

Installation Instructions v1.5: 2-Piece Exhaust Manifold 2003-2007 Dodge 5.9L

Please read all instructions before installation.



Figure 1 - Dodge 2-Piece Exhaust Manifold

- 1. Disconnect BOTH negative (-) battery terminals.
- 2. Remove air cleaner hose from the vehicle and disconnect the water line brackets from the manifold. The water line manifold bracket can be extremely difficult to remove. An easy option is to cut the bracket and ziptie the water line to the dip stick tube.
- Disconnect the turbo from the stock manifold by removing the four (4) nuts using a 15mm socket or wrench. The two back nuts are easily reached from underneath the truck using a long 3/8" drive extension along with a 15mm swivel socket or a universal joint and a 15mm shallow socket. (NOTE: It is not necessary to remove the turbo from the engine compartment or to loosen the exhaust).
- 4. Once the turbo is disconnected from the manifold, remove the four (4) nuts that secure the heat shield and remove the heat shield from the manifold. Remove the stock manifold bolts using a 13mm deep socket.
- 5. After the stock manifold is removed, clean the head and turbo surfaces for a better seal.
- 6. On turbine housings with long shouldered studs (approximately 1" shoulder), it will be necessary to remove the stock studs and replace

them. If the studs are seized in the turbine housing, there are several ways of removing them:



Figure 2 - Long Shouldered Stud

- a. If a stud remover is available, it is the easiest way to remove the factory studs. If the stud is still difficult to remove, heating the stud and flange with a torch will help break it loose.
- b. A pair of vise grips can be used to remove the stud as well.
- c. If the studs are seized, it is possible to use two M10-1.5 nuts to remove the stud. Thread the first nut up to the shoulder finger tight. Thread the second nut up to the first nut. Using two wrenches, turn the nuts into each other such that they no longer spin freely. Place one of the wrenches on the first nut and turn the stud out. If the stud is still difficult to remove, heating the stud and flange with a torch will help break it loose.

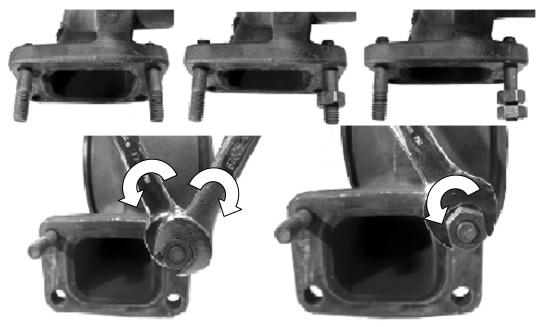


Figure 3 - Stud Removal

NOTE: ATS will not replace turbine housings if damaged during stud removal.

- 7. Clean out the threads and install new studs into turbine housing.
- 8. Install ATS 2-piece exhaust manifold.

- **IMPORTANT:** If any of your existing exhaust manifold gaskets are damaged, use new exhaust manifold gaskets available from either ATS or your local Dodge dealer. If purchasing the gaskets from a local dealer, use part number 5135789AA for the manifold gaskets and 3949530 for the turbo flange gasket.
- 9. Torque bolts to **32 ft-lbs** in a clockwise pattern from the center out (as shown in Figure 1). Re-torque the four center bolts to **32 ft-lbs**.

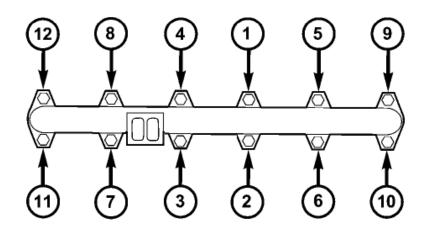


Figure 4 - Manifold Torque Sequence

- 10. After the manifold is tight, reconnect the turbo to the manifold and torque turbo nuts to **32 ft-lbs**.
- **Note:** Always use anti-seize on turbo mounting studs and replace the turbo gasket with a new gasket available from ATS or your local dodge dealer.
- 11. After the turbo and manifold are installed, reinstall the air cleaner hose and water hose brackets.
- 12. Reconnect the negative (-) battery terminals.