DIAGNOSIS SYSTEM

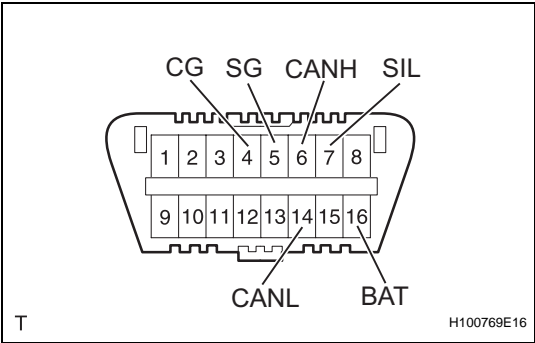### 1. DESCRIPTION

(a) Wireless door lock control system data and Diagnostic Trouble Codes (DTCs) can be read through the Data Link Connector 3 (DLC3) of the vehicle. When the system seems to be malfunctioning, use the intelligent tester to check for malfunctions and perform repairs.

2. CHECK DLC3

The vehicle's ECU uses the ISO 15765-4 communication protocol. 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 and connector.

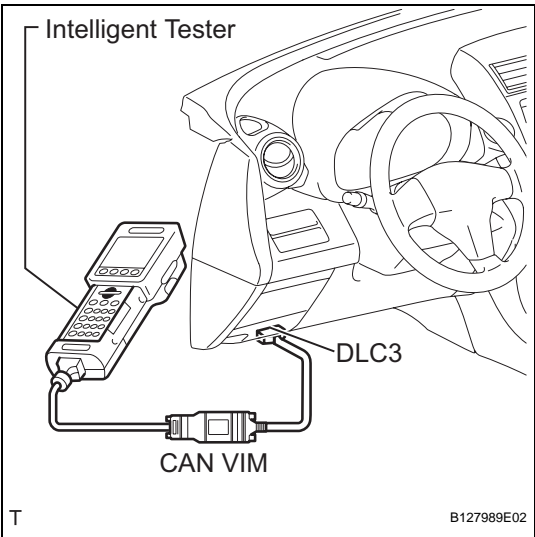| Symbols (Terminal No.)	Terminal Description	Condition	Specified Condition
SIL (7) - SG (5)	Bus "+" line	During transmission	Pulse generation
CG (4) - Body ground	Chassis ground	Always	Below 1 Ω
SG (5) - Body ground	Signal ground	Always	Below 1 Ω
BAT (16) - Body ground	Battery positive	Always	11 to 14 V
CANH (6) - CANL (14)	HIGH-level CAN bus line	Ignition switch off*	54 to 69 Ω
CANH (6) - Battery positive	HIGH-level CAN bus line	Ignition switch off*	1 kΩ or higher
CANH (6) - CG (4)	HIGH-level CAN bus line	Ignition switch off*	1 kΩ or higher
CANL (14) - Battery positive	LOW-level CAN bus line	Ignition switch off*	1 MΩ or higher
CANL (14) - CG (4)	LOW-level CAN bus line	Ignition switch off*	1 MΩ or higher

NOTICE:

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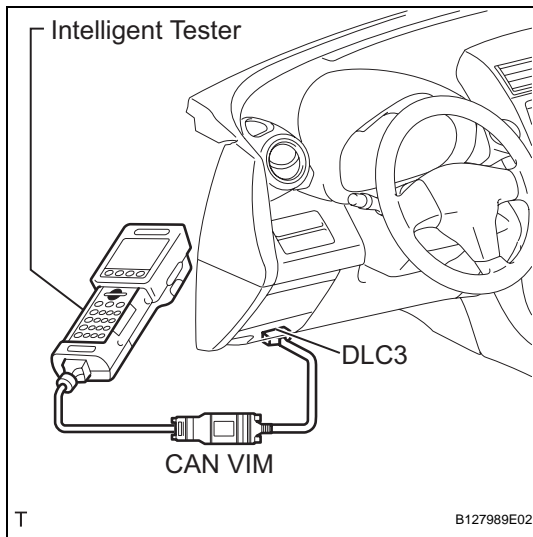
HINT:

Connect the cable of the intelligent tester (with CAN VIM) to the DLC3, turn the ignition switch ON and attempt to use the intelligent tester. If the screen displays UNABLE TO CONNECT TO VEHICLE, a problem exists in the vehicle side or the tester side.

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

If the communication is still not possible 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.

DL

Intelligent Tester

DLC3

CAN VIM

B127989E02

DTC CHECK / CLEAR

1. **CHECK DTC**
   (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
   (b) Turn the ignition switch ON and turn the intelligent tester ON.
   (c) Select the following menu items: DIAGNOSIS / OBD/MOBD / MAIN BODY / DTC INFO / CURRENT CODES.
   (d) Check DTCs and then write them down.
   HINT:
   Refer to the intelligent tester operator's manual for further details.
   (e) Confirm the details of the DTCs (see page DL-60).

2. **CLEAR DTC**
   (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
   (b) Turn the ignition switch ON (do not start the engine) and turn the intelligent tester ON.
   (c) Select the following menu items: DIAGNOSIS / OBD/MOBD / MAIN BODY / DTC INFO / CLEAR CODES.
   HINT:
   Refer to the intelligent tester operator's manual for further details.
   (d) Erase DTCs by pressing the YES button on the tester.
   HINT:
   Refer to the intelligent tester operator's manual for further details.

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