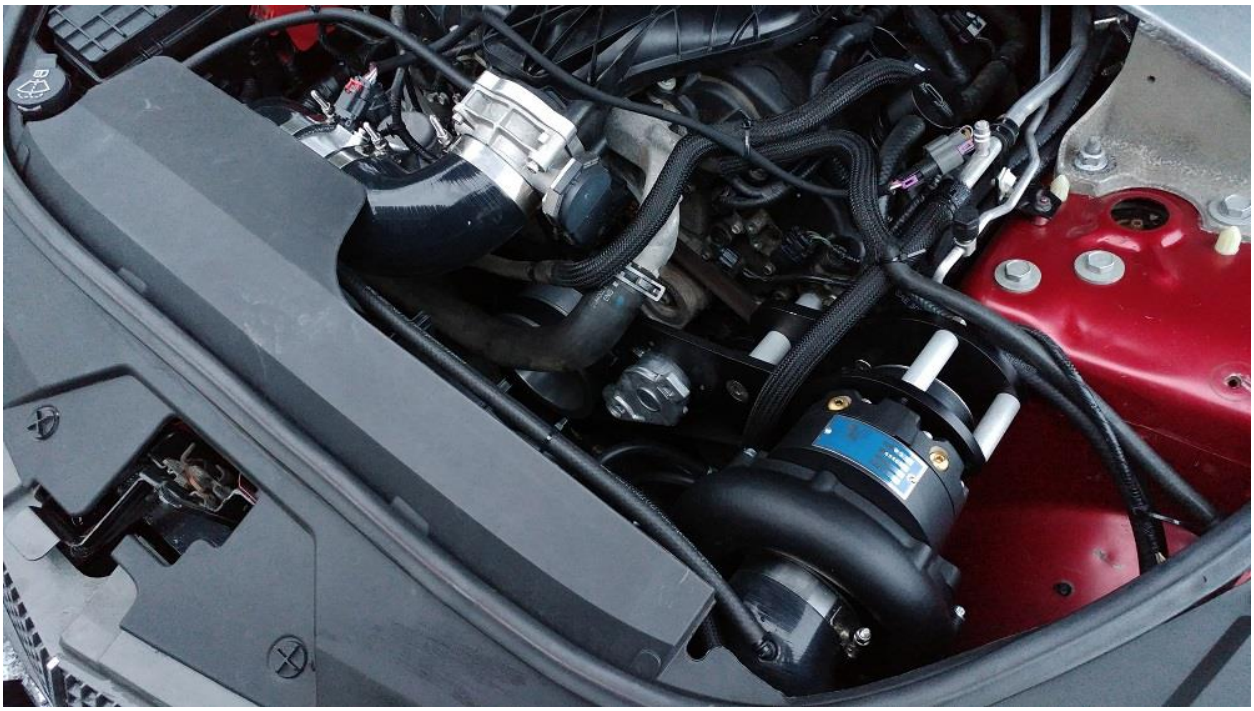
2008-2013 Cadillac CTS 3.6/3.0 Supercharger Kit Installation Guide



LEGAL DISCLAIMERS AND IMPORTANT INFORMATION, PLEASE READ BEFORE INSTALLING THE SUPERCHARGER SYSTEM!!

- Use extra caution when driving any modified vehicle. Increased power may produce increased speeds that may make the vehicle unsafe or uncontrollable and result in serious injury or death. We do not condone speeding or breaking any traffic laws. It is the responsibility of the purchaser, owner or operator of the vehicle being modified with this supercharger system to understand all risks associated with increasing the horsepower of a vehicle and to obey all local traffic laws.
- Overkill and its partners are not liable for any damages as a direct or indirect result of installing this supercharger. The purchaser, installer or reseller of this supercharger system cannot, under any circumstances, hold the companies mentioned liable for any subsequent loss, damages, fines or penalties. It is the responsibility of the purchaser, owner or operator of the vehicle being modified with this supercharger system to understand all risks associated with increasing the horsepower of a vehicle.
- This supercharger system is NOT CARB approved and is not legal for use on any public roads in the state of California. This system has not undergone any approval for use on public roads. Despite all efforts to ensure no increased emissions from normal vehicle operation, this system may not meet your local emissions laws. It is the responsibility of the purchaser, owner or operator of the vehicle being modified with this supercharger system to understand and comply with all emissions laws associated with their vehicle.
- Use of 91 octane or higher is REQUIRED with this supercharger system. Do not use 87 octane, 89 octane, or E85 ethanol fuel. For all forms of racing or sustained high speed use, it is recommended to use a mixture of 100+ octane unleaded race fuel and the highest octane pump gas available. It is HIGHLY RECOMMENDED to use the computer tuning services provided by Overkill or the installer of this system to ensure the safe and proper operation of the engine with this supercharger installed. Your provided Autocal or HP Tuners can provide scans for the owner/operator of the vehicle to view. It is the responsibility of the purchaser, owner or operator of the vehicle being modified with this supercharger system to understand all risks associated with increasing the horsepower of a vehicle, and to understand for themselves how to identify unsafe and improper vehicle operation which may lead to engine damage.
- Installation of this system by a trained certified mechanic is HIGHLY RECOMMENDED. It is the responsibility of the purchaser, owner or operator of the vehicle being modified with this supercharger system to ensure the safe and proper installation of this system to avoid damage to any of its components which may not be covered under warranty due to installation error or abuse.

Installation Overview

Step 1: Remove Front Bumper
Step 2: Remove Air Filter Assembly
Step 3: Remove Power Steering Reservoir and Install New Reservoir
Step 4: Remove the Power Steering Oil Cooler and Install New Cooler
Step 5: Install Crankshaft Pulley and Adjust Lower Coolant Hose
Step 6: Install 2008-2009 Accessory Kit (if applicable)
Step 7: Install Tensioner To Mounting Plate
Step 8: Install Mounting Plates and Vortech Unit
Step 9: Install Throttle Body Spacer
Step 10: Install Front Mounted Intercooler and Prep For Intercooler Tubing
Step 11: Install Drivers Side Intercooler Tubing
Step 12: Install Passenger's Side Intercooler Piping
Step 13: Install Intake and Air Filter
Step 14: Install Horns and if applicable Computer Bracket
Step 15: Spark Plugs and MAP Sensor
Step 16: Install Catch Can
Step 17: Reinstall Front Bumper
Step 18: Install Vortech Plug
Step 19: Final checks
Step 20: Flash Tuning File

Before you begin the installation, ensure that you have followed the included instructions to read the factory computer tuning from your vehicle and emailed it to willoverkill@gmail.com and waited to receive your new supercharged tunes back before attempting to install. This process may take several business days.

Disconnect your battery before starting the installation. Remove the negative battery terminal and place a clean towel on the battery post to prevent contact.

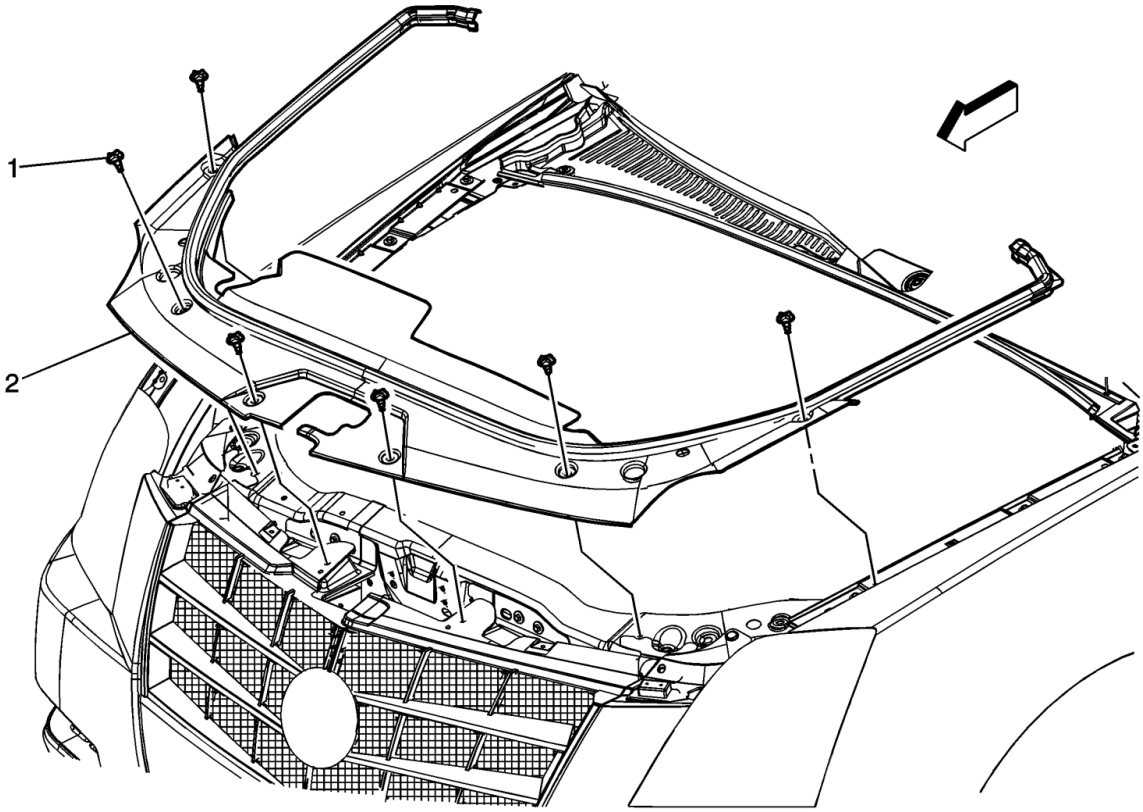
From your dealership, you will need 500ml to a quart of power steering fluid applicable to your year CTS.

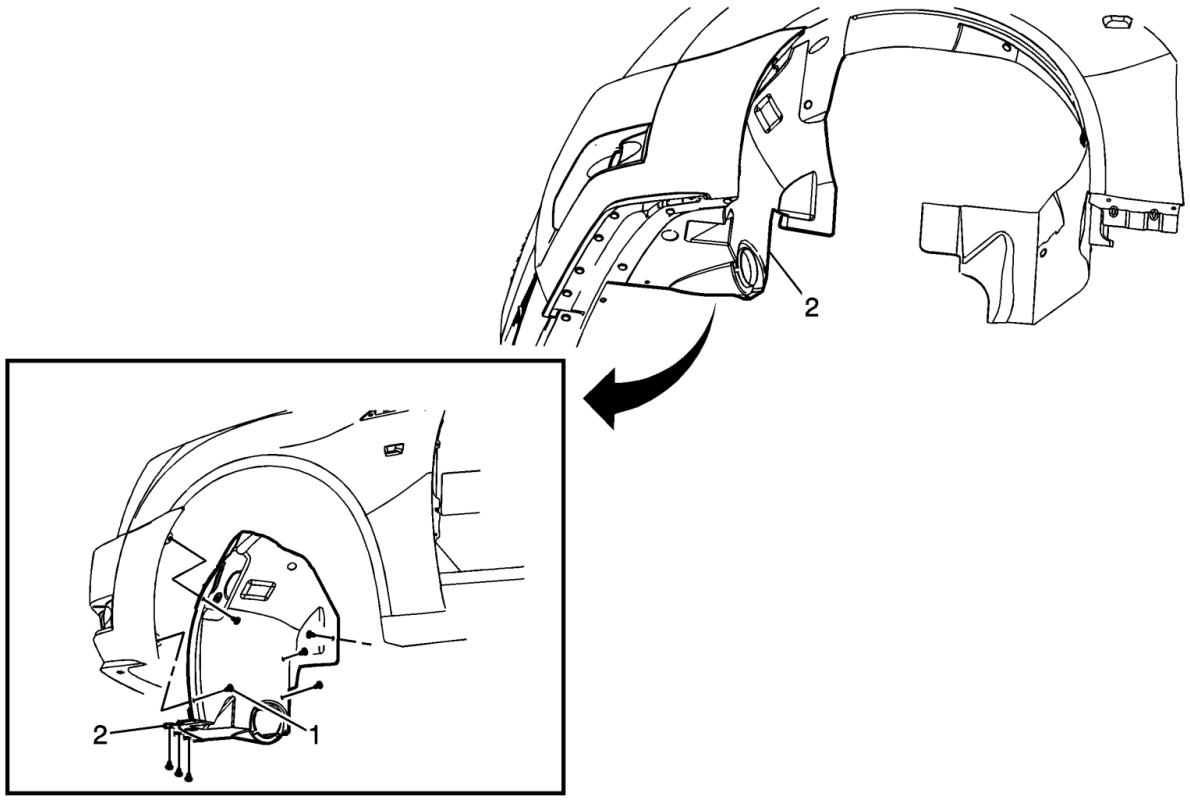
Recommended items to have: Blue Loctite, Dielectric Grease, WD40, Spark Plug Gapping Tool, Electrical Tape, A Sharp Razor Blade, Drill, 3.5" Hole Saw, Allen Socket and Torx Socket Bits for 3/8" Rachet, Torque Wrench, Full Socket Set, Sturdy Scissors, Tub to catch oil that will drain, Zipties

Good ideas: The factory belt is harder to change with the supercharger installed, consider replacing it during this install.

Step 1: Remove Front Bumper

Let’s get the hard part out of the way and remove the front bumper and the inner fender skirts to give room to work. Follow the location references in these following images to remove all the screws and trim parts required, and finally remove the front bumper fascia.



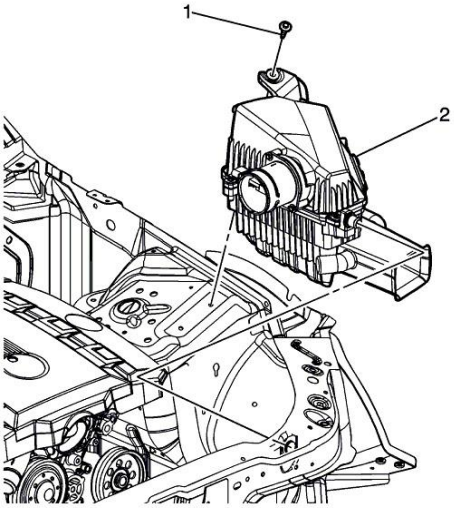

2
2
1
1
2
1
1
3

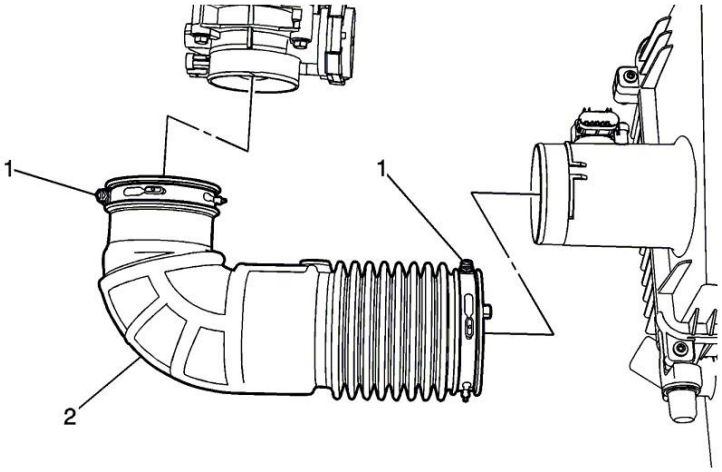
Step 2: Remove Air Filter Assembly

Onto an easier task, remove the factory air filter system, or whichever aftermarket system you may have. We'll outline the factory system, but refer to your aftermarket manufacturer's instructions as needed. Remove the engine cover to start.

Unhook the breather tube from the air tube and follow it back to the rear of the engine to remove. Loosen the the clamps at the throttle body and air cleaner and remove the tube. Unplug the MAF sensor. Remove the one bolt on the strut tower behind the filter housing, and then the housing will pull straight up and out of the vehicle.

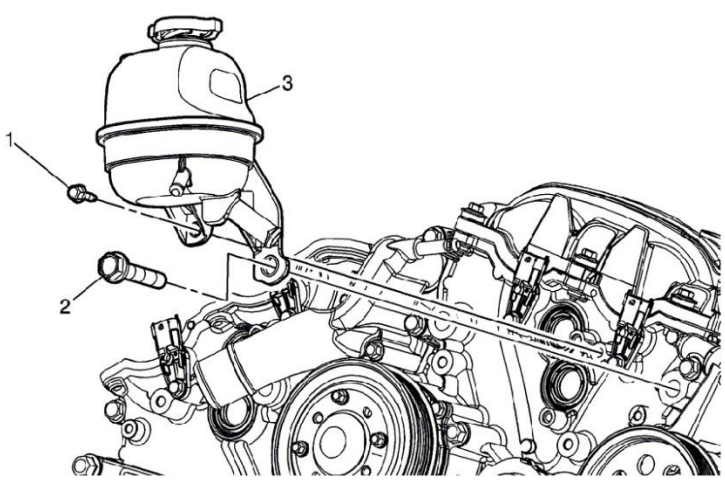
If you have a 2012-13, remove the two torx screws and remove the MAF sensor insert to reuse. For all 2008-2011 models, you don't need to remove the MAF as the kit will have come with a new 2012-13 model of MAF. For 2010-2011 3.0 models, you'll have a MAP sensor looking device on your air cleaner housing, you'll want to remove it from the housing and ziptie it somewhere secure either now or towards the end of the installation, simply leaving it open to free air.

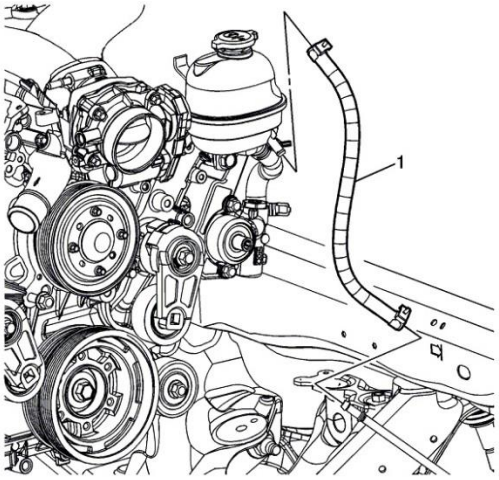




Step 3: Remove Power Steering Reservoir and Install New Reservoir

Let’s remove the power steering fluid reservoir, as we’ll be relocating it with our new kit. Ideally you’ll want to suck the fluid out of the reservoir, but you can also disconnect the smaller hose carefully and drain the reservoir, then tip the hose over to drain as it’ll be full of fluid as well. The reservoir is held on with two bolts; once drained, remove the bolts and remove the reservoir. Follow the large hose down the power steering pump, loosen its clamp and remove the hose.



