

Electrical Troubleshooting

Troubleshooting Flowchart

Self-diagnosis LED indicator blinks once.

Disconnect the 26P connector from the control unit.

Turn the ignition switch ON.

Measure the voltage between the A24 (RED/WHT) and A1 (BRN/BLK) terminals.

Is there voltage? YES

Repair short to power source in RED/WHT wire between the A24 terminal and the lock-up control solenoid valve A.

NO
Turn the ignition switch OFF.

Disconnect the 2P connector from the lock-up control solenoid valve assembly.

Check for continuity between the A24 (RED/WHT) and A1 (BRN/BLK) terminals.

Is there continuity? YES

Repair short to ground in RED/WHT wire between the A24 terminal and the lock-up control solenoid valve A.

NO
Connect the 2P connector to the lock-up control solenoid valve assembly.

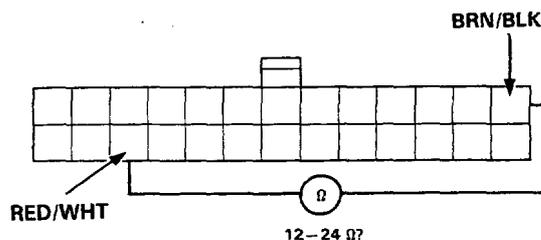
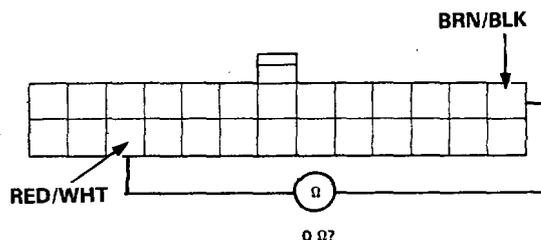
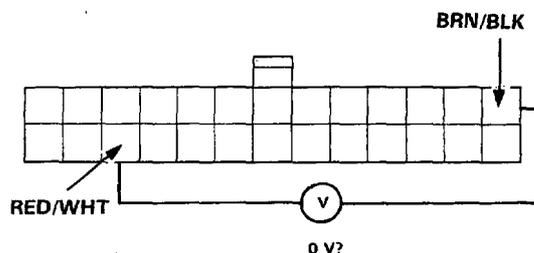
Measure the resistance between the A24 (RED/WHT) and A1 (BRN/BLK) terminals.

Is the resistance 12–24 Ω? NO

Check for open in RED/WHT wire between the A24 terminal and the lock-up control solenoid valve A. If wire is OK, check the Lock-up Control Solenoid Valve A.

YES
Check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.

NOTE: View from wire side.



(cont'd)

Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)

Self-diagnosis LED indicator blinks twice.

Disconnect the 26P connector from the control unit.

Turn the ignition switch ON.

Measure the voltage between the A25 (WHT/BLK) and A1 (BRN/BLK) terminals.

Is there voltage? YES

Repair short to power source in WHT/BLK wire between the A25 terminal and the lock-up control solenoid valve B.

NO

Turn the ignition switch OFF.

Measure the resistance between the A25 (WHT/BLK) and A1 (BRN/BLK) terminals.

Is the resistance 12 – 24 Ω? NO

Check for open in WHT/BLK wire between the A25 terminal and the lock-up control solenoid valve B. If wire is OK, check the Lock-Up Control Solenoid Valve B.

YES

Disconnect the 2P connector from the lock-up control solenoid valve assembly.

Check for continuity between the A25 (WHT/BLK) and A1 (BRN/BLK) terminals.

Is there continuity? YES

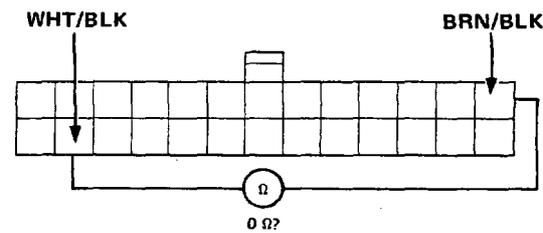
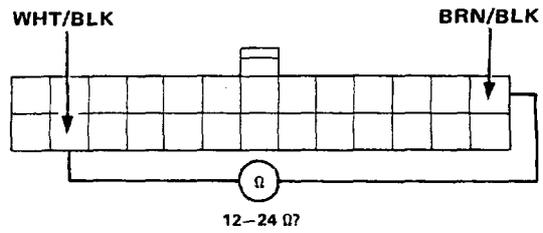
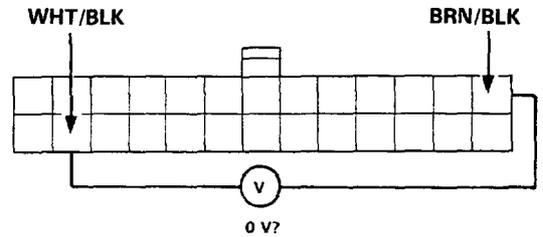
Repair short to ground in WHT/BLK wire between the A25 terminal and the lock-up control solenoid valve B.

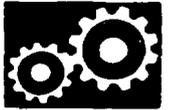
NO

Connect the 2P connector to the lock-up control solenoid valve assembly.

Check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.

NOTE: View from wire side.





Self-diagnosis LED indicator blinks three times.

Turn the ignition switch ON.

Check whether the PGM-FI LED display blinks.

Does the LED blink?

YES
Repair the PGM-FI System.

NO

Turn the ignition switch OFF.

Disconnect the 26P and 22P connectors from the control unit.

Turn the ignition switch ON.

Measure the voltage between the B14 (ORN) and A1 (BRN/BLK) terminals.

Is the voltage 4.75–5.25 V?

NO
Repair open or short in ORN wire between the B14 terminal and the D14 terminal of the PGM-FI ECU.

YES

Turn the ignition switch OFF.

Connect the 26P and 22P connectors to the control unit.

Turn the ignition switch ON.

Measure the voltage between the B8 (RED/YEL) and A1 (BRN/BLK) terminals.

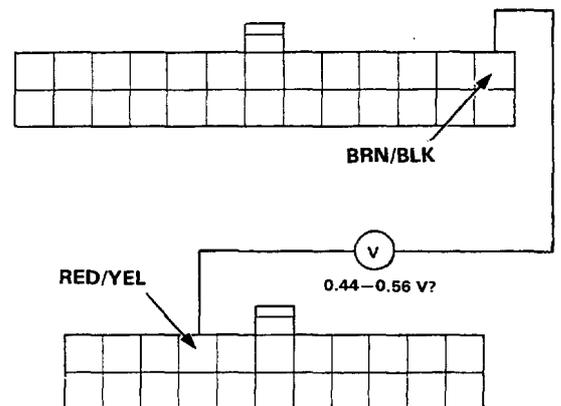
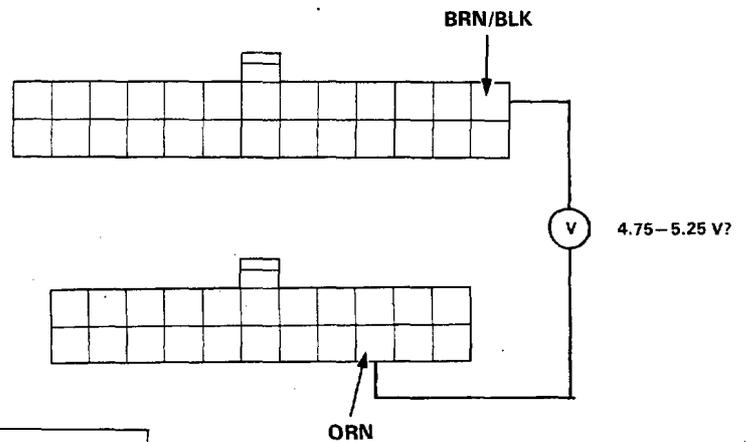
Is the voltage 0.44–0.56 V?*

NO
Repair open or short in RED/YEL wire between the B8 terminal and the throttle angle sensor.

YES * ± 10%

Check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.

NOTE: View from wire side.



(cont'd)

Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)

NOTE: For EC models

Self-diagnosis LED indicator blinks four times.

Jack up the front of the car and block one wheel.

Turn the ignition switch ON.

Rotate the front wheel and measure the voltage between the B7 (YEL/RED) and A1 (BRN/BLK) terminals.

Does the voltage 0–5 V appear alternately?

YES

Substitute a known-good control unit and recheck.

NO

Turn the ignition switch OFF.

Disconnect the 26P and 22P connectors from the control unit.

Rotate the front wheel and check for continuity between the A1 (BRN/BLK) and B7 (YEL/RED) terminals.

Do continuity and infinity alternately appear?

YES

Check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.

