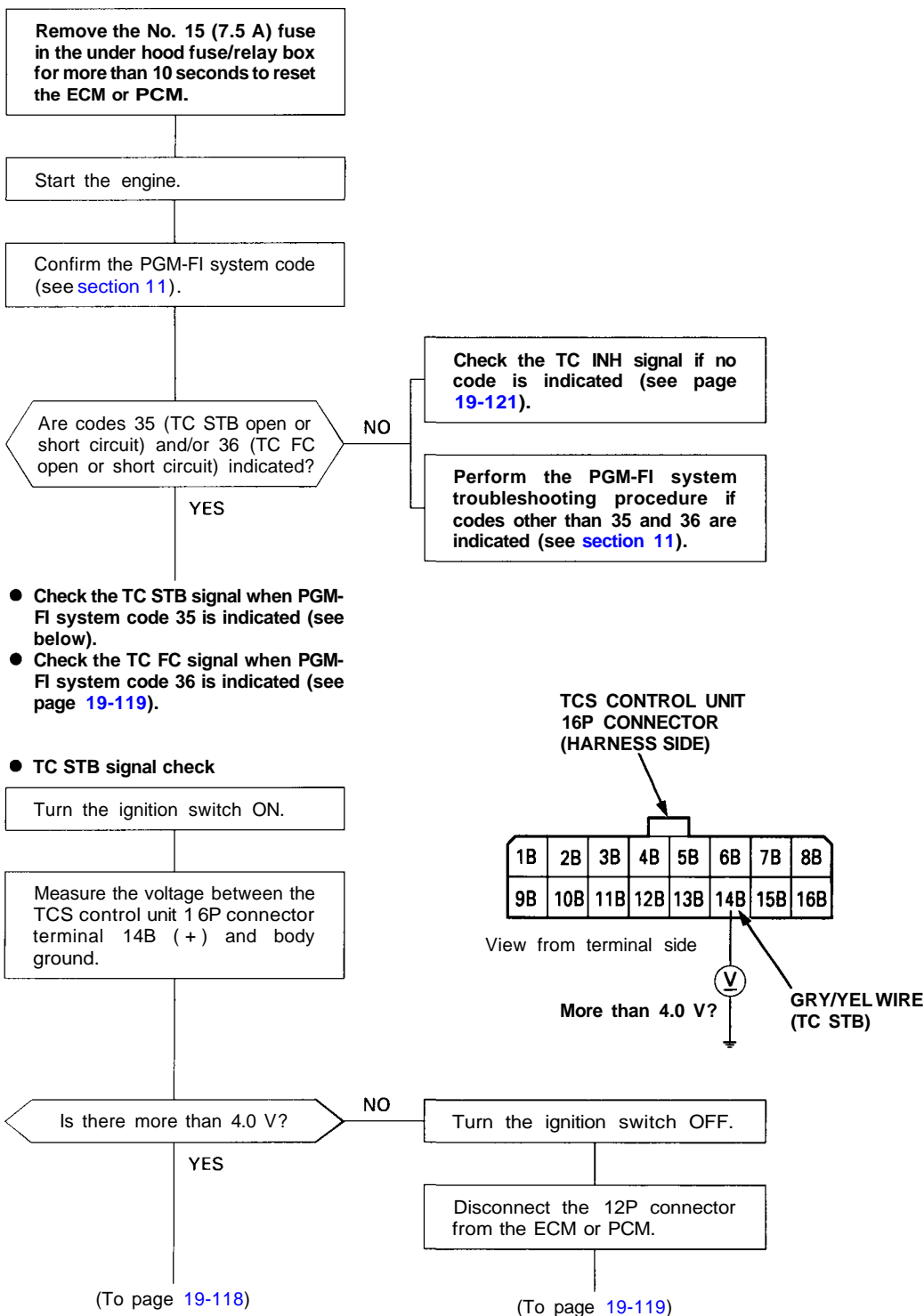




## PGM-FI Signals

### Diagnostic Trouble Code (DTC) 3-1: PGM-FI (TC STB, TC FC and TC INH signals)

NOTE: The ECM or PCM outputs the TC INH signal to the TCS control unit when the correct TC STB and TC FC signals have been inputted to the ECM or PCM from the TCS control unit.



