Identify and address cause

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

Check wind speed.

If wind speed was high (over 20m/s) and gusting at the time of the trip and there are no other alarms other than possibly the generator over speed alarm then high winds were likely the cause.

A momentary over speed can also be caused when the F01 trips. Check the alarm log to see if the F01 tripped at the same time that alarm 397 became active. If this is the case, no action is required for the over speed, but you will have to investigate the cause of the F01 trip.

Also check for drops in grid voltage. If grid voltage suddenly dips, the resulting loss of magnetic field in the generator could cause a momentary increase in rotor speed. This could happen to just one turbine or all turbines on a circuit.

Replace TAC 85 module

Does this solve the problem?

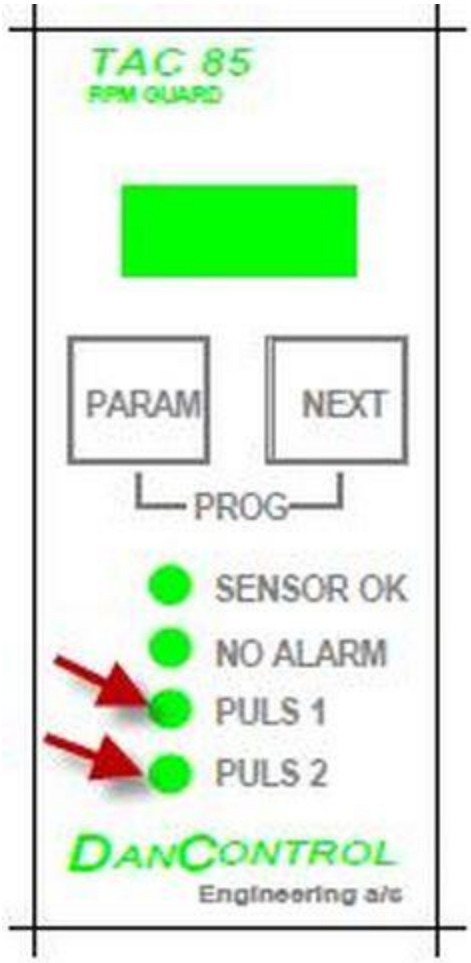
1] Yes

2] No

3] I don't know

- **Explanation**

1. Check the TAC 85 display. The screen should be reading current rotor RPM value. If the turbine is shut down RPM should be around 0. If the module is indicating that the rotor is spinning then replace the TAC 85 module.
2. Remove the sensors from their brackets. Be careful not to pass them close to a metal surface.
3. Check to see if either PULS 1 or PULS 2 lights are lit. With the sensors removed, neither should be. If either is lit, replace the TAC 85 module.



Replace Sensor

Does this solve the problem?

1] Yes

2] No

3] I don't know

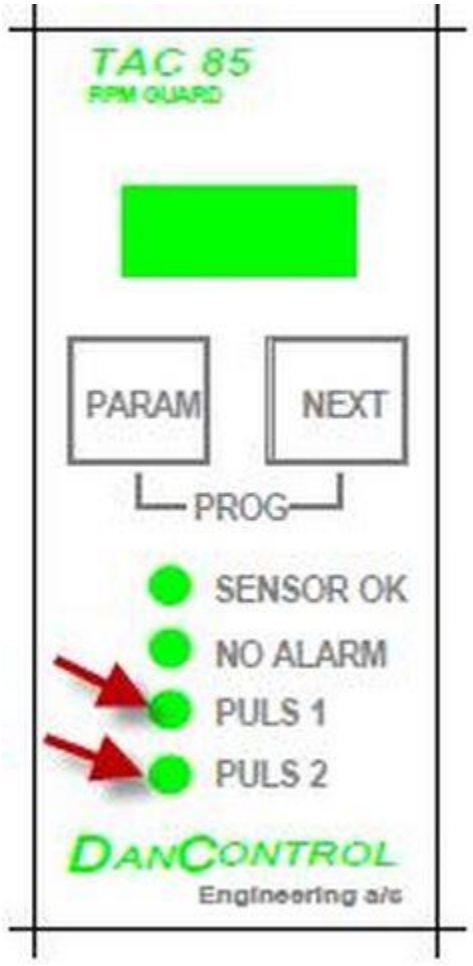
- **Explanation**

1. Remove speed sensors from their bracket and inspect for damage. Replace if damaged.

2. Gently move the sensors and sensor wires around, being careful not to come close to any meal surfaces. Check the TAC 85 module PULS 1 and PULS 2 lights. If either are lighting up, there is a short within the sensor and it must be changed.

