

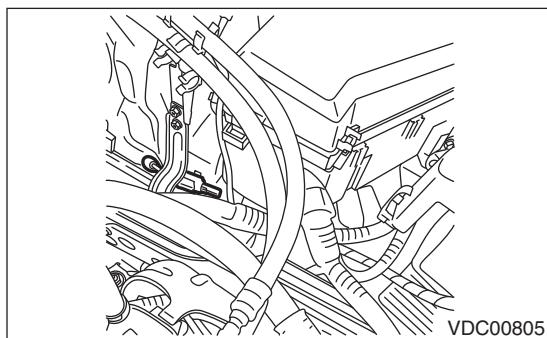
# Front ABS Wheel Speed Sensor

## VEHICLE DYNAMICS CONTROL (VDC)

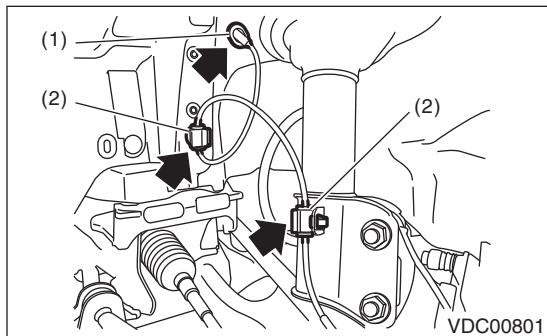
### 7. Front ABS Wheel Speed Sensor

#### A: REMOVAL

- 1) Disconnect the ground cable from battery.
- 2) Disconnect the ABS wheel speed sensor connector in the engine compartment.



- 3) Remove the sensor harness clip and the grommet.

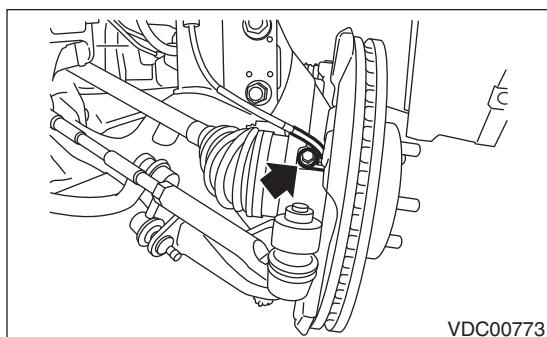


- (1) Grommet
- (2) Sensor harness clip

- 4) Remove the front ABS wheel speed sensor from housing.

#### CAUTION:

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



#### B: INSTALLATION

Install in the reverse order of removal.

#### Tightening torque:

##### Sensor:

7.5 N·m (0.76 kgf·m, 5.5 ft·lb)

#### CAUTION:

Be careful not to damage the sensor.

#### NOTE:

- Check the identification (mark) on the harness to make sure there is no warpage. <Ref. to VDC-2, SPECIFICATION, General Description.>
- Check if the harness is not pulled and does not come in contact with the suspension or body while operating the steering.

#### C: INSPECTION

##### 1. CHECK WITH SUBARU SELECT MONITOR

- 1) Connect the Subaru Select Monitor to 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-20, ABS WHEEL SPEED SENSOR, INSPECTION, Front ABS Wheel Speed Sensor.>

##### 2. ABS WHEEL SPEED SENSOR

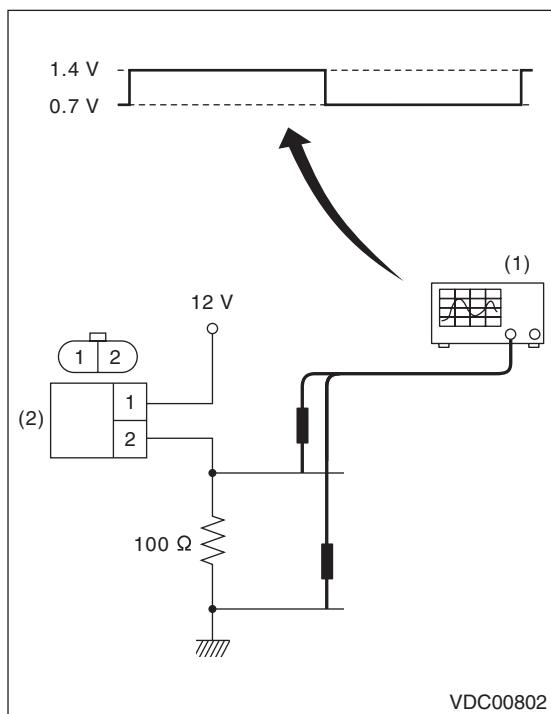
- 1) Check the tip of the ABS wheel speed sensor for foreign particles or damage. If necessary, clean the tip or replace the ABS wheel speed sensor.
- 2) Connect a 12 V power supply to No. 2 terminal of sensor connector as shown in the figure, then attach resistance to the No. 1 terminal. Rotate the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

# Front ABS Wheel Speed Sensor

VEHICLE DYNAMICS CONTROL (VDC)

**Standard value of output voltage:**

0.7 — 1.4 V



(1) Oscilloscope

(2) ABS wheel speed sensor

**NOTE:**

Check the ABS wheel speed sensor cable for discontinuity. If necessary, replace with a new part.