

- Wiring, terminals or connectors
- A/C clutch relay
- PCM

Visual Inspection and Diagnostic Pre-checks

- Inspect BJB fuses 23 (10A) and 42 (15A).

DIAGNOSIS AND TESTING > CLIMATE CONTROL SYSTEM - VEHICLES WITH: DUAL AUTOMATIC TEMPERATURE CONTROL (DATC) > PINPOINT TEST(S) > PINPOINT TEST B : P0645 > PINPOINT TEST B : P0645



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.

B1 CHECK THE VOLTAGE TO THE A/C (AIR CONDITIONING) CLUTCH RELAY VOLTAGE SUPPLY CIRCUITS

Ignition OFF.

Disconnect A/C clutch relay.

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
A/C clutch relay socket 1		Ground
A/C clutch relay socket 3		Ground

Are the voltages greater than 11 volts?

Yes	GO to B2
No	VERIFY BJB fuses 23 (10A) and 42 (15A) are OK. If not OK, REFER to the OEM ELECTRICAL WIRING DIAGRAM INTRODUCTION to identify the possible causes of the circuit short. If OK, REPAIR the circuit.

B2 CHECK THE A/C (AIR CONDITIONING) CLUTCH RELAY

Carry out the component test on the A/C clutch relay. Refer to Component Testing for schematic and connector information.

Did the relay pass the component test?

Yes	GO to B3
------------	----------

No	INSTALL a new A/C clutch relay.
-----------	---------------------------------

B3 CHECK THE A/C (AIR CONDITIONING) CLUTCH RELAY CONTROL CIRCUIT FOR A SHORT TO VOLTAGE

Ignition OFF.

Disconnect A/C clutch relay.

Disconnect PCM, 2.3L C1551B , 3.7L C1381B or 5.0L and 5.2L C175B .

Ignition ON.

Measure:

Positive Lead	Measurement / Action	Negative Lead
A/C clutch relay socket 2		Ground

Is any voltage present?

Yes	REPAIR the circuit.
------------	---------------------

No	GO to B4
-----------	----------

B4 CHECK THE A/C (AIR CONDITIONING) CLUTCH RELAY CONTROL CIRCUIT FOR A SHORT TO GROUND

Ignition OFF.

Measure:

Positive Lead	Measurement / Action	Negative Lead
A/C clutch relay socket 2	Ω	Ground

Is the resistance greater than 10, 000 ohms?

Yes	GO to B5
------------	----------

No	REPAIR the circuit.
-----------	---------------------

B5 CHECK THE A/C (AIR CONDITIONING) CLUTCH RELAY CONTROL CIRCUIT FOR AN OPEN

Measure:

2.3L

Positive Lead	Measurement / Action	Negative Lead
A/C clutch relay socket 2	Ω	C1551B-2

3.7L

Positive Lead	Measurement / Action	Negative Lead
A/C clutch relay socket 2	Ω	C1381B-15

5.0L or 5.2L

Positive Lead	Measurement / Action	Negative Lead
A/C clutch relay socket 2	Ω	C175B-15

Is the resistance less than 3 ohms?

Yes	GO to B6
No	REPAIR the circuit.

B6 CHECK FOR CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION

Ignition OFF.

Disconnect and inspect all PCM connectors.

Repair:

corrosion (install new connector or terminals - clean module pins)

damaged or bent pins - install new terminals/pins

pushed-out pins - install new pins as necessary

Reconnect all PCM connectors. Make sure they seat and latch correctly.

Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. For 2.3L, REFER to: Powertrain Control Module (PCM) . For 3.7L, REFER to: Powertrain Control Module (PCM) . For 5.0L, REFER to: Powertrain Control Module (PCM) .
No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.