DODGE Turbo Diesel Truck Supplemental Instructions

NOTE: Vulcan Universal Fit Fuel Pressure Line (VULCAN-FH) or your own equivalent is required when installing the mechanical fuel pressure isolator.

'98-'99, 24-Valve Trucks

The most frequently used location for a fuel pressure reading on the '98-'99 model year trucks is the innermost, closest to the center nut (clean side) 1/8 NPT fitting that is on top of the fuel filter assembly. We suggest you use thread tape at the threaded locations.

By monitoring the clean side of the filter, you will be able to determine a baseline gauge reading for fuel pump performance as well as a baseline for "clean" fuel. If you notice a drop from your baseline clean readings, accompanied with a drop in power, the fuel filter likely needs attention.

We suggest changing the fuel filter at the intervals suggested in Owner's Manual – not based on fuel pressure unless you are having the above symptoms.



'00-'02, 24-Valve Trucks

The factory changed the filter housing on these trucks to a plastic cap, top removal type assembly. On these fuel systems, there is not an easy-to-locate fitting for the installation of the isolator like the '98-'99 trucks.

If you opted for the Vulcan FH fuel pressure line, you're in luck. Attach one end to the Schraeder Valve test port and the other end to the isolator. At this point in the fuel delivery system, the customer is monitoring clean fuel and our "establish a baseline, watch for a change in fuel pressure" advice is the same as it is for the '98-'99 owners.

'03-'07, 5.9 Liter HPCR Trucks

Although it's not critical to monitor lift pump pressure in these trucks, some customers with serious power modifications have asked about and installed fuel pressure gauges. The tapped banjo bolt made by the R. L. Torresdal Company and Vulcan FH hose are your friends. We recommend replacing the banjo bolt that comes out of the bottom of the fuel filter housing and attaching the hose there. Then find a location for the isolator. This solution monitors clean fuel and our "establish a baseline, watch for a change in fuel pressure" advice still stands.

Continued on Next Page ▶



If you need more assistance, we are only a phone call away.

(770) 886-2500

Installation:

Mechanical Fuel Pressure Isolator

Gauge Lighting

The mechanical fuel pressure gauge needs no power, but the backlighting does. On the '94-'02 trucks, take power from the ashtray light, which is on the dimmer circuit.

On the '03-'07 trucks, the backside of the dimmer switch is also accessible for gauge backlighting. T-tap into the dimmer switch – orange wire with the white stripe for 2003 models only (pin #3 on the headlamp switch); orange wire with brown stripe for 2004 and up models (pin #2). For ground, we used a close-by Phillips-head screw and a d-ring attached to the light's wire.

Fuel Pressure Isolator

1. When installing compression fittings turn ½ turn past the point of first resistance, do not over tighten. Use diesel compatible sealant on pipe threads such as LocTite 545 or other anaerobic sealant (cures in the absence of air). This must be done in order to have a properly functioning gauge. Improper installation may cause the gauge to read incorrectly.

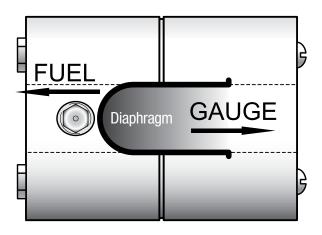


FIGURE 1

- 2. The diaphragm inside the fuel pressure regulator must be gently pushed in toward the fuel side (FIG. 1). You can use a tool or stick with a blunt end so you do not tear the diaphragm.
- 3. Fill this side of the isolator with coolant and insert a fitting into the gauge side of the isolater. Hand tighten for now.

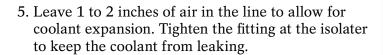


Installation:

Mechanical Fuel Pressure Isolator



4. Fill the plastic tube with coolant. It's best to expel as much air as possible. To accomplish this, loosely attach the plastic line to the isolator using the supplied fittings and then use the supplied syringe to fill the plastic line.





3. Seal off the end of the plastic line and route it to the back of the gauge.



4. Attach the line to the back of the gauge and tighten the fitting. Take care not to damage the gauge.

Installation:

Mechanical Fuel Pressure Isolator



5. Next, connect the fuel supply hose to the isolator, cycle the lift pump and bleed the air out of the hose by loosening the bleed screw.



6. Here is an example of a convenient location for mounting the isolator.

NOTE: The manufacturer suggests mounting the isolator with the gauge side up.

That's it. Installation is complete. Check for leaks and repair if needed.