

2003-06 HVAC

Heating/Air Conditioning - Element

COMPONENT LOCATION INDEX

WARNING: SUPPLEMENTAL RESTRAINT SYSTEM (SRS) (If HVAC maintenance is required)

The Element SRS includes a driver's airbag in the steering wheel hub, a passenger's airbag in the dashboard above the glove box, seat belt tensioners in the front seat belt retractors, seat belt buckle tensioners in the front seat belt buckles, and side airbags in the front seat-backs. Information necessary to safely service the SRS is included in this information.

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal or side collision, all SRS service work must be performed by an authorized Honda dealer.
- Improper service procedures, including incorrect removal and installation of the SRS, could lead to personal injury caused by unintentional deployment of the airbags and/or side airbags.
- Do not bump or impact the SRS unit, front impact sensors, side impact sensors when the ignition switch is ON (II), or for at least 3 minutes after the ignition switch is turned OFF; otherwise, the system may fail in a collision, or the airbags may deploy.
- SRS electrical connectors are identified by yellow color coding. Related components are located in the steering column, front console, dashboard, dashboard lower panel, in the dashboard above the glove box, in the front seats, and around the floor. Do not use electrical test equipment on these circuits.

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Fig. 1: Identifying Heating/Air Conditioning Component Locations (1 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fig. 2: Identifying Heating/Air Conditioning Component Locations (2 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fig. 3: Identifying Heating/Air Conditioning Component Locations (3 Of 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

A/C SERVICE TIPS AND PRECAUTIONS

WARNING:

- Compressed air mixed with R-134a forms a combustible vapor.
- The vapor can burn or explode causing serious injury.

- **Never use compressed air to pressure test R-134a service equipment or vehicle air conditioning systems.**

CAUTION:

- **Air conditioning refrigerant or lubricant vapor can irritate your eyes, nose, or throat.**
- **Be careful when connecting service equipment.**
- **Do not breathe refrigerant or vapor.**

The air conditioning system uses HFC-134a (R-134a) refrigerant and polyalkyleneglycol (PAG) refrigerant oil, which are not compatible with CFC-12 (R-12) refrigerant and mineral oil. Do not use R-12 refrigerant or mineral oil in this system, and do not attempt to use R-12 servicing equipment; damage to the air conditioning system or your servicing equipment will result. Use only service equipment that is U.L.-listed and is certified to meet the requirements of SAE J2210 to remove R-134a from the air conditioning system.

If accidental system discharge occurs, ventilate work area before resuming service.

R-134a service equipment or vehicle air conditioning systems should not be pressure tested or leak tested with compressed air.

Additional health and safety information may be obtained from the refrigerant and lubricant manufacturers.

- Always disconnect the negative cable from the battery whenever replacing air conditioning parts.
- Keep moisture and dirt out of the system. When disconnecting any lines, plug or cap the fittings immediately; don't remove the caps or plugs until just before you reconnect each line.
- Before connecting any hose or line, apply a few drops of refrigerant oil to the O-ring.
- When tightening or loosening a fitting, use a second wrench to support the matching fitting.
- When discharging the system, use an R-134a refrigerant recovery/recycling/charging station; don't release refrigerant into the atmosphere.

A/C REFRIGERANT OIL REPLACEMENT

Recommended PAG oil: DENSO ND-OIL 8:

- P/N 38897-PR7-A01AH: 120 mL (4 fl.oz)
- P/N38899-PR7-A01: 40 mL (1 1/3 fl.oz)

Add the recommended refrigerant oil in the amount listed if you replace any of the following

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parts.

- To avoid contamination, do not return the oil to the container once dispensed, and never mix it with other refrigerant oils.
- Immediately after using the oil, replace the cap on the container, and seal it to avoid moisture absorption.
- Do not spill the refrigerant oil on the vehicle; it may damage the paint; if it gets on the paint, wash it off immediately.

A/C condenser....25 mL (5/6 fl.oz)

Evaporator.....45 mL (1 1/2 fl.oz)

Line or hose.....10 mL (1/3 fl.oz)

Receiver/Dryer.....10 mL (1/3 fl.oz)

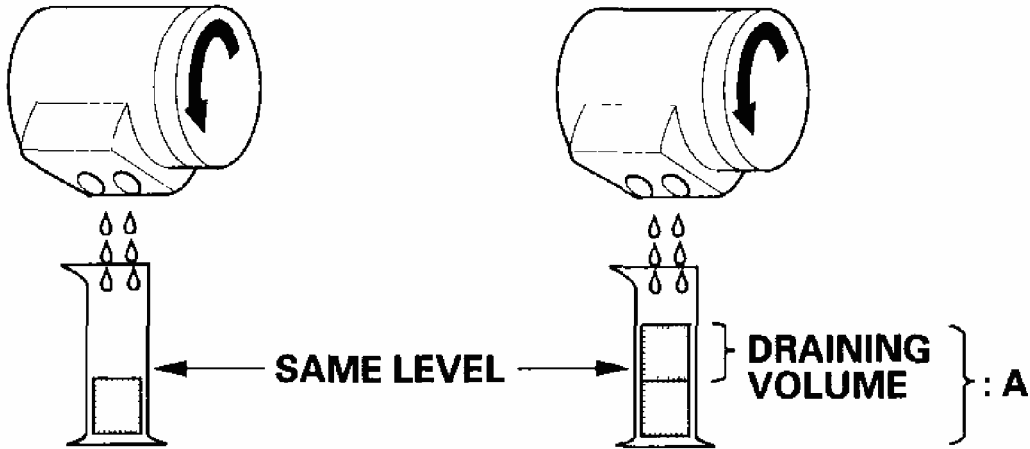
Leakage repair.....25 mL (5/6 fl.oz)

A/C compressor. For A/C compressor replacement, subtract the volume of oil drained from the removed A/C compressor from 160 mL (5 1/3 fl.oz), and drain the calculated volume of oil from the new A/C compressor: 160 mL (5 1/3 fl.oz) --- Volume of removed A/C compressor = Volume to drain from new A/C compressor.

NOTE: Even if no oil is drained from the removed A/C compressor, don't drain more than 50 mL (1 2/3 fl.oz) from the new A/C compressor.

**REMOVED
A/C COMPRESSOR**

**NEW
A/C COMPRESSOR**



A: 160 mL (5 1/3 fl-oz)

G03679577

Fig. 4: Identifying A/C Compressor Oil Replacement
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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Fig. 5: Discharging Hose To A/C Compressor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

HOW TO RETRIEVE A DTC

The heater control panel has a self-diagnostic function for heating, ventilation, and air conditioning system. To run the self-diagnostic function, do the following:

1. Turn the ignition switch OFF.
2. Press the recirculation control switch and the rear window defogger switch.
3. While holding the both switches down, turn the ignition switch ON (II).
4. The self-diagnosis will begin, and run for about 15 seconds.
 - If there is any problem in the system after self-diagnosis is finished, the recirculation indicator will blink the Diagnostic Trouble Code (DTC) 7 through 15.
 - If no DTCs are found, the indicator will not blink.

