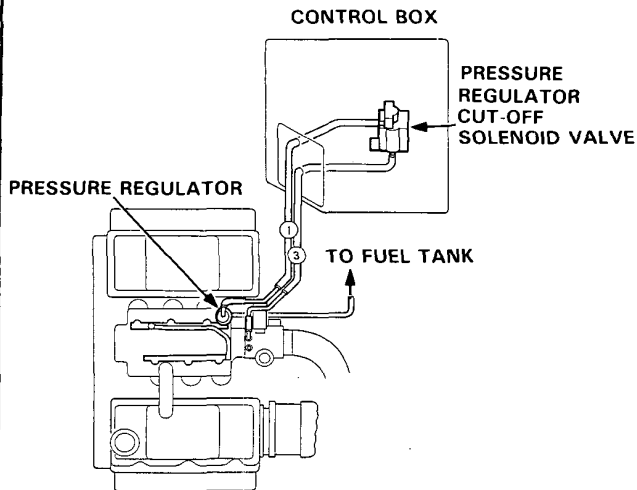


# Pressure Regulator

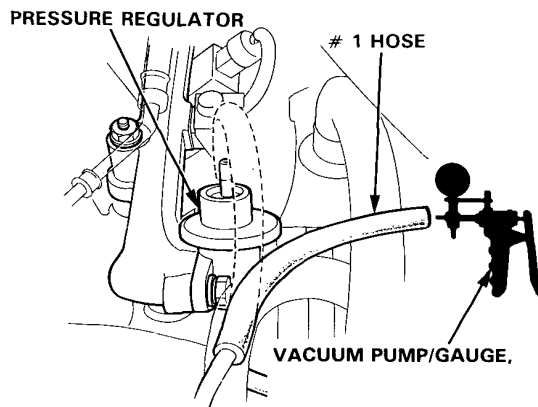
## Test

**WARNING** Do not smoke during the test. Keep open flames away from your work area.

1. Check the vacuum line for proper connection, cracks, blockage or disconnected hose.



2. Disconnect #1 vacuum hose from the pressure regulator, and connect a vacuum gauge to the hose.
3. Start the engine and allow to idle.
4. Check for vacuum.



There should be vacuum.

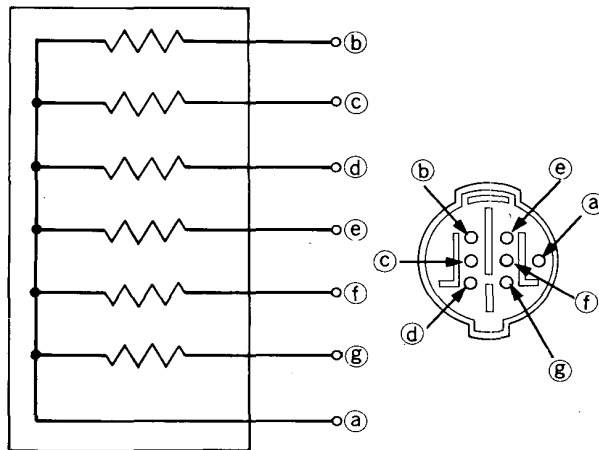
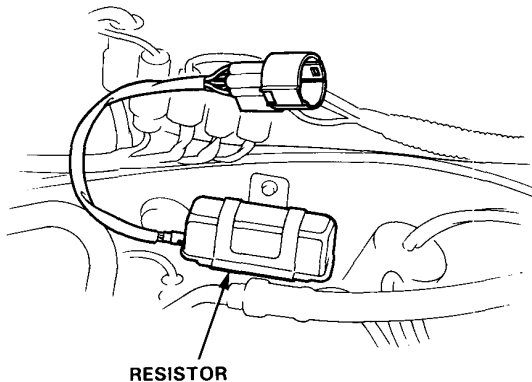
- If there is no vacuum, go to pressure regulator cut-off solenoid valve test II (page 6-82).

# Injector Resistor

## Test

1. Disconnect the resistor connector.
2. Check for resistance between each of the resistor terminals (g, f, e, d, c and b) and the power terminal (a).

Resistance should be: 5–7  $\Omega$



- Replace the resistor with a new one if any of the resistances are outside of the specification.



5. Stop the engine.
6. Restart the engine.

**NOTE:**

- Engine coolant temperature must be above 105°C (221°F).
- Intake air temperature must be above 80°C (176°F).

