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FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2002 LEXUS IS Sport Cross OEM Service and Repair Workshop Manual

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| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|----------------------------|---|---------------------|
| E16-1 (GND1) - Body ground | Cable disconnected from negative (-) battery terminal | Below 1 Ω |

(c) Reconnect the cable to the negative (-) battery terminal.

(d) Measure the voltage according to the value(s) in the table below.

Standard Voltage:



[Click Location & Routing\(E16\).](#)

[Click Connector\(E16\).](#)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-----------------------------|---------------------|---------------------|
| E16-15 (IG) - Body ground | Ignition switch ON | 11 to 14 V |
| E16-4 (+B1) - Body ground | Always | 11 to 14 V |
| E16-16 (ACC1) - Body ground | Ignition switch ACC | 11 to 14 V |

OK ► REPLACE RADIO AND DISPLAY RECEIVER ASSEMBLY

NG ► REPAIR OR REPLACE HARNESS OR CONNECTOR

- Inspect the fuses for circuits related to this system before performing the following procedure.
- Before measuring the resistance of the CAN bus, turn the ignition switch off and leave the vehicle for 1 minute or more without operating the key or any switches, or opening or closing the doors. After that, disconnect the cable from the negative (-) battery terminal and leave the vehicle for 10 minutes or more before measuring the resistance.
- After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) battery terminal.

Click here [INFO](#)

- When disconnecting and reconnecting the battery.

HINT:

When disconnecting and reconnecting the battery, there is an automatic learning function that completes learning when the respective system is used.

Click here [INFO](#)

- Some parts must be initialized and set when replacing or removing and installing parts.

Click here [INFO](#)

- After performing repairs, perform the DTC check procedure and confirm that the DTCs are not output again.

DTC check procedure: Turn the ignition switch to ON and wait for 1 minute or more. Then operate the suspected malfunctioning system and drive the vehicle at 60 km/h (37 mph) or more for 5 minutes or more.

- After the repair, perform the CAN bus check and check that all the ECUs and sensors connected to the CAN communication system are displayed as normal.

Click here [INFO](#)

HINT:

- Before disconnecting related connectors for inspection, push in on each connector body to check that the connector is not loose or disconnected.
- When a connector is disconnected, check that the terminals and connector body are not cracked, deformed or corroded.

PROCEDURE

| | |
|-----------|--|
| 1. | CHECK FOR OPEN IN CAN BUS WIRE (BLIND SPOT MONITOR SENSOR LH (B) BRANCH WIRE) |
|-----------|--|

- (a) Disconnect the cable from the negative (-) battery terminal.
- (b) Disconnect the K8 blind spot monitor sensor LH (B) connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(K8\).](#)
[Click Connector\(K8\).](#)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---------------------------|---|---------------------|
| K8-3 (CA1P) - K8-2 (CA1N) | Cable disconnected from negative (-) battery terminal | 54 to 69 Ω |

NG **REPAIR OR REPLACE CAN BRANCH WIRE OR CONNECTOR**

| | | |
|--|---------------------|--------------------------------------|
| Last Modified: 10-07-2024 | 6.11:8.1.0 | Doc ID: RM100000002HACM |
| Model Year Start: 2024 | Model: GX550 | Prod Date Range: [12/2023 -] |
| Title: NETWORKING: CAN COMMUNICATION SYSTEM: Parking Assist ECU Communication Stop Mode; 2024 MY GX550 [12/2023 -] | | |

Parking Assist ECU Communication Stop Mode

DESCRIPTION

| DETECTION ITEM | SYMPTOM | TROUBLE AREA |
|--|--|--|
| Parking Assist ECU Communication Stop Mode | Communication stop for "Panoramic View Monitor / Circumference Monitoring Camera Control Module" is indicated on the "Communication Bus Check" screen of the GTS. Click here INFO | <ul style="list-style-type: none"> • Parking assist ECU branch wire or connector • Power source circuit of parking assist ECU • Parking assist ECU ground circuit • Parking assist ECU |

WIRING DIAGRAM

For the circuit diagram of the parking assist ECU source refer to the panoramic view monitor system.

Click here [INFO](#)



CAUTION / NOTICE / HINT

CAUTION:

When performing the confirmation driving pattern, obey all speed limits and traffic laws.

NOTICE:

- Because the order of diagnosis is important to allow correct diagnosis, make sure to begin troubleshooting using How to Proceed with Troubleshooting when CAN communication system related DTCs are output.

