

301009

INSTALLATION MANUAL

FLO~PRO
PERFORMANCE EXHAUST

EGR & Cooler Delete for 2014-2018 Ram 1500 EcoDiesel

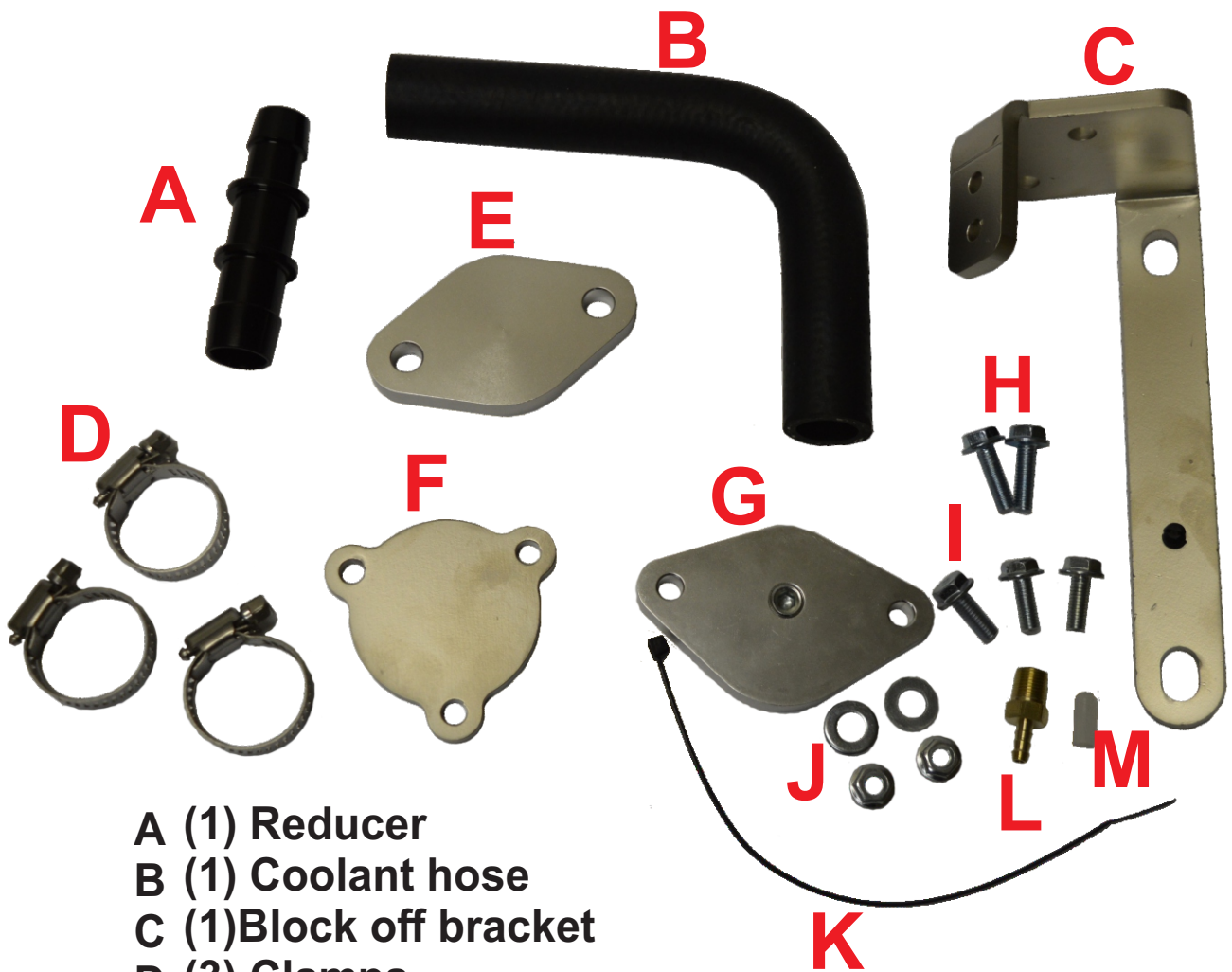
WARNING

ONLY install this kit if you are using a tuner that disables the EGR sensors & circuit system. Any product that requires the removal of ANY emissions control device is strictly prohibited and is intended for closed course racing only for non-registered vehicles.

