

VEHICLE SPEED SENSOR (VSS) INSPECTION

B3E051719010W05

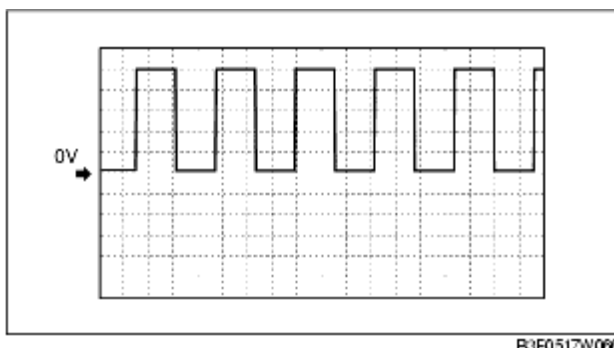
1. Connect the WDS or equivalent, drive the vehicle, and verify the input value of the OSS PID.
 - If the input value is 0 rpm, perform the "Power Supply Voltage Inspection", "Open Circuit Inspection", or "Short Circuit Inspection".
 - If the input value is other than 0 rpm, perform the "Visual Inspection"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

Visual Inspection

1. Remove the VSS. (See [VEHICLE SPEED SENSOR \(VSS\) REMOVAL/INSTALLATION.](#))
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 [VEHICLE SPEED SENSOR \(VSS\) REMOVAL/INSTALLATION.](#))

Wave Profile Inspection

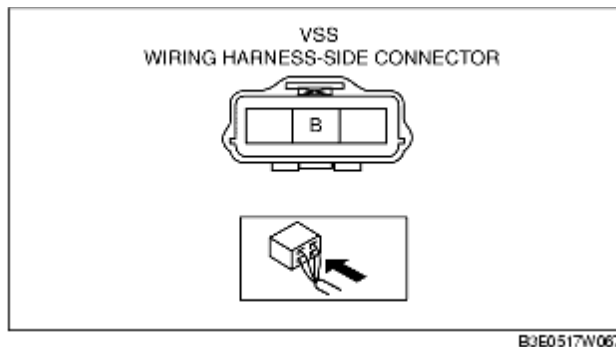
1. Remove the PCM. (See [INTAKE-AIR SYSTEM REMOVAL/INSTALLATION \[ZJ, Z6\].](#)) (See [BATTERY REMOVAL/INSTALLATION \[LF\].](#))
2. Connect the WDS or equivalent to DLC-2.
3. Connect oscilloscope test leads to the following PCM connector terminals.
 - (+) lead: PCM terminal 1AY
 - (-) lead: PCM terminal 2Y
4. Start the engine.
5. Monitor VSS PID.
6. Inspect wave profile.



- PCM terminal: 1AY (+)-2Y (-)
- 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"

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.



Specification

4.5-5.5 V

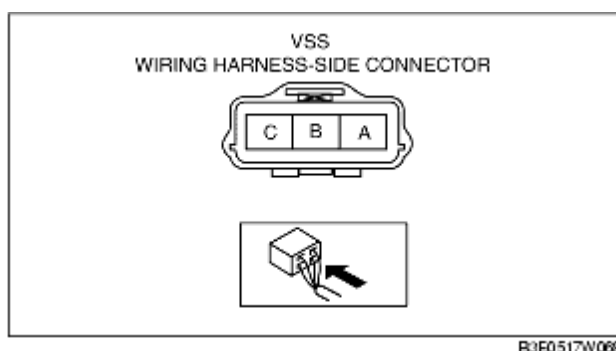
- If voltage is normal, go to Open Circuit Inspection and Short Circuit Inspection.
- If there is any malfunction, repair wiring harness between VSS and PCM.

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.

Sensor Rotor Inspection

1. Remove the VSS. (See [VEHICLE SPEED SENSOR \(VSS\) REMOVAL/INSTALLATION.](#))

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.