

DTC	B1214	DOOR SYSTEM COMMUNICATION BUS MALFUNCTION (+B SHORT)
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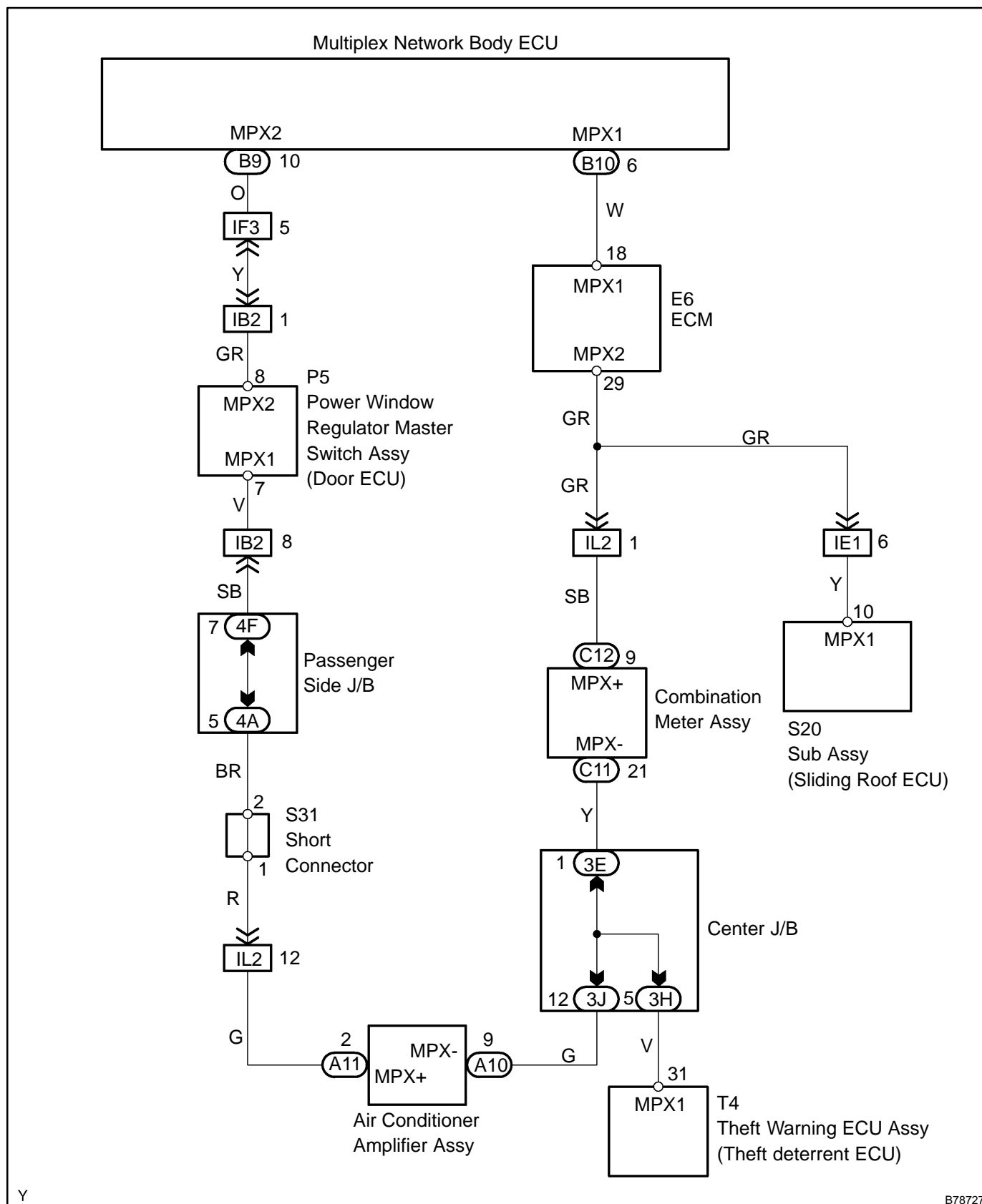
DTC	B1215	DOOR SYSTEM COMMUNICATION BUS MALFUNCTION (GND SHORT)
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CIRCUIT DESCRIPTION

B1214 and B1215 will be output when +B and body ground is short-circuited on the communication bus. Detecting this condition will make all the BEAN communication unable and output some DTCs.

