

Here are some helpful tips and procedures to be done for the installation of your new Huron Speed C5 Twin Turbo Kit!

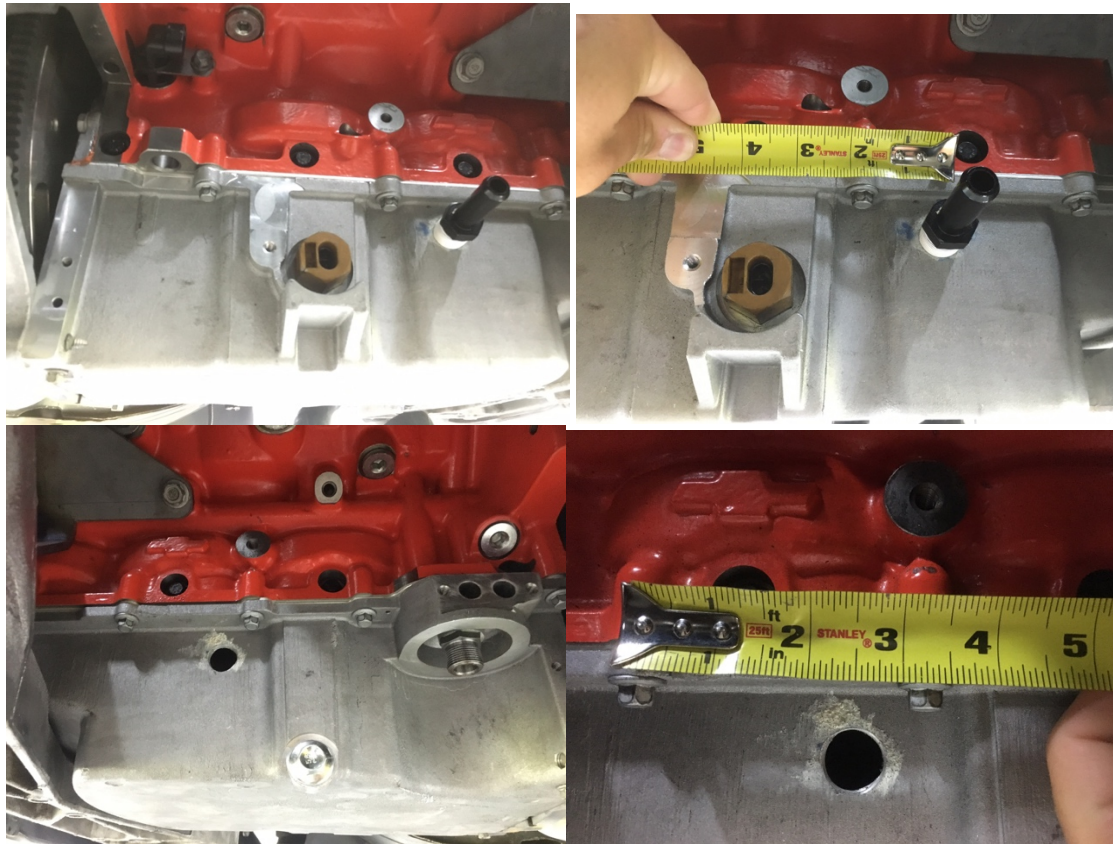
Please see the attached (2) files for the A/C Parts lists with the CTS-V compressor conversion and the proper orientation and also the alternator clocking procedure. Alternator clocking does not require any change to your belt size.

Oil Pan Prep for the drain. Please view the attached photo showing the location of the drain fittings in your new supplied C6 Oil Pan.

The threads are $\frac{1}{2}$ " NPT and should be drilled with a standard $\frac{3}{4}$ " drill bit and then tapped with a $\frac{1}{2}$ " NPT Tap. Be sure to thoroughly clean out all shavings in the pan prior to installing the oil pan on the car.

The driver's side will install at 2.5" from the bolt shown in the photo

The passenger side will install at 1.75" from the bolt shown in the photo.



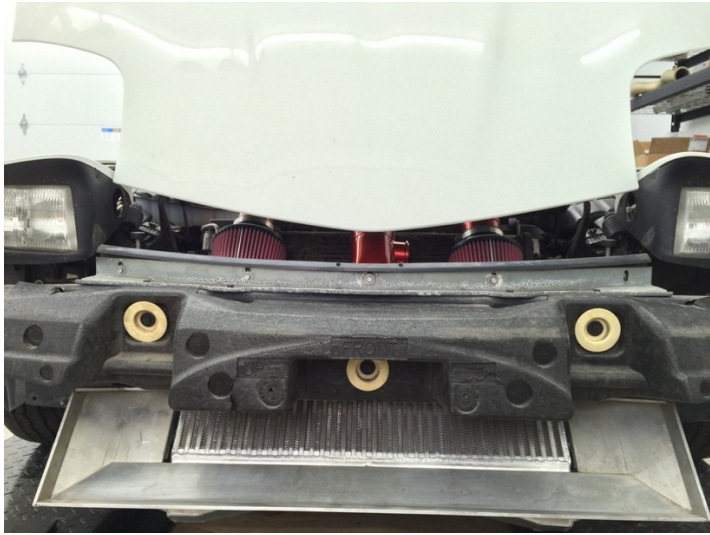
To remove the C5 Oil pan we have found it best to have the car in the air, and support the engine from a place either up top or down low. You could use a picker/crane up top or we used jack stands ahead of the pan and another back on the bellhousing. With this we place a jack under the front crossmember. Removed all necessary hardware such as the 4 main bolts and the engine mounts, and then lower the front crossmember down. With this you can remove the C5 pan and install the newly prepped C6 pan. Before re-installing the cross member, now is an excellent time to simply pop in your new fabricated engine mount pedestals and shorty Hinson Poly mounts!

