

**INSTALLATION INSTRUCTIONS - INS132** 

# FUEL RAIL KIT

PART # 5017 // 2005 - 2010 Mustang GT (S197)



SPECIAL 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 and Anti seize.



INSTALL TIME: Approximately 2 hours.



DIFFICULTY: Average.





IMPORTANT: All appropriate safety equipment and gear must be used during the installation of this or any BBK Performance products or any time you work on a vehicle. BBK Performance accepts no responsibility for injuries or damage caused by or during the installation of this product.





## HARDWARE INCLUDED

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

#### 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

## 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



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#### 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



## 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 ½"-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.

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#### 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

#### FOR BOTH RAILS

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.

## 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  $90^{\circ}$  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  $90^{\circ}$  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  $11/16^{\circ}$  wrench.

# STEP 22

Re-establish the electrical and vacuum connections to the fuel pressure sensor.

# STEP 23

Reconnect the negative battery terminal.

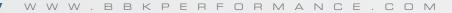
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## STEP 24

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.

NOTE! 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.

## DRIVER SIDE ASSEMBLED





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