

ABS

ABS

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GENERAL DESCRIPTION

ABS

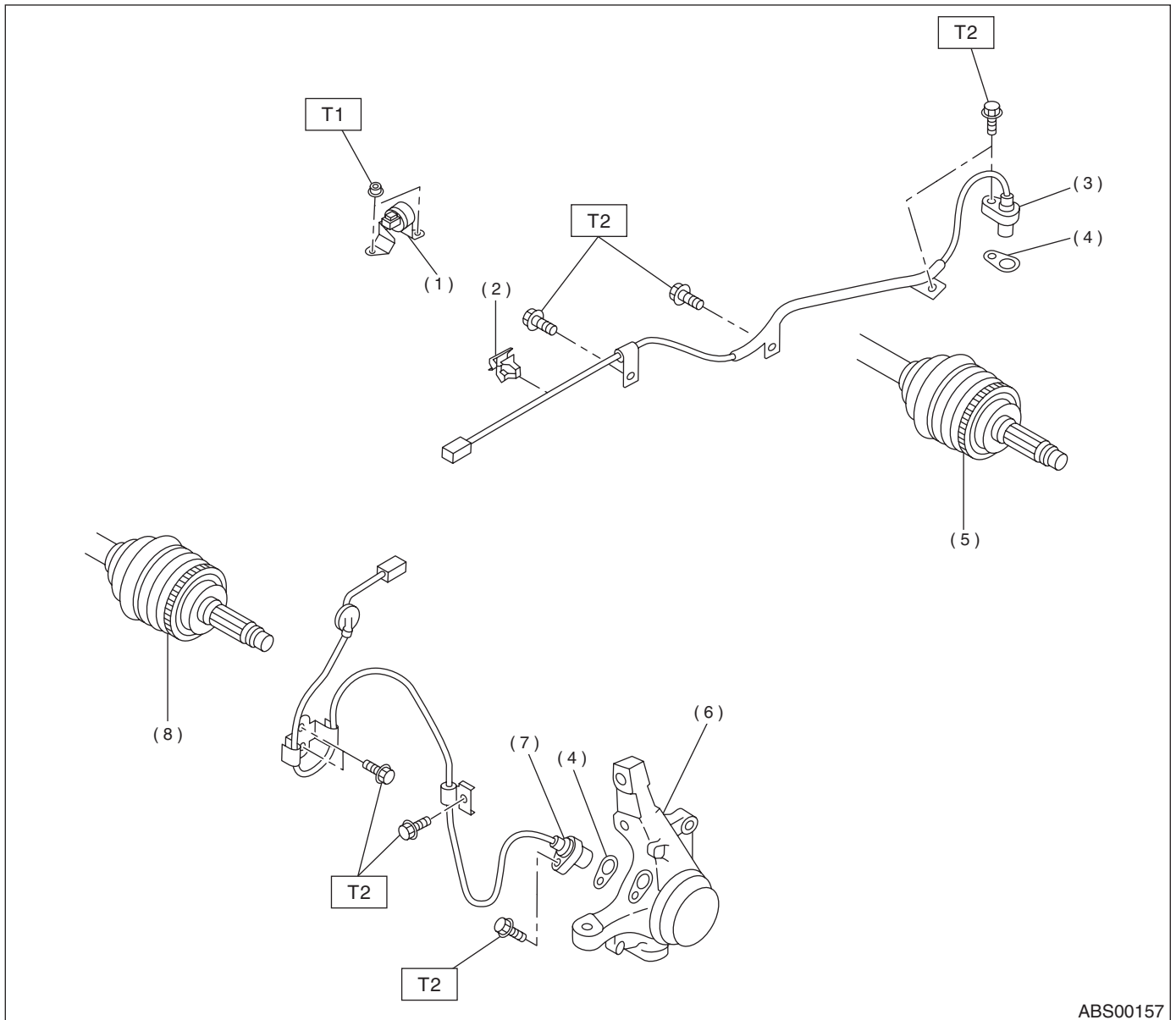
1. General Description

A: SPECIFICATIONS

Item		Standard or remarks	
ABS sensor	ABS sensor gap	Front	0.3 — 0.8 mm (0.012 — 0.031 in)
		Rear	0.44 — 0.94 mm (0.0173 — 0.0370 in)
	ABS sensor resistance		1.25±0.25 kΩ
	Marks of the harness	Front LH	Brown
		Front RH	Light blue
		Rear LH	Yellow
Rear RH		White	
G sensor	G sensor voltage	2.3±0.2 V	
ABS control module and hydraulic control unit (ABSCM&H/U) marks	AT	CI	
	MT	CJ	

B: COMPONENT

1. SENSOR



ABS00157

- (1) G sensor
- (2) Clip
- (3) Rear ABS sensor LH
- (4) ABS spacer

- (5) Tone wheel (Rear)
- (6) Housing
- (7) Front ABS sensor LH
- (8) Tone wheel (Front)

Tightening torque: N·m (kgf·m, ft·lb)

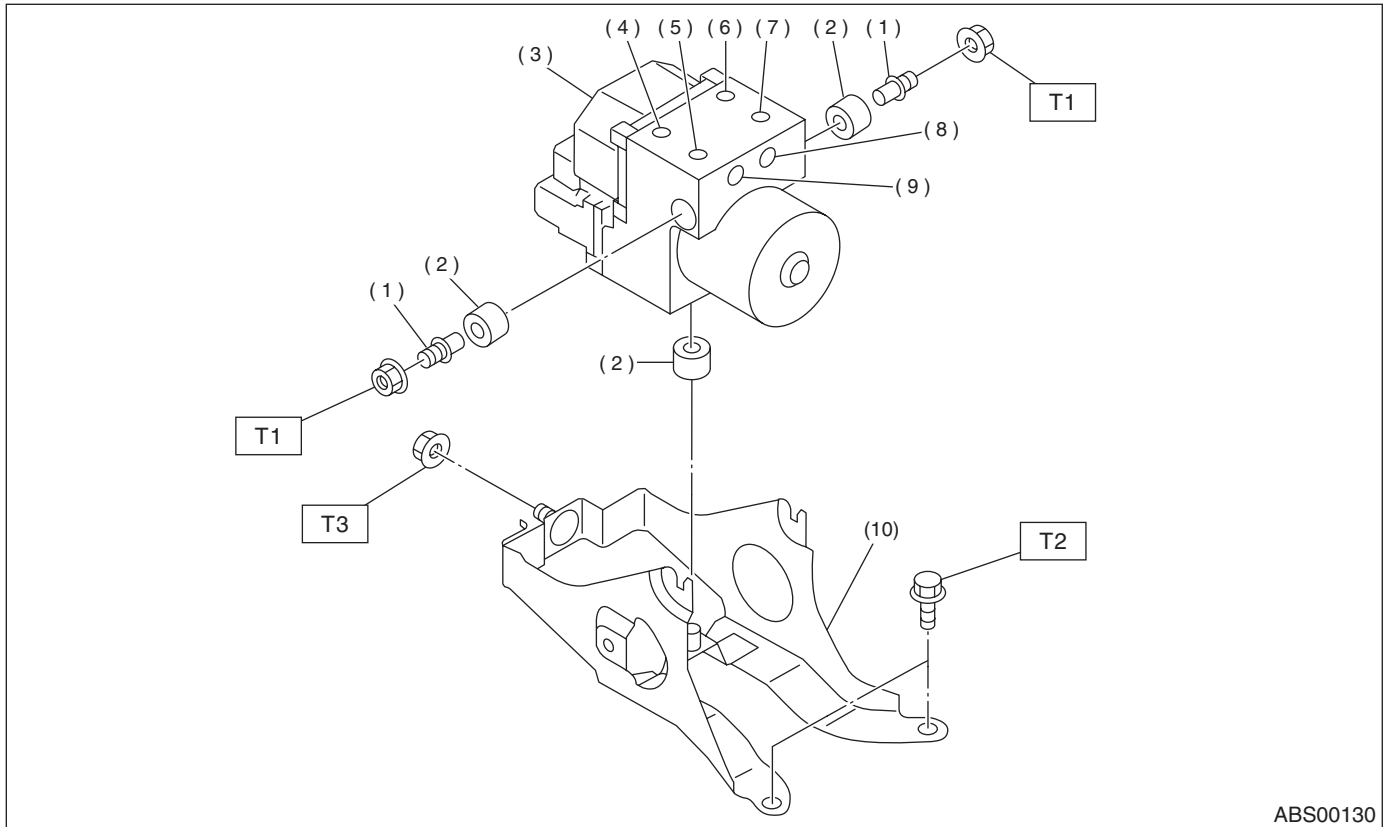
T1: 7.5 (0.77, 6)

