

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## IMMOBILIZER (DIAGNOSTICS)

### 10.Diagnostic Procedure with Diagnostic Trouble Code (DTC)

#### A: DTC B1570 ANTENNA

##### DTC DETECTING CONDITION:

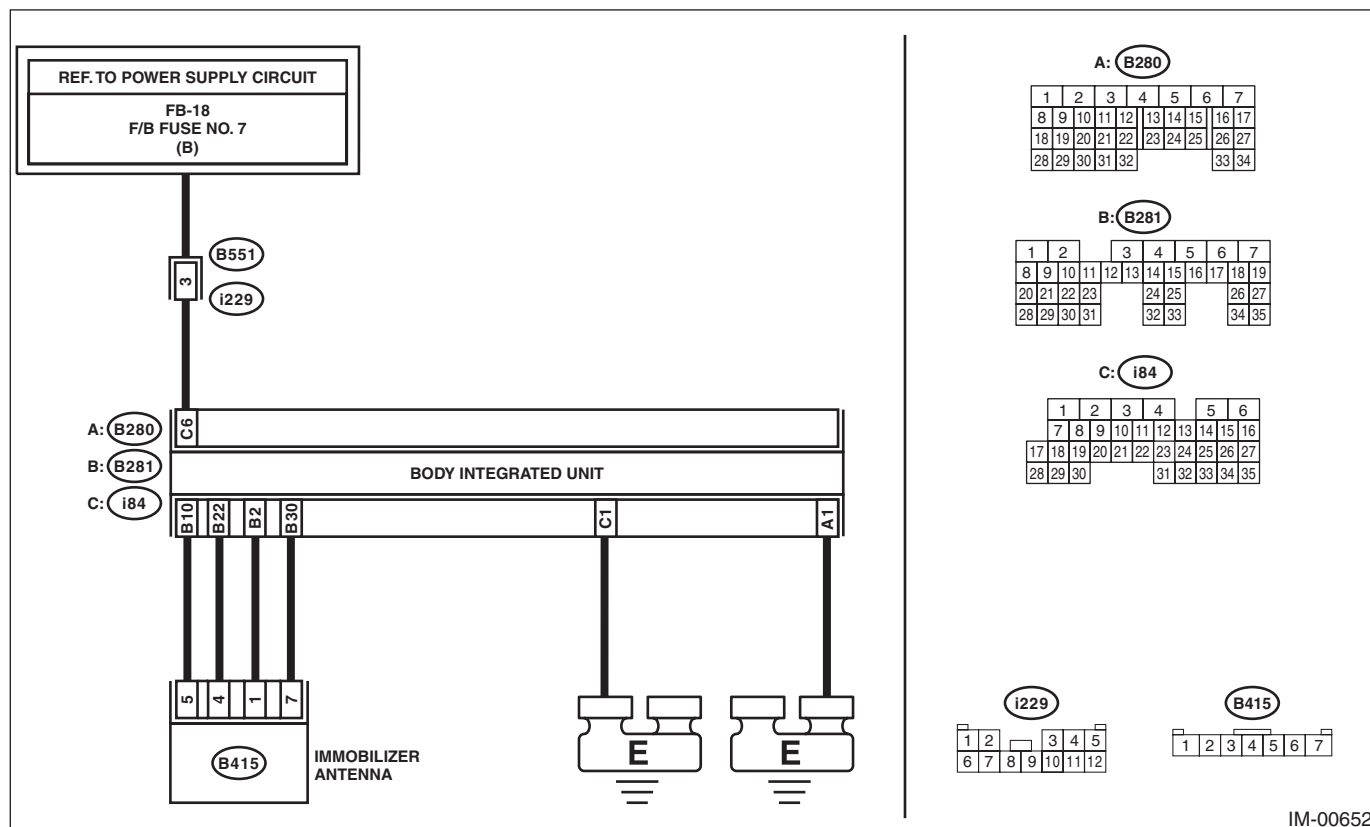
Faulty antenna

##### CAUTION:

When the body integrated unit is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.