(cont'd)

# Troubleshooting

## PGM-FI Signals (cont'd)

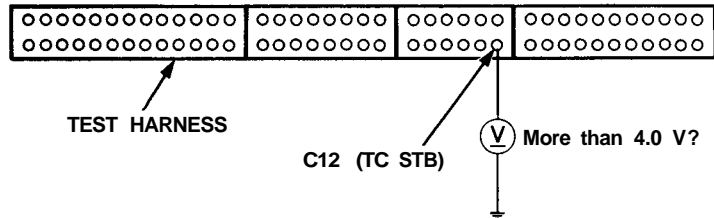
(From page 19-117)

Turn the ignition switch OFF.

Connect the test harness to the ECM or PCM (see section 11).

Turn the ignition switch ON.

Measure the voltage between the test harness C12 (+) terminal and body ground.



Is there more than 4.0 V?

NO

Repair open in the GRY/YEL wire between the TCS control unit and ECM or PCM.

YES

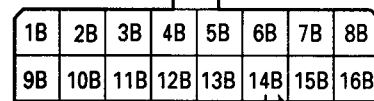
Raise the car and support it with safety stands (see section 1).

Start the engine.

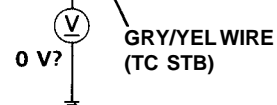
Shift the transmission into 2nd and depress the accelerator pedal slowly until a vehicle speed more than 12 mph (20 km/h) is reached.

Measure the voltage between the TCS control unit 16P connector terminal 14B (+) and body ground.

TCS CONTROL UNIT  
16P CONNECTOR  
(HARNESS SIDE)



View from terminal side



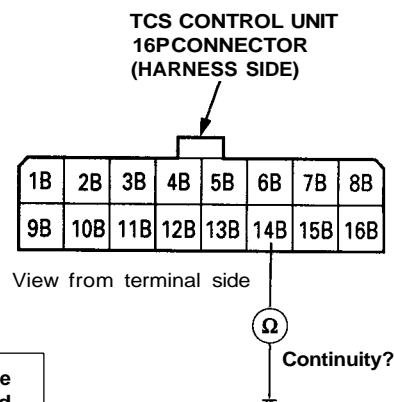
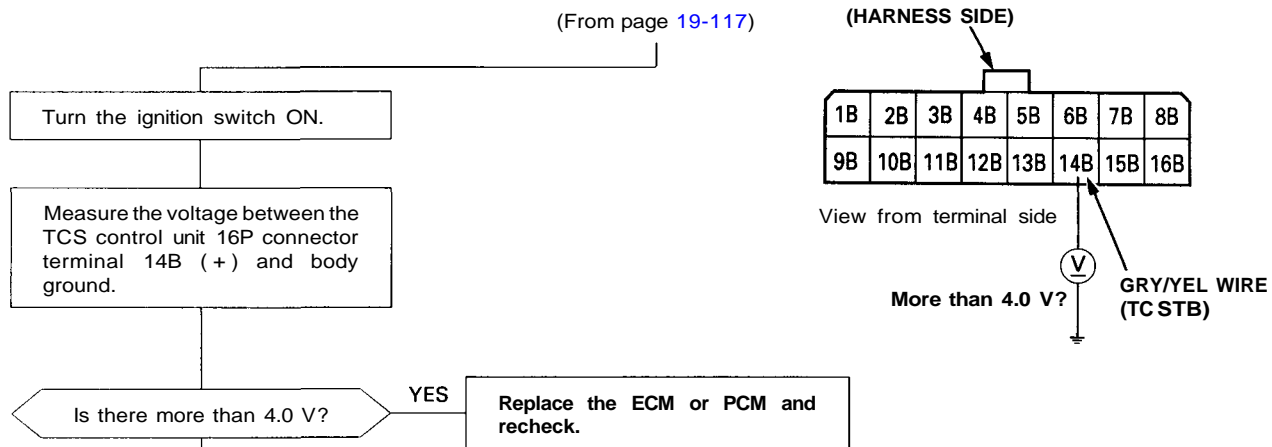
Is there 0 V? (TCS in operation.)

NO

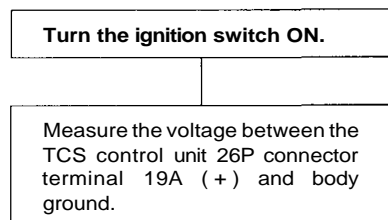
- Check for poor connections or loose wires.
- Substitute a known-good TCS control unit and recheck.

YES

- Check for poor connections or loose wires.
- Substitute a known-good ECM or PCM and recheck.

