

2015-2019 5.7L & 6.4L & 2020 6.4L Challenger  
High Output Intercooled System  
**Installation Guide**





**The ULTIMATE Power Adder™**

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TORQUE SPECIFICATION CHART	 GRADE 5			 GRADE 8		
	Torque (lb.ft.)			Torque (lb.ft.)		
1/4-20	11	8	7	16	12	10
1/4-28	13	10	8	18	14	11
5/16-18	23	17	14	33	25	20
5/16-24	26	19	15	36	27	22
3/8-16	41	31	25	58	44	35
3/8-24	47	35	28	66	49	39
7/16-14	66	49	40	93	70	56
1/2-13	101	75	60	142	106	85
1/2-20	113	85	68	160	120	96

## INTRODUCTION

Congratulations on purchasing your ProCharger® 2015-2019 5.7L & 6.4L & 2020 6.4L Dodge Challenger H.O. 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)
- Open End Wrench Set (standard & metric)
- 3/8" Hex Bit Set (allen head)
- Flat Screwdrivers
- Phillips Screwdrivers
- Plier Set
- Right Angle Drill
- Coolant
- Pipe Thread Sealant
- Vacuum Pump



**Warning:** Your supercharged Challenger must always be run on 91 octane or higher gas. Do not run vehicle at wide-open throttle if you have less than 1/4 tank of 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 (50-65 PSI), 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 IS REQUIRED WHEN INSTALLING YOUR PROCHARGER SYSTEM. SEE SUPPLEMENTAL TUNING GUIDE FOR INSTRUCTIONS.**

# STOCK COMPONENT REMOVAL



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

- (A) Factory Air Filter Box
- (B) Intake Air Temp. Sensor
- (C) PCV Tube
- (D) Plastic Engine Cover(s)



**Warning:** 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.



### For Cars With Shaker Option:

For Standard Option Skip to Page: 4

✓ **Tech Tip:** Before disconnecting the battery, lower the windows to prevent damage.

- 1 With an 8mm nut driver loosen the hose clamp securing the intake hose to the shaker assembly.



Remove Intake Hose

- 2 Using a 10mm remove the (4) nuts holding the shaker lid to the base. Lift the shaker lid to remove.



Remove 4 Nuts

- 3 **6.4L:** With a 10mm remove the (4) bolts securing the shaker base to the bracket. Remove the base.

**5.7L:** With a 10mm remove the (5) bolts securing the shaker base to the bracket. Remove the base.



Remove 4 Bolts (6.4)

- 4 6.4L:** With a 13mm and 15mm remove the (2) bolts holding the shaker bracket to the front of the motor.

**5.7L:** With a 10mm remove the (2) bolts holding the shaker bracket to the front of the motor and (2) bolts on the back of the motor.

- 5 6.4L Only:** On the back side of the motor use a 10mm to remove the (2) nuts (one on each side) securing the sensors to the motor.



Remove Braket Bolts (6.4 shown)

- 6 6.4L Only:** With the same 10mm as the previous step remove the (2) studs holding the backside of the shaker bracket to the motor (the bolts are the same ones the nuts came off of).



Remove Rear Braket Bolts (Drivers Side 6.4L Shown)

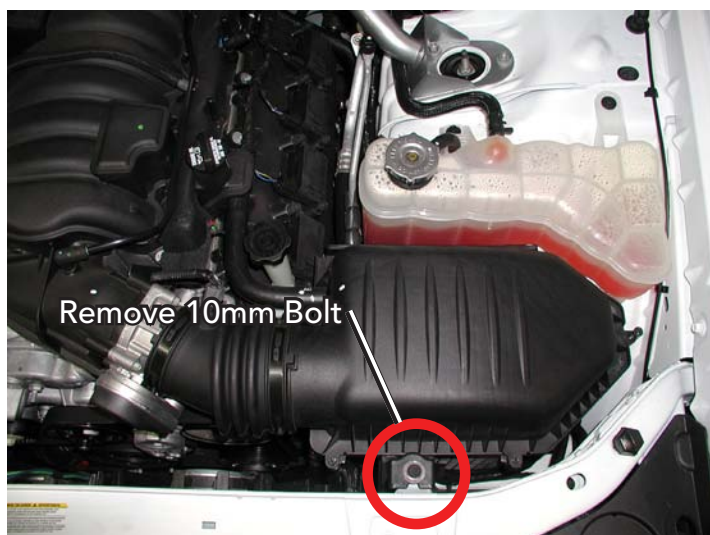
- 7 6.4L:** Lift up on the shaker bracket and slide to the drivers side of the engine.

**5.7L:** Lift up on the shaker bracket and remove it from the engine.

**Continue to next page.**

### Engine Air Filter

- 1 Disconnect the battery ground.
- 2 Remove the engine cover(s).
- 3 Remove the IAT (Intake Air Temperature) sensor.
- 4 Remove the PCV Hose from the intake assembly.
- 5 Remove the engine air filter assembly bolt with a 10mm socket.
- 6 Loosen the band clamp from the air filter assembly to throttle body connection with an 8mm nut driver.
- 7 Remove the entire air filter assembly from the vehicle.
- 8 Remove the radiator cavity covers (2x) by pulling up and towards the center of the vehicle.



Remove Air Filter Assembly Bolt



Air Filter Assembly/Cavity Covers Removed



Radiator Cavity Cover(s)

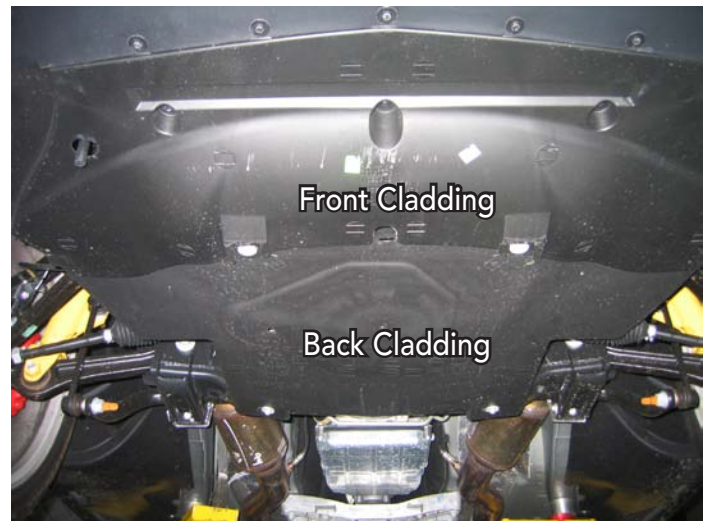


## Underside Body Cladding

- 1 Raise the vehicle.
- 2 Remove the front wheels from the vehicle. Use a 22mm socket for lug removal.
- 3 Underneath the vehicle, remove the six panel fasteners, three in each front fender well, with a flat head screwdriver.
- 4 Underneath the vehicle, remove the four 10mm bolts and remove the back cladding.
- 5 Underneath the vehicle, remove the seven 7mm bolts and four panel fasteners from the front cladding. Remove the front cladding from vehicle.



Front Fender Well Panel Fasteners



Underside Body Cladding



Underside Body Cladding Removed

### Front Fascia

- 1 Remove the ten panel fasteners from the top side of the front fascia.



Top Fascia Connections (Driver's Side)

- 2 Remove the lower six (three on each side) panel fasteners connecting the front fender wells to the front fascia. On some models, these are plastic rivets. Use a punch, drill, or side-cutter to remove the rivet.



Lower Fascia Connections (Pass. Side)

- 3 Use a 10mm to remove the (2) bolts (one on each side) from the lower fascia. Midway up the fascia, from the back side, remove the (2) nuts with a 10mm (one on each side).



Lower Fascia Nut (Driver's Side)



- 4 Remove the remaining two 10mm nuts (one on each side) from the front fascia, located on the top corner of the fascia, accessed from the engine bay.



Upper Fascia Nut (Passenger's Side)

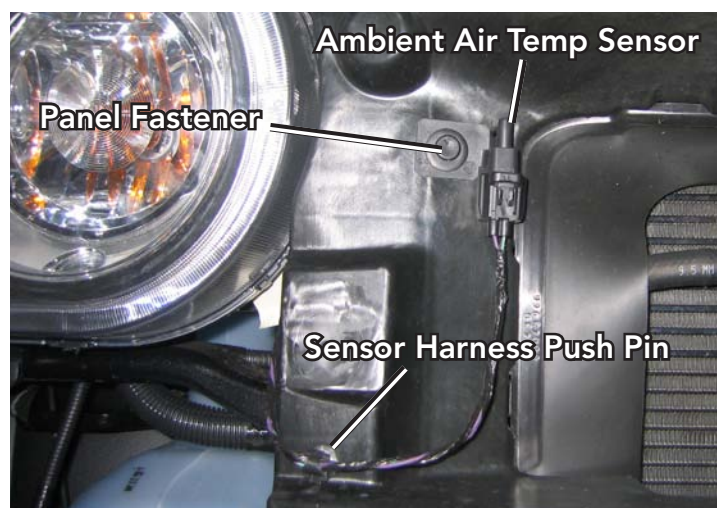
- 5 On the passenger's side of the vehicle, disconnect the wiring harness running to the front fascia. This will eliminate having to unplug the fog lamps and turn signals separately.



Disconnect Front Fascia Wiring Harness

- 7 If equipped, remove the brake cooling duct from the drivers side of the fascia. It will not be reused.