DTC No.	DTC Detecting Condition	Trouble Area
B1214	Communication circuit and +B battery system short	<ul style="list-style-type: none"> • Power window regulator master switch assy (door ECU) • ECM • Air conditioner amplifier assy (A/C ECU) • Combination meter assy (meter ECU) • Theft warning ECU assy (theft deterrent ECU) • Sliding roof drive gear sub-assy (sliding roof ECU) • Wire harness • Multiplex network body ECU
B1215	Communication circuit and body ground short	<ul style="list-style-type: none"> • Power window regulator master switch assy (door ECU) • ECM • Air conditioner amplifier assy (A/C ECU) • Combination meter assy (meter ECU) • Theft warning ECU assy (theft deterrent) • Sliding roof drive gear sub-assy (sliding roof ECU) • Wire harness • Multiplex network body ECU

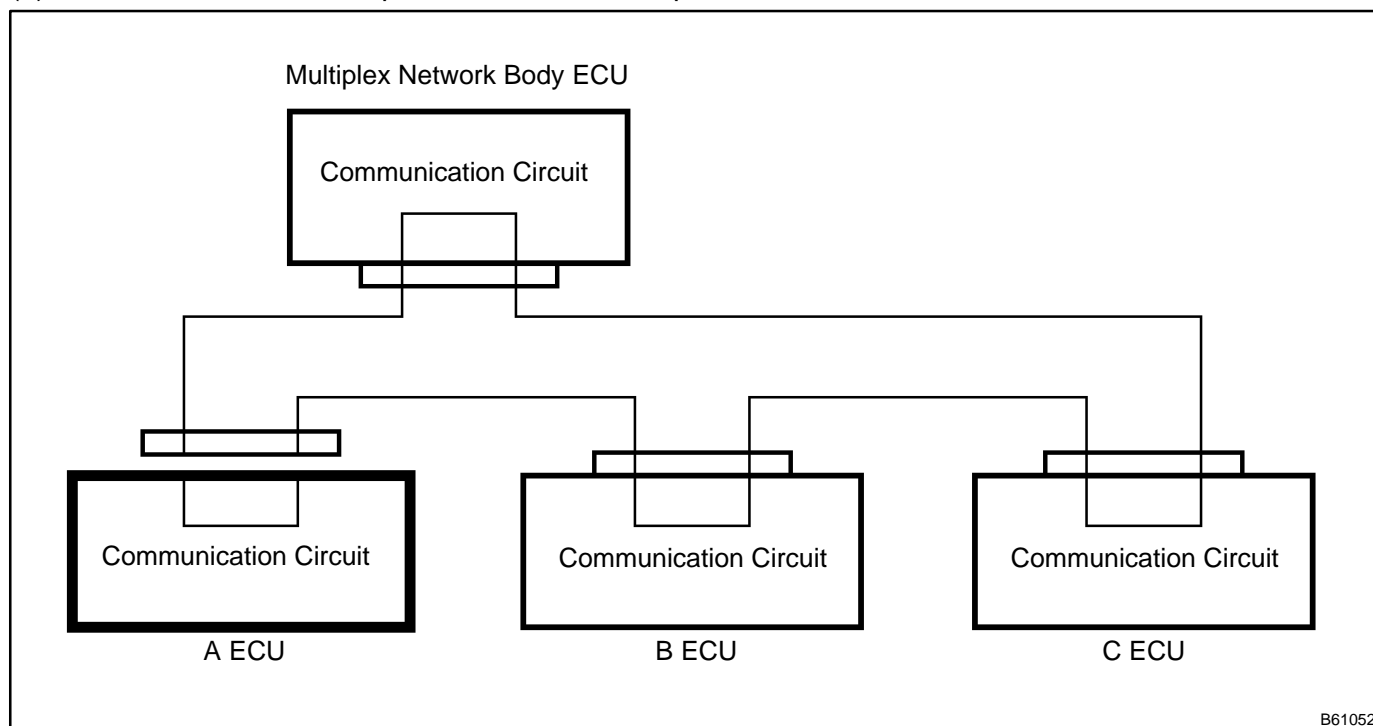
WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK DIAGNOSTIC TROUBLE CODE (A ECU)

- (a) Check whether the output of the DTC will stop when the A ECU connector is disconnected.