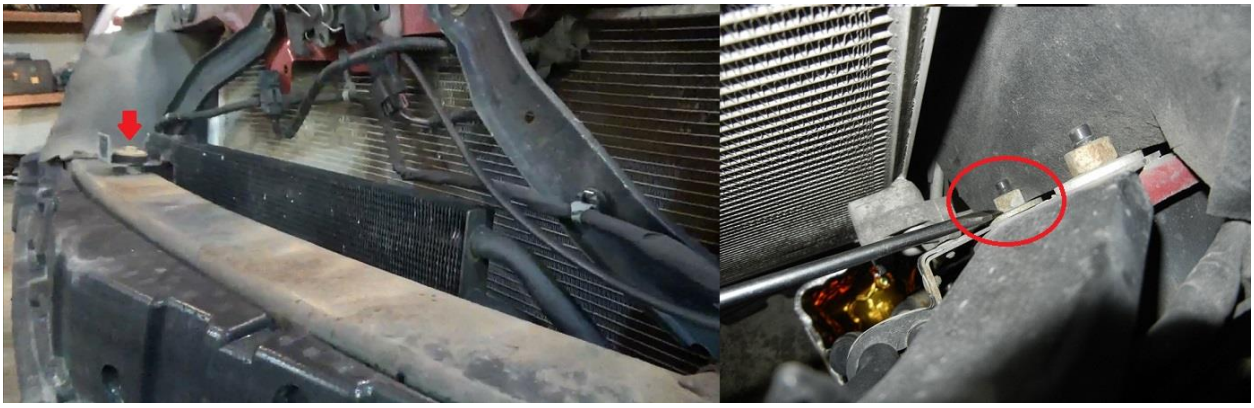


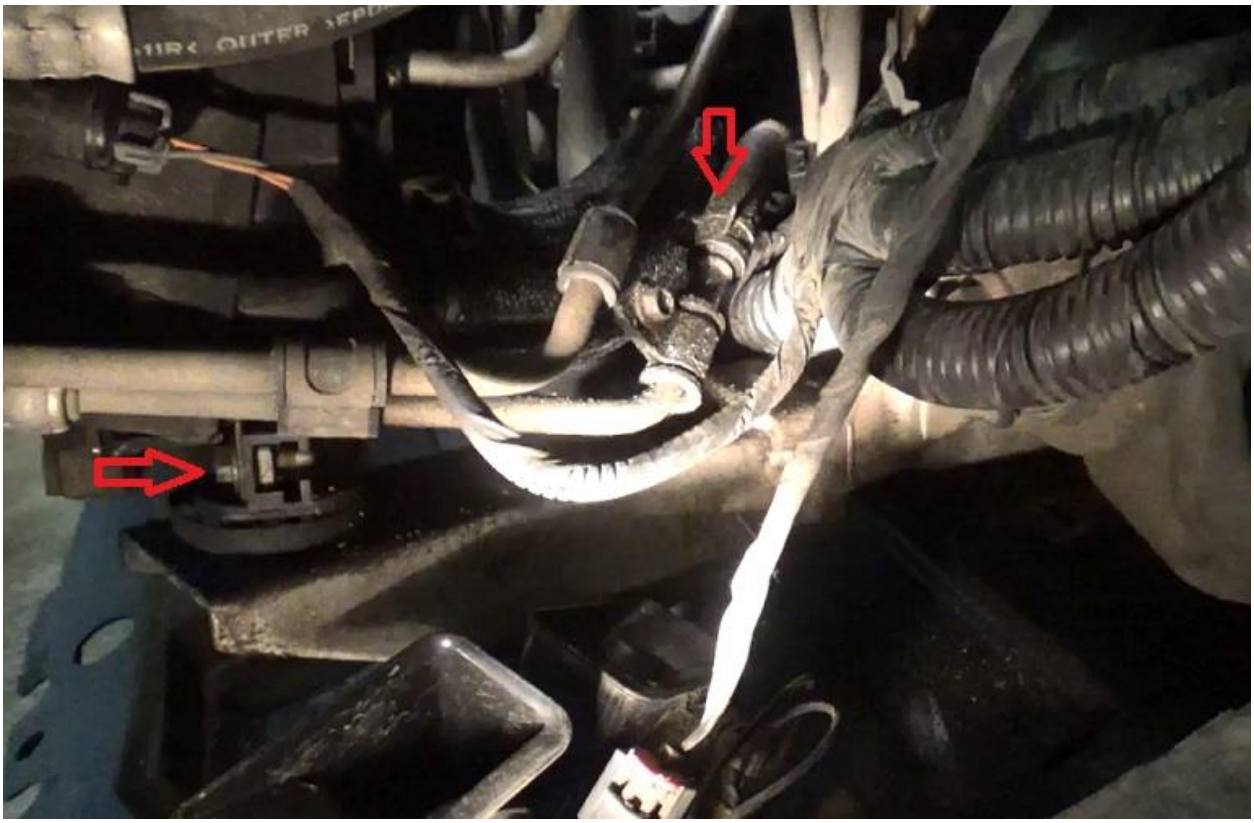
The new reservoir mounts back beside the brake fluid reservoir. The black bracket and its aluminum sub bracket goes over the stud and is secured by the same nut. The reservoir then slides down onto the black bracket. You'll need to use a little persuasion on the A/C line to give the reservoir some clearance.

Run the new larger hose from the new reservoir to the power steering pump and secure with the two new clamps provided. You can run the smaller hose from the reservoir following the A/C lines through the headlight area to the front bumper, in preparation for the next step.

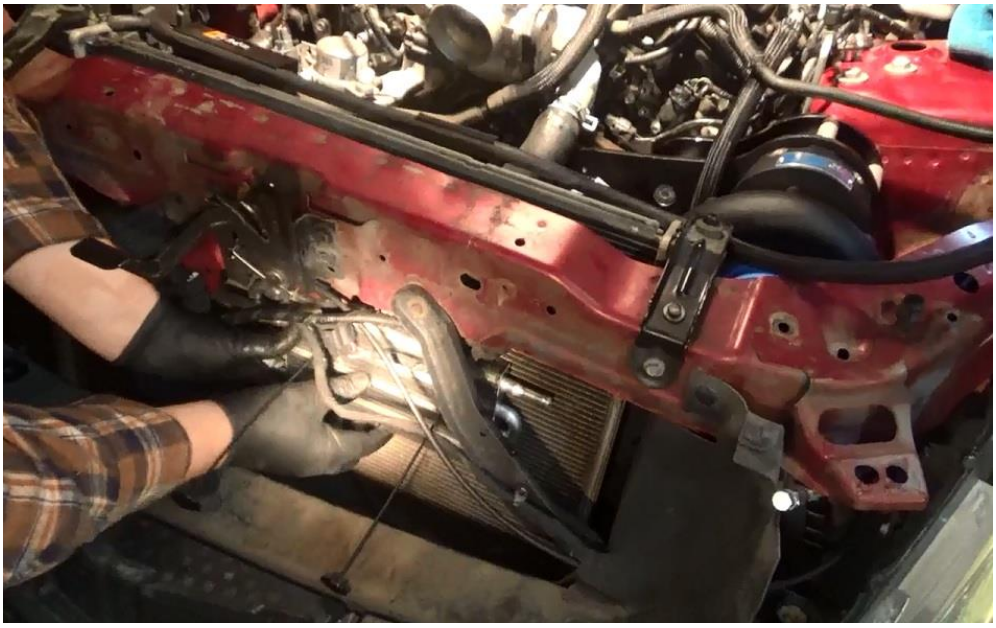
Step 4: Remove the Power Steering Oil Cooler and Install New Cooler

The factory oil cooler is very large and located behind the front crash bumper. Start by disconnecting the lines by the radiator in the front fenderwell area. You'll see clamps joining the cooler lines with a plastic joiner; you'll want to loosen the clamps and remove this joint, you'll be coupling the new lines to what remains in the engine bay. Follow the cooler lines, remove a securing bolt on the side of the radiator. The cooler is held on by two bolts, one atop of the crash bar, and the other behind on the passenger's side. Once loose, remove the cooler and catch any oil.

