

Diagnostic Procedure with Diagnostic Trouble Code (DTC)

BODY CONTROL SYSTEM (DIAGNOSTICS)

13. Diagnostic Procedure with Diagnostic Trouble Code (DTC)

A: DTC B1100 INTEG. UNIT SYSTEM ERROR

DTC DETECTING CONDITION:

System error in body integrated unit

TROUBLE SYMPTOM:

LAN communication immobilizer function may not be executed normally.

	Step	Check	Yes	No
1	CHECK DTC. Check DTC indicated by body integrated unit.	Is B1100 current malfunction?	Go to step 2.	Temporary EEPROM access error occurred.
2	CHECK CONNECTOR. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector. 3) Connect the disconnected connectors. 4) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1100 current malfunction?	Replace the body integrated unit. <Ref. to SL-73, REMOVAL, Body Integrated Unit.>	Temporary EEPROM access error occurred.

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B: DTC B1101 BATT P/SUPPLY MALFUNCTION CONT

DTC DETECTING CONDITION:

- Voltage malfunction caused by poor contact of battery power supply control circuit
- Battery voltage of body integrated unit is not within the 8.5 — 16.5 V range.

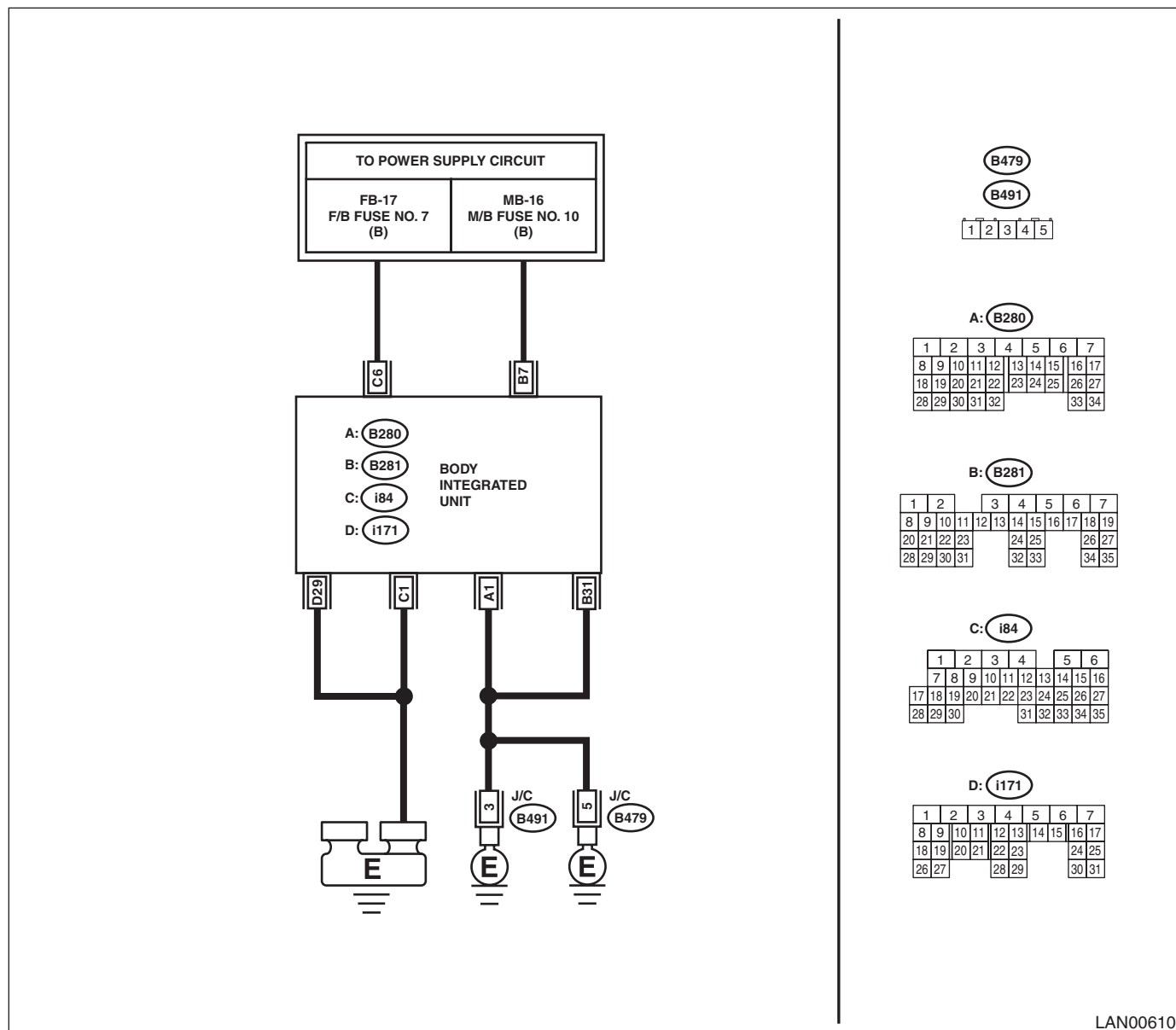
TROUBLE SYMPTOM:

Functions of body integrated unit stop.

NOTE:

When B1102 BATT p/supply (backup) malfunction is output at the same time, all the function of body integrated unit may not operate.

WIRING DIAGRAM:



Step	Check	Yes	No
1 CHECK DTC. Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1101 current malfunction?	Go to step 2.	Go to step 5.

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Step	Check	Yes	No
2 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect and then connect the body integrated unit connector. 3) Wait approx. 2 minutes. 4) Turn the ignition switch to ON. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1101 current malfunction?	Go to step 3.	Go to step 5.
3 CHECK FUSE. 1) Turn the ignition switch to OFF. 2) Check the fuse.	Is the fuse OK?	Go to step 4.	Replace the defective fuse.
4 CHECK HARNESS. 1) Disconnect the body integrated unit connector. 2) Using the tester, measure the voltage between terminals. Connector & terminal (i84) No. 6 (+) — Chassis ground (-):	Is the voltage 8.5 — 16.5 V?	Replace the body integrated unit. <Ref. to SL-73, REMOVAL, Body Integrated Unit.>	Repair the harness between body integrated unit and fuse.
5 CHECK CONNECTOR. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

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C: DTC B1102 BATT P/SUPPLY MALFUNCTION BACKUP

DTC DETECTING CONDITION:

Voltage malfunction caused by poor contact of battery power supply backup circuits

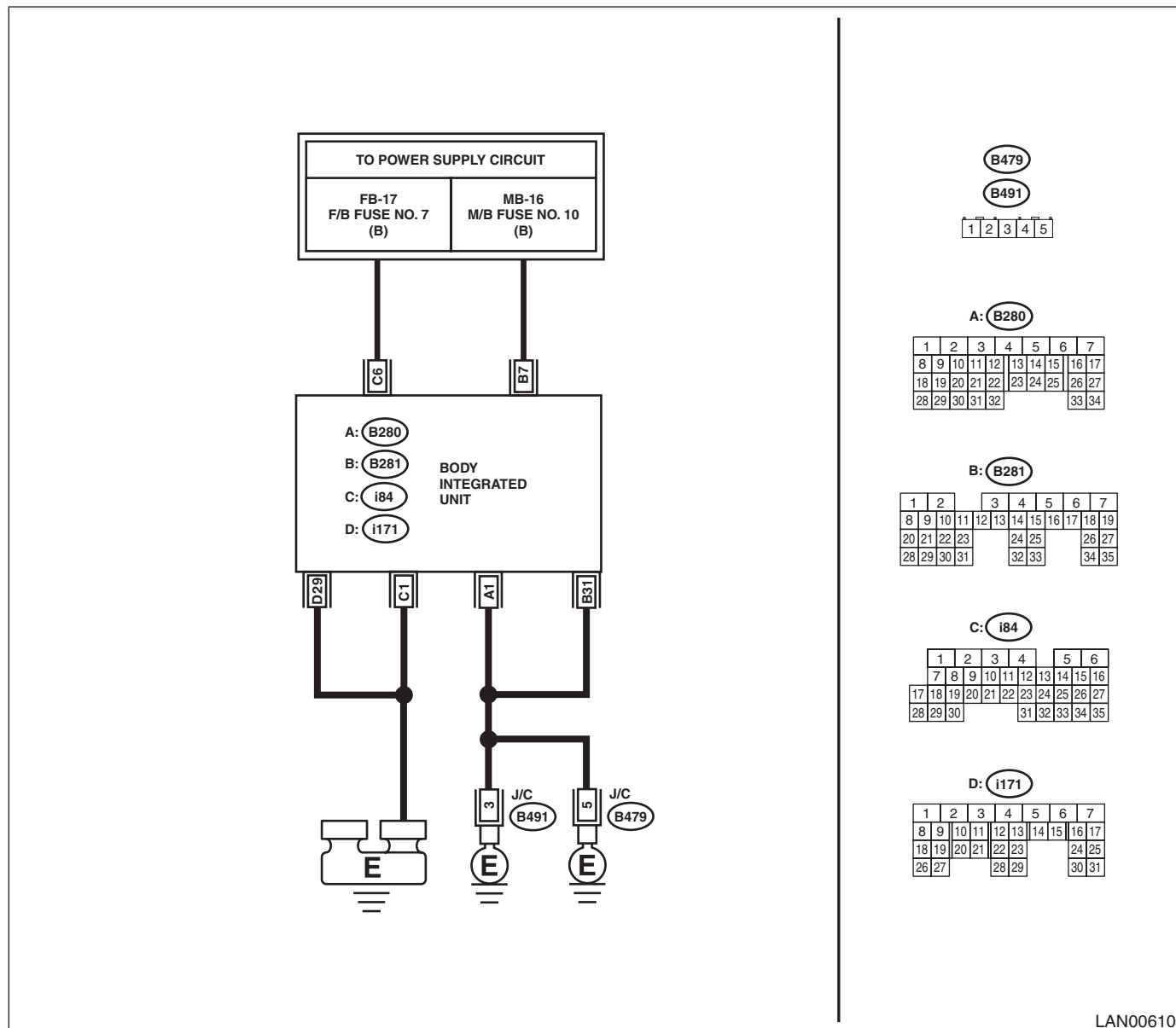
TROUBLE SYMPTOM:

Illuminations for the keyless entry, map light, luggage light, trunk light, room light, and ignition switch do not turn on.

NOTE:

When B1101 BATT p/supply (cont.) malfunction are output at the same time, all function of body integrated unit may not operate.

WIRING DIAGRAM:



LAN00610

Step	Check	Yes	No
1	CHECK DTC. Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1102 current malfunction? Go to step 2.	Go to step 5.

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Step	Check	Yes	No
2 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect and then connect the body integrated unit connector. 3) Wait approx. 2 minutes. 4) Turn the ignition switch to ON. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1102 current malfunction?	Go to step 3.	Go to step 5.
3 CHECK FUSE. 1) Turn the ignition switch to OFF. 2) Check the fuse.	Is the fuse OK?	Go to step 4.	Replace the defective fuse.
4 CHECK HARNESS. 1) Disconnect the body integrated unit connector. 2) Using the tester, measure the voltage between terminals. <i>Connector & terminal</i> <i>(B281) No. 7 (+) — Chassis ground (–):</i>	Is the voltage 8.5 — 16.5 V?	Replace the body integrated unit. <Ref. to SL-73, REMOVAL, Body Integrated Unit.>	Repair the harness between body integrated unit and fuse.
5 CHECK CONNECTOR. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

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D: DTC B1103 IGNITION POWER FAILURE

