

Huron Speed Products

V3 T4 Turbo Kit for 98-02 F-body



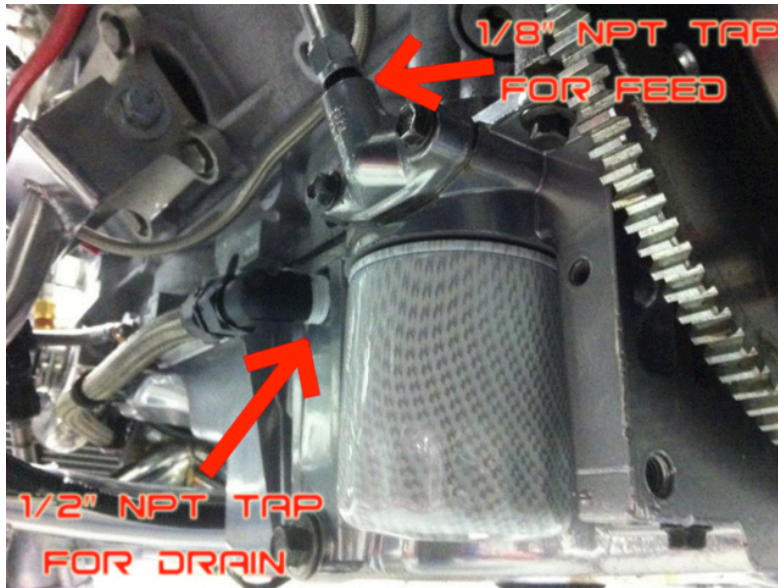
Prep:

-Remove all A/C Components, Front bumper, front bumper foam, and front bumper support. Remove radiator and cooling fans. (Fans will not be reused). Remove AIR pump from under the front drivers side of vehicle.

If using an oil-required turbo, follow the next step, if using a Comp Oil-Less Turbo, skip to relocation

-Remove oil pan to prepare for oil drain and feed fitting installation.

-Clean out oil pan and prep surface. Note the following picture for a good location of oil drain and feed fittings.



-Drill/Tap for your supplied fittings. Good recommended fittings are 1/2" NPT x -10an for the drain (tap pan for 1/2" NPT) and 1/8" NPT x -4an for the drain (tap the spout fitting above the oil filter for 1/8" NPT)

-Secure fittings into the oil pan using Teflon Tape on NPT sides of the fittings.

Hotside:

-Wrapping the Hot-Side pipes in heat wrap is strongly recommended to keep engine bay temps down, prevent melting of any close clearance components, and keep as much heat in the piping for best performance!

-Insert front 2 O2 sensors into the crossover pipe with a couple dabs of anti-seize on the threads of each.

-Attach bottom of v-band style 44-46mm waste gate to the fitting being sure to have the firing ring installed with the side port exit of the gate facing DOWN.

-Slide down-pipe in between motor mount and block of passenger side and let sit in there

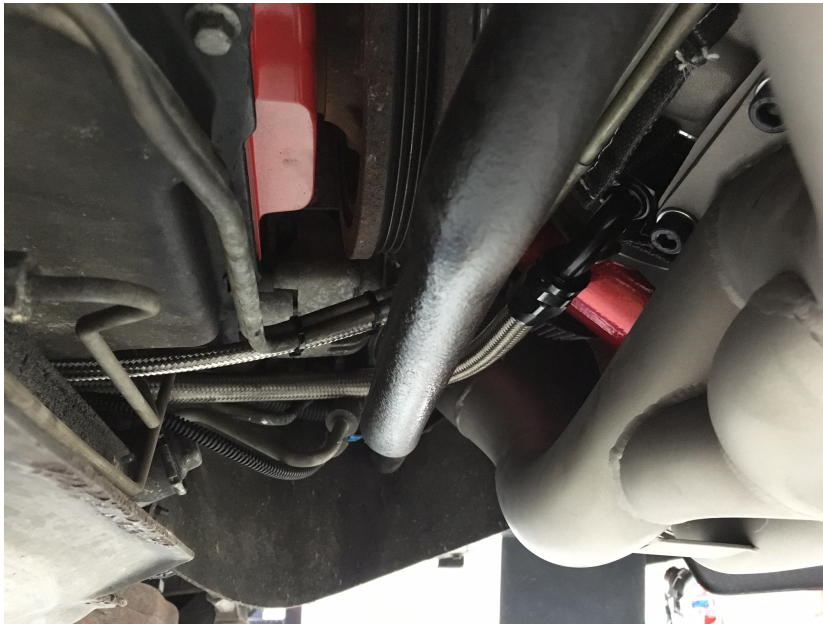
-Attach V3 exhaust manifolds to engine facing forward using the 12 supplied stainless m8x1.25 bolts. A fresh set of new GM manifold gaskets is recommended. Leave manifolds LOOSE, do not tighten down.

