraulic fluid when you disconnect the hydraulic line	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Hydraulic compartment of system 1 and system 2



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) Totally release the pressure from the related hydraulic system ([AMM TASK 29-10-00-860-802-A/200](#)).
- (3) Remove access panel 193BL and (or) 193CR (AMM MPP 06-41-01/100).

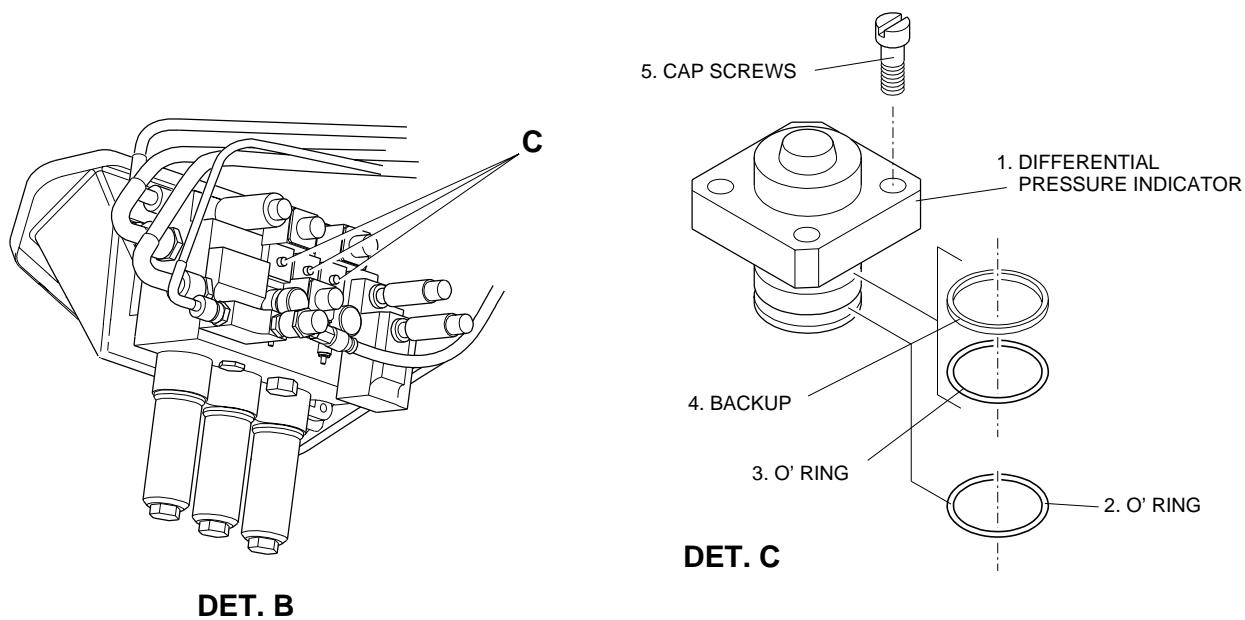
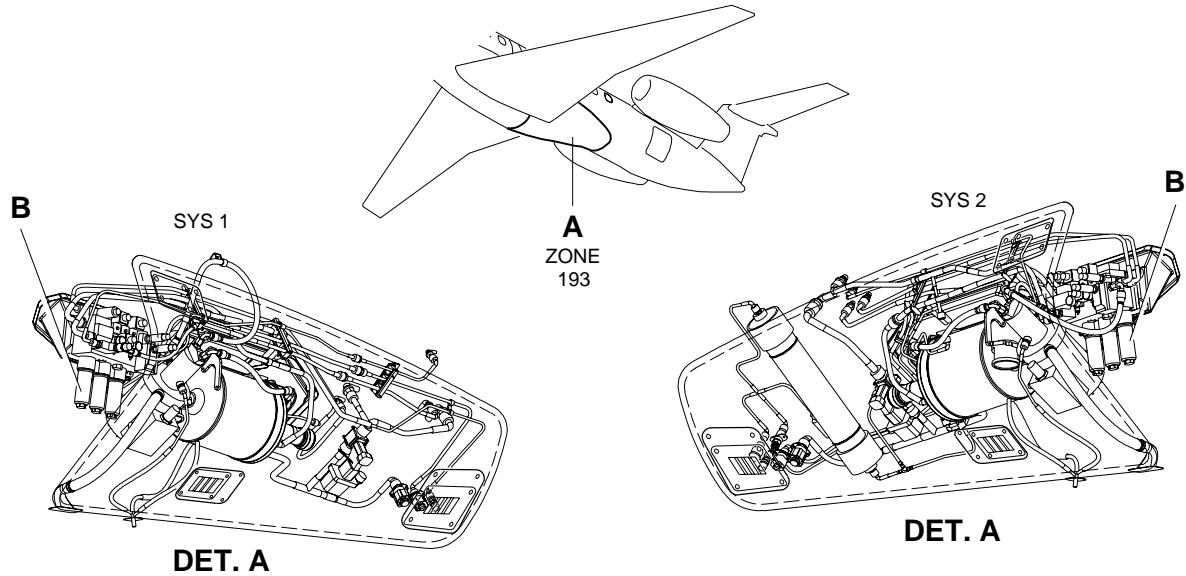
J. Removal ([Figure 401](#))

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) Remove the cap screws (5) from the differential pressure indicator.
- (2) Remove the differential pressure indicator (1) from the filter manifold.
- (3) Remove and discard the O-rings (2), (3) and the backup (4) from the differential pressure indicator (1).

EFFECTIVITY: ALL
DPI - Removal/Installation
Figure 401





EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 29-30-03-400-801-A

EFFECTIVITY: ALL

3. DPI - INSTALLATION

A. General

(1) This task gives the procedures to install the DPI.

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 29-10-07	MANIFOLD

C. Zones and Accesses

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

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 29-10-07	1/LRU
O-ring	IPC 29-10-07	1/LRU
Backup	IPC 29-10-07	1/LRU



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Hydraulic compartment of system 1 and system 2

I. Installation (Figure 401)

SUBTASK 420-002-A

- (1) Install the O-rings (2), (3) and backup (4) on the differential-pressure indicator assemblies (1).
- (2) Install the differential-pressure indicator assemblies on the filter manifold.
- (3) Attach the differential-pressure indicator assemblies (1) with cap screws (5).
- (4) Torque the cap screws to 1.1 to 1.5 N.m (10 to 13 lb.in).

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 DPI.
- (3) Bleed the air from the hydraulic system lines ([AMM TASK 29-10-00-860-803-A/200](#)).
- (4) Install access panel(s) 193BL and (or) 193CR (AMM MPP 06-41-01/100).