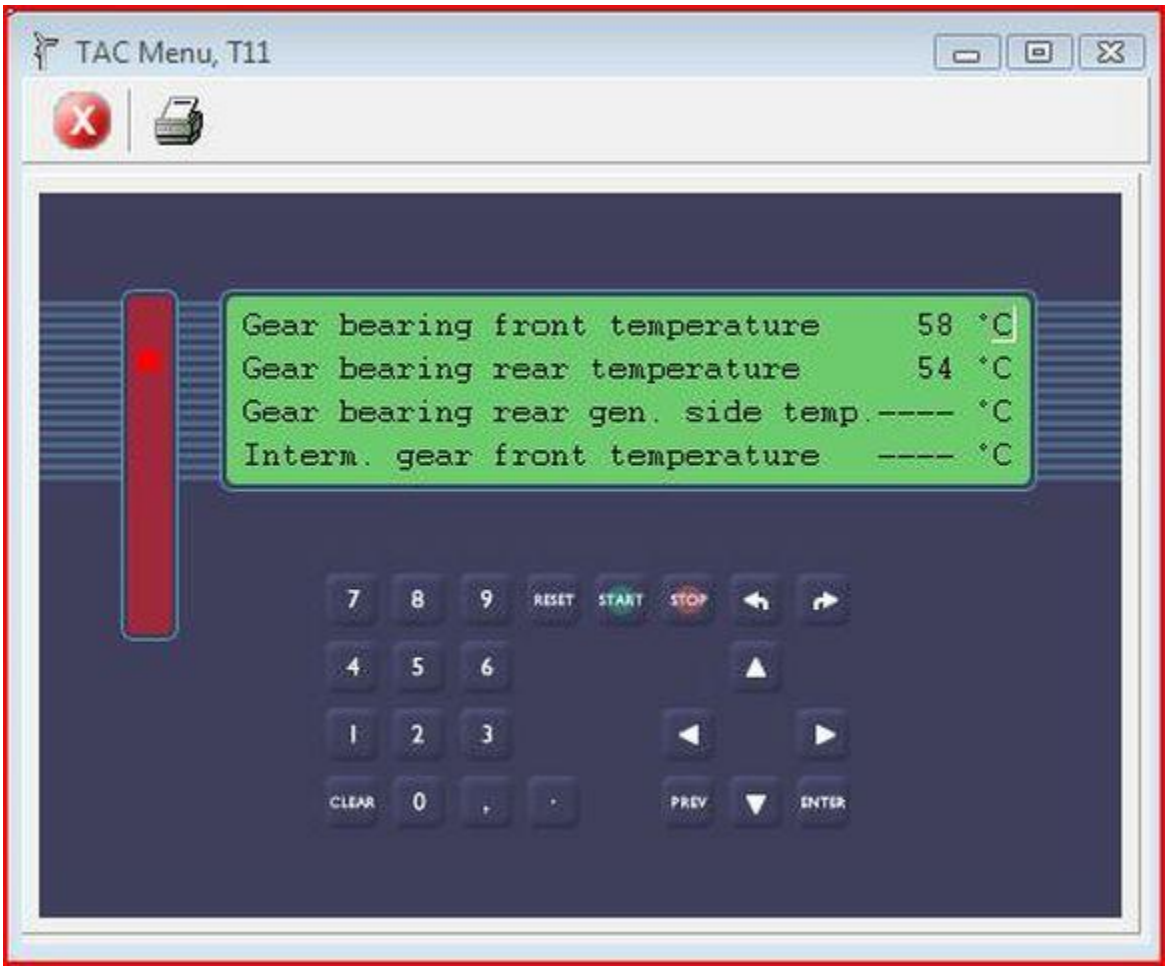
Repair or replace faulted component

