



## FAULT ISOLATION MANUAL

### MAINTENANCE PRACTICES

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#### **TASK 29-10-00-810-801**

#### **#1 HYD ISO VLV (Caution) – Fault Isolation**

##### 1. General

- A. This fault isolation procedure is for when the #1 HYD ISO VLV caution light on the Caution and Warning Panel (CAWP) comes on.
- B. The #1 HYD ISO VLV caution light comes on when the isolation valve closes because of the low quantity or the low pressure.
- C. The #1 HYD ISO VLV caution light can also come on when there is no bootstrap pressure to the pilot line of the isolation valve from the reservoir when the system is pressurized.
- D. The isolation valve stops the flow of hydraulic fluid to part of the hydraulic system if the reservoir contents drop below 80 in<sup>3</sup> (1311 cm<sup>3</sup>). The isolation valve is operated by spring force and pilot pressure controlled by a reservoir level sensing valve, installed in the reservoirs.
- E. No. 1 hydraulic system isolation in isolation mode (closed) only allows fluid flow to the components that follow:
  - Flaps
  - PTU
  - Rudder
  - Elevators.

##### 2. Job Set-Up Information

Subtask 29-10-00-946-009

##### 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 12-10-29-611-801	Servicing of the No. 1 and No. 2 Hydraulic System Reservoirs
AMM TASK 29-00-00-863-801	Pressurization of the No. 1 and No. 2 Hydraulic Systems
AMM TASK 29-11-11-000-801	Removal of the Hydraulic Isolation Valve
AMM TASK 29-11-11-400-801	Installation of the Hydraulic Isolation Valve
AMM TASK 29-11-16-000-801	Removal of the No. 1 Hydraulic System Reservoir
AMM TASK 29-11-16-400-801	Installation of the No. 1 Hydraulic System Reservoir
AMM TASK 29-30-11-000-801	Removal of the Hydraulic System Pressure Switches

PSM 1-84-23  
EFFECTIVITY:  
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REFERENCE	DESIGNATION
AMM TASK 29-30-11-400-801	Installation of the Hydraulic System Pressure Switches
FIM TASK 29-11-16-810-801	Hydraulic Reservoir 1 – Level Sensing Switch Fails to Operate – Fault Isolation
WM 29-30-00	Fuel Indicating System

### 3. Fault Confirmation

#### Subtask 29-10-00-810-001

A. Do the fault confirmation as follows:

- (1) Find the fluid quantity of the #1 hydraulic system reservoir (Refer to AMM TASK 12-10-29-210-801).
  - (a) If the fluid quantity is at the FULL (0 PSI) mark specified on the quantity/temperature graph near the reservoir, continue with the fault confirmation.
  - (b) If the fluid quantity is not at the FULL (0 PSI) mark specified on the quantity/temperature graph near the reservoir, service the #1 hydraulic system reservoir (Refer to AMM TASK 12-10-29-611-801).
- (2) Pressurize the #1 hydraulic system to 3000 psi (Refer to AMM TASK 29-00-00-863-801) and operate the #1 hydraulic system devices that follow:
  - Flaps
  - Inboard spoilers
  - Main wheel brakes
  - Rudder
  - Elevator.
  - (a) If the #1 HYD ISO VLV caution light does not come on, then no maintenance procedure is necessary. Do the Close Out.
  - (b) If the #1 HYD ISO VLV caution light does come on, then do the Fault Isolation.

### 4. Fault Isolation

#### Subtask 29-10-00-810-002

A. Isolate the fault as follows:

- (1) Make sure that the level sensing switch on the hydraulic reservoir 1 operates correctly (Refer to FIM TASK 29-11-16-810-801).
- (2) If you are able to operate the roll spoilers, with the hydraulic pressure, do the steps that follow:



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- (a) Do a test of the wiring between the #1 hydraulic isolation valve output pressure switch and the CAWP (Refer to WM 29-30-00):

2931-P19 (#1 Hydraulic Isolation Valve Output Pressure Switch)	3312-P3 (CAWP)
F	16

- (b) If the wiring is unserviceable, repair the wiring. Do the Close Out.
- (c) If the fault continues, remove and replace the #1 hydraulic isolation valve output pressure switch (Refer to AMM TASK 29-30-11-000-801 and AMM TASK 29-30-11-400-801). Do the Close Out.
- (3) If the fault continues, remove and replace the #1 hydraulic isolation valve (Refer to AMM TASK 29-11-11-000-801 and AMM TASK 29-11-11-400-801). Do the Close Out.
- (4) If the fault continues, remove and replace the #1 hydraulic system reservoir (Refer to AMM TASK 29-11-16-000-801 and AMM TASK 29-11-16-400-801). Do the Close Out.

### 5. Close Out

Subtask 29-10-00-941-011

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