Factory Five Racing, Inc.

Part Number: 15462	*Revision:* H	*Effective Date:* 9/19/19	*By:* J. INGERSLEV

EFI Fuel System

INSTALLATION INSTRUCTIONS

Table of Contents

- Drill, 3/16", 13/64", 9/64" drill bits, 9/16", 11/16" , ¾", ⅞", 13/16" wrenches, ¾" socket, ratchet, jack, jack stands, hack saw, ruler, marker
- This kit is usable for Coyote and LS engines.
- This kit includes a 255LPH in-tank or in-line pump good up to 500 hp

Fuel pressure regulator

- The fuel line from the tank and going to the engine can go on either side of the regulator. The return goes on the bottom.

Decide where you would like to mount a fuel pressure regulator; on the firewall or the underside of the 2”x 2” tube depending on its mount.

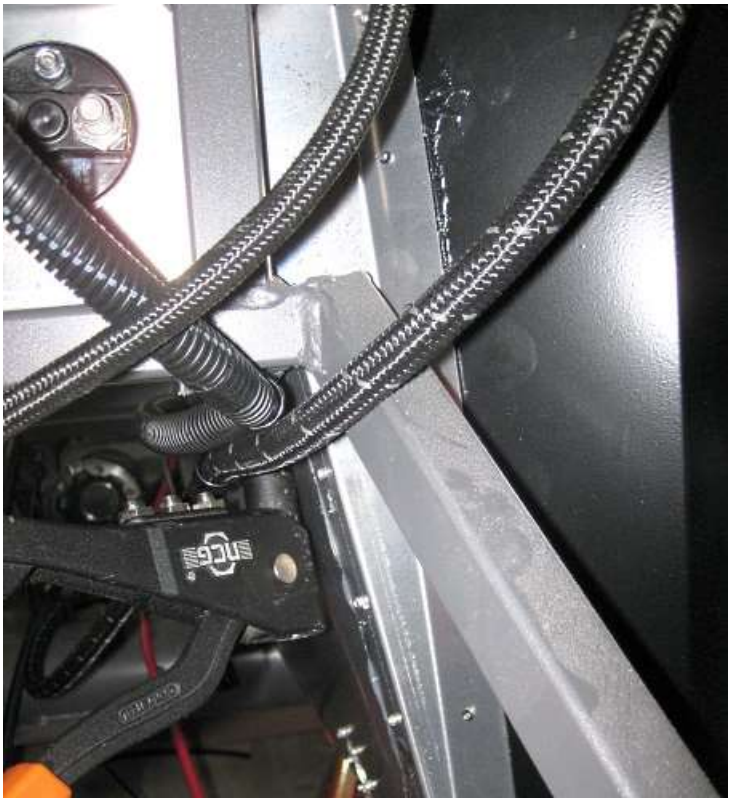
Use a piece of tape to locate the mounting holes and make sure the regulater is not crooked then drill $^{13}/_{64}$" mounting holes.

Attach the regulator to the firewall using the 10-32 x $^{5}/_{8}$" black button head screws and locknuts.

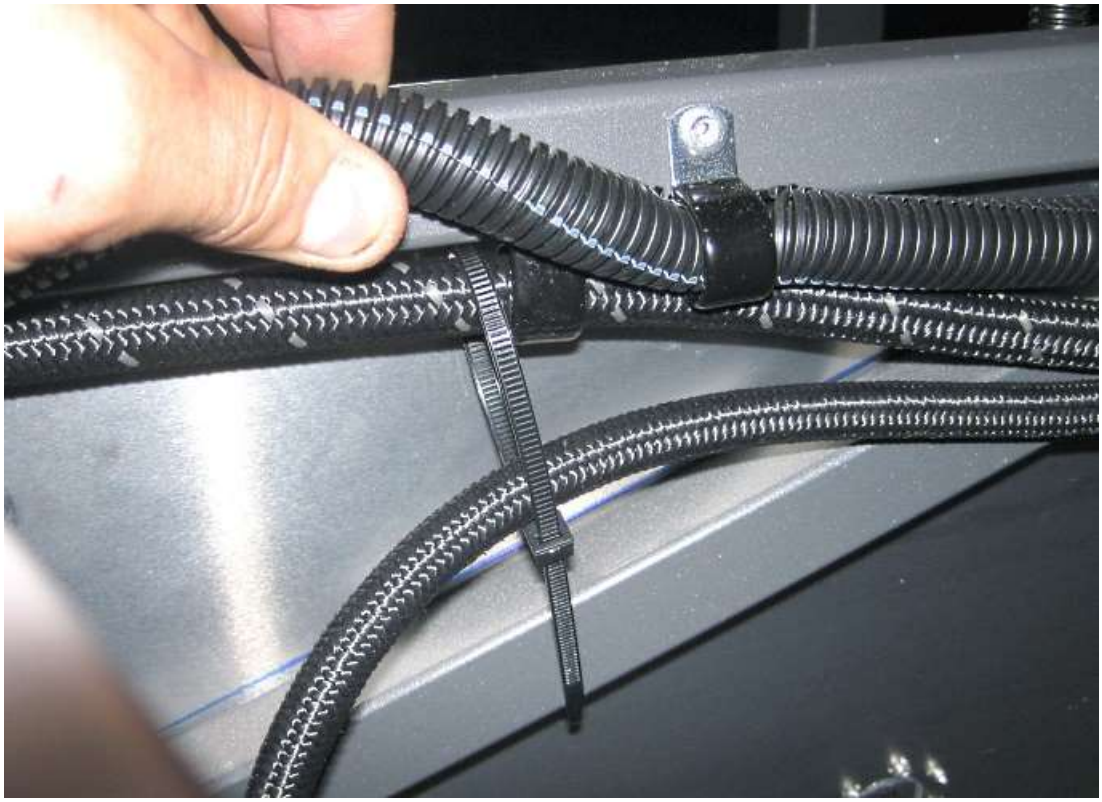
Tighten the side port fittings to the regulator.

Pick the side for the fuel line coming from the tank and screw it onto the regulator port fitting and tighten with a ¾" and $^{11}/_{16}$" wrenches.

Screw the smaller return line to the bottom of the regulator using a ¾" and $^{9}/_{16}$" wrenches.

