# POWER PLANT IAE V2500
# (IAE V2500 / ME)

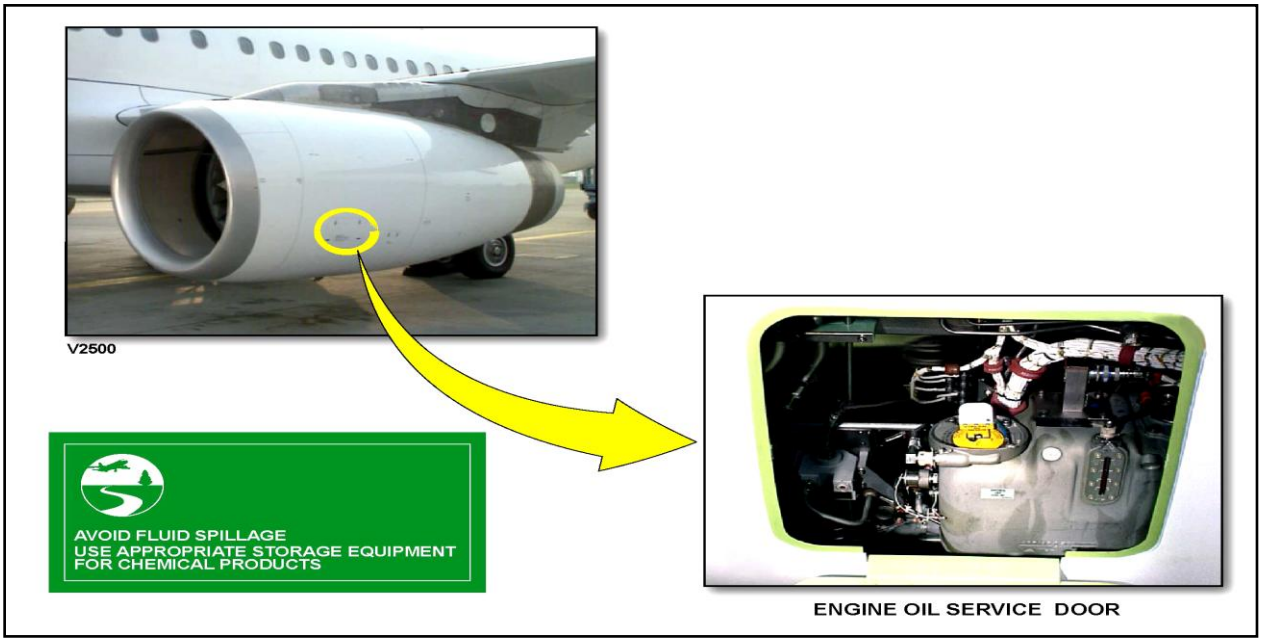
## 1- ENGINE OIL SERVICING

**CAUTION**:
Caution: The engine should be shut down for at least 5 minutes prior to oil servicing. This allows the residual pressure in the oil tank to decrease. If you open the filler cap when there is pressure in the tank the hot oil can spray out and burn you.

**NOTE:**
Note: If possible, the engine oil should be checked and serviced within 5 to 60 minutes after shutdown.
Note: If the engine has been shutdown more 1 hour but less than 10 hours, start the engine and run at idle for 3 minutes prior to servicing.
Note: If the engine has been shut down for 10 hours or more, you must dry crank the engine followed by an engine start and idle run of at least 3 minutes duration. This is to ensure that the oil level shown in the tank is correct before oil is added.

- open engine oil service door on left fan cowl,
- check oil level on the sight gage on the oil tank,
- raise filler cap handle to vertical (unlocked position),
- turn the oil filler cap to remove,
- add oil as necessary up to the FULL mark on the sight gage,
- install oil filler cap - make sure to LOCK the cap.

**NOTE:**
Note: It is also possible to Pressure Fill the engine oil. Two ports are installed on the oil tank, one for pressure and one for overflow. See AMM for procedure.