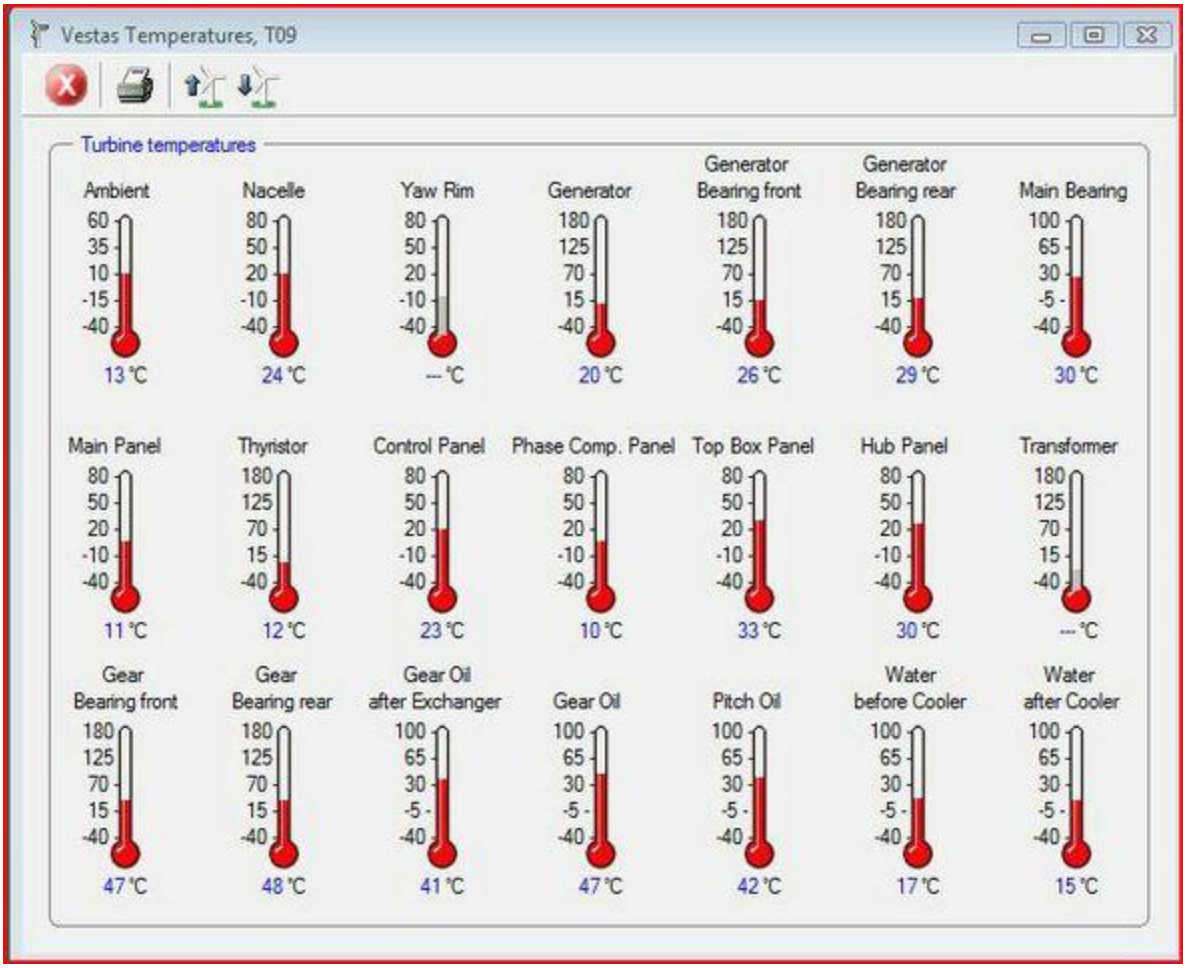
Does this solve the problem?

