

2011-2016 LML Duramax EGR Delete Installation Instructions



Step One: Let the engine cool down, disconnect the battery, and drain the coolant. This job is terrible when done on a hot engine.

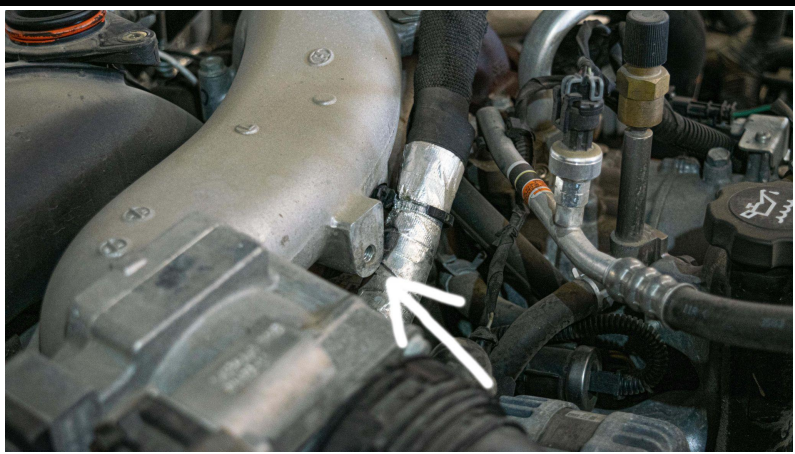


Step Two: Remove the fender liner with its T15 Torx bolts and hit every single bolt of the turbo/downpipe with penetrating fluid. The longer the penetrating fluid can sit on the bolts the less likely they are to break on you. Breaking bolts during this job is common.

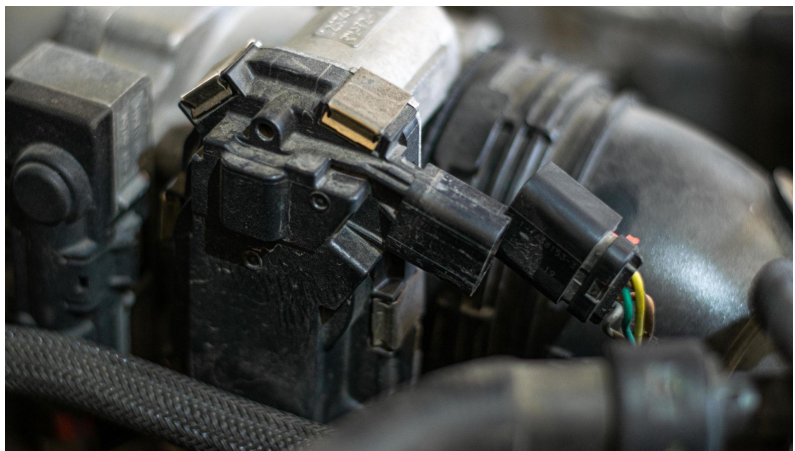


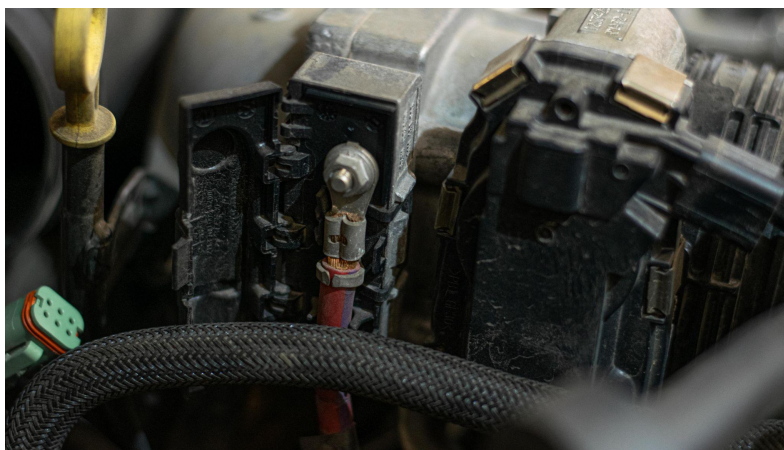
Step Three: Remove the top cover and intake hose of the motor. Then un-bolt the wiring harness from the intake pipe.





