Thank you first and foremost for your support of our products and services! It's much appreciated and your business is ***NEVER*** under-played. Without you, we would not be here. Thank you very much.

-Dezod Crew

Install level on this system is a 6.5-8.5 out of 10**

- This is contingent upon your previous knowledge base of forced induction parts and installation procedures.

PLEASE NOTE THAT THIS SYSTEM IS DESIGNED AND INTENDED FOR OFF-ROAD USE ONLY.

Important
1. This installation should only be performed by a trained specialist who is very familiar with the automobile's mechanical, electrical and fuel management system.

2. If installed by an untrained person, it may cause damage to the kit as well as the vehicle.

3. Dezod Motorsports Inc. is not responsible for any damage to the vehicle's electrical system caused by improper installation.

READ THIS FIRST: Study these instructions completely before proceeding. Engine and/or turbocharger damage may occur if any component within these instructions is improperly installed. Dezod Motorsports, Inc or any of its distributors cannot be held responsible for damages as a result of negligent or improper installation. This complete turbocharger system can be installed using common tools and automotive procedures, but installer must have a thorough knowledge of automotive engine operation and feel comfortable working on the vehicle. If in doubt, contact Dezod Motorsports' technical support staff at 716-681-6666, between the hours of 9:00AM and 4:00PM EST, Monday through Friday.

Remove the turbocharger system from its carton and inspect for any obvious physical damage. All kit components are thoroughly inspected and carefully packaged prior to shipment from the factory. If any shipping damage is evident, contact your supplier and request that they process a claim with the shipper involved. Be sure to review the parts list below to verify that you have all necessary

system components to proceed. If any components in the parts list are missing, contact Dezod Motorsports Inc' customer service staff.

Although this turbocharger system has been designed to use many of the factory emissions controls, it is not currently "smog" legal in New York, and therefore recommended for "off road" use only. In other states, check local laws regarding aftermarket modification to emission controlled vehicles.

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. Dezod Motorsports reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

SAFETY REQUIREMENTS: It is recommended to follow these precautions.
• Always wear safety glasses & gloves.
• Turn the ignition switch to the OFF position & disconnect the battery.
• Always use properly rated jack stands when working under the vehicle.
• Prevent unexpected vehicle movement by using wheel chocks and/or parking brake.
• Operate the vehicle only in well ventilated areas.
• Do not smoke or use flammable items near or around the vehicle's fuel system.
• Keep hands, clothing and other objects away from moving parts when engine is running.

Tools needed:

1. **10-19mm socket set**
2. **10-19mm box wrench set**
3. **Standard socket set**
4. **Crescent wrench**
5. **Zip ties**
6. **Jack stands**
7. **Floor jack**
8. **Copper RTV**
9. **Anti-seize**
10. **WD40**
11. **Screw drivers (both Flat & Phillips)**
12. **5/32 & 8mm Allen keys (for TiAL products)**
13. **Razor blades or gasket scraper**
14. **Dead blow hammer**
15. **Clean oil**
16. **Oil drainage pan**
17. **Teflon tape**
18. **Pliers**
19. **7/16" & 7/32" drill bits**
20. **10ft of 5/32" vacuum line for the FIC is required**

21. 10ft of 7/32” vacuum line for the TiAL fittings is required

Bill of materials:

1. Genuine Garrett T3/T04E turbocharger
2. Stainless steel braided -4 AN oil feed line
3. Stainless steel "Ram Horn" tubular TIG welded turbo manifold
4. TiAL 38mm V-band wastegate
5. Stainless steel 2.5” downpipe w/ flex section
6. Stainless steel 2.5” s-pipe w/ gasket saddle
7. TiAL Q 50mm blow off valve
8. Front mount intercooler 26”x 6.5” x 3.5”
9. 6 intercooler pipes & 1 intake inlet pipe
10. K&N filter
11. CNC vacuum manifold
12. Plug-N-Play 550cc fuel injectors
13. AEM Fuel & Ignition Controller (AEM FIC)
14. Custom wiring harness for the AEM FIC
15. (1) straight 10AN & (1) 45 10AN push lock oil return
16. 12” of 10AN push lock oil return hose
17. (4) 8m x 1.25 x 20 Bolts
    a. (4) DP to Turbine Housing
18. (7) 8mm Lock Washers
19. (2) 3/8 bolts to CHRA flange
20. (2) 3/8 lock washers
21. (2) Cap Screw 5/16”-18 3.75” Length
22. (2) Hex Nut, Grade 2, 5/16”-18
23. (2) 8mm x 1.25 x 16 bolts w/ (2) 8mm washers
24. (4) 10mx1.5” Hex Cap Screws
25. Couplers
    a. (1) 3” straight
    b. (1) 3>2.5
    c. (3) 2.5”
    d. (1) 2>2.5 90*
    e. (2) 2”
    f. (1) 2.5>3 OR 2.5>2.5 90*
26. Clamps
    a. (3) worms
    b. (8) 2.5” clamps
    c. (5) 2” clamps
27. 2.5” v-band clamp

Start of install……

1. Make sure the car is totally cooled down before touching it to avoid burns.
2. Disconnect terminals of battery and remove the complete battery from the

engine bay. Use 10mm wrench on posts.

