



Installation Instructions

Dodge PowerMax Turbo Upgrade Kit

1998.5 - 2002 Dodge Ram
2500 & 3500 Diesel Trucks

Part Numbers: 759361-0001 (Stage 1)
759361-0002 (Stage 2)
759361-0003 (Stage 3)

Parts List			Tools Needed	
Item	Description	Qty		
1	Turbocharger	1	<ul style="list-style-type: none"> • 7/16" deep-well socket • 7mm socket • 8mm 12-point socket • 10mm socket • 13mm socket • 14mm socket • 10mm hex socket 	<ul style="list-style-type: none"> • 13mm open end wrench • 14mm open end wrench • 13/16" open end wrench • Torque wrench • 6" extension
2	Ancillary kit (includes)	1		
3	Gasket Kit (includes)	1		
4	Turbine inlet gasket	1		
5	Oil drain gasket	1		
6	Turbine inlet bolt	2		
7	Turbine outlet adapter kit (includes)	1		
8	Turbine outlet adapter	1	<ul style="list-style-type: none"> • NOTE: Bolt and fastener sizes may be different from one model year to the next depending on OE specifications. Different tools than those listed above may be required. 	<h3>Recommended Other Items</h3> <ul style="list-style-type: none"> • Factory Service Manual • Safety glasses • Catch basin for engine coolant • Engine coolant (quantity per service manual) • Anti-seize compound • Oil filter • Oil (quantity per service manual)
9	Bolts	6		
10	Water Line Kit (includes)	1		
11	Water line, inlet	1		
12	Water line, outlet	1		
13	Banjo bolt	2		
14	Crush Washer	4		
15	Instructions, installation	1		
16	Compressor housing clamp	1		
17	Oil inlet fitting kit (includes)	1		
18	Oil fitting, inlet	1		
19	O-ring seal	1		
20	O-ring seal	1		
21	Bolt	2		

IMPORTANT INFORMATION - PLEASE READ CAREFULLY



We recommend that this turbo upgrade kit be installed by a qualified automotive technician. If you have any doubts as to your ability to install this turbo upgrade kit, consult with a local automotive repair company. Please be sure to carefully read all of the attached instructions prior to starting the installation process. If you have any questions about the enclosed parts or the instructions, call the distributor that you purchased the kit from for clarification.

Prior to the PowerMax Kit installation, be sure that the vehicle is parked on a level surface and the engine is cool. Engine fluids and components can be extremely hot following normal vehicle operation. Avoid direct contact of engine fluids or components with your skin; may cause personal injury.



NOTE: It is recommended that the oil and oil filter are changed prior to installing the Garrett turbocharger. This will provide clean oil to the new turbocharger. To ensure optimal performance, always follow oil and filter change intervals per the Factory Service Manual.

Installation Instructions

1. Disconnect the negative terminal from both batteries.
2. Drain engine coolant according to the service manual.
3. Loosen the clamp on the compressor inlet hose and remove hose (Fig. 1). Leave the hose attached to the air filter housing.



Fig. 1

4. Unclip the four clips on the top of the air filter housing (Fig. 2). Remove the top of the air filter housing with the hose still attached and set aside.



Fig. 2

5. Remove the three fasteners on the inside bottom of the lower half of the air filter housing (Fig. 3). Remove the lower half of the air filter housing and set aside along with the three fasteners.



Fig. 3

Installation Instructions (cont'd)

6. Remove nut on compressor housing discharge V-band (Fig. 4) and set aside.



Fig. 4

7. Slide V-band down elbow, reinstall nut loosely, and move elbow down out of the way as shown in Fig. 5.



Fig. 5

8. Remove the oil line from the top of the stock turbocharger (Fig. 6).



Fig. 6

9. Using a rag, move the oil line out of the way (Fig. 7).



Fig. 7

Installation Instructions (cont'd)

10. Remove the two bolts on the oil drain flange, located on the bottom of the turbocharger (Fig. 8). Set the two bolts aside. Separate the oil drain from the turbocharger center section. Inspect the oil drain flange for remaining gasket material. Remove gasket material prior to Garrett turbocharger installation.