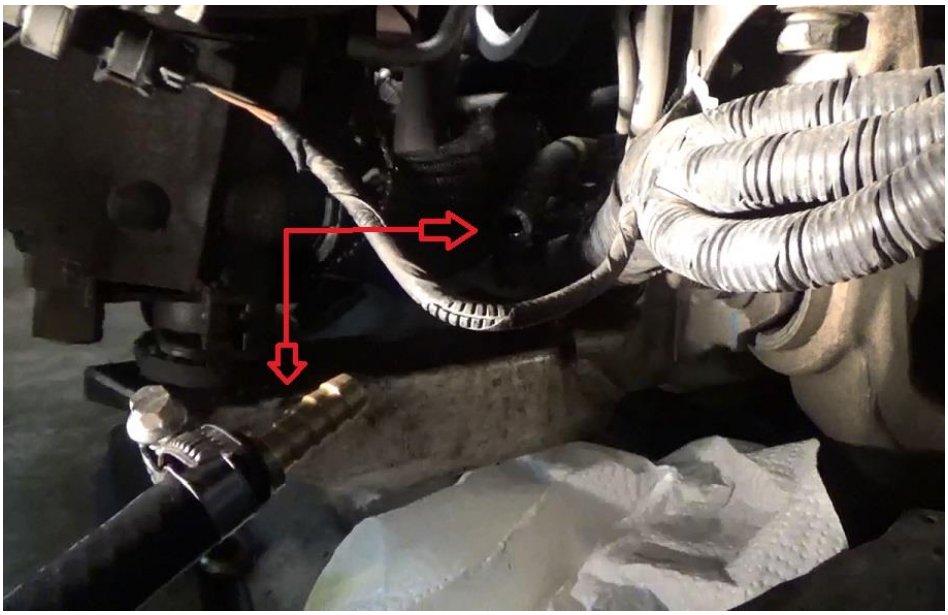




Place the new cooler in the middle of the condenser and as high up as it will go. Use the included zip ties to attach the cooler to the condenser to your satisfaction.



You can now secure the new cooler lines or leave it to later. You'll be running the smaller hose from the reservoir through the headlight area to the top of the cooler, leaving enough slack to run around the impending supercharger bracket install. Cut the hose to length and secure with hose clamp provided. Next run the remaining hose from the lower cooler port to the hose in the engine bay you disconnected, using the included brass barb and hose clamps to secure.



Step 5: Install Crankshaft Pulley and Adjust Lower Coolant Hose

One of the harder parts of the installation will be removing the crank pulley bolt. Using a strong impact gun ideally, remove the bolt. The new pulley will index into the OEM crank pulley spokes. Once the new slip fit pulley feels slotted in and sits flush with the OEM crank pulley, install the new longer provided bolt and torque to factory specifications of 74 ft-lbs and an additional 150 degrees rotation.

You should now find that the lower coolant hose is either touching the crank pulley or is very close. This is corrected by loosening the upper clamp on the coolant hose, and grab and twist the hose on its metal neck until you see clearance from the crank pulley of at least a finger width. Reinstall the clamp to secure. Done.

Step 6: Install 2008-2009 Accessory Kit (if applicable)

If you have a 2008-2009 CTS, you have a little extra work to do. Using the accessory kit, you'll be replacing the upper coolant hose and relocating the brake vacuum pump. You may wish to remove the intake manifold to help with access to everything.

Start by removing the upper coolant hose clamps and hose, catching the coolant that will spill. Next, locate the bolts and remove the coolant neck that the hose attached to.

Unplug the electrical connection and hose connection from the brake vacuum pump (the cylindrical device on the front of the engine on the driver's side). You can next remove the two nuts and bolts fastening the pump to its bracket, followed by removing the bracket from the engine.

Locate the new bracket in the kit, the two new bolts and two spacers. The larger spacer is a press fit into an existing large hole in the engine on the passenger's side. Use the larger diameter bolt and fender washer to connect the bracket to this spacer, and using the slit to move side to side, use the smaller diameter bolt and spacer to line up to an existing bolt hole. Secure both bolts.

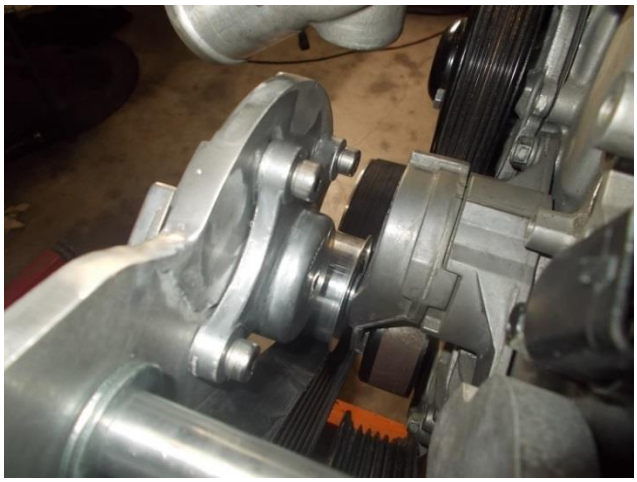
Mount the brake vacuum pump to the new bracket. Use the rubber hose extension to cut and extend the existing hose to reach the new location. Use the provided wiring extension to reach the new pump location.

Moving on to the coolant hose, the new coolant neck comes with new bolts and provided gasket. Ensure the surface its mounting to is clean and install. Use the clamps off of the old coolant hose on the new hose and install.

Lastly, you may or may not have an electric auxiliary coolant pump at the bottom of your radiator that has a looping hose on it. We provide a more direct 90* coolant elbow to replace it if you need clearance from the crankshaft pulley.

Step 7: Install Tensioner To Mounting Plate

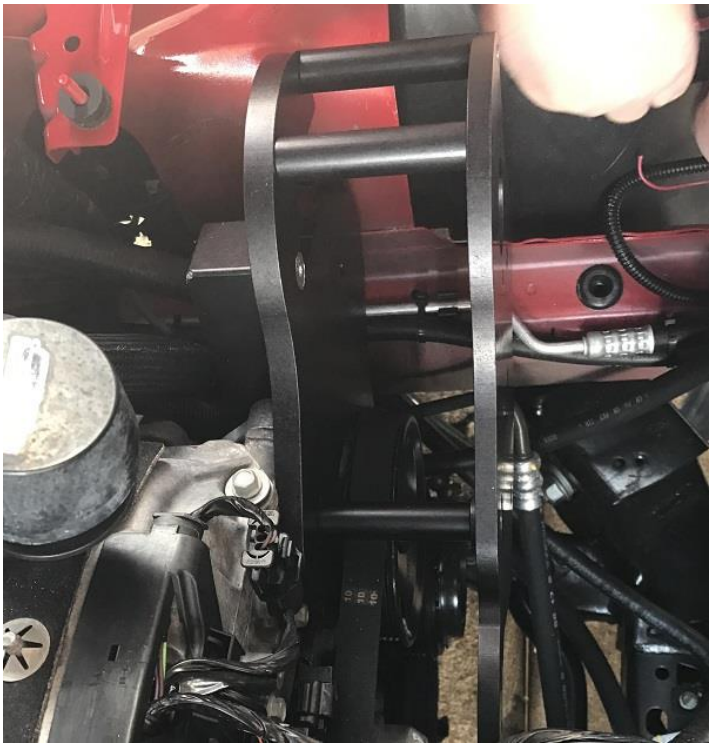
To prepare to install the mounting plates, first attach the tensioner assembly to the outer face plate with the Vortech attached. Referencing the Vortech, the tensioner body mounts on the pulley side of the plate, with the outside of the pulley facing the same direction as the Vortech pulley. Install the included 3 bolts and torque to 8 ft-lbs or 96 inch-lbs with blue Loctite recommended.



Step 8: Install Mounting Plates and Vortech Unit

Time to install the good stuff!

Once installed, the plates will look similar this (5th Gen Camaro shown), OF COURSE YOU"LL HAVE THE VORTECH ATTACHED TO IT, but this gives you an idea of how the plates install…



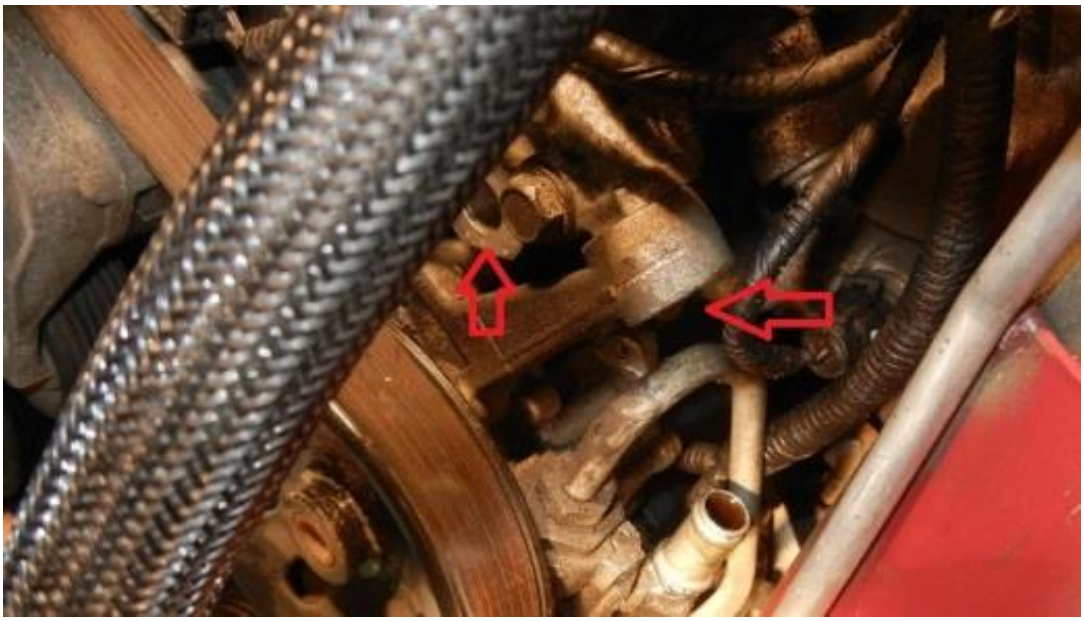
Identify first the components:

#1 You'll have the outer plate with the Vortech attached and tensioner now attached, #2 you'll have the inner engine side plate, #3 you'll have a block like bracket that goes behind the engine side plate to attach to the engine, #4 1 long round spacer with a larger inner diameter, #5 1 shorter round spacer with a larger inner diameter, #6 2 long round spacers with smaller inner diameter, #7 two medium hex head cap screws of the same length, #8 one medium-large hex head cap screw, #9 one large countersunk head screw, #10 one large hex head black color screw and #11 two smaller countersunk head screws.