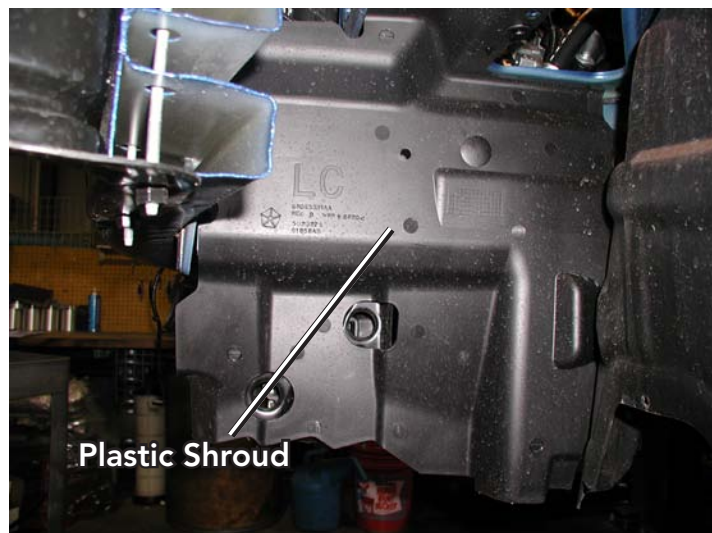
- 8 Remove the plastic radiator shroud located behind the front bumper (this shroud will not be re-used). Remove the three lower panel fasteners, the panel fastener holding the ambient air temp. sensor to the shroud, and pull the push pin securing the ambient air temp. sensor wiring harness to the shroud.



Radiator Shroud Removal

## Stock Component Removal

- 9 Remove the plastic shroud located on the driver's side of the vehicle by removing the four panel fasteners securing it to the vehicle.



Driver's Side Plastic Shroud Removal

- 10 Use a 3/8 drive ratchet to actuate the belt tensioner towards the passenger's side. Remove the serpentine belt.



Actuating Tensioner

- 11 Using a 10mm socket, remove the factory horns and horn brackets (one on each side). Unplug the wiring harnesses from the horns and remove the horns from the brackets using a 10mm wrench. The brackets will no longer be used, however, retain the factory hardware for later use.

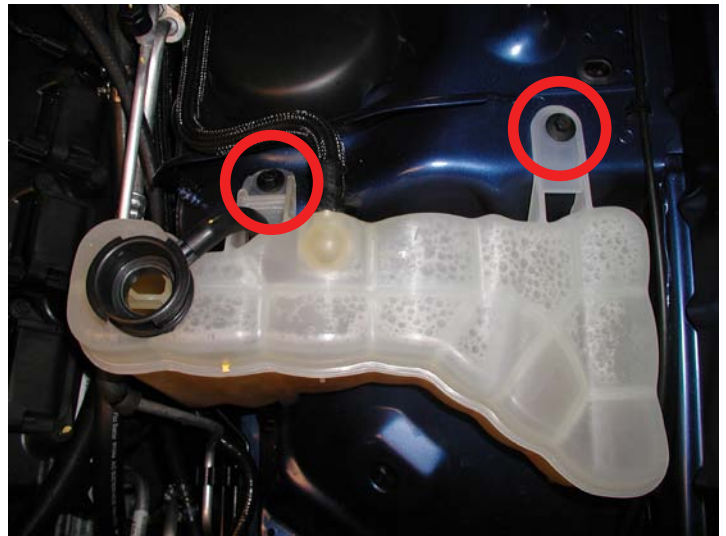


Factory Horn Locations



## Cooling System

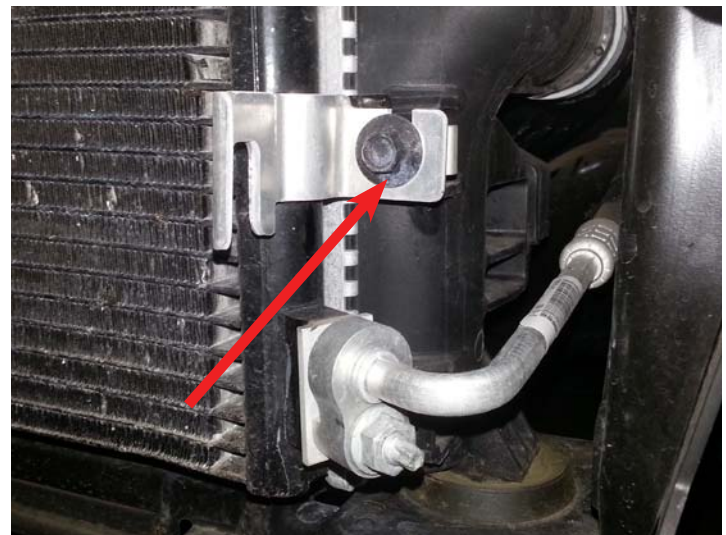
- 1 Remove the coolant reservoir cap. Place a container under the cooling system drain cock located on the passenger's side, bottom of the radiator. Turn the drain cock and allow all of the coolant to drain before proceeding. Once all the coolant has drained, close the drain cock.
- 2 Remove the two 10mm bolts fastenening the coolant reservoir to the vehicle.
- 3 Press the factory clamps together and pull the 3/4" and 3/8" factory coolant lines off of the factory coolant reservoir. Remove the reservoir from the vehicle, it will no longer be used.
- 4 Use a 10mm to remove the small bracket on the driver's side of the radiator. If the tab is not removable, bend the tab back towards the radiator or cut the spot weld and remove.



Remove Coolant Reservoir Bolts



Reservoir Removed



Remove Radiator Bracket

# CRANK PULLEY PINNING

- 1 Remove the four 13mm bolts securing the radiator cradle (two on each side of the vehicle). Pull the cradle straight down and out of the vehicle.

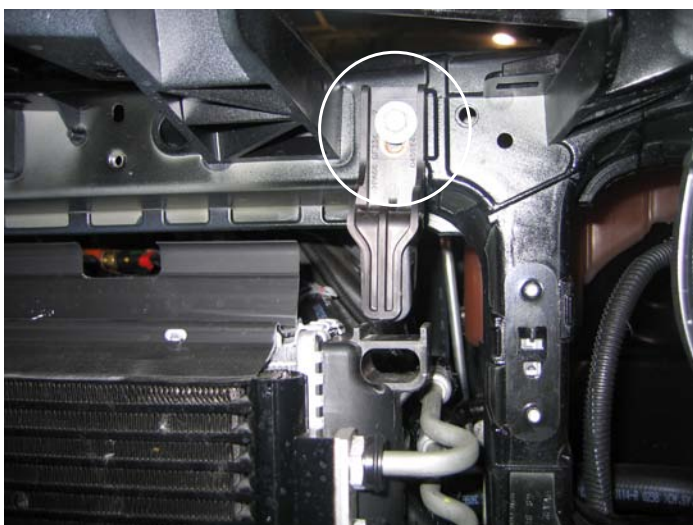


**Tech Tip:** At this point, the radiator will be hanging with no support. Support this using a jack/jackstands/etc.



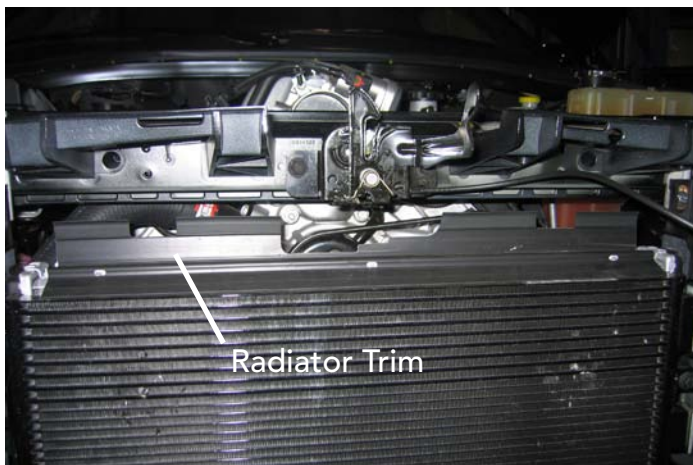
Radiator Cradle Bolts (Pass. Side)

- 2 Remove the two 10mm bolts (one on each side of the vehicle) securing the upper radiator mounts. Remove the mounts from the vehicle for later use.



Radiator Upper Mount Bolts (Driver's Side)

- 3 Remove the upper radiator plastic trim by pulling the trim away from the sheetmetal tabs securing it to the radiator. This will not be re-installed.



Upper Radiator Plastic Trim



- 4 Remove the factory fan assembly by removing the two 10mm bolts located on each side of the fan assembly, accessible from the top of the vehicle. Disconnect the electrical connection to the fan. Lift the fan up off of the lower supports, then out the bottom of the vehicle for removal.

✓ **Tech Tip:** Tape a piece of cardboard to the radiator on the engine side to prevent damage to radiator fins while pinning the crank.



Factory Crank Pulley and Bolt

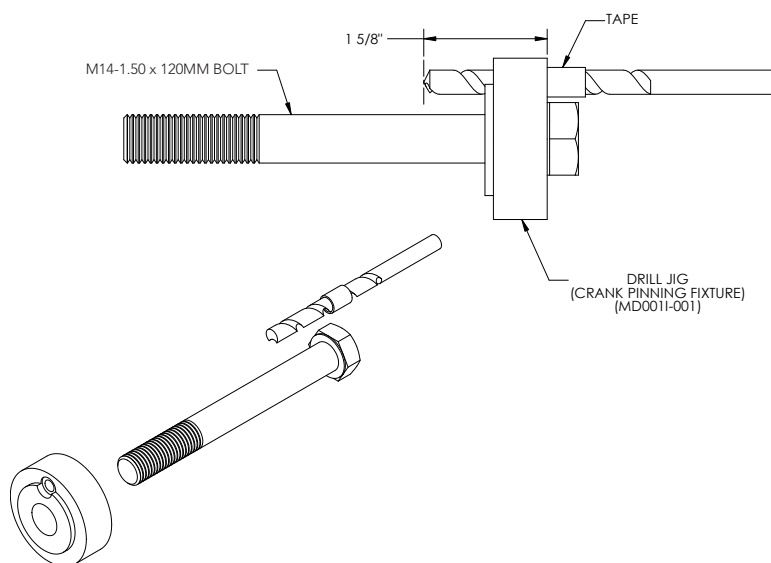
- 5 Remove the 21mm crank pulley bolt.