Click here [INFO](#)

- Inspect the fuses for circuits related to this system before performing the following procedure.

2. CHECK PARKING ASSIST ECU POWER SOURCE CIRCUIT

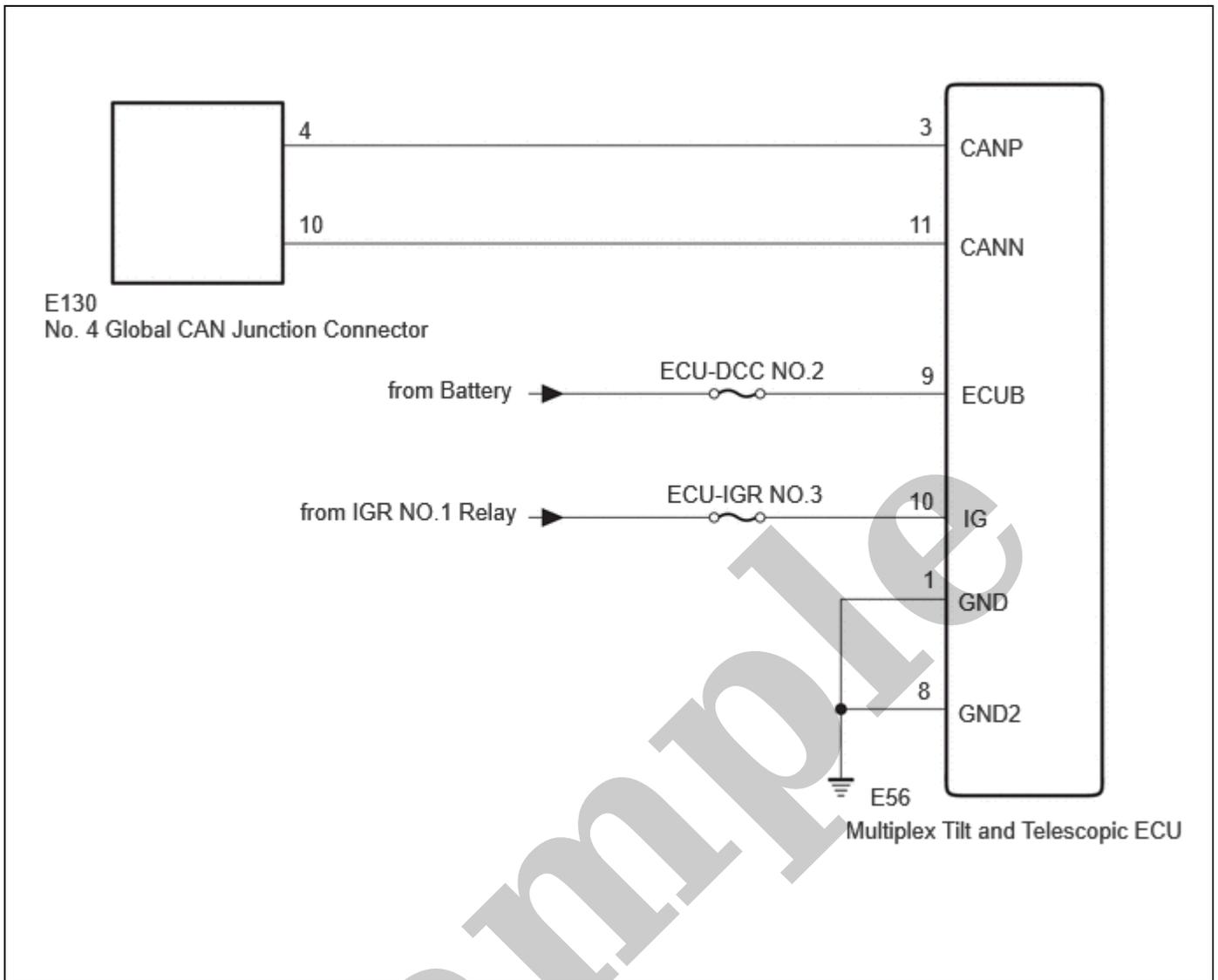
(a) Check the parking assist ECU power source circuit.

Click here 

OK  **REPLACE PARKING ASSIST ECU**

NG  **REPAIR OR REPLACE HARNESS OR CONNECTOR**

Sample



CAUTION / NOTICE / HINT

CAUTION:

When performing the confirmation driving pattern, obey all speed limits and traffic laws.