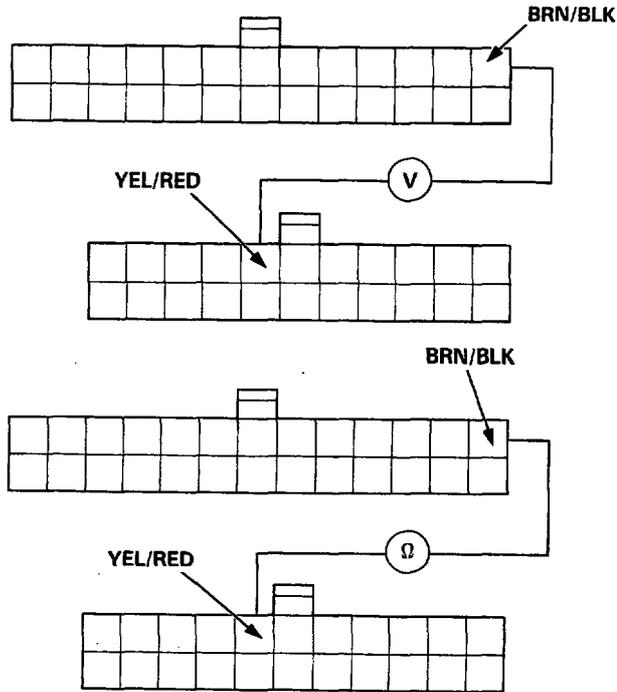
NO

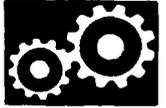
Check for short or open in YEL/RED wire between the B7 terminal and the gauge assembly. If wire is OK, check the Speed Pulser.

⚠ WARNING

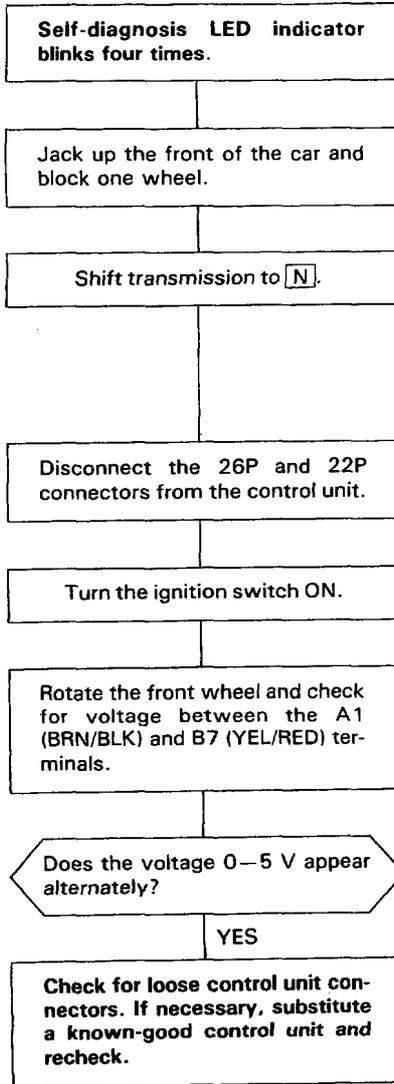
- Set the parking brake securely and block the rear wheels.
- Jack up the front of the car and support with a rigid rack.

NOTE: View from wire side.



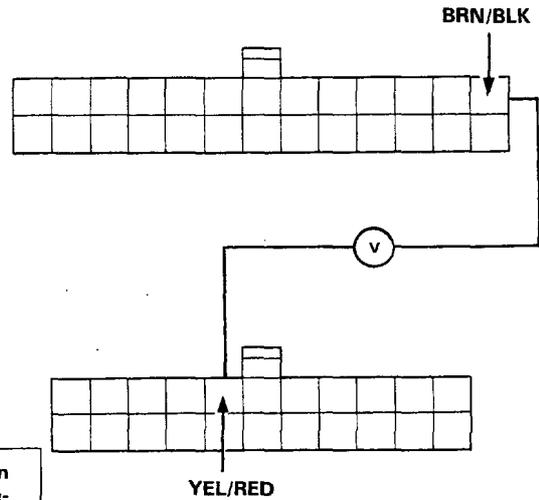


NOTE: Except EC models



⚠ WARNING

- Set the parking brake securely and block the rear wheels.
- Jack up the front of the car and support with a rigid rack.

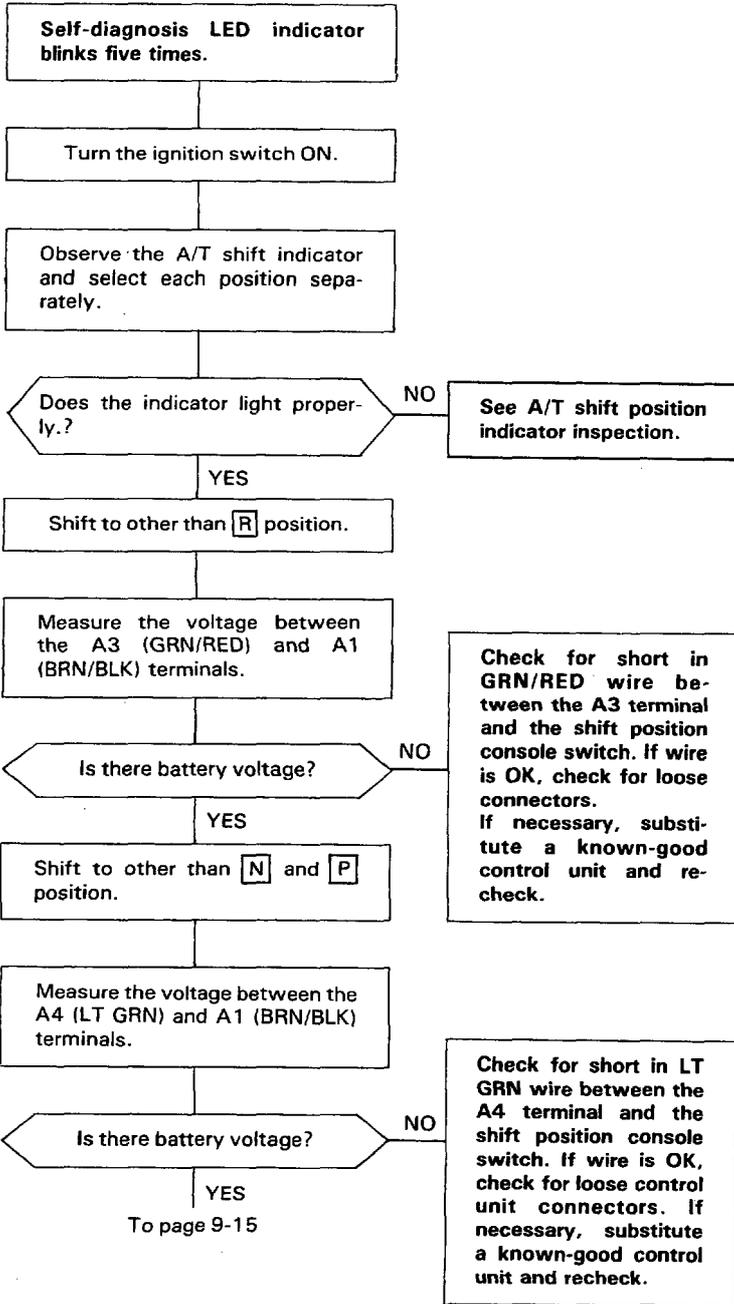


NOTE: View from wire side.

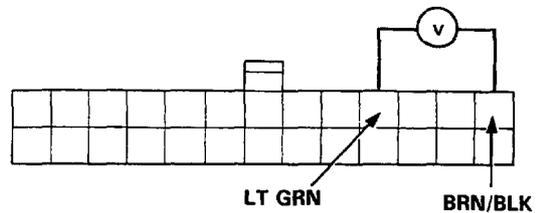
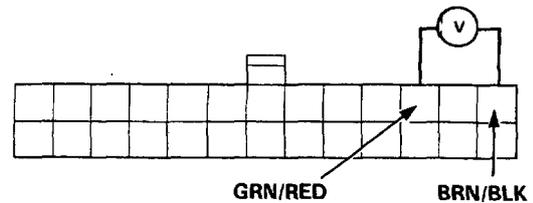
(cont'd)

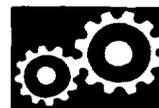
Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)



NOTE: View from wire side.





From page 9-14

NOTE: View from wire side.

Shift to other than **D** position.

Measure the voltage between the A5 (GRN/BLK) and A1 (BLK/RED) terminals.

Is there battery voltage?

NO

YES

Shift to other than **S** position.

Measure the voltage between the A6 (GRN/BLU) and A1 (BRN/BLK) terminals.

Is there battery voltage?