**NOTICE:**

Disconnect the connectors in the operational sequence, and start the next operation after the connector is connected.

HINT:

In this case, the A ECU represents the power window regulator master switch assy (door ECU).

Standard: The disconnected A ECU is abnormal when the output of the DTC stops.

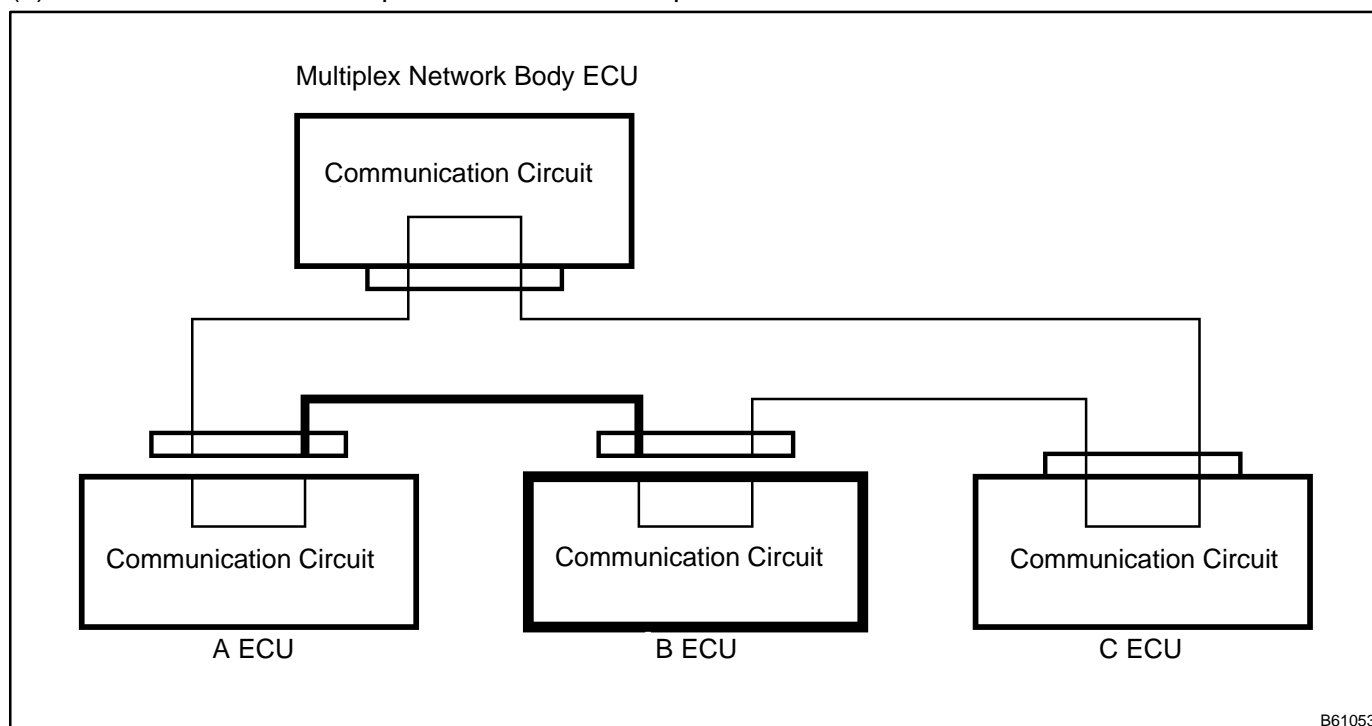
OK

REPLACE A ECU

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2 CHECK DIAGNOSTIC TROUBLE CODE (B ECU)

- (a) Check whether the output of the DTC will stop when the B ECU connector is disconnected.



