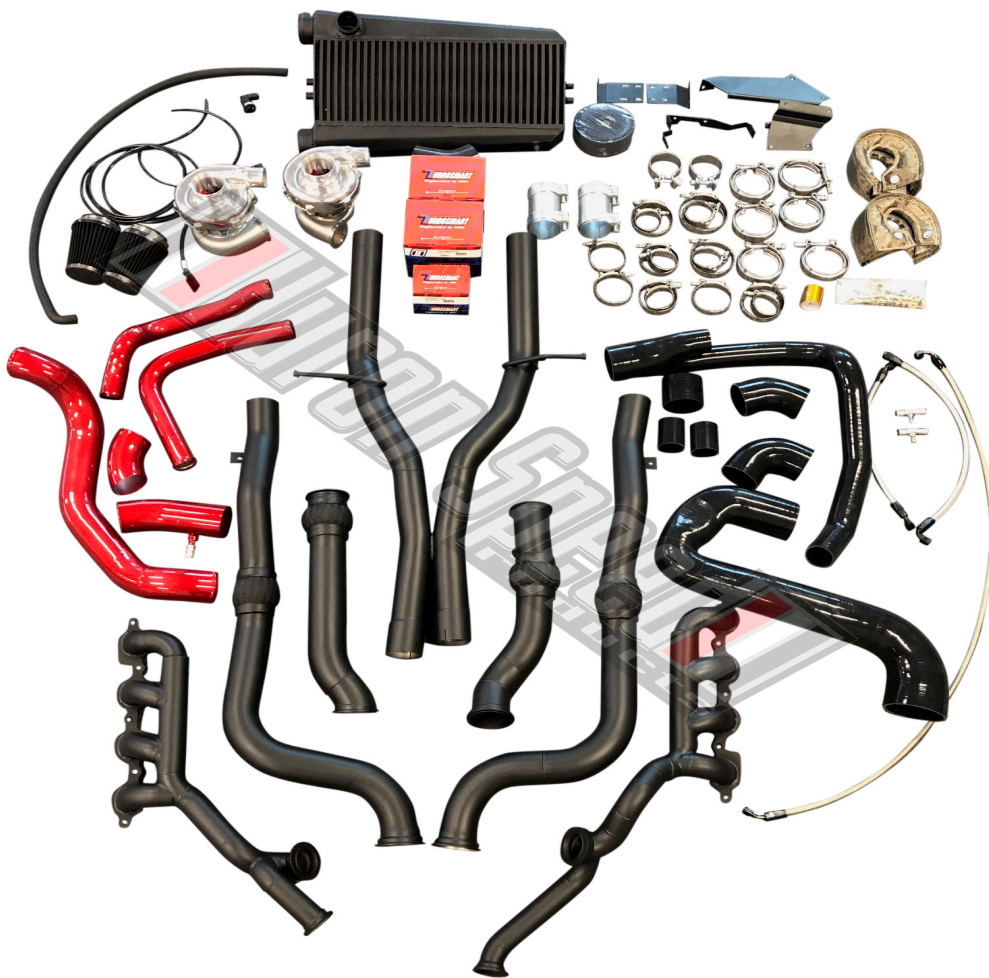




2016+ Camaro SS/ZL1

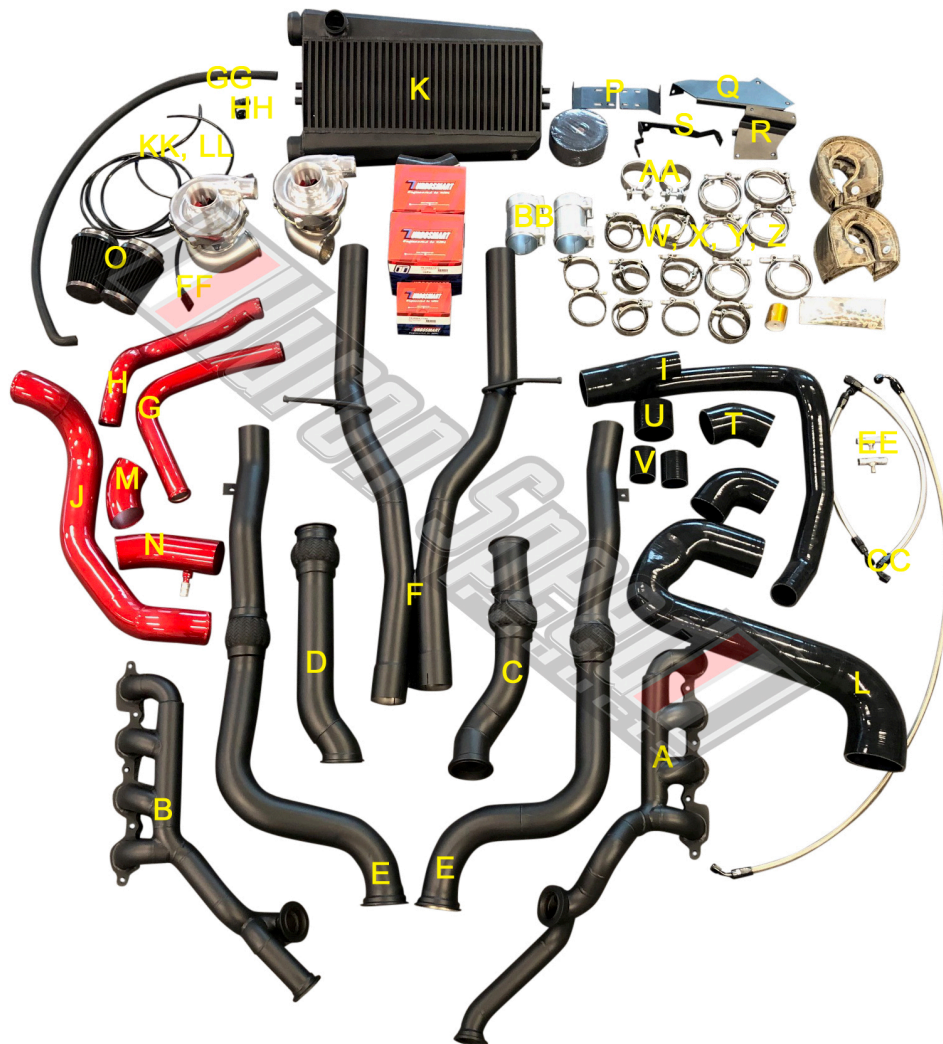
Twin Turbo Kit Installation Guide



Parts List

- A- Driver's Side Turbo Manifold
- B- Passenger's Side Turbo Manifold
- C- Driver's Side Downpipe
- D- Passenger's Side Downpipe
- E- Exhaust Mid-Pipe 2-piece
- F- Exhaust Axle Back Connection Pipe
- G- Driver's Side Cold-side Tube off Turbocharger
- H- Passenger's Side Cold-side Tube off Turbocharger
- I- Cold Side Silicone Connection Y-Merge Tube
- J- Cold Side Tube to Intercooler
- K- Black Series Front Mount Intercooler
- L- Silicone Cold Side Tube out of Intercooler to Throttle Body
- M- Driver's Side Turbocharger Intake Tube
- N- Passenger's Side Turbocharger Intake Tube
- O- Air Filters for Turbocharger Intake Tubes (2)
- P- Intercooler Support Brackets (2)
- Q- Driver's Side Aux Radiator Lower Relocation Bracket
- R- Driver's Side Aux Radiation Upper Relocation Bracket
- S- Driver's Side Transmission Cooler Mount
- T- Driver's Side Turbo Intake Tube Coupler
- U- Passenger's Side Turbo Intake Tube Coupler
- V- Couplers for Turbo Compressor Discharge to Cold Side (2)
- W- 2" T-bolt Clamps
- X- 3" T-bolt Clamps
- Y- 4" T-bolt Clamp
- Z- 3" V-band Clamps (2)
- AA- Exhaust Band Clamps (2)
- BB- Exhaust to Catback Sleeve Clamps (2)
- CC- -6an Coolant Hoses for Turbochargers (3)
- DD- 3/8" NPT to -6an Fittings for Turbochargers (4)

- EE- -6an to Barb T-fittings for Turbocharger Coolant (2)
- FF- MAF Extension Harness
- GG- 5/8" Hose
- HH- 5/8" Quick-Connect Fitting
- II- Boost/Vacuum Log
- JJ- 3/8" Vacuum Hose
- KK- 1/4" Vacuum Quick-Connect Fittings (straights, 90's, T)
- LL- 1/4" Vacuum Hose (4 lengths)



The following install guide is simply that, a guide to help you with installation. It is by no means the exact method to perform installation, simply some tips and tricks we can offer to help you out! Huron Speed is not responsible for anything that may happen to you, the vehicle, or the product during installation.

