
7.2.1.8 TXRX(Fan2)

[1] Content

There is a problem with the motor cooling fan in the transmitter-receiver unit.

[2] Problem location

[2]-1 Fan (motor and motor driver) (NKE-1125/2254/1130, NTG-3225/3230)

- Check the insertion status of J1114 in CMC-1205R
- Replace B104(NKE-1130) or B202(NKE-1125, NKE-2254) (*see 4.1.2.5, 4.1.4.12 and 4.1.6.11*)

7.2.1.9 TXRX(Motor)

[1] Content

There is a problem with the motor in the scanner unit.

[2] Problem location

[2]-1 Motor in the scanner unit

- Check the wiring of the motor.
- Replace motor B101 (The model name of motor B101 varies with the scanner unit.) (*see 4.1.2.3, 4.1.3.2, 4.1.4.3, 4.1.5.2, 4.1.6.3 and 4.1.7.3*)

7.2.1.10 TXRX(AZI)

[1] Content

The antenna rotation signal is not being output from the scanner unit. When this message appears, radar transmission is forcibly stopped.

There are two possible cases: 1) the motor is not rotating, and 2) the rotation signal is not being output. First, check that the motor is rotating.

If the motor is not rotating and wind blow very strong, it remains possible that the motor driving system has not a problem. If the radiator is subjected to external force of wind (corresponding wind speed is greater than 51.5m/s) that exceed the ability to drive the scanner unit, the scanner unit stop to drive the motor. Because a built-in overload protection circuit is activated. In this case, the alarm is appeared, but the equipment is not faulty. The radar transmit normally when the wind has calm down less than or equal to 51.5m/s.(*see 2.3.1, 7.2.1.3*)

If the motor is not rotating, it is possible that there is a problem with the motor, relay circuit CSC-656, the installation cable, power supply circuit CBD-1661 in the display unit, or AC / DC converter NBA-5135 in the display unit.

If the motor is rotating, it is possible there is a problem with the encoder or T/R control circuit CMC-1205R.

[2] Problem location

[2]-1 Scanner unit installation cable (NKE-1125/1129/2254/1130/1139)

- Check the scanner unit installation cable.
TB103/TB203 φA,φB
TB104/TB204 VERR/E
TB103/TB202 U1/V1
- Check the installation cable. (NKE-2103)

[2]-2 Display unit NBA-5135

- If the scanner unit is NKE-2103/2254, check the input/output of NBA5135.
TB521 U/V: Ship' s mains voltage
TB522 +/- : DC24V
Check fuse F501 of NBA-5135 and replace it , it is blown.(see 4.3.3.13)
Replace NBA-5135.(see 4.3.3.12)

[2]-3 Motor in the scanner unit

- Check the wiring of motor B101.
- Replace motor B101. (The model name of motor B101 varies with the scanner unit.)(see 4.1.2.3, 4.1.3.2, 4.1.4.3, 4.1.5.2, 4.1.6.3 and 4.1.7.3)

[2]-4 Scanner unit encoder

- Check the wiring of encoder B102.
- Replace encoder B102. (The model name of encoder B102 varies with the scanner unit.)(see 4.1.2.13, 4.1.3.4, 4.1.4.11, 4.1.5.4, 4.1.6.10 and 4.1.7.8)

[2]-5 CMC-1205R in transmitter-receiver unit (NKE-1125/2254/1130, NTG-3225/3230)

- Check the insertion status of J13 in CMC-1205R.
- Replace CMC-1205R. (see 4.1.2.10, 4.1.4.9, 4.1.6.8, 4.2.2.5 and 4.2.3.5)

[2]-6 CSC-656 in transmitter-receiver unit (NKE-1125/1129/2254/1130/1139)

- Check that all the connectors for CSC-656 are inserted.
- Replace CSC-656. (see 4.1.2.11 and 4.1.4.5)

[2]-7 CBD-1661 in display unit

- Check the U1/V1 connection on CBD-1661.
- Replace CBD-1661 (, the relay in CBD-1661 is damaged).(see 4.3.3.1)

[2]-8 CME-363: Modulator circuit for NKE-2103

- Check the insertion status of J201 and J208 in CME-363
- Replace CME-363. (see 4.1.7.5)

[2]-9 NRG-610: Receiver unit for NKE-2103

- Check the insertion status of J301 in CAE-529-1.
- Replace NRG-610. (see 4.1.7.7)

[2]-10 CBD-1783: Power supply circuitt for NKE-2103

- Check the insertion status of J1002 and J1003 in CBD-1783.
- Replace CBD-1783. (see 4.1.7.6)

[2]-11 Internal cable for Scanner unit

- Check the internal cable.(NKE-2103)

7.2.1.11 TXRX(HL)

[1] Content

The antenna's reference point signal is not being output from the scanner unit. When this message appears, radar transmission is forcibly stopped.

There are two possibilities: 1) the motor is not rotating and 2) the reference point signal is not being output.

First, check that the motor is rotating.

If the motor is not rotating, it is possible there is a fault in the motor, relay circuit CSC-656, installation cable, display unit power supply circuit CBD-1661, or AC/DC converter NBA-5135 in the display unit.

If the motor is rotating, it is possible that there is a fault in the encoder or T/R control circuit CMC-1205R.

[2] Problem location

[2]-1 Scanner unit installation cable (NKE-1125/1129/2254/1130/1139)

- Check the scanner unit installation cable.

TB103/TB203 φA,φB
 TB104/TB204 VERR/E
 TB103/TB202 U1/V1

[2]-2 Display unit NBA-5135

- If the scanner unit is NKE-2103/2254, check the input/output of NBA5135.

TB521 U/V: Ship' s mains voltage
 TB522 +/- : DC24V
 Check fuse F501 of NBA-5135 and replace it , it is blown.(see 4.3.3.13)

- Replace NBA-5135. (see 4.3.3.12)

[2]-3 Motor in the scanner unit

- Check the wiring of motor B101.
- Replace motor B101. (The model name of motor B101 varies with the scanner unit.)(see 4.1.2.3, 4.1.3.2, 4.1.4.3, 4.1.5.2, 4.1.6.3 and 4.1.7.3)

[2]-4 Scanner unit encoder

- Check the wiring of encoder B102.