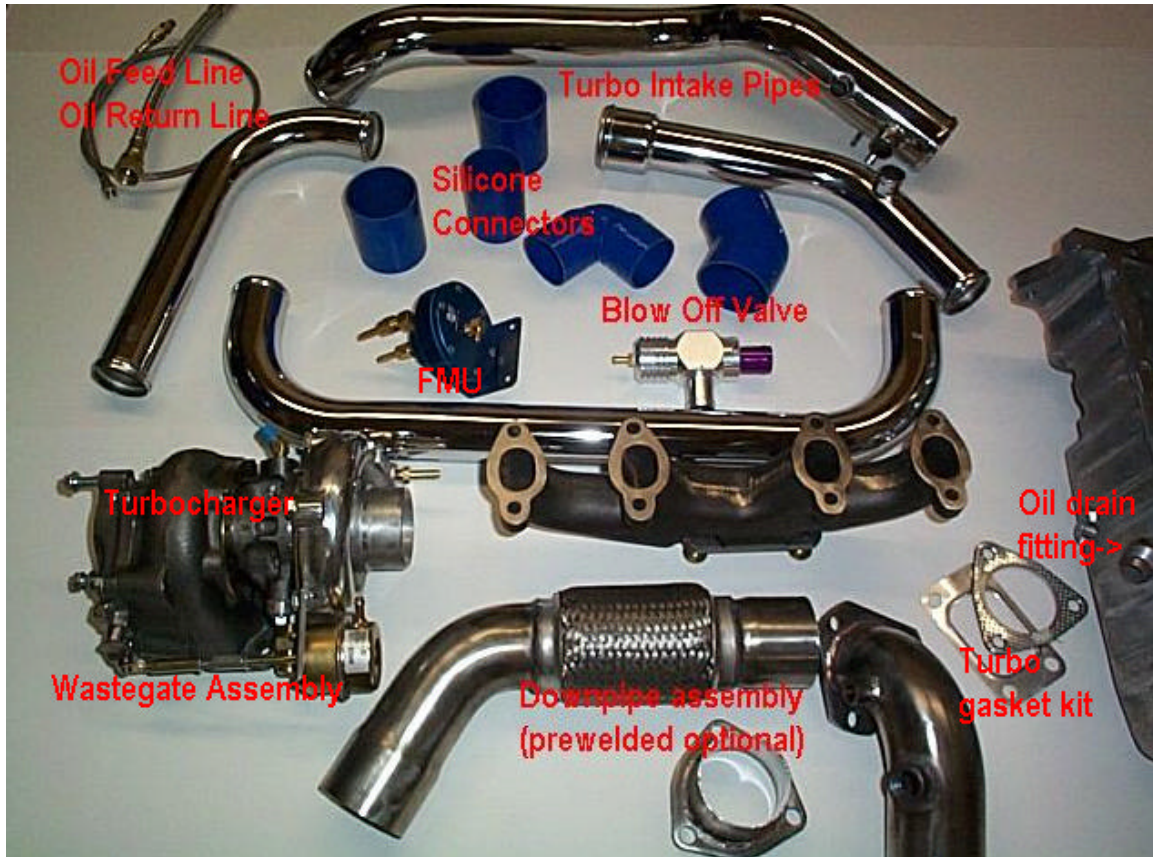


Procedure:**Installation of ATP Stage I Turbo on Jetta/Golf/GTI MKIV, 2.0L**

Warning: Check local laws before adding turbo components to your vehicle. Some states prohibit the addition of an aftermarket turbo system on emissions controlled vehicles.

**Parts Checklist:**

- Turbo Manifold
- Turbocharger w/ wastegate assembly
- Turbo downpipe assembly
- Oil feed line kit
- Oil return line kit
- Oil drain fitting (aluminum) – welded to oil pan
- Turbo gaskets kit
- Turbo intake pipes
- Silicone Connectors
- Blow off valve
- FMU – Fuel Management unit
- Hose Clamps
- Gasket maker to make oil pan gasket (hi temp silicone)

