



DISCLAIMER

Congratulations on your purchase of a Cartuning Performance Intercooler kit! The Cartuning Team would like to thank you for making the decision to increase the performance of your vehicle the smart way.

We require that the installer fully read and understand these installation instructions before continuing with installation of the intercooler kit. Read through it multiple times if necessary, print it for use during installation or keep a laptop nearby throughout. Be sure to have an understanding of what tools are necessary as well so you can be properly prepared. Although Cartuning Performance quotes a straightforward installation time of about 2.5 hours, we recommend that you set aside a full day for any unexpected issues which may arise (rusted factory bolts that could break, etc).

Cartuning Performance products are intended for off-road use only. We do not warrant the durability/longevity/effect of these products on any portion of the customer's vehicle. All liability and any possible issues arising are implied to be at the customer's expense as the products are required to be installed by a licensed mechanic or other qualified professional.

All Cartuning Performance products are warranted for a period of ninety (90) days from the date of purchase against defects in materials and workmanship. The warranty provides for a replacement product or refund only, and does not cover labor or any other costs. Purchaser and Installer assume all liability with regard to any and all damages in any way related to the purchase, installation and/or use of these products.

Thanks again,

The Cartuning Performance Team.

Preparation. Park vehicle with parking brake applied, rear wheel blocks in place, and make sure that the car has cooled sufficiently. Disconnect negative terminal of battery, and leave disconnected for entire installation of kit. It is recommended that you start with a cool car which has sat overnight giving you a full day to complete the installation if any problems should arise during disassembly and reassembly of the car. Note that it is assumed that you already own a Cartuning Performance Turbo Kit for your vehicle, or have purchased one with this intercooler kit. This intercooler kit should not be installed before the complete installation of the Turbo kit, as this is where the installation instructions begin. Please also note that because the product is designed to work on all “W” bodies, there will be some variances from vehicle to vehicle. The Monte Carlo for example has different plastic retainer locations (and number of retainers) than the Grand Prix does. We will use the Pontiac as the model for the installation manual, so expect minor variances to your vehicle if you own something else. While unpacking your product, inspect all pipes, and the IC to be sure that there are no articles of any sort obstructing airflow (as they can end up doing major engine damage!)

Disassembly of Front Bumper Components. Just like with the turbo kit installation, you will need to remove the 3 screws (Phillips or 7mm) in the wheel well of the front tires, along with the two or three screws under the vehicle as well. From inside the wheel well, you will need to remove the 10mm nut holding the bumper fascia to the front quarter panel on each side. Note that on the 2004+ models, there is also a nut by the headlight for the bumper. Remove the vehicle headlights by either taking out the 2 x 10mm bolts, or removing the 2 plastic white clips holding it in (pull up on clips). Continue the removal of the front bumper fascia by removing the 10mm bolts holding it to the frame, and securing it to the hood latch (4 x 10mm). Remove all the plastic clips from under the bumper that are holding it to the frame as well. At this point, you can pull the bumper fascia forward and slide it off of the car. As you are sliding it off, you will need to stop, to disconnect any wiring you may have going to the fog lights. Your front end should now look like this. There are now two black plastic pieces to be removed from the vehicle. One is the front scrape guard and support, it gets modified and kept. The other is an air dam for the radiator, and is discarded, or put aside permanently. Remove all the plastic clips holding these two plastic pieces in along with any 10mm bolts and put aside this piece, while keeping this piece for modification.



Modifying the Hood Latch Support. The hood latch support has to be modified, in order to allow the intercooler core to fit. Start by removing the support by taking off the 2 x 13mm bolts at the top, and removing the 10mm nut at the bottom as shown. Now using a sawz-all, hacksaw, or cutoff tool, cut the latch support as shown by the dotted line. You will also have to



grind down the stud at the bottom rad support as shown for a smooth flush surface. Re-install the hood latch making sure to line it up as the factory installed it (lining up the paint surfaces is easiest).