Furthermore Huron Speed is not responsible for any installation costs for any reason at all no matter if you are installing or a professional shop is installing. All installation and labor costs no matter the scenario are the responsibility of you the purchaser of the product. Proper fueling and a professional dyno tune is REQUIRED to safely run this system on your vehicle. Failure to properly set the car up for boost WILL result in damage. If you have ANY questions, please reach out and ask and we would be more than happy to assist!

Jon@HuronSpeed.com

Step 1: Disconnect Battery cables from the front passenger side of the engine bay.

Step 2: Remove Dipstick Tube, Plug wires, Spark Plugs, and O2 Sensors. Set aside for re-use later. Rear O2 Sensors will not be re-used in this off-road only system. Drain the engines coolant.

Step 3: Remove the lower aluminum skid plate from the bottom side of the vehicle along with all of the underside black plastics. Set aside and label your bolts, these will all be re-used!

Step 4: Remove Factory Exhaust from bottom side of vehicle. You will make a cut on each exhaust tube entering the rear muffler. Our system will tie into the rear muffler at this location, see photo below for the proper location to cut. Eye Protection must be used.



Step 5: Remove the front fascia. This is done via the following:

Up top, removing the (8) T15 Torx screws and (2) push pins on the top of fascia from the engine compartment.

Down below under the car remove the 22 screws and 6 bolts holding the black plastic splash guard and bottom of fascia.

The remaining bolts for the fascia to the fender are easiest to access by removing the (2) front wheels and some of the wheel liner screws to access through the wheel liner area. For this, loosen the front lug nuts with the vehicle on the ground, set the parking brake, and then safely jack up the front of the vehicle and secure with jack stands (or if on a lift, simply raise the vehicle). Remove the (4) T15 torx screws on each side to loosen the wheel well liners. Now you can gain access through the wheel well liner to locals the (3) 7mm screws that attach vertically into the fender, and the (4) horizontally on each side.

Lastly unclip the front fascia's wiring harness behind the driver's side wheel liner.

Step 6: Remove the engine's coolant overflow tank via unclamping the (2) hoses and (1) 10mm bolt . This will create more space to make your installation much easier. Set side as this will go back into place after installation of the kit.

Step 7: Remove the factory air box by disconnecting the MAF sensor, loosening the (2) clamps that attach the air inlet tube, removing the tube, and pulling up on the air box itself to remove. You will now have the sound tube attached to the inlet tube. To remove this, unbolt it via the (2) T45 Torx bolts from the water pump and then again back at the firewall via (1) 10mm nut to remove. Remove the PCV tube that remains from the PCV box on the passenger's side of the engine by squeezing the connector on the clamp. Remove the MAF card sensor and set aside for later use, the rest will not be re-used.

ZL1 Note: At this time if you have a ZL1 model, you will remove the factory Supercharger from the engine and replace with an intake manifold of your choice. Up front you will remove the factory Heat

Exchanger and accessories for the Supercharger system. This will not be re-used.

Step 8: Install the BMR Fabricated Engine Mount Pedestals per BMR's supplied instructions



Step 9: Install your Primary (front) O2 sensors into the Turbo Exhaust Manifolds (Parts A and B). We recommend adding a dab of anti-seize to the threads.

Step 10: Install the Turbo Exhaust Manifolds (Parts A and B) to the cylinder heads using OEM Multi-layer exhaust gasket, the factory gaskets can be re-used unless they were damaged. This is best done from the bottom and assistance of someone to hold them in place while you bolt them down. I recommend using a dab of anti-seize on the turbo exhaust manifold bolts. You may use our supplied M8x1.25 bolts or re-use the OEM exhaust manifold bolts.



