DTC	B1214	DOOR SYSTEM COMMUNICATION BUS MALFUNCTION (+B SHORT)

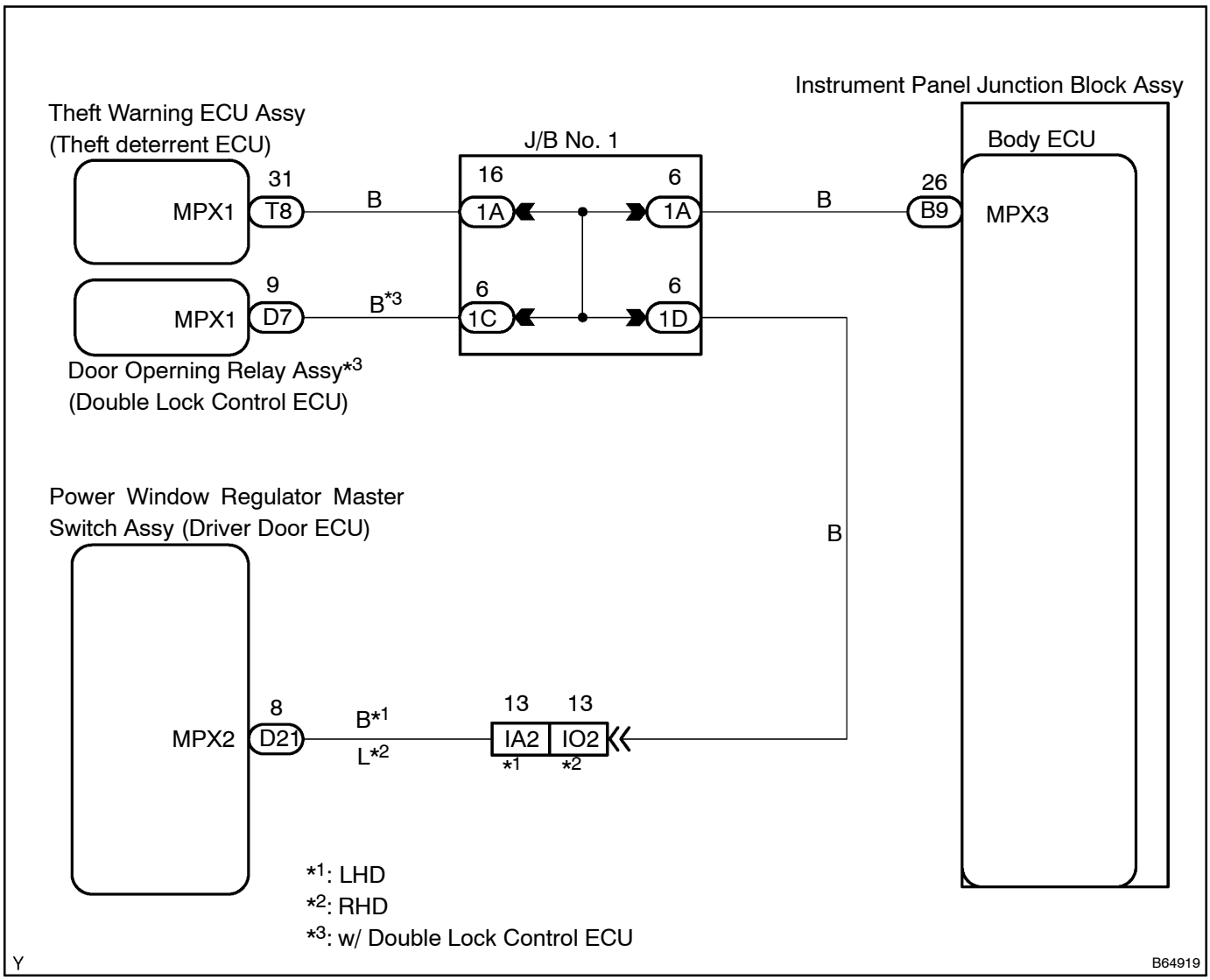
DTC	B1215	DOOR SYSTEM COMMUNICATION BUS MALFUNCTION (GND SHORT)

CIRCUIT DESCRIPTION

B1214 and B1215 are output when +B and the body ground is short–circuited on the communication bus. Detecting this condition disables all the BEAN communication and outputs some DTCs.