✓ **Tech Tip:** Use an impact for ease of removal. If not available, remove the access cover to the transmission and use a sufficient tool to lock the transmission in place for bolt removal.

- 6 Place the drill jig onto the crank pulley, and used a 7/8 socket to tighten it into place using the supplied M14-1.50 x 120mm hex head bolt and washer (later models will use an M16-2.0 x 120mm hex bolt and washer).



Drill Jig Installed



Crankshaft and Harmonic Balancer Drill Jig

- 7 Tape the supplied 1/4" HSS drill bit 1-5/8" from the tip. Using this taped bit, drill a hole in the crankshaft and harmonic balancer, stopping at the tape edge. The hole will be centered on the OD of the crankshaft. Do not drill deeper than .800" into the face of the crankshaft.

- 8 Remove the pinning tool and set aside. Use compressed air to thoroughly clean the chips from inside the drilled hole and the surrounding area.

- 9 Install the supplied 1/4" OD x .75" long stainless steel dowel pin in the hole. Re-install the crank pulley bolt and tighten to 129 ft-lbs.



Drilling the Crank



Crank Pulley Pinned to Crankshaft



# PROCHARGER HEAD UNIT

✓ **Note:** 5.7L models do not require removal of the throttle body. Skip to step 2.

- 1 Slide the red locking tab back and disconnect the throttle body electrical connector. Use an 8mm to remove the (4) throttle body screws and remove the throttle body.



Remove Idler Bracket

- 2 Use a 13mm to remove the (3) bolts that hold the idler bracket assembly to the cylinder head.

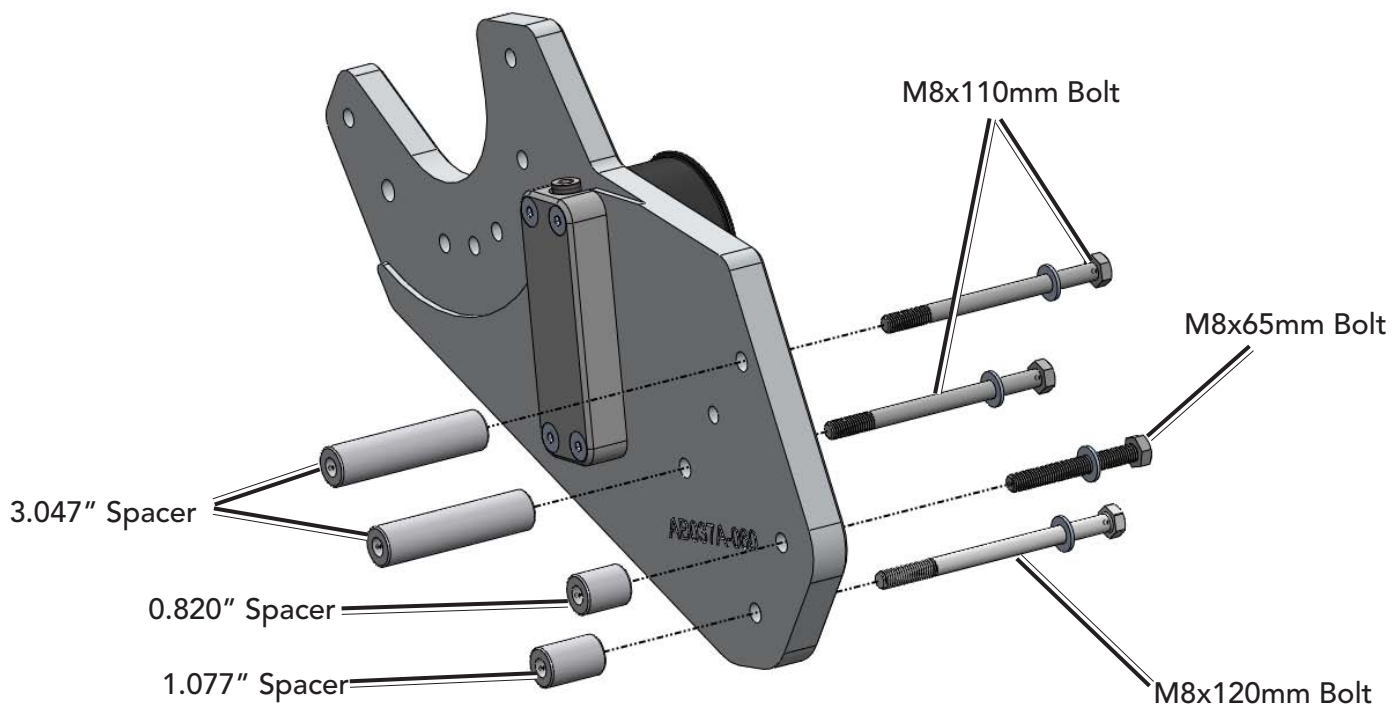


Remove Idler Bracket

- 3 Use a 13mm to remove the (2) timing cover bolts below the idler bracket mounting location.



Remove Timing Cover Bolts



- 4 Remove the ribbed idler from the main bracket. Keep the bolt, washer, pulley, and pulley shaft together.
- 5 Install the main bracket with bolts, washers and spacers as shown in the schematic.



Main Bracket Installed

- 6 Use a 9/16 to reinstall the ribbed idler pulley onto the main bracket.

✓ **Note:** The retaining clip on the idler bearing should be facing the bracket for the proper offset.

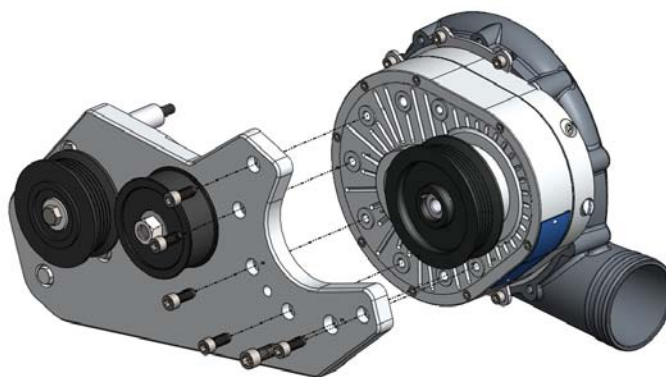


Ribbed Idler Installed

- 7 Remove the ProCharger oil fill reminder tag from the head unit. Fill the head unit with one of the supplied bottles of ProCharger supercharger oil. You will need to remove the fill plug/dipstick using a flat headed screwdriver. After filling the head unit with oil, replace the fill plug/dipstick
- 8 If pre-installed on the bracket, remove the small smooth idler pulley.
- 9 Install the ProCharger onto the main bracket using the (1) 3/8" SHCS and (5) 5/16" SHCS. Tighten all SHCS.
- 10 Install the smooth idler using the 0.260" idler shaft, 3/8" fine thread bolt, and washer.



**Note:** The retaining clip on the idler bearing should be facing the bracket for the proper offset.



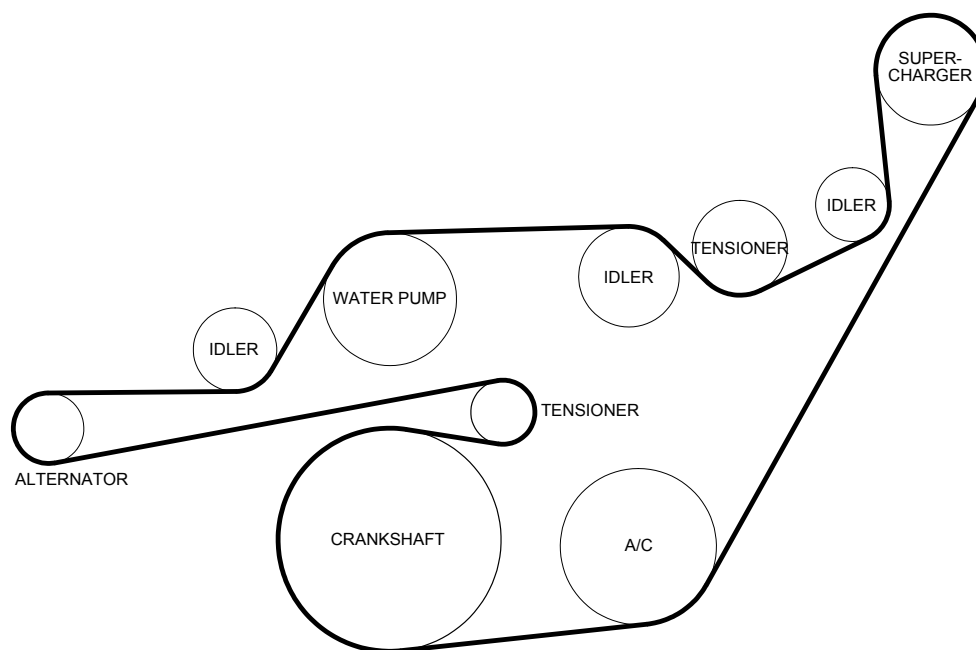
Procharger Head Unit Hardware



Idlers Installed



# SERPENTINE BELT



- 1 Use a 3/4" wrench to loosen the nut on the tensioner pulley. Use a 1/4" hex bit to run the slide tensioner pulley all the way up.
- 2 Install the serpentine belt as shown below.
- 3 Use a 1/4" hex bit to run the slide tensioner pulley down until the belt is tight.
- 4 Using a 3/4" wrench, tighten the bolt at the front of the pulley to lock the tensioner pulley in place.