Depending on car to car and mount to mount, some material may need to be trimmed off the side of the hinson poly mount on the passenger side to best clear the new A/C compressor if running the A/C conversion. We have found one car and set of mounts to work as is out of the box, and another set required simply trimming some material off the poly mount to give some better clearance to the back of the compressor.

Front bumper removal is required for intercooler installation. Please view the following photos that show the proper installation location of the Bell Intercooler/mounts/shroud. You can attach the shroud and mounts to the intercooler outside of the car and install as one piece to the car. The brackets will mount to the front cradle view the supplied self-tapping screws in the location shown in the following photos.







Some very minor grinding of un-important locations is required for turbo fitment.

- (1) Cross member on drivers side. The top corner will need to be ground down slightly as shown in the photo for proper turbo clearance to the cross-member.
- (2) Un-used engine mount boss on the driver's side of the block will need to be ground down for compressor cover clearance
- (3) Depending on which brand of turbo used, Boss on the compressor outlet (if your turbo has one) will need to be ground down smooth for clearance to the engine mounts. On the drivers' side, some material may need to be touched off on the housing itself, but taking some more off the Crossmember usually cures this!
- (4) Where as Precision, Comp, and Turbonetics are all nearly the same frame, their covers all have slight differences and very slight size differences. This being said simply be patient upon installation of your turbos for the first time up on the manifolds. I would recommend putting some tape on the compressor housings for protection as the space is tighter and you will hit the cover on areas when putting the turbos up and in, and most likely on the first install will have them in and out several times while you trim down the couple areas above.



Once you get the turbos up on the manifolds, note their orientation. You will now want to remove the turbos and properly clock them for the oil fitting locations. Note, remove the turbos and loosen both the compressor and turbine housing bolts so you can properly orientate the turbos. View the photos below to see orientation and turbos in place as a guide for you.



Before completely installing the turbos, you will want to install the wastegate tubes on the manifolds first. Put those up in place using the supplied additional (2) clamps that came in your package from Turbosmart with the wastegates. Tighten the clamps down so the tubes can still twist and you leave yourself access to the clamps to tighten down later once the turbos are in place.

Now is a good time to put the turbos up and into place on the manifolds, I would advise attaching your feed lines to the top of each turbo with them tightened down before installing. None of this order is concrete, simply the method I have found best when installing this kit, you may find a better way or a way that you prefer, however this method will hopefully prevent you from installing components and realizing they have to come back down for another procedure.

Silicone Cold Side Routing

Pictures are more beneficial than words here, view the following photos of each side for proper routing and orientation of silicone cold side tube.



Intakes

Some material trimmed off the 45* coupler used on the passenger side is recommended for best installation, see attached photo. A simple pocket knife or box cutter can perform this, be careful with the blade!



Wiring. A few wiring extensions/relocations are recommended to get certain wires away from heat. Some wiring running down to the starter is recommended to be wrapped and tied away from all piping as much as possible. You may find clocking the power wire on the starter itself a good idea to get it away from heat even further.

I also found re-routing the power wire to the starter from the battery best. I removed and re-routed it as much up front first as I could getting it to route down by the compressor housing first and then back to the starter again keeping it away from the heat.

O2 wiring and oil temp sensor wires on the driver's side are snug to the wastegate tube. I found extending them and running them up the fuel rail to the front, then down the front of the engine and finally towards the back of the car the safest wiring!

Power wire from the alternator to the starter I ran in the front of the engine under the throttle body and wrapped/protected it going to the starter.

Plug wires, 2 locations on the driver's side are a little tricky and I found using some custom wires in this area the best to prevent future head-aches. The #1 cylinder plug wire is tight to the intake tube off the compressor so a mendable end makes this much easier for the connection onto the plug. #5 is a little more tricky around the primaries, so I found running a longer wire here so you can run down and then up best to clear the exhaust!

Extending wiring (possibly new power wires to starter and from starter to alternator) can get the safest routing of the close wiring to run up front and away from the heat first and also a cleaner look so you are not stressing the factory lengths of wiring. Extend so you can route safely and cleanly!

Note Horn orientation for cold side clearance below:

