



The goal of AMS is to provide the highest quality, best performing products available. By utilizing research and development, and rigorous testing programs AMS will never compromise the quality or performance of our products. In addition, AMS will only provide the finest customer service offering only parts and advice that are in the best interests of the customer. AMS was built on a foundation of integrity. This is who we are; this is what you can count on.

A vehicle modified by the use of performance parts may not meet the legal requirements for use on public roads. Federal and state laws prohibit the removal, modification, or rendering inoperative of any part or element of design affecting emissions or safety on motor vehicles used for transporting persons or property on public streets or highways. Use or installation of performance parts may adversely affect the drivability and reliability of your vehicle, and may also affect or eliminate your insurance coverage, factory warranty, and/or new OEM part warranty. Performance parts are sold as-is without any warranty of any type. There is no warranty stated or implied due to the stresses placed on your vehicle by performance parts and our inability to monitor their use, tuning, or modification.

These instructions are provided as a guide only as there are many variables that cannot be accounted for concerning your particular vehicle, including but not limited to model year differences, model differences, the presence of non-OEM parts, and modifications that may already be or were previously installed. A basic knowledge of automotive parts and systems is helpful but a better understanding of the parts and systems on your particular vehicle may be required.

If you have any questions or issues at any time during the installation of your AMS product(s) please call us for technical assistance. The AMS tech line can be reached during business hours at 847-709-0530 for AMS products only.

From Bottom Side of Vehicle

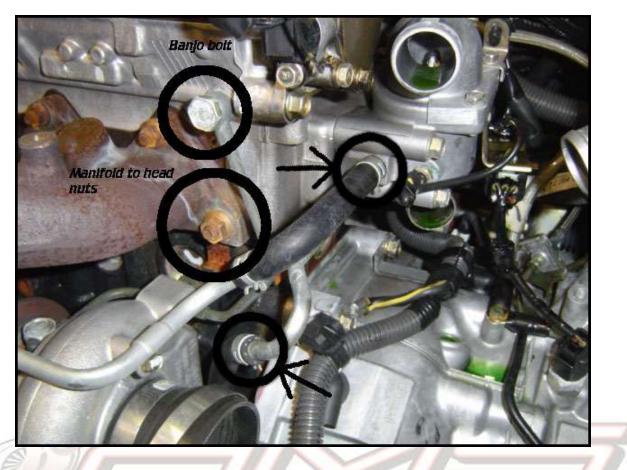
- 1. Disconnect battery
- 2. Jack up front and use suitable jack stands to safely support car
- 3. Drain oil and coolant
- 4. Remove undertray and cross braces
- 5. Remove downpipe
- 6. Remove bolts for oil return line at oil pan
- 7. Remove brace at turbo downpipe by removing 2 14mm bolts
- 8. Remove front bumper assembly to gain access for removal of stock lower intercooler pipe (not necessary if stock downpipe has been replaced by aftermarket)
- 9. Remove stock lower intercooler pipe

From Top Side of Vehicle

- 1. Remove intake and air filter box
- 2. Remove exhaust manifold heat shield
- Remove spark plug wire cover and disconnect o2 sensor
- 4. Unplug fan resistor box and remove driver side fan *<u>NOTE</u>: If you still have a stock upper intercooler pipe you may need to remove the 12mm bolt on the upper pipe bracket and gently pry pipe away from fan to gain clearance

5. Once coolant is completely drained remove and set aside upper radiator hose

- 6. Remove upper radiator support bolts
- 7. Remove lower radiator hose from thermostat housing and remove radiator
 - 8. Remove turbo coolant lines