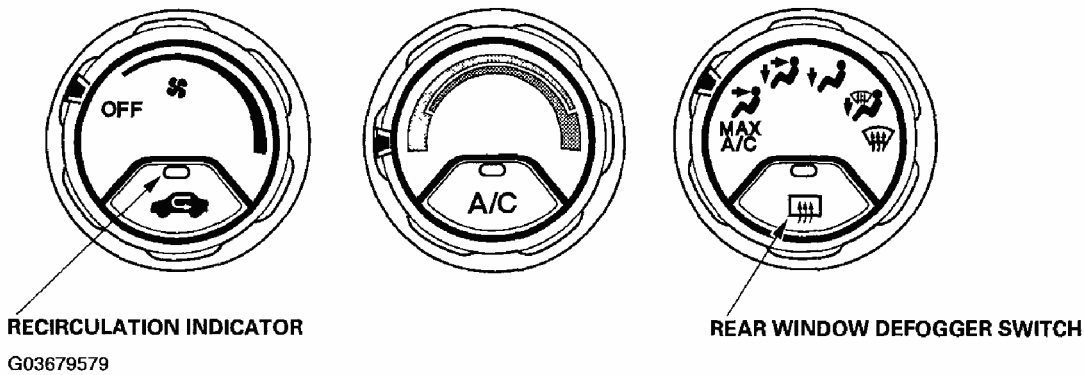


Fig. 6: Locating Recirculation Indicator
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Example of DTC indication Pattern (DTC 7)

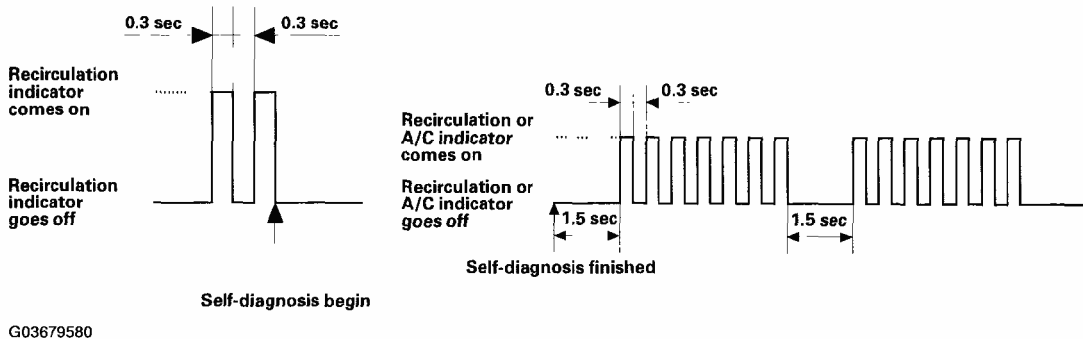


Fig. 7: Identifying Blinking Pattern
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Resetting the self-diagnostic Function

Turn the ignition switch OFF to cancel the self-diagnostic function. After completing repair work, run the self-diagnostic function again to make sure that there are no other malfunctions.

Max Cool Position Function

When the mode control dial is in the MAX A/C position, the heater control panel will automatically select the Recirculation mode and turn the A/C on. The recirculation switch and A/C switch are disabled and cannot be turned off in this mode. If the control panel fails to function as described, replace it.

DTC TROUBLESHOOTING INDEX

DTC TROUBLESHOOTING CHART

DTC (Recirculation Indicator Blinks)	Detection Item	Page
7	An open in the air mix control motor circuit	(see <u>DTC 7: AN OPEN IN THE AIR MIX CONTROL MOTOR CIRCUIT</u>)
8	A short in the air mix control motor circuit	(see <u>DTC 8: A SHORT IN THE AIR MIX CONTROL MOTOR CIRCUIT</u>)
9	A problem in the air mix control linkage, door, or motor	(see <u>DTC 9: A PROBLEM IN THE AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR</u>)
10	A short or open in the mode control motor circuit	(see <u>DTC 10: A SHORT OR OPEN IN THE MODE CONTROL MOTOR CIRCUIT</u>)
11	A problem in the mode control linkage, doors, or motor	(see <u>DTC 11: A PROBLEM IN THE MODE CONTROL LINKAGE, DOORS, OR MOTOR</u>)
12	A problem in the blower motor circuit	(see <u>DTC 12: A PROBLEM IN THE BLOWER MOTOR CIRCUIT</u>)
13	A problem in the EEPROM in the heater control panel; the control panel must be replaced	(see <u>HEATER CONTROL PANEL REMOVAL AND INSTALLATION</u>)
14 (With A/C)	An open in the evaporator temperature sensor circuit	(see <u>DTC 14: AN OPEN IN THE EVAPORATOR</u>)

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		<u>TEMPERATURE SENSOR CIRCUIT)</u>
15 (With A/C)	A short in the evaporator temperature sensor circuit	(see page <u>DTC 15: A SHORT IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT)</u>)

In case of multiple problems, the recirculation indicator will indicate only the DTC with the least number of blinks.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING CHART

Symptom	Diagnostic procedure	Also check for
Recirculation control doors do not change between Fresh and Recirculate	Recirculation control motor circuit troubleshooting (see <u>RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING)</u>)	<ul style="list-style-type: none"> • Blown fuse No. 14 (10 A) in the under-dash fuse/relay box • Cleanliness and tightness of all connectors
Blower, heater controls, and A/C do not work	Heater control power and ground circuit troubleshooting (see <u>HEATER CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING)</u>)	<ul style="list-style-type: none"> • Blown fuse No. 14 (10 A) in the under-dash fuse/relay box • Poor ground at G501 <ul style="list-style-type: none"> • Cleanliness and tightness of all connectors
The A/C condenser fan does not run at all (but radiator fan runs with the A/C on)	A/C condenser fan circuit troubleshooting (see <u>A/C CONDENSER FAN CIRCUIT TROUBLESHOOTING)</u>)	<ul style="list-style-type: none"> • Blown fuse No. 1 (30 A) in the under-hood fuse/relay box, and No. 14 (10 A) in the under-dash fuse/relay box • Poor ground at G201 <ul style="list-style-type: none"> • Cleanliness and tightness of all connectors
Both fans do not run with the A/C on (but the A/C compressor runs)	Radiator and A/C condenser fans common circuit troubleshooting (see <u>RADIATOR AND A/C CONDENSER FAN COMMON</u>)	<ul style="list-style-type: none"> • Blown fuse No. 1 (30 A) and No. 4 (20 A) in the under-hood fuse/relay box, and

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with the A/Con)	<u>CIRCUIT TROUBLESHOOTING</u>)	No. 14 (10 A) in the under-dash fuse/relay box <ul style="list-style-type: none"> • Poor ground at G201 <ul style="list-style-type: none"> • Cleanliness and tightness of all connectors
The A/C compressor clutch does not engage (but both fans run with the A/C on)	A/C compressor clutch circuit troubleshooting (see <u>A/C COMPRESSOR CLUTCH CIRCUIT TROUBLESHOOTING</u>)	<ul style="list-style-type: none"> • Blown fuse No. 1 (30 A) in the under-hood fuse/relay box, and No. 14 (10 A) in the under-dash fuse/relay box • Cleanliness and tightness of all connectors • Blower motor operation
A/C system does not come on (both fans and the A/C compressor do not work); heater is OK	A/C pressure switch circuit troubleshooting (see <u>A/C PRESSURE SWITCH CIRCUIT TROUBLESHOOTING</u>)	<ul style="list-style-type: none"> • Cleanliness and tightness of all connectors • Faulty evaporator temperature sensor

SYSTEM DESCRIPTION

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Fig. 8: Identifying Defroster Door And Heat Door (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Fig. 9: Identifying Defroster Door And Heat Door (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

The air conditioning system removes heat from the passenger compartment by circulating refrigerant through the system as shown.

