



97-09 GM LS-1/2/3/6/7 F-Body & Corvette FUEL RAIL KIT PART# 5018

INSTALLATION INSTRUCTIONS

Warning!

Fuel system is under pressure. You will need to relieve this pressure in Step 4. Please read instructions carefully!

Tools required-

3/8" Spring-Lok type fuel line disconnect tool, 11/16" wrench, 10, & 8mm sockets, 5mm & 5/32" Allen wrenches. White lithium grease, Anti seize.

SEE PAGE 2 FOR BILL OF MATERIALS

- Step 1** Disconnect negative battery terminal.
- Step 2** **Corvette** Remove decorative covers over fuel rails. **These will not be re-used.**
- Step 2** **F-Body** Unbolt throttle cable bracket, disconnect the throttle cables from the throttle body.
- NOTE** **In the next step you will release the fuel pressure in the fuel rails. Be sure to extinguish any open flames and disable any spark or ignition sources, or other potential fire hazards around the work area. Keep in mind that Gasoline vapors are more flammable than gasoline itself.**
- Step 3** Hold a rag around the shdrader valve on the front of the driver side rail, and then bleed off any fuel pressure by depressing the valve with a small pick tool.
- Step 4** With a 3/8" Spring Lok removal tool, disconnect fuel feed line from the fuel rails.
- Step 5** Unplug the electrical connections from the fuel injectors.
- Step 6** Use a 10mm socket to remove the bolts that attach the fuel rails to the intake manifold, and an 8mm socket to remove the small L shaped bracket that attaches to the fuel rail stud on the passenger side. **Corvette models may require that you remove the intake manifold bolts and slide it forward to remove this bracket.**
- Step 7** Remove the fuel rails and injectors by simply lifting them straight up.
- NOTE** **Now is the time to inspect your fuel injector O-rings. If they are damaged, replace them. Damaged O-rings can cause a fuel leak.**
- Step 8** Remove the clips that retain the injectors in the rails.
- Step 9** Apply a touch of white grease to all of the supplied O-rings and to the O-rings on the fuel injectors.
- Step 10** Place (1) O-ring over the ends of the (2) rail end caps, the (2) rail end adapters, and the (1) Spring Lok fitting.
- Step 11** **Corvette** For both rails, install an end cap on the **REAR** of the rail and a -6 rail end adapter on the **FRONT** of each rail and attach the rail mounting tabs with the supplied 1/4"-20 bolts with a washer under each bolt head.
- Step 11** **F-Body** For both rails, install an end cap on the **FRONT** of the rail and a -6 rail end adapter on the **REAR** of each rail and attach the rail mounting tabs with the supplied 1/4"-20 bolts with a washer under each bolt head.
- NOTE** **Each rail has LS-1/2/3 engraved in it at the corresponding mounting tab holes. Attach the mounting tabs at the proper location for your engine designation.**
- NOTE** **Each rail mounting tab has a round hole and a slotted hole. The round holes will attach to the rails. The slotted holes will attach to the intake manifold.**
- Step 12** Install supplied Spring Lok fuel feed fitting into the side of the driver rail.



Step 14 Insert (4) injectors into each rail.

NOTE

To ensure proper injector stab depth on the wide range of models that this kit will fit, BBK has supplied black spacers that sit on the intake manifold under each rail tab to accommodate for early (tall) and later (short) injector types.

For-

LS1/6 (tall injectors) use 2 thick spacers and 1 thin spacer under each tab.

LS2/3/7 1 (short injectors) use 1 thick spacer & 1 thin spacer under each tab.

NOTE

Corvette models will use the supplied crossover hose in its entirety, while F-bodies will need to cut 1" from one end of the hose.

Step 15 Assemble the crossover hose by pushing the barbed ends of the supplied 90° - 6 fittings into the ends of the hose.

Step 16 **Corvette** Finger-tighten the crossover hose onto the threads of the rail end adapters on the **FRONT** of both rails. **This is left loose for adjustability during the installation process.**

Step 16 **F-Body** Finger-tighten the crossover hose onto the threads of the rail end adapters on the **REAR** of both rails. **This is left loose for adjustability during the installation process.**

Step 17 Install both rails and injectors by guiding the tip of each injector into its respective bung in the intake manifold. Secure the rail to the intake manifold using (4) supplied bolts with the supplied washers (4) washers and the correct spacer configurations. **BBK has supplied short and long bolts to fit either tall or short configurations.**

Step 18 Plug in all 8 injectors.

Step 19 Tighten the fittings for the crossover hose with a wrench.

Step 19 Push the fuel feed hose onto the Spring Lok fitting until it snaps into place. **After snapping, be sure to pull back a bit to make sure the hose is actually snapped on.**

Step 20 Reconnect the negative battery terminal.

Step 21 **Without starting the engine**-Turn the ignition key to the ON position for 3-4 seconds, (primes the fuel system) then OFF 3 times and return to the ON position. Check all connections for fuel leaks. **Correct any leaks before starting!**

Step 22 **F-Body** Re-attach the throttle cables and bolt the throttle cable bracket to the intake manifold.



(1) Driver side rail

(1) Passenger Side Rail

(4) 1/4"-20 x 3/8" BHCS

(4) M6x1.0x25mm BHCS (for short spacer stack)

(4) M6x1.0x30mm BHCS (for tall spacer stack)

(4) Rail mounting brackets

(1) Spring-Lok fitting

(5) O-Rings + (1) Spare

(8) Mounting tab washers (4) 1/4" + (4) 6mm

(1) 10.5" Fuel line hose

(2) 9/16" Rail end plugs

(2) 9/16" Male-Male Rail end adapters

(2) 9/16" 90° Pushlock hose swivel fittings

(12) Spacers