2010-2011 Camaro SS H. O. & Stage II Intercooled System Installation Guide





The **ULTIMATE** Power Adder[™]

Accessible Technologies, Inc. 14801 W. 114th Terrace Lenexa, KS 66215 Phone: 913.338.2886

Fax: 913.338.2879 techserv@procharger.com

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INTRODUCTION

Congratulations on purchasing your ProCharger® 2010-2011 Camaro SS H. O. & Stage II Intercooled System. Read this entire manual before you attempt to install your ProCharger kit. It is imperative that you follow all of the instructions in the order they appear in this installation guide. If you have any questions regarding any aspect of this installation, call us at (913) 338-2886.

For best results, we recommend reviewing the installation instructions beforehand, and following the installation instructions closely and in sequence. A detailed packing list has been provided to assist you in identifying the components of your ProCharger system.

Required Tools and Supplies

- 3/8" & 1/2" Socket Sets (standard & metric)
- 1/2" Impact Gun
- 1/2" Breaker Bar
- T20 Torx Bit
- Open End Wrench Set (standard & metric)
- 3/8" Hex Bit Set (standard & metric))
- Flat & Phillips Screwdrivers
- Plier Set
- Propane torch
- Loctite 272
- Drill and 1/2" Drill Bit
- GM Balancer Install Tool
- GM Balancer Removal Tool



Warning: Your supercharged Camaro must always be run on 91 octane or higher gas.

You should also have the following gauges available to properly check the finished installation and monitor your vehicle's performance (especially for testing):

- Manifold Boost Pressure Gauge
- Fuel Pressure Gauge Wide Band Oxygen Sensor and Gauge

Gauges should be of a type that can be read from the cockpit while performing a wide-open throttle road test. Cockpit or hood-mounted gauges are preferable. In order to obtain usable readings, the gauges should measure pressure at the intake manifold and fuel rail. IF VEHICLE DOES NOT MAINTAIN PROPER FUEL PRESSURE, DECREASE THROTTLE APPLICATION IMMEDIATELY. In some cases, extra vehicle modifications can strain the stock fuel pump. If your vehicle has difficulty retaining adequate fuel pressure, contact ATI ProCharger about the availability of an upgraded fuel system.

The engine on which the ProCharger is to be installed should retain the factory compression ratio. If it has been modified in any way, please consult ProCharger staff before proceeding with the installation. This supercharger system is intended for use on STOCK, strong, well-maintained engines/transmissions. Installation on a worn or troublesome powertrain should be reconsidered. ATI PROCHARGER WILL NOT BE HELD RESPONSIBLE FOR DAMAGE TO A VEHICLE'S POWERTRAIN. ATI ProCharger is not responsible for ECM tuning/programming on non-stock vehicles. ATI PROCHARGER recommends verifying that your vehicle has current ECM updates from the vehicle manufacturer before installation.

For best performance and reliability, always use premium grade fuel (91 octane or higher) and listen closely for signs of detonation, which might sound like ball bearings rolling around in a tin can. IF DETONATION SHOULD OCCUR, OR IF YOU ARE UNSURE WHETHER WHAT YOU'RE HEARING IS DETONATION, DECREASE THROTTLE APPLICATION IMMEDIATELY and please consult ATI ProCharger staff. Detonation should not be an issue with a properly installed intercooled supercharger system, though OEM factory-shipped engine and parts inconsistencies are possible on any vehicle.

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TUNING THESE VEHICLES IS A MULTI-STEP PROCESS THAT SHOULD BE INITIATED BEFORE SYSTEM INSTALLATION BEGINS. PLEASE ALLOW 24 HOURS TO RECEIVE YOUR MODIFIED TUNE FILE. CONTACT ATI WITH ANY QUESTIONS REGARDING TUNING FOR THESE VEHICLES.

TUNING

- Set the parking brake. Plug the SCT handheld into the vehicle's OBDII port. Proceed to Program Vehicle and then to Upload Stock. Follow the on-screen prompts. The device will read the stock tune from the vehicle.
- Download SCT Device Updater from www.sctflash.com to your computer. Using SCT Device Updater, click on Get Stock File From Device. This will generate 2 files:
 - 1. "- -".bef
 - 2. "vin#".sul
- 3 Email the 2 files to tuning@procharger. com along with the serial number from the blower and SCT handheld.
- The tune for your vehicle will be emailed back to you from tuning@procharger. com. Upload the tune from your computer to the SCT handheld using the Device Updater Software.
- Plug the SCT handheld into the OBDII port. Proceed to Program Vehicle, Select Custom Tune, and Select Tune following the on-screen prompts.



Tech Tip: Tuning your vehicle correctly is extremely important and is necessary for proper vehicle operation and safety. If you have any questions regarding tuning your vehicle or with any steps outlined in these instructions, call a technical service representative at (913) 338-2886.

GETTING STARTED



Completion of this section will configure the vehicle for system installation:

- (A) Factory Air Filter Box
- (B) Mass Airflow (MAF) sensor
- (C) Factory Inlet Pipe
- (D) Plastic Engine Cover



Read and understand all safety precautions in this manual before installation. Failure to comply with instructions in this manual could result in personal injury, property damage, and/or voiding your warranty.

- Disconnect the negative battery cable from the battery (located in the trunk) using a 10mm wrench.
- 2 Remove the engine cover by removing the oil cap, then pulling firmly upward and out towards the front of the vehicle. Set the cover aside.
- Disconnect the Mass Airflow Meter (MAF) wiring harness from the intake tube by pressing the tab together and pulling out.
- Disconnect the PCV line running to the factory intake system by firmly pulling it out. Remove the opposite end of the PCV line attached to the passenger's side valve cover by squeezing the connector tabs together and pulling out. This will no longer be used. Using a 5/16" nut driver, loosen the throttle body hose clamp.
- 5 Remove the (2) nuts that fasten the air cleaner box to the vehicle using a 10mm socket.
- 6 Firmly pull up on the air filter box and remove the entire factory air intake system from the vehicle.



Disconnect MAF Harness From Intake Tube



Disconnect PCV Line and Loosen Hose Clamp

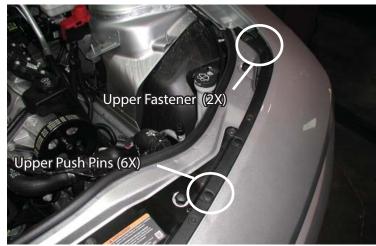


Remove Air Cleaner Box Fasteners

- 7 Using a T20 Torx bit, remove the MAF sensor from the factory intake tube and set it aside for reuse later. The rest of the intake system will not be re-installed.
- Remove the upper fascia fasteners with a 10mm socket (driver's and passenger's side).
- 9 Using a flat bladed screwdriver, remove the (6) push pins from the top of the vehicle.
- 10 Raise the front of the vehicle.
- Remove the front wheels from the vehicle.
- Using a T20 torx bit, remove the screws (3 per side) that attach the inner splash panel to the front fascia.



Remove Factory MAF From Intake Tube



Remove Upper Fascia Fasteners & Push Pins



Remove Screws (3 Per Side)

- Pull back the splash panel to gain access to the remaining fasteners that connect the fascia to the vehicle. Using a 7mm socket, remove the screws (1 per side) that fasten vertically per the image on the right.
- 14) 2014+ Model Years: From underneath, use a 7mm socket to remove the 3 screws on each side holding the bottom of the inner fender to the fascia.
- 15) With a 10mm socket and 3" extension, remove the screws (4 per side) that secure the fascia to the fender (located behind the front fascia). They can be accessed from the wheel well area.
- From underneath the vehicle, remove the (2) 10mm screws.



