## INSTALLATION INSTRUCTIONS



MAKE: Dodge

MODEL: Ram 2500/3500 YEAR: 1994 - 1998

**ENGINE:** L6 - 5.9L (td) Cummins

BladeRunner Exhaust Manifold 46-40041-1 (Stainless Steel) 46-40044-1 (Ported Ductile Iron)



Parts Included:	Qty.
Manifold, Exhaust	1
Bracket, Water Line	1
Bolt, Hex: M8x1.25x16	1
Bolt, Hex: M10x1.5x65mm	9
Stud: M10x1.5x37mm	4
Stud: M10x1.5x50mm	2
Stud: M10x1.5x95mm	1
Plug, 1/8" NPT Brass	2
Spacer, Steel	10
Washer, Flat M8	1
Elbow, Inverted Flare w/ Straight Fitting	1
Nut, Flange: M10x1.5	4
Nut, Machined Flange: M10 x 1.5	4
Gasket, Exhaust	6

CAUTION: Allow time for your vehicle to cool down prior to installation. When working on your vehicle proceed with caution. Wear protective safety equipment; eye goggles and gloves to ensure a safe installation. aFe recommends professional installation on this product. Thoroughly inspect the aFe manifold to make sure there is no damage from shipping (if damage is noted, immediately contact aFe customer service).

## Note: This kit is not compatible with factory EGR systems.

- 1. Disconnect the battery cables.
- 2. Remove air filter housing and air intake tube from the vehicle.
- 3. Remove the turbocharger from the vehicle by disconnecting the exhaust down-pipe, turbocharger outlet, oil supply line, oil return line and the four (4) nuts holding the turbocharger to the stock exhaust manifold.
- 4. Disconnect the water line bracket from the exhaust manifold and the clamps holding the water lines together.
- 5. Remove the stock exhaust manifold by removing the twelve (12) bolts.
- 6. Prepare the mating surfaces on the head and turbo with a scraper or sand paper for a better seal.

## Note: Apply anti-seize to the exhaust manifold studs, bolts and nuts before installing.

- 7. Install the four (4) supplied M10x1.5x37mm studs into the exhaust manifold to turbocharger flange on the supplied aFe exhaust manifold.
- 8. Install the two (2) supplied M10x1.5x50mm studs into the top two center bolt holes (cylinder 3 & 4) on the head. Make sure to install two (2) of the supplied gaskets onto the studs prior to aFe exhaust manifold installation.
- 9. Install the aFe exhaust manifold. Loosely install the two (2) supplied M10x1.5 flange nuts onto the studs installed in Step 8.
- 10. Install the supplied M10x1.5x95mm stud into the top front hole (cylinder 1). The 17mm side goes into the head. Install an exhaust manifold gasket onto the stud while installing the stud.
- 11. Finish installing the aFe exhaust manifold by installing the supplied nine (9) M10x1.5x65mm bolts, M10x1.5 flange nut, ten (10) steel spacers and three (3) exhaust manifold gaskets. Tighten all the hardware to factory specifications.

Note: Tighten the bolts for the exhaust manifold by using the factory torque procedure.

- 12. Install the supplied bracket for the water line on the stud installed in Step 10 with the supplied M10x1.5 flange nut and tighten. The bracket goes on the stud with the flag sitting between cylinder 1 & 2. Attach the rear clamp to the aFe exhaust manifold using the supplied M8x1.25x16 bolt and M8 washer. The remaining clamp can be installed in the factory location with the factory hardware.
- 13. If equipped, install E.G.T. probe(s) into ports on manifold. If not using ports, install supplied 1/8" NPT plugs.
- 14. Install the turbocharger using the four (4) supplied M10x1.5 machined flange nuts and tighten to factory specifications.
- 15. The oil supply line for the turbo will have to be removed and flipped over so that the 90° bend is on the oil filter housing and the straight end is at the turbo. Install the supplied inverted flare elbow on the turbo and connect it to the oil supply line using the supplied straight fitting.
- 16. Re-install the exhaust down-pipe, turbo outlet and oil return using the factory hardware with new gaskets (not supplied).
- 17. Re-install the factory air intake tube and air filter housing.
- 18. Re-connect the battery cables.
- 19. Your installation is now complete. Start the vehicle and verify again that all connections are secure and that you have no leaks.



## **EMISSIONS DISCLAIMER**

This product is not currently CARB exempt and is not available for purchase in California or for use on any vehicle registered with the California Department of Motor Vehicles.

Factory Gasket Part Numbers- (NOT SUPPLIED):

Turbo Flange (MOPAR 4429357)
Oil Return Tube (CUMMINS 5264569)