

Installation: VULCAN Fuel Line

DODGE Turbo Diesel 5.9L, '98-'07

Note fuel line and fuel cap parts below for reference in installation instructions.



1



2



3

1. Isolator or Sending Unit Hose End - 1/4" NPT Male
2. Fitting – 1/4" NPT Female to 1/8" NPT Female Adapter
3. Schraeder Valve – Valve Core Removal Tool.

Note:

The fittings are tapered or flared so the use of sealant or Teflon tape is not necessary. However, it is okay to use sealant or Teflon tape sparingly.



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4. Fitting – 1/8" NPT Male to Male Flare End
5. Vehicle Side Hose End – Female Flare End

6. Tapped Banjo Bolt 1/8" NPT Female
(Reference only. Not included.
Order GG-BFTAPPED-KIT)



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Monday–Friday
8:30am–5:30pm EST

GENO'S GARAGE, INC.
1150 Samples Industrial Drive
Cumming, Georgia 30041

Installation: VULCAN Fuel Line

The VULCAN Universal Fuel Line can be used on the many different fuel systems installed on the 24-Valve Dodge/Cummins Turbo Diesel trucks.

The fuel line is supplied with several fittings and adapters to suit the various needs. The fittings and adapters are loosely installed from the manufacturer. Begin by removing all of the fittings and adapters from the fuel line.

Determine which end of the fuel line goes to the vehicle. (See parts diagram on Page 1).

1998-1999, 24-Valve Engines

1998-1999 Dodge/Cummins Turbo Diesels have two 1/8" NPT test ports in the filter housing. The inner-most port (closest to the canister removal nut) is the "clean" side of the filter. This will be the pressure to the Bosch VP-44 Injection Pump.

It is our recommendation that you use the pressure readings from the inner-most/clean port. Should you see changes from normal, use the pressure readings to determine if the transfer pump is going bad or if there is a clogged or dirty fuel filter (a bad batch of fuel?).

If you take the reading from the outer-most port you lose the ability to troubleshoot a clogged or dirty fuel filter.

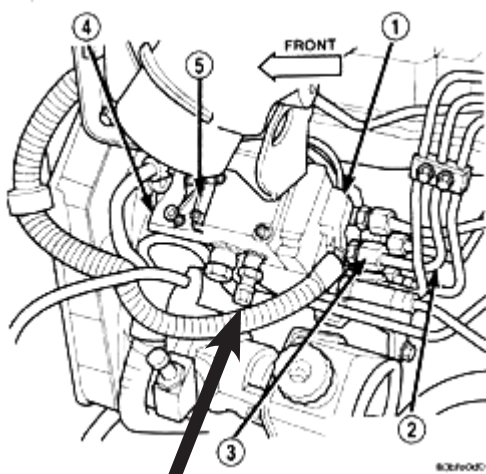
Vehicle Installation:

Remove the factory-supplied 1/8" NPT male plug that is in the inner-most test port. Install Fitting (#4) with the 1/8" NPT male threads into the test port. Install Vehicle Side Hose End 1/8"- Female Flare End (#5) to Fitting #4 Flare End.

Isolator or Sending Unit Installation:

This assembly of parts and installation is dependent upon the parts supplied from the gauge manufacturer. In most cases where you are attaching the fuel line to an isolator, the 1/4" NPT Male Hose End (#1) is a direct fit. Should you be attaching the fuel line to a pressure sending unit, use Fitting #2 (1/4" NPT Female to 1/8" NPT Female adapter) to make the transition.

2000-2002, 24-Valve Engines

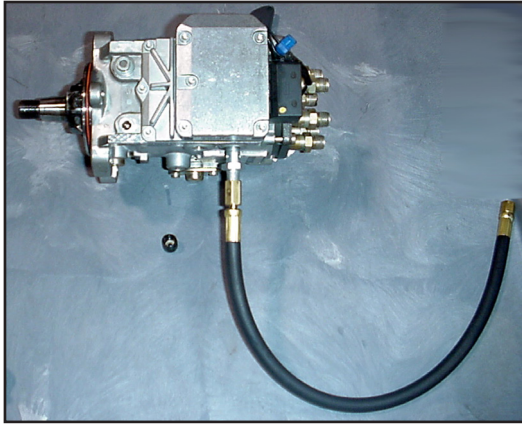


Schraeder Valve

Interface to the fuel system on these trucks is accomplished by using a Schraeder Valve test port that is located on the side of the VP-44 Fuel Injection Pump.

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VP-44 Fuel Pump with Fuel Hose attached.

Vehicle Installation:

The Schraeder Valve will require removal of the valve-core. The Valve-Core Removal Tool (#3) is supplied with the hose kit. Remove the valve core. Attach the Vehicle Side Hose End (#5) to the Schraeder Valve.

Note: It is important to bleed all the air out of the new fuel line to avoid erratic fuel pressure readings. To accomplish this, simply loosen the hose to the sending unit connection and cycle the Lift Pump until a steady flow of fuel is noted.

Isolator or Sending Unit Installation:

The assembly of parts and installation is dependent on the parts supplied from the gauge manufacturer. In most cases where the fuel line is being attached to an isolator, the 1/4" NPT Male Hose (#1) is a direct fit. Should you be attaching the fuel line to a pressure sending unit, use Fitting #2 (1/4" NPT Female to 1/8" NPT Female adapter) to make the transition.

2003-2007 High Pressure Common Rail (HPCR) Engines

The characteristics of the HPCR fuel system are quite different than the VP-44 Fuel Injection System in the '98-'02 trucks. Unlike the VP-44 Fuel Injection System, the loss of fuel pressure does not cause the HPCR fuel injection pump to fail. Therefore, while many Dodge/Cummins Turbo Diesel owners chose to monitor the HPCR systems with a Fuel Pressure gauge, it is not nearly as important as with the VP-44 system.

Unfortunately, the HPCR Fuel System does not have test ports. A tapped banjo bolt (#6) with pressure port will introduce a 1/8" NPT female port into the HPCR fuel system.

Vehicle Installation:

The Tapped Banjo Bolt (#6) has a 1/8" NPT female fitting on them. Install Fitting #4 with the 1/8" NPT Male End into the Fuel Cap or Banjo Bolt. Install Vehicle Side Hose End 1/8" NPT - Female Flare End (#5), onto Fitting #4, (1/8" NPT Male to Male Flare End)

Isolator or Sending Unit Installation:

The assembly of parts and installation is dependent on the parts supplied from the gauge manufacturer. In most cases where the fuel line is being attached to an isolator, the 1/4" NPT Male Hose (#1) is a direct fit. Should you be attaching the fuel line to a pressure sending unit, use Fitting #2 (1/4" NPT Female to 1/8" NPT Female adapter) to make the transition.