

SINISTER DIESEL



2010-2012 6.7L CUMMINS
EGR DELETE KIT



WARNING REGARDING EMISSIONS LAWS

Not legal for sale or use on pollution-controlled motor vehicles anywhere in the United States. Legal ONLY for off-road competition racing vehicles and cannot be used on vehicles that are operated on public streets, roads, or highways.



DISCLAIMER

1) By installing this product onto your vehicle, you assume all risk and liability associated with its use.

2) It is your responsibility to make sure your vehicle complies with all federal, state, and local emissions laws. Federal and many state and local laws prohibit the removal, modification or rendering inoperative of any part of the design affecting emissions or safety on motor vehicles used on a public street or highway. Violation may result in a fine of up to \$32,500 per vehicle (or possibly higher depending on changes in the law). All civil penalties and fines for removing your vehicle's emissions equipment are the sole responsibility of the end user.

3) Due to its high performance nature, this product may void vehicle manufacturer's warranty.

4) Sinister Mfg Company, Inc. is not responsible for misuse of its products. By installing this product, you release Sinister Mfg Company, Inc. of any and all liability associated with its use.

5) Depending on where you live, restrictions may apply. Check all applicable laws before installing or using!

6) The purchaser and end user releases, indemnifies, discharges and holds harmless Sinister Mfg Company, Inc. from any and all claims, damages, causes of action, injuries, or expenses resulting from or relating to the use or installation of this product that is in violation of the terms and conditions on this page, the product disclaimer, and/or the product installation instructions. Sinister Mfg Company, Inc. will not be liable for any direct, indirect, consequential, exemplary, punitive, statutory, or incidental damages or fines caused by the use or installation of this product.

6.7L Cummins EGR Delete



PACKING LIST:

<u>Part#</u>	<u>QTY.</u>	<u>Description</u>
A	1	Coolant Hose
B	1	Coolant Hose Connector
C	1	M10 Flange Nut
D	2	5/16 Bolts, Nuts, and Flat Washers
E	1	1/4-20 Bolt, Nut, and Lock Washer
F	2	M10 Hex Head Bolts
G	4	M8 x 1.25 x 20 Allen Head Bolts
H	1	Intake Block Off Plate
I	2	Exhaust Block Off Plates
J	1	Stand Off Bolt
K	1	Support Bracket
L	2	Hose Clamps

Read all instructions prior to install.

Note: *Prior to installation, please compare the parts that you have received with the bill of materials provided on this page to assure that you have all the parts necessary for the installation.*



CAUTION!!! Never work on a hot vehicle. Serious injury in the form of burns can result if the vehicle has been in use. Allow vehicle to cool prior to installation. Always wear eye protection when working on or under any vehicle.

Note: With a used vehicle, we suggest using a penetrating spray lubricant to be applied liberally to all exhaust fasteners. When doing so allow a significant amount of time for the chemical to lubricate the threads before attempting to disassemble.

Step 1: Disconnect batteries.

Step 2: Drain engine coolant.

Step 3: Remove the plastic engine cover that is held in place by four 8mm bolts. **Note:** The dipstick must be removed in order to remove the plastic engine cover. (Image 1)



Image 1

Step 4: Using an 11mm socket loosen the two V-band clamps. Remove the 10mm bolt in the center of the tube and disconnect the sensor plug. The EGR crossover tube can now be removed. (Image 2)

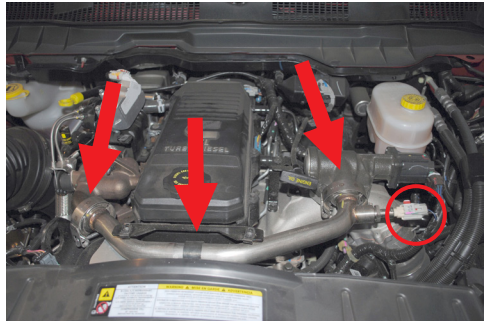


Image 2

Step 5: Remove the electrical connector on the EGR valve. (Circled in image 3)

Note: Some electrical connectors may have a locking tab. In order to remove these connectors the the tab must be slid into the "unlock" position.

Step 6: Remove the EGR valve that is held in place by four 10mm bolts.

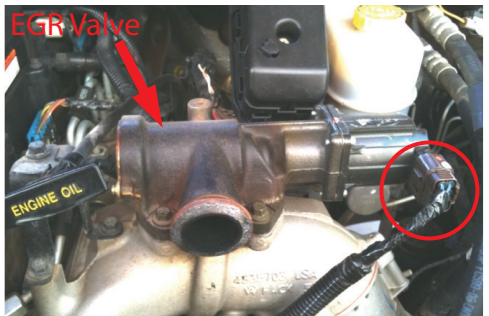


Image 3

Step 7: Remove any existing gasket material from the mounting surface on the intake elbow. (Image 4)

Note: It is important to keep gasket debris from getting in the open intake ports. We recommend putting a clean rag in each port to keep any excess gasket material out of the intake.

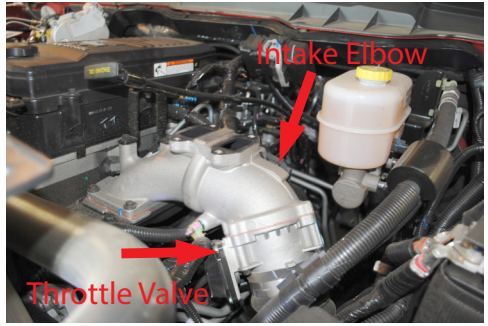


Image 4

Step 8: Unplug the electrical connector (equipped with locking tab) on the back side of the throttle valve. The throttle valve is located on the driver side, just under the intake elbow. It is important to leave this unplugged in order to keep the throttle valve from permanently closing.

(Image 4 & 5)

Note: An alternative to leaving the throttle valve unplugged is to install the Sinister Diesel Throttle Valve delete, which will also increase flow through the intake.

Step 9: Install the Sinister blue intake block off with the supplied bolts. Ensure that both O-rings are fully seated. (Image 6)

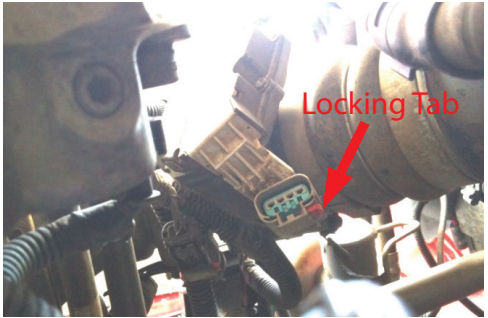


Image 5

Step 10: Remove the heat shield from the EGR bypass. The heat shield is held in place by three 10mm nuts and two 8mm bolts. (Image 7)



Image 6



Image 7

Step 11: With the heat shield out of the way remove the four 10mm bolts that secure the exhaust bypass in place. The exhaust bypass will get removed with the EGR servo. (Image 8)

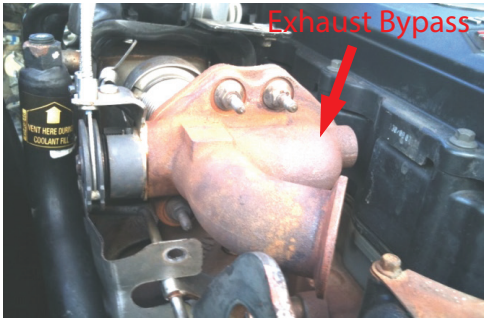


Image 8

Step 12: Remove the five 10mm bolts securing the EGR servo mounting bracket in place. (Image 9)



Image 9

Step 13: Simultaneously remove the EGR servo (still attached to the mounting bracket) and the exhaust bypass (bolts removed in step 11) from the vehicle.

Step 14: Remove the crankcase breather tube that runs over the EGR cooler. Also, disconnect the two coolant lines running to the EGR cooler. Be sure to remove the O-ring from the fitting on the engine block. (Image 10)



Image 10

Step 15: Remove the four 10mm EGR cooler mounting bolts. (One of which is circled in image 10)

Step 16: Remove the two 15mm nuts connecting the EGR cooler to the exhaust manifold near the fire wall.



Image 11

Step 17: Remove the V-band clamp that is connecting the EGR cooler and the exhaust crossover elbow. (Image 11) **Note:** Image shown with the V-band clamp removed.

Step 18: Remove exhaust crossover elbow that is held in place by two 15mm nuts. Install the small exhaust block off plate. (Image 12)

Note: The block off that is not pre-drilled will be installed in place of the exhaust crossover elbow.

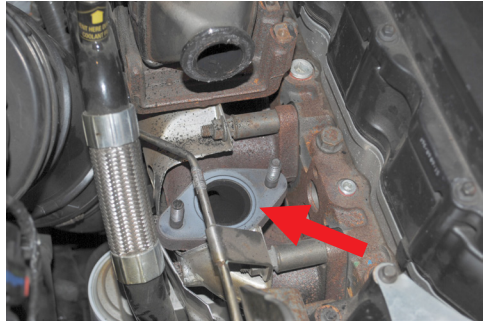


Image 12

Step 19: Remove the EGR cooler, this can be done by pulling the cooler up and out towards the front of the vehicle.

Step 20: Remove EGR cooler mounting bracket by unbolting the two 14mm bolts that bolt directly to the engine. (Image 13)

Note: The bolt heads are not visible in the image, however the arrows give a general idea of where the bolts are through the mounting bracket.

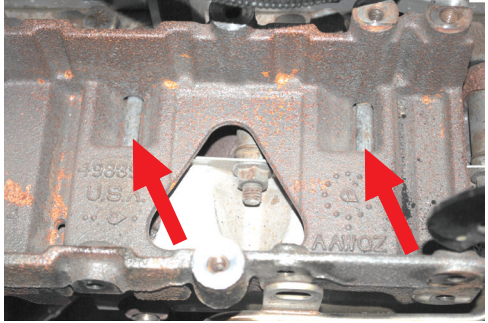


Image 13

Step 21: Install the other exhaust block off plate, reusing the factory hardware. The block off with the pre-drilled port will be installed on the back side of the exhaust manifold. (Image 14)

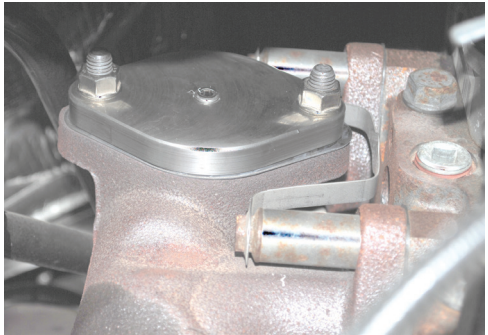


Image 14

Step 22: Re-install the crankcase breather tube.



Step 23: Using the new supplied coolant hose and hose adapter, connect the two coolant ports that previously went to the EGR cooler. Secure the hose with the supplied hose clamps. (Image 15 and 16)

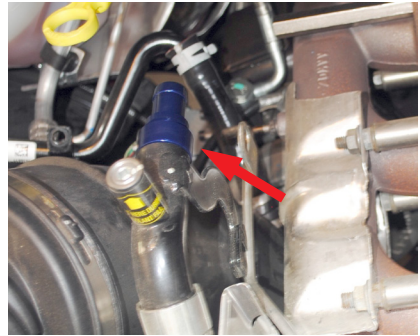


Image 15

Step 25: Replace the manifold bolt with the supplied stand off bolt. The bolt will be the third one in from the back of the motor. The nut on the stand off bolt should be used as a jam nut to secure it in place. Do not tighten the stand off bolt by the hex bar. (Image 17)



Image 16

Step 26: Mount the supplied support bracket as seen in image. A M10 bolt will screw into the stand off bolt. Use the 1/4-20 bolt, nut, and washer to secure the transmission dipstick to the bracket. (Image 18)



Image 17

Note: The bracket will hold the coolant hose connector in place.

Step 27: Refill the coolant to factory specifications.

Step 28: The installation of the Sinister EGR delete kit is complete and ready for testing. Start the engine and run until coolant circulates. Top off coolant system as necessary and make a close inspection for any leaks.

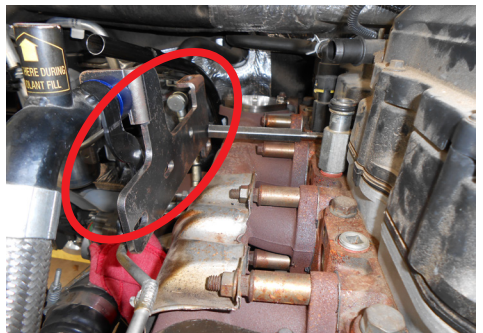
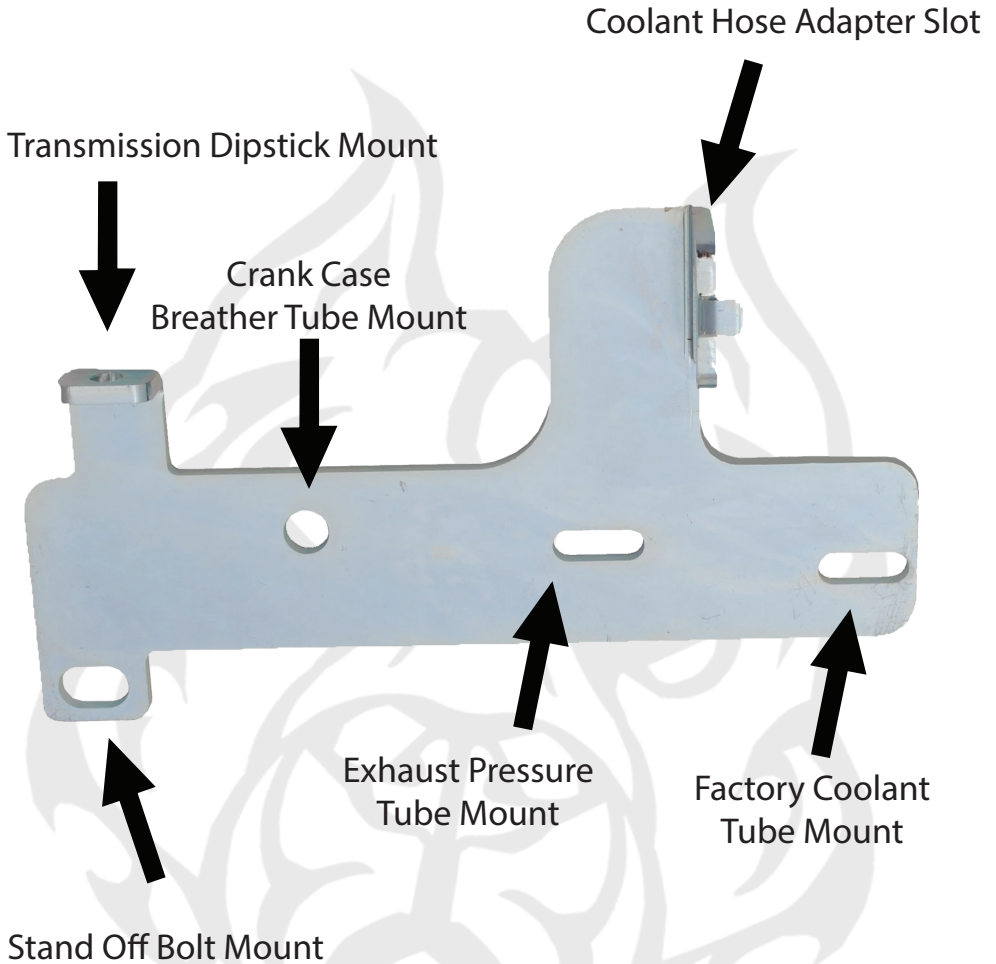


Image 18

Step 29: Re-install plastic engine cover.

Bracket Diagram



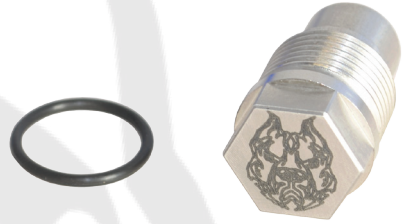
**Tighten the nut to secure the hex bar.
Do not tighten from the hex bar.**



DODGE CUMMINS PRODUCTS



Coolant Filtration Kit



Fuel Rail Race Valve



Steering Stabilizer



Sinister Diesel EGR Cooler



Throttle Valve Delete



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