3. Remove the heatshield from factory header using 12mm sockets.
4. Remove factory header by removing the 5 nuts on the cylinder head using 12mm sockets.
    a. Remove the 14mm spring loaded studs on the bottom of the header.
    b. Remove the factory s-pipe by removing the 2 rear bolts that hook up to the factory exhaust.
5. Remove factory air box and intake tract.
    a. **Gently remove the MAF sensor from it's housing and set aside. THIS SENSOR IS FRAGILE AND VERY EXPENSIVE. Set it aside out of harms way to be used later in the install.**
6. Remove front fascia & lower Subframe splash guards
    a. Disconnect fog lights if equipped
7. Drain oil using a 14mm socket.
8. Using a 10mm socket, remove the bolts holding the oil pan in place
    a. **Factory RTV is very strong. This is the time consumer!**
    b. Using razor blades attempt to wedge them and cut away at sealant holding pan in place as much as possible before attempting to pry it off.
        i. If you can not get it off by cutting the sealant away, you may **GENTLY** pry at the pan and use **VERY LIMITED** force. Try not to dent, deform or destroy the mating surfaces of the pan or the block as this can cause **leaks.**
            1. DO not pry one side, pry evenly on several sides at once. Working your way around the pan.
            2. Recall the torque spec is minimal on the nuts going out and it will be the same going back in.
            3. *****Please note that your engine will be exposed to the elements at this point once the pan is removed. This must be a white glove laboratory at this point as any debris can enter the engine and cause immediate engine failure. Therefore, time is of the essence at this point.**
9. To avoid cleaning the pan twice, we recommend tapping the pan at this point.
    a. Take note of the front side of the pan and your insta-tap fitting. The center of the 10AN male off of the flange.

b. The top of the flange should mount 1” down from the top lip of the pan while also remaining directly under the front most bolt on the pan.
c. There is a paper gasket that is included with this fitting. Use this as a template with a paint marker to install the fitting.
    i. The pan fitting should be placed high enough to be above the oil line when the car is running. Remember this is essential because the oil return is gravity fed, and you do not want to re-enter the pan with oil blocking the passage. This oil back-up will lead to turbocharger failure and possibly engine failure as well.
    ii. Using a paint marker and the pan gasket, make a template on the pan where the fitting will sit. Using the paint marker, make the 3 paint marks for a template to drill the holes for the fitting.
    iii. Once you have a rough template, ensure that this is where the fitting will be fine with the line length and threading into place. Measure twice and drill once!
    iv. Once you have made sure this is where the fitting will be, go ahead and drill your three holes. The two smaller ones are ¼” and the larger is a 7/16”.
        i. Now that the holes are drilled, feel free to use the paper gasket between the pan and the two supplied bolts for this fitting and hand tighten the bolts to the fitting on the pan. Once hand tightening is complete, tighten to 7ft/lbs of torque. Now your oil pan tapping is complete!

10. Now that you have removed the pan and tapped it, clean both surfaces from the factory RTV. They need to be absolutely clean and be sure to inspect for pry damage on the block along with removal of ALL metal fragments from the drilling process.
11. Now reinstall the oil pan by adding a generous bead of RTV along the rim of the pan and reinstall all 10mm bolts. Note there are 2 alignment studs on this pan assembly which should be done first to ensure proper fitment.
    a. Install all bolts and tighten in an apposing fashion similar to a wheel

stud.

b. The pan must cure for approximately 8-12 hours to ensure the gasket forms and seals properly.
c. Note, these tighten to only 7ft/lbs of torque
d. Do not add oil until you have completed install. **BE SURE TO ADD IT LATER!**

12. Locate the 10mm & 3/8" shank bolts from the hardware kit and the turbocharger.

a. Losen all of the bolts, but no not remove them, from the back of the turbocharger compressor housing and turbine housings.
b. Note, the CHRA (center section of the turbo) must be oriented a particular way to ensure proper oil feed and drainage. The square outlet of the CHRA must be pointing downward while the single circular hole orfice must be pointing upward at approximately 12 o'clock

13. Assemble oil return flange to turbo with the supplied flange & (2) 3/8" shank bolts and lock washers.

a. Lightly bead the blue fitting with Teflon tape and thread into the CHRA aluminum flange. Note that this is a taper fit and become tight after about 3-4 turns.
b. Install this flange onto the CHRA oil discharge on the turbo.
c. 

d. Thread on the straight push lock fitting on to the blue fitting and your ready to roll!