DTC No.	DTC Detection Condition	Trouble Area
B1214	Communication circuit and +B battery system short	• Door opening relay assy (Double locking ECU) • Power window regulator master switch assy (Driver door ECU) • Theft warning ECU assy (Theft deterrent ECU) • Wire harness • Instrument panel junction block assy (Body ECU)
B1215	Communication circuit and body ground short	• Door opening relay assy (Double locking ECU) • Power window regulator master switch assy (Driver door ECU) • Theft warning ECU assy (Theft deterrent ECU) • Wire harness • Instrument panel junction block assy (Body ECU)

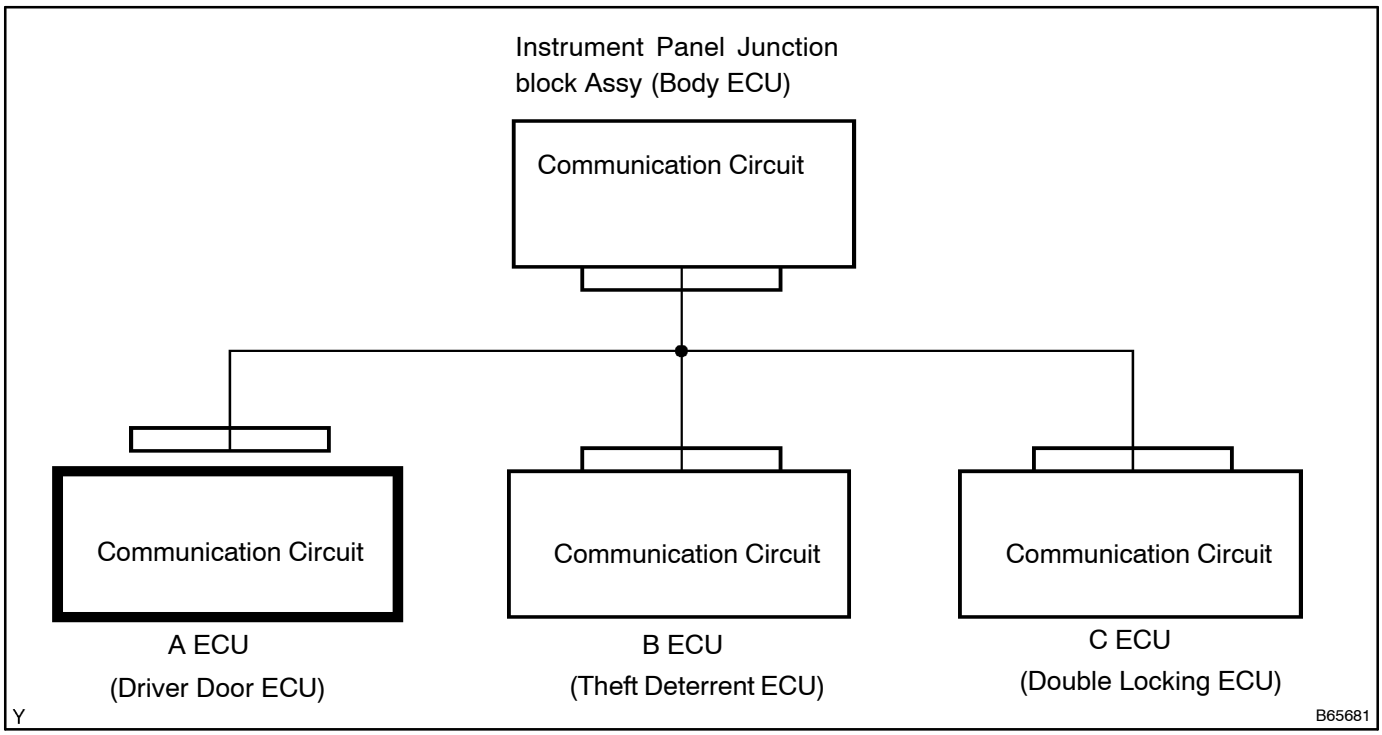
WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK DIAGNOSTIC TROUBLE CODE (A ECU)

(a) Check whether outputs of diagnosis codes will stop when A ECU connector is disconnected.



