

# **DIRTY**

# **DIESEL CUSTOMS**

## **LBZ-EGR-A005 Installation**

### **EGR And Up-Pipe Install LBZ/LMM Duramax**

**\*Skill Level: High\***

#### **Tools Required:**

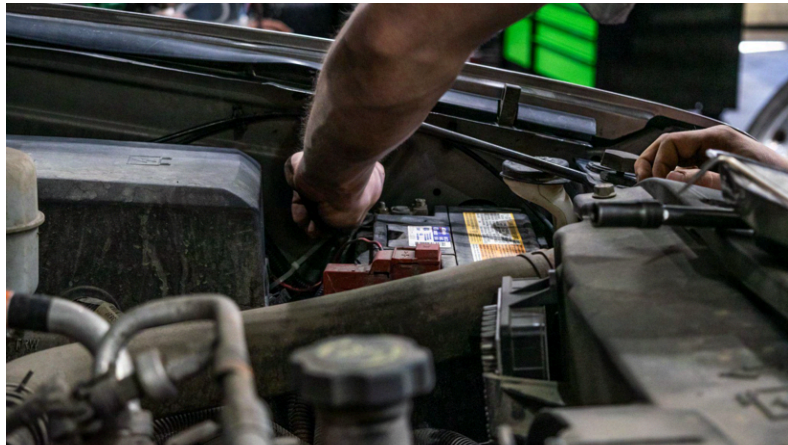
- **Ratchet Set w/various sizes**
- **Flat Back Pliers**
- **Box Cutter**
- **Small Flathead screwdriver**
- **Recommended: Torch**

#### **Before You start:**

- **Confirm all parts are present**
- **Read installation guide**
- **Allow the cooling system enough time to depressurize**
- **Ensure you have 8-14 hours of time. This is a 4-8 hour job, but broken exhaust bolts can complicate it.**

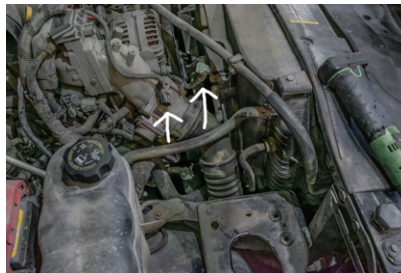
# Chevrolet/GMC LBZ/LMM EGR Delete/Install

**Step One:** Disconnect Both Batteries



**Step Two:** Remove the resonator on the top of the engine, the airbox and the associated wiring going to the airbox.

(LML SHOWN)



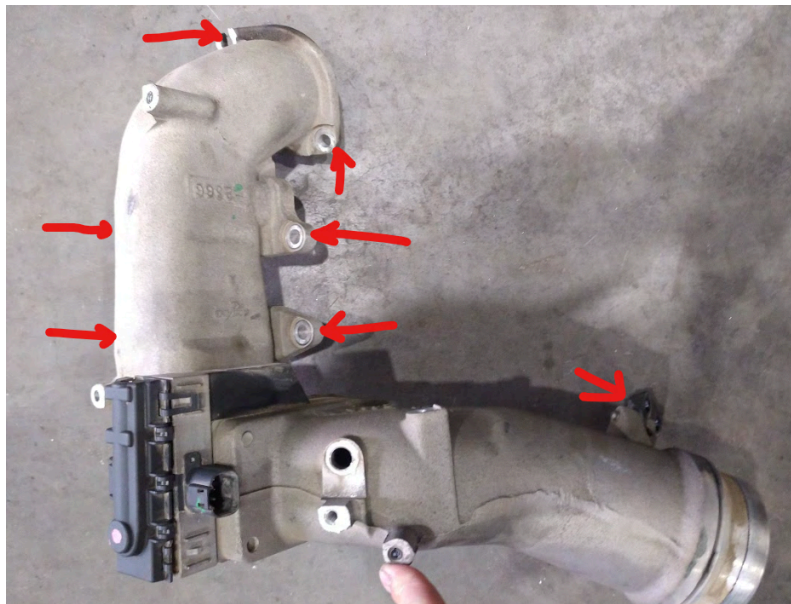
**Step Three:** Remove the grid heater harness. There will be a large power wire connected under the black cover in addition to the external black connector.

At this point you can either completely remove the grid heater power wire, or apply shrink tubing to the end.

Be absolutely certain that you will not encounter chafing and potential grounding with this live wire.



