



INSTALLATION INSTRUCTIONS

MAKE: Dodge
 MODEL: RAM
 YEAR: 1998.5-2002
 ENGINE: 5.9L (td)

BladeRunner Exhaust Manifold 46-40034 (Ported, Ductile Iron)



Parts Included:

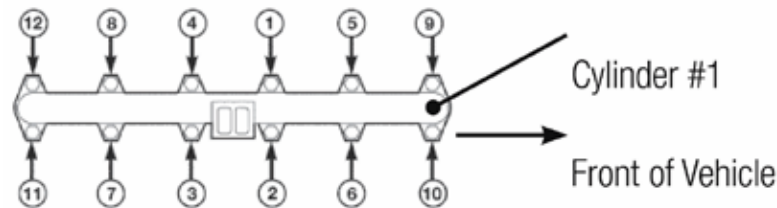
- Exhaust Manifold (1)
- Channel Bracket (1)
- Water line bracket (1)
- M8x1.25x25mm Bolt (1)
- Socket head plug 1/8" NPT (2)
- M10x1.50x37mm Stud (4)
- M10x1.50x50mm Stud (2)
- M10x1.50 Flange Nut (2)
- M10x1.50 Small Flange Nut (4)
- Gasket Set (1)

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
- 3/16 Allen Wrench

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 both of 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 four 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 removing the twelve manifold bolts using a 13mm socket.
6. Prepare the mating surfaces on the head and the turbo for a better seal.
7. Install two (2) of the supplied M10x1.50x37mm studs into the tapped holes in the turbo flange on the new aFe exhaust manifold.
8. Install the two (2) supplied M10x1.50x50mm studs into the top two center bolt (cylinder 3&4) on the head.
9. Install the aFe Exhaust Manifold using the ten (10) factory bolts, ten (10) factory spacers, two (2) supplied M10x1.50mm flange nuts and six (6) supplied exhaust manifold gaskets. Apply anti-seize to the bolts before installing. Tighten the bolts by using the recommend factory torque procedure as shown. **Tighten to 32 ft./lbs.**



10. Install the two (2) supplied 1/8" NPT plugs into the exhaust manifold.
 11. Mark and cut the water line bracket 3/4" from the bend in the bracket. Install the new aFe bracket by capturing the water line bracket. Install and tighten using the supplied M8x1.25x25mm bolt and the factory hardware.
 12. Replace the stock studs in the turbo with the supplied two (2) M10x1.50x37mm studs.
 13. Reinstall the turbo with the four (4) supplied M10x1.50mm small flanged nuts. Tighten using a 15mm wrench and a socket.
 14. Reinstall the exhaust down-pipe, turbo outlet, oil supply line, oil return line using the factory hardware.
- Note: aFe recommends replacement of old gaskets (not supplied).**
15. Reinstall the air intake tube and air filter housing.
 16. Reconnect the batteries. Your installation is now complete. Thank you for choosing aFe Power.

* **Note:** Retighten all connections after approximately 100-200 miles.

* **Note:** Factory gaskets part numbers: Turbo flange gasket: 4429357

Oil return line: 500332ad