10mm Screw Removal (8 Total)

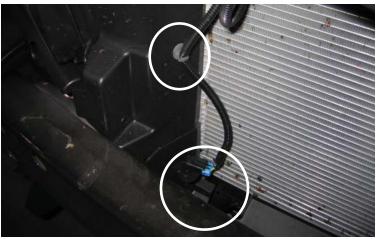


Remove 7mm Screw (1 Per Side)

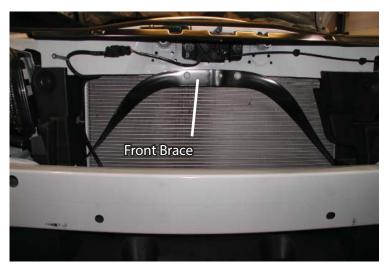


Lower 10mm Screw Removal (2X)

- Pull out on each side of the fascia to unclip it from the vehicle. Pull the entire fascia forward and separate it from the vehicle. Unplug the wiring harness located on the passenger's side. Remove the fascia from the vehicle.
- Unclip the ambient air temperature sensor and wiring harness that is connected to the radiator shrouding.
- With a 13mm socket, remove the (4) bolts that secure the front brace to the vehicle (convertible models only). Remove the brace from the vehicle.
- Three (3) seperate pieces make up the radiator shrouding. Remove the plastic radiator shrouding by removing the (8) push pins holding it in place.



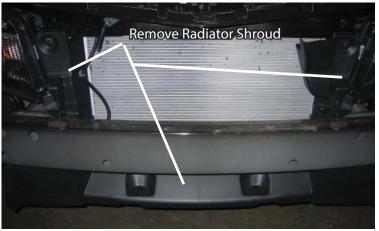
Unclip Wiring Harness and Temp. Sensor



Remove Front Brace (Convertible Only)



Radiator Shrouding Removed



Remove Radiator Shrouding

- Using a 13mm socket and 3" extension, remove the fasteners (3 per side) that connect the front bumper to the vehicle. Remove the bumper and set it aside.
- Place a pan under the radiator drain cock; open the drain cock by rotating the fitting counter clockwise. Removing the coolant cap from the top of the radiator will speed up this process. Once all coolant has been released, close the drain cock.
- Using a pair of pliers, loosen the coolant hose clamps and remove the upper raditor hose. Remove the 5/8" line that leads to the lower section of the engine. Once removed, separate the plastic fitting from the upper coolant hose and retain for reuse. On 2011 convertible models only, keep the lower 5/8" line attched to the plastic fitting. All other models, remove the plastic fitting from all rubber lines.



Remove Front Bumper (Driver's Side Fasteners)



Remove Coolant Lines



Upper Coolant Line Removed

- Disconnect the (2) coolant lines that run below the radiator cap. Pull the filler neck off of the overflow tank and remove from the vehicle (this will make extra room for the fan removal).
- Unplug the cooling fan wiring harness located on the passenger's side of the vehicle. Using a 13mm socket, remove the (2) screws that fasten the fan to the fan shroud. Shift the fan towards the rear of the vehicle, and lift it up and out of the vehicle. Set it aside, it will be reinstalled later.
- Locate the windshield washer reservoir on the driver's side of the vehicle. Place a pan under the reservoir, disconnect the main line found on the side of the reservoir, and drain. Unplug the wiring harness from the reservoir. Using a 13mm socket and 3" extension, remove the (3) bolts fastening the reservoir to the vehicle. Remove the reservoir from the vehicle, it will be replaced by a new unit.



Filler Neck Removal

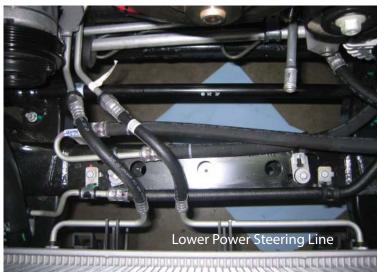


Fan Removal



Windshield Washer Reservoir Removal

- Loosen the (2) clamps holding the lower power steering line to the vehicle. Slide the line to the driver's side until the passenger's side clamp stops at the 180° bend in the line. Tighten the clamps back into place. This will make room for the blower bracket installation.
- Place a 15mm socket onto the factory tensioner bolt and rotate clockwise until there is slack in the factory accessory belt. Remove the belt from the vehicle. Release the tensioner.



Lower Power Steering Line, Stock Location



New Lower Power Steering Line Location



Loosen Tensioner and Remove Accessory Belt

- 29 Locate the A/C compressor on the lower passenger's side of the vehicle. Remove the (4) bolts fastening the compressor to the A/C bracket using a 13mm socket and extension.
- 30 Slide the compressor towards the front of the vehicle. You should now be able to slide the 4 rib A/C belt off of the factory balancer.
- Remove the stud used to fasten the factory air intake system to the vehicle.



Tech Tip: Your system includes a new stud and speed nut for re-installation of the factory air intake system at a later time.



Remove (4) A/C Compressor Bolts



Remove Stud

CRANK PULLEY



Tech Tip: If installing on a manual transmission vehicle, placing the car in 6th gear with the rear wheels on the ground will eliminate the need to lock the flywheel through the access cover.

- 1 Identify the transmission access cover, located under the vehicle in front of the transmission. It is secured by (1) bolt.
 Remove this bolt with a 10mm socket, and set the cover aside.
- 2 Looking inside the transmission access hole, the flywheel should be visible. Using a large flathead screwdriver, place the screwdriver into one of the holes in the flywheel to keep the flywheel from spinning during the crank pulley bolt removal.
- Remove the factory crank bolt using a 24mm socket.



Tech Tip: Using a torch to heat the flange on the crank pulley bolt makes removal easier. There is an adhesive on the back of the flange which helps retain the bolt. Heating this breaks the adhesion.



Crank Balancer Removed

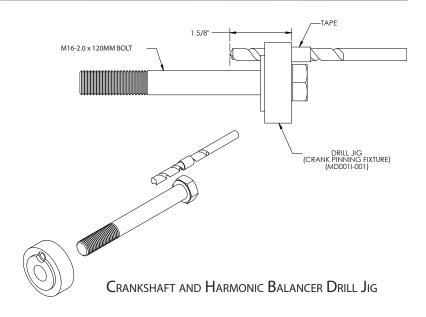
4 Using a GM crank balancer removal tool, pull the factory balancer off of the crank and remove it from the vehicle. A new modified balancer is supplied with your kit.



Tech Tip: Verify that the supplied balancer is equipped with a seal.

Crank Pulley

- Using a GM crank balancer installation tool, install the supplied modified balancer onto the crankshaft.
- Tech Tip: If installing an aftermarket balancer, install it according to the manufacturer's specs at this time (ATI Performance Products Damper part #918635).
- To ensure that the balancer does not spin independently from the crank, the two must be pinned.
- 7 Following the diagram to the right, set up the drill bit, measuring 1-5/8" from the end and taping the bit for drill depth reference.
- 8 Place the provided bolt through the pinning fixture, and tighten onto the crankshaft with a 24mm socket.
- 9 Drill the crank to the proper depth, then remove the bolt and fixture. Clean the area thoroughly, including the drilled hole.
- 10 Place the 1/4" pin into the crank; be sure the pin is set all the way into the crank (tapping the pin with a rubber mallet is acceptable).





DRILL FIXTURE IN PLACE



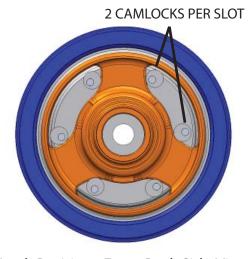
BALANCER PINNED TO CRANKSHAFT

Installation Using Factory Balancer

- Insert the (6) 5/16 18 bolts and washers through the supplied pulley, apply Loctite 272 to the bolts and thread the (6) supplied cam locks onto the threads from behind the pulley. Hand tighten the cam locks.
- 12) Mount the crank pulley and cam locks onto the factory balancer, ensuring (2) cam locks are inserted into each slot on the balancer.
- Place the provided cupped washer onto the new crank bolt, insert into the new crank pulley and into the crank. Rotate the assembly until the cam locks stop the pulley. Tighten the crank bolt to 240 ft-lbs. Be sure the flathead that is holding the flywheel stationary is properly positioned for tightening.
- Activate the cam locks by tightening the (6) bolts to ensure that the crank pulley and balancer spin together.
- Remove the screwdriver from the transmission access hole, replace the access shield, and tighten the bolt.
- Re-install the 4 rib A/C belt. Slide the A/C compressor back into place and tighten the (4) bolts with a 13mm socket.
- Zip tie the (2) lines that run near the crank pulley together, and out of the way.



