B2109 IGNITION SWITCH SENSE INPUT CIRCUIT HIGH



1). When Monitored:

With the Instrument Cluster awake.

2). Set Condition:

Ignition Switch Sense circuit voltage greater than 4.7 volts.

Possible Causes

- 1. G20) IGNITION SWITCH SENSE CIRCUIT OPEN
- 3. G900) IGNITION SWITCH SENSE RETURN CIRCUIT OPEN
- 3. IGNITION SWITCH
- 4. INSTRUMENT CLUSTER

Diagnostic Test

- 1). CHECK FOR AN ACTIVE DTC
 - Turn the ignition on.

With the scan tool, record and erase DTCs.

Wait 30 seconds.

With the scan tool, read DTCs.

Is the DTC active?

- **Yes** >> Go To 2
- No >> The condition that caused this code to set is not present at this time. Check for an intermittent condition by inspecting the related wiring harness for chaffed, pierced, pinched, and partially broken wires. Also inspect the related connectors for broken, bent, pushed out, spread, corroded, or contaminated terminals.

Perform BODY VERIFICATION TEST - VER 1.

2). CHECK THE (G20) IGNITION SWITCH SENSE CIRCUIT FOR A SHORT TO VOLTAGE

Turn the ignition off.

Disconnect the Ignition Switch harness connector.

Connect a jumper wire between Ignition Switch harness connector cavities 3 and 5.

NOTE: This will provide power to the vehicle systems with the ignition switch disconnected.

Measure the voltage on the (G20) Ignition Switch Sense circuit.

Is the voltage above 5.4 volts? Yes >> Go To 3 No >> Go To 4





3). CHECK THE (G20) IGNITION SWITCH SENSE CIRCUIT FOR A SHORT TO VOLTAGE

Remove the jumper wire between Ignition Switch harness connector cavities 3 and 5.

Disconnect the Instrument Cluster C2 harness connector.

Measure the voltage of the (G20) Ignition Switch Sense Circuit.

Is the voltage above 5.4 volts?

Yes >> Repair the (G20) Ignition Switch Sense circuit for a short to voltage.

Perform BODY VERIFICATION TEST - VER 1.

No >> Replace the Instrument Cluster in accordance with the service information.

Perform BODY VERIFICATION TEST - VER 1.



4). CHECK OPERATION OF IGNITION SWITCH

Turn the ignition off.

Disconnect the Ignition Switch harness connector.

Connect a jumper wire between Ignition Switch harness connector cavities 3 and 5.

NOTE: This will provide power to the vehicle systems with the ignition switch disconnected.

Connect a jumper wire between Ignition Switch harness connector cavities 1 and 2.

With the scan tool, erase Instrument Cluster DTCs.

Wait 30 seconds.

With the scan tool, read Instrument Cluster DTCs.

Does the scan tool display-B2108-IGNITION SWITCH SENSE INPUT CIRCUIT LOW?

Yes >> Replace the Ignition Switch in accordance with the service information.

Perform BODY VERIFICATION TEST - VER 1.

No >> Go To 5



