

Replace the yaw box

Does this solve the problem?

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

- **Explanation**

IN THE NACELLE:

Possible cause of Error with different conditions:

→ Power supply to the encoder may fail. In This case while yawing, Nacelle Position count & Yaw counter will remain the same as read even when the turbine is yawing.

→ If any one of the signal (count 1 or count 2) is missing in the encoder, then the yaw position will indicate but the yaw counter will not change.

→ Under normal conditions if turbines yaw CW, the yaw counter value should increase. If this doesn't happen then it may be a wiring problem or defective encoder or a mechanical defect within the yaw box.

→ Before referring to the yaw counter values always remember that the count will be zero if the center cam is activated. Until the center cam is released, the count will remain at zero. At the time of yawing only the nacelle position value will change and this depends on the direction of yaw.

TOI Input:

INPUT 500-523

- Vibration ball
- Overspeed TAC84
- Vibration TAC84
- Manual start top box
- Manual stop top box
- Manual yaw CW
- Manual yaw CCW

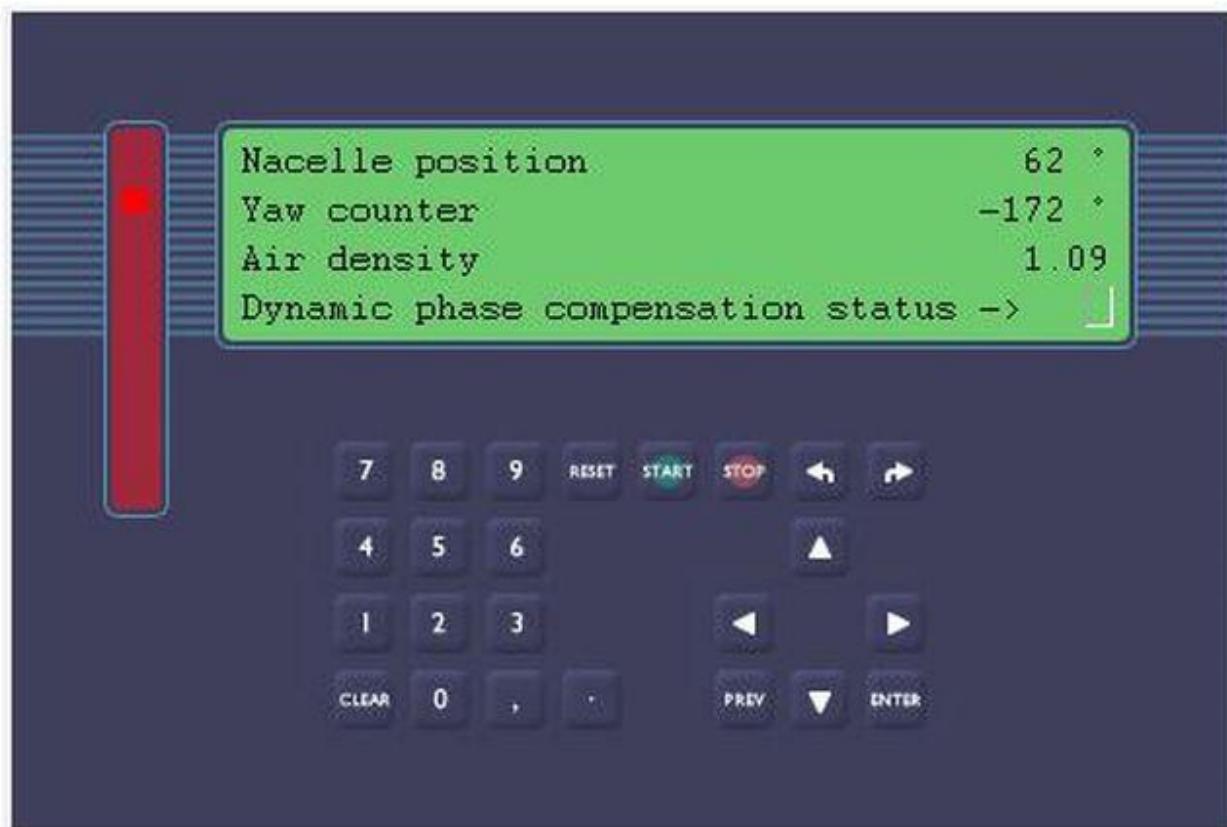
- Long untwist CW
- Untwist center
- Long untwist CCW

