

Installation Guide

Fuel Injection In-Line Fuel Delivery Kit

555-15948 & 555-15949



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Parts List

555-15948



#	PART	QTY.	#	PART	QTY.
1	-6 AN Push Loc Fuel Hose	40 ft.	9	Electrical Connector Covers	2
2	-6 AN Bulkhead Fitting Assembly	1	10	M18 x 1.5 mm Pump Inlet Fitting	1
3	60 Micron Billet Aluminum Pre-Filter	1	11	M12 x 1.5 mm Pump Outlet Fitting	1
4	3/8 in. Barb Fitting for Pre-Filter	2	12	-6 AN Straight Hose End with 3/8 in. Barb	2
5	Pre-Filter Clamp	1	13	-6 AN Female 45° Hose End with 3/8 in. Barb	2
6	30 Micron Black Billet Post-Filter	1	14	Stainless Steel EFI Hose Clamps	10
7	In-Line External EFI Fuel Pump	1	15	14-16 Gauge Ring Terminals with nuts	2
8	Pump Mounting Bracket	1	16		

Parts List

555-15949



#	PART	QTY.	#	PART	QTY.
1	-6 AN Pro-Flo 350 Braided Hose	40 ft.	9	M18 x 1.5 mm Pump Inlet Fitting	1
2	In-Line External EFI Fuel Pump	1	10	M12 x 1.5 mm Pump Outlet Fitting	1
3	Pump Mounting Bracket	1	11	-6 AN to -8 AN Fitting for Pre-Filter	2
4	60 Micron Billet Aluminum Pre-Filter	1	12	-6 AN 90° Bulkhead Fitting	1
5	Pre-Filter Clamp	1	13	-6 Bulkhead Nuts	2
6	30 Micron Black Billet Post-Filter	1	14	Stat-o-Seal Washers	2
7	-6 AN Black Straight Hose End	7	15	Fuel Pump Connector Covers	2
8	-6 AN Black Female 45° Hose End	3	16	14-16 Gauge Ring Terminals with nuts	2

Read Before Use

Thank you for your purchase of this JEGS Fuel Injection In-Line Delivery Kit. Before installation please be sure to read this guide to ensure proper installation.

This system employs electricity and fuel. Proper safety precautions are required.

If you have any issues with this in-line deliver kit, or the unit is damaged, please contact customer service at: 1.800.345.4545.

Return Information: *Once this in-line deliver kit has been modified, it will not be accepted for return.*

WARNING

**READ AND UNDERSTAND
ALL INSTRUCTIONS.**

Failure to follow all instructions listed in this user guide may result in electric shock, fire risk, and/or serious injury.

SAVE THESE INSTRUCTIONS!

This JEGS Fuel Injection In-Line Fuel Delivery Kit provides a comprehensive solution when converting your vehicle to EFI from carburetion. This fuel delivery style requires a return line to the fuel tank. The necessary parts are included.

During installation, make sure that the fuel pump and pre-filter are mounted as low as possible. The pump needs to be mounted as low as the bottom of the tank. This style of pump is designed to push fuel, not pull it from the fuel tank. While the tank's pickup may be higher than the pump, once primed it will function correctly.

Note: *Mounting the pump too high will contribute to premature failure.*

This In-Line Fuel Delivery Kit is capable of providing enough fuel for engines producing up to 650 HP.

Note: These systems are still suitable to be used on engines that are making as little as 200 HP.

Installation

The installation of fuel related components should be done in a well ventilated area free of any possible fire hazards. Gasoline fumes are toxic and highly inflammable.

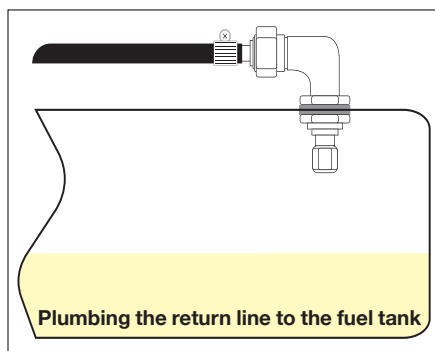
1. Disconnect the negative (-) terminal of the battery.
2. Release the pressure in the fuel system by removing the gas cap.
3. Remove the stock fuel lines from the factory fuel pump and remove the pump from the engine. Clean the block's mounting surface and install a fuel pump block-off plate (not supplied). Make sure you acquire a block off plate for your specific engine. Be sure to remove all fuel pump related parts including the push rod.
4. If a low pressure electric pump is being used you may already have a pump block-off plate and will not require a new one. Remove all of the electric pump components.
5. Disconnect the factory hard line (or hose) from the tank's sending unit assembly. **Note:** *The factory hard lines can be completely removed if not used for the return line. If not removing or using as a return line, cap the ends of the factory hard line to avoid contamination entering the tank.*
6. For proper operation of the EFI system, a return line provision must be installed onto the fuel tank sending unit. You have several options for providing a fuel return line.

