DIAGNOSIS SYSTEM

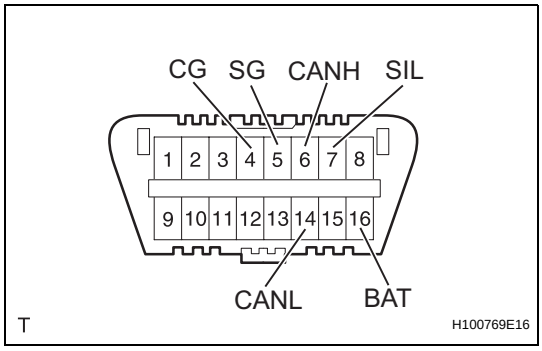
1. DESCRIPTION

When troubleshooting a vehicle with the diagnosis system, the only difference from the usual troubleshooting procedure is connecting the intelligent tester 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 to the DLC3 on the vehicle. The intelligent tester enables you to erase the DTCs, activate the various actuators, and check the freeze frame data and Data List.

2. CHECK DLC3



(a) The ECU uses ISO 15765-4 for communication. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 15765-4 format.

If the result is not as specified, the DLC3 may have a malfunction. Repair or replace the harness or connector.

DL

Symbols (Terminal No.)	Terminal Description	Condition	Specified Condition
SIL (7) - SG (5)	Bus "+" line	During transmission	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)	CAN bus line	Ignition switch OFF*	54 to 69 Ω
CANH (6) - CG (4)	HIGH-level CAN bus line	Ignition switch OFF*	200 Ω or higher
CANL (14) - CG (4)	LOW-level CAN bus line	Ignition switch OFF*	200 Ω or higher
CANH (6) - BAT (16)	HIGH-level CAN bus line	Ignition switch OFF*	6 kΩ or higher
CANL (14) - BAT (16)	LOW-level CAN bus line	Ignition switch OFF*	6 kΩ or higher

NOTICE:

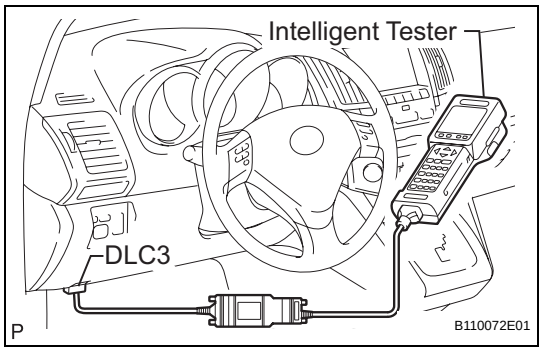
***: Before measuring the resistance, leave the vehicle as is for at least 1 minute and do not operate the ignition switch, any other switches or the doors.**

HINT:

If the display shows a communication error message after connecting the intelligent tester to the DLC3 and turning the ignition switch to the ON position, there is a problem with either the vehicle or the tool (intelligent tester only).

- If communication is normal when the tester is connected to another vehicle, inspect the DLC3 on the original vehicle.

- If communication is still impossible when the tester is connected to another vehicle, the problem is probably in the tester itself. Consult the Service Department listed in the tester's instruction manual.



DTC CHECK / CLEAR

1. DTC CHECK/CLEAR (USING INTELLIGENT TESTER:)

(a) DTC check

(1) Connect the intelligent tester to the DLC3.

(2) Turn the ignition switch to the ON position.

(3) Read the DTCs on the tester screen.

(b) DTC clear

(1) Connect the intelligent tester to the DLC3.

(2) Turn the ignition switch to the ON position.

(3) Clear the DTCs following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.