INPUT 525-613

- Shaft brake worn
- Shaft brake hot
- Gear oil filter clogged
- Off-line filter clogged
- Drip tray level
- Beacon light fault
- Ice detector
- Gear oil level
- Shaft brake lock

- Service key top box
- Ice detector fault
- Tac 84 downwind
- Tac 84 lateral
- External alarm 7
- External alarm 8
- Pitch oil level low
- Pitch oil level very low
- Hub hatch override
- Hub hatch closed

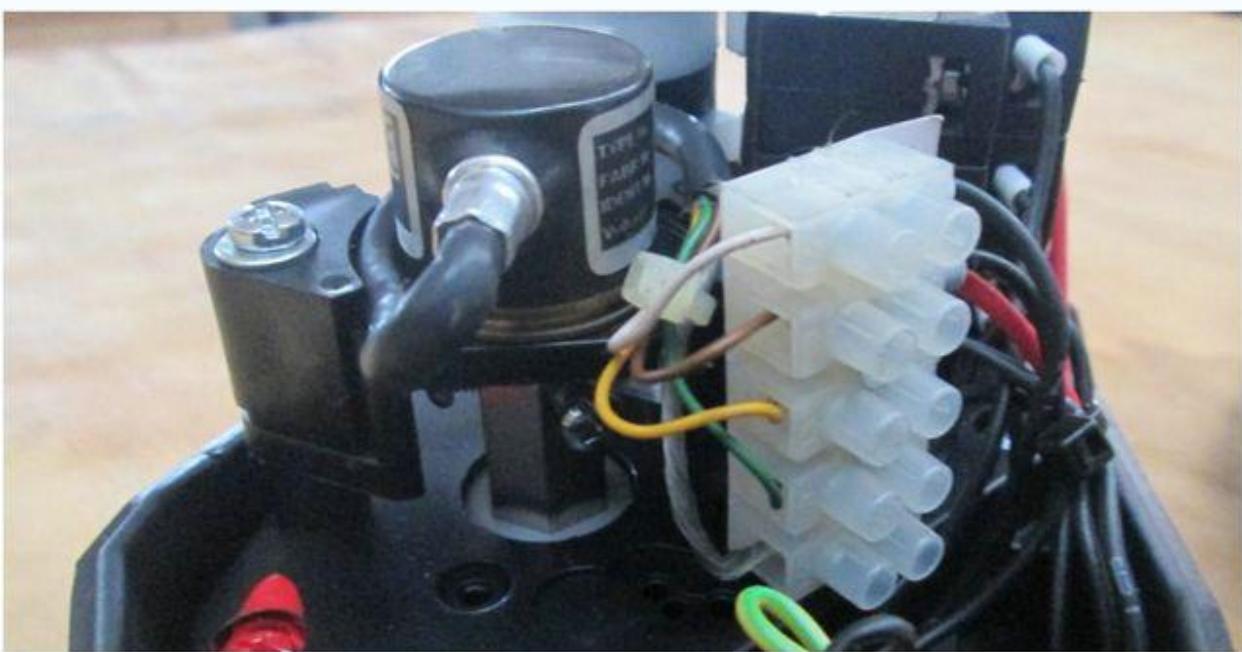
TAC counter:



Yaw Box Assembly:



Encoder Inside the yaw box.



Part Number detail:

Yaw box With cable:

60019732 YAW BOX W ENCODER RESET SEN

Yaw box Without cable:

60009234 YAW SENSOR

Encoder of Yaw box:

60106432 ENCODER SCANCON

Check the yaw box setting and execute the testing of cams.