**ENGINE OIL SERVICING**

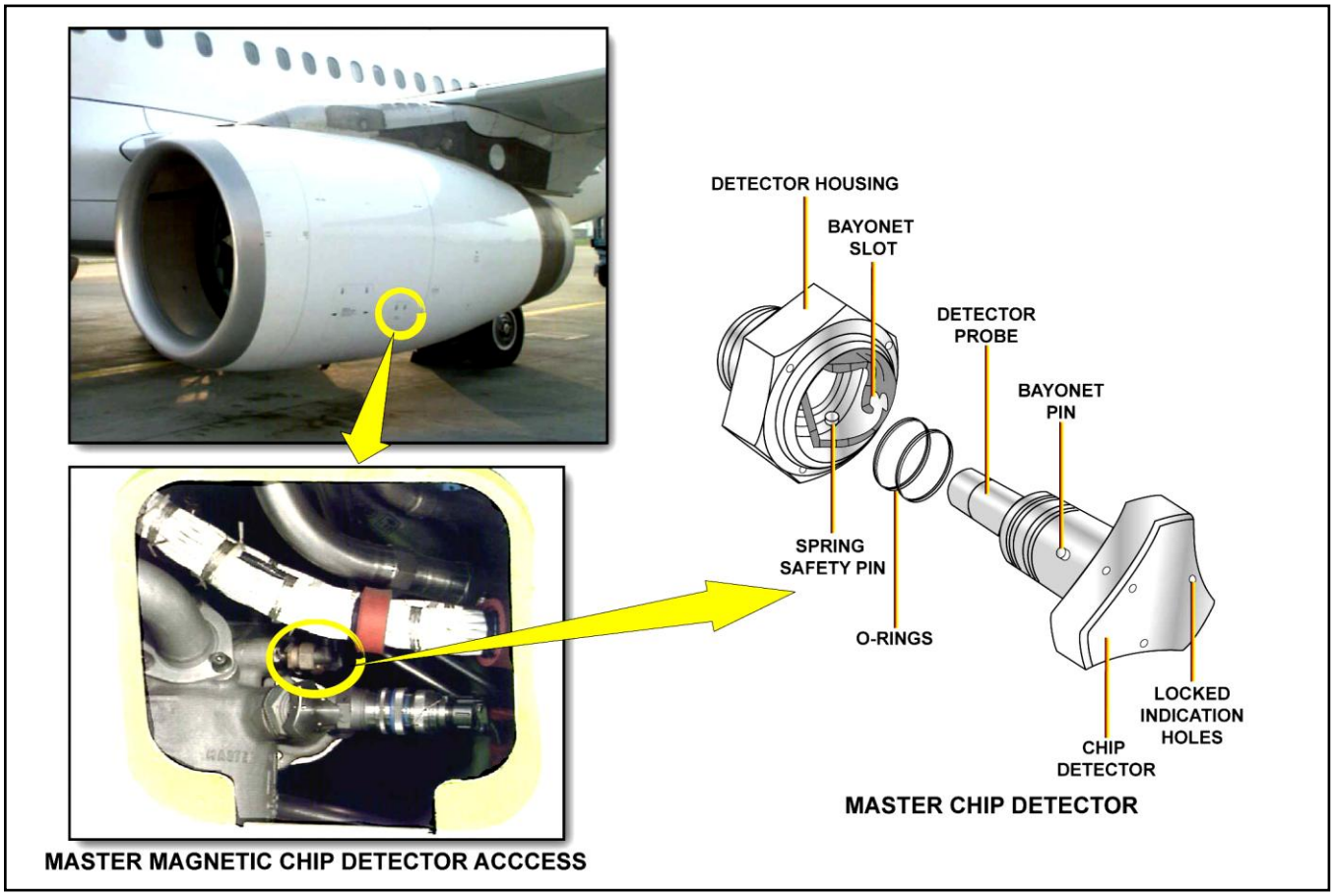
## 2- MASTER CHIP DETECTOR CHECK

**The Master Magnetic Chip Detector (MCD) is located on the oil scavenge filter housing attached to the oil tank. The probe will collect any magnetic particles in the oil system. To check for contamination, remove the Master MCD first:**

- open the left fan cowl,
- push in and turn the MCD plug counterclockwise,
- check the AMM for examples of NORMAL and ABNORMAL Contamination

NOTE: Note: NO CONTAMINATION on Master MCD - No maintenance required.
Note: CONTAMINATION on Master MCD - Inspect ALL other MCD's.

