



FAULT ISOLATION MANUAL

**ON A/C ALL

TASK 29-30-00-810-802

#1 ENG HYD PUMP (Caution) – Fault Isolation

1. General

- A. This fault isolation procedure is for when the Caution and Warning Panel (CAWP) #1 ENG HYD PUMP caution light is on.
- B. The CAWP #1 ENG HYD PUMP caution light comes on when the Engine Driven Pump (EDP) output pressure is less than 1800 psi.

NOTE: The #1 HYD ENG HYD PUMP caution light can also come on when the No. 1 PROP lever is set to FUEL OFF. This is not a malfunction condition.

- C. There are no related Central Diagnostic System (CDS) messages.

2. Job Set-Up Information

Subtask 29-30-00-946-003

A. Reference Information

REFERENCE	DESIGNATION
AMM TASK 12-10-29-210-801	Fluid Quantity Check of the No. 1 and No. 2 Hydraulic System Reservoirs
AMM TASK 29-11-01-000-801	Removal of the Variable Delivery Hydraulic Pump
AMM TASK 29-11-01-400-801	Installation of the Variable Delivery Hydraulic Pump
AMM TASK 29-11-31-000-801	Removal of the Hydraulic Filter Manifold
AMM TASK 29-11-31-400-801	Installation of the Hydraulic Filter Manifold
AMM TASK 29-30-16-000-801	Removal of the Hydraulic Warning Pressure Switch
AMM TASK 29-30-16-400-801	Installation of the Hydraulic Warning Pressure Switch
AMM TASK 31-51-01-000-801	Removal of the Caution and Warning Panel
AMM TASK 31-51-01-400-801	Installation of the Caution and Warning Panel
AMM TASK 71-00-00-868-801	Engine Start
AMM TASK 71-00-00-868-802	Engine Shutdown
AMM TASK 76-10-06-000-801	Removal of the Condition Quadrant
AMM TASK 76-10-06-400-801	Installation of the Condition Quadrant
FIM TASK 29-30-00-810-812	FIRE PROTECTION panel, an indication discrepancy of the OPEN light for the ENGINE 1 HYD – Fault Isolation
WM 29-11-00-1	Main Hydraulic (No. 1 and No. 2) System



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3. Fault Confirmation

Subtask 29-30-00-810-004

A. Confirm the fault as follows:

- (1) Do the fluid quantity check of the No. 1 hydraulic system reservoir (Refer to AMM TASK 12-10-29-210-801).
- (2) Start the No. 1 engine (Refer to AMM TASK 71-00-00-868-801).
 - (a) If the #1 ENG HYD PUMP caution light goes off, no maintenance procedure is necessary. Do the Close Out.
 - (b) If the #1 ENG HYD PUMP caution light comes on, continue with the Fault Confirmation.
- (3) Check and record the HYD PRESS No. 1 indication.
- (4) On the fire protection panel, do a check of the VALVES HYD OPEN advisory light as follows:
 - (a) If the OPEN advisory light is not on or it flashes, do the fault isolation for an indication discrepancy of the OPEN light for the ENGINE 1 HYD (Refer to FIM TASK 29-30-00-810-812). Do the Close Out.
 - (b) If the OPEN advisory light is on, continue with the Fault Confirmation.
- (5) Shut down the No. 1 engine (Refer to AMM TASK 71-00-00-868-802).
- (6) Do the Fault Isolation.

4. Fault Isolation

Subtask 29-30-00-810-005

A. Isolate the fault as follows:

- (1) If the HYD PRESS No. 1 pressure indication is more than 2400 psi, do the steps that follow:
 - (a) Remove and replace the hydraulic warning pressure switch (Refer to AMM TASK 29-30-16-000-801 and AMM TASK 29-30-16-400-801).
 - (b) If the fault still continues, remove and replace the condition quadrant (Refer to AMM TASK 76-10-06-000-801 and AMM TASK 76-10-06-400-801).
 - (c) If the fault still continues, remove and replace the CAWP (Refer to AMM TASK 31-51-01-000-801 and AMM TASK 31-51-01-400-801).
 - (d) If the fault still continues, do a check of the wiring between the hydraulic pressure switch and the CAWP (Refer to WM 29-11-00-1):

2921-P1 (Hydraulic Warning Pressure Switch)	3312-P3 (CAWP)
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- (e) If the wiring is unserviceable, repair the wiring. Do the Close Out.
- (f) If the fault still continues, do a check of the wiring between the No. 1 prop lever 15° micro switch and the CAWP (Refer to WM 29-11-00-1):

6100-P10 (No. 1 PROP Lever 15° Micro Switch)	3312-P3 (CAWP)
6	32

- (g) If the wiring is unserviceable, repair the wiring. Do the Close Out.
- (2) If the HYD PRESS No. 1 pressure indication is less than 1800 psi, do the steps that follow:
 - (a) Remove and replace the no. 1 EDP (Refer to AMM TASK 29-11-01-000-801 and AMM TASK 29-11-01-400-801).
 - (b) If the fault still continues, remove and replace the No. 1 filter manifold (Refer to AMM TASK 29-11-31-000-801 and AMM TASK 29-11-31-400-801). Do the Close Out.

5. Close Out

Subtask 29-30-00-941-002

- A. Make sure that the CAWP #1 ENG HYD PUMP caution light is not on.
- B. Remove all tools, equipment, and unwanted materials from the work area.