

Fuel Pressure Lab

Name: _____

ID#: _____

Tools Needed:

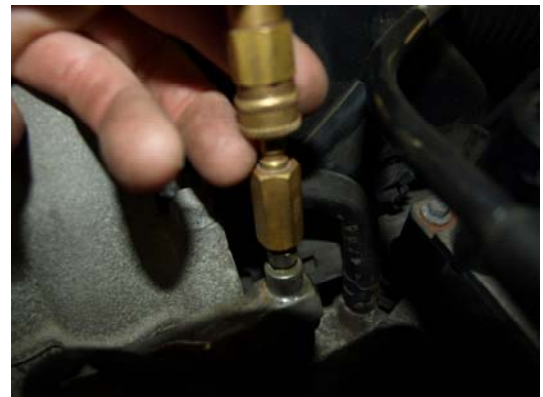
Fuel Pressure Tester
Line Disconnect Tool
Fire Extinguisher
Hand Held Vacuum Pump
Return Line Plug

1. Make sure you have a fire extinguisher near the car.
2. Install exhaust hose and turn on the exhaust system.



3. Locate the fuel pressure regulator, inlet line, return line, and the Schrader valve. Find the correct adapter to install the gauge on the Schrader valve and install. (Hand tight ONLY!!)

4. Install the gauge onto the adapter. The gauge has a quick disconnect like an air line. Pull on it to make sure it is securely connected



5. Make sure that the pressure relief valve is closed on the gauge set. It should be turned clockwise to close.

6. Now cycle the ignition key on and off several times. Do not start the car at this point. Check for fuel leaks. After a few key cycles leave the key on with the engine off (KOEO) Record your fuel pressure.

_____ PSI

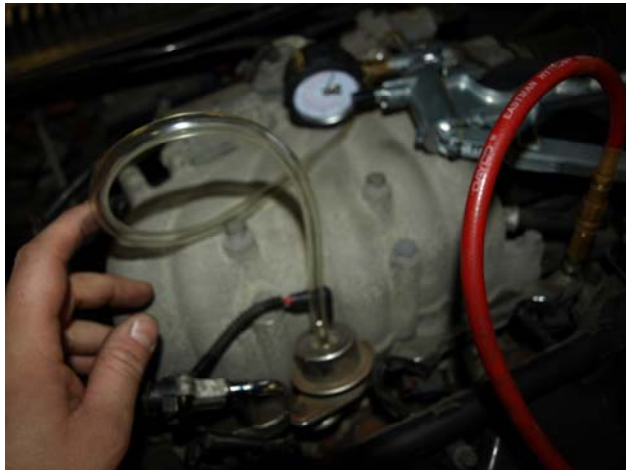
7. Start the car and allow the engine to idle. Record your fuel pressure.

_____ PSI

8. With the car running, unplug the vacuum hose to the fuel pressure regulator. Record the fuel pressure.

_____ PSI

9. (Think!) What did you just simulate by disconnecting the vacuum line? High Engine Load, or Low?



10. Install the hand vacuum pump to the fuel pressure regulator and pump up to 25"hg. Record your fuel pressure.

_____ PSI

11. How long does the regulator hold the vacuum from the hand pump? (You can stop when you get to 30 sec)

_____ Seconds

12. What does it mean if it won't hold vacuum?



13. Stop the engine. Reinstall the regulator vacuum hose. Using the pressure relief valve, relieve the fuel pressure into a gas container.

14. Locate the fuel return line. Ford uses a "Spring Clip" quick disconnect system



15. Remove the safety clip like in the picture. You will need to find the correct release tool to press on the small garter spring located inside the connector. Mr. Santini will perform a quick demo with the first group.

16. Separate the return line and install the fuel line plug into the line. This will “dead head” the pump. Make sure the plug is fully inserted into the line and snaps in place or you will get a gasoline bath!

17. Start the engine and quickly record the fuel pressure.

_____ PSI

This is your maximum pump pressure.



18. Relieve fuel pressure, remove line plug, reinstall return line, and return car to original condition. Put all equipment away.

19. Using a service information system look up the fuel pressure specification. Record all information pertaining to the fuel pressure specification. Some manufactures will specify an engine RPM, some KOEO, etc.

Instructor Signature: _____ Date: _____