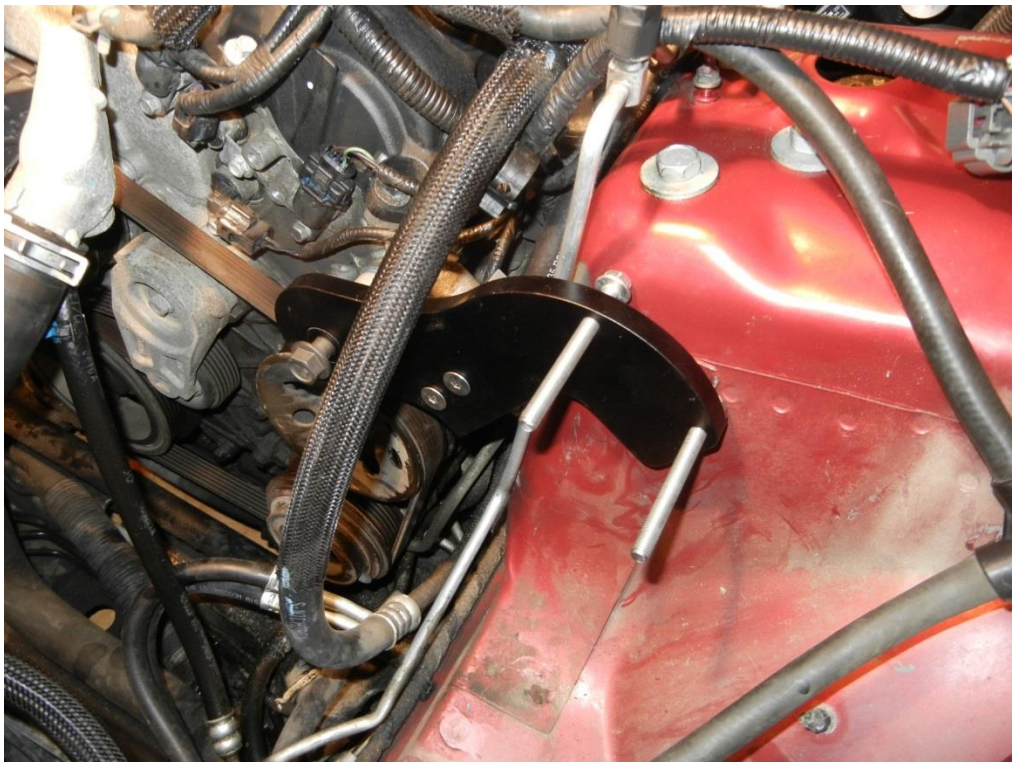
Blue Loctite is recommended on all of the following bolts.

The sequence is important to ensure minimal curse words and disgruntlement, so follow along!

You'll start by bolting the #3 bracket to the side of the engine on the driver's side. Removing the existing bolt by the oil filter, and use the provided longer bolt (#8) to secure the bracket, hand tight only.



Grab the engine side mounting bracket. You'll need bolts #10, #11 and #7 and spacer #5. Identify the backside of the plate, and slide bolts #7 through the two bolts at the top of the plate so they face forward.

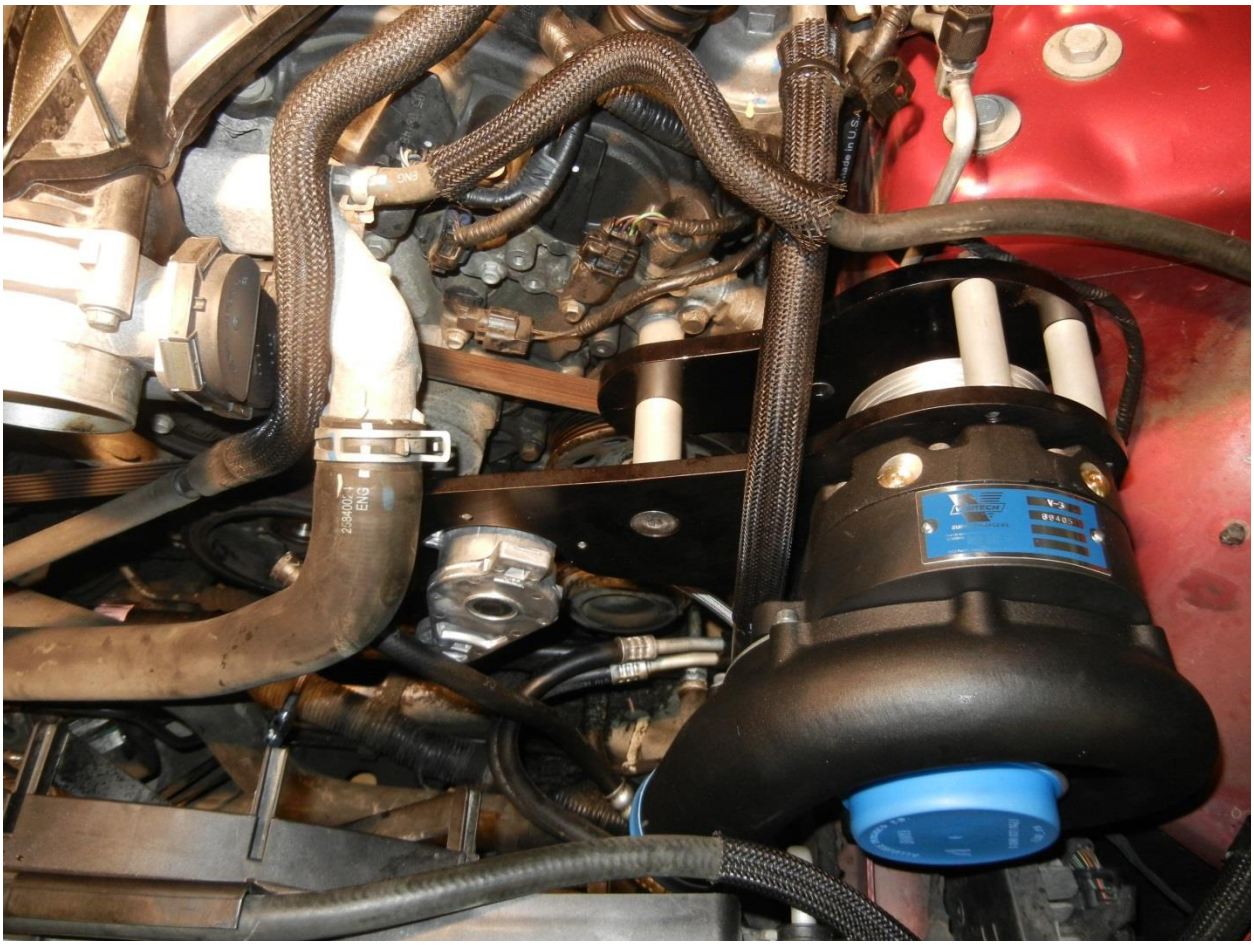


Using bolt #10 and spacer #5, slide the bolt through plate from the front side, then through the spacer, and attach to the existing threaded hole on the front of the engine, hand tighten the bolt. Rotate the plate until the countersunk holes and the threads in the #3 bracket line up, and use the #11 bolts to secure. Tighten the #10 bolt snug to line up the plate, then torque the #11 bolts to 15ft-lbs to connect the two brackets.

Now the tougher part, use a ring wrench (a ratcheting one helps) to tighten the #8 bolt now that the brackets connected and aligned. It's a tight fit sliding up from around the power steering pump, the right ring wrenches will make the difference between a difficult and an easy job.

With the bolts tightened, remove the #10 bolt and discard, its job is done. Slide the #6 spacers over the #7 bolts and ready the #4 spacer and #9 bolt.

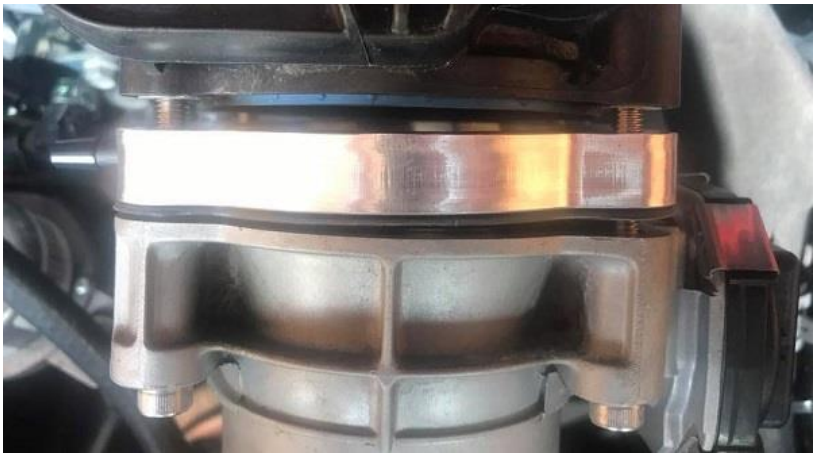
Time to slide the outer plate and the Vortech underneath the large A/C line to an adjacent position to the engine plate. Slide the #9 bolt through the outer plate, through the #4 spacer, through the engine side plate, through the #5 spacer and begin to tighten to the engine block. Rotate the backside of the outer mounting plate up to line up the #7 bolts from the engine plate and begin to secure them with a ring wrench until snug. Go back to the #9 bolt, fully snug and torque to 35ft-lbs. You won't really be able to torque the #7 bolts, ensure they're snug and secure but do not overtighten.