Fig. 10: Removing Heat From Passenger Compartment By Circulating Refrigerant
Courtesy of AMERICAN HONDA MOTOR CO., INC.

This vehicle uses HFC-134a (R-134a) refrigerant which does not contain chlorofluorocarbons. Pay attention to the following service items:

- Do not mix refrigerants CFC-12 (R-12) and HFC-134a (R-134a). They are not compatible.
- Use only the recommended polyalkyleneglycol (PAG) refrigerant oil (DENSO ND-OIL 8) designed for the R-134a A/C compressor. Intermixing the recommended (PAG) refrigerant oil with any other refrigerant oil will result in A/C compressor failure.
- All A/C system parts (A/C compressor, discharge line, suction line, evaporator, A/C condenser, receiver/dryer, expansion valve, O-rings for joints) are designed for refrigerant R-134a. Do not exchange with R-12 parts.
- Use a halogen gas leak detector designed for refrigerant R-134a.
- Use a vacuum pump adapter which is equipped with a check valve to prevent the backflow of the vacuum pump oil.
- Separate the manifold gauge sets (pressure gauges, hoses, joints) for refrigerants R-12 and R-134a. Do not confuse them.

Fig. 11: Identifying Heater Control Panel 30P Connector Pinout
Courtesy of AMERICAN HONDA MOTOR CO., INC.

CIRCUIT DIAGRAM

(WITHOUT A/C)

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Fig. 12: Circuit Diagram - Without A/C
Courtesy of AMERICAN HONDA MOTOR CO., INC.

(WITH A/C)

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Fig. 13: Circuit Diagram - With A/C (1 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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Fig. 14: Circuit Diagram - With A/C (2 Of 2)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC INDEX

DTC	Description
DTC 7	An Open in the Air Mix Control Motor Circuit
DTC 8	A Short in the Air Mix Control Motor Circuit
DTC 9	A Problem in the Air Mix Control Linkage, Door, or Motor

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DTC 10	A Short or Open in the Mode Control Motor Circuit
DTC 11	A Problem in the Mode Control Linkage, Doors, or Motor
DTC 12	A Problem in the Blower Motor Circuit
DTC 14	An Open in the Evaporator Temperature Sensor Circuit
DTC 15	A Short in the Evaporator Temperature Sensor Circuit

DTC 7: AN OPEN IN THE AIR MIX CONTROL MOTOR CIRCUIT

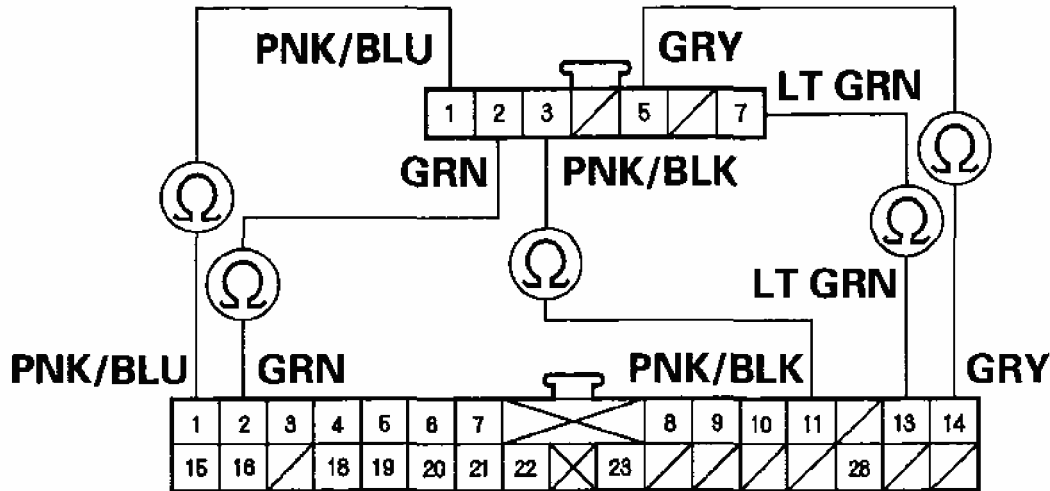
1. Disconnect the air mix control motor 7P connector.
2. Disconnect the heater control panel 30P connector.
3. Check for continuity between the following terminals of the heater control panel 30P connector and the air mix control motor 7P connector.

TERMINAL NUMBER INDEX

30P:	7P:
No. 1	No. 1
No. 2	No. 2
No. 11	No. 3
No. 13	No. 7
No. 14	No. 5

AIR MIX CONTROL MOTOR 7P CONNECTOR

Wire side of female terminals



HEATER CONTROL PANEL 30P CONNECTOR

Wire side of female terminals

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Fig. 15: Checking Continuity Between Terminals Of Heater Control Panel 30P Connector And Air Mix Control Motor 7P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 4.

NO - Repair any open in the wire(s) between the heater control panel and the air mix control motor.

- Check for loose wires or poor connections at the heater control panel 30P connector and at the air mix control motor 7P connector. If the connections are good, substitute a known-good air mix control motor and retest.

Did the symptom/indication go away?

YES - The original air mix control motor is faulty, replace it.

NO - Substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

1. Disconnect the air mix control motor 7P connector.
2. Disconnect the heater control panel 30P connector.
3. Check for continuity between body ground and heater control panel 30P connector terminals No. 1, 2, 11, 13, and 14 individually.

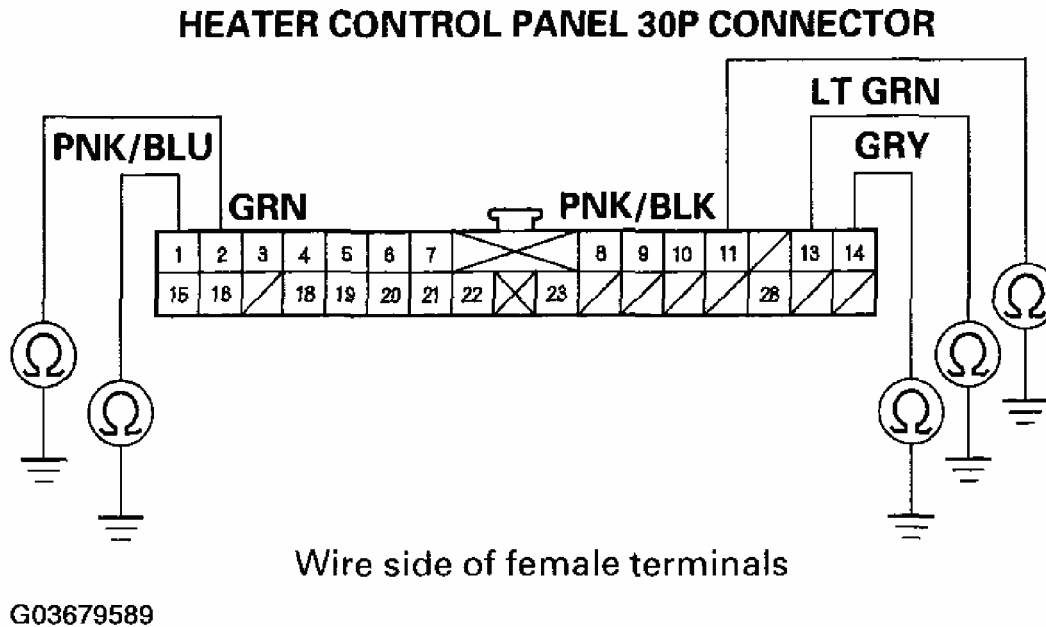


Fig. 16: Checking Continuity Between Body Ground And Heater Control Panel 30P Connector Terminals No. 1, 2, 11, 13, And 14
Courtesy of AMERICAN HONDA MOTOR CO., INC.