3. Place a metal tool (e.g. a screwdriver) over the white plastic tip of each sensor and verify that one of the RPM

lights (PULS 1 or PULS 2) on the TAC 85 module is illuminated.



If the metal tool is removed, the light must go out. If it does not, then find the source of voltage. Start by removing wire 1 from the +AN11 X01 terminal strip. This is the 24VDC power supply to the sensor. If the PULS light goes out, there is an internal fault in the sensor wire and the whole sensor must be replaced.
Speed Sensor p/n 60009270

Adjust Sensor

Does this solve the problem?

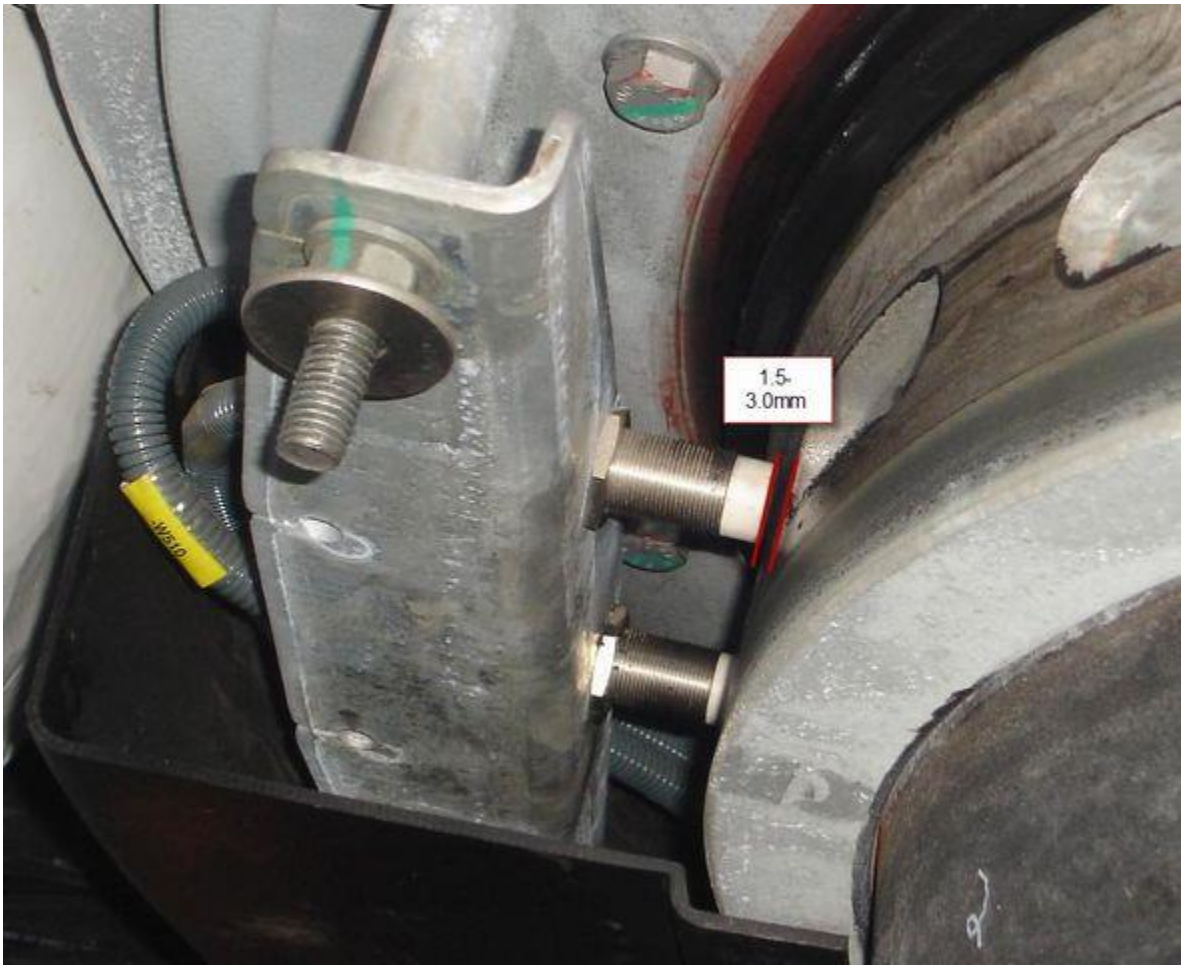
1] Yes

2] No

3] I don't know

- **Explanation**

  Check that the speed sensors are positioned 1.5-3.0mm from the rotor. Adjust if necessary.