NOTICE:

Disconnect the connectors in the operational sequence, and start the next operation after the connector is connected.

HINT:

In this case, the B ECU represents the sliding roof drive gear sub-assy (sliding roof ECU), combination meter assy (meter ECU), air conditioner amplifier assy (A/C ECU) or theft warning ECU assy (theft deterrent).

Standard: The disconnected B ECU or the wire harness between the A ECU and B ECU is abnormal when the output of the DTC stops.

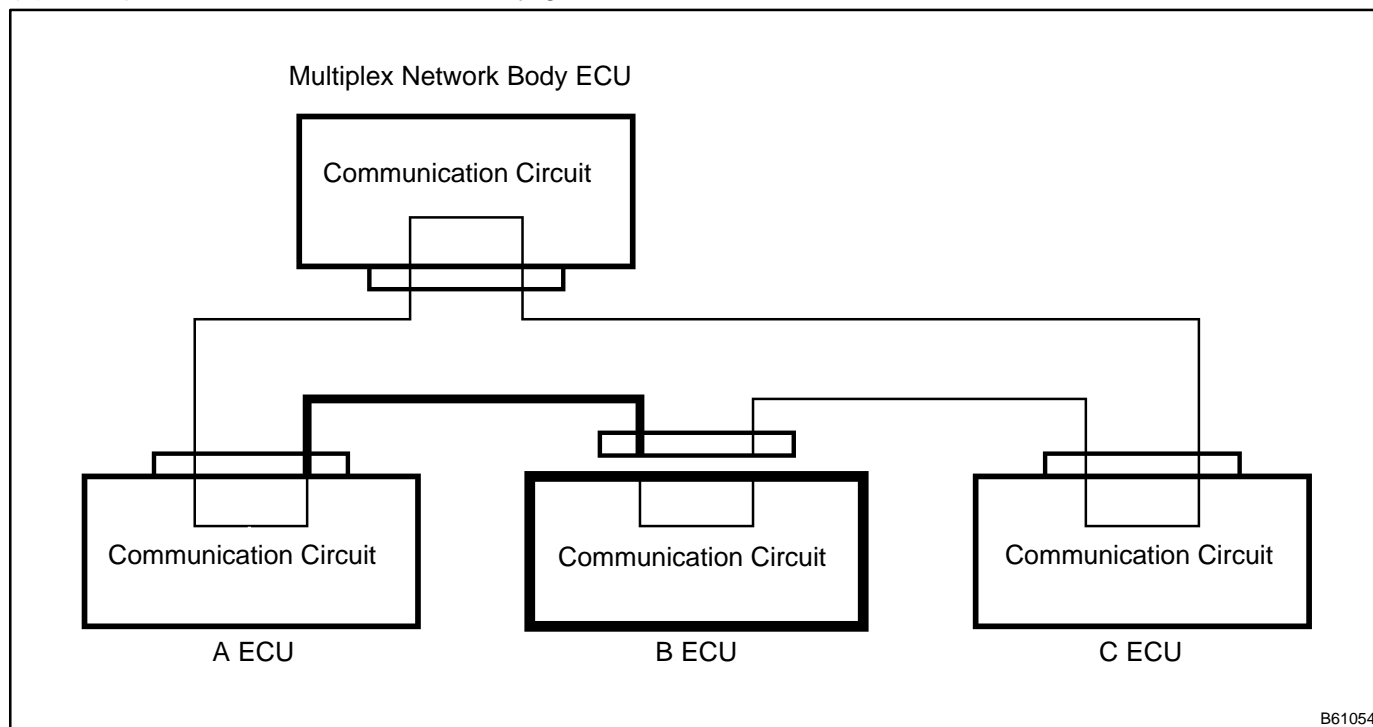
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Go to step 4

OK

3 CHECK WIRE HARNESS BETWEEN A ECU AND B ECU

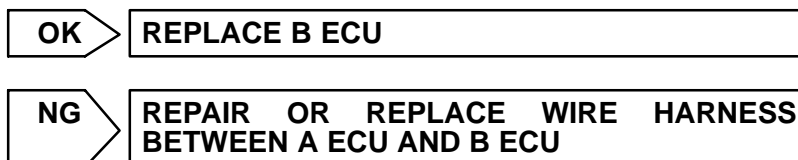
(a) Inspect short-circuit in +B or body ground.



