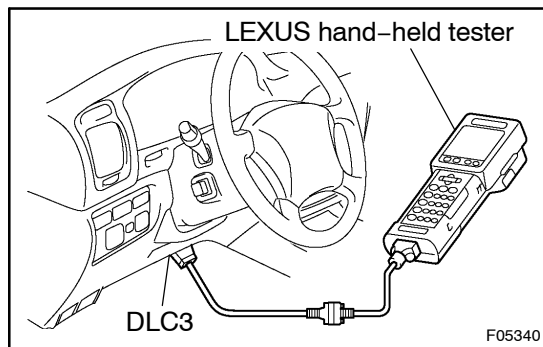




PRE-CHECK

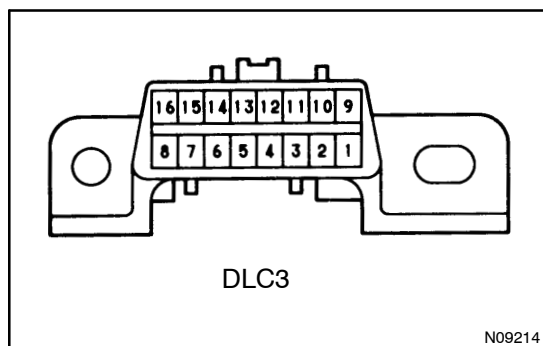
1. DESCRIPTION

(a) DIAGNOSIS SYSTEM

When troubleshooting Multiplex OBD (M-OBD) vehicles, the only difference from the usual troubleshooting procedure is that you connect the LEXUS hand-held tester to vehicle, and read off various data output from the vehicle's Power Tilt and Telescopic Steering ECU.

The Power Tilt and Telescopic Steering ECU records the applicable DTCs when the computer detects a malfunction in the computer itself or its circuit.

To check the DTCs, connect a LEXUS hand-held tester to DLC3 on the vehicle. The LEXUS hand-held tester enables you to erase the DTCs and activate the several actuators and check freeze frame data and various forms on steering data.



(b) DATA LINK CONNECTOR 3 (DLC3)

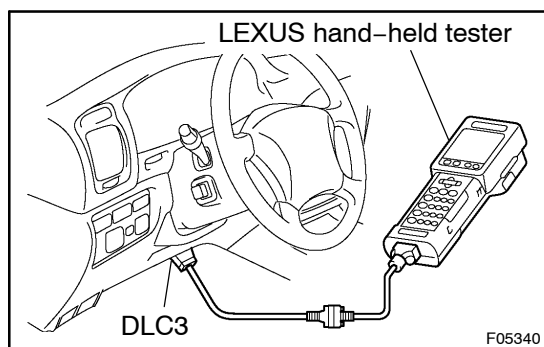
The Power Tilt and Telescopic Steering ECU uses ISO 14230 for communication. The terminal arrangement of DLC3 complies with SAE J1962 and matches the ISO 14230 format.

Terminal No.	Connection	Voltage or Resistance	Condition
7	Bus + Line	Pulse generation	During transmission
4	Chassis Ground	↔ Body Ground 1 Ω or less	Always
5	Signal Ground	↔ Body Ground 1 Ω or less	Always
16	Battery Positive	↔ Body Ground 9 – 14 V	Always

HINT:

If your display shows "UNABLE TO CONNECT TO VEHICLE" when you have connected the cable of LEXUS hand-held tester to DLC3, turned the ignition switch ON and operated the LEXUS hand-held tester, there is a problem on the vehicle side or tester side.

- If communication is normal when the tester is connected to another vehicle, inspect DLC3 on the original vehicle.
- If communication is still not possible when the tester is connected to another vehicle, the problem is probably in the tester itself, so consult the Service Department listed in the tester's Operator's Manual.



2. DIAGNOSIS INSPECTION

- (a) Check the DTC.
 - (1) Prepare the LEXUS hand-held tester
 - (2) Connect the LEXUS hand-held tester to DLC3 at the lower of the instrument panel.
 - (3) Turn the ignition switch ON and turn the LEXUS hand-held tester switch ON.
 - (4) Use the LEXUS hand-held tester to check the DTCs and freeze frame data, note or print them (See the Operator's Manual for operating instructions.).
 - (5) See page [DI-458](#) to confirm the details of the DTC.
- (b) Clear the DTC.

The following actions will erase the DTC and freeze frame data.

 - When using the LEXUS hand-held tester:
Operating the LEXUS hand-held tester to erase the DTCs (See the Operator's Manual for operating instructions.).
 - When not using the LEXUS hand-held tester :
Disconnecting the battery terminals.