If you need to clock the Vortech, you’re able to move it be loosening the 6 small allen head retaining bolts and rotating the snail like outer housing. The outlet should be pointed straight down.

Step 9: Install Throttle Body Spacer

Before doing the intercooler tubing, good time to install the throttle body spacer. A throttle body spacer is provided to provide engine vacuum to the blow off valve and to the catch can system. Open the kit, it'll have a spacer with fittings preinstalled, a gasket and longer bolts. Remove the throttle body by removing the 4 securing bolts. Install the spacer with the straight vacuum fitting and hose facing the passenger's side of the vehicle, the 90* fitting will face upwards and towards the driver's side. Using the longer provided bolts, secure the throttle body with the provided gasket between the throttle body and plate. The included ¼" hose will run to the blow off valve.



Step 10: Install Front Mounted Intercooler and Prep For Intercooler Tubing

Use a jack to slide the intercooler up behind the front crash support.

Use the longer included bolts with spacers to secure the intercooler to the long leg of the L brackets and hang the short leg over the crash support bumper. It's recommended you don't yet secure to the crash support, in case you wish to slide the intercooler sideways one way or the other to help with fitment of the intercooler tubing.

Prep to install the driver's side tubing. The small transmission cooler and A/C lines along the driver's side of the radiator will almost all need to be disconnected from their securing tabs in order to wiggle around and provide clearance.

The lower transmission cooler line needs to be bent from its current 60* to a full 90* angle in order to provide clearance from the intercooler tubing. Pull its retaining clip with a pick and disconnect from the radiator, catch any fluid that drains. Using a pipe bending tool ideally but your hands carefully as needed, bend the existing bend until it's a full 90*, then reinstall into the radiator and secure.

If you have a 2010-2013 model with the engine computer in the fenderwell, remove the computer from its bracket by unclipping it at the top, and follow its wiring harness to unclip and move it out of the way. You'll also want to remove the two nuts holding the bracket inplace, remove the bracket, then reinstall the nuts. Set the computer aside for now, it'll be reinstalled later with its bracket in a different location.

You may also find that this bracket that retainers the bottom passenger's side corner of the A/C condenser may need to be removed to provide clearance to the intercooler.

Step 11: Install Drivers Side Intercooler Tubing

The following picture shows the driver's side intercooler tubing. There's a long leg silicone elbow with orange inside, with a size reducing insert in the long end, followed by a short aluminum elbow, followed by a short silicone 90* elbow with orange side, with the shorter leg attaching to the aluminum elbow and longer leg to the intercooler inlet.

Slide the long leg tubing up by the radiator into the engine bay and with a bronze nut clamp over the end slide up and attach to the Vortech outlet. Some WD40 is helpful to slide the silicone parts onto metal, and the WD40 will dry up shortly after. Ensure you get the clamp high enough that it clamps over the top of the silicone where the reducing insert goes; if you clamp it too low it won't clamp over the insert and may come loose.

Slide the aluminum elbow into the short leg in the fenderwell, and follow with the silicone 90* with the short leg to the aluminum tube and the longer leg to the intercooler. Use bronze nut clamps to secure each connection.

Step 12: Install Passenger's Side Intercooler Piping

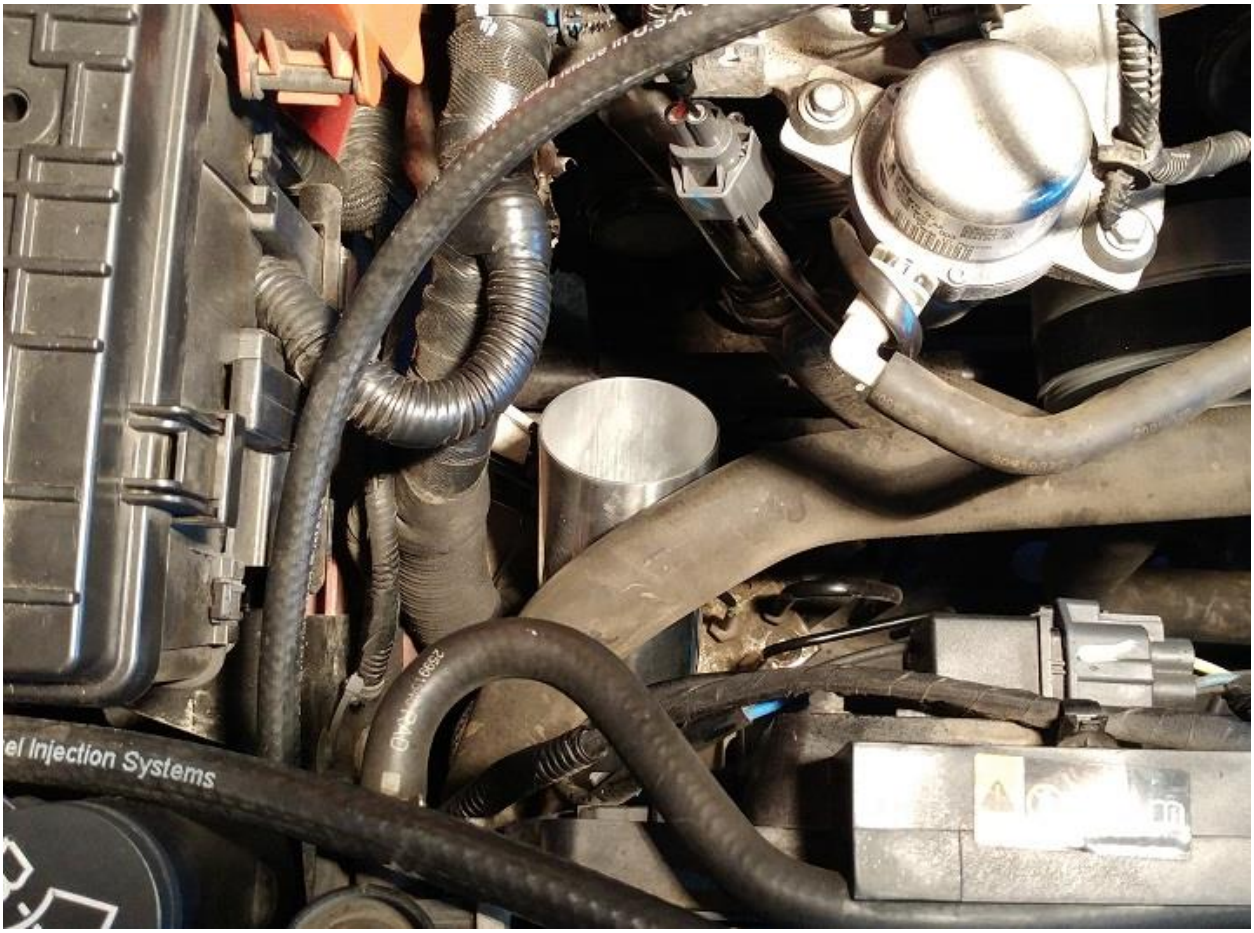
Reference the following picture for a rough idea of how the tubing goes together:

The sequence from the intercooler outlet will be the Cobra head silicone elbow to the metal BOV T pipe to the smaller 90* silicone (black inside) to the short leg on the aluminum tube with unequal length to the moderate bend silicone elbow to the short metal joiner tube to one of the unequal size silicone elbows to the MAF sensor housing to the second unequal size elbows to the throttle body. The MAF sensor will take two of the larger clamps, with all other connections using the bronze nut clamps.

Remember to use WD40 and spray the insides of the silicone couplers to help them slide onto the aluminum tubing and rotate easily. The WD40 will dry and not harm the silicone.

Prep by installing the MAF into the MAF housing. If you have a 2012-13 model you'll reuse your factory MAF sensor, otherwise use the new included card MAF sensor. Very important to face the MAF components the correct way. Locate the open end of the MAF sensor, this will face towards the end of the MAF housing that has the screen in it, and the screen end will point into the airflow with the open end facing the throttle body end.

Assemble the Cobra head to the blow off valve tee pipe, to the 90* silicone and the irregular leg aluminum tube. Focus on their fitment first. The 90* silicone will need to be tilted upward, and the aluminum tube tilted towards the back of the car. Don't forget to use the rotation of the Cobra head silicone coupler as well as the travel on its connection to the BOV tee pipe to achieve the right fit. Test fit as needed until you get the fitment of the aluminum tube to look like this in the engine bay of the vehicle, then remove a final time as needed to tighten the clamps and reinstall.