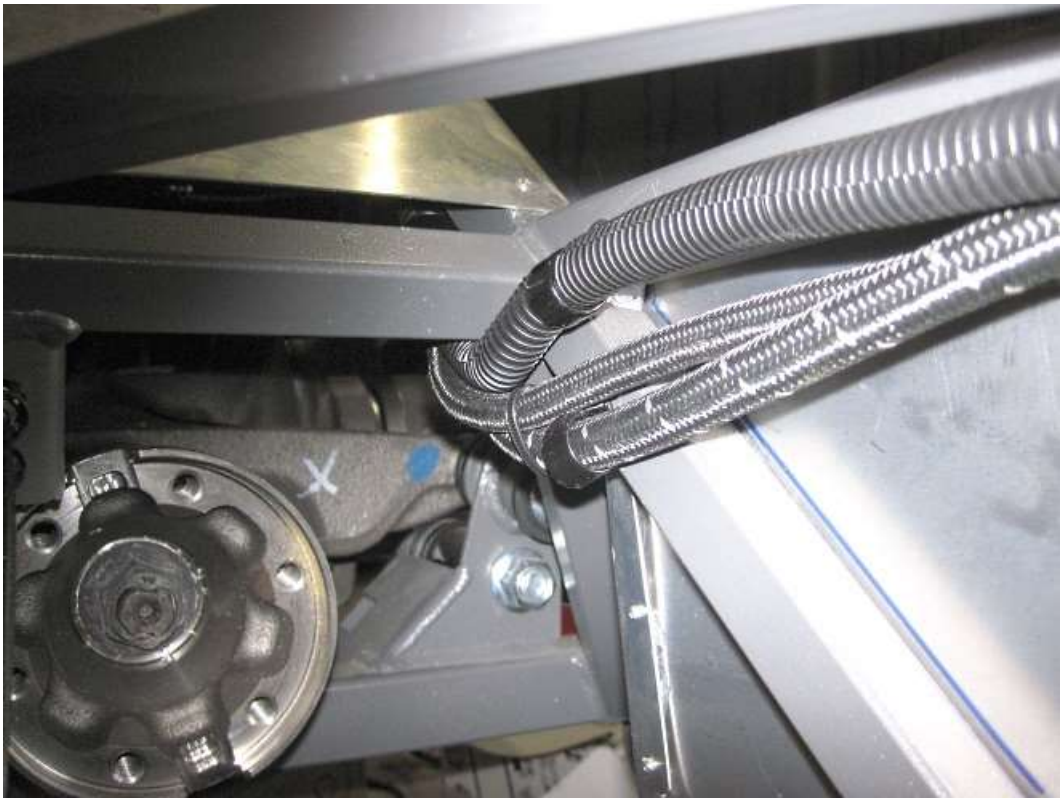


Run the lines down into the transmission tunnel and attach the larger #6 send line with $^{5}/_{8}$" insulated clamps from the kit and $^{3}/_{16}$" rivets.

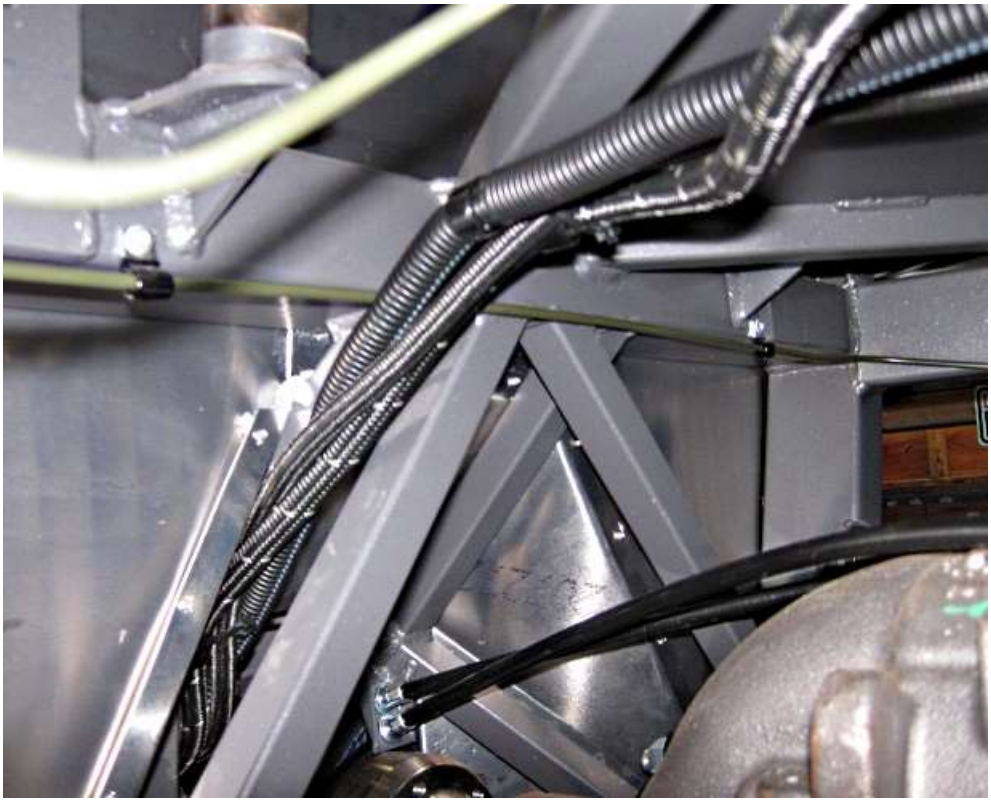


The smaller #4 return line should get zip tied next to the send line clamp. Do not make the zip tie too tight, just snug it up.