##### WIRING DIAGRAM:

Immobilizer system <Ref. to WI(w/o HEV)-143, WIRING DIAGRAM, Immobilizer System.> <Ref. to WI(HEV)-151, WIRING DIAGRAM, Immobilizer System.>



IM-00652

Step	Check	Yes	No
<b>1</b> <b>CHECK BODY INTEGRATED UNIT POWER SUPPLY CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit. 3) Measure the voltage between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(i84) No. 6 (+) — Chassis ground (-):</b>	Is the voltage 10 V or more?	Go to step 2.	Check the harness for open or short circuit between body integrated unit and fuse.
<b>2</b> <b>CHECK BODY INTEGRATED UNIT GROUND CIRCUIT.</b> Measure the resistance between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B280) No. 1 — Chassis ground:</b> <b>(i84) No. 1 — Chassis ground:</b>	Is the resistance less than 10 Ω?	Go to step 3.	Repair the open circuit of the body integrated unit ground circuit.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

IMMOBILIZER (DIAGNOSTICS)

Step	Check	Yes	No
<b>3</b> <b>CHECK ANTENNA POWER SUPPLY CIRCUIT.</b> 1) Connect the connector to body integrated unit. 2) Disconnect the connector from the antenna. 3) Insert the ignition key into the key cylinder, then measure the voltage between the antenna connector terminal and the chassis ground. <b>Connector &amp; terminal</b> <b>(B415) No. 1 (+) — Chassis ground (-):</b>	Is the voltage $5 \pm 0.5$ V approx. 200 ms after inserting the ignition key into the key cylinder? And then, does the voltage return to 0 V within 2 s?	Go to step 5.	Go to step 4.
<b>4</b> <b>CHECK ANTENNA POWER SUPPLY CIRCUIT.</b> 1) Disconnect the connector from body integrated unit. 2) Measure the resistance of body integrated unit connector terminal and antenna connector terminal. <b>Connector &amp; terminal</b> <b>(B281) No. 2 — (B415) No. 1:</b>	Is the resistance less than 10 $\Omega$ ?	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>	Repair the harness or connector between body integrated unit and antenna.
<b>5</b> <b>CHECK ANTENNA GROUND CIRCUIT.</b> Measure the resistance between antenna connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B417) No. 7 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 7.	Go to step 6.
<b>6</b> <b>CHECK ANTENNA GROUND CIRCUIT.</b> 1) Disconnect the connector from body integrated unit. 2) Measure the resistance between antenna connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B281) No. 30 — (B415) No. 7:</b>	Is the resistance less than 10 $\Omega$ ?	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>	Repair the harness or connector between body integrated unit and antenna.
<b>7</b> <b>CHECK ANTENNA COMMUNICATION CIRCUIT.</b> Measure the resistance of body integrated unit connector terminal and antenna connector terminal. <b>Connector &amp; terminal</b> <b>(B281) No. 10 — (B415) No. 5:</b> <b>(B281) No. 22 — (B415) No. 4:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 8.	Repair the harness or connector between body integrated unit and antenna.
<b>8</b> <b>CHECK ANTENNA.</b> 1) Replace the immobilizer antenna. 2) Insert the ignition key in the ignition switch. (OFF or ACC) 3) Check DTC of body integrated unit.	Is DTC B1411 detected?	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>	Antenna has a failure.

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### IMMOBILIZER (DIAGNOSTICS)

#### B: DTC B1571 REFERENCE CODE INCOMPATIBILITY

##### DTC DETECTING CONDITION:

Reference code incompatibility between body integrated unit and ECM

##### CAUTION:

When the body integrated unit is replaced, registration of the immobilizer system is required. For details, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

Step	Check	Yes	No
<b>1</b> <b>CONFIRM NUMBER OF REGISTERED IMMOBILIZER KEY.</b> Confirm the number of registered immobilizer key. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is the number of registration 0?	Go to step 2.	Go to step 3.
<b>2</b> <b>PERFORM IMMOBILIZER SYSTEM REGISTRATION.</b> Register the immobilizer system. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is registration complete?	Finish the diagnosis.	Go to step 4.
<b>3</b> <b>PERFORM ECM REGISTRATION.</b> Perform ECM registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is registration complete?	Finish the diagnosis.	Go to step 4.
<b>4</b> <b>CHECK FOR ANY OTHER DTC ON DISPLAY.</b>	Is any other DTC displayed?	Perform the diagnosis according to DTC.	Go to step 5.
<b>5</b> <b>PERFORM ECM REGISTRATION.</b> 1) Replace the ECM. 2) Perform ECM registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".	Is registration complete?	Finish the diagnosis.	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>