14. Now that the oil discharge is half complete, we are now going to affix the turbo to the manifold.

a. Take the 10mm shank bolts and affix the turbo to the manifold. The next few steps are **VERY** crucial to correct fitment of the entire system. **PLEASE PAY ATTENTION**!

b. Take the smallest 2" intercooler pipe and one 2" coupler and a t-bolt clamp.

i. Affix the 2" coupler to the compressor outlet and use a 2" t-bolt and tighten it for final install.

ii. Insert the smallest 2" pipe into that coupler and proceed to put the entire manifold/turbo/oil discharge assembly into the car.

iii. Slide the manifold over the studs and rotate the housings to clear all objects in the way like motor mounts etc. You should have clearance from every avenue.

1. Tighten one easy to reach bolt on both the compressor and turbine housing once you have the proper position acquired. **This may take several times of in and out to confirm fitment.**

a. IF further fitment issues are encountered down the line from install, this is the point to revert back to as the root cause.

b. The small pipe should be not touching the

motor mount or the radiator shroud. It should be pointing down and away from the fans.

iv. Slide manifold assembly off of the studs and proceed to tighten ALL of the bolts on the compressor and turbine housing. **Note, the compressor threads are aluminum and no do not over-tighten.**

v. Put another 2" clamp on the smallest pipe fixing it position from moving with a t-bolt clamp, but do not tighten it. Leave it loose for further adjustment.

vi. Put manifold on studs and tighten down in factory fashion which is center most lower nut first, top left, top right, bottom left and bottom right all to 30 ft/lbs reusing factory gasket.

1. Feel free to apply a thin layer of **Copper RTV** on the gasket mating surface as well to help promote good sealing.

15. Mount the intercooler

a. Find the mid-point of the intercooler and bumper support beam. These two should line up perfectly.

b. Use the supplied brackets as a template and prepare to drill two holes in the support beam to mount the IC.

i. Note, the slotted portion of the bracket is located on the beam, while the smaller holes go into the supplied intercooler taps on top.

ii. The object is to get the intercooler as high as you can get it to the bottom of the support beam and centered perfectly to ensure perfect fitment of all pipes.

iii. Drill holes and use supplied 3" bolts and nuts to affix IC to support beam.

iv. Locate the two 2.5" straight couplers and slide them onto the end-tanks and affix the one end of each side with supplied t-bolts and tighten them down. You may put the clamps on and in place, but again, do not tighten those yet.

16. Mounting the cold side intercooler pipes ***(this is a confidence builder)***

i. All of these pipes should have couplers and clamps (untightened) yet at this point to ensure maximum adjustability and perfect fitment before tightening down for final install.

b. Located the longest 2.5" pipe and slide it into the driver side coupler of the intercooler as it wraps around lower radiator core support and kicks upward into the inner fender behind the driver's side headlight.

c. Find the pipe with the TiAL BOV flange on it and install BOV using the supplied o-ring AND v-band clamp. This pipe (once BOV is installed) will need to be dropped into the coupler on the other end from above. **It will not fit into the system from below without damaging the BOV and/or the pipe**.

d. 
e. Take the 3” MAF pipe and install the MAF with supplied screws.
f. 

g. 

h. 

i. 
   i. NOTE: FIC harness is easy to feed into the car BEFORE installation of this pipe as the ECU main grommet is located right behind it.
   ii. NOTE2: Installing the injectors at this point is an excellent idea as it allows for more room
   iii. Re-install battery, but leave negative terminal off.

j. Locate the single 3” coupler and put it on TB with supplied SS worm gear.

k. Place 3” MAF pipe in coupler and note the bracket that affixes the pipe to the factory battery tie down for added support. This pipe should engage into the lower IC pipe with the BOV on it and be connected with a 2.5” to 3” coupler.

l. Adjust all pipes as you see fit and clock clamps to easy tightening position for wrench accessibility and proceed to tighten all clamps.