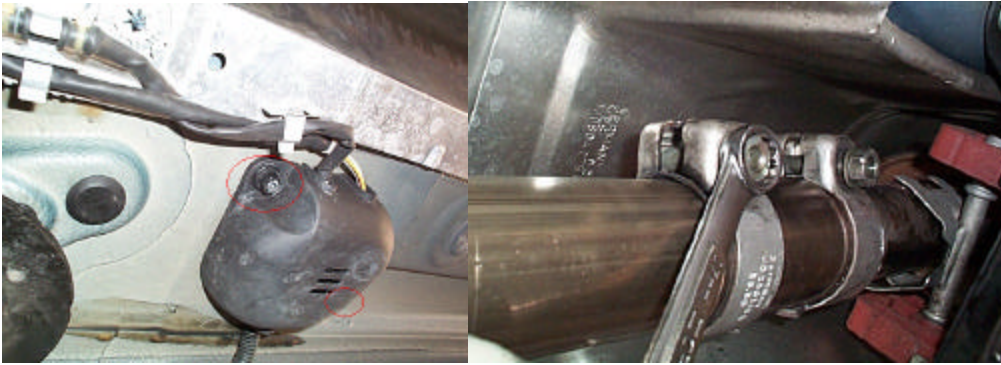
Tools Checklist:

- Liquid Wrench – Spray Lubricant
- 13 mm combination wrench
- 17 mm combination wrench
- 22 mm combination wrench
- 10 mm socket and ratchet driver
- 12 mm socket and ratchet driver
- 13 mm socket and ratchet driver
- 15 mm combination wrench
- 15 mm socket and ratchet driver
- 6mm hex bit
- 5mm hex bit
- 12mm – 12point bit
- Large Flathead screwdriver

Instructions:**Remove stock parts: Downpipe, Exhaust manifold, Heatshield for exhaust manifold.**

1. Raise vehicle and Spray Liquid Wrench on all nuts and bolts prior to attempt to removal in order to prevent stripping or damaging of parts. Concentrate on the following:
 - 6 nuts/studs attaching downpipe to turbo
 - 2 nuts/bolts on band clamp attaching end of cat to exhaust pipe

Allow minimum of 10 – 15 minutes for lubricant to take effect
2. Use 12mm – 12point bit/socket to unbolt the (6) bolts on the passenger side axle shaft attached to differential part of transmission.
 - Unbolt only the inside of the half shaft – do not undo the big axle nut – do not remove axle from vehicle
 - Move inside of axle out of the way as necessary to gain space to work
3. Using 17 mm socket, loosen the (2) 17mm nuts holding band clamp to end of cat and exhaust pipe:
 - Mark the rotation of the bolt so that the clamp can be re-installed in the same position
 - Loosen both nuts all the way and use large flathead screwdriver to spread the clamp to loosen from pipe

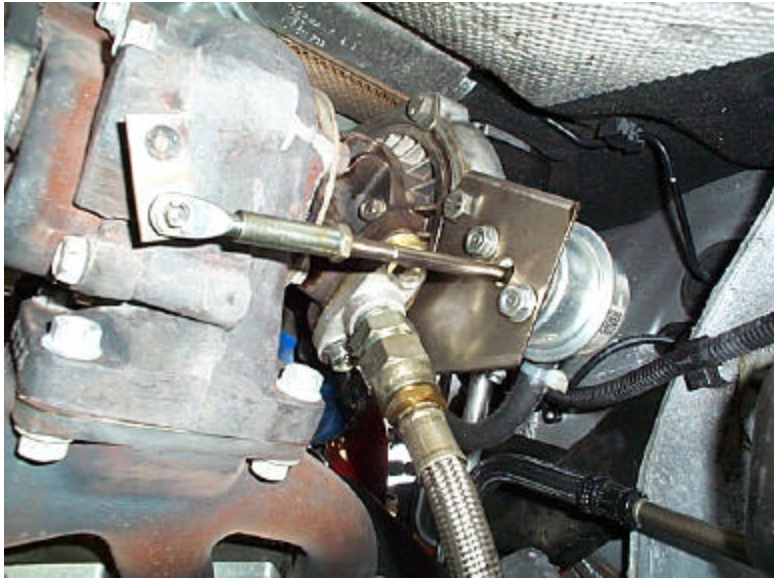


4. Unplug both O2 sensors from harness:
 - Use 10mm socket and ratchet to remove black cover from under car frame.
 - Unplug both O2 sensor plugs from harness and free wires from clips
5. Using 17 mm socket, loosen and remove the (6) 17mm nuts holding the downpipe to the bottom of the exhaust manifold.
6. Carefully slide the downpipe assembly down and away from the manifold.
 - Slide the band clamp at the end of the pipe into the downpipe, away from the exhaust to make room
 - Remove the stockpipe assembly (along with the O2 sensors and band clamp) from the car. Remove the front heatshield above the downpipe in order to make room for removal.