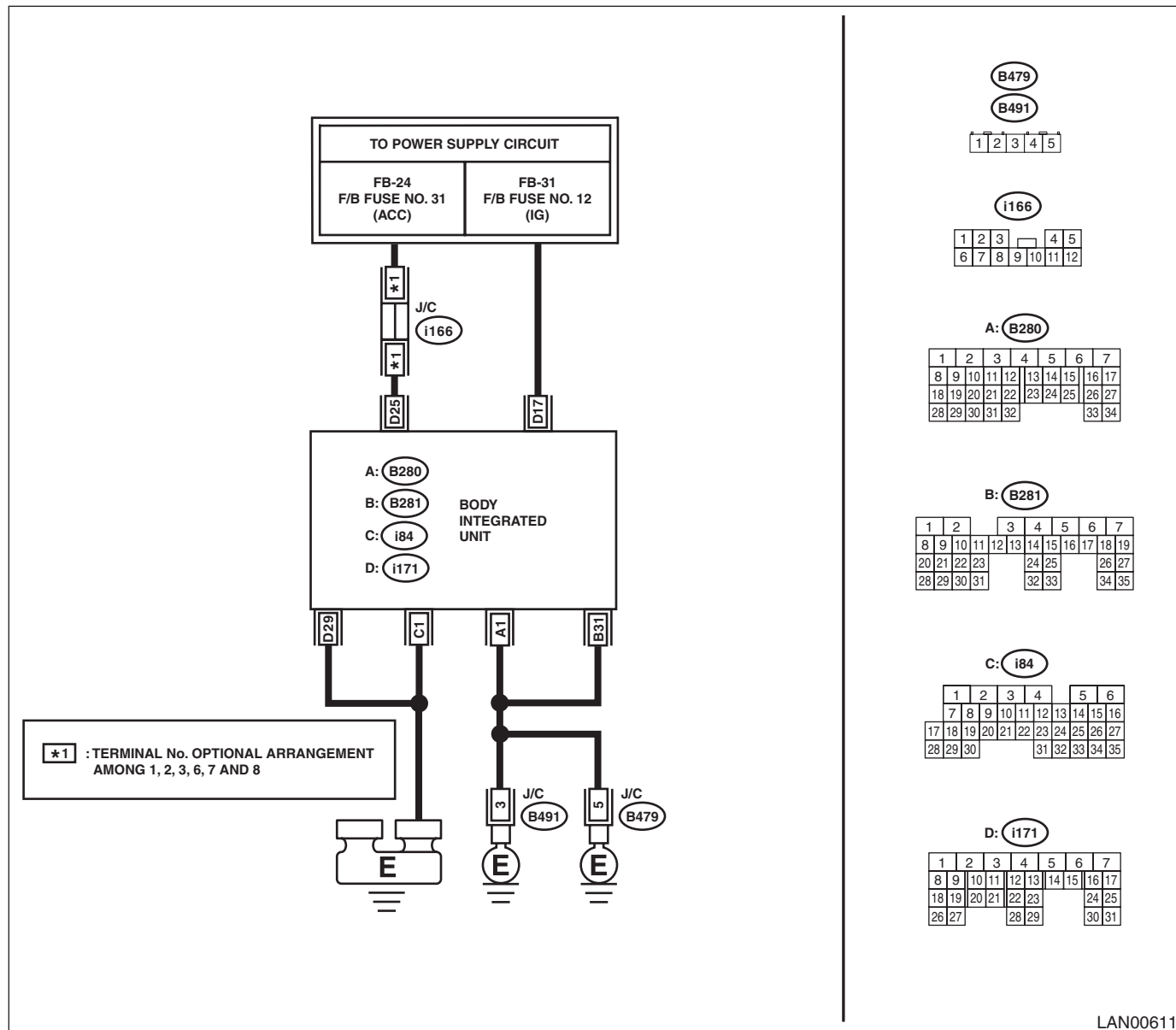
DTC DETECTING CONDITION:

Voltage malfunction caused by poor contact of IGN power supply circuits

TROUBLE SYMPTOM:

Symptoms such as shift lock, reverse lock or wiper not operating may occur.

WIRING DIAGRAM:



LAN00611

Step	Check	Yes	No
1	CHECK DTC. Read the DTC of body integrated unit using Subaru Select Monitor.	Go to step 2.	Go to step 5.
2	CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect and then connect the body integrated unit connector. 3) Wait approx. 2 minutes. 4) Turn the ignition switch to ON. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Go to step 3.	Go to step 5.

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Step	Check	Yes	No
3 CHECK FUSE. 1) Turn the ignition switch to OFF. 2) Check the fuse.	Is the fuse OK?	Go to step 4.	Replace the defective fuse.
4 CHECK HARNESS. 1) Disconnect the body integrated unit connector. 2) Using the tester, measure the voltage between terminals. Connector & terminal (i171) No. 17 (+) — Chassis ground (-):	Is the voltage 8.5 — 16.5 V?	Replace the body integrated unit. <Ref. to SL-73, REMOVAL, Body Integrated Unit.>	Repair the harness between body integrated unit and fuse.
5 CHECK CONNECTOR. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

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E: DTC B1104 ACC POWER FAILURE

