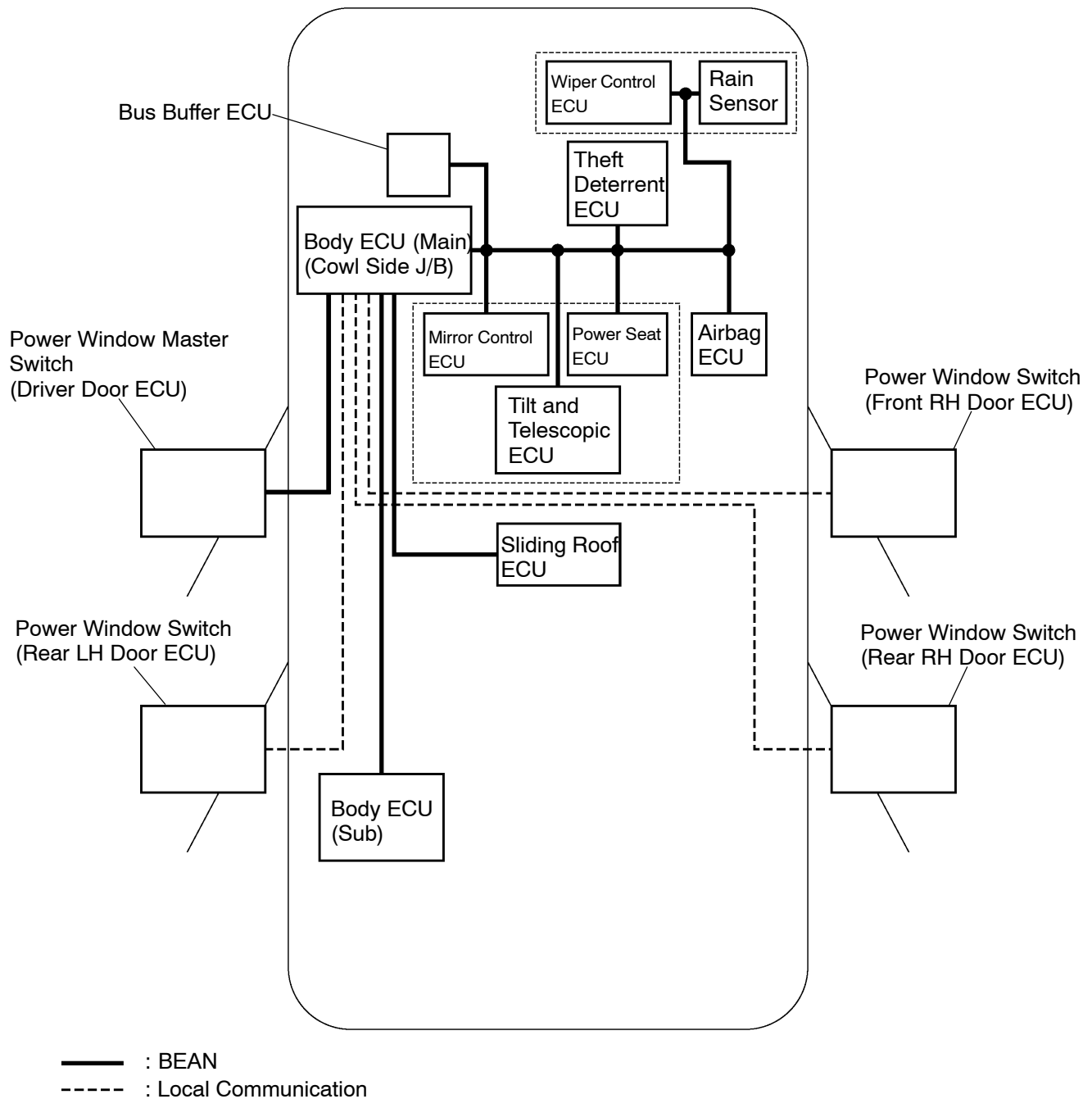


## PRE-CHECK

### 1. DIAGNOSIS SYSTEM

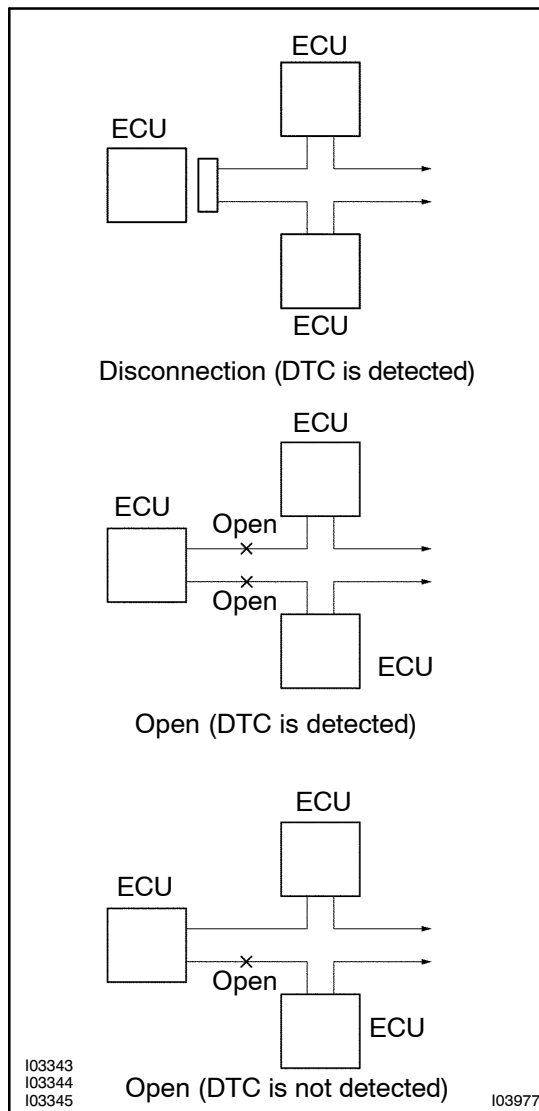
- (a) As shown in the following diagram, all ECU on this vehicle are connected each other via communication buses through which various signals are transmitted. These communication buses are diagnosed by the Body ECU (Main). When the Body ECU (Main) detects a communication error between ECU, or B+ short or GND short of a communication bus, a DTC is output and stored. The Body ECU (Main) cannot diagnose accurately unless it can function normally. Therefore, first confirm the normal condition by performing a "BASIC INSPECTION" described later, and then, troubleshoot against each DTC.

## Connection between each terminal and bus

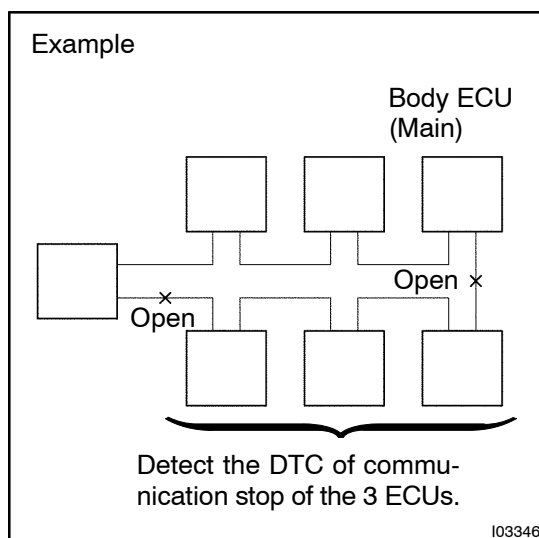


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- (b) If DTC of ECU communication stop is output, connectors may be disconnected, or communication buses may be open at 2 points. It will not become abnormal with only 1 communication bus open.



- (c) If 2 communication buses are open at the position as shown in the illustration, DTC of ECU communication stop between those 2 buses is output.

**2. BASIC INSPECTION****Inspect Body ECU (Main).**

- |   |                                                                             |
|---|-----------------------------------------------------------------------------|
| 1 | Check that the DTC can be read from Body ECU (Main) using hand-held tester. |
|---|-----------------------------------------------------------------------------|

**OK****Go to step 3 "DTC check".****NG**

- |   |                                                 |
|---|-------------------------------------------------|
| 2 | Check the Body ECU (Main) power source circuit. |
|---|-------------------------------------------------|

**PREPARATION:**

Disconnect the Body ECU (Main) connector.

**CHECK:**

Check voltage terminal BECU and GND.

**OK:****Voltage: 10 – 14 V****CHECK:**

Check continuity terminal GND1, GND2 and body ground.

