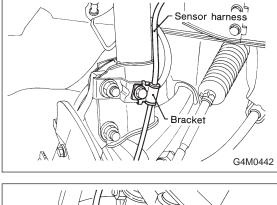
Proportioning valve to bracket Normal brake vehicle: 22±4.4 N·m (2.25±0.45 kg-m, 16.3±3.3 ft-lb) A.B.S. equipped vehicle: 18±5 N·m (1.8±0.5 kg-m, 13.0±3.6 ft-lb)

14. A.B.S. Sensor

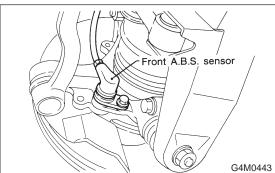
A: REMOVAL

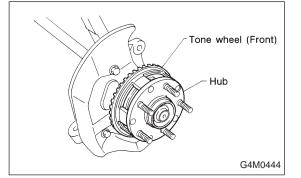
1. FRONT A.B.S. SENSOR

1) Disconnect front A.B.S. sensor located in engine compartment.



2) Remove bolts which secure sensor harness to bracket.





3) Remove bolts which secure front A.B.S. sensor to housing, and remove front A.B.S. sensor.

CAUTION:

Be careful not to damage pole piece located at tip of the sensor during removal.

4) Remove front disc brake caliper and disc rotor from housing after removing front tire.

5) Remove front drive shaft and housing and hub assembly. <Ref. to 4-2 [W1A0].>

6) Remove tone wheel while removing hub from housing and hub assembly. <Ref. to 4-2 [W1B0].>

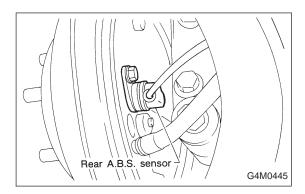
CAUTION:

Be careful not to damage teeth faces of tone wheel during removal.

2. REAR A.B.S. SENSOR

1) Remove rear seat and disconnect rear A.B.S. sensor connector.

2) Remove rear sensor harness bracket from rear trailing link.



3) Remove rear A.B.S. sensor from rear back plate.

4) Remove rear tone wheel while removing hub from housing and hub assembly. <Ref. to 4-2 [W2A0].> CAUTION:

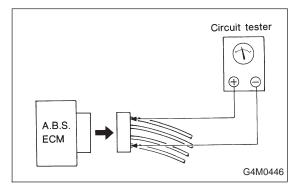
• Be careful not to damage pole piece of sensor and teeth faces.

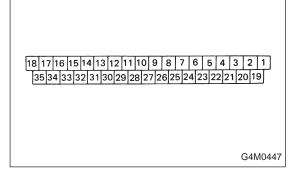
• Do not pull sensor harness during removal.

B: INSPECTION

1. A.B.S. SENSOR

1) Check pole piece of A.B.S. sensor for foreign particles or damage. If necessary, clean pole piece or replace A.B.S. sensor.





2) Measure resistance between A.B.S. ECM terminals.

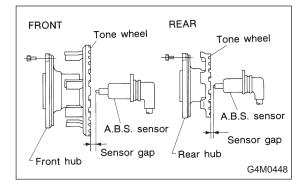
A.B.S. sensor	Model	Terminal No.	Standard
Front - LH	AWD	22 and 4	1.0±0.2 kΩ
	FWD	5 and 4	
Front - RH	ALL	23 and 21	
Rear - LH	ALL	8 and 9	
Rear - RH	ALL	24 and 26	
Front - LH	AWD	22 and 10, 20, 34	More than 1 x $10^3 k\Omega$ (Insulation resistance)
	FWD	5 and 10, 20, 34	
Front - RH	ALL	23 and 10, 20, 34	
Rear - LH	ALL	8 and 10, 20, 34	
Rear - RH	ALL	24 and 10, 20, 34	

CAUTION:

If resistance is outside the standard value, replace wheel A.B.S. sensor with new one or adjust sensor gap between A.B.S. sensor and tone wheel.

NOTE:

Check A.B.S. sensor cable for discontinuity. If necessary, replace with a new one.