NO

YES

Shift to other than **2** position.

Measure the voltage between the A7 (GRN/YEL) and A1 (BRN/BLK) terminals.

Is there battery voltage?

NO

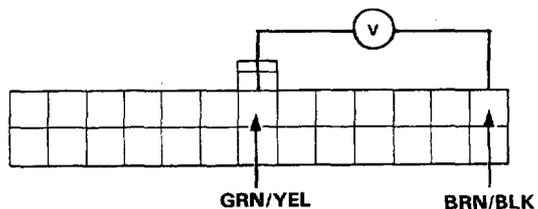
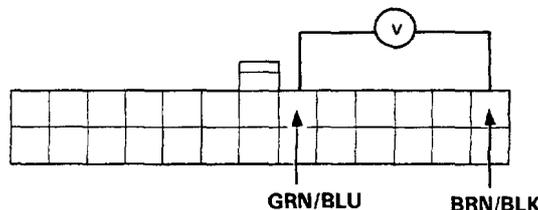
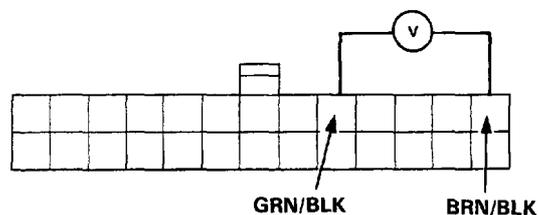
YES

Substitute a known-good control unit and recheck.

Check for short in GRN/BLK wire between the A5 terminal and the shift position console switch. If wire is OK, check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.

Check for short in GRN/BLU wire between the A6 terminal and the shift position console switch. If wire is OK, check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.

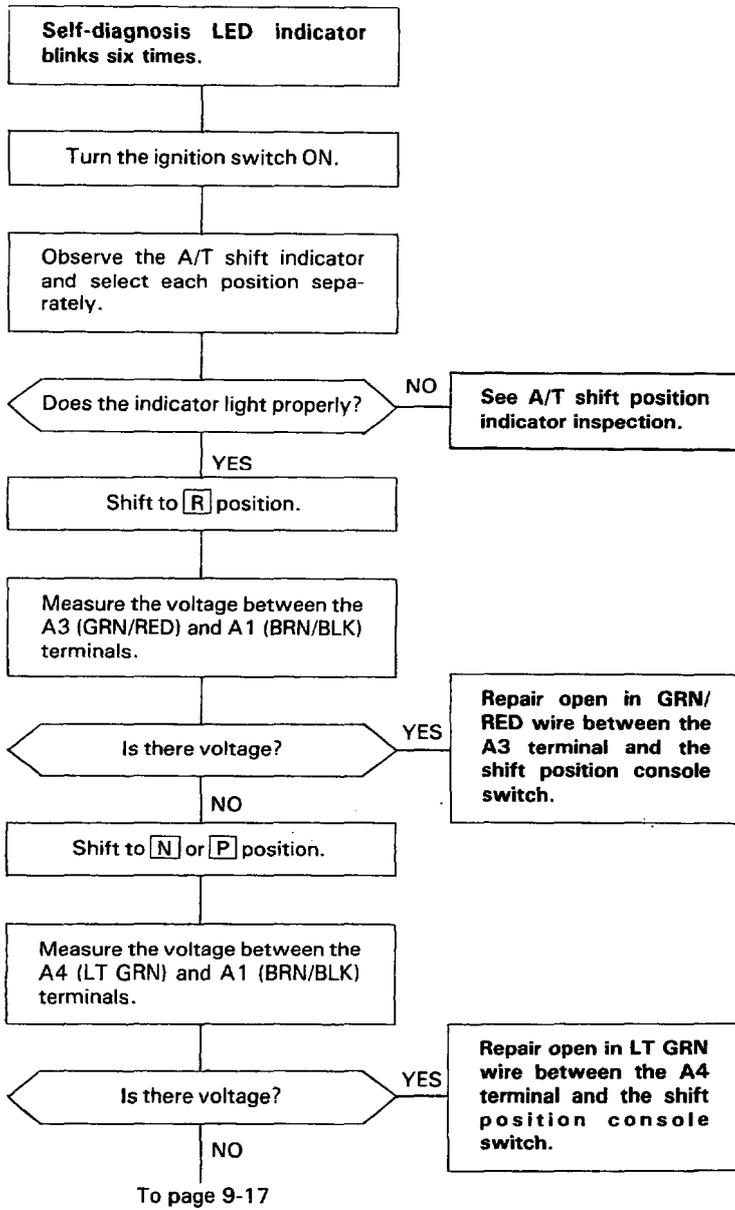
Check for short in GRN/YEL wire between the A7 terminal and the shift position console switch. If wire is OK, check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.



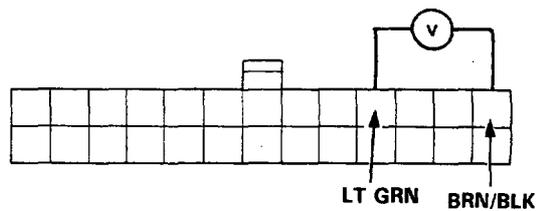
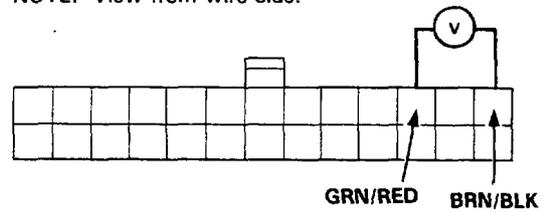
(cont'd)

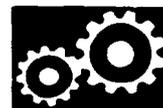
Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)



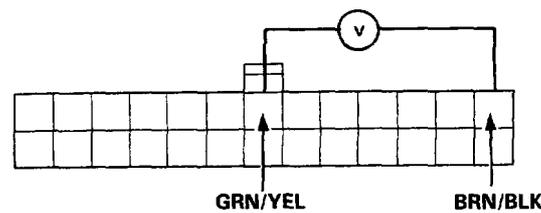
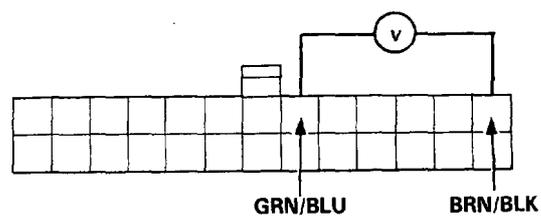
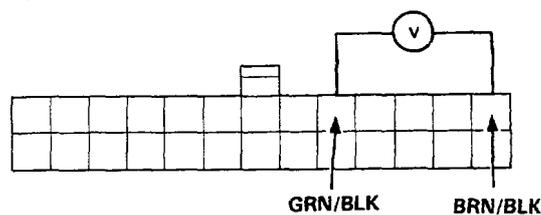
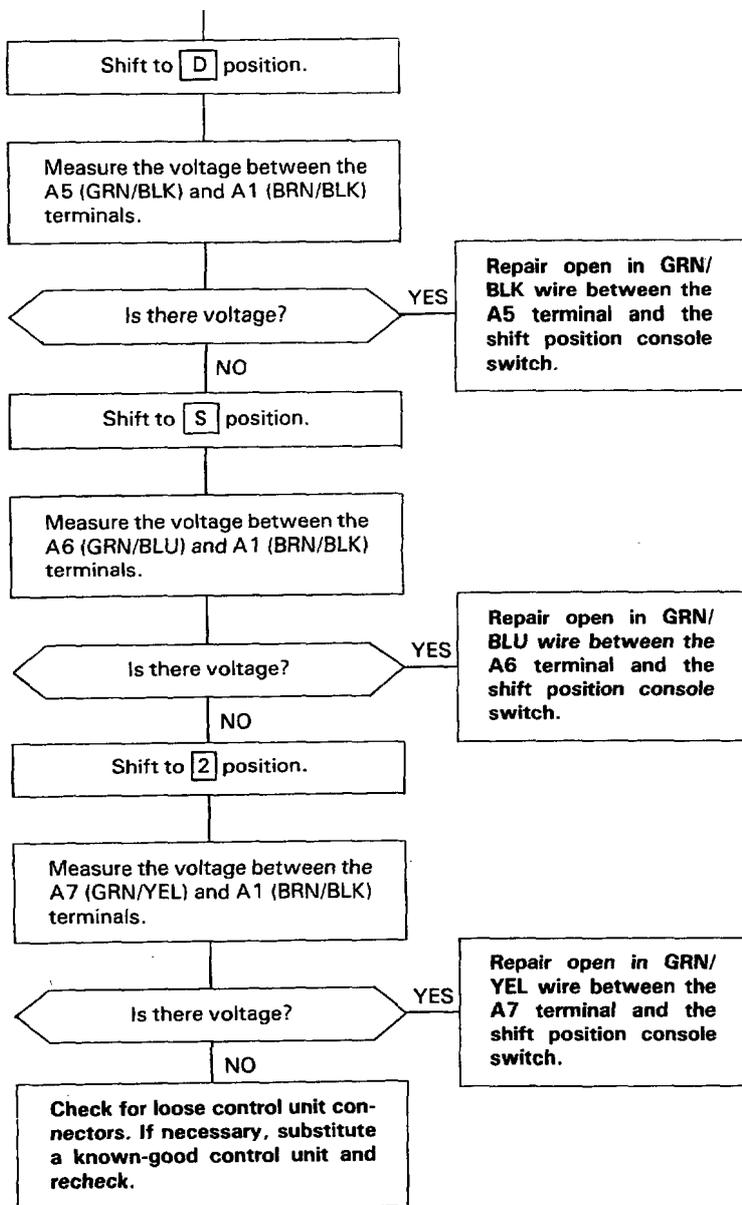
NOTE: View from wire side.





