DIAGNOSIS SYSTEM

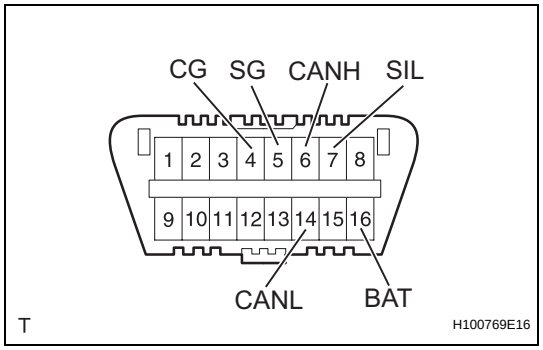
1. DESCRIPTION

(a) 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.

Standard

Symbol (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	Power switch OFF*	54 to 69 Ω
CANH (6) - CG (4)	HIGH-level CAN bus line	Power switch OFF*	200 Ω or higher
CANL (14) - CG (4)	LOW-level CAN bus line	Power switch OFF*	200 Ω or higher
CANH (6) - BAT (16)	HIGH-level CAN bus line	Power switch OFF*	6 kΩ or higher
CANL (14) - BAT (16)	LOW-level CAN bus line	Power 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:

Connect the cable of the intelligent tester to the DLC3, turn the power switch ON (IG) and attempt to use the tester. If the display indicates that a communication error has occurred, there is a problem either with the vehicle or with the tester.

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

- If communication is still impossible 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 instruction manual.