



PART NO. XD381
CAT FILTER ADAPTER
 INSTALLATION MANUAL



CODE	DESCRIPTION	QTY
A	Filter Base	1
B	3/8" Fuel Line	1
C	Cat 1R-0750 Filter	1
D	3/8" Push lock to bead fitting	1
E	3/8" Male JIC x 12mm Port Metric Adapter with retaining ring	3
F	90° 3/8" Push-on hose barb fitting	2
G	3/8" Hose x 3/8" Female JIC Brass adapter fitting	1
H	Metric 1.25 x 1" bolt	2
I	Lock Washer	2



BEFORE REMOVING ANY PARTS FROM YOUR TRUCK, PLEASE COMPARE THE ITEMS YOU HAVE RECEIVED WITH THE PACKING LIST PROVIDED TO VERIFY THAT YOU HAVE EVERYTHING NECESSARY TO INSTALL YOUR NEW CAT FILTER ADAPTER.

Push pin tool
Fluid catch pan
8x1.25 thread chaser/ tap (optional)
Adjustable Wrench

8mm socket / wrench
Extension
Filter wrench
11/16 wrench

10mm socket / wrench
Ratchet
Razor blade/ hose cutter
3/4" wrench



BEFORE YOU BEGIN! Ensure that the vehicle has not been in use and that the engine is cool to the touch. Always wear eye protection when working on any vehicle.

1 Using an 8mm socket (in some cases a 13mm), disconnect both negative battery terminals. Loosen nut then twist terminal off of post. Set negative cable aside so that it does not contact battery. To ease installation, suspend the vehicle using a lift or set the front end on jack stands to gain further access.

2 After the vehicle has been safely secured, remove the driver side front wheel then remove the inner wheel well. The wheel well has (3) push pins, (7) 8mm bolts, and (2) 10mm bolts. (See Figure 1)



FIGURE 1

- 3** Place a large fluid catch pan below vehicle. Locate the Water in Fuel Drain Valve (yellow) on the filter housing. To drain, turn valve 1/4 turn counterclockwise, fuel will start to drain from hose attached below. Adjust fluid catch pan as needed. (See Figure 2)



FIGURE 2

- 4** Disconnect the fuel supply line at the CP3 injection pump. Fuel line is quick disconnect, simply use your fingers or a pick tool to press in on the white tabs and pull off. (See Figure 3)



FIGURE 3

- 5** Disconnect the Water in Fuel Sensor harness connector located on the lower front part of the fuel filter housing. (See Figure 4)



FIGURE 4

- 6** Disconnect the fuel heater harness connector located towards the top, rear side of the fuel filter housing.
Note- This will no longer be used. Secure out of the way. (See Figure 5)



FIGURE 5

- 7** Remove fuel supply line connection located under the fuel heater. This line is quick disconnect and routes from the fuel tank to the fuel filter housing. Press in on the white tabs and pull off. (See Figure 6)



FIGURE 6

- 8** Using a 10mm socket with an extension, remove the 3 bolts securing the fuel filter housing to the engine. Two bolts are located below the Water in Fuel sensor connector, and one is located next to the fuel line that was removed in Step 7. (See Figure 7)

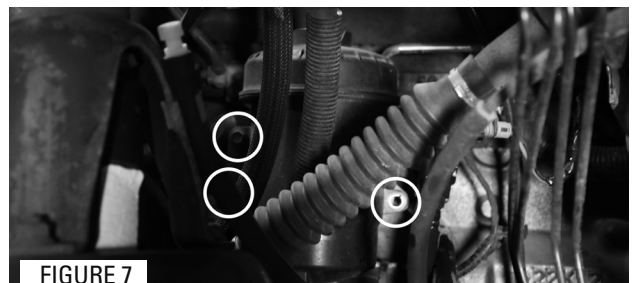


FIGURE 7

- 9** Remove the factory fuel filter housing assembly (residual fuel will spill) by carefully bringing towards the firewall and out in between the steering shaft and the shock tower.
Note- The fuel feed line from the bottom of filter housing that supplies the CP3 doesn't need to be removed and will come out with housing. (See Figure 8)



FIGURE 8

- 10** Using a small adjustable wrench, swap the Water in Fuel Sensor over to the new XDP Cat Filter Adapter. Install the supplied ORB fittings and tighten with 11/16 wrench. (See Figure 9)



FIGURE 9

- 11** Use the supplied bolts and a 13mm wrench/socket to mount the XDP Cat Filter Adapter to the side of the cylinder head (See Figure 10).

