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 the DTC B1100 displayed current malfunction?	Go to step 2.	Temporary EEPROM access error occurred.
2	<ol> <li>CHECK CONNECTOR.</li> <li>Turn the ignition switch to OFF.</li> <li>Disconnect the body integrated unit connector.</li> <li>Connect the disconnected connectors.</li> <li>Read the DTC of body integrated unit using Subaru Select Monitor.</li> </ol>		Replace the body integrated unit. <ref. sl-72,<br="" to="">REMOVAL, Body Integrated Unit.&gt;</ref.>	Temporary EEPROM access error occurred.

**BODY CONTROL SYSTEM (DIAGNOSTICS)** 

## **B: DTC B1101 BATT P/SUPPLY MALFUNCTION CONT**

## DTC DETECTING CONDITION:

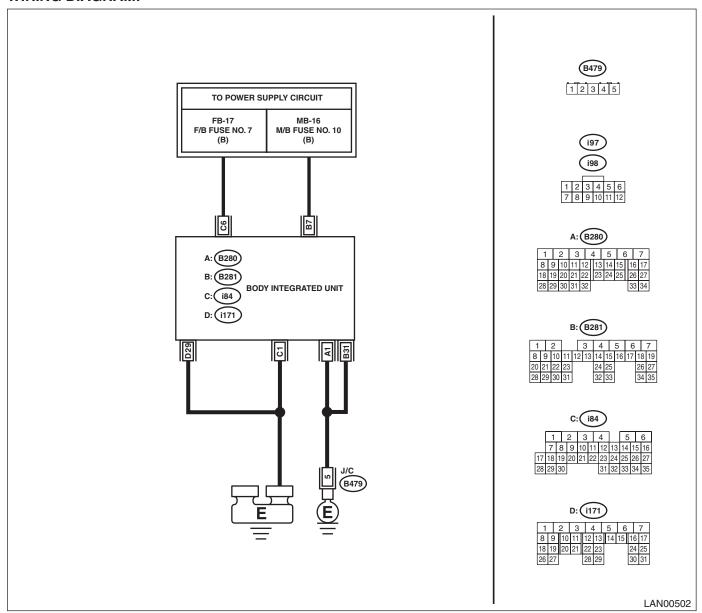
Battery power supply control circuit is open or shorted.

#### 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.



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

	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 a current malfunction?	Go to step 3.	Go to step 5.
3	CHECK FUSE. 1) Turn the ignition switch to OFF. 2) Inspect 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 V?	Replace the body integrated unit. <ref. sl-72,<br="" to="">REMOVAL, Body Integrated Unit.&gt;</ref.>	Repair the harness between body inte- grated unit and fuse.
5	<ul><li>CHECK CONNECTOR.</li><li>1) Turn the ignition switch to OFF.</li><li>2) Disconnect the body integrated unit connector.</li></ul>	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:

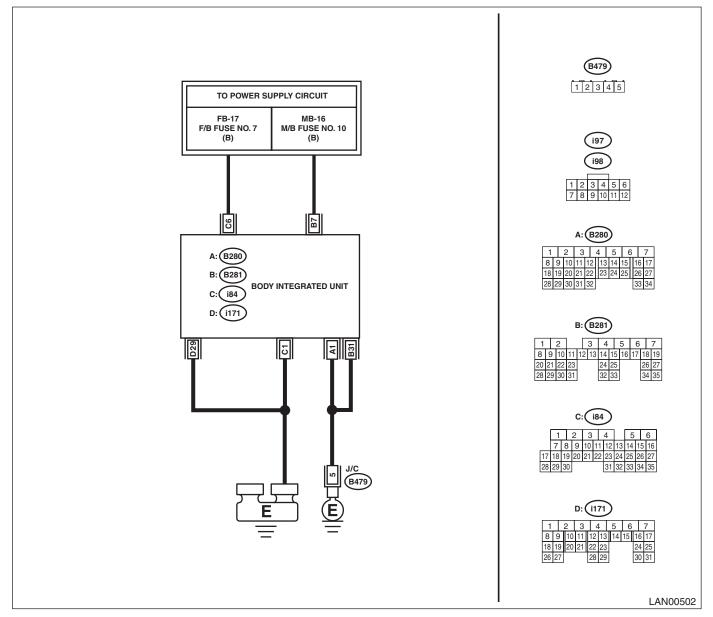
Battery power supply backup circuit is open or shorted.

### TROUBLE SYMPTOM:

Does not exist.