9. Remove all exhaust manifold-to-cylinder head nuts

10. Remove oil feed banjo bolt and save bolt

11. Pull stock turbo assembly forward and out through the top.

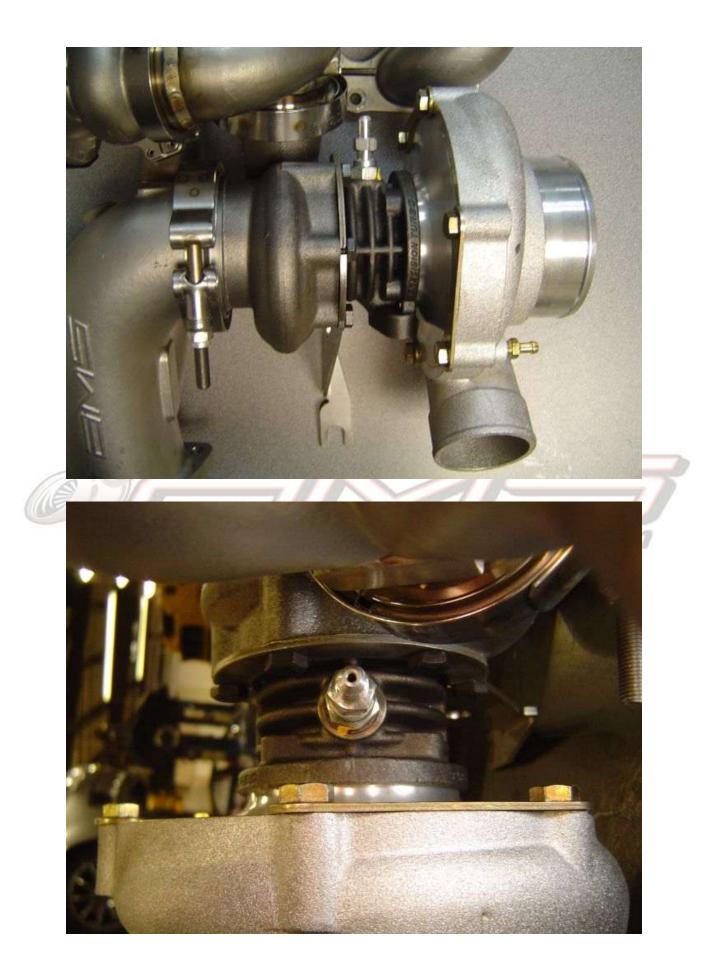
AMS Turbo Kit Assembly and Installation

1. Assemble the turbo kit as shown below. Leave the compressor cover bolts and o2 housing to turbine housing vband clamp loose at the moment. Clock the center section as shown below referencing the oil feed line. The turbo kit support bracket replaces one of the two center section retaining plates on the turbine housing, do not stack it on top of the regular retaining plate. While tightening the support bracket to the turbine housing push it towards where it will sit on the block. This will ensure it sits tightly against the engine block when mounted.



Re-Circulated Wastegate Turbo Kit







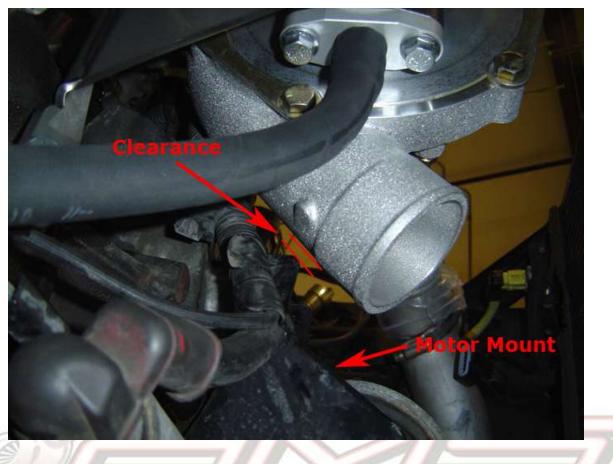


External Dump Wastegate Turbo Kit



2. Temporarily install the turbo kit. This is done to clock the compressor cover and check clearance around the turbo kit. The best way to do this is with one nut on the top of the header flange and one on the bottom. Then down below bolt the support bracket to the block, on some cars the hole that is used with the support bracket may need to be cleaned out, if that's the case use a M10x1.25 tap to clean up the threads and blow out with compressed air.

Turn the compressor cover until you have about $\frac{1}{2}''$ clearance between it and the motor mount bracket. Once correct tighten a bolt or two to hold the cover in place.



3. Remove the kit and tighten the compressor cover down. At this point you can also install the o2 sensor into the o2 housing and the oil return fitting onto the oil pan.

4. At this point you can re-install the kit. Tighten all header nuts and the support bracket bolt. Install the oil return line and install the downpipe. Once downpipe is all tightened down you can tighten the o2 housing to turbine housing vband clamp. The downpipe is what decides the location of the o2 housing.





5. Install the lower intercooler pipe.

6. Install the oil feed line. *<u>NOTE</u>: Do not over tighten!!! <u>Torque spec</u>: 10-14 FT-LBS



7. Loop the coolant lines using the supplied silicone hose.



8. Remove factory radiator fan and install slimline fan in place of removed fan following instructions in box. Cut small plug off of old fan and remove resistor box Wire new fan to cut connector: black-to-black, blue-to-blue.



9. Install radiator and re connect fan and resistor box. Use the supplied heat wrap on the upper radiator hose and overflow hose. The overflow hose also gets re-mounted using the supplied clamps that fit over the heat wrap. If the radiator hose is too close to the exhaust manifold you can cut off 1-1.5" off the radiator end of the hose to pull it away.



- 10. Install turbo intake pipe.
- 11. Install your method of boost control.
- 12. Refill oil and coolant.
- 13. Start vehicle and check for leaks.
- 14. Check oil level.

15. Let car warm up and bleed the cooling system and confirm the cooling fan turns on.

16. **GET TUNED!!!!**