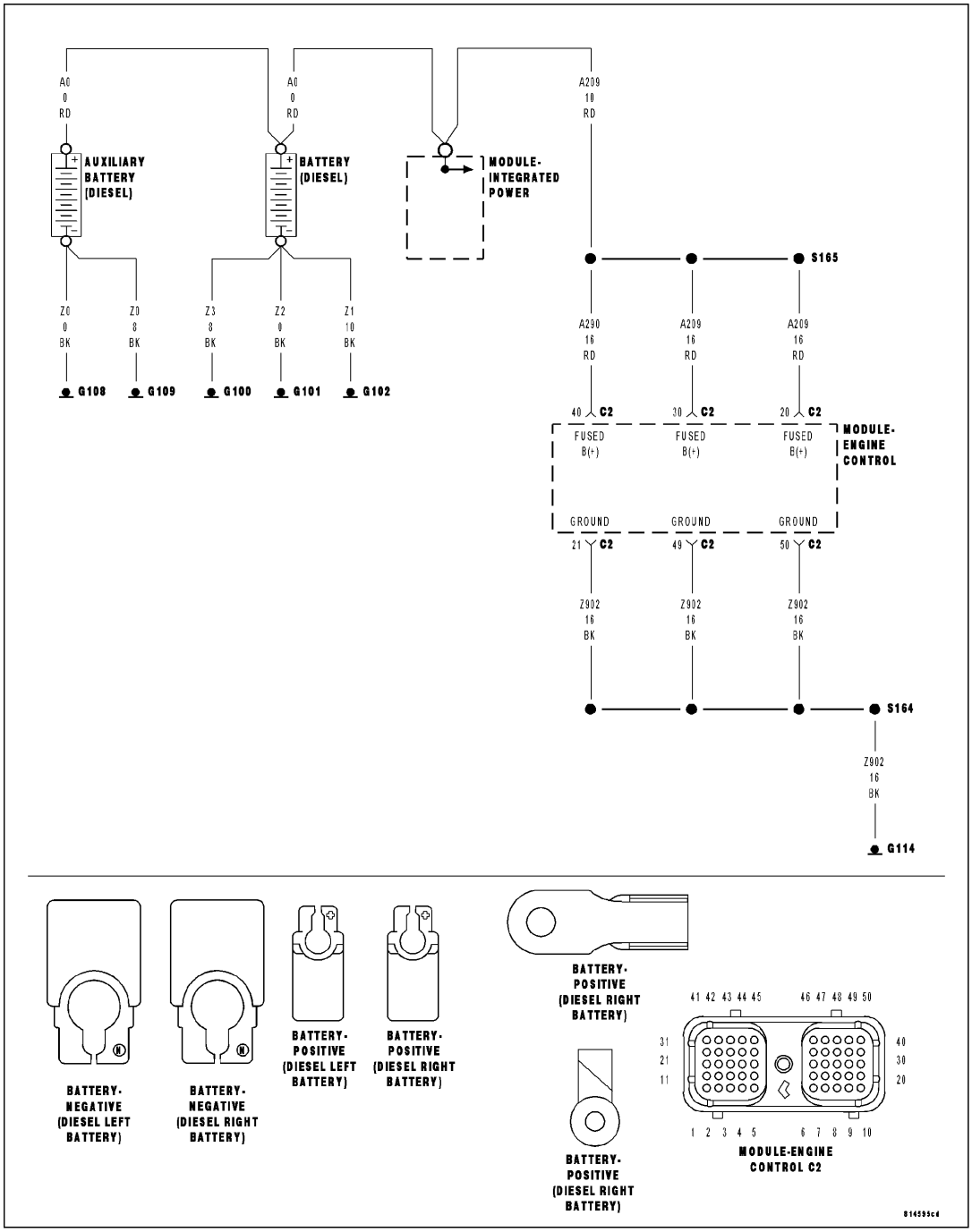
2006 Dodge or Ram Truck RAM 2500 Truck 4WD L6-5.9L DSL Turbo VIN C
Vehicle > ALL Diagnostic Trouble Codes (DTC) > Testing and Inspection > P Code Charts

P2509

P2509-POWERDOWN DATA LOST ERROR

P2509 - Powerdown Data Lost Error

P2509-POWERDOWN DATA LOST ERROR



WHEN MONITORED

Continuous - key on or key off.

SET CONDITION

Loss of voltage detected at the ECM for a calibrated amount of time.

POSSIBLE CAUSES

- Poor connections at the batteries
- Low battery voltage
- Open fused B+ to ECM
- Open ground circuit
- Battery + shorted to other circuits
- Return circuit shorted
- Battery + shorted to ground
- Intermittent condition

Always perform the Pre-Diagnostic Troubleshooting procedure before proceeding.