The moderate bending silicone elbow and the multi-sized 90* silicone elbow join together with the short metal silicone joiner you've received, I suggest you prejoin them before installing. If you test fit you'll see the bends need to be set at a 90* angle to each other. Ensure to get an equal amount of the joiner in both silicone elbows and tighten

their clamps to secure. With that joint made and secure, slide the moderate bend elbow over the pipe coming up from the blow off valve you previously installed above, and secure with hose clamp. Insert the MAF sensor screen side first into the multi-sized elbow that will be facing towards the driver's side, and finish with the second multi-sized elbow, secure all clamps.

Finish the tubing install by running the ¼" hose from the throttle body spacer down to the blow off valve vacuum port, cut to length as needed and secure. Use the new included wiring harness to adapt the original MAF sensor plug to the new MAF sensor location.

Finally you can secure the intercooler to the crash bar support. Use the included drill bit and tap to make threads to secure the brackets to both the topside and front side of the bar and secure with the provided shorter bolts.

Step 13: Install Intake and Air Filter

Locate the larger Cobra head elbow and the 45" bend larger aluminum elbow, these are your intake tubing components, along with the Amsoil air filter and the two remaining larger T-Bolt clamps.

You'll need to start by removing the horns from their existing location. The bracket is held on with three 10mm bolts, which you'll need to access from the driver's fender lining area and remove, set aside for now.

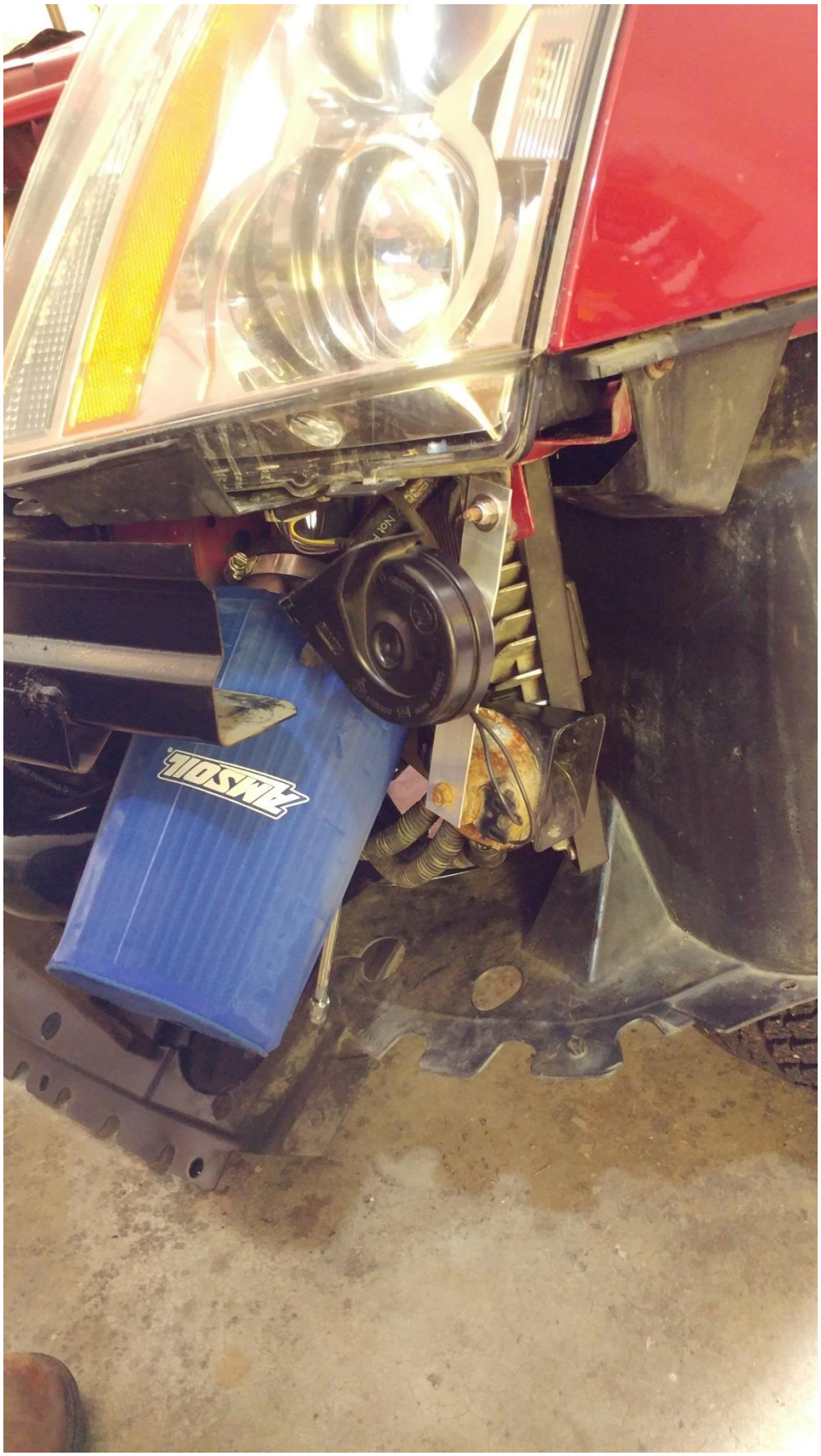
Imagine the Vortech inlet as a clock, the Cobra elbow will need to be clocked to around 5 o'clock. Install the longer leg of the aluminum tube into the elbow, rotating the bend of the pipe to angle the filter forward towards the front bumper, with the filter attaching to the shorter leg. Secure all clamps

Step 14: Install Horns and if applicable Computer Bracket

On 2012-13 3.6 models and 2010-13 3.0 models, the engine computer and its bracket you previously removed will now be remounted around where the horns mounted.

Reference the picture below, you'll see how you can mount the bracket to two of the holes left from the horn bracket and secure with two nuts and bolts. Simply place the bracket on the surface, sliding it over as far as you can and down as you can so it sits flush, then mark and drill the holes. Secure the bracket with the included low profile button head screws and nylon lock nuts.

For all models, remove the two horns from the original bracket by loosening their nuts, and install them on the new provided bracket, resecuring with the nuts. Loosen the headlight securing nut and install the bracket, resecure with the same nut. Your horns will now look like this…


AMSOIL

Step 15: Spark Plugs and MAP Sensor

Use the included spark plugs to do a full plug change on your engine. The plugs come pregapped at .035”, it’s always recommended to double check before installing. Should you ever need new replacements, take note of the part numbers, they can be purchased at the GM dealership or any place that sells AC Delco parts.

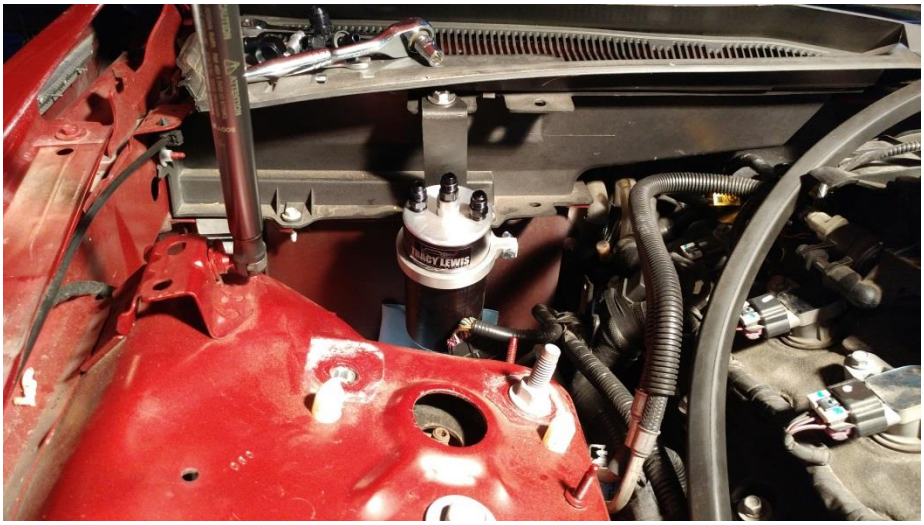
If you have higher mileage, consider replacing all of the ignition coils while doing the spark plugs, they are a moderately risk failure item as they age and a full set can be purchased off of Amazon or elsewhere for around $200 for the set.

The MAP sensor is located ontop of the intake manifold towards the back. Remove its Torx retaining bolt and electrical connector and swap the sensors with the new provided, resecuring the bolt and electrical connection.

Step 16: Install Catch Can System

Installing the catch can is very important. Without this system inplace, oil will get into your engine, your valves, piston tops, into your intercooler system and into your supercharger even. However with it in place, you’ll be amazed at the oil it prevents entering these crucial areas and will help prolong engine life considerably.

Your catch can will include a bunch of new preassembled hoses and the can itself with mounting brackets. The can should be mounted at the rear passenger’s side of the engine bay using one of the bolts you see or using a new nut and bolt to an existing hole in the plastic trim.



There are 4 lines to be run in total, plus a PCV valve fitting to replace. Follow along in the sequence step by step, reread as many times as you need to, and you'll be able to install the catch can successfully.