Crank Pulley and Cam Lock Assembly



Cam Lock Positions From Back Side View



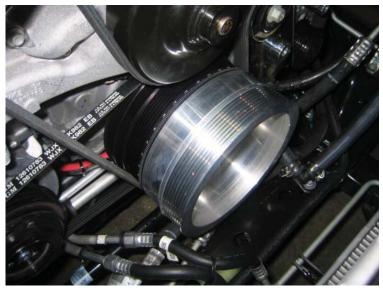
Crank Pulley Installed

Installation Using ATI Performance Products Damper

- Insert the provided new factory crank bolt into the damper assembly and into the crank. Tighten the crank bolt to 240 ft-lbs. Be sure the flathead that is holding the flywheel stationary is properly positioned for tightening.
- Remove the screwdriver from the transmission access hole, replace the access shield, and tighten the bolt.
- Re-install the 4 rib A/C belt. Slide the A/C compressor back into place and tighten the (4) bolts with a 13mm socket.
- Insert the (3) 3/8 16 X 1.5" bolts and washers through the supplied crank pulley; apply Loctite 272 to the bolts. Mount the crank pulley onto the damper, being sure to center it onto the damper, and that it is fully seated onto the face of the damper. There are clearance holes on the crank pulley for clearance of the A/C pulley bolt heads.
- 25 Zip tie the (2) lines that run near the crank pulley together, and out of the way.



ATI PP Damper Installed



Crank Pulley Installed

MAIN BRACKET ASSEMBLY

- 1 Locate the power steering pump on the front of the driver's side cylinder head. By rotating the pulley, align the thru holes with the (3) bolts located behind the pulley. Remove these bolts with a 13mm socket and 3" extension.
- 2 Slide the power steering pump off of the bracket, and set the pump off to the driver's side fenderwell. Do not disconnect the lines for the power steering pump.
- Using a 15mm socket, remove the (3) bolts that fasten the power steering pump bracket to the driver's side cylinder head. Remove the bracket from the vehicle, it will not be reused.



Remove Power Steering Pump Bolts (3X)



Remove Power Steering Pump Bracket Bolts (3X)



Power Steering Pump Bracket Removed

Main Bracket Assembly

- Mount the sub-bracket to the driver's side cylinder head using the provided (3) M10 x 30mm SHCS. Tighten using an 8mm allen.
- Mount the supplied power steering pump relocation bracket to the subbracket, spacing them apart using the (3) 2.874" long tube spacers. Using the (3) 3/8" x 3-1/2" long SHCS, tighten the bracket.
- Mount the power steering pump onto the new bracket using the (3) supplied M8 x 20mm SHCS.



Sub-Bracket Mounted

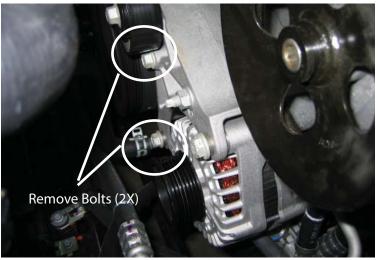


Power Steering Pump Bracket Mounted

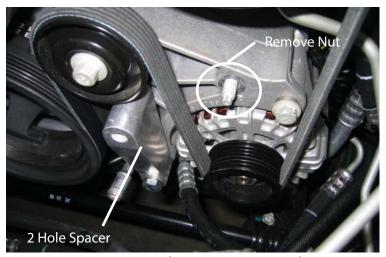


Power Steering Pump Mounted

- 7 Remove the (2) factory alternator bolts with a 15mm socket in order to gain clearance for mounting the ProCharger main bracket.
- 8 Using a 15mm socket, remove the factory nut located above the alternator. Mount the lower 2 hole spacer using the provided M10 x 160mm hex head bolt and washer. Tighten loosely at this time.
- 9 Install the supplied accessory belt; refer to the accessory belt schematic for installation. It is easiest to slide the belt over the water pump last, while rotating the tensioner clockwise until the belt is installed.



Remove Factory Bolts/Nut



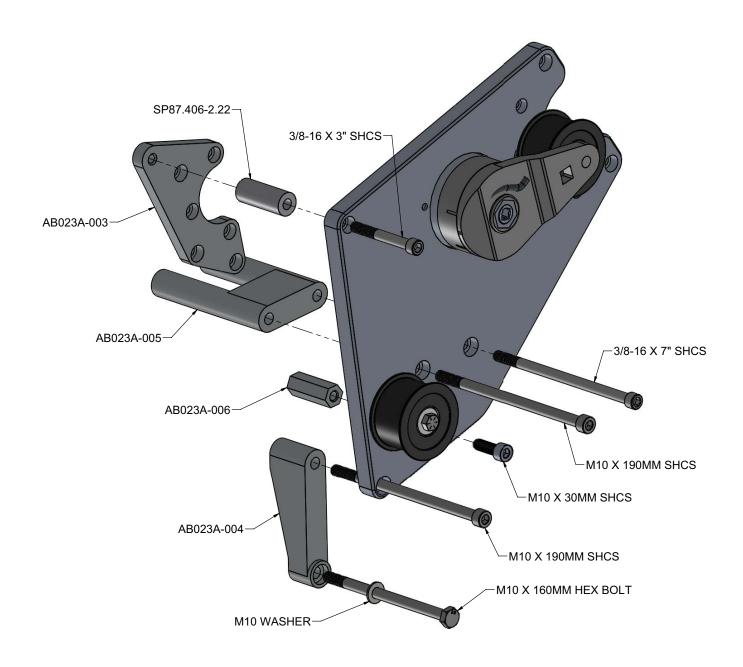
Lower 2 Hole Spacer Mounted



Accessory Belt Schematic

Main Bracket Assembly

- Mount the provided threaded hex shaped spacer onto the stud where the nut was removed from the previous step. Tighten the spacer using a 3/4" wrench.
- Set the upper 2 hole spacer in place, straddling the power steering pump pressure line. Set the bracket assembly into place, aligning the mounting holes with their respective spacer holes.
- 12) For Manual (LS3) Vehicles:
 - Remove the (3) SHCS securing the tensioner and re-clock the tensioner counter clockwise (left).
- 13) For Auto (L99) Vehicles:
 - Remove the (3) SHCS securing the tensioner and re-clock the tensioner counter clockwise (left).



Main Bracket Assembly

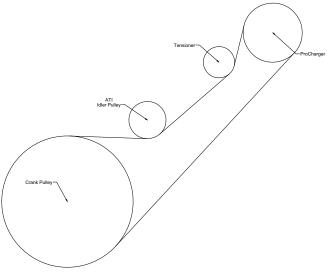
- Using the provided fasteners and referencing the bracket assembly schematic on the previous page, tighten the main bracket into place.
- 15 Tighten the hex bolt on the lower 2 hole spacer at this time using a 17mm socket.
- Using the supplied 2.220" tube spacer and 3/8" x 3" long SHCS, fasten the main bracket to the power steering pump bracket.
- Re-install the factory fan; plug the fan wiring harness into the fan. Re-install the coolant neck.
- Install the oil drain line onto the supercharger. Fill the supercharger with (1) 6 ounce bottle of supplied blower oil.
- Mount the ProCharger onto the main bracket using the provided 5/16" and 3/8" SHCS's. Tighten the fasteners.
- Insert a 1/2 drive ratchet/extension into the square of tensioner arm.
- 21) Rotate the tensioner counter clockwise.
- 22 Install the provided supercharger belt as shown in the belt schematic.