NOTICE:

- Because the order of diagnosis is important to allow correct diagnosis, make sure to begin troubleshooting using How to Proceed with Troubleshooting when CAN communication system related DTCs are output.

Click here [INFO](#)

- Inspect the fuses for circuits related to this system before performing the following procedure.
- Before measuring the resistance of the CAN bus, turn the ignition switch off and leave the vehicle for 1 minute or more without operating the key or any switches, or opening or closing the doors. After that, disconnect the cable from the negative (-) battery terminal and leave the vehicle for 10 minutes or more before measuring the resistance.
- After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) battery terminal.

Click here [INFO](#)

- When disconnecting and reconnecting the battery.

HINT:

When disconnecting and reconnecting the battery, there is an automatic learning function that completes learning when the respective system is used.

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|----------------------------|---|---------------------|
| E56-1 (GND) - Body ground | Cable disconnected from negative (-) battery terminal | Below 1 Ω |
| E56-8 (GND2) - Body ground | Cable disconnected from negative (-) battery terminal | Below 1 Ω |

(b) Reconnect the cable to the negative (-) battery terminal.

(c) Measure the voltage according to the value(s) in the table below.

Standard Voltage:



[Click Location & Routing\(E56\).](#)

[Click Connector\(E56\).](#)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|----------------------------|--------------------|---------------------|
| E56-9 (ECUB) - Body ground | Always | 11 to 14 V |
| E56-10 (IG) - Body ground | Ignition switch ON | 11 to 14 V |

OK ► REPLACE MULTIPLEX TILT AND TELESCOPIC ECU

NG ► REPAIR OR REPLACE HARNESS OR CONNECTOR

CAUTION / NOTICE / HINT

CAUTION:

When performing the confirmation driving pattern, obey all speed limits and traffic laws.

NOTICE:

- Because the order of diagnosis is important to allow correct diagnosis, make sure to begin troubleshooting using How to Proceed with Troubleshooting when CAN communication system related DTCs are output.

[Click here](#) **INFO**

- Inspect the fuses for circuits related to this system before performing the following procedure.
- Before measuring the resistance of the CAN bus, turn the ignition switch off and leave the vehicle for 1 minute or more without operating the key or any switches, or opening or closing the doors. After that, disconnect the cable from the negative (-) battery terminal and leave the vehicle for 10 minutes or more before measuring the resistance.
- After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) battery terminal.

[Click here](#) **INFO**

- When disconnecting and reconnecting the battery.

HINT:

When disconnecting and reconnecting the battery, there is an automatic learning function that completes learning when the respective system is used.

[Click here](#) **INFO**

- Some parts must be initialized and set when replacing or removing and installing parts.

[Click here](#) **INFO**

- After performing repairs, perform the DTC check procedure and confirm that the DTCs are not output again.

DTC check procedure: Turn the ignition switch to ON and wait for 1 minute or more. Then operate the suspected malfunctioning system and drive the vehicle at 60 km/h (37 mph) or more for 5 minutes or more.

- After the repair, perform the CAN bus check and check that all the ECUs and sensors connected to the CAN communication system are displayed as normal.

[Click here](#) **INFO**

HINT:

- Before disconnecting related connectors for inspection, push in on each connector body to check that the connector is not loose or disconnected.
- When a connector is disconnected, check that the terminals and connector body are not cracked, deformed or corroded.

PROCEDURE

1. CHECK FOR OPEN IN CAN BUS WIRE (DCM (TELEMATICS TRANSCEIVER) BRANCH WIRE)

- Disconnect the cable from the negative (-) battery terminal.
- Disconnect the E66 DCM (telematics transceiver) connector.
- Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(E66\).](#)

[Click Connector\(E66\).](#)