EGR/Cooler Delete Will:

- Provide lower Exhaust Gas Temperatures (EGT)**
 - Increase low end power**
 - Reduced black smoke emission**
 - Eliminates EGR cooler failure**

Your Kit Includes



- A (1) Reducer
- B (1) Coolant hose
- C (1) Block off bracket
- D (3) Clamps
- E (1) Cooler side block off plate
- F (1) Turbo manifold block off plate
- G (1) Intake manifold side blocker plate
- H (2) 10mm bolts
- I (3) 10mm bolts
- J (2) 10mm nuts
- K (1) Zip tie
- L (1) 1/8th NPT nipple for optional boost gauge
- M (1) Rubber Vacuum line cap

Phase 1 and 2 Combined Instructions

****Important note****

Some anti-seize is recommended for any exhaust bolts.
See manufacturers recommended specs for
proper torque specs on each bolt.

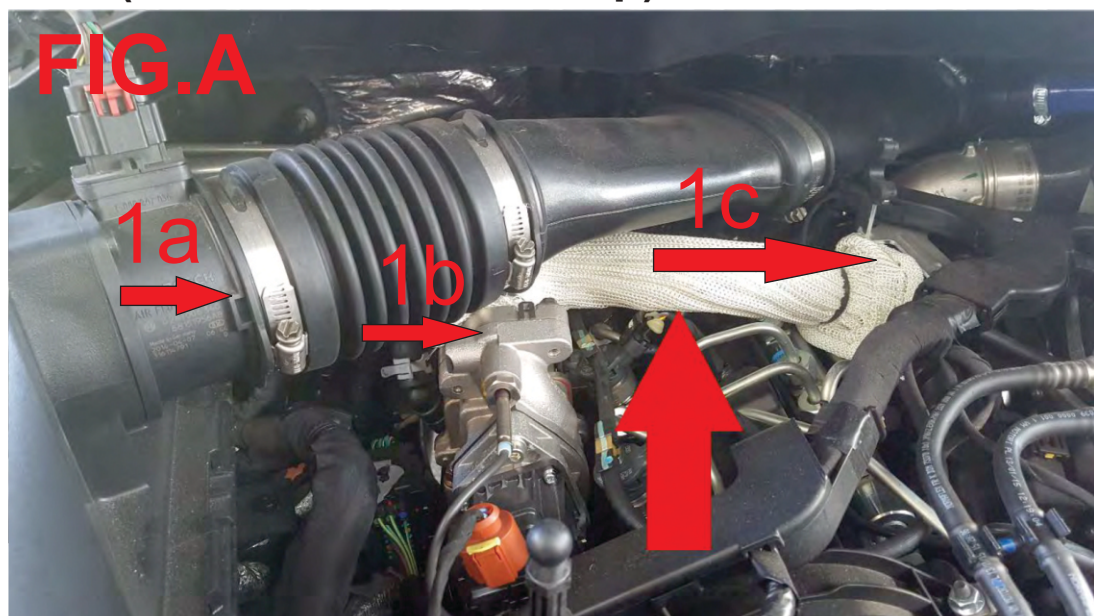
Step 1: Phase 1

Remove the injector cover by firmly pulling on each side of the cover to dislodge the locating pins and free the cover from the engine.



Step 2:

Remove the sound absorbing foam pads that are under the injection cover to expose EGR tube (in the white heat wrap)



Phase 1 and 2 Combined Instructions

Step 3:

Loosen the clamp on the flexible rubber hose on the air intake tube at the filter side.

See **1a** in **Fig. A** Once the clamp is loose, pull the hose out and away from the filter box.

Lift up carefully along the intake tube until you release the ball and socket style joint holding the intake tube in place. With this joint loose you will have enough room to lift the intake tube up enough to easily access the bolts on the EGR tube.

Step 4:

Using a socket, remove the two 10mm bolts holding the EGR tube on the cooler side.

See **1b** in **Fig. A** **Keep these bolts!**

Step 5:

Using a socket, remove the two 8mm bolts holding the EGR tube on the intake manifold side. See **1c** in **Fig. A**

Phase 1 and 2 Combined Instructions

Step 6:

With all 4 bolts removed lift up on the EGR tube from the cooler side until it clears and then slide the EGR tube to the passenger side to remove it from the intake manifold.

Step 7:

Using the provided 2 x 10mm bolts, **Part #H** install blocker plate **Part #G** onto the valve cover port.

Note

The intake side blocker plate comes with a port for mounting an optional boost gauge. If using an additional boost gauge install **Part #L**. If no boost gauge is desired then leave plug in place.

If you are doing a phase 2 install then skip ahead to step 11. If you are doing a phase 1 install only then continue with steps 8-10 only.

Step 8:

Remove the gasket from the EGR tube on the cooler side by gently pushing on the tabs that go along the sides. Reinstall this gasket onto your cooler side blocker plate **Part #E**. Using the factory 10mm bolts, install your blocker plate.

Phase 1 Installation Completion

Step 9:

Reposition the intake tube and reconnect the ball and socket joint. Reinstall intake tube to the filter box and secure clamp.

Step 10:

Reinstall the sound foam and plastic engine cover.

**At this point your phase
1 install is complete!**

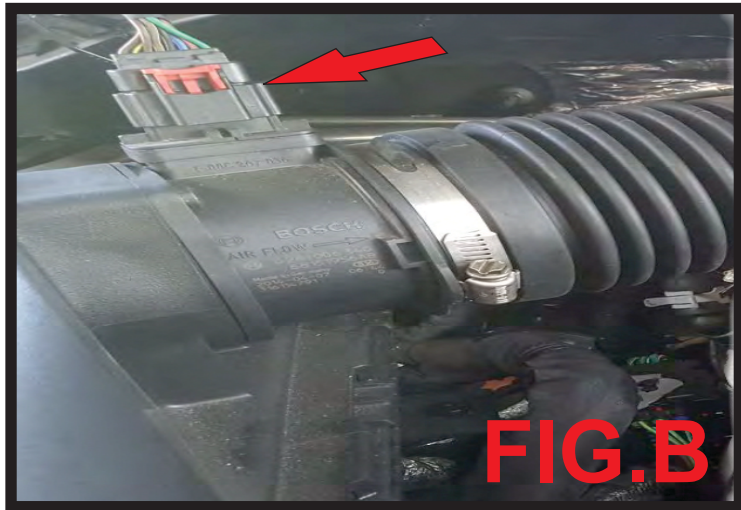
**To continue with
phase 2 skip to step 11.**

Phase 2 Installation Instructions

Step 11:

Removing the air filter, box and intake tube

- A)** Disconnect the MAF sensor by pulling the red tab out of the connector see **Fig.B**



- B)** Remove intake tube from air box. See step 3

- C)** Open the 4 clips that hold the lid onto the air box and remove the lid and filter.

- D)** Follow the intake tube, removing it from the ball and socket connection as in step 3. Then locate the clamp holding the intake tube to the turbo **Fig C**. Undo the clamp and remove intake from turbo and out of the way.



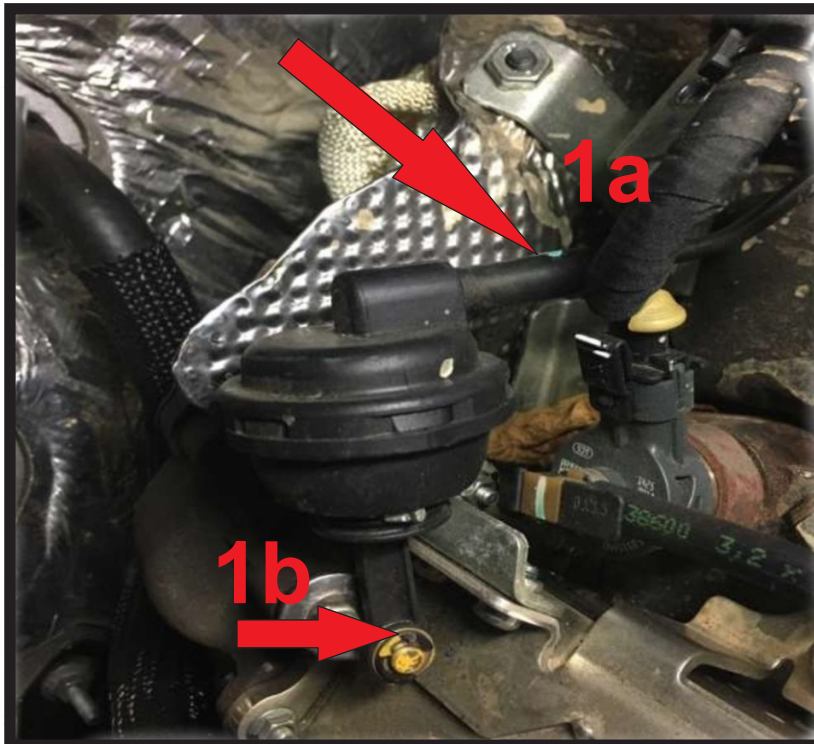
Phase 2 Installation Instructions

- E)** Locate 2 plastic pins holding a wiring harness between the filter box and the firewall and remove the two pins to free the box of any wires.
- F)** Remove inner wheel well plastic
- G)** Now that your filter box should be free from all connection points, lift straight up off of the locating pins and remove from vehicle.

Step 12: Removing EGR vacuum line

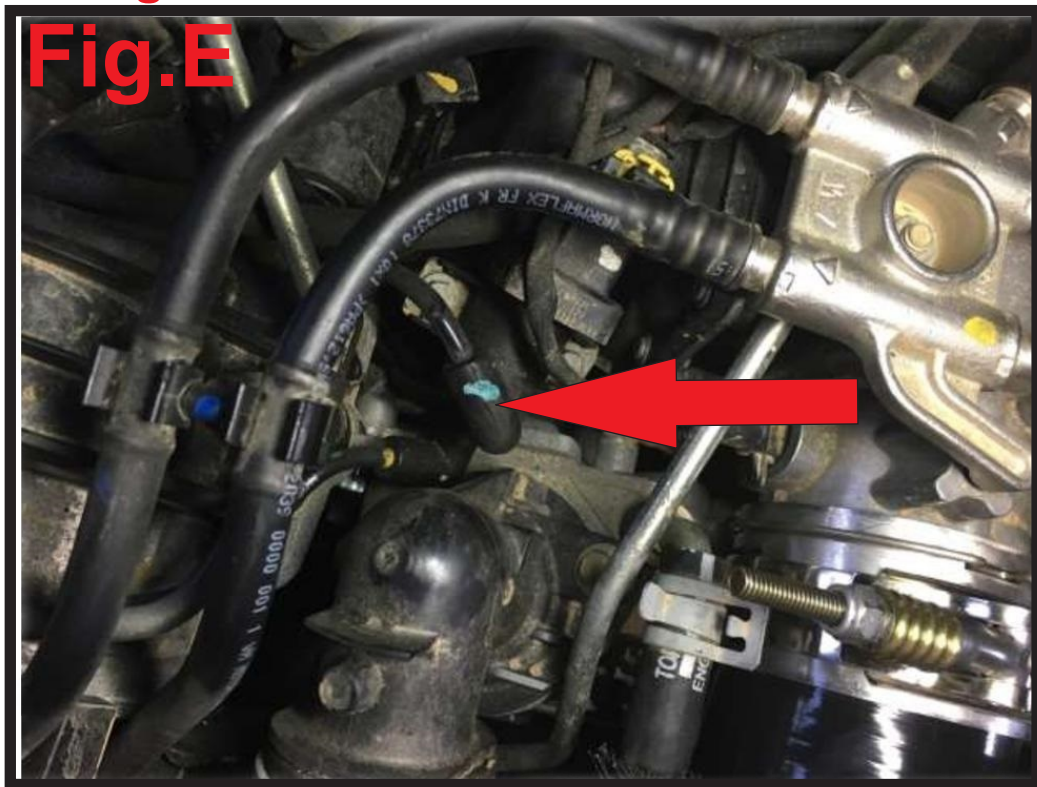
- A)** Disconnect the vacuum line from the EGR actuator. See **1a** in **Fig.D**

Fig. D



Phase 2 Installation Instructions

- B)** Follow the vacuum line from the EGR actuator to the solenoid, removing any clips you find along the way. The solenoid is located on the passenger side of the throttle plate assembly. See **Fig.E**



- C)** Remove the Vacuum line from the solenoid and cap the end with the cap provided in the kit **part #M**
- D)** Carefully guide the vacuum line out towards the front of the truck to remove it completely.

Phase 2 Installation Instructions

Step 13: Removing EGR actuator

A) Remove the E-Clip and washer from the EGR actuator. See **1b** on **Fig.D**
DO NOT DROP THE WASHER!!

B) After removing the 2 T-25 bolts from the bracket, pull the actuator off towards the front of the vehicle.
See **Fig.F**

Fig.F



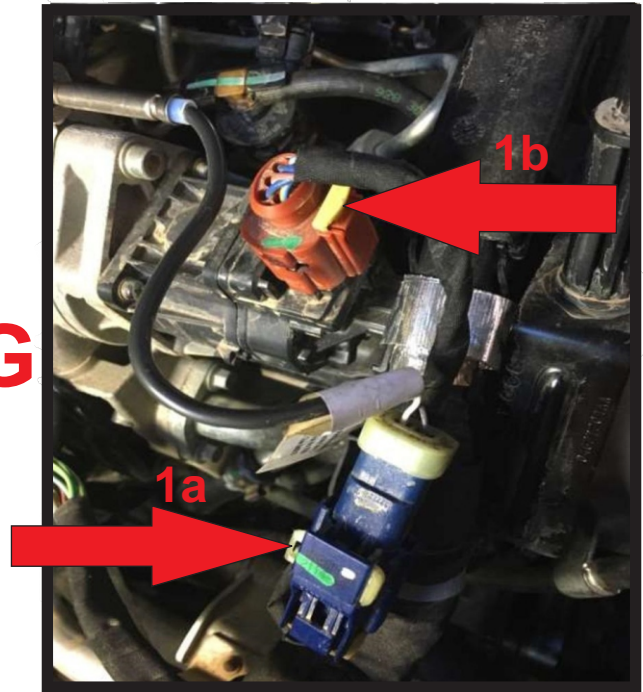
Pull actuator arm off the wall/bracket

Phase 2 Installation Instructions

Step 14: Removing electrical components

- A)** Disconnect the blue connector. See **1a** in **Fig.G**
Disconnect the red connector.
See **1b** in **Fig.G**

Fig.G



- B)** Disconnect the large black connector by carefully pulling the red tabs and then lifting the grey handle separating the plug.
See **1a** in **Fig. H**

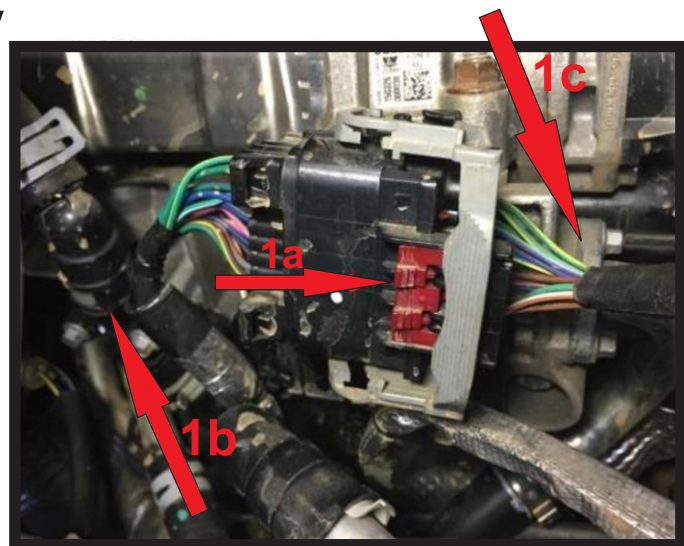


Fig.H

Phase 2 Installation Instructions

- C)** With the plug loose, push the fixed part of the plug towards the ground exposing the 2 clips that hold the plug onto the bracket. Remove the plug and any other clips from the bracket.

Step 15: Coolant lines

- A)** Open your coolant reservoir cap and then locate the radiator drain plug under the front drivers side. You can use a 16mm wrench to open the drain but be very careful not to break the plastic plug itself. see **Fig.1**

- B)** Drain about 1 gallon of coolant or until it begins to drip slowly. Re-tighten and secure the plug.

Fig.1



Phase 2 Installation Instructions

C) Locate the two 10mm bolts that hold the rear coolant hose on the body of the EGR. See **1b** in **Fig.H** Start by using pliers to grab the clip holding the top side hose and slide the clip back to free the hose from the coupler. Remove the (2) bolts.

Note: some coolant will drain from the hose and EGR.

D) Locate the front coolant line. See **1c** in **Fig.H** Remove the 2 8mm bolts. **Do NOT** loose the gasket as it will be reused.

Step 16:

Locate the EGR up pipe directly behind the EGR actuator removed in step **#13, Fig.F** and remove the 2 10mm bolts that connect the tube to the EGR unit.

Step 17:

Locate and remove the T-40 Torx bolt just under the flange bolts you took out of the EGR up pipe in the previous step.

See **Fig.J**

Note: This bolt can be tough to get.

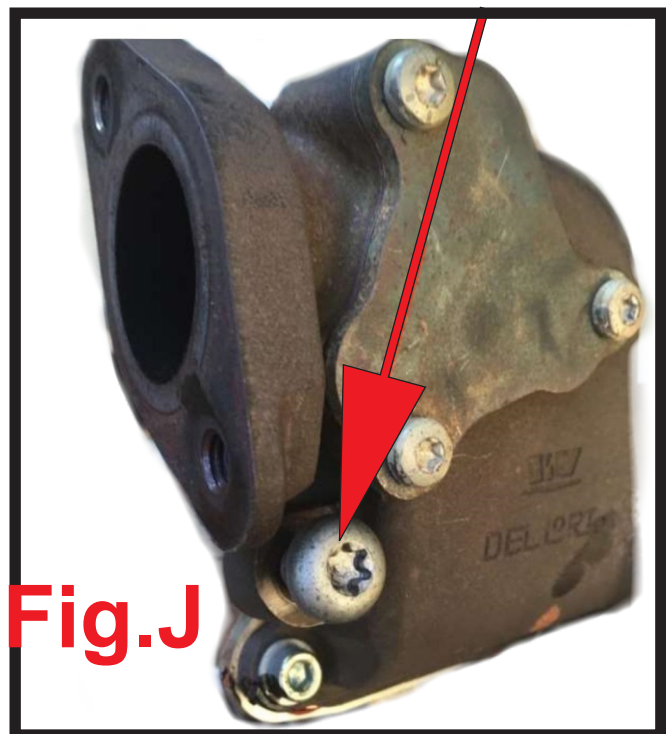


Fig.J

Phase 2 Installation Instructions

Step 18:

Locate and remove the 3 13mm bolts from the black, lower support bracket.

See **Fig.K**



Fig.K

Step 19:

Remove the (3) 13mm bolts holding the lower EGR cooler manifold in place. The right and left bolts will be reused to bolt on bracket part **#C** later. See **Fig.L**

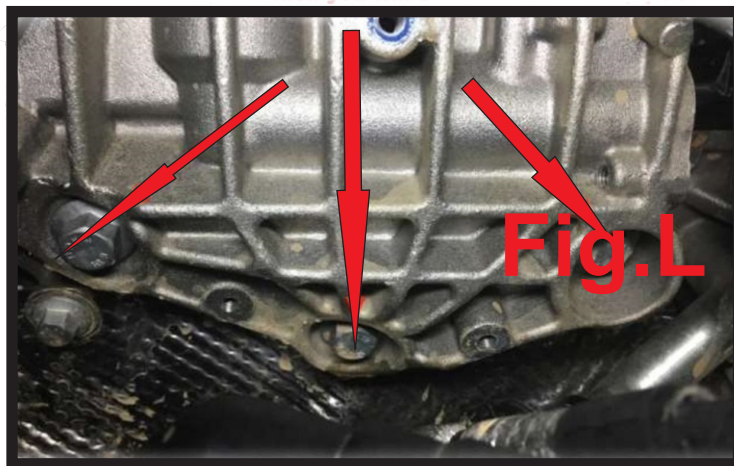


Fig.L

You should now be able to remove the unit from the truck.

Phase 2 Installation Instructions

Step 20:

Going back to the lower side coolant hose that you left attached to the coupler in part **C** of step **15**. Again using pliers loosen the clamp holding the rubber hose to the hard coolant line and slide clamp so that the rubber hose can be removed completely. This hose will be replaced with the provided hose part **#B**

Step 21:

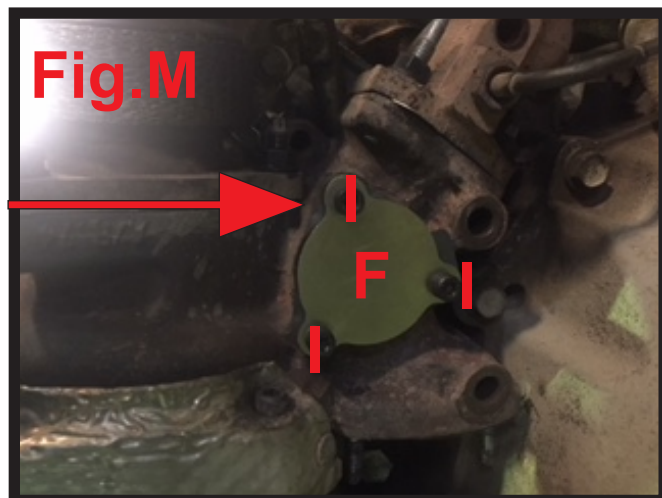
Go back to the EGR up pipe from step **#16** and trace it down to the turbo manifold. Locate and remove the (3) 8mm bolts holding the lower flange in place.

Note: These bolts will be replaced with the provided part **#I**

Note: This gasket will be reused.

Step 22:

Using the supplied bolts part **#I**, and the factory gasket, install the turbo manifold plate part **#F**
See **Fig.M**



Phase 2 Installation Instructions

Step 23:

Using (2) 13 mm bolts from the turbo manifold in step **#19**, mount the supplied blocker/mounting plate part **#C** using the same holes the bolts came out of. See **Fig.N**

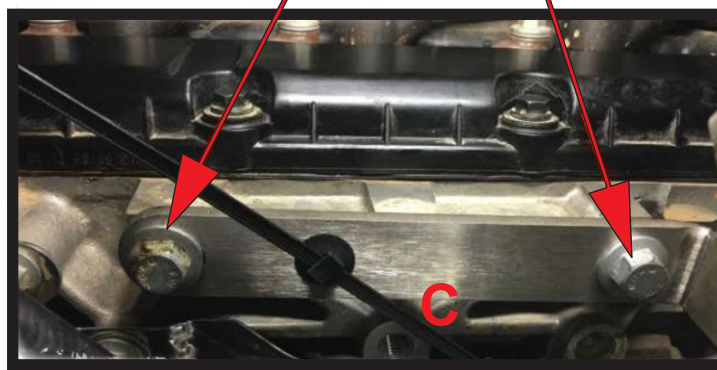


Fig.N

Step 24:

Reusing the (2) 8mm bolts and the included (2) 10mm nuts and washers part **#J**, fasten the Front Coolant line (see **1c** from **Fig.H** in step **#14**) to the block off bracket from step **#23**. see **Fig.O**

Do not forget to use the factory gasket!!



Fig.O

Phase 2 Installation Instructions

Step 25:

Go back to where you removed the lower coolant line in step **#15** from the hard line and using one of the provided hose clamps, fasten the supplied hose, part **#B** to the hard line.

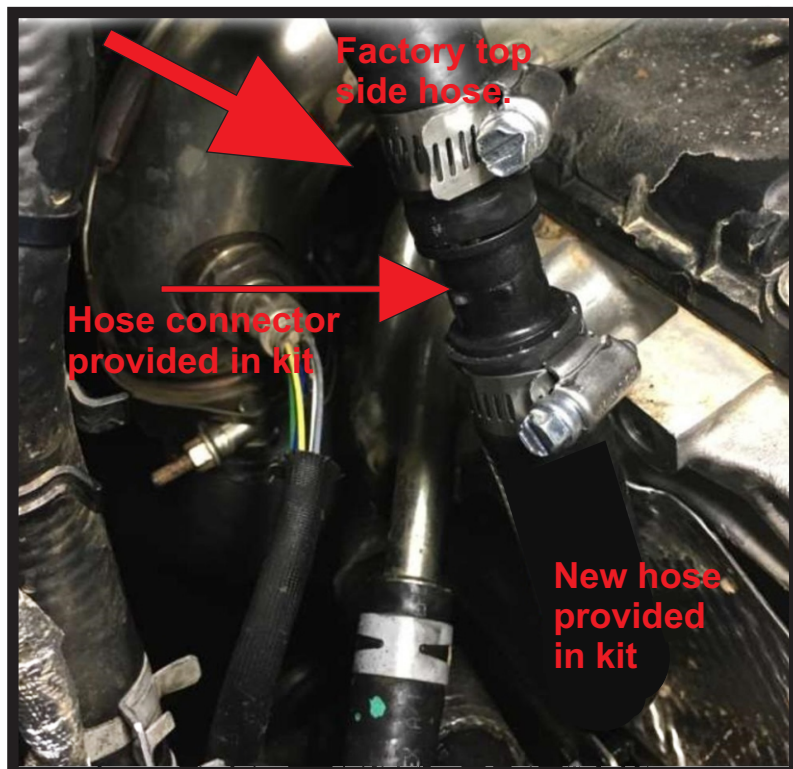
Step 26:

Now locate the upper coolant line and put one of the supplied hose clamps on the end. Then using part **#A**, connect the upper and lower lines and secure clamps. see **Fig.P**

Fig.P

Step 27:

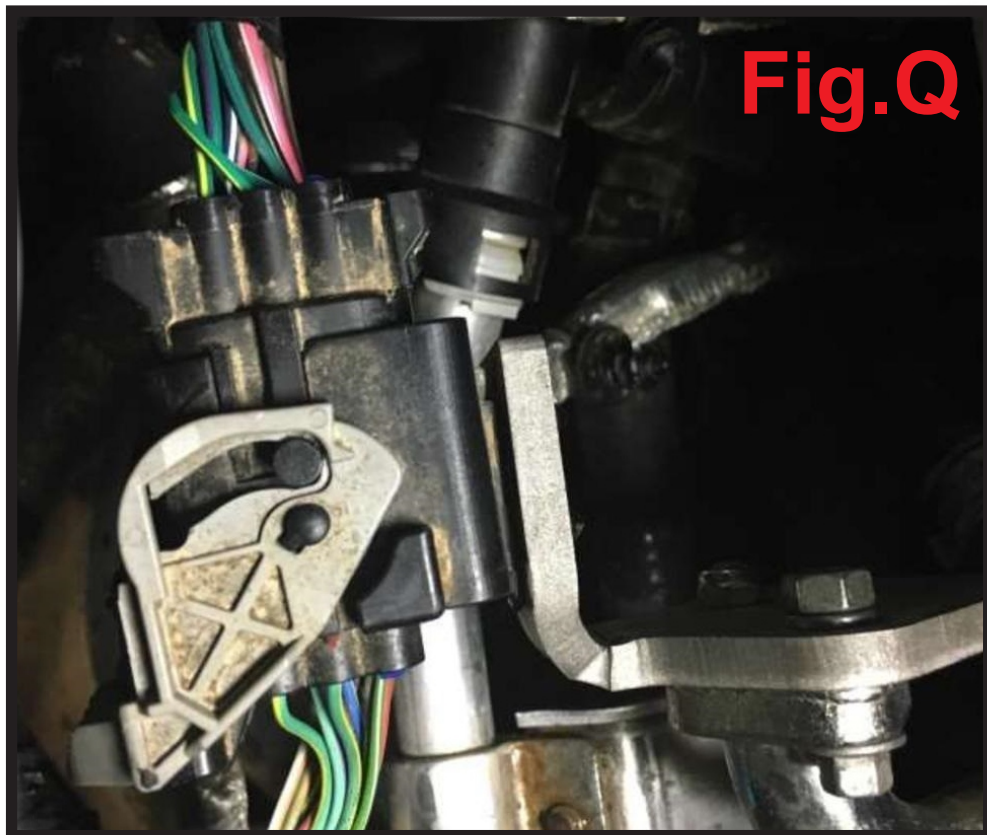
Secure the coolant hose to the new bracket from step **#23** with provided zip tie.



Phase 2 Installation Instructions

Step 28:

Reattach the large electrical connector to the new bracket. Tie any left over wiring to the bracket to ensure it cannot be damaged. See **Fig.Q**



Phase 2 Installation Completion

Step 29:

Double check that all bolts, clamps and fittings are tight and secure.

Step 30:

Working backwards, re-install your air filter box, intake tube, sound foam and plastic engine cover.

Step 31:

Start your engine and check for coolant leaks.

Congratulations!
You are finished your phase 2 install.

Note: It is recommended that after bringing your engine up to optimal operating temperatures and running it for a while, double check for any coolant leaks and re-torque any loose bolts as needed

Did you know?

Flo~Pro also offers exhaust options to get your EcoDiesel Ram

Race Track Ready!!

2014-2016 3.0L EcoDiesel Ram 1500 3" Race Kit

Part **#863NB** - Aluminized steel

part **#SS863NB** - T409 Stainless Steel

NOTE: These kits will retain your factory muffler and tailpipe assembly.

NOTE: Will not fit on Regular Cab trucks

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