Step Four: Remove these connectors from the top of the motor. Disconnect the throttle valve near the passenger side, and the green connector back towards the firewall. Open the casing on the side to disconnect the red power line.





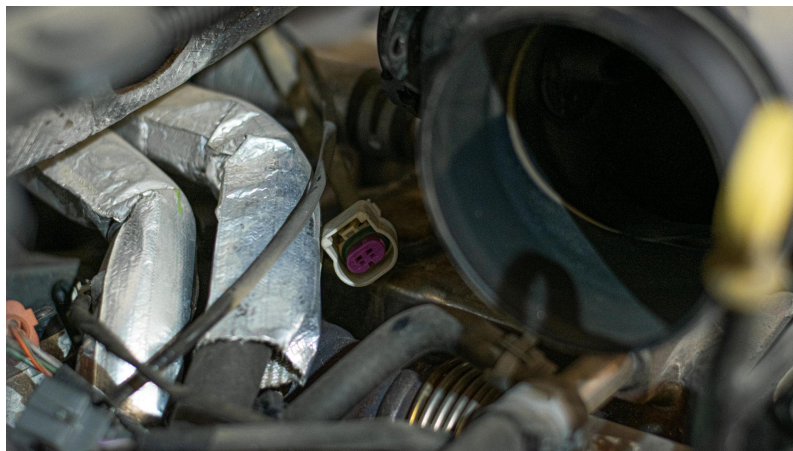
Step Five: Remove the intake hose before the throttle valve by using a flat head screwdriver and turning the locking ring.



Step Six: Remove the intake pipe with the 2 bolts still retaining it.



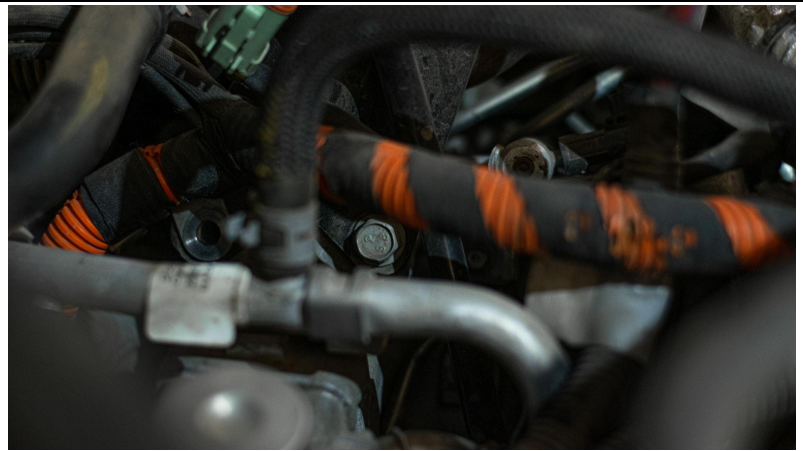
Step Seven: On the backside of the engine, remove these two electrical connectors attached to the turbo air intake pipe, one white and black.



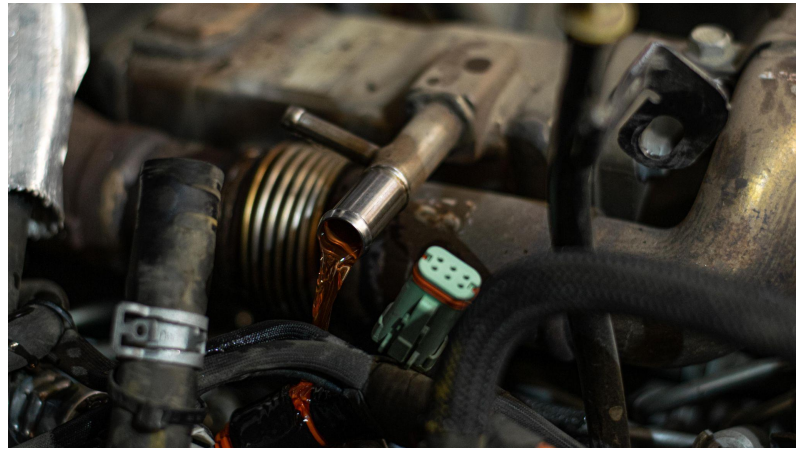
Step Eight: Tucked in and hard to see is a hose clamp (8mm or flathead) that connects the plastic intake hose to the turbocharger inlet.



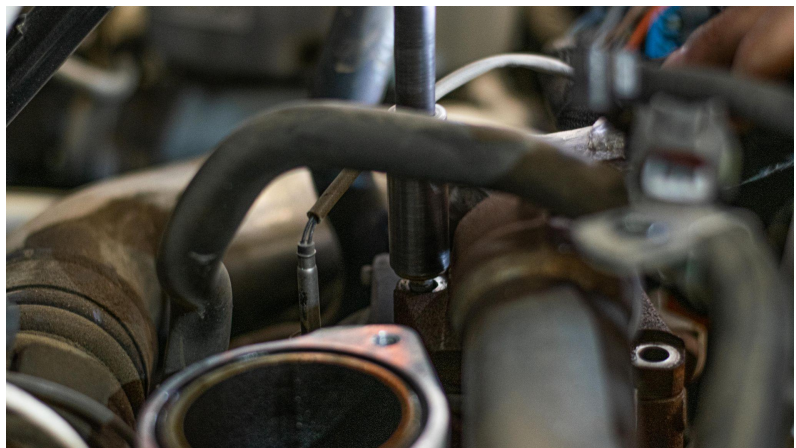
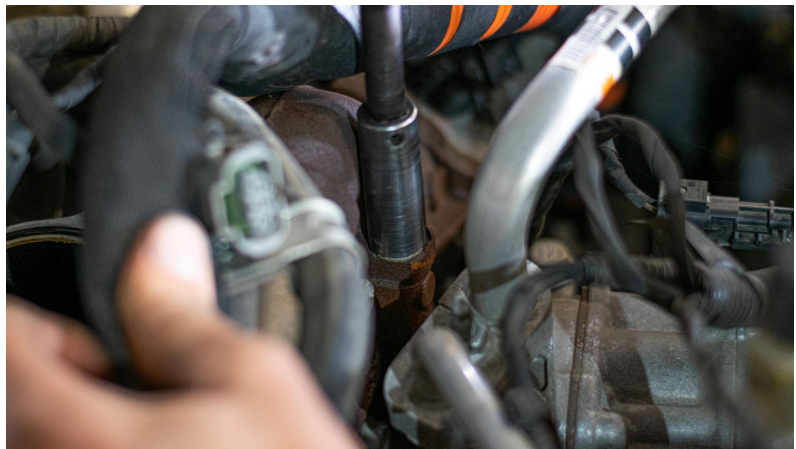
Step Nine: Un-bolt the bracket holding the dipstick on the passenger side



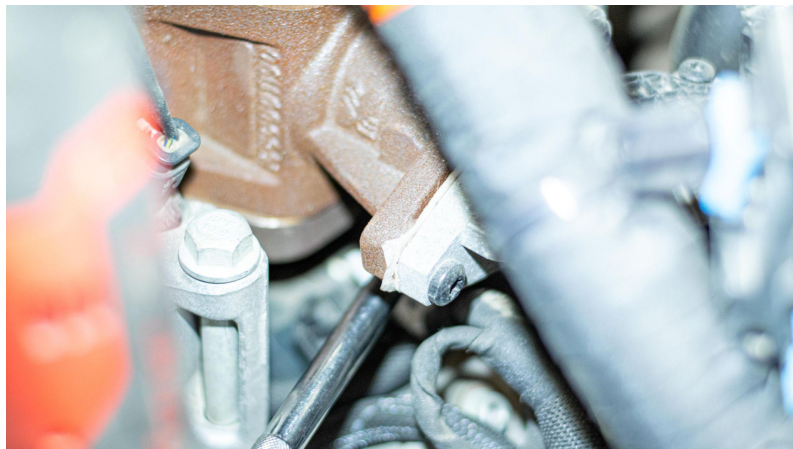
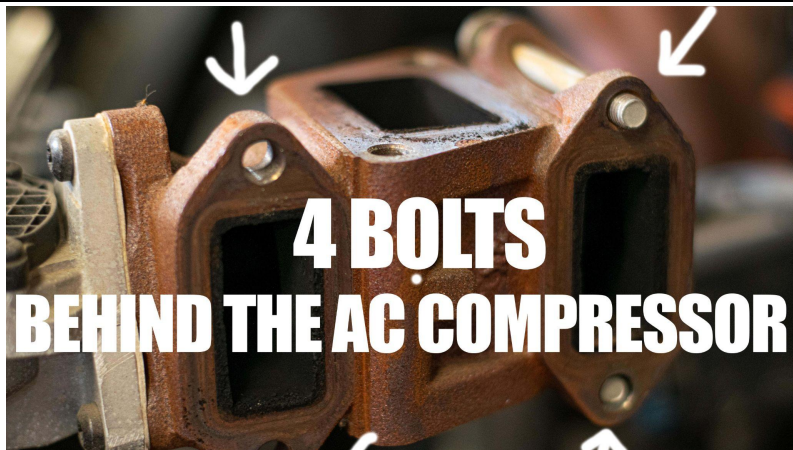
Step Ten: Unhook the coolant lines to the EGR cooler



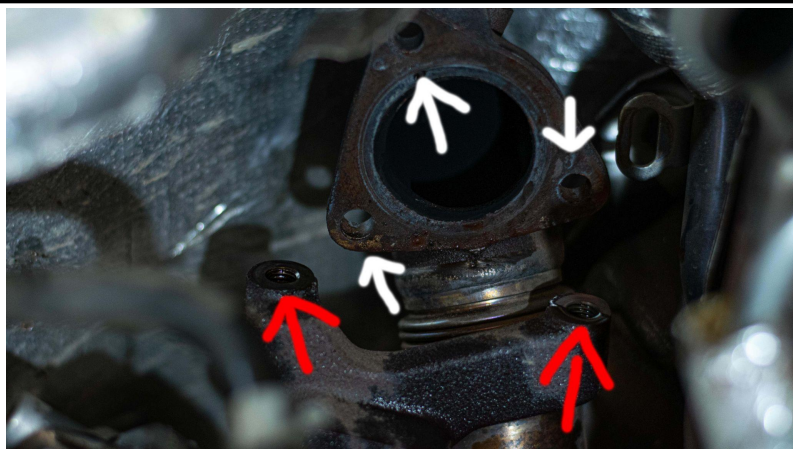
Step Eleven: Remove the EGR bypass pipe held on by five bolts. It runs from the passenger side by the up-pipe to the driver's side near the A/C compressor.



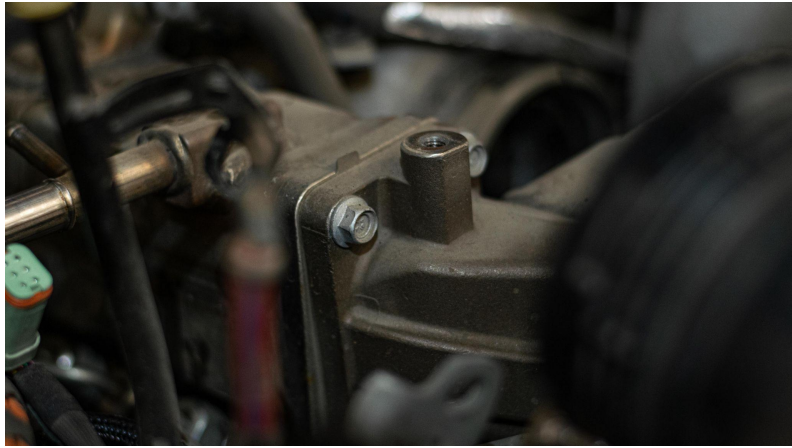
Step Twelve: Unbolt the EGR cooler from the motor. Reference the next steps for final removal and the orientation of the bolts on the up-pipe.



Step Thirteen: The hardest bolts to get are the up-pipe to the EGR cooler. The first image shows the setup already disconnected so you can easily reference the locations. There are 3 bolts (white arrows) connecting the cooler to the up-pipe and then two bolts (red arrows) connecting the cooler to the bracket. The rear 3 usually requires a combination of a wrench and pry bar to remove. (shown to the right) Be careful and take your time! They are prone to breaking.



