



Walbro 255lph Inline Fuel Pump Install Procedure With USRT Mk4 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:

- 5/16 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) Underneath the dashboard you should find the fuse block. 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.
- 3) Once you have determined which wire is the factory pump power wire, DISCONNECT THE BATTERY.
- 4) Place included Walbro securing sleeve over the fuel pump. Note the direction of flow is towards the electrical connectors. Also install barbed fittings with washers onto the pump and tighten.
- 5) Locate the area next to the engine where several fuel lines are bundled together above the motor mount. Remove the factory sleeve that bundles the fuel lines together in order to separate the fuel lines from one another.
- 6) Now cut the fuel supply line that comes from the fuel filter under the car. *** 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. ***
- 7) Connect Walbro into the factory fuel supply line that you just cut and install new fuel line hose clamps on each connection.



- 8) 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 engine bay beside the battery. 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 engine bay by finding a suitable location to mount the relay. We chose to mount the relay to a fender stud that generally attaches the factory airbox to the fender. The relay should be mounted close to a suitable ground location within reach of the two ground wires at the relay. (We will be grounding our wiring onto the negative battery terminal in this installation).
- Install the relay and ground wires. *Depending on the year of your car, you may need a securing nut for the accessory post on the battery terminal.*
- Route the pump wiring portion of the relay harness over to the new fuel pump location. We routed it along the fender to behind the headlight where it proceeds to above the radiator behind the plastic trim pieces by the headlight. (Minor trimming of the trim piece behind the headlight was necessary along the fender to route it this way.)



- When you get to the passenger side of the radiator, we dropped the wiring to the frame rail area and around behind the passenger side motor mount making sure to keep the wiring away from moving parts and heat sources by using the factory wiring clips.



- 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!
- Now route the yellow signal wire thru a firewall grommet like the rest of the engine bay.
- Underneath the dashboard – 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 from 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. *Depending on the year of your car, you may need a securing nut for the accessory post on the battery terminal.*



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

9) 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.