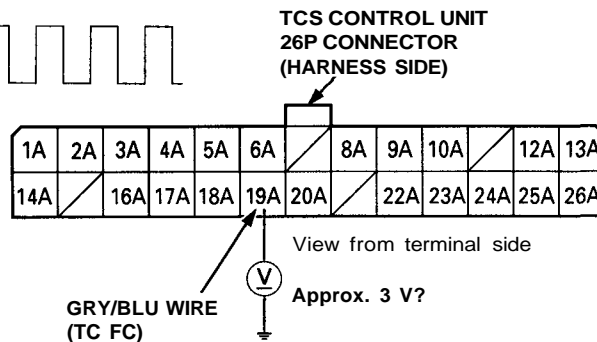
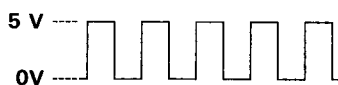


● TC FC signal check



NOTE:

- Use the 10 V range or a similar range in the analog tester.
- Confirm that the analog tester needle swings to approx. 3 V.



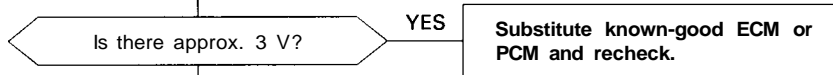
(To page 19-120)

(cont'd)

# Troubleshooting

## PGM-FI Signals (cont'd)

(From page 19-119)

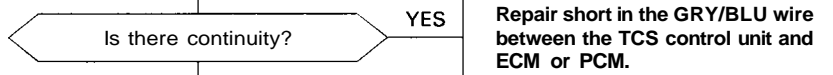
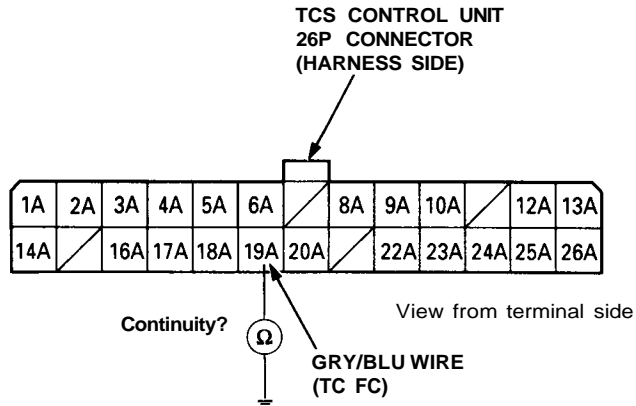


NO

Turn the ignition switch OFF.

Disconnect the 26P connector from the TCS control unit and the 12P connector from the ECM or PCM.

Check for continuity between the 26P connector terminal 19A and body ground.



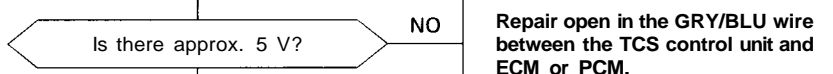
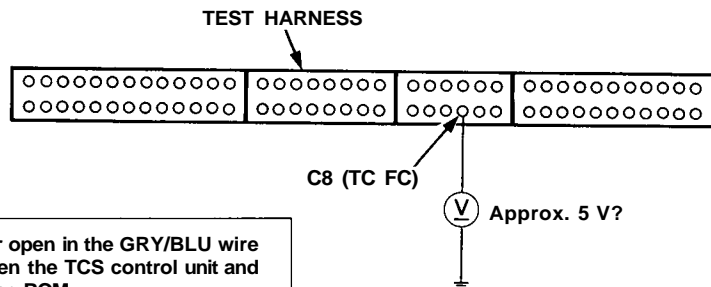
NO

Reconnect the 26P connector for the TCS control unit.

Connect the test harness to the ECM or PCM Wire harness side only (see section 11).

Turn the ignition switch ON.

Measure the voltage between the C8 terminal (+) of the test harness and body ground.



YES

- Check for poor connections or loose wires.
  - Substitute a known-good TCS control unit and recheck.
- If symptom does not go away, substitute a known-good ECM or PCM and recheck.



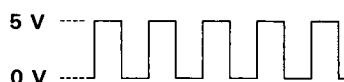
● TC INH signal check (Continued from page 19-117 if no PGM-FI system codes are indicated.)

Start the engine.

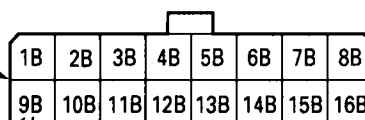
Measure the voltage between the TCS control unit 16P connector terminal 9B (+) and body ground.

NOTE:

- Use the 10 V range or a similar range in the analog tester.
- Confirm that the analog tester needle swings to more than 2.0 V.



TCS CONTROL UNIT  
16P CONNECTOR  
(HARNESS SIDE)



View from terminal side

GRY/BLK WIRE  
(TC INH)



More than 2.0 V?