Step 11: With the exhaust manifolds in place, we now need to get the Turbocharger inlet tubes with air filters in place. Attach the supplied Air Filters (Parts: O) to the Drivers side Inlet tube (Part:M) and the Passenger's Side Inlet tube (Part: N). Attach Inlet coupler (Part: T) to the Driver's Side Inlet tube/Filter assembly and Inlet coupler (Part: U) to the Passenger's Side inlet tube/Filter assembly. From here you will simply place these inlet tubes with Filters attached to them in their rough area of installation shown below to attach to the Turbochargers later on.





Step 12: At this time we recommend placing the Driver's and Passenger's Side Cold Side tubes (Parts G and H) into their rough positions. The Passenger's side Cold Side tube can be tricky to get into place if not done at this time so we recommend hanging in into position now. Attach the supplied Straight 2" silicone couplers (Parts: V) to the bottom ends of of the Cold Side tubes and secure onto the tube using the supplied 2" T-bolt clamps (Parts: W)



Step 13: Prepare Turbochargers for Installation. Please view the following photos below for the proper clocking orientation. You will clock your turbocharger housings from their out of the box orientation by loosening the (6) bolts on the inside edge of the exhaust housing and the 8 bolts on the inside edge of the compressor housing. Once these are loose you will be able to spin both housings to get in your desired positions.





Step 14: With the Turbochargers now clocked properly, still leave them loose to test fit in the vehicle. Attach the turbochargers to installed Turbo Exhaust Manifolds (Parts A and B) via the supplied 2.5" V-band Clamps that came with the Turbochargers



Step 15: With the Turbochargers now installed, check the clocking orientation in the car to ensure they are correct for the compressor outlets as well as access to your coolant ports. Once correct, tighten down a few bolts for each housing on the Turbochargers so they do not move on you. Remove the Turbochargers by removing the 2.5" V-band clamps and return to your work bench.

Step 16: On your work bench, tighten down the remaining Turbocharger housing bolts so they are all snug. Install the supplied (4) 3/8" NPT to -6an fittings (Parts DD) into the Turbocharger coolant ports with thread sealant or Teflon tape on the NPT threads going into the turbo housing. These threads will get tighter the more you tighten it being NPT.

Step 17: Back to the vehicle, you are now ready to do your final install of the Turbochargers to the Turbo Exhaust Manifolds (Parts A and B) using the supplied 2.5" V-band Clamps that came with the Turbochargers. At this time when installing you will slip the Inlet section of the Turbochargers into the 3" Couplers that are in their rough positions of the Inlet Tube/Filter assembly from Step 10 as well as the compressor discharge into the 2" Couplers that are on the cold side tubes from Step 11. Tighten the V-band clamp holding the Turbochargers to the Turbo Exhaust Manifolds down enough for the time being so they are secure but you can still spin them on the Turbo Manifolds' V-band Flange. Secure the cold side tube's 2" Silicone Coupler to the Turbocharger outlets using another supplied 2" T-bolt clamp (Part: W) The 3" Inlet coupler for the Inlet Tube/Filter assembly does not require a clamp being on the suction side of the system, you may add one if you desire.



Step 18: Installation of the exhaust downpipes. Attach Driver's Side Downpipe (Part C) to the outlet of the installed Driver's Side Turbocharger using the supplied 3" V-band clamp that came with the Turbocharger.

Attach Passenger's Side Downpipe (Part D) to the outlet of the installed Passenger's Side Turbocharger using the supplied 3" V-band clamp that came with the Turbocharger.



Step 19: Install the exhaust Mid-Pipe (Part: E) which is 2-piece bolted together to the ends of the Exhaust Downpipes Parts C and D using (2) of the supplied 3" V-band Clamps (Parts: Z). If you leave the bolt loose that connects the 2 pieces of the Exhaust Mid-pipe together it will make installation easier. Once all aligned properly you can then tighten that bolt back down.



Step 20: Slide the (2) Exhaust Sleeve clamps (Parts: BB) over the (2) exhaust tubes exiting your rear mufflers.



Step 21: Install the Catback connection exhaust (Part: F) by installing the (2) hanger mounts that are welded on the exhaust into the (2) OEM Rubber mounts near the rear axle, sliding the ends of the pipes into the (2) Exhaust sleeve clamps from Step 15, and attaching the other end to the Exhaust Mid-Pipe (Part: E) using the (2) supplied 3" band clamps (Parts: AA)



Step 22: At this point all of your exhaust on the bottom of the car should be installed. You can now go over each connection point once all is

properly aligned to ensure all connection points are sealed properly and tighten them all down. It is not a bad idea to slightly loosen the entire system once installed to help align and seal all locations before tightening them all down.