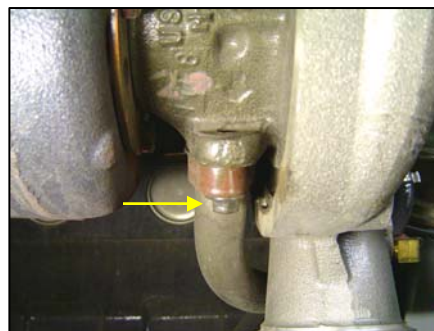


Fig. 8

11. Remove the bolts on the exhaust elbow flange and set aside (Fig. 9). The bolt head is on the bottom side of the flange.



Fig. 9

12. Remove the two rear exhaust flange nuts located on the bottom of the turbocharger flange and set aside (Fig. 10). While supporting the turbocharger, remove the front two flange nuts and set aside. Carefully remove the stock turbocharger from the vehicle.

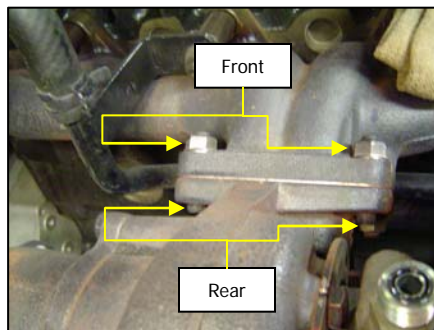


Fig. 10

13. Disconnect and remove the coolant hose (Fig. 11) from the tube and move it out of the way.



Fig. 11

Installation Instructions (cont'd)

14. Remove the nut on the coolant tube bracket and pull the bracket off of the stud. Reinstall the nut (Fig. 12) and torque to 18 lbf-ft.

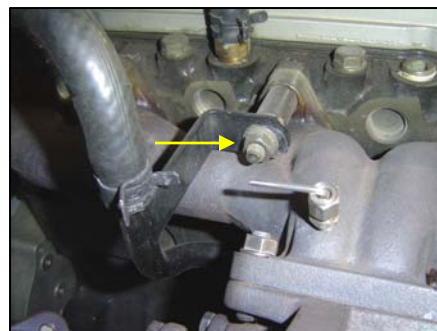


Fig. 12

15. Remove the coolant tube assembly from the engine (Fig. 13). This assembly will not be used with the Garrett turbo upgrade kit. Retain the rubber hose and clamps.



Fig. 13

16. Place the Garrett turbocharger on a workbench and remove the two compressor housing bolts and clamp shown in Fig. 14. One of these bolts will be reused.

Note: A single clamp will be used for the Dodge application to provide clearance for the stock drain flange.

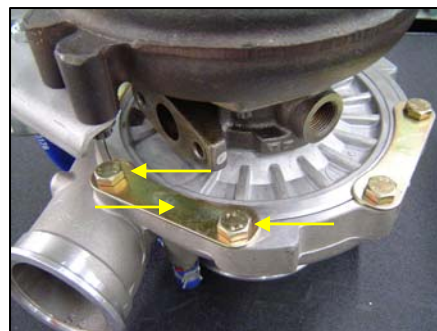


Fig. 14

17. Install the clamp provided in ancillary kit 759360-1 using one of the bolts from Step 16 as shown in Fig. 15. Torque to 100 lbf-in.

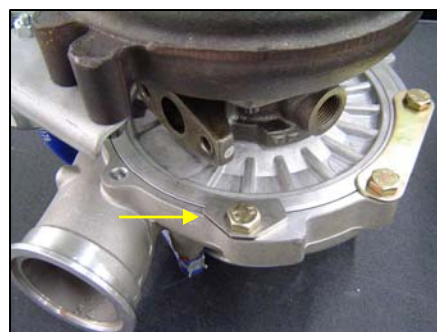


Fig. 15

Installation Instructions (cont'd)

18. Using the smaller water line, one banjo bolt and two crush washers from kit 764062-1, install the water line on the center housing. This water line will use the port nearest to the turbine housing inlet flange as shown in Fig. 16.