NOTICE:
Disconnect connectors in operational sequence, and start the next operation after the connector connected.
HINT:
In this case, the A ECU represents the driver door ECU.

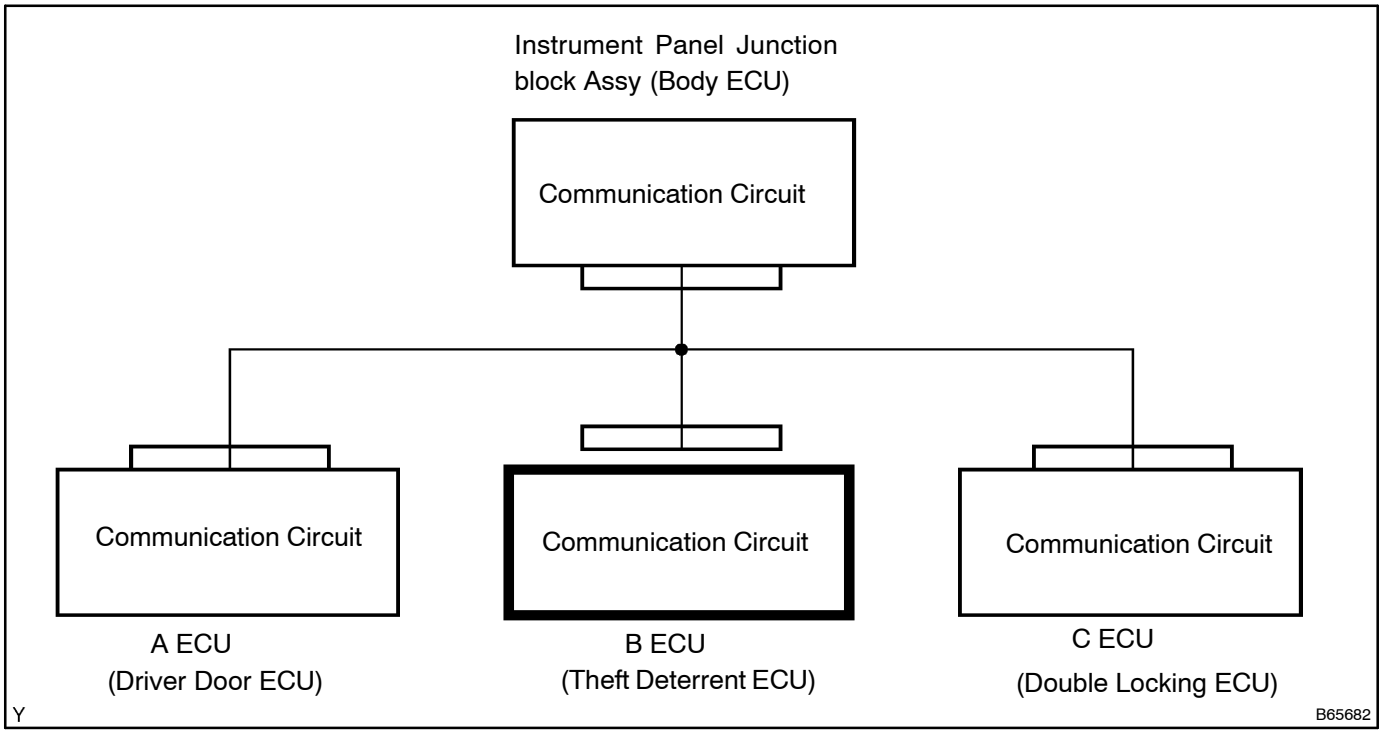
Standard: When the output of the DTC stops, the disconnected A ECU is abnormal.

OK	REPLACE A ECU

NG

2	CHECK DIAGNOSTIC TROUBLE CODE (B ECU)

(a) Check whether outputs of diagnosis codes will stop when B ECU connector is disconnected.



NOTICE:

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

HINT:

In this case, the B ECU represents the theft deterrent ECU.