T2: 33 (3.4, 24)

GENERAL DESCRIPTION

ABS

2. ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)



ABS00130

- | | |
|---|---------------------|
| (1) Stud bolt | (6) Front-RH outlet |
| (2) Damper | (7) Primary inlet |
| (3) ABS control module and hydraulic control unit | (8) Rear-LH outlet |
| (4) Front-LH outlet | (9) Rear-RH outlet |
| (5) Secondary inlet | (10) Bracket |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 18 (1.8, 13.06)

T2: 33 (3.4, 24)

T3: 38 (3.9, 28)

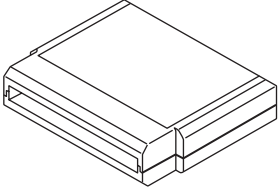

C: CAUTION

- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust or dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly, and replacement.

- Be careful not to burn your hands, because each part in the vehicle is hot after running.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or safety stands at the specified points.
- Before disconnecting electrical connectors of sensors or units, be sure to disconnect ground cable from battery.

D: PREPARATION TOOL

1. SPECIAL TOOLS

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST18482AA010	18482AA010	CARTRIDGE	Troubleshooting for electrical systems.
 ST22771AA030	22771AA030	SELECT MONITOR KIT	Troubleshooting for electrical systems.

2. GENERAL PURPOSE TOOLS

TOOL NAME	REMARKS
Circuit Tester	Used for measuring resistance, voltage and ampere.
Pressure Gauge	Used for measuring oil pressure.
Oscilloscope	Used for measuring sensor.

ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)

ABS

2. ABS Control Module and Hydraulic Control Unit (ABSCM&H/U)

A: REMOVAL

- 1) Disconnect ground cable from battery.
- 2) Remove air intake duct from engine compartment to facilitate removal of ABSCM&H/U.
- 3) Use an air gun to get rid of water around the ABSCM&H/U.

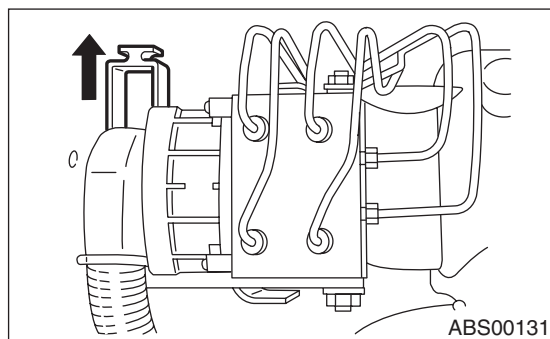
CAUTION:

The contact will be insufficient if the terminal gets wet.

- 4) Pull off the lock of the ABSCM&H/U connector to remove it.

CAUTION:

Do not pull on harness when disconnecting the connector.



CAUTION:

Be careful not to let water or other foreign matter contact the ABSCM&H/U terminal.

- 5) Unlock cable clip.
- 6) Disconnect brake pipes from ABSCM&H/U.

CAUTION:

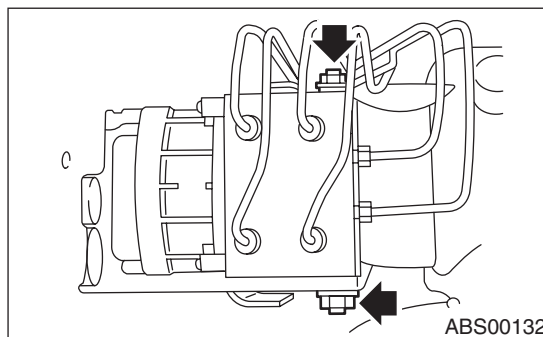
Wrap brake pipes with vinyl bag to avoid spilling brake fluid on vehicle body. Flush the vehicle completely and wipe it when applying the brake fluid to the body.

- 7) Remove ABSCM&H/U ground terminal from bracket.

- 8) Remove ABSCM&H/U from engine compartment.

CAUTION:

- Do not drop or bump ABSCM&H/U.
- Do not turn the ABSCM&H/U upside down or place it on its side.
- Be careful to prevent foreign particles from getting into ABSCM&H/U.
- Apply a coat of rust-preventive wax (Nippeco LT or GB) to bracket attaching bolt after tightening.
- Do not pull harness when disconnecting connector.



B: INSTALLATION

- 1) Install ABSCM&H/U.

CAUTION:

Confirm that the specifications of the ABSCM&H/U conforms to the vehicle specifications.

Tightening torque:

18 N·m (1.8 kgf·m, 13.0 ft·lb)

- 2) Install ABSCM&H/U ground terminal to bracket.

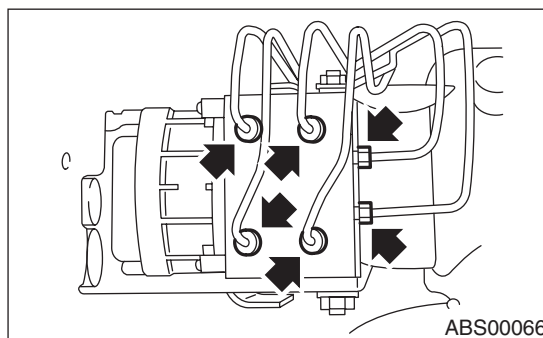
Tightening torque:

33 N·m (3.4 kgf·m, 24 ft·lb)

- 3) Connect brake pipes to their correct ABSCM&H/U connections.

Tightening torque:

15 N·m (1.5 kgf·m, 10.8 ft·lb)



- 4) Using cable clip, secure ABSCM&H/U harness to bracket.

5) Connect connector to ABSCM&H/U.

CAUTION:

- Be sure to remove all foreign matter from inside the connector before connecting.
- Ensure that the ABSCM&H/U connector is securely locked.

6) Install air intake duct.

7) Connect ground cable to battery.

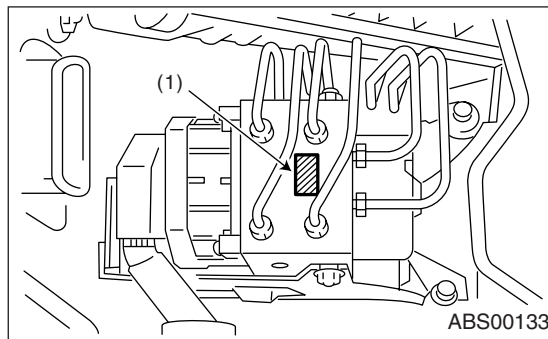
8) Bleed air from the brake system.

C: INSPECTION

1) Check connected and fixed condition of connector.

2) Check specifications of the mark with ABSCM&H/U.

Mark	Model
CI	AT (OUTBACK)
CJ	MT (OUTBACK)



(1) Mark

1. CHECKING THE HYDRAULIC UNIT ABS OPERATION BY PRESSURE GAUGE

1) Lift-up vehicle and remove wheels.

2) Disconnect the air bleeder screws from the FL and FR caliper bodies.

