Troubleshooting

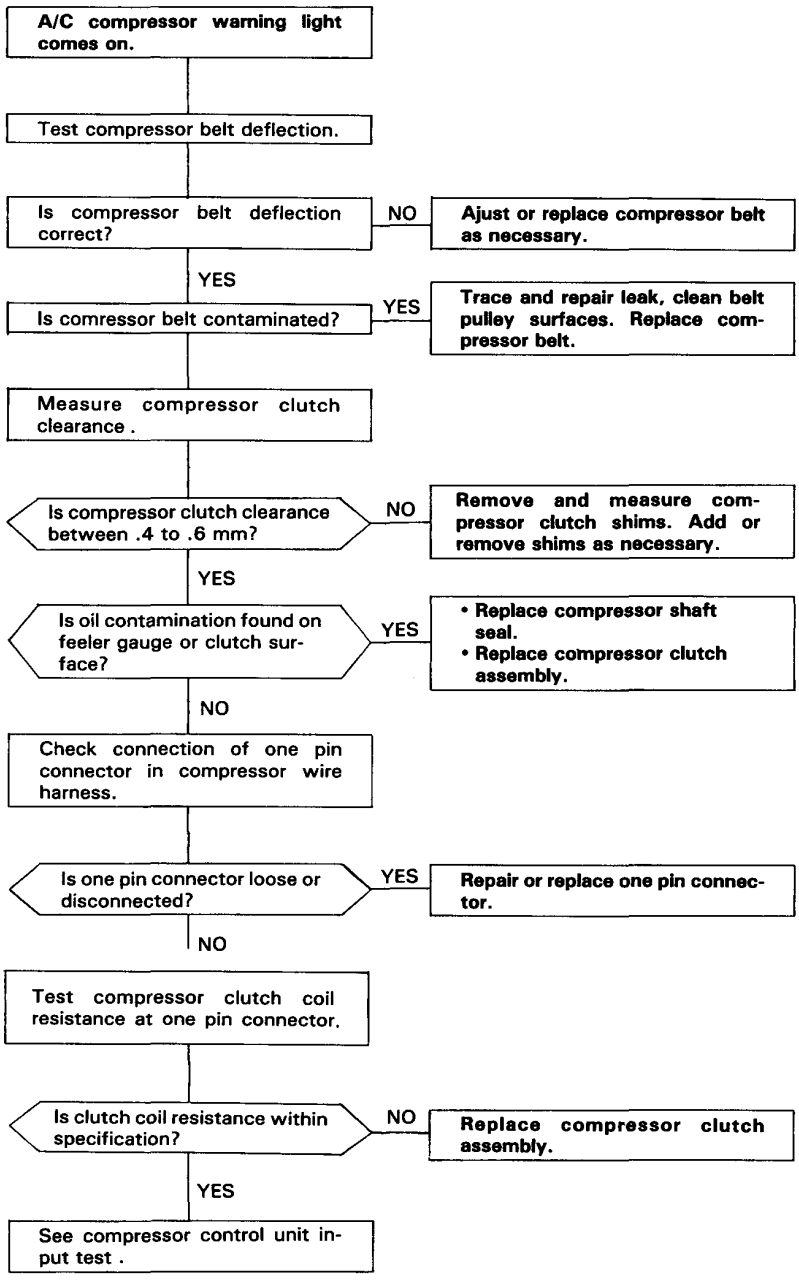
- Any abnormality must be corrected before continuting to the next test.
- Because of the precise measurements needed, use a digital voltmeter and ohmmeter when testing.

Before performing any troubleshooting procedures check:
- Fuses No. 18, 36, 39, 17, 12, 35, 20
- Grounds No. G201, G401, G202, G203
- All electrical connections are clean and tight.

