

A collection of various mechanical parts and tools, including a carburetor, a large metal flange, a long black hose with blue fittings, several bolts and nuts, a small black bracket, and a blue-handled tool, all arranged on a white background.

INSTALLATION INSTRUCTIONS



STEP 1

Disconnect and isolate negative battery cables.



STEP 2

Remove engine cover.



STEP 3

Loosen left charge air cooler clamp and remove air intake elbow.



STEP 4

Remove fuel rail noise isolator.



STEP 5

Using brake clean and shop air, clean fuel rail and fuel injection pump. Then remove high pressure and low pressure fuel connections.



STEP 6

Disconnect low pressure feed and return lines from cp4 injection pump. #2 and #3 in **Figure 1 (next page)**.

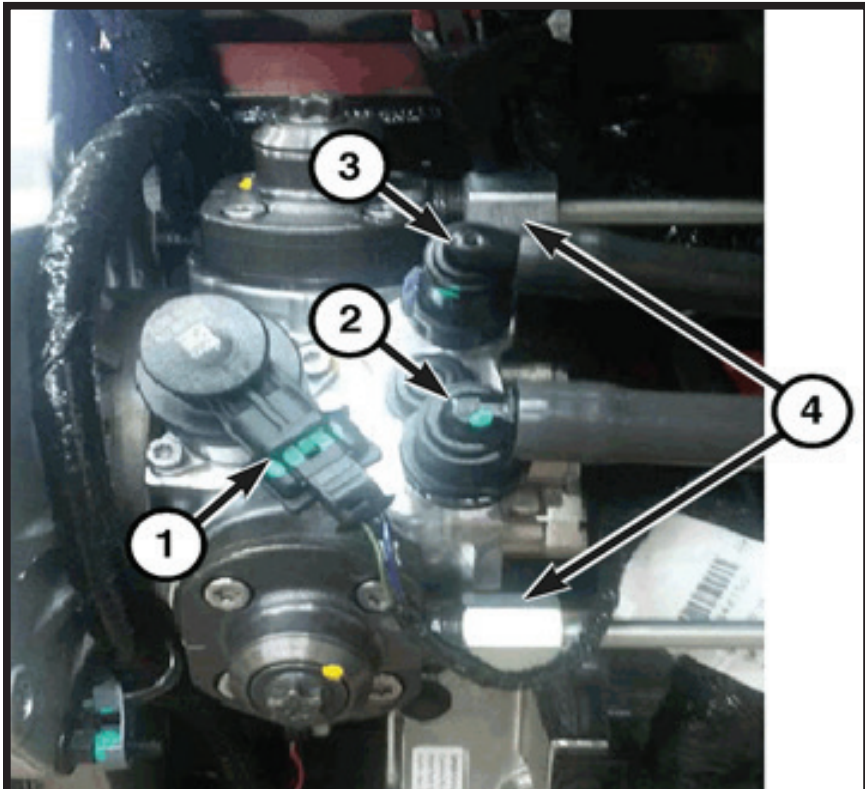


FIGURE 1



STEP 7

Remove rear high pressure fuel line hold down bolt #7 from cylinder head and hold down nut#1 from side of cylinder block. Remove both high pressure fuel lines from fuel rail and injection pump. #16 and #17 in **Figure 2 (next page)**.



STEP 8



FK-1057

Install FX-1057 to block off the rear high-pressure inlet on the fuel rail. This kit uses a single high-pressure line to feed the fuel rail from the CP3. **Figure 2 (next page)**.