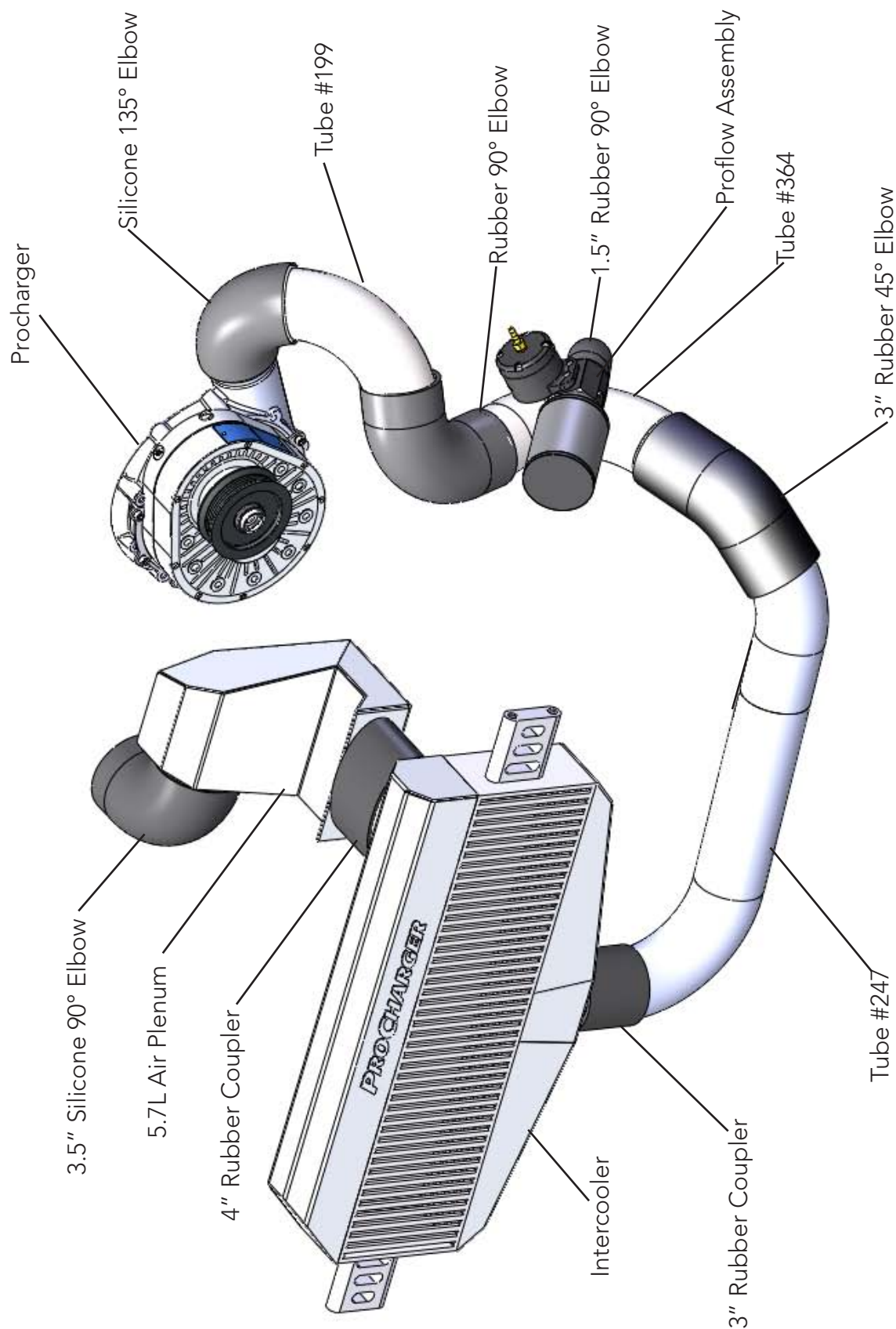
Belt Routed



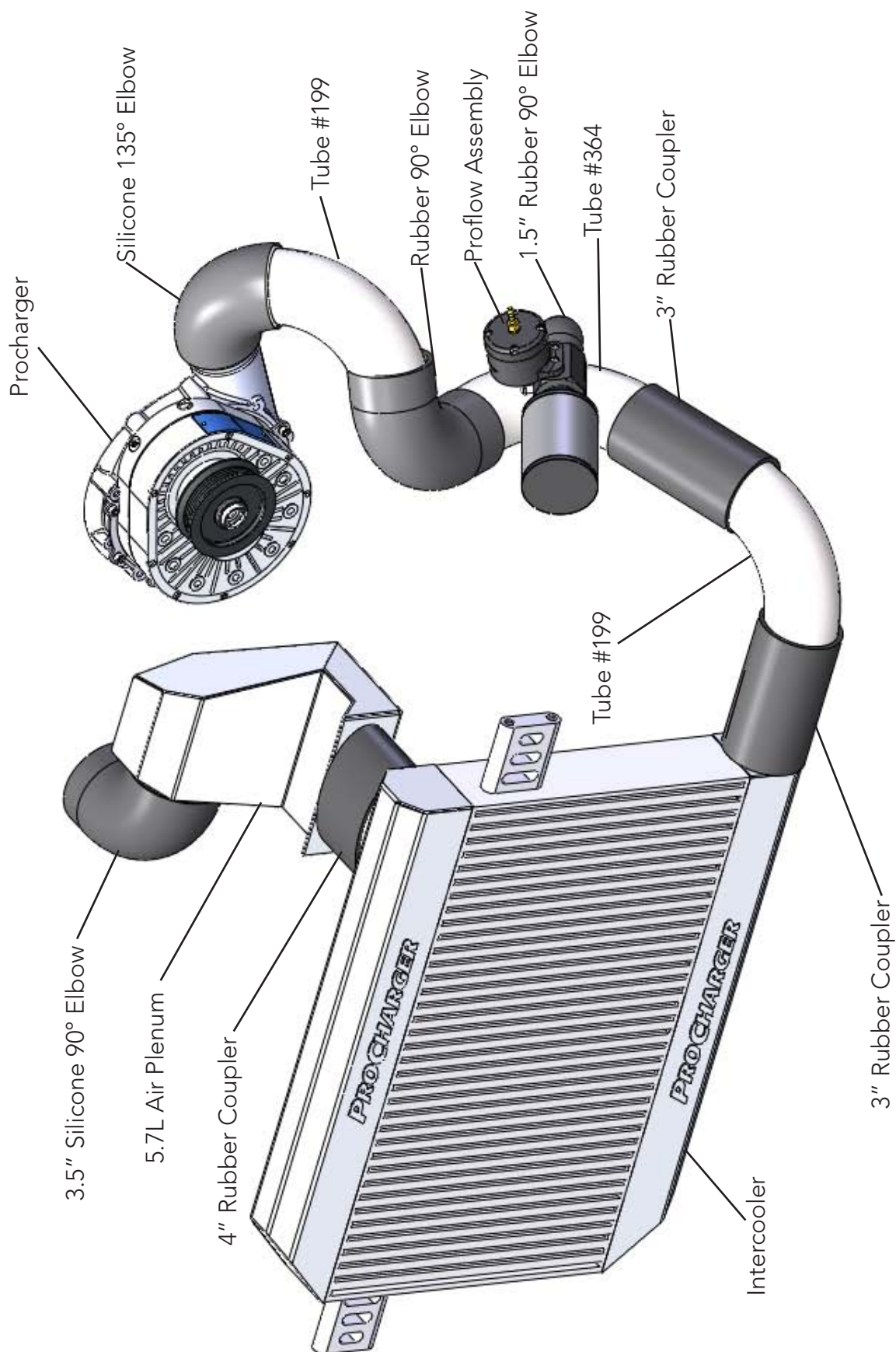
Tensioner Screw



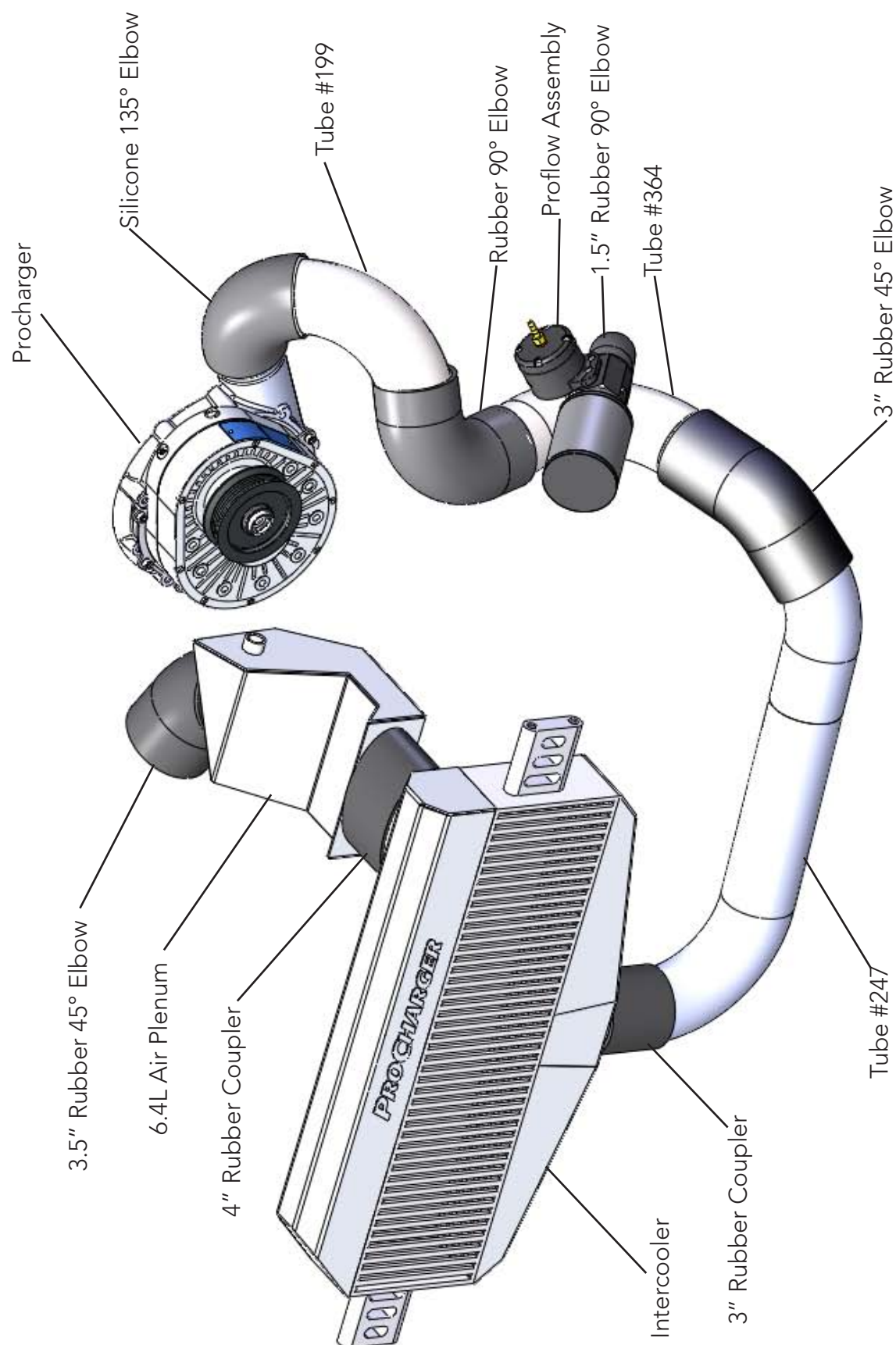
## 5.7L H.O. INTERCOOLER AND TUBING SCHEMATIC



## 5.7L RACE INTERCOOLER AND TUBING SCHEMATIC

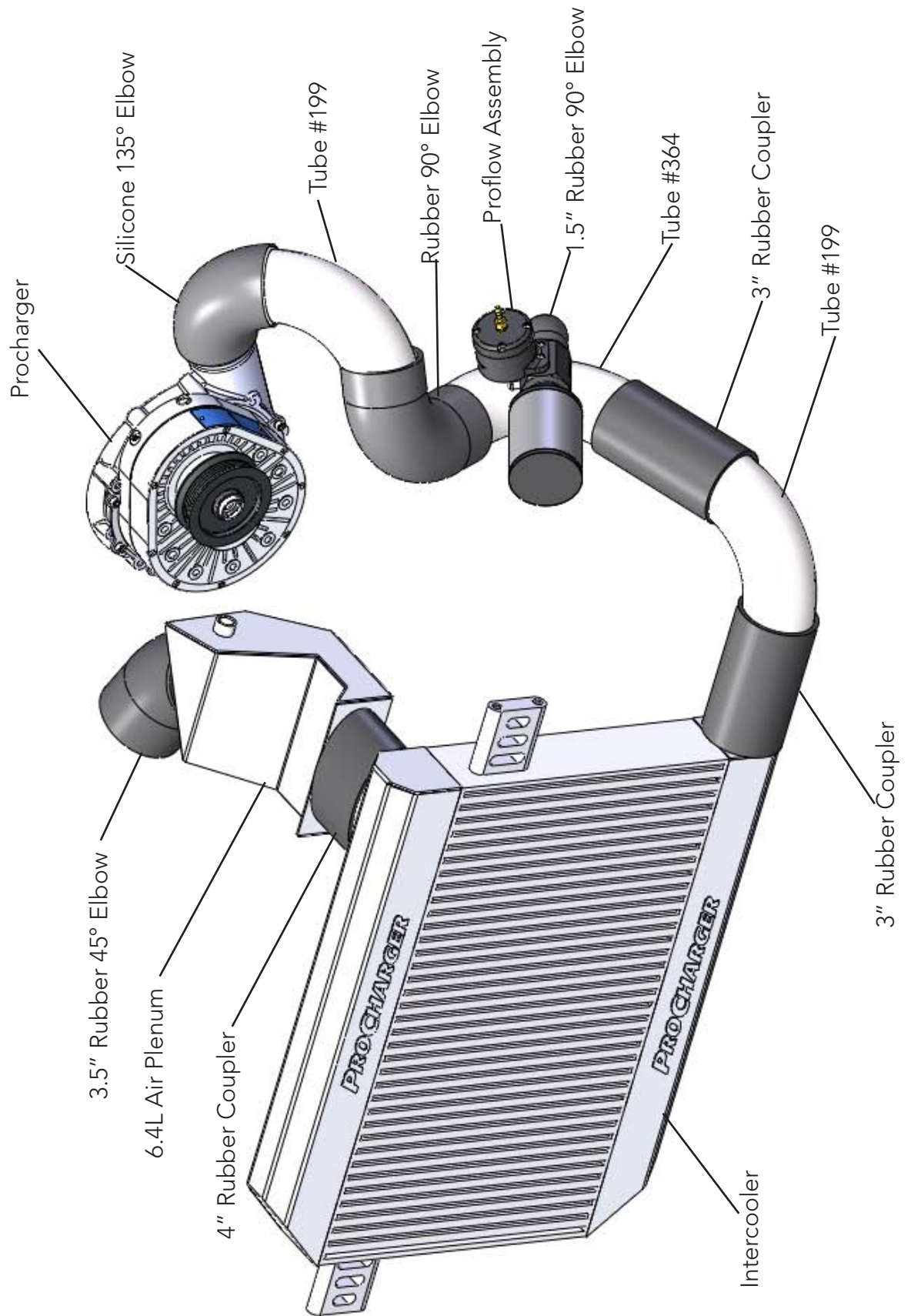


## 6.4L H.O. INTERCOOLER AND TUBING SCHEMATIC





## 6.4L RACE INTERCOOLER AND TUBING SCHEMATIC





# INTERCOOLER

- 1 Assemble the intercooler brackets. The offset portion of the intercooler brackets goes towards the back to push the intercooler out from the vehicle to gain room from the condenser. Use the (4) M6 x 25mm bolts and washers for assembly.

- 2 Mount the brackets to the vehicle using the two M8 x 60mm bolts and washers for the lower connections, and the two M6 x 20MM bolts and washers for the upper connections.

✓ **Tech Tip:** If the body holes do not allow for proper bracket mounting, drill out the top hole to a larger size.

- 3 Undo the horn wiring harness from the body to allow it to reach both horns on the passenger's side. Mount the horns with the factory 10mm nuts onto the supplied horn relocation bracket in the orientation shown at right. Point the horns down to avoid filling with water.

- 4 Slide the intercooler up from underneath. Mount it to the brackets using the four 3/8-16 x 1" bolts and washers. Before installing the passenger's side upper bolt and washer, slide the horn relocation bracket between the bolt and intercooler bracket. Position the intercooler as high up as possible. Tighten the assembly.



Driver's Side Intercooler Brackets



Pass. Side Intercooler & Horn Relocation



Intercooler Installed

**5** Slide the 4" rubber coupler over the top port on the intercooler. Slide the (2) #72 hose clamps over the coupler, with the screw located on the top.

**6** Slide the air plenum under the radiator support and connect it with the 4" rubber coupler. Tighten the hose clamps.



Air Plenum Connected to Intercooler

**7** Place a small amount of lube on the IAT sensor and insert it into the bung on the air plenum. Note location of the locking tab. Twist the sensor until it is locked into place.

**8** Connect the sensor to the factory wiring harness using the IAT extension harness.



IAT Sensor in Air Plenum (6.4L Shown)

**9a** *6.4L Engines:* Connect the air plenum to the throttle body using the silicone 3.5" 45° elbow. Then bolt the throttle body back onto the intake manifold using the factory screws. Secure the silicone coupler with the supplied T-bolt clamps.

**9b** *5.7L Engines:* Connect the air plenum to the throttle body using the silicone 3.5" 90° elbow. Secure the silicone coupler with the supplied T-bolt clamps.

**10** Reinstall the cooling fan. Plug in the electrical connector.



Throttle Body Tube Installed (6.4L Shown)



- 11 For 6.4L models use the factory hardware, mount the supplied radiator brackets to the frame rail where the factory radiator cradle was mounted. Bolt the radiator cradle to the brackets using the supplied M8 bolts, washers, and locknuts. Position the radiator and condenser approximately 1/4"-1/2" back from the intercooler and tighten.



Radiator Cradle Bracket (Driver's Side)

✓ **Note:** 5.7L models utilize tube spacers and longer hardware to relocate the radiator.

- 12 Mount the provided straps (two total) to the upper radiator mount bolt hole locations using the factory hardware.
- 13 Using the two provided M6 bolts, washers, and locknuts, mount the factory upper radiator mount to the bottom of the straps. Position the mount so the offset pushed the radiator towards the engine. Slide the rubber mounts over the top of the radiator to securely hold it in place.



Radiator Cradle Upper Mount (Driver's Side)

- 14 Slide the silicone 135° elbow onto the discharge of the Procharger. Cut the ends as needed for proper fitment. Slide tube #199 into the open end of the elbow, secure each connection using the supplied 3.25" t-bolt clamps. Use a 7/16" socket to tighten.

- 15 Slide one of the 90° rubber elbows onto the open end of tube #199. The other end should point through the triangular opening in the fender.



Blower Discharge Connection



### H.O. Intercooler Only

- 16** From under the vehicle, slide the straight rubber coupler onto the bottom bung of the intercooler. Slide tube #247 onto the open end of the rubber coupler, followed by the 3" 45° rubber coupler.
- 17** Use tube #364 to connect the 45° rubber coupler to the 90° coming through the fender. Secure with #52 hose clamps.



Lower Tubing (H.O. Intercooler)

### Race Intercooler Only

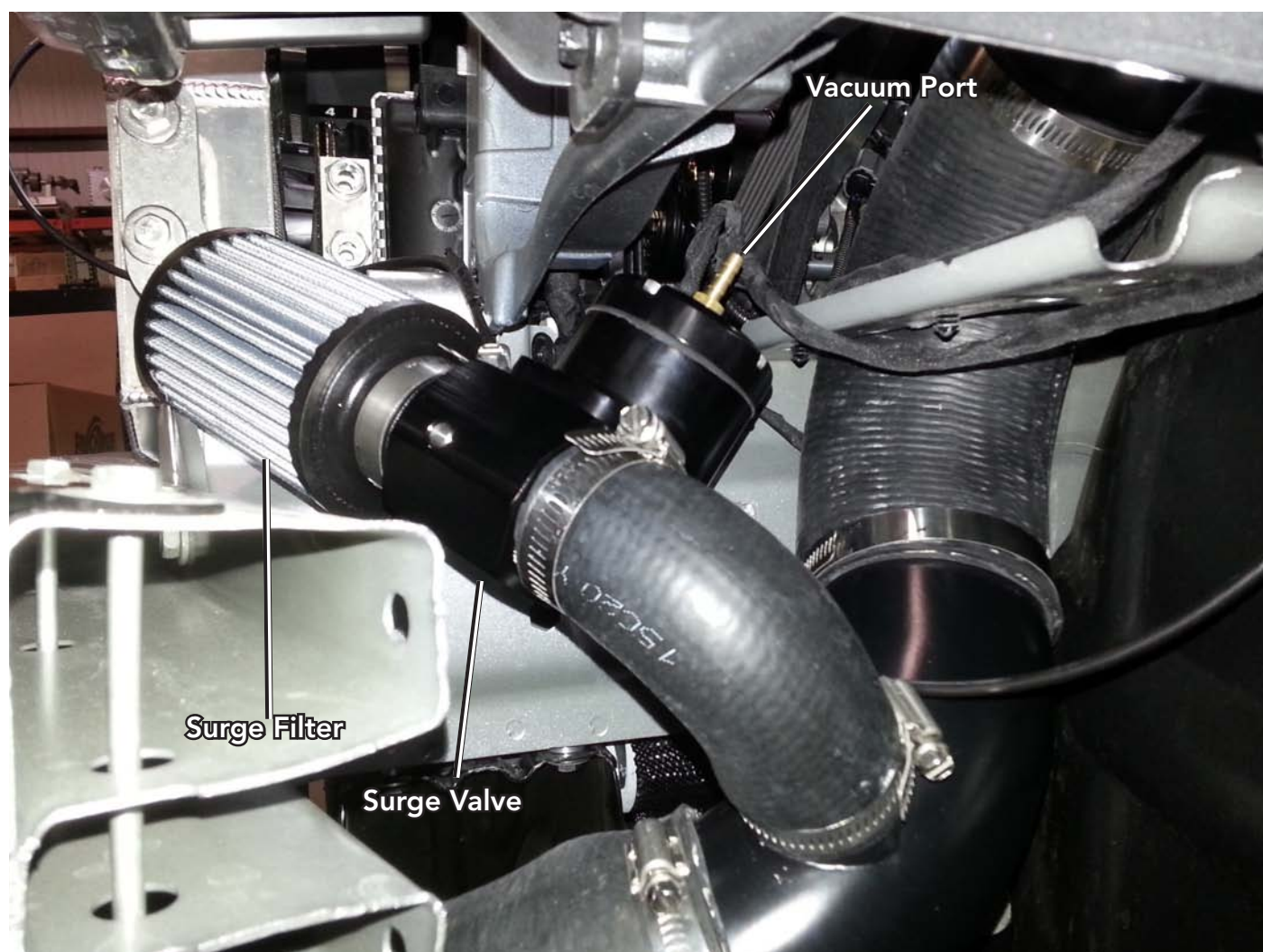
- 18** From under the vehicle, slide one of the straight rubber couplers onto the bottom bung of the intercooler. Slide tube #199 onto the open end of the rubber coupler, followed by the other straight rubber coupler.
- 19** Slide one end of tube #364 into the straight coupler, and the other end into the 90° coupler coming through the fender. Secure with #52 hose clamps.



Lower Tubing (Race Intercooler)

## SURGE SYSTEM

- 1 Trim the provided 90° rubber elbow to the proper length and slide it onto the open 1-1/2" bung located on the surge tube (tube #364).
- 2 Slide the surge valve onto the open end of the rubber elbow in the orientation shown below. Place the filter onto the end of the valve. Ensure the surge valve linkage is unobstructed.
- 3 Secure the connections with #20 hose clamps.



Surge System Assembly

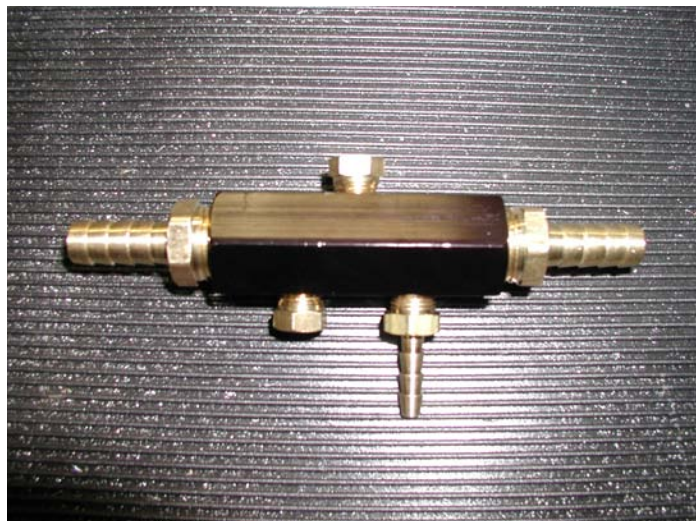


# VACUUM MANIFOLD

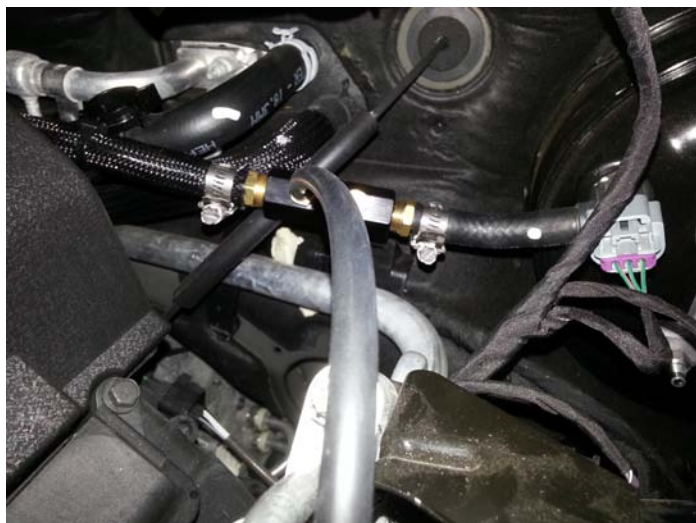
- 1 Assemble the supplied vacuum manifold as shown. If you have or are installing a boost gage, do not install the plug, use an additional barb fitting. Thread each fitting into the manifold. Thread the 3/8" barbed fittings onto each end of the manifold.
- 2 Locate the brake booster hose on the driver's side near the firewall. Remove a 3-1/2" section of this hose in order to place the manifold in-line.
- 3 Mount the manifold by sliding each barbed fitting into the open ends of the brake booster hose. Secure the connections with the provided #06 hose clamps.
- 4 Be sure the brake booster hose connections are tight; verify the connection to the booster did not come loose as well.

**!** **Warning:** Improper clamping of the splice into the brake booster hose could cause a vacuum leak and could cause the power brakes to become inoperable. Use extreme caution in installing the vacuum manifold to prevent any possible leaks.

- 5 Using the provided 3/16" vacuum line, connect one end onto the barb located on the surge valve, and route it to the open barb located on the vacuum manifold. Be sure to zip tie the line for clearance from moving components, as well as the exhaust manifold.



