| DTC | B1214 | DOOR SYSTEM COMMUNICATION BUS MALFUNCTION (+B SHORT) |
|-----|-------|---|
| DTC | B1215 | DOOR SYSTEM COMMUNICATION BUS MALFUNCTION (GND SHORT) |

CIRCUIT DESCRIPTION

DTCS B1214 and B1215 are detected when +B and body ground is short–circuited on the door system communication bus. Detecting this condition will disable the door system communication bus (BEAN) and output some diagnosis codes.

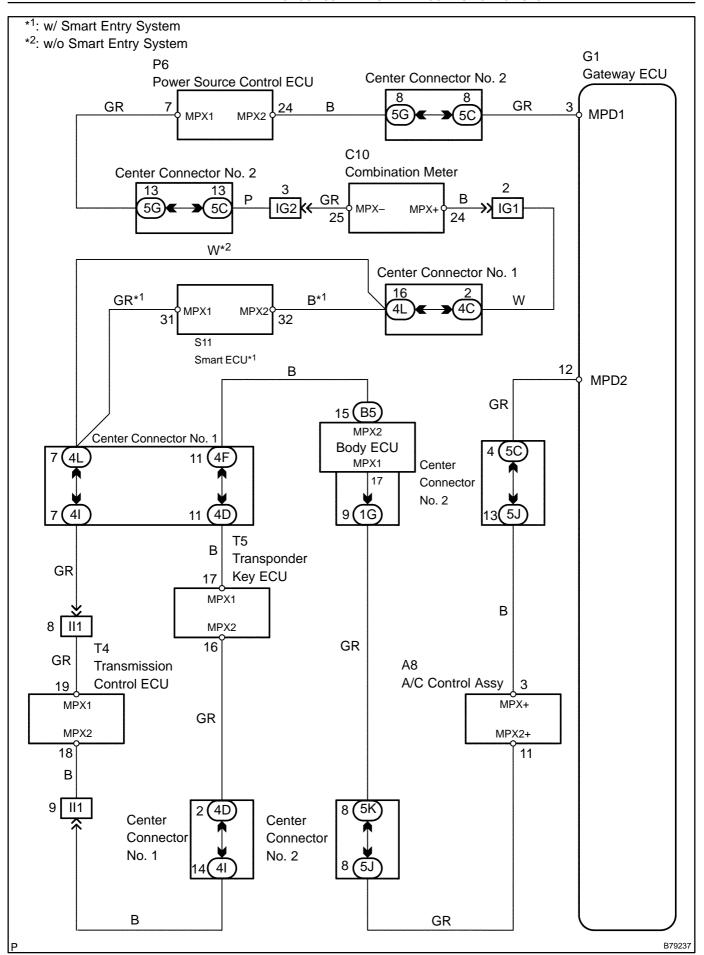
| DTC NO. | DTC Detection Condition | Trouble Area |
|---------|---|---|
| B1214 | Door system communication circuit and +B battery system short | Body ECU Smart ECU* Power source control ECU Radio receiver amplifier Transmission control ECU A/C amplifier Combination meter Transponder key ECU (Immobilizer ECU) Wire harness |
| B1215 | Door system communication circuit and body ground short | Body ECU Smart ECU* Power source control ECU Radio receiver amplifier Transmission control ECU A/C amplifier Combination meter Transponder key ECU (Immobilizer ECU) Wire harness |

^{*:} w/ Smart entry system

WIRING DIAGRAM

The wiring diagram is shown on the next page.

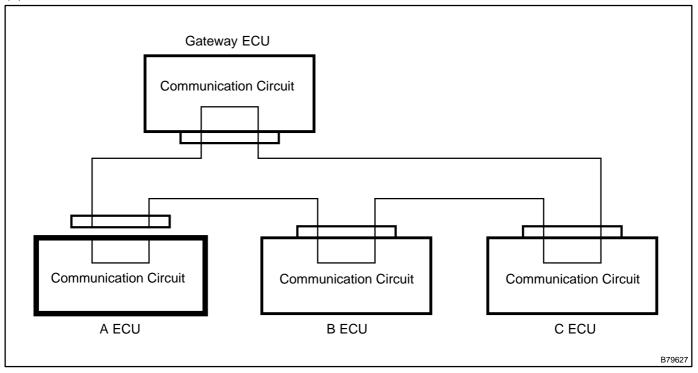
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INSPECTION PROCEDURE

1 | CHECK DIAGNOSTIC TROUBLE CODE (A ECU)

(a) Disconnect the A ECU connector and check for DTCs B1214 and B1215.