DIAGNOSTIC TEST

1. POOR CONNECTIONS AT THE BATTERIES

Visually inspect the wiring at the battery for damaged wires, or corrosion.

Q: Are the connections tight and free of corrosion?

YES: Go To 2

NO: Repair the poor connections at the batteries. Perform POWERTRAIN VERIFICATION TEST VER - 1 (DIESEL). See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test - Ver 1

2. LOW BATTERY VOLTAGE

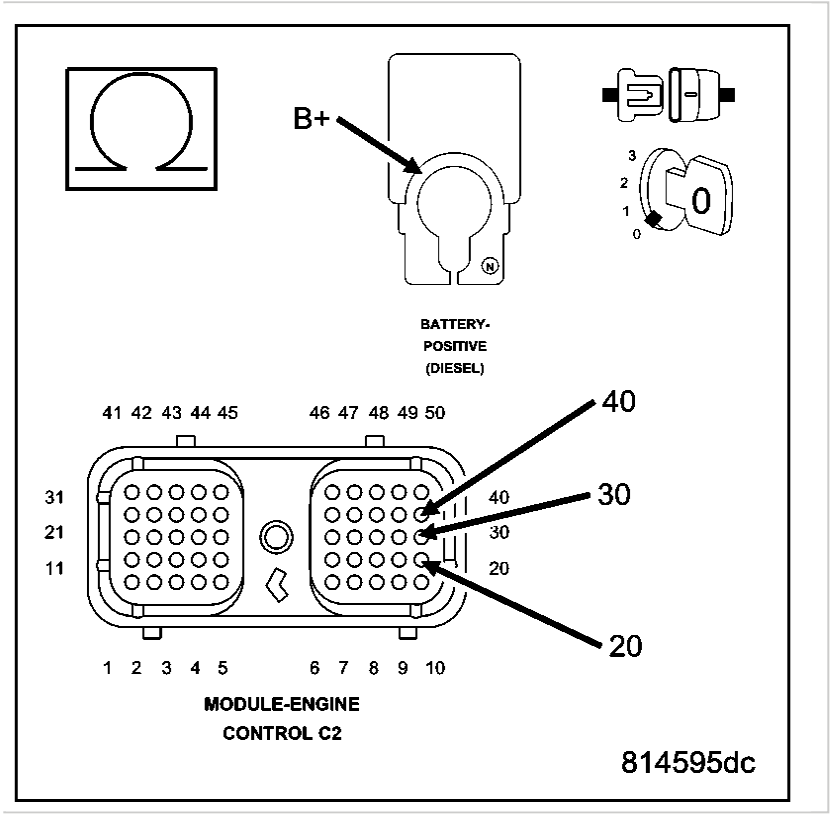
Measure the voltage between the positive and negative posts of the batteries.

Q: Is the battery voltages both above 12 volts?

YES: Go To 3

NO: Recharge or replace the battery (s). Perform POWERTRAIN VERIFICATION TEST VER - 1 (DIESEL). See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test - Ver 1