Main Bracket Installed



Rotate Tensioner Counter Clockwise



Belt Schematic

Main Bracket Assembly



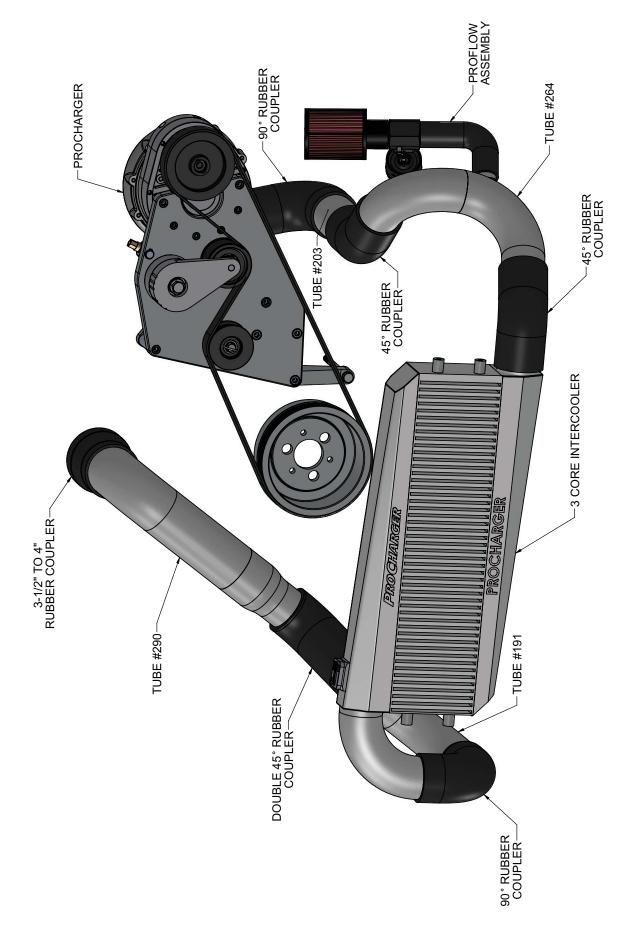
Tech Tip: The cog kit utilizes a linear tensioner. Use a hex bit to adjust the jackscrew on the back side of the main bracket for proper tension. Tighten the idler pulley into place by using a 3/4" socket and tightening the lock nut located in the center of the pulley.

23

Release the tensioner and remove the ratchet/extension.



Belt Installed



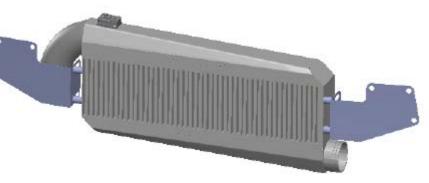
Intercooler and Tubing



Tech Tip: Proceed to the next section for installation of the optional Stage II intercooler.

H.O. Intercooler Installation

- Using the (4) provided 3/8 16 x .75" bolts and washers, mount the provided brackets to the intercooler loosely.
 Using the supplied M4 screws and washers, mount the MAF into the bung located on the intercooler. Make sure the arrow on the MAF points towards the passenger's side of the vehicle.
- 2 The (3) holes located on each intercooler bracket will align with the existing tapped holes on the vehicle used to mount the front bumper.
- Align the front bumper in front of the intercooler brackets and, using the factory hardware, tighten the bumper and intercooler assembly onto the vehicle.



Brackets Mounted To Intercooler



Intercooler and Factory Bumper Installed

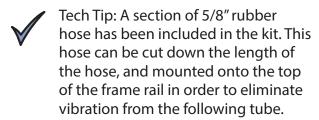


Intercooler Installed, Closeup of MAF Installed (Passenger's Side View)



Tech Tip: All hose connections for the intercooler tubing will utilize #52 hose clamps except the coupler which connects to the throttle body. Use a #64 hose clamp for the throttle body connection, and the provided #56 hose clamp for the tube side connection.

- Slide (1) of the provided 90° rubber couplers onto the outlet of the supercharger.
- 5 Slide the straight section of tubing (#203) onto the end of the elbow, followed by one of the 45° rubber couplers.



- From the front of the vehicle, slide the surge tube (#264) under the driver's side headlight assembly, and insert it into the open hose end from the previous step.
- 7 Using the other 45° rubber coupler, connect the surge tube to the intercooler on the driver's side.
- 8 Slide the supplied 1-1/2" rubber elbow onto the bung located on the surge tube. Slide the ProFlow surge valve onto the open end of the elbow, followed by the supplied filter. Secure each connection with the supplied #24 hose clamps.
- 9 Slide the remaining 90° rubber coupler onto the outlet tube which is welded to the intercooler.



Upper Driver's Side Intercooler Tubing Installed



5/8" Hose Installed For Eliminating Vibration



Lower Intercooler Tubing & Proflow Assembly

Intercooler and Tubing

10 Remove the 10mm bolt securing the line to the top of the frame rail. Secure the line away from the tubes and frame rail once everything is installed.



Relocate Oil Line

- Slide the long leg of the 90° rubber coupler onto the tube on the intercooler.
- 12 Insert tube #191 into the short leg of the 90° rubber coupler. Route as shown in the picture.
- 13 Slide the double 45° rubber coupler through the gap between the frame rail and the opening in the fan shroud and into tube #191.



Lower Intercooler Tubing (Passenger's Side)

- Slide the throttle body tube (#290) into the open end of the double 45° rubber coupler.
- Locate the provided 4" to 3-1/2" rubber reducer. Slide the 4" side onto the throttle body. Slide the throttle body tube into the 3-1/2" end.
- 16 Secure all connections with the provided hose clamps.



Throttle Body Tube Installed

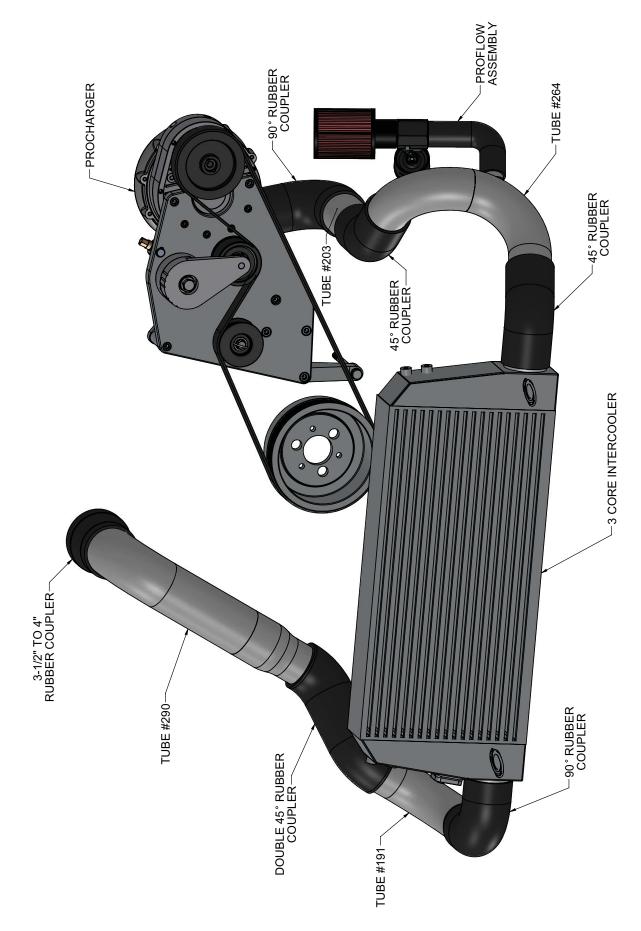
- Connect the MAF wiring harness extension provided with the kit to the open end of the factory MAF harness. Plug the other end into the MAF which is installed in the intercooler. Be sure to zip tie the wiring harness away from the fan and belts/pulleys.
- Zip tie the ambient air temp sensor to one of the open holes in the factory sheetmetal above the front bumper.
- 19 Plug the (2) coolant lines into the bungs located under the radiator cap that were previously disconnected.