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

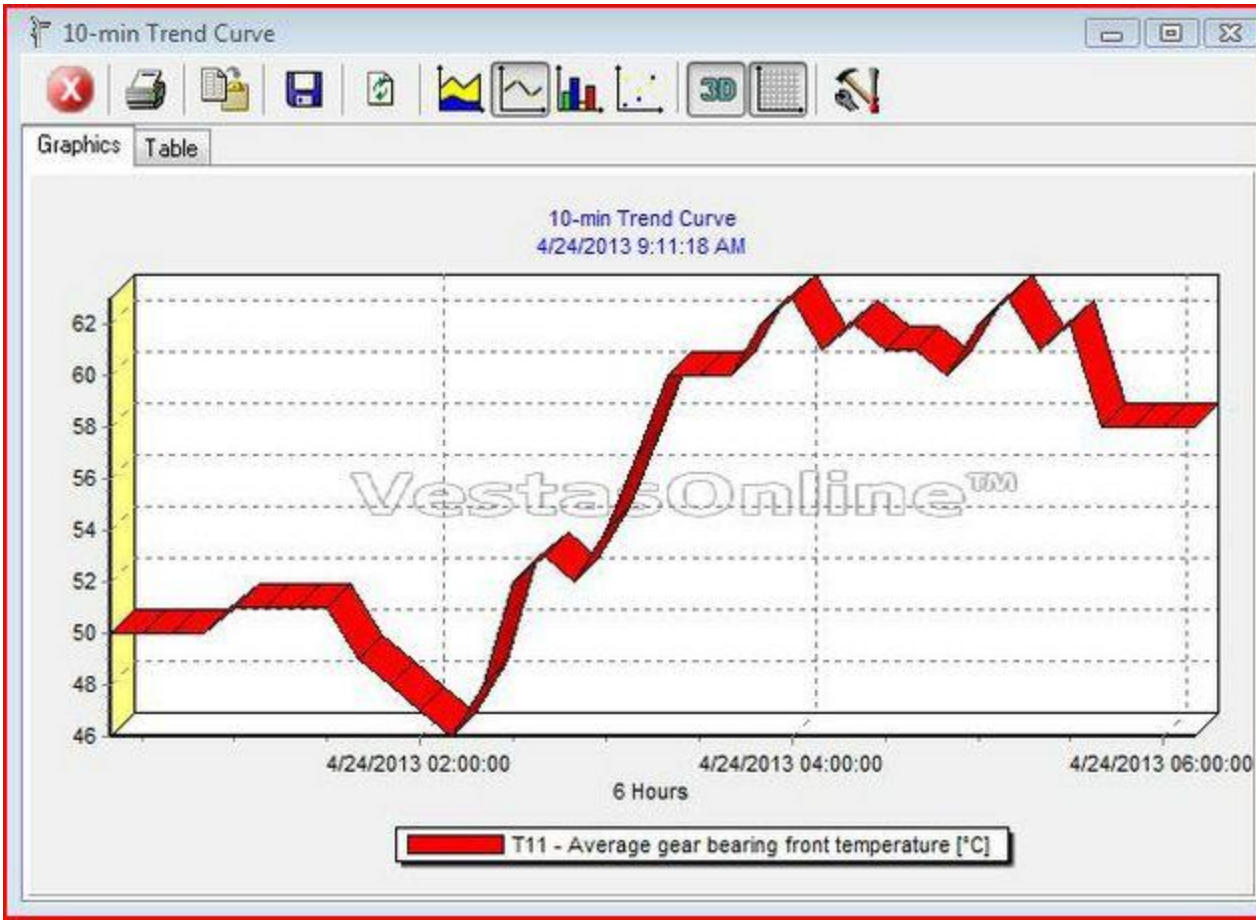
- **Explanation**

Check the temperature display on the TAC computer or in VOB. A broken wire will cause a temperature of 205C to be displayed.



