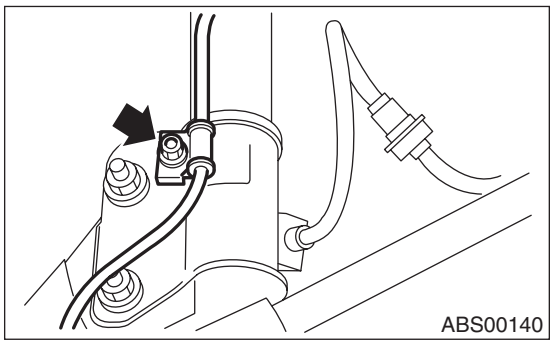
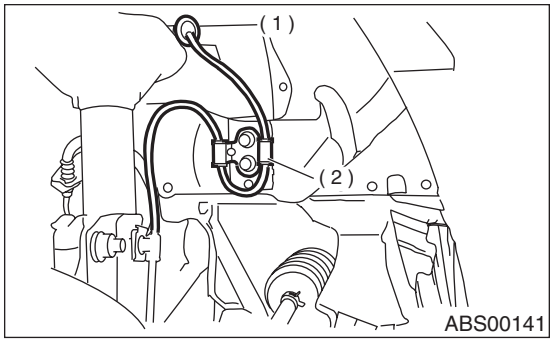
4. Front ABS Sensor

A: REMOVAL

1) Disconnect the ground terminal from battery.
2) Jack-up the vehicle, support it with rigid racks, and remove the wheel.
3) Disconnect the front ABS sensor connector located next to the front strut mounting house in engine compartment and pull out the connector from the tire side through the grommet hole.
4) Remove the bolts which secure sensor harness to strut.



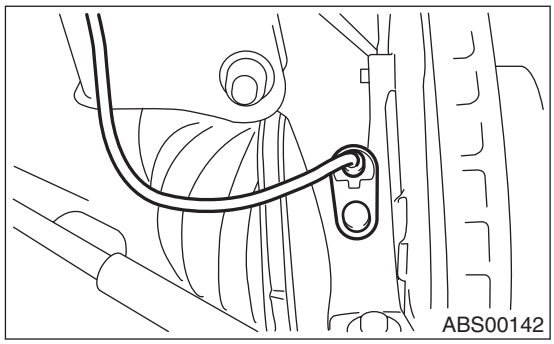
5) Remove the bolts which secure sensor harness to body.



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

6) Remove the bolts which secure front ABS sensor to housing, and remove the front ABS sensor.

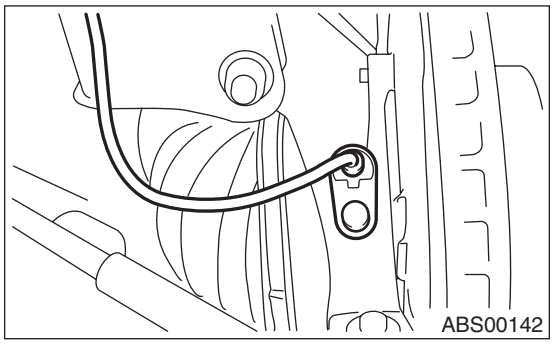
CAUTION:
• Be careful not to damage the pole piece located at tip of the sensor and teeth faces during removal.
• Do not pull the sensor harness during removal.



B: INSTALLATION

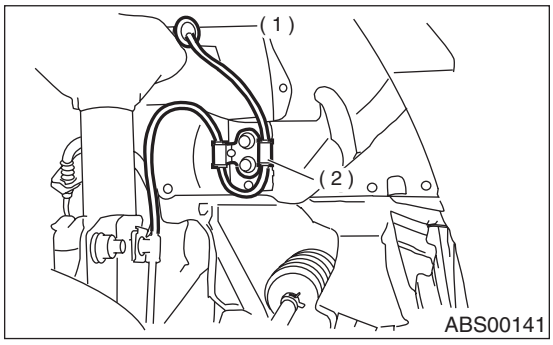
1) Temporarily install the front ABS sensor on housing.

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



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

Tightening torque:
33 N·m (3.3 kgf-m, 24 ft-lb)

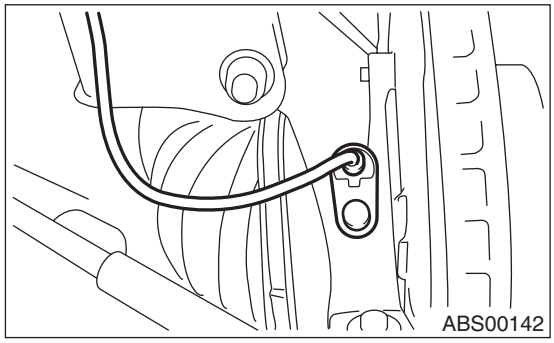


(1) To front ABS sensor connector
(2) Bracket

3) Measure the ABS sensor clearance. After standard clearance is obtained over the entire perimeter, tighten the ABS sensor on housing to specified torque.

