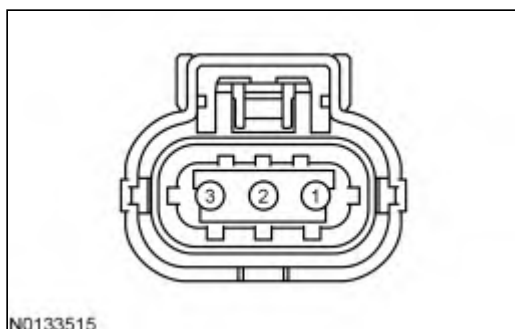


DP: Output Shaft Speed (OSS) Sensor/Vehicle Speed Sensor (VSS)

This pinpoint test is intended to diagnose the following:

- OSS (7F293)
- harness circuits: OSS, PWRGND, SIGRTN and VBPWR
- PCM (12A650)

Output Shaft Speed (OSS) Sensor Connector

Pin	Circuit
3	SIGRTN (Signal Return)
2	OSS (Output Shaft Speed)
1	VBPWR (Vehicle Buffered Power)

DP1 CHECK FOR DTCS

Note: For vehicles with automatic transmission and OSS sensor DTCs, refer to the Workshop Manual Section 307-01, Diagnostic Trouble Code (DTC) Charts.

Are DTCs P0500, P0503, P0720, P0721, P0722, P0723, P1500, P1502, P1900, P1934 or P193F present?

Yes	GO to DP2 .
No	RETURN to Section 3, Symptom Charts for further direction.

DP2 VERIFY THE DRIVE CYCLE

- Access the PCM and monitor the OSS_SRC (RPM) PID.
- Access the PCM and monitor the VSS (SPD) PID.
- Drive the vehicle.
- Monitor both of the PIDs in all transmission gear ranges while increasing and decreasing the speed.

Do both PID readings increase and decrease with engine and vehicle speed?

Yes	GO to DP3 .
No	GO to DP4 .

DP3 VISUAL INSPECTION

- OSS Sensor connector disconnected.
- Inspect the OSS sensor harness for damage.
- Inspect the OSS harness connector for damage and correct seating.
- Carry out a thorough wiggle test on the OSS harness.

Is a concern present?

Yes	REPAIR as necessary. Clear the PCM DTCs. REPEAT the self-test.
No	GO to Pinpoint Test Z .

DP4 CHECK VOLTAGE TO THE OSS SENSOR

- Ignition OFF.
- OSS Sensor connector disconnected.
- Ignition ON, engine OFF.
- Measure the voltage between:

(+) OSS Sensor Connector, Harness Side	(-) Vehicle Battery
VBPWR - Pin 1	Negative terminal

Is the voltage greater than 10.5 V?

Yes	GO to DP5 .
No	REPAIR the open circuit. Clear the PCM DTCs. REPEAT the self-test.

DP5 CHECK THE OSS CIRCUIT FOR AN OPEN

- Ignition OFF.
- PCM connector disconnected.
- OSS Sensor connector disconnected.
- Measure the resistance between:

(+) PCM Connector, Harness Side	(-) OSS Sensor Connector, Harness Side
OSS	OSS - Pin 2
SIGRTN	SIGRTN - Pin 3

Are the resistances less than 5 ohms?

Yes	GO to DP6 .
No	REPAIR the open circuit. Clear the PCM DTCs. REPEAT the self-test.

DP6 CHECK THE OSS CIRCUIT FOR A SHORT TO GROUND

- Measure the resistance between:

(+) OSS Sensor Connector, Harness Side	(-)
OSS - Pin 2	Ground

Is the resistance greater than 10K ohms?

Yes	GO to DP7 .
No	REPAIR the short circuit. Clear the PCM DTCs. REPEAT the self-test.

DP7 CHECK THE OSS CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition ON, engine OFF.
- OSS Sensor connector disconnected.
- Measure the voltage between:

(+) OSS Sensor Connector, Harness Side	(-) Vehicle Battery
OSS - Pin 2	Negative terminal

Is any voltage present?

Yes	REPAIR the short circuit. Clear the PCM DTCs. REPEAT the self-test.
No	REMOVE the OSS sensor and INSPECT the target wheel. REPAIR as necessary. If OK, INSTALL a new OSS. REFER to the Workshop Manual Section 308-03, Manual Transmission. Clear the PCM DTCs. REPEAT the self-test.