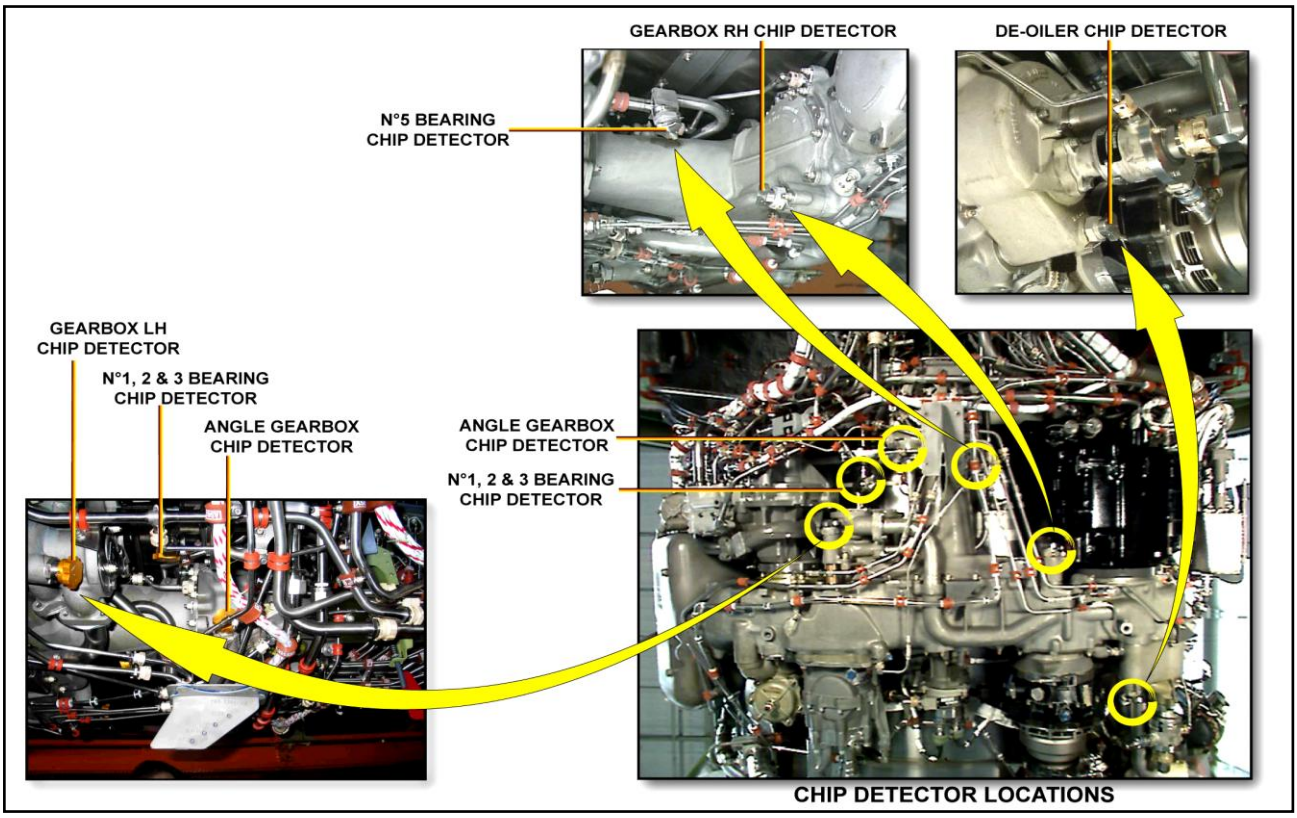
- clean the MCD,
- replace seal ring and re-install - check that the RED marks are aligned.




