

INJECTOR INSTALLATION INSTRUCTIONS

- 1.** Start by removing negative battery cables, intercooler pipes, and valve covers.
- 2.** Begin removing the injectors starting with the back two (toward the firewall) on each side. To remove the injector remove all oil spouts on top of the injector. Then locate the retaining clip of the injector. This is located in the middle of the injector on the body. You will notice two 8mm bolts hold the retainer in the cylinder head. Remove the bottom bolt only. After this is removed you can then unplug the harness from the injector and slid the retainer upward to clear the top bolt. Remove wiring harness and valve cover gasket. Place a pry-bar under the retainer and gently pry away from the cylinder head while still holding the retainer upward. The injector should dislodge from the cylinder head.
Note: Make sure all old injector that are removed still have the copper washer on the nozzle. If the washer is missing locate it and remove it from the injector cup. Allow a few moments for the oil rail and fuel rail to drain into these two cylinders.
- 3.** Remove the other 4 injectors.
- 4.** Put a fresh coat of oil on all the rubber o-rings. Install the new injectors (be careful that the new copper washers stay on the injector during installation). You will need to make sure the injectors are seated properly. With a rubber hammer tap of the top of the injector until it is fully seated. Do not use anything steel to tap the injectors in or damage to the solenoids will occur. Be sure to hold the retaining clip up as you are tapping them in to place. You will notice that the sound changes to a thud type of sound when they have seated. After you install one bank of the injectors check with a straight edge and make sure they are level and all are seated.
- 5.** Remove the rear two glow plugs (same two toward the firewall) on both sides of the head. The glow plugs are in the 10 o'clock position as you face the injector. These are covered by a wire from the harness. Remove the wire and cap to see the top of the glow plug. Remove them with a 1/4" drive deep well 10mm. If they try to bind against the rocker arm, screw them back in until you can pull the socket off of the glow plug enough to get past the rocker arm then unscrew the rest of the way.
- 6.** Replace the valve covers. Put in a couple of valve cover bolts to hold it in place and keep oil from spraying all over.

7. Reconnect the batteries. 1999-2003 guys should cycle the key a few times to get fuel pressure to the injectors. Then using the key bump the motor a few times to expel fluids off the cylinder. Bump lightly the first few times then you may, when you feel the fluid is out, turn the motor over 3-4 times as if trying to start the truck to make sure the cylinders are clean. (****if the motor will not turn over with the starter there most likely is fluid in one or more of the other 4 cylinders and you will have to remove the other 4 glow plugs. If you follow the removal above (two near firewall first) this is not likely to happen****) 1994 guys flow the same procedure but you must remove the #9 fuse under the hood while turning over your motor. This will keep the injectors from firing as you build fuel pressure. Reinstall the fuse when finished.

8. Disconnect the batteries again and reinstall the glow plugs and attach the wiring harnesses to the glow plugs and injectors.

9. Reinstall everything previous uninstalled.

10. Reconnect batteries and start the truck. Starting the truck may take a few times as you need to build up oil pressure. Start in increments of 30 seconds with a cool off period between for the starter. After the truck has started ENJOY YOUR NEW BDP INJECTORS!!!