Refer to document DMS : [0000-9925](#) -Commissioning Instruction, Section 5.14.3



Adjusting the yaw twist box as per SWI DMS : [0004-4426](#)

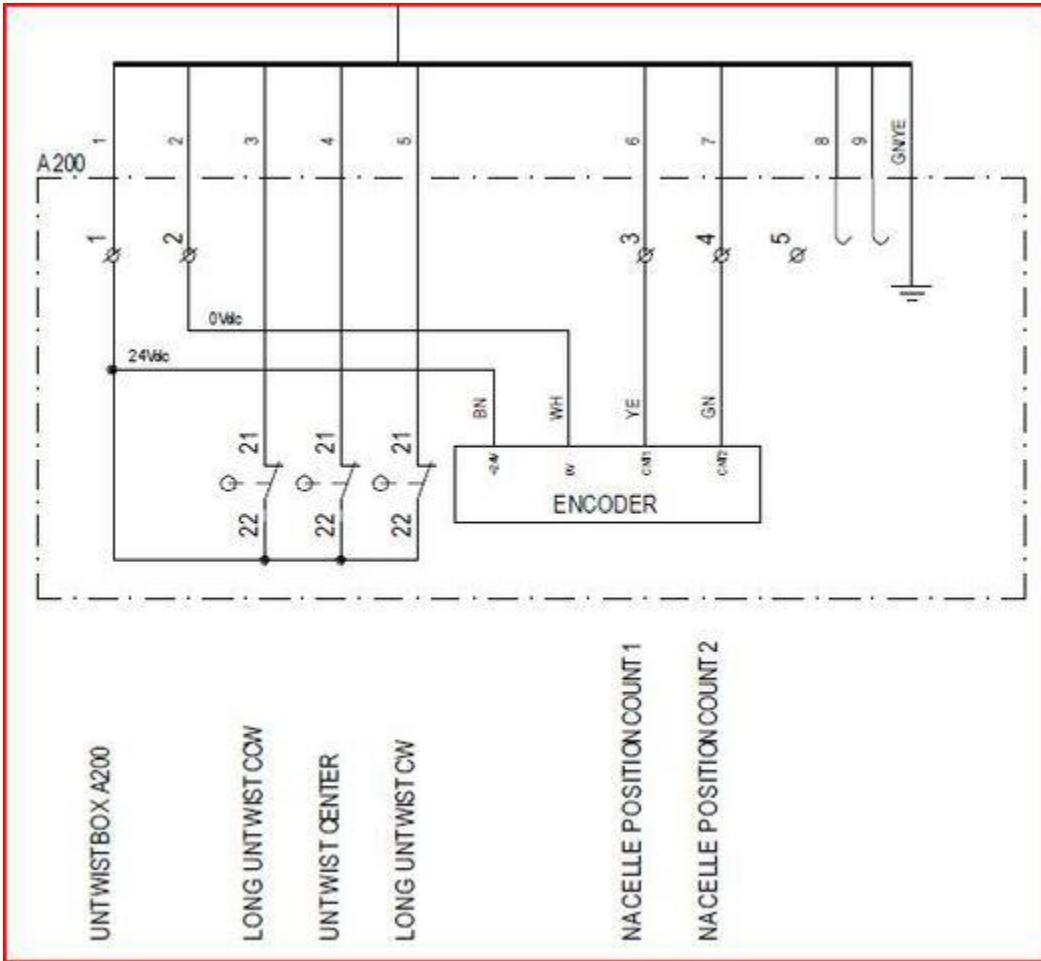
Check the Wirings connections as per WKI