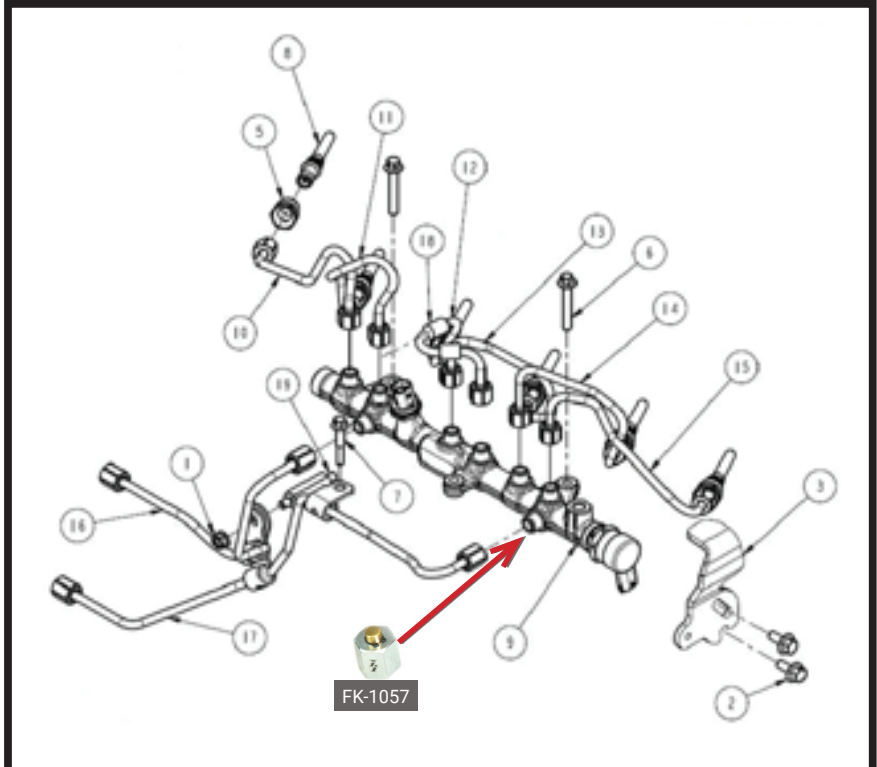


FIGURE 2



STEP 9

Disconnect fuel quantity solenoid electrical connector. #1 in **Figure 1** (page 3).

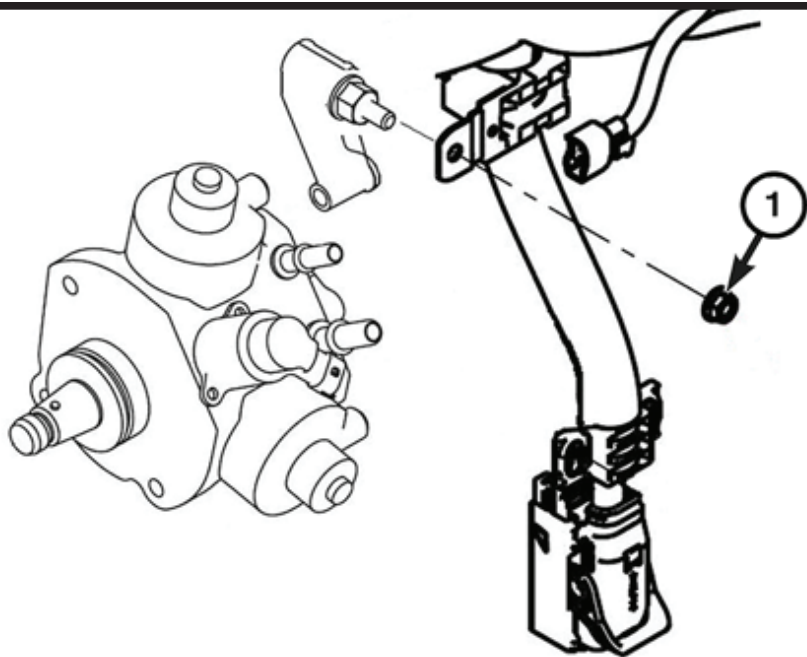


FIGURE 3



STEP 10

Remove nut holding engine harness to the injection pump support bracket. And remove fuel pump support bracket mounting bolts and bracket.
Figure 3.



STEP 11

Remove engine harness holder that is attached to the engine harness.





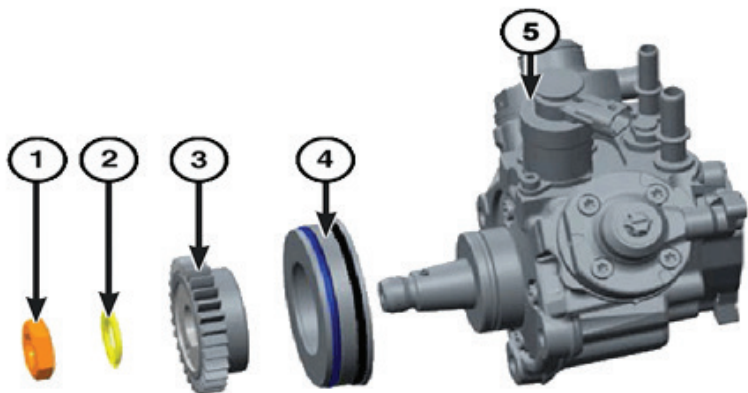
STEP 12

Remove 3 injection pump mounting nuts and remove injection pump by pulling straight backwards from the gear housing. Pump, pilot adapter, and gear will come out as one unit.