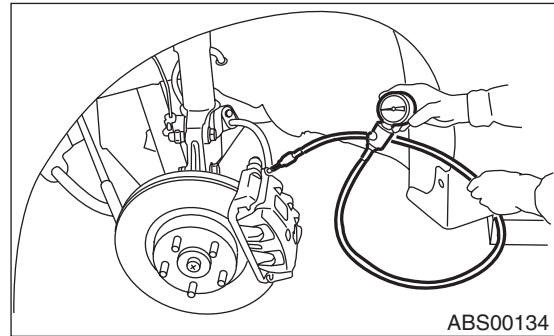
3) Connect two pressure gauges to the FL and FR caliper bodies.

CAUTION:

- Pressure gauges used exclusively for brake fluid must be used.
- Do not employ pressure gauge previously used for transmission since the piston seal is expanded which may lead to malfunction of the brake.

NOTE:

Wrap sealing tape around the pressure gauge.



ABS00134

4) Bleed air from the pressure gauges.

5) Perform ABS sequence control.

<Ref. to ABS-11, ABS Sequence Control.>

6) When the hydraulic unit begins to work, and first the FL side performs decompression, holding, and compression, and then the FR side performs decompression, holding, and compression.

7) Read values indicated on the pressure gauge and check if the fluctuation of the values between decompression and compression meets the standard values. Also check if any irregular brake pedal tightness is felt.

	Front wheel	Rear wheel
Initial value	3,432 kPa (35 kg/cm ² , 498 psi)	3,432 kPa (35 kg/cm ² , 498 psi)
When decompressed	490 kPa (5 kg/cm ² , 71 psi) or less	490 kPa (5 kg/cm ² , 71 psi) or less
When compressed	3,432 kPa (35 kg/cm ² , 498 psi) or more	3,432 kPa (35 kg/cm ² , 498 psi) or more

8) Remove pressure gauges from FL and FR caliper bodies.

9) Remove air bleeder screws from the RL and RR caliper bodies.

10) Connect the air bleeder screws to the FL and FR caliper bodies.

11) Connect two pressure gauges to the RL and RR caliper bodies.

12) Bleed air from the pressure gauges and the FL and FR caliper bodies.

13) Perform ABS sequence control.

<Ref. to ABS-11, ABS Sequence Control.>

14) When the hydraulic unit begins to work, at first the RR side performs decompression, holding, and compression, and then the RL side performs decompression, holding, and compression.

15) Read values indicated on the pressure gauges and check if they meet the standard value.

16) After checking, remove the pressure gauges from caliper bodies.

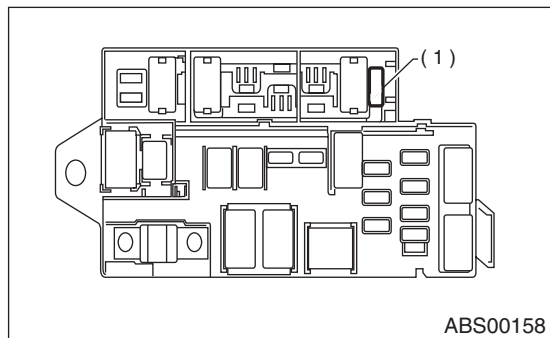
ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)

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- 17) Connect the air bleeder screws to RL and RR caliper bodies.
- 18) Bleed air from brake line.

2. CHECKING THE HYDRAULIC UNIT ABS OPERATION WITH BRAKE TESTER

- 1) In the case of AT model, install a spare fuse with the FWD connector in the main fuse box so as to simulate FWD model for checking.

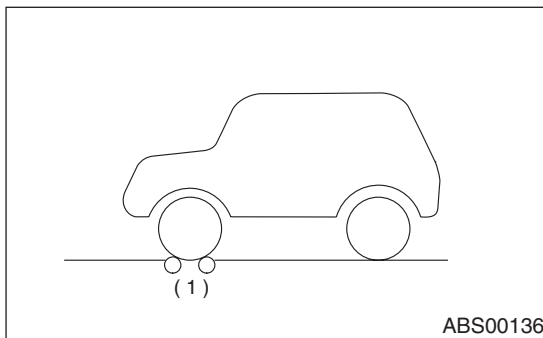


(1) FWD connector

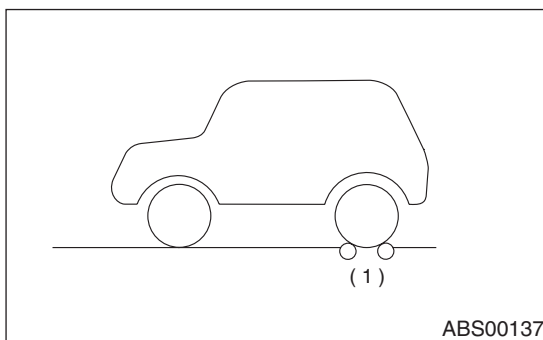
- 2) In the case of MT mode, perform measurement with the wheels other than the applicable wheels put on the free rollers because the AWD circuit cannot be forcibly cut off.

- 3) Prepare for operating ABS sequence control.
<Ref. to ABS-11, ABS Sequence Control.>

- 4) Set the front wheels or rear wheels on the brake tester and set the select lever's position at "neutral".



(1) Brake tester



(1) Brake tester

- 5) Operate the brake tester.
- 6) Perform ABS sequence control.
<Ref. to ABS-11, ABS Sequence Control.>
- 7) Hydraulic unit begins to work; and check the following working sequence.

- (1) The FL wheel performs decompression, holding, and compression in sequence, and subsequently the FR wheel repeats the cycle.
- (2) The RR wheel performs decompression, holding, and compression in sequence, and subsequently the RL wheel repeats the cycle.

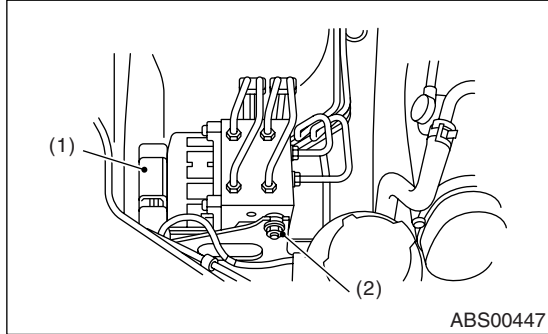
- 8) Read values indicated on the brake tester and check if the fluctuation of values, when decompressed and compressed, meet the standard values.

	Front wheel	Rear wheel
Initial value	981 N (100 kgf, 221 lb)	981 N (100 kgf, 221 lb)
When decompressed	490 N (50 kgf, 110 lb) or less	490 N (50 kgf, 110 lb) or less
When compressed	981 N (100 kgf, 221 lb) or more	981 N (100 kgf, 221 lb) or more

- 9) After checking, also check if any irregular brake pedal tightness is felt.

D: ABSCM (ABS CONTROL MODULE)

- 1) Disconnect the ground cable from battery.
- 2) Disconnect the ABSCM harness connector.
- 3) Remove the bracket mounting nut of ABSCM&H/U.



- (1) ABSCM harness connector
- (2) Bracket mounting nut

- 4) Leaving the brake pipe connected, raise the ABSCM&H/U for approx. 5 cm (2.0 in) from bracket.

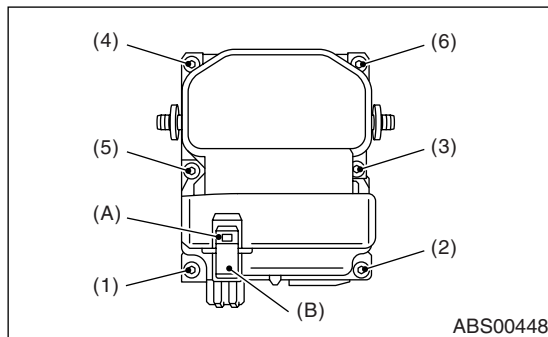
CAUTION:

Do not deform the brake pipe.

- 5) Unlock the motor power supply connector lock, and disconnect the connector.
- 6) Using TORX® BIT T20, remove the screws (1), (2), (3), (4), (5), (6) in this order.

CAUTION:

Do not reuse the screw.