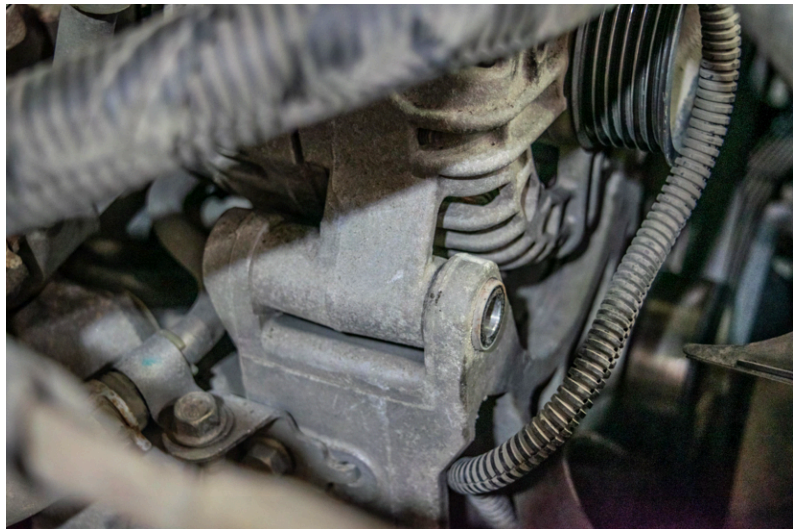
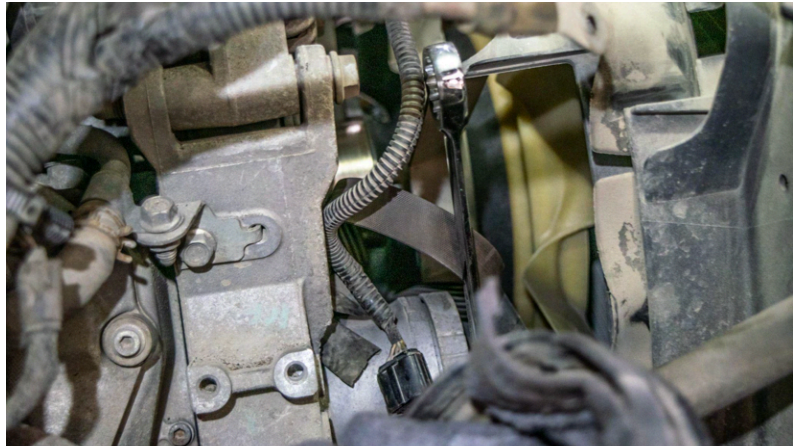
**Step Four:** Remove the intake pipe. Four studs connect the intake to the EGR cooler, two connect it to the Y-Bridge, and one at the front.





**Step Six (OPTIONAL):** Remove the Serpentine belt using a ½” Ratchet in the belt tensioner and then remove the alternator

This is not absolutely necessary, but can make installation a bit less cramped. Our in house techs do not do this.



**Step Eight:** Remove the coolant lines on the front and rear of the EGR Cooler.



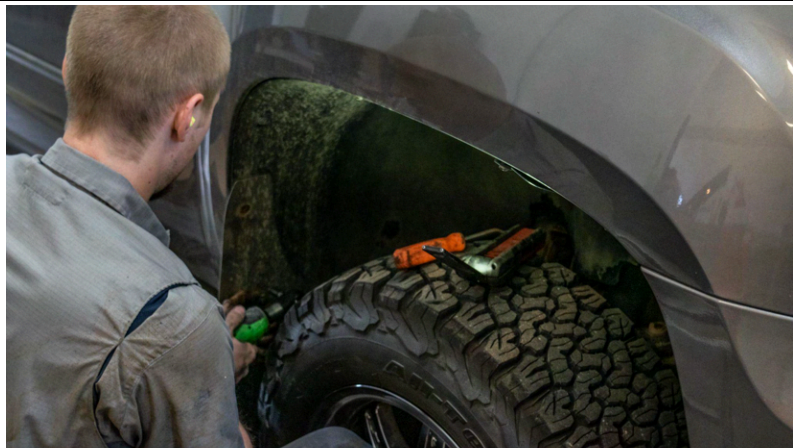
**Step Ten:** Remove the bolts holding the EGR to the engine, EGR cooler, and the two studs holding the EGR cooler to the up-pipe. Wiggle the EGR cooler up and out.



