

## Replace the breather with new type

Does this solve the problem?

- 1] Yes
- 2] No
- 3] I don't know

- **Explanation**  
**IN THE NACELLE:**

Generally, a clogged gearbox breather is the most likely cause of this alarm as well as 365- Gear Oil Level Pressure Low- since the level pressure sensor is calibrated at atmospheric pressure, it is critical that the gearbox maintains equilibrium with atmospheric pressure. If the breather is clogged, the pressure inside the gearbox will fluctuate significantly causing both level pressure alarms.

Older Hydac breathers are susceptible to oil saturation from oil mist; a new type with a replaceable filter element is available and should be used in place of the older Hydac breathers.

Check the gearbox breather for oil saturation.

Replace the breather if necessary.

**CIM Case: [1855](#)**

Reference Service message SM: [0027-4983](#) for more information on replacing the gearbox breather.



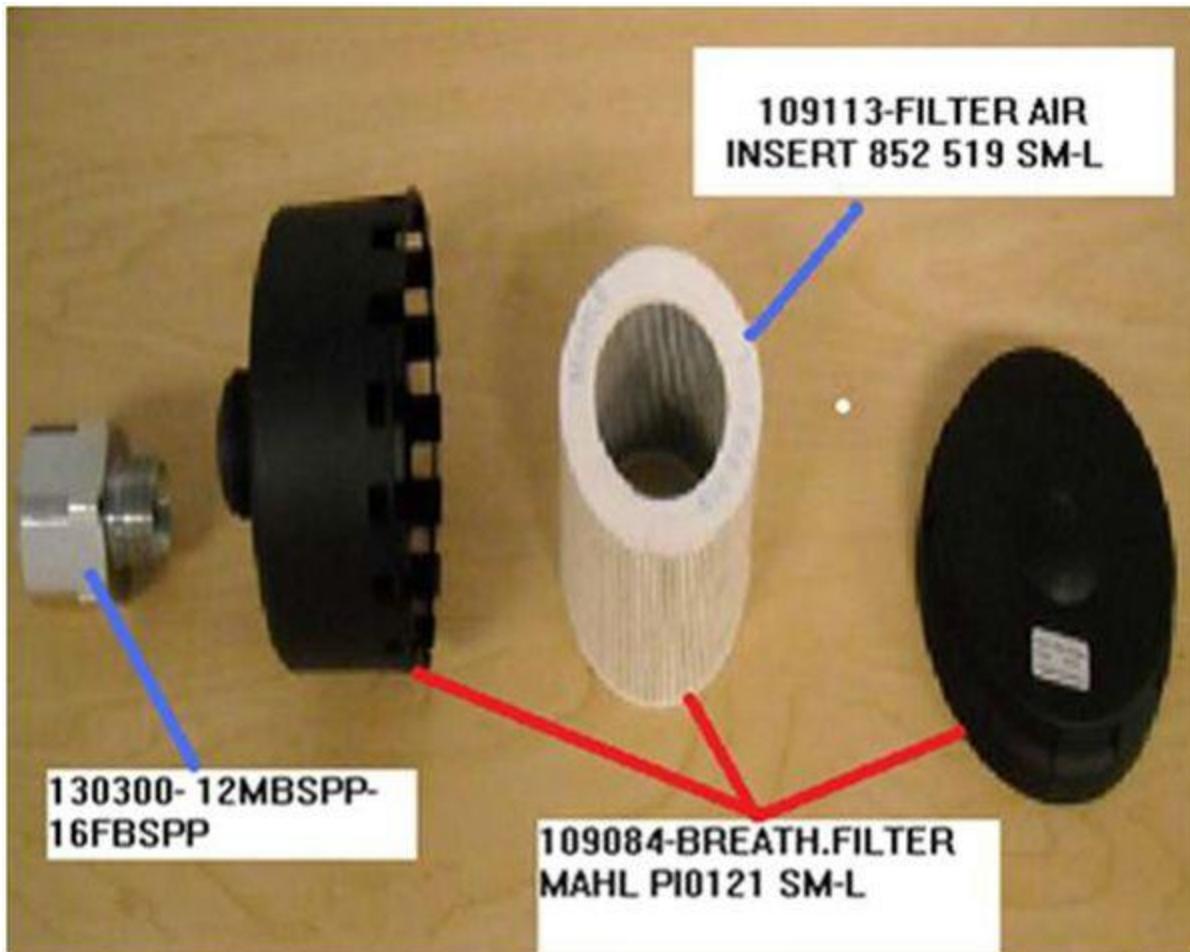
New type Breather:



**Part number for air filter unit:**

109113-FILTER AIR INSERT 852 519 SM-L

**Part number details for whole breather unit:**



Replace the defective varistors and defective Nacelle TOI

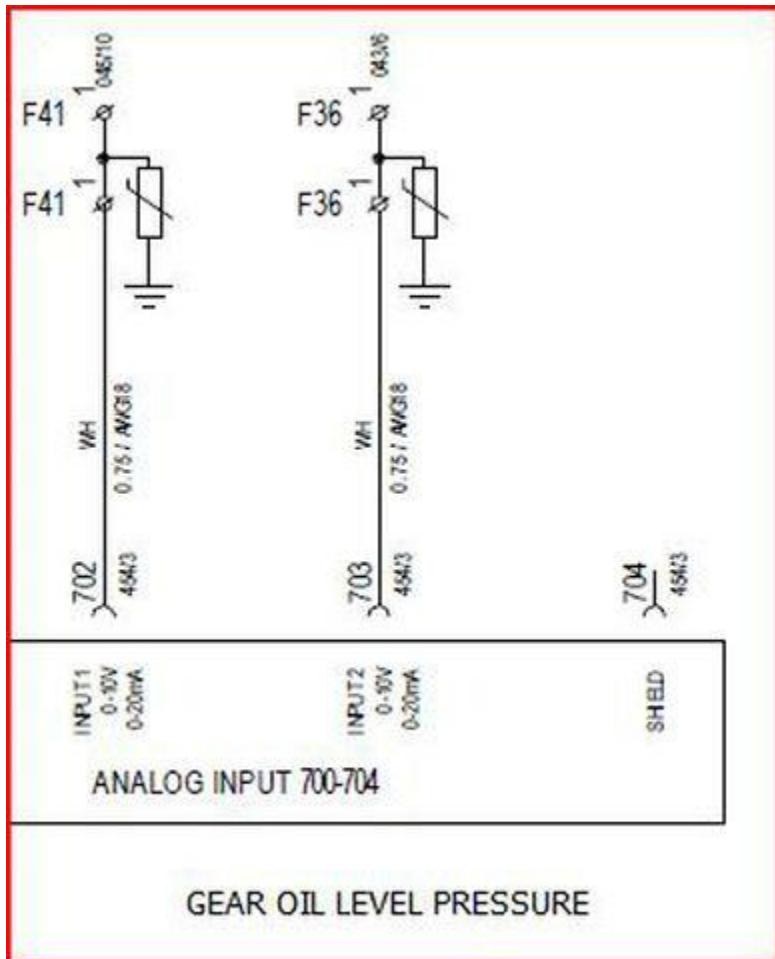
Does this solve the problem?

- 1] Yes
- 2] No
- 3] I don't know

• **Explanation  
IN THE AN1 CABINET:**

Varistors (F36) can be tested individually by placing a multimeter (set to measure  $\Omega$ ) lead on the common (earth) side

of the varistors and the other on the individual varistor terminals. The resistance value over the varistor should be  $\infty$  or in the high  $M\Omega$  range. If the resistance is lower, the varistor has been damaged by an over voltage in the circuit and must be replaced.





Item Number : 51706201 VARISTOR BOX X8

Varistor box F36:



Press the clip on the top and bottom of the varistor box and remove the varistor assembly from its housing:



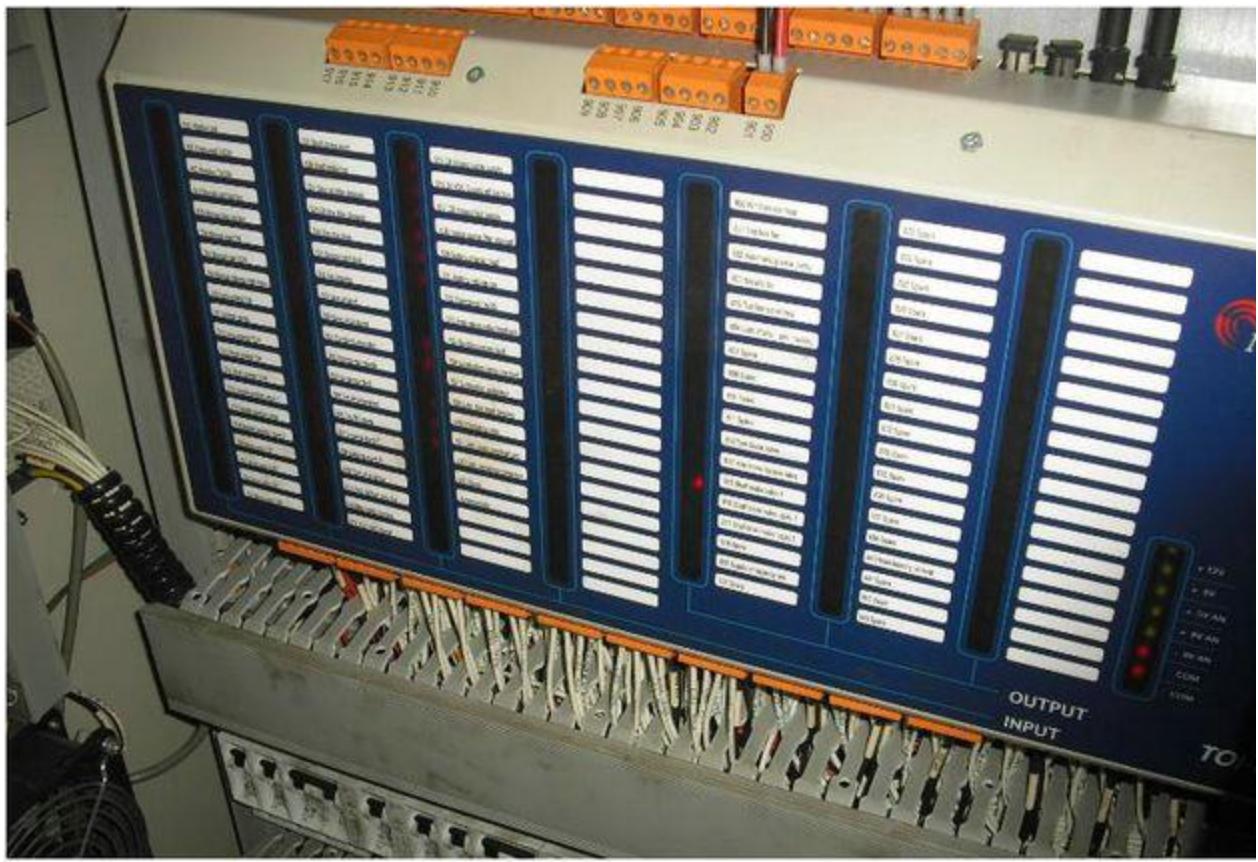
The varistor box is made up of eight varistors and has provisions for 16 wire connections (protection for 8 signals)

**IN THE AN1 CABINET:**

If all system components are confirmed operational, then the Nacelle TOI may be defective.

**Part Number for TOI unit:**

51701601- TOI-II INTERF EXT POC



**Check the electrical connection**

**Does this solve the problem?**

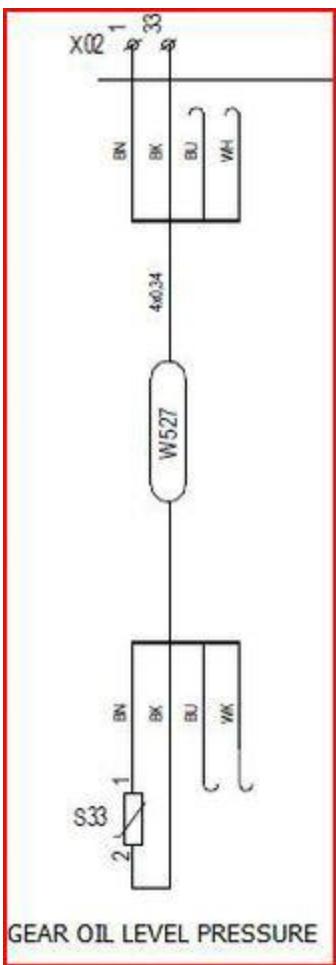
- 1] Yes
- 2] No
- 3] I don't know

• **Explanation  
IN THE NACELLE:**

Check the connections at the gear oil level sensor, the plugs on the sensor are particularly sensitive and can be easily damaged.

Check the connections the W527 cable connected in to +AN12.





Replace the cable if it shows any signs of wear or damage.

Ensure the plug is fastened correctly and the cable is properly connected.

60110454 - CABLE -W527 NM30t. MRK III 4x0 (Level sensor).

Also Check the W522 PT100 sensor cable plug tightness and cable connection.

A loose connection of the PT100 sensor cable can lead to these alarms;

193 -Gear Oil Temp. High Long Term and

192 -Gear Oil Temp. High Short Term

60110452 -CABLE -W522 NM30t. MRK III 4x0 (PT100 sensor)

