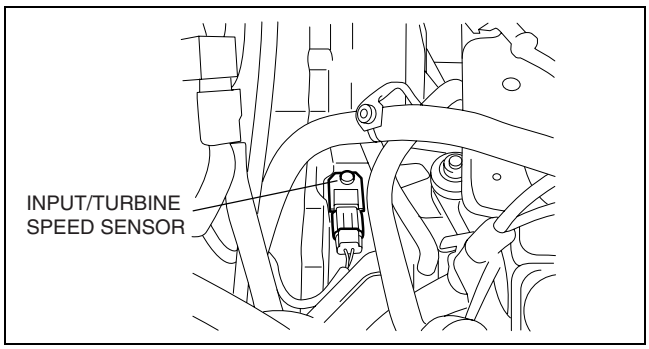
4. Disconnect the input/turbine speed sensor connector.
5. Remove the input/turbine speed sensor.
6. Apply ATF to a new O-ring and install it on an input/turbine speed sensor.
7. Install the input/turbine speed sensor.

   Tightening torque
   8—11 N·m {82—112 kgf·cm, 71—97 in·lbf}

8. Connect the input/turbine speed sensor connector.
9. Install the battery, battery box and battery tray. (See 01–17A–1 BATTERY REMOVAL/INSTALLATION [L3, LF].)
10. Connect the negative battery cable.
11. Install the battery duct and battery cover. (See 01–17A–1 BATTERY REMOVAL/INSTALLATION [L3, LF].)



B3E0517W011

VEHICLE SPEED SENSOR (VSS) INSPECTION [FN4A-EL]

DPE051719200W08

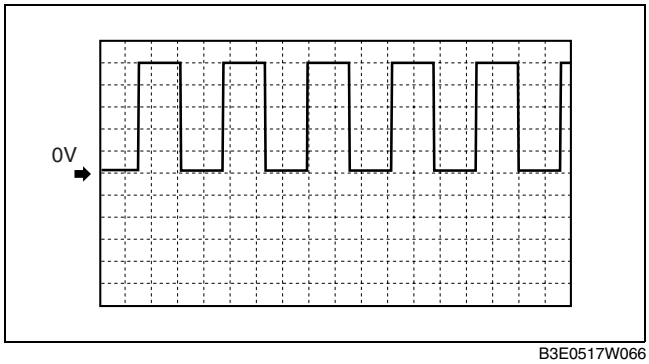
1. Connect the WDS or equivalent, drive the vehicle, and verify the input value of the OSS PID.
   - If the input value is 0 rpm, perform the “Power Supply Voltage Inspection”, “Open Circuit Inspection”, or “Short Circuit Inspection”.
   - If the input value is other than 0 rpm, perform the “Visual Inspection” or “Wave Profile Inspection”.

Visual Inspection

1. Remove the VSS. (See 05–17–22 VEHICLE SPEED SENSOR (VSS) REMOVAL/INSTALLATION [FN4A-EL].)
2. Verify that the sensor is free of any metallic shavings or particles.
   - If there is any malfunction, clean them off.
3. Install the VSS. (See 05–17–22 VEHICLE SPEED SENSOR (VSS) REMOVAL/INSTALLATION [FN4A-EL].)

Wave Profile Inspection

1. Remove the PCM. (See 01–40A–5 PCM REMOVAL/INSTALLATION [L3, LF].)
2. Connect the WDS or equivalent to DLC-2.
3. Connect oscilloscope test leads to the following PCM connector terminals.
   - (+) lead: PCM terminal 1J
   - (–) lead: PCM terminal 1BD
4. Start the engine.
5. Monitor VSS PID.
6. Inspect wave profile.
   - PCM terminal: 1J (+)—1BD (–)
   - Oscilloscope setting: 1 V/DIV (Y), 2.5 ms/DIV (X), DC range
   - Vehicle condition: drive the vehicle with 32 km/h {20 mph}
     — If there is any malfunction, perform the “Open Circuit Inspection” or “Short Circuit Inspection”