### C: DTC B1572 IMM CIRCUIT FAILURE (EXCEPT ANTENNA CIRCUIT)

#### DTC DETECTING CONDITION:

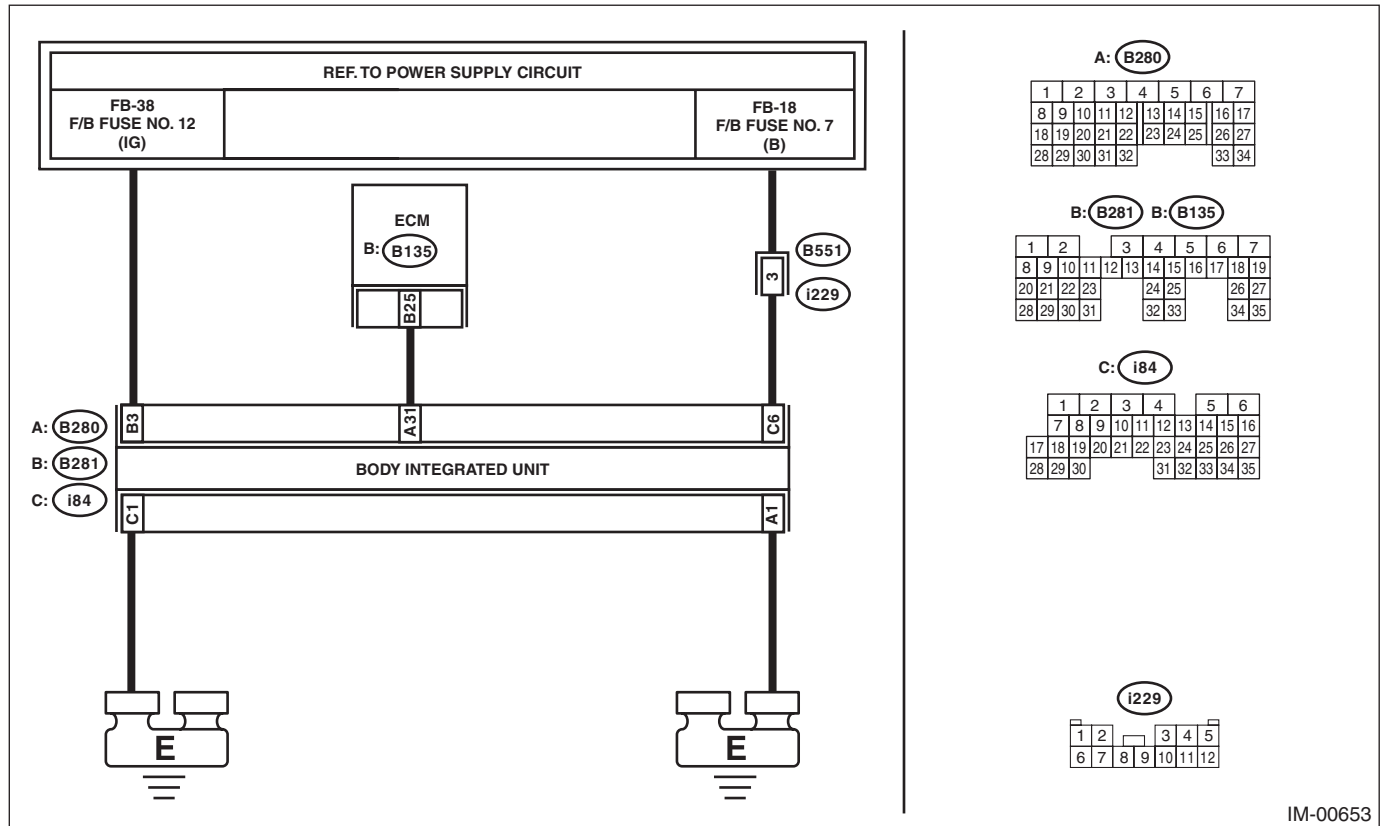
Communication failure between body integrated unit and ECM

#### CAUTION:

When the body integrated unit is replaced, registration of the immobilizer system is required. For details, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

#### WIRING DIAGRAM:

Immobilizer system <Ref. to WI(w/o HEV)-143, WIRING DIAGRAM, Immobilizer System.> <Ref. to WI(HEV)-151, WIRING DIAGRAM, Immobilizer System.>