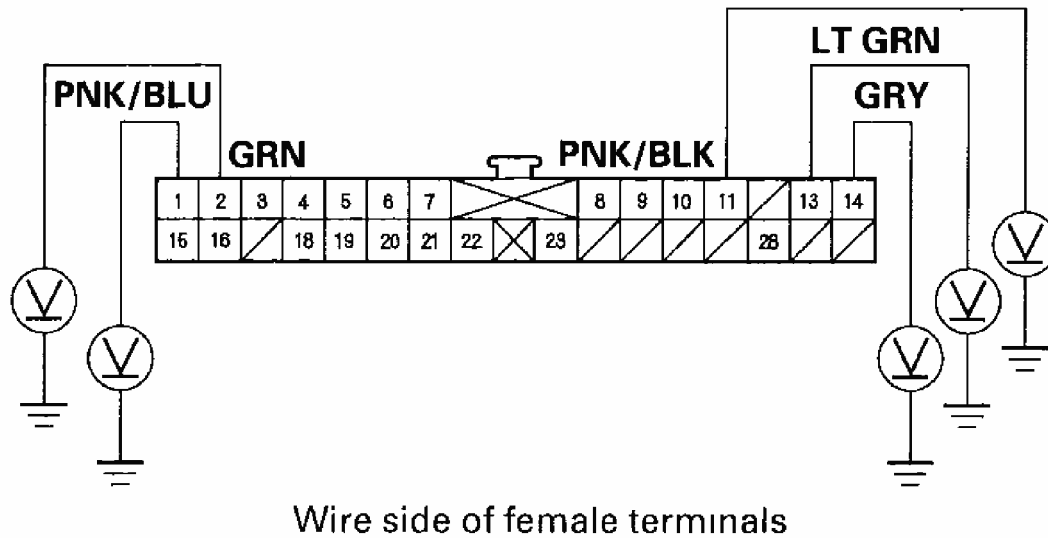
Is there continuity?

YES - Repair any short to body ground in the wire(s) between the heater control panel and the air mix control motor.

NO - Go to step 4.

4. Turn the ignition switch ON (II), and check the same terminals for voltage.

HEATER CONTROL PANEL 30P CONNECTOR



Wire side of female terminals

G03679590

Fig. 17: Checking Voltage Between Body Ground And Heater Control Panel 30P Connector Terminals No. 1, 2, 11, 13, And 14
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the heater control panel and the air mix control motor. This short also may damage the heater control panel. Repair the short to power before replacing the heater control panel.

NO - Go to step 5.

5. Substitute a known-good air mix control motor and recheck.

Did the symptom/indication go away?

YES - The original air mix control motor is faulty, replace it.

NO - Substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

DTC 9: A PROBLEM IN THE AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR

1. Test the air mix control motor (see AIR MIX CONTROL MOTOR TEST).

Is the air mix control motor OK?

YES - Substitute a known-good heater control panel, and recheck. If the

symptom/indication goes away, replace the original heater control panel.

NO - Go to step 2.

2. Remove the air mix control motor (see **AIR MIX CONTROL MOTOR REPLACEMENT**).
3. Check the air mix control linkage and door for smooth movement.

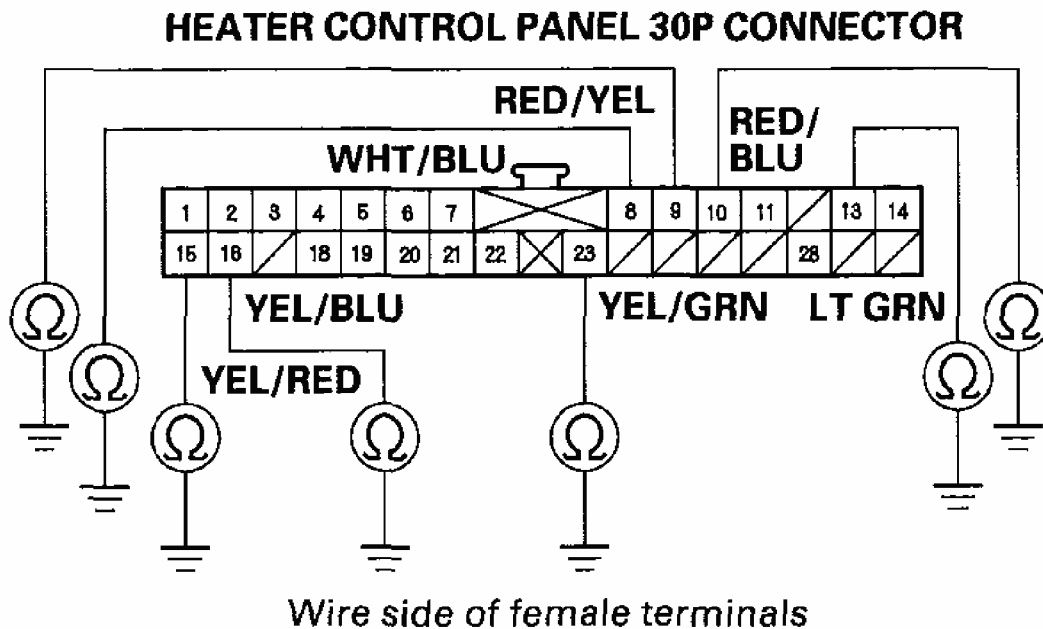
Do the air mix control linkage and door move smoothly?

YES - Replace the air mix control motor.

NO - Repair the air mix control linkage or door.

DTC 10: A SHORT OR OPEN IN THE MODE CONTROL MOTOR CIRCUIT

1. Disconnect the mode control motor 7P connector.
2. Disconnect the heater control panel 30P connector.
3. Check for continuity between body ground and the heater control panel 30P connector terminals No. 8, 9, 10, 13, 15, 16, and 23 individually.