Note: *Some vehicles already have a return line which may be used. Other methods require welding on the tank. It is recommended that any welding be performed by a qualified professional.*

Here are your various options:

- Using the supplied rubber -06 hose:
 - Use supplied hardware and install return line fittings as outlined in the diagram below.
 - Install a filler neck return kit. Sold separately
- Use the vehicle's existing fuel hard line as the fuel return line with modification to the sending unit and pickup.
- Use the vehicle's existing fuel return line (if equipped) as the fuel return line.

Note: *Regardless of which of the above systems you use for a return line, it is important to locate the in-tank return line as far as possible from the fuel pickup line. This will avoid drawing aerated return fuel into the inlet line fuel pickup which can cause erratic operation.*



Fuel Inlet Line

It is recommended to use a -06 inlet line from the tank to the pump. From the pump to the engine a -06 line is also suitable. The hose and hose fittings supplied in this kit are suitable for plumbing your system.

Using a -06 line from the tank may require the installation of a larger pickup in the tank. Some stock tanks have a $\frac{5}{16}$ " diameter fuel tube; this is too small. The outlet line from the tank must be a minimum of $\frac{3}{8}$ " in diameter. The -06 supplied fuel hose will work on a $\frac{3}{8}$ " tube. If your current tank has a $\frac{5}{16}$ " fuel line coming from the sending unit, source a replacement sending unit with a larger fuel line. Vehicles originally equipped with small block engines typically have $\frac{5}{16}$ " lines while big block engines have a $\frac{3}{8}$ " fuel line. If your model car was available with both small and big block engines there should be a $\frac{3}{8}$ " sending unit available.

Note: *Some of these sending units have both an outlet and a return fuel line provision.*

If you cannot source a sending unit with a $\frac{3}{8}$ " fuel line you will need to have one custom installed in your tank. This should be accomplished by an experienced professional who can modify your fuel tank.

Since the line from the tank to the pump is low pressure you can secure the -06 hose to the tank with a supplied hose clamp. The rest of the connections are made with the supplied special fittings and clamps.

Pump & Pre-Filter Plumbing

Select a location for mounting the pump. Provide enough space between the tank and the pump to allow for the pre-filter. The pump and filter should be mounted at the lowest portion of the fuel tank. Mount within three feet of the tank. This is important to avoid premature pump failure.

Using the mounting bracket as a template, mark two mounting holes on the frame (if that's where the pump will be mounted) and drill (2) 4mm holes, #21 drill bit, for #10 self tapping metal screws. Mount the bracket to the frame using #10 self tapping sheet metal screws or other suitable hardware.

Note: *The fuel pump is directional and must be positioned with the wire terminals facing the front of the vehicle.*

Slip the fuel pump into the bracket and clamp it securely. See Figure 4.

Position the filter between the tank and the pump. Mount the filter to the frame using the supplied clamp. Drill a 4mm hole and use a #10 self tapping screw to hold the clamp.

Measure out the necessary lengths of the -06 hose to run from tank to the filter and from the filter to the pump. Cut the hose cleanly using a sharp blade. Make sure the ends are cut square. Push the hose onto the fitting placing a hose clamp over the hose. Tighten hose clamp securely. It will ease installation by using some lubricant sprayed on the hose nipple when installing the hose.

Connect the hose from the tank to the filter and a second hose from the filter to the pump.

Pump to EFI Plumbing

Determine the lengths of the -06 hose which will run from the pump to the post-filter and then a second hose from the filter to the inlet port of the throttle body.

Note: *The post-filter can be located anywhere between the pump and the throttle body. This filter is very light and can be supported by the fuel hose. No mounting clamp should be required, but you will need to provide some type of support for the fuel line at several points between the pump and the engine compartment. It can be zip-tied or held in place with small clamps. (Not supplied)*

Most throttle bodies have three inlet ports and one outlet port. The outlet port is marked "Return." Select one of the three inlet ports and install a supplied -06 AN inlet fitting. The return port typically requires a special fitting which is installed in the throttle body. Install plugs in the two unused ports.

When using a Fuel Command Center, which is return-less, the return port is also plugged.

Connect the -06 fuel hose from the filter to the inlet fitting on the throttle body. Secure with a hose clamp.

Wiring the Fuel Pump

When wiring the fuel pump, refer to your EFI installation guide's wiring diagram.