7. Using 22mm wrench, carefully remove O2 sensors from the stock downpipe. Mark the front O2 sensor (larger wire plug) vs. the rear O2 sensor (smaller wire plug) for appropriate reinstall.
8. Using 5mm and 6mm hex bits to remove heatshield from exhaust manifold.
9. Use 12mm socket and ratchet to remove exhaust manifold from engine.

Install Turbo components



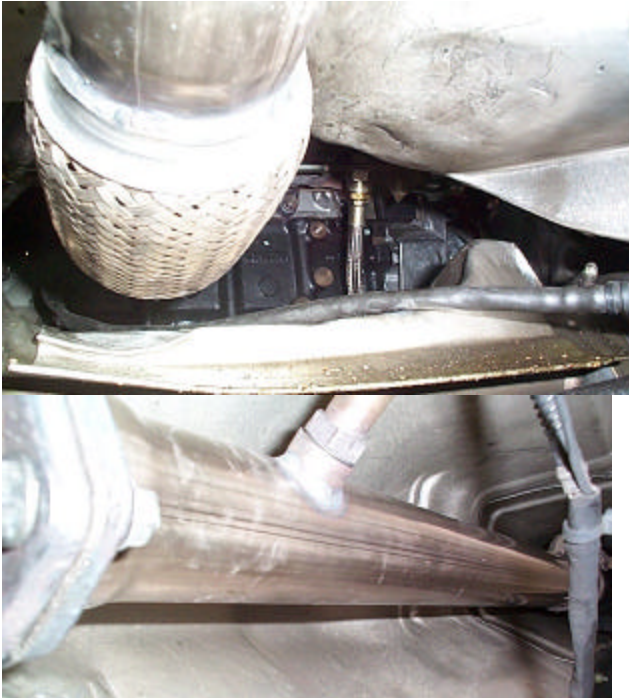
1. Install Exhaust Manifold onto head and torque into place.

Note: If engine has 4 small exhaust ports for secondary air pump, these holes must be plugged with tapered screw heads prior to installing the manifold.

