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## Duramax LLY and LBZ Injector Nozzle Swap Directions

Please read these instructions from start to finish before starting the installation. For removal and installation of the injectors themselves, please see a GM Service manual.

If you choose only to read a short section of these instructions, please save yourself some hassle and read direction #1. It is extremely important!

#1 Underneath the nozzle, there is a very small puck shaped piece of metal. When removing the nozzle, EXTREME care must be taken to keep from loosing the puck. It may stick to the nozzle as you lift the nozzle off of the injector body. When reinstalling the nozzle you must make sure to put the puck back in the recess it's designed to fit into and make sure it lays flat.

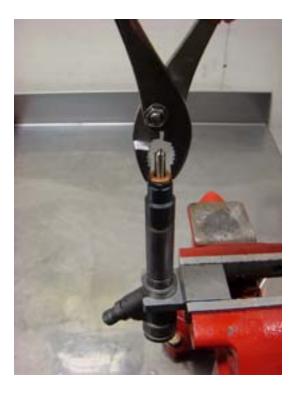


#2 Make sure your work area is clean, dry, well lit and easy to find any dropped parts. If you attempt this install in a cluttered area and cannot find the pucks listed above you will have to buy a complete new injector to replace the parts. These are not available separately.

#3 Mount the injector hold down collar in a vise and clamp it tightly. The injector hold down collar is the part that holds the injector in the cylinder head. Slide the injector onto the collar and make sure it seats well so it does not come loose. Work on only one injector at a time to minimize part loss.



#4 Using pliers, remove the copper sealing washer. If you are missing the copper washer be sure to dig it out of the cylinder head before putting the injectors back in. Some carbon buildup may be present and this is normal. Sometimes the carbon may seem excessive but there is no reason to worry. Do not clean the nozzles for us. We use an ultrasonic machine to gently clean the nozzles without damaging them.



#5 Using a 15mm wrench, remove the nozzle cap. Once you have removed the nozzle cone you can remove the nozzle, but BE CAREFUL not to loose the small puck which can sometimes stick to the nozzle. The puck fits into the small recess right in the middle of the injector body and lays flat.





#6 Clean nozzle and injector body mating surface to remove any carbon that may have fallen on the mating surface during disassembly. You may use brake clean but DO NOT blow the puck out of the hole, or remove it before spraying.

#7 Clean the nozzle cap and remove all of the carbon buildup on the tip where the injector nozzle goes through the cone.

#8 Replace nozzle on injector body being sure to align the alignment pins, the recess that holds the puck, and the puck itself. Once you are absolutely sure all of these parts are aligned and placed correctly, reinstall the nozzle cone and torque it to 50 foot pounds with a torque wrench.



#9 Use supplied grease packet to hold the new copper washers onto the injector. Don't be afraid to use it liberally to make sure the washer does not fall off when you are reinstalling the injector into the head.



Please feel free to call us with any questions. If you think you may have lost a puck, DO NOT reinstall the injectors. If you do, there is a possibility that complete engine failure could occur if the engine runs away. DO NOT TRY IT!!!