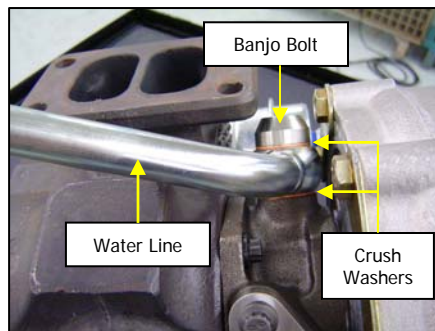


Fig. 16

19. Position the water line so there is about a 1/4" – 1/2" of space between the tube and the turbine housing as shown in Fig. 17. Using a **10mm hex socket** torque to 30 lbf-ft.



Fig. 17

20. Use the exhaust elbow and the six bolts from kit 764192-1 and install onto the turbine housing using a **8mm 12-point socket** as shown in Fig. 18. Torque to 17 lbf-ft.



Fig. 18

21. Use the larger water line from kit 764062-1 and install into vehicle prior to the turbocharger installation. Insert the tube into the hose. Leave the clamp in the position on the hose as shown in Fig. 19.



Fig. 19

Installation Instructions (cont'd)

22. Remove the bolt and spacer from the bottom right location on the exhaust manifold. Assemble the bolt and spacer onto the bracket of the Garrett supplied water line as shown in Fig. 20. Torque to 32 lbf-ft.



Fig. 20

23. Reinstall hose and clamp so that it is over the barb of the tube as shown in Fig. 21.



Fig. 21

24. Fig. 22 shows the water line properly installed prior to the installation of the turbocharger.



Fig. 22

25. Use the turbine inlet gasket from kit 716909-36 and place it on the studs on the stock manifold as shown in Fig. 23.

Note: It is recommended to place anti-seize compound onto the stud threads prior to installation.



Fig. 23

Installation Instructions (cont'd)

26. Obtain the four stock nuts that were set aside in Step 12 and the two bolts from the kit 759360-1. Carefully install the Garrett turbocharger onto the studs and hand-tighten the back nuts. Put anti-seize compound on the bolt threads and install the bolts and nuts as shown in Fig. 24. Torque to 32 lbf·ft.

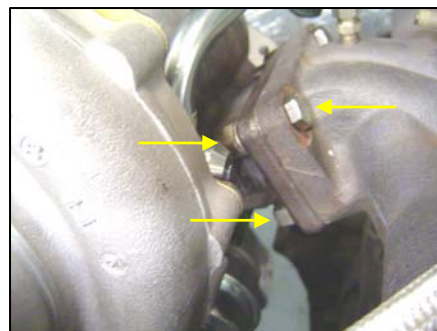


Fig. 24

27. Install the hose onto the tube approximately $\frac{3}{4}$ "-1". Install clamp onto the hose as shown in Fig. 25.

Note: Do not install the hose too far onto the tube. This could cause the hose to be pulled too tight.

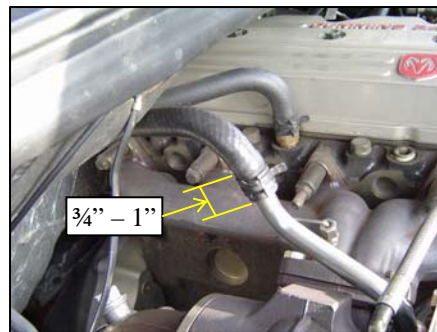


Fig. 25

28. Reinstall the compressor discharge pipe onto the Garrett compressor housing using the stock V-band and nut as shown in Fig. 26. Torque V-band nut to 72 lbf·in .



Fig. 26

29. Assemble the down-pipe to the Garrett exhaust elbow using the stock bolts as shown in Fig. 27. Torque to 25 lbf·ft .



Fig. 27

Installation Instructions (cont'd)

30. Use the oil outlet gasket from 716909-36 kit and place it on the stock oil drain flange as shown in Fig. 28.



Fig. 28

31. Using the stock bolts, assemble the oil drain flange onto the center housing of the turbocharger as shown in Fig. 29. Torque to 18 lbf-ft.