-Ensure clearance of Power Steering lines to manifold on drivers side. Bend out of way for desired clearance using your hands to mend them with ease. Our Power Steering relocation line kit helps greatly here if your alternator is still in the OEM Position.

-A reminder to already have the downpipe resting in place.

-Bolt cross over pipe to V3 manifolds using the (2) supplied 2.5" V-band clamps. May have to wiggle the manifolds to line up the V_bands at first but rest assured once you get your initial heat into the system, everything with line right up for you!

-Place turbo onto crossover and ensure it is clocked properly. You want the oil drain and feed as straight up and down as possible, pointed slightly toward rear of car as shown below. Ensure no kinks or uphill climbs in the line back to the oil pan.



-You may find it easiest to place turbo onto the crossover loose to properly clock everything, remove the turbo along with the crossover pipe and then install the oil fittings to the turbo outside of the car, tighten down all bolts on the turbo, and bolt to the crossover out of the car. Then slide the unit up as a whole and attached to the manifolds.

-Turbo to crossover pipe will install with the supplied M10x1.5 bolts. Depending on turbo used, you may need to install the additional supplied longer M10x1.5 bolts through the bottom of the crossover acting as a stud and secure with additional nut.

-With the turbo on the crossover and all secured to the manifolds, ensure all connections are tight now by tightening them down each a little at a time drawing the system together straight. Any loose connections may result in a leak, which will drastically effect performance in a turbo application.

-Bolt the downpipe up to the turbo that was sitting in place using the supplied 3" V-band clamp.

-Run your Oil Lines from the installed fittings in the oil pan to the turbo as shown in the photo above.

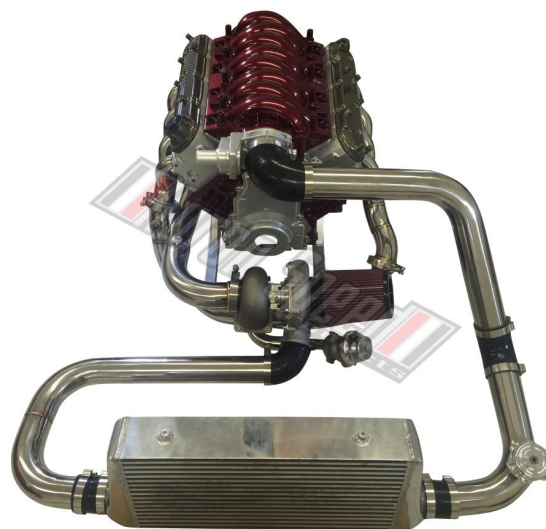
*Consult with the turbo manufacturer to note if a restrictor is recommended to run in your feed line to the turbocharger.

Cold Side:

-Bolt the intercooler to the intercooler brackets using the supplied (4) short m8x1.25 stainless bolts and washers, and leave somewhat loose.

-Bolt the Intercooler/Bracket combo to the vehicle where the bumper support used to be using the supplied (3) m10x1.5 nut/bolt combo and (1) m8x1.25 nut/bolt combo.

-Once the combo is all bolted to the car, tighten all bolts and nut/bolt combinations.