FLOW CHART NO.	SYMPTOM	PAGE
1	A/C compressor warning light comes ON.	15-17
2	Compressor, warning light and cooling fans do not come on.	15-18
3	A/C compressor does not come on and cooling fans come on.	15-20
4	Both fans (condenser and compressor fans) do not run. Compressor operates normally.	15-22
5	One fan (condenser or compressor fan) does not run. Compressor operates normally.	15-24

NOTE: To improve acceleration and engine response, the ECU temporarily stops A/C operation when it receives signals that the vehicle is accelerating. (PGM-FI CAR ONLY)

Flow Chart 1


A/C compressor warning light comes on.
Test compressor belt deflection.
Is compressor belt deflection correct?
NO
Ajust or replace compressor belt as necessary.
YES
Is comressor belt contaminated?
YES
Trace and repair leak, clean belt pulley surfaces. Replace compressor belt.
Measure compressor clutch clearance .
Is compressor clutch clearance between .4 to .6 mm?
NO
Remove and measure compressor clutch shims. Add or remove shims as necessary.
YES
Is oil contamination found on feeler gauge or clutch surface?
YES
• Replace compressor shaft seal.
• Replace compressor clutch assembly.
NO
Check connection of one pin connector in compressor wire harness.
Is one pin connector loose or disconnected?
YES
Repair or replace one pin connector.
NO
Test compressor clutch coil resistance at one pin connector.
Is clutch coil resistance within specification?
NO
Replace compressor clutch assembly.
YES
See compressor control unit input test .

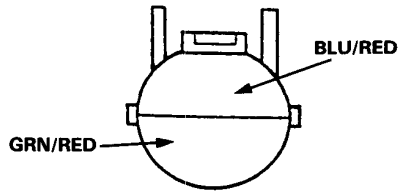
Flow Chart 2

NOTE: Perform all checks with the engine running.

Compressor, warning light and cooling fans do not come on.

Disconnect the dual pressure switch.

Connect a jumper wire between BLU/RED terminal and body ground.



Does the A/C system (compressor and cooling fans) come on?

NO → **Repair open in BLU/RED wire between A/C diodes and dual pressure switch.**

YES

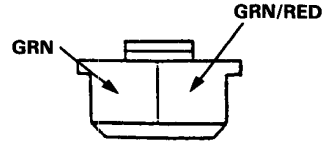
Connect a jumper wire between BLU/RED and GRN/RED terminals.

Does the A/C system come on?

YES → **Check the A/C pressure; if OK, replace the dual pressure switch.**

NO

Reconnect the dual pressure switch and disconnect evaporator sensor connector.



View from wire side

Connect a jumper wire between GRN/RED terminal and body ground.

Does the A/C system come on?

NO → **Repair open in GRN/RED wire between A/C dual pressure switch and body ground.**

YES

Connect a jumper wire between GRN/RED and GRN terminals.

Does the A/C system come on?

YES → **Replace the evaporator sensor.**

NO

Reconnect the evaporator sensor.

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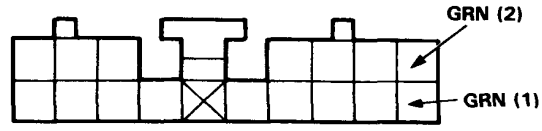
Disconnect the heater control panel and connect a jumper wire between GRN (1) terminal and body ground.



View from wire side

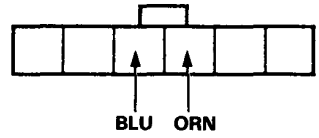
Does the A/C system come on?
- NO → **Repair open in GRN (1) wire between the evaporator sensor and the heater control panel.**
- YES

Connect a jumper wire between GRN (1) and BLK terminals.

Does the A/C system come on?
- NO → **Repair open in BLK wire between the heater control panel and body ground.**
- YES

Reconnect the control panel.

Remove A/C switch and connector.



view from wire side

With switch connected, ground the BLU wire.

Does A/C system come on?
- NO → Replace the heater control panel.
- YES

Turn on A/C switch and ground the ORN wire.

Does A/C system come on?
- NO → Replace the A/C switch.
- YES

Ground GRN (2) at heater control connector.

Does A/C system come on?
- NO → Replace the heater control panel.
- YES

- Check connection of GRN wire to blower switch.
- Test blower switch.

