Walbro 255lph Inline Fuel Pump Install Procedure

Note: Instructions are based on a single in tank pump with under car OEM VW filter.
Total install time for a qualified technician is approximately 2 hrs.

Materials Required:

- 2’ of 5/15” high pressure EFI approved fuel line.
- 5/16 fuel line hose clamps
- 30 amp automotive relay
- 10 gauge black ground wire
- 10 gauge red power wire
- 12-14 gauge relay signal wire (any color you want)
- 10 gauge (yellow) small ring terminals (see Walbro pump posts for size)
- 10 gauge yellow butt connectors
- 10 gauge in-line fuse holder
- 10 gauge yellow ring terminal for power attachment at battery cable

Tools Required

- Test light or multimeter
- Flat head and Phillips head screw driver
- Metric socket set, short extension, and ratchet
- Fuel line cutting tool (hose cutter, sharp razor knife, etc)
- Wire stripper/crimper tool
- Drill (possibly)

1) Open Walbro fuel pump kit and ensure all components are present.



2) Remove the factory fuel pump cover plate in the trunk to gain access to the factory fuel pump wiring.



3) There should be 2 heavy gauge wires, and 2 thin wires. The thin wires are for the fuel level sender, the 2 heavy gauge wires are for the OEM in tank pump. One of the heavy gauge wires will be a ground, and the other will be the pump power wire. Determine which wire is the power wire. To do this you can use a test light, or multimeter and have a friend turn the cars ignition to the 'Accessory' position. The pump power wire should get power for a couple seconds and then turn off with the engine not running. Make note of this wire for later in the install.

4) Once you have determined which wire is the factory pump power wire, **DISCONNECT THE BATTERY**.

5) Jack the rear passenger side of the car up and support with jackstands. Make sure the hand brake is engaged and the wheels are chocked.

6) Locate under car filter. It will probably have a short length of soft line coming out of it, connected to a hard line towards the front of the car.



7) Disconnect the OEM fuel line from the "OUT" side of the fuel filter. It may be installed with a standard hose clamp, or a factory one time use clamp. *** **Fuel will come**

out of the filter, so have a few rags handy, and make sure you are away from open flames, sparks, heat etc. ***



8) Place included Walbro securing sleeve over the fuel pump. Slide both fuel pump straps over this sleeve, one on each side. Note the direction of flow is towards the electrical connectors. Also install barbed fittings with washers onto the pump and tighten.



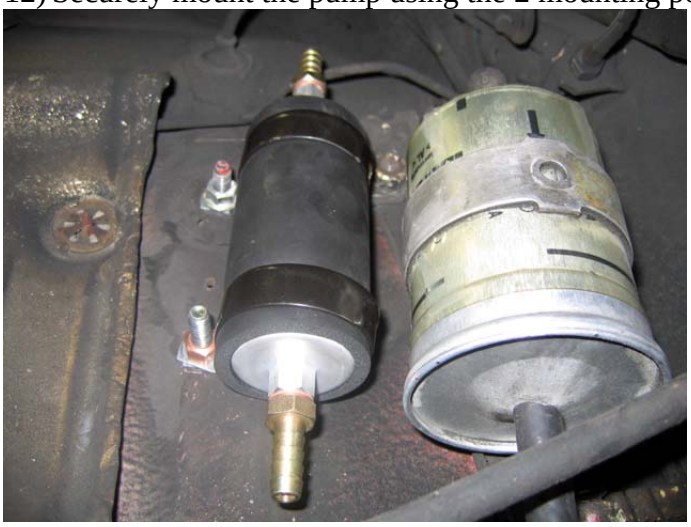
9) Locate an area near the factory fuel filter to mount the pump. Most applications will have one or more pre-existing studs in this area which you can use. You will need a total of 2 studs, properly spaced, in order to securely mount the pump to the chassis. In this example, only one was present that would work. An additional mounting point was added by test fitting the pump using a pre-existing stud, and marking a second location to drill for another. Before mounting, make sure the pump will be free from exhaust heat and in an area where fuel lines can be attached to the pump inlet/outlet. Once this has been checked, mark the stud location(s) and remove the pump.

10) Check inside the car where the additional mounting point(s) will be added to ensure nothing vital will be damaged. In most applications, this is right under the passenger rear seat bottom.

11) Drill for the additional mounting point(s) and install a bolt with washer. The head of the bolt will be inside the car, with the threaded portion hanging under the car.



12) Securely mount the pump using the 2 mounting points mentioned above.