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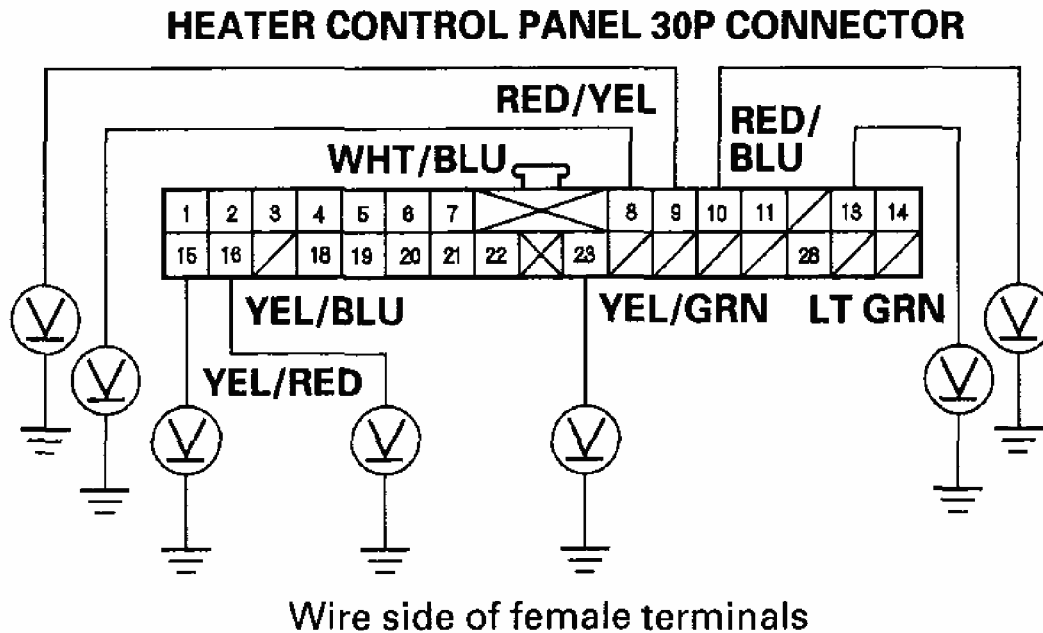
Fig. 18: Checking Continuity Between Body Ground And Heater Control Panel 30P Connector Terminals No. 8, 9, 10, 13, 15, 16, And 23
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the heater control panel and the mode control motor.

NO - Go to step 4.

- Turn the ignition switch ON (II), and check the same terminals for voltage.



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Fig. 19: Checking Voltage Between Body Ground And Heater Control Panel 30P Connector Terminals No. 8, 9, 10, 13, 15, 16, And 23
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the heater control panel and the mode control motor. This short also may damage the heater control panel. Repair the short to power, then recheck before replacing the heater control panel.

NO - Go to step 5.

- Turn the ignition switch OFF, and check for continuity between the following terminals of the heater control panel 30P connector and the mode control motor 7P connector.

CONNECTOR TERMINAL CONTINUITY

30P	7P
No. 8	No. 4
No. 9	No. 6

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No. 10	No. 5
No. 13	No. 7
No. 15	No. 2
No. 16	No. 1
No. 23	No. 3

Fig. 20: Checking Continuity Between Terminals Of Heater Control Panel 30P Connector And Mode Control Motor 7P Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 6.

NO - Repair any open in the wire(s) between the heater control panel and the mode control motor.

6. Check for loose wires or poor connections at the heater control panel 30P connector

and at the mode control motor 7P connector. If the connections are good, substitute a known-good mode control motor and recheck.

Did the symptom/indication go away?

YES - The original mode control motor is faulty, replace it.

NO - Substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

DTC 11: A PROBLEM IN THE MODE CONTROL LINKAGE, DOORS, OR MOTOR

1. Test the mode control motor (see **AIR MIX CONTROL MOTOR REPLACEMENT**).

Is the mode control motor OK?

YES - Substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

NO - Go to step 2.

2. Remove the mode control motor (see **MODE CONTROL MOTOR REPLACEMENT**).
3. Check the mode control linkage and doors for smooth movement.

Do the mode control linkage and doors move smoothly?

YES - Replace the mode control motor.

NO - Repair the mode control linkage or doors.

DTC 12: A PROBLEM IN THE BLOWER MOTOR CIRCUIT

1. Check the No. 12 (40 A) fuse in the under-hood fuse/relay box, and the No. 14 (10 A) fuse in the under-dash fuse/relay box.

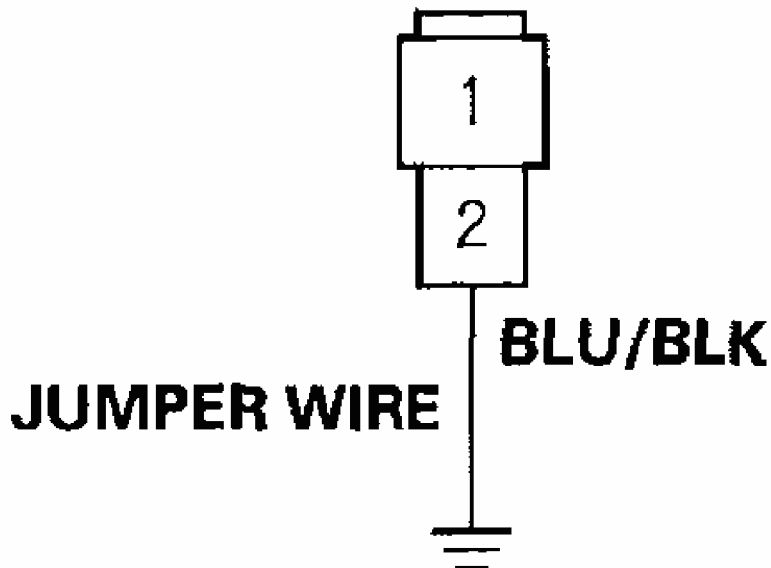
Are the fuses OK?

YES - Go to step 2.

NO - Replace the fuse(s), and recheck.

2. Connect the No. 2 terminal of the blower motor 2P connector to body ground with a jumper wire.

BLOWER MOTOR 2P CONNECTOR



Wire side of female terminals

G03679594

Fig. 21: Connecting No. 2 Terminal Of Blower Motor 2P Connector To Body Ground With Jumper Wire

Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Turn the ignition switch ON (II).

Does the blower motor run?

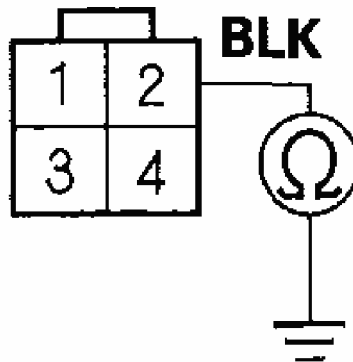
YES - Go to step 4.

NO - Go to step 17 .

4. Turn the ignition switch OFF.
5. Disconnect the jumper wire.

6. Disconnect the power transistor 4P connector.
7. Check for continuity between the No. 2 terminal of the power transistor 4P connector and body ground.

POWER TRANSISTOR 4P CONNECTOR



Wire side of female terminals

G03679595

Fig. 22: Checking Continuity Between No. 2 Terminal Of Power Transistor 4P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

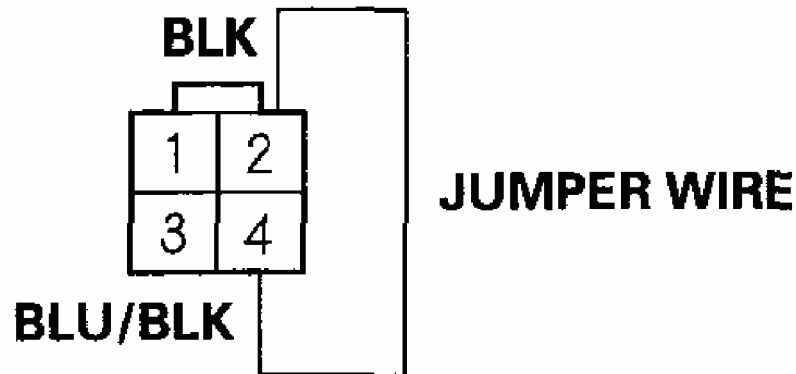
YES - Go to step 8.