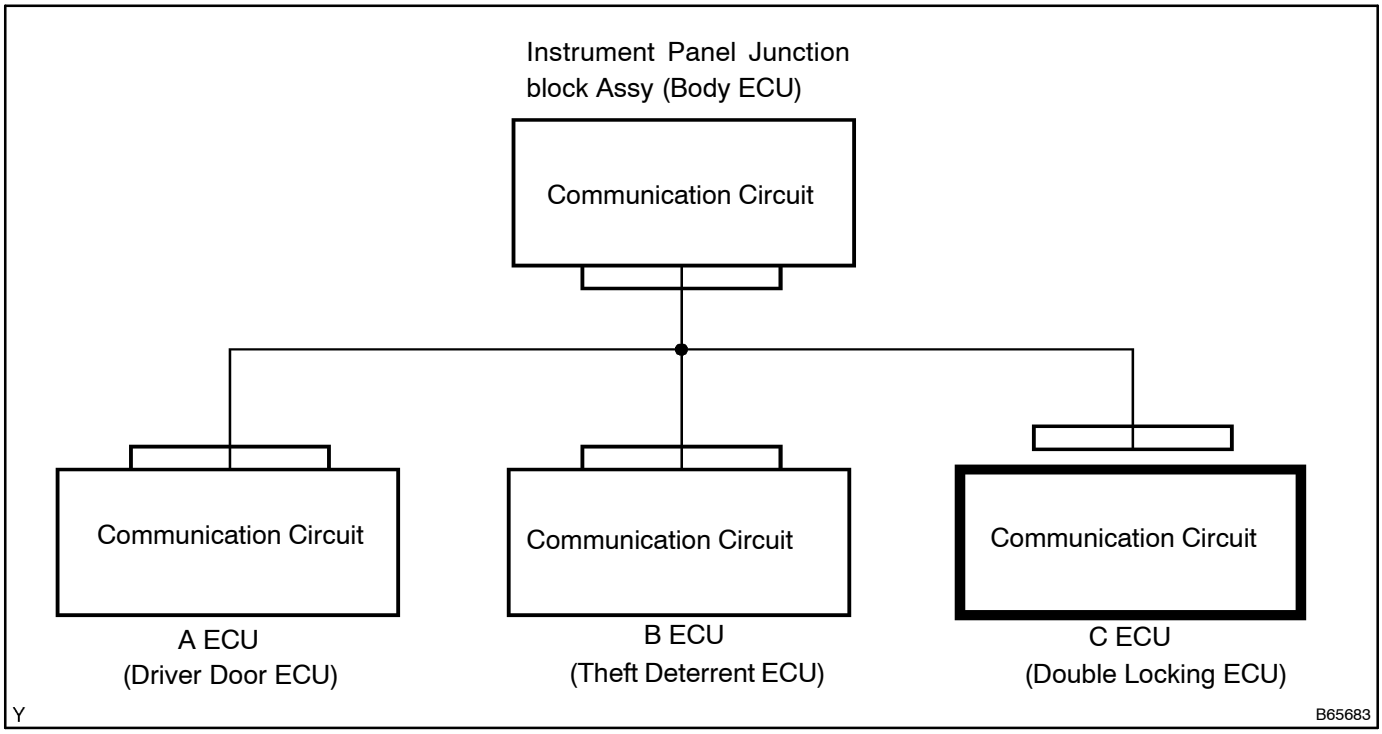
Standard: When the output of the DTC stops, the disconnected B ECU is abnormal.

OK	REPLACE B ECU

NG

3	CHECK DIAGNOSTIC TROUBLE CODE (C ECU)

(a) Check whether outputs of diagnosis codes will stop when C ECU connector is disconnected.



NOTICE:
Disconnect connectors in operational sequence, and start the next operation after the connector connected.
HINT:
In this case, the C ECU represents the double locking ECU.