Step 23: Install the wastegates. First prepare the wastegates by installing the appropriate fittings in for the boost reference. If you are NOT using a boost controller and simply going to operate off the Wastegate Spring Pressure for boost, you will install (1) of the supplied 90* 1/8" NPT to 1/4" Pushlock fittings (Parts: KK) into one of the lower ports on each wastegate. You will block off any additional lower ports. You will leave (1) top port open to vent, you may block the other. See our photo orientation for what clears best with the 90* fittings on the lower ports.

If you are going to be using a boost controller, you will use their connection instructions.

Ensure the CNC valve seals are sitting on the bottom of the wastegates and connect the bottom of the wastegates to the flanges welded onto the Turbo Exhaust Manifolds (Parts A and B), securing using the supplied clamps with the wastegates.



Step 24: Install the coolant hoses for the Turbochargers. There are (3) Coolant Hoses and (2) T-fittings in the Coolant Hose Kit (Part: CC).

Install the shortest Coolant Hose (13.5" with 45° fittings on each end) to the (2) -6an fittings on the insides of each Turbocharger connecting them together.

Install the longest Coolant Hose (51" with 45° on one end and 90° on the other) to the Outside -6an fittings on the Driver's side Turbocharger using the 90° end of the hose. This hose will route up into the engine bay, and behind the intake manifold over to the Passenger Side of the engine bay near the Coolant Overflow Tank.

Install the remaining Coolant Hose (19" with straight on one end and 90* on the other) to the outside -6an fittings of the Passenger side Turbocharger using the 90* end of the hose. This will hose will route straight up to the Coolant Overflow Tank area of the engine bay.

From the top of the engine bay now, locate the (2) Heater Core hoses running on the Passenger's side of the engine bay near the Coolant Overflow Tank. You will cut both of these hoses and install the supplied T fittings into each line (Parts: EE), securing with the supplied clamps from the Coolant Hose Kit. Face one of the -6an ends from the T fittings down to attach to the Coolant Hose from the Passenger's side Turbocharger, and the other up to attach to the Coolant Hose from the Driver's side Turbocharger. Tighten all of these -6an connections, no sealant or Teflon is to be used on AN fittings.





Step 25: Install the Cold Side Y-Merge Connection Silicone Tube (Part: I) by slipping it behind the intake manifold to connect the long leg of the coupler to the Passenger's Side Cold Side tube (Part: H). Secure with a supplied 2" T-bolt Clamp (Part: W)

Connect the other 2" leg to the Driver's side Cold Side Tube (Part: G) near the AC Line on the Driver's side of the engine bay and secure with a supplied 2" T-bolt Clamp (Part: W)

Step 26: Moving back up front with the Front Fascia removed from earlier, we will begin the minor relocation process to fit the rest of the cold-side. Begin by removing the (3) plastic push pins on each side of the transmission cooler bracket, and the (5) pins on the driver's side aux radiator shroud. Lastly remove the push pins from the top of each brake duct and remove along with the driver's side aux radiator shroud.

Step 27: Remove the (4) 7mm screws that hold the Driver's side headlight in place, unplug the headlight and set aside. Remove the (3) plastic push pins on the Driver's side headlight shroud and also set aside.

Step 28: Remove the (3) push pins on each side of the plastic paneling near both headlight and remove paneling.

Step 29: Remove the (2) front bumper support braces that connect the upper core support to the front bumper support via 10mm bolts and set aside. Remove the horns using a 10mm and unclipping the electrical harness.

Step 30: Remove the (2) 10mm bolts that hold the transmission cooler bracket to the bottom of the front bumper support, unclip the trans line from the plastic shroud, and remove the temperature sensor from the plastic shroud, which now can also be removed.

Step 31: Remove the (2) 10mm nuts on the driver's side holding the transmission cooler to the bracket and replace with our modified driver's side bracket. Passenger's side remains untouched.

Step 32: Remove the front bumper support via the (4) 13mm bolts on each side.