(1) Check whether the DTC will be output when the A ECU connector is connected.

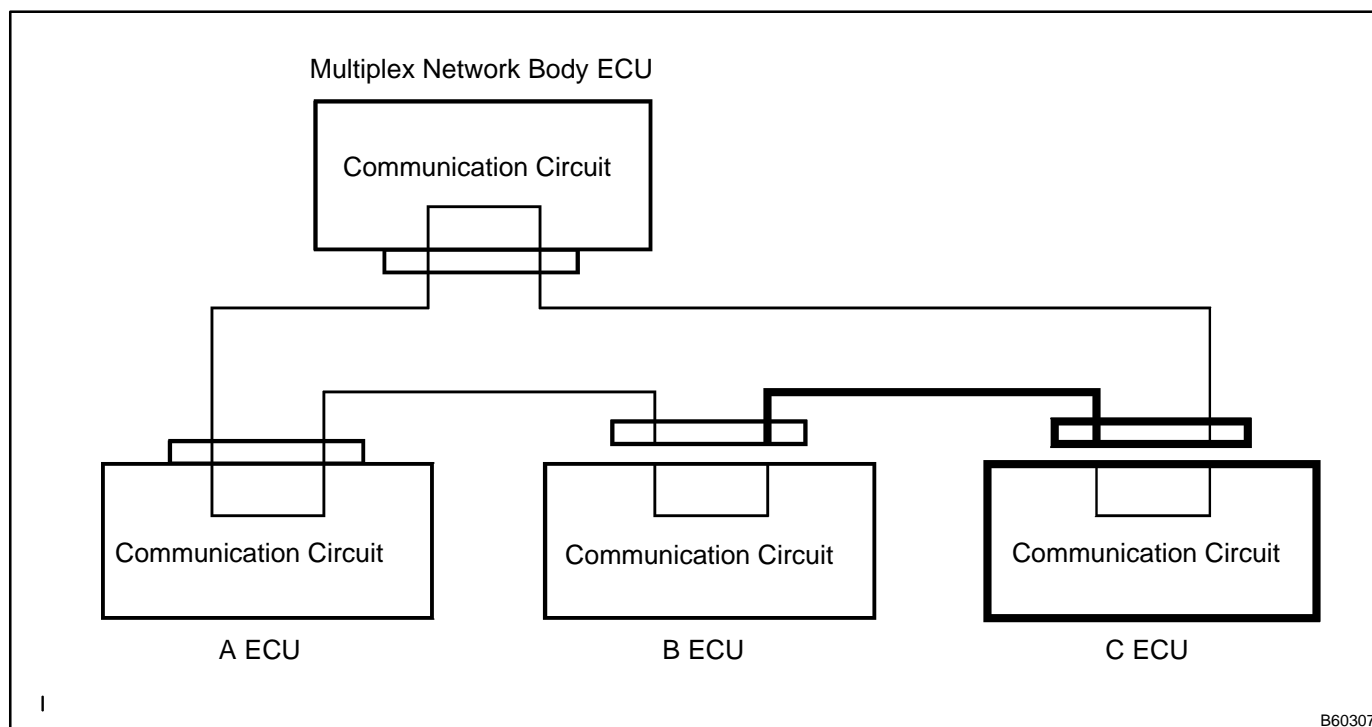
NOTICE:

Disconnect the connectors in the operational sequence, and start the next operation after the connector is connected.



4 CHECK DIAGNOSTIC TROUBLE CODE (C ECU)

- (a) Check whether the output of the DTC will stop when the A ECU connector is connected and the C ECU connector is disconnected.



NOTICE:

Disconnect the connectors in the operational sequence, and start the next operation when the connector is connected.

HINT:

In this case, the C ECU represents the ECM.

Standard: The disconnected C ECU or the wire harness between the B ECU and C ECU is abnormal when the output of the DTC stops.