Clear Alarm Stack

Does this solve the problem?

1] Yes

2] No

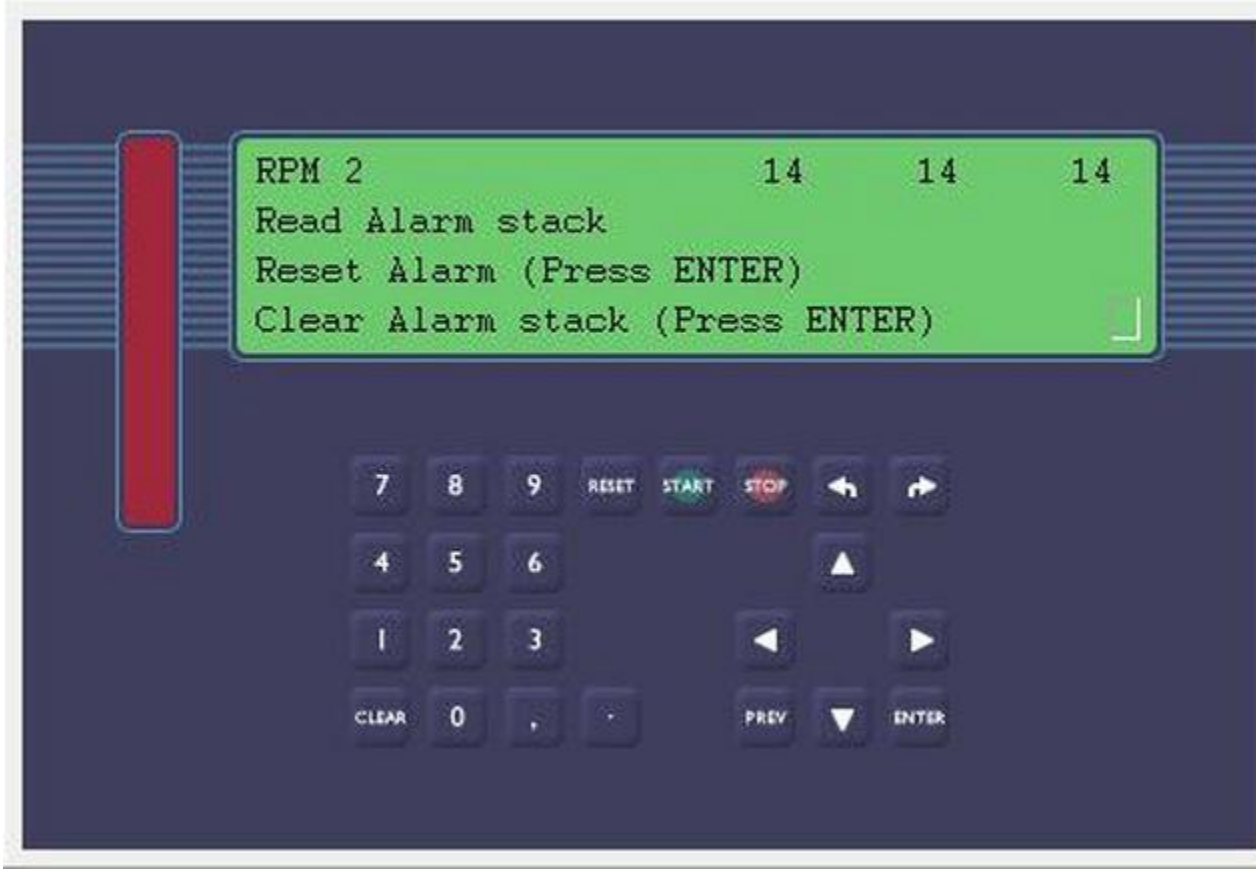
3] I don't know

- **Explanation**

The TAC 85 module is able to store up to 11 alarms. Once 11 alarms occur it will not be possible to reset an alarm until those alarms are cleared out of the module. This is called an “Alarm Stack”.

To check the alarm stack on the TAC computer go to Configuration-Set Top Sensor Parameters-TAC 85 Parameters-Read Alarm Stack. If all 11 alarms have a number other than 0, the stack must be cleared. Go down to “Clear Alarm

Stack” and press Enter.