Step 33: Assemble the supplied intercooler brackets (Parts: P) to the sides of the intercooler (Part: M), note the orientation in the photo below. This can now be lifted into place to bolt to the (4) bumper support holes on each side. Holding in place, have someone assist you in placing the front bumper support back on over top of the intercooler. The intercooler mounts will sandwich between the mounting point on the car and the

front bumper support and secure using the OEM (4) 13mm bolts on each side. It is best to leave these bolts loose, along with the mount bolts to the intercooler, loose, so you can adjust after in place and then tighten all back down.

Step 34: The factory horns will now bolt to the top of the intercooler on the passenger side via the 8mm bung. Secure the horns using the supplied 8mm bolt and plug the factory harness back in.

Step 35: Install the BOV to the intercooler using the supplied O-ring and clamp from the BOV. Install (1) of our straight 1/8" NPT to 1/4" Push-Lock fittings (Parts: KK) into the top port of the BOV. If your BOV has (2) ports, you will block off the other.

Step 36: Remove the Driver's Side Aux Radiator via the (2) 13mm bolts on the top of the bracket, the (2) 10mm bolts on the top of the radiator bracket, and the (1) 13mm bolt attaching the bottom of the bracket to the frame. Using pliers on the clamps, remove the hoses from the Driver's Side Aux Radiator and remove the Radiator. Remove the shroud via the (1) push pin. Remove the bracket from the Radiator via rotating the outlets on the top to loosen the 10mm bolts and slide the bracket out from the radiator.

Step 37: Remove the factory fender support brace via the 10mm bolt and the 10mm nut.

Step 38: Remove the Brake Assist Pump which is located on the Driver's side frame rail behind the bumper support via the (2) 13mm bolts holding it's bracket to the frame, (2) vacuum lines and (1) electrical connector.

Step 39: On your work-bench, remove the Brake Assist Pump's bracket from the pump via the (2) 10mm bolts. Re-mount the Brake Assist pump on our supplied bracket (Part: R) using the (2) OEM 10mm Bolts.



Step 40: Re-mount the Brake Assist Pump using (2) supplied M6 nuts to the exposed studs under the Driver's side headlight on the frame bracing. Reconnect the (2) Vacuum Lines and Electrical Connector.

Step 41: Re-install the Driver's Side Aux Radiator via the (2) Phillips head bolts supplied to the the (2) remaining open bolt holes on the Brake Assist Pump Bracket (Part: R).

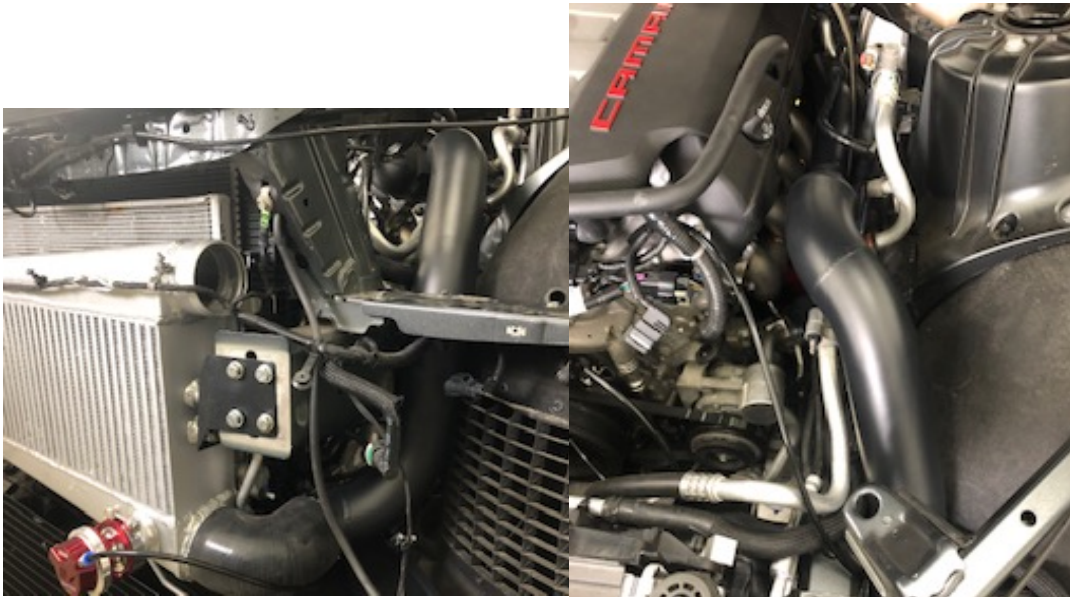


Step 42: Transfer the (2) Grommets from the factory lower support bracket of the Driver's Side Aux Radiator and insert into our supplied lower bracket for the Driver's Side Aux radiator. (Part: Q)