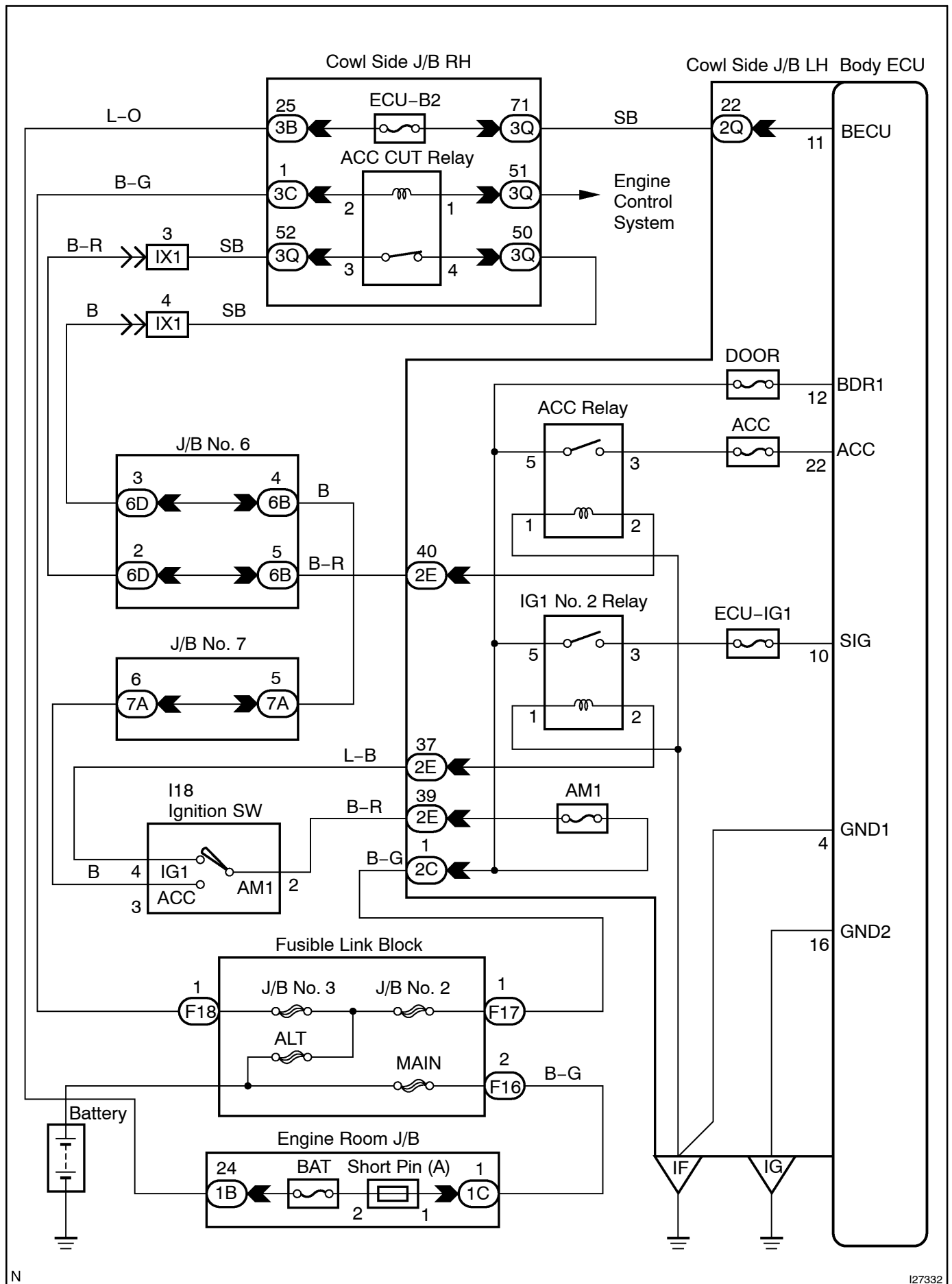
**OK:****Continuity****PREPARATION:**

Turn the ignition switch ON.

**CHECK:**

Check voltage terminal SIG, BDR1, ACC and GND1.

**OK:****Voltage: 10 – 14 V**



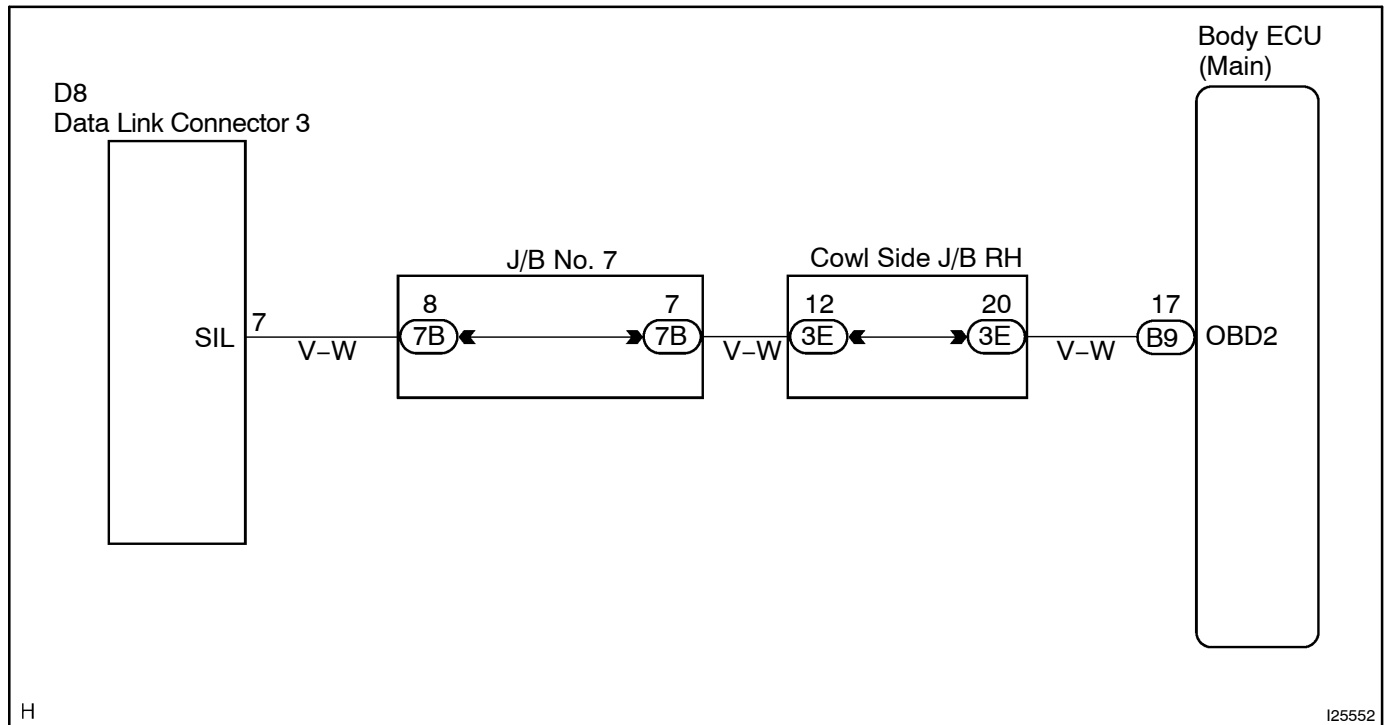
NG

Replace or repair wire harness or connector.

OK

3

Check wire harness between Body ECU (Main) and DLC3.



## HINT:

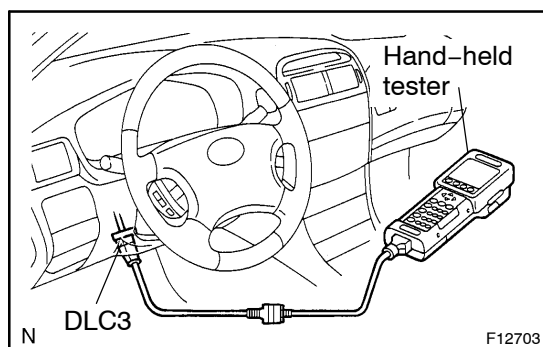
If there is a failure on SIL line, also hand-held tester cannot communicate with ECM or Center airbag sensor assembly.

NG

Replace or repair wire harness or connector.

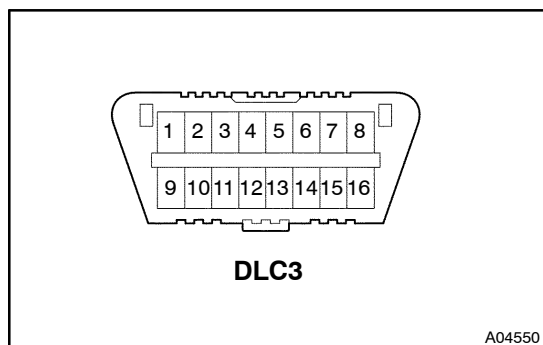
OK

Replace the Body ECU (Main).



### 3. DTC CHECK (Using hand-held tester)

- (a) Prepare a hand-held tester.
- (b) Connect the hand-held tester to DLC3.
- (c) Turn the ignition switch ON and switch the hand-held tester main switch ON.
- (d) Using the hand-held tester, check DTC and note them down. (For opening instructions, see the hand-held tester's instruction book.)



- (e) Check the DLC3.  
The vehicle's ECM uses ISO 9141-2 for communication. The terminal arrangement of DLC3 complies with SAE J1962 and matches the ISO 9141-2 format.

| Terminal No. | Connection/Specified Condition         | Condition |
|--------------|----------------------------------------|-----------|
| 4            | Chassis Ground ↔ Body Ground/1 or less | Always    |
| 13           | TC ↔ Body Ground/9 – 14 V              | Always    |

#### HINT:

If the display shows "UNABLE TO CONNECT TO VEHICLE" when the cable of the hand-held tester is connected to DLC3, the ignition switch is turned ON and the hand-held tester is operated, there is a problem either on the vehicle side or tool side.

- If communication is normal when the tool is connected to another vehicle, inspect DLC3 on the original vehicle.
- If communication does not function when the tool is connected to another vehicle, the problem is probably in the tool itself, so consult the Service Department listed in the tool's instruction manual.

### 4. DTC CLEARANCE

- **PRESENT CODE:**  
DTC will be cleared when the trouble output as DTC is recovered normally.
- **PAST CODE:**  
Clear it using the hand-held tester.