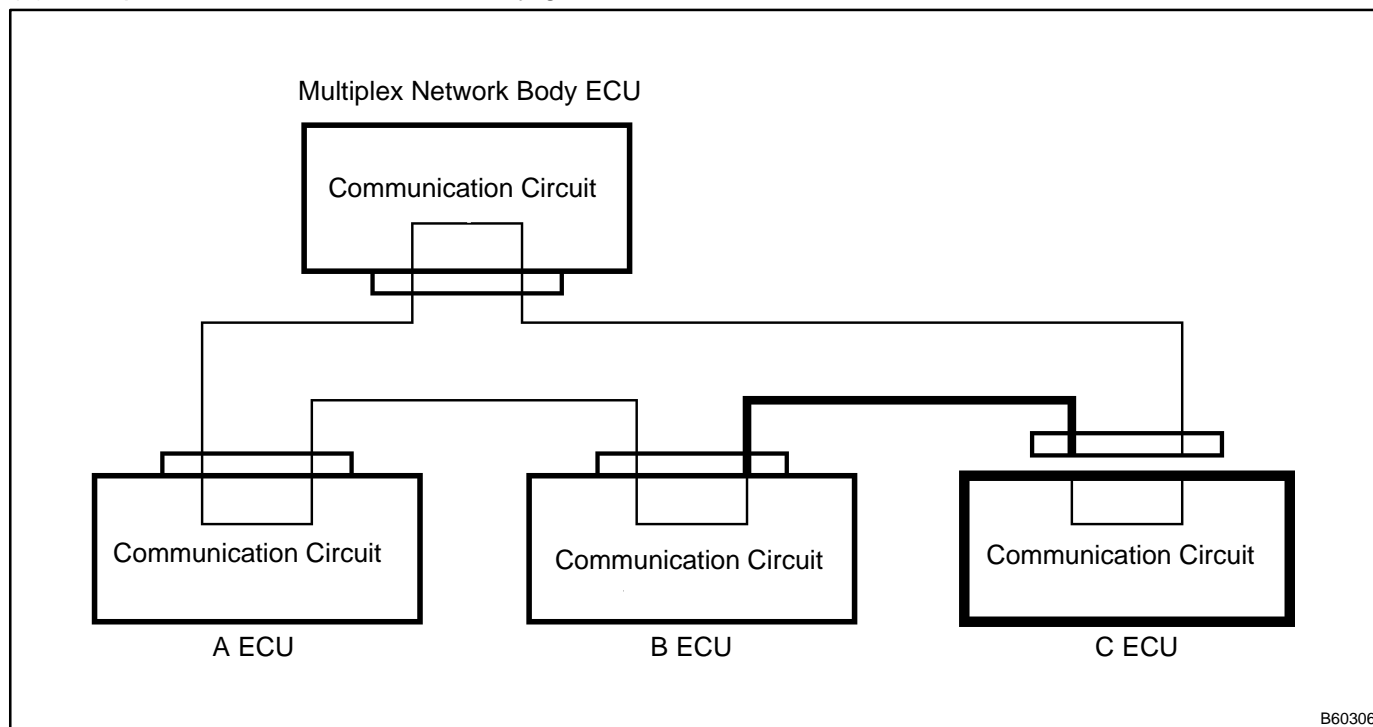
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Go to step 6

OK

5 CHECK WIRE HARNESS BETWEEN B ECU AND C ECU

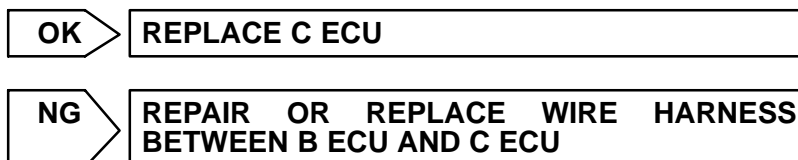
(a) Inspect short-circuit in +B or body ground.



(1) Check whether the DTC will be output when the B ECU connector is connected.

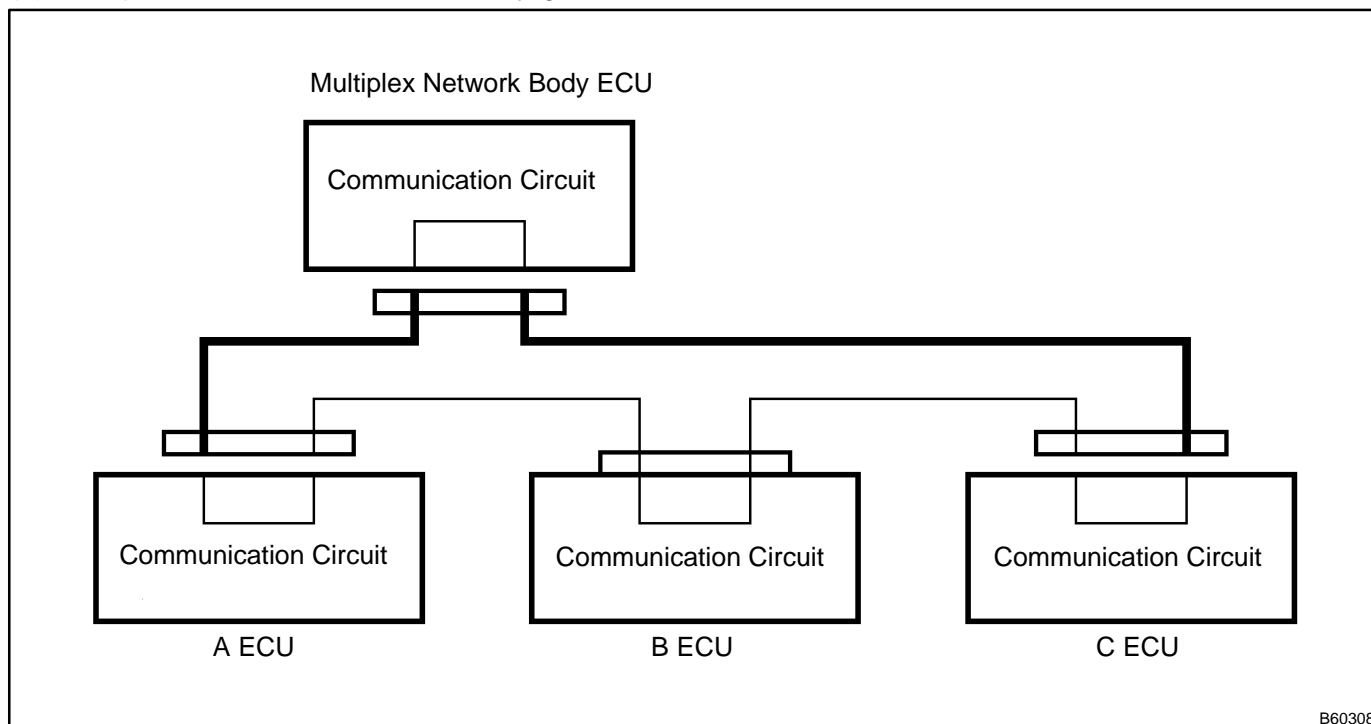
NOTICE:

Disconnect the connectors in the operational sequence, and start the next operation after the connector is connected.



6 CHECK WIRE HARNESS MPX BODY ECU AND A ECU OR C ECU

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



- (1) Disconnect the connectors of the A ECU and multiplex network body ECU.
- (2) Inspect short-circuit in +B of the wire harness between the A ECU and multiplex network body ECU, and also in the body ground.

Standard:

0 V when short-circuited in +B.

No continuity between each ECU terminal and the body ground when short-circuited in the body ground.

HINT:

In this case, the A ECU represents the power window regulator master switch assy (door ECU).

- (3) Inspect short-circuit in +B of the wire harness between the C ECU and multiplex network body ECU, and also in the body ground.

Standard:

0 V when short-circuited in +B.

No continuity between each ECU terminal and the body ground when short-circuited in the body ground.

HINT:

In this case, the C ECU represents the ECM.

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REPAIR OR REPLACE WIRE HARNESS BETWEEN MPX BODY ECU AND A ECU OR C ECU

OK

REPLACE MULTIPLEX NETWORK BODY ECU