7. Check for vacuum.

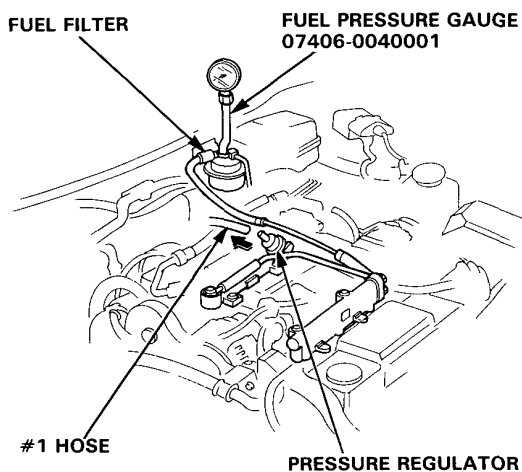
There should be no vacuum.

- If there is vacuum, go to pressure regulator cut-off solenoid valve test I (page 6-82).

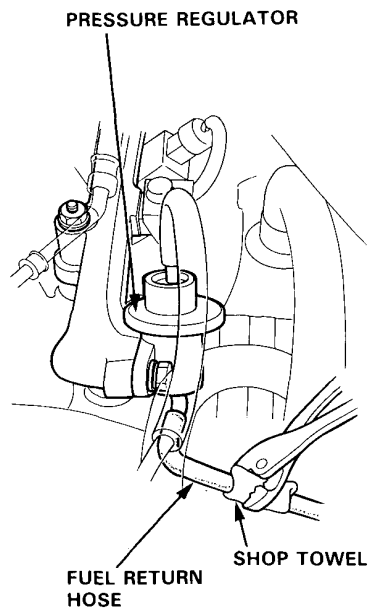
8. Stop the engine.
9. Attach a pressure gauge to the service port of the fuel filter (page 6-77).
10. Restart the engine and check that the fuel pressure rises by disconnecting #1 vacuum hose from the regulator.

**Pressure should be:**

250—279 kPa (2.55—2.85 kg/cm<sup>2</sup>, 36-41 psi)  
(with the hose disconnected)



- If the fuel pressure does not rise, check whether it rises when the return hose is lightly pinched.



- If the pressure does not rise, replace the regulator and retest.

# Pressure Regulator

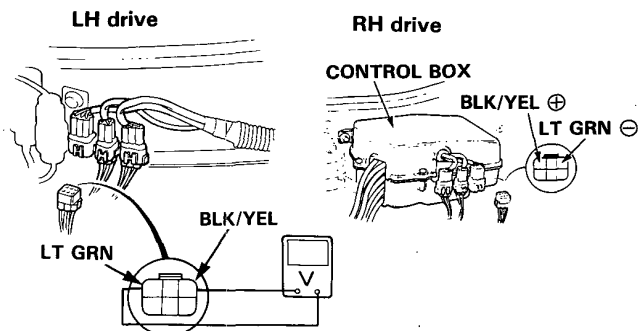
## Solenoid Valve Test

### Test I:

#### NOTE:

- Engine coolant temperature must be above 105°C (221 °F).
- Intake air temperature must be above 80 °C (176 °F).

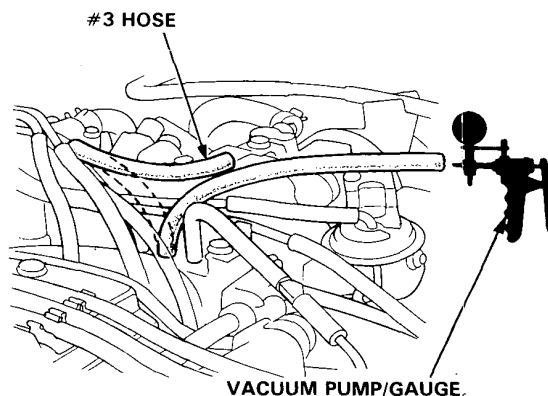
1. Disconnect 6P connector, then attach the positive probe of the voltmeter to BLK/YEL terminal and the negative probe to LT GRN terminal.



- If there is voltage, replace the solenoid valve and retest.
- If there is no voltage attach the positive probe of the voltmeter to BLK/YEL terminal and the negative probe to body ground within one minute after restart.
  - If there is no voltage, repair open circuit in BLK/YEL wire between the solenoid valve and NO. 11 (7.5A) fuse.
  - If there is voltage, check for an open circuit in LT GRN wire between the solenoid valve and the ECU. If wire is OK, substitute a known-good ECU and retest. If symptom goes away, replace the original ECU.