**MASTER CHIP DETECTOR CHECK**

## 3- ADDITIONAL CHIP DETECTORS

**Additional magnetic chip detectors are installed in the oil system to isolate the source of metallic debris.**



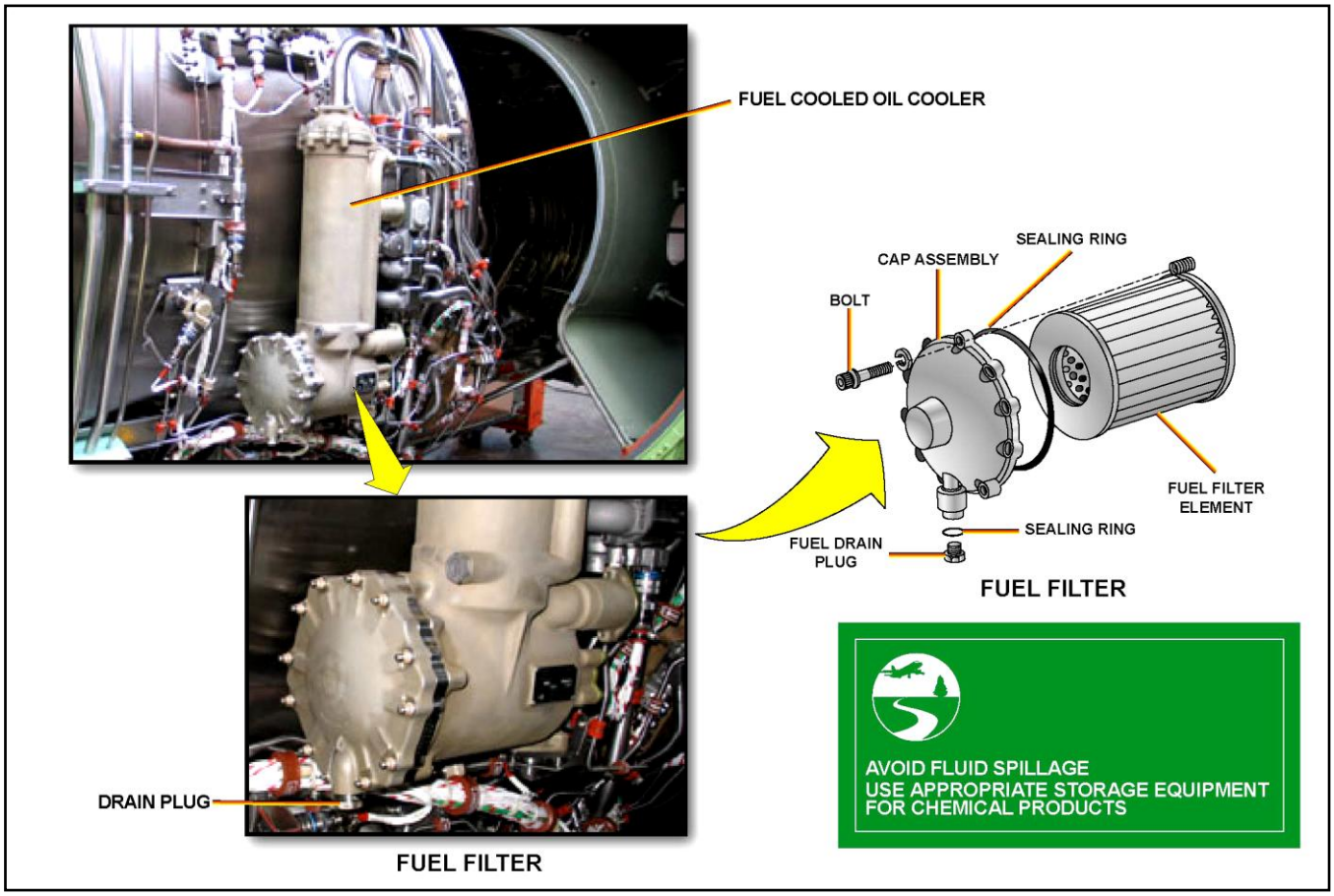

**MASTER CHIP DETECTOR CHECK - ADDITIONAL CHIP DETECTORS**

# MEL / DEACTIVATION

## 1- FUEL FILTER CLOGGING

**In case of a failure of the FUEL CLOG warning on ECAM, the aircraft may be dispatched per MEL as long as the fuel filter is changed once each day. The filter housing is part of the fuel cooled oil cooler on the fan case LH side. Procedure:**