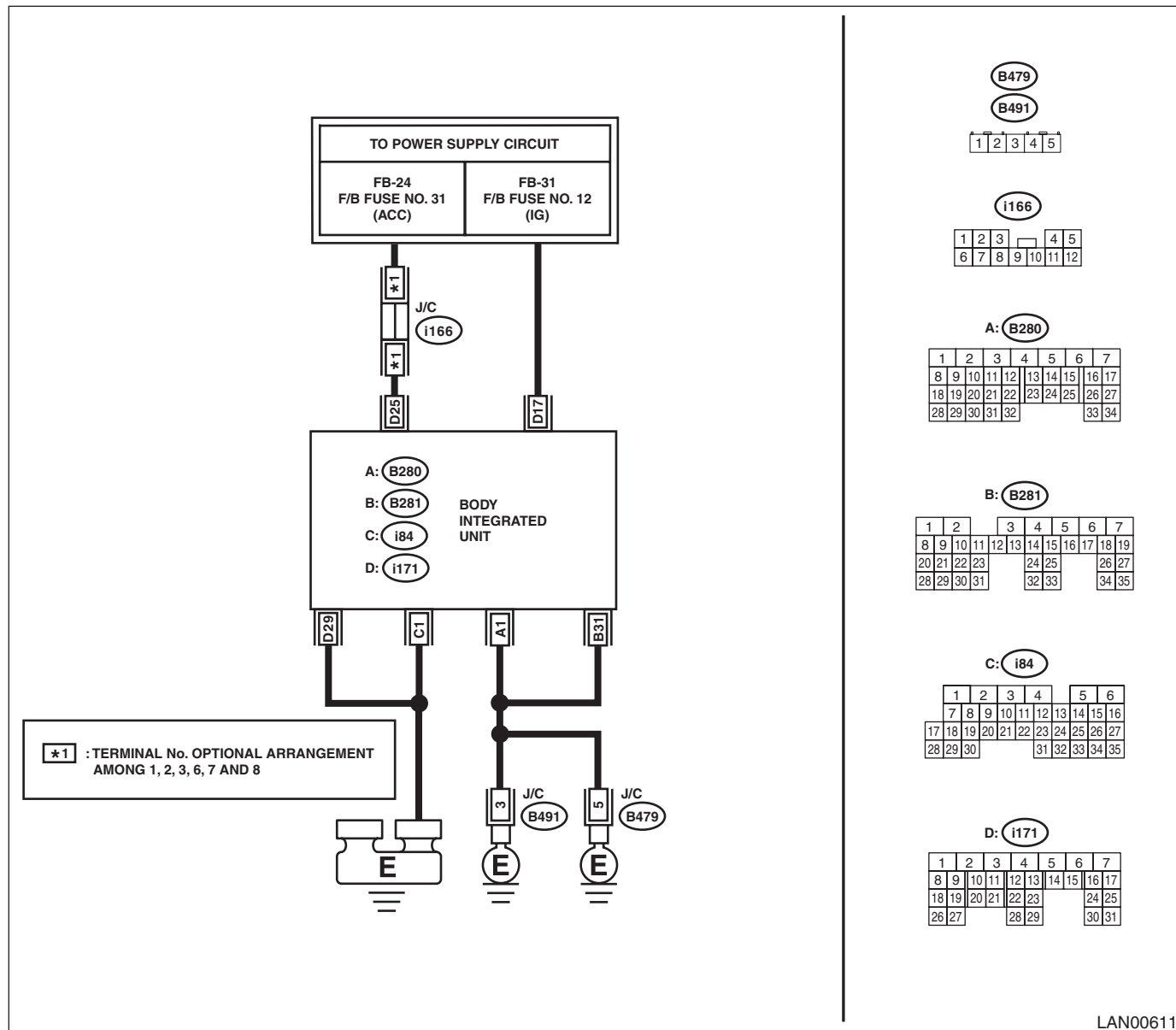
DTC DETECTING CONDITION:

Voltage malfunction caused by poor contact of ACC power supply circuit

TROUBLE SYMPTOM:

DRL may not illuminate.

WIRING DIAGRAM:



LAN00611

Step	Check	Yes	No	
1	CHECK DTC. Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1104 current malfunction?	Go to step 2.	Go to step 5.
2	CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect and then connect the body integrated unit connector. 3) Wait approx. 2 minutes. 4) Turn the ignition switch to ON. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1104 current malfunction?	Go to step 3.	Go to step 5.

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Step	Check	Yes	No
3 CHECK FUSE. 1) Turn the ignition switch to OFF. 2) Check the fuse.	Is the fuse OK?	Go to step 4.	Replace the defective fuse.
4 CHECK HARNESS. 1) Disconnect the body integrated unit connector. 2) Using the tester, measure the voltage between terminals. Connector & terminal (i171) No. 25 (+) — Chassis ground (-):	Is the voltage 8.5 — 16.5 V?	Replace the body integrated unit. <Ref. to SL-73, REMOVAL, Body Integrated Unit.>	Repair the harness between body integrated unit and fuse.
5 CHECK CONNECTOR. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector.	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

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F: DTC B1106 SHIFT LOCK CIRCUIT FAILURE

