

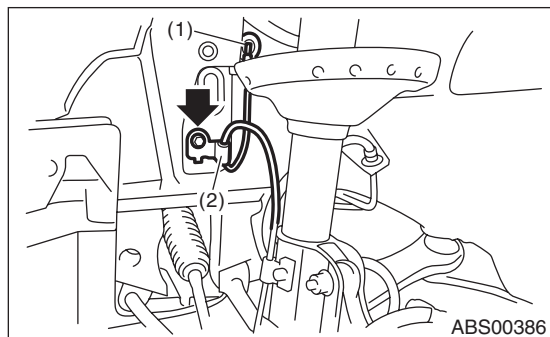
Front ABS Wheel Speed Sensor

VEHICLE DYNAMICS CONTROL (VDC)

8. Front ABS Wheel Speed Sensor

A: REMOVAL

- 1) Disconnect the ground cable from battery.
- 2) Disconnect the ABS wheel speed sensor connector located next to the front strut mounting house in the engine compartment.
- 3) Remove the bolts and then remove the sensor harness bracket.

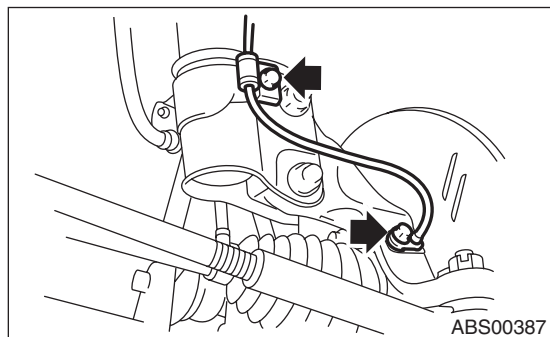


- (1) To the front ABS wheel speed sensor connector
(2) Sensor harness bracket

- 4) Remove the bolts which secure the sensor harness to the front strut.
- 5) Remove the bolts, and remove the front ABS wheel speed sensor from the front housing.

CAUTION:

- Be careful not to damage the sensor.
- Do not apply excessive force to the sensor harness.



B: INSTALLATION

CAUTION:

Be careful not to damage the sensor.

Install each part in the reverse order of removal.

Tightening torque:

Sensor:

7.5 N·m (0.76 kgf-m, 5.5 ft-lb)

Bracket:

33 N·m (3.36 kgf-m, 24.3 ft-lb)

NOTE:

- Check the identification (mark) on the harness to make sure there is no warpage. (RH: K1 (White), LH: K2 (Yellow))
- Check if the harness is not pulled and does not come in contact with the suspension or body during steering wheel effort.

C: INSPECTION

1. CHECK WITH SUBARU SELECT MONITOR

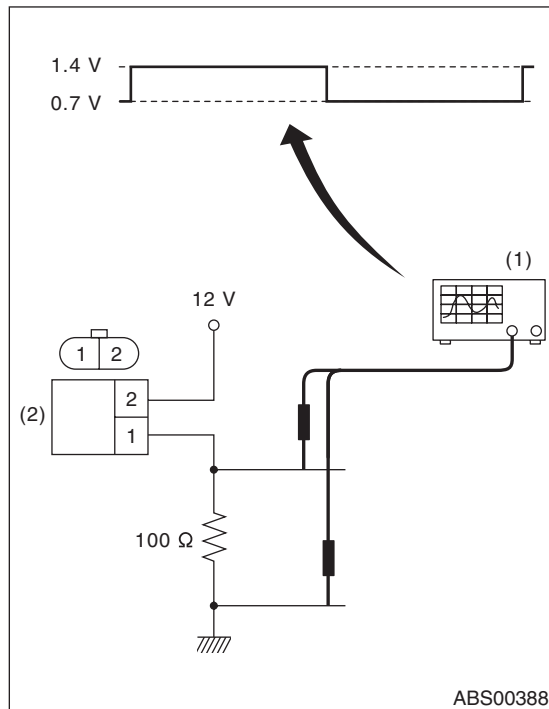
- 1) Connect the Subaru Select Monitor to the data link connector.
- 2) Select {Current Data Display & Save}. Check if the speed indicated on the display changes in the same manner as the speedometer reading during acceleration/deceleration when the steering wheel is in the straight-ahead position.
- 3) If the speed indicated on the display does not change, check the ABS wheel speed sensor. <Ref. to VDC-25, ABS WHEEL SPEED SENSOR, INSPECTION, Front ABS Wheel Speed Sensor.>

2. ABS WHEEL SPEED SENSOR

- 1) Check the tip of the ABS wheel speed sensor for foreign particles or damage. If necessary, clean the tip or replace the ABS wheel speed sensor.
- 2) Check the ABS wheel speed sensor cable for discontinuity. If defective, replace the ABS wheel speed sensor.
- 3) Connect a 12 V power supply to No. 2 terminal of sensor connector as shown in the figure, then attach resistance to the No. 1 terminal. Rotate the wheel at about 2.75 km/h (2 MPH), and measure the voltage using an oscilloscope.

Standard value of output voltage:

0.7 — 1.4 V



- (1) Oscilloscope
(2) ABS wheel speed sensor

- 4) Replace the ABS wheel speed sensor if the inspection result is not within the standard value.