

RETURN FILTER BY-PASS VALVE - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do a check of the return-filter by-pass valve.
- B. In case you still have performed the check of hydraulic fluid contamination [AMM TASK 29-10-00-200-803-A/600](#) is suggested to perform this task ([AMM TASK 29-10-10-700-801-A/500](#)) in the same opportunity of the task [AMM TASK 29-30-03-700-801-A/500](#) (DPIs check).
- C. 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
29-10-10-700-801-A ♦	RETURN-FILTER BY-PASS VALVE - FUNCTIONAL CHECK	ALL

TASK 29-10-10-700-801-A

EFFECTIVITY: ALL

2. RETURN-FILTER BY-PASS VALVE - FUNCTIONAL CHECK

A. General

(1) This procedure is applicable to the return filter by-pass valve of hydraulic systems 1 and 2.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 12-13-01-600-801-A/300	HYDRAULIC SYSTEM RESERVOIR - FLUID LEVEL CHECK
AMM TASK 29-10-08-000-801-A/400	FILTERING ELEMENT - REMOVAL
AMM TASK 29-10-08-400-801-A/400	FILTERING ELEMENT - INSTALLATION

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

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 087	Dummy filter element	To make a condition equivalent to a blocked filter	
Commercially available	Pressure gage (200 psi)	To do a check of the operation of the DPI and by-pass valve	
Commercially available	Hand pump (200 psi)	To pressurize the return line	
Commercially available	Hose	To connect the hand pump and the reservoir refill port together	
Commercially available	Filter with 5-micron (absolute) mesh	To filter the hydraulic fluid before its supply to the hand pump	
Commercially available	Reservoir	To supply the hydraulic fluid to the hand pump	

E. Auxiliary Items

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

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
SAE AS 1241A Type IV	Phosphate ester-base hydraulic fluid	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Hydraulic system compartments

I. Preparation ([Figure 501](#))

SUBTASK 841-005-A

- (1) Remove access panels 193BL (SYS 1) and 193CR (SYS 2) (AMM MPP 06-41-01/100).
- (2) Connect the pressure gage (2) to the outlet of the hand pump (1). Refer to [Figure 501](#).
- (3) Connect one end of the hose (3) to the pressure gage (2).
- (4) Connect a hose (4) with a filter (5) to the inlet of the hand pump (1). Refer to [Figure 501](#).
- (5) Put the other end of the hose (4) in the reservoir (6) with hydraulic fluid.

J. Functional Check of Return Filter By-Pass Valve ([Figure 501](#))

SUBTASK 720-005-A

- (1) Do a check of the by-pass valve of the return filter of hydraulic system 1 as follows:
 - (a) Remove the return filter element (8). Refer to [AMM TASK 29-10-08-000-801-A/400](#).
 - (b) Install the dummy filter element and the filter bowl to make a condition equivalent to a blocked filter.
 - (c) Connect the hose (3) to the refill port of the reservoir (7). Refer to [Figure 501](#).
 - (d) Operate the hand pump and make sure that you get this result:
Result:
1 The by-pass valve (14) opens with 110 ± 10 psi.
 - (e) Slowly decrease the pressure and make sure that you get this result:
Result:
1 The by-pass valve (14) closes with 55 psi (minimum).
 - (f) Remove the filter bowl and the dummy filter element.
 - (g) Disconnect the hose (3) of the hand pump from the refill port of the reservoir (7). Refer to [Figure 501](#).
 - (h) Install the return filter element (8). Refer to [AMM TASK 29-10-08-400-801-A/400](#).

NOTE: Before you install the filter bowl, fill it with hydraulic fluid.

- (2) Do steps (a) thru (h) for hydraulic system 2.

K. Follow-on

SUBTASK 842-005-A

- (1) Make sure that the reservoirs are full. If necessary, fill them ([AMM TASK 12-13-01-600-801-A/300](#)).
- (2) Pressurize the hydraulic systems and make sure that there are no leaks.
- (3) Install access panels 193BL (SYS 1) and 193CR (SYS 2) back (AMM MPP 06-41-01/100).

Figure 501