Tech tip- It is recommend that prior to installation you chase the threads with an 8 x 1.25 mm thread chaser to avoid bolts binding upon installation.

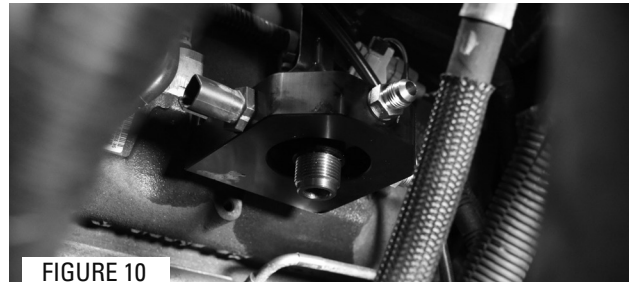


FIGURE 10

- 12** Push 90° fitting onto supplied fuel hose. Loosely install fitting to the REAR of XDP Cat Filter Adapter JIC fitting (**DO NOT TIGHTEN**). Route hose down to factory fuel supply line and cut to desired length using a razor blade or hose cutter tool. Install supplied black barb adapter fitting to the cut end of hose. Locate the fuel line disconnected from Step 7 and attach to black barb adapter fitting. Now tighten JIC 90-degree fitting at the XDP Cat Filter Adapter using a 3/4" wrench. (See Figure 11)

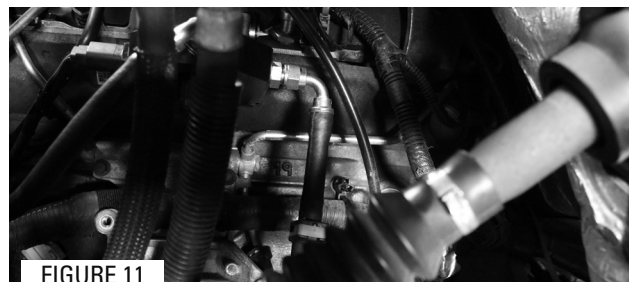


FIGURE 11

- 13** Locate the fuel inlet fitting on the CP3 injection pump (this fitting is the supply line connection from Step 4). Using a ratchet with a deep 17 mm socket, remove and discard fitting from CP3. Install supplied male JIC fitting to the CP3 injection pump and tighten. (See Figure 12)



FIGURE 12

- 14** Using the other supplied 90° fitting, push onto provided fuel hose. Loosely install fitting to the FRONT side of XDP Cat Filter Adapter male JIC fitting (**DO NOT TIGHTEN**). Route hose towards the CP3 fitting installed in Step 13 then cut to desired length using a razor blade or hose cutter tool. Install your straight JIC fitting to the cut end of the hose and attach to the fitting located on the CP3 then tighten with 3/4 wrench.

Tech tip- Re-check all fitting connections for tightness at this time to avoid leaks

- 15** Re-connect the harness to the Water in Fuel Sensor.

- 16** Thread on supplied Cat fuel filter and tighten with filter wrench. Note – fuel filter should be filled with diesel fuel prior to installation.

- 17** Reconnect battery cables then key the engine to the run position, but do not start at this time. This will help prime the fuel filter with fuel and minimize the amount of air in lines. Repeat this step two or three times for 8-10 second intervals.

- 18** Start engine and check for leaks. Re-install wheel well and driver side wheel in reverse fashion from Step 2.