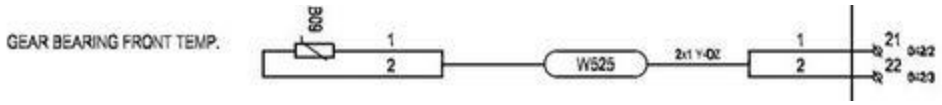


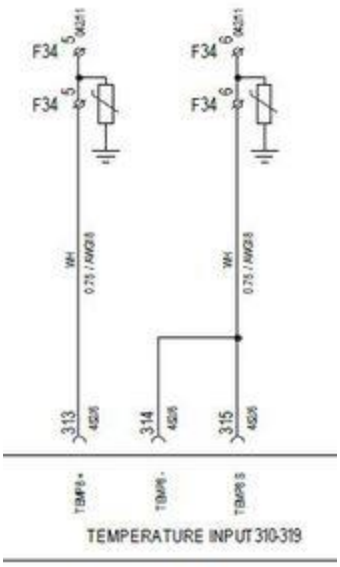
Also look at the average temperature values for the front gear bearing. A smooth change in temperature means that the PT100 is likely operating correctly while sudden spikes in temperature mean a defective PT100 or wiring issue



Check that the PT100 measurement is accurate.

1. If the sensor is suspected to be reading inaccurately, check the resistance of the PT100.
    a. Disconnect the wires of the Pt100 sensor from terminals 21 & 22 in AN12.
    b. Measure the resistance of the PT100 across the leads.
    c. Using the PT100 Ohm-Temp chart, determine if the sensor is operating within range.
    d. If the sensor is good, check for faulty connections in the rest of the circuit.
2. If connections are good and the PT100 is working then check the TOI.
    a. Remove wires from TOI terminal 313 and 314 and switch them with another temperature input (e.g. 316 and 317).
    b. Observe temperature with the wires in the new input. If it is the same as it was with the wires in 313 and 314 then the TOI is likely working.
    c. If temperature is different, the TOI is defective.
3. If both the PT100 and TOI are working then inspect the varistor F34 in the AN1 cabinet.
    a. Remove PT100 wires from the top and bottom terminals 5 and 6 of the F34 varistor and place them in a spare set of terminals.
    b. If temperature returns to normal then the varistor was defective and must be replaced.


GEAR BEARING FRONT TEMP.
1
2
W525
1
2
21
22



GEAR BEARING FRONT TEMPERATURE

TOI Item number 60015648
Varistor Item number 51706201
Hansen PT100 Item number 60102405
Jake PT100 Item number 60066565
Winergy PT100 Item number 60077843