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

Tightening torque:
32 N·m (3.3 kgf-m, 24 ft-lb)



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

RH: White
LH: Yellow

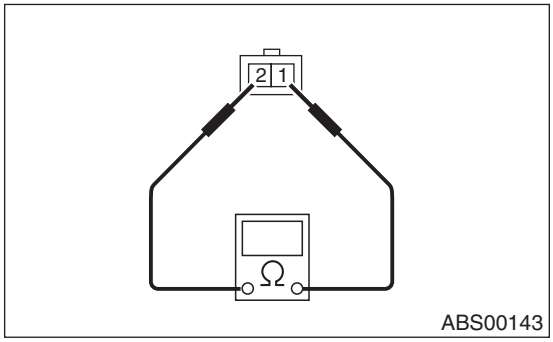
NOTE:
If the clearance is outside specifications, readjust.

4) After confirmation of the ABS sensor clearance, connect the connector to ABS sensor.
5) Install the wheel.
6) Connect the battery ground terminal to battery.

C: INSPECTION

1. ABS SENSOR

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



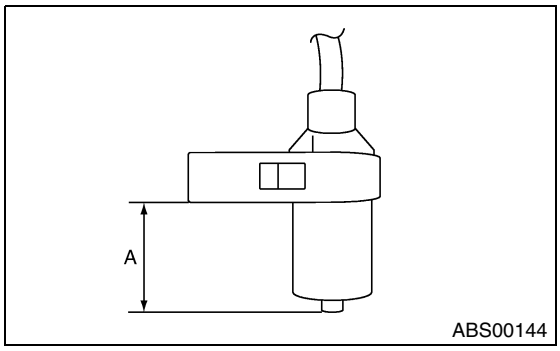
Terminal No.	Standard
1 and 2	1.25±0.25 kΩ

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

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

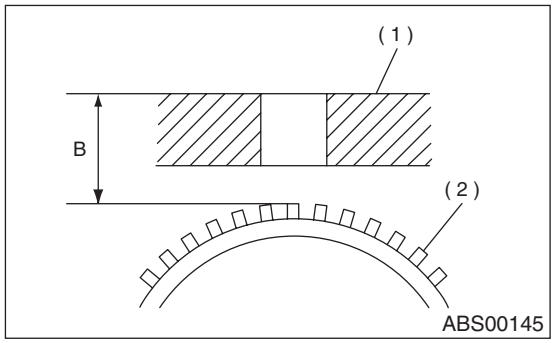
2. SENSOR GAP

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



2) Measure the distance “B” between the surface where 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.

ABS sensor clearance = B − A

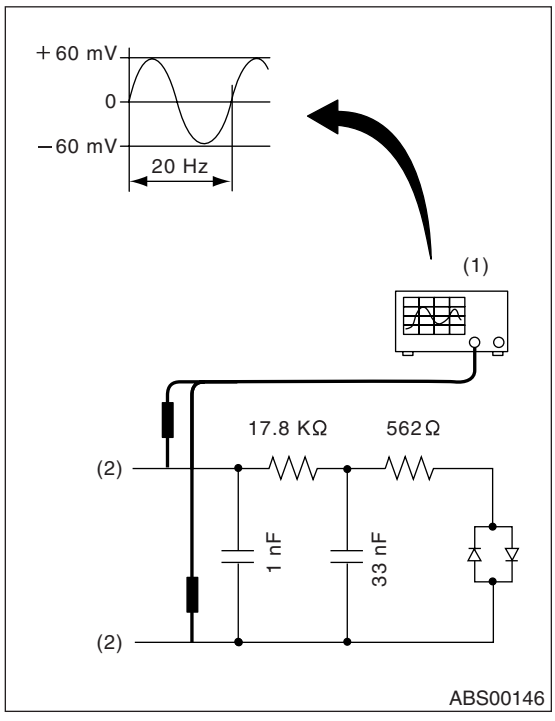
ABS sensor standard clearance:
0.3 — 0.8 mm (0.012 — 0.031 in)

NOTE:
If the clearance is outside specifications, readjust.

3. OUTPUT VOLTAGE

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

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



D: ADJUSTMENT

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