MAF Harness Extension Installed



Ambient Air Temp Sensor Mounted



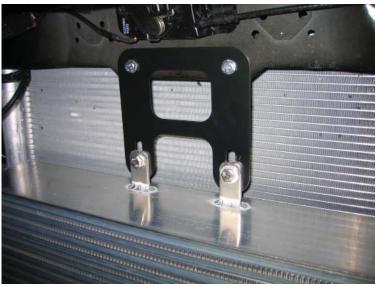
Optional Stage II Intercooler Installation

- Install the provided sheetmetal bracket to the upper tabs located on the top of the intercooler using the supplied 3/8 16 x 1" hex bolts, washers, and lock nuts. Do not tighten at this point. Using the supplied M4 screws and washers, mount the MAF into the bung located on the intercooler. Make sure the arrow on the MAF points down and towards the passenger's side of the vehicle.
- Mount the assembly to the vehicle by lining up the upper intercooler bracket with the two tapped holes located under the hood latch assembly. Tighten the bracket into place using the supplied M8 x 20mm hex bolts and washers.
- Align the lower intercooler mounts with the slots found on the factory sheetmetal below the intercooler. Using the provided 3/8 16 x 3/4" hex bolts, tighten the intercooler into place.

 Tighten the bolts from step one.
- 4 Re-install the front bumper onto the vehicle using the factory hardware.



Tech Tip: If applicable, place the two supplied sections of adhesive backed rubber strips between the bumper and intercooler plenums to eliminate wear and possible vibration for vehicles where the two components touch.



Upper Intercooler Bracket Installed



Lower Intercooler Mounts



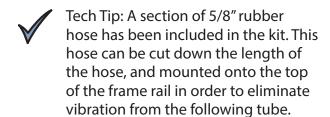
Intercooler & Factory Bumper Installed

Intercooler and Tubing



Tech Tip: All hose connections for the intercooler tubing will utilize #52 hose clamps except the coupler which connects to the throttle body. Use a #64 hose clamp for the throttle body connection, and the provided #56 hose for the tube side.

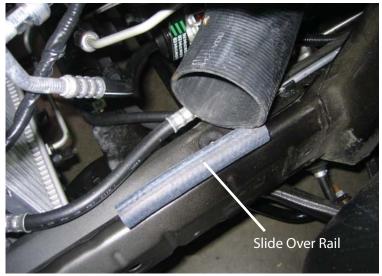
- 5 Slide (1) of the provided 90° rubber couplers onto the outlet of the supercharger.
- 6 Slide the straight section of tubing (#203) onto the end of the elbow, followed by one of the 45° rubber couplers.



- Mount the provided race valve to the surge tube by setting the provided o-ring into the groove on the tube bung, and fasten the race valve onto the bung using the (6) 10 24 x 1/2" SHCS's. Verify that the o-ring is seated properly in place before moving on to the next step. Install one of the push lock fittings onto the race valve at this time.
- 8 From the front of the vehicle, slide the surge tube (#283) under the driver's side headlight assembly, and insert it into the open hose end from step 6.
- 9 Using the other 45° rubber coupler, connect the surge tube to the intercooler on the driver's side.



Upper Driver's Side Intercooler Tubing Installed



5/8" Hose Installed For Eliminating Vibration



Lower Intercooler Tubing & Race Valve Installed

- Remove the 10mm bolt securing the line to the top of the frame rail. Secure the line away from the tubes and frame rail once everything is installed.
- Slide the long leg of the 90° rubber coupler onto the tube on the intercooler.
- 12 Insert tube #191 into the short leg of the 90° rubber coupler. Route as shown in the picture.
- 13 Slide the double 45° rubber coupler through the gap between the frame rail and the opening in the fan shroud and into tube #191.
- 14 Slide the throttle body tube (#290) into the open end of the double 45° rubber coupler.
- Locate the provided 4" to 3-1/2" rubber reducer supplied with the kit. Slide the 4" side onto the throttle body. Slide the throttle body tube into the 3-1/2" end.
- Secure all connections with the provided hose clamps.
- Connect the MAF wiring harness extension provided with the kit to the open end of the factory MAF harness. Plug the other end into the MAF which is installed in the intercooler. Be sure to zip tie the wiring harness away from the fan and belts/pulleys.
- 2ip tie the ambient air temp sensor to one of the open holes in the factory sheetmetal above the front bumper.
- Plug the (2) coolant lines into the bungs located under the radiator cap that were previously disconnected.



Relocate Oil Line



Lower Intercooler Tubing (Passenger's Side)



Throttle Body Tube Installed

WINDSHIELD WASHER RESERVOIR

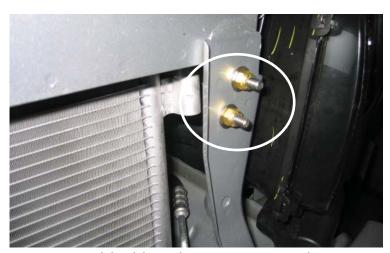
- 1 Mount the (2) windshield washer reservoir brackets together using the supplied 6mm bolts and nuts, then to the vehicle using the provided 5/16" x 3/4" long bolts, washers, and lock nuts. The mounting holes are located on the driver's side, to one side of the headlight housing.
- 2 Cut the factory windshield washer wires to remove the plug from the factory harness. Using the supplied solder crimps, attach the factory wires to the supplied plug. Slide the wires into the solder crimps and heat the center of the crimp fitting until the solder melts. Cover the wires with the provided wire loom.
- Plug the factory washer line into the port on the top of the motor. Plug an additional line into the front of the motor and route to the bottom of the reservoir (see image below). Plug the harness into the new reservoir at this time as well.
- 4 Slide the new reservoir onto the mounted brackets.



Windhsield Washer Hose Routing



Windshield Washer Reservoir Brackets Mounted



Windshield Washer Reservoir Bracket Hardware Mounted (Front View)



Windhsield Washer Reservoir Installed

COOLANT HOSE

- Locate the cooling bag. Slide the provided 12" section of 5/8" rubber hose onto the lower coolant bung located on the front of the engine.
- If installing onto a 2011 convertible model, skip to the net paragraph. Slide the provided 5/8" plastic 90° fitting onto the end of the rubber hose from the previous step. Slide the supplied 18" section of rubber hose onto the other end of the plastic elbow. Route the rubber hose towards the top front of the vehicle. Be sure to route it away from the belts and fan.

On 2011 convertible models, trim the elbow off of the 5/8" rubber factory line. Slide the provided 5/8" plastic 90° fitting onto the end of the factory hose. Plug the open end of the plastic fitting into the line from step 1. Proceed to step 3.

- Take the plastic tee fitting that was removed from the coolant hoses, and slide the provided 90° 1-1/2" rubber elbows onto each end. Plug the 5/8" line into the plastic bung.
- 4 Slide the ends of the elbows onto the water pump bung and the upper radiator bung.
- Secure the 5/8" hose connections with the provided #8 hose clamps (you will use a #10 clamp on the connection to the plastic factory bung). Secure the 1-1/2" hose connections with the supplied #24 hose clamps.



Factory Coolant Lines



2011 Convertible Line Modified



New Coolant Lines Installed



Tech Tip: Be sure all lines are clear of moving components, i.e. fan/belts/pulleys.

PCV System

L99 MODELS

- If not already done, remove the PCV line that runs from the air intake system to the passenger's side valve cover bung.
- Install the supplied 36" long 3/8" hose from the passenger's side valve cover to the rear of the blower, on the inlet side of the supercharger. This line will be attached to the air filter later in the install.
- Remove the PCV line that runs from the intake manifold (just behind the throttle body) to the rear of the driver's side valve cover.
- 4 Run the supplied 36" long 3/8" hose from the intake manifold to the rear driver's side PCV bung. This line replaces the line removed in Step 3.
- 5 Cut the line from Step 4 in half, and insert the supplied check valve, reconnecting these lines to each end of the check valve. Be certain the arrow on the check valve points towards the intake manifold connection, preventing boost from entering the valve cover.