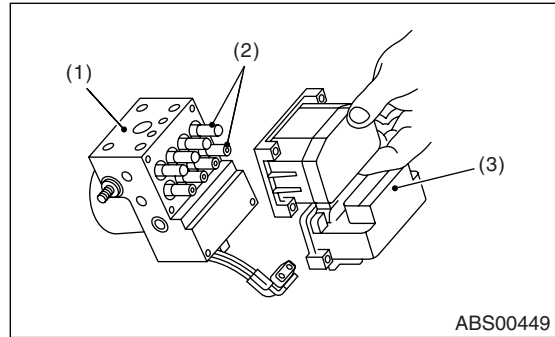


- (A) Motor power supply connector lock
- (B) Motor power supply connector

- 7) Remove the ABSCM from H/U.

CAUTION:

- Do not pry the ABSCM out, extract it straight out against H/U.
- Do not reuse the seal of ABSCM.



- (1) H/U
- (2) Valve
- (3) ABSCM

- 8) Check that H/U seal surface is free from dust and damages.

CAUTION:

- If damage is found on seal surface, replace the H/U.
- Do not apply compressed air to ABSCM&H/U for cleaning.

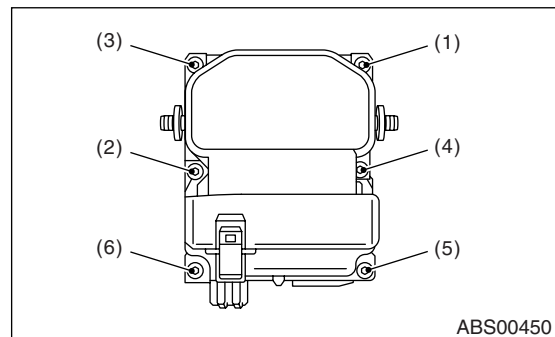
- 9) Install ABSCM straight for ward on to H/U, being careful not to scratch the valve.

- 10) Temporarily tighten the six new screws by hand.

- 11) Using TORX® BIT T20, tighten the screws (1), (2), (3), (4), (5), (6) in this order.

Tightening torque:

2.65 N·m (0.27 kgf·m, 1.95 ft·lb)



- 12) Make sure no clearance exists at the mating surface of ABSCM and H/U.

- 13) Connect the motor power supply connector to ABSCM.

CAUTION:

Securely connect the connector until connector lock sound is heard.

ABS CONTROL MODULE AND HYDRAULIC CONTROL UNIT (ABSCM&H/U)

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14) Attach the ABSCM&H/U to bracket, and then tighten with nuts.

Tightening torque:

18 N·m (1.8 kgf-m, 13.0 ft-lb)

15) Connect the ABSCM harness connector.

16) Connect the battery ground cable to battery.

17) Turn the ignition key to ON. Check the ABS warning light turns on normally, then off.

18) Check that correct information (model year, drive system, transmission type) is displayed on the initial screen by connecting Subaru Select Monitor.

19) Start the engine and move the car to accelerate to more than 20 km/h (12.4 MPH). Check the ABS warning light does not turn on.

20) If any abnormal is found during the work of step 17) to 19), repair according to the procedure of relevant failure in "ABS (DIAGNOSTICS)" section. <Ref. to ABS-16, OPERATION, Subaru Select Monitor.>

3. ABS Sequence Control

A: OPERATION

- 1) Under the ABS sequence control, after the hydraulic unit solenoid valve is driven, the operation of the hydraulic unit can be checked by means of the brake tester or pressure gauge.
- 2) ABS sequence control can be started by select monitor.

1. ABS SEQUENCE CONTROL WITH SELECT MONITOR

NOTE:

In the event of troubles such as “ABS cannot communicate with Select Monitor”, the sequence control will not activate. In such a case, perform trouble diagnosis. <Ref. to ABS-2, Basic Diagnostic Procedure.>

- 1) Connect select monitor to data link connector under driver's seat instrument panel lower cover.
- 2) Turn ignition switch ON.
- 3) Turn select monitor switch ON.
- 4) Put select monitor to “BRAKE CONTROL” mode.
- 5) When “Function check sequence” is selected, “ABS sequence control” will start.
- 6) The message “Press Brake Pedal Firmly” is displayed as follows:
 - (1) When using the brake tester, depress brake pedal with braking force of 981 N (100 kgf, 221 lb).
 - (2) When using the pressure gauge, depress brake pedal so as to make the pressure gauge indicate 3,432 kPa (35 kg/cm², 498 psi).

CAUTION:

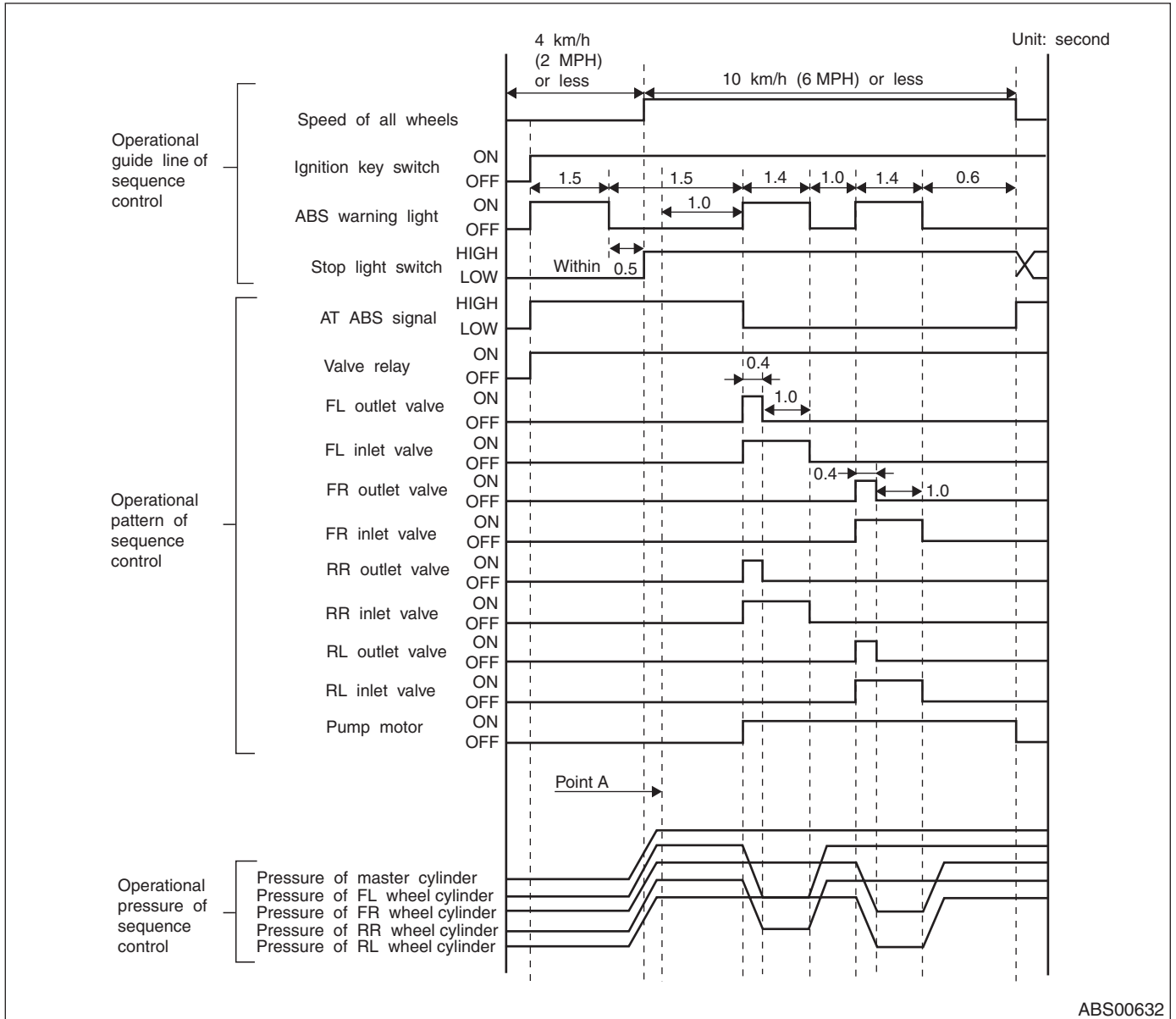
Do not depress the clutch pedal.