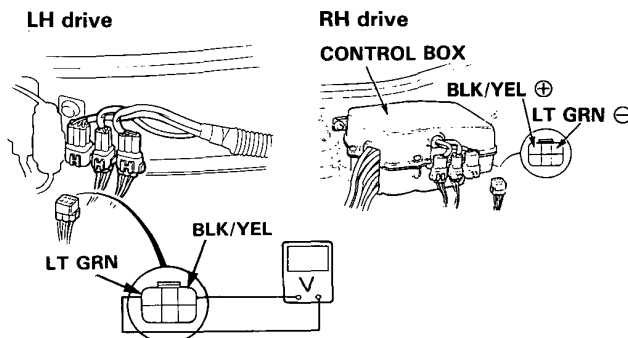
### Test II:

1. Start the engine.
2. Disconnect the #3 vacuum hose from the intake manifold and check the vacuum.



- If there is no vacuum, check the vacuum port.
- If there is vacuum, check the vacuum line for proper connection, cracks, blockage or disconnected hose. If the vacuum line is OK, reconnect the #3 vacuum hose.

3. Disconnect the 6p connector.
4. Attach the positive probe of the voltmeter to BLK/YEL terminal and the negative probe to LT GRN terminal.



- If there is voltage, check for a short in LT GRN wire between the solenoid valve and ECU. If wire is OK, substitute a known-good ECU and retest. If symptom goes away, replace the original ECU.
- If there is no voltage, replace the solenoid valve and retest.

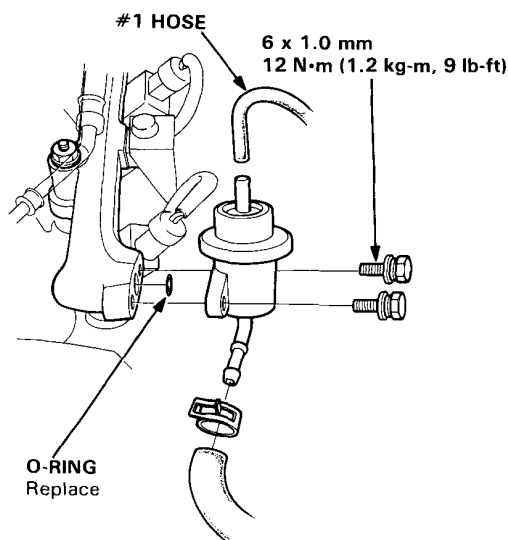


## Fuel Filter

### Replacement

**WARNING** Do not smoke while working on fuel system. Keep open flame away from work area.

1. Disconnect the negative terminal of the battery.
2. Place a shop towel under the pressure regulator, then relieve fuel pressure (page 6-77).
3. Disconnect the #1 vacuum hose and fuel return hose.
4. Remove the two 6 mm retainer bolts.



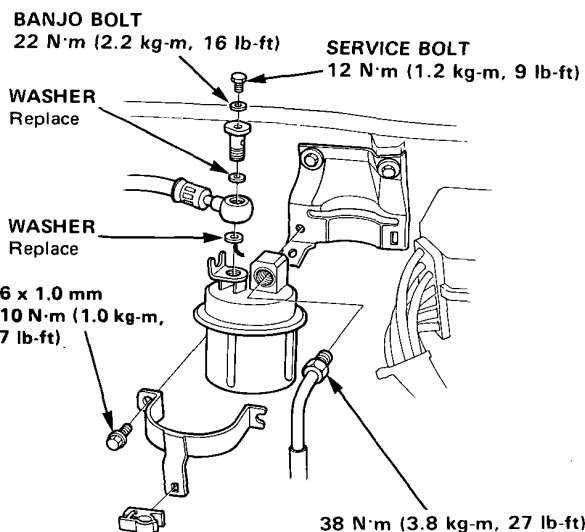
#### NOTE:

- Replace the O-ring.
- When assembling the regulator, apply clean engine oil to the O-ring and assemble it into its proper position, taking care not to damage the O-ring.

**WARNING** Do not smoke while working on fuel system. Keep open flame away from work area.

The filter should be replaced: every 4 years or 60,000 miles (96,000 km), whichever comes first or whenever the fuel pressure drops below the specified value (250–279 kpa, 2.55–2.85 kg/cm<sup>2</sup>, 36–41 psi with the vacuum pressure hose disconnected) after making sure that the fuel pump and the pressure regulator are OK.

1. Disconnect the battery cable from the negative terminal.
2. Place a shop towel under and around the fuel filter.
3. Relieve fuel pressure (page 6-77).
4. Remove the 12 mm banjo bolt and the fuel feed pipe from the filter.
5. Remove the fuel filter clamp and fuel filter.
6. When assembling, use new washers, as shown.



**CAUTION:** Clean the flared joint of high pressure hoses thoroughly before reconnecting them.