Vacuum Manifold Assembled



Vacuum Manifold Installed



# FUEL SYSTEM

## MAP Sensor

- 1 Use a 7mm to remove the factory MAP sensor located on the passenger's side of the intake manifold. Remove the electrical harness by sliding the red retaining tab back and disconnecting it from the sensor.
- 2 Remove the o-ring from the factory MAP sensor and install it onto the supplied MAP adapter fitting. Insert the MAP adapter into the intake manifold and tighten using the factory screw.
- 3 Install the new supplied MAP sensor into the MAP adapter fitting with the (2) supplied M4 screws and tighten with a 7mm. Connect the electrical harness to the new MAP sensor.



**Note:** The orientation of the MAP sensor in the images provided. Do not install the MAP sensor upside down.



MAP Adapter Installed



New MAP Sensor Installed

## Fuel Injectors

- 1 Reconnect the battery.
  - 2 Remove relay 46 from the panel in the trunk.
- ✓ **Tech Tip:** Check your owners manual to ensure you are pulling the proper relay. Some models require the removal of the #6 20 amp fuse located in the trunk for power to the fuel pump to be off.
- 3 Crank the engine for 15 seconds.
  - 4 Disconnect the battery.
  - 5 Unclip the wiring harnesses from each injector. Remove the four 10mm bolts securing the fuel rails to the manifold. Pull the fuel rails up off of the manifold to gain access to the fuel injectors.
  - 6 Remove the fuel injector retaining clips from the injectors and rails. Remove the injectors by pulling them straight out of the rails.
  - 7 Install the new injectors, followed by the factory retaining clips.

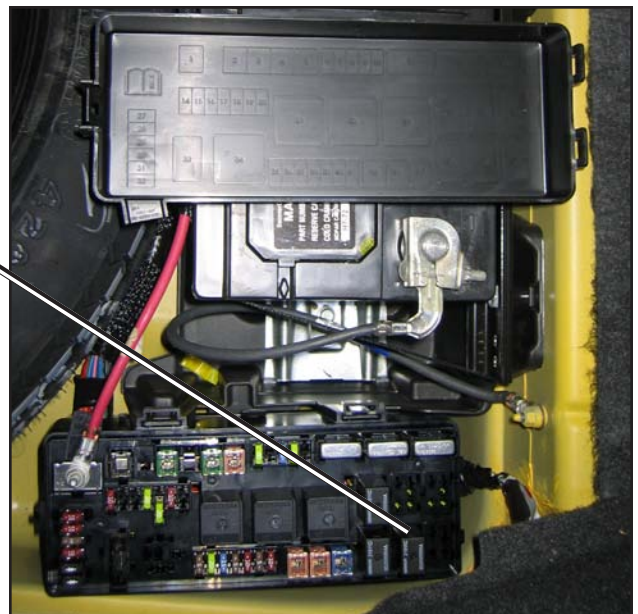
### For 5.7L Models Only:

- 8 Mount the spacers on the manifold, push the injector and rail assembly into place, and tighten the rails with the new hardware. Re-install each wiring harness to each injector.

### For 6.4L Models Only:

- 8 Push the injector and rail assembly into place, and tighten the rails. Re-install each wiring harness to each injector.
- 9 Re-install the shaker assembly bracket.

Relay 46



Electrical Panel



5.7L Models: Fuel Rails Installed



6.4L Models: Fuel Rails Installed



## Fuel Pump

✓ **Tech Tip:** Be sure car has less than a 1/2 tank of fuel before starting.

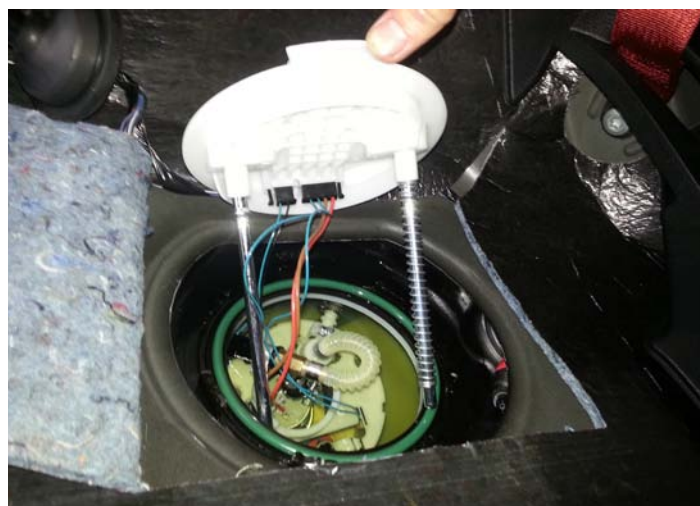
- 1 Make sure the ignition is off and the key is removed from the ignition.
- 2 Pull up on both sides of the rear seat cushion to remove.
- 3 Remove the plastic cover over the pump. Disconnect the fuel pump electrical connector.
- 4 Use a hammer and a punch to rotate the fuel pump locking ring counterclockwise.
- 5 Pull the fuel pump lid up to gain access to the (2) electrical connectors. Disconnect them.
- 6 Push the clip on the fuel pump feed line to disconnect it from the pump.



Fuel Pump Cover



Fuel Pump Locking Ring



Electrical Connectors Under Pump Lid



## Fuel System

- 7 Pop the (2) plastic lines off the top of the pump.
- 8 Pull up on the fuel pump basket assembly and remove it from the tank.



Fuel Pump Removed

- 9 Disconnect the fuel pump electrical connector.
- 10 Remove the plastic pump cover by pulling out on the (3) locking tabs.



Cover Locking Tab

- 11 Use a pick tool to pry back the fuel pump locking tabs and slide the pump up as far as it can go.
- 12 Reach into the basket and pop the fuel pump sock and the blue plastic siphon part. Remove pump from basket.



Fuel Pump Locking Tabs

- 13 Trim fuel pump locking tabs to accept the new larger fuel pump.



Trimmed Tabs

- 14 Use a pick tool to compress the locking tabs on the fuel pump spade connectors. Slide the spade connectors out of the connector housing



Spade Connectors Removed

- 15 Snap the new fuel sock onto the new pump.



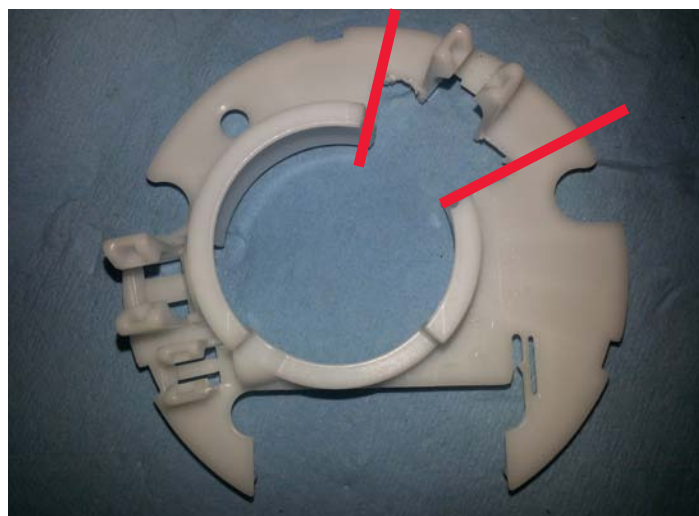
New Fuel Sock Installed

- 16** Insert the new pump into the fuel basket, oriented as shown.



Fuel Pump Orientation

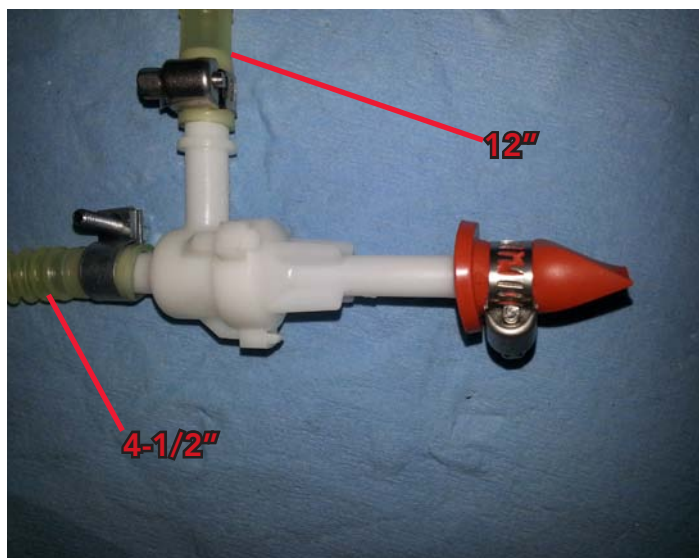
- 17** Trim the pump cover as shown (trim where the red lines are shown). Removing the section in between the two lines. Reinstall the cover.



Cut and Remove Pump Cover Section

- 18** Trim the siphon tube back to where the ribs end. Connect the orange rubber damper to the end of the siphon tube. Secure with a hose clamp.

- 19** Connect the 12" section of flexible fuel hose to the perpendicular barb on the jet siphon. Connect the 4-1/2" section of flexible hose to the parallel barb on the siphon. Secure with hose clamps.



Siphon Tube Trimmed & Damper Installed



**20** Insert the supplied brass "T" into the open end of the 4-1/2" section of flexible hose on the siphon tube.

**21** Locate the supplied sections of submersible 3/8 fuel hose. Slide the 1-1/2" section onto the perpendicular barb of the "T". Slide the 2" section of hose onto the parallel barb of the "T". Secure with hose clamps.