-Attached a straight 3" silicone coupler on each end of the intercooler. Secure each to the intercooler using a 3" T-Bolt clamp. (7/16 ratchet on the t-bolt nuts)

-Use the J shaped pipe to run from the turbo to the passenger side of the intercooler. The short end of the J will connect to the passenger side inlet of the intercooler. Secure this to rubber coupler using a 3" T-Bolt clamp.

-Attach the other end of this pipe to the compressor outlet of the turbo using the 90* 3"- 2.5" or 3" to 3" 90* silicone coupler (2.5" side on the compressor outlet unless your turbo outlet is 3", then use the supplied 3" x 3" 90* coupler). Use corresponding T-Bolt clamps to secure this coupler.

-Attach the 90* pipe with the attached BOV flange to the drivers side outlet of the intercooler. Attach so the BOV flange is facing UP. Secure this to the intercooler using a 3" T-Bolt clamp. Attach your BOV to this pipe using the BOV's supplied V-band clamp.

-Attach the 60* 3" Silicone coupler to the open end of the 90* BOV Cold Side pipe. Orientate as shown in the picture below and secure using another 3" T-Bolt clamp.

-Insert your factory IAT sensor into the Cold Side pipe leading to the throttle body into the pre-drilled hole. Insert the grommet first followed by the sensor.

-Install final Cold Side charge pipe. This will run through the hole beneath the fuse boxes on the driver's side. Some minor trimming of the plastic surrounding the fuse boxes may be required.

-Install this charge pipe into the open end of the 60* 3" silicone coupler and secure using another 3" T-Bolt clamp.

-Cold side is set up to run a Speed Density (MAF Delete) Tune. You will need to replace your OEM MAP Sensor on the back of the intake manifold with a GM 2-bar sensor or a plug and paly 3-bar sensor from EFI-Source.

Final Notes:

*Attach and wire your supplying pusher style fans to your radiator and reinstall radiator and upper radiator support.

*Reinstall front bumper. Some minor trimming of the bottom may be required for it to tuck nicely up around the bottom of the intercooler brackets. Some self-tapping screws can secure the bottom flap of the bumper to the bottom beam of the intercooler bracket if desired.

*Run vacuum lines from the side port of your waste gate (top port vented to atmosphere unless using a boost controller), and BOV to a boost/vacuum source.

*Ensure your PCV is properly set-up so you do not boost the crank-case. The stock PCV system set-up WILL boost the crank-case.

*Attach supplied Air Filter to the compressor inlet of the turbo.

*Ensure all electrical connections/plugs/grounds are plugged back in (O2 sensors, IAT sensor, etc)

These are just helpful steps and by no means a strict guide that must be followed as many cars are already in modded form. This is to help give you a good direction of what all is involved in the install and to bring up tips and tricks that may help you along. This kit is for off-road use only and should be installed by a professional. Please refer to Huron Speed's terms and conditions once again prior to install.

Derale #16925 Cooling Fans Wiring Guide:

Take the green wire that is supposed to go to the A/C clutch and cut it off. If you do have A/C and wish to use this feature, by all means run it to the A/C compressor.

Take the Orange Power wire with the in-line fuse and tie the Black wire into it. Then run them to 12v power. I run these orange wires to the post on the fuse box. I also had some issues with the supplied 30a fuses. Switched to 40a fuses and never blew a fuse again.

Run the Red power wires to the Power wires (blue) on the fans. I like to use connectors here so you can easily remove the radiator/fan combo in the future should you have to and not have to cut wires.

Run the 2 yellow wires together into 1 wire, extend and run across to the passenger side by the battery. Here you will want to find the dark blue wire in the harness that runs over the shock tower. This is your PCM's trigger to turn the fans on (ground). You can tap into this blue wire, or cut and connect it to the PCM side as the other side goes to your own fan harness (unused). This is just a trigger wire so if you extend, 18awg will be fine.

The power wires from the fans connect to the red wires of the harness as mentioned above. Keep at least 12awg.

The ground wires from the fans run to a good chassis ground. Keep at least 12awg.