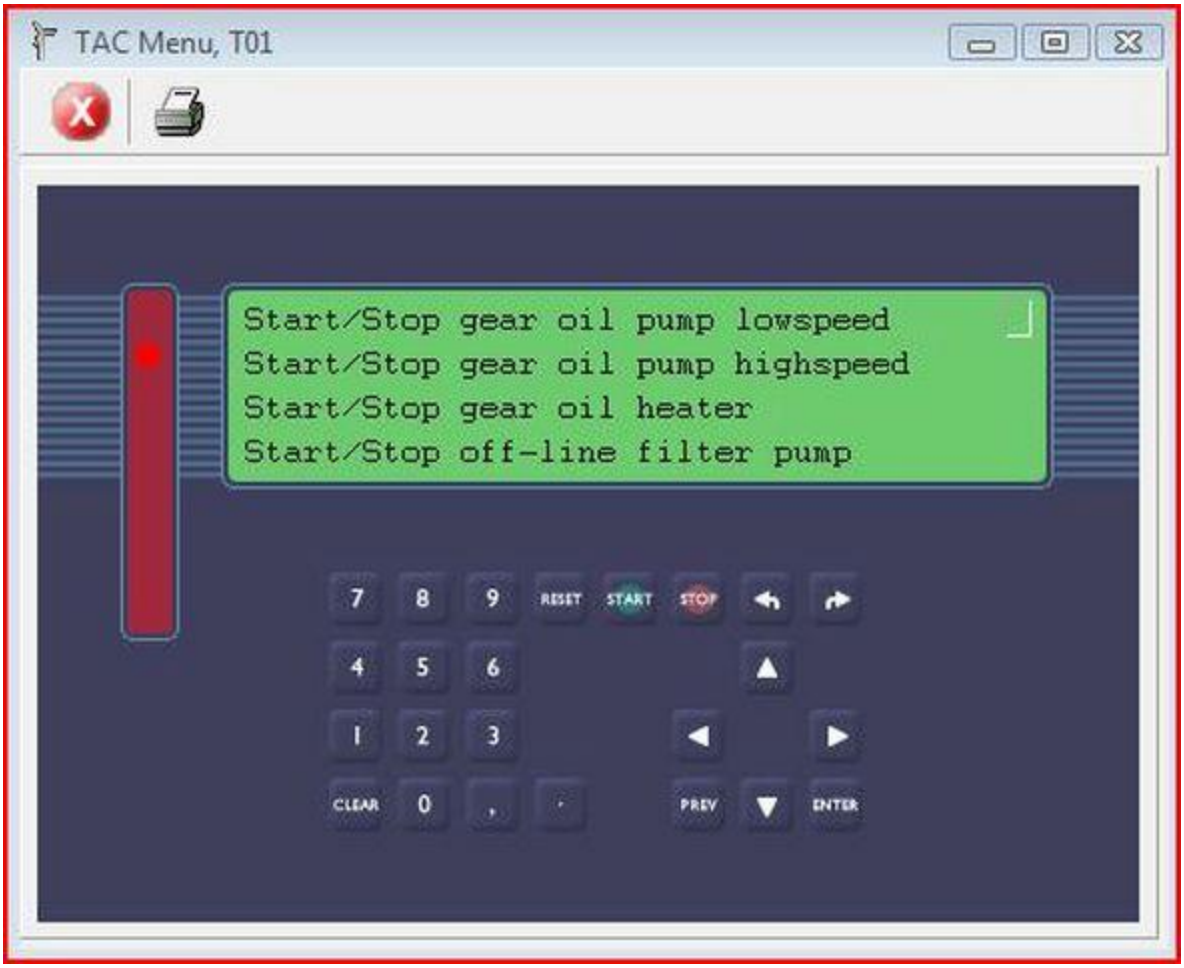
Repair or replace damaged component

Does this solve the problem?