17. Hotside intercooler pipes.

a. **THIS SIDE REQUIRES A LOT OF ATTENTION TO DETAIL TO ENSURE NO CUTTING OF THE BUMPER IS REQUIRED AND CORRECT PIPING FITMENT**.

b. The longest 2” pipe has a straight leg on one end and a 15* kick on the other end has to be installed. The straight leg 90 of this pipe engages into the coupler that would be on the end of the compressor outlet pipe which was already installed on the turbo.

   i. **THE TWO 2” PIPES AND THEIR ORIENTATION DICTATE THE OVERALL FITMENT OF HOTSIDE PIPES AND NO TRIMMING TO BE NEEDED OF THE FASCIA. IF YOU HAVE COMPLETED INSTALL OF SAID PIPES AND YOUR BUMPER WILL NOT FIT, THIS IS THE SOURCE OF YOUR PROBLEM AND FURTHER ADJUSTMENT IS NEEDED.**

ii. 

c. This longer pipe rides through the lower radiator core support channel.
    i. Removal of the rubber splash guard is the only method of this pipe getting through to the intercooler.
    ii. The end of this pipe with the 15* kick goes into the supplied 2” to 2.5” 90* transition coupler.
    iii. The last connection to the intercooler will be the 90* 2.5” pipe with straight leg.
    iv. Now that all of these pipes are loose, feel free test fit your front bumper to see if it will go back onto the car without cutting or trimming. If it does, congratulations, feel free to begin tighten the clamps working from the turbo to the intercooler.
        1. If the fascia does not fit, adjust as needed.
d. With all of the pipes tightened and in place, reinstall bumper, lower splash guards and inner fender liners.

18. Downpipe install

a. Remove the factory primary and secondary O2 sensors from the factory header and s-pipe.
b. Locate the 2.5” downpipe and s-pipe and reinstall the O2 in their appropriate positions using anti-seize on the threads of each sensor. **THREADS ONLY**
    i. Note we included an extra bung for your wideband O2! **YAY**
    ii. Note the O2 extension provided is for the primary O2 sensor on the downpipe.

iii. 

c. Loosely install the downpipe to the turbine housing.
    i. Loosely connect the 2.5” s-pipe with v-band clamp left loose. Make sure that the setup meets both the exhaust used and the downpipe perfectly once this is all oriented, please feel free to tighten the bolts from the turbine housing back.
        1. With the s-pipe you are avoiding the axle and Subframe for fitment. Once achieved, you are ready to tighten.
        2. The downpipe is best installed from the bottom upward.

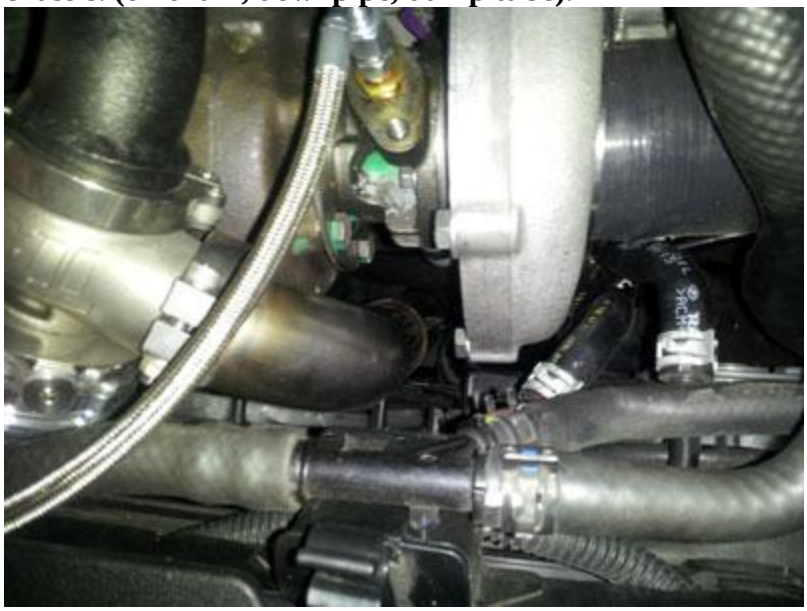
3. 

d. Install the donut gasket and spring loaded bolts provided. A little RTV will help hold that donut gasket in place on the saddle of the s-pipe.
    i. **Once the springs are half compressed, the system sealed and no further action required. Over tightening will result is some failure of a system component.**
    ii. 

19. Oil drain
a. Take the 12” of 10AN line and push it into the straight on one end and the 45 on the other.
b. Take the 45* AN fitting and loosely thread it onto the pan 10AN fitting
c. Take the straight AN fitting and thread it onto the blue fitting on the bottom of the CHRA of the turbo.
d. Tighten all AN fitting and oil drain is complete.

e. 

20. Wastegate

a. Remove the red tape holding in the fire ring to the wastegate. Push the gate onto the v-band flange on the manifold and have the outlet pointing downward toward the driver side and **do not tighten clamp**.
b. Affix dump tube in same fashion and rotate as needed on both axis to ensure clearance of all parts and discharge from dump tube is pointed toward Subframe.
c. Tighten all clamps once fitment is achieved.
d. **The intersection of all of these components is very tight on this chassis. (oil drain, downpipe, dump tube).**
e. 

f. 

21. Add oil back to engine. Ensure it's a 100% full synthetic oil.

22. Vacuum manifold

a. Locate the hardline brake booster and "T" into that.

b. 

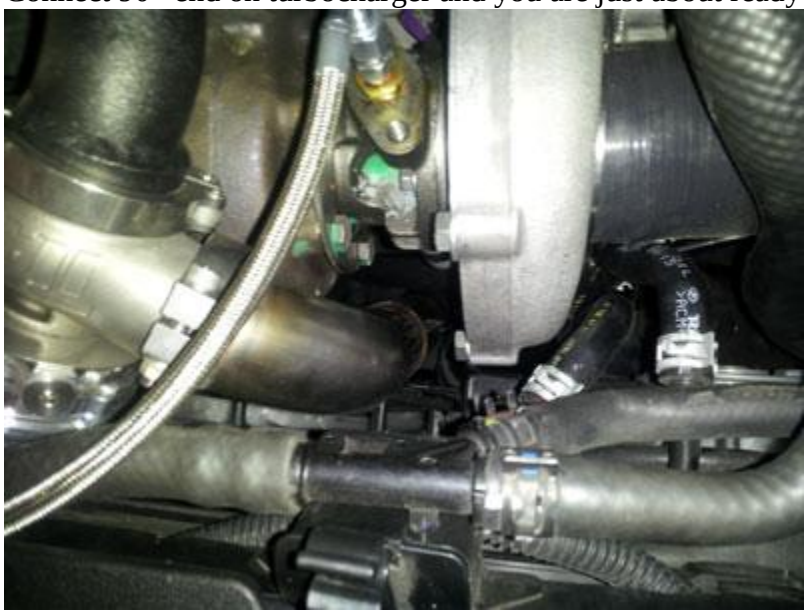
   i. **The side port of the wastegate, the bov and your FIC all require a vacuum source from this.**
   ii. 5/32" vacuum line for the FIC is required
   iii. 7/32" vacuum line for the TiAL fittings is required

23. Oil feed line

a. Remove the oil pressure sending unit on the front of the head.

b.

c. Lightly bead RTV on the BSPT fitting AND the oil pressure sending unit. And thread both into the “T” fitting along with the 1/8” to 4AN fitting.

d. Thread loaded “T” into the head
    i. **DO NOT OVERTIGHTEN!**
e. Connect 90* end on turbocharger and you are just about ready to roll!
f. 

24. Install intake pipe.

a. Located 90* silicone elbow and slide over compressor inlet and affix with supplied worm gear.
b. Slide cone filter over 45 degreed leg pipe and tighten with supplied clamp.
c. Take 45 degree legged pipe and insert into other end of coupler coming off of turbo you just installed. Adjust as you see fit as it should slide under your MAF housing pipe with the battery bracket. Once location is achieved, tighten all clamps and you’re just about done. (wipe sweat off of brow)
d. 

25. Load FIC base cal

a. Make sure FIC has vacuum source
b. FIC must be in car as it's not a sealed unit and will fail if exposed to the elements.

26. Ready? Set? DO NOT FIRE YET!

a. Ensue by now no oil has seeped out anywhere from the pan, or anything like that.
    i. Check feed, drain, pan, CHRA.
b. Affix negative battery terminal slightly clocked to ensure it does not make contact with any other metal clamps or parts.
    i. 
c. Pull EFI1 fuse and crank car for 5 seconds to ensure fuel pressure and oil is primed into the system and there are no leaks.
d. Replace EFI1 fuse if no leaks are found on fuel or oil.

27. Start up your ride!

i. Check oil level
ii. Check for any leaks while idling
iii. Listen for vibrations of pipe contact (adjust if necessary)
    1. Condensation from exhaust might drip from exhaust v-band and s-pipe donut assembly. This is normal and may not need to be retightened.

28. Turn it over to your tuner to get the most power. The base cal is not designed to be driven on, but merely to start your tuner on the right road quickly.