

# OBS Bellowed Up-Pipe Instructions

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**IMPORTANT:** Before starting installation, please be sure that all items which were supplied with the kit are accounted for.

## Riffraff Diesel Bellowed Up-Pipe Kit [RDP-1843486C92](#)

Contains: L/H Pipe, R/H Pipe, & Bolt Kit (2 gaskets, 4 short bolts, 4 long bolts, & 4 nuts)

### Recommended Parts:

\*Turbo/Pedestal O-Ring Kit P/N [GZ-9-003](#)

### Recommended Tools:

\*Standard and Metric Sockets and Wrenches

\*PB Blaster or Aero-Kroil penetrating oil

\*Anti-Seize Lubricant

- 1) Soak all exhaust bolts and turbo clamps down with penetrating oil several times over a couple days prior to starting replacement. This will make the job go a little easier. (fig 1)
- 2) Disconnect the batteries.
- 3) Remove the Engine Access Cover by removing the three attach bolts. Remove the air intake tube from the air box to the turbo. You will need to remove the two 8mm bolts holding the tube on the engine bracket. You can then pull the tube out of the drivers side doghouse hose.
- 4) Remove the Y pipe from the turbo by removing the band clamp from the turbo and loosening the band clamps from the intake boots at the plenums. Block off the plenum openings with rags or tape. (fig 2)
- 5) Removal of the Up-Pipes is eased if you remove the turbo first. Start by loosening the four bolts holding the Up-Pipe collector to the turbo. The upper bolts are 13mm, the lower nuts are 15mm. These will be very tight and are loosened using a pry bar. Once they are loose, you will use a wrench and socket to remove completely. Removal of the lower nuts is most difficult. Using a 1/4" drive swivel socket in 15mm will make the removal easier. (fig 3)
- 6) Remove the EBPV from the turbo by removing the clamp from the outlet to the down pipe. Then remove the three 8mm bolts holding the EBPV onto the turbine housing.



fig 1

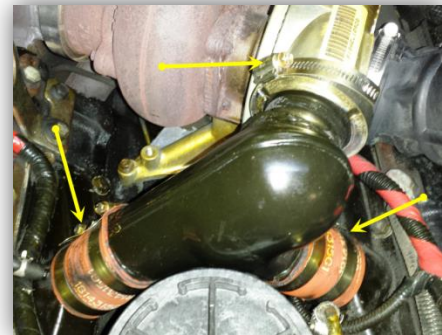


fig 2



fig 3

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- 7) Disconnect the EBP Actuator rod from the EBPV arm by sliding the sleeve towards the actuator. Once you do this, you will be able to disconnect the rod from the EBPV. You can now remove the EBPV from the turbo. (fig 4)
- 8) Remove the bracket from the turbo that sits behind the center cartridge just I/B of the compressor housing. It is retained by a single 10mm bolt. This will give you better access to the rear pedestal bolt. (fig 5)
- 9) Remove the pedestal bolts from the pedestal. There are four 10mm bolts you will need to remove. The front bolts are easy to see and get access to. The aft two bolts are a little harder to find, but are accessible with a  $\frac{1}{4}$ " drive socket and extension. You will need to leave the two aft bolts in the pedestal as they are long and have an interference to remove while the turbo is on the engine. (fig 6 & 7)
- 10) Disconnect the EBPV Solenoid connector from the plug. The turbo is now able to be removed. It will be stuck down and may require a pry to loosen it up. Remove the turbo from the truck carefully and set it aside on something soft to prevent scratches on the pedestal mounting surface.
- 11) The up-pipe collector should now be accessible to remove the bolts common to the clamps. These can be hard to break loose, using a long wrench, you can often break them loose. You may not have to completely remove the bolts. Often times the pipes are loose in the clamps and donuts, so the collector may slide off the pipe with a little wiggling. You can also get access to the bolts from below with a long extension. This will allow easier access to the aft bolts.
- 12) From underneath the vehicle, remove the two bolts attaching the up-pipe to the exhaust manifold on both sides. A 10mm and 13mm wrench, you should be able to remove the bolts and slide the up-pipes from behind the engine to the ground.
- 13) Remove the bolts from the up-pipe collector and clean any rust from the mating surfaces of the turbo and up-pipes.
- 14) Lay the new Riffraff Diesel Bellowed pipes next to the OEM pipes to see how you should install them. Carefully install each pipe from underneath the vehicle. Once you get the pipe situated, install the manifold to up-pipe bolts (apply anti-seize to threads) to hold the pipe in position. (You will tighten them fully later)

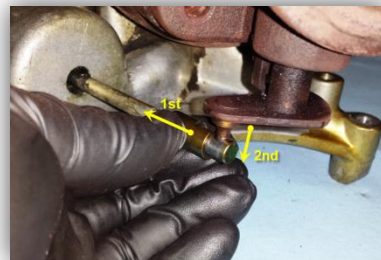


fig 4



fig 5



fig 6



fig 7

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- 18) Install the supplied gaskets on the up-pipe flanges. Then install the up-pipe collector and loosely install the four bolts (apply anti-seize to threads) (fig 8)
- 19) Place the collector gasket supplied in the kit onto the collector studs. Apply anti-seize to the studs as well as the bolts before installation.
- 20) Position the turbo/pedestal assembly in the vehicle using new O-rings for the pedestal to engine interface.
- 21) Align the turbo pedestal bolts and tighten to 18 ft-lbs.
- 22) Install the two lower nuts and two upper bolts through the turbo to the collector. Tighten down evenly in a crisscross fashion to ensure it is going on straight.
- 23) Tighten the four bolts from the up-pipe flange to the collector down fully now.
- 24) Final torque the manifold to up-pipe bolts from underneath the vehicle.
- 25) Reinstall the EBPV ensuring the actuator rod gets reinstalled. Tighten the EBPV to Turbine bolts to 18ft-lbs. (apply anti-seize to threads). Reconnect the down pipe to the EBPV using the Marmon clamp.
- 26) Re-install the bracket to the turbo and install the air intake pipe.
- 27) Reconnect the EBPV Solenoid connector.
- 28) Re-install the turbo to plenum boots and Y adapter tightening clamps down (do not over torque).
- 29) Reinstall the Engine access cover. Reconnect the batteries.



Fig 8



Pipe Installation Reference

Pictures and instructions provided by Ken (Woodnthings) from FTE.

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