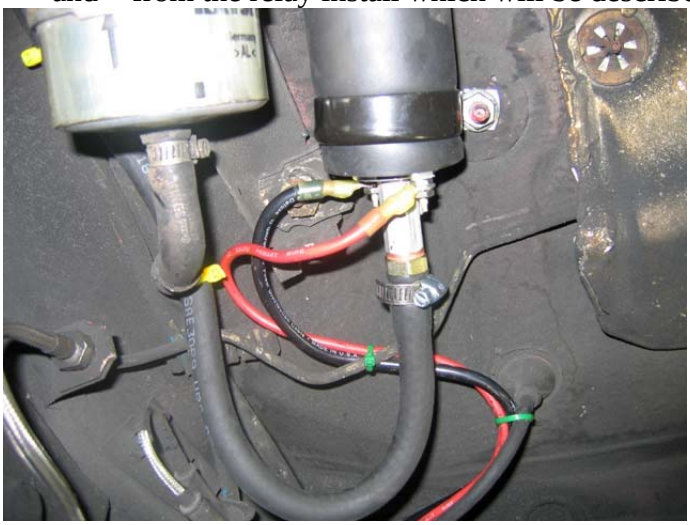


13) Install a short length of 5/16 high pressure EFI approved fuel line from the factory fuel filter outlet barb, to the Walbro fuel pump inlet barb. Secure with 5/16 fuel line hose clamps.



14) Connect Walbro outlet to the factory feed line you removed from the OEM under car filter in step 8. If the factory filter outlet line used a one time use clamp, install a new

fuel line hose clamp. In this application a length of 5/16 high pressure EFI approved fuel line was added to extend the factory feed line for cleaner routing. Here you can see the – and + from the relay install which will be described in the next step.



15) You will need to install a 30 amp auto relay to power the Walbro pump as the load from 2 pumps (factory and Walbro) is too much for the factory wiring/fuse. This is a simple procedure which will be outlined below. In this example the relay was mounted in the trunk near the rear passenger side tail light. You can mount the relay anywhere you want, but keep in mind the wiring instructions may be slightly different depending on where you decide to mount your relay.
    - Run a 10 gauge wire from the positive battery cable to the relay location. At the battery cable (which is not connected right ☺), install an inline fuse holder with a 20amp fuse (******NEED TO VERIFY THIS IS CORRECT AMP RATING*****). **DO NOT CONNECT THE BATTERY CABLE TO THE BATTERY AT THIS TIME**). At the relay, connect this power wire to the relay positive power in connection.
    - Locate a solid chassis ground connection point. In this install we sanded a small section of paint down to the metal in the trunk under the carpet near where we mounted the relay. We then used a large metal screw and washer through ring terminals as our chassis ground. This enables the ground connection to be very short and solid. Attach a 10 gauge wire to the chassis ground with a ring terminal, and connect to the relay ground connection on the relay.
    - From the previous mentioned ground connection point in the trunk, or another solid chassis ground connection near where the Walbro pump is mounted, run a 10 gauge ground from the chassis to the – terminal on the Walbro pump. Install with a small ring terminal connector, and included nut/washer.
    - Locate the factory in tank fuel pump wire from step 3. Tap into this wire with 12-14 gauge wire. It is best to NOT use the quick tap connectors, as these can lead to damage of your factory in tank pump power wire. In this install we cut the wire, stripped both ends, and used a heat shrink butt connector. One end of the butt connector has the one side of the original in tank pump power wire by itself, and the other end has the other half of the original in tank pump power wire twisted with the 12-14 gauge signal wire.
    - Run this signal wire to the relay switched on connection.
    - Run a 10 gauge wire from the relay positive power out connection, to the + connector on the Walbro pump. Secure with small ring terminal and included nut/washer.

- Secure all wires, make sure relay is mounted securely, and all wires are free from moving parts.
- Your pump wiring is complete.



16) Post Install Check

Your Walbro fuel pump installation is nearly complete. Please follow these instructions before starting the car.

- Leave the car on jackstands for a few more minutes.
- Connect the battery cables to the battery with the key out of the ignition.
- Have a friend turn get in the car and turn the key to the Accessory position, but do not start the car. You should hear the Walbro and factory pumps turn on for a couple seconds and then turn off. Have your friend turn the key to OFF then Accessory position until the pumps stop a few times to prime the pump/rail. If you do not hear the pumps turn on, check your wiring.
- Check for any leaks at all of the fuel line connections. If any leaks are present fix them before starting the engine.
- If no leaks are present, have your friend start the car. Check for leaks again. If none are present, turn the car off, take it off jackstands, and enjoy the hard work you just performed ☺.