IM-00653

Step	Check	Yes	No
<b>1</b> <b>CHECK BODY INTEGRATED UNIT POWER SUPPLY CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit. 3) Measure the voltage between the body integrated unit connector terminal and chassis ground. <i>Connector &amp; terminal (i84) No. 6 (+) — Chassis ground (-):</i>	Is the voltage 10 V or more?	Go to step 2.	Check the harness for open or short circuit between body integrated unit and fuse.
<b>2</b> <b>CHECK BODY INTEGRATED UNIT POWER SUPPLY CIRCUIT.</b> 1) Turn the ignition switch to ON. 2) Measure the voltage between the body integrated unit connector terminal and chassis ground. <i>Connector &amp; terminal (B281) No. 3 (+) — Chassis ground (-):</i>	Is the voltage 10 V or more?	Go to step 3.	Check the harness for open or short circuit between the body integrated unit and ignition switch.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## IMMOBILIZER (DIAGNOSTICS)

Step	Check	Yes	No
<b>3</b> <b>CHECK BODY INTEGRATED UNIT GROUND CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B280) No. 1 — Chassis ground:</b> <b>(i84) No. 1 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 4.	Repair the open circuit of the body integrated unit ground circuit.
<b>4</b> <b>CHECK GROUND CIRCUIT FOR ECM.</b> Measure the resistance between the ECM ground terminal and engine ground. <b>Connector &amp; terminal</b> <b>(B134) No. 3 — Chassis ground:</b> <b>(B134) No. 4 — Chassis ground:</b> <b>(B136) No. 1 — Chassis ground:</b> <b>(B136) No. 2 — Chassis ground:</b> <b>(B136) No. 3 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 5.	Repair the ECM ground circuit.
<b>5</b> <b>CHECK HARNESS BETWEEN BODY INTEGRATED UNIT AND ECM.</b> 1) Disconnect the connector from ECM. 2) Measure the resistance between body integrated unit connector terminal and ECM connector terminal. <b>Connector &amp; terminal</b> <b>(B280) No. 31 — (B135) No. 25:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 6.	Repair the open circuit of the harness between the body integrated unit and ECM.
<b>6</b> <b>CHECK COMMUNICATION CIRCUIT HARNESS.</b> 1) Turn the ignition switch to ON. 2) Measure the voltage between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B280) No. 31 (+) — Chassis ground (-):</b>	Is the voltage 6 V or more?	Repair the harness between body integrated unit and ECM.	Go to step 7.
<b>7</b> <b>CHECK COMMUNICATION CIRCUIT HARNESS.</b> Measure the voltage between ECM connector terminal and engine ground. <b>Connector &amp; terminal</b> <b>(B135) No. 25 (+) — Engine ground (-):</b>	Is the voltage 6 V or more?	Repair the harness between body integrated unit and ECM.	Go to step 8.
<b>8</b> <b>CHECK COMMUNICATION CIRCUIT HARNESS.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B280) No. 31 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Repair the harness between body integrated unit and ECM.	Go to step 9.
<b>9</b> <b>CHECK COMMUNICATION CIRCUIT HARNESS.</b> Measure the resistance between ECM connector terminal and engine ground. <b>Connector &amp; terminal</b> <b>(B135) No. 25 — Engine ground:</b>	Is the resistance less than 10 $\Omega$ ?	Repair the harness between body integrated unit and ECM.	Go to step 10.

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

IMMOBILIZER (DIAGNOSTICS)

Step		Check	Yes	No
10	<b>CHECK ECM.</b>	Is DTC B1572 detected?	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>	ECM has a failure. Perform ECM registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".
	1) Replace the ECM. (Do not perform ECM registration.)			
	2) Turn the ignition switch to ON.			
	3) Wait for 5 seconds.			
	4) Read the DTC relating the ECM using the Subaru Select Monitor.			