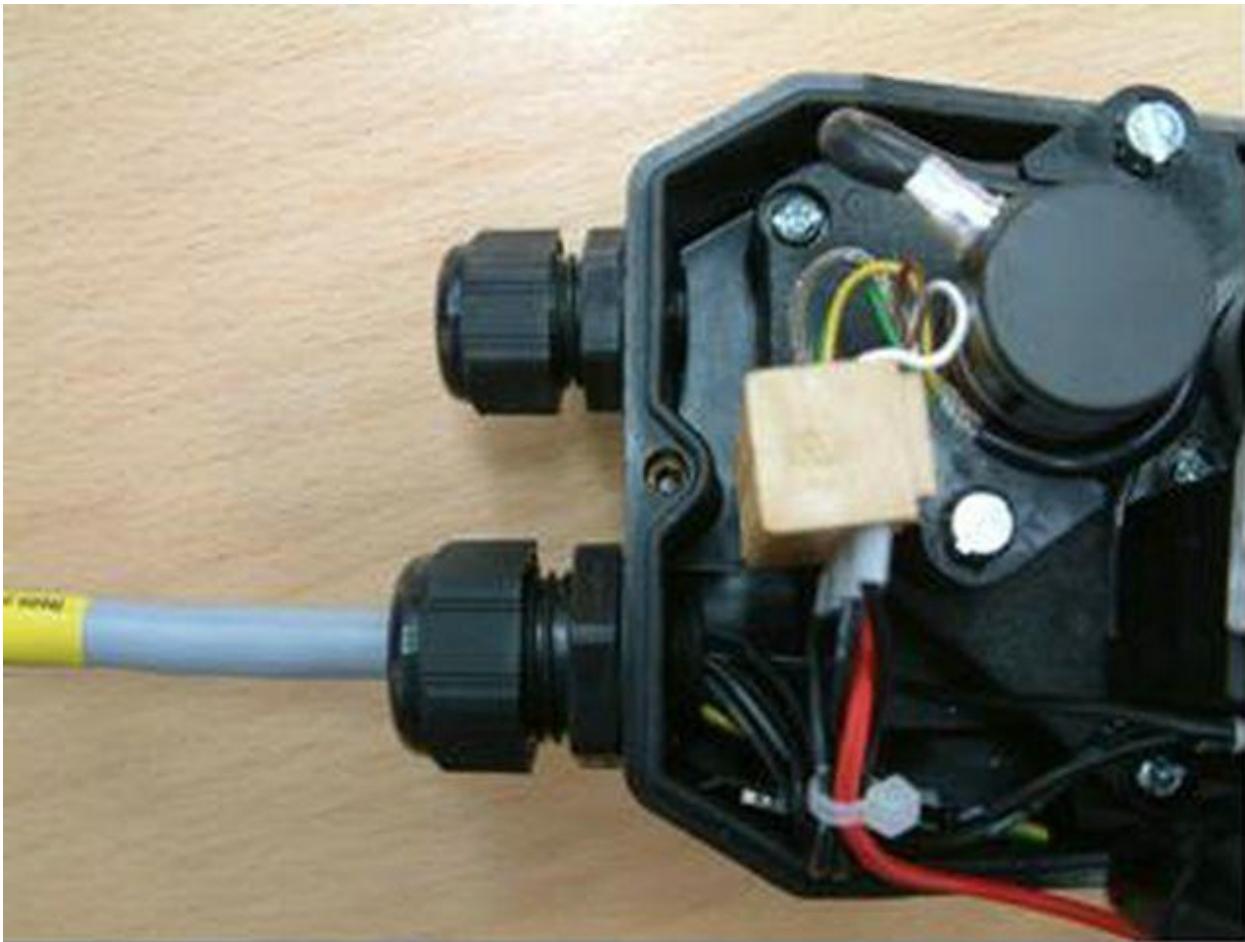
Does this solve the problem?

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

- **Explanation**
IN THE NACELLE +AN13 box

Check the wire connections inside the yaw box terminals and +AN13 box.





Replace the defect nacelle TOI

Does this solve the problem?

