

**C1242**

**1807463C91**

Injection Pressure  
Regulator (IPR)



Pin	Circuit	Circuit function
1	361 (RD)	Voltage supplied in Start and Run (overload protected)
2	552 (YE/RD)	Injection Pressure Regulator (IPR), to Powertrain Control Module (PCM) (12A650)

## **Fuel Pressure Regulator: Vehicle Damage Warnings**

**CAUTION:** Use O-rings made of special fuel resistant material. Use of ordinary O-rings can cause the fuel system to leak. Do not reuse O-rings.

## Fuel Pressure Regulator: Description and Operation

### Gasoline Fuel System

#### FUEL PRESSURE REGULATOR

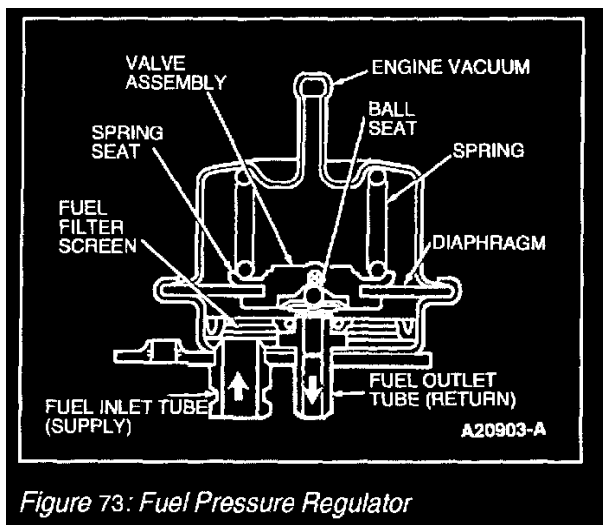


Figure 73: Fuel Pressure Regulator

#### Fuel Pressure Regulator

The fuel pressure regulator (Figure 72) is attached to the fuel rail downstream of the fuel injectors. It regulates fuel pressure supplied to the fuel injectors. The regulator is a diaphragm-operated relief valve. One side of the diaphragm senses fuel pressure and the other side is connected to the intake manifold vacuum. Fuel pressure is established by a spring preload applied to the diaphragm. Balancing one side of the diaphragm with manifold vacuum maintains a constant fuel pressure drop across the fuel injectors. Fuel pressure is high when engine vacuum is low. Excess fuel is bypassed through the fuel pressure regulator and returned through the fuel return line to the fuel tank.

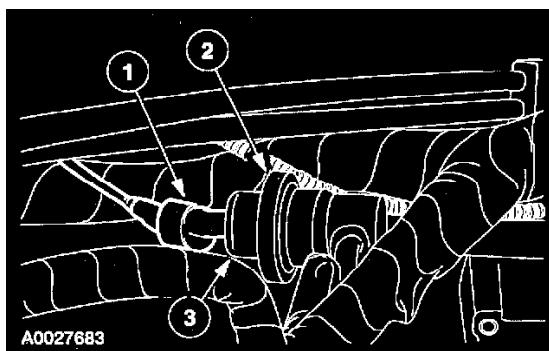
## Fuel Pressure Regulator: Service and Repair

### REMOVAL

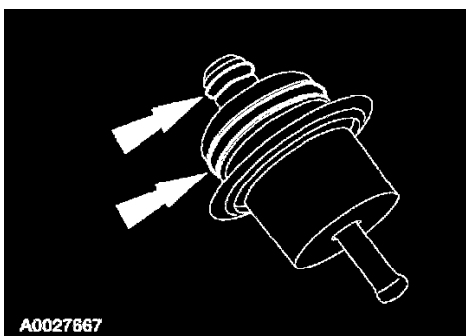
#### WARNING:

- ^ **DO NOT SMOKE OR CARRY LIGHTED TOBACCO OR OPEN FLAME OF ANY TYPE WHEN WORKING ON OR NEAR ANY FUEL-RELATED COMPONENTS. HIGHLY FLAMMABLE MIXTURES ARE ALWAYS PRESENT AND MAY BE IGNITED. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.**
- ^ **FUEL IN THE FUEL SYSTEM REMAINS UNDER HIGH PRESSURE EVEN WHEN THE ENGINE IS NOT RUNNING. BEFORE WORKING ON OR DISCONNECTING ANY OF THE FUEL LINES OR FUEL SYSTEM COMPONENTS, THE FUEL SYSTEM PRESSURE MUST BE RELIEVED. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY.**

1. Remove the engine cover.
2. Relieve the fuel pressure.



3. Remove the pressure regulator.
  1. Remove the vacuum hose.
  2. Remove the retaining clip.
  3. Remove the fuel pressure regulator.



4. Remove and discard the two fuel pressure regulator O-rings.

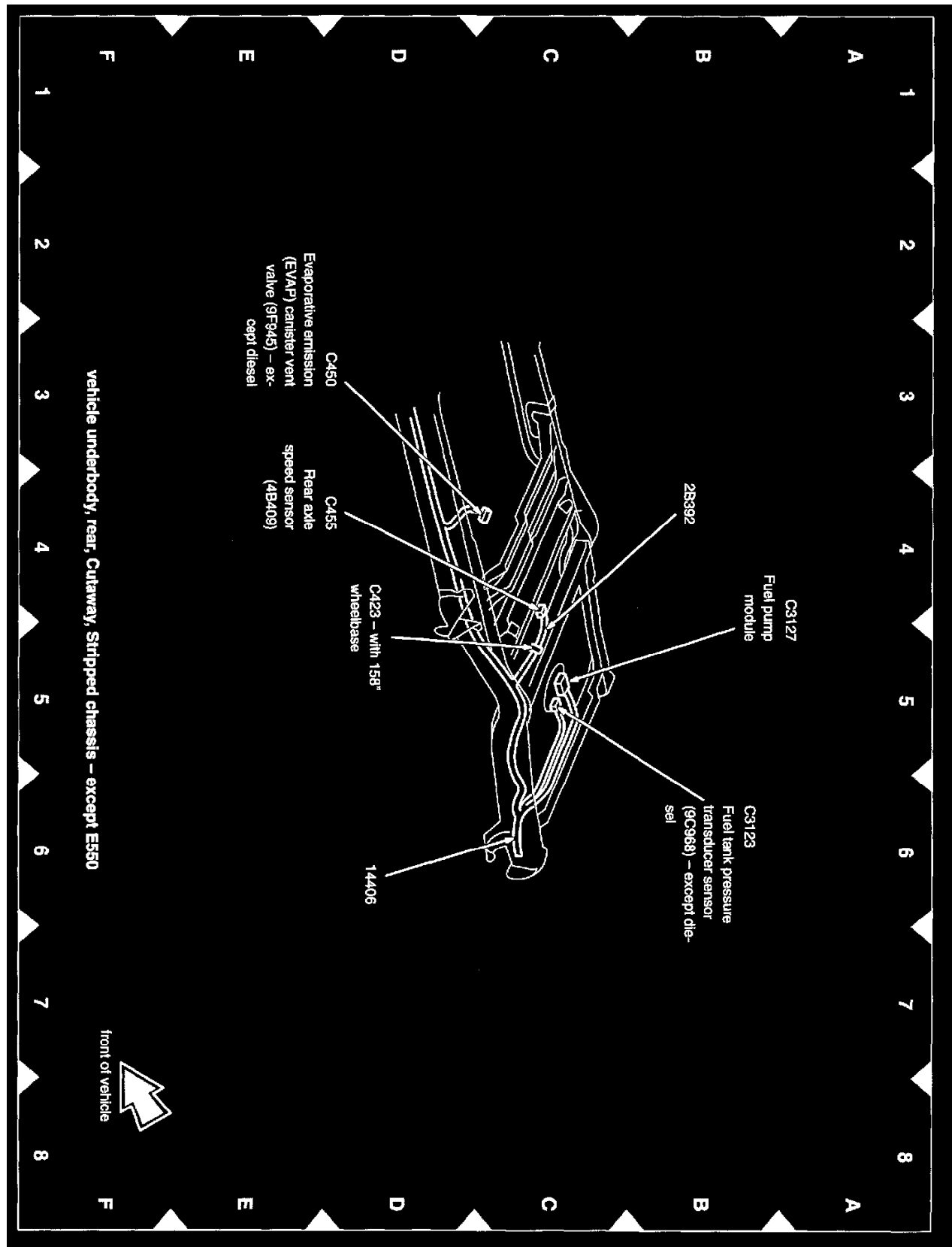
### INSTALLATION

1. To install, reverse the removal procedure.

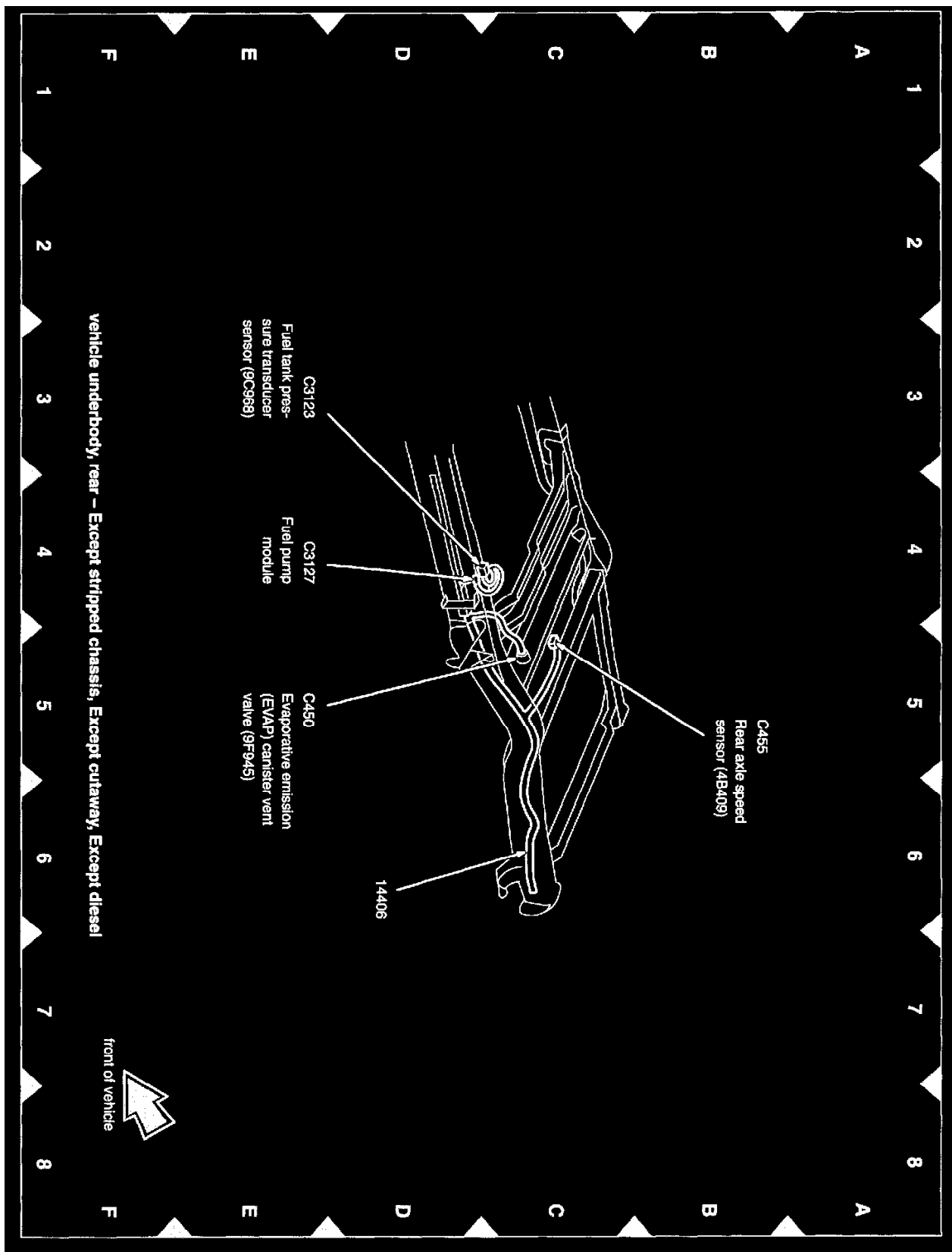
**CAUTION:** Use O-rings made of special fuel resistant material. Use of ordinary O-rings can cause the fuel system to leak. Do not reuse O-rings.

**NOTE:** Lubricate the new O-rings with clean engine oil to aid installation.

# Fuel Pressure Sensor/Switch: Locations



View 151-44

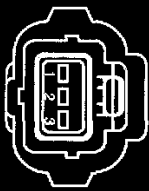


View 151-45

# Fuel Pressure Sensor/Switch: Diagrams

## Fuel Tank Pressure Transducer Sensor

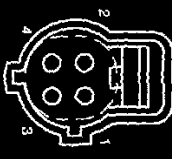
**C3123 (BK)**  
**14406**  
 Fuel tank pressure transducer sensor (9C988)



F03093

Pin	Circuit	Circuit function
1	351 (BN/W/H)	Reference, voltage
2	359 (GY/R/D)	signal, return
3	791 (RD/P/K)	Fuel tank pressure transducer sensor (9C988)

**C3166 (BK)**  
**14406**  
 Fuel tank pressure transducer sensor (9C988)



F04253

Pin	Circuit	Circuit function
1	359 (GY/R/D)	signal, return
2	351 (BN/W/H)	Reference, voltage
3	141 (RD/P/K)	Fuel tank pressure transducer sensor (9C988)
4	-	not used

**C1244**

**1807463C91**

Injection Control  
Pressure (ICP) sensor



F00120

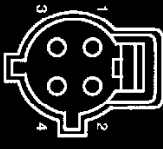
Pin	Circuit	Circuit function
1	351 (BN/WH)	Reference, voltage
2	359 (GY/BD)	signal, return
3	812 (DB/LG)	Injection Control Pressure (ICP) sensor, to, Powertrain Control Module (PCM) (12A650)



**C106** (BK)

**12B637**

Injection pressure sensor



F04195

Pin	Circuit	Circuit function
1	351 (BN/W/H)	Reference, voltage
2	359 (GV/RD)	signal, return
3	-	not used
4	141 (RD/PK)	Injector pressure sensor