Remove Factory PCV Lines



Factory PCV Bungs



New PCV Routing With Check Valve

LS3 MODELS

- If not already done, remove the PCV line that runs from the air intake system to the passenger's side valve cover bung.
- Remove the "U" shaped PCV line that is located behind the throttle body, and connects the intake manifold and crankcase valley.
- Place the supplied 3/8" vacuum cap over the intake manifold bung, and secure with the provided #6 hose clamp.
- 4 Cut a 6" length of 3/8" rubber hose and install it onto the crankcase valley bung. Slide the provided plastic tee fitting onto the opposite end.
- 5 Cut a 6" length of 3/8" rubber hose and install it onto the passenger side valve cover bung. Slide the opposite end into the plastic tee fitting.
- Attach the remaining 3/8" rubber hose to the open end of the plastic tee, and route it along the firewall to the driver's side. This will be connected to the air filter in a later step.



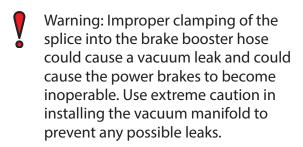
Remove Factory PCV Hose



New PCV Routing

VACUUM MANIFOLD

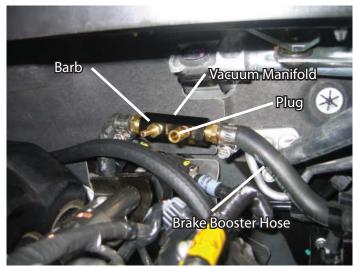
- 1 Locate the ½" ID brake booster hose that runs along the back side of the engine near the firewall. The line is connected to the brake booster located on the driver's side.
- 2 Using a hose cutter, remove a 3-1/2" long section of the hose.
- 3 Assemble the vacuum manifold using the provided barb fittings and plugs. Install the supplied vacuum manifold and securely clamp in place using the supplied #6 hose clamps, making sure that there are no vacuum leaks at the splice points.



Attach the supplied 3/16" vacuum hose to one of the 3/16" barb fittings on the installed vacuum manifold, then route and attach to the ProFlow anti-surge valve vacuum port. Attach a boost gauge to the other 3/16" barb fitting. If you are not going to use a boost gauge, remove the 3/16" barb fitting that isn't being used and replace with the supplied pipe plug.



Tech Tip: Stage 2 systems, leave an 1/8" port on the vacuum manifold open. It will be used for a pressure switch in a later step.



Vacuum Manifold Installed



Tech Tip: When installing a race valve, the assembly utilizes push lock fittings and nylon hose, replacing the standard barb fitting and rubber hose. Thread the push lock fitting onto the vacuum manifold and race valve, and simply push the nylon line into each fitting to create a secure connection.

FUEL SYSTEM

- 1 If you have not already done so, depressurize the fuel system by completing steps 2-4. Otherwise, skip to step 5.
- 2 Remove the gas cap to relieve vapor pressure in the fuel tank.
- Remove the fuel pump fuse from the underhood fuse block (in front of the battery). Crank the engine over for 5 seconds (the engine will not start) to bleed fuel pressure from the fuel lines and fuel rail assembly. Replace the fuel pump fuse. Remove the keys from the ignition.
- 4 Disconnect the negative battery cable.
- Place a shop towel underneath the fitting on the driver's side fuel rail where the stainless steel fuel supply line and fuel rail join. Using the supplied fuel fitting quick-disconnect tool, remove the supply line from the fuel rail, being careful to minimize fuel leakage.

CAUTION: The fuel system should be de-pressurized, but some fuel may leak out when the lines are disconnected. Take the necessary precautions to avoid injury or fire.

- Disconnect the fuel injector electrical connectors one at a time, labeling them by their corresponding injector location, to ensure proper sequential injector firing order after re-assembly.
- 7 Disconnect the fuel rail wiring harness

- from the fuel rail. Remove the fuel rail attaching bolts.
- 8 Remove the fuel rail assembly as one piece with the injectors still attached and place on a clean work surface, making sure to support the assembly to avoid damaging any of the components.
- 9 Spread the injector retainer clips to release each injector from the fuel rail. Remove the old injectors and set aside.
- 10 Lubricate each new injector o-ring seal with several drops of clean engine oil.

CAUTION: Never re-use fuel injector o-ring seals, as they lose elasticity over time and could cause a fuel leak and/or potential fire.

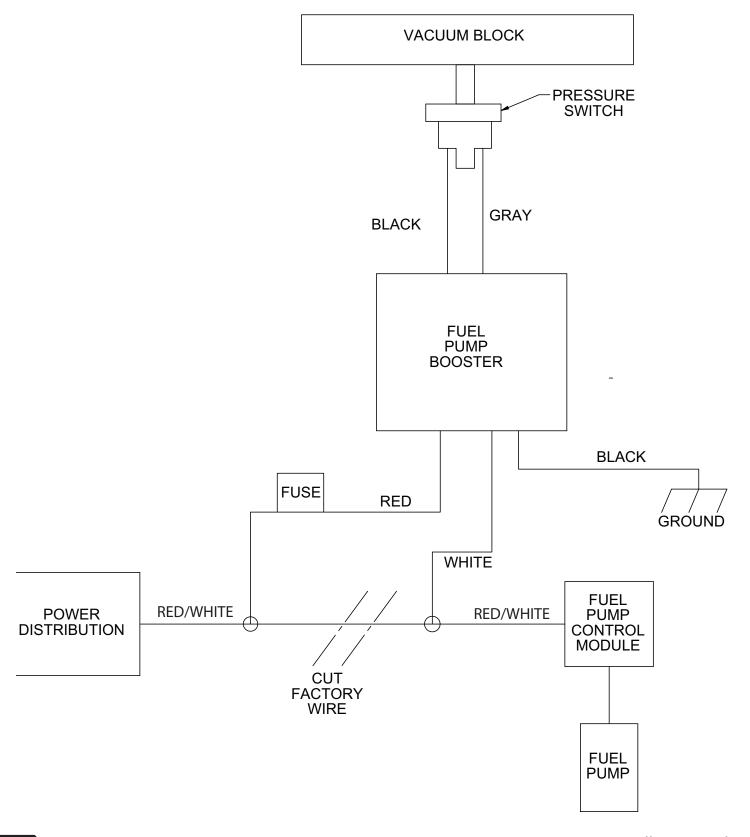
- Install the retainer clips onto the new injectors. Push each injector into the fuel rail injector socket with the electrical connector facing outward. The retainer clip should lock onto a flange on the fuel rail.
- Install the fuel rail assembly onto the intake manifold, making sure that the injectors are rotated to line up with their corresponding electrical connectors.

 Using Loctite 272™ (high temperature thread locker) or equivalent, install the fuel rail bolts and torque to 90 in-lbs.
- Connect each injector to the factory harness.

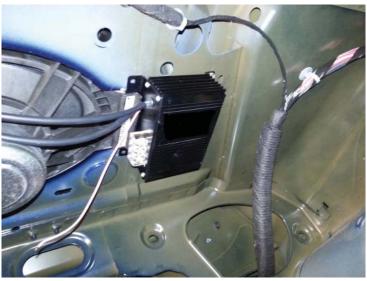
FUEL PUMP BOOSTER



Tech Tip: Fuel pump booster installations are for Stage II systems only. Proceed to the next section if installing a H.O. system/kit.



- Warning: This fuel pump booster has been configured to work properly with your application. Changing the settings could result in fuel pump or engine damage.
- Replace the factory fuel pump fuse with the supplied 30 amp fuse.
- 15 If not already done, disconnect the negative battery cable in the trunk.
- Securely mount the fuel pump booster to the bottom of the rear deck in the trunk. For high power or high ambient temperature usage, the booster should be mounted outside of the spare tire well where it is exposed to cooling air.
- Attach the eyelets on the black and gray wires to the tabs on the pressure switch (order does not matter) and route the wires along the back of the firewall, through grommet in passenger side of firewall, then through the passenger compartment to the trunk next to the fuse box. Run wires under carpet and behind plastic interior panels. Connect the harness to the fuel pump booster.