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

- **Explanation**
IN THE AN1 CABINET:

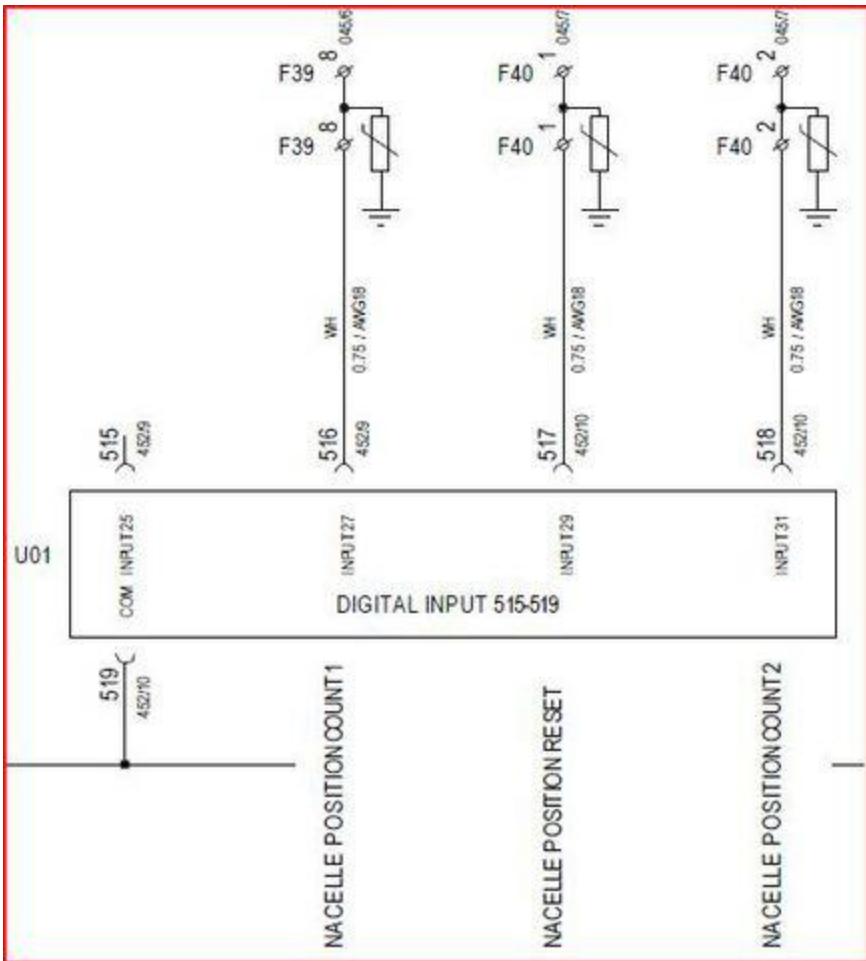
Check the indication on the nacelle TOI during yawing, the LED should blink and TAC yaw counter value should change.

If the value does not change in TAC, then the cause is likely a faulty Nacelle TOI .

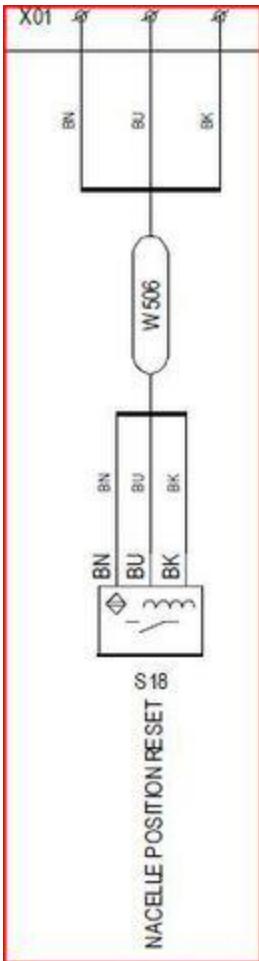
Nacelle TOI part Number:

51701601- TOI-II INTERF EXT POC

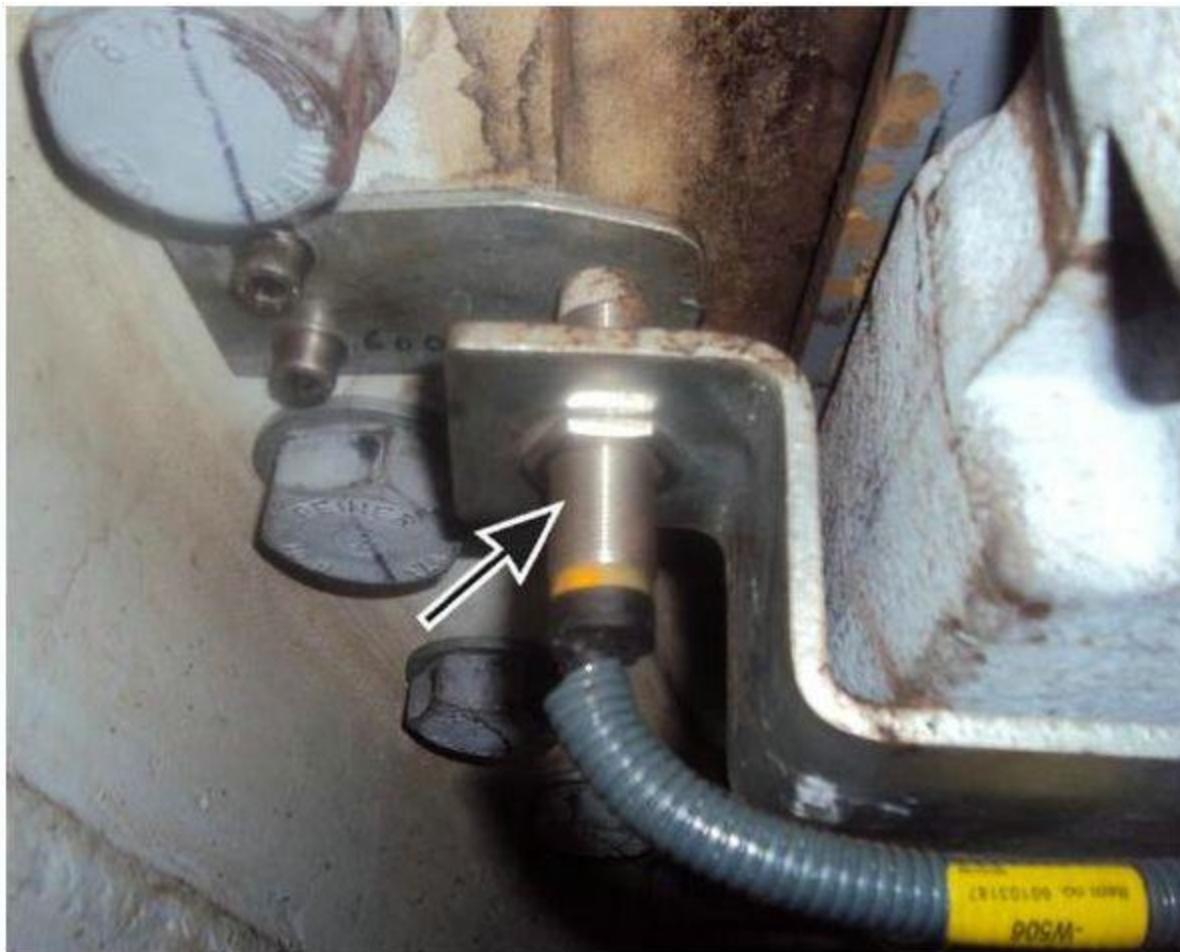




Check the nacelle position reset sensor connections, if required replace the new sensor



Part Number sensor:
60009270 PROXI SWITCH I1808PPOS1531 Ø18



Replace the yaw reader wheel

Does this solve the problem?

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

• **Explanation**

IN THE NACELLE:

Check the yaw reader wheel which is connected to the yaw box

PWI- Yaw box assembly: DMS : [1001465](#)

Drawing: Yaw box assembly: DMS : [60109909](#)

Check the teeth on the remaining yaw gear pinion wheels for any damage.

