Remove obstruction and clean the FT wind sensor by using recommended cleaner

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**
  IN THE NACELLE:

  Check for any debris in the wind sensors. If the plates are contaminated, clean the the sensor.

Remove obstruction and clean the FT wind sensor by using recommended cleaner

Does this solve the problem?

1] Yes

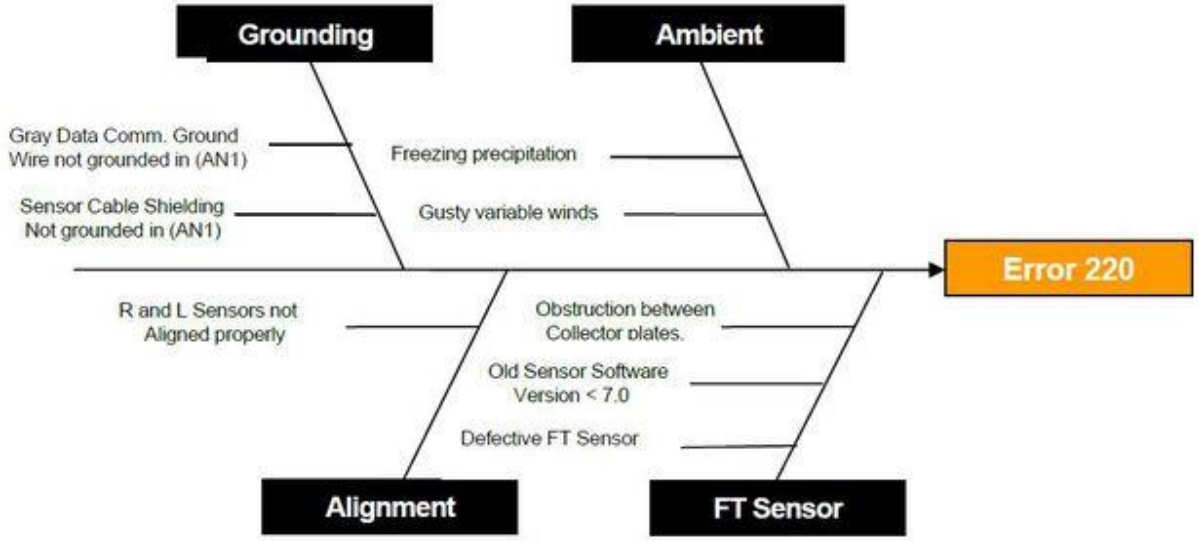
2] No

3] I don't know

- **Explanation**
  IN THE NACELLE:

Check for any debris in the wind sensors. If the plates are contaminated, clean the the sensor.

Cause and Effect Diagram:



Check the FT sensor and replace if defective.

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

IN THE NACELLE:

If the fault is intermittent and occurring often, set up the TAC data-logger to trigger on fault 220 and record wind direction and speed for both sensors. If the signal is consistently missing at the exact same time from both sensors then it is likely a problem with communication between the TAC controller and the sensor.

Check the software version & serial number of both sensors both are same.

Note: that signal is naturally intermittent from ultrasonic sensors.

Remove the connector plug on the wind sensors and check for signs of moisture/corrosion/damage.


Preset sensor right 2 ID (Press ENTER)
WS: 1 sec 10 min WD: 1sec 10 min
Left1: 5.1m/s 5.7m/s -18.0° -3.6°
Right2: 4.4m/s 5.7m/s 0.0° 1.3°
7 8 9 RESET START STOP
4 5 6
1 2 3
CLEAR 0 PREV ENTER

Remember that while replacing a sensor, remove the other sensor connection physically from circuit and enable appropriate channel (left 1 or right 2) then calibrate.

Ref the below document for wind sensor calibration.

Item No. 106510 WIND SENSOR US FT702LT V22

Replace the defective cables and tighten the loose connections

Does this solve the problem?