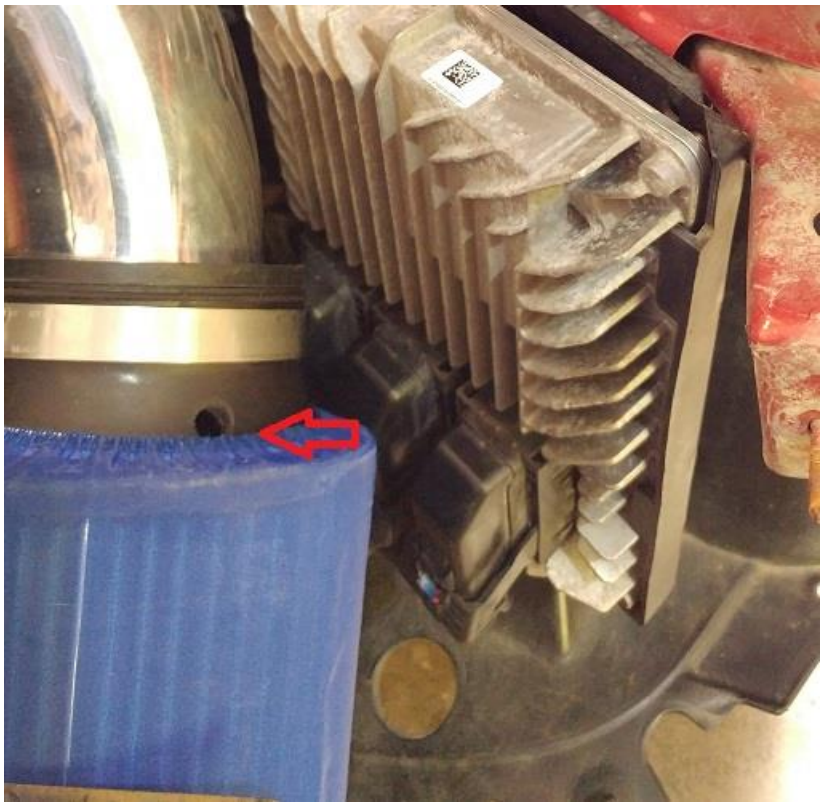
Locate the old PCV valve at the passenger's rear valve cover on the engine. If you haven't yet removed the hard plastic vacuum line ontop of the intake manifold, follow it to the rear valve cover and you'll find the fitting. Release the tab from the PCV valve, then rotate the fitting on the valve cover to clear its locking tabs, then pull up to remove. Remove the metal PCV valve, it will pull out with a little persuasion, it's a press fit. Install the new aluminum fitting where the PCV valve went, it will press in with a little persuasion.

Line #1, take the short ½" hose and run it from the new valve cover fitting to the larger center port on the catch can.

Line #2 – Run the 2 foot length 3/8" hose with check valve from the top of the intake manifold to one of the two outer ports on the catch can.

Line #3 – Run the much longer 3/8" hose with check valve from the Cobra silicone elbow on the inlet of the Vortech in the predrilled hole all the way around the engine bay to the remaining outer port on the catch can.

Line #4 –Included in the kit is a piece that replaces the oil filler cap. It's called a clean side separator. Install the CSS by screwing into the oil filler neck. Connect the longer ½" hose to its vacuum port, and run that hose down to the air filter, shoving the ½" hose over a preinstalled fitting on the filter neck.



Step 17: Reinstall Front Bumper

Time to reinstall the front bumper fascia and button up the car. Refer to the original disassembly process, and just do everything in reverse.

Step 18: Install Vortech plug

Using the included package, remove the plug shown from the Vortech (meant for shipping only) and replace with the new plug and new crush washer.

Step 19: Final Checks Under The Hood

Time to check everything you've installed. Look for the following items:

- Things are clear from the serpentine belt
- Things are clear from the exhaust downpipes
- Intercooler piping isn't clunking against the subframe, adjust if so to correct
- Check the fluid level in the supercharger. It comes prefilled. Do not overfill.
- Check all clamps are tight
- Check that the catch can fittings are tight and the drain valve is closed
- Secure the drain lines of the supercharger and catch can.
- Fill the Power Steering fluid reservoir with oil
- Fill coolant as needed, fill transmission as needed.

Step 20: Flash Tuning

With your HP Tuner Suite, you'll need to first use the suite to read the factory computer tuning and email the file it generates to Overkill so that I can write your Overkill tune using the factory programming for your vehicle.

Follow the included HP Tuner package instructions to install the HP Tuner VCM Editor and VCM Scanner programs onto your laptop. You'll be asked for the application key when you first start up VCM Editor, which they've provided.

You'll be reading and writing the vehicle with the ignition on but the engine off, repeat you do not start the engine to either read or write the tune files, the ignition simply needs to be turned on to where the dash and instrument cluster power up. If you have a key ignition, the key will be turned to the rest position where the car is normally running, and if you have a push button ignition this is typically done with your foot off the brake pedal and two taps to the ignition button. Read your owner's manual if you need further clarification for your car. Wait for a count of 15 seconds minimum after turning the ignition on before reading or writing the tune, and once the tune read/write is completed count to 5 before turning the ignition off, do not rush the ignition cycles, be patient!

With VCM Editor installed, go out to your vehicle to your HP Tuner cable and laptop. The connection port is under the dash in the driver's foot well. Connect your laptop to the vehicle with the cable. Open the VCM Editor program. Turn the ignition to on, do not start the engine, and recommend that you turn off your radio and HVAC so not to drain the battery. Go to Flash in the top menu, Read Vehicle. In the new window that pops up, click the Gather Info button. You should now see a list of the readable computers in your vehicle. Very importantly, particularly if you have a Cadillac CTS or Chevrolet Camaro, if you see the hardware "FSCM" at the bottom of the window, set it to Do Not Read, unless Overkill requests otherwise. When it's done, it'll ask you to save the file, save it as "YourName Factory Tune". You can then turn off the ignition and disconnect the cable, and email this file to willoverkill@gmail.com

When you get your Overkill tune files back, you'll follow a similar procedure. Open the tune in VCM Editor using File > Open. Go to Flash > Write Vehicle, and when prompted you can use the preloaded credits available on your HP Tuner cable to license your vehicle (typically 2 credits). Once licensed you won't have to license the factory tune or any Overkill tunes again for your vehicle, one time license only. Ensure that the files are set to Write Calibration if available. With the ignition on, waiting 15 seconds minimum, begin the Write of the vehicle, this should take up to 1 minute. Once completed, turn the ignition off, wait 5 seconds minimum, and then you can start the vehicle.

Maintenance On The Supercharger Kit

The Vortech will require its first oil change at 2500 miles, and then regular oil changes every 7500 miles or 1 year. Check the oil level on a regular basis in between changes.

Use the braided oil drain line to drain the fluid. The unit will then take 4 oz of the specific fluid from Vortech. Do not overfill. Do not use any substitute oil. Part number for a 3 pack of 4 oz oil bottles is **009035** and at time of writing instructions the price is $33.99 from Jegs.com. You can also order from other performance outlets. Ensure to get proper Vortech branded oil, no substitutes!!

The Amsoil oil filter has an outer prefilter that can be wiped off with a clean wet towel to remove excess dirt. Should the filter itself require cleaning, remove from the vehicle, remove the prefilter sock, vacuum the outside with a shop vac to remove loose dirt. Mix up a solution of Woolite and very warm water in a tub deep enough to submerge the filter, and then submerge the filter. Leave for 10 minutes to soak, and you can then use a soft brush like a paint brush to agitate the outside of the filter to further clean. Rinse with a soft stream of water from the inside out to rinse the dirt and soap away. Repeat as needed to clean any soiled areas that remain. Finally leave to air dry, which may take 3 hours or more, do not reinstall until the material is dry. The prefilter can be washed in soapy water and dried with a towel. Finally reassemble. No oiling required.

The spark plugs are iridium and have a long life span. For ideal performance, we recommend replacing every 4 years or 60,000 miles. They can be purchased GM.

Your catch can should be drained at every oil change or at least twice per year. Ensure to close the drain valve after draining the oil from the can, or you'll have an air leak.

Strongly recommend the use of synthetic oil like Amsoil in your engine, differential and transmission, with quality filters, and change at factory intervals or earlier!

Warranty On Supercharger Kit

The Vortech and all physical components on the kit are warrantied for 1 year from date of purchase for defects of materials. Examples of this would be if a silicone elbow developes a split, if the intercooler develops a crack, the tensioner no longer operates as designed, the Vortech develops a leak from its body. Items that aren't covered are items that come from abuse, misinstallation, improper maintenance, collisions, acts of god, or from additional non kit related modifications.

This warranty covers replacement of the part only. It does not cover labor costs to diagnose or to remove or replace the component. It does not cover any towing costs. It does not cover any downtime costs on the vehicle.

Items that exclude the Vortech manufacturer's warranty include but are not limited to:

-Disassembly, attempted disassembly, or modification of the Vortech unit

-Removal of the serial tag identification

-Ingestion of debris by the supercharger

-Running low on oil, using improper oil, or improper oil change intervals

What If I Need A New…

The supercharger kit has been designed with no components that will require extraordinary replacement schedules. There are of course items on the kit that won't last forever. Here's a list of wearable parts:

Supercharger Belt –Gates K080550 for base pulley, K080547 for Stage 2 pulley

Tensioner Pulley – Gates 38022 (76mm diameter)

Spark Plugs – AC Delco 41-147 (application 2016 Cadillac ATS-V 3.6 Turbo)

Amsoil Air Filter – EAAU3590 (check amsoil.com for local dealer), EAPF21 prefilter