Step Fourteen: Once you have the up-pipe bolts off, you will need to separate the two halves of the EGR cooler. There are four bolts connecting them with 13mm heads. The bottom two are only accessible once the whole setup is disconnected from the motor, which is why this is the final step.



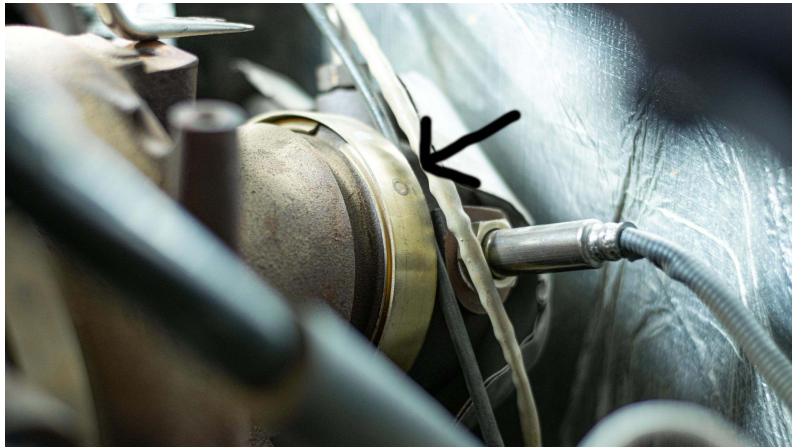
Step Fifteen: In order to take off the downpipe you will need to remove the hard coolant pipe that runs down the back of the block. It's held by a single 13mm bolt. Be careful as the O-Ring can get damaged, if damage occurs you will have to replace it.



Step Sixteen: Now you're moving on to the downpipe. First off you'll have to head over to the driver's side firewall and undo this electrical module. It's easier to take this off than the sensor on the downpipe, take them off together.

The downpipe utilizes two V-Band clamps that hold the top and bottom to the turbo. Undo both of those along with the 9th injector for the DEF system.

The heat shield will need to be removed from the top of the engine bay, and the downpipe will need to be removed from the bottom, so un-do the three bolts that hold them together.



Step Seventeen:

Now comes the fun part! THESE BOLTS BREAK EASILY, SO TAKE YOUR TIME.

The up-pipe has six bolts, 3 up and 3 down. Heat them, if you can, to get them out. If possible, use an impact gun on these bolts.



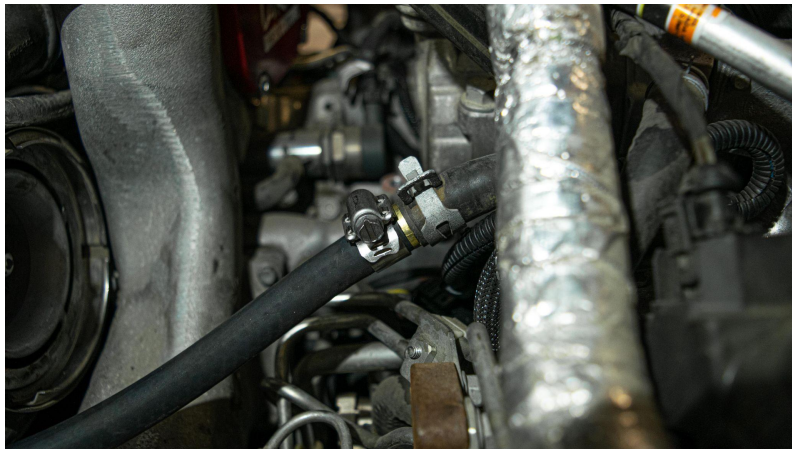
If the bolts for your downpipe haven't broken then you're on the home stretch of being done! If they have, remove the turbo so you can drill out the bolts.



Step Eighteen: On the intake, behind the A/C compressor, install the blocker plate.



Step Nineteen: Next, install the coolant re-route kit on the hoses coming out of the firewall. The small diameter hose pre-installed goes towards the front of the truck.



Step Twenty: Now install the new up pipe that goes directly to the turbo.



Step Twenty One: From here it is reinstalling everything but the EGR and bypass pipe.

Leave the throttle valve plug disconnected and two orange connectors from the EGR valve off to the side.

Confirm your engine has no leaks on the hard line and on the newly installed re-route hoses.