3. OPEN FUSED B+ TO ECM

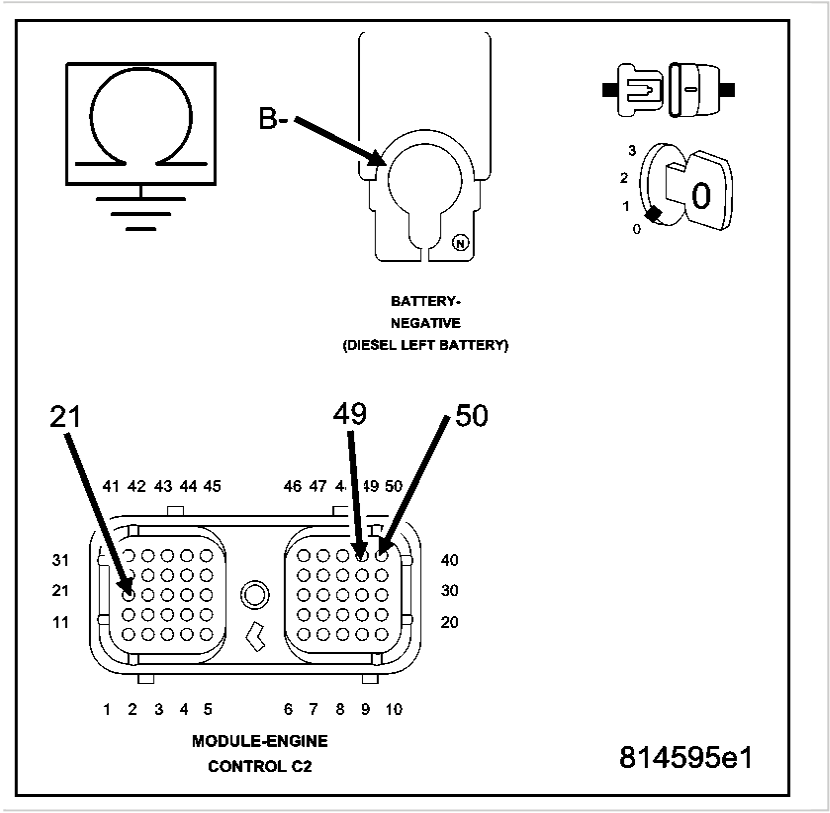


Turn the ignition off.
Disconnect the ECM harness connectors.
Turn the ignition on.
Measure the resistance between the positive battery post and the ECM supply circuits.

Q: Is the resistance less than 10 Ohms?

YES: Go To 4
NO: Repair the open fused B+ circuit to ECM. Perform POWERTRAIN VERIFICATION TEST VER - 1 (DIESEL). See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test - Ver 1

4. OPEN GROUND CIRCUIT

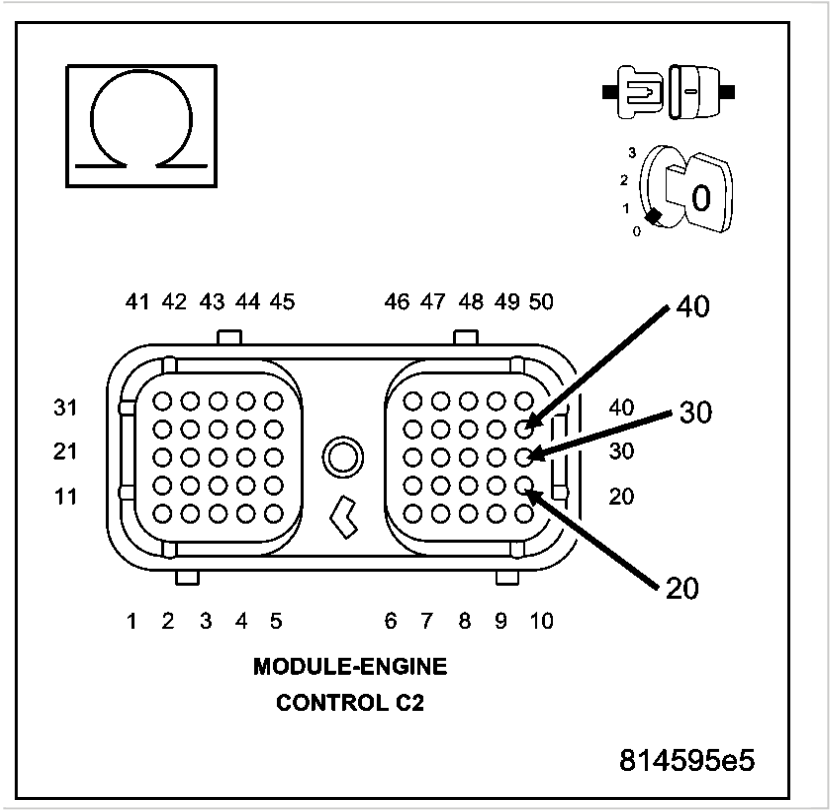


Measure the resistance between the negative battery post and the ECM ground circuits.

Q: Is the resistance less than 10 Ohms?

YES: Go To 5
NO: Repair the open ground circuit. Perform POWERTRAIN VERIFICATION TEST VER - 1 (DIESEL). See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test - Ver 1

