

Installation Manual v2.0:

PN: 204-920-2272

2-Piece Exhaust Manifold

2003 -2007½ Dodge 5.9L 24V, T3, 2PC



Please read all instructions before installation

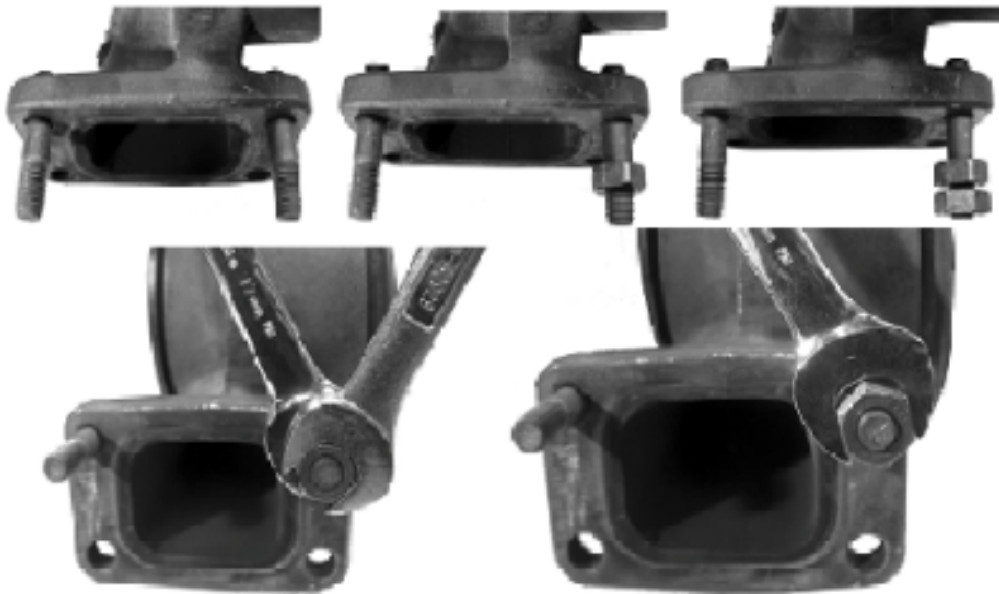
BILL OF MATERIALS:

- 1) T3 2-Piece Pulse Flow Manifold 24V CR 2003-2007 ½ Assembly (Qty: 1)
- 2) Hardware Kit, Exhaust Manifold to Turbo Flange, Dodge CR (204-003-2272) (Qty: 1)
 - a) M10 DIN 934 Plain Finish Steel Class 8 Hex Nut (Qty: 4)
 - b) ⅜"/M10 Belleville Spring Lock Washer, Steel (Qty: 4)
 - c) M10x1.5mm threaded stud (Qty: 2)
 - d) M10-1.5 x 40mm Plain Finish DIN 6921 Class 10.9 Hex Flange Bolt (Qty: 2)
- 3) ATS Gasket Set, 1998½ - 2007 Dodge 5.9L Cummins (Qty: 1)
 - e) 1998.5 - 2019 Cummins Single Exhaust Manifold Gasket (Qty: 6)
 - f) T3 Turbo Mount Gasket (Qty: 1)

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 zip tie the water line to the dip stick tube.
3. 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:
 - 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.
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**.
10. After the manifold is tight, reconnect the turbo to the manifold and torque turbo nuts to **32 ft-lbs**.

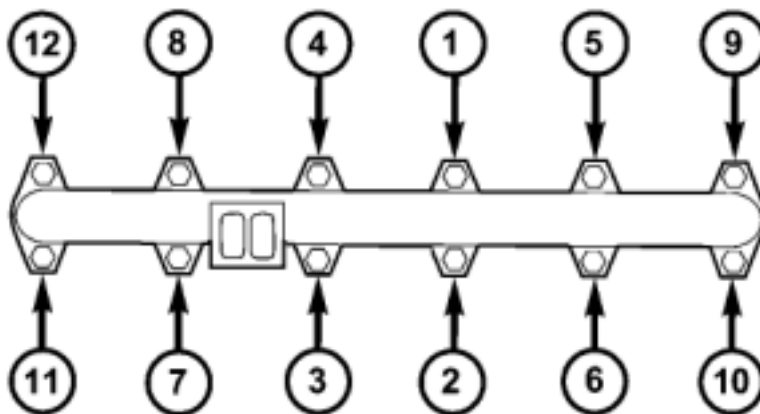


Figure 4 - Manifold Torque Sequence

11. After the turbo and manifold are installed, reinstall the air cleaner hose and water hose brackets.
12. Reconnect the negative (-) battery terminals.

CARB E.O. Label

Clean a flat visible surface under the hood and affix the enclosed CARB EO sticker for SMOG purposes. See the illustration below for acceptable locations to affix to vehicle. ATS Diesel recommends using the radiator shroud if possible.



Vehicle CARB E.O. Label Placement



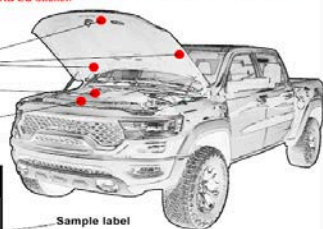
IMPORTANT: Be sure to clean and dry a flat visible surface under the hood prior to affixing the enclosed CARB EO sticker.

Locations

underside of vehicle hood

engine valve cover

radiator shroud
(preferred location)



Sample label



THIS VEHICLE IS EQUIPPED WITH AN ATS DIESEL PERFORMANCE PULSE FLOW EXHAUST MANIFOLD

PN: 204-920-2272

LEGAL FOR SALE, INSTALLATION AND USE IN THE STATE OF CALIFORNIA

CARB EO D-708

ATS DIESEL PERFORMANCE, 5293 WARD RD, ARVADA, CO 80002, (800) 949-6002