

Procedure:

Installation of the ATP Eliminator Series turbo hardware kit for the 1.8T B5/B6 Audi A4/VW Passat Years 1996 through 2005.



Parts Checklist (Bill Of Materials):

1. Turbocharger unit with integral waste gate - Eliminator Series (GTRS or GT2X)
2. GT oil inlet restrictor/fitting
3. Oil return studs(8mm to 6mm), nuts and a gasket
4. Gasket (Turbo to manifold)
5. Gasket (Turbo to Cat converter)
6. 3x 10mm Hex Head Bolts (Turbo to manifold) along with washers
7. 3x 10mm studs (Turbo to Cat converter)
8. 3x 10mm copper locknuts (Turbo to Cat converter)
9. 6x 30mm hose clamps to replace all 1 time use factory clamps removed during install
10. Coolant loop hose assembly (GT2X)
11. 90 degree rubber hose adapter for hose connection to back of block (97-99 cars)

GTRS kit adds the following:

1. Machined aluminum inlet adaptor (to use with stock turbo inlet hose)
2. Machined aluminum outlet adaptor (with boost pressure fitting)
3. Front coolant hose assembly to connect with stock coolant feed line.
4. Rear coolant fitting and line kit to replace stock coolant line.

Optional upgrade equipment:

1. Large diameter turbo inlet hard pipe kit (Required for over 200WHP).
2. 3" Stainless cat converter delete (Test pipe).

Some Notes regarding this turbo application:

The “Eliminator” series of bolt-on turbochargers has been designed to be both installation friendly and user friendly. The most basic use of this kit is to replace a defective K03 or K04 turbo without any modifications to the main components in the engine bay. The following procedure outlines the steps for installing the base turbo hardware kit which allows you to keep all stock supporting components. With the basic install, all emissions related components are retained. Refer to the supplementary documents to install the optional upgraded inlet pipe, racing test pipe, injectors, and ECU chip. Make no mistake though, this turbo is capable of 300+ HP in it's stealth-like form and can blend into the engine bay a stocker.

Begin Installation Process

Installation Tip #1 – Using a vehicle lift, securely place vehicle on lift so that bottom of engine components are accessible. In absence of a vehicle lift, use tall ramps, if possible. If jacks stands are to be used, make sure vehicle is securely planted before getting under the vehicle.

1. Drain fluids (both coolant and oil):

While it's not completely necessary to do so, draining both fluids is highly recommended. During turbo removal, since both oil and coolant fittings have to be disconnected, there is a high chance of oil coolant mixing. In addition, the new turbo will like to see fresh fluids running through its veins.

1. Using a 19mm wrench, undo oil drain nut on oil pan and allow oil to drain completely.
2. Disconnect the coolant hose leading from turbo to back of the engine block and allow coolant to drain completely.

2. Begin basic removal:



1. Remove two screws holding air box inlet duct in place.

2. Gently pull on entire air inlet duct assembly and remove.



3. Unscrew 2 screws holding air box top to air box bottom.
4. Pinch and disconnected round air injection hose from top of air box.
5. Disconnect MAF connector
6. Pull rubber small evap hose from top of air box.
7. Unscrew and remove large clamp holding rubber inlet to top of air box.
8. Wiggle and remove top half of air box.



9. Using flathead screwdriver, remove plastic pin holding bottom of air box to vehicle.



10. Remove bottom of air box from vehicle.



Installation Tip #2 – Using a spray on penetrating oil (such as liquid wrench lubricant), saturate all the exhaust nuts/bolts (turbo to manifold & turbo to down pipe) and allow it to sit. This will allow any rusted hardware to come loose without breaking. 5 minutes of preparation can save a lot of hours in nut/bolt extracting!



11. Remove the 4 (10mm) bolts holding the flat heat shield to the head.
12. Remove the 2 (6mm) socket head bolts holding the steel oil line to the head.

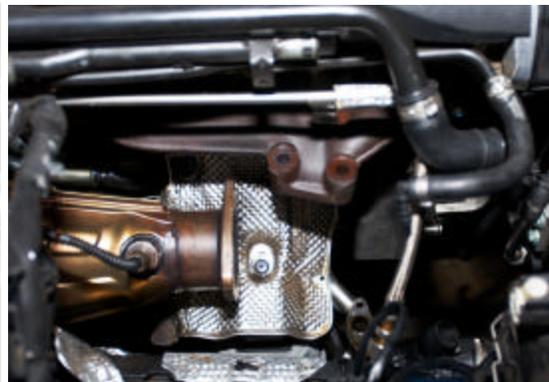
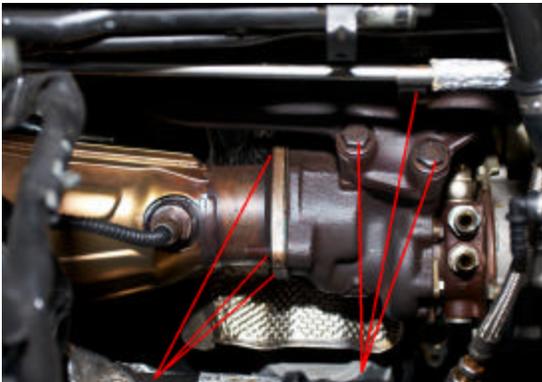


13. Unscrew the oil feed line and coolant feed line from top of turbo.



14. From under the car:

- a. Unbolt the two (5mm) socket head screws holding the return line to the turbo.
- b. Unscrew the compressor outlet hose clamp and pull the rubber hose aside.
- c. Remove the coolant return line leading from turbo to back of engine block (if not previously done).