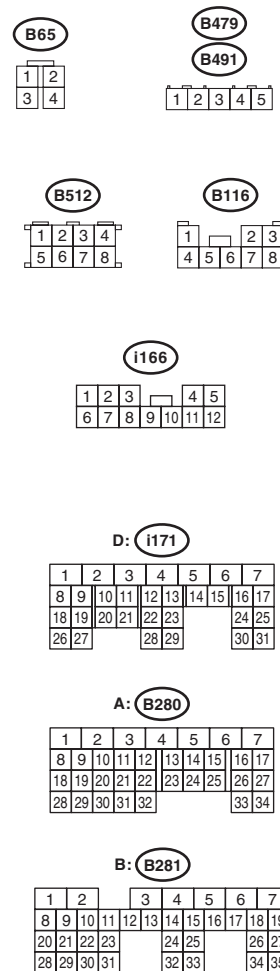
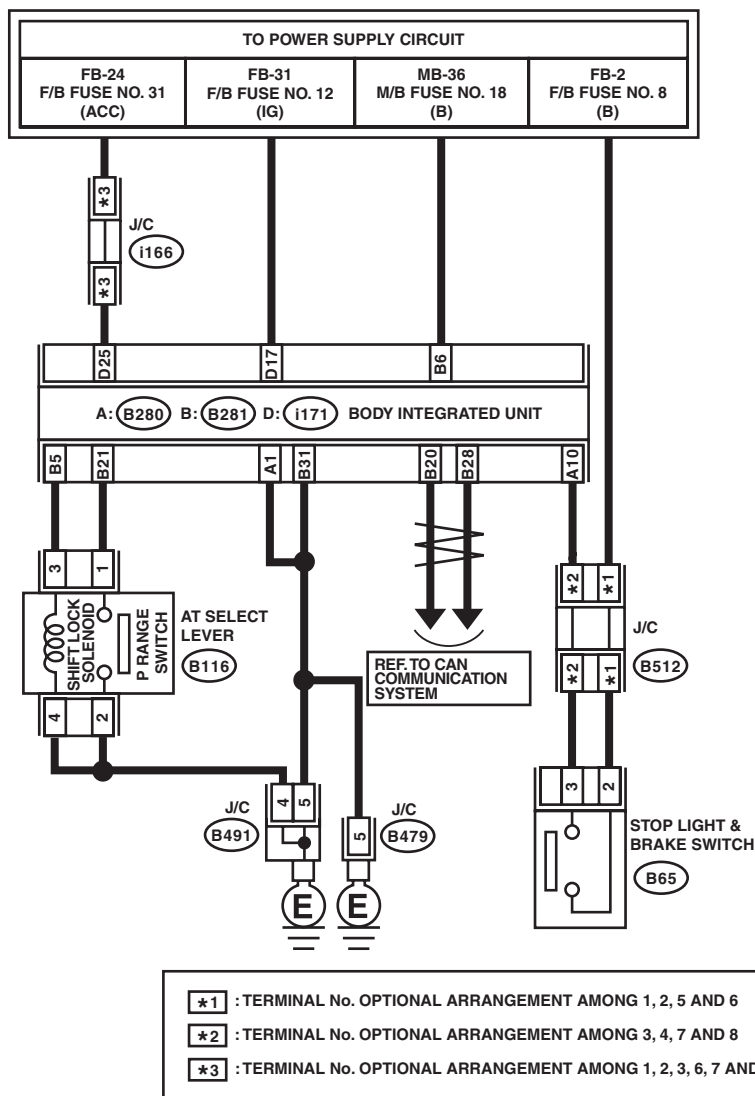
DTC DETECTING CONDITION:

Open or power supply-output short, GND-output short in shift lock circuit.

TROUBLE SYMPTOM:

Shift lock does not be released or remain locked.

WIRING DIAGRAM:



LAN00612

Step	Check	Yes	No
1	CHECK DTC. 1) Turn the ignition switch to ON. 2) Keep the Parking range for approx. 5 seconds. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1106 current malfunction? Go to step 6.	Go to step 2.

