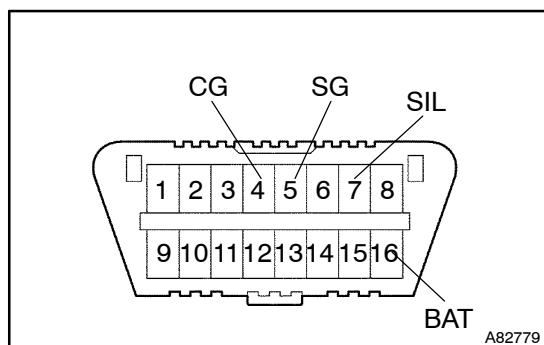


## DIAGNOSIS SYSTEM

### 1. DESCRIPTION

- (a) The ECM controls the vehicle's immobilizer system functions. Immobilizer system data and the Diagnostic Trouble Code (DTCs) can be read through the vehicle's Data Link Connector 3 (DLC3). In some cases, a malfunction may be occurring in the immobilizer system even though the security indicator lamp is not illuminated. When the system seems to be malfunctioning, use the intelligent tester II to check for malfunctions and perform repairs.

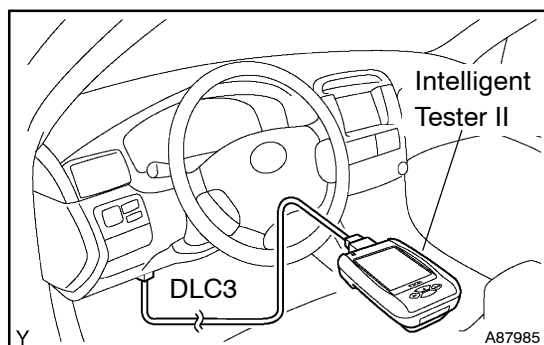


### 2. CHECK DLC3

The vehicle uses the ISO 15765-4 for communication protocol. The terminal arrangement of the DLC3 complies with ISO 15031-03 and matches the ISO 15765-4 format.

Symbol	Terminal No.	Name	Reference terminal	Result	Condition
SIL	7	Bus "+" line	5 – Signal ground	Pulse generation	During transmission
CG	4	Chassis ground	Body ground	1 $\Omega$ or less	Constant
SG	5	Signal ground	Body ground	1 $\Omega$ or less	Constant
BAT	16	Battery positive	Body ground	9 to 14 V	Constant

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 II to the DLC3, turn the ignition switch ON and attempt to use the intelligent tester II. If the screen displays UNABLE TO CONNECT TO VEHICLE, a problem may be on the vehicle side or tester side.

- 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 may be in the tester itself. Consult the Service Department listed in the tester's instruction manual.

### 3. CHECK BATTERY VOLTAGE

**Standard: 11 to 14 V**

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