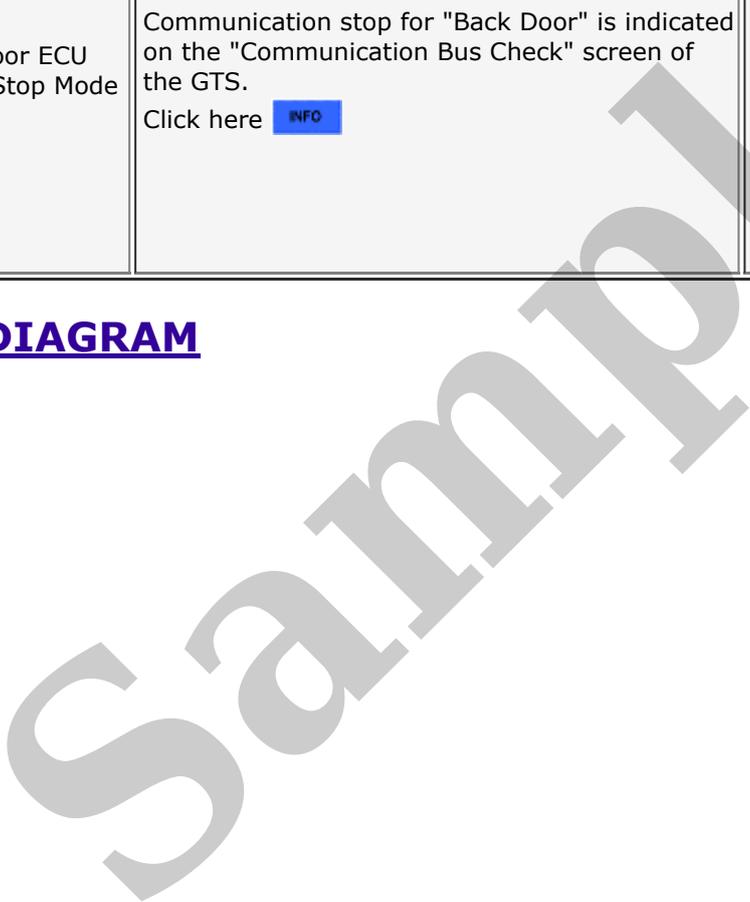
| | | |
|---|---------------------|--------------------------------------|
| Last Modified: 10-07-2024 | 6.11:8.1.0 | Doc ID: RM100000002HACP |
| Model Year Start: 2024 | Model: GX550 | Prod Date Range: [12/2023 -] |
| Title: NETWORKING: CAN COMMUNICATION SYSTEM: Power Back Door ECU Communication Stop Mode; 2024 MY GX550 [12/2023 -] | | |

Power Back Door ECU Communication Stop Mode

DESCRIPTION

| DETECTION ITEM | SYMPTOM | TROUBLE AREA |
|---|--|--|
| Power Back Door ECU Communication Stop Mode | Communication stop for "Back Door" is indicated on the "Communication Bus Check" screen of the GTS. Click here INFO | <ul style="list-style-type: none"> • Multiplex network door ECU branch wire or connector • Power source circuit of multiplex network door ECU • Multiplex network door ECU ground circuit • Multiplex network door ECU |

WIRING DIAGRAM



[Click here](#) **INFO**

- Some parts must be initialized and set when replacing or removing and installing parts.

[Click here](#) **INFO**

- After performing repairs, perform the DTC check procedure and confirm that the DTCs are not output again.
 DTC check procedure: Turn the ignition switch to ON and wait for 1 minute or more. Then operate the suspected malfunctioning system and drive the vehicle at 60 km/h (37 mph) or more for 5 minutes or more.
- After the repair, perform the CAN bus check and check that all the ECUs and sensors connected to the CAN communication system are displayed as normal.

[Click here](#) **INFO**

HINT:

- Before disconnecting related connectors for inspection, push in on each connector body to check that the connector is not loose or disconnected.
- When a connector is disconnected, check that the terminals and connector body are not cracked, deformed or corroded.

PROCEDURE

1. CHECK FOR OPEN IN CAN BUS WIRE (MULTIPLEX NETWORK DOOR ECU BRANCH WIRE)

- (a) Disconnect the cable from the negative (-) battery terminal.
- (b) Disconnect the U19 multiplex network door ECU connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(U19\).](#)
[Click Connector\(U19\).](#)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|-------------------------------|---|---------------------|
| U19-10 (CANP) - U19-20 (CANN) | Cable disconnected from negative (-) battery terminal | 54 to 69 Ω |

NG ▶ **REPAIR OR REPLACE CAN BRANCH WIRE OR CONNECTOR**



2. CHECK HARNESS AND CONNECTOR (POWER SOURCE CIRCUIT)

- (a) Disconnect the U21 and U22 multiplex network door ECU connectors.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(U21\).](#)
[Click Connector\(U21\).](#)