From page 9-16

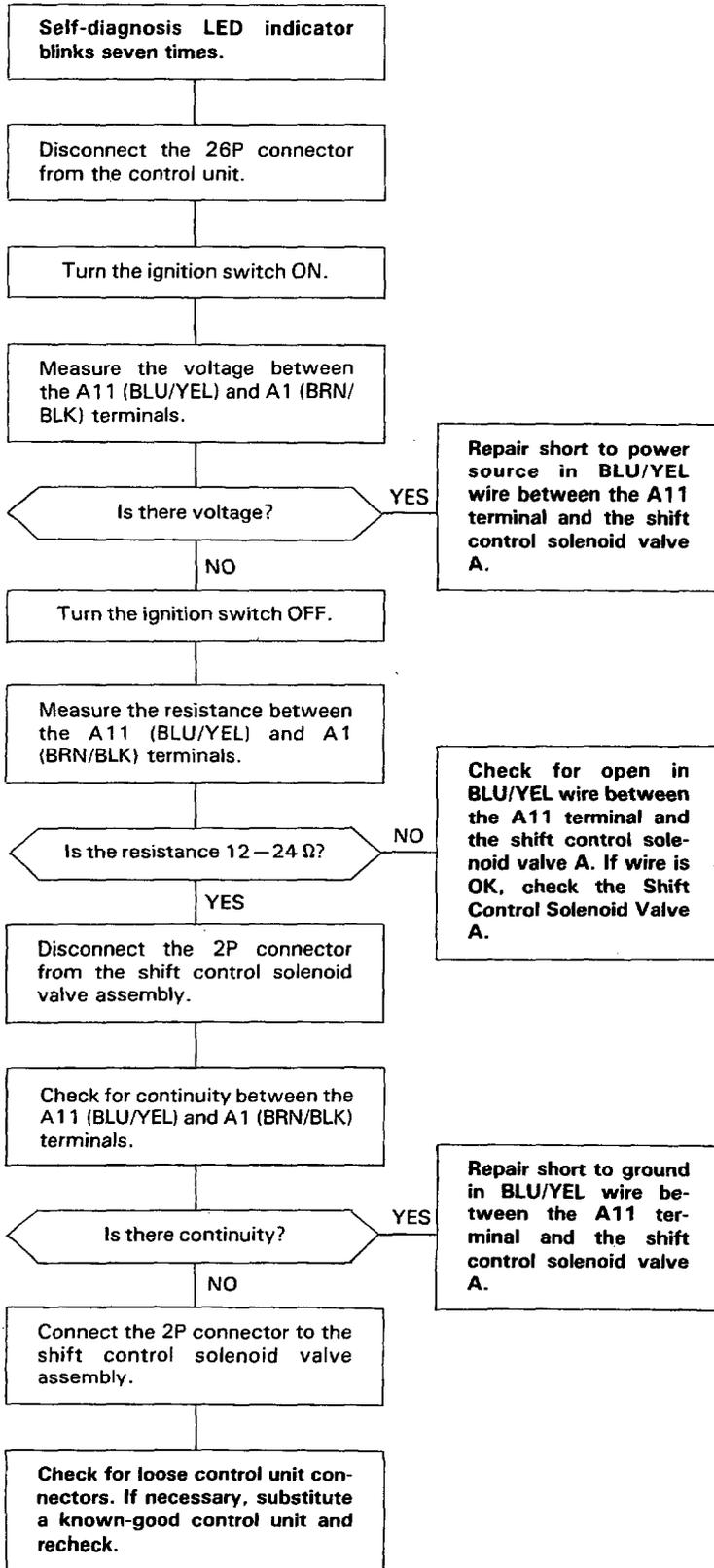
NOTE: View from wire side.



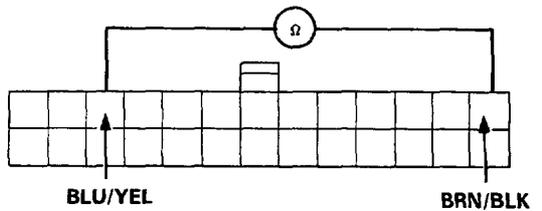
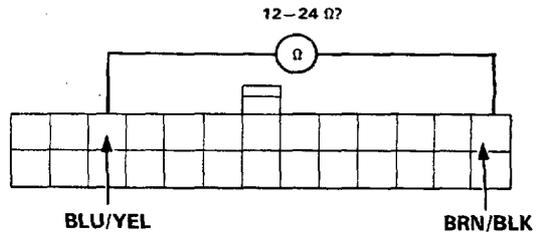
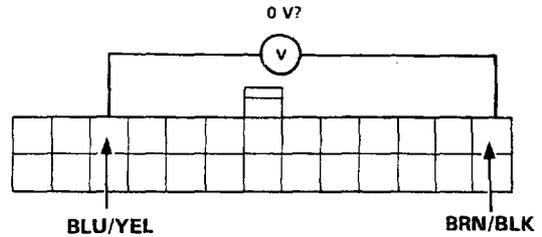
(cont'd)

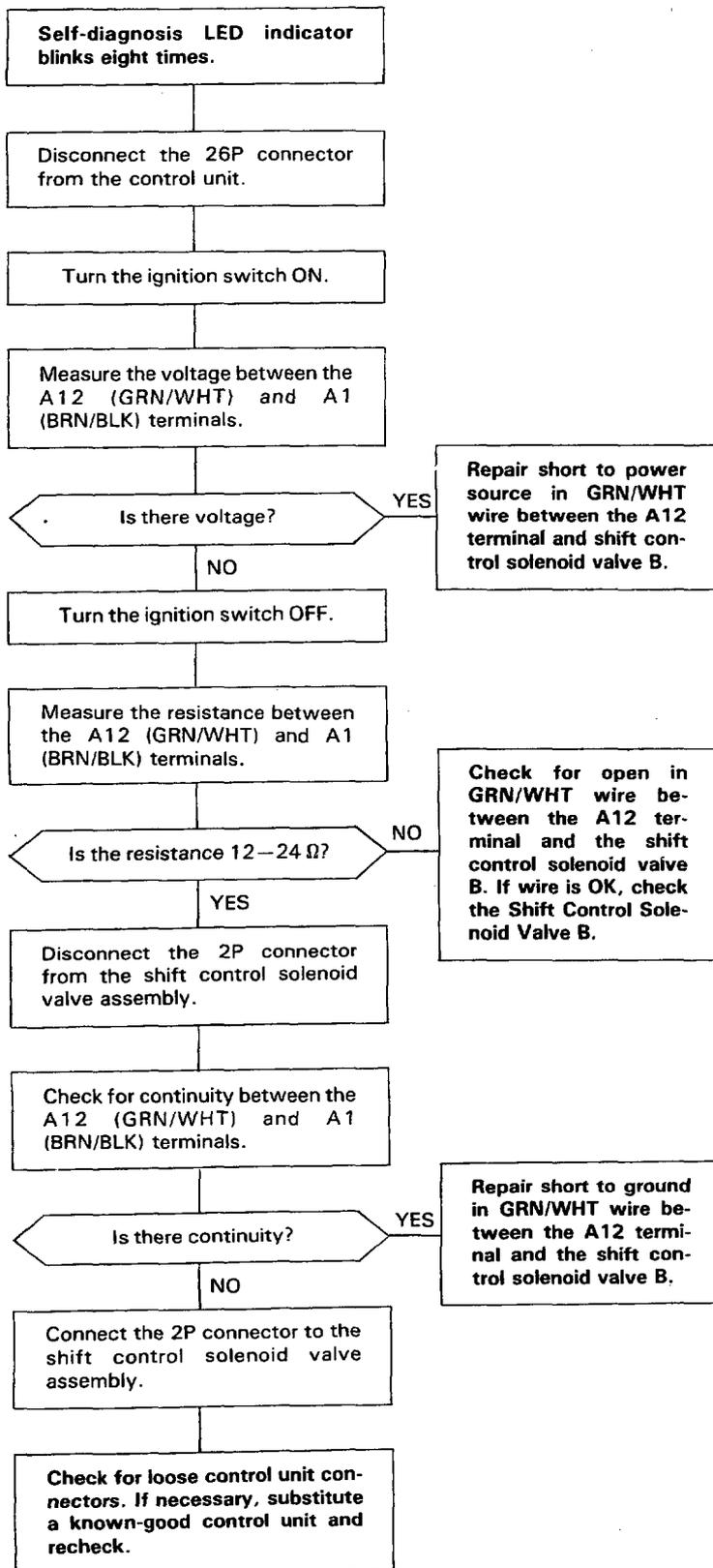
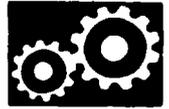
Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)