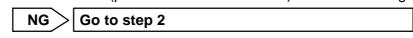


OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check. HINT:

- The A ECU in the door system bus represents the power source control ECU.
- If the result is as specified, the disconnected A ECU (power source control ECU) is malfunctioning.

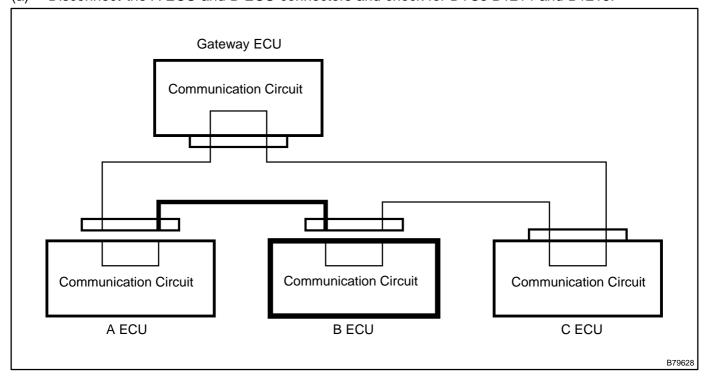


OK

REPLACE A ECU

2 CHECK DIAGNOSTIC TROUBLE CODE (B ECU)

(a) Disconnect the A ECU and B ECU connectors and check for DTCs B1214 and B1215.

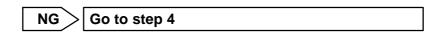


OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check. HINT:

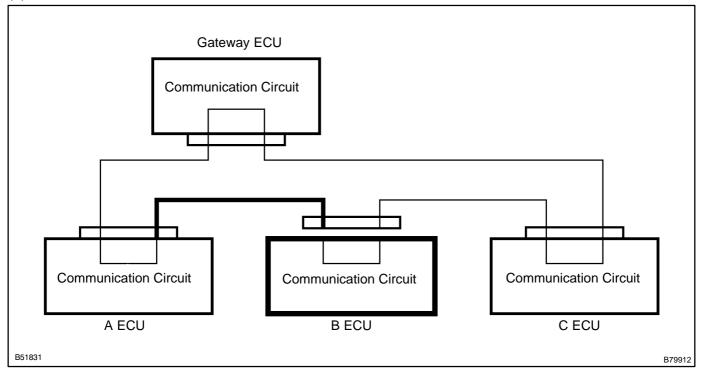
- The B ECU in door system bus represents one of the following: combination meter, smart ECU*, transmission control ECU, transponder key ECU or body ECU.
- If the result is as specified, the disconnected B ECU (one of the ECUs from the above list) or the wire harness between the A ECU and B ECU is malfunctioning.
- *: w/ Smart entry system



OK

3 CHECK WIRE HARNESS BETWEEN A ECU AND B ECU

(a) Disconnect the B ECU connectors and check for DTCs B1214 and B1215.



OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check. HINT:

If the result is as specified, the wire harness between the A ECU and B ECU is functioning normally but the disconnected B ECU is malfunctioning.