2. Bolt turbocharger along with wastegate assembly to the turbo. Bolts: 3/8"-16 x 1.25" long

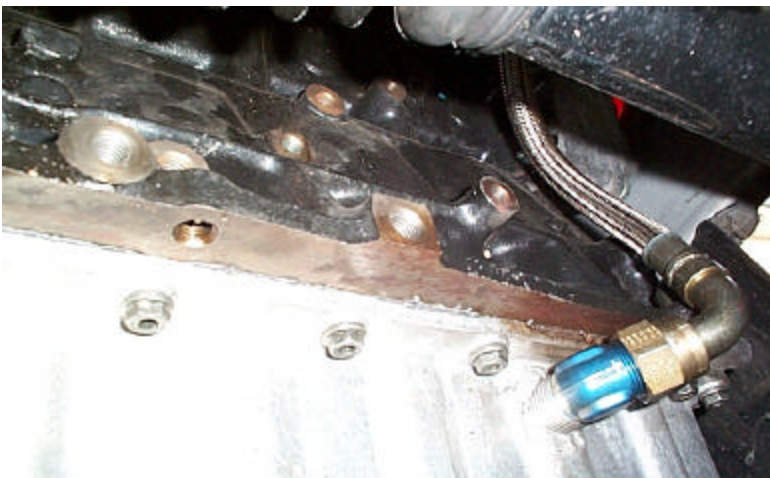


4. Bolt Downpipe to exhaust side of turbo. Top bolts: 8mm x 25mm, bottom bolt 20mm.



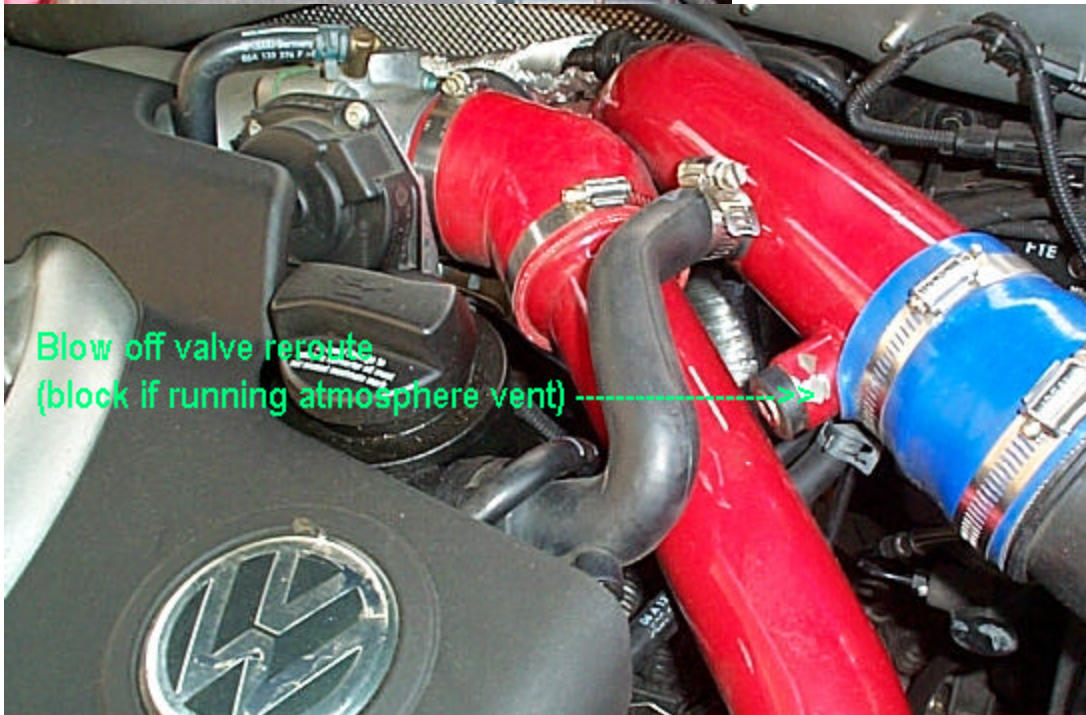
5. Reinstall O2 sensors into fittings provided on downpipe.
6. Bolt Oil drain flange to bottom of turbo. Use gasket. Bolts: 8mm x 25mm.
7. Attach oil drain line to bottom of oil drain flange.
8. Install prewelded oil pan and attach other end of oil line to fitting.

Note: Oil pan gasket not available. Use High temp silicone gasket maker to build gasket for aluminum oil pan.



9. Connect oil feed line to top of turbo and tap into available port on top of oil filter housing.
10. Install intake pipes using clamps and silicone connectors.

- 11. Connect all vacuum hoses to intake pipes.

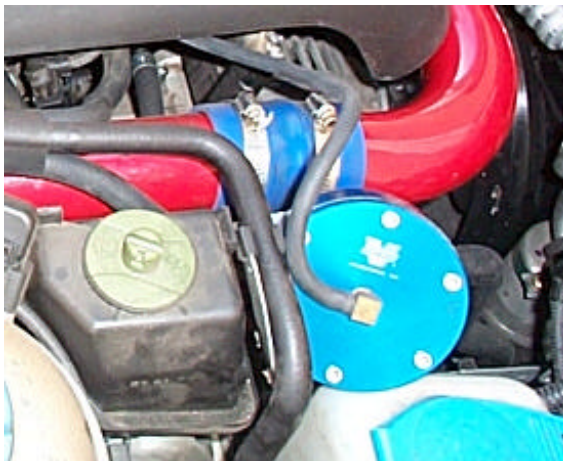


12. Mount Blow Off Valve and tee into vacuum signal on stock fuel pressure regulator.



13. Mount FMU unit and connect to fuel return line.

- Remove return line (marked with blue writing) from fuel rail and connect to port marked "OUT" on FMU.
- Connect hose from center port on FMU to now available return nipple on fuel rail.
- Tee FMU vacuum signal into vacuum signal on stock fuel pressure regulator.



14. Install boost gauge. Tap into vacuum signal for fuel pressure regulator.
15. Install Air/Fuel gauge or EGT to monitor fuel mixture.
16. Check all connections.
17. Fill engine with appropriate amount of engine oil.
18. Start car and allow car to idle for 5-10 minutes.
19. Watch for any leaks. Light smoking/fumes are normal and should burn off within 30 minutes of operation.