**Replace the defective level pressure sensor**

**Does this solve the problem?**

1] Yes

2] No

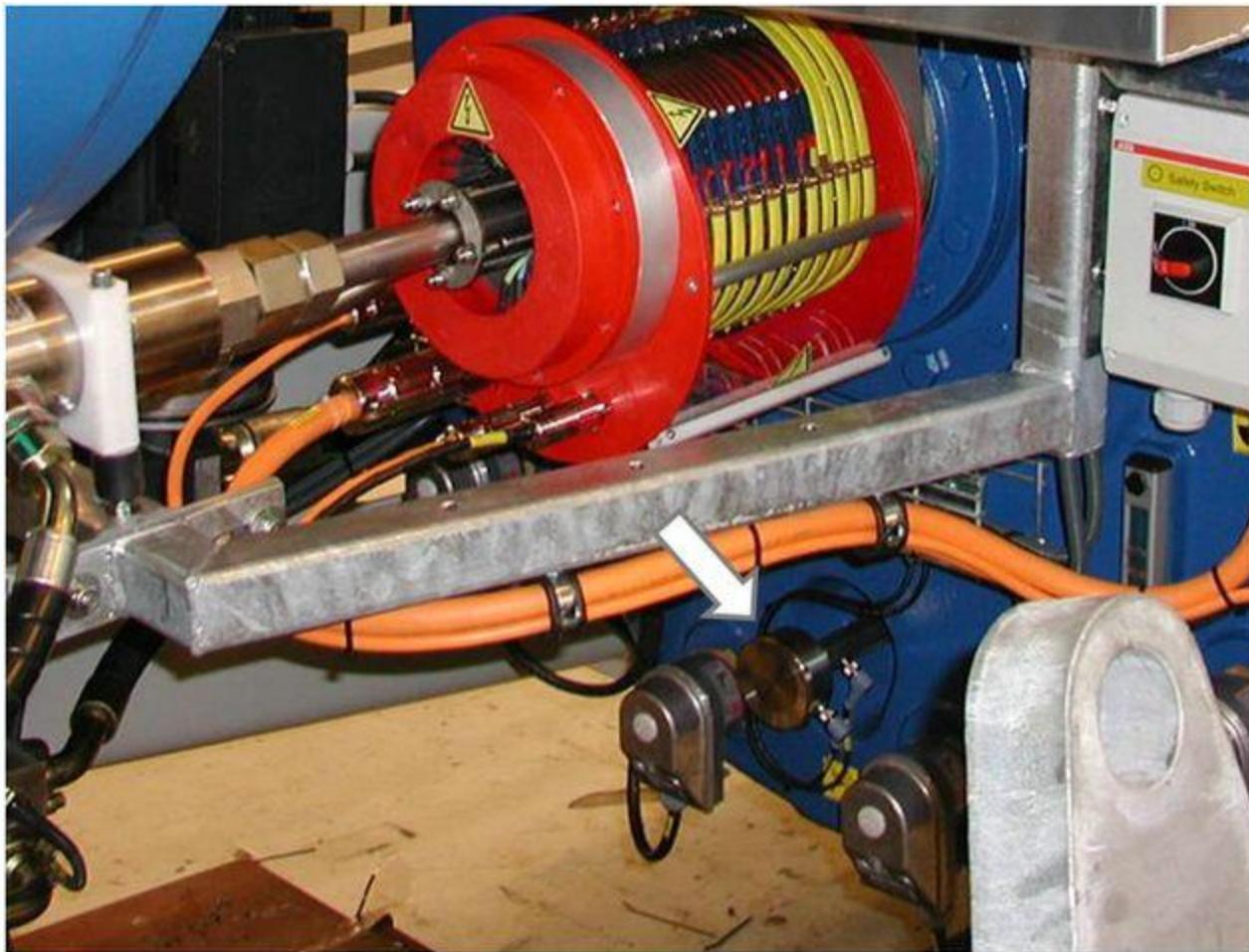
3] I don't know

● **Explanation**

**IN THE NACELLE:**

- The gear oil level should be checked as shown below; the correct level should be in between the minimum and maximum marks in the glass indicator.
- If the oil level is low, then check for an oil leak in the gear box lubrication and cooling system.
- Only check the oil level when the turbine is in stopped condition and the oil is at its highest level (while freewheeling the turbine, the level will go up and down slowly as the planetary gears displace oil).





#### CONFIGURATION OF LEVEL SENSOR:

Disconnect W527 connector on the gear oil level pressure sensor. **DO NOT** disconnect the W522 connector to the PT100 sensor.

Configure the Gear Oil Level Pressure Sensor as per DMS: [0023-4419](#)

Reference Service message SM: [0027-4983](#) for CIM [1855](#) for more information on correct parameters.



**NOTE:**

- Don't maintain the oil level above the MAX mark in the glass indicator,

Max oil leads to leak at the LSS shrink disc.

- Verify that the oil level pressure sensor is enabled;

'SERVICE MENU → ENABLE PRESSURE CHANNELS→ ENABLE GEAR OIL LEVEL PRESSURE' from 0 to

- Verify that the correct gearbox type is entered;

'SERVICE MENU → WTG SETUP→  
SELECT GEARBOX TYPE (0 / 1 / 2)'.

0 = WINERGY

1 = HANSEN

2 = JAKE

After level sensor calibration pressure value is higher than 30 mbar is likely a defective gear oil level pressure sensor or electrical connection problem.

**Part number for gear oil level sensor:**

60109925 PR TRANSMITTER/PT-100 L=40mm (WINERGY)

60109922 PR TRANSMITTER/PT-100 L=100mm (HANSEN & JAKE)