Flow Chart 3

A/C compressor does not come on and cooling fans come on.

Disconnect A/C compressor clutch relays A and B.

Measure voltage between the YEL/BLK terminal (+) and body ground.

Is there battery voltage? — NO → **Repair open in YEL/BLK wire between relay and fuse box or a blown No. 18 fuse.**

YES

Connect a jumper wire between YEL/BLK terminal on relay A and RED terminal on relay B.

Does the A/C compressor come on? — NO → **Check the A/C compressor clutch or thermal protector, or an open in RED wire.**

YES

Inspect the compressor clutch relays A and B.

Are the relays OK? — NO → **Replace the relay(s).**

YES

Check for continuity on the GRY terminal between relays A and B.

Is there continuity? — NO → **Repair open GRY wire between relays A and B.**

YES

Reconnect relays A and B and remove the A/C diodes (taped to wire harness under right headlight).

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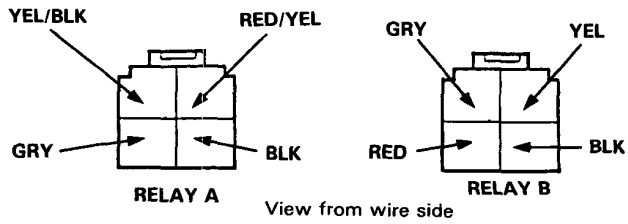

View from wire side

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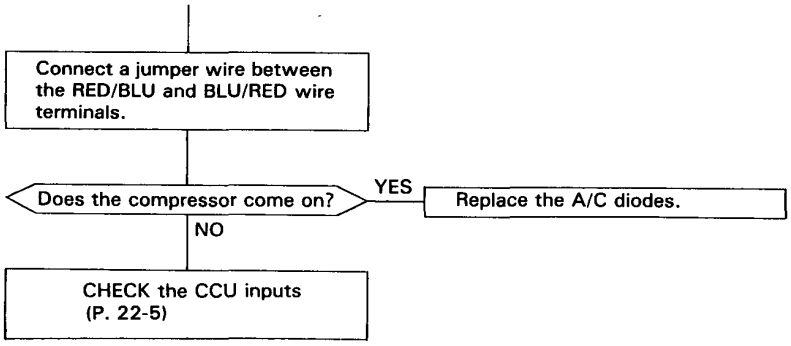


NOTE: Check the A/C signal (A/C CCU ⟷ PGM-FI ECU, PGM-FI ECU ⟷ A/C DIODES) (PGM-FI CAR ONLY) (See electrical section)

CCU: Compressor Control Unit

Flow Chart 4

Both fans (condenser and compressor fans) do not run with A/C on.

Check the fuses No. 18, 35, 39, 13, 34.

Are the fuses OK? NO → **Replace the fuse(s).**

YES

Remove the radiator and condensor fan relays

Are the relays OK? NO → **Replace the relays.**

YES

Check for battery voltage at terminal B (condensor fan) and D (radiator fan)

Is there battery voltage? NO → **Check connection at fuse box. If OK, replace fuse box.**

YES

Torn the ignition ON.

Check for battery voltage at terminal C.

Is there battery voltage? NO → **See cooling fan control unit input test.**

Reinstall both relays.

Remove A/C diode located under right headlight.

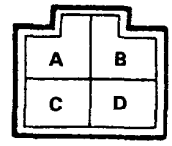
Using a jumper wire, connect the BLU wire to body ground.

Do both fans come on? NO → **Repair open circuit in BLU wire between the underhood relay box and the A/C diode.**

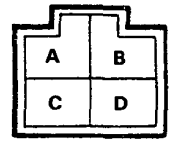
YES

Replace A/C diode.