Fuel Pump Booster Mounted



Pressure Switch



Trigger Wires and Trunk Fusebox

- 19 In the trunk of the vehicle, locate and remove the Fuel Pump Control Module fuse (position F15 on some models) from the fusebox on the passenger side.
- Remove the fusebox from the passenger side of the trunk and remove the rear cover of the fusebox to expose the wiring harness.
- Locate the fuel pump wire (red with white stripe) coming from behind the module fuse and cut a couple inches back from fusebox to allow splicing onto both ends.
- Connect the cut end of the red/white wire that goes to the fuse box to the red wire on the fuel pump booster. Connect the cut end of the red/white wire that goes to the control module to the white wire on the fuel pump booster. Connect the black wire on the booster to a good chassis ground. The extra connectors are not used.
- Assemble and mount the fusebox back onto trunk panel. Re-install the passenger side panel carpet and rear plastic trim panel.
- Replace the gas cap and negative battery cable. Re-install the fuel supply hose by pressing the fitting onto the fuel rail fitting until a snap is heard.
- Check the new injectors for leaks by performing the following procedure:
 - A. Turn the ignition to the "on" position for 2 seconds. Don't start the engine!
 - B. Turn the ignition off for 10 seconds.
 - C. Turn the ignition to the "on" position.
 - D. Check for fuel leaks at both ends of each injector and at the fuel supply hose fittings.



Fusebox Disassembled



Fuel Pump Wire Location



Fuel Pump Booster Installed

FINAL ASSEMBLY

- Re-install the factory engine cover.
 Remove the oil fill cap, slide the cover into the (2) rear clips, and push the cover down onto the fuel rails. Re-install the oil fill cap.
- Using a 1/4" drill bit, drill out the spotwelds (4x) holding the auxilary battery post bracket to the inner fender. Slide the battery post off of the bracket and remove the bracket from the vehicle. Install the supplied bracket using the provided 1/4-20 screws, washers, and nuts. Slide the battery post into the new bracket.
- 3 Slide the provided rubber coupler onto the inlet of the blower, followed by the air inlet box. The air inlet box will rest on top of the engine cover. Secure the connections using the supplied #64 hose clamps.
- 4 Mount the air filter onto the open end of the air inlet box and secure with the provided hose clamp.
- 5 Slide the PCV line that was routed earlier in the installation onto the bung located on the backside of the air inlet box.
- Re-install the front fascia. Be sure to connect the wiring harness to the fascia. Install all of the factory hardware for fascia installation. Install the fasteners that secure the wheel liners.
- 7 Re-install the wheels and tires if removed.

- 8 Reconnect the battery.
- 9 Locate the CARB Executive Order sticker included with your system. This sticker must be installed in an underhood location that is readily visible.



Auxilary Battery Post Relocation Bracket Installed



Air Inlet Box Installed

OPERATION AND MAINTENANCE

Cold Starting

Never race your engine and ProCharger supercharger when your engine is cold. Allow the water temperature to climb into operating range for several minutes before driving above 2,500 rpm, to ensure adequate oil lubrication.

Fuel Quality

With a properly installed intercooled ProCharger supercharger system, detonation should not occur. For the best performance and reliability, use premium grade fuel (91 octane or higher). Listen for signs of detonation after refueling, and after replacement or modification of any fuel system component(s). If detonation occurs, reduce the throttle and locate the source.

Ignition System Maintenance

If your spark plugs are more than a year old or have more than 10,000 miles logged, you should consider changing them before driving your vehicle under load. Spark plug wires should be changed if visibly damaged or when resistance exceeds factory specifications.

Air Filter Maintenance

Your air filters should be cleaned periodically, potentially as often as every 10,000 miles or 6 months, even though a service interval of 50,000 - 100,000 miles is quoted by the manufacturer under normal driving conditions. A clogged air filter will result in decreased boost levels and vehicle performance. Be sure to re-oil the cleaned filter before re-installing. Always operate your vehicle with an air filter; failure to do so may result in damage to your ProCharger supercharger and personal injury!

Belt Replacement

The serpentine belt, which turns your ProCharger supercharger, will stretch after initial run-in, and should be retightened after the first hundred miles. Tighten the belt sufficiently to avoid slippage, but do not overtighten. Overtightening the belt could cause damage to the ProCharger supercharger's precision bearings. When reinstalling the belt, use the belt routing diagram in this manual. If you reuse a thrown belt and find that it needs frequent re-tightening, the belt is damaged and should be replaced. Gates Micro-V belts can be bought from ATI or from your local parts store.

ProCharger Oil Change Intervals

The first oil change should be performed at 500 miles and at 6,000 mile intervals thereafter. Clean the drain plug after every oil change. Drain oil by removing the drain plug. Clean off the drain plug before re-installing.

ProCharger Oil Level

The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.



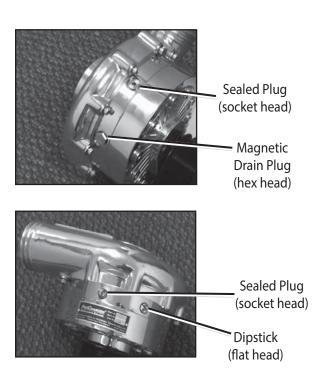
Warning: Filling the ProCharger higher than the maximum level on the dipstick can lead to bearing and seal damage. The supercharger is a sealed unit and should not normally require the addition of oil between service intervals. If excessive usage is noted, the unit should be sent to ATI for inspection and repair. The dipstick fitting should be firmly tightened after changing or checking the oil level.

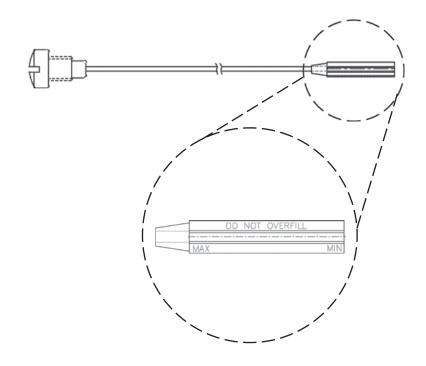
General

When removing the dipstick, be sure to retain the nylon washer. A spare nylon washer and o-ring is included. Use only the ATI supplied nylon washer and o-ring when servicing the oil dipstick and drain plug. A discoloration of the oil and residue on the drain plug may occur during the initial oil changes. This is normal and will gradually decrease. For the proper positioning of the ProCharger supercharger, the serial tag should be pointing upwards. Installing the ProCharger supercharger in another position will cause inadequate oiling and supercharger failure. If you have any questions about the maintenance of your supercharger, contact ATI.



Warning: The supercharger contains no oil from the factory. The unit must be filled prior to use. Use only ATI supplied oil in your ProCharger. The ATI oil has been specially formulated for the bearings in the ProCharger and use of oil other than that supplied by ATI will void your warranty.





LIMITED WARRANTY

Accessible Technologies, Inc. (ATI) provides a limited twelve (12) month warranty on the ProCharger supercharger against defects in materials and workmanship unless otherwise specified. This limited warranty starts on the date of original purchase from your local dealer, or date of shipment from the factory. This limited warranty coverage is extended only to the original owner and excludes hoses, sleeves, and electronic components manufactured by other companies. IF THE SUPERCHARGER'S DRIVE RATIO IS ALTERED IN ANY WAY FROM THE FACTORY SETTING, WARRANTY COVERAGE IS VOID. USE OF ANY PULLEY NOT MANUFACTURED OR SUPPLIED BY ATI VOIDS ALL WARRANTY COVERAGE. ATI's warranty obligations are limited to the terms below:

ATI agrees to honor a warranty claim at its sole discretion and only after inspection at the ATI factory. No warranty will be honored if any part of the product is found to have been improperly installed, tampered with, mishandled, or misused in any way. Disassembly of the ProCharger supercharger or removal of the ProCharger supercharger's serial plate voids all warranties. Claims for freight damages should be directed to the freight company.

If ATI's limited warranty applies, your product will be repaired or replaced at ATI's discretion and shipped back. If the limited warranty does not apply, ATI will advise you of the specific reason, cost of the repair, and delivery time. After advising you of this information we will, at your option, either proceed with repairs or return your product to you in the state in which it was received. In either case the product will be shipped to you, insured at replacement value. Therefore, you will pay the return shipping and insurance charges if ATI's limited warranty does not apply to your product.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. THE DURATION OF ANY AND ALL WARRANTIES ON THE PRODUCTS DISCUSSED ARE LIMITED TO THE PERIOD IDENTIFIED ABOVE. ATI IS NOT RESPONSIBLE IN ANY EVENT FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. No ATI dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

To obtain service under this warranty you must do the following during the warranty period:

Phone ATI (913-338-2886) and provide us with the following information:

- ProCharger supercharger serial number.
- Vehicle year, make, model, engine modifications, and other modifications.
- Description of perceived issue.

