

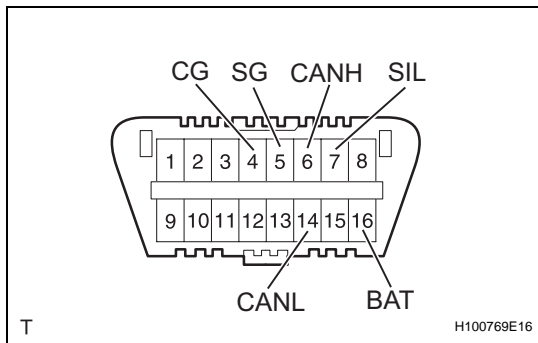
## DIAGNOSIS SYSTEM

### 1. DESCRIPTION

- (a) The main body ECU controls the functions of the multiplex communication system on the vehicle. Data of the multiplex communication system and the Diagnostic Trouble Codes (DTC) can be read through the Data Link Connector 3 (DLC3) of the vehicle.

### 2. CHECK DLC3

- (a) The ECU uses ISO 15765-4 for communication. The terminal arrangement of the DLC3 complies with ISO 15031-3 and matches the ISO 15765-4 format.

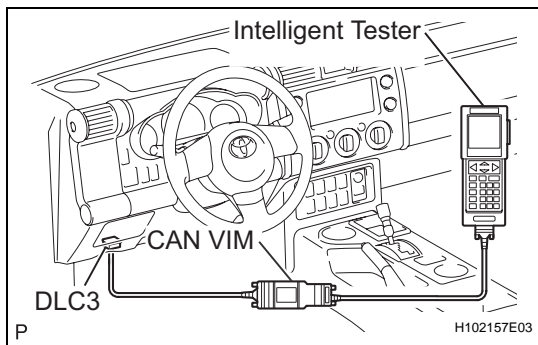


Symbols (Terminal No.)	Terminal Description	Condition	Specified Condition
SIL (7) - SG (5)	Bus "+" line	During transmission	Pulse generation
CG (4) - Body ground	Chassis ground	Always	Below 1 Ω
SG (5) - Body ground	Signal ground	Always	Below 1 Ω
BAT (16) - Body ground	Battery positive	Always	11 to 14 V
CANH (6) - CANL (14)	HIGH-level CAN bus line	Ignition switch OFF*	54 to 69 Ω
CANH (6) - CG (4)	HIGH-level CAN bus line	Ignition switch OFF*	200 Ω or more
CANL (14) - CG (4)	LOW-level CAN bus line	Ignition switch OFF*	200 Ω or more
CANH (6) - BAT (16)	HIGH-level CAN bus line	Ignition switch OFF*	6 kΩ or more
CANL (14) - BAT (16)	LOW-level CAN bus line	Ignition switch OFF*	6 kΩ or more

#### CAUTION:

\*: 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.

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



- (b) Intelligent tester

#### HINT:

Connect the cable of the intelligent tester to the CAN VIM, connect the CAN VIM to the DLC3, turn the ignition switch ON 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 not possible when the tester is connected to another vehicle, the problem may be in the tester itself. Consult the Service Department listed in the tester's instruction manual.

### 3. INSPECT BATTERY VOLTAGE

**Standard voltage:**

**11 to 14 V**

If the voltage is below 11 V, recharge or replace the battery before proceeding.

## DTC CHECK / CLEAR

### 1. CHECK DTC

- Connect the intelligent tester to the DLC3.
- Turn the ignition switch ON.
- Enter the following menus: DIAGNOSIS/OBD/MOBD/BODY/DTC INFO.
- Check the DTCs on the tester screen.

HINT:

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

### 2. CLEAR DTC

- Connect the intelligent tester to the DLC3.
- Turn the ignition switch ON.
- Erase the DTCs by following the prompts on the tester screen.
- Enter the following menus: DIAGNOSIS/OBD/MOBD/BODY/DTC INFO.

HINT:

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