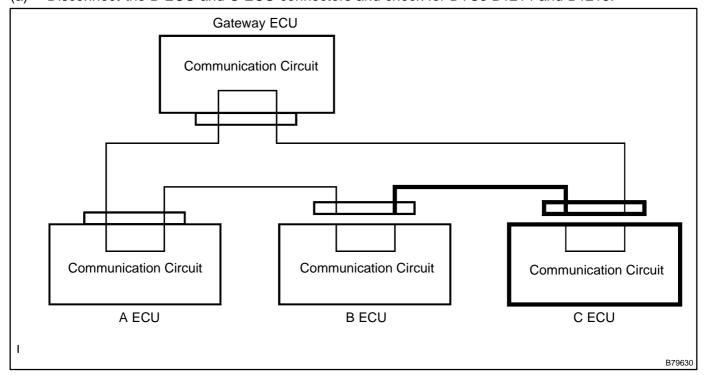


ок

REPLACE B ECU

4 CHECK DIAGNOSTIC TROUBLE CODE (C ECU)

(a) Disconnect the B ECU and C ECU connectors and check for DTCs B1214 and B1215.

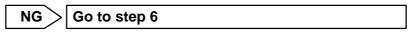


OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check. HINT:

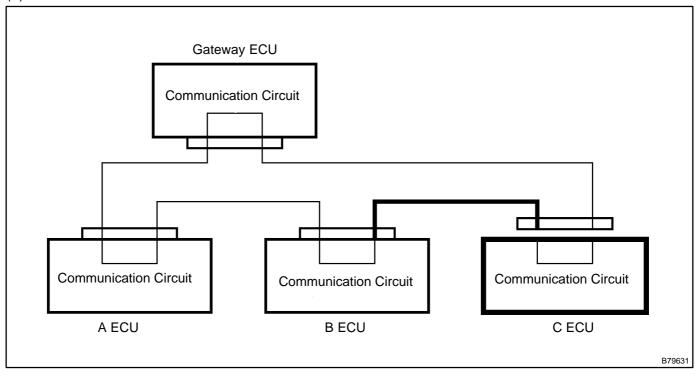
- The C ECU in the door system bus represents the A/C control assy.
- If the result is as specified, the disconnected C ECU (A/C control assy) or the wire harness between the B ECU and C ECU is malfunctioning.



OK

5 CHECK WIRE HARNESS BETWEEN B ECU AND C ECU

(a) Disconnect the C ECU connector and check for DTCs B1214 and B1215.



OK: DTCs B1214 and B1215 are not output.

NOTICE:

Disconnect the connectors one by one. Reconnect the connector before starting the next check. HINT:

If the result is as specified, the wire harness between the B ECU and C ECU is functioning normally but the disconnected C ECU malfunctioning.

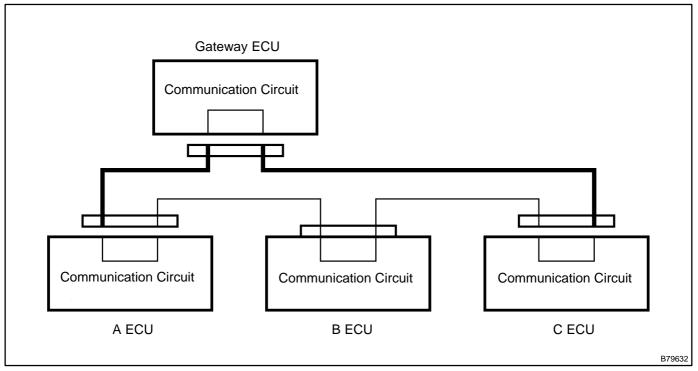


OK

REPLACE C ECU

6 CHECK WIRE HARNESS BETWEEN GATEWAY ECU AND A ECU OR C ECU

(a) Check for a short-circuit in +B or body ground.



- (1) Disconnect the A ECU, C ECU and gateway ECU connectors.
- (2) Measure the voltage and resistance of the wire harness side connectors.

Standard:

| Tester Connection | Specified Condition |
|---|-------------------------|
| A ECU connector/gateway ECU connector – body ground | 0 V |
| C ECU connector/gateway ECU connector – body ground | 0 V |
| A ECU connector/gateway ECU connector – body ground | 10 kΩ or higher |
| C ECU connector/gateway ECU connector – body ground | 10 k Ω or higher |

HINT:

- The A ECU in the door system bus represents the power source control ECU.
- The C ECU in the door system bus represents the A/C control assy.



OK

REPLACE NETWORK GATEWAY ECU

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