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### IMMOBILIZER (DIAGNOSTICS)

#### D: DTC B1574 KEY COMMUNICATION FAILURE

##### DTC DETECTING CONDITION:

Communication failure between key and body integrated unit

##### CAUTION:

**When the body integrated unit is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.**

Step	Check	Yes	No
<b>1</b> <b>CHECK IGNITION KEY.</b> 1) Remove the ignition key from the ignition switch. 2) Insert the ignition key into the ignition switch, and then turn the ignition switch to ON. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC B1410 detected?	Go to step 2.	Finish the diagnosis.
<b>2</b> <b>CHECK IGNITION KEY.</b> 1) Prepare another ignition key. 2) Insert the ignition key into the ignition switch, and then turn the ignition switch to ON. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC B1410 detected?	Go to step 3.	Ignition key unit was defective.
<b>3</b> <b>CHECK IMMOBILIZER ANTENNA.</b> 1) Replace the immobilizer antenna. 2) Insert the ignition key into the ignition switch, and then turn the ignition switch to ON. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC B1410 detected?	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>	Immobilizer antenna was defective.

#### E: DTC B1575 INCORRECT IMMOBILIZER KEY

##### DTC DETECTING CONDITION:

Incorrect immobilizer key (use of unregistered key in body integrated unit)

##### CAUTION:

**When the body integrated unit is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.**

Step	Check	Yes	No
<b>1</b> <b>PERFORM IGNITION KEY REGISTRATION.</b> Perform key registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is key registration complete?	Finish the diagnosis.	Replace ignition keys (including transponder) which cannot be registered. Go to step 2.
<b>2</b> <b>PERFORM IGNITION KEY REGISTRATION.</b> Perform key registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is key registration complete?	Finish the diagnosis.	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

IMMOBILIZER (DIAGNOSTICS)

## F: DTC B1576 EGI CONTROL MODULE EEPROM

### DTC DETECTING CONDITION:

- ECM malfunctioning
- Inaccessible ROM in ECM during key registration.

### CAUTION:

**When the ECM is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.**

Step	Check	Yes	No
<b>1</b> <b>PERFORM ECM REGISTRATION.</b> Perform ECM registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is registration complete?	Finish the diagnosis.	Go to step 2.
<b>2</b> <b>PERFORM ECM REGISTRATION.</b> Perform ECM registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is registration complete?	Finish the diagnosis.	Go to step 3.
<b>3</b> <b>PERFORM ECM REGISTRATION.</b> Perform ECM registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is registration complete?	Finish the diagnosis.	Replace the ECM. <Ref. to FU(H4DO(w/o HEV))-100, Engine Control Module (ECM).>

## G: DTC B1577 IMM CONTROL MODULE EEPROM

### DTC DETECTING CONDITION:

- Body integrated unit malfunctioning
- Failed to access ROM inside the body integrated unit.

### CAUTION:

**When the body integrated unit is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.**

Step	Check	Yes	No
<b>1</b> <b>PERFORM ECM REGISTRATION.</b> Perform ECM registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is registration complete?	Finish the diagnosis.	Go to step 2.
<b>2</b> <b>PERFORM ECM REGISTRATION.</b> Perform ECM registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is registration complete?	Finish the diagnosis.	Go to step 3.
<b>3</b> <b>PERFORM ECM REGISTRATION.</b> Perform ECM registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is registration complete?	Finish the diagnosis.	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>



## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### IMMOBILIZER (DIAGNOSTICS)

#### H: DTC B1578 METER FAILURE

##### DTC DETECTING CONDITION:

- Except for C0 and C5 models

Reference code incompatibility between combination meter and body integrated unit or communication failure between body integrated unit and ECM

- For C0 and C5 models

Reference code incompatibility between security control module and body integrated unit or communication failure between body integrated unit and ECM

Step	Check	Yes	No
<b>1</b> <b>CHECK DTC.</b> Read the DTC of body integrated unit using Subaru Select Monitor.	Is any of DTC B1401, B1405, B1406, B1407, B1408 or B1409 detected?	Perform the diagnosis according to the DTC.	<Ref. to IM(diag)-19, DTC B1572 IMM CIRCUIT FAILURE (EXCEPT ANTENNA CIRCUIT), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

#### I: DTC B1401 M COLLATION NG

##### DTC DETECTING CONDITION:

Reference code incompatibility between combination meter and body integrated unit