**Step Eleven:** Remove the heat shield over the turbo, it may need some careful re-shaping to come out



**Step Twelve:** Dive into the wheel well and remove the lining from the bolts around the arch





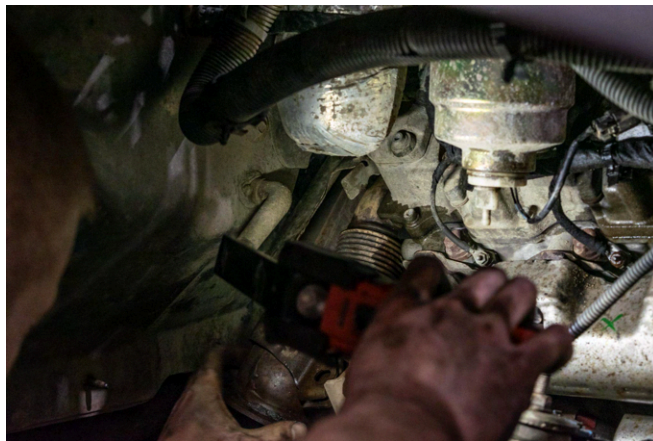
**Step Thirteen:** Remove the clamps connecting the downpipe to the exhaust and the downpipe to the back of the turbo



**Step Fourteen:** Start to remove all of the bolts holding the downpipe on and the bracketing on the backside of the engine. The two lower bolts hold on the transmission dipstick bracket that will need to be bent off to the side slightly to remove the downpipe.

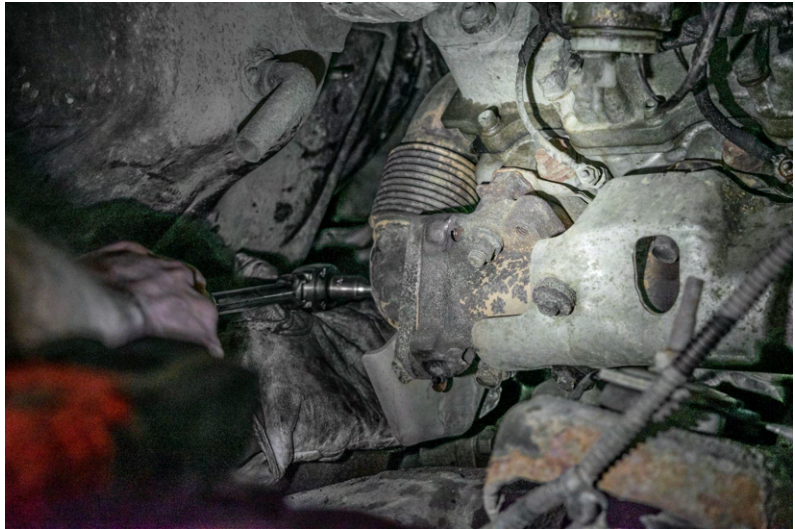


**Step Fifteen:** With some gentle persuasion and a little bit of force, the downpipe should come out the passenger side wheel well



**Step Sixteen:** There are 8 bolts holding the factory EGR pipe to the block, remove them carefully as they have been heat cycled many times. We recommend using a torch to heat up the metal as if they break you have a lot more work.







**Step Seventeen:** Now that the old pipe is out you're ready to install the new pipe. Thread in a lower bolt to hold the pipe and the gasket in place.



**Step Eighteen:** Now that you've got the up-pipe installed you can go for the reassembly



**Step Nineteen:** When reassembling, use the supplied coolant line to connect the two coolant hoses that were originally routed to the EGR. Most trucks require the  $\frac{3}{4}$ " hose, while some require  $\frac{5}{8}$ " hose.

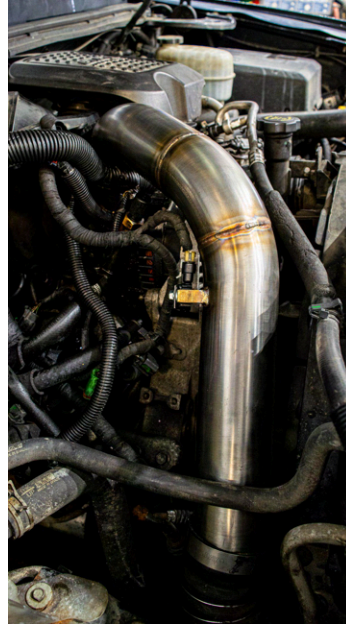




**Step Twenty:** When reassembling the engine bay you will use the supplied cold side up pipe to replace the factory unit. Move the MAP sensor over to the new up-pipe on reassembly.

We recommend getting the pipe connected to your silicone coupler first, then aligning the hanger bracket, running the bolt in loose, and then getting the main flange screws in place.

Tie wire all your unused connectors so they are out of the way, ensure all of your fasteners are tightened, and you have no coolant leaks.



**Step Twenty One:** Now that you have your engine bay put back together and your emissions off tunes loaded to the truck you are good to go for a test drive!