Clamp the send line every foot down the transmission tunnel to the back of the tunnel.



Clamp the send line at the back of the tunnel up in the corner.



Run the lines up and over the rear axle.

Fuel Pump

Assemble the in-tank pump to the bracket according to the instructions included with the pump install kit.

If using an in-line pump follow the directions in the assembly manual for location and install.

Send line at tank

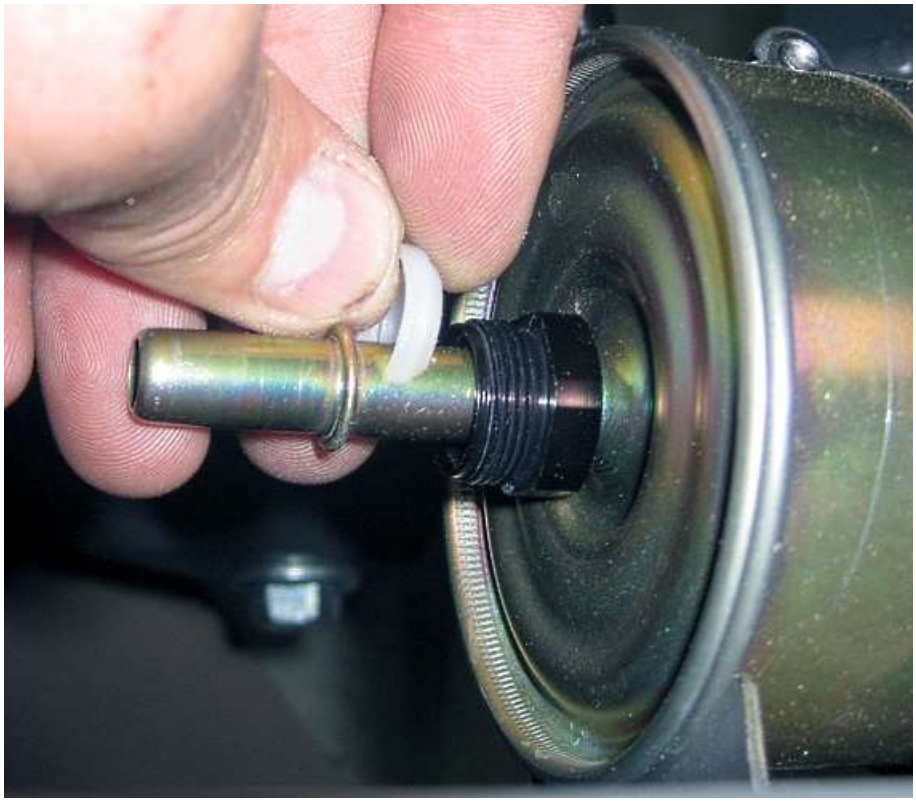
Kit fuel line components, OEM fuel tank components.
$^{11}/_{16}$”, ¾” wrenches

Use the $^{5}/_{16}$” hose and hose clamps from the kit along with the $^{5}/_{16}$” fuel line connector from the EFI components and $^{3}/_{8}$” to $^{5}/_{16}$” fuel line connector from the OEM fuel tank components to run the fuel line from the fuel tank to the fuel filter.

Send line at filter

Remove the end of the EFI fitting.

Slide the black end of the fitting onto the fuel filter.



Put the small white plastic piece behind the bead on the filter with the curved part towards the black fitting end.

Push the send hose onto the end of the filter.

Tighten the end of the fitting onto the hose using $^{11}/_{16}$" and ¾" wrenches.

Return Line

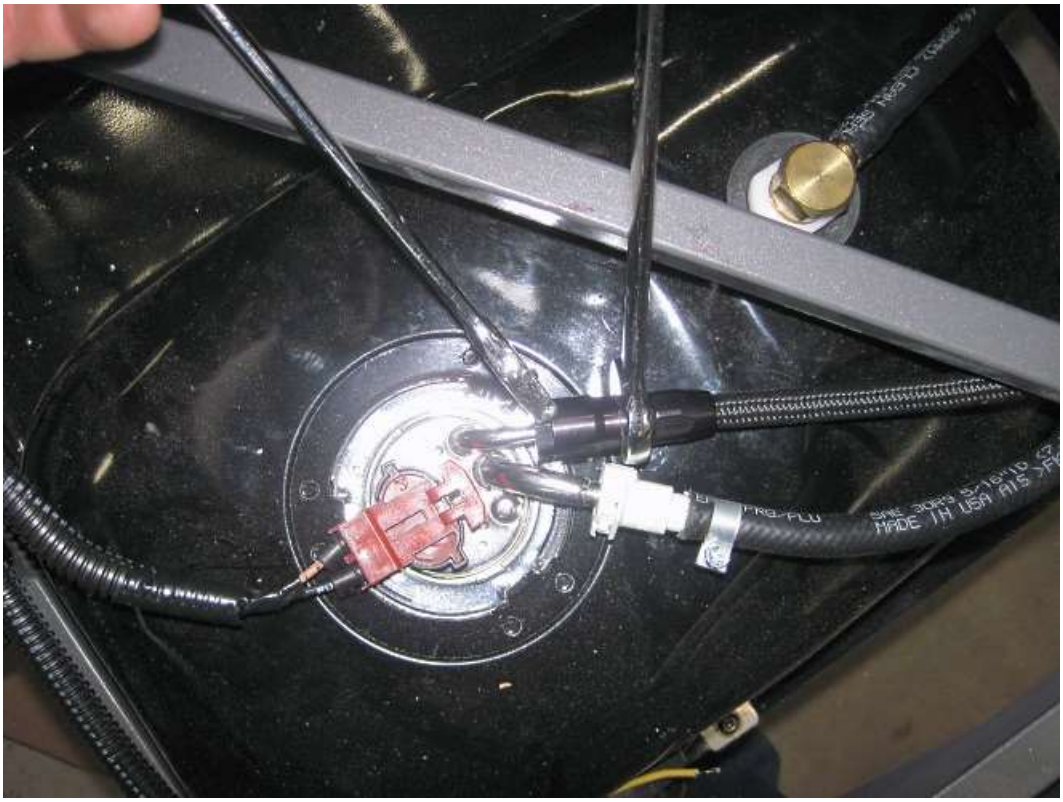
Route the #4 return line by the filter to the fuel pump.

Drill one of the filter rivet locations out and use a rivet to hole an insulated line clip as well as the filter mount.

Route to the return connection on the fuel pump.

Put the EFI black connector piece on the return tube.

Push the white plastic piece on the tube behind the bead.



Push the hose onto the tube then screw the end piece into the hose piece and tighten with $^{11}/_{16}$”, ¾” wrenches.

Charcoal can

🛠 $^{3}/_{16}$” drill bit, drill, rivet tool, $^{5}/_{16}$” nut driver, Philips head screwdriver.

🚘 Charcoal can and mount, kit fuel line components.

Put the charcoal can on the mount.

Hold the fuel tank vent hose up to the smaller fitting on the charcoal can then locate the cn so that the hose can reach.

Making sure that the can is seated on the mount, use a $^{5}/_{16}$" nut driver on the #10 self drilling screw through the top of the can; middle hole of the mount and into the frame.

