

DIAGNOSIS SYSTEM

1. DESCRIPTION

(a) DIAGNOSTIC SYSTEM

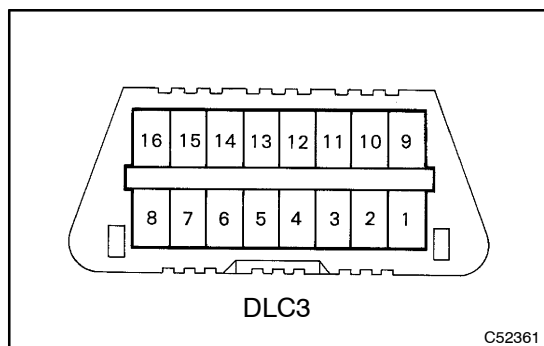
When troubleshooting a vehicle with the diagnosis system, the only difference from the usual troubleshooting procedure is connecting the intelligent tester II to the vehicle and reading various data output from the vehicle's clearance warning ECU.

The clearance warning ECU records DTCs when the computer detects a malfunction in the computer itself or in its circuits.

To check the DTCs, connect the intelligent tester II to the DLC3 on the vehicle. The intelligent tester II enables you to erase the DTCs, activate the several actuators and check the freeze frame data and data list.

(b) Check the DLC3.

The clearance warning ECU follows CAN and the ISO 9141-2 (Euro-OBD)/ISO 14230 (M-OBD) communication protocol. The terminal arrangement of the DLC3 complies with the ISO 15031-3 and matches the ISO 9141-2/ISO 14230 format.



Symbols (Terminals No.)	Terminal Description	Condition	Specified Condition
SIL(7) – SG(5)	Bus "+" line	During communication	Pulse generation
CG(4) – Body ground	Chassis ground	Always	Below 1 Ω
SG(5) – Body ground	Signal ground	Always	Below 1 Ω
BAT(16) – Body ground	Battery positive	Always	11 to 14 V
CANH(6) – CANL (14)	HIGH-level CAN bus line	IG switch OFF	54 to 67 Ω
CANH(6) – Battery positive	HIGH-level CAN bus line	IG switch OFF	1 M Ω or higher
CANH(6) – CG(4)	HIGH-level CAN bus line	IG switch OFF	3 K Ω or higher
CANL(14) – Battery positive	LOW-level CAN bus line	IG switch OFF	1 M Ω or higher
CANL(14) – CG(4)	LOW-level CAN bus line	IG switch OFF	3 K Ω or higher

HINT:

If the display shows "UNABLE TO CONNECT TO VEHICLE" after connecting the intelligent tester II cable to the DLC3 and turning the ignition switch to the ON position, there is either a problem with the vehicle or tester.

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