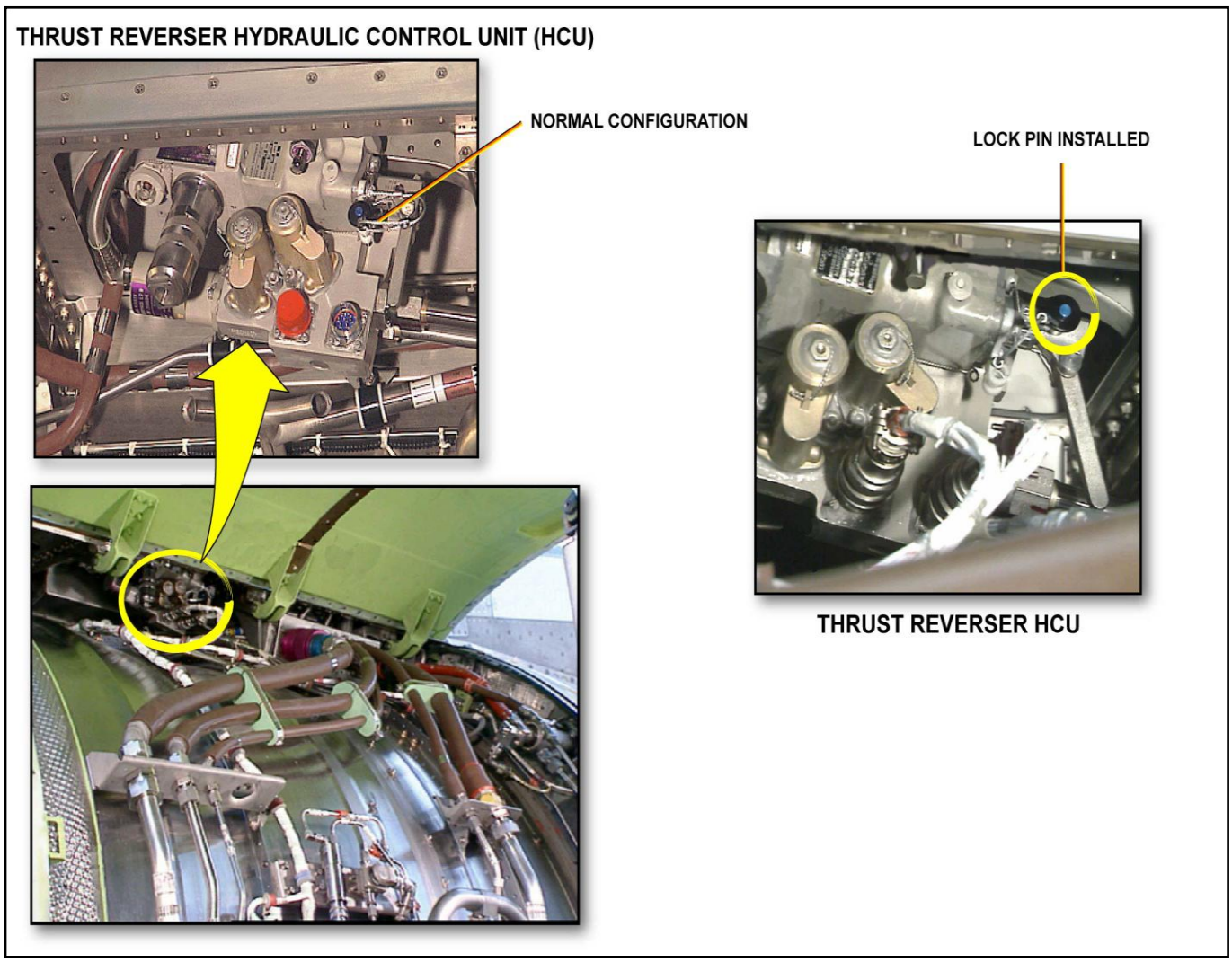
- FADEC GND PWR selected OFF,
- open LH fan cowl,
- drain residual fuel using drain plug,
- open filter cover to remove and replace fuel filter element and o-rings,
- replace filter cover. Check AMM for correct torque value for filter cover bolts,
- perform minimum idle check for leaks,
- close fan cowl.




**MEL / DEACTIVATION - FUEL FILTER CLOGGING**

## 2- T/R DEACTIVATION AND LOCKOUT

**Per the MEL, one or both Thrust Reversers may be deactivated in the STOWED position for dispatch. The deactivation procedure has two parts. First, the Hydraulic Control Unit (HCU) is deactivated. Moving the deactivation lever to the inhibit position prevents the pressurizing valve from supplying hydraulic pressure to the reverser actuators. In the second part of the deactivation procedure each translating sleeve is secured (bolted) to the reverser structure preventing any movement.**