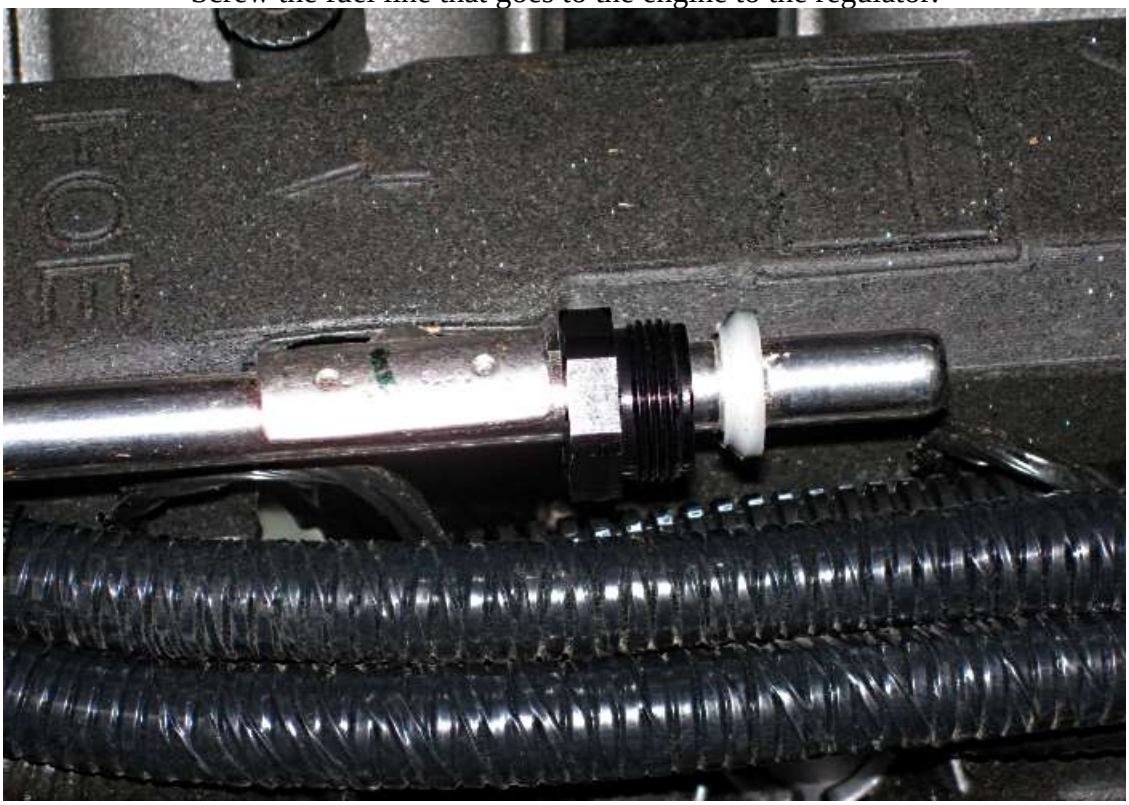
Use a $^{3}/_{16}$" bit to drill through one of the side mount holes then rivet the mount to the frame.

Repeat for the last mount hole.
If necessary, use some WD-40 on the inside of the ¼" fuel line from the kit then slide a hose clamp onto the hose and push the vent hose onto the small barb on the charcoal can.

Snug the hose clamp down with a Philips head screwdriver.

After engine install

Screw the fuel line that goes to the engine to the regulator.



Slide the black end and small white plastic piece behind the bead on the of the fuel rail on the engine

Screw and tighten the end of the fitting onto the hose using $^{11}/_{16}$" and ¾" wrenches.

Tighten the fitting on the Regulator using $^{11}/_{16}$" and ¾" wrenches.

Attach the vacuum line to the intake and regulator if not already done.

Use one of the small kit zip ties to make sure there is a good seal on the regulator vacuum hose.

Fuel pressure gauge

Remove the set screw on the front of the regulator.

Put Teflon tape on the fuel pressure gauge threads.

Screw the gauge into the front of the regulator and tighten with wrenches.

Fuel pressure

With the fuel system hooked up to the engine, cycle the fuel pump by turning the ignition to the ON position and letting the pump run. If the pump turns on and off through the computer, it may be necessary to wait a few seconds after turning the ignition off to let the relays reset before cycling again.

Loosen the large nut on top of the regulator.

Once you can hear the pump start bogging down and getting up to pressure, with the key in the on position set the fuel pressure regulator by turning the set screw on top of the regulator to the correct pressure as described in the engine control instructions. It will be necessary to cycle the pump a few times during the process.

Tighten the large nut on top of the regulator.