Connect the EFI harness's fuel pump power wire to the positive (+) terminal on the fuel pump. Connect one end of a ground wire to the (-) terminal of the fuel pump and attach the other end to one of the screws holding the pump to the frame. Make sure the wire terminal makes contact with bare metal.

Fuel Pressure Regulator

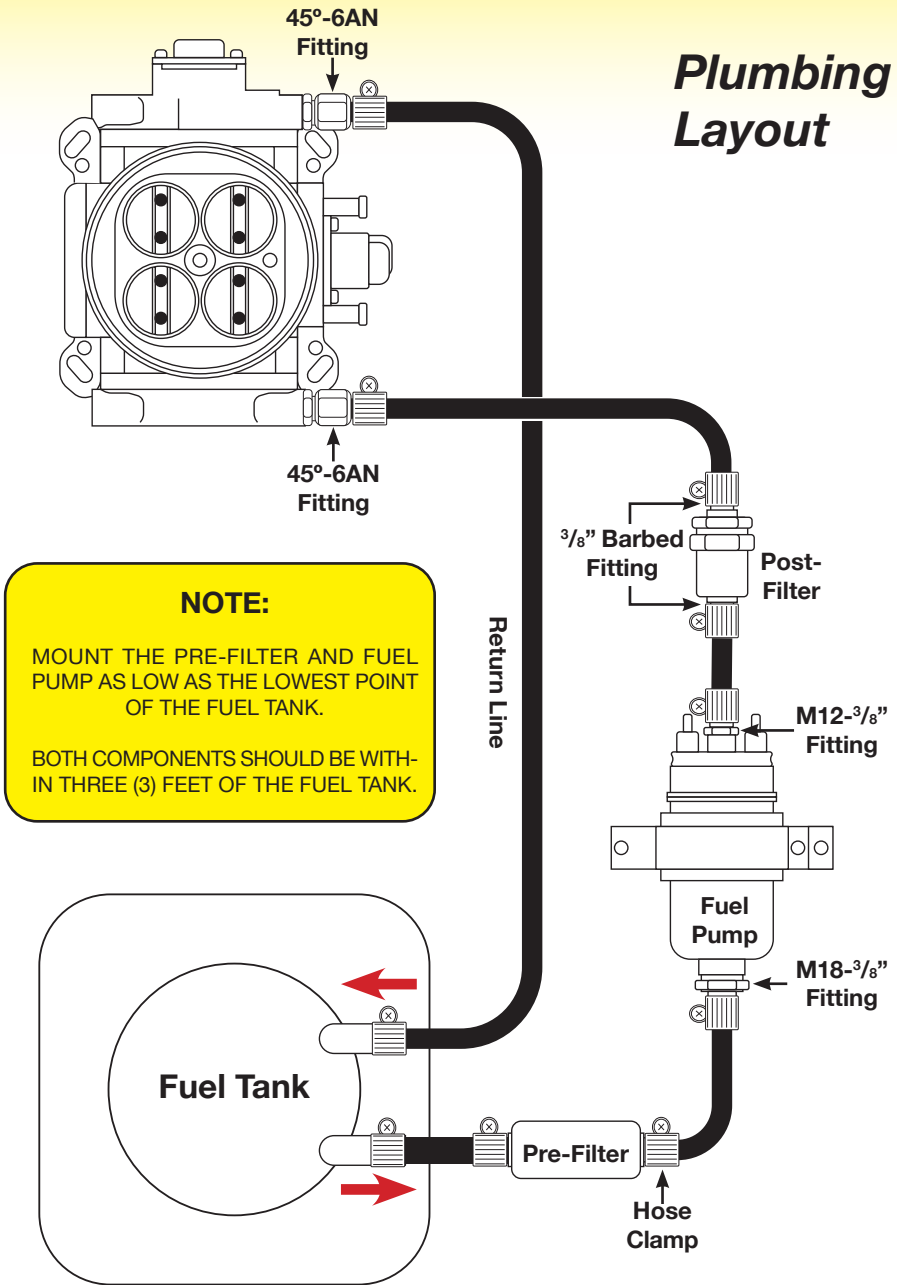
Refer to your EFI system's installation guide regarding the fuel pressure regulator. Some systems have internal regulators, while other require an external unit. Be sure to plumb your system accordingly.

Improper fuel pressure can lead to poor running, or damage to the engine or EFI system.

Completion & Testing

Once the entire installation is completed, turn on the ignition switch. This will activate the fuel pump. Immediately examine every connection checking for fuel leaks. If any leaks are detected, turn off the ignition switch and repair all leaks. It is critical that no fuel leaks exist which could lead to a fire.

Plumbing Layout



Notes

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