Making room for the Intercooler Outlet Pipe. The intercooler pipe (larger drivers side) has a couple obstructions in the way which need to be removed. The first is as pictured, and needs to be cut out on the dotted line. Any cut metal should be treated with a rust stopping chemical to combat corrosion. The second obstruction in the way is a larger piece of metal which is used as a tow point for a towing hook. It is shown in the picture, along with a dotted line along which you need to cut. We recommend using a sawz-all, or cut off tool (don't forget proper eyewear at all times!) as cutting through this steel will prove time consuming if done by hand. Note that if you have a 2004+ model, you will not have this tow



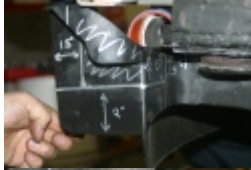
hole that needs to be removed. You will however have to remove the support bracket as shown by removing the 2 x 13mm bolts, and then removing the nut under the support to remove the bracket. Replace the nut from under back where it came from, and tighten very securely.





Installing the Intercooler Unit. Now that all the provisions have been made to fit the intercooler on the vehicle, it is time to mark, and screw it into place. The IC core itself is 24" wide when not measuring the end tanks. First mark off 3.25" from the drivers and passengers side as shown. The distance between these inside lines is exactly 24" like the core (confirm), as this is how you will line it up (ignore the endtank portion of the IC for alignment.) With help of a couple extra hands, you will now slide the IC up and into it's location as shown with the 2.5" outlet on the driver side of the car. Note there are four tabs to screw through with the provided self tapping screws. Screw the IC into place making sure you have the ends of the core lined up with your marks on the frame of the vehicle, and the large upper tabs are flush to the re-bar as shown in the picture.





Modifying the plastic scrape guard. For this step, you will need a good utility knife, measuring tape, and a marking device. In order to make the intercooler fit well, and allow for the inlet and outlet pipe to route freely, we need to modify the

shape of this plastic scrape guard. To start we will modify the passenger side. First cut along the dotted line to remove the lip as shown in the picture, being sure to adhere to the measurements indicated in the photo. Once the lip is removed,

the piece should look like the picture shown. Now we will cut a hole 5" x 2.75" in the passenger side as shown in the following pictures. You will need to use the measurements given in the photo's to accurately mark out the plastic, and then

take your time cutting out this rectangle. Now that you are done with the passenger side, modifications need to be made to the drivers side. Again, like with the passenger side, we will remove the lip as shown following the dashed line. For

this next step, make sure to take your time marking and comparing to our following pictures before cutting. You'll be measuring in order to cut out the area which is filled in with crosshatch area. This new opening will allow for the 2.5" IC

outlet pipe to pass through. The final pictures showing the finished cut product are the clearest of all, giving you a great idea of how you should cut this out. You can now install the scrape guard back onto the vehicle, installing all plastic clips

and 10mm bolts that were holding it in to the frame. Don't forget to leave the air damn discarded, or out of the vehicle, as it will no longer fit. ****NOTE**** if you have a Monte Carlo, you won't have this same plastic scrape guard to remove. You

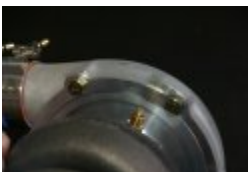
will have a plastic piece which will need very simple modification as shown in this picture which is a rectangular hole of 2.5" x 16".



Preparing for pipe installation. Since we have assumed that you already installed your fenderwell intake for your turbo kit, parts of your fenderwell area must already be modified. We now need to make one more change to your fender area to allow for a bit more

comfort room for the two pipes which are passing through. In order to do this, trim a bit of your fender area as shown in the picture. One picture shows the cut being made, and the second shows what the area should look like after the cut.