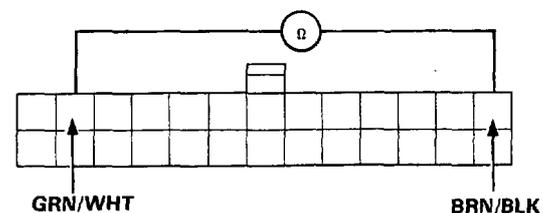
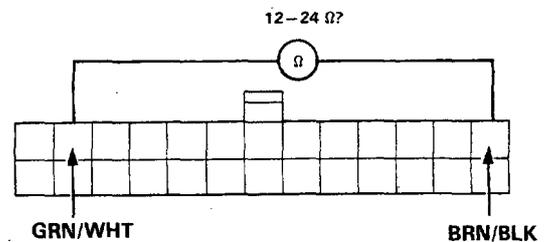
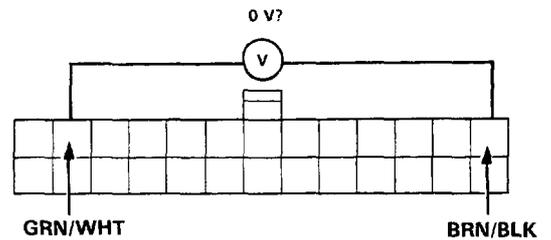


NOTE: View from wire side.





NOTE: View from wire side.



(cont'd)

Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)

Self-diagnosis LED indicator blinks nine times.

Check the state of installation of the NC speed sensor.

OK?

NO

Reinstall and recheck.

YES

Disconnect the 2P connector from the NC speed sensor coupler.

Measure the resistance of the NC speed sensor.

Is the resistance 400–600 ohms? (20°C)

NO

Replace the NC speed sensor.

YES

Reconnect the NC speed sensor.

Disconnect the 22P connector from the control unit.

Measure the resistance between the B3 (BLU/GRN) and B4 (BLU/YEL).

Is the resistance 400–600 ohms? (20°C)

NO

Check for continuity between the B3 (BLU/GRN) terminal and body ground.

Is there continuity?

YES

Repair short in BLU/GRN or BLU/YEL wire between B3 and B4 terminals and the NC speed sensor.

NO

Check for continuity on the BLU/GRN wire between B3 terminal and the NC speed sensor.

Is there continuity?

NO

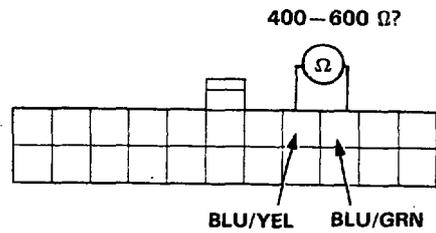
Repair open in BLU/GRN wire.

YES

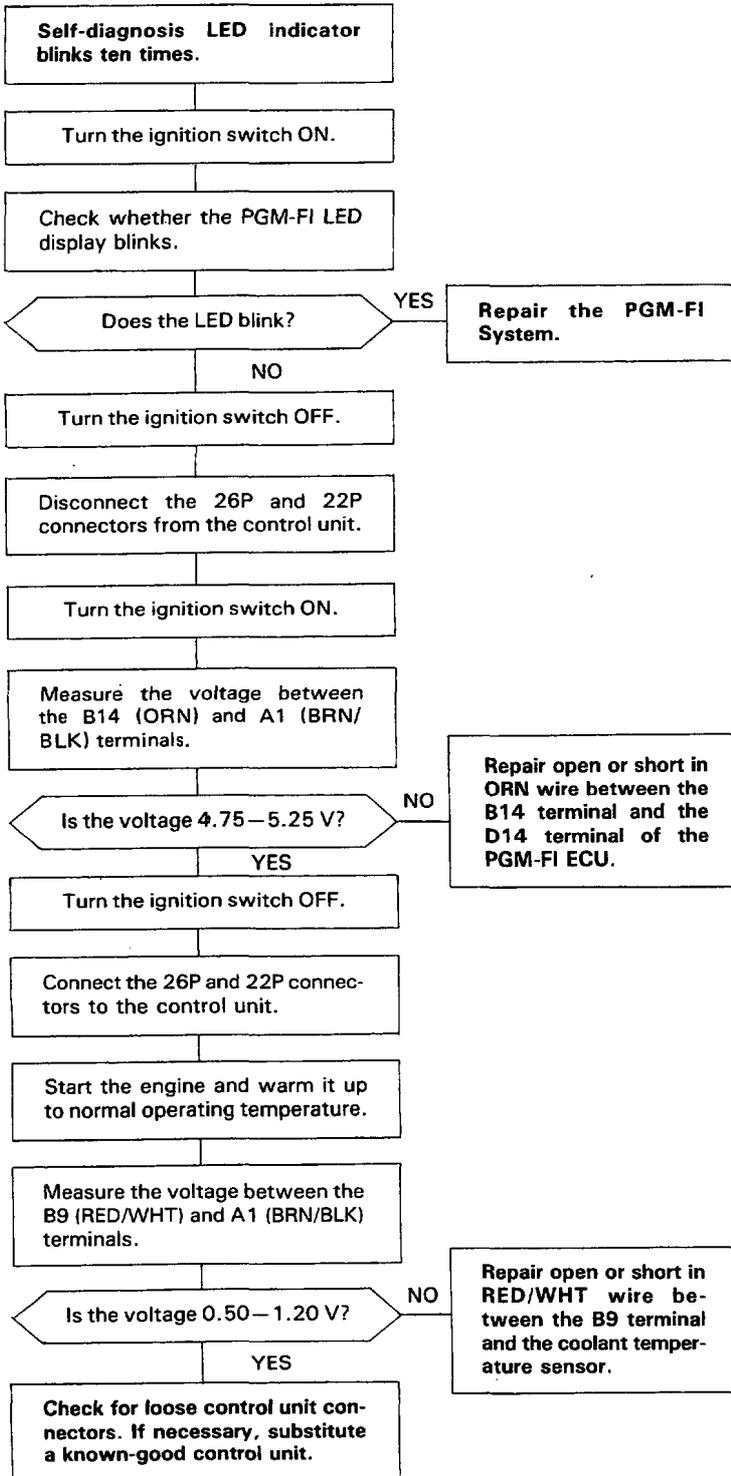
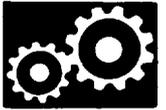
Check for continuity on the BLU/YEL wire between B4 terminal and NC speed sensor.

YES

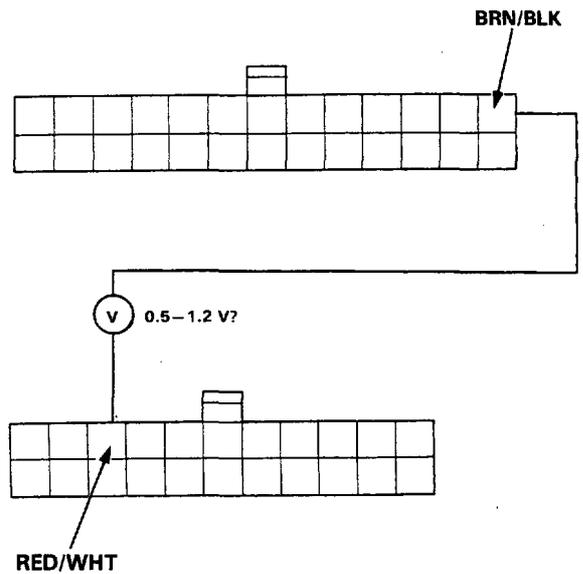
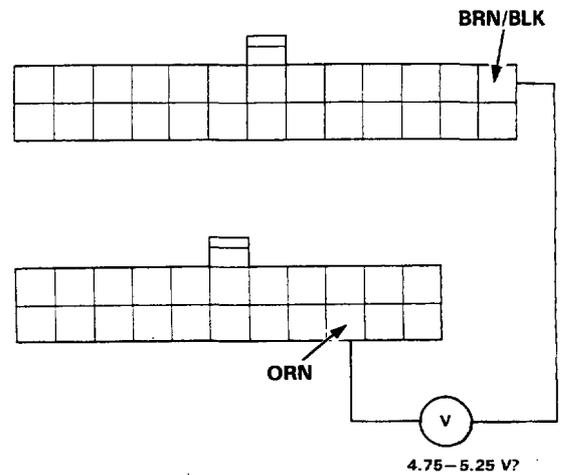
Check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.