##### CAUTION:

**When the combination meter is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.**

Step	Check	Yes	No
<b>1</b> <b>CHECK DTC.</b> Read the DTC of body integrated unit using Subaru Select Monitor.	Is any of DTC B1407 or B1408 detected?	Perform the diagnosis according to the DTC.	Go to step 2.
<b>2</b> <b>CHECK COMBINATION METER REGISTRATION.</b> Perform registration of combination meter. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is registration complete?	Finish the diagnosis.	Go to step 3.
<b>3</b> <b>CHECK DTC.</b> Read the DTC of body integrated unit using Subaru Select Monitor.	Is any of DTC B1407 or B1408 detected?	Perform the diagnosis according to the DTC.	Replace the combination meter. <Ref. to IDI-20, Combination Meter.>

### J: DTC B1402 IMMOBILIZER KEY COLLATION NG

#### DTC DETECTING CONDITION:

- Incorrect immobilizer key (use of unregistered key in body integrated unit)
- Faulty antenna
- Communication failure between key and body integrated unit

Step	Check	Yes	No
1 <b>CHECK DTC.</b> Read the DTC of body integrated unit using Subaru Select Monitor.	Is any of DTC B1410 or B1411 detected?	Perform the diagnosis according to the DTC.	<Ref. to IM(diag)-22, DTC B1575 INCORRECT IMMOBILIZER KEY, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

### K: DTC B1405 SCU COLLATION NG

#### DTC DETECTING CONDITION:

Reference code incompatibility between security control module and body integrated unit

#### CAUTION:

**When the security control module is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.**

Step	Check	Yes	No
1 <b>CHECK DTC.</b> Read the DTC of body integrated unit using Subaru Select Monitor.	Is any of DTC B1406 or B1409 detected?	Perform the diagnosis according to DTC.	Go to step 2.
2 <b>PERFORM SECURITY CONTROL MODULE REGISTRATION.</b> Perform security control module registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.	Is registration complete?	Finish the diagnosis.	Go to step 3.
3 <b>CHECK DTC.</b> Read the DTC of body integrated unit using Subaru Select Monitor.	Is any of DTC B1406 or B1409 detected?	Perform the diagnosis according to DTC.	Replace the security control module. <Ref. to SL-80, Security Control Module.>

### L: DTC B1406 SCU\_EEPROM\_NG

#### DTC DETECTING CONDITION:

- Defective security control module
- ROM of security control module cannot be accessed

#### CAUTION:

**When the security control module is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.**

Step	Check	Yes	No
1 <b>PERFORM SECURITY CONTROL MODULE REGISTRATION.</b> 1) Perform security control module registration. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC B1406 detected?	Replace the security control module. <Ref. to SL-80, Security Control Module.>	Finish the diagnosis.

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### IMMOBILIZER (DIAGNOSTICS)

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#### M: DTC B1407 M COMMUNICATION ABNORMAL

##### DTC DETECTING CONDITION:

Communication failure between body integrated unit and combination meter

##### CAUTION:

When the combination meter is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.

Step		Check	Yes	No
1	<b>CHECK DTC.</b> Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC of the body integrated unit except for DTC B1407 displayed?	Perform the diagnosis according to the DTC.	Replace the combination meter. <Ref. to IDI-20, Combination Meter.>

#### N: DTC B1408 METER EEPROM ABNORMAL

##### DTC DETECTING CONDITION:

Defective combination meter

##### CAUTION:

When the combination meter is replaced, registration of the immobilizer system is required. For details, refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”.

Step		Check	Yes	No
1	<b>CHECK COMBINATION METER REGISTRATION.</b> 1) Perform registration of combination meter. Refer to the “REGISTRATION MANUAL FOR IMMOBILIZER”. 2) Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC B1408 detected?	Replace the combination meter. <Ref. to IDI-20, Combination Meter.>	Finish the diagnosis.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

IMMOBILIZER (DIAGNOSTICS)

## O: DTC B1409 SCU COMMUNICATION ABNORMAL

### DTC DETECTING CONDITION:

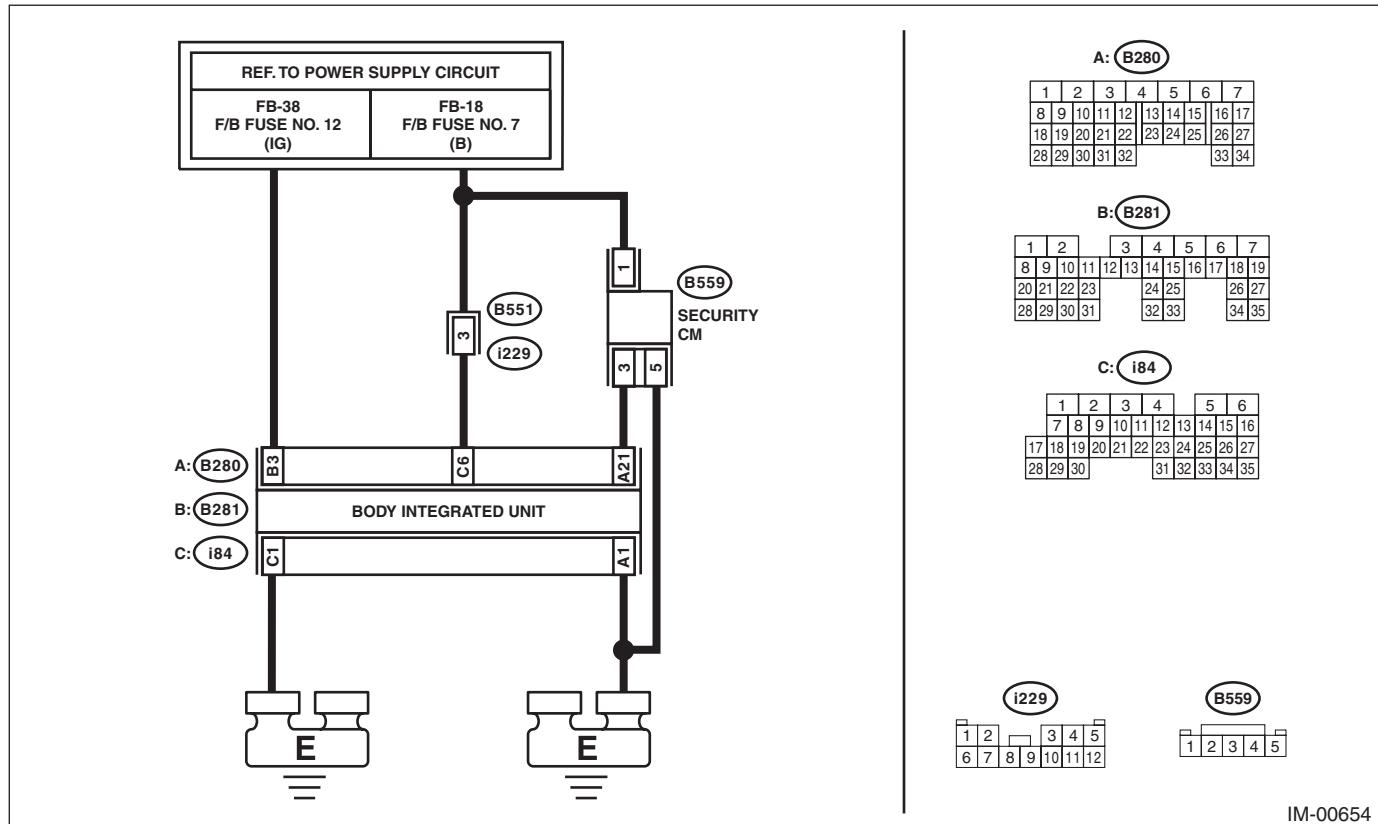
Communication failure between body integrated unit and security control module

### CAUTION:

When the body integrated unit is replaced, registration of the immobilizer system is required. For details, refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

### WIRING DIAGRAM:

Immobilizer system <Ref. to WI(w/o HEV)-143, WIRING DIAGRAM, Immobilizer System.> <Ref. to WI(HEV)-151, WIRING DIAGRAM, Immobilizer System.>



IM-00654

Step	Check	Yes	No
<b>1</b> <b>CHECK BODY INTEGRATED UNIT POWER SUPPLY CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit. 3) Measure the voltage between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(i84) No. 6 (+) — Chassis ground (-):</b>	Is the voltage 10 V or more?	Go to step 2.	Check the harness for open or short circuit between body integrated unit and fuse.
<b>2</b> <b>CHECK BODY INTEGRATED UNIT POWER SUPPLY CIRCUIT.</b> 1) Turn the ignition switch to ON. 2) Measure the voltage between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B281) No. 3 (+) — Chassis ground (-):</b>	Is the voltage 10 V or more?	Go to step 3.	Check the harness for open or short circuit between the body integrated unit and ignition switch.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## IMMOBILIZER (DIAGNOSTICS)

