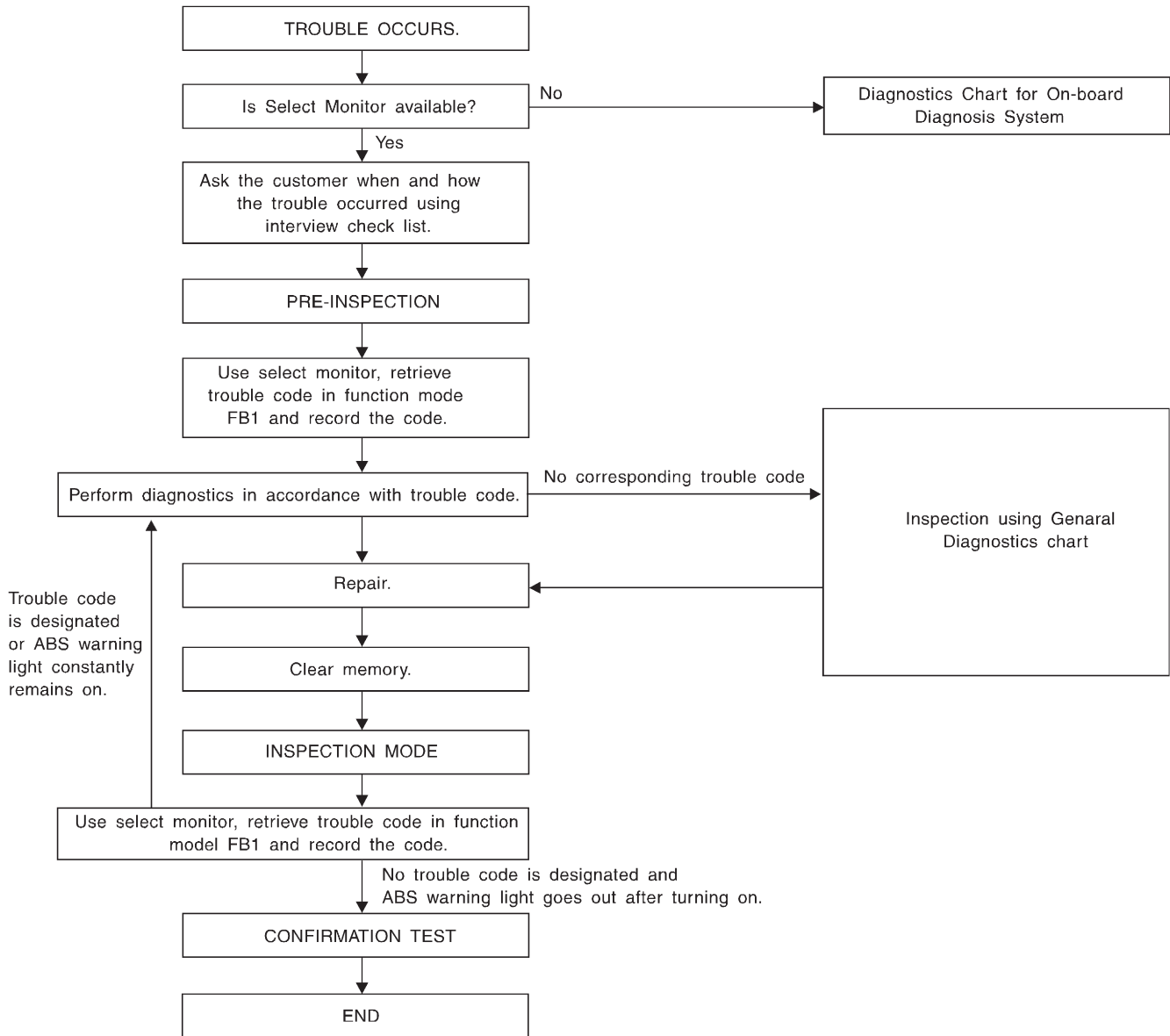


# 10. Diagnostics Chart with Select Monitor

## A: BASIC DIAGNOSTIC CHART



B4M1076A

**CAUTION:**  
 Remove foreign matter (dust, water, etc.) from the ABSCM&H/U connector during removal and installation.

**NOTE:**  
 To check harness for broken wires or short circuits, shake it while holding it or the connector.

**B: LIST OF TROUBLE CODE**

Code	Display screen (FB1)	Contents of diagnosis	Ref. to
—	ERROR 3 (1)	Select monitor communication failure	4-4d [T10C0]
11	NO TROUBLE	Although no trouble appears on the select monitor display, the ABS warning light remains on.	4-4d [T10D0]
21	FR. SS HARD	Open circuit or input voltage too high of FR sensor	4-4d [T10E0]
22	FR. SS SOFT	Abnormal ABS sensor signal of FR sensor	4-4d [T10I0]
23	FL. SS HARD	Open circuit or input voltage too high of FL sensor	4-4d [T10F0]
24	FL. SS SOFT	Abnormal ABS sensor signal of FL sensor	4-4d [T10J0]
25	RR. SS HARD	Open circuit or input voltage too high of RR sensor	4-4d [T10G0]
26	RR. SS SOFT	Abnormal ABS sensor signal of RR sensor	4-4d [T10K0]
27	RL. SS HARD	Open circuit or input voltage too high of RL sensor	4-4d [T10H0]
28	RL. SS SOFT	Abnormal ABS sensor signal of RL sensor	4-4d [T10L0]
29	EITHER. SS SOFT	Abnormal ABS sensor signal (any one of four)	4-4d [T10M0]
31	FR. EV VALVE	Abnormal FR inlet valve	4-4d [T10N0]
32	FR. AV VALVE	Abnormal FR outlet valve	4-4d [T10R0]
33	FL. EV VALVE	Abnormal FL inlet valve	4-4d [T10O0]
34	FL. AV VALVE	Abnormal FL outlet valve	4-4d [T10S0]
35	RR. EV VALVE	Abnormal RR inlet valve	4-4d [T10P0]
36	RR. AV VALVE	Abnormal RR outlet valve	4-4d [T10T0]
37	RL. EV VALVE	Abnormal RL inlet valve	4-4d [T10Q0]
38	RL. AV VALVE	Abnormal RL outlet valve	4-4d [T10U0]
41	ECU	Abnormal ABSCM&H/U	4-4d [T10V0]
42	LOW VOLTAGE	Source voltage is low.	4-4d [T10W0]
	HIGH VOLTAGE	Source voltage is high.	4-4d [T10X0]
44	CCM LINE	A combination of AT control abnormalities (ABS not in control)	4-4d [T10Y0]
	CCM OPEN	A combination of AT control abnormalities (ABS in control)	4-4d [T10Z0]
51	V. RELAY	Abnormal valve relay	4-4d [T10AA0]
	V. RELAY ON	Valve relay ON failure	4-4d [T10AB0]
52	M. RELAY OPEN	Open circuit of motor relay	4-4d [T10AC0]
	M. RELAY ON	Motor relay ON failure	4-4d [T10AD0]
	MOTOR	Abnormal motor	4-4d [T10AE0]
54	BLS	Abnormal stop light switch	4-4d [T10AF0]
56	G SENSOR LINE	Open or short circuit of G sensor	4-4d [T10AG0]
	G SENSOR +B	Battery short of G sensor	4-4d [T10AH0]
	G SENSOR H $\mu$	Abnormal G sensor high $\mu$ output	4-4d [T10AI0]
	G SENSOR STICK	G sensor output is stuck.	4-4d [T10AJ0]

**NOTE:**

High  $\mu$  means high friction coefficient against road surface.

\*\*\*\*\*  
**ERROR 3**  
 B4M0943

**C: ERROR 3 (1)**  
**— SELECT MONITOR COMMUNICATION FAILURE —**

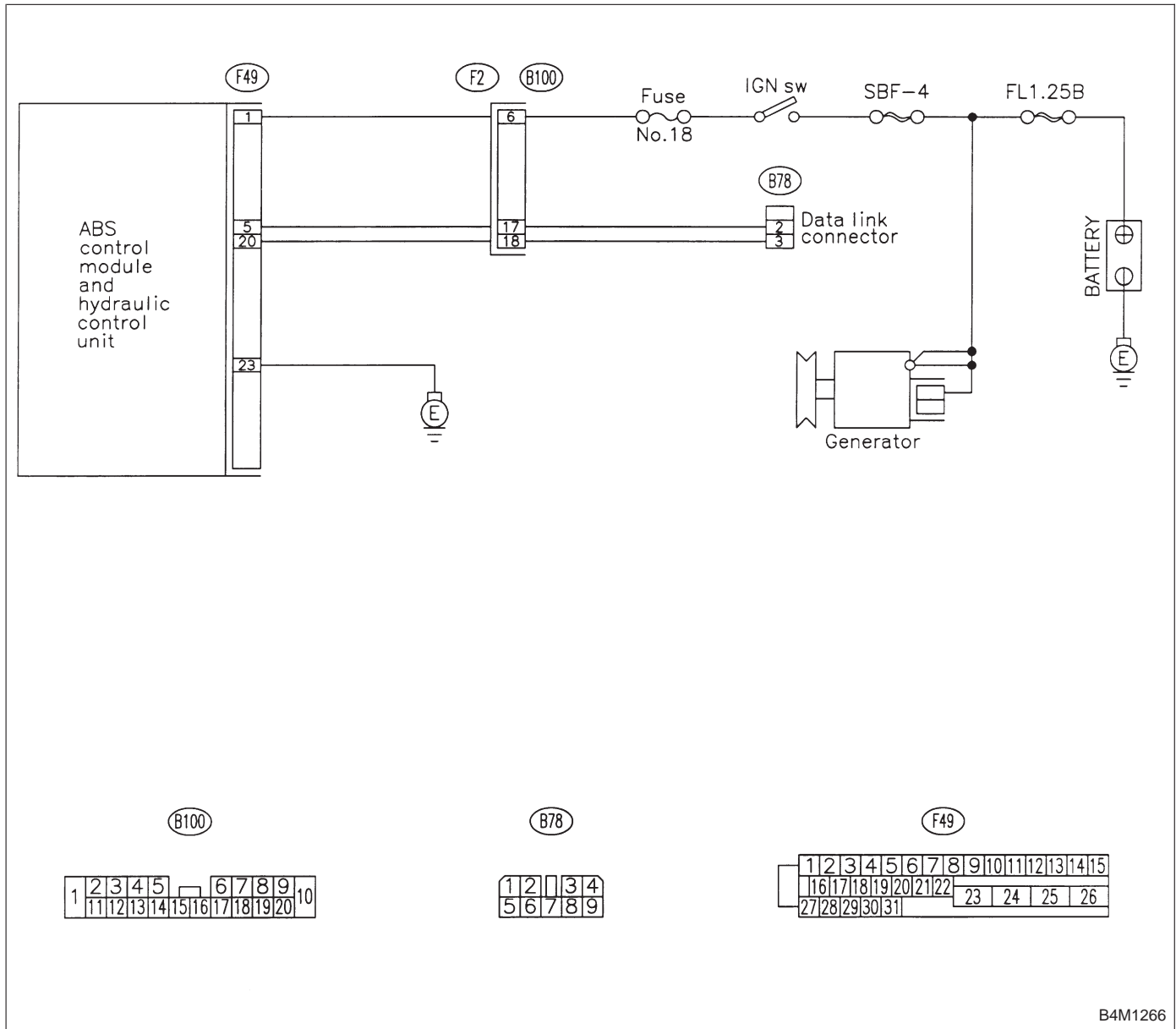
**DIAGNOSIS:**

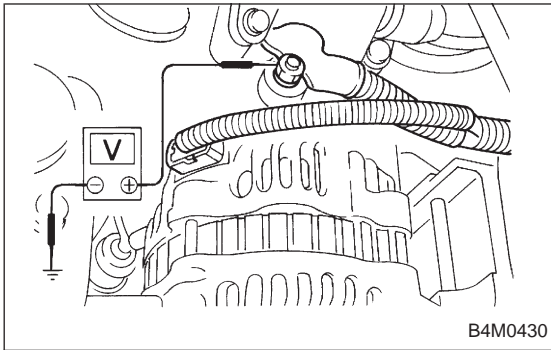
- Faulty harness connector

**TROUBLE SYMPTOM:**

- ABS warning light remains on.
- ERROR 3 or 1 appears on the select monitor display.

**WIRING DIAGRAM:**



**10C1 CHECK GENERATOR.**

- 1) Start the engine.
- 2) Idle the engine.
- 3) Measure voltage between generator and chassis ground.

**Terminal**

**Generator B terminal (+) — Chassis ground (-):**

**CHECK** : *Is the voltage between 10 and 15 V?*

**YES** : Go to step **10C2**.

**NO** : Repair generator.

**10C2 CHECK BATTERY TERMINAL.**

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact at battery terminal?*

**YES** : Repair battery terminal.

**NO** : Go to step **10C3**.

**10C3 CHECK COMMUNICATION OF SELECT MONITOR.**

Using the select monitor, check whether communication to other system (such as engine, AT, etc.) can be executed normally.

**CHECK** : *Are the name and year of the system displayed on the select monitor?*

**YES** : Go to step **10C4**.

**NO** : Repair select monitor communication cable and connector.

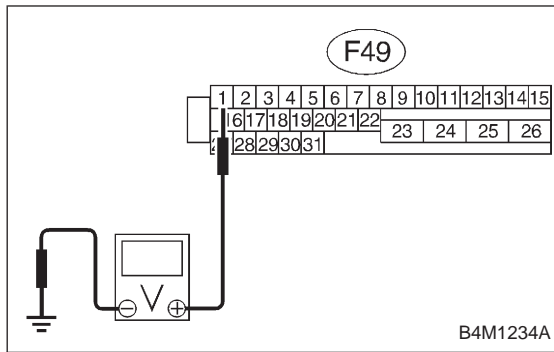
**10C4 CHECK INSTALLATION OF ABSCM&H/U CONNECTOR.**

Turn ignition switch to OFF.

**CHECK** : *Is ABSCM&H/U connector inserted into ABSCM&H/U until the clamp locks onto it?*

**YES** : Go to step **10C5**.

**NO** : Insert ABSCM&H/U connector into ABSCM&H/U until the clamp locks onto it.



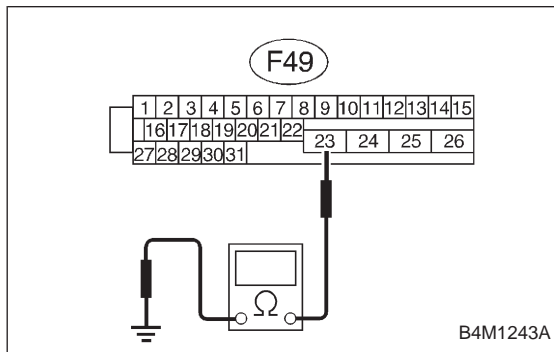
**10C5 CHECK POWER SUPPLY OF ABSCM&H/U.**

- 1) Disconnect connector from ABSCM&H/U.
- 2) Start engine.
- 3) Idle the engine.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

**(F49) No. 1 (+) — Chassis ground (-):**

- (CHECK)** : *Is the voltage between 10 and 15 V?*
- (YES)** : Go to step 10C6.
- (NO)** : Repair ABSCM&H/U power supply circuit.



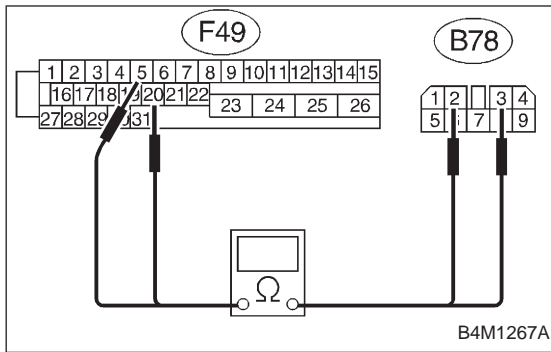
**10C6 CHECK GROUND CIRCUIT OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

**(F49) No. 23 — Chassis ground:**

- (CHECK)** : *Is the resistance less than 0.5 Ω?*
- (YES)** : Repair harness/connector between ABSCM&H/U and select monitor.
- (NO)** : Go to step 10C7.

**10C7****CHECK HARNESS/CONNECTOR BETWEEN ABSCM&H/U AND DATA LINK CONNECTOR.**

- 1) Turn ignition switch OFF.
- 2) Measure resistance between ABSCM&H/U connector and data link connector.

**Connector & terminal****(F49) No. 20 — (B78) No. 3:****(F49) No. 5 — (B78) No. 2:****CHECK** : *Is the resistance less than 0.5 Ω?***YES** : Repair harness and connector between ABSCM&H/U and data link connector.**NO** : Go to step **10C8**.**10C8****CHECK POOR CONTACT IN CONNECTORS.****CHECK** : *Is there poor contact in connectors between ABSCM&H/U and data link connector? <Ref. to FOREWORD [T3C1].>***YES** : Repair connector.**NO** : Replace ABSCM&H/U.

D•ALL 11 (FB1)  
NO TROUBLE

B4M0944

**D: NO TROUBLE**  
— ALTHOUGH NO TROUBLE APPEARS ON THE SELECT MONITOR DISPLAY, THE ABS WARNING LIGHT REMAINS ON —

**DIAGNOSIS:**

- ABS warning light circuit is shorted.

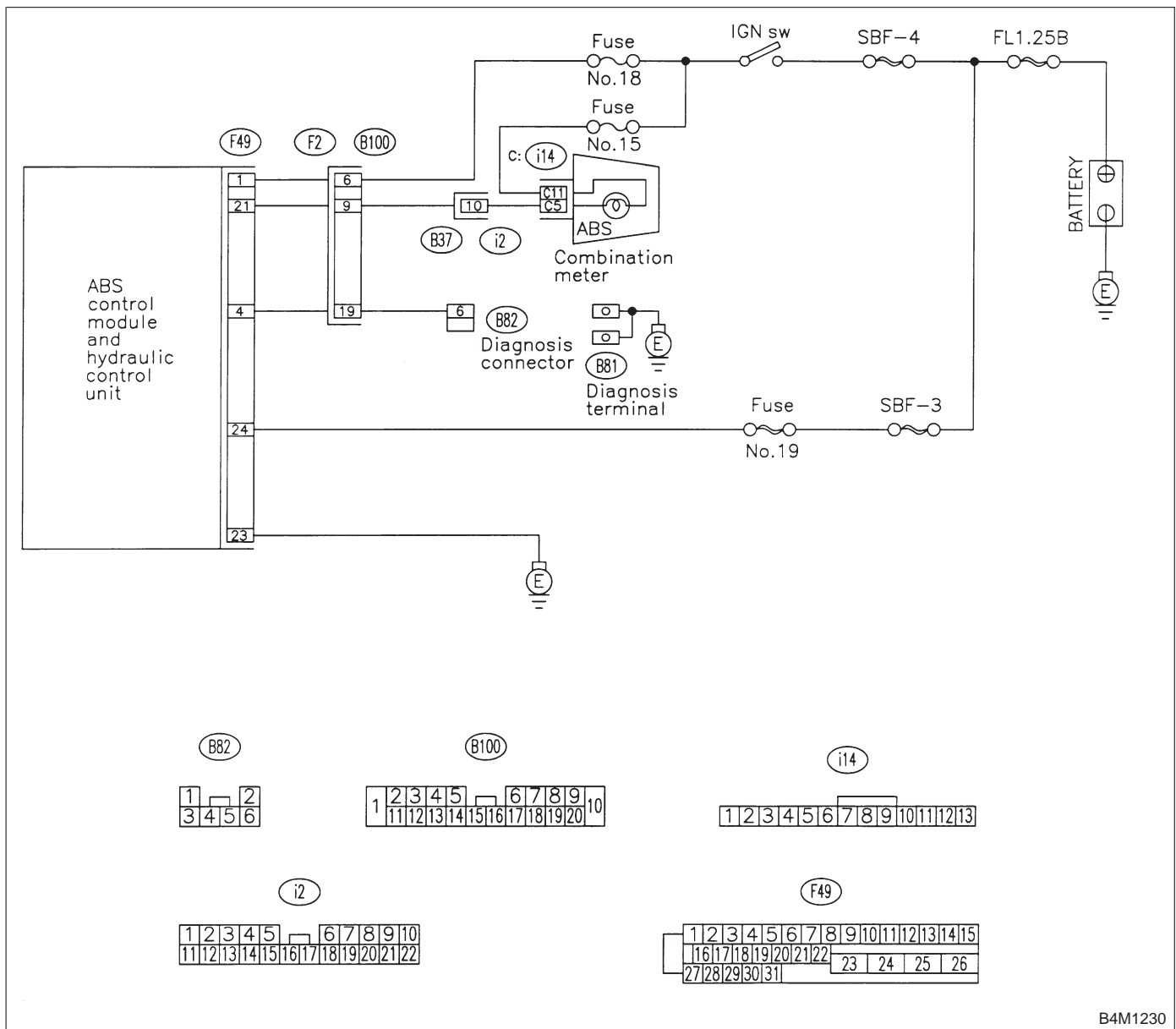
**TROUBLE SYMPTOM:**

- ABS warning light remains on.
- NO TROUBLE displayed on the select monitor.

**NOTE:**

When the ABS warning light is OFF and “NO TROUBLE” is displayed on the select monitor, the system is in normal condition.

**WIRING DIAGRAM:**



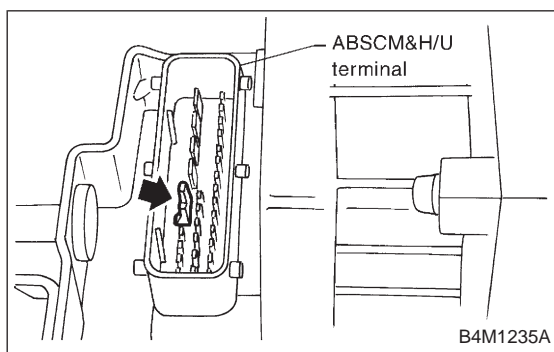
**10D1 CHECK WIRING HARNESS.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector (F2) from connector (B100).
- 3) Turn ignition switch to ON.

**CHECK** : *Does the ABS warning light remain off?*

**YES** : Go to step 10D2.

**NO** : Repair front wiring harness.



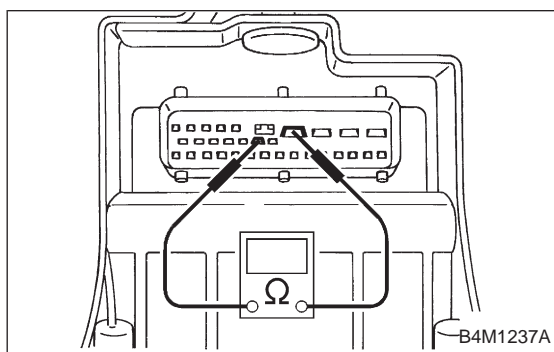
**10D2 CHECK PROJECTION AT ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Check for broken projection at the ABSCM&H/U terminal.

**CHECK** : *Are the projection broken?*

**YES** : Go to step 10D3.

**NO** : Replace ABSCM&H/U.



**10D3 CHECK ABSCM&H/U.**

Measure resistance between ABSCM&H/U terminals.

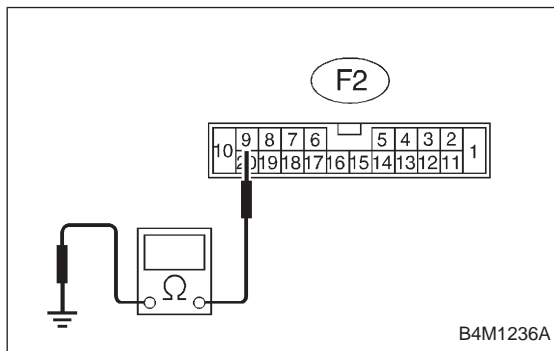
**Terminals**

**No. 21 — No. 23:**

**CHECK** : *Is the resistance more than 1 MΩ?*

**YES** : Go to step 10D4.

**NO** : Replace valve relay.



**10D4 CHECK WIRING HARNESS.**

Measure resistance between connector (F2) and chassis ground.

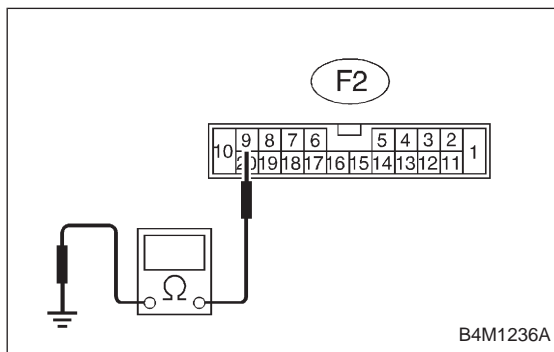
**Connector & terminal**

**(F2) No. 9 — Chassis ground:**

**CHECK** : *Is the resistance less than 0.5 Ω?*

**YES** : Go to step 10D5.

**NO** : Repair harness.



**10D5 CHECK WIRING HARNESS.**

- 1) Connect connector to ABSCM&H/U.
- 2) Measure resistance between connector (F2) and chassis ground.

**Connector & terminal**

**(F2) No. 9 — Chassis ground:**

**CHECK** : *Is the resistance more than 1 MΩ?*

**YES** : Go to step 10D6.

**NO** : Repair harness.



10D6

CHECK POOR CONTACT IN ABSCM&amp;H/U CONNECTOR.

**CHECK** : *Is there poor contact in ABSCM&H/U connector? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Replace ABSCM&H/U.

D•NEW 21 (FB1)  
FR. SS HARD

B4M0945

**E: TROUBLE CODE 21 FR. SS HARD  
— ABNORMAL FRONT RH ABS SENSOR  
(OPEN CIRCUIT OR INPUT VOLTAGE TOO  
HIGH) —**

D•NEW 23 (FB1)  
FL. SS HARD

B4M0946

**F: TROUBLE CODE 23 FL. SS HARD  
— ABNORMAL FRONT LH ABS SENSOR  
(OPEN CIRCUIT OR INPUT VOLTAGE TOO  
HIGH) —**

D•NEW 25 (FB1)  
RR. SS HARD

B4M0947

**G: TROUBLE CODE 25 RR. SS HARD  
— ABNORMAL REAR RH ABS SENSOR  
(OPEN CIRCUIT OR INPUT VOLTAGE TOO  
HIGH) —**

D•NEW 27 (FB1)  
RL. SS HARD

B4M0948

**H: TROUBLE CODE 27 RL. SS HARD  
— ABNORMAL REAR LH ABS SENSOR  
(OPEN CIRCUIT OR INPUT VOLTAGE TOO  
HIGH) —**

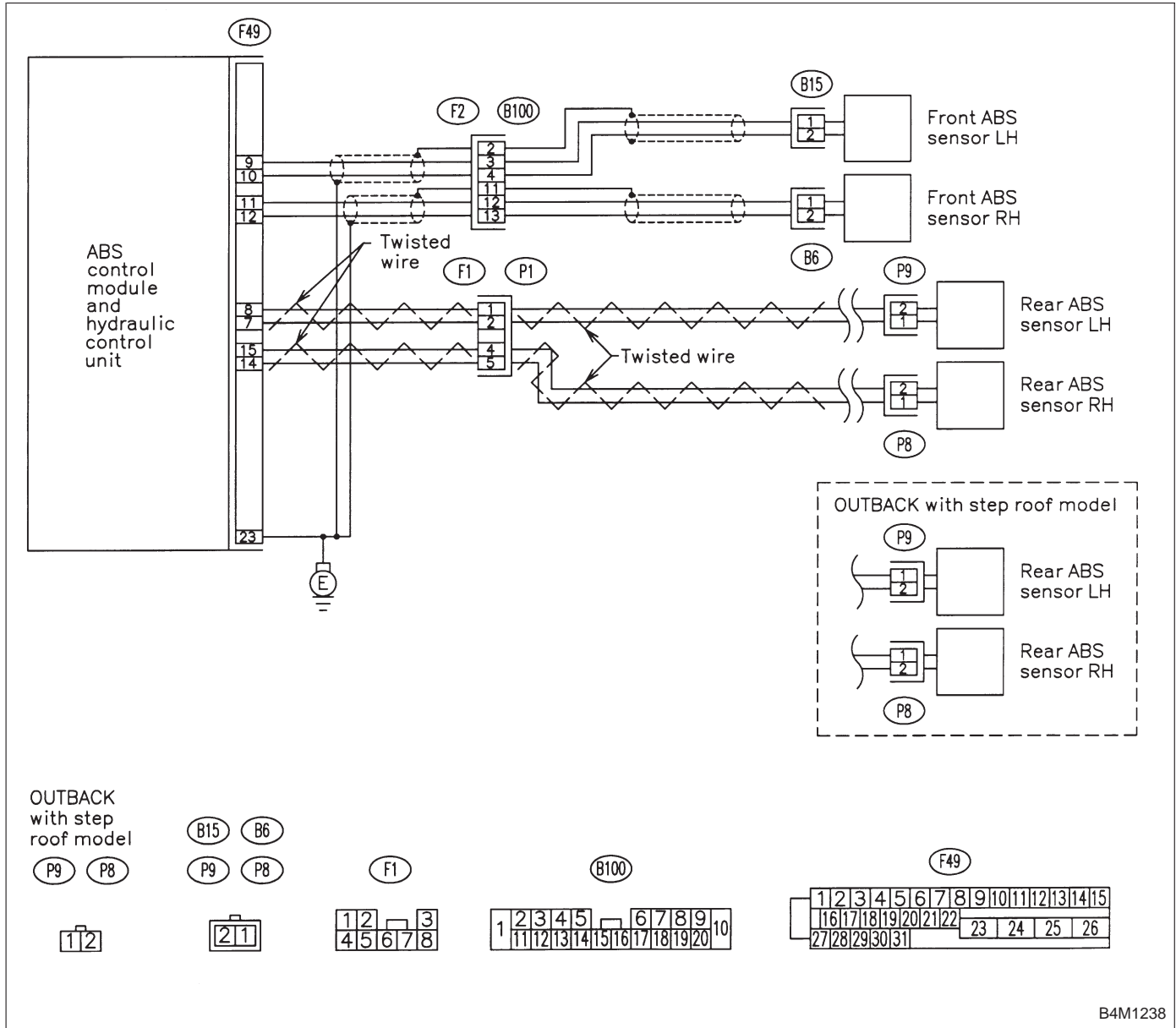
**DIAGNOSIS:**

- Faulty ABS sensor (Broken wire, input voltage too high)
- Faulty harness connector

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



FR (F05)  
30 km/h

B4M0922

10H1

**CHECK OUTPUT OF ABS SENSOR USING SELECT MONITOR.**

Read the ABS sensor output corresponding to the faulty system in the select monitor function mode.

NOTE:

The select monitor display shows that the front right wheel is rotating at 30 km/h.

**CHECK** : *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?*

**YES** : Go to step 10H2.

**NO** : Go to step 10H9.

10H2

**CHECK INSTALLATION OF ABS SENSOR.**

**Tightening torque:**

**$32 \pm 10$  N·m ( $3.3 \pm 1.0$  kg·m,  $24 \pm 7$  ft·lb)**

**CHECK** : *Are the ABS sensor installation bolts tightened securely?*

**YES** : Go to step 10H3.

**NO** : Tighten ABS sensor installation bolts securely.

10H3

**CHECK INSTALLATION OF TONE WHEEL.**

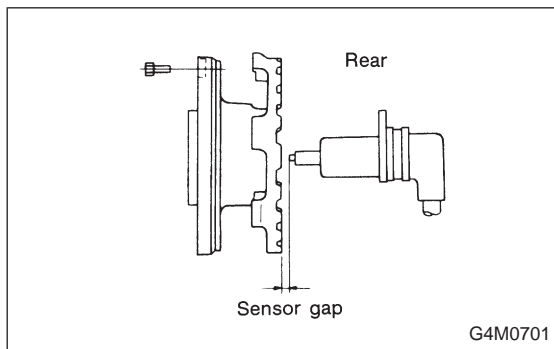
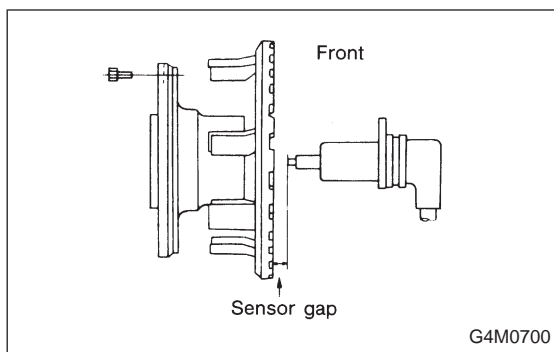
**Tightening torque:**

**$13 \pm 3$  N·m ( $1.3 \pm 0.3$  kg·m,  $9 \pm 2.2$  ft·lb)**

**CHECK** : *Are the tone wheel installation bolts tightened securely?*

**YES** : Go to step 10H4.

**NO** : Tighten tone wheel installation bolts securely.



**10H4 CHECK ABS SENSOR GAP.**

Measure tone wheel-to-pole piece gap over entire perimeter of the wheel.

**CHECK** : *Is the gap within the specifications shown in the following table?*

Specifications	Front wheel	Rear wheel
	0.9 — 1.4 mm (0.035 — 0.055 in)	0.7 — 1.2 mm (0.028 — 0.047 in)

**YES** : Go to step 10H5.

**NO** : Adjust the gap.

**NOTE:**

Adjust the gap using spacers (Part No. 26755AA000). If spacers cannot correct the gap, replace worn sensor or worn tone wheel.

**10H5 CHECK HUB RUNOUT.**

Measure hub runout.

**CHECK** : *Is the runout less than 0.05 mm (0.0020 in)?*

**YES** : Go to step 10H6.

**NO** : Repair hub.

**10H6 CHECK POOR CONTACT IN CONNECTORS.**

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connectors between ABSCM&H/U and ABS sensor? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step 10H7.

**10H7 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

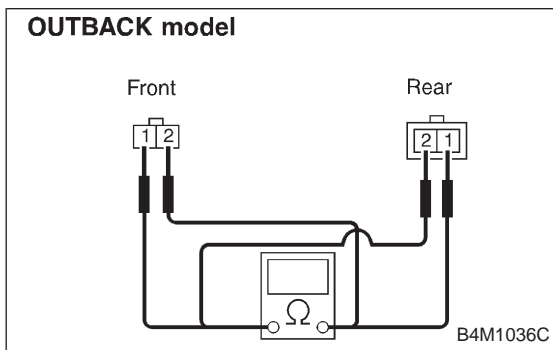
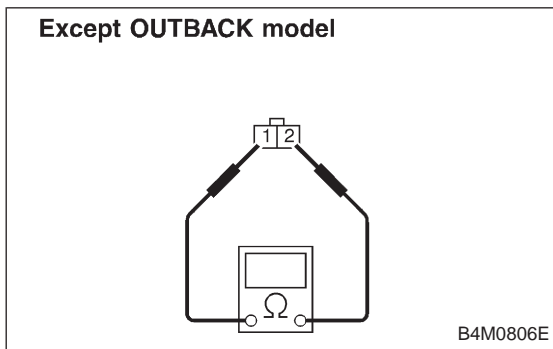
**NO** : Go to step 10H8.

**10H8 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**

**CHECK** : *Are other trouble codes being output?*  
**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

**NOTE:**  
 Check harness and connectors between ABSCM&H/U and ABS sensor.



**10H9 CHECK ABS SENSOR.**

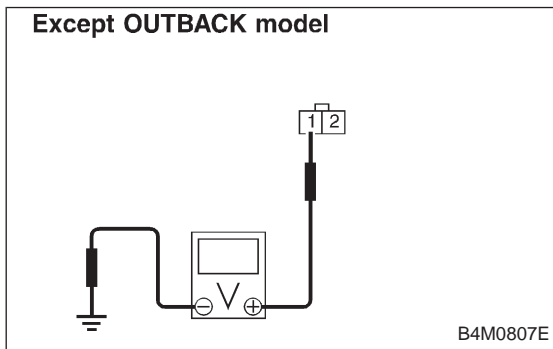
- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABS sensor.
- 3) Measure resistance of ABS sensor connector terminals.

**Terminal**  
**Front RH No. 1 — No. 2:**  
**Front LH No. 1 — No. 2:**  
**Rear RH No. 1 — No. 2:**  
**Rear LH No. 1 — No. 2:**

**CHECK** : *Is the resistance between 0.8 and 1.2 kΩ?*

**YES** : Go to step 10H10.

**NO** : Replace ABS sensor.



**10H10 CHECK BATTERY SHORT OF ABS SENSOR.**

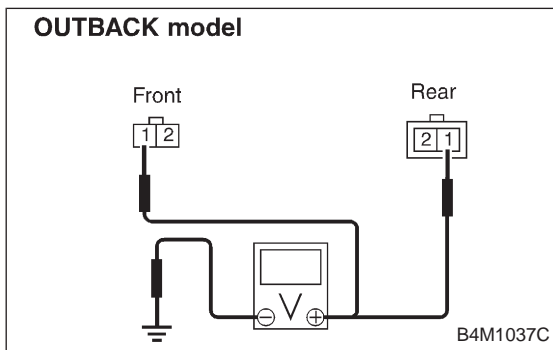
- 1) Disconnect connector from ABSCM&H/U.
- 2) Measure voltage between ABS sensor and chassis ground.

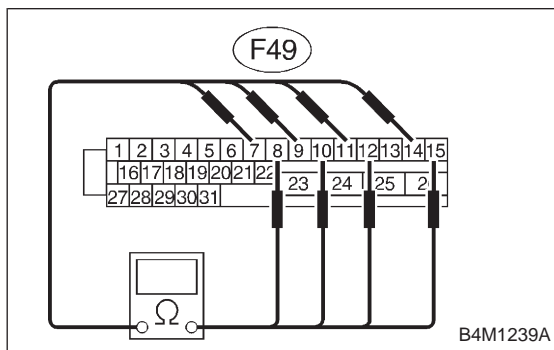
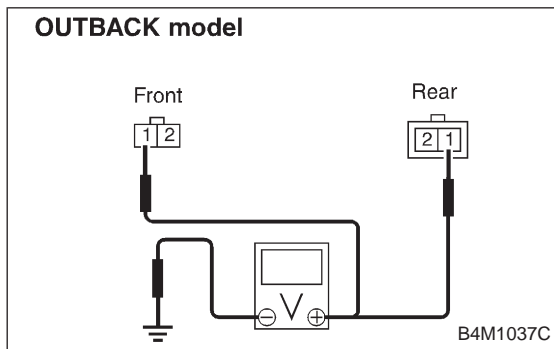
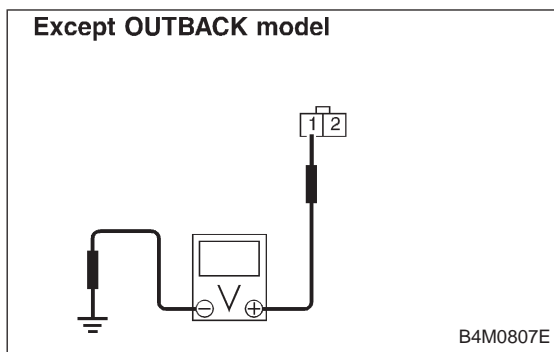
**Terminal**  
**Front RH No. 1 (+) — Chassis ground (-):**  
**Front LH No. 1 (+) — Chassis ground (-):**  
**Rear RH No. 1 (+) — Chassis ground (-):**  
**Rear LH No. 1 (+) — Chassis ground (-):**

**CHECK** : *Is the voltage less than 1 V?*

**YES** : Go to step 10H11.

**NO** : Replace ABS sensor.





**10H11 CHECK BATTERY SHORT OF ABS SENSOR.**

- 1) Turn ignition switch to ON.
- 2) Measure voltage between ABS sensor and chassis ground.

**Terminal**  
**Front RH No. 1 (+) — Chassis ground (-):**  
**Front LH No. 1 (+) — Chassis ground (-):**  
**Rear RH No. 1 (+) — Chassis ground (-):**  
**Rear LH No. 1 (+) — Chassis ground (-):**

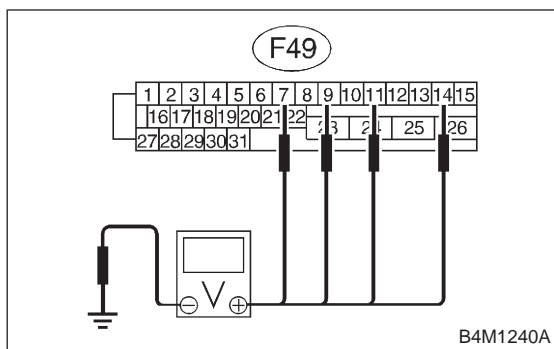
- CHECK** : Is the voltage less than 1 V?  
**YES** : Go to step 10H12.  
**NO** : Replace ABS sensor.

**10H12 CHECK HARNESS/CONNECTOR BETWEEN ABSCM&H/U AND ABS SENSOR.**

- 1) Turn ignition switch to OFF.
- 2) Connect connector to ABS sensor.
- 3) Measure resistance between ABSCM&H/U connector terminals.

**Connector & terminal**  
**Trouble code 21 / (F49) No. 11 — No. 12:**  
**Trouble code 23 / (F49) No. 9 — No. 10:**  
**Trouble code 25 / (F49) No. 14 — No. 15:**  
**Trouble code 27 / (F49) No. 7 — No. 8:**

- CHECK** : Is the resistance between 0.8 and 1.2 kΩ?  
**YES** : Go to step 10H13.  
**NO** : Repair harness/connector between ABSCM&H/U and ABS sensor.

**10H13 CHECK BATTERY SHORT OF HARNESS.**

Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

**Trouble code 21 / (F49) No. 11 (+) — Chassis ground (-):**

**Trouble code 23 / (F49) No. 9 (+) — Chassis ground (-):**

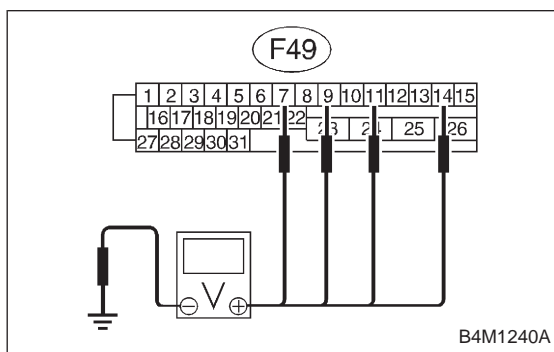
**Trouble code 25 / (F49) No. 14 (+) — Chassis ground (-):**

**Trouble code 27 / (F49) No. 7 (+) — Chassis ground (-):**

**CHECK** : Is the voltage less than 1 V?

**YES** : Go to step 10H14.

**NO** : Repair harness between ABSCM&H/U and ABS sensor.

**10H14 CHECK BATTERY SHORT OF HARNESS.**

1) Turn ignition switch to ON.

2) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

**Trouble code 21 / (F49) No. 11 (+) — Chassis ground (-):**

**Trouble code 23 / (F49) No. 9 (+) — Chassis ground (-):**

**Trouble code 25 / (F49) No. 14 (+) — Chassis ground (-):**

**Trouble code 27 / (F49) No. 7 (+) — Chassis ground (-):**

**CHECK** : Is the voltage less than 1 V?

**YES** : Go to step 10H15.

**NO** : Repair harness between ABSCM&H/U and ABS sensor.

**10H15 CHECK INSTALLATION OF ABS SENSOR.****Tightening torque:**

**32±10 N·m (3.3±1.0 kg·m, 24±7 ft·lb)**

**CHECK** : Are the ABS sensor installation bolts tightened securely?

**YES** : Go to step 10H16.

**NO** : Tighten ABS sensor installation bolts securely.



<b>10H16</b>	<b>CHECK INSTALLATION OF TONE WHEEL.</b>
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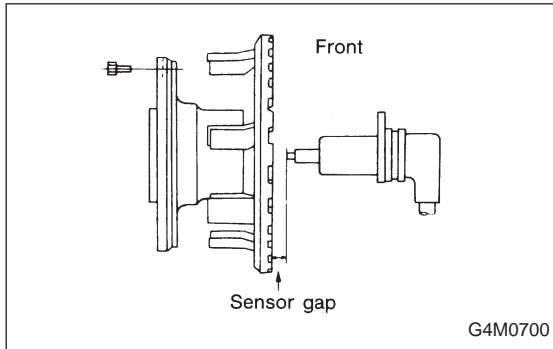
**Tightening torque:**

**13±3 N·m (1.3±0.3 kg-m, 9±2.2 ft-lb)**

**CHECK** : Are the tone wheel installation bolts tightened securely?

**YES** : Go to step 10H17.

**NO** : Tighten tone wheel installation bolts securely.



<b>10H17</b>	<b>CHECK ABS SENSOR GAP.</b>
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Measure tone wheel-to-pole piece gap over entire perimeter of the wheel.

**CHECK** : Is the gap within the specifications shown in the following table?

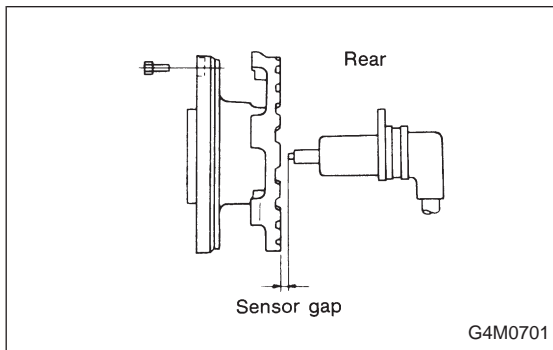
	Front wheel	Rear wheel
Specifications	0.9 — 1.4 mm (0.035 — 0.055 in)	0.7 — 1.2 mm (0.028 — 0.047 in)

**YES** : Go to step 10H18.

**NO** : Adjust the gap.

**NOTE:**

Adjust the gap using spacers (Part No. 26755AA000). If spacers cannot correct the gap, replace worn sensor or worn tone wheel.



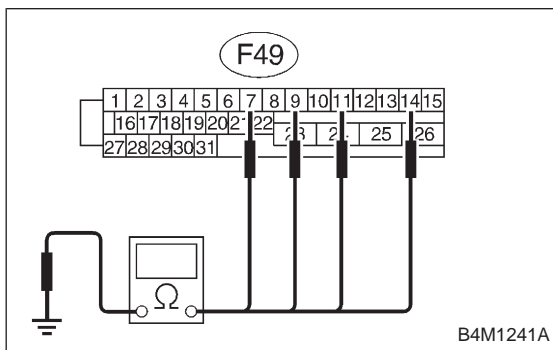
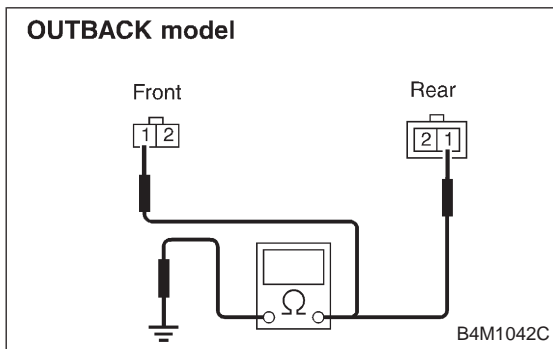
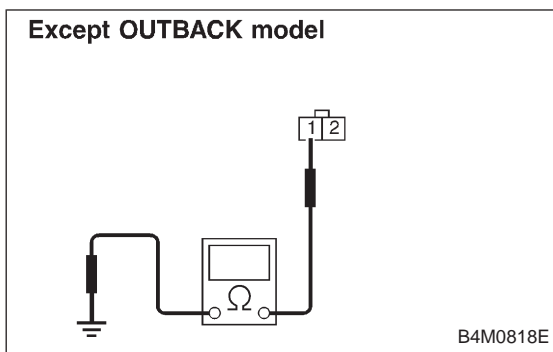
<b>10H18</b>	<b>CHECK HUB RUNOUT.</b>
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Measure hub runout.

**CHECK** : Is the runout less than 0.05 mm (0.0020 in)?

**YES** : Go to step 10H19.

**NO** : Repair hub.



**10H19 CHECK GROUND SHORT OF ABS SENSOR.**

- 1) Turn ignition switch to ON.
- 2) Measure resistance between ABS sensor and chassis ground.

**Terminal**  
**Front RH No. 1 — Chassis ground:**  
**Front LH No. 1 — Chassis ground:**  
**Rear RH No. 1 — Chassis ground:**  
**Rear LH No. 1 — Chassis ground:**

- CHECK** : Is the resistance more than 1 MΩ?  
**YES** : Go to step 10H20.  
**NO** : Replace ABS sensor and ABSCM&H/U.

**10H20 CHECK GROUND SHORT OF HARNESS.**

- 1) Turn ignition switch to OFF.
- 2) Connect connector to ABS sensor.
- 3) Measure resistance between ABSCM&H/U connector terminal and chassis ground.

**Connector & terminal**  
**Trouble code 21 / (F49) No. 11 — Chassis ground:**  
**Trouble code 23 / (F49) No. 9 — Chassis ground:**  
**Trouble code 25 / (F49) No. 14 — Chassis ground:**  
**Trouble code 27 / (F49) No. 7 — Chassis ground:**

- CHECK** : Is the resistance more than 1 MΩ?  
**YES** : Go to step 10H21.  
**NO** : Repair harness between ABSCM&H/U and ABS sensor.  
 And replace ABSCM&H/U.

**10H21 CHECK POOR CONTACT IN CONNECTORS.**

- CHECK** : Is there poor contact in connectors between ABSCM&H/U and ABS sensor? <Ref. to FOREWORD [T3C1].>  
**YES** : Repair connector.  
**NO** : Go to step 10H22.

<b>10H22</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10H23**.

<b>10H23</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
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**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

**NOTE:**

Check harness and connectors between ABSCM&H/U and ABS sensor.

D•NEW 22 (FB1)  
FR. SS SOFT

B4M0812

**I: TROUBLE CODE 22 FR. SS SOFT  
— ABNORMAL FRONT RH ABS SENSOR  
(ABNORMAL ABS SENSOR SIGNAL) —**

D•NEW 24 (FB1)  
FL. SS SOFT

B4M0949

**J: TROUBLE CODE 24 FL. SS SOFT  
— ABNORMAL FRONT LH ABS SENSOR  
(ABNORMAL ABS SENSOR SIGNAL) —**

D•NEW 26 (FB1)  
RR. SS SOFT

B4M0950

**K: TROUBLE CODE 26 RR. SS SOFT  
— ABNORMAL REAR RH ABS SENSOR  
(ABNORMAL ABS SENSOR SIGNAL) —**

D•NEW 28 (FB1)  
RL. SS SOFT

B4M0951

**L: TROUBLE CODE 28 RL. SS SOFT  
— ABNORMAL REAR LH ABS SENSOR  
(ABNORMAL ABS SENSOR SIGNAL) —**

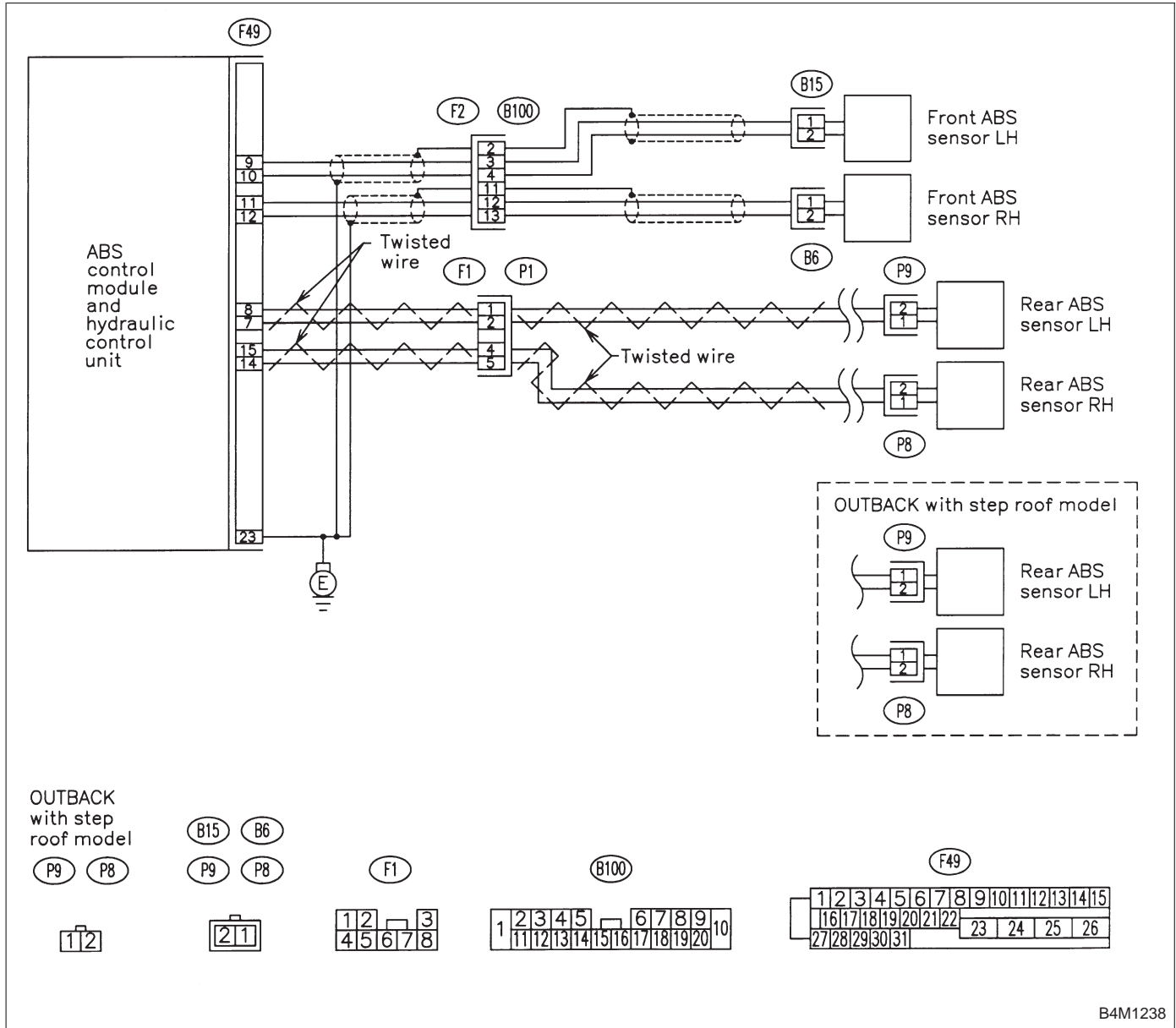
**DIAGNOSIS:**

- Faulty ABS sensor signal (noise, irregular signal, etc.)
- Faulty harness/connector

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



FR (F05)  
30 km/h

B4M0922

10L1

**CHECK OUTPUT OF ABS SENSOR USING SELECT MONITOR.**

Read the ABS sensor output corresponding to the faulty system in the select monitor function mode.

**NOTE:**

The select monitor display shows that the front right wheel is rotating at 30 km/h.

**CHECK** : *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?*

**YES** : Go to step 10L2.

**NO** : Go to step 10L8.

10L2

**CHECK POOR CONTACT IN CONNECTORS.**

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connectors between ABSCM&H/U and ABS sensor?*

**YES** : Repair connector.

**NO** : Go to step 10L3.

10L3

**CHECK SOURCES OF SIGNAL NOISE.**

**CHECK** : *Is the car telephone or the wireless transmitter properly installed?*

**YES** : Go to step 10L4.

**NO** : Properly install the car telephone or the wireless transmitter.

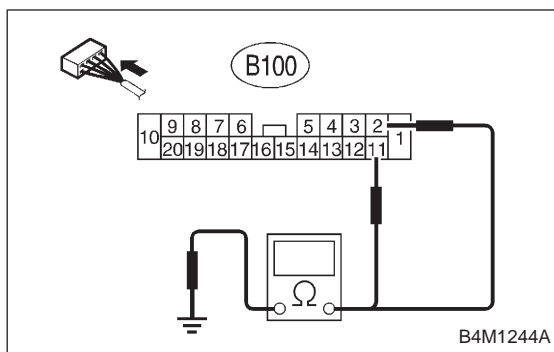
10L4

**CHECK SOURCES OF SIGNAL NOISE.**

**CHECK** : *Are noise sources (such as an antenna) installed near the sensor harness?*

**YES** : Install the noise sources apart from the sensor harness.

**NO** : Go to step 10L5.

**10L5 CHECK SHIELD CIRCUIT.**

- 1) Turn ignition switch to OFF.
- 2) Connect all connectors.
- 3) Measure resistance between shield connector and chassis ground.

**Connector & terminal**

**Trouble code 22 / (B100) No. 11 — Chassis ground:**

**Trouble code 24 / (B100) No. 2 — Chassis ground:**

**Trouble code 26 / Go to step 10L6.**

**Trouble code 28 / Go to step 10L6.**

**CHECK** : *Is the resistance less than 0.5 Ω?*

**YES** : Go to step 10L6.

**NO** : Repair shield harness.

**10L6 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step 10L7.

**10L7 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary noise interference.

**10L8 CHECK INSTALLATION OF ABS SENSOR.****Tightening torque:**

**32±10 N·m (3.3±1.0 kg·m, 24±7 ft·lb)**

**CHECK** : *Are the ABS sensor installation bolts tightened securely?*

**YES** : Go to step 10L9.

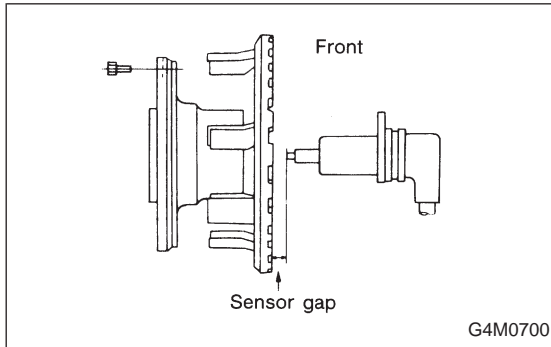
**NO** : Tighten ABS sensor installation bolts securely.

**10L9****CHECK INSTALLATION OF TONE WHEEL.****Tightening torque:****13±3 N·m (1.3±0.3 kg-m, 9±2.2 ft-lb)**

**CHECK** : Are the tone wheel installation bolts tightened securely?

**YES** : Go to step 10L10.

**NO** : Tighten tone wheel installation bolts securely.

**10L10****CHECK ABS SENSOR GAP.**

Measure tone wheel to pole piece gap over entire perimeter of the wheel.

**CHECK** : Is the gap within the specifications shown in the following table?

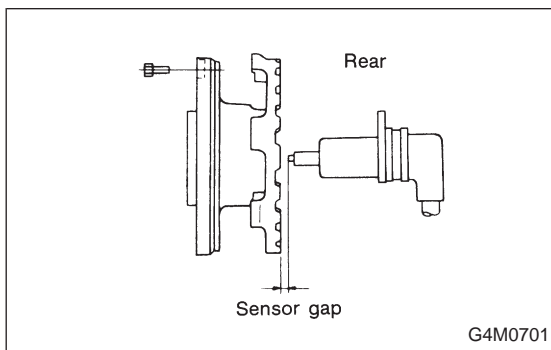
	Front wheel	Rear wheel
Specifications	0.9 — 1.4 mm (0.035 — 0.055 in)	0.7 — 1.2 mm (0.028 — 0.047 in)

**YES** : Go to step 10L11.

**NO** : Adjust the gap.

**NOTE:**

Adjust the gap using spacer (Part No. 26755AA000). If spacers cannot correct the gap, replace worn sensor or worn tone wheel.

**10L11****CHECK OSCILLOSCOPE.**

**CHECK** : Is an oscilloscope available?

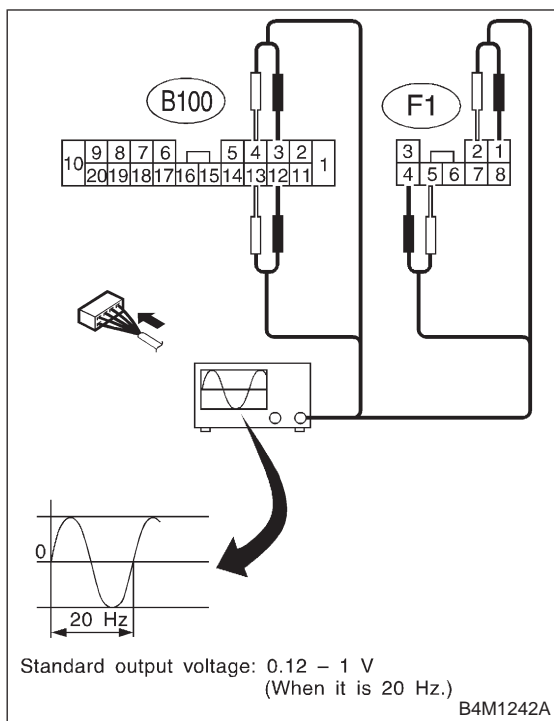
**YES** : Go to step 10L12.

**NO** : Go to step 10L13.

**10L12****CHECK ABS SENSOR SIGNAL.**

- 1) Raise all four wheels of ground.
- 2) Turn ignition switch OFF.
- 3) Connect the oscilloscope to the connector (F1) or connector (B100) in accordance with trouble code.
- 4) Turn ignition switch ON.





5) Rotate wheels and measure voltage at specified frequency.

NOTE:

When this inspection is completed, the ABSCM&H/U sometimes stores the trouble code 29.

**Connector & terminal**

**Trouble code 22 / (B100) No. 12 (+) — No. 13 (-):**

**Trouble code 24 / (B100) No. 3 (+) — No. 4 (-):**

**Trouble code 26 / (F1) No. 4 (+) — No. 5 (-):**

**Trouble code 28 / (F1) No. 1 (+) — No. 2 (-):**

**Specified voltage: 0.12 — 1 V (When it is 20 Hz.)**

**CHECK** : Is oscilloscope pattern smooth, as shown in figure?

**YES** : Go to step 10L16.

**NO** : Go to step 10L13.

<b>10L13</b>	<b>CHECK CONTAMINATION OF ABS SENSOR OR TONE WHEEL.</b>
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Remove disc rotor or drum from hub in accordance with trouble code.

**CHECK** : Is the ABS sensor pole piece or the tone wheel contaminated by dirt or other foreign matter?

**YES** : Thoroughly remove dirt or other foreign matter.

**NO** : Go to step 10L14.

<b>10L14</b>	<b>CHECK DAMAGE OF ABS SENSOR OR TONE WHEEL.</b>
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**CHECK** : Are there broken or damaged in the ABS sensor pole piece or the tone wheel?

**YES** : Replace ABS sensor or tone wheel.

**NO** : Go to step 10L15.

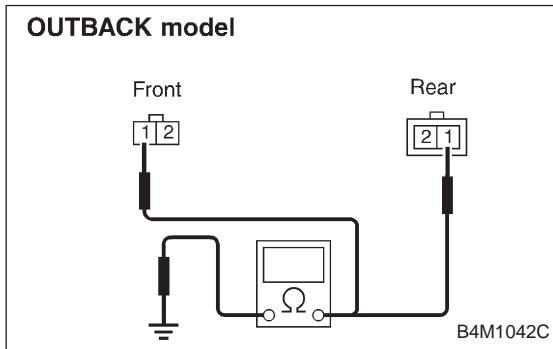
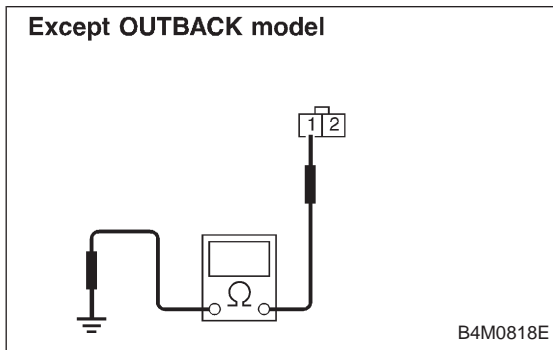
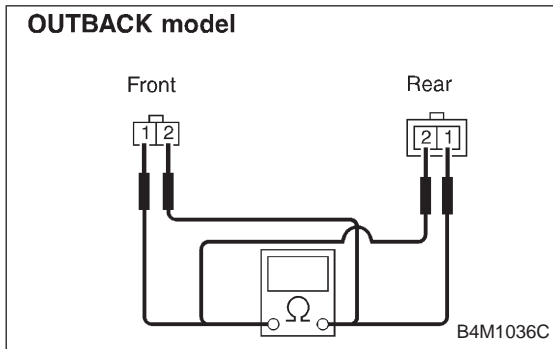
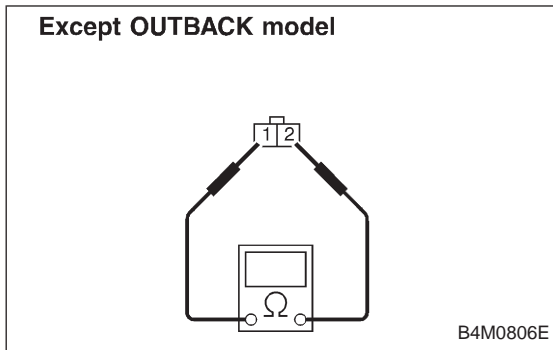
<b>10L15</b>	<b>CHECK HUB RUNOUT.</b>
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Measure hub runout.

**CHECK** : Is the runout less than 0.05 mm (0.0020 in)?

**YES** : Go to step 10L16.

**NO** : Repair hub.



**10L16 CHECK RESISTANCE OF ABS SENSOR.**

- 1) Turn ignition switch OFF.
- 2) Disconnect connector from ABS sensor.
- 3) Measure resistance between ABS sensor connector terminals.

**Terminal**  
**Front RH No. 1 — No. 2:**  
**Front LH No. 1 — No. 2:**  
**Rear RH No. 1 — No. 2:**  
**Rear LH No. 1 — No. 2:**

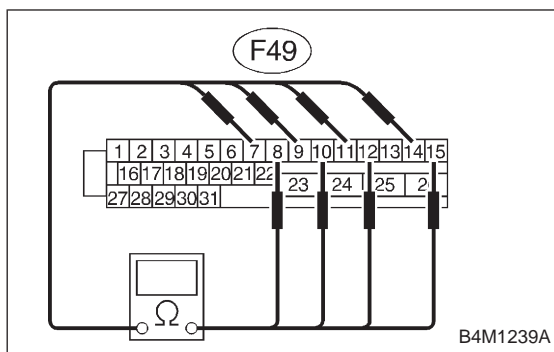
- CHECK** : Is the resistance between 0.8 and 1.2 kΩ?  
**YES** : Go to step 10L17.  
**NO** : Replace ABS sensor.

**10L17 CHECK GROUND SHORT OF ABS SENSOR.**

Measure resistance between ABS sensor and chassis ground.

**Terminal**  
**Front RH No. 1 — Chassis ground:**  
**Front LH No. 1 — Chassis ground:**  
**Rear RH No. 1 — Chassis ground:**  
**Rear LH No. 1 — Chassis ground:**

- CHECK** : Is the resistance more than 1 MΩ?  
**YES** : Go to step 10L18.  
**NO** : Replace ABS sensor.



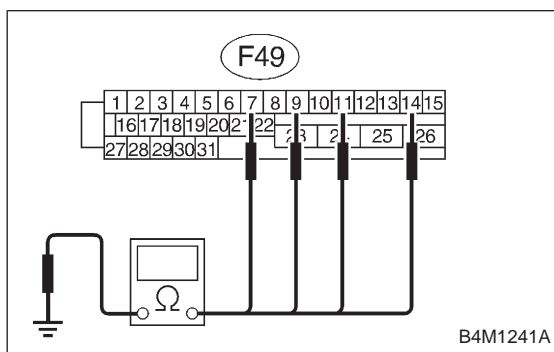
10L18

**CHECK HARNESS/CONNECTOR BETWEEN ABSCM&H/U AND ABS SENSOR.**

- 1) Connect connector to ABS sensor.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Measure resistance at ABSCM&H/U connector terminals.

**Connector & terminal**
**Trouble code 22 / (F49) No. 11 — No. 12:**
**Trouble code 24 / (F49) No. 9 — No. 10:**
**Trouble code 26 / (F49) No. 14 — No. 15:**
**Trouble code 28 / (F49) No. 7 — No. 8:**
**CHECK** : Is the resistance between 0.8 and 1.2 k $\Omega$ ?

**YES** : Go to step 10L19.

**NO** : Repair harness/connector between ABSCM&H/U and ABS sensor.


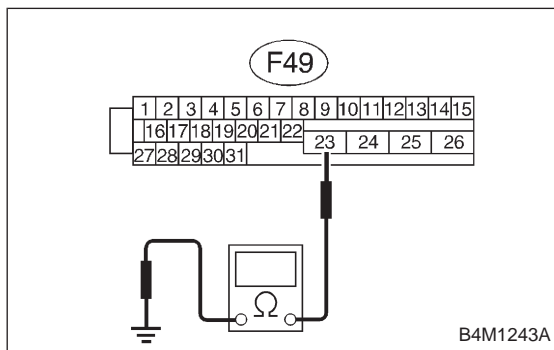
10L19

**CHECK GROUND SHORT OF HARNESS.**

Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal**
**Trouble code 22 / (F49) No. 11 — Chassis ground:**
**Trouble code 24 / (F49) No. 9 — Chassis ground:**
**Trouble code 26 / (F49) No. 14 — Chassis ground:**
**Trouble code 28 / (F49) No. 7 — Chassis ground:**
**CHECK** : Is the resistance more than 1 M $\Omega$ ?

**YES** : Go to step 10L20.

**NO** : Repair harness/connector between ABSCM&H/U and ABS sensor.


10L20

**CHECK GROUND CIRCUIT OF ABSCM&H/U.**

Measure resistance between ABSCM&H/U and chassis ground.

**Connector & terminal**
**(F49) No. 23 — GND:**
**CHECK** : Is the resistance less than 0.5  $\Omega$ ?

**YES** : Go to step 10L21.

**NO** : Repair ABSCM&H/U ground harness.

<b>10L21</b>	<b>CHECK POOR CONTACT IN CONNECTORS.</b>
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**CHECK** : *Is there poor contact in connectors between ABSCM&H/U and ABS sensor? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step 10L22.

<b>10L22</b>	<b>CHECK SOURCES OF SIGNAL NOISE.</b>
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**CHECK** : *Is the car telephone or the wireless transmitter properly installed?*

**YES** : Go to step 10L23.

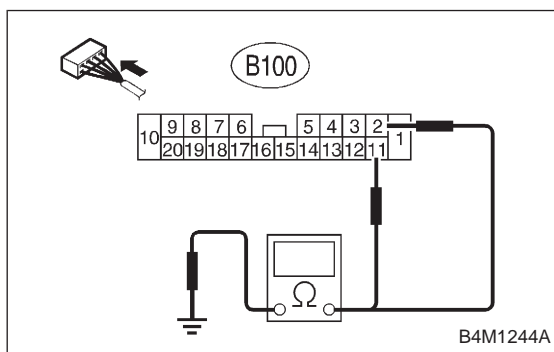
**NO** : Properly install the car telephone or the wireless transmitter.

<b>10L23</b>	<b>CHECK SOURCES OF SIGNAL NOISE.</b>
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**CHECK** : *Are noise sources (such as an antenna) installed near the sensor harness?*

**YES** : Install the noise sources apart from the sensor harness.

**NO** : Go to step 10L24.



<b>10L24</b>	<b>CHECK SHIELD CIRCUIT.</b>
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1) Connect all connectors.

2) Measure resistance between shield connector and chassis ground.

**Connector & terminal**

**Trouble code 22 / (B100) No. 11 — Chassis ground:**

**Trouble code 24 / (B100) No. 2 — Chassis ground:**

**Trouble code 26 / Go to step 10L25.**

**Trouble code 28 / Go to step 10L25.**

**CHECK** : *Is the resistance less than 0.5 Ω?*

**YES** : Go to step 10L25.

**NO** : Repair shield harness.

<b>10L25</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10L26**.

<b>10L26</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
--------------	--

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary noise interference.

**D•NEW 29 (FB1)  
EITHER. SS SOFT**

B4M0952

**M: TROUBLE CODE 29 EITHER. SS SOFT  
— ABNORMAL ABS SENSOR SIGNAL (ANY  
ONE OF FOUR) —**

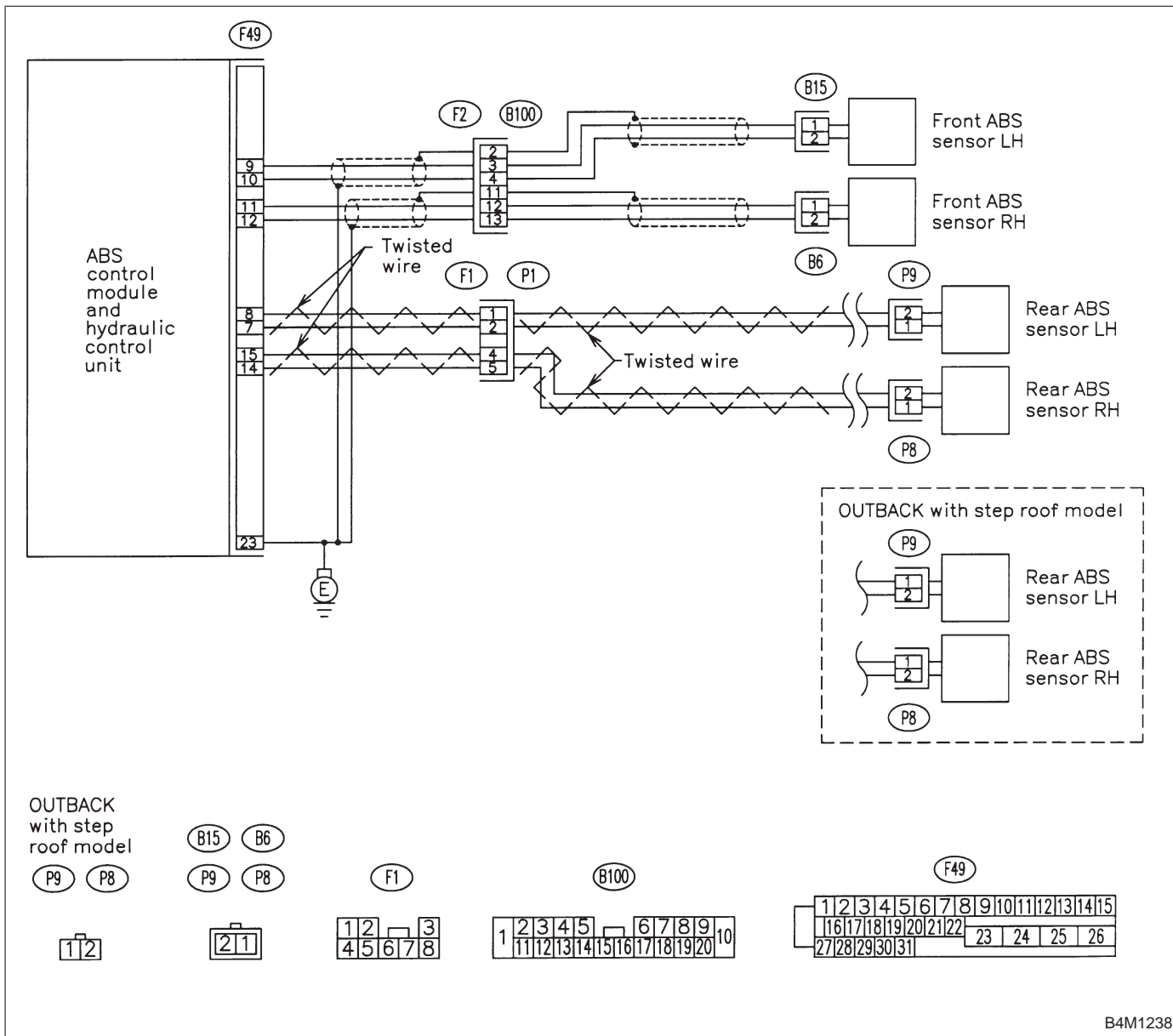
**DIAGNOSIS:**

- Faulty ABS sensor signal (noise, irregular signal, etc.)
- Faulty tone wheel
- Wheels turning freely for a long time

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



B4M1238

<b>10M1</b>	<b>CHECK IF THE WHEELS HAVE TURNED FREELY FOR A LONG TIME.</b>
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**CHECK** : *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 tire is not in contact with road surface.*

**YES** : The ABS is normal. Erase the trouble code.

NOTE:

When the wheels turn freely for a long time, such as when the vehicle is towed or jacked-up, or when steering wheel is continuously turned all the way, this trouble code may sometimes occur.

**NO** : Go to step **10M2**.

<b>10M2</b>	<b>CHECK TIRE SPECIFICATIONS.</b>
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Turn ignition switch to OFF.

**CHECK** : *Are the tire specifications correct?*

**YES** : Go to step **10M3**.

**NO** : Replace tire.

<b>10M3</b>	<b>CHECK WEAR OF TIRE.</b>
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**CHECK** : *Is the tire worn excessively?*

**YES** : Replace tire.

**NO** : Go to step **10M4**.

<b>10M4</b>	<b>CHECK TIRE PRESSURE.</b>
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**CHECK** : *Is the tire pressure correct?*

**YES** : Go to step **10M5**.

**NO** : Adjust tire pressure.

<b>10M5</b>	<b>CHECK INSTALLATION OF ABS SENSOR.</b>
-------------	--

**Tightening torque:**

**$32 \pm 10$  N·m ( $3.3 \pm 1.0$  kg·m,  $24 \pm 7$  ft·lb)**

**CHECK** : *Are the ABS sensor installation bolts tightened securely?*

**YES** : Go to step **10M6**.

**NO** : Tighten ABS sensor installation bolts securely.

<b>10M6</b>	<b>CHECK INSTALLATION OF TONE WHEEL.</b>
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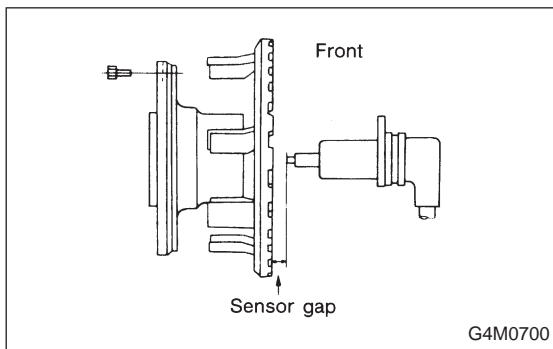
**Tightening torque:**

**13±3 N·m (1.3±0.3 kg·m, 9±2.2 ft·lb)**

**CHECK** : Are the tone wheel installation bolts tightened securely?

**YES** : Go to step 10M7.

**NO** : Tighten tone wheel installation bolts securely.



<b>10M7</b>	<b>CHECK ABS SENSOR GAP.</b>
-------------	------------------------------

Measure tone wheel to pole piece gap over entire perimeter of the wheel.

**CHECK** : Is the gap within the specifications shown in the following table?

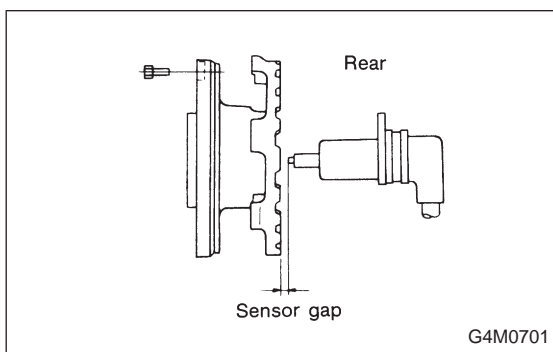
	Front wheel	Rear wheel
Specifications	0.9 — 1.4 mm (0.035 — 0.055 in)	0.7 — 1.2 mm (0.028 — 0.047 in)

**YES** : Go to step 10M8.

**NO** : Adjust the gap.

**NOTE:**

Adjust the gap using spacer (Part No. 26755AA000). If spacers cannot correct the gap, replace worn sensor or worn tone wheel.



<b>10M8</b>	<b>CHECK OSCILLOSCOPE.</b>
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**CHECK** : Is an oscilloscope available?

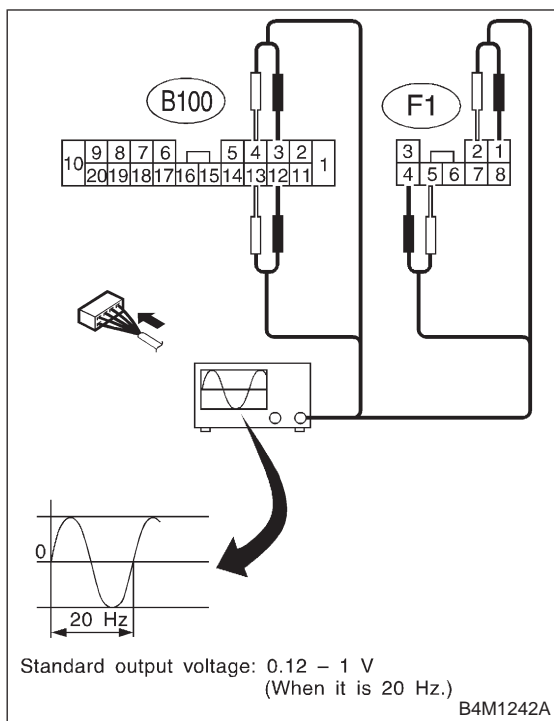
**YES** : Go to step 10M9.

**NO** : Go to step 10M10.

<b>10M9</b>	<b>CHECK ABS SENSOR SIGNAL.</b>
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- 1) Raise all four wheels of ground.
- 2) Turn ignition switch OFF.
- 3) Connect the oscilloscope to the connector (F1) or connector (B100) in accordance with trouble code.
- 4) Turn ignition switch ON.





5) Rotate wheels and measure voltage at specified frequency.

NOTE:

When this inspection is completed, the ABSCM&H/U sometimes stores the trouble code 29.

**Connector & terminal**

(B100) No. 12 (+) — No. 13 (-) (Front RH):

(B100) No. 3 (+) — No. 4 (-) (Front LH):

(F1) No. 4 (+) — No. 5 (-) (Rear RH):

(F1) No. 1 (+) — No. 2 (-) (Rear LH):

Specified voltage: 0.12 — 1 V (When it is 20 Hz.)

**CHECK** : Is oscilloscope pattern smooth, as shown in figure?

**YES** : Go to step 8M13.

**NO** : Go to step 8M10.

<b>10M10</b>	<b>CHECK CONTAMINATION OF ABS SENSOR OR TONE WHEEL.</b>
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Remove disc rotor from hub.

**CHECK** : Is the ABS sensor pole piece or the tone wheel contaminated by dirt or other foreign matter?

**YES** : Thoroughly remove dirt or other foreign matter.

**NO** : Go to step 10M11.

<b>10M11</b>	<b>CHECK DAMAGE OF ABS SENSOR OR TONE WHEEL.</b>
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**CHECK** : Are there broken or damaged teeth in the ABS sensor pole piece or the tone wheel?

**YES** : Replace ABS sensor or tone wheel.

**NO** : Go to step 10M12.

<b>10M12</b>	<b>CHECK HUB RUNOUT.</b>
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Measure hub runout.

**CHECK** : Is the runout less than 0.05 mm (0.0020 in)?

**YES** : Go to step 10M13.

**NO** : Repair hub.

<b>10M13</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Turn ignition switch to OFF.
- 2) Connect all connectors.
- 3) Erase the memory.
- 4) Perform inspection mode.
- 5) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10M14**.

<b>10M14</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
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**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 31 (FB1)  
FR. EV VALVE

B4M0953

**N: TROUBLE CODE 31 FR. EV VALVE  
— ABNORMAL FRONT RH INLET SOLENOID  
VALVE —**

D•NEW 33 (FB1)  
FL. EV VALVE

B4M0954

**O: TROUBLE CODE 33 FL. EV VALVE  
— ABNORMAL FRONT LH INLET SOLENOID  
VALVE —**

D•NEW 35 (FB1)  
RR. EV VALVE

B4M0955

**P: TROUBLE CODE 35 RR. EV VALVE  
— ABNORMAL REAR RH INLET SOLENOID  
VALVE —**

D•NEW 37 (FB1)  
RL. EV VALVE

B4M0956

**Q: TROUBLE CODE 37 RL. EV VALVE  
— ABNORMAL REAR LH INLET SOLENOID  
VALVE —**

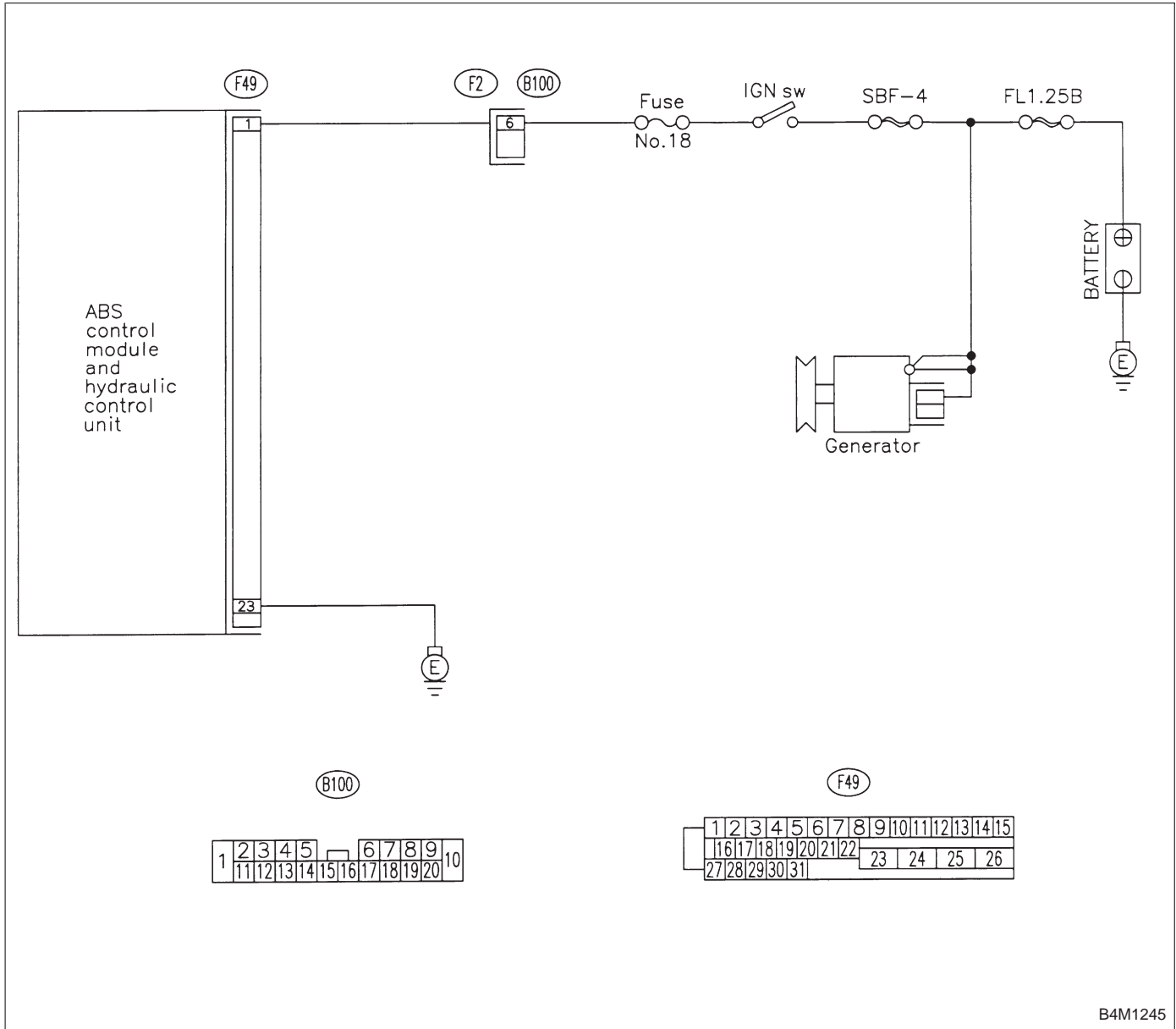
**DIAGNOSIS:**

- Faulty harness/connector
- Faulty inlet solenoid valve

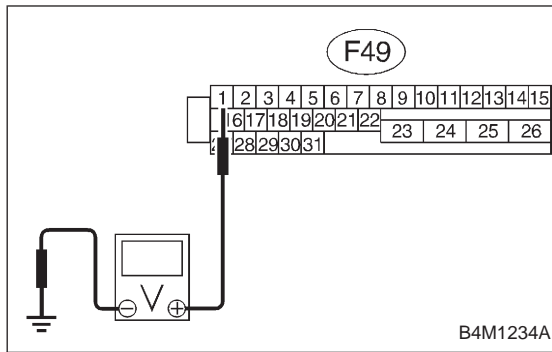
**TROUBLE SYMPTOM:**

- ABS does not operate.

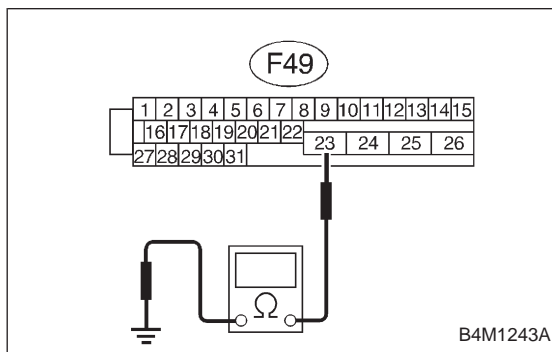
**WIRING DIAGRAM:**



B4M1245

**10Q1****CHECK INPUT VOLTAGE OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Run the engine at idle.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal****(F49) No. 1 (+) — Chassis ground (-):****CHECK** : *Is the voltage between 10 V and 15 V?***YES** : Go to step 10Q2.**NO** : Repair harness connector between battery, ignition switch and ABSCM&H/U.**10Q2****CHECK GROUND CIRCUIT OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal****(F49) No. 23 — Chassis ground:****CHECK** : *Is the resistance less than 0.5 Ω?***YES** : Go to step 10Q3.**NO** : Repair ABSCM&H/U ground harness.**10Q3****CHECK POOR CONTACT IN CONNECTORS.****CHECK** : *Is there poor contact in connectors between generator, battery and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>***YES** : Repair connector.**NO** : Go to step 10Q4.

<b>10Q4</b>	<b>CHECK ABSCM&amp;H/U.</b>
-------------	-----------------------------

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10Q5**.

<b>10Q5</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
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**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 32 (FB1)  
FR. AV VALVE

B4M0958

**R: TROUBLE CODE 32 FR. AV VALVE  
— ABNORMAL FRONT RH OUTLET  
SOLENOID VALVE —**

D•NEW 34 (FB1)  
FL. AV VALVE

B4M0959

**S: TROUBLE CODE 34 FL. AV VALVE  
— ABNORMAL FRONT LH OUTLET  
SOLENOID VALVE —**

D•NEW 36 (FB1)  
RR. AV VALVE

B4M0960

**T: TROUBLE CODE 36 RR. AV VALVE  
— ABNORMAL REAR RH OUTLET SOLENOID  
VALVE —**

D•NEW 38 (FB1)  
RL. AV VALVE

B4M0961

**U: TROUBLE CODE 38 RL. AV VALVE  
— ABNORMAL REAR LH OUTLET SOLENOID  
VALVE —**

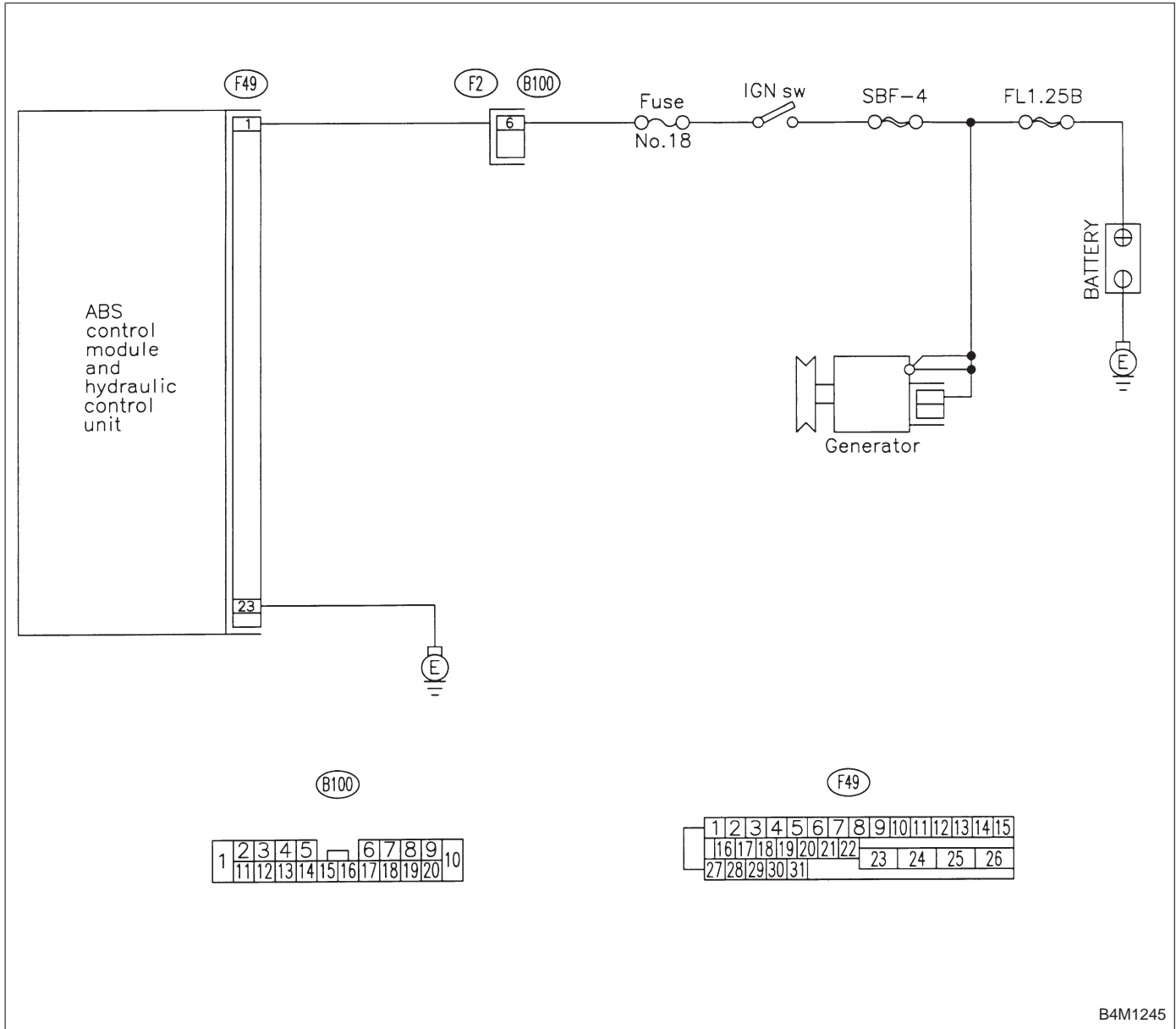
**DIAGNOSIS:**

- Faulty harness/connector
- Faulty outlet solenoid valve

**TROUBLE SYMPTOM:**

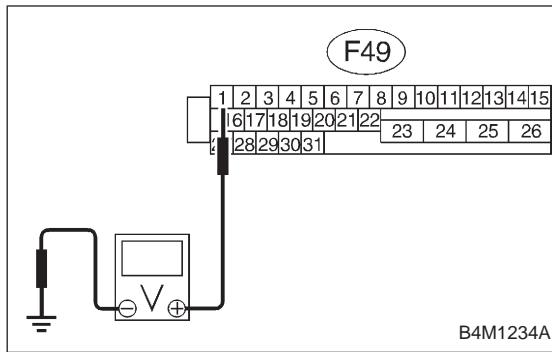
- ABS does not operate.

**WIRING DIAGRAM:**

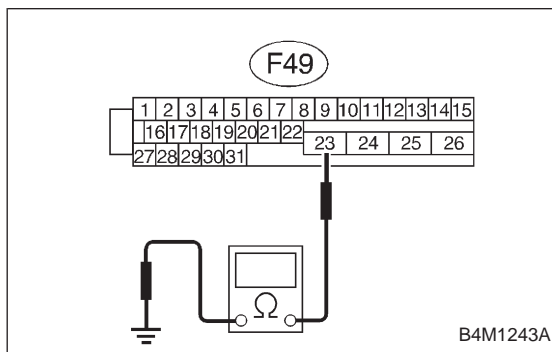


B4M1245



**10U1****CHECK INPUT VOLTAGE OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Run the engine at idle.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal****(F49) No. 1 (+) — Chassis ground (-):****CHECK** : *Is the voltage between 10 V and 15 V?***YES** : Go to step 10U2.**NO** : Repair harness connector between battery, ignition switch and ABSCM&H/U.**10U2****CHECK GROUND CIRCUIT OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal****(F49) No. 23 — Chassis ground:****CHECK** : *Is the resistance less than 0.5 Ω?***YES** : Go to step 10U3.**NO** : Repair ABSCM&H/U ground harness.**10U3****CHECK POOR CONTACT IN CONNECTORS.****CHECK** : *Is there poor contact in connectors between generator, battery and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>***YES** : Repair connector.**NO** : Go to step 10U4.

<b>10U4</b>	<b>CHECK ABSCM&amp;H/U.</b>
-------------	-----------------------------

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10U5**.

<b>10U5</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
-------------	--

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 41 (FB1)  
ECU

B4M0962

**V: TROUBLE CODE 41 ECU**  
**— ABNORMAL ABS CONTROL MODULE —**

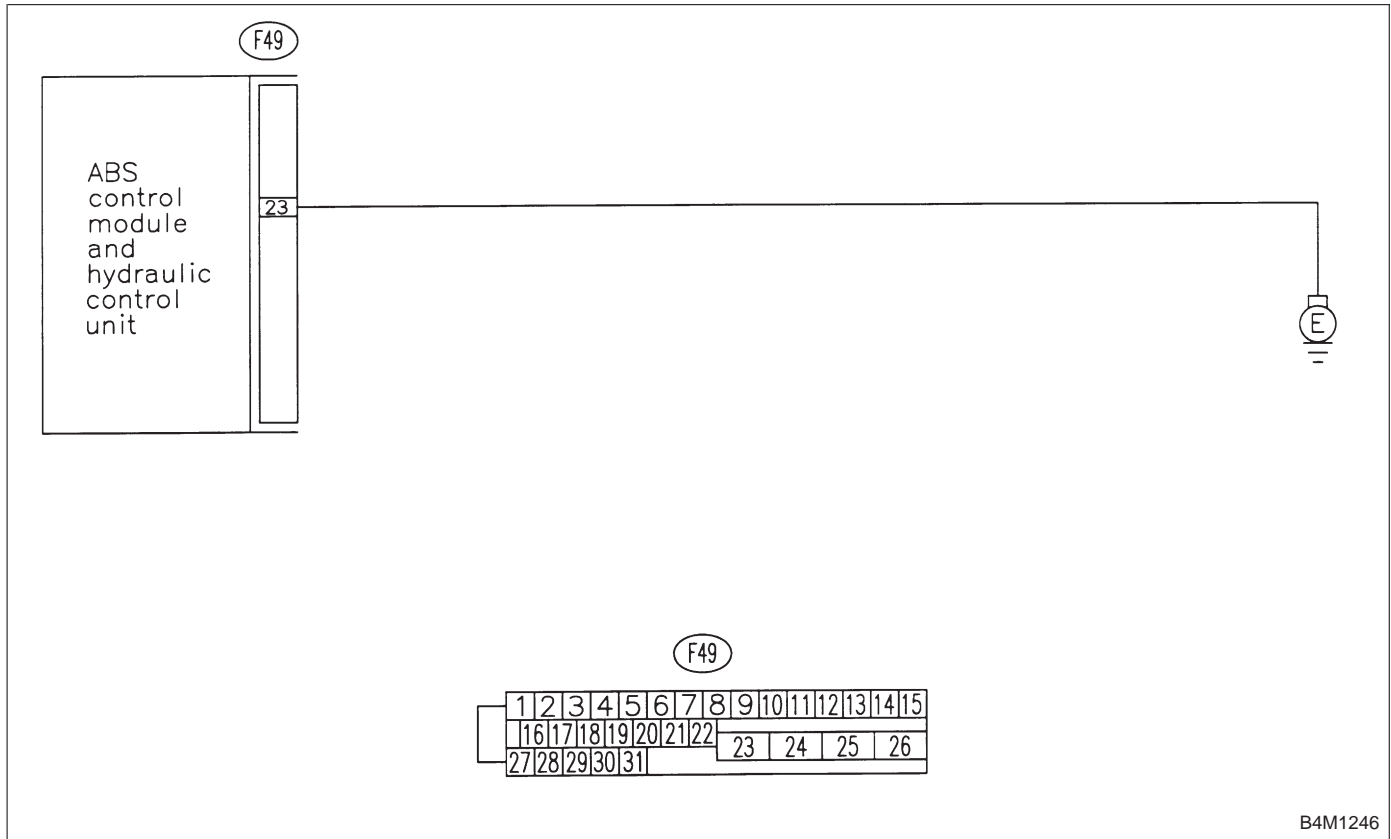
**DIAGNOSIS:**

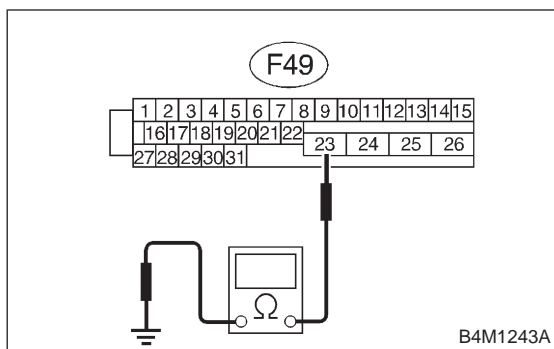
- Faulty ABSCM&H/U

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**





**10V1 CHECK GROUND CIRCUIT OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Measure resistance between ABSCM&H/U and chassis ground.

**Connector & terminal**

**(F49) No. 23 — Chassis ground:**

- CHECK** : Is the resistance less than 0.5 Ω?
- YES** : Go to step 10V2.
- NO** : Repair ABSCM&H/U ground harness.

**10V2 CHECK POOR CONTACT IN CONNECTORS.**

- CHECK** : Is there poor contact in connectors between battery, ignition switch and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>
- YES** : Repair connector.
- NO** : Go to step 10V3.

**10V3 CHECK SOURCES OF SIGNAL NOISE.**

- CHECK** : Is the car telephone or the wireless transmitter properly installed?
- YES** : Go to step 10V4.
- NO** : Properly install the car telephone or the wireless transmitter.

**10V4 CHECK SOURCES OF SIGNAL NOISE.**

- CHECK** : Are noise sources (such as an antenna) installed near the sensor harness?
- YES** : Install the noise sources apart from the sensor harness.
- NO** : Go to step 10V5.

**10V5 CHECK ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
  - 2) Connect all connectors.
  - 3) Erase the memory.
  - 4) Perform inspection mode.
  - 5) Read out the trouble code.
- CHECK** : Is the same trouble code as in the current diagnosis still being output?
- YES** : Replace ABSCM&H/U.
- NO** : Go to step 10V6.

**10V6****CHECK ANY OTHER TROUBLE CODES  
APPEARANCE.****CHECK**: *Are other trouble codes being output?***YES**

: Proceed with the diagnosis corresponding to the trouble code.

**NO**

: A temporary poor contact.

D•NEW 42 (FB1)  
LOW VOLTAGE

B4M0963

**W: TROUBLE CODE 42 LOW VOLTAGE  
— SOURCE VOLTAGE IS LOW —**

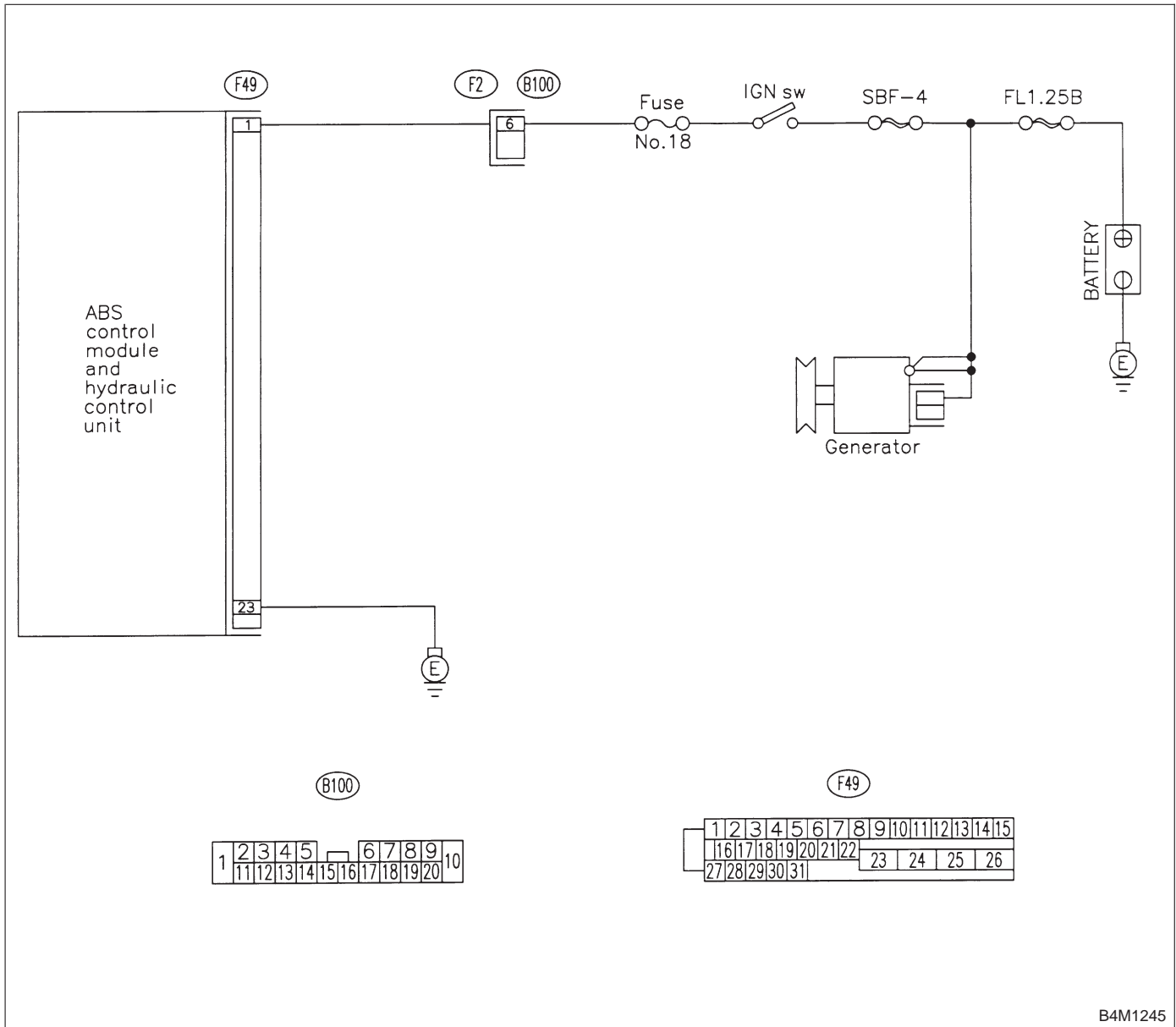
**DIAGNOSIS:**

- Power source voltage of the ABSCM&H/U is low.

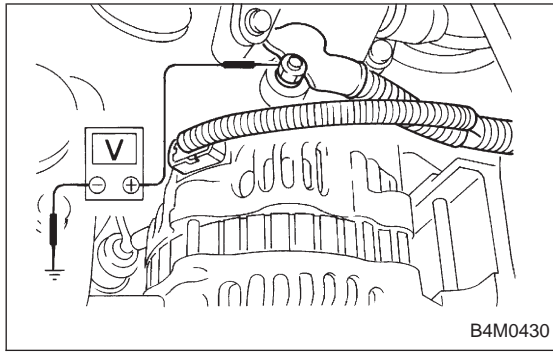
**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



B4M1245



**10W1 CHECK GENERATOR.**

- 1) Start engine.
- 2) Idling after warm-up.
- 3) Measure voltage between generator B terminal and chassis ground.

**Terminal**

**Generator B terminal — Chassis ground:**

**CHECK** : Is the voltage between 10 V and 15 V?

**YES** : Go to step 10W2.

**NO** : Repair generator.

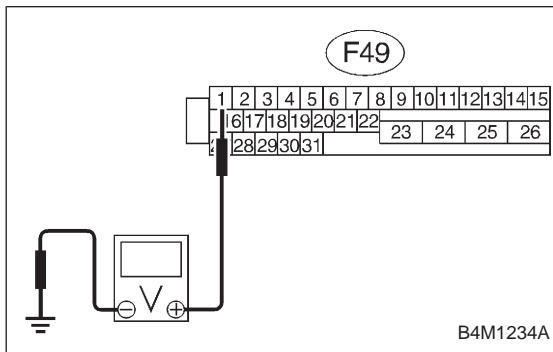
**10W2 CHECK BATTERY TERMINAL.**

Turn ignition switch to OFF.

**CHECK** : Are the positive and negative battery terminals tightly clamped?

**YES** : Go to step 10W3.

**NO** : Tighten the clamp of terminal.



**10W3 CHECK INPUT VOLTAGE OF ABSCM&H/U.**

- 1) Disconnect connector from ABSCM&H/U.
- 2) Run the engine at idle.
- 3) Measure voltage between ABSCM&H/U connector and chassis ground.

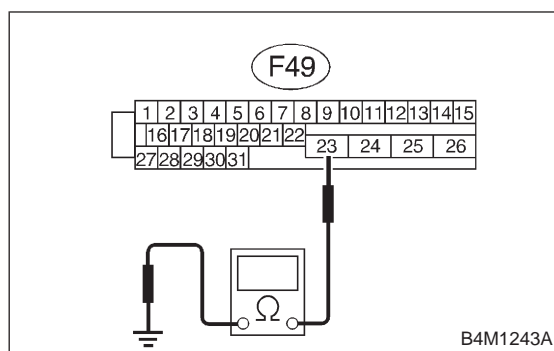
**Connector & terminal**

**(F49) No. 1 (+) — Chassis ground (-):**

**CHECK** : Is the voltage between 10 V and 15 V?

**YES** : Go to step 10W4.

**NO** : Repair harness connector between battery, ignition switch and ABSCM&H/U.


**10W4 CHECK GROUND CIRCUIT OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal**
**(F49) No. 23 — Chassis ground:**
**CHECK** : *Is the resistance less than 0.5 Ω?*
**YES** : Go to step **10W5**.

**NO** : Repair ABSCM&H/U ground harness.

**10W5 CHECK POOR CONTACT IN CONNECTORS.**
**CHECK** : *Is there poor contact in connectors between generator, battery and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>*
**YES** : Repair connector.

**NO** : Go to step **10W6**.

**10W6 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*
**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10W7**.

**10W7 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**
**CHECK** : *Are other trouble codes being output?*
**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.



D•NEW 42 (FB1)  
HIGH VOLTAGE

B4M1268

**X: TROUBLE CODE 42 LOW VOLTAGE  
— SOURCE VOLTAGE IS HIGH —**

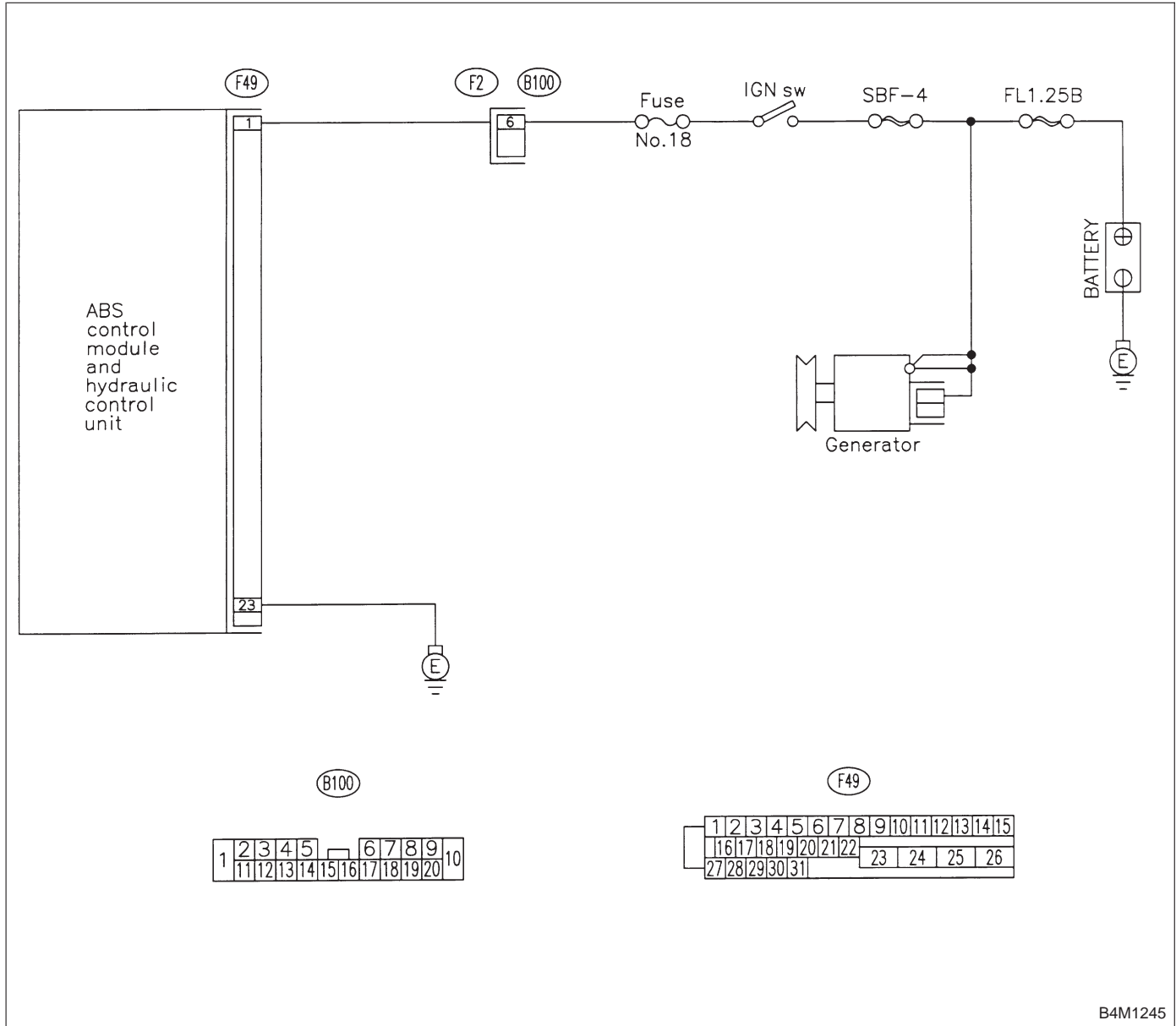
**DIAGNOSIS:**

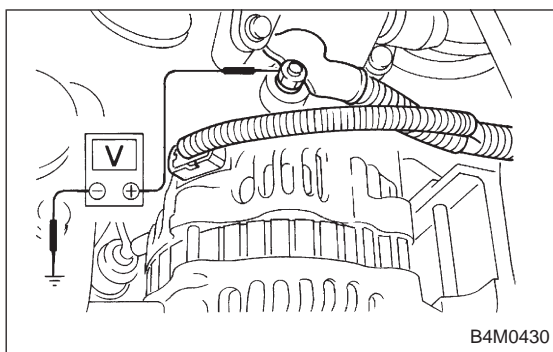
- Power source voltage of the ABSCM&H/U is high.

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**





**10X1 CHECK GENERATOR.**

- 1) Start engine.
- 2) Idling after warm-up.
- 3) Measure voltage between generator B terminal and chassis ground.

**Terminal**

**Generator B terminal — Chassis ground:**

**CHECK** : *Is the voltage between 10 V and 17 V?*

**YES** : Go to step 10X2.

**NO** : Repair generator.

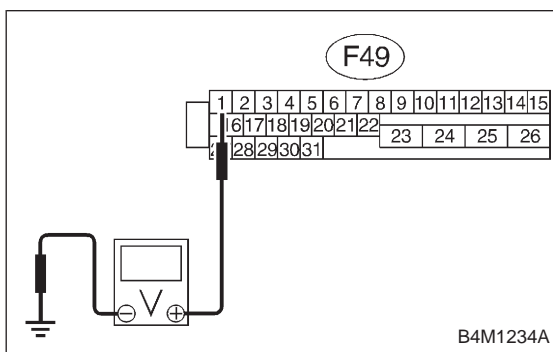
**10X2 CHECK BATTERY TERMINAL.**

Turn ignition switch to OFF.

**CHECK** : *Are the positive and negative battery terminals tightly clamped?*

**YES** : Go to step 10X3.

**NO** : Tighten the clamp of terminal.



**10X3 CHECK INPUT VOLTAGE OF ABSCM&H/U.**

- 1) Disconnect connector from ABSCM&H/U.
- 2) Run the engine at idle.
- 3) Measure voltage between ABSCM&H/U connector and chassis ground.

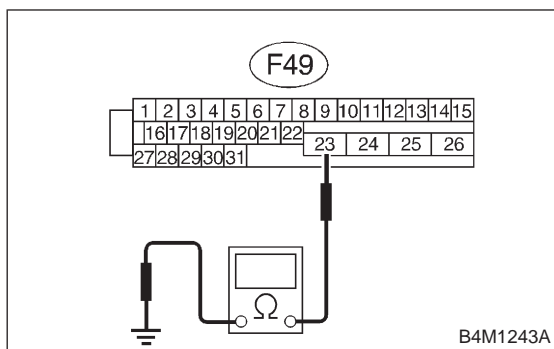
**Connector & terminal**

**(F49) No. 1 (+) — Chassis ground (-):**

**CHECK** : *Is the voltage between 10 V and 17 V?*

**YES** : Go to step 10X4.

**NO** : Repair harness connector between battery, ignition switch and ABSCM&H/U.

**10X4****CHECK GROUND CIRCUIT OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal****(F49) No. 23 — Chassis ground:****CHECK** : *Is the resistance less than 0.5 Ω?***YES** : Go to step 10X5.**NO** : Repair ABSCM&H/U ground harness.**10X5****CHECK POOR CONTACT IN CONNECTORS.****CHECK** : *Is there poor contact in connectors between generator, battery and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>***YES** : Repair connector.**NO** : Go to step 10X6.**10X6****CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?***YES** : Replace ABSCM&H/U.**NO** : Go to step 10X7.**10X7****CHECK ANY OTHER TROUBLE CODES APPEARANCE.****CHECK** : *Are other trouble codes being output?***YES** : Proceed with the diagnosis corresponding to the trouble code.**NO** : A temporary poor contact.

D•NEW 44 (FB1)  
CCM LINE

B4M0964

**Y: TROUBLE CODE 44 CCM LINE  
— A COMBINATION OF AT CONTROL  
ABNORMALS —**

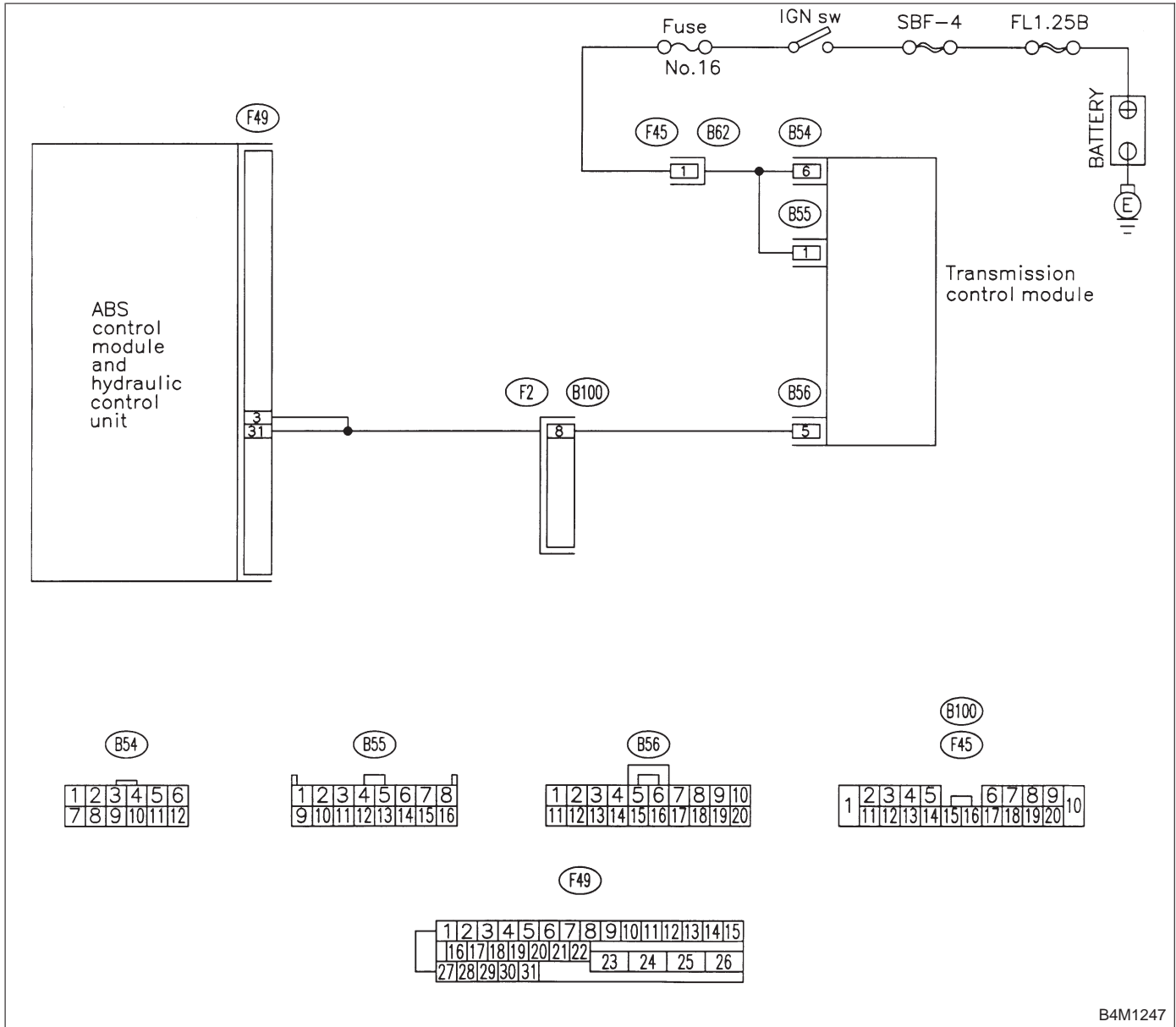
**DIAGNOSIS:**

- Combination of AT control faults

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



B4M1247

1997 (F00)  
ABS 4WD•AT

H4M1117

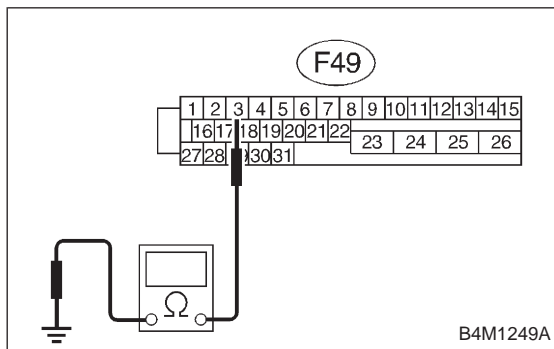
<b>10Y1</b>	<b>CHECK SPECIFICATIONS OF ABSCM&amp;H/U USING SELECT MONITOR.</b>
-------------	--

- 1) Press [F], [0] and [0] on the select monitor.
- 2) Read the select monitor display.

**CHECK** : *Is an ABSCM&H/U for AT model installed on a MT model?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10Y2**.



<b>10Y2</b>	<b>CHECK GROUND SHORT OF HARNESS.</b>
-------------	---------------------------------------

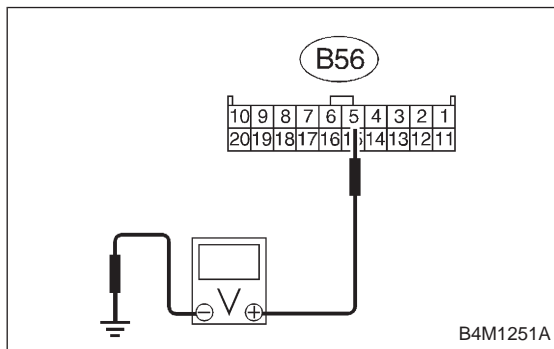
- 1) Turn ignition switch to OFF.
- 2) Disconnect two connectors from TCM.
- 3) Disconnect connector from ABSCM&H/U.
- 4) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal (F49) No. 3 — Chassis ground:**

**CHECK** : *Is the resistance more than 1 MΩ?*

**YES** : Go to step **10Y3**.

**NO** : Repair harness between TCM and ABSCM&H/U.



<b>10Y3</b>	<b>CHECK TCM.</b>
-------------	-------------------

- 1) Connect all connectors to TCM.
- 2) Turn ignition switch to ON.
- 3) Measure voltage between TCM connector terminal and chassis ground.

**Connector & terminal (B55) No. 5 (+) — Chassis ground (-):**

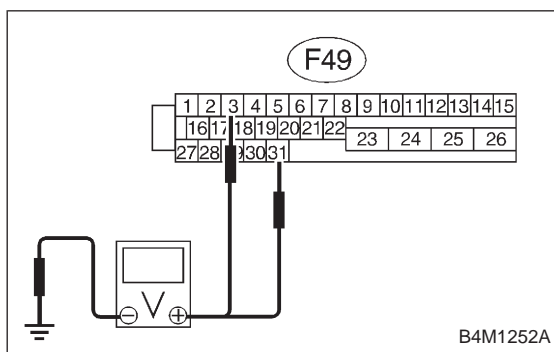
**CHECK** : *Is the voltage between 10 V and 15 V?*

**YES** : Go to step **10Y5**.

**NO** : Go to step **10Y4**.

<b>10Y4</b>	<b>CHECK AT.</b>
-------------	------------------

- CHECK** : *Is the AT functioning normally?*
- YES** : Replace TCM.
- NO** : Repair AT.



<b>10Y5</b>	<b>CHECK OPEN CIRCUIT OF HARNESS.</b>
-------------	---------------------------------------

Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

- (F49) No. 3 (+) — Chassis ground (-):**
- (F49) No. 31 (+) — Chassis ground (-):**

- CHECK** : *Is the voltage more than 10 V?*
- YES** : Go to step 10Y6.
- NO** : Repair harness/connector between AT control module and ABSCM&H/U.

<b>10Y6</b>	<b>CHECK POOR CONTACT IN CONNECTORS.</b>
-------------	--

**CHECK** : *Is there poor contact in connectors between AT control module and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>*

- YES** : Repair connector.
- NO** : Go to step 10Y7.

<b>10Y7</b>	<b>CHECK ABSCM&amp;H/U.</b>
-------------	-----------------------------

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

- YES** : Replace ABSCM&H/U.
- NO** : Go to step 10Y8.

<b>10Y8</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
-------------	--

**CHECK** : *Are other trouble codes being output?*

- YES** : Proceed with the diagnosis corresponding to the trouble code.
- NO** : A temporary poor contact.

D•NEW 44 (FB1)  
CCM OPEN

B4M0965

**Z: TROUBLE CODE 44 CCM OPEN  
— A COMBINATION OF AT CONTROL  
ABNORMALS —**

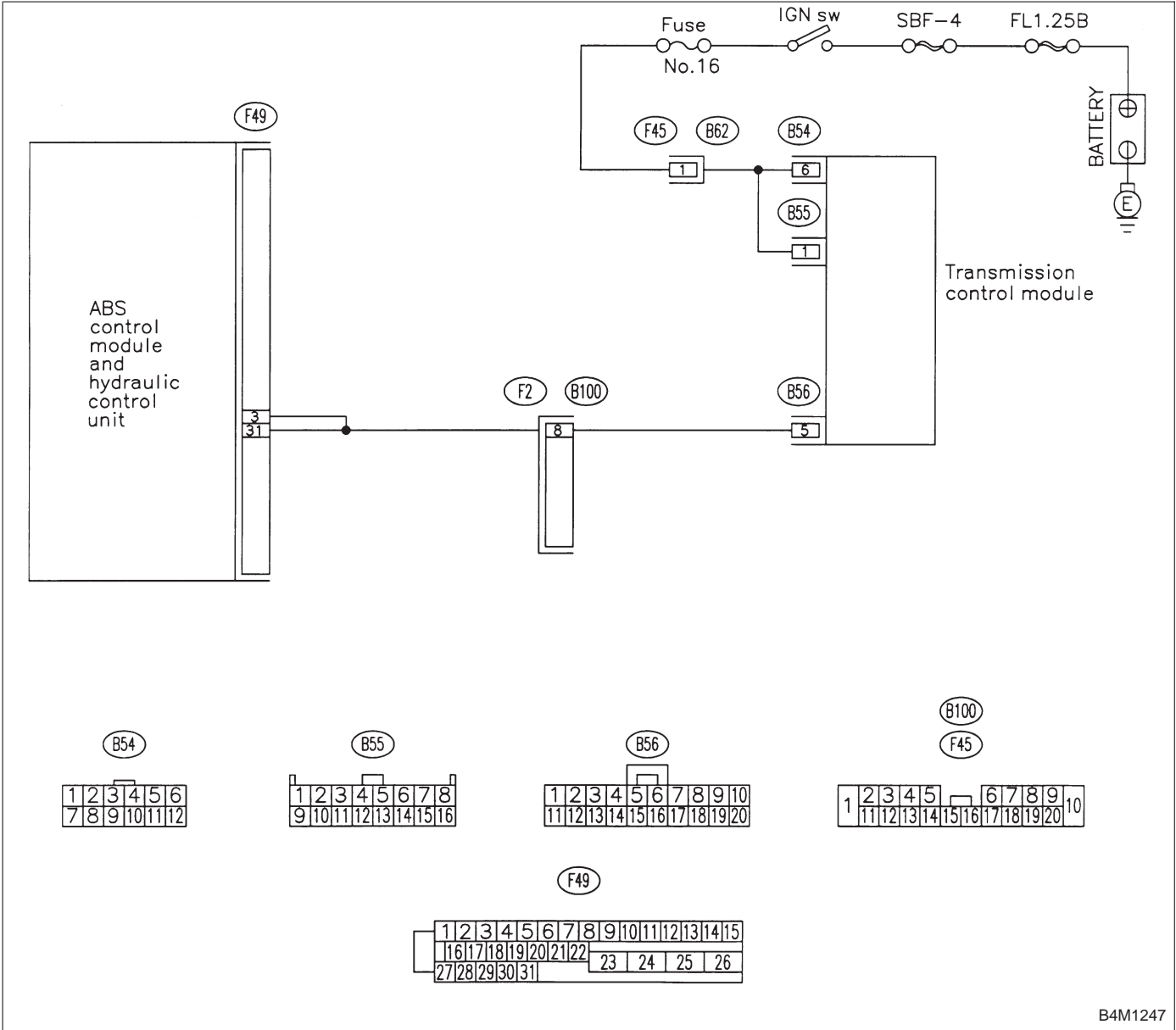
**DIAGNOSIS:**

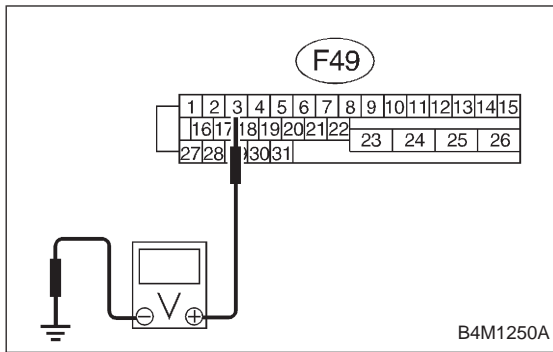
- Combination of AT control faults

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



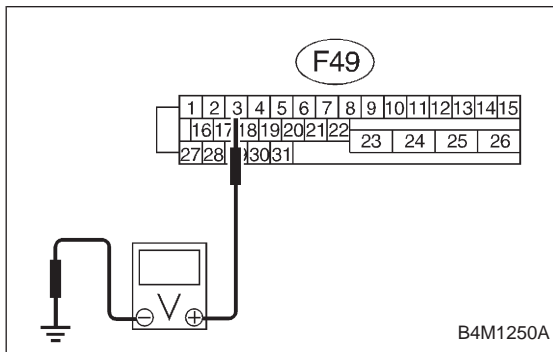


**10Z1 CHECK BATTERY SHORT OF HARNESS.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect two connectors from AT control module.
- 3) Disconnect connector from ABSCM&H/U.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal**  
**(F49) No. 3 (+) — Chassis ground (-):**

- CHECK** : Is the voltage less than 1 V?
- YES** : Go to step 10Z2.
- NO** : Repair harness between AT control module and ABSCM&H/U.



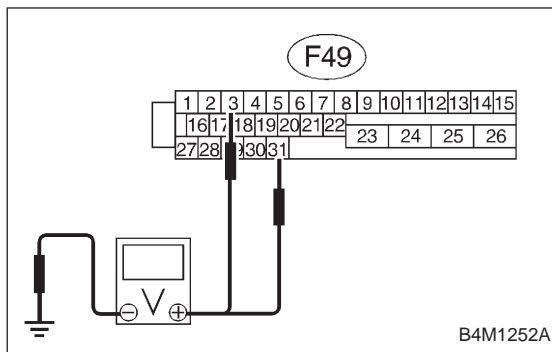
**10Z2 CHECK BATTERY SHORT OF HARNESS.**

- 1) Turn ignition switch to ON.
- 2) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal**  
**(F49) No. 3 (+) — Chassis ground (-):**

- CHECK** : Is the voltage less than 1 V?
- YES** : Go to step 10Z3.
- NO** : Repair harness between AT control module and ABSCM&H/U.



**10Z3 CHECK OPEN CIRCUIT OF HARNESS.**

- 1) Turn ignition switch to OFF.
- 2) Connect all connectors to TCM.
- 3) Turn ignition switch to ON.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal****(F49) No. 3 (+) — Chassis ground (-):****(F49) No. 31 (+) — Chassis ground (-):****CHECK** : *Is the voltage between 10 V and 13 V?***YES** : Go to step **10Z4**.**NO** : Repair harness/connector between TCM and ABSCM&H/U.**10Z4 CHECK POOR CONTACT IN CONNECTORS.**

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connectors between AT control module and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>***YES** : Repair connector.**NO** : Go to step **10Z5**.**10Z5 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?***YES** : Replace ABSCM&H/U.**NO** : Go to step **10Z6**.**10Z6 CHECK ANY OTHER TROUBLE CODES APPEARANCE.****CHECK** : *Are other trouble codes being output?***YES** : Proceed with the diagnosis corresponding to the trouble code.**NO** : A temporary poor contact.

D•NEW 51 (FB1)  
V. RELAY

B4M0968

**AA: TROUBLE CODE 51 V. RELAY  
— ABNORMAL VALVE RELAY —**

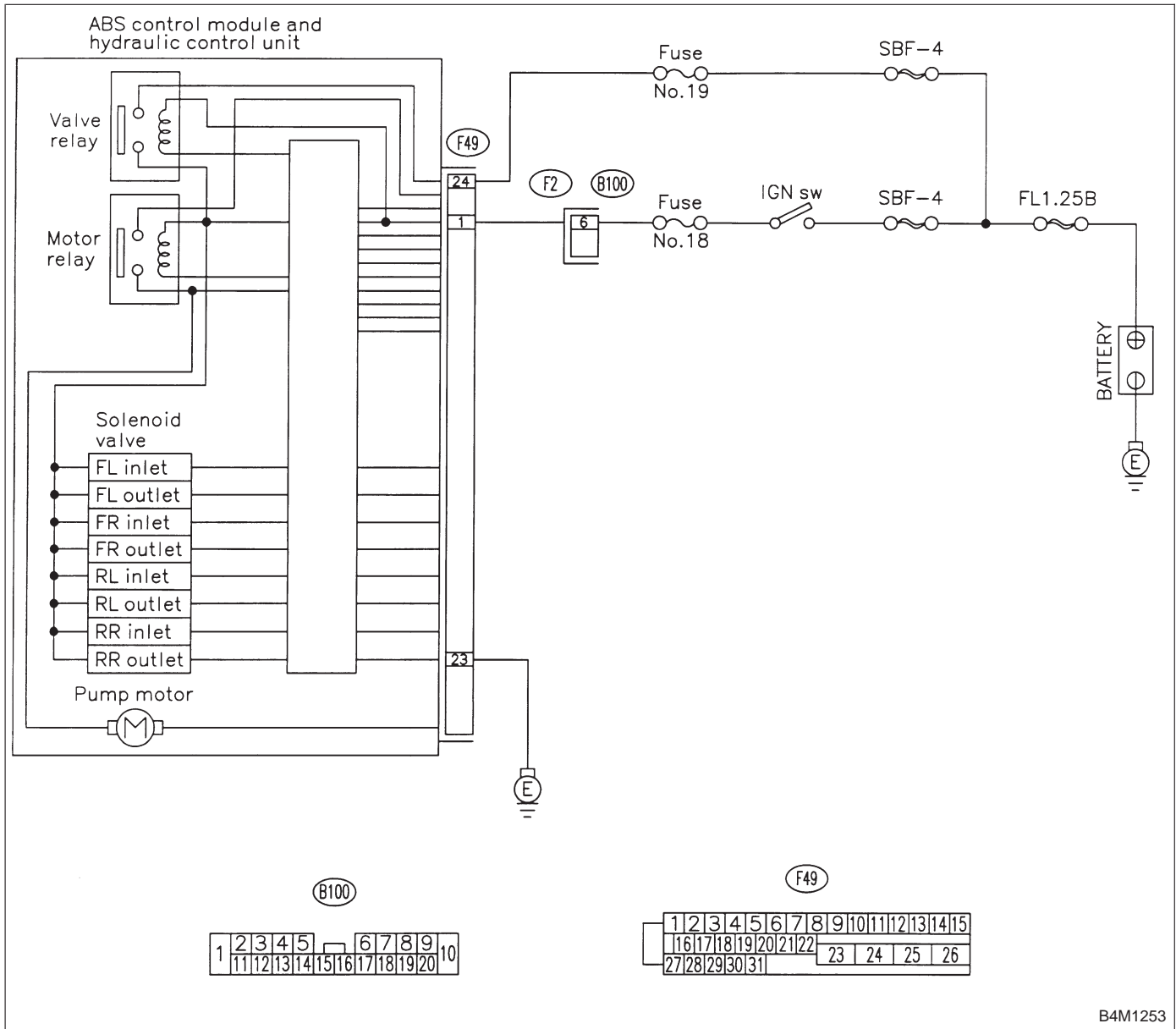
**DIAGNOSIS:**

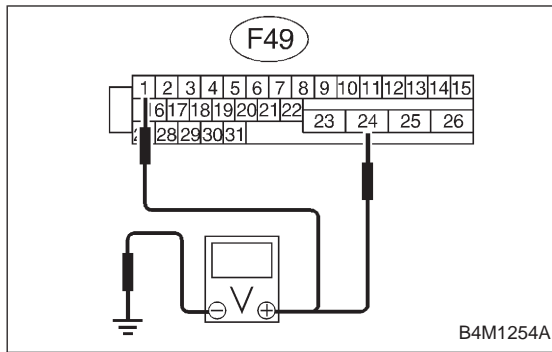
- Faulty valve relay

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**




**10AA1 CHECK INPUT VOLTAGE OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Run the engine at idle.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

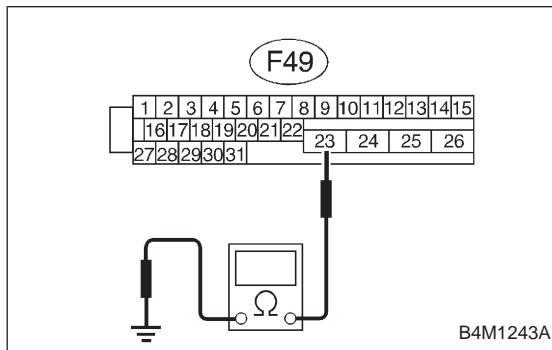
**(F49) No. 1 (+) — Chassis ground (-):**

**(F49) No. 24 (+) — Chassis ground (-):**

**CHECK** : Is the voltage between 10 V and 15 V?

**YES** : Go to step 10AA2.

**NO** : Repair harness connector between battery and ABSCM&H/U.


**10AA2 CHECK GROUND CIRCUIT OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

**(F49) No. 23 — Chassis ground:**

**CHECK** : Is the resistance less than 0.5  $\Omega$ ?

**YES** : Go to step 10AA3.

**NO** : Repair ABSCM&H/U ground harness.

**10AA3 CHECK POOR CONTACT IN CONNECTORS.**

**CHECK** : Is there poor contact in connectors between generator, battery and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>

**YES** : Repair connector.

**NO** : Go to step 10AA4.

<b>10AA4</b>	<b>CHECK ABSCM&amp;H/U.</b>
--------------	-----------------------------

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10AA5**.

<b>10AA5</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
--------------	--

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 51 (FB1)  
V. RELAY ON

B4M0802

**AB: TROUBLE CODE 51 V. RELAY ON  
— VALVE RELAY ON FAILURE —**

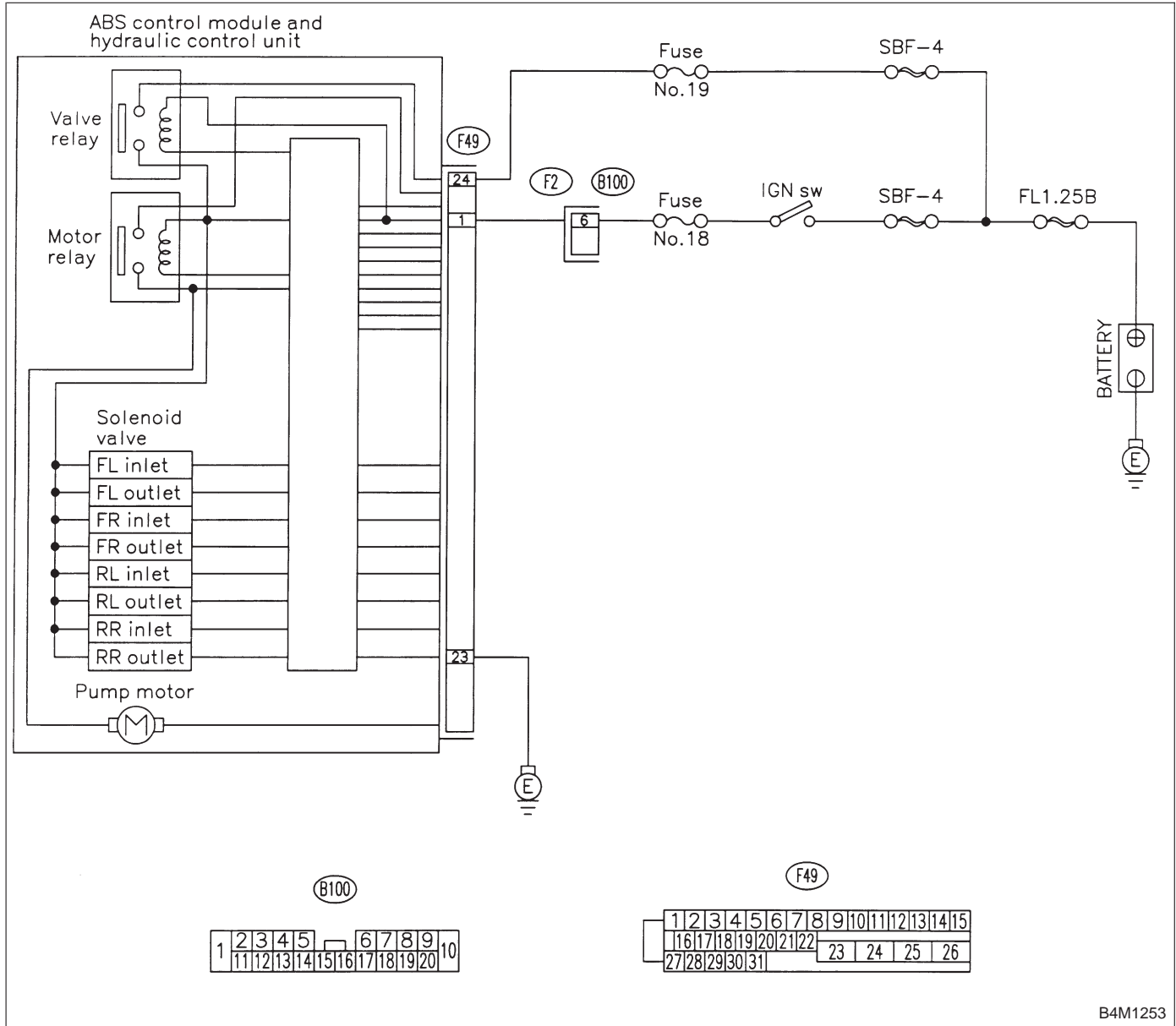
**DIAGNOSIS:**

- Faulty valve relay

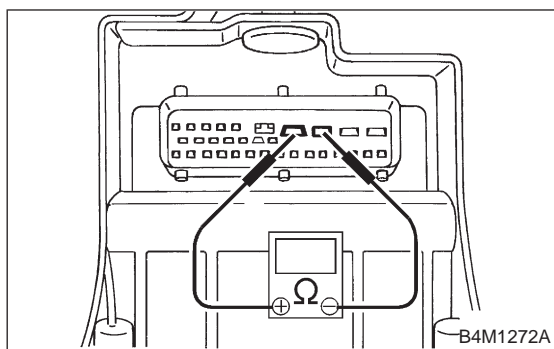
**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



B4M1253

**10AB1 CHECK VALVE RELAY IN ABSCM&H/U.**

Measure resistance between ABSCM&H/U terminals.

**Terminals**

**No. 23 (+) — No. 24 (-):**

**CHECK** : *Is the resistance more than 1 MΩ?*

**YES** : Go to step 10AB2.

**NO** : Replace ABSCM&H/U.

**10AB2 CHECK POOR CONTACT IN CONNECTORS.**

**CHECK** : *Is there poor contact in connectors between generator, battery and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step 10AB3.

**10AB3 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step 10AB4.

**10AB4 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 52 (FB1)  
M. RELAY OPEN

B4M0969

**AC: TROUBLE CODE 52 M. RELAY OPEN  
— OPEN CIRCUIT OF MOTOR RELAY —**

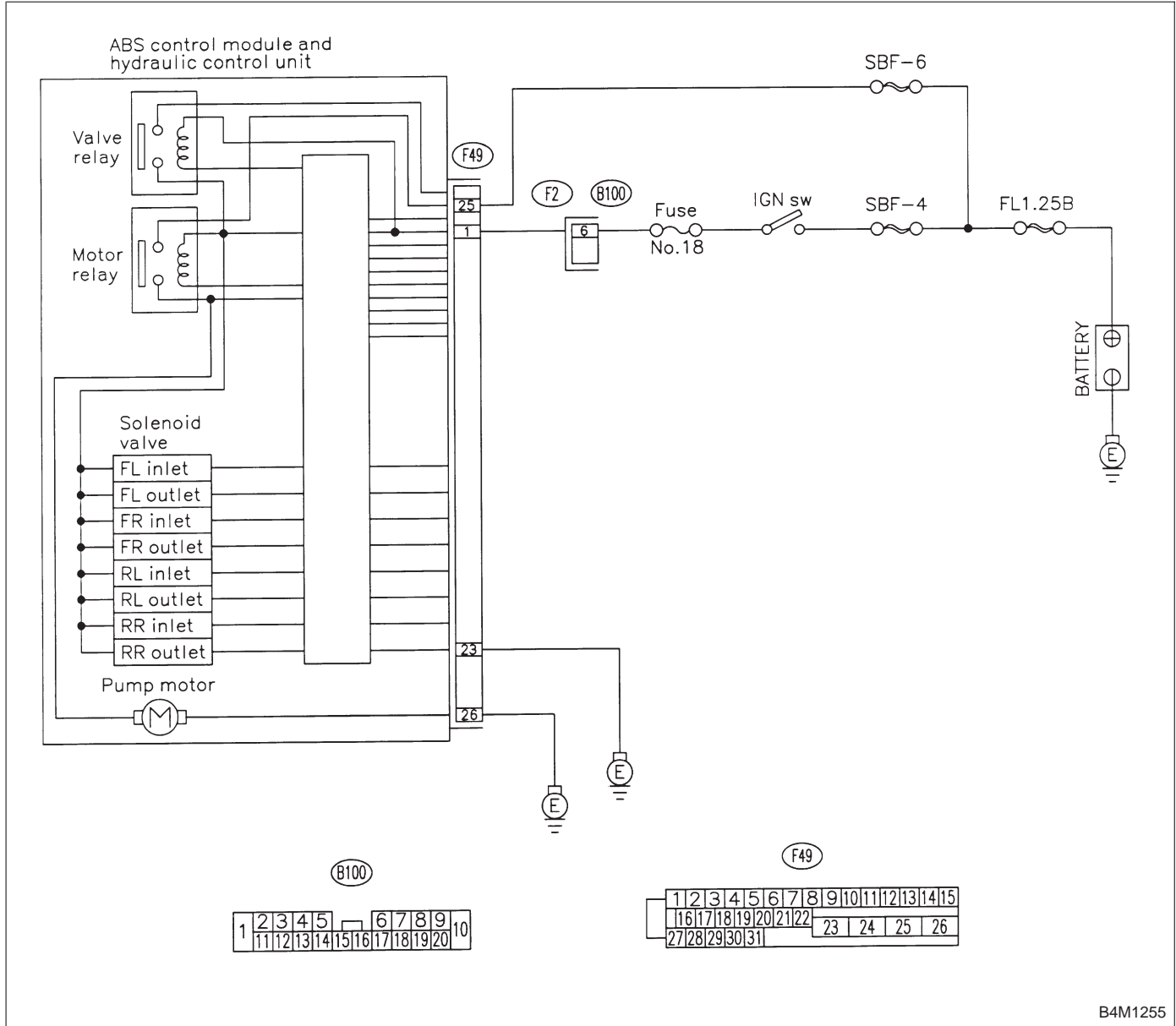
**DIAGNOSIS:**

- Faulty motor
- Faulty motor relay
- Faulty harness connector

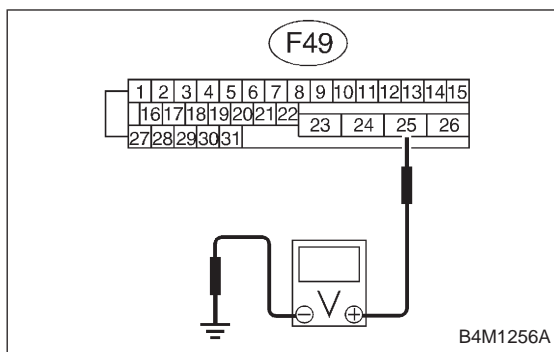
**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



B4M1255



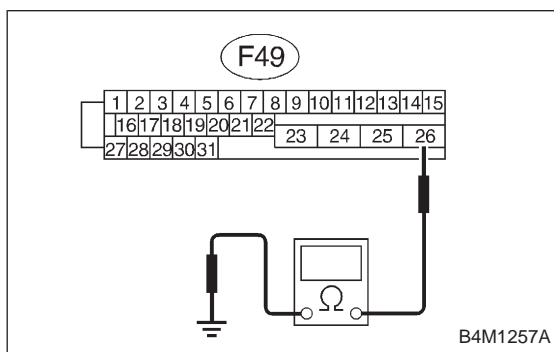
**10AC1 CHECK INPUT VOLTAGE OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Turn ignition switch to ON.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

**(F49) No. 25 (+) — Chassis ground (-):**

- CHECK** : Is the voltage between 10 V and 13 V?
- YES** : Go to step 10AC2.
- NO** : Repair harness/connector between battery and ABSCM&H/U and check fuse SBF6.



**10AC2 CHECK GROUND CIRCUIT OF MOTOR.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

**(F49) No. 26 — Chassis ground:**

- CHECK** : Is the resistance less than 0.5 Ω?
- YES** : Go to step 10AC3.
- NO** : Repair ABSCM&H/U ground harness.

**10AC3 CHECK MOTOR OPERATION.**

Operate the check sequence. <Ref. to 4-4 [W20D1].>

**NOTE:**

Use the diagnosis connector to operate the sequence control.

- CHECK** : Can motor revolution noise (buzz) be heard when carrying out the check sequence?
- YES** : Go to step 10AC4.
- NO** : Replace ABSCM&H/U.



<b>10AC4</b>	<b>CHECK POOR CONTACT IN CONNECTORS.</b>
--------------	--

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connector between hydraulic unit, relay box and ABSCM&H/U?*  
<Ref. to FOREWORD [T3C1].>

**YES** : Repair connector.

**NO** : Go to step **10AC5**.

<b>10AC5</b>	<b>CHECK ABSCM&amp;H/U.</b>
--------------	-----------------------------

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10AC6**.

<b>10AC6</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
--------------	--

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 52 (FB1)  
M. RELAY ON

B4M0970

**AD: TROUBLE CODE 52 M. RELAY ON  
— MOTOR RELAY ON FAILURE —**

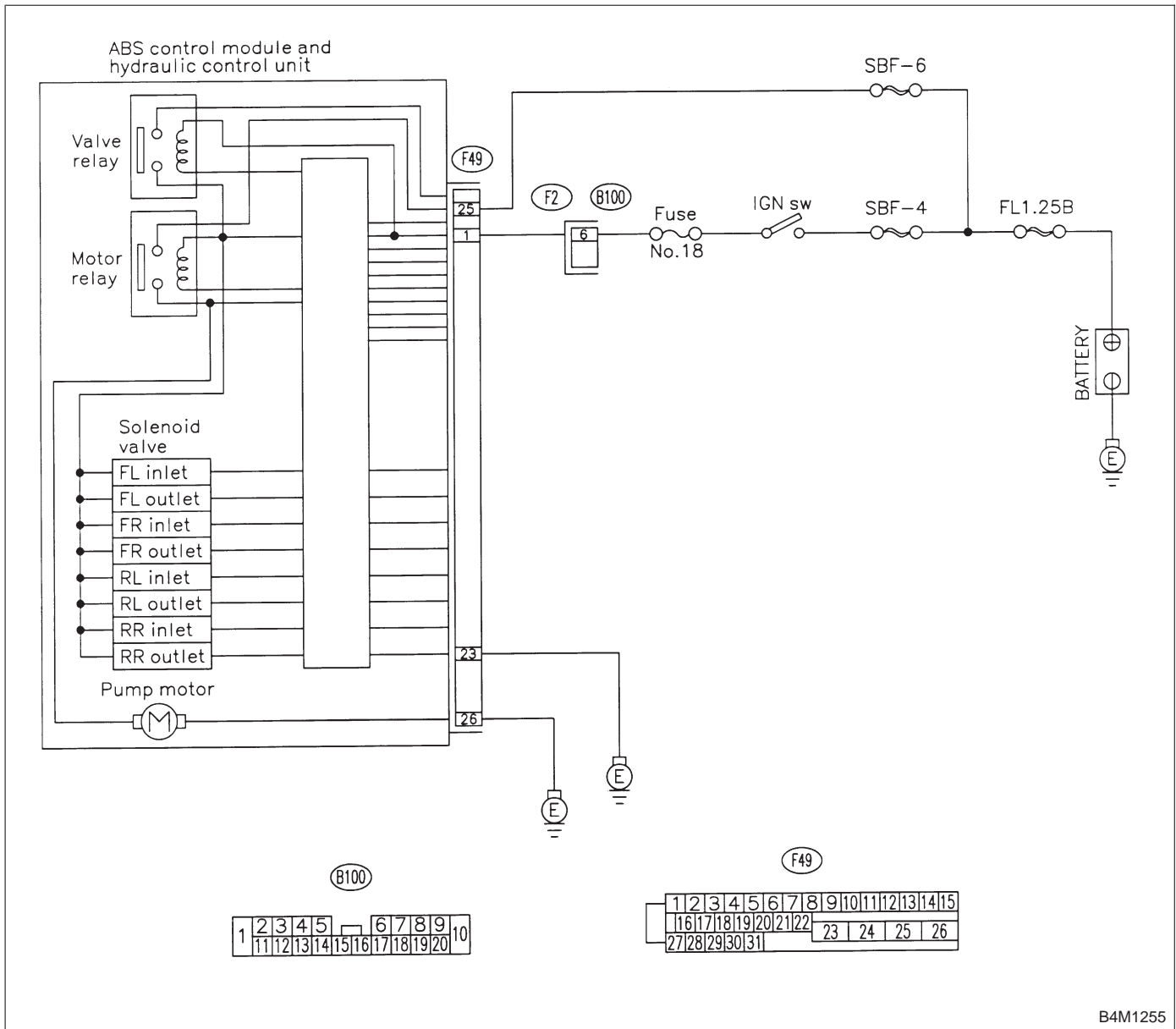
**DIAGNOSIS:**

- Faulty motor
- Faulty motor relay
- Faulty harness connector

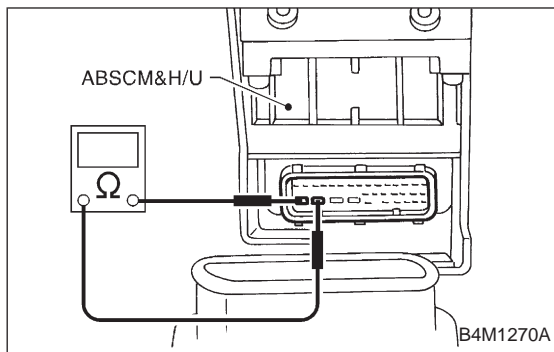
**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



B4M1255

**10AD1 CHECK MOTOR RELAY IN ABSCM&H/U.**

Measure resistance between ABSCM&H/U terminals.

**Terminals**

**No. 25 — No. 26:**

**CHECK** : *Is the resistance more than 1 MΩ?*

**YES** : Go to step 10AD2.

**NO** : Replace ABSCM&H/U.

**10AD2 CHECK MOTOR OPERATION.**

Operate the sequence control. <Ref. to 4-4 [W20D1].>

**CHECK** : *Can motor revolution noise (buzz) be heard when carrying out the sequence control?*

**YES** : Go to step 10AD3.

**NO** : Replace ABSCM&H/U.

**10AD3 CHECK POOR CONTACT IN CONNECTORS.**

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connector between hydraulic unit, relay box and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step 10AD4.

**10AD4 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step 10AD5.

**10AD5 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 52 (FB1)  
MOTOR

B4M0971

**AE: TROUBLE CODE 52 MOTOR  
— ABNORMAL MOTOR —**

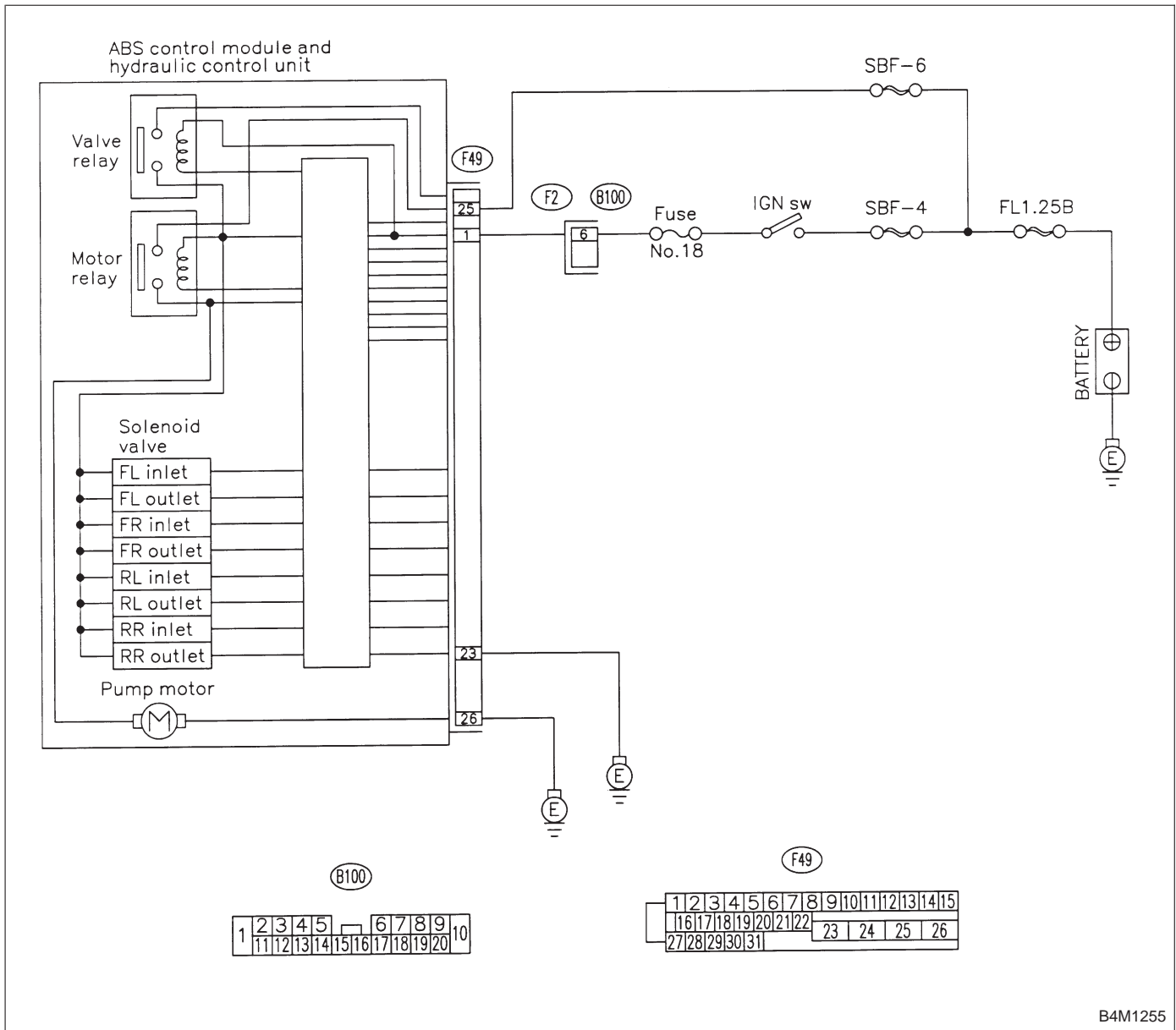
**DIAGNOSIS:**

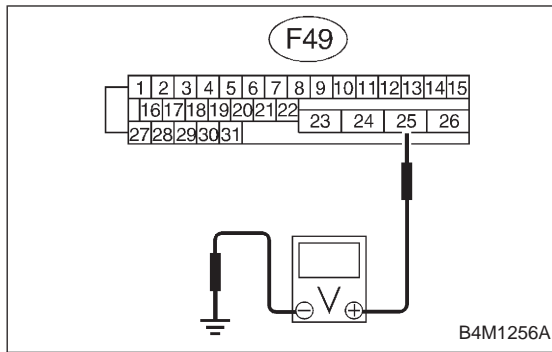
- Faulty motor
- Faulty motor relay
- Faulty harness connector

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**




**10AE1 CHECK INPUT VOLTAGE OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Turn ignition switch to ON.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

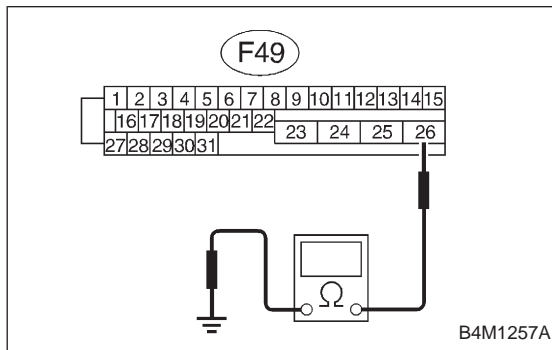
**Connector & terminal**

**(F49) No. 25 (+) — Chassis ground (-):**

**CHECK** : Is the voltage between 10 V and 13 V?

**YES** : Go to step 10AE2.

**NO** : Repair harness/connector between battery and ABSCM&H/U and check fuse SBF6.


**10AE2 CHECK GROUND CIRCUIT OF MOTOR.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

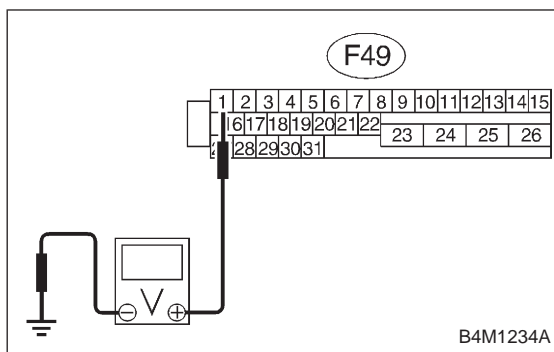
**Connector & terminal**

**(F49) No. 26 — Chassis ground:**

**CHECK** : Is the resistance less than 0.5  $\Omega$ ?

**YES** : Go to step 10AE3.

**NO** : Repair ABSCM&H/U ground harness.



**10AE3 CHECK INPUT VOLTAGE OF ABSCM&H/U.**

- 1) Run the engine at idle.
- 2) Measure voltage between ABSCM&H/U connector and chassis ground.

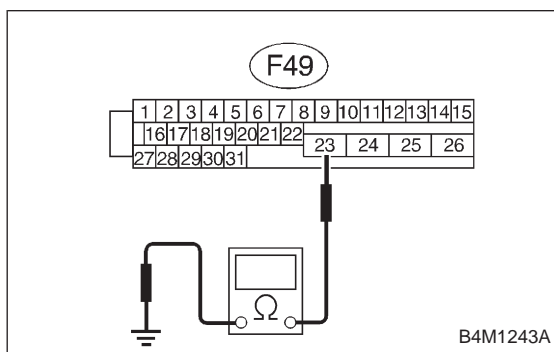
**Connector & terminal**

**(F49) No. 1 (+) — Chassis ground (-):**

**(CHECK)** : Is the voltage between 10 V and 15 V?

**(YES)** : Go to step 10AE4.

**(NO)** : Repair harness connector between battery, ignition switch and ABSCM&H/U.



**10AE4 CHECK GROUND CIRCUIT OF ABSCM&H/U.**

- 1) Turn ignition switch to OFF.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal**

**(F49) No. 23 — Chassis ground:**

**(CHECK)** : Is the resistance less than 0.5 Ω?

**(YES)** : Go to step 10AE5.

**(NO)** : Repair ABSCM&H/U ground harness.

**10AE5 CHECK MOTOR OPERATION.**

Operate the sequence control. <Ref. to 4-4 [W20D1].>

NOTE:

Use the diagnosis connector to operate the sequence control.

**(CHECK)** : Can motor revolution noise (buzz) be heard when carrying out the sequence control?

**(YES)** : Go to step 10AE6.

**(NO)** : Replace hydraulic unit.

<b>10AE6</b>	<b>CHECK POOR CONTACT IN CONNECTORS.</b>
--------------	--

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connector between generator, battery and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step 10AE7.

<b>10AE7</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step 10AE8.

<b>10AE8</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
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**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 54 (FB1)  
BLS

B4M0972

**AF: TROUBLE CODE 54 BLS**  
**— ABNORMAL STOP LIGHT SWITCH —**

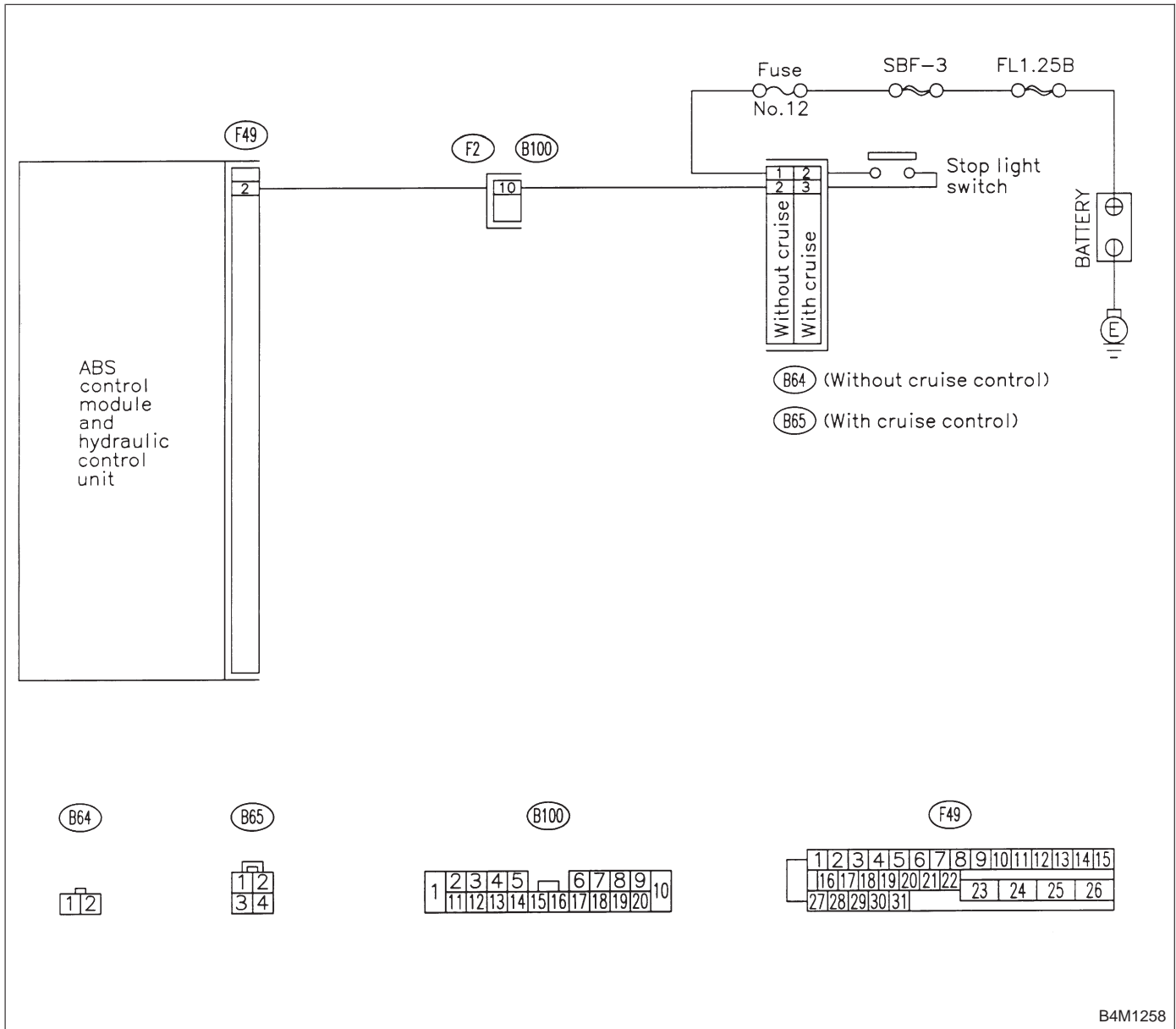
**DIAGNOSIS:**

- Faulty stop light switch

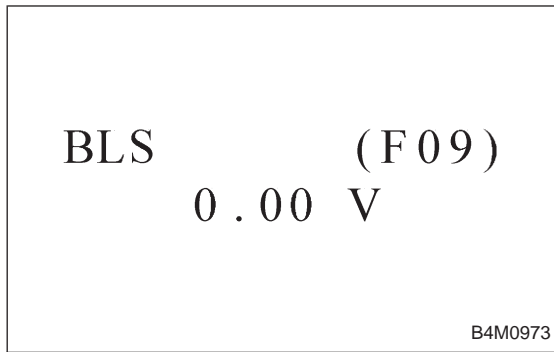
**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**







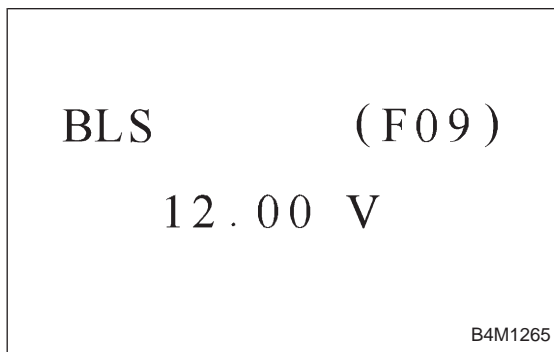
<b>10AF1</b>	<b>CHECK OUTPUT OF STOP LIGHT SWITCH USING SELECT MONITOR.</b>
--------------	--

- 1) Press [F], [0] and [9] on the select monitor.
- 2) Depress the brake pedal.
- 3) Read the stop light switch output on the select monitor display.

**CHECK** : *Is the reading indicated on monitor display less than 1.5 V?*

**YES** : Go to step 10AF2.

**NO** : Go to step 10AF3.



<b>10AF2</b>	<b>CHECK OUTPUT OF STOP LIGHT SWITCH USING SELECT MONITOR.</b>
--------------	--

- 1) Release the brake pedal.
- 2) Read the stop light switch output on the select monitor display.

**CHECK** : *Is the reading indicated on monitor display between 10 V and 15 V?*

**YES** : Go to step 10AF5.

**NO** : Go to step 10AF3.

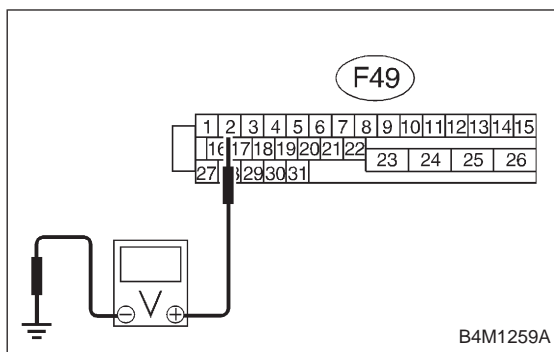
<b>10AF3</b>	<b>CHECK IF STOP LIGHTS COME ON.</b>
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Depress the brake pedal.

**CHECK** : *Do stop lights turn on?*

**YES** : Go to step 10AF4.

**NO** : Repair stop lights circuit.



B4M1259A

**10AF4 CHECK OPEN CIRCUIT IN HARNESS.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Depress brake pedal.
- 4) Measure voltage between ABSCM&H/U connector and chassis ground.

**Connector & terminal (F49) No. 2 — Chassis ground:**

- CHECK** : *Is the voltage between 10 V and 15 V?*
- YES** : Go to step 10AF5.
- NO** : Repair harness between stop light switch and ABSCM&H/U connector.

**10AF5 CHECK POOR CONTACT IN CONNECTORS.**

- CHECK** : *Is there poor contact in connector between stop light switch and ABSCM&H/U? <Ref. to FOREWORD [T3C1].>*
- YES** : Repair connector.
- NO** : Go to step 10AF6.

**10AF6 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
  - 2) Erase the memory.
  - 3) Perform inspection mode.
  - 4) Read out the trouble code.
- CHECK** : *Is the same trouble code as in the current diagnosis still being output?*
- YES** : Replace ABSCM&H/U.
- NO** : Go to step 10AF7.

**10AF7 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**

- CHECK** : *Are other trouble codes being output?*
- YES** : Proceed with the diagnosis corresponding to the trouble code.
- NO** : A temporary poor contact.

D•NEW 56 (FB1)  
G SENSOR LINE

B4M0974

**AG: TROUBLE CODE 56 G SENSOR LINE  
— OPEN OR SHORT CIRCUIT OF  
G SENSOR —**

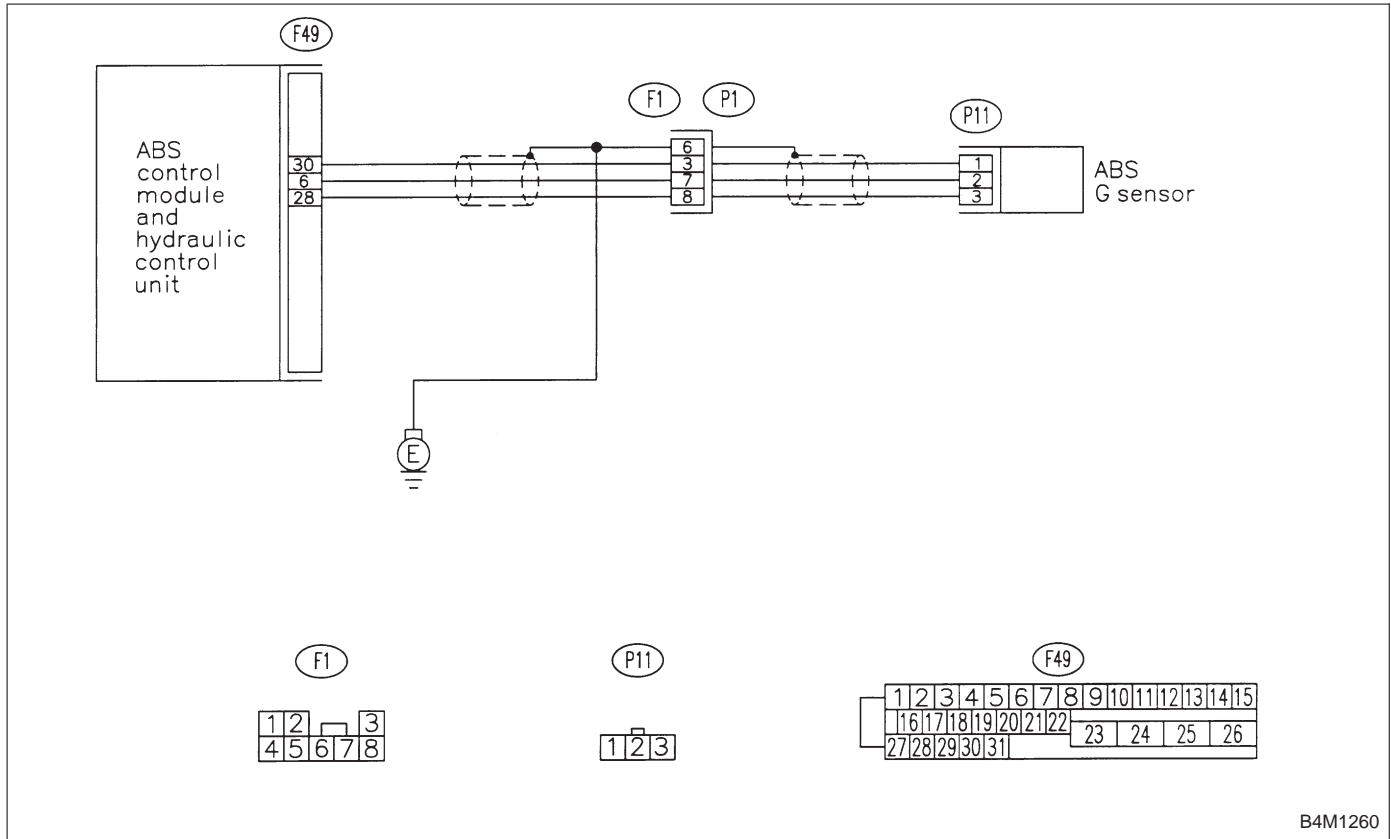
**DIAGNOSIS:**

- Faulty G sensor output voltage

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



B4M1260

1997 (F00)  
ABS 4WD•AT

H4M1117

**10AG1 CHECK SPECIFICATIONS OF ABSCM&H/U USING SELECT MONITOR.**

- 1) Press [F], [0] and [0] on the select monitor.
- 2) Read the select monitor display.

**CHECK** : *Is an ABSCM&H/U for 4WD model installed on a FWD model?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10AG2**.

**10AG2 CHECK OUTPUT OF G SENSOR USING SELECT MONITOR.**

- 1) Press [F], [1] and [0] on the select monitor.
- 2) Read the select monitor display.

**CHECK** : *Is the indicated reading between 2.1 and 2.5 V when the G sensor is in horizontal position?*

**YES** : Go to step **10AG3**.

**NO** : Go to step **10AG6**.

G-SENS (F10)  
2.30 V

B4M0927

**10AG3 CHECK POOR CONTACT IN CONNECTORS.**

**CHECK** : *Is there poor contact in connector between ABSCM&H/U and G sensor? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step **10AG4**.

**10AG4 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10AG5**.

**10AG5 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

FR  (FE5)  0 km/h	B4M0977
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**10AG6 CHECK FREEZE FRAME DATA.**

- 1) Press [F], [E] and [5] on the select monitor.
- 2) Read the select monitor display.

**CHECK** : *Is the reading indicated on monitor display 0 km?*

**YES** : Go to step **10AG7**.

**NO** : Go to step **10AG15**.

FL  (FE6)  0 km/h	B4M0978
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**10AG7 CHECK FREEZE FRAME DATA.**

- 1) Press the scroll key so that FE6 appears on the monitor display.
- 2) Read the select monitor display.

**CHECK** : *Is the reading indicated on monitor display 0 km?*

**YES** : Go to step **10AG8**.

**NO** : Go to step **10AG15**.

RR  (FE7)  0 km/h	B4M0979
-------------------------------	---------

**10AG8 CHECK FREEZE FRAME DATA.**

- 1) Press the scroll key so that FE7 appears on the monitor display.
- 2) Read the select monitor display.

**CHECK** : *Is the reading indicated on monitor display 0 km?*

**YES** : Go to step **10AG9**.

**NO** : Go to step **10AG15**.

RL  (FE8)  0 km/h	B4M0980
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**10AG9 CHECK FREEZE FRAME DATA.**

- 1) Press the scroll key so that FE8 appears on the monitor display.
- 2) Read the select monitor display.

**CHECK** : *Is the reading indicated on monitor display 0 km?*

**YES** : Go to step **10AG10**.

**NO** : Go to step **10AG15**.

G-SENS (FE14)  3.70 V	B4M0981
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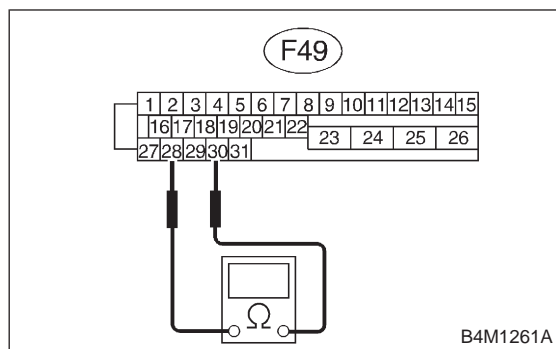
**10AG10 CHECK FREEZE FRAME DATA.**

- 1) Press the scroll key so that FE14 appears on the monitor display.
- 2) Read the select monitor display.

**CHECK** : *Is the reading indicated on monitor display more than 3.65 V?*

**YES** : Go to step **10AG11**.

**NO** : Go to step **10AG15**.



**10AG11 CHECK OPEN CIRCUIT IN G SENSOR OUTPUT HARNESS AND GROUND HARNESS.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Measure resistance between ABSCM&H/U connector terminals.

**Connector & terminal  
(F49) No. 30 — No. 28:**

- CHECK** : *Is the resistance between 4.3 and 4.9 k $\Omega$ ?*
- YES** : Go to step **10AG12**.
- NO** : Repair harness/connector between G sensor and ABSCM&H/U.

**10AG12 CHECK POOR CONTACT IN CONNECTORS.**

- CHECK** : *Is there poor contact in connector between ABSCM&H/U and G sensor? <Ref. to FOREWORD [T3C1].>*
- YES** : Repair connector.
- NO** : Go to step **10AG13**.

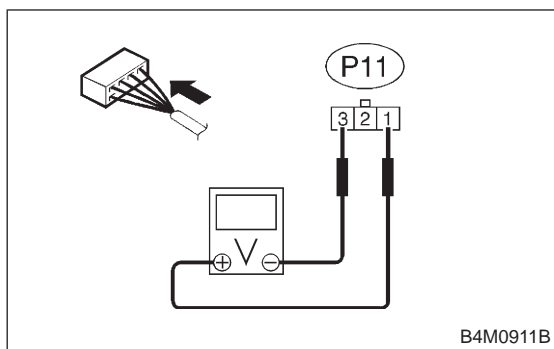
**10AG13 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

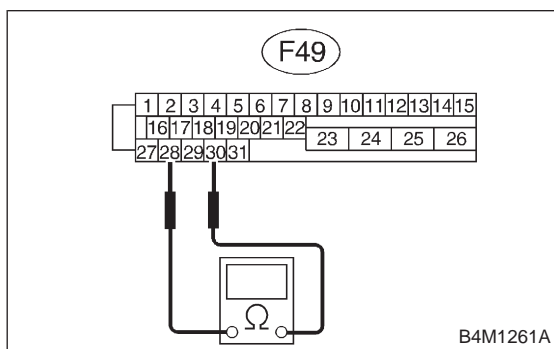
- CHECK** : *Is the same trouble code as in the current diagnosis still being output?*
- YES** : Replace ABSCM&H/U.
- NO** : Go to step **10AG14**.

**10AG14 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**

- CHECK** : *Are other trouble codes being output?*
- YES** : Proceed with the diagnosis corresponding to the trouble code.
- NO** : A temporary poor contact.

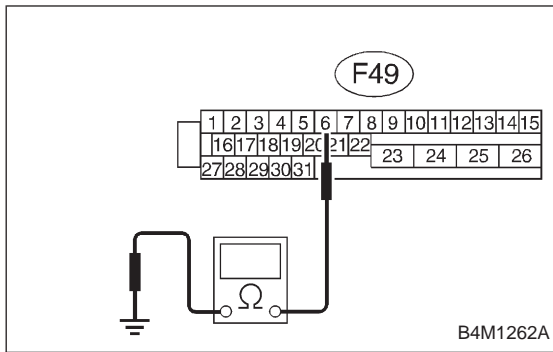
**10AG15 CHECK INPUT VOLTAGE OF G SENSOR.**

- 1) Turn ignition switch to OFF.
- 2) Remove console box.
- 3) Disconnect G sensor from body. (Do not disconnect connector.)
- 4) Turn ignition switch to ON.
- 5) Measure voltage between G sensor connector terminals.

**Connector & terminal****(P11) No. 1 (+) — No. 3 (-):****CHECK** : Is the voltage between 4.75 and 5.25 V?**YES** : Go to step 10AG16.**NO** : Repair harness/connector between G sensor and ABSCM&H/U.**10AG16 CHECK OPEN CIRCUIT IN G SENSOR OUTPUT HARNESS AND GROUND HARNESS.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Measure resistance between ABSCM&H/U connector terminals.

**Connector & terminal****(F49) No. 30 — No. 28:****CHECK** : Is the resistance between 4.3 and 4.9 kΩ?**YES** : Go to step 10AG17.**NO** : Repair harness/connector between G sensor and ABSCM&H/U.

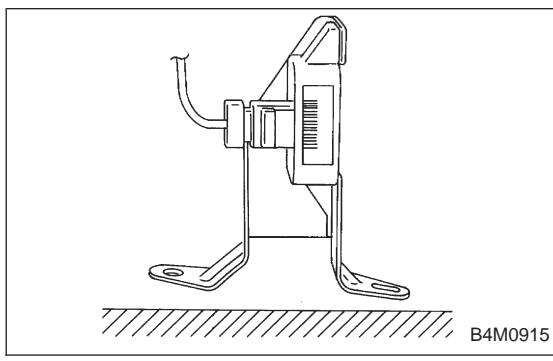


**10AG17 CHECK GROUND SHORT IN G SENSOR OUTPUT HARNESS.**

- 1) Disconnect connector from G sensor.
- 2) Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal**  
(F49) No. 6 — Chassis ground:

- CHECK** : Is the resistance more than 1 MΩ?
- YES** : Go to step 10AG18.
- NO** : Repair harness between G sensor and ABSCM&H/U.

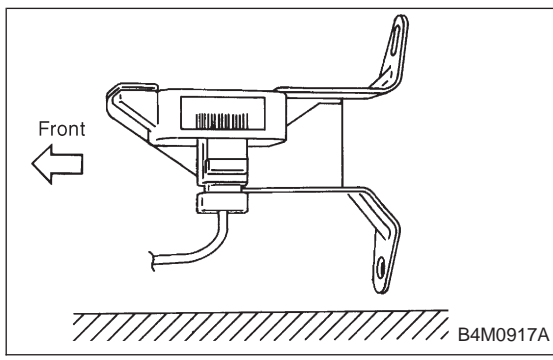


**10AG18 CHECK G SENSOR.**

- 1) Connect connector to G sensor.
- 2) Connect connector to ABSCM&H/U.
- 3) Turn ignition switch to ON.
- 4) Measure voltage between G sensor connector terminals.

**Connector & terminal**  
(P11) No. 2 (+) — No. 1 (-):

- CHECK** : Is the voltage between 2.1 and 2.5 V when G sensor is horizontal?
- YES** : Go to step 10AG19.
- NO** : Replace G sensor.



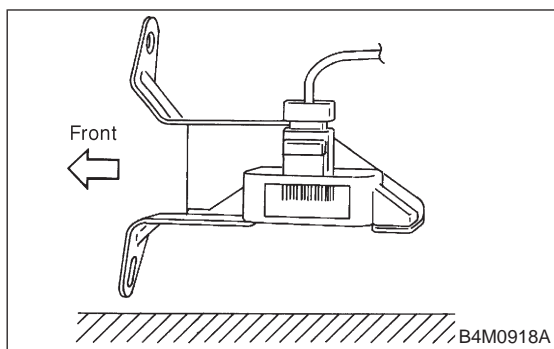
**10AG19 CHECK G SENSOR.**

Measure voltage between G sensor connector terminals.

**Connector & terminal**  
(P11) No. 2 (+) — No. 1 (-):

- CHECK** : Is the voltage between 3.7 and 4.1 V when G sensor is inclined forwards to 90°?
- YES** : Go to step 10AG20.
- NO** : Replace G sensor.



**10AG20 CHECK G SENSOR.**

Measure voltage between G sensor connector terminals.

**Connector & terminal  
(P11) No. 2 (+) — No. 1 (-):**

**CHECK** : *Is the voltage between 0.5 and 0.9 V when G sensor is inclined backwards to 90°?*

**YES** : Go to step 10AG21.

**NO** : Replace G sensor.

**10AG21 CHECK POOR CONTACT IN CONNECTORS.**

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connector between ABSCM&H/U and G sensor? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step 10AG22.

**10AG22 CHECK ABSCM&H/U.**

- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step 10AG23.

**10AG23 CHECK ANY OTHER TROUBLE CODES APPEARANCE.**

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 56 (FB1)  
G SENSOR +B

B4M0982

**AH: TROUBLE CODE 56 G SENSOR +B  
— BATTERY SHORT OF G SENSOR —**

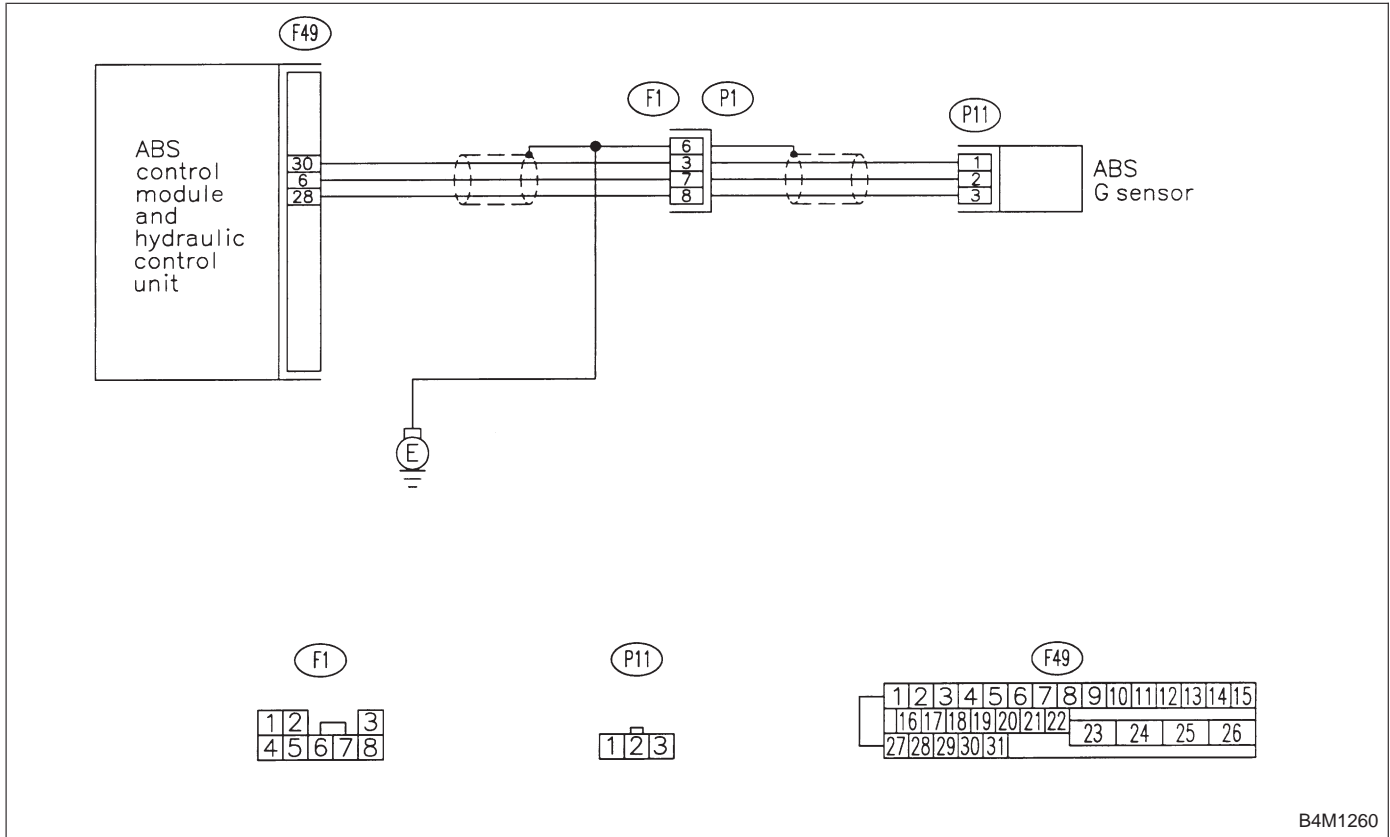
**DIAGNOSIS:**

- Faulty G sensor output voltage

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



B4M1260

G - SENS (F10)  
2.30 V

B4M0927

### 10AH1 CHECK OUTPUT OF G SENSOR USING SELECT MONITOR.

- 1) Press [F], [1] and [0] on the select monitor.
- 2) Read the select monitor display.

**CHECK** : Is the indicated reading between 2.1 and 2.5 V when the G sensor is in horizontal position?

**YES** : Replace ABSCM&H/U.

**NO** : Go to step 10AH2.

### 10AH2 CHECK BATTERY SHORT OF HARNESS.

- 1) Turn ignition switch to OFF.
- 2) Remove console box.
- 3) Disconnect connector from G sensor.
- 4) Disconnect connector from ABSCM&H/U.
- 5) Measure voltage between ABSCM&H/U connector and chassis ground.

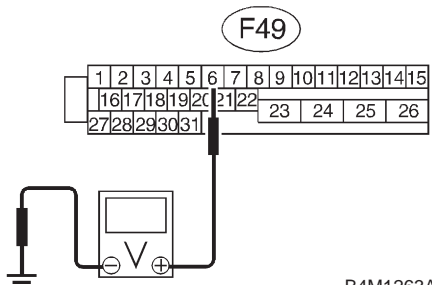
#### Connector & terminal

(F49) No. 6 (+) — Chassis ground (-):

**CHECK** : Is the voltage less than 1 V?

**YES** : Go to step 10AH3.

**NO** : Repair harness between G sensor and ABSCM&H/U.



B4M1263A

### 10AH3 CHECK BATTERY SHORT OF HARNESS.

- 1) Turn ignition switch to ON.
- 2) Measure voltage between ABSCM&H/U connector and chassis ground.

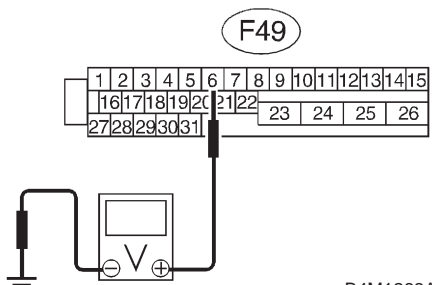
#### Connector & terminal

(F49) No. 6 (+) — Chassis ground (-):

**CHECK** : Is the voltage less than 1 V?

**YES** : Go to step 10AH4.

**NO** : Repair harness between G sensor and ABSCM&H/U.



B4M1263A

<b>10AH4</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Turn ignition switch to OFF.
- 2) Connect all connectors.
- 3) Erase the memory.
- 4) Perform inspection mode.
- 5) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10AH5**.

<b>10AH5</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
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**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 56 (FB1)  
G SENSOR H $\mu$

B4M0984

**AI: TROUBLE CODE 56 G SENSOR H $\mu$**   
**— ABNORMAL G SENSOR HIGH  $\mu$  OUTPUT**  
**—**

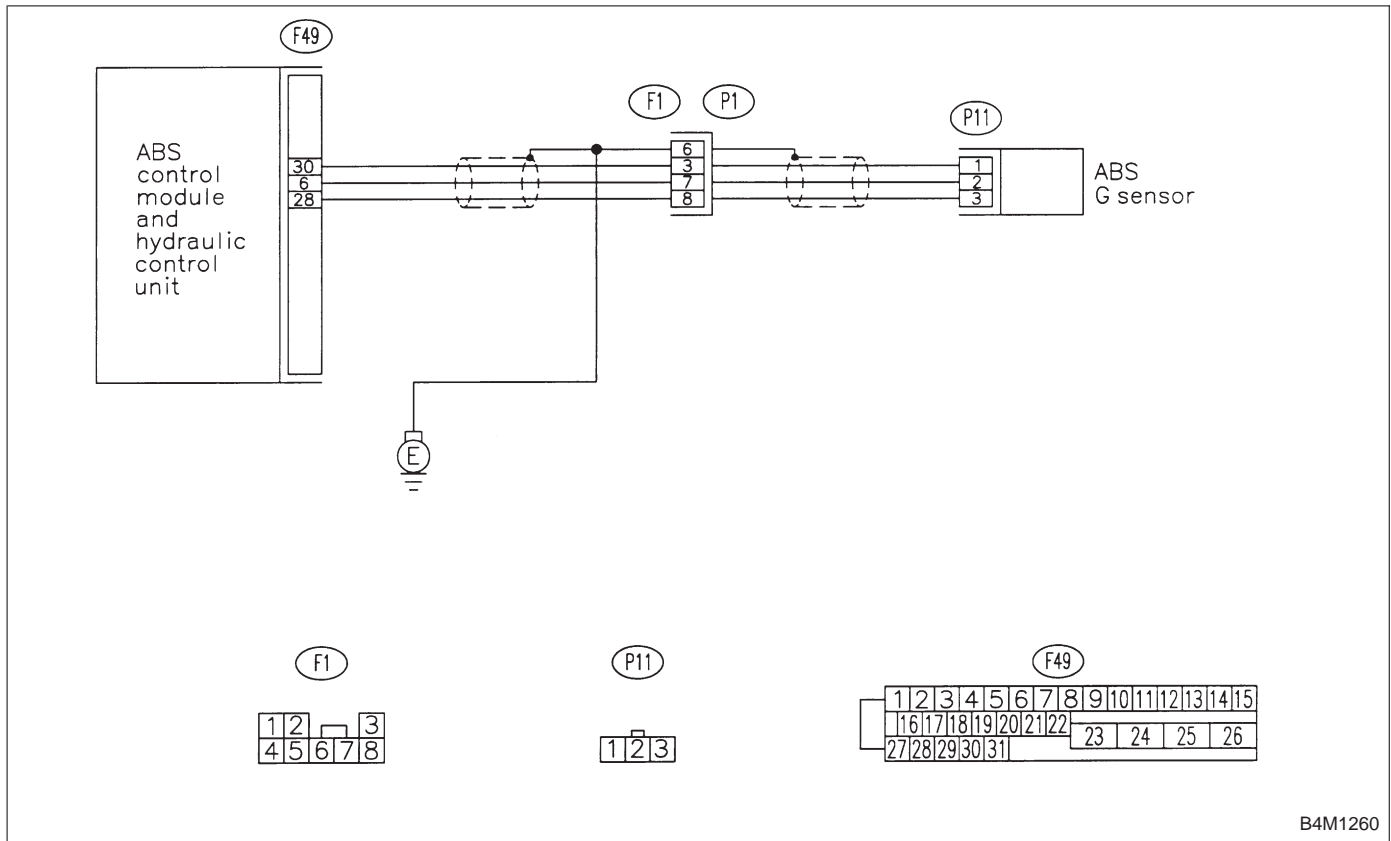
**DIAGNOSIS:**

- Faulty G sensor output voltage

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



G - SENS (F10)  
2.30 V

B4M0927

<b>10AI1</b>	<b>CHECK OUTPUT OF G SENSOR USING SELECT MONITOR.</b>
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- 1) Press [F], [1] and [0] on the select monitor.
- 2) Read the select monitor display.

**CHECK** : *Is the indicated reading  $2.3\pm 0.2$  V when the G sensor is in horizontal position?*

**YES** : Go to step 10AI2.

**NO** : Go to step 10AI6.

<b>10AI2</b>	<b>CHECK POOR CONTACT IN CONNECTORS.</b>
--------------	--

Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connector between ABSCM&H/U and G sensor? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step 10AI3.

<b>10AI3</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

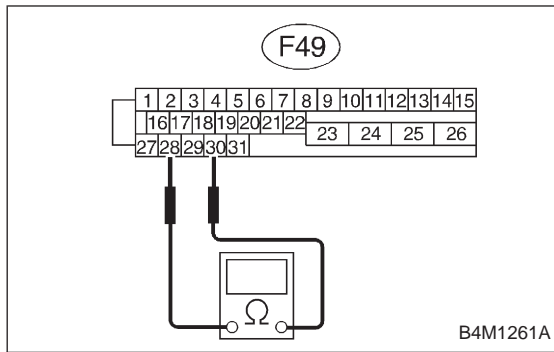
**NO** : Go to step 10AI4.

<b>10AI4</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
--------------	--

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.



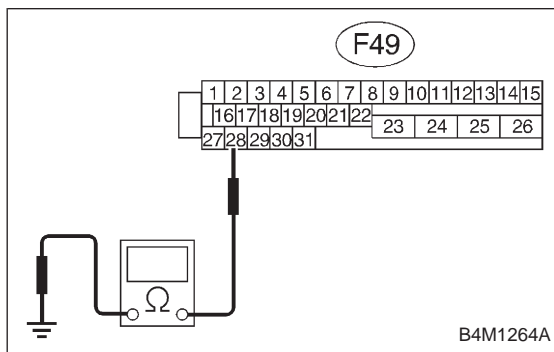
10AI5

**CHECK OPEN CIRCUIT IN G SENSOR OUTPUT HARNESS AND GROUND HARNESS.**

- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Measure resistance between ABSCM&H/U connector terminals.

**Connector & terminal (F49) No. 30 — No. 28:**

- CHECK** : Is the resistance between 4.3 and 4.9 kΩ?
- YES** : Go to step 10AI6.
- NO** : Repair harness/connector between G sensor and ABSCM&H/U.



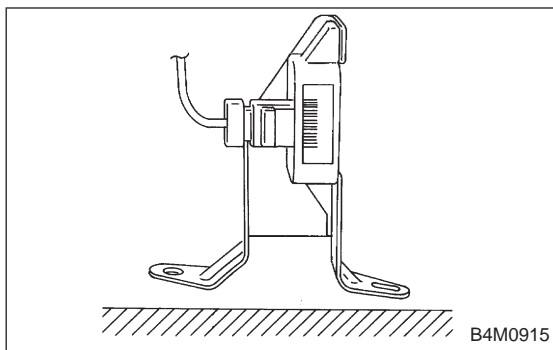
10AI6

**CHECK GROUND SHORT OF HARNESS.**

Measure resistance between ABSCM&H/U connector and chassis ground.

**Connector & terminal (F49) No. 28 — Chassis ground:**

- CHECK** : Is the resistance more than 1 MΩ?
- YES** : Go to step 10AI7.
- NO** : Repair harness between G sensor and ABSCM&H/U.  
Replace ABSCM&H/U.



**10AI7 CHECK G SENSOR.**

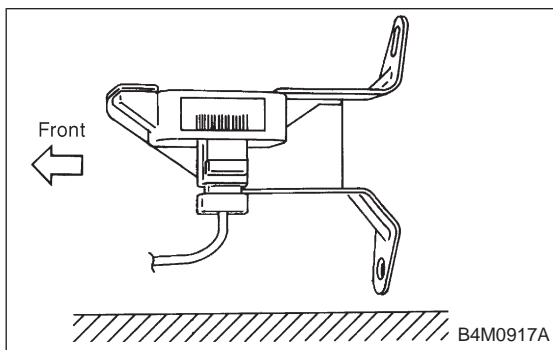
- 1) Remove console box.
- 2) Remove G sensor from vehicle.
- 3) Connect connector to G sensor.
- 4) Connect connector to ABSCM&H/U.
- 5) Turn ignition switch to ON.
- 6) Measure voltage between G sensor connector terminals.

**Connector & terminal**  
**(P11) No. 2 (+) — No. 1 (-):**

**CHECK** : *Is the voltage between 2.1 and 2.5 V when G sensor is horizontal?*

**YES** : Go to step 10AI8.

**NO** : Replace G sensor.



**10AI8 CHECK G SENSOR.**

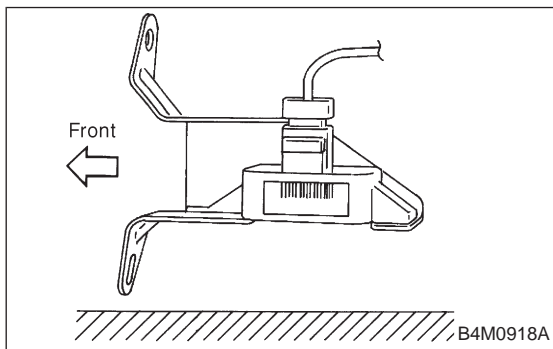
Measure voltage between G sensor connector terminals.

**Connector & terminal**  
**(R70) No. 2 (+) — No. 1 (-):**

**CHECK** : *Is the voltage between 3.7 and 4.1 V when G sensor is inclined forwards to 90°?*

**YES** : Go to step 10AI9.

**NO** : Replace G sensor.



**10AI9 CHECK G SENSOR.**

Measure voltage between G sensor connector terminals.

**Connector & terminal**  
**(R70) No. 2 (+) — No. 1 (-):**

**CHECK** : *Is the voltage between 0.5 and 0.9 V when G sensor is inclined backwards to 90°?*

**YES** : Go to step 10AI10.

**NO** : Replace G sensor.



<b>10AI10</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Turn ignition switch to OFF.
- 2) Connect all connectors.
- 3) Erase the memory.
- 4) Perform inspection mode.
- 5) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10AI11**.

<b>10AI11</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
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**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.

D•NEW 56 (FB1)  
G SENSOR STICK

B4M0813

**AJ: TROUBLE CODE 56 G SENSOR STICK  
— G SENSOR OUTPUT IS STUCK —**

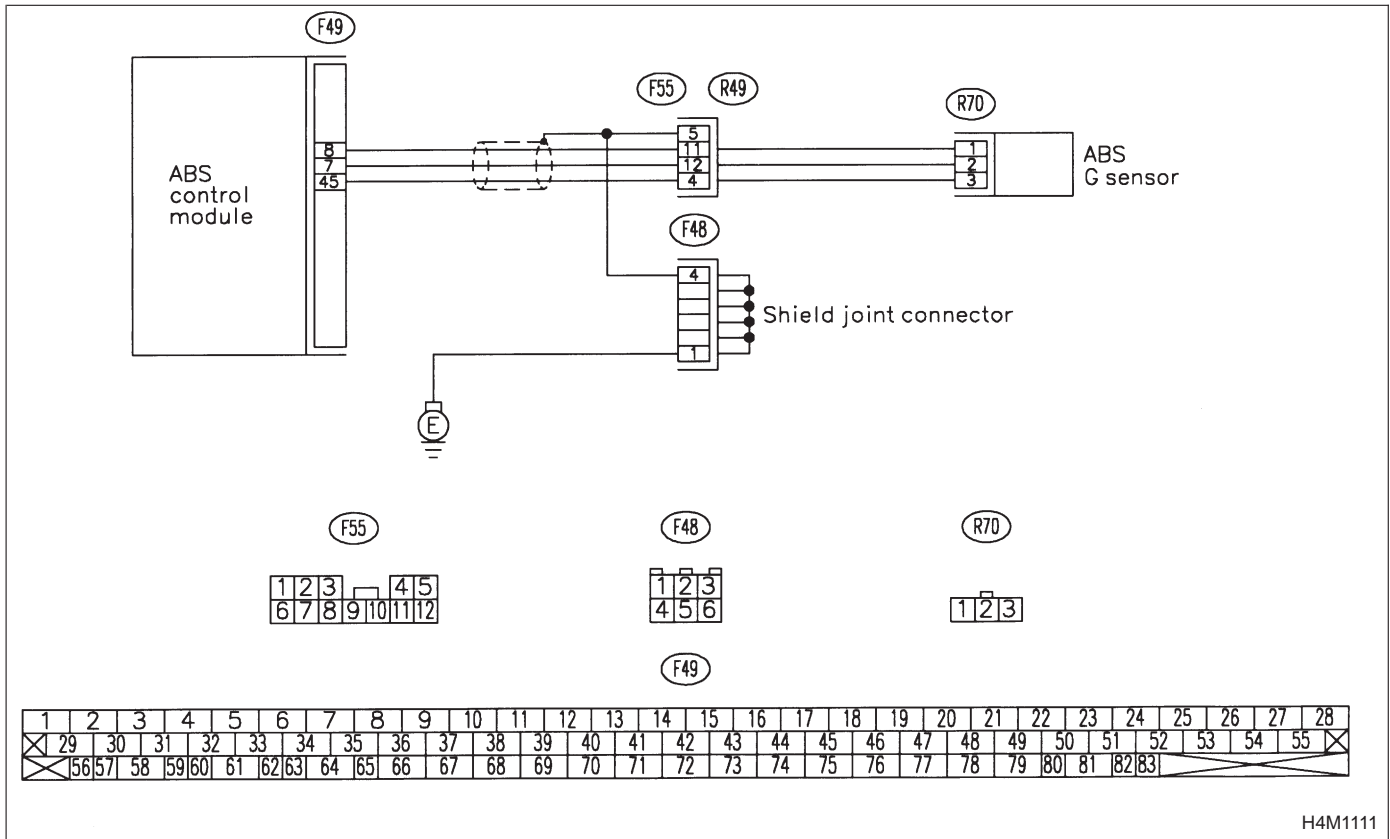
**DIAGNOSIS:**

- Faulty G sensor output voltage

**TROUBLE SYMPTOM:**

- ABS does not operate.

**WIRING DIAGRAM:**



H4M1111

**10AJ1****CHECK ALL FOUR WHEELS FOR FREE TURNING.**

**CHECK** : *Have the wheels been turned freely such as when the vehicle is lifted up, or operated on a rolling road?*

**YES** : The ABS is normal. Erase the trouble code.

**NO** : Go to step **10AJ2**.

G-SENS (F10)  
2.30 V

B4M0927

**10AJ2****CHECK OUTPUT OF G SENSOR USING SELECT MONITOR.**

1) Press [F], [1] and [0] on the select monitor.

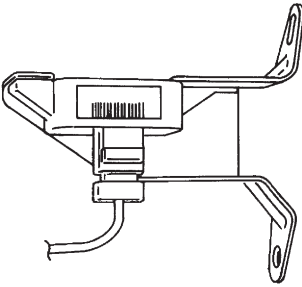
2) Read the select monitor display.

**CHECK** : *Is the indicated reading between 2.1 and 2.5 V when the vehicle is in horizontal position?*

**YES** : Go to step **10AJ3**.

**NO** : Go to step **10AJ8**.

Front  
←



B4M0917A

**10AJ3****CHECK OUTPUT OF G SENSOR USING SELECT MONITOR.**

1) Turn ignition switch to OFF.

2) Remove console box.

3) Remove G sensor from vehicle. (Do not disconnect connector.)

4) Turn ignition switch to ON.

5) Press [F], [1] and [0] on the select monitor.

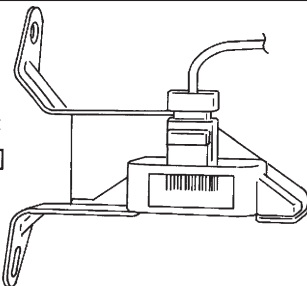
6) Read the select monitor display.

**CHECK** : *Is the indicated reading between 3.7 and 4.1 V when G sensor is inclined forwards to 90°?*

**YES** : Go to step **10AJ4**.

**NO** : Replace G sensor.

Front  
←



B4M0918A

**10AJ4****CHECK OUTPUT OF G SENSOR USING SELECT MONITOR.**

Read the select monitor display.

**CHECK** : *Is the indicated reading between 0.5 and 0.9 V when G sensor is inclined backwards to 90°?*

**YES** : Go to step **10AJ5**.

**NO** : Replace G sensor.

<b>10AJ5</b>	<b>CHECK POOR CONTACT IN CONNECTORS.</b>
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Turn ignition switch to OFF.

**CHECK** : *Is there poor contact in connector between ABSCM&H/U and G sensor? <Ref. to FOREWORD [T3C1].>*

**YES** : Repair connector.

**NO** : Go to step 10AJ6.

<b>10AJ6</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Connect all connectors.
- 2) Erase the memory.
- 3) Perform inspection mode.
- 4) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

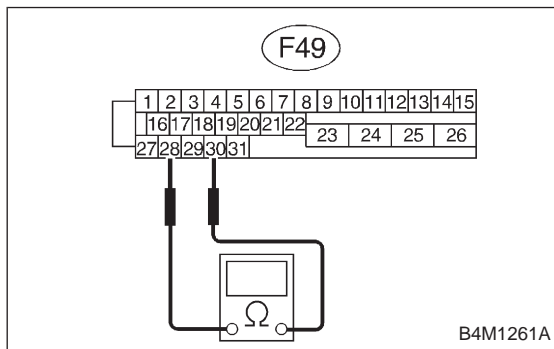
**NO** : Go to step 10AJ7.

<b>10AJ7</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
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**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.



<b>10AJ8</b>	<b>CHECK OPEN CIRCUIT IN G SENSOR OUTPUT HARNESS AND GROUND HARNESS.</b>
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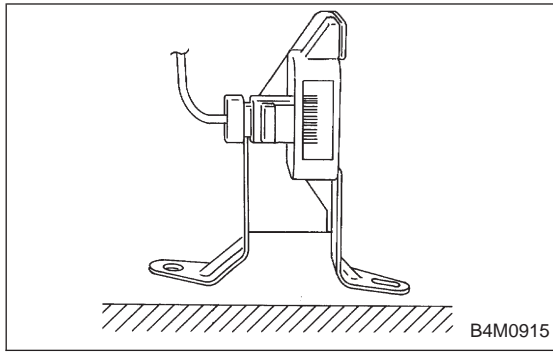
- 1) Turn ignition switch to OFF.
- 2) Disconnect connector from ABSCM&H/U.
- 3) Measure resistance between ABSCM&H/U connector terminals.

**Connector & terminal (F49) No. 30 — No. 28:**

**CHECK** : *Is the resistance between 4.3 and 4.9 k $\Omega$ ?*

**YES** : Go to step 10AJ9.

**NO** : Repair harness/connector between G sensor and ABSCM&H/U.

**10AJ9 CHECK G SENSOR.**

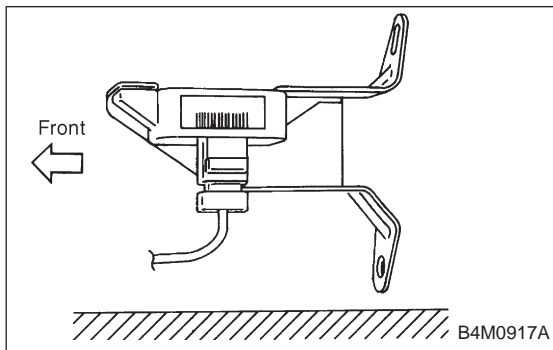
- 1) Remove console box.
- 2) Remove G sensor from vehicle.
- 3) Connect connector to G sensor.
- 4) Connect connector to ABSCM&H/U.
- 5) Turn ignition switch to ON.
- 6) Measure voltage between G sensor connector terminals.

**Connector & terminal****(P11) No. 2 (+) — No. 1 (-):**

**CHECK** : Is the voltage between 2.1 and 2.5 V when G sensor is horizontal?

**YES** : Go to step 10AJ10.

**NO** : Replace G sensor.

**10AJ10 CHECK G SENSOR.**

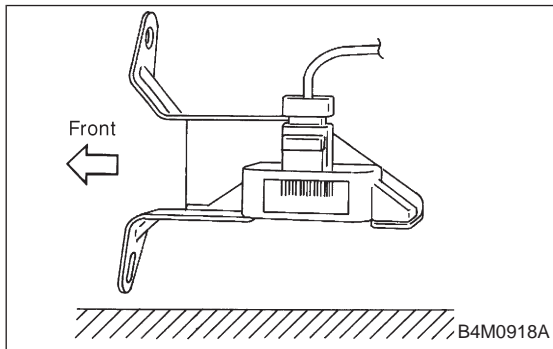
Measure voltage between G sensor connector terminals.

**Connector & terminal****(P11) No. 2 (+) — No. 1 (-):**

**CHECK** : Is the voltage between 3.7 and 4.1 V when G sensor is inclined forwards to 90°?

**YES** : Go to step 10AJ11.

**NO** : Replace G sensor.

**10AJ11 CHECK G SENSOR.**

Measure voltage between G sensor connector terminals.

**Connector & terminal****(P11) No. 2 (+) — No. 1 (-):**

**CHECK** : Is the voltage between 0.5 and 0.9 V when G sensor is inclined backwards to 90°?

**YES** : Go to step 10AJ12.

**NO** : Replace G sensor.

<b>10AJ12</b>	<b>CHECK ABSCM&amp;H/U.</b>
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- 1) Turn ignition switch to OFF.
- 2) Connect all connectors.
- 3) Erase the memory.
- 4) Perform inspection mode.
- 5) Read out the trouble code.

**CHECK** : *Is the same trouble code as in the current diagnosis still being output?*

**YES** : Replace ABSCM&H/U.

**NO** : Go to step **10AJ13**.

<b>10AJ13</b>	<b>CHECK ANY OTHER TROUBLE CODES APPEARANCE.</b>
---------------	--

**CHECK** : *Are other trouble codes being output?*

**YES** : Proceed with the diagnosis corresponding to the trouble code.

**NO** : A temporary poor contact.