



Walbro 255lph Inline Fuel Pump Install Procedure With USRT Relay Harness

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 5/16" high pressure EFI approved fuel line.
- fuel line hose clamps
- USRT Relay Harness

Tools Required:

- Test light or multi-meter
- 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)

Installation

- 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 multi-meter 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 jack stands. 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.

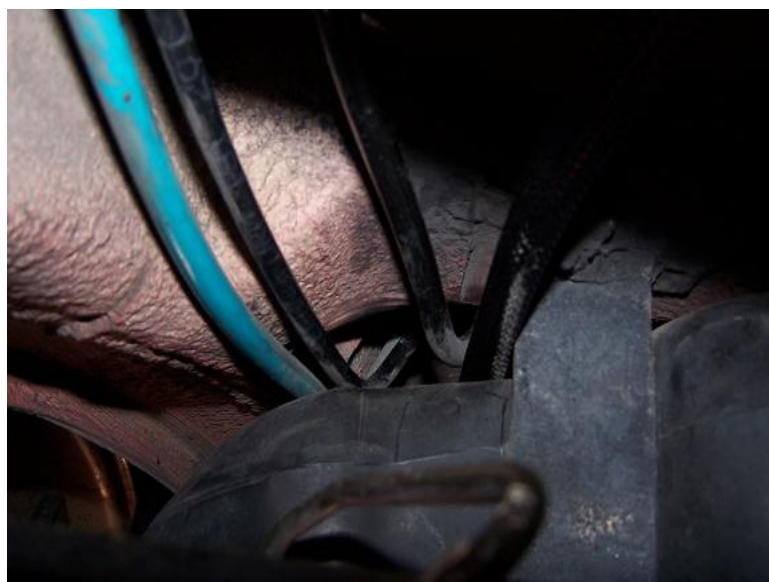


- 15) You will now begin to install the USRT Relay Harness to power the Walbro pump as the load from 2 pumps (factory and Walbro) is too much for the factory wiring/fuse. This is a simple procedure which will be outlined below. In this example the relay was mounted in the trunk near the rear passenger 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.

- Begin in the trunk/hatch area by finding a suitable location to mount the relay. The relay should be mounted close to a suitable ground location within reach of the two ground wires at the relay. (There is usually a factory ground location near the passenger side tail light).



- Install the relay and ground wires.
- The in-tank fuel pump access cover should still be removed from your pump installation. If it is not, you should remove it now.
- Route the pump wiring portion of the relay harness down to the new fuel pump location. You should be able to see how the fuel lines travel from the in-tank pump toward the front of the car. The wiring will follow this path as well.
- Underneath the car – locate the wiring you just routed down from above and continue extending the wiring to the pump.



- Connect the wiring to the pump. The red wire is positive and the black wire is negative. Be sure to attach the wiring properly or the pump will spin backward!



- Back inside the hatch/trunk area – locate the factory fuel pump power wire that you determined during the beginning of your pump installation. If you did not do this during the pump installation – refer to the pump installation procedure for information on how to locate this wire.
- Cut the wire in a suitable location for attachment to the yellow wire in the relay harness. Strip both ends of the factory wire as well as the yellow signal wire. Included in the relay harness kit is a heat shrink butt connector. One end of the butt connector should have 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 yellow signal wire.
- With that completed you should now route the main power wire to the vehicle's positive battery terminal.
- 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 jack stands for a few more minutes.
- Connect the battery cables to the battery with the key out of the ignition.
- Have a friend 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 jack stands, and enjoy the hard work you just performed.