Step	Check	Yes	No
<b>3</b> <b>CHECK BODY INTEGRATED UNIT GROUND CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B280) No. 1 — Chassis ground:</b> <b>(i84) No. 1 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 4.	Repair the open circuit of the body integrated unit ground circuit.
<b>4</b> <b>CHECK SECURITY CONTROL MODULE POWER SUPPLY CIRCUIT.</b> 1) Disconnect the connector from the security control module. 2) Measure the power supply between security control module connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B559) No. 1 (+) — Chassis ground (-):</b>	Is the voltage 10 V or more?	Go to step 5.	Check for an open or short circuit in the harness between security control module and fuse.
<b>5</b> <b>CHECK SECURITY CONTROL MODULE GROUND CIRCUIT.</b> Measure the resistance between security control module connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B559) No. 5 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 6.	Repair the open circuit of the security control module ground circuit.
<b>6</b> <b>CHECK HARNESS BETWEEN BODY INTEGRATED UNIT AND SECURITY CONTROL MODULE.</b> Measure the resistance between the body integrated unit connector terminal and security control module connector terminal. <b>Connector &amp; terminal</b> <b>(B280) No. 21 — (B559) No. 3:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 7.	Repair the harness between body integrated unit and security control module.
<b>7</b> <b>CHECK COMMUNICATION CIRCUIT HARNESS.</b> 1) Turn the ignition switch to ON. 2) Measure the voltage between security control module connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B559) No. 3 (+) — Chassis ground (-):</b>	Is the voltage 6 V or more?	Repair the harness between body integrated unit and security control module.	Go to step 8.
<b>8</b> <b>CHECK COMMUNICATION CIRCUIT HARNESS.</b> 1) Turn the ignition switch to ON. 2) Measure the voltage between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B280) No. 21 (+) — Chassis ground (-):</b>	Is the voltage 6 V or more?	Repair the harness between body integrated unit and security control module.	Go to step 9.
<b>9</b> <b>CHECK COMMUNICATION CIRCUIT HARNESS.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between security control module connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B559) No. 3 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Repair the harness between body integrated unit and ECM.	Go to step 10.

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### IMMOBILIZER (DIAGNOSTICS)

Step	Check	Yes	No
<b>10</b> <b>CHECK COMMUNICATION CIRCUIT HARNESS.</b> 1) Turn the ignition switch to ON. 2) Measure the resistance between the body integrated unit connector terminal and chassis ground. <b>Connector &amp; terminal</b> <b>(B280) No. 21 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Repair the harness between body integrated unit and security control module.	Go to step 11.
<b>11</b> <b>CHECK SECURITY CONTROL MODULE.</b> 1) Replace the security control module. (Do not perform security control module registration.) 2) Turn the ignition switch to ON. 3) Read the DTC of body integrated unit using Subaru Select Monitor.	Is DTC B1409 detected?	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>	Security control module was defective. Perform security control module registration. Refer to the "REGISTRATION MANUAL FOR IMMOBILIZER".

### P: DTC B1410 TRANSPONDER COMMUNICATION ABNORMAL

#### NOTE:

Refer to DTC B1574 for diagnostic procedure. <Ref. to IM(diag)-22, DTC B1574 KEY COMMUNICATION FAILURE, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

### Q: DTC B1411 IMMOBILIZER ANTENNA ABNORMAL

#### NOTE:

Refer to DTC B1570 for diagnostic procedure. <Ref. to IM(diag)-16, DTC B1570 ANTENNA, Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

# **Diagnostic Procedure with Diagnostic Trouble Code (DTC)**

IMMOBILIZER (DIAGNOSTICS)

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# LAN SYSTEM (DIAGNOSTICS)

# *LAN(w/o HEV)(diag)*

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	Page
1. Basic Diagnostic Procedure .....	2
2. Check List for Interview .....	4
3. General Description .....	5
4. Electrical Component Location .....	8
5. Control Module I/O Signal .....	9
6. Subaru Select Monitor .....	10
7. Read Diagnostic Trouble Code (DTC) .....	25
8. Clear Memory Mode .....	26
9. CAN Communication Circuit Check .....	27
10. List of Diagnostic Trouble Code (DTC) .....	64
11. Diagnostic Procedure with Diagnostic Trouble Code (DTC) .....	95
12. General Diagnostic Table .....	120