Step 43: Install the lower bracket for the Driver's Side Aux Radiator (Part: Q) by sliding the bottom pins on the radiator into the grommets on the new bracket, and bolt to the (2) Bolt holes in the frame via the supplied M8x1.25 bolts.

Step 44: Reconnect the hoses to the Driver's Side Aux Radiator. Place the 5/8" Line that runs from the T in the main radiator hose onto the connection on the radiator closest to the frame rail. Don't forget the secure using the OEM Clamp via pliers. Using the supplied 5/8" hose (Part: GG), attach to the remaining connection on the Driver's Side Aux Radiator and route tightly to the frame into the remaining hose via the supplied 5/8" Union fitting. Secure all connections with the supplied hose clamps, and secure the new hose tightly via the supplied zip-ties.

Step 45: Route the 3" Intercooler Tube (Part: J) up through the Driver's Side old Aux Cooler area tightly to the wheel well liner into the Y-merge coupler (Part: I). Connect the tube to the Intercooler via the 3" 90* Silicone coupler (Part: J) to the bottom Inlet of the Intercooler. Secure using (2) Supplied 3" T-bolt clamps on the 90* coupler and (1) at the Y-merge Coupler. (Parts: X)



Step 46: Install the factory MAF sensor in the main Silicone Cold Side Tube (Part: L)

Step 47: Install the main Silicone Cold Side tube (Part: L) routing it through the headlight area to attach at the upper Intercooler outlet (securing with a supplied 3" T-bolt clamp, Part: X) and at the Throttle Body (securing with a supplied 4" T-bolt clamp, Part: Y).

Step 48: Use the supplied MAF Extension Harness (Part: FF) to re-connect the MAF sensor into the factory wiring harness connector.

Step 49: Remove the U-shape PCV Hose from the intake manifold on the Driver's side. Using the supplied 3/8" Vacuum hose (Part: JJ), cut (2) short sections to attach to these now open ports and the other end into our supplied Boost/Vacuum Log (Part: II). Secure using the supplied 3/8" hose clamps.

NOTE: Depending on all of your accessories, our Boost/Vacuum Log has (4) ports. With no additional accessories, you will use (2) of these ports (1 for the BOV, and 1 for the Wastegates). If adding in additional items such as a boost gauge, methanol system, etc, you may get boost or vacuum reference from one of the additional ports on our log. Be sure to cap any remaining ports that are un-used and be sure to use thread sealant or Teflon tape on the threads (they are 1/8" NPT).

Step 50: Thread (2) of the supplied 1/8" NPT to 1/4" push lock fittings (Parts: KK) into (2) ports on the Boost/Vacuum log. Run the 50" length Section of 1/4" Push-Lock tubing (Parts: LL) from one of the fittings on the log down to the Blow Off Valve. Attach to the fitting in the BOV. Run the 82" length Section of the 1/4" Push-Lock tubing (Parts: LL) from the other fitting on the log down to the Passenger's side of the engine near the oil-pan. Attach the supplied 1/4" Push-Lock T-fitting (Parts: KK) into this end of the hose. Run the shorter 10" length section of hose (Parts: LL) to the Passenger's Side Wastegate bottom port and attach. Run the last 25" length section (Parts: LL) over to the Driver's Side Wastegate bottom port and attach.



Step 51: Attach our supplied 5/8" 90° Quick-connect fitting (Part: HH) to the open PCV port on the PVC block on the passenger's side of the engine. Run our supplied 5/8" hose (Part: GG) from here down to the Passenger's side Turbo Inlet to Air filter tube. Attach to the 5/8" Barb fitting on this tube, secure both ends with the 5/8" Hose clamps.

Reassembly



