

Troubleshooting

Symptom Chart

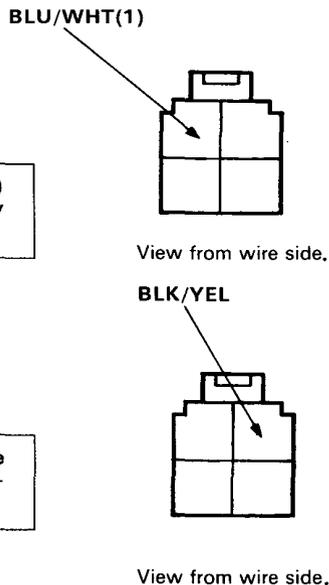
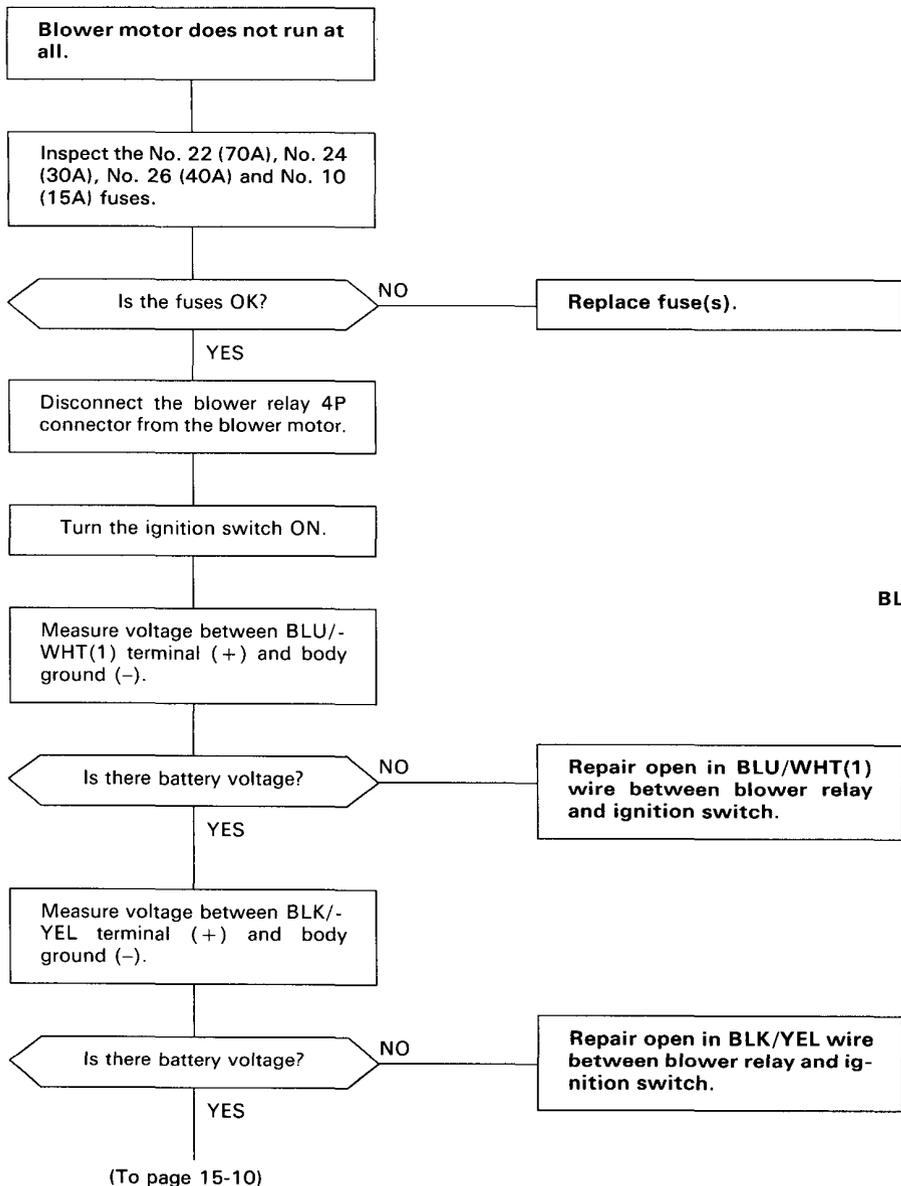
SYMPTOM		REMEDY
No hot air flow	Blower motor does not run	Perform the flowchart (page 15-9)
	Blower motor runs	Check followings: <ul style="list-style-type: none">• Clogged blower outlet• Clogged heater valve• Faulty air mix door• Out of air mix cable adjustment• Faulty thermostat (section 5)
Hot air flow is low	Blower speed does not change	Perform flow chart (page 15-14)
	Blower runs properly	Check followings: <ul style="list-style-type: none">• Clogged blower outlet• Incorrect door position
Function does not change	Function control motor does not run	Perform flow chart (page 15-18)
	Function control motor runs	Check for the heater door linkage.
Recirculation door does not change	Recirculation motor does not run	Perform flow chart (page 15-16)
	Recirculation motor run	Check for the door linkage or perform flow chart (page 15-16).

NOTE: Use digital circuit tester (07411—0020000) to check.



Flow Chart — Blower

NOTE: Use the digital circuit tester (07411—0020000) to check.



(cont'd)

Troubleshooting

Flow Chart — Blower (cont'd)

(From page 15-9)

Inspection the blower relay (page 15-28).

Is the blower relay OK?

NO

Replace the blower relay and retest.

YES

Reconnect the blower relay, then connect a jumper wire between the BLK terminal and body ground.

Does blower motor run?

YES

Repair open in BLK wire between the blower relay and body ground or poor ground (G401).

NO

Turn the ignition switch OFF.

Disconnect the 2P connector from the blower motor.

Turn the ignition switch ON.

Measure voltage between BLU/-WHT terminal (+) and body ground (-).

Is there battery voltage?

NO

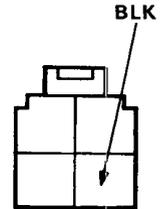
Repair open in BLU/WHT wire between blower motor and blower relay.

YES

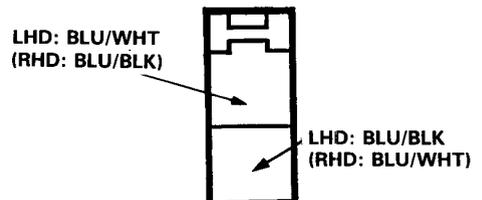
Turn the ignition switch OFF.

Reconnect the 2P connector to the blower motor.

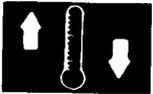
(To page 15-11)



View from wire side.



View from wire side.



(From page 15-10)

Connect a jumper wire between the BLU/BLK terminal and body ground. Turn the ignition switch ON.

LHD: BLU/BLK
(RHD: BLU/WHT)



LHD: BLU/WHT
(RHD: BLU/BLK)

View from wire side.

Does blower motor run? NO

Replace the blower motor and retest.

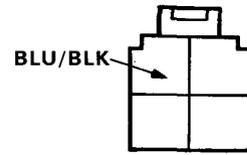
YES

Turn the ignition switch OFF.

Disconnect the blower hi relay 4P connector.

Turn the ignition switch ON.

Connect a jumper wire between the BLU/BLK terminal (+) and body ground.



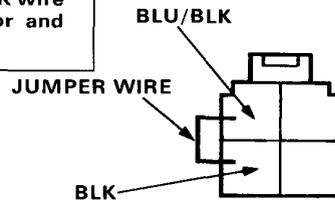
View from wire side.

Does blower motor run? NO

Repair open in BLU/BLK wire between blower motor and blower hi-relay.

YES

Connect a jumper wire between the BLU/BLK terminal and BLK terminal.



View from wire side.

Does blower motor run? NO

Repair open in BLK wire between blower hi-relay and body ground or poor ground (G401).

YES

(To page 15-12)

(cont'd)

Troubleshooting

Flow Chart — Blower (cont'd)

(From page 15-11)

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

Is the battery voltage?

NO

Repair open in BLK/YEL wire between ignition switch and blower hi-relay.

YES

Inspect blower hi-relay (page 15-28).

Is the blower hi-relay OK?

NO

Replace the blower hi-relay and retest.

YES

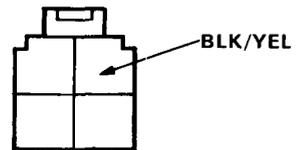
Turn the ignition switch OFF.

Reconnect the 4P connector to the blower hi-relay.

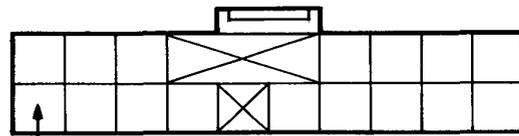
Disconnect the 16P connector from the function control panel.

Connect a jumper wire between the ORN/WHT terminal and body ground.

(To page 15-13)



View from wire side.



ORN/WHT

View from wire side.



(From page 15-12)

Turn the ignition switch ON.

Does the blower motor run?

NO

Repair open in ORN/WHT wire between blower hi-relay and function control panel.