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Step	Check	Yes	No
2 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the shift lock solenoid connector. 3) Connect the disconnected connectors. 4) Turn the ignition switch to ON, then keep the Parking range for approx. 5 seconds. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1106 current malfunction?	Go to step 3.	Go to step 7.
3 CHECK HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the shift lock solenoid connector. 3) Using the tester, measure the resistance between terminals. Connector & terminal (B116) No. 4 — Chassis ground:	Is the resistance less than 10 Ω ?	Go to step 4.	Repair or replace the open circuit of harness.
4 CHECK SHIFT LOCK SOLENOID. Using a tester, measure the resistance between shift lock solenoid terminals. Connector & terminal (B116) No. 4 — No. 3:	Is the resistance less than 27 — 31 Ω ?	Go to step 5.	Replace the shift lock solenoid. <Ref. to CS-30, DISASSEMBLY, Select Lever.>
5 CHECK SHIFT LOCK SOLENOID. Connect the battery terminal to shift lock solenoid. Connector & terminal (B116) No. 3 — positive terminal: (B116) No. 4 — ground terminal:	Does the shift lock solenoid operate and then release the lock?	Go to step 6.	Replace the shift lock solenoid. <Ref. to CS-30, DISASSEMBLY, Select Lever.>
6 CHECK HARNESS. Use a tester to measure the resistance between harness terminals. Connector & terminal (B116) No. 3 — (B281) No. 5: NOTE: If body integrated unit and shift lock connector are not disconnected, disconnect them first and then perform measurement.	Is the resistance less than 10 Ω ?	Replace the body integrated unit. <Ref. to SL-73, Body Integrated Unit.>	Repair or replace the open circuit of harness.
7 CHECK DTC. 1) Depress the brake pedal at the parking range. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1106 current malfunction?	Go to step 8.	Go to step 9.
8 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector and shift lock connector. 3) Connect the disconnected connectors. 4) Turn the ignition switch to ON. 5) Depress the brake pedal at the parking range. 6) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1106 current malfunction?	Go to step 4.	Go to step 9.
9 CHECK CONNECTOR. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector and shift lock connector.	Is there poor contact of connector terminal?	Repair or replace the poor contact of terminal.	It is possible that temporary poor contact occurs.

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G: DTC B1401 M COLLATION NG

For detailed diagnosis procedure, refer to IMMOBILIZER (DIAG). <Ref. to IM(diag)-25, DTC B1401 M COLLATION NG, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

H: DTC B1402 IMMOBILIZER KEY COLLATION NG

For detailed diagnosis procedure, refer to IMMOBILIZER (DIAG). <Ref. to IM(diag)-25, DTC B1402 IMMOBILIZER KEY COLLATION NG, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

I: DTC B1403 E/G REQUEST NG

For detailed diagnosis procedure, refer to IMMOBILIZER (DIAG). <Ref. to IM(diag)-25, DTC B1403 E/G REQUEST NG, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

J: DTC B1405 SCU COLLATION NG

For detailed diagnosis procedure, refer to IMMOBILIZER (DIAG). <Ref. to IM(diag)-26, DTC B1405 SCU COLLATION NG, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

K: DTC B1406 SCU_EEPROM_NG

For detailed diagnosis procedure, refer to IMMOBILIZER (DIAG). <Ref. to IM(diag)-26, DTC B1406 SCU_EEPROM_NG, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

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L: DTC B1500 KEYLESS UART COM. MALFUNCTION