1] Yes

2] No

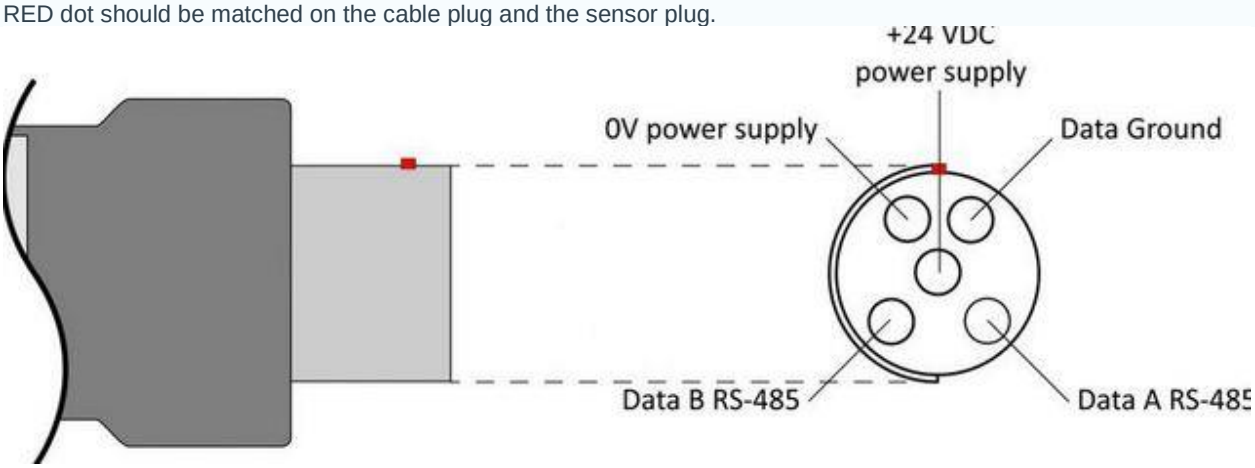
3] I don't know

- **Explanation**
  IN THE NACELLE:

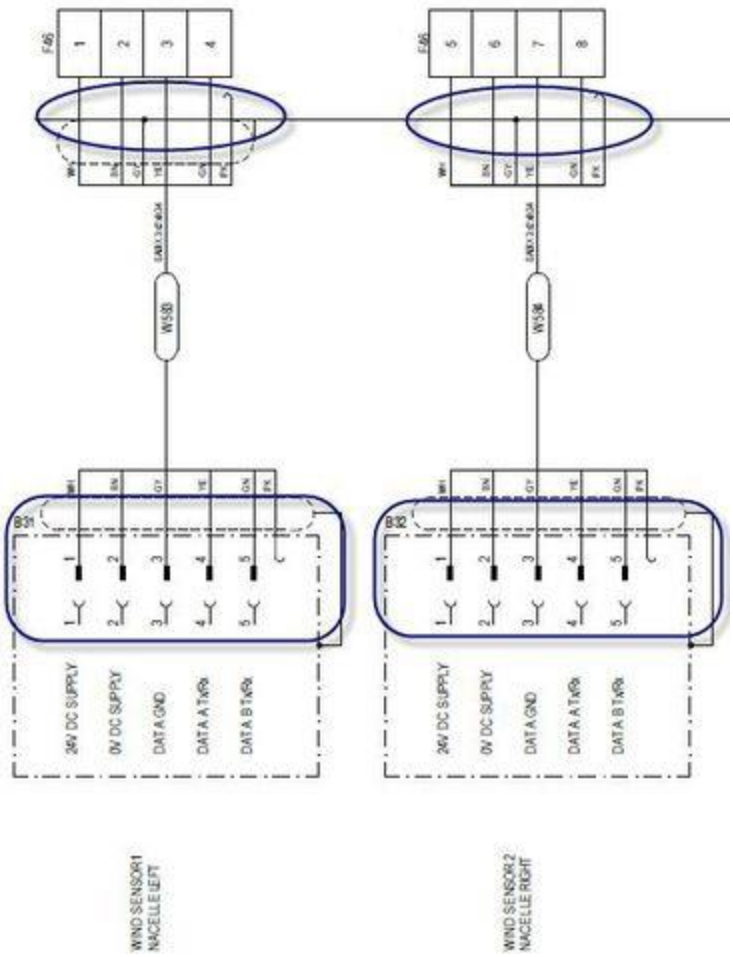
Check the sensor terminal pins for any corrosion, moisture or damage.

Check the connection in between sensor cable and sensors.
Ensure the cable is connected properly and is not loose. The connector can easily be mounted incorrectly. If the cable is mounted tight and it pulls in the sensor connector, it must be rerouted so that it is not pulling the plug.