NOTE: View from wire side.



NOTE: View from wire side.



Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)

Self-diagnosis LED indicator blinks eleven times.

Disconnect the 26P connectors from the control unit.

Start the engine.

Measure the voltage between the A9 (BLU) and A1 (BRN/BLK) terminals.

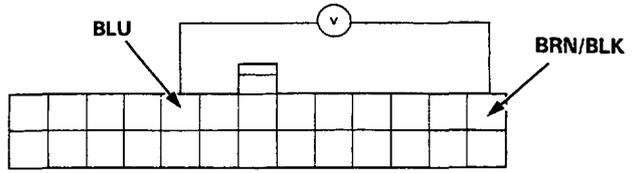
Is there battery voltage?

NO

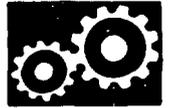
Repair open or short in BLU wire between the A9 terminal and the ignition coil.

YES

Check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.



NOTE: View from wire side.



Self-diagnosis LED indicator blinks twelve.

Turn the ignition switch ON.

Measure the voltage between the A20 (YEL) and A1 (BRN/BLK) terminals.

Is there battery voltage?

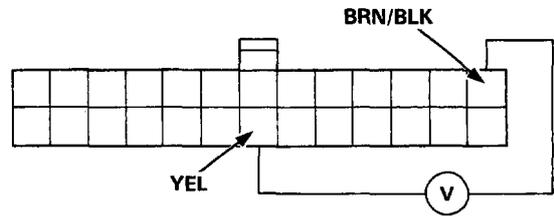
YES

Substitute a known-good control unit and recheck.

NO

Repair short in YEL wire between the A20 terminal and the cooling fan control unit. If wire is OK, check the cooling fan control unit.

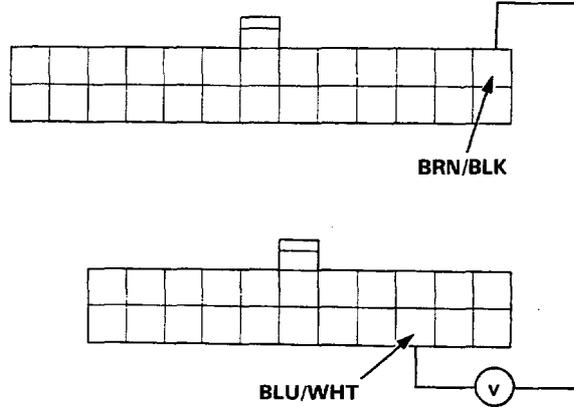
NOTE: View from wire side.



Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)

NOTE: View from wire side.



Self-diagnosis LED indicator blinks fourteen times.

Start the engine and warm it up to normal operating temperature.

Shift to **P** position

Turn the ignition switch OFF.

Turn the ignition switch ON and wait for at least two seconds.

Using an analog voltmeter, measure the voltage between the B15 (+) and A1 (-) terminals.

Is there approx. 5 V for over five seconds?

YES

Jack up the front of the car.

Start the engine.

Shift to **D** position.

Raise the engine to over 2000 rpm (over 40 mph in 4th gear) for five seconds.

Release and depress the throttle so that the transmission downshifts and upshifts.

Using an analog voltmeter, measure the voltage between B15 (+) and A1 (-) terminals.

Does the meter jerk toward 0 V only when the transmission shifts?

NO

To page 9-25

NO Does the meter jerk from 0 V to 4 V approx every four seconds?

YES

Refer to PGM-FI ECU Signal.

NO

Is the Check Engine warning light on?

YES

Repair the PGM-FI System.

NO

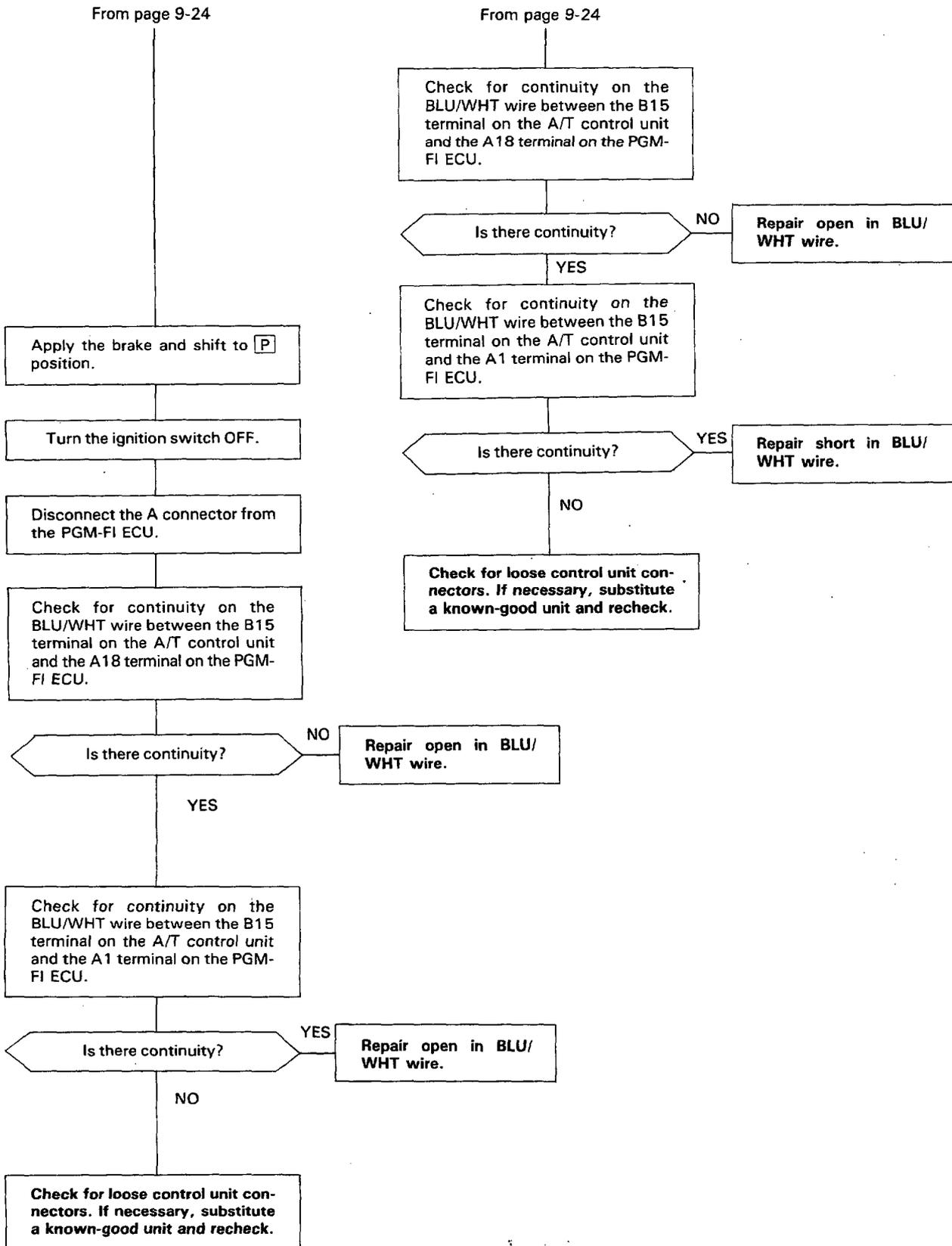
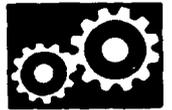
Turn the ignition switch OFF.

Disconnect the A connector from the PGM-FI ECU.