- 7) When the message “Press YES” is displayed, press «YES» key.
- 8) Operation points will be displayed on select monitor.

ABS SEQUENCE CONTROL

ABS

2. CONDITIONS FOR ABS SEQUENCE CONTROL



ABS00632

NOTE:

- When select monitor is used, control operation starts at point A.
- HIGH means high voltage.
- LOW means low voltage.

B: SPECIFICATION

1. CONDITIONS FOR COMPLETION OF ABS SEQUENCE CONTROL

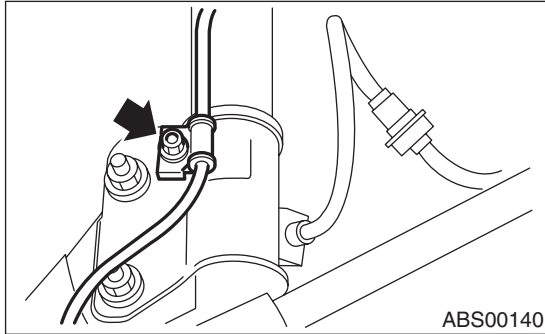
When the following conditions develop, the ABS sequence control stops and ABS operation is returned to the normal control mode.

- 1) When the speed of at least one wheel reaches 10 km/h (6 MPH).
- 2) When the brake pedal is released during sequence control and the braking lamp switch is set to off.
- 3) After completion of the sequence control.
- 4) When malfunction is detected. (When select monitor is used.)

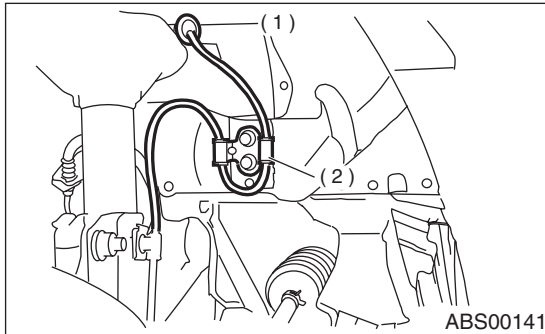
4. Front ABS Sensor

A: REMOVAL

- 1) Disconnect ground cable from battery.
- 2) Disconnect front ABS sensor connector located next to front strut mounting house in engine compartment.
- 3) Remove bolts which secure sensor harness to strut.



- 4) Remove bolts which secure sensor harness to body.

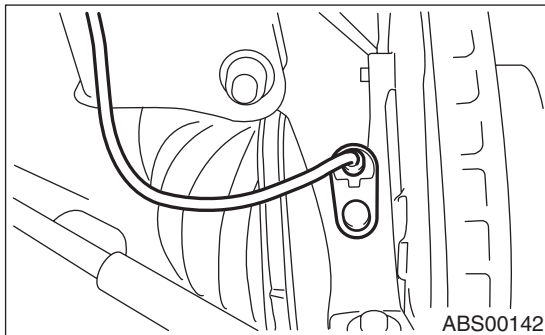


- (1) To front ABS sensor connector
- (2) Bracket

- 5) Remove bolts which secure front ABS sensor to housing, and remove front ABS sensor.

CAUTION:

- Be careful not to damage pole piece located at tip of the sensor and teeth faces during removal.
- Do not pull sensor harness during removal.

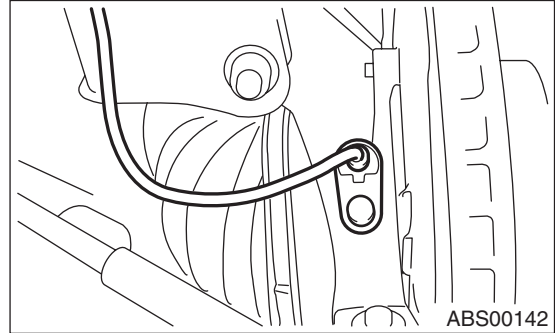


B: INSTALLATION

- 1) Temporarily install front ABS sensor on housing.

CAUTION:

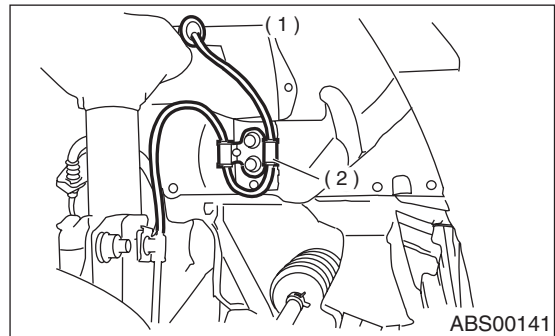
Be careful not to strike ABS sensor's pole piece and tone wheel's teeth against adjacent metal parts during installation.



- 2) Install front ABS sensor on strut and wheel apron bracket.

Tightening torque:

33 N·m (3.4 kgf-m, 24 ft-lb)

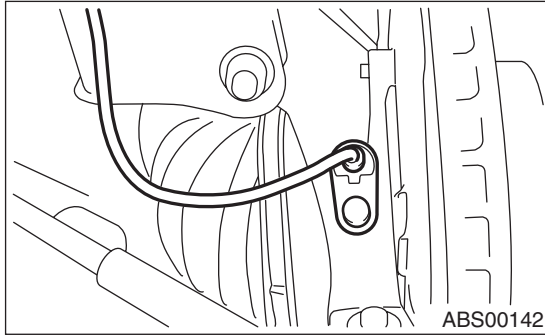


- (1) To front ABS sensor connector
- (2) Bracket

3) Place a thickness gauge between ABS sensor's pole piece and tone wheel's tooth face. After standard clearance is obtained over the entire perimeter, tighten ABS sensor on housing to specified torque.

ABS sensor standard clearance:
0.3 — 0.8 mm (0.012 — 0.031 in)

Tightening torque:
33 N·m (3.4 kgf·m, 24 ft·lb)



CAUTION:
Check the marks on the harness to make sure that no distortion exists.

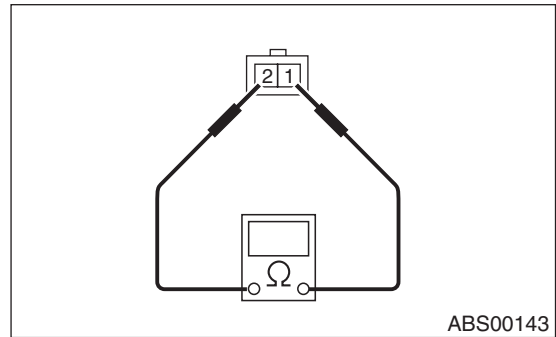
LH	RH
Brown	Light blue

NOTE:
 If the clearance is outside specifications, adjust the gap using spacer (Part No. 26755AA000).
 4) After confirmation of the ABS sensor clearance, connect connector to ABS sensor.
 5) Connect connector to battery ground cable.

C: INSPECTION

1. ABS SENSOR

- 1) Check pole piece of ABS sensor for foreign particles or damage. If necessary, clean pole piece or replace ABS sensor.
- 2) Measure ABS sensor resistance.



Terminal No.	Standard
1 and 2	1.25±0.25 kΩ

CAUTION:
If resistance is outside the standard value, replace ABS sensor with new one.