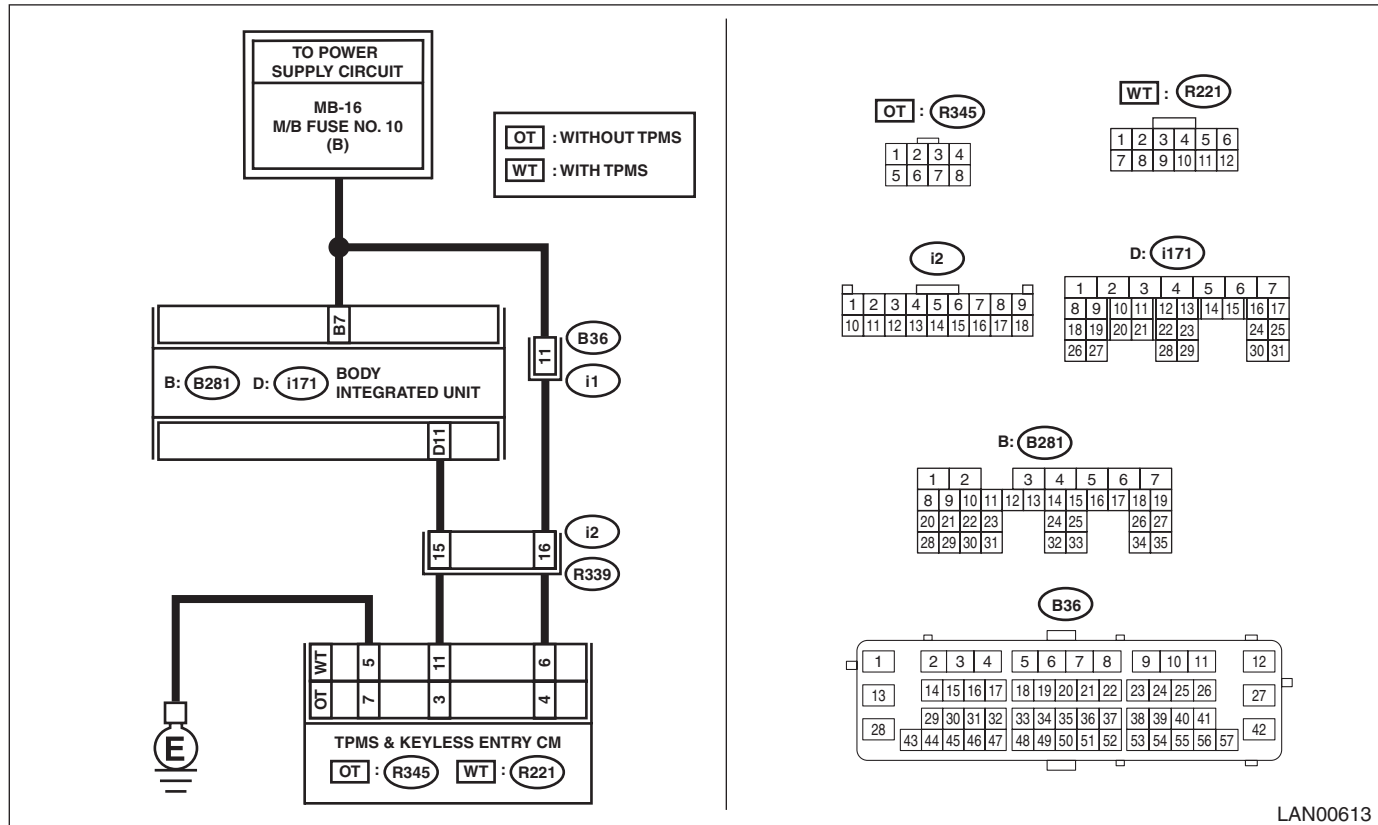
DTC DETECTING CONDITION:

UART between the keyless control module and body integrated unit is open or shorted, or has communication failure.

TROUBLE SYMPTOM:

Door lock does not operate with keyless.

WIRING DIAGRAM:



Step	Check	Yes	No
1 CHECK DTC. 1) Insert the ignition key to the ignition key cylinder and remove. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1500 current malfunction?	Go to step 2.	Go to step 7.
2 CHECK DTC. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit and keyless entry control module connector. 3) Connect the disconnected connectors. 4) Insert the ignition key to the ignition key cylinder and remove. 5) Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1500 current malfunction?	Go to step 3.	Go to step 7.

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Step	Check	Yes	No
3 CHECK HARNESS. 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit and keyless entry control module connector. 3) Using the tester, measure the resistance between terminals. Connector & terminal With TPMS <i>(i171) No. 11 — (R221) No. 11:</i> Without TPMS <i>(i171) No. 11 — (R345) No. 3:</i>	Is the resistance 10 Ω or less?	Go to step 4.	Repair the open circuit of harness or replace harness.
4 CHECK HARNESS. 1) Turn the ignition switch to OFF. 2) Use a tester to measure the voltage between the terminals. Connector & terminal With TPMS <i>(R221) No. 6 (+) — Chassis ground (-):</i> Without TPMS <i>(R345) No. 4 (+) — Chassis ground (-):</i>	Is the voltage 10 V or more?	Go to step 5.	Repair the power supply circuit.
5 CHECK HARNESS. Using the tester, measure the resistance between terminals. Connector & terminal With TPMS <i>(R221) No. 5 — Chassis ground:</i> Without TPMS <i>(R345) No. 7 — Chassis ground:</i>	Is the resistance 10 Ω or less?	Go to step 6.	Repair the ground circuit.
6 CHECK CONTROL MODULE. 1) Turn the ignition switch to OFF. 2) Remove the keyless entry control module. 3) Install a keyless entry control module that was operating normally on another vehicle.	Does it operate with the remote control key of another vehicle?	Replace the keyless entry control module. <Ref. to SL-70, REMOVAL, Keyless Entry Control Module.>	Replace the body integrated unit.
7 CHECK CONNECTOR. Check for poor contact of connectors used for low-speed CAN.	Is there poor contact of connector?	Repair the connector that has poor contact, or replace harness.	It is possible that temporary poor communication occurs. Delete the DTC.