16.Turbine Speed Sensor

A: REMOVAL

CAUTION:

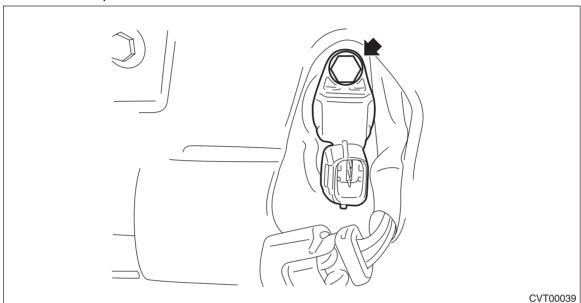
Be sure to prevent water or oil from contacting the connector terminal of turbine speed sensor. If adhesion occurs, replace with a new part.

1) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

NOTE:

For the 12 volt engine restart battery, disconnect the ground terminal from 12V engine restart battery sensor.

- 2) Lift up the vehicle.
- 3) Remove the harness connector from turbine speed sensor.
- 4) Remove the turbine speed sensor.



B: INSTALLATION

CAUTION:

Be sure to prevent water or oil from contacting the connector terminal of turbine speed sensor. If adhesion occurs, replace with a new part.

Install in the reverse order of removal.

NOTE:

- Use new O-rings.
- · Apply CVTF to the O-ring.

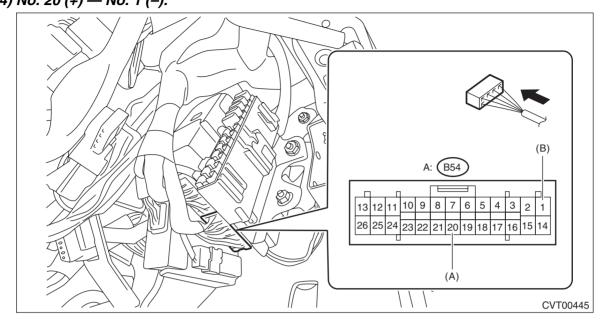
Tightening torque:

7 N·m (0.7 kgf-m, 5.2 ft-lb)

C: INSPECTION

1) Set the probe of oscilloscope to TCM harness connector.

Connector & terminal (B54) No. 20 (+) — No. 1 (-):



- (A) + probe
- (B) probe
- 2) Start and warm up the engine.
- 3) Perform "Engine only Drive Mode" using the Subaru Select Monitor. <Ref. to HEV(diag)-71, HYBRID POWERTRAIN CONTROL SYSTEM, OPERATION, System Operation Check Mode.>
- 4) Check the waveform and output voltage of the turbine speed sensor with engine idling.

NOTE:

The waveform cycle changes as the speed changes.