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

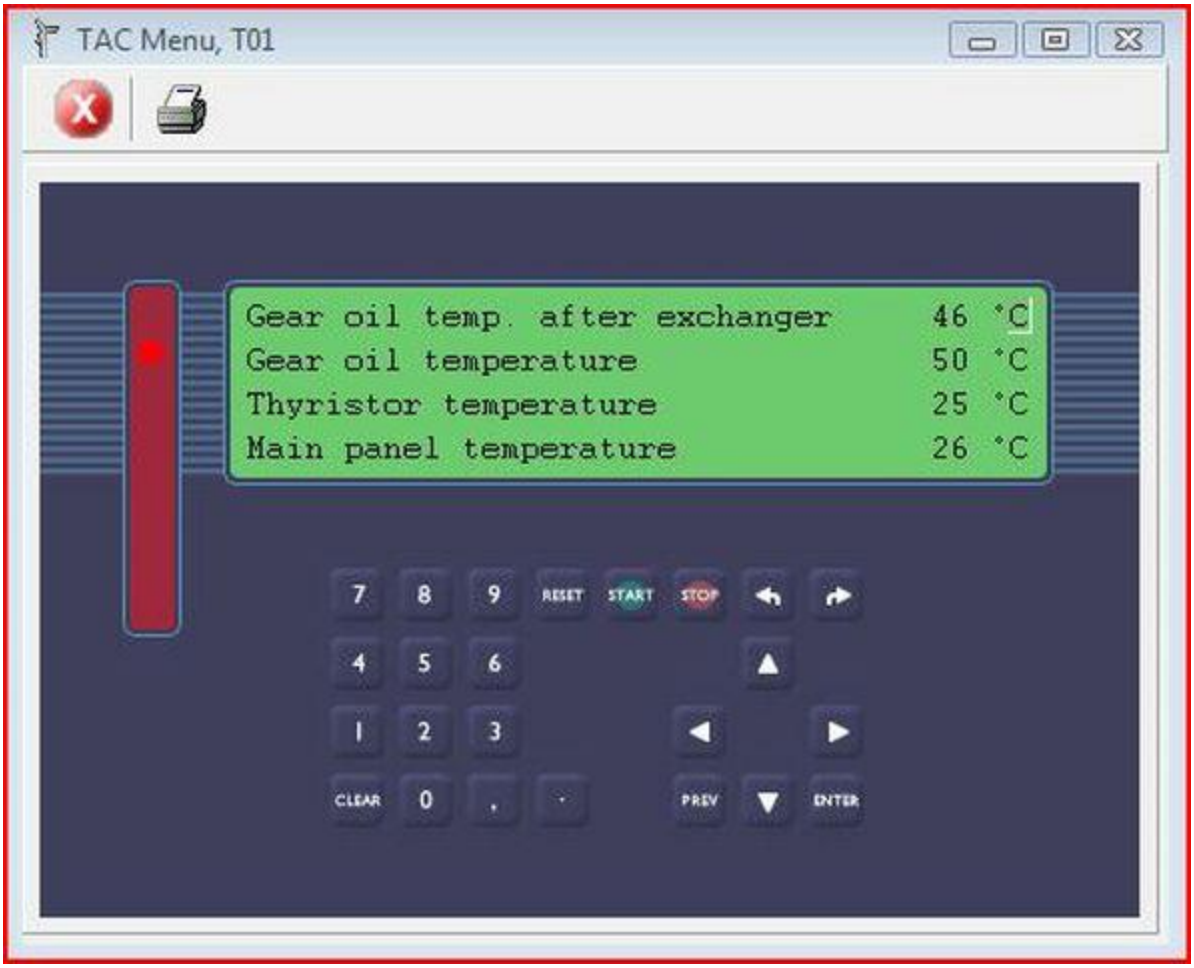
- **Explanation**

Check pump operation-Start and stop the gear oil pump in both low and high speed by going into the menu Service-Manual Test



Check gear oil temperature and gear oil temperature after heat exchanger. Gear oil temperature should be slightly higher than temperature after the heat exchanger. If they are the same, then investigate the cause. This will either be due to low flow through the heat exchanger (if ambient temp is below about 20C) or radiator (if ambient temp is above about 20C) or due to low flow or warm water through the heat exchanger. Check to see if other gearbox temperature alarms are active to confirm whether or not there is a flow issue.

Also check the thermostatic bypass valve if low flow through the radiator is suspected. If the thermostatic bypass valve is defective then you would also expect to see alarm 193 Gear Oil Temp High Long Term.



Check Filter-Inspect Gear Oil filter for sludge build up even if the gear oil filter clogged alarm is not active. Restricted flow could lead to a loss of cooling.

Sludge built up on bearing or clogging lubrication ports. This would have to be verified by a visual inspection of the bearings themselves.

Gear oil filter Item number 60076343
Gear oil pump Item number 60111058
Gear oil pump motor Item number 60093993
Thermostatic Valve Item number 60104320

Fill with oil

Does this solve the problem?

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

- **Explanation**

Check oil level by following section 1.10 of Service Instruction 1001058. Allow the rotor to turn a few turns while checking. Use the lowest level indicated as the correct gear oil level. If level is low then refill.

Gear oil part number 60059781

Replace Oil

Does this solve the problem?

1] Yes
2] No

3] I don't know

- **Explanation**

Either sample the gear oil and submit to a local company for analysis or look at the results of a previous sample. If oil quality is poor then change the gear oil.
Use Work Instruction 0001-8670 to perform the sample.
Gear oil part number 60059781

Replace damaged bearing

Does this solve the problem?

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

- **Explanation**

Listen for abnormal noise during operation. Perform Gearbox inspection by following Service Instruction 1001058