NO - Check for an open in the wire between the power transistor and body ground. If the wire is OK, check for poor ground at G501.

8. Connect the No. 2 and No. 4 terminals of the power transistor 4P connector with a

jumper wire.

POWER TRANSISTOR 4P CONNECTOR



Wire side of female terminals

G03679596

Fig. 23: Connecting No. 2 And No. 4 Terminals Of Power Transistor 4P Connector With Jumper Wire

Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Turn the ignition switch ON (II).

Does the blower motor run at high speed?

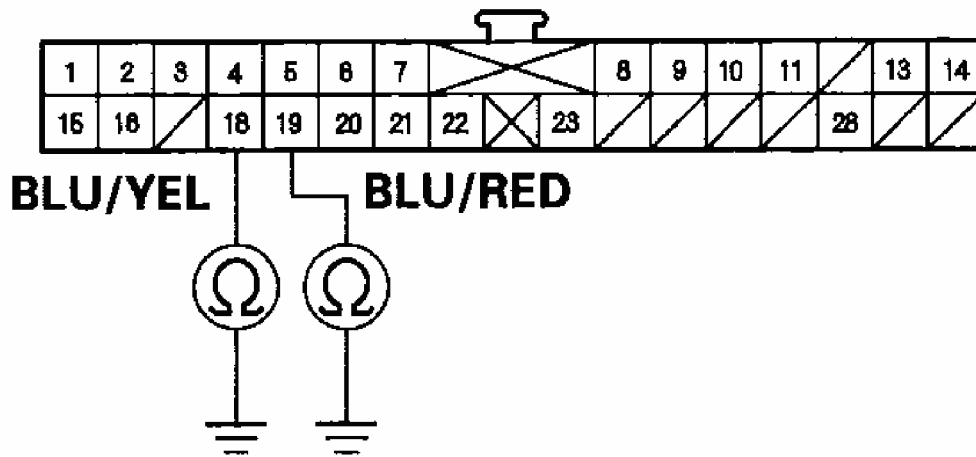
YES - Go to step 10.

NO - Repair open in the BLU/BLK wire between the power transistor and the blower motor.

10. Turn the ignition switch OFF.
11. Disconnect the jumper wire.
12. Disconnect the heater control panel 30P connector.

- Check for continuity between the No. 18 and No. 19 terminals of the heater control panel 30P connector and body ground individually.

HEATER CONTROL PANEL 30P CONNECTOR



Wire side of female terminals

G03679597

Fig. 24: Checking Continuity Between No. 18 And No. 19 Terminals Of Heater Control Panel 30P Connector And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair any short to body ground in the wire(s) between the heater control panel and the power transistor.

NO - Go to step 14.

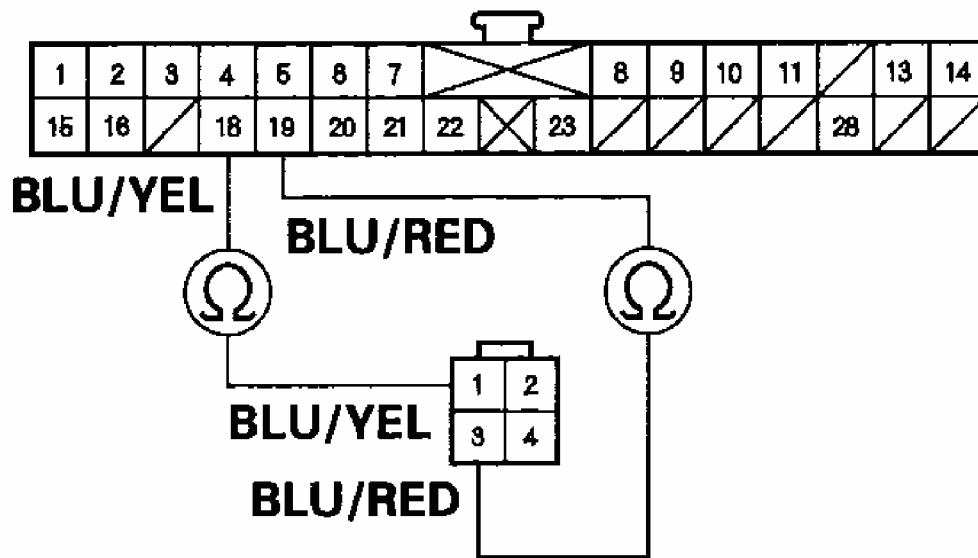
- Check for continuity between the following terminals of the heater control panel 30P connector and the power transistor 4P connector.

CONNECTOR TERMINAL CONTINUITY

30P	4P
No. 18	No. 1

HEATER CONTROL PANEL 30P CONNECTOR

Wire side of female terminals



POWER TRANSISTOR 4P CONNECTOR

Wire side of female terminals

G03679598

Fig. 25: Checking Continuity Between Terminals Of Heater Control Panel 30P Connector And Power Transistor 4P Connector
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Go to step 15.

NO - Repair any open in the wire(s) between the heater control panel and the power transistor.

15. Reconnect the heater control panel 30P connector.
16. Test the power transistor (see **RECIRCULATION CONTROL MOTOR REPLACEMENT**).

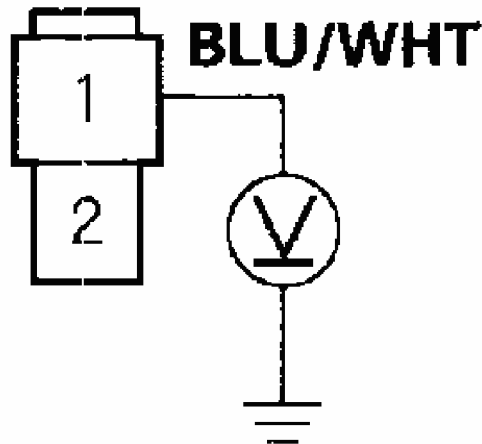
Is the power transistor OK?

YES - Check for loose wires or poor connections at the heater control panel 30P connector and at the power transistor 4P connector. If the connections are good, substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

NO - Replace the power transistor.

17. Disconnect the jumper wire.
18. Disconnect the blower motor 2P connector.
19. Turn the ignition switch ON (II).
20. Measure the voltage between the No. 1 terminal of the blower motor 2P connector and body ground.

BLOWER MOTOR 2P CONNECTOR



Wire side of female terminals

G03679599

Fig. 26: Measuring Voltage Between No. 1 Terminal Of Blower Motor 2P Connector And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Replace the blower motor.

NO - Go to step 21.

21. Turn the ignition switch OFF.
22. Remove the blower motor relay from the under-hood fuse/relay box, and test it (see **POWER RELAY TEST**).

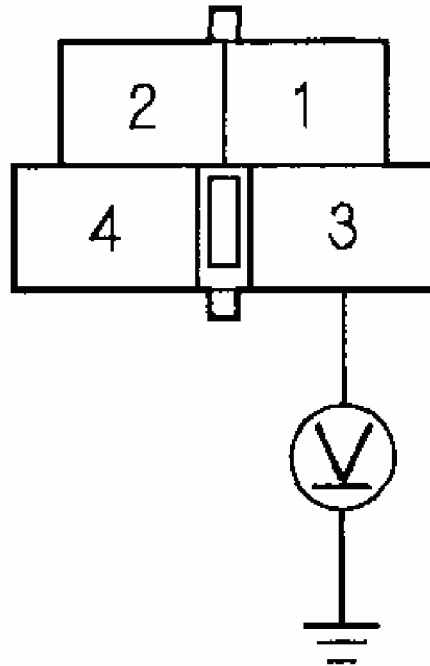
Is the relay OK?