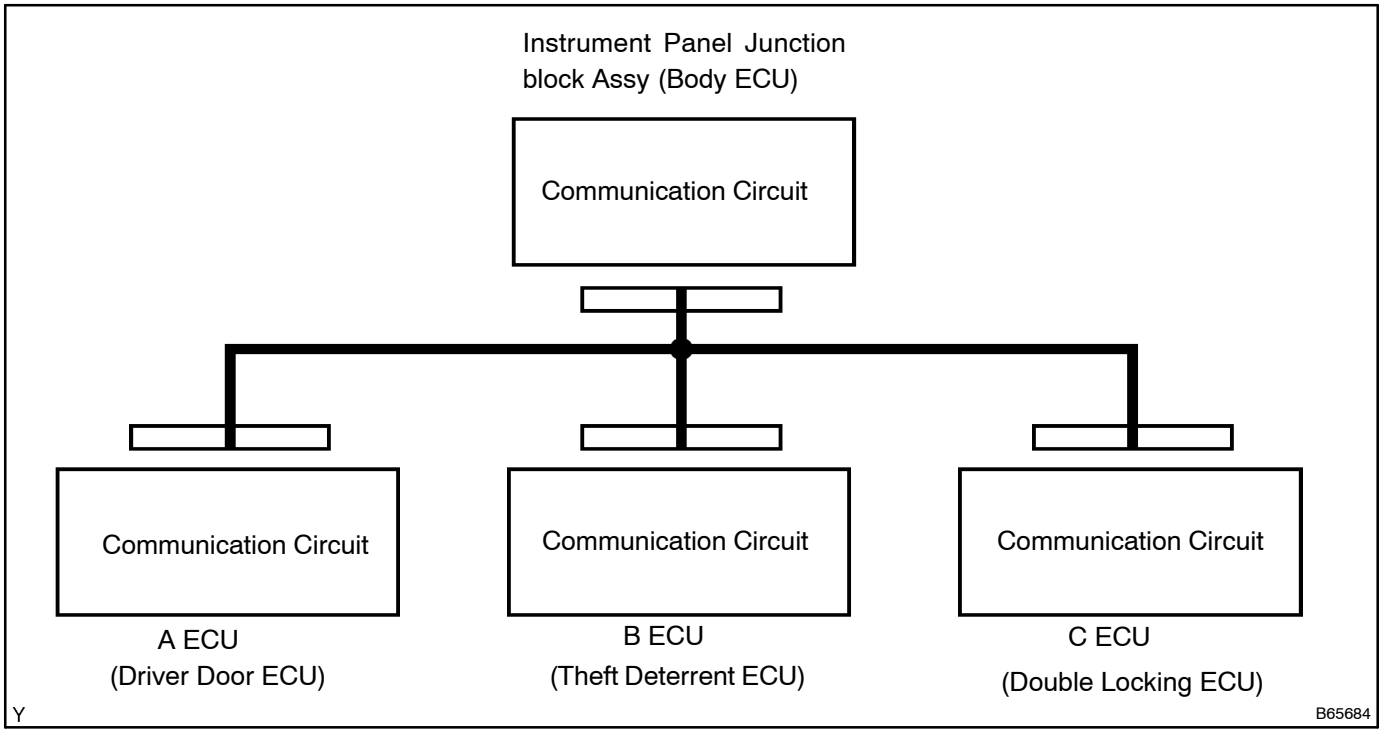
Standard: When the output of the DTC stops, the disconnected C ECU is abnormal.

OK	REPLACE C ECU

NG

4	CHECK WIRE HARNESS BETWEEN BODY ECU AND A ECU OR B ECU OR C ECU

(a) Disconnect the A ECU, B ECU, C ECU and body ECU connectors.
(b) Check the wire harness (MPX line) between the A ECU, B ECU, C ECU and body ECU.



(1) Turn the ignition switch ON.
(2) Check the voltage between the wire harness (MPX lines) and body ground.

Standard:

MPX Line ⇔ Body Ground	Voltage
Body ECU or A ECU (Driver door ECU) ⇔ Body ground	0 V
Body ECU or B ECU (Theft deterrent ECU) ⇔ Body ground	
Body ECU or C ECU (Double locking ECU) ⇔ Body ground	

If the output voltage is not 0 V, the wire harness (MPX line) may be short–circuited with +B.

(3) Check the continuity of the wire harness (MPX lines) and body ground.

Standard:

MPX Line ⇔ Body Ground	Continuity
Body ECU or A ECU (Driver door ECU) ⇔ Body ground	No continuity
Body ECU or B ECU (Theft deterrent ECU) ⇔ Body ground	
Body ECU or C ECU (Double locking ECU) ⇔ Body ground	

If there is continuity, the wire harness (MPX line) and body ground may be short–circuited with the body ground.

NG → **REPAIR OR REPLACE WIRE HARNESS BETWEEN BODY ECU AND A ECU OR B ECU OR C ECU**

OK

REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSY