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BD 1998-2002 5.9L Cummins Screamer Turbo

Drop-in Turbo

Part#	Compressor Size	Turbine Size	Description
1045758	58mm	70mm	BD Screamer

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Pre-Installation

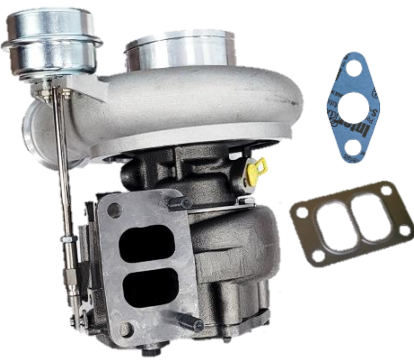





A new turbocharger will not solve the following failures:

- Oil contamination
- Restrictive oil drain
- Over speed due to a boost leak or clogged air filter
- Exhaust leaks due to faulty bellows, clamps, or seals



Turbo Mount Exhaust Brakes

The BD Diesel Screamer turbo retains the factory turbine outlet. If your stock turbo has a turbo mount exhaust brake it can be transferred to your Screamer turbo. If you plan on purchasing an exhaust brake with your Screamer turbo buy according to the year of truck; see optional accessories section for year ranges and part numbers for BD Diesel exhaust brakes.

Kit Contents

	1462441	1462430
		
Turbo; Screamer 03-07 5.9L Cummins	Mounting Nuts	Stud M10-1.5x30 - M10-1.5x42
Qty: 1 3678603	Qty: 4 FT-920156020	Qty: 2
		
O-ring	O-ring	Downpipe Exhaust Adapter
Qty: 1	Qty: 1	Qty: 1

Optional Accessories

Part	Description	
BD Diesel Exhaust Brake <ul style="list-style-type: none"> • 2033137 	Turbo mount exhaust brake. Will work with a BD Diesel Screamer Turbo or a stock turbo.	
BD Diesel Hose and Clamp Kit <ul style="list-style-type: none"> • 10452510 	Boots can withstand over 100psi and are secured by rugged, spring-loaded, stainless steel clamps.	

Introduction

The BD Screamer turbo series is now available for the 1998-2002 Dodge 5.9L Cummins. The Screamer turbo is designed to be a drop-in stock-appearing performance turbocharger that increases the capacity for boost, decreases drive pressure, and peak EGTs without affecting low-end drivability. The 5.9L Cummins screamer turbo utilizes 58mm billet compressor wheel and a 70mm turbine wheel.

Tools Required for Installation

- 8mm-21mm Metric Socket and Wrench Set
- Torque Wrench
- Flat Head Screwdriver

Installation

Removal

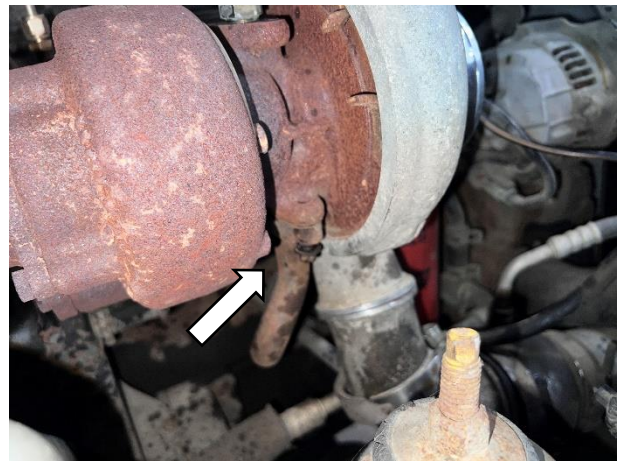
1. Disconnect the battery and secure the vehicle with wheel chocks.

2. Remove the air intake tube and box. Loosen clamps with a flat head screwdriver or a 8mm socket.



3. Disconnect the Oil drain bolts using a 10mm socket. There is one on each side.

Note: Remove gasket from oil drain. It will be replaced.



4. Disconnect and remove the turbo oil feed using a 21mm wrench. A 19mm wrench can be used to support fitting.

Note: Remove the turbocharger oil supply fitting and put it aside. It will be used on the new turbo.



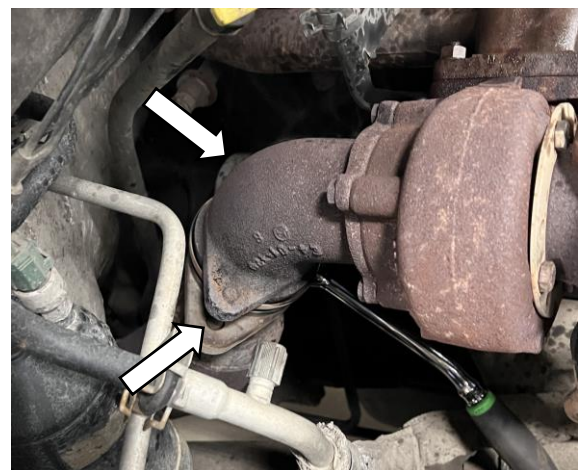
5. Remove the turbo outlet elbow from the turbo by removing the T-bolt clamp and V-band clamp using a 10mm and 11mm socket.



Note: Put this elbow aside, it will get used with the new turbo.

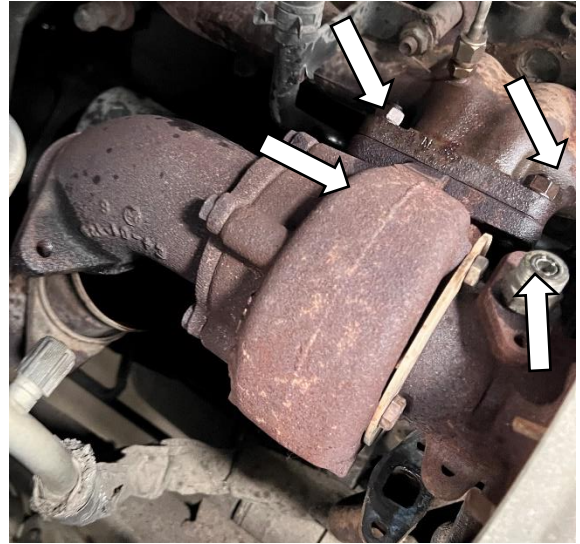


6. Remove the two bolts connecting the downpipe using a 13mm socket. The bolts can be sprayed with penetrating fluid to make the removal easier.



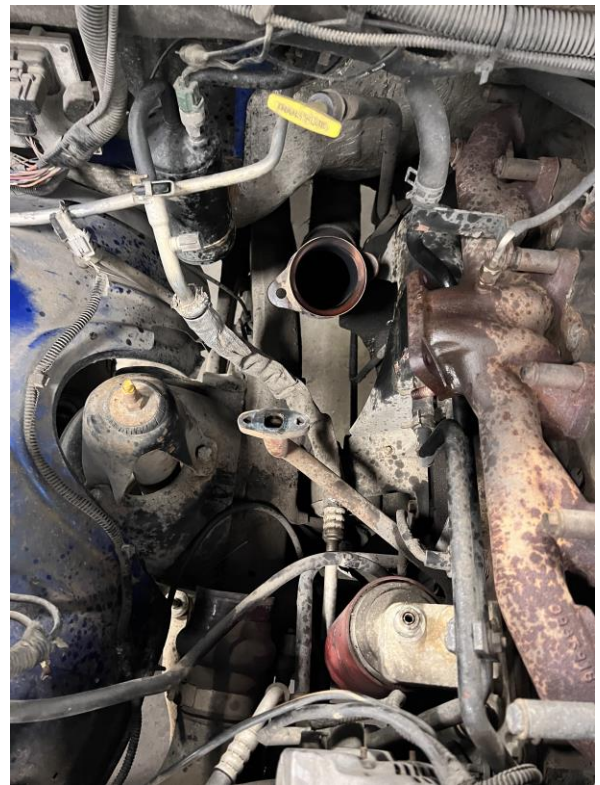
7. Remove the four turbo mounting nuts with a 15mm socket/wrench.

Note: Once the last nut is removed the turbo can fall. Make sure to maintain a hold to avoid possible damage



8. Remove the turbo and gasket from the engine bay. Also, remove oil feed fitting from the old turbo.

Note: Clean up oil drain, exhaust manifold, and downpipe connections in preparation for installation.

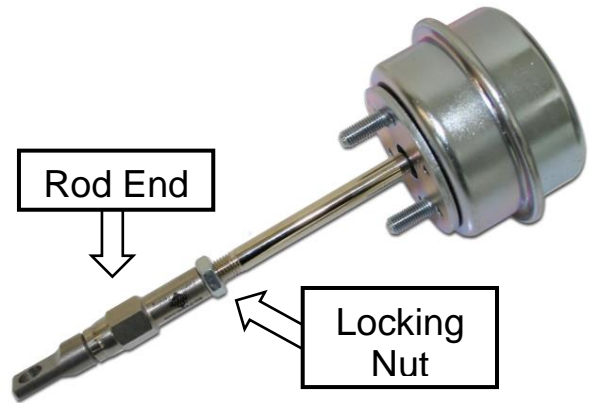
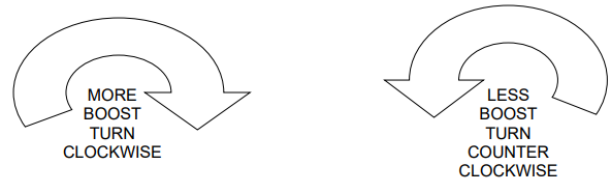


Installation

NOTE: The wastegate is preset to 20 PSI for automatic transmission applications. Wastegate can be manually adjusted to 27 PSI for manual transmission applications.

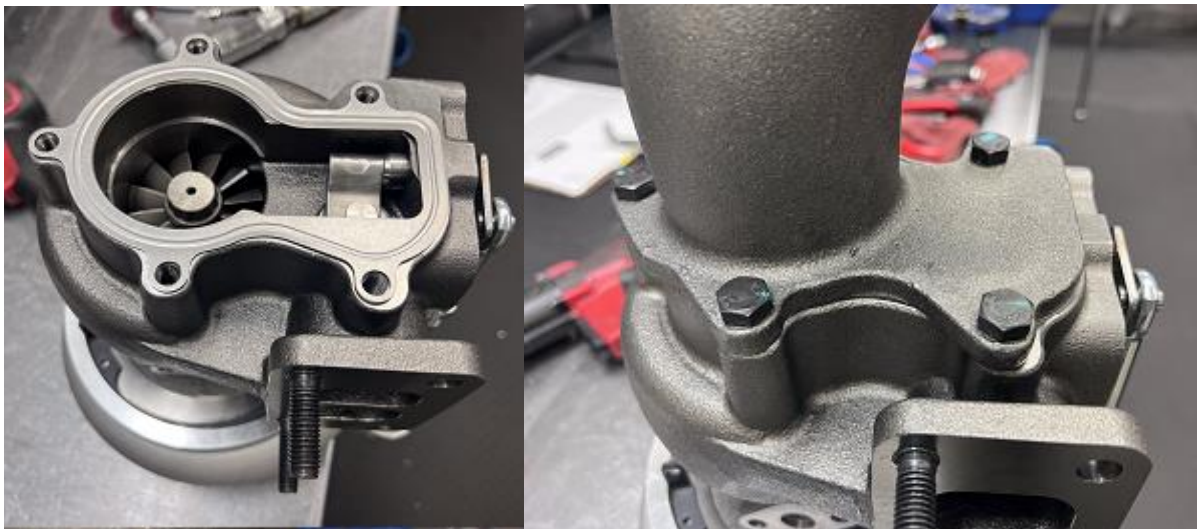
To adjust the unit, loosen the lock nut and turn the rod end. Remember: the shorter the rod, the more boost pressure you will make. When looking at the rod end, turn the rod end clockwise for more boost pressure. The wastegate is pre-set to open at 20 PSI. Once you have set the boost pressure, re-install the circlip and tighten the lock nut.

1 turn clockwise = + 2.5 PSI.
ie: 3 turns clockwise will become 27.5 PSI

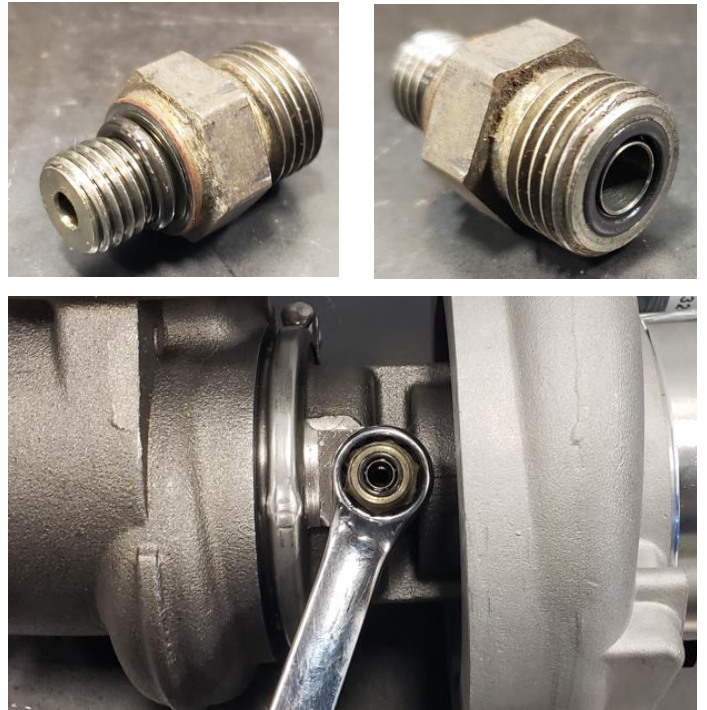


Automatic Transmission	Default (20PSI)
Manual Transmission	3 CW Turns (27.5PSI)

NOTE: For ease of shipping, the downpipe exhaust adapter was removed and requires reinstallation. Place the gasket and tighten the bolts on the downpipe exhaust adapter to 31 ft.lbs.

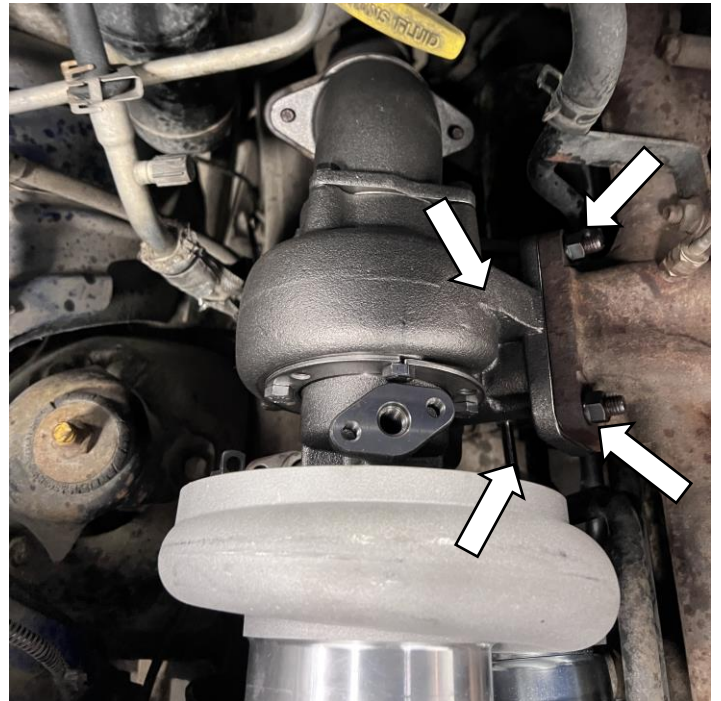


1. Using the new gaskets (FT-920156020 & 3922794) provided in the kit, install the oil supply fitting from the old turbo to the Screamer turbo. Tighten fitting to **36 N.m (27 ft.lbs)** with a 19mm socket.

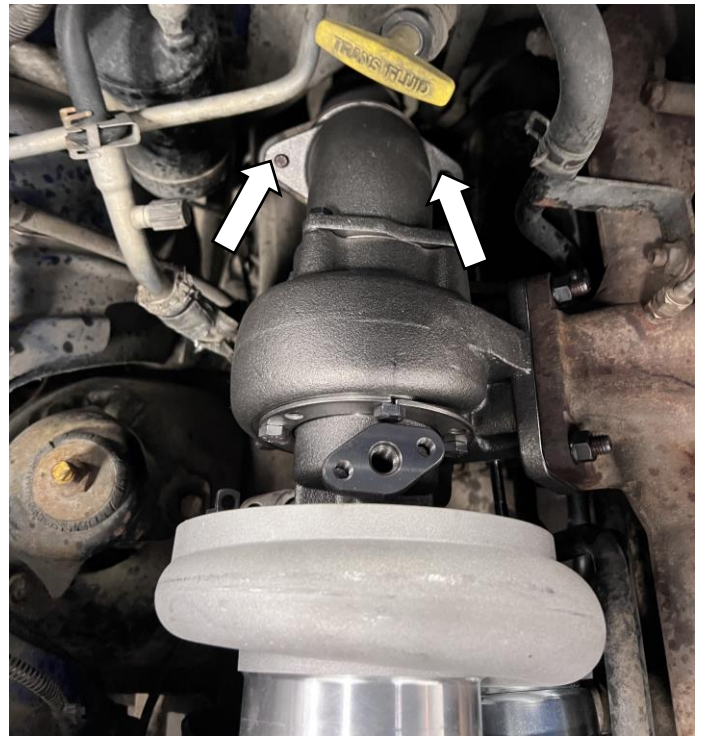


2. Secure the turbo to the exhaust manifold with the two upper turbo mounting nuts and the two lower turbo mounting nuts. Use the NEW gasket provided with the turbo, and tighten nuts to **43 N.m (32ft. lbs)** with a 14mm socket.

Important! Improper torque of flange can lead to exhaust leak, gasket failure and flange damage.

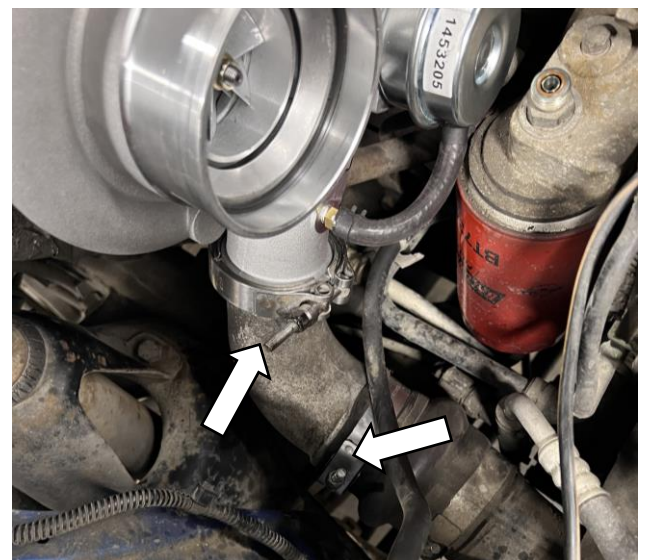
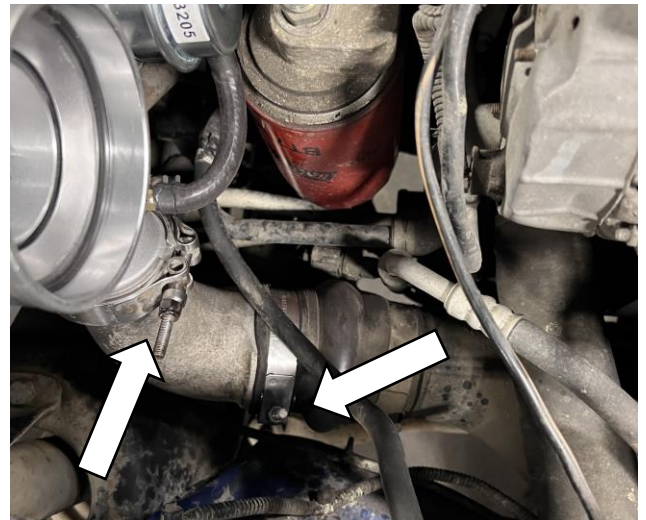


3. Connect the turbo to the downpipe using a 13mm socket.



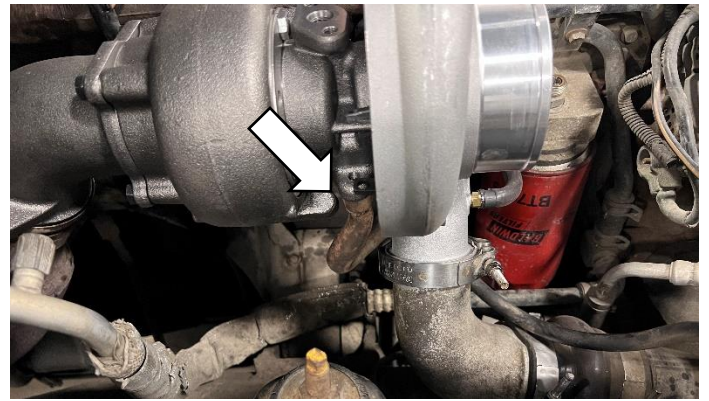
4. Connect the turbo outlet elbow to the turbo with the V-band clamp and T-bolt clamp. Tighten the clamps to **11.3 N.m (100in.lbs)** using a 10mm socket.

Note: Clean off edges of the exhaust elbow to make connections smoother. Ensure O-Ring is retained in elbow groove.



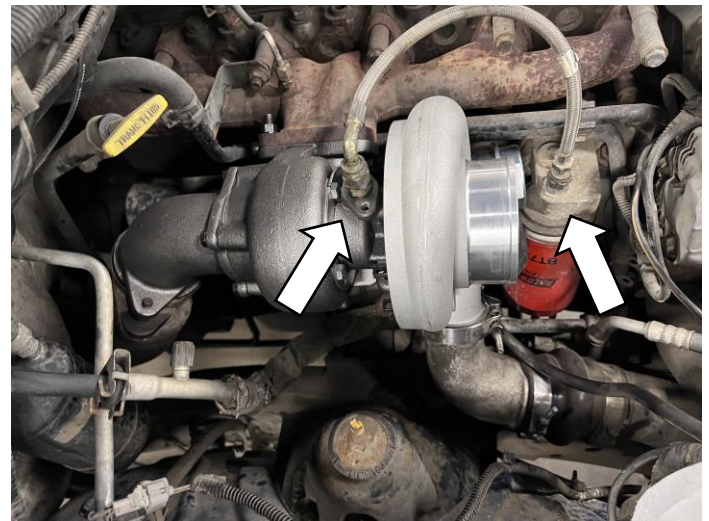
- Using the new gasket provided in the kit, install the oil drain tube to the turbo. Tighten the drain tube bolts to 24 N.m (18ft.lbs) with a 10mm socket.

Note: Make sure to remove old gasket completely.



- Pre lubricate the turbo. Pour 30 to 60ml (1 to 2 oz), of clean 15w40 engine oil in the oil supply inlet. Install and tighten the oil supply line with a 21mm wrench. Torque to **24 N.m (18 ft. lbs)** with a 21mm crow's foot.

Note: Carefully rotate the turbocharger by hand to distribute the oil thoroughly. Use torque wrench with crow foot at 90 degrees to account for the extension.



- Install air intake box and intake tube. Tighten the clamps with a flat head screwdriver or 8mm socket.



- Connect the battery and start the engine and check for leaks

Troubleshooting		
Error Code	Possible Causes	Solution
P0234 – Turbo Boost Limit Exceeded	Wastegate Set to High	Adjust wastegate to 20 PSI for automatic transmissions and 27 PSI for manual transmissions.