

INDUSTRIAL INJECTION



Stock/XR/PhatShaft Turbo INSTALLATION INSTRUCTIONS 2003-2007 5.9L Cummins

STEP 3: Remove oil feed line to turbo and intercooler pipe from the cold side of the turbo. When removing the Intercooler pipe be mindful of not damaging the boot.



STEP 4: Remove the V-band clamp connecting the factory cast elbow to the turbine housing on the exhaust side of the turbo. Loosen the second clamp connecting the down pipe to factory cast elbow so it can be rotated. (2004.5-2007 trucks disconnect the air control valve plug from the factory harness).



STEP 5: From under the truck, you should see the factory turbo oil drain line that connects from the bottom of the turbo to the engine block. Grab the drain line where it seats into the block and push up carefully and the tube will pop out. Be cautious not to kink this oil drain line or it will need to be replaced.

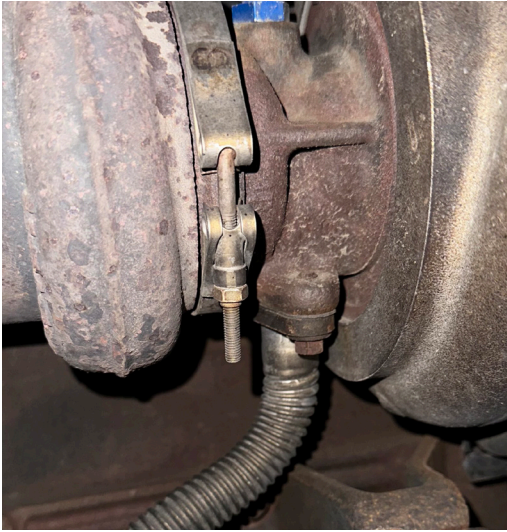
STEP 6: Remove the four 15mm nuts connecting the turbo to the exhaust manifold. The turbo can then rest on the frame while you remove the two studs from the turbine housing and the two other studs from the manifold. Be cautious of when removing the studs not to damage the threads as you will be reusing them for installation.



STEP 7: With the turbocharger removed you will notice two small alignment pins on the factory cast elbow. If you are installing a stock turbo you will keep the pins in the elbow, if you are installing a Phatshaft turbo you will need to remove the pins in the elbow with pliers.

STEP 8: On the top side of the factory turbo remove the oil inlet fitting from the turbo using a 19mm and install the fitting into the replacement turbo oil feed port. DO NOT over tighten when installing to the replacement turbo.

STEP 9: Remove the 2 bolts holding the oil drain line to the bottom side of the turbo. With the oil drain removed, clean the old gasket off the mating surface of the oil drain. Install new gasket and install the oil drain line to the replacement turbo. *Note: Do not use silicone!*



STEP 10: Remove the two bolts holding the exhaust hanger from the transmission to assist in aligning the new turbocharger.



STEP 11: Lower the replacement turbo letting it rest on the frame (be sure not to kink or bend the oil drain). Install the studs back into the manifold and turbine housing for the replacement turbo. Line up the turbo to manifold gasket using the studs on the turbo. Lift the turbo to the manifold flange lining the studs up with the holes. Hand tighten the nuts onto the studs to hold turbo in place and start tightening all four nuts to seal the turbo to the manifold.

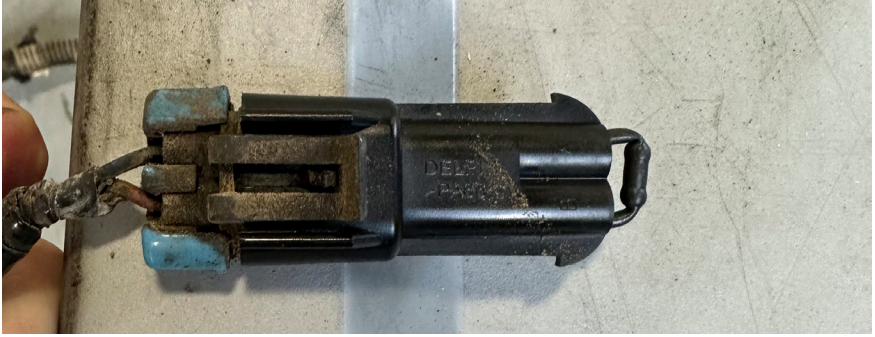
Note: For Phatshaft turbo install you will only thread the studs into the manifold. The Phatshaft upgrade will come with two studs and nuts, the stud will go in the untapped holes and use the nut on the top of the stud and bottom. You will be reusing two of the nuts that you removed prior from the factory.



STEP 12: Reconnect exhaust elbow to the turbine housing of the turbo along with the intercooler pipe and boot on the front side of the turbo. Reinstall the air intake and reconnect the air flow sensor. Install the oil feed line to the factory fitting you swapped over from the previous unit leaving it loose for now.

STEP 13: From under the truck make sure the oil drain fitting is clean of debris and apply white lithium grease to the o-rings and reinsert into the engine block. Reinstall the two exhaust hanger bolts for the downpipe.

STEP 14: Plug the included waste-gate-fooler into the plug that you disconnected from the old turbo



STEP 15: Priming the oil feed line. Crank the engine over without starting it as many times as it takes until you see oil spilling from the fitting you left loose in Step 12. If during the cranking process the engine starts, shut it off immediately! Once you see oil coming out of the fitting tighten the fitting and clean off the remaining oil.

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