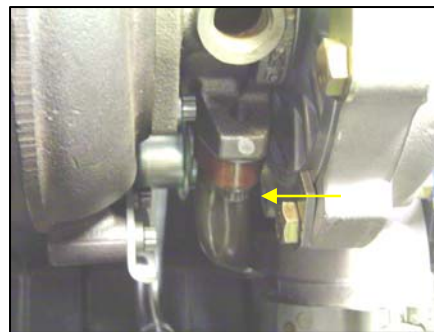


Fig. 29

32. Use the last banjo bolt and two crush washers from kit 764062-1. Pull the flexible end of the water line up to the water port on the center section and assemble using a **10mm hex socket** as shown in Fig. 30. Torque to 30 lbf-ft.

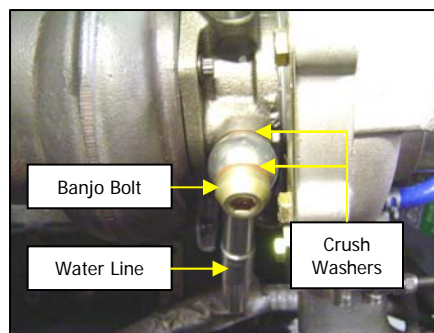


Fig. 30

33. Pre-lube the turbocharger. Fill the oil inlet hole with clean engine oil and rotate the compressor wheel by hand several times to distribute the oil thoroughly. Refill the oil inlet hole one more time prior to installing the oil inlet fitting.

Installation Instructions (cont'd)

34. Use the oil inlet fitting and larger O-ring from kit 759359-1. Install the O-ring into the groove on the bottom of the fitting as shown in Fig 31.



Fig. 31

35. Using the two bolts supplied in kit 759359-1, install the fitting onto the Garrett turbo's center housing using a **8mm 12-point socket** as shown in Fig. 32. Pay close attention that the O-ring did not come out of the bottom groove during installation. Torque to 17 lbf·ft. Install the small O-ring from kit 759359-1 onto the oil inlet fitting.

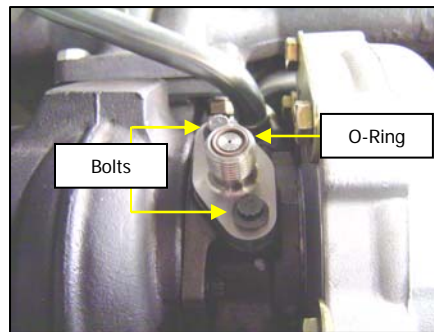


Fig. 32

36. Assemble the stock oil line onto the fitting as shown in Fig. 33.

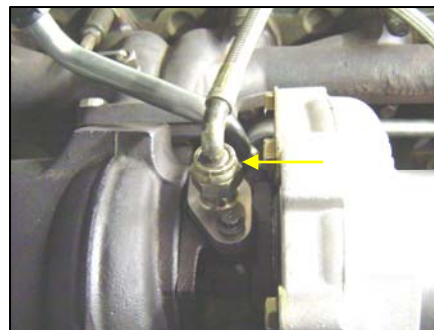


Fig. 33

37. Using the stock three fasteners, reinstall the lower half of the air filter housing as shown in Fig. 34.



Fig. 34

Installation Instructions (cont'd)

38. Install the air filter and the top of the air filter housing, with the hose attached, using the four stock clips as shown in Fig. 35.



Fig. 35

39. Assemble the hose onto the compressor housing inlet as shown in Fig. 36 and tighten the clamp. Torque to 72 lbf-in.



Fig. 36

40. The installed PowerMax Kit is shown in Fig. 37.



Fig. 37

41. Refill the engine coolant per the service manual.

42. Check the engine oil level.

Installation Instructions (cont'd)

43. Attach the negative battery terminals on both batteries.

44. Start the vehicle and allow it to idle until the engine is at operating temperature.
Check for leaks.

45. Once it is confirmed that there are no leaks, you are ready to enjoy your new PowerMax turbocharger upgrade kit!