YES - Go to step 23.

NO - Replace the blower motor relay.

23. Measure the voltage between the No. 3 terminal of the blower motor relay 4P socket and body ground.

BLOWER MOTOR RELAY 4P SOCKET



G03679600

Fig. 27: Measuring Voltage Between No. 3 Terminal Of Blower Motor Relay 4P Socket And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 24.

NO - Replace the under-hood fuse/relay box.

24. Turn the ignition switch ON (II).
25. Measure the voltage between the No. 2 terminal of the blower motor relay 4P socket and body ground.

BLOWER MOTOR RELAY 4P SOCKET

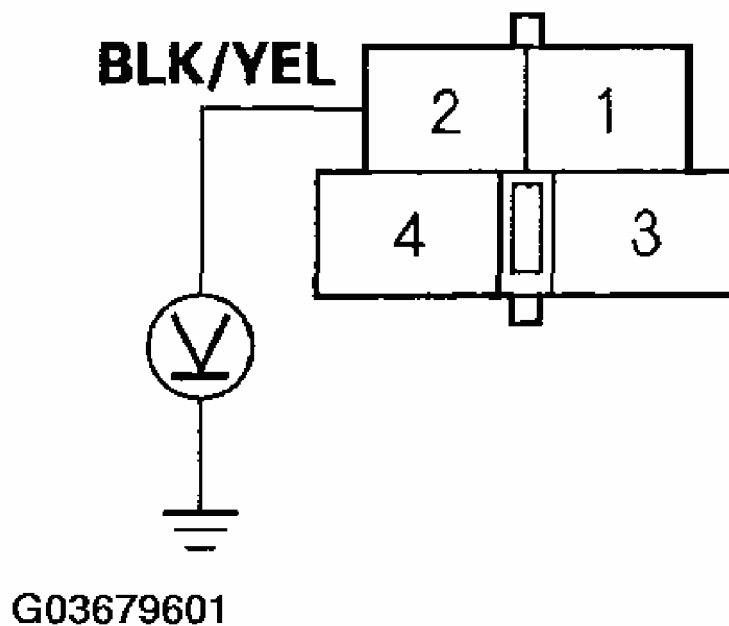


Fig. 28: Measuring Voltage Between No. 2 Terminal Of Blower Motor Relay 4P Socket And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

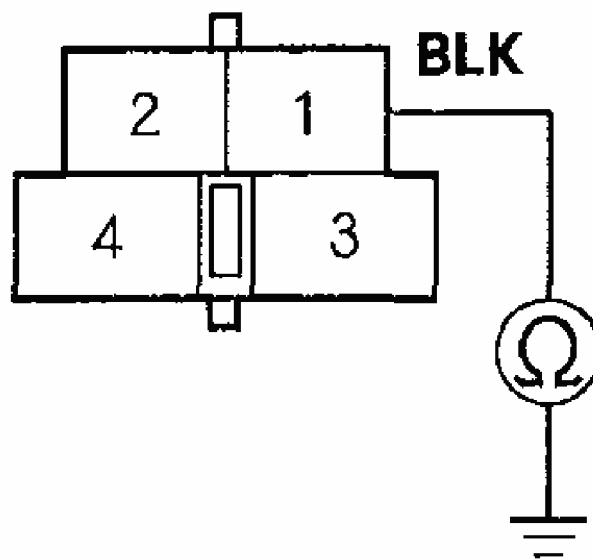
Is there battery voltage?

YES - Go to step 26.

NO - Repair open in the wire between the No. 14 (10 A) fuse in the under-dash fuse/relay box and the blower motor relay.

26. Turn the ignition switch OFF.
27. Check for continuity between the No. 1 terminal of the blower motor relay 4P socket and body ground.

BLOWER MOTOR RELAY 4P SOCKET



G03679602

Fig. 29: Checking Continuity Between No. 1 Terminal Of Blower Motor Relay 4P Socket And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair open in the BLU/WHT wire between the blower motor relay and the blower motor.

NO - Check for an open in the wire between the blower motor relay and body ground. If the wire is OK, check for poor ground at G301.

DTC 14: AN OPEN IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Remove the evaporator temperature sensor (see EVAPORATOR TEMPERATURE SENSOR REPLACEMENT).
2. Test the evaporator temperature sensor (see EVAPORATOR TEMPERATURE SENSOR REPLACEMENT).

Is the evaporator temperature sensor OK?

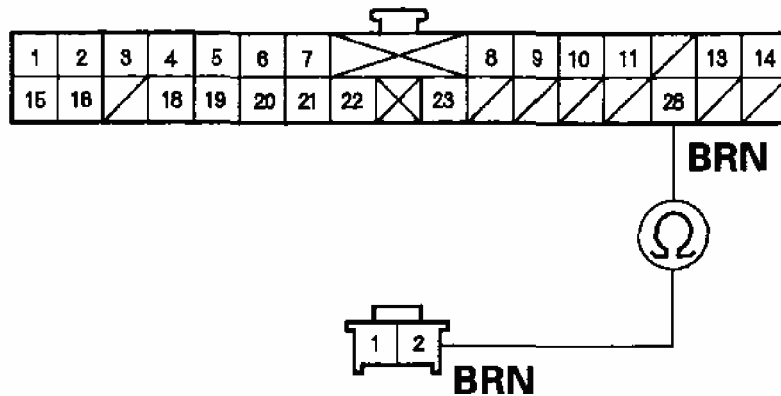
YES - Go to step 3.

NO - Replace the evaporator temperature sensor.

3. Disconnect the heater control panel 30P connector.
4. Check for continuity between the No. 28 terminal of the heater control panel 30P connector and the No. 2 terminal of the evaporator temperature sensor 2P connector.

HEATER CONTROL PANEL 30P CONNECTOR

Wire side of female terminals



EVAPORATOR TEMPERATURE SENSOR 2P CONNECTOR

Wire side of female terminals

G03679603

Fig. 30: Checking Continuity No. 28 Terminal Of Heater Control Panel 30P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

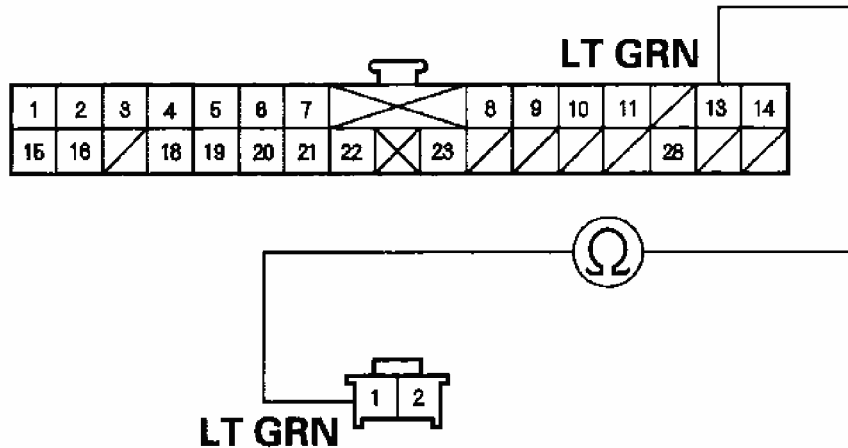
YES - Go to step 5.