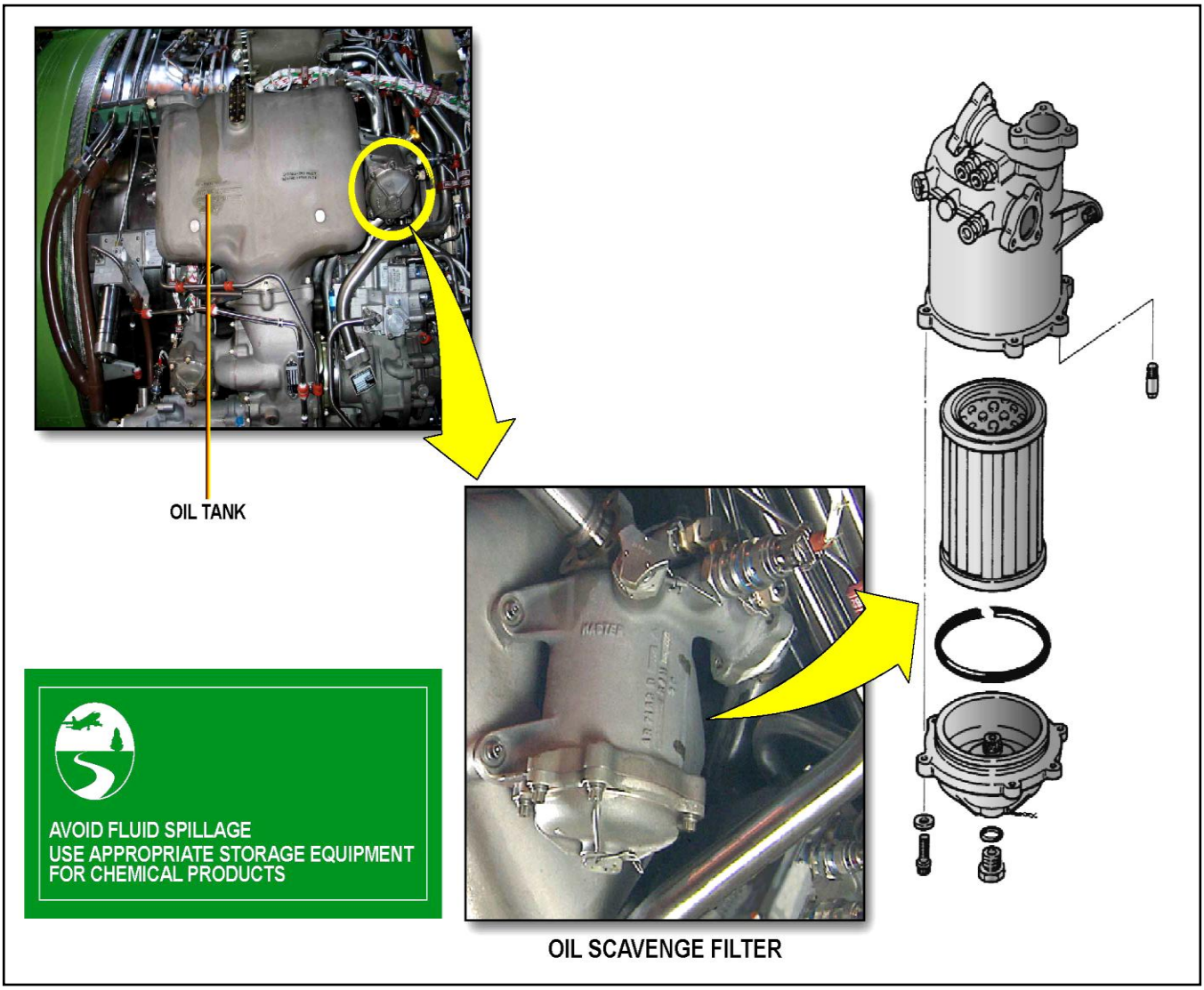



**MEL / DEACTIVATION - T/R DEACTIVATION AND LOCKOUT**

## 3- OIL FILTER CLOGGING

**In case of a failure of the OIL CLOG warning on ECAM, the aircraft may be dispatched per MEL as long as the scavenge filter is changed once each day. The filter housing is attached to the oil tank on the fan case LH side. Procedure:**

- FADEC GND PWR selected OFF,
- open LH fan cowl,
- drain residual oil using drain plug,
- open filter cover to remove and replace the oil scavenge filter element and o-rings,
- replace filter cover. Check AMM/MEL for correct torque value for filter cover bolts,
- check Master MCD for contamination,
- perform minimum idle check for leaks,
- close fan cowl.




