

♦ CLASSIC ♦ *Diesel Designs*

— SAN ANTONIO, TEXAS —

Thank you for purchasing 6.9/7.3 IDI Injectors from Classic Diesel Designs, if you have any questions about the installation of this product, email us at Sales@ClassicDieselDesigns.com, or feel free to call us at 830-252-9767.

To begin, start by removing the injection pump hardlines and injector return lines. Using a 1" socket, remove all eight injectors, being very careful not to damage the pintle on the end of the injector nozzle. If your injectors do not come out, do not worry, this is common. When copper washers are not replaced often enough, these lose their seal and carbon from the combustion process is able to build up around the injector. Typically, these injectors get stuck in one of two ways, either the injector keeps spinning at the top of the threads, but does not come out, or the injector will come apart in two pieces, normally with the lower half stuck in the injector bore. If the injector does not come apart, use an impact to spin the injector around at high speed, using the impact to push from side to side as it spins, this will help create space in the buildup to allow the injector to come free. A slide hammer can be used here to remove a stubborn unit, but typically a liberal application of penetrating fluid will get these out with the impact method after a bit of work. If the injector comes apart, you will need to sacrifice one of your core injectors by grinding the main threads down from the injector body so that this area becomes flat, then thread that body back into the stuck nozzle, and use the impact method to get the nozzle out except using forward on the impact to prevent the nozzle from threading out again.

With the old injectors out, it is important to spend some time cleaning the injector bores before installing your new injectors. Using a one inch or 12 gauge bore brush on a drill, combined with brake clean, remove all of the carbon from the bores, paying special attention to the bottom of the bore where the copper washer seats, which must be completely clean in order to seal. To prevent debris from entering the prechamber, you can remove the glow plugs and use compressed air blown through the glow plug hole to pressurize the cylinder and prechamber so that all the debris is pushed out of the injector bore. Copper washers can sometimes be stuck to the bottom of the bore, however these can be easily removed by use of a pick or using a small drill bit that is the right size to grab the inside diameter of the washer.

With the injector bores completely clean, it is now time to begin installing the new injectors. Drop the copper washers into the bores, making sure they are seated flat and centered in their bores. A very, very light application of anti seize can be used on the injector threads, but it must be kept away from the nozzle to avoid contamination. Very gently, install the injector into the bore, being careful to not hit the pintle on anything, but to lightly seat it inside the copper washer, and spin it down by hand. Torque the injectors to 40 ft lbs, and reinstall the return lines following our installation instructions. Reinstall the hard lines and crank the engine over until clean fuel is present at every injector, then tighten down the hardlines and check for fuel leaks.