15. Unbolt the 3 turbo to manifold bolts and 3 turbo to catalyst nuts.

16. Remove turbo assembly from vehicle with catalyst/downpipe and manifold still intact.



17. Ensure that the following is in place with the new turbo prior to install:
 - a. The clocking of compressor inlet/outlet is similar to stock.
 - b. The clock of the oil inlet/outlet is similar to stock.
 - c. All the nuts and bolts on the turbo are firmly torqued.
18. Place the 10mm studs onto catalyst side of the turbo and hand tighten in place.

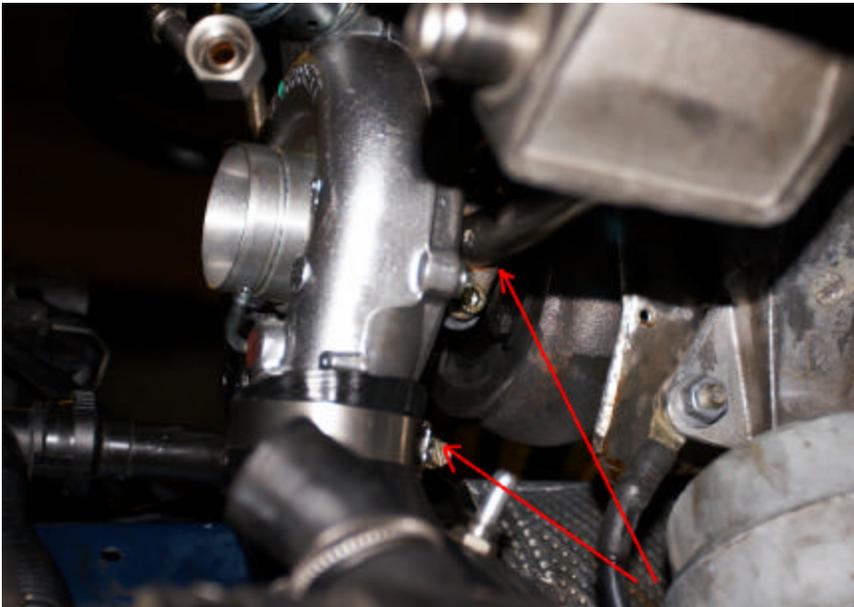


19. Bolt in the new Eliminator turbo by sliding into place. Torque down the turbo to manifold and turbo to catalyst bolts.

Installation Tip #3 – Turbo to catalyst/downpipe nuts have 17mm heads from the factory. The locknuts provided in our kit are 14mm, leaving extra room for easy install. Torque to 35 ft/lb.



20. Reinstall the oil feed line and the air injection hose. Replace one time use clamp with new clamp provided.
21. Reinstall the flat heat shield and two bolts holding oil feed line to cylinder head.



22. Reinstall the top of oil return line into the bottom of the new turbo.
23. Slip the compressor discharge hose on and firmly clamp down.
24. COOLANT: For GT2X – Install the loop hose from feed all the way to back of block.
For GTRS – Install the original coolant feed at top to port on turbo
Install the steel braided coolant return from turbo to back of block.



25. Reinstall the stock inlet hose and use clamps provided on all one time use clamps removed.
 - a. Note: GT2X inlet diameter requires a little effort to slip on the stock inlet hose.
 - b. Note2: GTRS inlet diameter has been adapted to stock diameter so just slip on.



26. Reinstall the bottom half of air box along with the black plastic retaining pin.



27. Reinstall the top half of air box in reverse order and tighten down two screws and all clamps.



28. Reinstall the top air duct and 2 mounting screws.

Note: Installation of the stealthy, undetectable Eliminator hardware is complete. Proceed to filling fluids and follow startup procedure carefully.

Pre - Startup Process

1. Fill fluids (both coolant and oil):

1. Make sure oil drain plug has been re-installed on oil pan.
2. Fill engine with new oil to proper level. Oil type and capacity can be found in the car owner's manual.
3. Fill coolant system with factory specified coolant type.

2. Circulate the oil through the turbo **WITHOUT** starting the engine!

Option #1: Remove the ECU from the car.

Option #2: Disconnect all the injector connectors from the injectors and disconnect all the connectors from the coil packs.

1. Once one of the above options has been met, proceed to crank the engine (as though trying to start it) for 10 seconds at a time for 3 minutes.
2. If ECU was previously removed, reinstall now. Re-install injector connectors and coil pack connectors and engine will start.
3. Allow engine to idle and observe for leaks. If any leaks are detected, shut down the car and fix. Repeat steps 1 through 3 as necessary.
4. Once there are no leaks found, allow engine to idle for 15 to 20 minutes for proper warm-up.

Note: During warm up idle, all the oil residue from installation will burn off. During this time, there will be light smoking due to the burn off. If there is heavy, cloudy white smoke or any foreign mechanical sounds observed, shut the car down and contact your nearest dealer.

3. Test Driving:

1. An upgraded turbo vehicle should never be driven without both a boost gauge and an air fuel monitoring device. If you do not have both installed, do not drive the car!
2. Install any supporting programming and/or injectors as necessary and follow the software manufacturer's specifications during the drive.
3. During the driving, monitor that boost levels never exceed the software provider's limits and air/fuel ratio does not go lean. Anything over 12:1 A/F under wide open throttle is considered lean.

Happy Motoring!

Addendum 1:

Applicable to Eliminator GTRS installation on all models years (1996 to 2005)
Audi A4 and VW Passat:

Coolant line construction diagram

COOLANT FEED LINE CONSTRUCTION



Addendum 2:

Applicable to Eliminator GTRS installation on all models years (1996 to 2005)
Audi A4 and VW Passat:

Coolant line construction diagram

COOLANT RETURN LINE CONSTRUCTION

APPLIES TO 2000-2005 1.8T ENGINES (EX. AWM, ATW)



APPLIES TO 1996-1999.5 1.8T ENGINES (EX. AEB)