**MEL / DEACTIVATION - OIL FILTER CLOGGING**

## 4- START VALVE MANUAL OPERATION

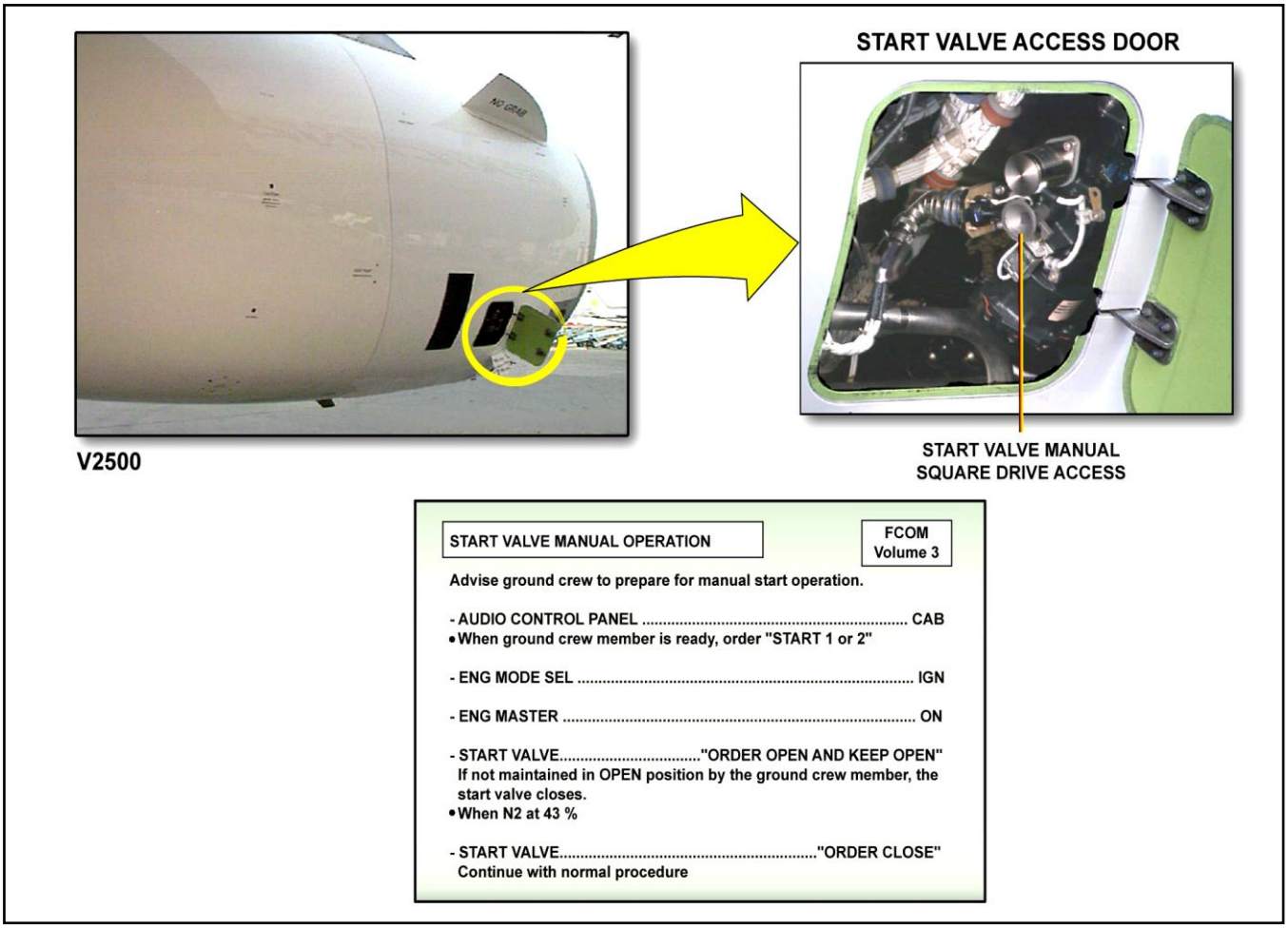
**In case of an electrical failure of the start valve, the valve may be operated manually to start the engine. The aircraft may be dispatched per the MEL with the valve INOP closed.**

NOTE:
Note: Do not operate the valve unless the starter system is pressurized. Damage to the valve can occur.

- open the start valve access door on the RH cowl,
- establish communications with the cockpit (Interphone jack on engine inlet cowl),
- on command from the cockpit, Use a 3/8" square drive to move the start valve manual handle to the OPEN position.

NOTE:
Note: Make sure you maintain pressure against the spring tension to keep the valve open.