If a solution to your issue can not be found after the above phone consultation, you will be assigned a return authorization number (RMA). You must then properly package and ship your product, at your expense, to the ATI factory. The product should be carefully packaged in a rugged box.

Include the following information inside the box with your product:

- Copy of your original invoice or receipt.
- Name, address, and daytime telephone number.
- Return authorization number (RMA).
- Vehicle year, make, model, engine modifications, and other modifications.
- Description of perceived issue.

Clearly mark the warranty claim number on the top and one side of the box in characters at least 2" tall. Properly package the product and ship it, prepaid and insured for the retail value of the component(s) being returned, to the following address:

Accessible Technologies, 14801 West 114th Terrace, Lenexa, Kansas 66215

ProCharger Extended Coverage

The ProCharger Extended Coverage Program extends the ProCharger warranty coverage for an additional twenty-four (24) months, for a total of thirty-six (36) months or three years of coverage. This extended coverage applies to parts for the ProCharger supercharger head unit only and does not include other system components. With your extended coverage registration, you will receive two (2) additional boxes of ProCharger Supercharger oil.

Under the extended coverage program, Accessible Technologies, Inc. (ATI) will repair or replace any component within the supercharger head unit which is found to be defective. Only the supercharger head unit itself is included in the extended coverage.

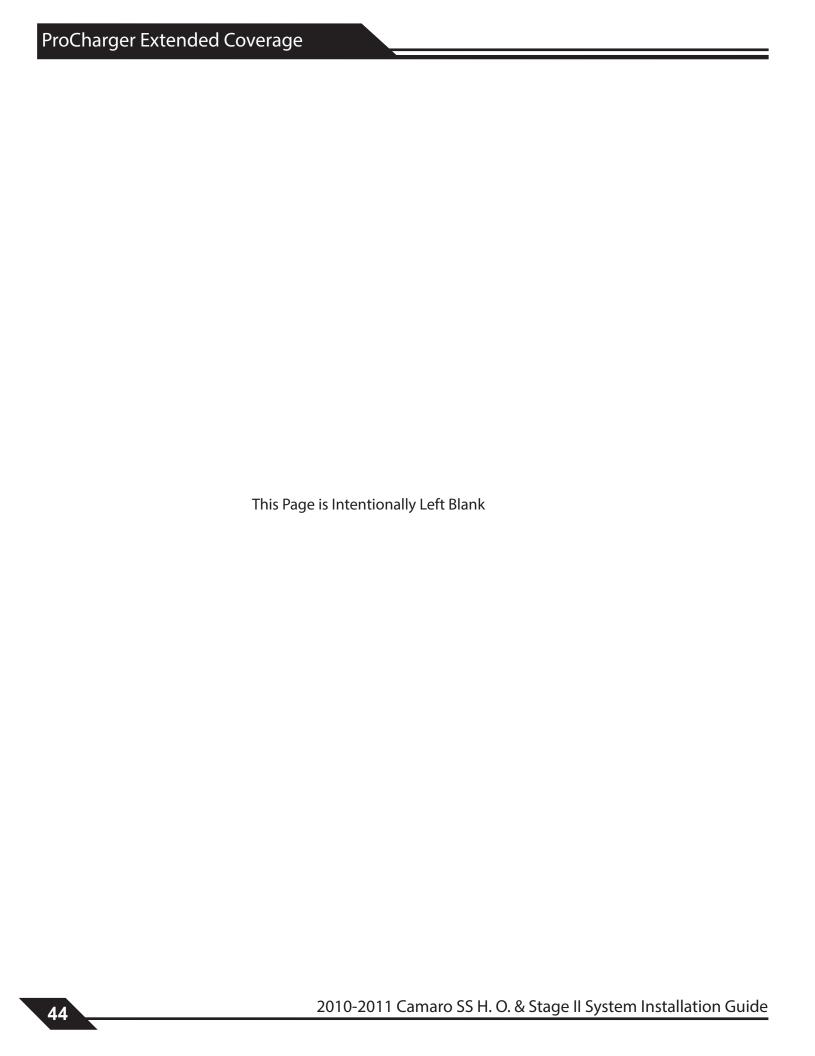
Service under the extended coverage program is obtained through the same process as described in the Limited Warranty.

Race kits are not eligible for the ProCharger Extended Coverage Plan

To qualify for the ProCharger Extended Coverage:

- Only the original owner of the ProCharger supercharger is eligible.
- Completion of the Extended Coverage
 Registration Form is required, along with a \$99
 registration fee. This form must be completed
 in its entirety, and must be submitted along
 with payment within 30 days from the date of
 original purchase from your local dealer or date
 of shipment from the factory.

- Participants must have a ProCharger P-1SC, P-1X, P-1SC-1, C1, or C2 supercharger head unit using the maximum warranted boost level. All terms and conditions within "The Limited Warranty" apply. Acts resulting in disqualification include but are not limited to the following:
 - Disassembly or modification the ProCharger supercharger.
 - Removal or attempted removal of the ProCharger drive pulley(s).
 - Removal or attempted removal of the ProCharger supercharger serial number plate.
 - Removal or attempted removal of the compressor housing or transmission case.
- Participants agree to properly maintain the ProCharger supercharger and provide proof of compliance with the following recommended maintenance:
 - Change the ProCharger supercharger oil after the initial break-in period of 500 miles (automotive) or 15 hours (marine).
 - Change the ProCharger supercharger oil every 6,000 miles after the initial breakin period.
 - Use only the specified amount of ProCharger Supercharger oil in the ProCharger supercharger.
 - Inspect and clean the magnetic drain plug at every ProCharger supercharger oil change.
 - Check the ProCharger supercharger oil level frequently.



cut along the dotted line

ProCharger Extended Coverage Program Registration Form

Return this completed form and a \$99 check within 30 days of original purchase.

Name:	Date of Purchase:
Address:	Purchased From:
City:	ProCharger Serial #:
State:Zip:	
Country:	
Daytime phone:	
Evening phone:	
E-mail:	1 hoing most important
Age□ 18 - 24 □ 25 - 34 □ 35 - 44 □ 45 - 54 □ 55 and up	Which information sources most influenced your decision to purchase a ProCharger system?
Income	ProCharger Brochures Witnessed performance on a car Test drive Magazine editorials Friends Conversations with ATI technicians Web Site (please specify) Other (please specify) What most influenced your decision to purchase a ProCharger system? Reliability Standard warranty Extended coverage warranty Performance Quiet operation Removability (ability to return car to stock)
☐ Street Truck	Cost Ease of Installation
Who installed your ProCharger system?	□ Self □ Dealer □ Other
Have you own a forced induction system previously: If yes: Supercharger: Brand(s)	
Turbocharger: Brand(s)	
I have read and understand the policy for the and will not modify my ProCharger superchar coverage program. I have read and answered \$99, payable to ATI, for enrolling my ProCharg	ProCharger Extended Coverage Program. I have not ger in any way during my participation in the extended all questions on this form. I have enclosed my check for er supercharger (serial number indicated above) in the twenty-four (24) months beyond the standard limited
Signature	Date
Mail this completed registration form with a	a \$99 check to ATI at: 14801 West 114th Terrace.

Mail this completed registration form with a \$99 check to ATI at: 14801 West 114th Terrace, Lenexa, KS 66215. If you have any questions, contact us at techserv@procharger.com or (913) 338-2886 8:30 AM - 5:30 PM CST, Monday - Friday.







Accessible Technologies, Inc. 14801 W. 114th Terrace Lenexa, KS 66215 Phone: 913.338.2886 Fax: 913.338.2879

techserv@procharger.com

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