

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

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

#### **A: DTC C0101 ABS WHEEL SPEED SENSOR MALFUNCTION RR SENSOR (BROKEN WIRE, INPUT VOLTAGE TOO HIGH)**

NOTE:

Refer to DTC C0104 for diagnostic procedure. <Ref. to ABS(diag)-37, DTC C0104 ABS WHEEL SPEED SENSOR MALFUNCTION FL SENSOR (BROKEN WIRE, INPUT VOLTAGE TOO HIGH), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

#### **B: DTC C0102 ABS WHEEL SPEED SENSOR MALFUNCTION RL SENSOR (BROKEN WIRE, INPUT VOLTAGE TOO HIGH)**

NOTE:

Refer to DTC C0104 for diagnostic procedure. <Ref. to ABS(diag)-37, DTC C0104 ABS WHEEL SPEED SENSOR MALFUNCTION FL SENSOR (BROKEN WIRE, INPUT VOLTAGE TOO HIGH), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

#### **C: DTC C0103 ABS WHEEL SPEED SENSOR MALFUNCTION FR SENSOR (BROKEN WIRE, INPUT VOLTAGE TOO HIGH)**

NOTE:

Refer to DTC C0104 for diagnostic procedure. <Ref. to ABS(diag)-37, DTC C0104 ABS WHEEL SPEED SENSOR MALFUNCTION FL SENSOR (BROKEN WIRE, INPUT VOLTAGE TOO HIGH), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

## D: DTC C0104 ABS WHEEL SPEED SENSOR MALFUNCTION FL SENSOR (BROKEN WIRE, INPUT VOLTAGE TOO HIGH)

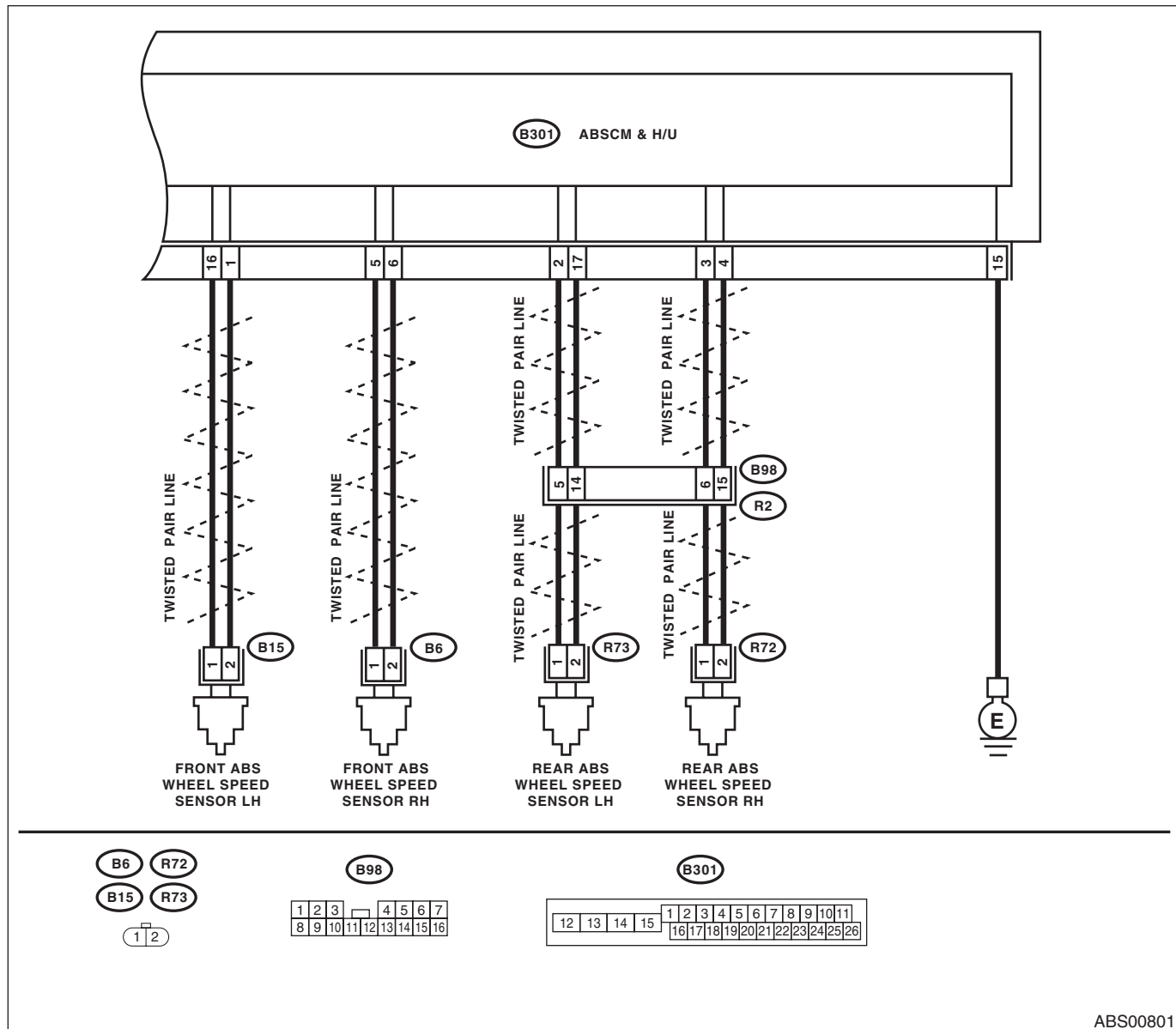
### DTC DETECTING CONDITION:

- Defective ABS wheel speed sensor (broken wire, input voltage too high)
- Defective harness connector

### Trouble Symptom:

ABS does not operate.

### WIRING DIAGRAM:



ABS00801

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1</b> <b>CHECK POOR CONTACT IN CONNECTOR.</b> Check if there is poor contact between ABSCM&H/U and ABS wheel speed sensor.	Is there poor contact?	Repair the connector.	Go to step 2.
<b>2</b> <b>CHECK HARNESS CONNECTOR BETWEEN ABSCM&amp;H/U AND ABS WHEEL SPEED SENSOR.</b> 1) Disconnect the connector (B301) from the ABSCM&H/U. 2) Disconnect the connector from the ABS wheel speed sensor. 3) Measure the resistance between ABSCM&H/U connector and ABS wheel speed sensor connector. <b>Connector &amp; terminal</b> <b>DTC C0101</b> (B301) No. 3 — (R72) No. 1: (B301) No. 4 — (R72) No. 2: <b>DTC C0102</b> (B301) No. 2 — (R73) No. 1: (B301) No. 17 — (R73) No. 2: <b>DTC C0103</b> (B301) No. 5 — (B6) No. 1: (B301) No. 6 — (B6) No. 2: <b>DTC C0104</b> (B301) No. 16 — (B15) No. 1: (B301) No. 1 — (B15) No. 2:	Is the resistance less than 0.5 Ω?	Go to step 3.	Repair the harness connector between ABSCM&H/U and ABS wheel speed sensor.
<b>3</b> <b>CHECK GROUND SHORT OF HARNESS.</b> Measure the resistance between the ABSCM&H/U connector and chassis ground. <b>Connector &amp; terminal</b> <b>DTC C0101</b> (B301) No. 4 — Chassis ground: <b>DTC C0102</b> (B301) No. 17 — Chassis ground: <b>DTC C0103</b> (B301) No. 6 — Chassis ground: <b>DTC C0104</b> (B301) No. 1 — Chassis ground:	Is the resistance more than 1 MΩ?	Go to step 4.	Repair the harness connector between ABSCM&H/U and ABS wheel speed sensor.
<b>4</b> <b>CHECK ABS WHEEL SPEED SENSOR POWER SUPPLY CIRCUIT.</b> 1) Connect ABSCM&H/U connector. 2) Turn the ignition switch to ON. 3) Measure the voltage between ABS wheel speed sensor connector and chassis ground. <b>Connector &amp; terminal</b> <b>DTC C0101</b> (R72) No. 1 (+) — Chassis ground (-): <b>DTC C0102</b> (R73) No. 1 (+) — Chassis ground (-): <b>DTC C0103</b> (B6) No. 1 (+) — Chassis ground (-): <b>DTC C0104</b> (B15) No. 1 (+) — Chassis ground (-):	Is the voltage 5 — 16 V?	Go to step 6.	Go to step 5.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>5 CHECK THE ABSCM&amp;H/U POWER SUPPLY CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Turn the ignition switch to ON. 4) Measure the voltage between ABSCM&H/U connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B301) No. 18 (+) — (B301) No. 15 (-):</b>	Is the voltage 10 — 15 V?	Go to step 6.	Check the generator, battery and ABSCM&H/U power supply circuit.
<b>6 CHECK ABS WHEEL SPEED SENSOR SIGNAL.</b> 1) Install the ABS wheel speed sensor. 2) Prepare an oscilloscope. 3) Check the ABS wheel speed sensor. <Ref. to ABS-14, ABS WHEEL SPEED SENSOR, INSPECTION, Front ABS Wheel Speed Sensor.>	Is the pattern the same waveform as shown in the figure?	Go to step 7.	Replace the ABS wheel speed sensor.
<b>7 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. <Ref. to ABS(diag)-17, CLEAR MEMORY MODE, OPERATION, Subaru Select Monitor.> 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 8.
<b>8 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.