Correct the faulty connection

Does this solve the problem?

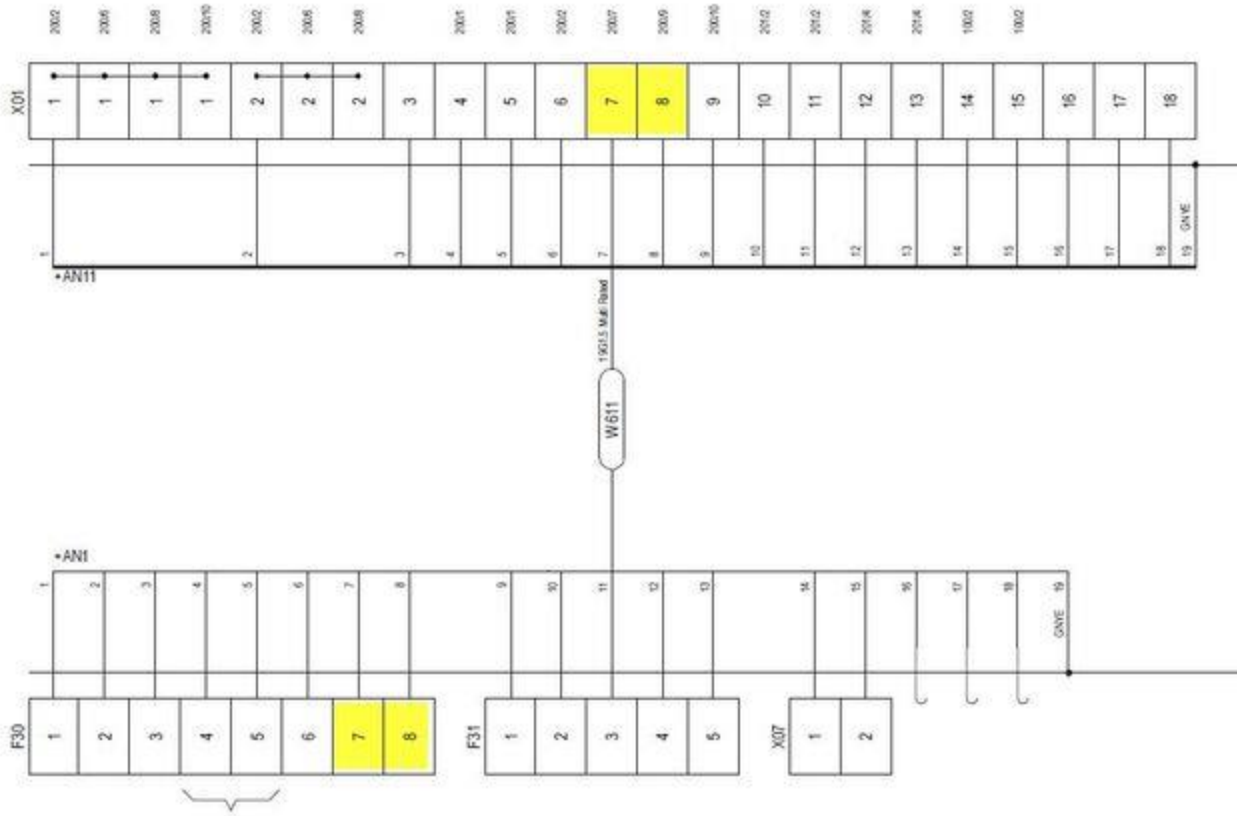
1] Yes

2] No

3] I don't know

- **Explanation**

1. Remove the sensors from their brackets. Be careful not to pass them close to a metal surface.
2. Measure for VDC at terminals 7 and 8 of the +AN11 X01 terminal strip and at terminals 7 and 8 of the +AN1 F30 (+AN1 F08 terminal 6 and F09 terminal 1 for Mk.2 and older) varistor box. If voltage is present at any point, find and correct the cause. Look for a loose connection, or a sensor wire touching another wire.



Enter Correct Parameters

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

1. Check the parameter “Pulses per Revolution 1 and 2” This can be found in Configuration-Set Top Sensor Parameters-TAC 85 Parameters-Key in Parameter no. 5 (or 8 for sensor 2).

The parameter is usually 18, but check with your site to make sure. If the parameter is incorrect, change it to the correct parameter in the “New Parameter Value” line.

Replace TAC

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

If all other sources have been eliminated, reload software. If that does not work, replace TAC computer.

TAC computer p/n 60015639