YES

Check for continuity between BLK terminal and body ground.

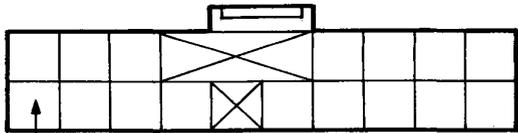
Is there continuity?

NO

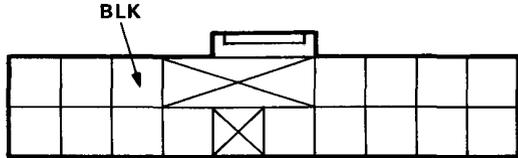
Repair open in BLK wire between function control panel and body ground or poor ground (G701).

YES

Replace the function control panel and retest.



ORN/WHT View from wire side.



View from wire side.

(cont'd)

Troubleshooting

Flow Chart — Blower (cont'd)

NOTE: Use the digital circuit tester (07411—0020000) to check.

Blower motor running speed does not change.

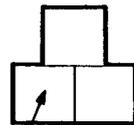
Turn the ignition switch OFF.

Disconnect the 3P connector from the power transistor.

Measure voltage between LT GRN/BLK (+) terminal and body ground.

Turn the ignition switch ON.

Blower motor speed control switch ON. (center position).



LT GRN/BLK
View from wire side.

Is there battery voltage?

NO

Turn the ignition switch OFF.

YES

Disconnect the 16P connector from the function control panel

Inspect the power transistor (page 15-28).

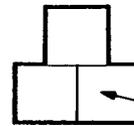
Is the power transistor OK?

NO

Replace the power transistor and retest.

YES

Check for continuity from BLK terminal and body ground.



View from wire side.

Is there continuity?

NO

Repair open in BLK wire between power transistor and body ground or poor ground (G401).

YES

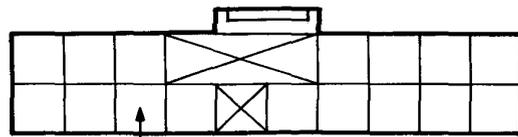
Replace the function control panel and retest.

(To page 15-15)



(From page 15-14)

Measure voltage between BLU/BLK(+) terminal and body ground. Turn the ignition switch ON.



BLU/BLK

View from wire side.

Is there battery voltage?

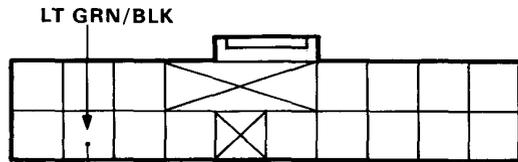
NO

Repair open in BLU/BLK wire between function control panel and blower motor.

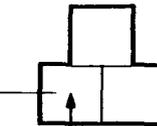
YES

Turn the ignition switch OFF.

Check for continuity from LT GRN/BLK terminal and power transistor LT GRN/BLK terminal.



LT GRN/BLK



LT GRN/BLK

View from wire side.

Is there continuity?

NO

Repair open in LT GRN/BLK wire between function control panel and power transistor.

YES

Check for continuity from BLK terminal and body ground.

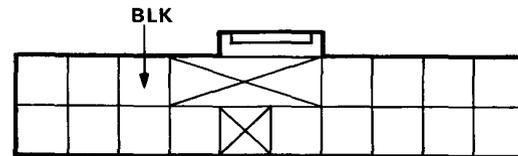
Is there continuity?

NO

Repair open in BLK wire between function control panel and body ground or poor ground (G701).

YES

Replace the function control panel and retest.



BLK

View from wire side.

Troubleshooting

Flow Chart — Recirculation Control

NOTE: Use the digital circuit tester (07411—0020000) to check.

Recirculation control door does not change between FRESH and REC.

Inspect the No. 10 (15A) fuse.

Is the No. 10 fuse OK?

NO

Replace the No. 10 fuse.

YES

Push the FRESH button and turn the ignition switch ON.

Does the motor run all the time?

YES

- Repair short in BLU/ORN wire between recirc. motor and switch.
- Replace the control switch.

NO

Turn the ignition switch OFF.

Push the REC button and turn the ignition switch ON.

Does the motor run all the time?

YES

- Repair short in BLU/GRN wire between recirc. motor and switch.
- Replace the control switch.

NO

Turn the ignition switch OFF.

Disconnect the 6P connector from the recirc. motor at the bottom of the blower assembly.

Turn the ignition switch ON.

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

Is there battery voltage?