2. TONE WHEEL

1) Check tone wheel's teeth (44 pieces) for cracks or dents. If necessary, replace tone wheel with a new one.

2) Clearances (sensor gaps) should be measured one by one to ensure tone wheel and speed sensor are installed correctly.

A.B.S. sensor clearance:

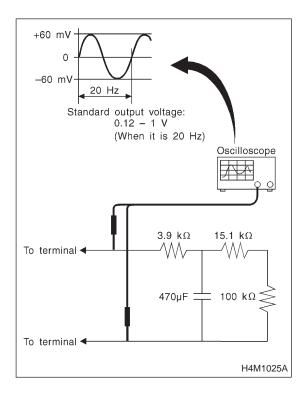
Front

0.9 — 1.4 mm (0.035 — 0.055 in) Rear

NOTE:

• If clearance is narrow, adjust by using spacer (Part No. 26755AA000)

• If clearance is wide, check the outputted voltage then replace A.B.S. sensor or tone wheel if the outputted voltage is outside the specification.



3. OUTPUT VOLTAGE

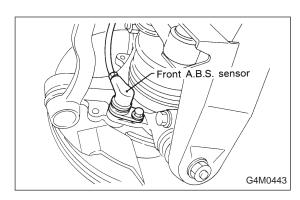
1) Output voltage can be checked by the following method. Install resistor and condenser as follows, then rotate wheel about 2.75 km/h (1.7 MPH) or equivalent. NOTE:

Regarding terminal No., please refer to item A.B.S. SEN-SOR.

C: INSTALLATION

1. FRONT A.B.S. SENSOR

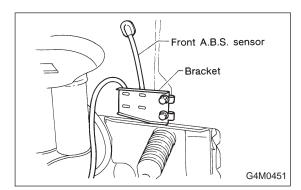
1) Install tone wheel on hub, then install housing on hub assembly. <Ref. to 4-2 [W1D0].>



2) Temporarily install front A.B.S. sensor on housing. CAUTION:

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

3) Install front drive shaft to hub spline. <Ref. to 4-2 [W1E0].>



4) Install front A.B.S. sensor on strut and wheel apron bracket.

Tightening torque: 32±10 N·m (3.3±1.0 kg-m, 24±7 ft-lb)

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

A.B.S. sensor standard clearance: 0.9 — 1.4 mm (0.035 — 0.055 in)

Tightening torque: 32±10 N m (3.3±1.0 kg-m, 24±7 ft-lb)

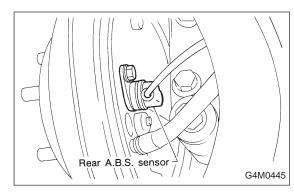
NOTE:

If the clearance is outside specifications, readjust.

2. REAR A.B.S. SENSOR

1) Install rear tone wheel on hub, then rear housing on hub. <Ref. to 4-2 [W2D0].>

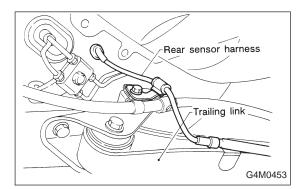
SERVICE PROCEDURE



2) Temporarily install rear A.B.S. sensor on back plate. **CAUTION:**

Be careful not to strike A.B.S. sensor's pole piece and tone wheel's teeth against adjacent metal parts.

3) Install rear drive shaft to rear housing and rear differential spindle. <Ref. to 4-2 [W2E0].>



 4) Install rear sensor harness on rear trailing link.
Tightening torque: 32±10 N·m (3.3±1.0 kg-m, 24±7 ft-lb)

5) Place a thickness gauge between A.B.S. sensor's pole piece and tone wheel's tooth face. After standard clearance is obtained over the entire perimeter, tighten A.B.S. sensor on back plate to specified torque.

A.B.S. sensor standard clearance: 0.7 — 1.2 mm (0.028 — 0.047 in)

Tightening torque: 32±10 N·m (3.3±1.0 kg-m, 24±7 ft-lb)

NOTE:

If the clearance is outside specifications, readjust.