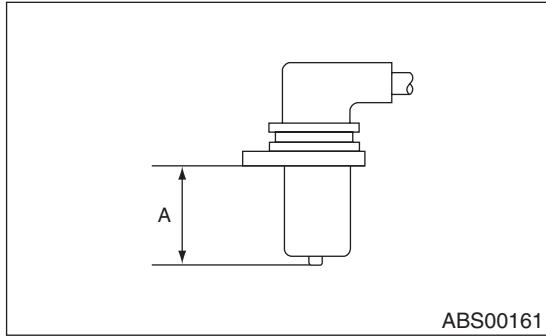
NOTE:
 Check ABS sensor cable for discontinuity. If necessary, replace with a new one.

FRONT ABS SENSOR

ABS

2. SENSOR GAP

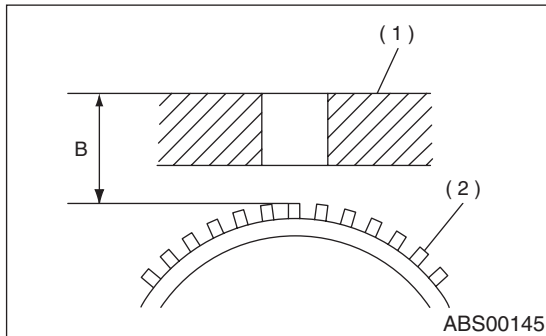
1) Measure the distance "A" between ABS sensor surface and sensor pole face.



2) Measure the distance "B" between surface where the front axle housing meets the ABS sensor, and the tone wheel.

NOTE:

Measure so that the gauge touches the tone wheel teeth top.



- (1) Axle housing
- (2) Tone wheel

3) Find the gap between the ABS sensor pole face and the surface of the tone wheel teeth by putting the measured values in the formula below and calculating.

$$\text{ABS sensor clearance} = B - A$$

ABS sensor standard clearance:

0.3 — 0.8 mm (0.012 — 0.031 in)

NOTE:

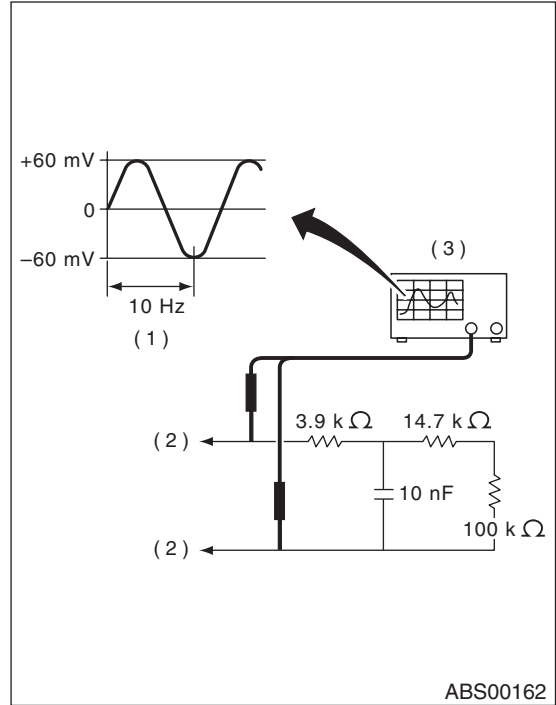
If the clearance is outside specifications, adjust the gap using spacer (Part No. 26755AA000).

3. OUTPUT VOLTAGE

Output voltage can be checked by the following method. Install resistor and condenser, then rotate wheel about 2.75 km/h (2 MPH) or equivalent.

NOTE:

Regarding terminal No., please refer to item 1. ABS SENSOR.



- (1) Standard output voltage:
Approx. 120 mV (When it is 10 Hz)
- (2) To terminal
- (3) Oscilloscope

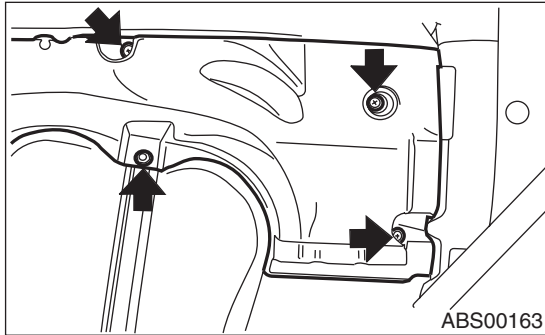
D: ADJUSTMENT

Adjust the gap using spacer (Part No. 26755AA000).

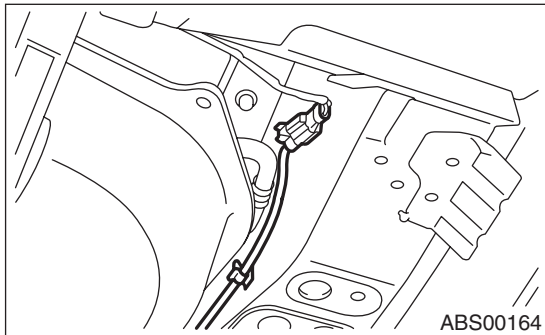
5. Rear ABS Sensor

A: REMOVAL

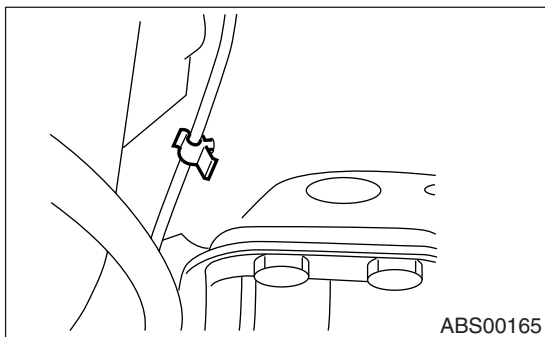
- 1) Disconnect ground cable from battery.
- 2) Lift-up the vehicle.
- 3) Remove fuel tank cover.



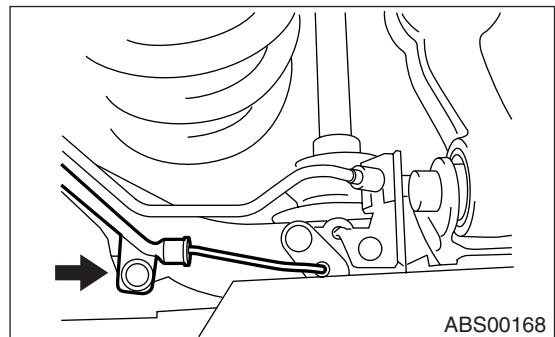
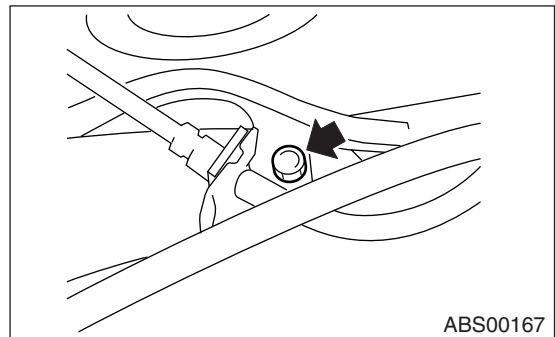
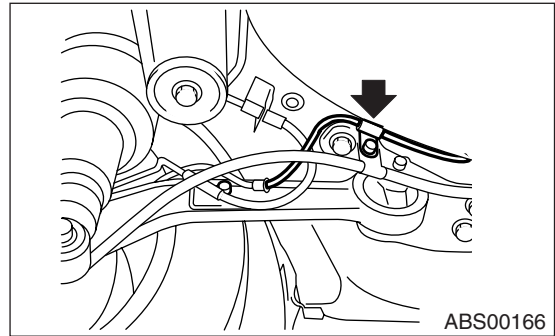
- 4) Disconnect rear ABS sensor connector.



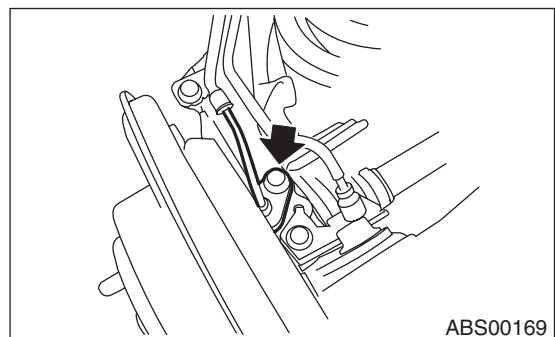
- 5) Remove rear sensor harness from clip on body side.