To page 9-25

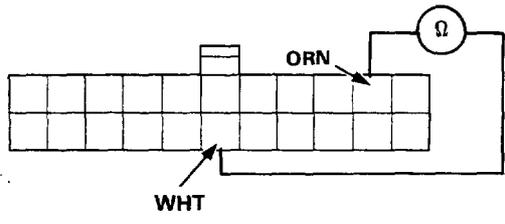
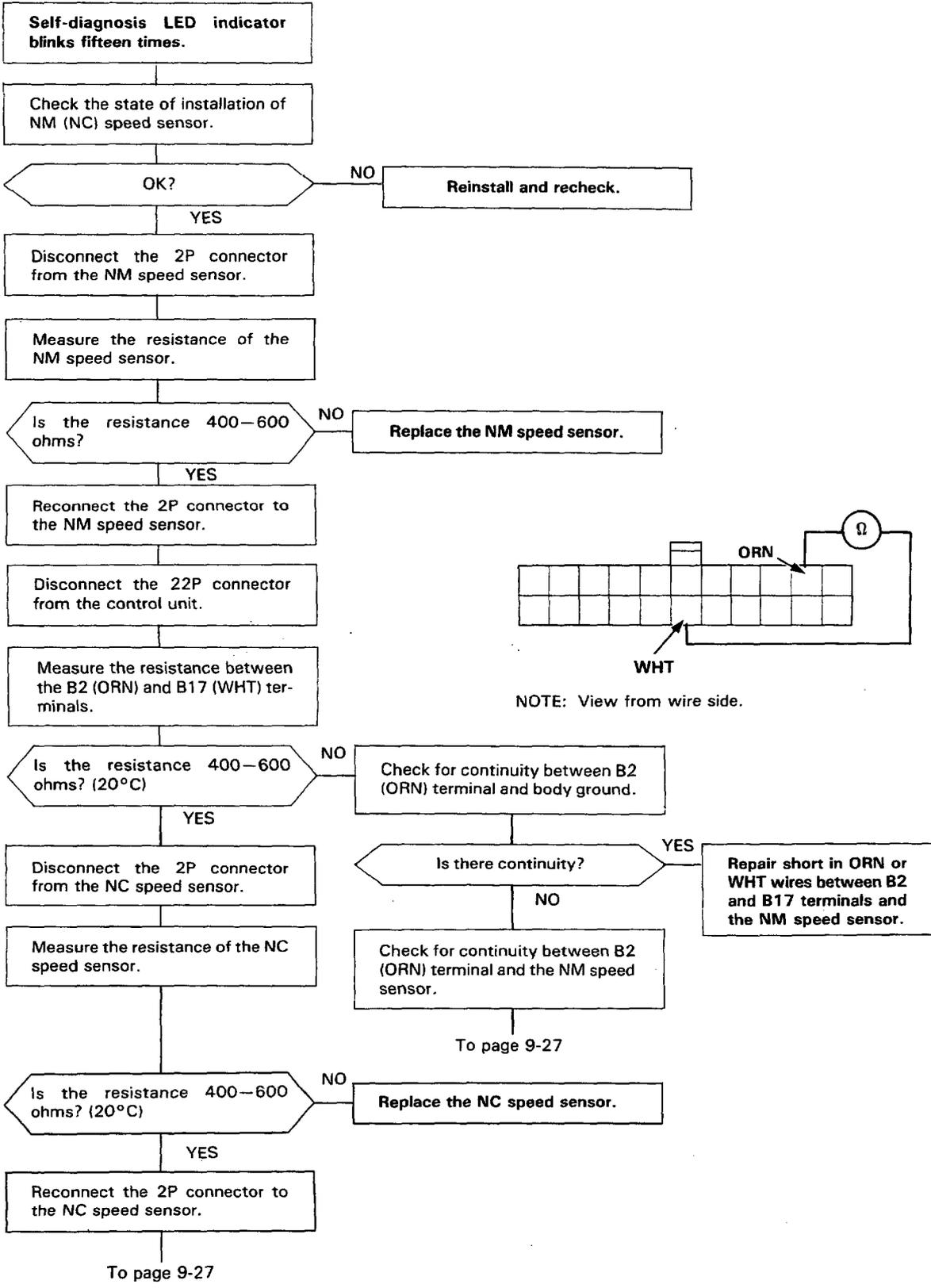
YES

Check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.

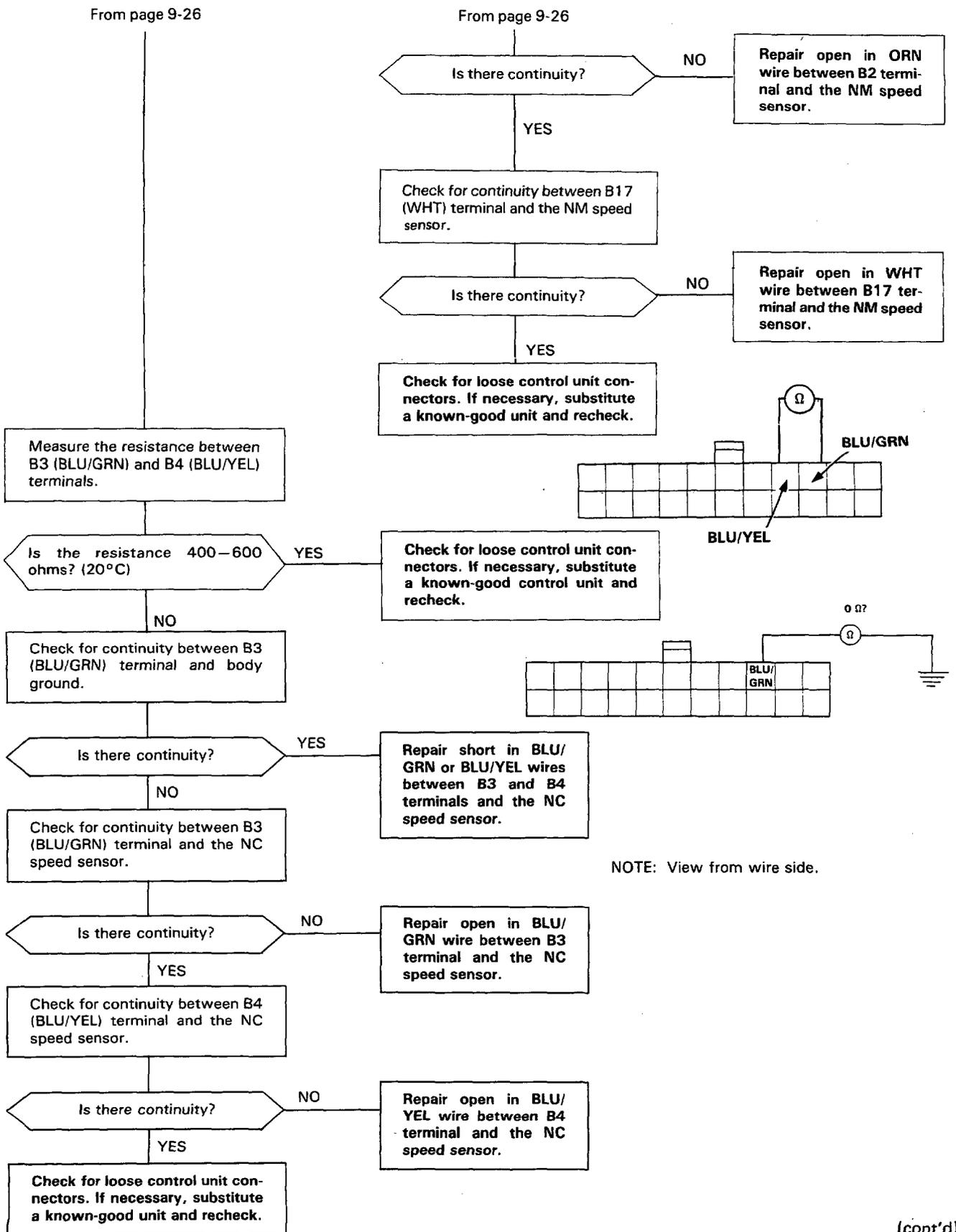
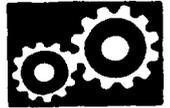


Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)