NO - Repair open in the wire between the heater control panel and the evaporator temperature sensor.

5. Check for continuity between the No. 13 terminal of the heater control panel 30P connector and the No. 1 terminal of the evaporator temperature sensor 2P connector.

HEATER CONTROL PANEL 30P CONNECTOR

Wire side of female terminals

**EVAPORATOR TEMPERATURE SENSOR 2P CONNECTOR**

Wire side of female terminals

G03679604

Fig. 31: Checking Continuity No. 13 Terminal Of Heater Control Panel 30P Connector

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Check for loose wires or poor connections at the heater control panel 30P connector and at the evaporator temperature sensor 2P connector. If the connections are good, substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

NO - Repair open in the wire between the heater control panel and the evaporator temperature sensor.

DTC 15: A SHORT IN THE EVAPORATOR TEMPERATURE SENSOR CIRCUIT

1. Remove the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).
2. Test the evaporator temperature sensor (see **EVAPORATOR TEMPERATURE SENSOR REPLACEMENT**).

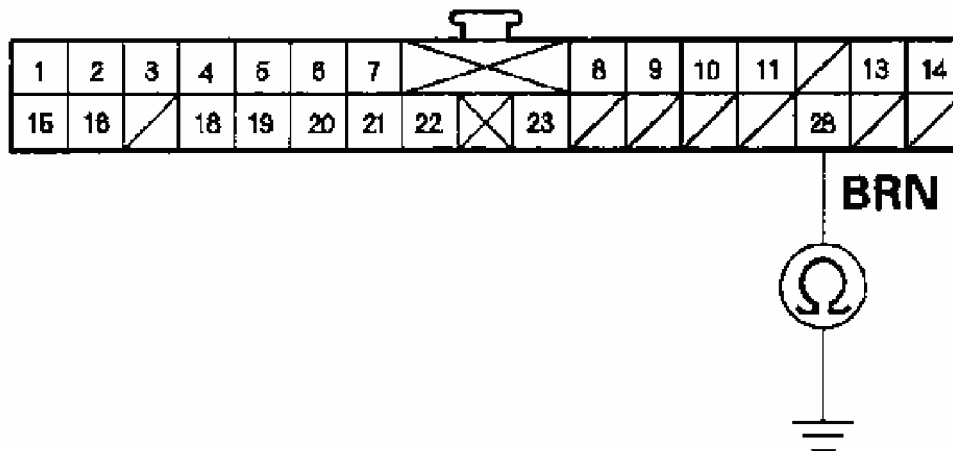
Is the evaporator temperature sensor OK?

YES - Go to step 3.

NO - Replace the evaporator temperature sensor.

3. Disconnect the heater control panel 30P connector.
4. Check for continuity between the No. 28 terminal of the heater control panel 30P connector and body ground.

HEATER CONTROL PANEL 30P CONNECTOR



Wire side of female terminals

G03679605

Fig. 32: Checking Continuity Between No. 28 Terminal Of Heater Control Panel 30P Connector And Body Ground

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES - Repair short to body ground in the wire between the heater control panel and the evaporator temperature sensor.

NO - Substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING

1. Check the No. 14 (10 A) fuse in the under-dash fuse/relay box.

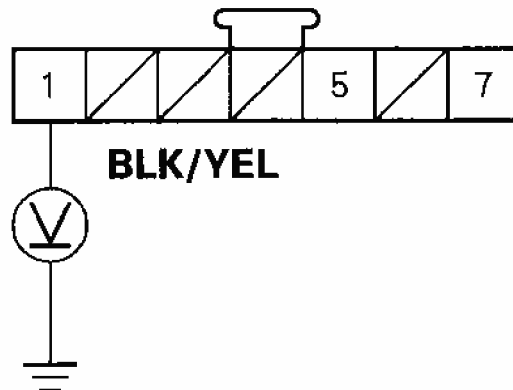
Is the fuse OK?

YES - Go to step 2.

NO - Replace the fuse, and recheck.

2. Disconnect the recirculation control motor 7P connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the No. 1 terminal of the recirculation control motor 7P connector and body ground.

RECIRCULATION CONTROL MOTOR 7P CONNECTOR



Wire side of female terminals

G03679606

Fig. 33: Measuring Voltage Between No. 1 Terminal Of Recirculation Control Motor 7P Connector And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES - Go to step 5.

NO - Repair open in the wire between the No. 14 (10 A) fuse in the under-dash fuse/relay box and the recirculation control motor.

5. Turn the ignition switch OFF.
6. Test the recirculation control motor (see **MODE CONTROL MOTOR REPLACEMENT**).

Is the recirculation control motor OK?

YES - Go to step 7.

NO - Go to step 13 .

7. Disconnect the heater control panel 30P connector.
8. Check for continuity between the No. 5 and No. 6 terminals of the heater control panel 30P connector and body ground individually.

Fig. 34: Checking Continuity Between No. 5 And No. 6 Terminals Of Heater Control Panel 30P Connector And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

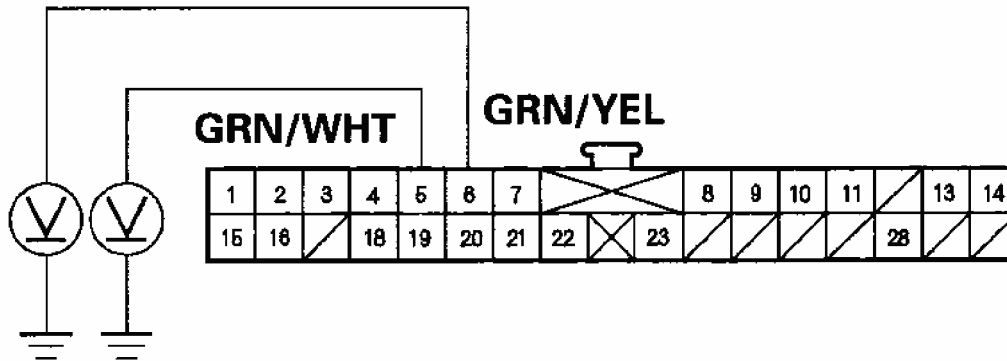
Is there continuity?

YES - Repair any short to body ground in the wire(s) between the heater control panel and the recirculation control motor.

NO - Go to step 9.

- Turn the ignition switch ON (II), and check the same wires for voltage.

HEATER CONTROL PANEL 30P CONNECTOR



Wire side of female terminals

G03679608

Fig. 35: Checking Voltage Between No. 5 And No. 6 Terminals Of Heater Control Panel 30P Connector And Body Ground
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES - Repair any short to power in the wire(s) between the heater control panel and the recirculation control motor. This short also may damage the heater control panel. Repair the short to power and retest before replacing the heater control panel.

NO - Go to step 10.

- Turn the ignition switch OFF.
- Check for continuity between the following terminals of the heater control panel 30P connector and the recirculation control motor 7P connector.

CONNECTOR TERMINAL CONTINUITY

30P	7P
No. 5	No. 5
No. 6	No. 7