- 6) Remove bolts which hold rear sensor harness brackets.



- 7) Remove rear ABS sensor from rear arm.



REAR ABS SENSOR

ABS

8) When inspecting rear tone wheel, remove rear drive shaft as rear tone wheel is unitized with BJ assembly of rear drive shaft.
<Ref. to DS-37, REMOVAL, Rear Drive Shaft.>

CAUTION:

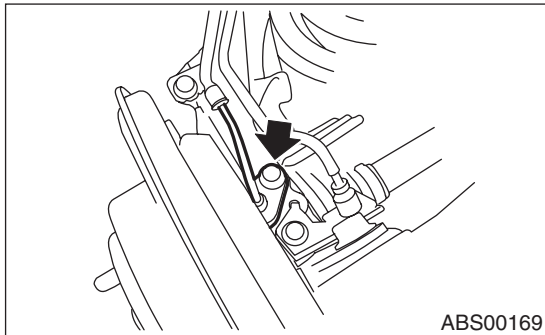
- Be careful not to damage pole piece located at tip of the sensor and teeth faces during removal.
- Do not pull sensor harness during removal.

B: INSTALLATION

- 1) Install rear drive shaft to the vehicle.
<Ref. to DS-37, INSTALLATION, Rear Drive Shaft.>
- 2) Temporarily install rear ABS sensor on rear arm.

CAUTION:

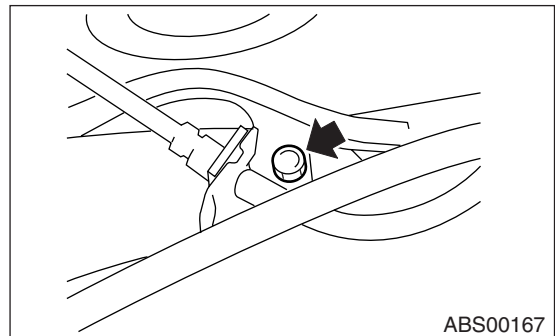
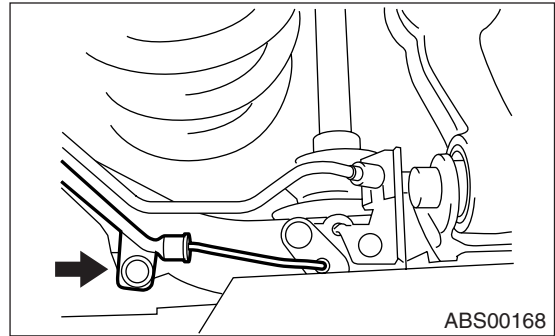
Be careful not to strike ABS sensor's pole piece and tone wheel's teeth against adjacent metal parts during installation.



- 3) Install rear sensor harness brackets in the original positions and install harness on the clip.

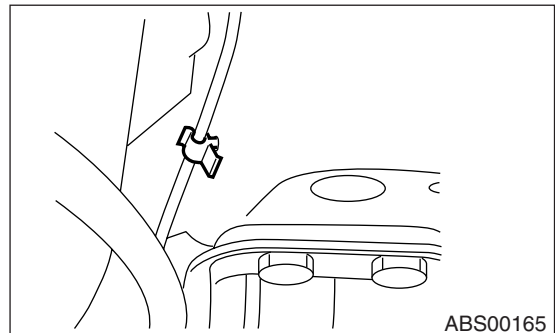
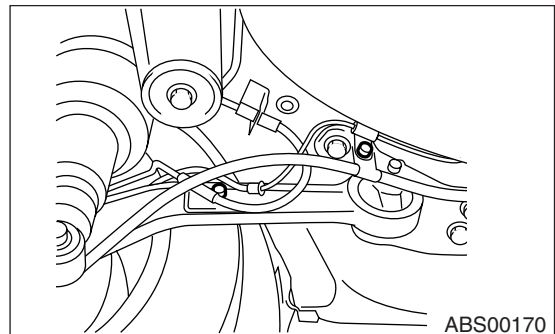
Tightening torque:

33 N·m (3.4 kgf-m, 24 ft-lb)



Tightening torque:

33 N·m (3.4 kgf-m, 24 ft-lb)



4) Place a thickness gauge between ABS sensor's and tone wheel's tooth face. After standard clearance is obtained over the entire perimeter, tighten ABS sensor on rear arm to specified torque.

ABS sensor standard clearance:
0.44 — 0.94 mm (0.0173 — 0.0370 in)

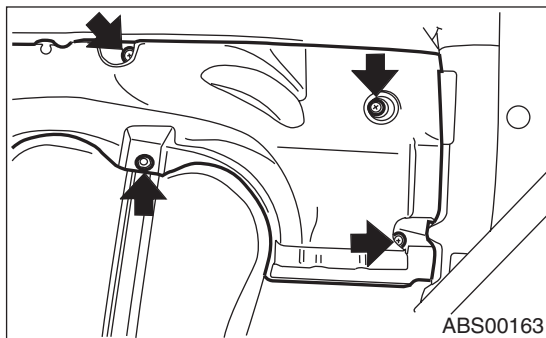
Tightening torque:
33 N·m (3.4 kgf·m, 24 ft·lb)

CAUTION:
Check the marks on the harness to make sure that no distortion exists.

	LH	RH
Mark	Yellow	White

NOTE:
 If the clearance is outside specifications, adjust the gap using spacer (Part No. 26755AA000).

5) After confirmation of the ABS sensor clearance, connect connector to ABS sensor and install fuel tank cover.

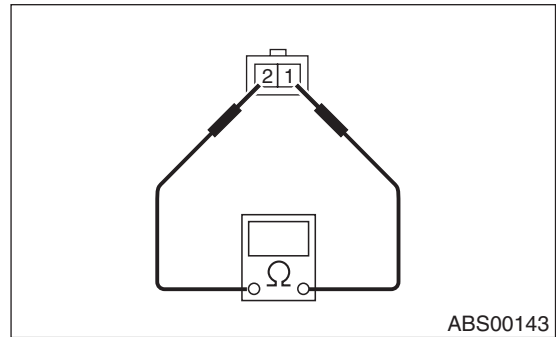


6) Connect connector to battery ground cable.

C: INSPECTION

1. ABS SENSOR

- 1) Check pole piece of ABS sensor for foreign particles or damage. If necessary, clean pole piece or replace ABS sensor.
- 2) Measure ABS sensor resistance.



Terminal No.	Standard
1 and 2	1.25±0.25 kΩ

CAUTION:
If resistance is outside the standard value, replace ABS sensor with new one.

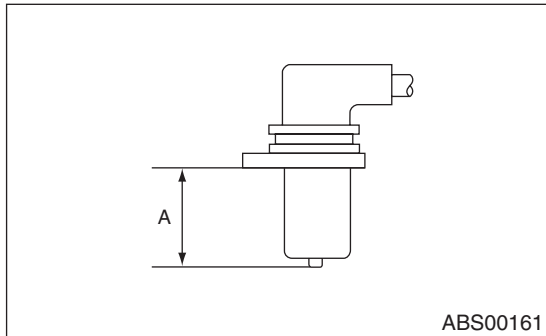
NOTE:
 Check ABS sensor cable for discontinuity. If necessary, replace with a new one.

REAR ABS SENSOR

ABS

2. SENSOR GAP

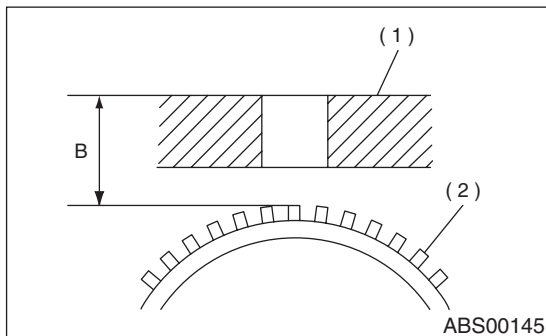
1) Measure the distance "A" between ABS sensor surface and sensor pole face.