CONDENSER FAN RELAY SOCKET



RADIATOR FAN RELAY SOCKET



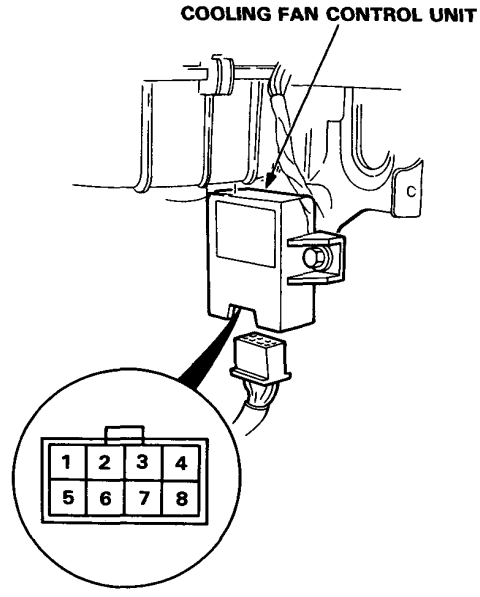
Cooling Fan Control Unit Input Test

- All test should be performed with the key "ON" (unless specified otherwise) and the cooling fan control unit unplugged (unless specified otherwise).
- All test are made from the wire side of the connector.
- Any abnormality must be corrected before continuing to the next test.

Before performing any troubleshooting procedures check:

- Fuses No. 17, 12, 36, 39, 35.
- All electrical connections are clean and tight.

NOTE: If all tests check OK, replace with known-good cooling fan control unit.



View from wire side

WIRE COLOR	TEST CONDITION	IF DESIRED RESULTS ARE NOT OBTAINED:
YEL/BLK	Connect to WHT/YEL using a jumper wire. Condenser fan shoold come on.	Repair open in YEL/BLK between cooling fan control unit and underhood relay box.
BLK/YEL[2]	Check for battery voltage.	Repair open in BLK/YEL[2] between fuse No. 17 and cooling fan control unit.
RED/GRN	Connect to WHT/YEL using a jumper wire. Radiator fan ahould come on.	Repair open in RED/GRN between cooling fan control unit and underhood relay box.
BLK	Check for continuity to ground.	Repair open circuit to body ground.
WHT/YEL	Check for battery voltage.	Repair open between fuse No. 35 and cooling fan control unit.
BLK/YEL[1]	Check for battery voltage.	Repair open in BLK/YEL[1]between fuse No. 12 and cooling fan control unit.

Flow Chart 5

Cooling fan (or radiator fan) does not run.

Check fuse 36 (or 39).

Is the fuse OK? NO → **Replace the fuse(s).**

YES

Check the relay of the fan motor that does not run.

Is the relay OK? NO → **Replace the relay.**

YES

Connect a fused jumper from BLU/BLK wire to BLU/BLK. (Disconnect the fan relay connector)

Turn ignition to RUN.

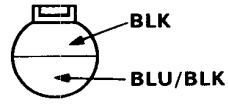
Does cooling fan operate? YES → B

(continued on nest page.)

NO

Disconnect cooling fan motor connector.

Connect voltmeter between BLU/BLK wire (+) and BLK wire (−).



View from wire side

Is battery voltage present? YES → **Replace cooling fan motor.**

NO → A

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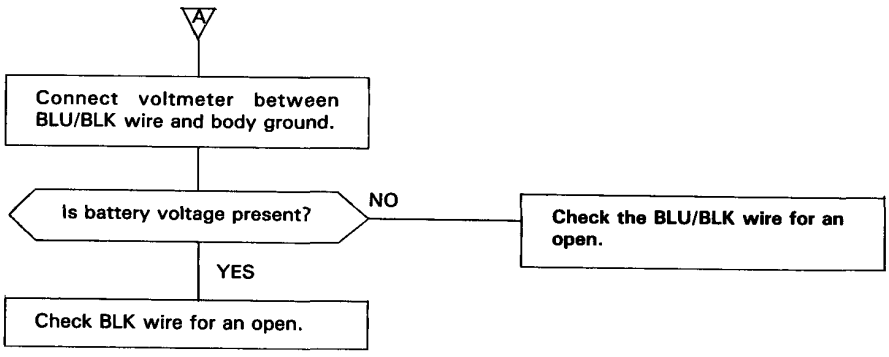

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