## E: DTC C0105 REAR ABS WHEEL SPEED SENSOR RH MALFUNCTION (ABS WHEEL SPEED SENSOR ABNORMAL SIGNAL)

NOTE:

Refer to DTC C0108 for diagnostic procedure. <Ref. to ABS(diag)-40, DTC C0108 FRONT ABS WHEEL SPEED SENSOR LH MALFUNCTION (ABS WHEEL SPEED SENSOR ABNORMAL SIGNAL), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

## F: DTC C0106 REAR ABS WHEEL SPEED SENSOR LH MALFUNCTION (ABS WHEEL SPEED SENSOR ABNORMAL SIGNAL)

NOTE:

Refer to DTC C0108 for diagnostic procedure. <Ref. to ABS(diag)-40, DTC C0108 FRONT ABS WHEEL SPEED SENSOR LH MALFUNCTION (ABS WHEEL SPEED SENSOR ABNORMAL SIGNAL), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

## G: DTC C0107 FRONT ABS WHEEL SPEED SENSOR RH MALFUNCTION (ABS WHEEL SPEED SENSOR ABNORMAL SIGNAL)

NOTE:

Refer to DTC C0108 for diagnostic procedure. <Ref. to ABS(diag)-40, DTC C0108 FRONT ABS WHEEL SPEED SENSOR LH MALFUNCTION (ABS WHEEL SPEED SENSOR ABNORMAL SIGNAL), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

## H: DTC C0108 FRONT ABS WHEEL SPEED SENSOR LH MALFUNCTION (ABS WHEEL SPEED SENSOR ABNORMAL SIGNAL)

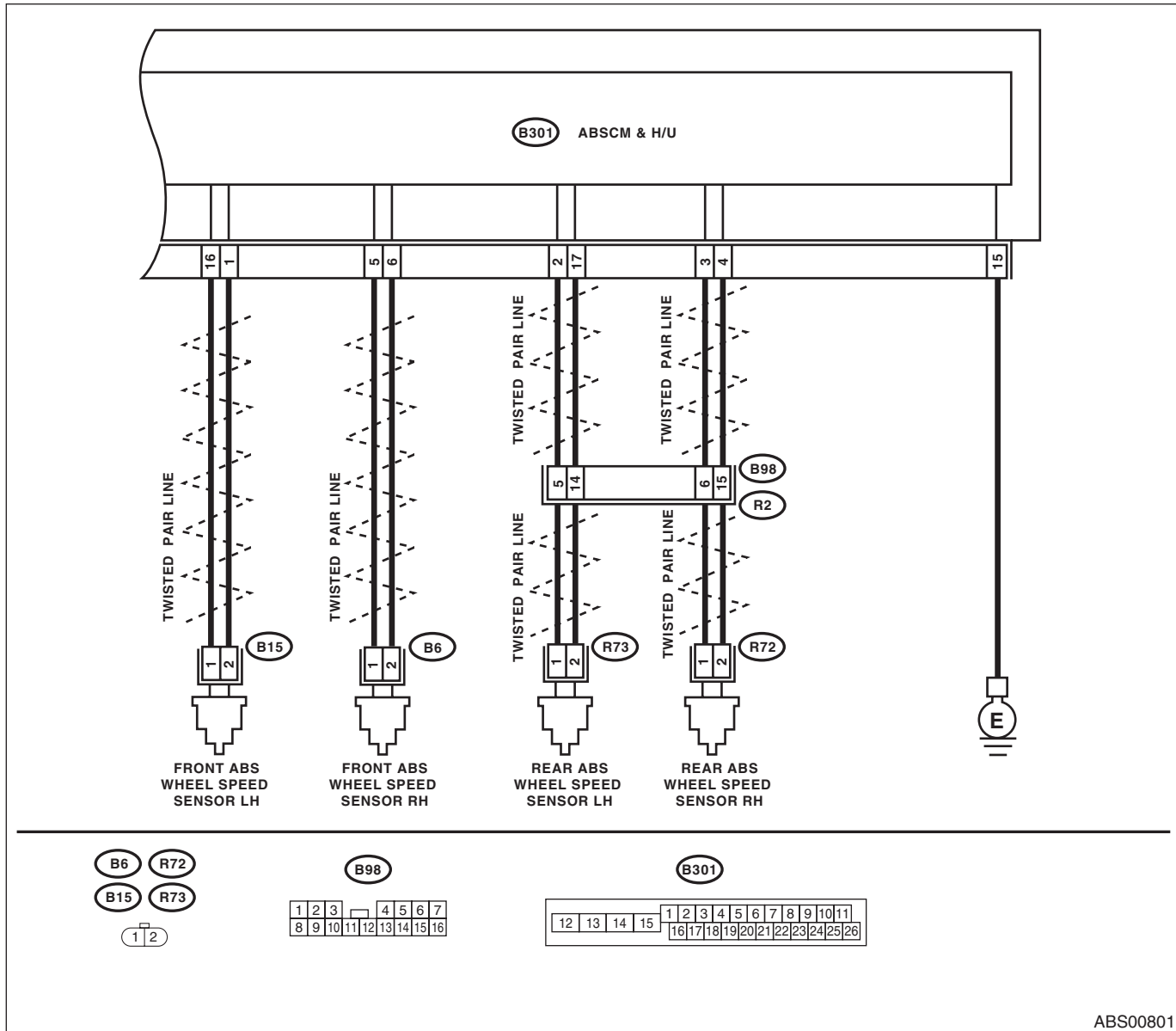
### DTC DETECTING CONDITION:

- Defective ABS wheel speed sensor signal (noise, abnormal signal, etc.)
- Defective harness connector

### TROUBLE SYMPTOM:

ABS does not operate.

### WIRING DIAGRAM:



ABS00801

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No	
1	<b>CHECK OUTPUT OF ABS WHEEL SPEED SENSOR USING SUBARU SELECT MONITOR.</b> 1) Select {Current Data Display & Save} in Subaru Select Monitor. 2) Read the ABS wheel speed sensor output corresponding to the faulty wheel in Subaru Select Monitor data display mode.	Does the speed indicated on the display change in response to the speedometer reading during acceleration/deceleration when the steering wheel is in the straight-ahead position?	Go to step 2.	Go to step 7.
2	<b>CHECK POOR CONTACT IN CONNECTOR.</b> Turn the ignition switch to OFF.	Is there poor contact in connectors between ABSCM&H/U and ABS wheel speed sensor?	Repair the connector.	Go to step 3.
3	<b>CHECK CAUSE OF SIGNAL NOISE.</b> Make sure the radio wave devices and electric components car phone, radio, etc. are installed correctly.	Are the radio wave devices and electric components installed correctly?	Go to step 4.	Install the radio wave devices and electric components properly.
4	<b>CHECK CAUSE OF SIGNAL NOISE.</b> Check if the noise sources (such as an antenna) are installed near the sensor harness.	Are noise sources installed?	Install the noise sources apart from sensor harness.	Go to step 5.
5	<b>CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. <Ref. to ABS(diag)-17, CLEAR MEMORY MODE, OPERATION, Subaru Select Monitor.> 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 6.
6	<b>CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.
7	<b>CHECK INSTALLATION OF ABS WHEEL SPEED SENSOR.</b>	Is the ABS wheel speed sensor installation bolt tightened 7.5 N·m (0.76 kgf·m, 5.5 ft·lb)?	Go to step 8.	Tighten the ABS wheel speed sensor installation bolts.
8	<b>CHECK ABS WHEEL SPEED SENSOR SIGNAL.</b> 1) Install the ABS wheel speed sensor. 2) Prepare an oscilloscope. 3) Check the ABS wheel speed sensor. <Ref. to ABS-14, ABS WHEEL SPEED SENSOR, INSPECTION, Front ABS Wheel Speed Sensor.>	Does the oscilloscope indicate the waveform pattern like shown in the figure when the tire is slowly turned? Does the oscilloscope indication repeat the waveform pattern like shown in the figure when the tire is slowly turned in equal speed for more one rotation?	Go to step 10.	Go to step 9.
9	<b>CHECK ABS WHEEL SPEED SENSOR OR MAGNETIC ENCODER.</b>	Are there foreign matter, breakage or damage at the tip of ABS wheel speed sensor or magnetic encoder?	Remove dirt thoroughly. Also replace the ABS wheel speed sensor or magnetic encoder as a unit with hub unit bearing if it is broken or damaged.	Go to step 10.
10	<b>CHECK CAUSE OF SIGNAL NOISE.</b> Make sure the radio wave devices and electric components car phone, radio, etc. are installed correctly.	Are the radio wave devices and electric components installed correctly?	Go to step 11.	Install the radio wave devices and electric components properly.
11	<b>CHECK CAUSE OF SIGNAL NOISE.</b> Check if the noise sources (such as an antenna) are installed near the sensor harness.	Is the noise sources installed?	Go to step 12.	Install the noise sources apart from sensor harness.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>12</b> <b>CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. <Ref. to ABS(diag)-17, CLEAR MEMORY MODE, OPERATION, Subaru Select Monitor.> 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 13.
<b>13</b> <b>CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference.  NOTE: Though the ABS warning light remains on at this time, this is normal. Drive the vehicle at more than 12 km/h (7 MPH) in order to turn ABS warning light off. Be sure to drive the vehicle and check that the warning light goes off.

## I: DTC C0115 ABS WHEEL SPEED SENSOR SIGNAL MALFUNCTION IN ONE OF FOUR WHEELS

### DTC DETECTING CONDITION:

- Defective ABS wheel speed sensor signal (noise, abnormal signal, etc.)
- Defective magnetic encoder
- When a wheel is turned freely for a long time

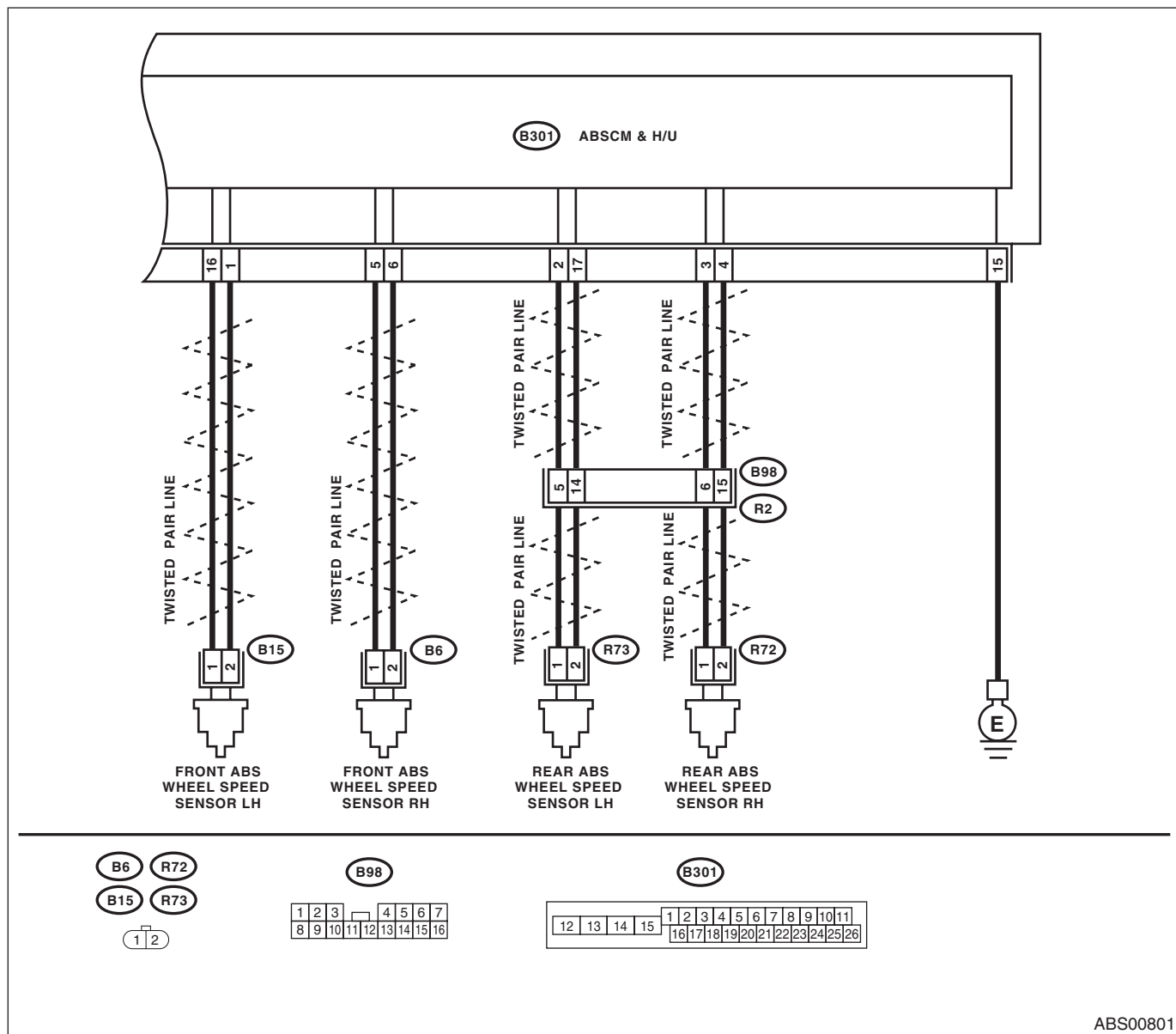
### TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.