Installing the inlet/outlet pipes & silicone. The first task here is to get the silicone pieces on the intercooler. There are two blue couplers, which you should now slide on fully to the ends of the

intercooler. Now is also a good time to install the two band clamps for each piece of silicone as shown in the pictures. For the inlet side (passenger side) use the two clamps labeled “2.25”, and use the

“2.75”s for the outlet side. Do not tighten the clamps at this time, just leave them loose until everything is in place. The clamp nuts on the drivers side should be at the top, and facing the front of the car, the

passenger side clamp nuts should be at the bottom of the intercooler facing the rear of the vehicle. Now comes the easy part. You have four pipes to install, two black powder coat, and two high polish ceramic.

First install the two black powder coat pipes as shown in the following pictures. Now slide on the two orange hump hoses, placing the 2 x 2.50” and 2 x 2.00” clamps with them as shown. Before

installing the two ceramic pipes, we need to check the clocking (rotation) of the turbo. This should ONLY be done when the turbo is completely cold. If you ordered the turbo kit with the IC together, your turbo is all set and needs no clocking. If however you already had a turbo kit previously, you’ll need to loosen the ½” bolts on the compressor (aluminum) side of the turbo and rotate the turbo to point as shown in the following picture. Don’t tighten the turbo

bolts up just yet, as you may need to tweak it’s position a bit. It should also be noted, that there should be no intake hose, or air filter in the car at this time, so remove it now if you have not done so already. You can now loosely install the two ceramic pipes, smaller one first. After installing the 2.5” pipe you can install the custom

black silicone adaptor allowing connection to the throttle body. You will have to slide on the two remaining T-bolt clamps. Fit everything so that it looks like it does in the pictures, making sure that nothing will be rattling together, or touching the frame of the car to buzz. You can now start to tighten all the band clamps one at

a time, paying attention to alignment of the pipes. When everything is tightened and looking good, tighten up the bolts on the compressor cover which determines it’s rotation. Finally, before finishing up, install three or more tie-wraps between the two holes on the mounting tabs of the lower two IC pipes to pull the two pipes



together solid, so that they don't have any chance of rattling. Grab the pipes, make sure that they have room to move, yet are solid. Also make sure that the orange hump hoses are doing their job, allowing the engine to flex back under heavy acceleration (meaning : be sure the hump is not stretched at all when sitting idle). If you already had a turbo kit installed, this will mean that you will have to remove the blow off valve from the original "U" shaped intake pipe, and install it on the bung provided on the new IC pipe. If you purchased the turbo kit and IC kit separately, you will need to use the new intake tube provided which is shorter. In order to install the air filter, you will need to remove the top engine dogbone mounts and tilt the engine towards the firewall. You can now arrange the air filter, and pcm using our photos as a guide. Re-install the dog bone mounts now, and ensure all clamps throughout are tight.

Re-assembling the front bumper fascia. This is very self explanatory. Reverse the order of removal, paying attention to alignment and ensuring that all nuts, bolts, and plastic retainers find their home. Don't forget about your fog-light connections. Finally, if your vehicle is equipped with an outside temperature gauge, you'll need to secure that sensor in the front of the vehicle using a tie-wrap. Lower the vehicle back to the ground.

Final Inspection. Start the vehicle, checking for any vacuum leaks, or rattles. It is a good idea to brake-torque the engine by firmly holding the brake pedal (have parking brake engaged!) while the transmission is in Drive. Apply some gas to torque the engine, while a partner inspects for clearances and buzzing (noises). One final note; if you already own an installed Cartuning turbo kit previous to this installation, you will notice that the blow-off-valve will sound quite different. This is due to the spring effect of air in the IC, and is completely normal. Without a boost controller, gains to be found with this kit will be with increased timing, and much cooler/denser air year round. Cartuning Performance recommends using no more than 15psi of boost with stock engine internals and this IC kit. Boost controllers are available at request or via your Cartuning Performance retailer. **If you feel that you are ready for more boost, we only recommend doing so AFTER talking with a Cartuning Performance representative.** If there are any issues with the installation of this IC kit, feel free to contact our Tech Support at 416-863-8863 and ask for Kevin.