#### NOTE:

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



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

	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 a current malfunction?	Go to step 3.	Go to step 5.
3	CHECK FUSE. 1) Turn the ignition switch to OFF. 2) Inspect 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  (B281) No. 7 (+) — Chassis ground (-):	Is the voltage 8.5 — 16 V?	Replace the body integrated unit. <ref. sl-72,<br="" to="">REMOVAL, Body Integrated Unit.&gt;</ref.>	Repair the harness between body inte- grated unit and fuse.
5	<ul><li>CHECK CONNECTOR.</li><li>1) Turn the ignition switch to OFF.</li><li>2) Disconnect the body integrated unit connector.</li></ul>	Is there poor contact of connector?	Repair or replace the poor contact of connector.	A temporary change of voltage occurred.

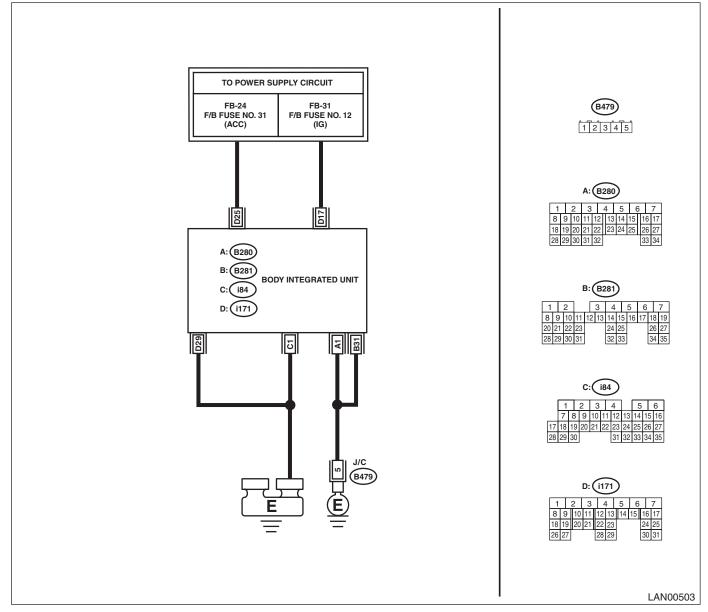
## D: DTC B1103 IGNITION POWER FAILURE

## DTC DETECTING CONDITION:

IGN power supply circuit is open or shorted.

### TROUBLE SYMPTOM:

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



	Step	Check	Yes	No
1	CHECK DTC.  Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1103 a current malfunction?	Go to step 2.	Go to step 5.
2	<ul> <li>CHECK DTC.</li> <li>1) Turn the ignition switch to OFF.</li> <li>2) Disconnect and then connect the body integrated unit connector.</li> <li>3) Wait approx. 2 minutes.</li> <li>4) Turn the ignition switch to ON.</li> <li>5) Read the DTC of body integrated unit using Subaru Select Monitor.</li> </ul>		Go to step 3.	Go to step 5.

	Step	Check	Yes	No
3	CHECK FUSE.  1) Turn the ignition switch to OFF.  2) Inspect 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 (-):		Replace the body integrated unit. <ref. sl-72,<br="" to="">REMOVAL, Body Integrated Unit.&gt;</ref.>	Repair the harness between body inte- grated unit and fuse.
5	<ul><li>CHECK CONNECTOR.</li><li>1) Turn the ignition switch to OFF.</li><li>2) Disconnect the body integrated unit connector.</li></ul>	Is there poor contact of connector?		A temporary change of voltage occurred.

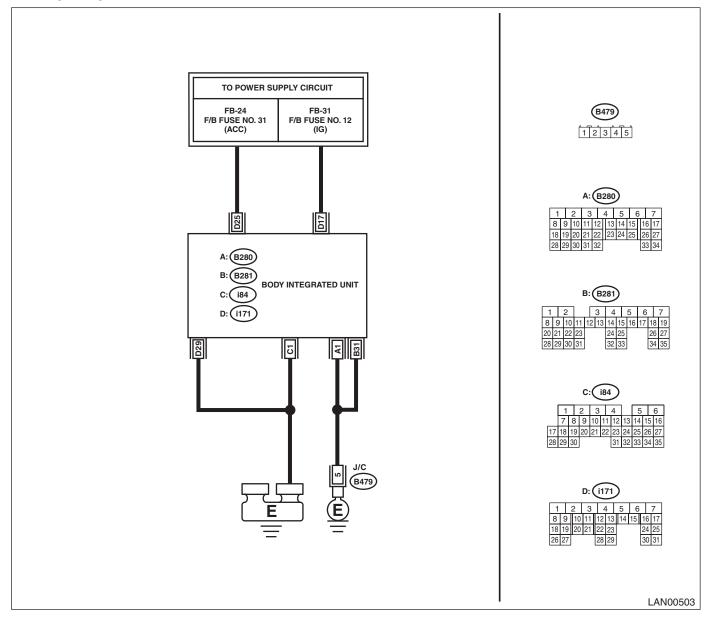
## E: DTC B1104 ACC POWER FAILURE

## DTC DETECTING CONDITION:

ACC power supply circuit is open or shorted.

### TROUBLE SYMPTOM:

Rear wiper may not operate at ACC position.



	Step	Check	Yes	No
1	CHECK DTC.  Read the DTC of body integrated unit using Subaru Select Monitor.	Is B1104 a 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.		Go to step 3.	Go to step 5.

	Step	Check	Yes	No
3	CHECK FUSE.  1) Turn the ignition switch to OFF.  2) Inspect 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 (-):		Replace the body integrated unit. <ref. sl-72,<br="" to="">REMOVAL, Body Integrated Unit.&gt;</ref.>	Repair the harness between body inte- grated unit and fuse.
5	<ul><li>CHECK CONNECTOR.</li><li>1) Turn the ignition switch to OFF.</li><li>2) Disconnect the body integrated unit connector.</li></ul>	Is there poor contact of connector?		A temporary change of voltage occurred.

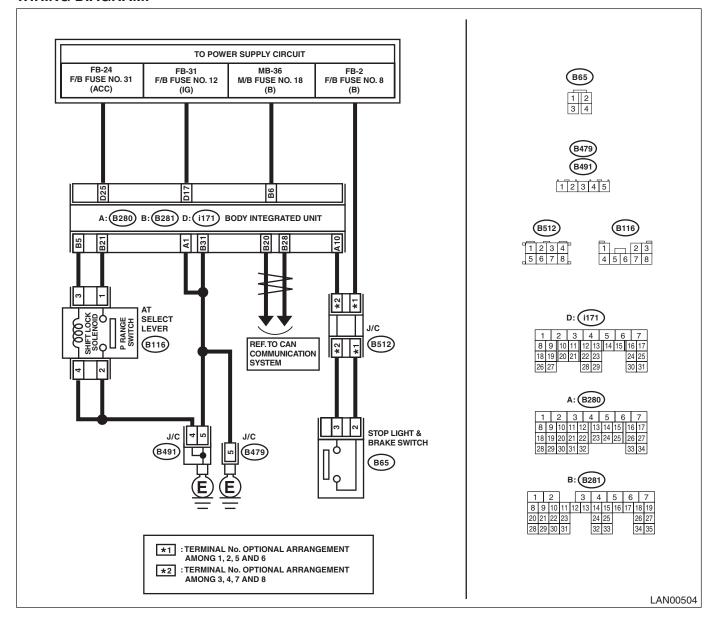
## F: DTC B1106 SHIFT LOCK CIRCUIT FAILURE

## DTC DETECTING CONDITION:

Shift lock circuit is shorted to ground.

### TROUBLE SYMPTOM:

Shift lock does not be released or remain locked.



	Step	Check	Yes	No
1	CHECK DTC.	Is B1106 a current malfunc-	Go to step 6.	Go to step 2.
	<ol> <li>Turn the ignition switch to ON.</li> </ol>	tion?		
	2) Keep the Parking range for approx. 5 sec-			
	onds.			
	3) Read the DTC of body integrated unit using			
	Subaru Select Monitor.			