5. BATTERY + SHORTED TO OTHER CIRCUITS

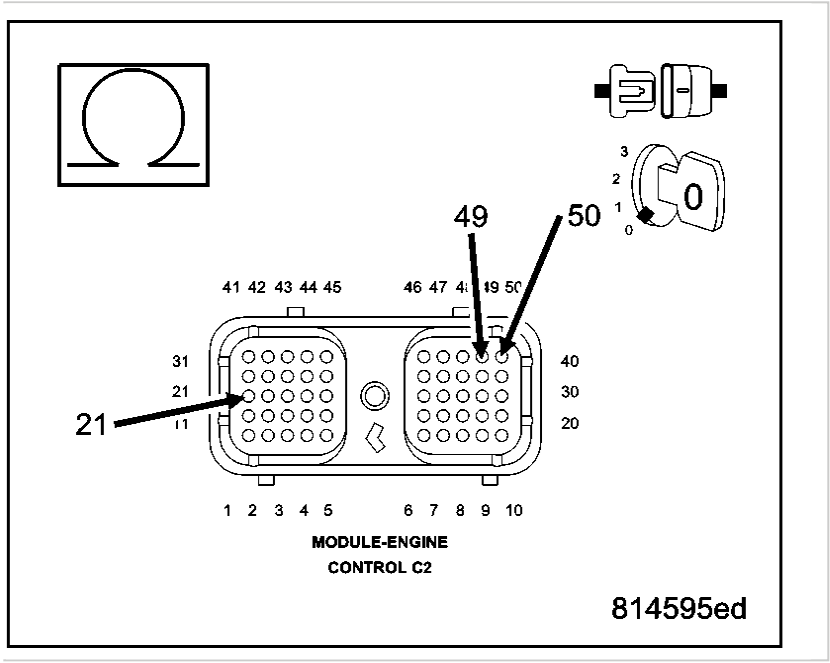


Measure the resistance between the ECM supply circuits and all other circuits in the ECM harness connector, except other supply circuits.

Q: Is the resistance greater than 100k Ohms?

YES: Go To 6
NO: Repair the battery circuit short to other circuits in engine harness. Perform POWERTRAIN VERIFICATION TEST VER - 1 (DIESEL). See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test - Ver 1

6. RETURN CIRCUIT SHORTED

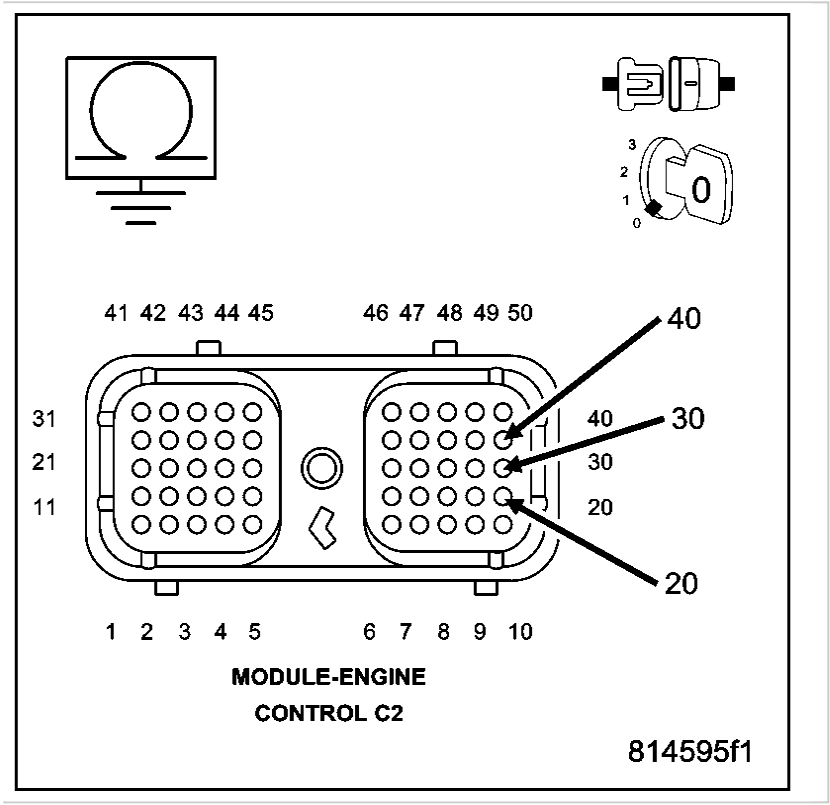


Measure the resistance between the ECM return circuits and all other circuits in the ECM harness connector, except other return circuits.

Q: Is the resistance greater than 100k Ohms?

YES: Go To 7
NO: Repair or replace the engine harness. Perform POWERTRAIN VERIFICATION TEST VER - 1 (DIESEL). See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test - Ver 1

7. BATTERY + SHORTED TO GROUND



Measure the resistance between the ECM B+ supply circuits and ground.

Q: Is the resistance greater than 100k Ohms?

YES: Refer to the INTERMITTENT CONDITION Symptom (Diagnostic Procedure). See: Computers and Control Systems > Component Tests and General Diagnostics > Intermittent Condition

NO: Repair Battery + shorted to ground. Perform POWERTRAIN VERIFICATION TEST VER - 1 (DIESEL). See: A L L Diagnostic Trouble Codes (DTC) > Verification Tests > Powertrain Verification Test - Ver 1