Is there more than 2.0 V?

YES

- Check for poor connections or loose wires.
- Substitute a known-good TCS control unit and recheck.

NO

Turn the ignition switch OFF.

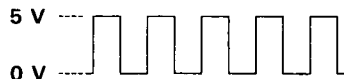
Connect the test harness to the ECM or PCM (see section 11).

Start the engine.

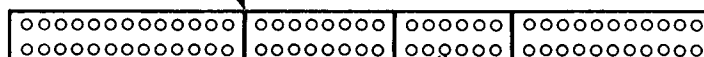
Measure the voltage between the test harness C6 terminal (+) and body ground.

NOTE:

- Use the 10 V range or a similar range in the analog tester.
- Confirm that the analog tester needle swings to more than 2.0 V.



TEST HARNESS



C6 (TC INH)



More than 2.0 V?

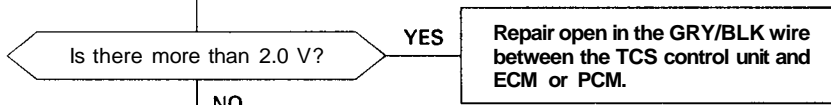
(To page 19-122)

(cont'd)

# Troubleshooting

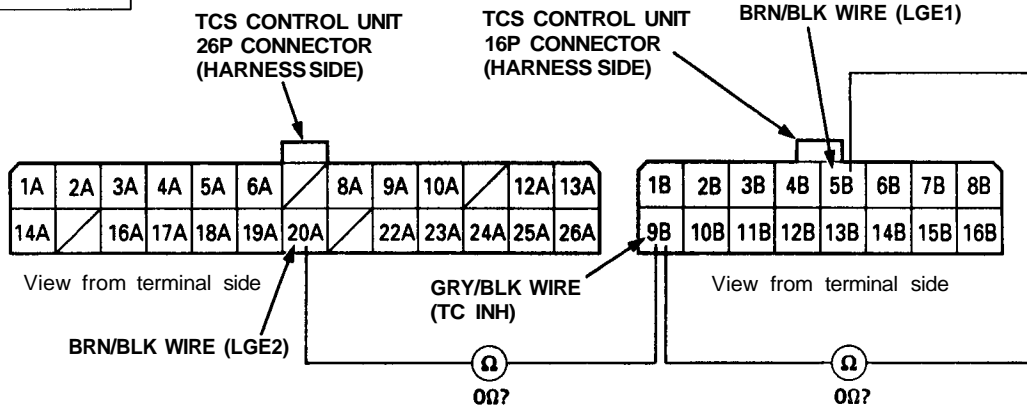
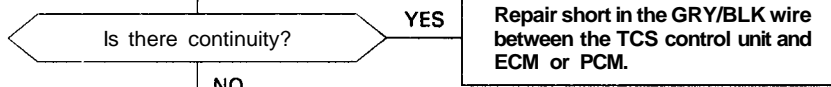
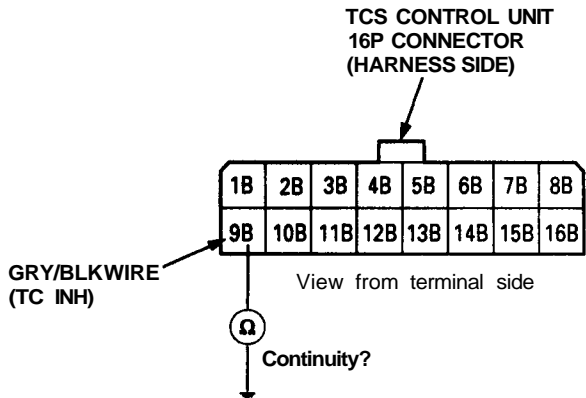
## PGM-FI Signals (cont'd)

(From page 19-121)

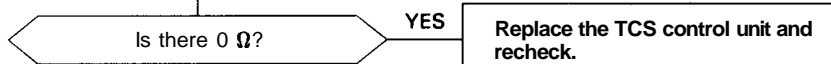


Disconnect the 12P connector from the ECM or PCM and the 16P connector from the TCS control unit.

Check for continuity between the 16P connector terminal 9B and body ground.



Measure the resistance between the 16P connector terminal 9B and 26P connector terminal 20A or 16P connector terminal 5B of the TCS control unit.



- Check for poor connections or loose wires.
- Substitute a known-good ECM or PCM and recheck.

NOTE: The normal resistance is approx. 20 kΩ for reference.