	Step	Check	Yes	No
2	CHECK DTC.	Is B1106 a current malfunc-	Go to step 3.	Go to step 7.
	Turn the ignition switch to OFF.	tion?	See 10 010 p 01	one to one pro-
	2) Disconnect the shift lock solenoid connec-			
	tor.			
	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.			
3	CHECK HARNESS.	Is the resistance less than 10	Go to step 4.	Repair or replace
	Turn the ignition switch to OFF.     Disconnect the shift lock colonsid connect.	$\Omega$ ?		the open circuit of
	<ol><li>Disconnect the shift lock solenoid connector.</li></ol>			harness.
	3) Using the tester, measure the resistance			
	between terminals.			
	Connector & terminal			
	(B116) No. 4 — Chassis ground:			
4	CHECK SHIFT LOCK SOLENOID.	Is the resistance less than 27 —	Go to step 5.	Replace the shift
	Using a tester, measure the resistance between		See 10 010 p 01	lock solenoid.
	shift lock solenoid terminals.			<ref. cs-30,<="" th="" to=""></ref.>
	Connector & terminal			DISASSEMBLY,
	(B116) No. 4 — No. 3:			Select Lever.>
5	CHECK SHIFT LOCK SOLENOID.	Does the shift lock solenoid	Go to step 6.	Replace the shift
	Connect the battery terminal to shift lock sole-	operate and then release the		lock solenoid.
	noid.	lock?		<ref. cs-30,<="" th="" to=""></ref.>
	Connector & terminal			DISASSEMBLY,
	(B116) No. 3 — positive terminal:			Select Lever.>
	(B116) No. 4 — ground terminal:		D 1 11 1 1	Б
6	CHECK HARNESS. Use a tester to measure the resistance between	Is the resistance less than 10	Replace the body integrated unit.	Repair or replace the open circuit of
	harness terminals.	52!	<ref. sl-72,<="" th="" to=""><th>harness.</th></ref.>	harness.
	Connector & terminal		Body Integrated	namoos.
	(B116) No. 3 — (B281) No. 5:		Unit.>	
	NOTE:			
	If body integrated unit and shift lock connector			
	are not disconnected, disconnect them first and			
	then perform measurement.			
7	CHECK DTC.	Is B1106 a current malfunc-	Go to step 8.	Go to step 9.
	<ol> <li>Depress the brake pedal at the parking</li> </ol>	tion?		
	range.			
	2) Read the DTC of body integrated unit using			
0	Subaru Select Monitor.	In P1106 o accurrent realforms	Co to stop 4	Co to stan C
8	CHECK DTC.  1) Turn the ignition switch to OFF.	Is B1106 a current malfunction?	Go to step 4.	Go to step 9.
	<ul><li>2) Disconnect the body integrated unit connec-</li></ul>	I I I I I I I I I I I I I I I I I I I		
	tor and shift lock connector.			
	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.			
9	CHECK CONNECTOR.	Is there poor contact of connec-		It is possible that
	<ol> <li>Turn the ignition switch to OFF.</li> </ol>	tor terminal?	the poor contact of	temporary poor
	2) Disconnect the body integrated unit connec-		terminal.	contact occurs.
	tor and shift lock connector.			

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## G: DTC B1401 M COLLATION NG

For detailed diagnosis procedure, refer to IMMOBILIZER (DIAGNOSTICS). <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 (DIAGNOSTICS). <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 (DIAGNOSTICS). <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 (DIAGNOSTICS). <Ref. to IM(diag)-25, 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 (DIAGNOSTICS). <Ref. to IM(diag)-26, DTC B1406 SCU\_EEPROM\_NG, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

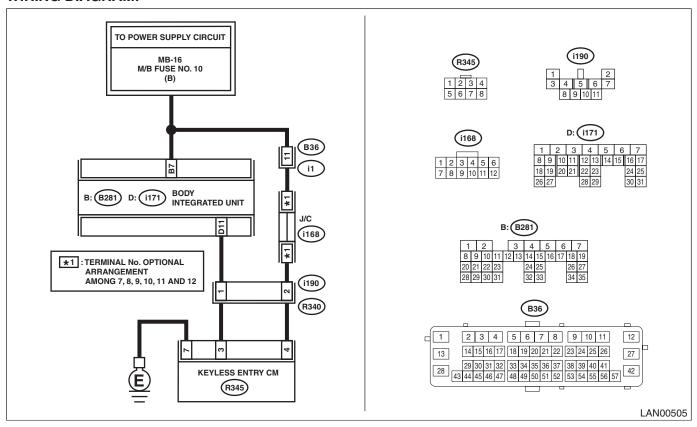
## L: DTC B1500 KEYLESS UART COM. MALFUNCTION

### **DTC DETECTING CONDITION:**

UART between keyless control unit and body integrated unit is open or shorted, the connector is not connected properly, or the terminal is crimped improperly.

### TROUBLE SYMPTOM:

Door lock does not operate with keyless.



	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 U1500 a 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 U1500 a current malfunction?	Go to step 3.	Go to step 7.
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  (i171) No. 11 — (R345) No. 3:	Is the resistance 10 $\Omega$ or less?	Go to step 4.	Repair the open circuit of harness or replace harness.

	Step	Check	Yes	No
4	CHECK HARNESS.  1) Turn the ignition switch to OFF.  2) Using the tester, measure the voltage between terminals.  Connector & terminal  (R345) No. 4 (+) — Chassis ground (-):	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 (R345) No. 7 — Chassis ground:	Is the resistance 10 $\Omega$ 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 key- less entry control module. <ref. to<br="">SL-69, REMOVAL, Keyless Entry Con- trol Module.&gt;</ref.>	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 may be a temporary communication malfunction. Delete the DTC.