

- Wiring, terminals or connectors
- DC/ AC inverter
- AC power point

Visual Inspection and Diagnostic Pre-checks

- Verify that any device being used in the AC outlet is rated at less than 400 watts.
- Verify the AC outlet is not being used with the engine off for a period longer than 13 minutes without starting the engine or cycling the ignition.
- Verify the cabin temperature is less than 75°C (167°F).
- Verify the BCM fuse 23 (10A) is OK.
- Inspect the AC outlets for damage.

DIAGNOSIS AND TESTING > DIRECT CURRENT ALTERNATING CURRENT (DC AC) INVERTER > PINPOINT TESTS > PINPOINT TEST A : NO POWER AT THE AC (ALTERNATING CURRENT) POWER POINT OR THE AC (ALTERNATING CURRENT) POWER POINT LED (LIGHT EMITTING DIODE) INDICATOR FLASHES WITH THE KEY IN THE ON POSITION > PINPOINT TEST A : NO POWER AT THE AC (ALTERNATING CURRENT) POWER POINT OR THE AC (ALTERNATING CURRENT) POWER POINT LED (LIGHT EMITTING DIODE) INDICATOR FLASHES WITH THE KEY IN THE ON POSITION



NOTE: Use the correct probe adapter(s) from the Flex Probe Kit when taking measurements. Failure to use the correct probe adapter(s) may damage the connector.

A1 CHECK THE POWER OUTLET LED (LIGHT EMITTING DIODE) STATUS

Start the engine.

Check the LED on the AC outlets

Is the LED flashing?

Yes	GO to A2
No	GO to A3

A2 DETERMINE IF THE DC/AC INVERTER IS OVERHEATED

Determine if the DC/ AC inverter is overheated.

Is the vehicle cabin temperature is greater than 75°C (167°F) or has the inverter been in continuous use for a long period of time?

Yes	The inverter does not operate if it has overheated or if ambient (cabin) temperatures have exceeded 75°C (166.9°F). Cycle the ignition off and ALLOW to cool. Test the system for normal operation.
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No	GO to A3
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A3 CHECK AC (ALTERNATING CURRENT) POWER OUTLET 1 OPERATION

Start the engine.

With the engine running, plug a device rated less than 400 watts into AC power outlet 1.

Is the device operating?

Yes	If the 110V device is operating and the LED is NOT illuminated, GO to Pinpoint Test B . If the device is operating and the LED is illuminated solid AC POWER OUTLET 1 is operating correctly at this time. GO to A4
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No	GO to A5
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A4 CHECK AC (ALTERNATING CURRENT) POWER OUTLET 2 OPERATION

With the engine running, plug a device rated less than 400 watts into AC power outlet 2.

Is the device operating?

Yes	If the 110V device is operating and the LED is NOT illuminated, GO to Pinpoint Test B If the device is operating and the LED is illuminated solid AC POWER OUTLET 2 operating correctly at this time. VERIFY the customer's device is rated less than 400 watts. REFER to the Owner's Literature for a list of appropriate electrical loads/devices that can be used.
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No	GO to A5
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A5 CHECK THE INVERTER MODULE POWER SUPPLY CIRCUITS FOR VOLTAGE

Ignition OFF.

Disconnect DC/ AC Inverter C2293A .

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2293A-1		Ground
C2293A-3		Ground

Are the voltages greater than 11 volts?

Yes	GO to A6
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No	VERIFY BCM fuse 23 (10A) is OK. If OK, REPAIR the open circuit or high resistance on the affected circuit(s). If not OK, REFER to the SYSTEM WIRING DIAGRAMS article to identify the possible cause of the circuit short.
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A6 CHECK THE GROUND CIRCUIT FOR AN OPEN

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2293A-6	Ω	Ground

Is the resistance less than 3 ohms?

Yes	GO to A7
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No	REPAIR the circuit.
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A7 CHECK THE AC (ALTERNATING CURRENT) CIRCUITS FOR AN OPEN

Disconnect AC Outlet 1 C2292 .

Disconnect AC Outlet 2 C301 .

Disconnect DC/ AC Inverter C2293B .

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2293B-3	Ω	C2292-1
C2293B-6	Ω	C2292-3
C2293B-3	Ω	C301-1
C2293B-6	Ω	C301-3

Are the resistances less than 3 ohms?

Yes	GO to A8
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No	REPAIR the affected circuit(s).
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A8 CHECK THE AC (ALTERNATING CURRENT) CIRCUITS FOR A SHORT TOGETHER

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2293B-3	Ω	C2293B-6

Is the resistance greater than 10, 000 ohms?

Yes	GO to A9
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No	REPAIR the circuits.
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A9 CHECK THE AC (ALTERNATING CURRENT) CIRCUITS FOR A SHORT TO GROUND

Measure:

Positive Lead	Measurement / Action	Negative Lead
C2293B-3	Ω	Ground
C2293B-6	Ω	Ground

Are the resistances greater than 10, 000 ohms?

Yes	GO to A10
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No	REPAIR the affected circuit(s).
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A10 CHECK AC (ALTERNATING CURRENT) OUTLET 1 FOR AN OPEN

Measure:

Positive Lead	Measurement / Action	Negative Lead
pin 1 (component side)	Ω	pin 1 (component side)

Positive Lead	Measurement / Action	Negative Lead
pin 2 (component side)	Ω	pin 3 (component side)

Are the resistances less than 3 ohms?

Yes	GO to A11
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No	INSTALL a new AC outlet 1. REFER to: Alternating Current (AC) Power Outlet Socket .
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A11 CHECK AC (ALTERNATING CURRENT) OUTLET 2 FOR AN OPEN

Measure: