2007.5-2010 DURAMAX LMM UPGRADE KIT



Installation Manual

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EGR UPGRADE KIT
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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 cannotbe 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 locallaws prohibit the removal, modication 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) GDP Tuning, LLC. is not responsible for misuse of its products. By installing this product, you release GDP Tuning, LLC. 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, indemnies, discharges and holds harmless GDP Tuning, LLC. 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. GDP Tuning, LLC. 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.

on the bottom and the long bolt at the front of the resonator box. (Image 24)

Step 39: Re-install the air intake and plug in the mass air flow sensor. (Image 25)

Step 40: After everything is tight, rell the vehicle with coolant through the overflow bottle.

Step 41: Re-connect batteries.

Step 42: Start the engine and let it run for a few minutes. Check for any leaks and if needed top of the coolant. Note: Check coolant after driving, add coolant as necessary.



IMAGE 24



IMAGE 25

Step 33: Re-connect the heater grid wire and mount the wire support bracket back in place.
(Image 20)

Step 34: Mount the wiring harness that is in the plastic liner back to the top of the cast intake piece. Be sure to mount the small metal bracket back onto the stud. (Image 21)

Step 35: Re-connect the small tube coming from the sensor back to the port on the cast intake next to the heater grid. (Image 21)

Step 36: Re-connect the power wire that runs to the top of the heater grid under the plastic housing. (Image 22)

Step 37: Re-connect the charge-back wire to the top of the alternator and use plastic clip to hold wiring harness to the plastic wireway. (Image 23)

Step 38: Install the intake resonator box on top of the plastic turbo mouthpiece and secure it with the hose clamp

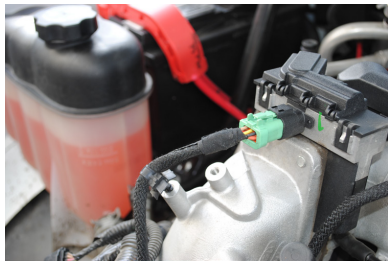


IMAGE 20



IMAGE 21

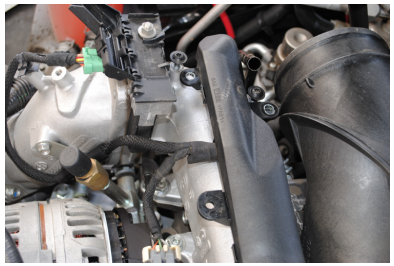


IMAGE 22



IMAGE 23

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 signicant amount of time for the chemical to lubricate the threads before attempting to disassemble.

Step 1: Disconnect batteries.



IMAGE 1

Step 2: Drain engine coolant by removing the passenger side inner wheel well and disconnecting the lower radiator line by removing the metal clip. (Note: The line does not need to be pulled all the way off, just enough to allow coolant to flow out.) Once coolant flow has slowed down and the overflow bottle is empty, re-connect the lower radiator line.
(Image 1)

Step 3: Loosen the hose clamps on the intake and disconnect the MAF sensor connector.

Step 4: Remove the intake tube that is routed from the

filter to the plastic turbo mouthpiece. (Image 2)

Step 5: Remove the air box and filter, by gently prying out the three rubber grommets. (Image 3)

Step 6: Remove the resonator box on top of the engine by loosening the hose clamp at the base of the resonator box and remove the long bolt on the front of the resonator box. (Image 4)

Step 7: Disconnect the charge-back wire on the alternator and remove the plastic clip that holds the wiring harness to the plastic wireway. (Image 5)



IMAGE 2



IMAGE 3



IMAGE 4



IMAGE 5

Step 28: Install the blue billet intake block o plates with O-rings onto the cast intake using the remaining supplied cap head bolts. Be sure that the longer bolts are on the side towards the front of the vehicle.

Step 29: Re-install the plastic mouthpiece and the PCV tube.

Step 30: Re-install the cast intake piece into the factory location, the two longer bolts that are now towards the front of the vehicle, should line up with and fit through the two remaining holes in the support bracket. Use the supplied flange nuts to secure the intake to the bracket. (Image 18)

Step 31: Re-install the forward most piece of the cast intake. Be careful to not damage the gasket during this process. Once installed, install the wire connector going to the throttle plate. (Image 19)

Step 32: Re-install the plastic intercooler piping.

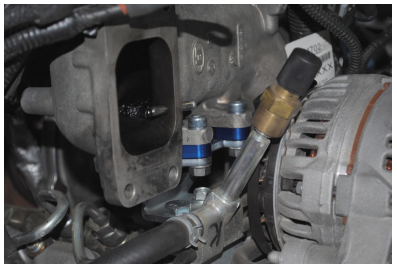


IMAGE 18



IMAGE 19

Step 24: Remove the coolant lines that previously ran from the EGR cooler to the rewall.

Step 25: Install the new exhaust block off plate using the factory gasket and the supplied hardware (Note: Image shows previous bracket design). Two M8 x 25 hex head bolts will bolt in from the back and one M10 x 20 hex head bolt will hold the bracket in place.

Step 26: Using the supplied hose clamps install the supplied “U” shaped coolant tube from one port on the rewall back to the other port on the rewall. Both of these ports previously had coolant lines that ran to the EGR cooler.

Step 27: Install the support bracket where the EGR valve was using the supplied hardware. The support bracket washer goes underneath the bracket on the M10 x 20 hex head bolt. The other support bracket bolt is one of the bolts that was removed in step 23. (Image 17)



IMAGE 17

Step 8: Open the plastic housing on top of the intake heater grid and disconnect the power wire. (Image 6)

Step 9: Remove the two bolts and one nut that secure the plastic wire way in place. (Image 7)

Step 10: Disconnect the wire connector on the front of the intake heater grid and remove the bolt that secures the connector wires to the side of the intake. (Image 8)

Step 11: Remove the plastic clip that is also holding part of the wire in place. (Image 8)

Step 12: Pop out the metal retaining clip on the plastic intercooler piping and disconnect the plastic piece from the cast aluminum piece. (Image 9)

Step 13: Remove the wire connector and the four bolts that hold the forward most section of the cast intercooler piping on to the intermediate section. On the bottom of the



IMAGE 6

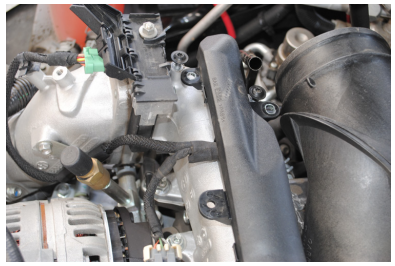


IMAGE 7



IMAGE 8



IMAGE 9

forward most piece, there is a fth bolt that secures it to a support bracket. (Circled in Image 9)

Step 14: Carefully remove the forward most piece of the cast intercooler piping. Ensure that the gasket is not damaged, as it will be re-used during installation. (Image 10)

Step 15: Remove the small tube that is attached to the cast intake, next to the intake heater grid. (Image 11)

Step 16: Remove the four nuts and two bolts that hold the main section of the cast intake in place. It may be easier to remove the intake from the truck if you remove the two studs with a reversed torx socket. (Note: two bolts are located on the back side of the main section of the cast intake.) (Image 12)

Step 17: Remove the PCV tube from the driver and passenger side valve covers as well as the plastic turbo mouthpiece. (Image 13)

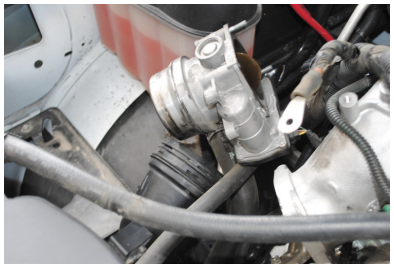


IMAGE 10

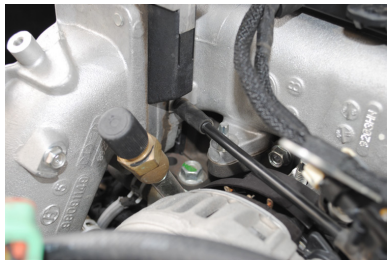


IMAGE 11



IMAGE 12



IMAGE 13

Step 18: Remove the plastic turbo mouthpiece by loosening the hose clamp that secures the mouthpiece to the turbo.

Step 19: Remove the two temperature sensors from the EGR cooler on the passenger side. (Image 14 and 15)
Step 20: Disconnect all of the coolant lines that are running to the EGR cooler.

Step 21: Remove the EGR cooler that is secured by six bolts. Four at the back of the cooler (two bolts are facing forward and two are facing downward) and two rear facing bolts at the front of the cooler.

Step 22: Once the cooler is out, disconnect the temperature sensors at the electrical connectors and remove them from the vehicle.

Step 23: Remove the EGR valve that is held in place with two bolts, keep one of these bolts as it will be used during installation. (Image 16)

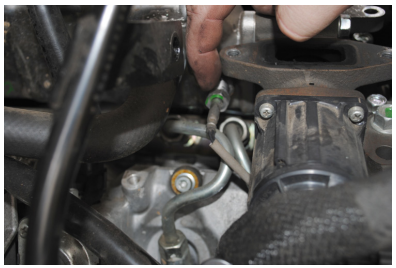


IMAGE 14



IMAGE 15



IMAGE 16