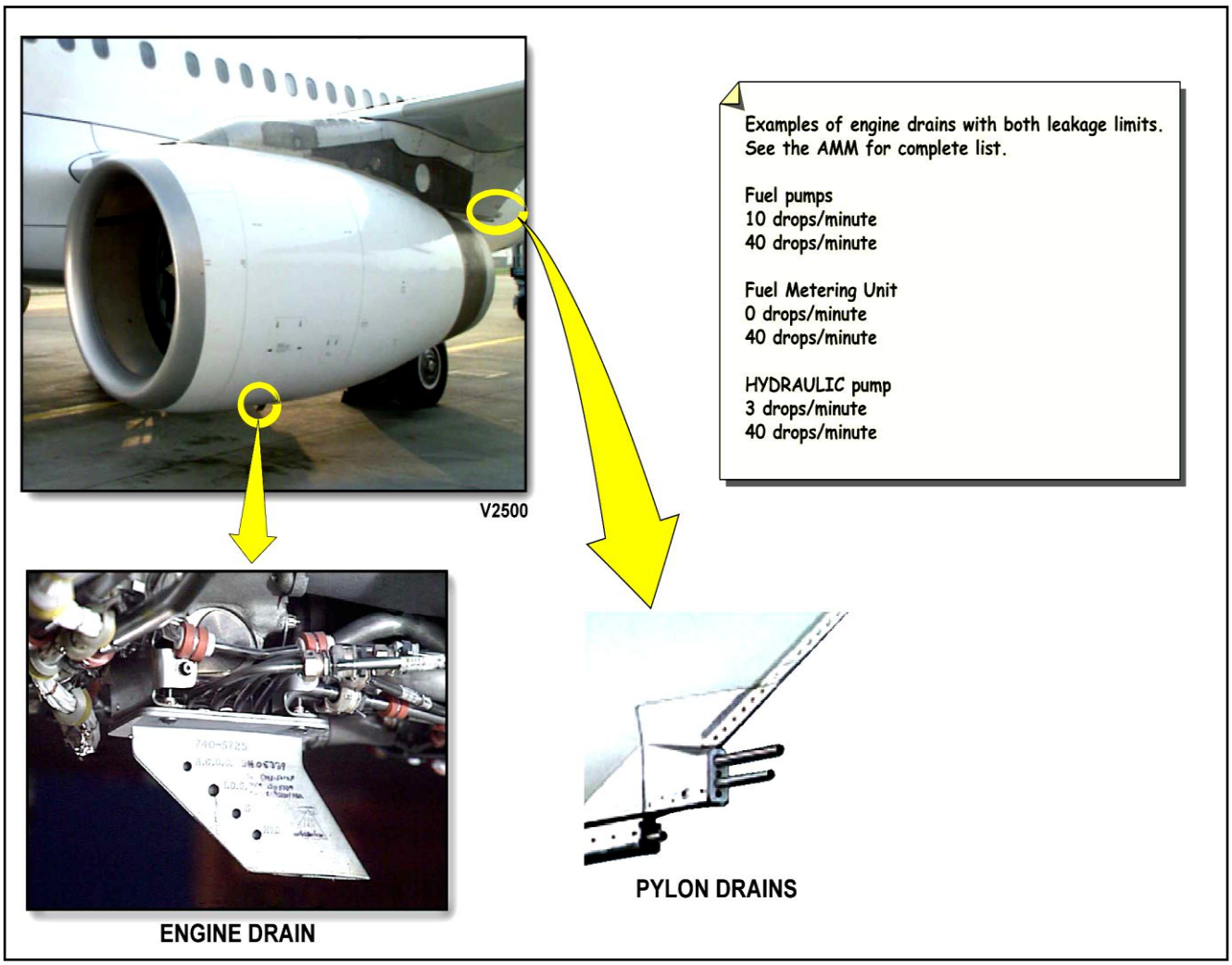
- after engine start, on command from the cockpit, move start valve manual handle to CLOSED. Make sure that the start valve is fully closed.




**MEL / DEACTIVATION - START VALVE MANUAL OPERATION**

## MAINTENANCE TIPS

**The engine and pylon drain system is designed to collect fuel, oil, water and hydraulic fluid from engine systems and accessories and discharge them overboard through the engine drain mast and the pylon drain tubes.**
**For troubleshooting and leak isolation the drain mast body has separate drains identified and visible with the cowls closed. The pylon drain tubes collect fluids from individual pylon chambers, also for leak isolation.**
**If fluid leaks are found during transit operations, run the engine at idle for 5 minutes. If the leak stops, the aircraft may be dispatched without maintenance action. If leaks continue after 5 minutes, consult the AMM (ATA 71-70) for maximum permitted leakage limits for all of the drains.**
**There are 2 limits for each drain. If the first limit is exceeded, the aircraft may be dispatched and can continue to operate for a maximum of 25 hours or 10 flights as long as the second limit is not exceeded.**
**Here are some examples of engine drains with both leakage limits. See the AMM for complete list.**




MAINTENANCE TIPS

# ENVIRONMENTAL PRECAUTIONS

**Do not discharge products such as oil, fuel, solvent, lubricant either in trash bins, soil or into the water network (drains, gutters, rain water, waste water, etc...).**
**Sort waste fluids and use specific waste disposal containers.**
**Each product must be stored in an appropriate and specific cabinet or room such as a fire-resistant and sealed cupboard.**

STORE PRODUCTS IN APPROPRIATE CONTAINER/CUPBOARD/ROOM

SORT WASTE FLUIDS IN CONTAINERS


FLUID SPILL CLEANUP KIT

USE SPECIFIC WASTE DISPOSAL CONTAINERS

ENVIRONMENTAL PRECAUTIONS