2) Measure the distance "B" between surface where the front axle housing meets the ABS sensor, and the tone wheel.

NOTE:

Measure so that the gauge touches the tone wheel teeth top.



- (1) Axle housing
- (2) Tone wheel

3) Find the gap between the ABS sensor pole face and the surface of the tone wheel teeth by putting the measured values in the formula below and calculating.

$$\text{ABS sensor clearance} = B - A$$

ABS sensor standard clearance:

$$0.44 - 0.94 \text{ mm } (0.0173 - 0.0370 \text{ in})$$

NOTE:

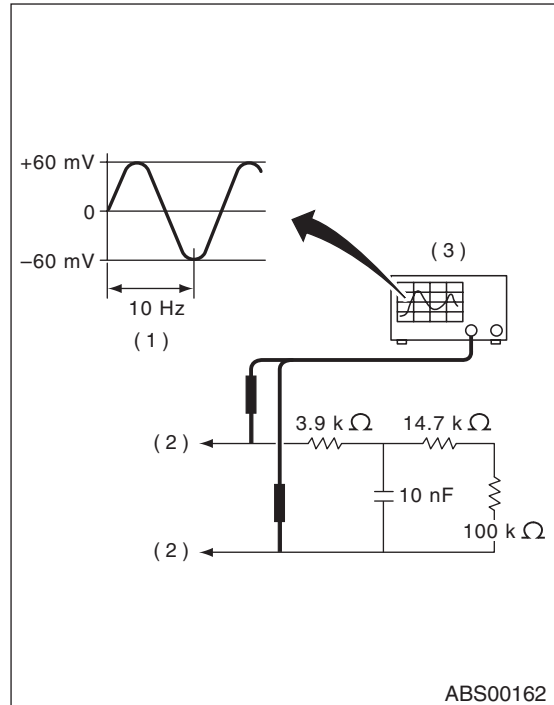
If the clearance is outside specifications, adjust the gap using spacer (Part No. 26755AA000).

3. OUTPUT VOLTAGE

Output voltage can be checked by the following method. Install resistor and condenser, then rotate wheel about 2.75 km/h (2 MPH) or equivalent.

NOTE:

Regarding terminal No., refer to item 1. ABS SENSOR.



- (1) Standard output voltage:
Approx. 120 mV (When it is 10 Hz)
- (2) To terminal
- (3) Oscilloscope

D: ADJUSTMENT

Adjust the gap using spacer (Part No. 26755AA000).

6. Front Tone Wheel

A: REMOVAL

Refer to Front Drive Shaft, because front tone wheel is integrated with front drive shaft.

<Ref. to DS-29, REMOVAL, Front Drive Shaft.>

B: INSTALLATION

Refer to Front Drive Shaft, because front tone wheel is integrated with front drive shaft.

<Ref. to DS-30, INSTALLATION, Front Drive Shaft.>

C: INSPECTION

Visually check tone wheels teeth (44 pieces) for cracks or dents. If necessary, replace tone wheel with a new one.

NOTE:

Replace BJ assembly with new one as a single unit if there are any defects found on tone wheel is unitized with BJ assembly of drive shaft.

7. Rear Tone Wheel

A: REMOVAL

Refer to Rear Drive Shaft, because rear tone wheel is integrated with rear drive shaft.

<Ref. to DS-37, REMOVAL, Rear Drive Shaft.>

B: INSTALLATION

Refer to Rear Drive Shaft, because rear tone wheel is integrated with rear drive shaft.

<Ref. to DS-37, INSTALLATION, Rear Drive Shaft.>

C: INSPECTION

Visually check tone wheels teeth (44 pieces) for cracks or dents. If necessary, replace tone wheel with a new one.

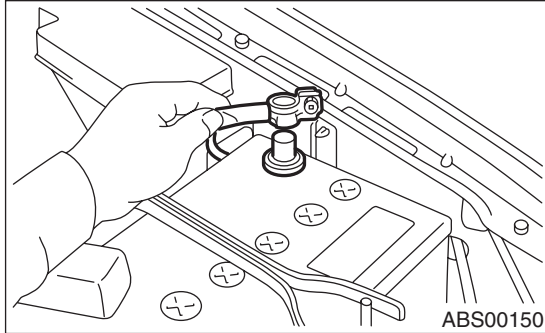
NOTE:

Replace BJ assembly with new one as a single unit if there are any defects found on tone wheel is unitized with BJ assembly of drive shaft.

8. G Sensor

A: REMOVAL

1) Disconnect ground cable from battery.



2) Remove console cover.

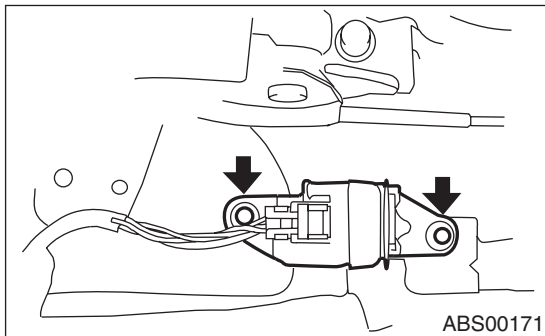
<Ref. to EI-36, REMOVAL, Console Box.>

3) Disconnect connector from G sensor.

4) Remove G sensor from body.

CAUTION:

Do not drop or bump G sensor.

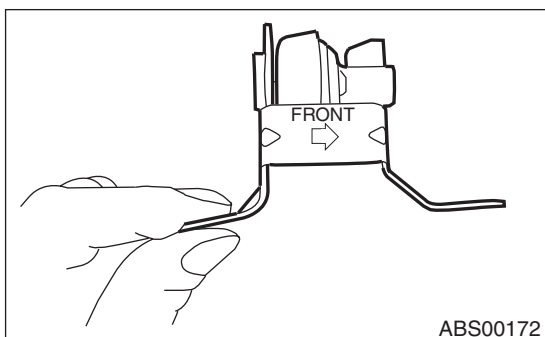


B: INSTALLATION

1) Install in the reverse order of removal.

NOTE:

Do not install G sensor in the wrong direction.
There is an arrow mark on the sensor showing which side faces the vehicle front.



G SENSOR

ABS

C: INSPECTION

Step	Check	Yes	No
1	CHECK SUBARU SELECT MONITOR.	Go to step 5.	Go to step 2.
2	CHECK G SENSOR. 1) Turn ignition switch to OFF. 2) Remove G sensor from vehicle. 3) Connect connector to G sensor. 4) Turn ignition switch to ON. 5) Measure voltage between G sensor connector terminals. Connector & terminal: (R70) No. 2 (+) — No. 3 (-)	Go to step 3.	Replace G sensor.
3	CHECK G SENSOR. Measure voltage between G sensor connector terminals. Connector & terminal: (R70) No. 2 (+) — No. 3 (-)	Go to step 4.	Replace G sensor.
4	CHECK G SENSOR. Measure voltage between G sensor connector terminals. Connector & terminal: (R70) No. 2 (+) — No. 3 (-)	G sensor is normal.	Replace G sensor.
5	CHECK G SENSOR. 1) Turn ignition switch to OFF. 2) Connect select monitor connector to data link connector. 3) Turn select monitor into {BRAKE CONTROL} mode. 4) Set the display in the {Current Data Display & Save} mode. 5) Read the G sensor output voltage.	Go to step 6.	Replace G sensor.
6	CHECK G SENSOR. 1) Remove console box. 2) Remove G sensor from vehicle. (Do not disconnect connector.) 3) Read the select monitor display.	Go to step 7.	Replace G sensor.
7	CHECK G SENSOR. Read the select monitor display.	G sensor is normal.	Replace G sensor.