B3E0517W066

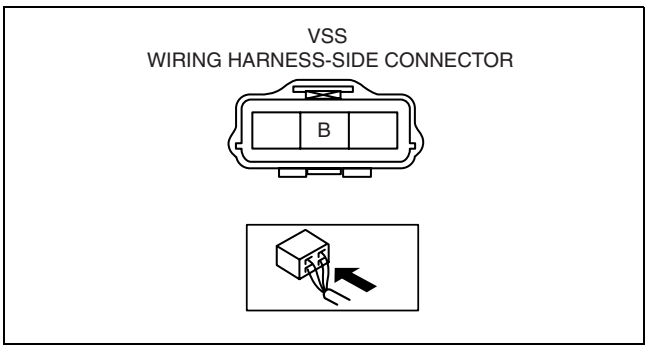
Power Supply Voltage Inspection

1. Disconnect the VSS connector.
2. Turn the ignition switch to the ON position.

3. Measure voltage at VSS terminal B.

Vehicle speed sensor (VSS) voltage
4.5—5.5 V

- If voltage is normal, go to Open Circuit Inspection and Short Circuit Inspection.
- If there is any malfunction, repair wiring harness between VSS and PCM.



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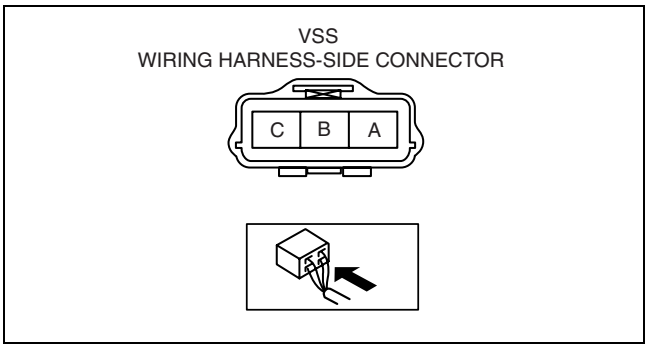
Open Circuit Inspection

1. Inspect the following circuit for open.
   - Power circuit (VSS terminal A to main relay terminal D)
   - Ground circuit (VSS terminal C to GND)
   - If an open circuit or short circuit is found, repair the malfunctioning wiring harness.
   - If there are no open or short circuits, perform the sensor rotor inspection.

Short Circuit Inspection

1. Inspect the following circuit for short circuit.
   - Power circuit (VSS terminal A to main relay terminal D)
   - If an open circuit or short circuit is found, repair the malfunctioning wiring harness.
   - If there are no open or short circuits, perform the sensor rotor inspection.



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Sensor Rotor Inspection

1. Remove the VSS. (See 05–17–22 VEHICLE SPEED SENSOR (VSS) REMOVAL/INSTALLATION [FN4A-EL].)
2. Shift the selector lever to N position.
3. Inspect sensor rotor surface via VSS installation hole while rotating the front tire manually.
   (1) Is sensor rotor free of damage and cracks?
   (2) Is sensor rotor free of any metallic shavings or particles?
      - If sensor rotor is normal, replace the VSS.
      - If there is any malfunction, clean or replace the sensor rotor.

VEHICLE SPEED SENSOR (VSS) REMOVAL/INSTALLATION [FN4A-EL]

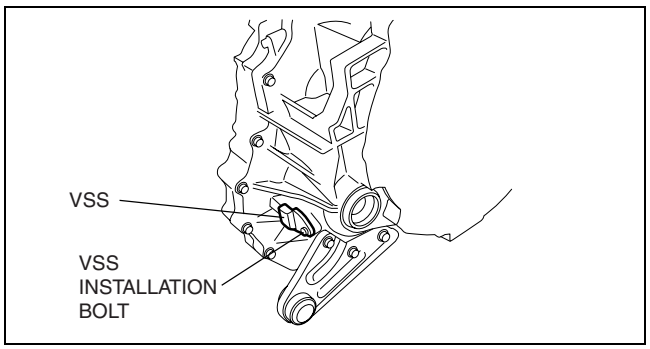
DPE051719200W09

Caution

- **Water or foreign material entering the connector can cause a poor connection or corrosion. Be sure not to drop water or foreign material on the connector when disconnecting it.**
- **If foreign materials are stuck to the VSS, disturbance by magnetic flux can cause sensor output to be abnormal and thereby negatively affect control. Make sure that foreign materials such as iron filings are not stuck to the VSS during installation.**

1. Remove the battery duct and battery cover. (See 01–17A–1 BATTERY REMOVAL/INSTALLATION [L8, LF].)
2. Disconnect the negative battery cable.
3. Remove the under cover.
4. Disconnect the VSS connector.