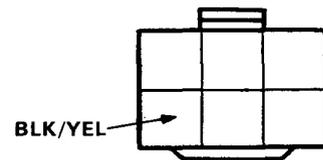
NO

Repair open in BLK/YEL wire between the fuse box and recirc. motor.

YES

Turn the ignition switch off and reconnect the 6P connector.

(To page 15-17)

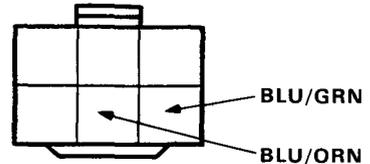


View from wire side.



(From page 15-16)

Connect the BLU/ORN and BLU/GRN terminals to the body ground. Turn the ignition switch ON.



View from wire side.

Does the motor run all the time?

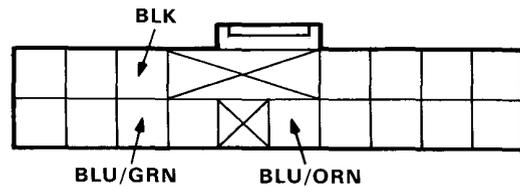
NO

Replace the recirculation control motor and retest.

YES

Turn the ignition switch OFF. Remove the function control panel and disconnect the 16P connector.

Connect the BLU/GRN and BLU/ORN terminals to BLK terminal using a jumper wire.



View from wire side.

Does the motor run all the time?

YES

Replace the function control panel and retest.

NO

Check for continuity between the BLK terminal and body ground.

Is there continuity?

NO

Repair open in BLK wire between the function control panel and body ground or poor ground (G401).

YES

Repair open in BLU/ORN and/or BLU/GRN wire(s) between the function control panel and recirculation control motor.

Troubleshooting

Flow Chart — Function Control

NOTE: Use the digital circuit tester (07411—0020000) to check.

Function control motor does not run.

Inspect the No. 10 (15A) fuse.

Is the No. 10 fuse OK?

NO

Replace the No. 10 fuse.

YES

Disconnect the 8P connector from the function control motor.

Turn the ignition switch ON.

Measure voltage between BLK/YEL terminal and body ground.

Is there battery voltage?

NO

Repair open in BLK/YEL wire between heater control and fuse box.

YES

Turn the ignition switch OFF.

Check for continuity from BLK terminal to body ground.

Is there continuity?

NO

Repair open in BLK wire between the function control motor and body ground or poor ground (G403).

YES

Inspect the function control motor (page 15-27)

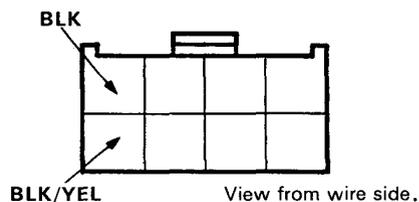
Is the function control motor OK?

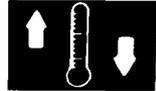
NO

Replace the function control motor and retest.

YES

(To page 15-19)

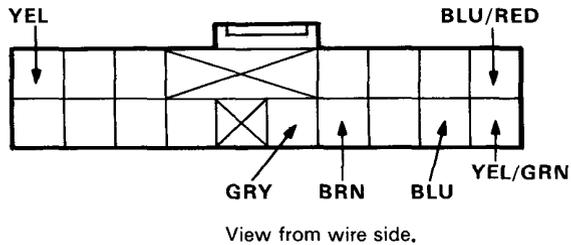




(From page 15-18)

Disconnect the 16P connector from the function control panel.

Check for continuity at each wire (YEL, GRY, BRN, YEL/GRN, BLU/RED or BLU) between the 8P and 16P connectors.



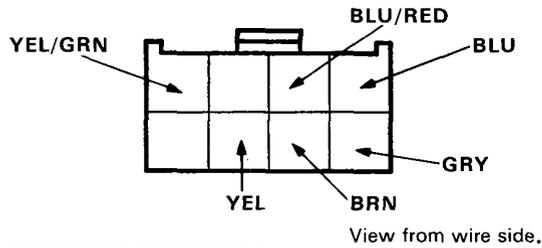
Does continuity exist?

NO

Repair open YEL, GRY, BRN, YEL/GRN, BLU/RED and/or BLU wire(s).

YES

Check for continuity from each wire (YEL, GRY, BRN, YEL/GRN, BLU/RED or BLU) to body ground.



Is there continuity?

YES

Repair short to body ground in wire.

NO

Check for continuity between BLK terminal to body ground.

NOTE: If any of the wires are shorted to ground, the function control motor will not change positions.

Is there continuity?

NO

Repair open in BLK wire or poor ground (G403).

YES

Replace the function control panel.