### NOTE:

Brake warning light comes on as well as the ABS warning light.

### WIRING DIAGRAM:



ABS00801



# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1</b> <b>WHETHER A WHEEL TURNED FREELY OR NOT.</b> Check if the wheels have been turned freely for more than one minute, such as when the vehicle is jacked-up, under full-lock cornering or when the wheels are not in contact with road surface.	Did the wheels turn freely?	ABS is normal. Erase the memory. NOTE: This diagnostic trouble code may sometimes occur if the wheels turn freely for a long time, for example when the vehicle is towed or jacked-up, or when steering wheel is continuously turned all the way.	Go to step 2.
<b>2</b> <b>CHECK TIRE SPECIFICATIONS.</b> Turn the ignition switch to OFF.	Are the tire specifications correct?	Go to step 3.	Replace the tire.
<b>3</b> <b>CHECK WEAR OF TIRE.</b>	Is the tire worn excessively?	Replace the tire.	Go to step 4.
<b>4</b> <b>CHECK TIRE INFLATION PRESSURE.</b>	Is the tire pressure correct?	Go to step 5.	Adjust the tire pressure.
<b>5</b> <b>CHECK INSTALLATION OF ABS WHEEL SPEED SENSOR.</b>	Are the ABS wheel speed sensor installation bolts tightened 7.5 N-m (0.76 kgf-m, 5.5 ft-lb)? (For four wheels)	Go to step 6.	Tighten the ABS wheel speed sensor installation bolts.
<b>6</b> <b>CHECK ABS WHEEL SPEED SENSOR SIGNAL.</b> 1) Install the ABS wheel speed sensor. 2) Prepare an oscilloscope. 3) Check the ABS wheel speed sensor. <Ref. to ABS-14, ABS WHEEL SPEED SENSOR, INSPECTION, Front ABS Wheel Speed Sensor.>	Does the oscilloscope indicate the waveform pattern like shown in the figure when the tire is slowly turned? Does the oscilloscope indication repeat the waveform pattern like shown in the figure when the tire is slowly turned in equal speed for more one rotation?	Go to step 8.	Go to step 7.
<b>7</b> <b>CHECK ABS WHEEL SPEED SENSOR OR MAGNETIC ENCODER.</b>	Are there foreign matter, breakage or damage at the tip of ABS wheel speed sensor or magnetic encoder?	Remove dirt thoroughly. Also replace the ABS wheel speed sensor or magnetic encoder as a unit with hub unit bearing if it is broken or damaged.	Go to step 8.
<b>8</b> <b>CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. <Ref. to ABS(diag)-17, CLEAR MEMORY MODE, OPERATION, Subaru Select Monitor.> 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 9.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No	
9	CHECK ANY OTHER DTC ON DISPLAY.	Is there any other DTC displayed?	Perform the diagnosis according to DTC.	It results from a temporary noise interference. NOTE: Though the ABS warning light remains on at this time, this is normal. Drive the vehicle at more than 12 km/h (7 MPH) in order to turn ABS warning light off. Be sure to drive the vehicle and check that the warning light goes off.

## **J: DTC C0120 FRONT INLET SOLENOID VALVE LH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)**

### NOTE:

Refer to DTC C0126 for diagnostic procedure. <Ref. to ABS(diag)-46, DTC C0126 REAR INLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

## **K: DTC C0122 FRONT INLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)**

### NOTE:

Refer to DTC C0126 for diagnostic procedure. <Ref. to ABS(diag)-46, DTC C0126 REAR INLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

## **L: DTC C0124 REAR INLET SOLENOID VALVE LH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)**

### NOTE:

Refer to DTC C0126 for diagnostic procedure. <Ref. to ABS(diag)-46, DTC C0126 REAR INLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

## M: DTC C0126 REAR INLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)

### DTC DETECTING CONDITION:

- Defective harness connector
- Defective inlet solenoid valve in ABSCM&H/U

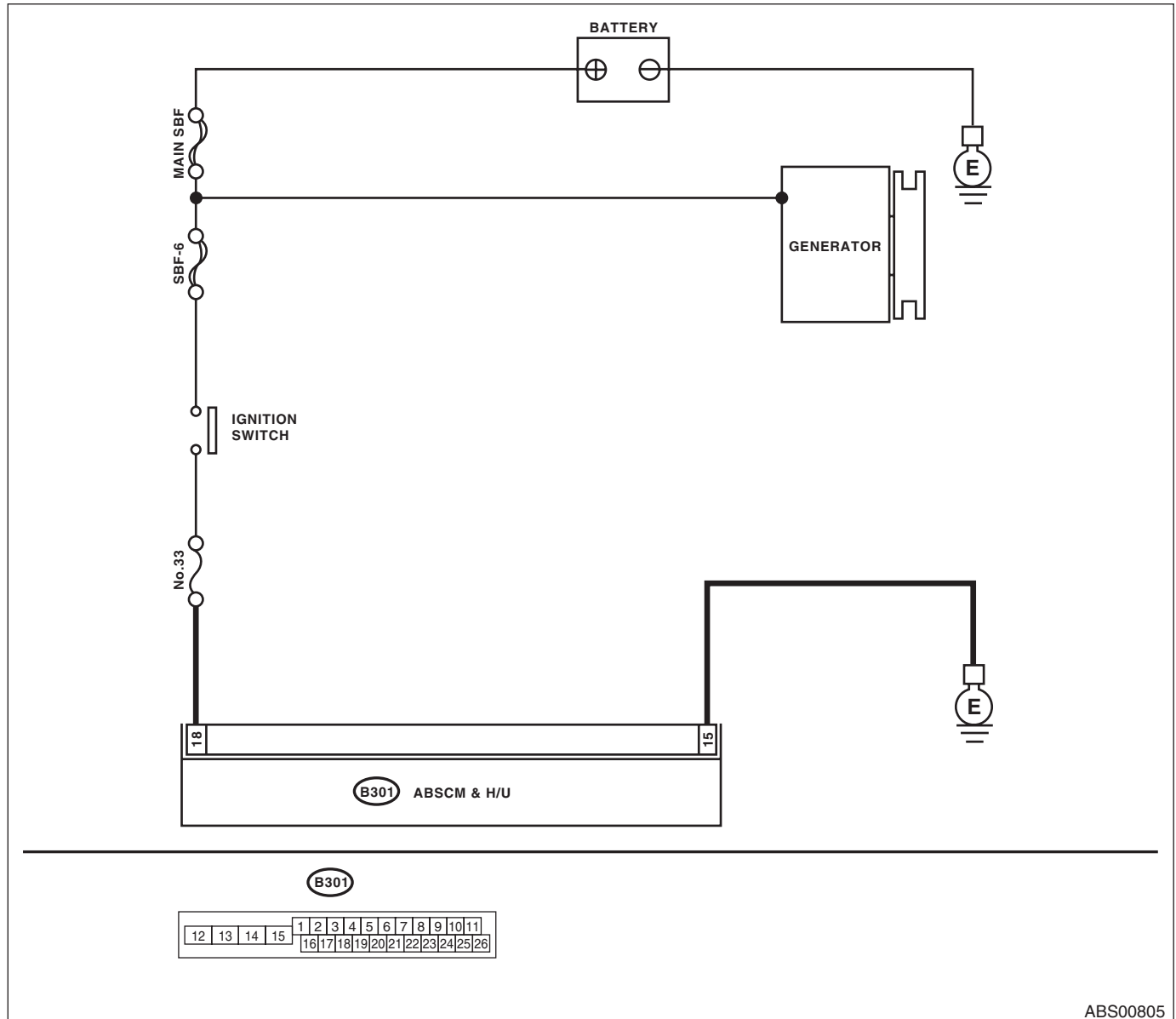
### TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.

### NOTE:

Brake warning light comes on as well as the ABS warning light.

### WIRING DIAGRAM:



ABS00805

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1 CHECK INPUT VOLTAGE OF ABSCM&amp;H/U.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Run the engine at idle. 4) Measure the voltage between ABSCM&H/U connector and chassis ground. <i>Connector &amp; terminal (B301) No. 18 (+) — Chassis ground (-):</i>	Is the voltage 10 — 15 V?	Go to step 2.	Repair the ABSCM&H/U power circuit.
<b>2 CHECK THE ABSCM&amp;H/U GROUND CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the ABSCM&H/U connector and chassis ground. <i>Connector &amp; terminal (B301) No. 15 — Chassis ground:</i>	Is the resistance less than 0.5 $\Omega$ ?	Go to step 3.	Repair the ABSCM&H/U ground harness.
<b>3 CHECK POOR CONTACT IN CONNECTOR.</b>	Is there poor contact in connector between generator, battery and ABSCM&H/U?	Repair the connector.	Go to step 4.
<b>4 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM&H/U. <Ref. to ABS-6, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 5.
<b>5 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using “List of Diagnostic Trouble Code (DTC)”. <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

## **N: DTC C0121 FRONT OUTLET SOLENOID VALVE LH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)**

### NOTE:

Refer to DTC C0127 for diagnostic procedure. <Ref. to ABS(diag)-48, DTC C0127 REAR OUTLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

## **O: DTC C0123 FRONT OUTLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)**

### NOTE:

Refer to DTC C0127 for diagnostic procedure. <Ref. to ABS(diag)-48, DTC C0127 REAR OUTLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

## **P: DTC C0125 REAR OUTLET SOLENOID VALVE LH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)**

### NOTE:

Refer to DTC C0127 for diagnostic procedure. <Ref. to ABS(diag)-48, DTC C0127 REAR OUTLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U), Diagnostic Procedure with Diagnostic Trouble Code (DTC).>

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

## Q: DTC C0127 REAR OUTLET SOLENOID VALVE RH MALFUNCTION IN ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)

### DTC DETECTING CONDITION:

- Defective harness connector
- Defective outlet solenoid valve in ABSCM&H/U

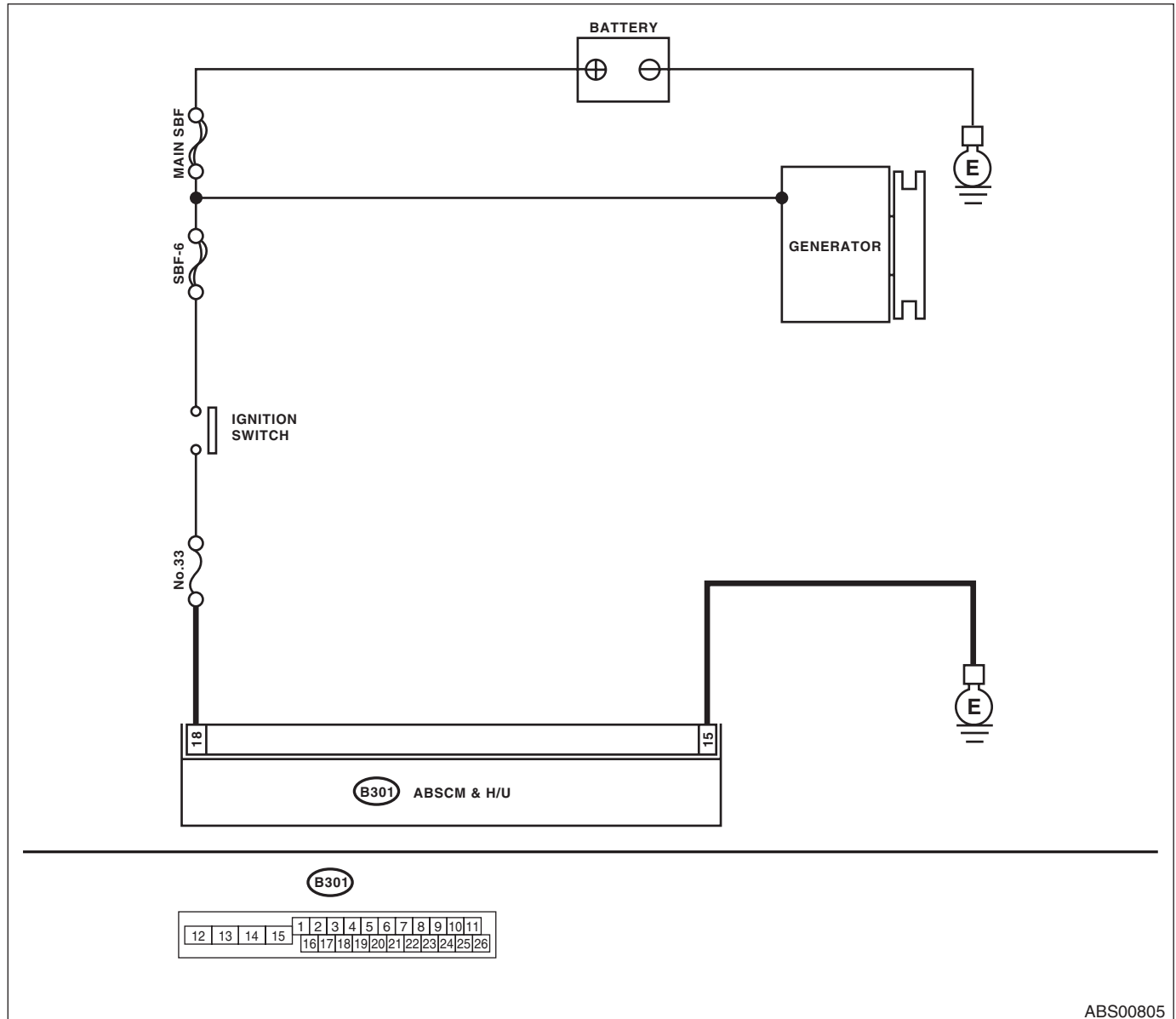
### TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.

### NOTE:

Brake warning light comes on as well as the ABS warning light.

### WIRING DIAGRAM:



# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1 CHECK INPUT VOLTAGE OF ABSCM&amp;H/U.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Run the engine at idle. 4) Measure the voltage between ABSCM&H/U connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B301) No. 18 (+) — Chassis ground (-):</b>	Is the voltage 10 — 15 V?	Go to step 2.	Repair the ABSCM&H/U power circuit.
<b>2 CHECK THE ABSCM&amp;H/U GROUND CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the ABSCM&H/U connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B301) No. 15 — Chassis ground:</b>	Is the resistance less than 0.5 $\Omega$ ?	Go to step 3.	Repair the ABSCM&H/U ground harness.
<b>3 CHECK POOR CONTACT IN CONNECTOR.</b>	Is there poor contact in connector between generator, battery and ABSCM&H/U?	Repair the connector.	Go to step 4.
<b>4 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM&H/U. <Ref. to ABS-6, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 5.
<b>5 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

## R: DTC C0110 ABS CONTROL MODULE MALFUNCTION

### DTC DETECTING CONDITION:

Defective ABSCM&H/U

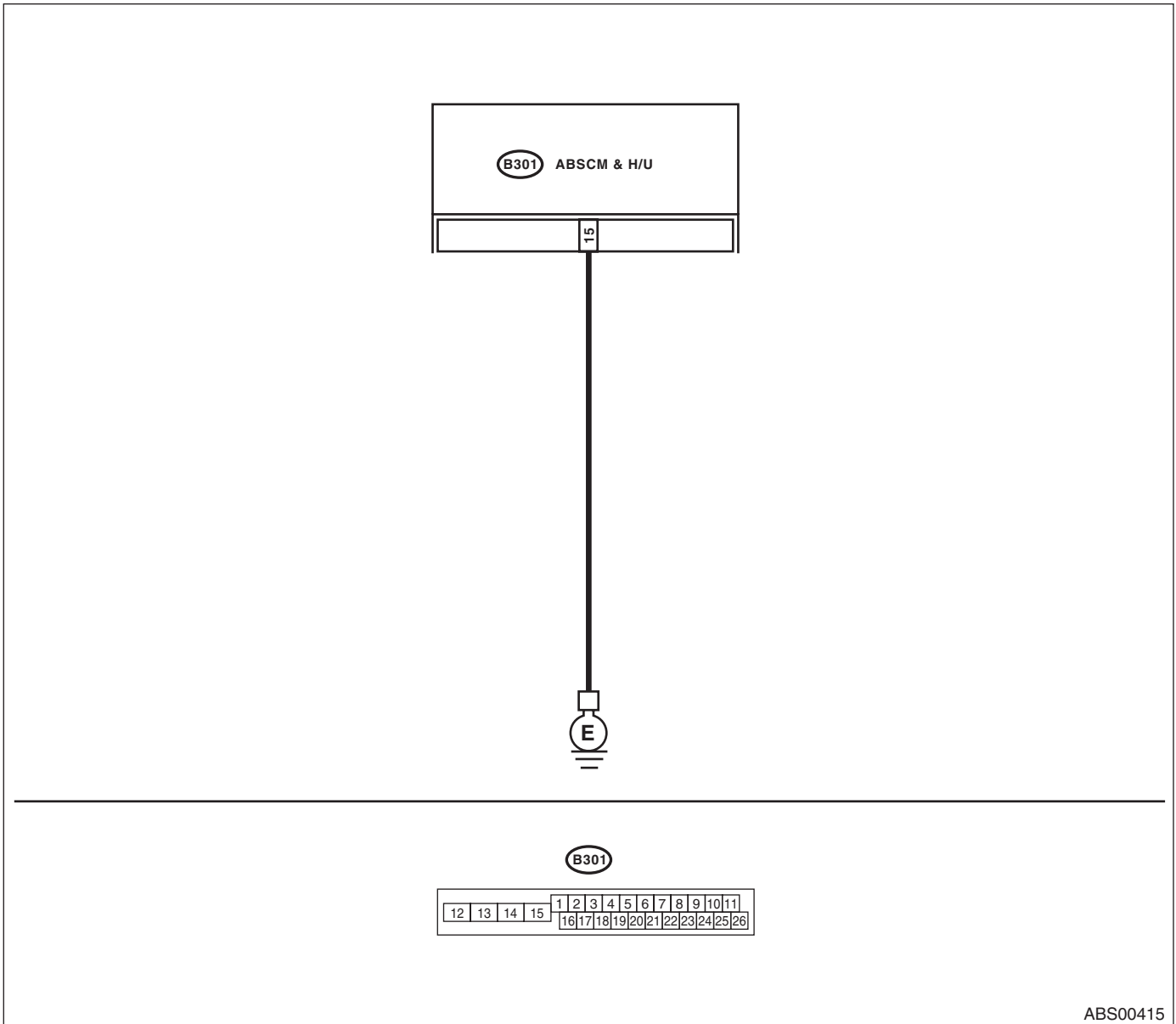
### TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate.

### NOTE:

Brake warning light comes on as well as the ABS warning light.

### WIRING DIAGRAM:



ABS00415

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1 CHECK THE ABSCM&amp;H/U GROUND CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Measure the resistance between the ABSCM&H/U and chassis ground. <i>Connector &amp; terminal (B301) No. 15 — Chassis ground:</i>	Is the resistance less than 0.5 $\Omega$ ?	Go to step 2.	Repair the ABSCM&H/U ground harness.
<b>2 CHECK POOR CONTACT IN CONNECTOR.</b>	Is there poor contact of the connector between the battery, ignition switch and ABSCM&H/U?	Repair the connector.	Go to step 3.
<b>3 CHECK CAUSE OF SIGNAL NOISE.</b>	Is the car telephone or the radio properly installed?	Go to step 4.	Properly install the car telephone or the wireless transmitter.
<b>4 CHECK CAUSE OF SIGNAL NOISE.</b>	Is there a noise source (such as an antenna) installed near the sensor harness?	Install the noise source apart from the sensor harness.	Go to step 5.
<b>5 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 6.
<b>6 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.



# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

## S: DTC C0109 POWER VOLTAGE MALFUNCTION

### DTC DETECTING CONDITION:

Power supply voltage of the ABSCM&H/U is too low or too high.

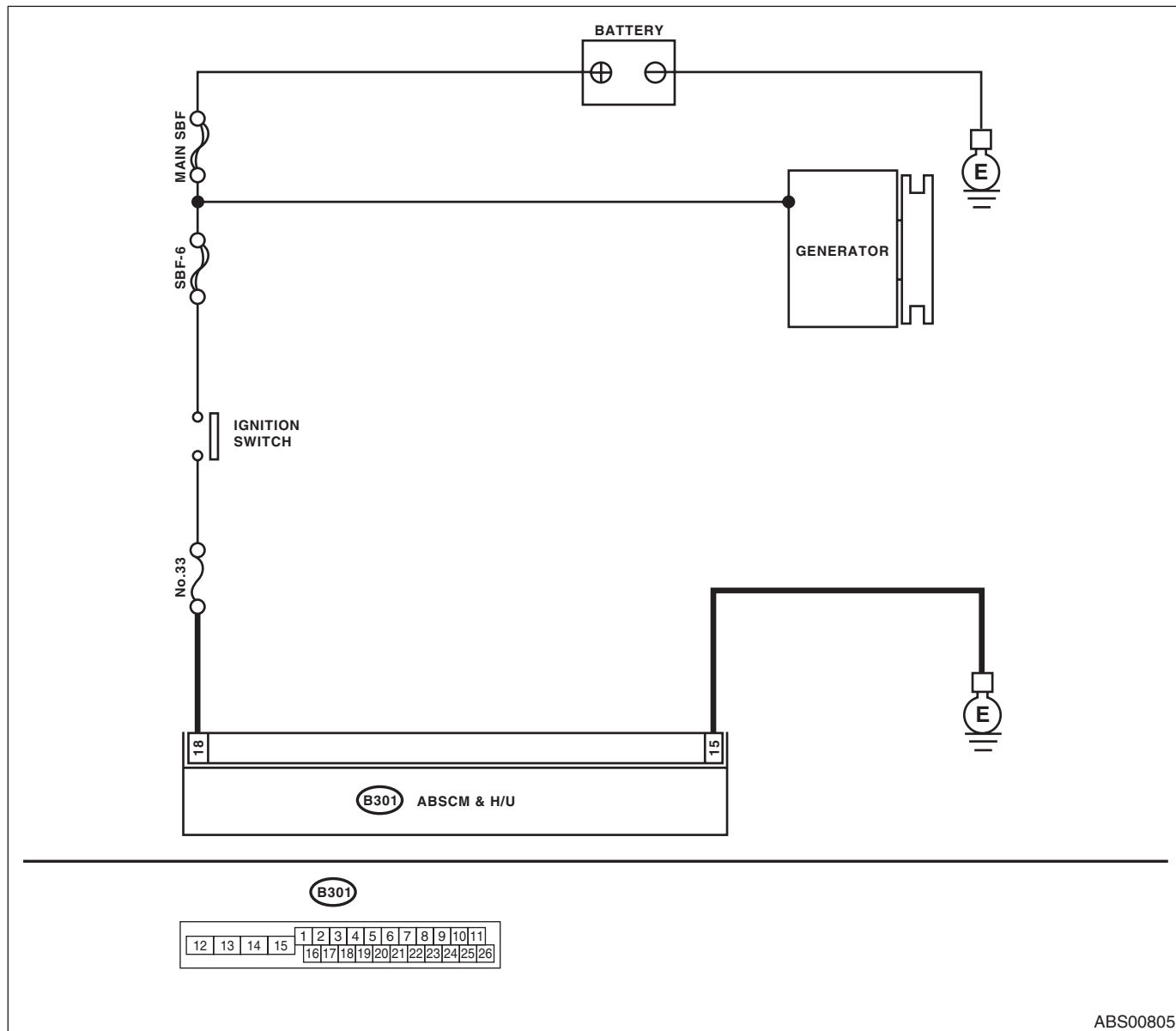
### TROUBLE SYMPTOM:

- ABS does not operate.
- EBD may not operate.

### NOTE:

If EBD does not operate, the brake warning light illuminates in addition to ABS warning light. Both warning lights go off if voltage returns.

### WIRING DIAGRAM:



ABS00805

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1 CHECK GENERATOR.</b> 1) Start the engine. 2) Run the engine at idle after warming up. 3) Measure the voltage between generator terminal B and chassis ground. <i>Terminals</i> <b>Generator B terminal (+) — Chassis ground (-):</b>	Is the voltage 10 — 15 V?	Go to step 2.	Repair the generator.
<b>2 CHECK BATTERY TERMINAL.</b> Turn the ignition switch to OFF.	Are the positive and negative battery terminals tightened securely?	Go to step 3.	Tighten the terminal.
<b>3 CHECK INPUT VOLTAGE OF ABSCM&amp;H/U.</b> 1) Disconnect the ABSCM&H/U connectors. 2) Run the engine at idle. 3) Operate devices such as headlights, air conditioner, defogger, etc. which produce an electrical load. 4) Measure the voltage between ABSCM&H/U connector and chassis ground. <i>Connector &amp; terminal</i> <b>(B301) No. 18 (+) — Chassis ground (-):</b>	Is the voltage 10 — 15 V?	Go to step 4.	Repair the ABSCM&H/U power circuit.
<b>4 CHECK THE ABSCM&amp;H/U GROUND CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the ABSCM&H/U connector and chassis ground. <i>Connector &amp; terminal</i> <b>(B301) No. 15 — Chassis ground:</b>	Is the resistance less than 0.5 $\Omega$ ?	Go to step 5.	Repair the ABSCM&H/U ground harness.
<b>5 CHECK POOR CONTACT IN CONNECTOR.</b>	Is there poor contact in connector between generator, battery and ABSCM&H/U?	Repair the connector.	Go to step 6.
<b>6 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 7.
<b>7 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

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## T: DTC C0140 CAN COMMUNICATION MALFUNCTION

### DTC DETECTING CONDITION:

Defective CAN communication

### TROUBLE SYMPTOM:

Possibly the vehicle speed cannot output on CAN.

	Step	Check	Yes	No
1	<b>CHECK LAN SYSTEM.</b> Perform the diagnosis for LAN system. <Ref. to LAN(diag)-25, OPERATION, Read Diagnostic Trouble Code (DTC).>	Is there any fault in LAN system?	Repair it according to DTC of LAN system.	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>

## U: DTC C0114 VALVE RELAY MALFUNCTION

### DTC DETECTING CONDITION:

Defective valve relay

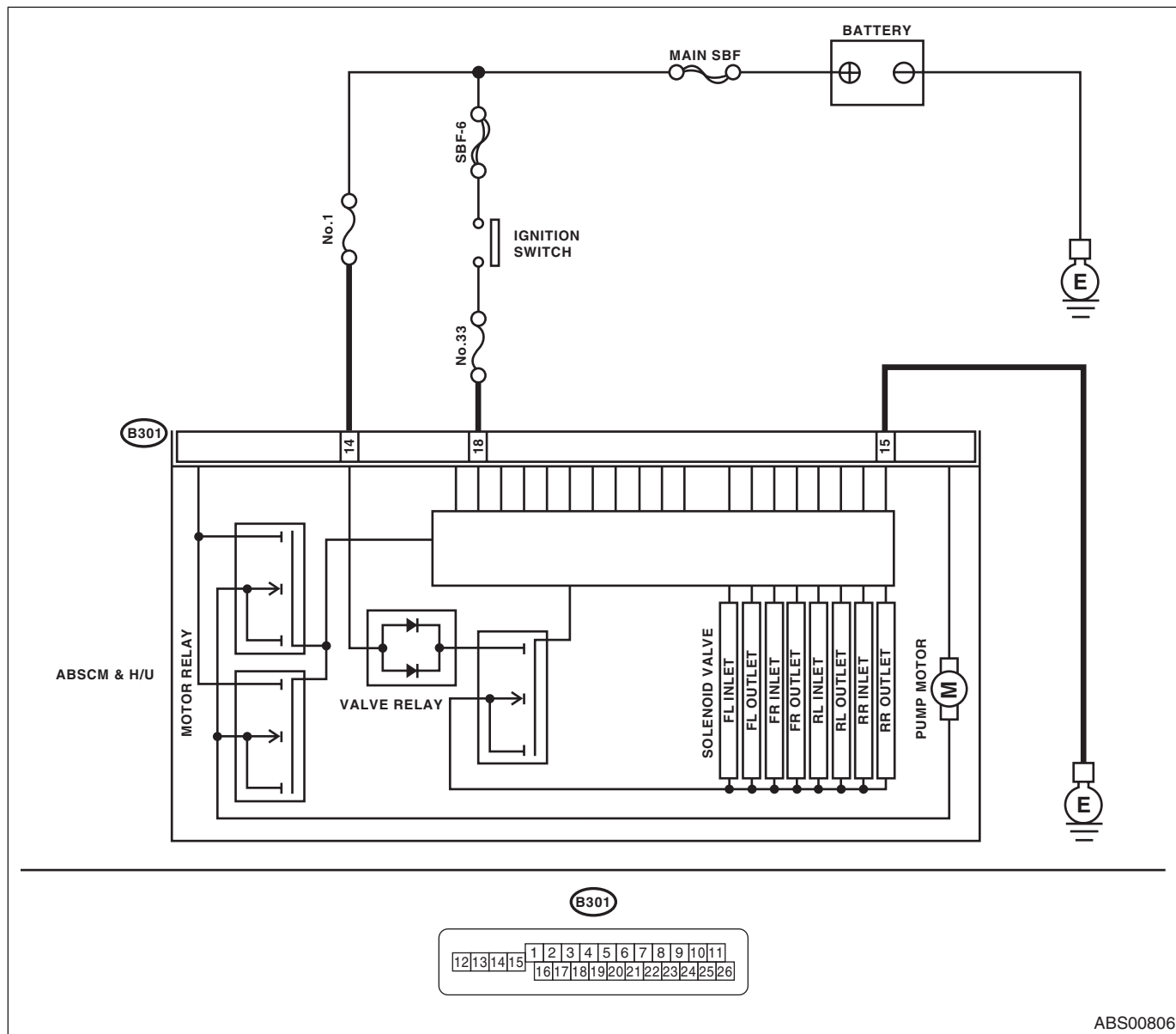
### TROUBLE SYMPTOM:

- ABS does not operate.
- EBD does not operate depending on the trouble contents.

### NOTE:

Brake warning light comes on as well as ABS warning light when EBD does not operate.

### WIRING DIAGRAM:



# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1 CHECK INPUT VOLTAGE OF ABSCM&amp;H/U.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Run the engine at idle. 4) Measure the voltage between ABSCM&H/U connector and chassis ground. <i><b>Connector &amp; terminal</b></i> <i><b>(B301) No. 18 (+) — Chassis ground (-):</b></i> <i><b>(B301) No. 14 (+) — Chassis ground (-):</b></i>	Is the voltage 10 — 15 V?	Go to step 2.	Repair the harness connector between battery and ABSCM&H/U.
<b>2 CHECK THE ABSCM&amp;H/U GROUND CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the ABSCM&H/U connector and chassis ground. <i><b>Connector &amp; terminal</b></i> <i><b>(B301) No. 15 — Chassis ground:</b></i>	Is the resistance less than 0.5 Ω?	Go to step 3.	Repair the ABSCM&H/U ground harness.
<b>3 CHECK VALVE RELAY IN ABSCM&amp;H/U.</b> Measure the resistance between the ABSCM&H/U terminals. <i><b>Terminals</b></i> <i><b>No. 14 — No. 15:</b></i>	Is the resistance more than 1 MΩ?	Go to step 4.	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>
<b>4 CHECK POOR CONTACT IN CONNECTOR.</b>	Is there poor contact in connector between generator, battery and ABSCM&H/U?	Repair the connector.	Go to step 5.
<b>5 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 6.
<b>6 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using “List of Diagnostic Trouble Code (DTC)”. <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

## V: DTC C0111 MOTOR/MOTOR RELAY MALFUNCTION

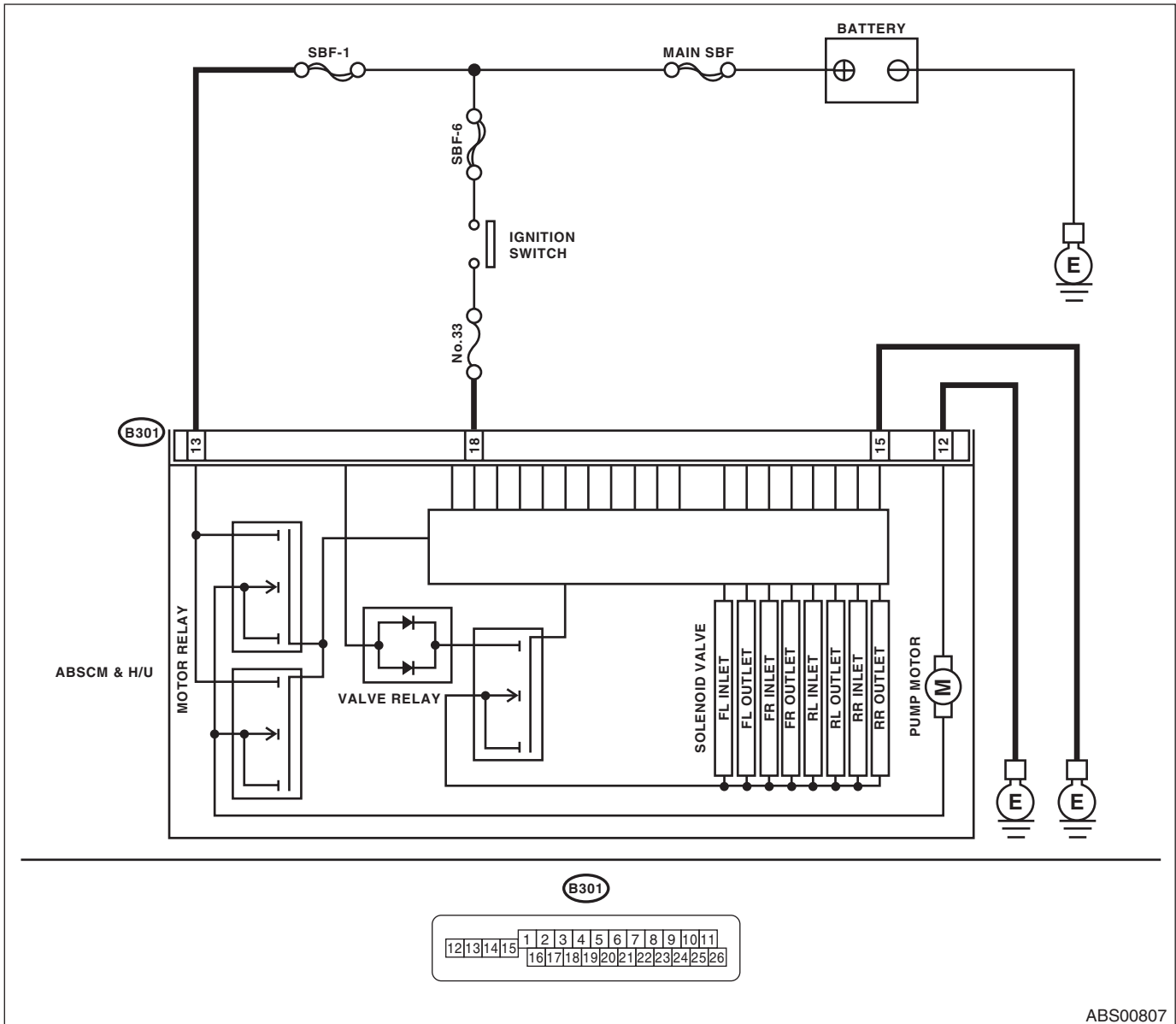
### DTC DETECTING CONDITION:

- Defective motor
- Defective motor relay
- Defective harness connector

### TROUBLE SYMPTOM:

ABS does not operate.

### WIRING DIAGRAM:



# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## ABS (DIAGNOSTICS)

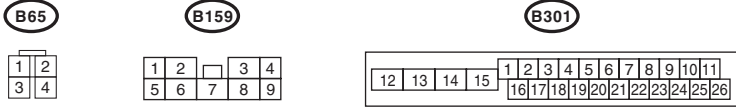
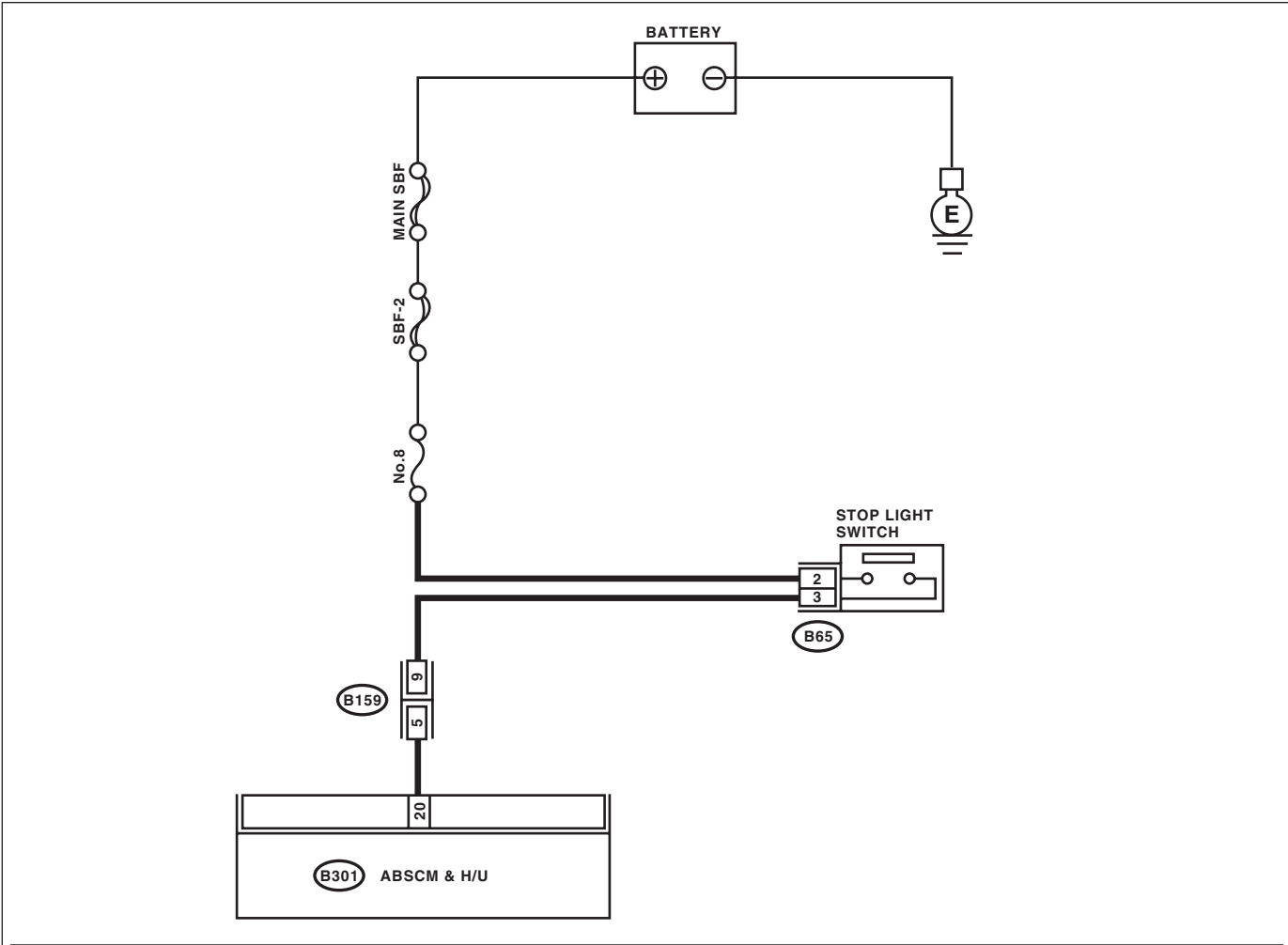
Step	Check	Yes	No
<b>1 CHECK INPUT VOLTAGE OF ABSCM&amp;H/U.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Turn the ignition switch to ON. 4) Measure the voltage between ABSCM&H/U connector and chassis ground. <i><b>Connector &amp; terminal</b></i> <i><b>(B301) No. 13 (+) — Chassis ground (-):</b></i>	Is the voltage 10 — 15 V?	Go to step 2.	Repair the harness connector between battery and ABSCM&H/U.
<b>2 CHECK INSTALLATION OF MOTOR GROUND.</b>	Is the motor ground terminal installation bolt tightened 33 N·m (3.3 kgf-m, 24.3 ft-lb)?	Go to step 3.	Tighten the motor ground terminal installation bolt.
<b>3 CHECK GROUND CIRCUIT OF MOTOR.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the ABSCM&H/U connector and chassis ground. <i><b>Connector &amp; terminal</b></i> <i><b>(B301) No. 12 — Chassis ground:</b></i>	Is the resistance less than 0.5 Ω?	Go to step 4.	Repair the ABSCM&H/U ground harness.
<b>4 CHECK INPUT VOLTAGE OF ABSCM&amp;H/U.</b> 1) Run the engine at idle. 2) Measure the voltage between ABSCM&H/U connector and chassis ground. <i><b>Connector &amp; terminal</b></i> <i><b>(B301) No. 18 (+) — Chassis ground (-):</b></i>	Is the voltage 10 — 15 V?	Go to step 5.	Repair the harness connector between battery, ignition switch and ABSCM&H/U.
<b>5 CHECK THE ABSCM&amp;H/U GROUND CIRCUIT.</b> 1) Turn the ignition switch to OFF. 2) Measure the resistance between the ABSCM&H/U connector and chassis ground. <i><b>Connector &amp; terminal</b></i> <i><b>(B301) No. 15 — Chassis ground:</b></i>	Is the resistance less than 0.5 Ω?	Go to step 6.	Repair the ABSCM&H/U ground harness.
<b>6 CHECK POOR CONTACT IN CONNECTOR.</b> Turn the ignition switch to OFF.	Is there poor contact in connector between generator, battery and ABSCM&H/U?	Repair the connector.	Go to step 7.
<b>7 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM&H/U. <Ref. to ABS-6, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 8.
<b>8 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.  NOTE: Though the ABS warning light remains on at this time, this is normal. Drive the vehicle at more than 12 km/h (7 MPH) in order to turn ABS warning light off. Be sure to drive the vehicle and check that the warning light goes off.

**W: DTC C0116 FAULTY STOP LIGHT SWITCH**

**DTC DETECTING CONDITION:**

Defective stop light switch

**WIRING DIAGRAM:**





## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1 CHECK OUTPUT OF STOP LIGHT SWITCH USING SUBARU SELECT MONITOR.</b> 1) Select {Current Data Display & Save} in Subaru Select Monitor. 2) Release the brake pedal. 3) Read the stop light switch signal in Subaru Select Monitor.	Is "OFF" displayed on the screen?	Go to step 2.	Go to step 3.
<b>2 CHECK OUTPUT OF STOP LIGHT SWITCH USING SUBARU SELECT MONITOR.</b> 1) Depress the brake pedal. 2) Read the stop light switch output in Subaru Select Monitor.	Is "ON" displayed on the screen?	Go to step 5.	Go to step 3.
<b>3 CHECK IF STOP LIGHTS COME ON.</b> Depress the brake pedal.	Does the stop light illuminate?	Go to step 4.	Repair the stop light circuit.
<b>4 CHECK OPEN CIRCUIT IN HARNESS.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Depress the brake pedal. 4) Measure the voltage between ABSCM&H/U connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B301) No. 20 (+) — Chassis ground (-):</b>	Is the voltage 10 — 15 V?	Go to step 5.	Repair the harness between stop light switch and ABSCM&H/U connector.
<b>5 CHECK POOR CONTACT IN CONNECTOR.</b>	Is there poor contact in the connector between stop light switch and ABSCM&H/U?	Go to step 6.	Repair the connector.
<b>6 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 7.
<b>7 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

## X: DTC C0118 G SENSOR OUTPUT VOLTAGE MALFUNCTION

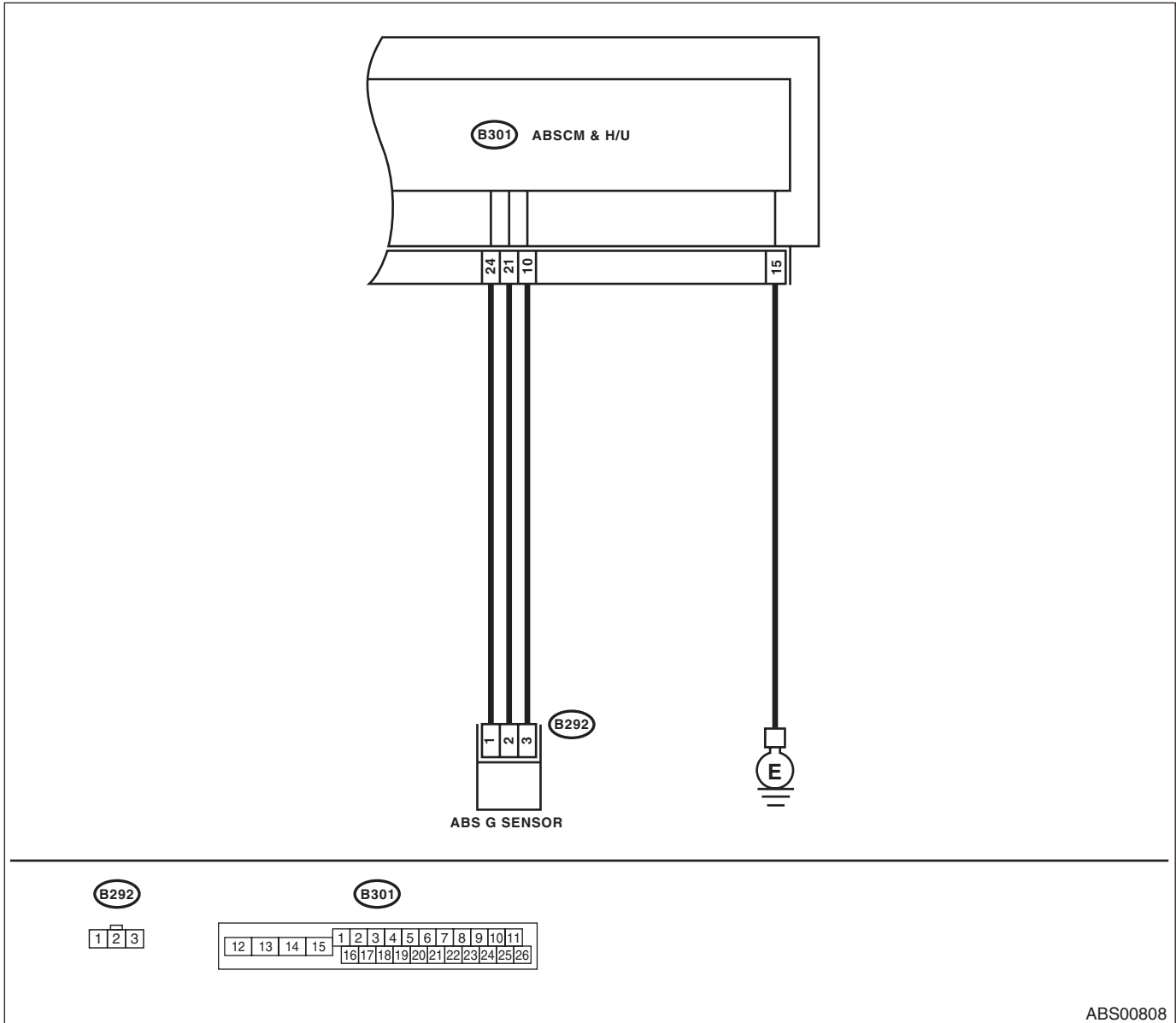
### DTC DETECTING CONDITION:

Defective G sensor

### TROUBLE SYMPTOM:

ABS does not operate.

### WIRING DIAGRAM:



ABS00808

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

## ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>1 CHECK OUTPUT OF G SENSOR USING SUBARU SELECT MONITOR.</b> 1) Select {Current Data Display & Save} in Subaru Select Monitor. 2) Read the G sensor output on Subaru Select Monitor.	Is the reading indicated on display $-1.2$ — $1.2$ m/s when the G sensor is horizontal?	Go to step 2.	Go to step 5.
<b>2 CHECK POOR CONTACT IN CONNECTOR.</b>	Is there poor contact in connectors between ABSCM&H/U and G sensor?	Repair the connector.	Go to step 3.
<b>3 CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 4.
<b>4 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.
<b>5 CHECK INPUT VOLTAGE OF G SENSOR.</b> 1) Turn the ignition switch to OFF. 2) Remove the console box. 3) Remove the G sensor from vehicle. (Do not disconnect the connector.) 4) Turn the ignition switch to ON. 5) Measure the voltage between G sensor connector terminals. <b>Connector &amp; terminal</b> <b>(B292) No. 1 (+) — No. 3 (-):</b>	Is the voltage $4.75$ — $5.25$ V?	Go to step 6.	Repair the harness connector between the G sensor and ABSCM&H/U.
<b>6 CHECK OPEN CIRCUIT IN G SENSOR OUTPUT HARNESS AND GROUND HARNESS.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Measure the resistance between ABSCU&H/U connector terminals. <b>Connector &amp; terminal</b> <b>(B301) No. 21 — No. 10:</b>	Is the resistance between $3.6$ and $3.8$ k $\Omega$ ?	Go to step 7.	Repair the harness connector between the G sensor and ABSCM&H/U.
<b>7 CHECK GROUND SHORT IN G SENSOR OUTPUT HARNESS.</b> 1) Disconnect the connector from G sensor. 2) Measure the resistance between the ABSCM&H/U connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B301) No. 21 — Chassis ground:</b>	Is the resistance more than $1$ M $\Omega$ ?	Go to step 8.	Repair the harness between the G sensor and ABSCM&H/U.
<b>8 CHECK G SENSOR.</b> 1) Connect the connector to G sensor. 2) Connect the connector to ABSCM&H/U. 3) Turn the ignition switch to ON. 4) Measure the voltage between G sensor connector terminals. <b>Connector &amp; terminal</b> <b>(B292) No. 2 (+) — No. 3 (-):</b>	Is the voltage $2.1$ — $2.5$ V when G sensor is in horizontal position?	Go to step 9.	Replace G sensor. <Ref. to ABS-18, G Sensor.>

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>9</b> <b>CHECK G SENSOR.</b> Measure the voltage between G sensor connector terminals. <i>Connector &amp; terminal</i> <i>(B292) No. 2 (+) — No. 3 (-):</i>	Is the voltage 3.6 — 4.1 V when the G sensor is inclined forward to 90°?	Go to step 10.	Replace G sensor. <Ref. to ABS-18, G Sensor.>
<b>10</b> <b>CHECK G SENSOR.</b> Measure the voltage between G sensor connector terminals. <i>Connector &amp; terminal</i> <i>(B292) No. 2 (+) — No. 3 (-):</i>	Is the voltage 0.5 — 1.0 V when G sensor is inclined back 90°?	Go to step 11.	Replace G sensor. <Ref. to ABS-18, G Sensor.>
<b>11</b> <b>CHECK POOR CONTACT IN CONNECTOR.</b> Turn the ignition switch to OFF.	Is there poor contact in connectors between ABSCM&H/U and G sensor?	Repair the connector.	Go to step 12.
<b>12</b> <b>CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 13.
<b>13</b> <b>CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using “List of Diagnostic Trouble Code (DTC)”. <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

## Y: DTC C0119 G SENSOR OUTPUT VOLTAGE MALFUNCTION

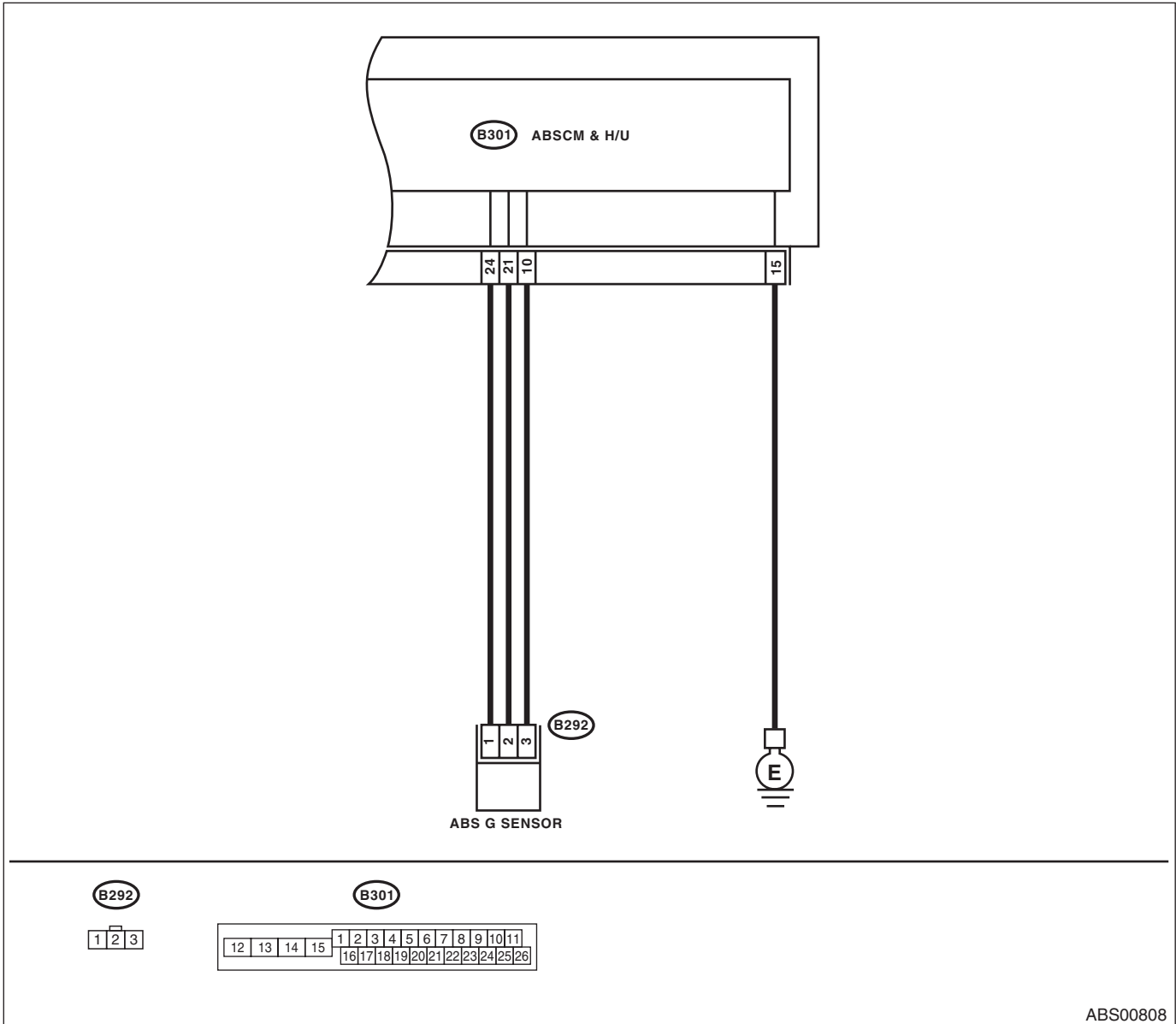
### DTC DETECTING CONDITION:

Defective G sensor

### TROUBLE SYMPTOM:

ABS does not operate.

### WIRING DIAGRAM:



ABS00808

# Diagnostic Procedure with Diagnostic Trouble Code (DTC)

ABS (DIAGNOSTICS)

Step	Check	Yes	No
1	<b>WHETHER A WHEEL TURNED FREELY OR NOT.</b>	ABS is normal. Erase the memory.	Go to step 2.
2	<b>CHECK OUTPUT OF G SENSOR USING SUBARU SELECT MONITOR.</b> 1) Select {Current Data Display & Save} in Subaru Select Monitor. 2) Read the Subaru Select Monitor display.	Go to step 3.	Go to step 8.
3	<b>CHECK OUTPUT OF G SENSOR USING SUBARU SELECT MONITOR.</b> 1) Turn the ignition switch to OFF. 2) Remove the console box. 3) Remove the G sensor from vehicle. (Do not disconnect the connector.) 4) Turn the ignition switch to ON. 5) Select {Current Data Display & Save} in Subaru Select Monitor. 6) Read the Subaru Select Monitor display.	Go to step 4.	Replace G sensor. <Ref. to ABS-18, G Sensor.>
4	<b>CHECK OUTPUT OF G SENSOR USING SUBARU SELECT MONITOR.</b> Read the Subaru Select Monitor display.	Go to step 5.	Replace G sensor. <Ref. to ABS-18, G Sensor.>
5	<b>CHECK POOR CONTACT IN CONNECTOR.</b> Turn the ignition switch to OFF.	Repair the connector.	Go to step 6.
6	<b>CHECK ABSCM&amp;H/U.</b> 1) Connect all connectors. 2) Erase the memory. 3) Perform the Inspection Mode. 4) Read the DTC.	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 7.
7	<b>CHECK ANY OTHER DTC ON DISPLAY.</b>	Check DTC using "List of Diagnostic Trouble Code (DTC)". <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.
8	<b>CHECK OPEN CIRCUIT IN G SENSOR OUTPUT HARNESS AND GROUND HARNESS.</b> 1) Turn the ignition switch to OFF. 2) Disconnect the ABSCM&H/U connectors. 3) Measure the resistance between ABSCU&H/U connector terminals. <b>Connector &amp; terminal</b> <b>(B301) No. 21 — No. 10:</b>	Go to step 9.	Repair the harness connector between the G sensor and ABSCM&H/U.
9	<b>CHECK GROUND SHORT OF HARNESS.</b> Measure the resistance between the ABSCM&H/U connector and chassis ground. <b>Connector &amp; terminal</b> <b>(B301) No. 21 — Chassis ground:</b>	Go to step 10.	Repair the harness connector between the G sensor and ABSCM&H/U.

## Diagnostic Procedure with Diagnostic Trouble Code (DTC)

### ABS (DIAGNOSTICS)

Step	Check	Yes	No
<b>10 CHECK G SENSOR.</b> 1) Remove the console box. 2) Remove the G sensor from vehicle. 3) Connect the connector to G sensor. 4) Connect the connector to ABSCM&H/U. 5) Turn the ignition switch to ON. 6) Measure the voltage between G sensor connector terminals. <i>Connector &amp; terminal (B292) No. 2 (+) — No. 3 (-):</i>	Is the voltage 2.1 — 2.5 V when G sensor is in horizontal position?	Go to step 11.	Replace G sensor. <Ref. to ABS-18, G Sensor.>
<b>11 CHECK G SENSOR.</b> Measure the voltage between G sensor connector terminals. <i>Connector &amp; terminal (B292) No. 2 (+) — No. 3 (-):</i>	Is the voltage 3.6 — 4.1 V when the G sensor is inclined forward to 90°?	Go to step 12.	Replace G sensor. <Ref. to ABS-18, G Sensor.>
<b>12 CHECK G SENSOR.</b> Measure the voltage between G sensor connector terminals. <i>Connector &amp; terminal (B292) No. 2 (+) — No. 3 (-):</i>	Is the voltage 0.5 — 1.0 V when G sensor is inclined back 90°?	Go to step 13.	Replace G sensor. <Ref. to ABS-18, G Sensor.>
<b>13 CHECK ABSCM&amp;H/U.</b> 1) Turn the ignition switch to OFF. 2) Connect all connectors. 3) Erase the memory. 4) Perform the Inspection Mode. 5) Read the DTC.	Is the same DTC displayed?	Replace the ABSCM only. <Ref. to ABS-9, REPLACEMENT, ABS Control Module and Hydraulic Control Unit (ABSCM&H/U).>	Go to step 14.
<b>14 CHECK ANY OTHER DTC ON DISPLAY.</b>	Is there any other DTC displayed?	Check DTC using “List of Diagnostic Trouble Code (DTC)”. <Ref. to ABS(diag)-34, List of Diagnostic Trouble Code (DTC).>	Temporary poor contact occurs.