



INSTALLATION INSTRUCTIONS

MAKE: Dodge
MODEL: RAM 2500/3500
YEAR: 1998.5-2002
ENGINE: L6-5.9L (td) Cummins

BladeRunner Exhaust Manifold 46-40032 (Ductile Iron)



Parts Included:

- Exhaust Manifold (1)
- Channel Bracket (1)
- Water line bracket (1)
- M8x1.25x25mm Bolt (1)
- Socket head plug 1/8" NPT
- M10x1.50x50mm Stud - 20mm /20mm (4)
- M10x1.50x50mm Stud - 20mm/16mm (2)
- M10x1.50 Flange Nut (2)
- M10x1.50 Flange Nut Smooth (4)

Tools Needed:

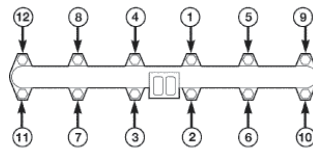
- 7/16 socket/wrench
- 8mm socket/wrench
- 10mm socket/wrench
- 13mm socket/wrench
- 15mm socket/wrench
- Torque wrench
- Scraper (gasket remover)
- Socket driver
- Socket driver extension
- 5/16 socket/nut driver
- Hacksaw

CAUTION: Allow time for your vehicle to cool down prior to installation. When working on or under your vehicle proceed with caution. Engine bays may reach high temperatures and may cause serious burns. Wear protective safety equipment; eye goggles and gloves to ensure a safe installation. aFe Power recommends professional installation on our products.

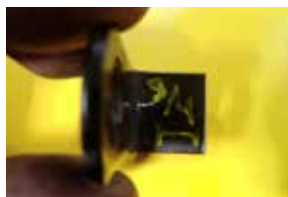
1. Disconnect the battery cables.
2. Remove air filter housing and air intake tube from the vehicle.
3. Remove turbo from the vehicle by disconnecting the exhaust down-pipe, turbo outlet, oil supply line, oil return line and the 4 nuts holding the turbo to the stock exhaust manifold.
4. Disconnect the water line bracket from the exhaust manifold and the clamp holding the water lines together.
5. Remove the stock exhaust manifold by undoing the (12) bolts using a 13mm socket or wrench.
6. Prepare the mating surfaces on the head and turbo for a better seal.
7. Install the (2) M10x1.5x50mm studs into the turbo flange on the new aFe exhaust manifold.
8. Install the (2) aFe studs in the top two center bolt holes (cylinder 3 & 4) on the head.



9. Install the exhaust manifold using the (10) factory bolts, (2) M10x1.5 flange nuts, (10) factory spacer and (6) exhaust manifold gaskets (gaskets not supplied). Apply anti-seize to the bolts before installing. Tighten to 32 ft./lbs. Tighten the bolts by using the recommend factory torque procedure.



10. Mark and cut the water line mounting bracket 3/4" from the bend in the bracket. Install the new aFe bracket by capturing the water line bracket. Tighten the bolt on bracket. Use the stock bolt on the manifold side. Install stock waterline clamp in stock location.



11. If equipped, install E.G.T. probe(s) into ports on manifold. If not using ports, install supplied 1/8" NPT hex plugs. Re-install and tighten turbo using factory nuts.
12. Re-install the exhaust down-pipe, turbo outlet, oil supply line and oil return using the factory hardware with new gaskets (gaskets not supplied).
13. Re-install the factory air intake tube and air filter housing.
14. Re-connect the battery cables. **Place enclosed CARB EO sticker on or near the device on a smooth/clean surface. EO identification label is required to pass the smog test inspection.**

Factory Gasket Part Numbers: Exhaust Manifold (501579aa), Turbo Flange (4429357) and Oil Return Tube (500332ad) - NOT SUPPLIED.