



## 2005-10 MUSTANG GT (S197) FUEL RAIL KIT PART# 5017

### INSTALLATION INSTRUCTIONS

### Warning!

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

#### Tools required-

5/8" Spring-Lok type fuel line disconnect tool, 11/16" wrench, 8mm socket, 4mm, 5mm, 7/64", & 3/16" Allen wrenches. Lithium grease, Teflon tape, Anti seize.

#### Bill Of Materials

- |                                |   |
|--------------------------------|---|
| (1) Driver side rail           | (6) O-Rings                                 |
| (1) Passenger Side Rail        | (8) Washers                                 |
| (4) Rail mounting brackets     | (4) Black spacers                           |
| (1) Fuel pressure sensor mount | (1) Spring-Lok fitting                      |
| (1) 1/8" Pipe plug             | (1) 13" Fuel line hose                      |
| (2) 6-32 x 3/4" SHCS           | (2) 9/16" Rail end plugs                    |
| (2) 10-32 x 5/8" BHCS          | (2) 9/16" Rail end adapters                 |
| (4) 1/4"-20 x 3/8" BHCS        | (2) 9/16" 90° Pushlock hose swivel fittings |
| (4) M6x1.0x16mm BHCS           |   |

**Step 1** Disconnect negative battery terminal.

**Step 2** Unplug fuel injectors and fuel pressure sensor (on top of driver side rail).

**Step 3** Disconnect the vacuum hose that connects to the fuel pressure sensor.

**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 4** Wrap a rag around the fuel pressure sensor to avoid fuel spray and loosen the bolts that attach it to the driver side rail while holding the rag tightly. Remove the bolts and the sensor from the rail.

**Step 5** Use a Spring-Lok disconnect tool to separate the fuel feed line from the driver side rail.

**Step 6** Use an 8mm socket to remove the (4) fuel rail hold down bolts from the intake manifold.

**NOTE** **Fuel rails will have some fuel remaining in them. Use caution when removing them from the engine as the remaining fuel will spill out when moving them.**

**Step 7** Remove the keeper clips that hold the injectors into the rails and remove the injectors from the rails.

**Step 8** Place the supplied O-rings onto the (2) supplied rail end caps, (2) -6 fittings & (1) Spring-Lok adapter.

- NOTE** *Smear a small amount of grease onto the O-rings, and a small amount of anti seize onto the threads of all fittings, and the tapered tips of the -6 fittings.*
- Step 9** Install the supplied caps into the front of each BBK rail. Hand tighten until fully compressed. Then snug with an 11/16" wrench.
- Step 10** Install the -6 fittings into the rear of each BBK rail. Hand tighten until fully compressed. Then snug with an 11/16" wrench.
- Step 11** Install the mounting tabs onto the bottom of the BBK rails by placing a washer over the threads of each of the supplied 1/4"-20x 3/8" (shorter button head) Allen bolts and placing the bolt through the round hole (not the slot) in each bracket.
- NOTE** *Use extra care when attaching the pressure sensor mount to the rail. The hardware is very small and can easily cross thread or break if over tightened.*
- Step 12** Wrap a small amount of Teflon tape around the threads of the supplied brass Allen headed block off plug, or a fuel pressure gage of your choice and thread it into the 1/8" pipe threaded port in the BBK pressure sensor mount.
- Step 13** Install the supplied Spring-Lok connector onto the pressure sensor mount.
- Step 14** Install the pressure sensor mount onto the BBK driver side rail using the supplied hardware and O-ring with a small amount of grease applied to it.
- Step 15** Install the original pressure sensor onto the BBK driver side rail using the supplied hardware.
- NOTE** *Now is the time to inspect your fuel injector tips and O-rings. If they are damaged, replace them. Damaged O-rings can cause a fuel leak.*
- Step 16** Grease the O-rings on your injectors lightly and insert the tops of the injectors into the BBK fuel rails.
- Step 17** Guide the bottoms of the injectors into the appropriate injector bungs in the intake manifold and push the rail assembly down lightly to fully engage the injector tips into the their respective bungs.  
*For both rails*
- Step 18** Place (1) of the supplied black spacer/washers under each of the (4) rail mounting tabs and tighten the rails down using the supplied M6x1.0x16mm (longer button head) Allen bolts with a washer over the threads of each bolt.
- Step 19** Apply a small amount of grease to the barbs of the supplied 90° swivel hose ends.
- Step 20** Push the ends of the supplied hose onto the barbs of the 90° swivel hose ends until the end of the hose fully touches the hose end stops.
- Step 21** Install the hose assembly by tightening the 90° swivels onto the exposed ends of the -6 fittings on the back of each BBK rail. Hand tighten until fully compressed. Then snug with an 11/16" wrench.
- Step 22** Re-establish the electrical and vacuum connections to the fuel pressure sensor.
- Step 23** Reconnect the negative battery terminal.
- Step 24** *Without starting the engine*-Turn the ignition key to the ON position, then OFF 3 times and return to the ON position. Check all connections for fuel leaks. **Correct any leaks before starting the engine.**  
*To avoid a possible CHECK ENGINE light activation, Start the engine and let it idle for about 5 minutes, then drive the car at part throttle for about 5 minutes before applying heavy or full throttle. Otherwise, any air bubbles/pockets that may have entered the system will cause the CHECK ENGINE light to come on and will need to be reset with a proper OBD II tool.*
- NOTE**

## Assembly Photos



**8. Place O-rings around fittings**



**9&10 Install and tighten the rail end fittings**



**11. Attach Brackets**



**12, 13 & 14 Assemble & install the pressure sensor mount**



**Driver side rail assembled**



**20 Hose ends pushed on**