RED dot should be matched on the cable plug and the sensor plug.



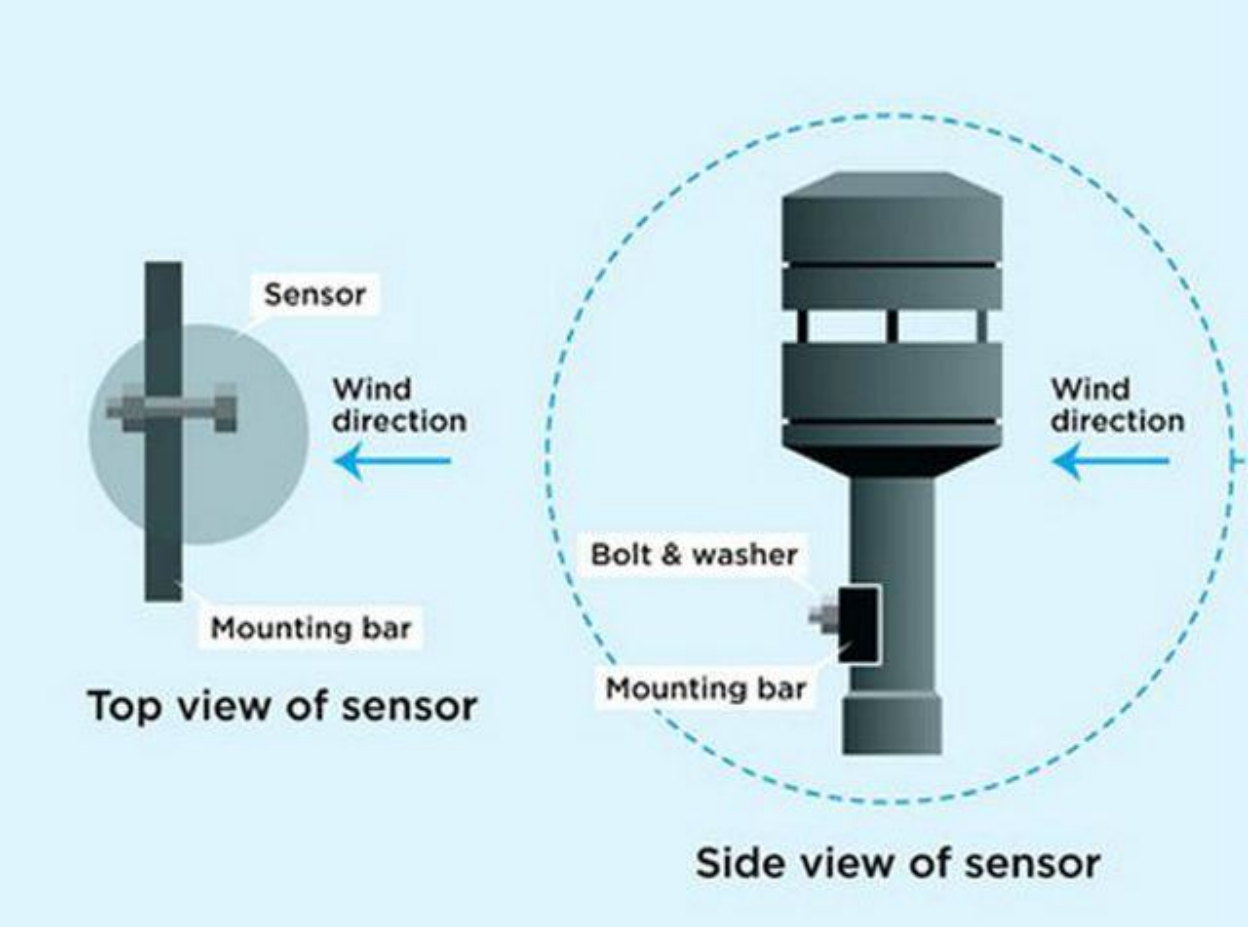
Ensure proper installation of the protective boot.



Check the varister F46 ultrasonic sensor connections as per the diagram and check for any loose wire connections.

Refer to drawing No: 934705 page 049 “External Connections Wind Sensors”.

