1999-2004 Ford Mustang 4.6L 2-V

Fuel Rail Kit

Part #5016



Special Tools

Required:

1/2" & 5/8" Spring-Lok type fuel disconnect tools

White Lithium Grease

Teflon Tape

Install Time:

Approximately 2 Hour

Difficulty:

3 out of 5

Follow these instructions carefully to ensure correct fitment and operation.

STEP 1

Disconnect the negative battery terminal.
Remove the air inlet hose assembly from the throttle body. <u>NOTE!!!</u> The throttle body does not need to be separated from the plenum for the next step. You can remove them together as one.

STEP 2

Disconnect the throttle cables, unplug the sensors and vacuum connections from the intake plenum (also known as the intake elbow), unbolt the EGR valve from the driver side and unbolt and remove the intake plenum assembly.

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 then gasoline itself.

STEP 3

 Hold a rag around the Schrader valve on the front of the driver side fuel rail, and then bleed off any fuel pressure be depressing the valve with a small flat head screwdriver or pick tool.

STEP 4

- Unplug the electrical connections from the fuel injectors and fuel pressure sensor. With a 5/8" Spring Lok removal tool, disconnect the fuel feed line from the fuel rails. Use an 8mm socket to remove the bolts that attach the fuel rails to the intake manifold. Remove the fuel rails and injectors by simply lifting them straight up.
 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.
- Remove the fuel pressure sensor from the driver side fuel rail.

STEP 5

 Apply a touch of white grease to all of the supplied O-Rings and to the O-Rings on the Fuel Injectors. Place (1) O-Ring over the ends of the (2) Rail End Caps, the (2) rail end adaptors, and the (1) 58" Spring Lok Fitting. Remove the (2) O-rings from the pressure switch. Install the (1) supplied small O-Ring into the groove closest to the sensor head.



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STEP 6

For both rails, install an end cap on the front of the rail and a rail end adaptor on the rear of each rail and attach the rail mounting tabs with the supplied ¼"-20 bolts. <u>NOTE!!!</u> 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. Use the supplied washers at the intake manifold end and fuel rail mount tabs.

STEP 7

 Install the supplied Spring Lok fitting into the side of the passenger rail. Insert (4) injectors into the passenger side rail.

STEP 8

Install the passenger side rail 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 the supplied hardware. NOTE!!! To ensure clearance between the fuel rails and ignition coils, use (1) of the supplied washers under the mounting tabs and place (1) over the threaded portion of each bolt that go through the tabs at the intake manifold. NOTE!!! Take extreme care when installing the small button head cap screws (BHCS) into the fuel rail. Using the wrong length will penetrate the fuel rail resulting in a fuel leak. Use the supplied washers underneath the small BHCS's. In addition these screws can easily cross thread.

STEP 9

 Install the original fuel pressure sensor onto the driver side fuel rail with supplied o-ring and the supplied 10-32x1/4" BHCS's. <u>NOTE!!!</u> Measure these screws from the bottom of the head to the end first to ensure you are using the correct hardware here!

STEP 10

Insert (4) injectors into the driver side rail. Install
the driver side fuel rail and injectors by guiding
the tip of each injector into its respective bung in
the intake manifold. Secure the rail to the intake
manifold by using the supplied hardware.

STEP 11

 Assemble the cross over hose by pushing the barbed ends of the supplied 90 degree fittings into the end of the hose. Tighten the cross over hose onto the threads of the rail end adaptors on the back of both rails. <u>NOTE!!!</u> When routing the cross over hose, be mindful of hot EGR tube it must pass by. Route so no contact is made with the EGR Tube.

STEP 12

 Route the stock fuel feed line under the A/C line and connect to the 5/8" Spring Lok fitting on the side of the passenger side fuel rail.







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STEP 13

Reconnect the negative battery terminal.
 <u>WITHOUT STARTING THE ENGINE</u> Turn the ignition 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
 <u>BEFORE STARTING!!!</u> Re-install the intake elbow and re-attach all connections. Re-install the air inlet tube.



STEP 14

 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 will come on and will need to be reset with a Proper OBDII tool.



- (1) Driver side rail
- (1) Passenger Side Rail
- (2) 10-32 x 1/4" SHCS
- (2) Sensor mounting washers (small)
- (4) 1/4"-20 x 3/8" BHCS
- (4) M6x1.0x16mm BHCS
- (4) Rail mounting brackets
- (1) Spring-Lok fitting

- (1) Regulator base O-ring
- (5) O-Rings + (1) Spare
- (12) Mounting tab washers
- (1/4") (15") 3/8" Hose
- (1) 13" 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







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