

INSTALLATION INSTRUCTIONS

MAKE: Dodge

MODEL: RAM 2500/3500

YEAR: 1994-1998

ENGINE: L6-5.9L (td) Cummins

BladeRunner Exhaust Manifold 46-40041 (Stainless Steel) 46-40042 (Ductile Iron)



Parts Included:

- Manifold, Exhaust (1)
- Bracket, Water Line (1)
- EGR, Block Off Plate (1)
- Bolt, Hex: M8x1.25x16 (1)
- Bolt, Hex: M10x1.5x65 (9)
- Nut, Flange: M10x1.5 (6)
- Stud: M10x1.5x50 (2)
- Stud: M10x1.5x40 (4)
- Stud: M10x1.5x95 (1)
- Plug, Hex: 1/8" NPT (2)
- Spacer, Steel (10)
- Washer, Flat M8 (1)
- Elbow, Inverted Flare w/ Straight Fitting (1)
- Nut, Hex Flange: M10 x 1.5 (2)

Tools Needed:

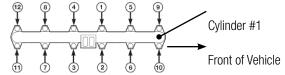
- 3/4 wrench
- 5/8 wrench
- 7/16 socket/wrench
- 11/16 socket/wrench
- 8mm socket/wrench
- 10mm socket/wrench
- 13mm socket/wrench
- 15mm socket/wrench
- Torque wrench
- Scraper (gasket remover)
- Socket driver
- Socket driver extension
- 5/16 socket/nut driver

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 EGR and EGR tube (if equipped). Install the block off plate on intake manifold and new gasket (gasket not supplied).
- 3. Remove air filter and housing and air intake tube from the vehicle.
- 4. Remove the 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.
- 5. Disconnect the water line bracket from the exhaust manifold and the clamp holding the water lines together.
- 6. Remove the stock exhaust manifold by undoing the (12) bolts using a 13mm socket or wrench.
- 7. Prepare the mating surfaces on the head and turbo with a scraper or sand paper for a better seal.
- 8. Install the (4) M10x1.5x40mm studs into the turbo flange on the new aFe exhaust manifold.
- 9. Install the (2) M10x1.5x50mm studs to the top two center bolt holes (cylinder 3 & 4) on the head.



10. Install the aFe exhaust manifold using the (9) M10x1.5x65mm bolts, (1) M10x1.5 flange nuts, (1) M10x1.5x95mm stud, (10) steel spacers and (6) exhaust manifold gaskets (gaskets not supplied). Apply anti-seize to the bolts before installing. Tighten to 32 ft./lbs. The new M10x1.5x95mm stud is placed in the top front hole (cylinder 1). Install the (2) M10x1.5 Hex Flange nuts onto the studs installed in step 9. Tighten the bolts by using the recommended factory torque procedure.



- 11. Install new bracket for waterline at front of the aFe exhaust manifold on the stud with (1) M10x1.5 flange nut and tighten. The remaining clamps can be installed in the factory location with the factory hardware.
- 12. If equipped, install E.G.T. probe(s) into ports on manifold. If not using ports, install supplied 1/8" NPT hex plugs.
- 13. Install the turbo and tighten. The oil supply line for the turbo will have to be removed and flipped over so that the 90 degree bend is on the oil filter housing and the straight end is at the turbo. Install the new supplied inverted flare elbow on the turbo and connect it to the oil supply line using the supplied straight fitting.
- 14. Re-install the exhaust down-pipe, turbo outlet and oil return using the factory hardware with new gaskets (not supplied).
- 15. Re-install the factory air intake tube and air filter housing.
- 16. Re-connect the battery cables.

Factory Gasket Part Numbers: EGR (4882883), Exhaust Manifold (4796511), Turbo Flange (4429357) and Oil Return Tube (500332ad) - NOT SUPPLIED.