STEP 13

Remove nut, washer, and gear from injection pump as these will be re-used.



STEP 14

Remove mounting studs from front cover at this time. (Mounting nuts can be used to double nut and remove studs)





STEP 15

Disconnect ECM connectors by pushing in tabs under latches and pulling latch upwards.



STEP 16

Remove 4 bolts attaching ECM to mounting plate and remove ECM.



STEP 17

Remove ECM mounting plate bolts and remove mounting plate from engine block.



STEP 18

Re-install ECM mounting plate with new supplied bolts and spacers. 2 short spacers for lower 2 mounting holes and longer spacers for the upper 2 mounting holes. Using the supplied retaining clips, secure the spacers and bolts to the ECU mounting plate for an easy installation



STEP 19

Re-install the **rear ECM connector only** using caution to not bend ECM pins as this is a tight fit.



STEP 20

Re-install ECM to mounting plate with the factory hardware. You may need to slightly bend power steering line towards the drivers fender.



STEP 21

Install supplied black O-ring onto CP3 hub.



STEP 22

The new pilot adapter will come with o-rings installed. Install the pilot adapter onto the CP3 followed by the gear, lock washer, and nut. Torque to 85 ft lbs.



STEP 23

Install front cover adapter to front cover as shown using supplied M8x1.25X30 cap head bolts. Use a small amount of Loctite and torque to 15lbft.





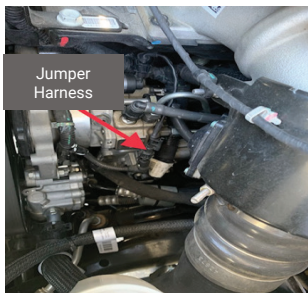
STEP 24

Install CP3 injection pump through the front cover adapter. Pump will need to be rotated towards the driver's fender and then rotated towards the engine block to clear the boss on the block and align the pump mounting holes. Install supplied m8x1.25x40 cap head bolts, **lock washers, and flat washers.** Hand tighten them in a star pattern until snug, then torque them 33 lb ft.



STEP 25

Plug in front ECM connector. Then install FCA extension harness between factory harness and actuator on the pump.



STEP 26

Install high pressure fuel lines. The line will route from the high pressure outlet next to the return fitting to the front port on the fuel rail.

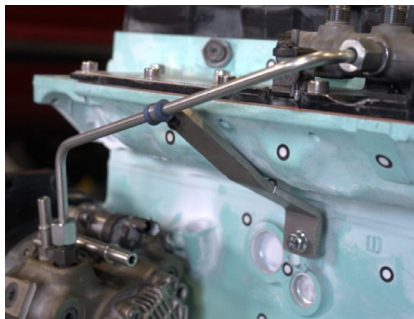
Connect fuel feed and return lines onto the pump. Be sure the lines are not bent or pinched.





STEP 27

Using the hardware provided, Install the High pressure feed line as shown in the picture.



STEP 28

Reinstall noise isolator over fuel rail and install intake air horn. Be sure to plug in all sensors that were disconnected when removing. Be sure to replace both fuel filters before starting truck with the new fuel pump.



STEP 29

Turn truck to the run position for 3 cycles - 15 sec each while keeping your foot off the brake, in order to prime the low pressure system. Start truck and check for fuel leaks and codes.

Truck may have a little extended crank on first fire up after a few minutes of driving it will be back to normal.

DO NOT ATTEMPT TO BLEED HIGH PRESSURE FUEL SYSTEM SERIOUS INJURY MAY OCCUR.

INDUSTRIAL ***I N J E C T I O N***

800-955-0476

2858 South 300 West

Salt Lake City, Utah 84115

www.industrialinjection.com