Check that the wind sensor is fixed properly and ensure there is no loosening of the fixing bolts.



Check for cable failure by measuring the continuity. Replace any faulty cables with new.

W583 and W584.

Item No. 60106332 CABLE for FT702/LT 9m

Replace the defective varistor or repeater

Does this solve the problem?

1] Yes

2] No

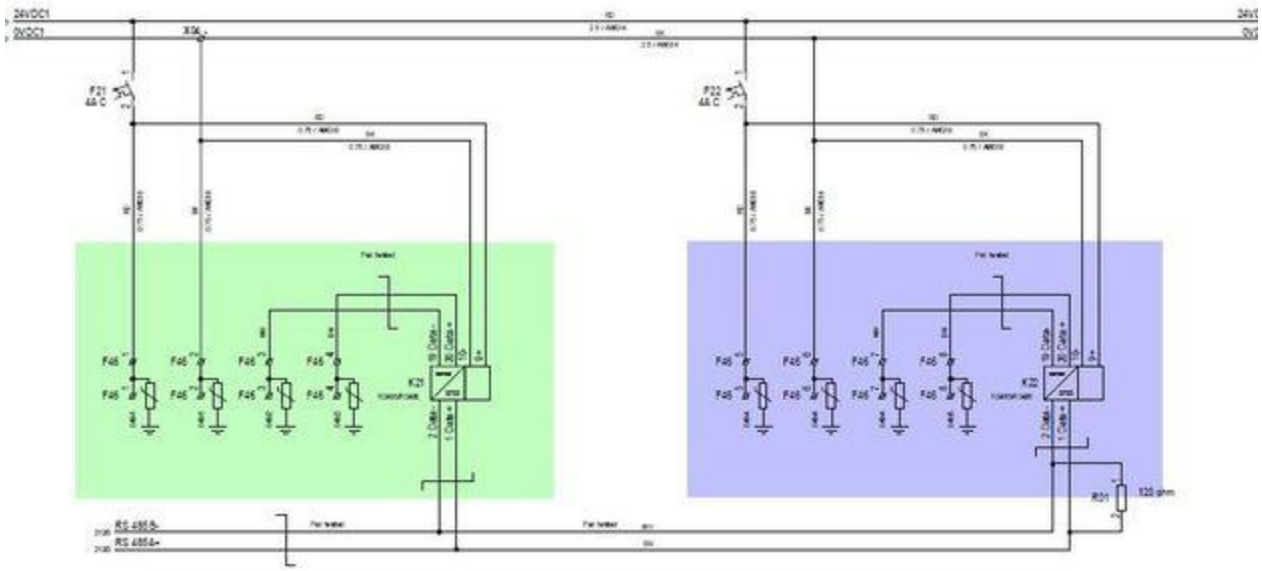
3] I don't know

- **Explanation**

IN THE +AN1 PANEL:

Check repeaters by replacing one with a new one. Replace any defective repeaters with new.

Refer to drawing No: 934705 page 214 “Wind Sensor Connections”.


24VDC1
0VDC1
X04
F21
4A C
F22
4A C
F45
K23
K22
19 Data-
20 Data+
15
9+
2 Data-
1 Data+
R21
120 ohm
RS 485/B-
RS 485/A+
24VDC WIND SENSOR 1
NACELLE LEFT
DATA B TxRx
WINDSENSOR 1 NACELLE LEFT
DATA A TxRx
WINDSENSOR 1 NACELLE LEFT
24VDC WIND SENSOR 2
NACELLE RIGHT
DATA B TxRx
WINDSENSOR 2 NACELLE RIGHT
DATA A TxRx
WINDSENSOR 2 NACELLE RIGHT

Item No. 60004933 RS485/RS485 REPEATER I-75

Check varistor box connections and function with a multimeter. Replace the varistor box if it is defective.

Item No. 51706201 VARISTOR BOX X8

Check wind sensor alignment correct if any deviations.

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

IN THE NACELLE:

Check the wind sensor alignment as per procedures. Correct the wind sensor alignment using the laser boy kit.

Refer 0000-9925 Commissioning Instruction, V82-1.65 MW

Using this 3 fixing points we can adjust the sensor fixing stands.
After adjustment of required level again perform the sensor alignment and check to ensure there is no deviation.