P0121

Tests 1 - 2

TEST	ACTION	APPLICABILITY
1	Ignition off. Disconnect APPS Connector. **Check connectors-Clean/repair as necessary.** Start the Engine. Using a Voltmeter, measure the voltage of the APPS supply circuit. Is the voltage above 5.5 volts? Yes → Go To 2 No → Go To 3	ENGINE- 5.9L DIESEL
2	Ignition off. Disconnect APPS Connector. **Check Connectors-Clean/repair as necessary.** Start the Engine. Cycle Key Off, then On. Using a voltmeter, measure the voltage between the APPS supply circuit. Is the voltage above 5.5 volts? Yes → Repair the short to voltage, with the key on. Perform Verification Test VER-5A. No → Repair the short to voltage, with the engine running. Perform Verification Test VER-5A.	ENGINE- 5.9L DIESEL

Tests 3 - 5

TEST	ACTION	APPLICABILITY
3	Ignition off. Disconnect APPS Connector. **Check connectors-Clean/repair as necessary.** Using an ohmmeter, measure the resistance between the APPS ground circuit and ground. Is the resistance above 5.0 ohms? Yes → Go To 4 No → Replace the APPS.	ENGINE- 5.9L DIESEL
4	Ignition off. Disconnect APPS Connector. **Check connectors-Clean/repair as necessary.** Start the Engine. Cycle Key Off, then On. Using a voltmeter, measure the voltage of the APPS IVS #2 circuit. Is the voltage above 4.5 volts? Yes → Repair the short to voltage. Perform Verification Test VER-5A. No → Go To 5	ENGINE- 5.9L DIESEL
5	Ignition off. Disconnect APPS Connector. **Check Connectors-Clean/repair as necessary.** Disconnect ECM Connector. **Check connectors-Clean/repair as necessary.** Using an ohmmeter, measure the resistance of the sensor ground circuit between the APPS connector and the ECM. Is the resistance above 5.0 ohms? Yes → Repair the open circuit. Perform Verification Test VER-5A. No → Replace the ECM Perform Verification Test VER-5A.	ENGINE- 5.9L DIESEL

SYMPTOM

P0121-ACCELERATOR PEDAL POSITION SENSOR VOLTS DO NOT AGREE W/IDLE VALID SIGNAL

WHEN MONITORED

During idle which is less than 15% of full throttle range for approximately **1.0 second** or during not at idle and vehicle speed is greater than **10 MPH** for approximately **1.0 second**.

SET CONDITION

IVS indicates idle while APPS signal voltage indicates not a idle condition or WS indicates not at idle while APPS signal voltage indicates idle condition.

POSSIBLE CAUSES

- APPS
- APPS wire harness circuit open
- APPS wire harness short to voltage (IVS # 2)
- APPS wire harness short to voltage w/engine ON
- APPS wire harness short to voltage with key ON
- ECM