5. Remove the VSS.
6. Apply ATF to a new O-ring and install it on a new VSS.



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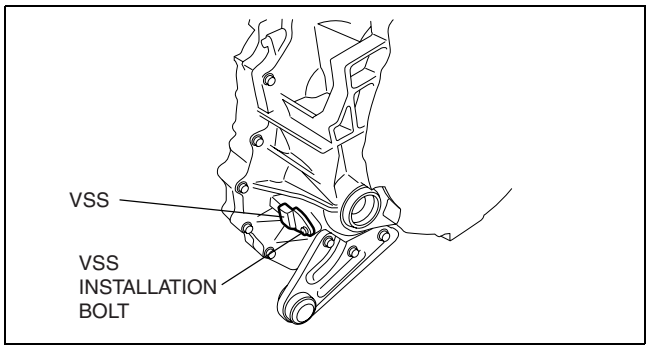
7. Install the VSS.

   Tightening torque
   8—11 N·m {82—112 kgf·cm, 71—97 in·lbf}

8. Connect the VSS connector.
9. Install the under cover.
10. Connect the negative battery cable.
11. Install the battery duct and battery cover. (See 01–17A–1 BATTERY REMOVAL/INSTALLATION [L8, LF].)



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SOLENOID VALVE INSPECTION [FN4A-EL]

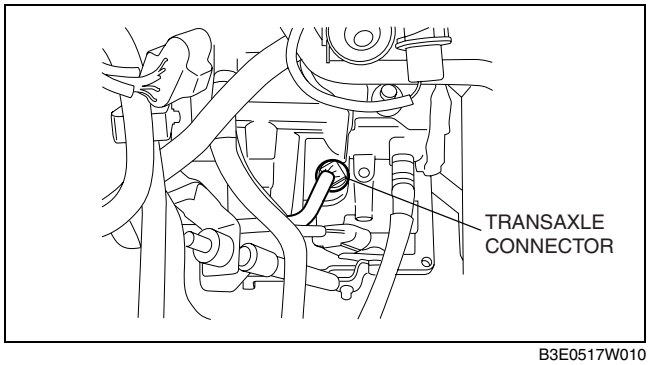
DPE051721101W01

Resistance Inspection (On-Vehicle Inspection)

Caution
- **Water or foreign material entering the connector can cause a poor connection or corrosion. Be sure not to drop water or foreign material on the connector when disconnecting it.**

1. Remove the battery duct and battery cover. (See 01–17A–1 BATTERY REMOVAL/INSTALLATION [L8, LF].)
2. Disconnect the negative battery cable.
3. Remove the under cover.
4. Disconnect the transaxle connector.

Note
- When inspecting the pressure control solenoid, connect the ground connection to the ground terminal (terminal I) of the pressure control solenoid inside the solenoid valve connector.



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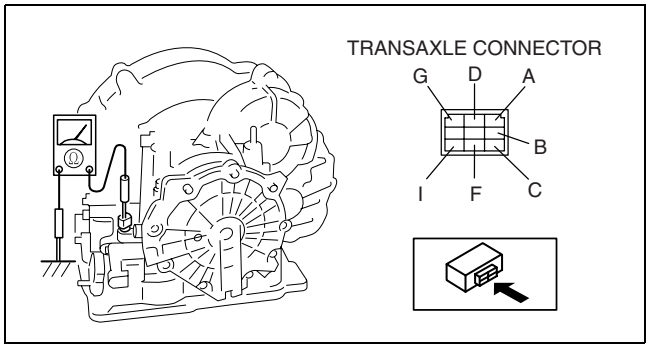
5. Measure the resistance between the following terminals.
   - If there is any malfunction, inspect the ground, then perform the operating inspection.



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