

- (b) Measure the voltage and resistance of the wire harness side connectors.

Standard:

Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	Specified Condition
1B-4 (BECU) Body ground	W-R - Body ground	Power source circuit (From battery)	Always	11 to 14 V
1H-2 (GND1) - Body Ground	W-B - Body ground	Ground	Always	Below 1V
1A-7 (GND2) - Body ground	W - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction in the wire harness.

- (c) Reconnect the main body ECU (driver side J/B) connectors.
 (d) Measure the voltage of the wire harness side connectors.

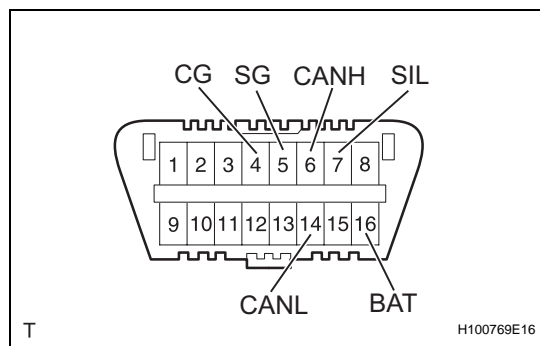
Standard voltage:

Symbols (Terminals No.)	Wiring Color	Terminal Description	Condition	Specified Condition
1F-8 (SIG) - Body ground	B-R - Body ground	Ignition switch signal	Ignition switch OFF → ON	Below 1V → 11 to 14V
E6-13 (DBKL) - Body ground	G-Y - Body ground	Front seat inner belt signal (Front driver side)	Ignition switch ON Front seat belt is unfastened (Front driver side)	Below 1 V
E6-13 (DBKL) - Body ground	G-Y - Body ground	Front seat inner belt signal (Front driver side)	Ignition switch ON Front seat belt is fastened (Front driver side)	11 to 14 V

If the result is not as specified, there may be a malfunction in the wire harness.

DIAGNOSIS SYSTEM**1. CHECK DLC3**

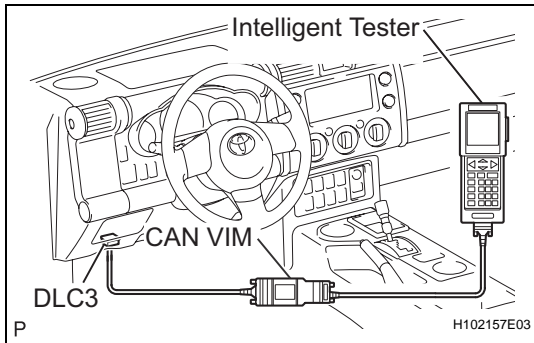
- (a) The ECU uses ISO 15765-4 for communication. The terminal arrangement of the DLC3 complies with ISO SAE J1962 and matches the ISO 15765-4 format.



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)	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.



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

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 is probably in the tester itself. Consult the Service Department listed in the tester's instruction manual.

2. INSPECT BATTERY VOLTAGE

Standard voltage:

11 to 14 V

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

3. INSPECT FRONT DRIVER SEAT BELT WARNING LIGHT

- (a) Turn the ignition switch ON.
- (b) When the driver seat belt is not fastened, check that the combination meter assembly driver seat belt warning light blinks.
- (c) When the seat belt is fastened, check that the combination meter assembly driver seat belt warning light turns off.

4. INSPECT FRONT PASSENGER SEAT BELT WARNING LIGHT

- (a) Turn the ignition switch ON.
- (b) When the front passenger seat is occupied, but the seat belt is not fastened, check that the front passenger seat belt warning light on the integration control and panel assembly blinks.
- (c) When the front passenger seat belt is fastened, check that the front passenger seat belt warning light turns off.

5. INSPECT SEAT BELT WARNING BUZZER USING DRIVER SEAT BELT

- (a) Turn the ignition switch ON.
- (b) When the driver seat belt is not fastened within 1.8 seconds of the ignition switch being turned ON, check that the seat belt warning buzzer sounds at 1.2 second intervals for 6 seconds.
- (c) When the driver seat belt is not fastened within 13.8 seconds of the ignition switch being turned ON and the vehicle speed reaches 12.4 mph (20 km/h) or more, check that the buzzer sounds at 1.2 second intervals for 9.6 seconds.
- (d) After the buzzer has sounded for 9.6 seconds, check that the buzzer sounds at 0.4 second intervals for a further 20 seconds.

- (e) When 29.6 seconds have elapsed since the buzzer started sounding in step (c) above, check that the buzzer stops sounding.
- (f) After the buzzer has stopped sounding, turn the ignition switch OFF and then start the engine again. With the driver seat belt unfastened, drive the vehicle at 12.4 mph (20 km/h) or more. Check that the buzzer sounds.
- (g) After the buzzer has stopped sounding, fasten the driver seat belt, drive the vehicle at 12.4 mph (20 km/h) or more, and then unfasten the seat belt. Check that the buzzer sounds.
- (h) After the buzzer has stopped sounding, move the shift lever to R. Then move the shift lever to D (for A/T only). With the driver seat belt unfastened, drive the vehicle at 12.4 mph (20km/h) or more. Check that the buzzer sounds.

6. INSPECT SEAT BELT WARNING BUZZER USING FRONT PASSENGER SEAT BELT

HINT:

If the following inspection is conducted by one person, since the front passenger seat belt warning buzzer function uses signals from the occupant classification sensors, place an object with a weight of 36 kg (79.37 lb) or more on the front passenger seat.

- (a) Turn the ignition switch ON.
- (b) When the front passenger seat belt is not fastened within 1.8 seconds of the ignition switch being turned ON, check that the seat belt warning buzzer sounds at 1.2 second intervals for 6 seconds.
- (c) When the front passenger seat belt is not fastened within 13.8 seconds of the ignition switch being turned ON and the vehicle speed reaches 12.4 mph (20 km/h) or more, check that the buzzer sounds at 1.2 second intervals for 9.6 seconds.
- (d) After the buzzer has sounded for 9.6 seconds, check that the buzzer sounds at 0.4 second intervals for a further 20 seconds.
- (e) When 29.6 seconds have elapsed since the buzzer started sounding in step (c) above, check that the buzzer stops sounding.
- (f) After the buzzer has stopped sounding, turn the ignition switch OFF and then start the engine again. With the front passenger seat belt unfastened, drive the vehicle at 12.4 mph (20 km/h) or more. Check that the buzzer sounds.
- (g) After the buzzer has stopped sounding, fasten the front passenger seat belt, drive the vehicle at 12.4 mph (20 km/h) or more, and then unfasten the front passenger seat belt. Check that the buzzer sounds.

- (h) After the buzzer has stopped sounding, move the shift lever to R. Then move the shift lever to D. With the front passenger seat belt unfastened, drive the vehicle at 12.4 mph (20km/h) or more. Check that the buzzer sounds.