Very important:

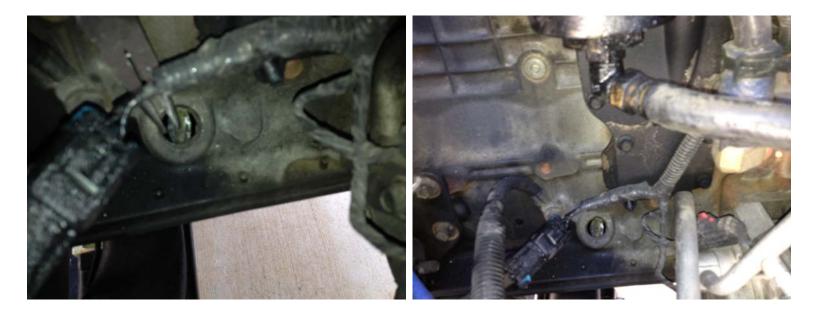
Prior to installation, blow out all oil lines and air tubes to make sure debris is not inside any of the lines or tubes

Oil Drain Lines Rear Port in Block

Please completely remove the stock turbo oil drain line from the engine block, and discard. You will then replace this drain line with the provided long (lower) flexible drain pipe. Insert the provided drain line, by greasing the o-rings and firmly pushing them into the hole. Both o-rings should be within the hole. This step should be done prior to step # 2, or immediately after removing the stock turbocharger & manifold. Later you will attached the flange end to the bottom turbo, with the two 8mm bolts and gasket supplied.



Next. Locate the front freeze plug (same height as the back oil drain port). Take a punch or screwdriver and lightly tap on one edge of the freeze plug to get it to rotate or twist inside the hole. Then take a pair of needle nose pliers and remove the freeze plug (BE VERY CAREFUL NOT TO PUSH THE PLUG INTO THE OIL PAN, OR YOU WILL HAVE TO DROP THE OIL PAN TO RETRIEVE IT).



Next take the provided oil drain fitting, and pound into the hole that you just pulled the freeze plug out of. Oil Drain Fitting Pictures: The plug in the end of this fitting should be just snug so it can be pounded on. After fitting is tapped in place remove the plug and discard. Then the rubber oil drain tube can be attached to the fitting. The top two turbo will attach to the 'Y' oil drains. Then after the 'Y' the 1'' rubber oil hose attaches to this fitting (now in the block).



Stock Wastegate Solenoid 2004.5-2007 Trucks

Also on 2004.5-2007 year of truck the stock turbo waste gate is electronically controlled. You have two options. The first, and easiest option is to simply unscrew the entire sensor from the stock turbo, and wire tie it onto the shock mount. This works very good. The second option is to purchase a boost-fooler and plug it into the sensor wire.

Installation Instructions for Triple Turbos.

Following these instructions is crucial to proper installation!

Prior to installation the engine oil and oil filter should be changed. Also allow engine to idle for 10 minutes after turbos are installed to allow turbos a break-in period. We strongly recommend head studs for boost pressure over 45 psi, and fire rings for boost pressure over 55 psi. Nearly every issue can be solved during installation by adjusting the clocking of the turbos slightly.

1. Begin by removing air box, battery, battery box, and plastic inner wheel well cover (splash guard). These items must be removed before attempting to install Triple turbos. Be careful when removing plastic wheel well cover, there are wires mounted on engine side.

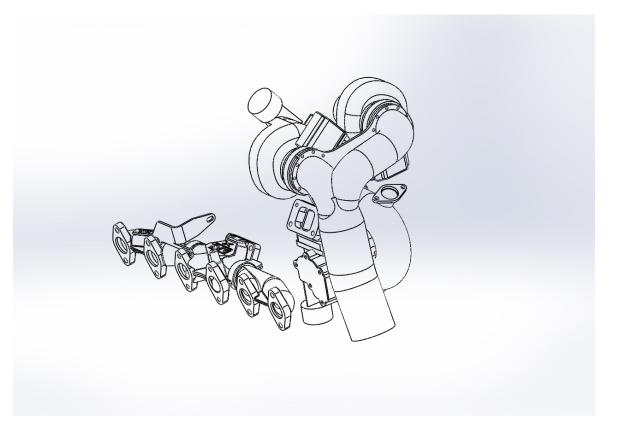
Next remove old turbo, old exhaust manifold, and old oil lines.

2. It will be helpful if you slightly loosen the bolts on all turbos which will allow you to "clock" the turbos (don't remove the bolts or loosen too much as this can damage the turbo(s)). Later in the installation (NOT NOW) as you slide the turbo cartridges into the turbine housings slightly tighten (or leave slightly loose) the four bolts that attach the two halves together so you can rotate the housings. In this installation, if items don't fit properly, it's usually just a matter of "clocking" or turning slightly one of the turbos, or "clocking" the down elbow, to get the proper relationship with each other.

As you install this kit, makes sure that all air conditioning tubes, heater lines, electrical cords, wastegate tubes etc. are not in contact with any portion of the Triple Turbo Kit (especially with the cast iron (hot) sides of the turbos, as they will melt or wear into these items.

3. Install oil drains, as described in the "Oil Drain" instructions earlier. Install the lower turbine housing outlet to the exhaust hot pipe\, using the 10 provided 6mm bolts. There is only one way this housing can mount to the hot pipe. (In some cases this turbine housing may already be installed.

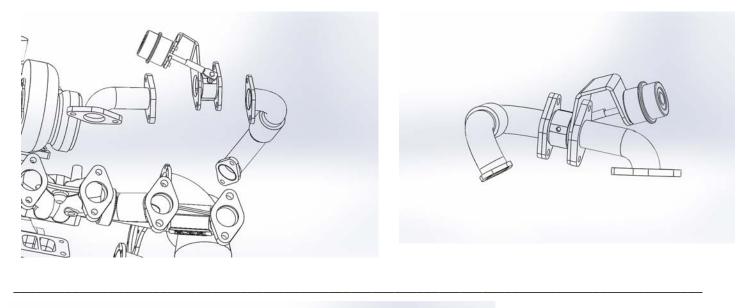
4. Attach the manifold T-3 flange to the three turbine housing assembly, as shown, don't forget the flange gasket. This must be done prior to installing. Then, use an engine hoist to lower the entire assembly into the engine compartment, and attach the manifold to the head using the supplied bolts and gaskets. Torque manifold bolts to 35-40ft/lbs. Note: The multiple 6mm bolts that attach the hot pipe and down pipe to the turbine housings, and the twin pedestal, have been pre-tightened with a sealant in them. DO NOT LOOSEN THESE BOLTS, it will break the seal, and may cause the exhaust leaks. At this time also install the support bracket to the driver side turbine housing and to the manifold (cylinders 2 & 3).

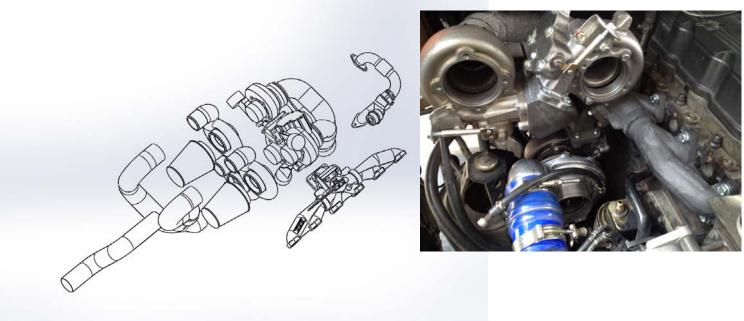




EXTERNAL WASTEGATE (ONLY IF INCLUDED (many kits do not include the external wastegates) We highly recommend using the block-off plate between the manifold and the external wastegate pipe for street driving, as spool-up will be much better because the split scroll stays in use. Adjust wastegating with the bottom turbo first, then adjust the external wastegate.

5. Attach the external wastegate pipes as shown here using the supplied nuts and bolts. Place the supplied "sealant" in between the flanges. This sealant will cure with 10 minutes of running heat, when you first fire up the truck allow it to idle for 10 minutes to heat up and create a good seal. Then attach the wastegate pipe assembly to the hot pipe.





6. Insert the Turbo Cartridges into the turbine housings, starting with the lower turbo. Attach the oil drain and oil supply lines to the turbos. Tighten the four turbine bolts to secure. Then attach the wastegate hose to the fitting on the compressor housing. The lower turbo wastegates off its own pressure, or the high pressure.

7. Then attach the intercooler charge pipe, and both couplers.

8. Next insert the **upper driver-side** turbo cartridge into its turbine housing. Attach the oil drain and oil supply lines. Tighten the four turbine bolts to secure. The cartridge will be clocked at approximately a 3 degree angle, with the oil supply line toward the drive side. If 0 degrees is the oil supply to oil drain line directly vertical. You will attach the support bracket to the turbine housing of this turbo.

9. Next insert the **upper passenger-side** turbo cartridge into its turbine housing. Attach the oil drain and oil supply lines. Tighten the four turbine bolts to secure. This cartridge will be clocked at an opposite angle to the other top turbo, and should be clocked at approximately a 15 to 20 degree angle, as shown in the picture. It should be clocked so that the oil drain fitting clears the wastegate bracket.

10. Attach the external wastegate hose to the driverside top turbo. This will wastegate with the low pressure. **DO NOT OVERTIGHTEN THE EXTERNAL WASTEGATE ACTUATOR. It can damage the valve inside.** It can hold exhaust pressure with very little spring pressure. To adjust the external wastegate do so by adjusting 1/4 turn at a time. The wastegate block-off plate can be used to block-off the wastegate exhaust by being inserted between the manifold and external wastegate pipe.



11. Attach the rubber oil drain/return line to the fitting you tapped into the engine earlier. Then attach the oil drain lines of the two upper turbos to the 'T' where the oil drain lines come together. Make sure the 'T' and is below the bottom of the turbos, and the drain lines slope down.

Note: Every set of air conditioning, and transmission dipstick tubes are slightly different. While there should be plenty of clearance, if by chance they do touch the Triple Turbo Kit, they may require some slight bending to get them to fit properly. The transmission dipstick tube can touch the hot pipes, but the air conditioning lines CAN NOT touch any part of the Triple Turbo Kit, as they will have holes worn in them.

12. Attach the oil supply lines. They attach to the oil filter mount, remove one of the oil plugs from the top of the oil filter mount, and screw in the provided fitting (should be at the end of the steel braided oil line from the large turbo), then couple the oil line to that fitting. The other one goes to the factory oil supply fitting.

13. Put on the low pressure charge pipes, attach required couplers and clamps. Tighten securely. (Helpful Hint: use a small amount of soapy water to help the tube slide into the couplers. DO NOT USE OIL TO DO THIS as oil will not dry and tube may slip out under pressure.

14.

VERY IMPORTANT! Be sure that when truck is started that oil pressure rises to the correct pressure.

We highly recommend oiling the filter with K&N filter oil, especially if being used in dusty environments. Also the K&N filter cleaning and oiling kit can be used to wash the air filter when it gets dirty.

On 2004.5-2007 trucks, remove the rubber cover to on the front, passenger side of the radiator. This needs to be left off, because if it is on it restricts cool air from entering the filter, and makes a substantial difference in EGT's and overall performance.





Completed Pictures