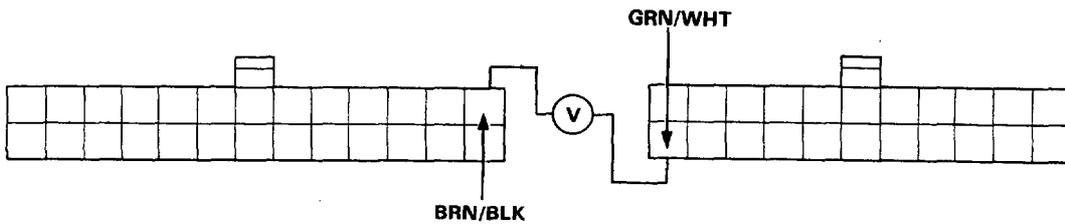
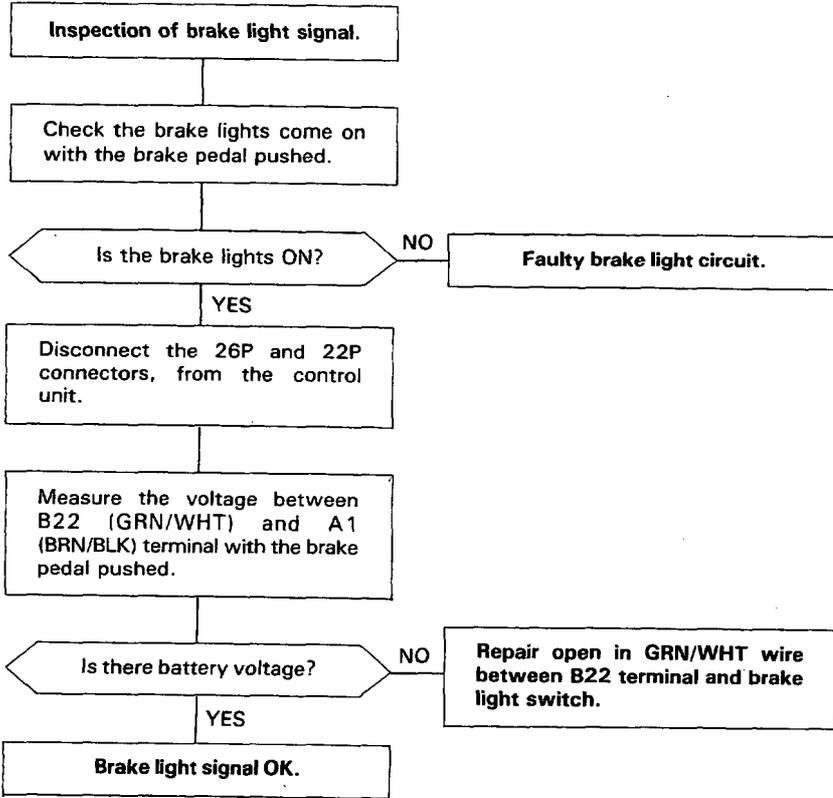
NOTE: View from wire side.



(cont'd)

Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)



NOTE: View from wire side.

Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)

S₄ indicator light does not come on with the ignition switch ON. (It should come on for about 2 seconds.)

Shift to **D** or **S** and depress the S₄ switch.

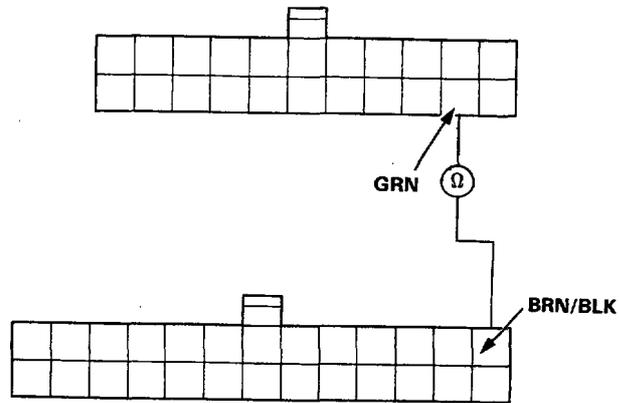
Does the S₃ indicator light come on?

YES Check for loose control unit connectors. If necessary, substitute a known-good control unit and recheck.

NO
Turn the ignition switch OFF.

Disconnect the 26P and 22P connectors from the control unit.

Check for continuity between the B13 (GRN) and A1 (BRN/BLK) terminals.



NOTE: View from wire side.

Is there continuity?

NO Check for continuity on the GRN wire between B13 terminal and the S₄ switch.

YES
Reconnect the 26P and 22P connectors to the control unit.

Is there continuity?

NO Repair open in GRN wire between B13 terminal and S₄ switch.

Turn the ignition switch ON.

YES
Check for continuity on BLK wire between S₄ switch and G401.

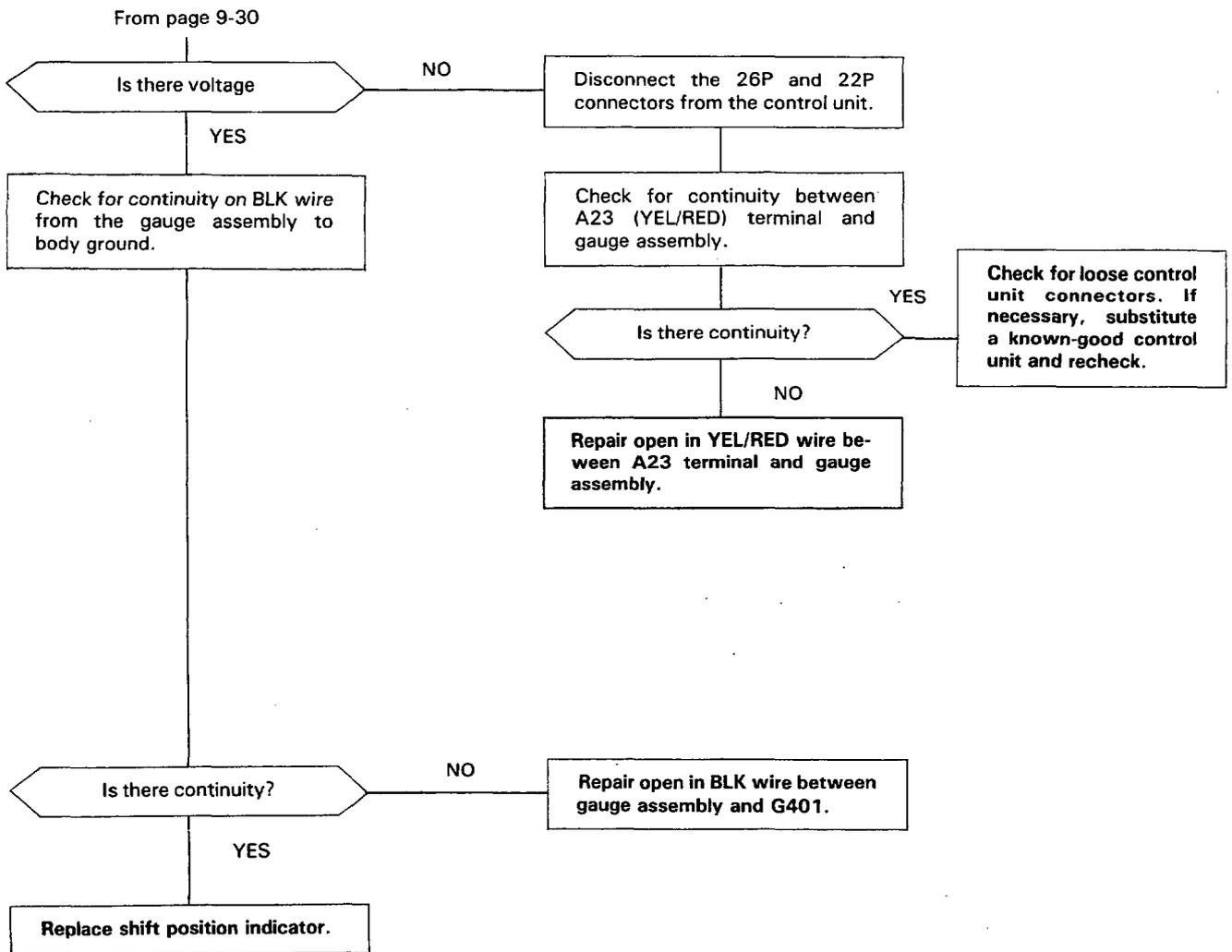
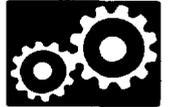
Check for voltage on YEL/RED wire at the gauge assembly.

Is there continuity?

YES Replace S₄ switch.

To page 9-31

NO
Repair open in BLK wire between S₄ switch and G401.



Electrical Troubleshooting

Troubleshooting Flowchart (cont'd)

NOTE: View from wire side.

S₄ indicator light is on steady (not blinking) whenever the ignition switch is ON.

Turn the ignition switch OFF.

Disconnect the 26P and 22P connectors from the control unit.

Check for continuity between the B13 (GRN) terminal and body ground.

Is there continuity?

YES
Disconnect the 2P connector from the S₄ switch.

Check for continuity between the B13 (GRN) terminal and body ground.

Is there continuity?

YES
Repair short in GRN wire between B13 terminal and S₄ switch.

NO
Replace S₄ switch.

Turn the ignition switch ON.

Measure voltage between A23 (YEL/RED) terminal and body ground.

Is there voltage?

NO
Replace the A/T control unit.

YES
Measure voltage between the YEL/RED wire at the gauge assembly to body ground.

Is there voltage?

NO
Replace faulty shift position indicator.

YES
Repair short to power source on YEL/RED wire between A23 terminal and gauge assembly.