**22** Slide the aluminum adapter into the open end of the 2" hose. Secure with a hose clamp.

**23** Slide the jet siphon into the fuel basket. The orange damper should be pointing downward.



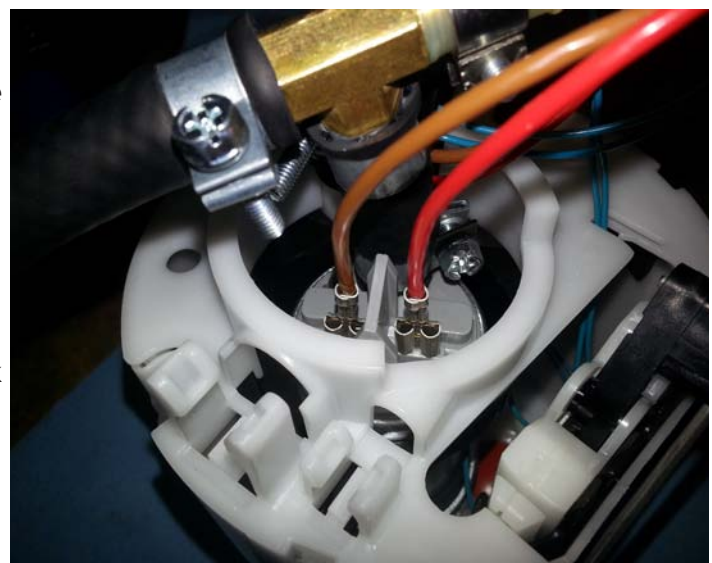
Fuel Hose Routing



Jet Siphon Installed in Basket

**24** Slide the shorter section of rubber 3/8 hose over the fuel pump outlet. Secure with a hose clamp.

**25** Connect the fuel pump wires. **2015-16 Model Year:** The orange wire is positive (+), the brown wire is negative (-). **2017+ Model Year:** The yellow wire is positive (+), the black wire is negative (-).



Pump Hose & Wiring Connections

## Fuel System

- 26** Drill a small hole in the base of the basket. Use a zip tie to attach the 12" section of flexible hose to the basket as shown. This will keep the hose in an optimal position to reach the fuel.



Suction Hose Attached to Basket

- 27** Drop the fuel pump assembly down into the tank.
- 28** Reconnect the factory fuel feed line to aluminum fitting.
- 29** Reconnect the electrical connectors.



Pump Assembly Into Tank

- 30** Line up the lid with the basket and push the lid on.
- 31** Reinstall the locking ring. Make sure it is fully seated.
- 32** Reinstall the plastic cover. Reconnect the electrical connector.
- 33** Reinstall the rear seat cushion.

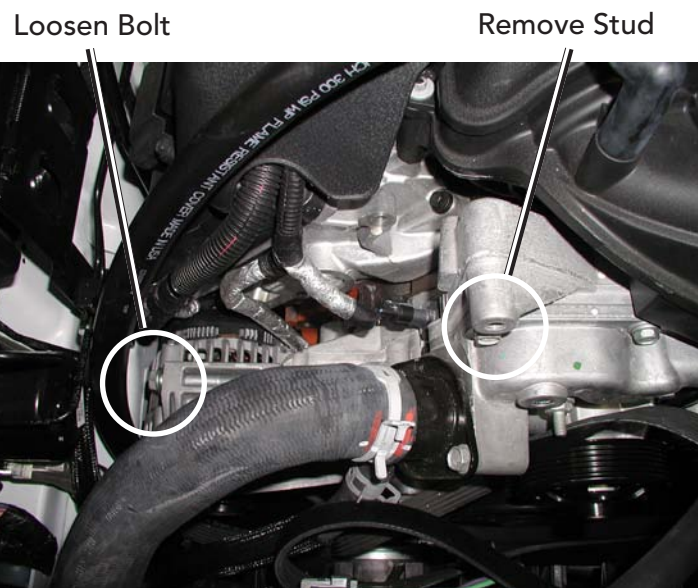


Reinstall Lid



## COOLANT RESERVOIR

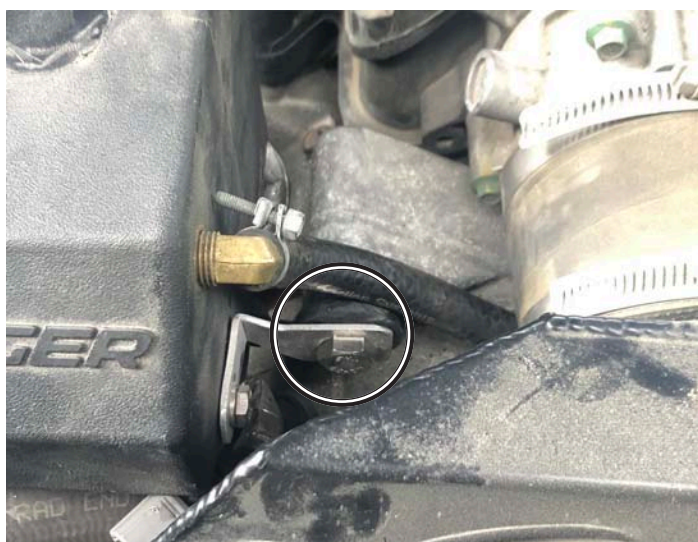
- 1 Remove the stud on the front cover of the engine with a 15mm wrench. Remove the top alternator bolt with a 15mm wrench (see image at right).
- 2 Apply thread sealer to the 3/4" 90° brass barbed fitting and install it onto the bottom of the new reservoir. Point the fitting in the direction shown. Apply thread sealer to the 3/8" 90° barb fitting and install it onto the side of the reservoir. Install the final 3/8" 90° brass barb fitting onto the back of the tank and aim it down and towards the ground.
- 3 Slide the supplied rubber isolator onto the alternator bolt loosely threading it into the alternator.
- 4 Mount the reservoir, sliding the slotted bracket between the head of the upper alternator bolt and the rubber isolator between the bracket and the alternator body. Align the upper bracket with the hole in the front cover where the stud was removed. Slide the provided rubber isolator between the bracket and the engine cover. Using the factory hardware, secure the reservoir to the vehicle.



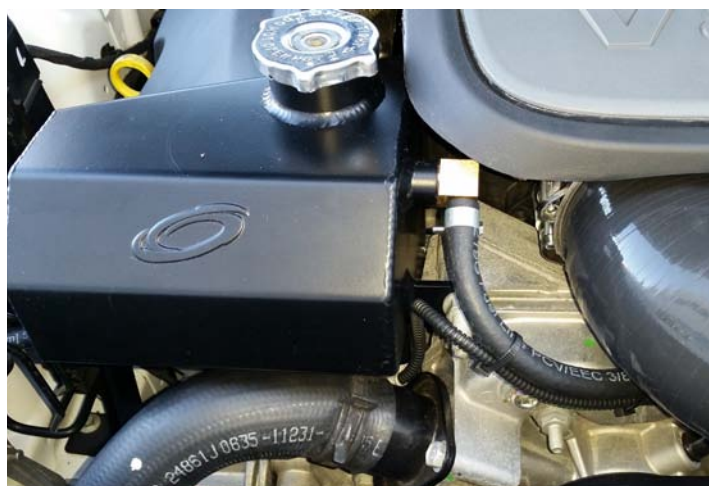
Coolant Reservoir Mounting Locations



3/4" Brass Fitting Direction



Upper Rubber Isolator Installed



Remote Reservoir Mounted



### 6.4L Models Only

5.7L Models Skip to Next Page

- 5 From under the vehicle, locate the plastic "T" fitting in the lower radiator hose. Remove the 3/4" hose, it will no longer be used.
- 6 Disconnect the clamps on both side of the "T" fitting and remove it from the radiator hoses. Flip the fitting around and reinstall so the 3/4" fitting is now pointed towards the passenger's side as shown.
- 7 Attach the supplied 3/4" rubber hose to the "T" fitting and secure with a #12 hose clamp.
- 8 Route the hose along the fan, then up to the 90° fitting underneath the coolant reservoir. Secure with a #12 hose clamp. Use the supplied zip ties to secure the hose.



Coolant Fitting Reversed (6.4L)



New Coolant Hose Routed (6.4L)

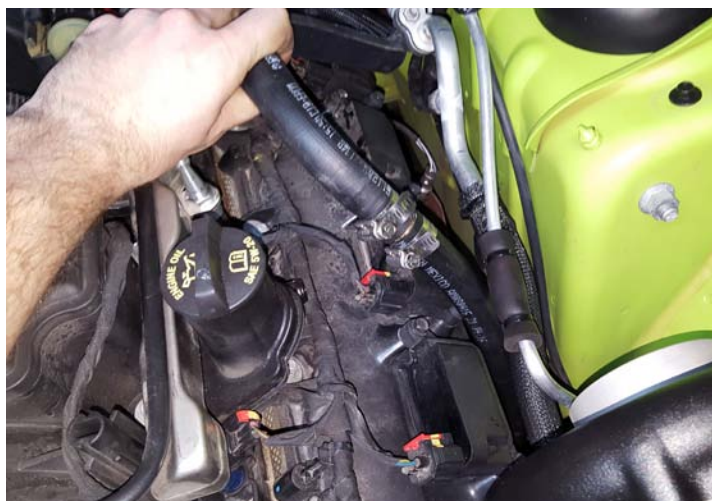
## 5.7L Models Only

6.4L Models Skip to Next Page

- 9 Locate the open end of the factory 3/4" rubber hose that was connected to the factory coolant tank. Insert the supplied 3/4 x 3/4 brass barb fitting into the open end of the hose.
- 10 Attach the new supplied 3/4" rubber hose to the bottom fitting on the new ProCharger coolant reservoir. Route the hose down toward the bottom of the radiator fan.
- 11 Route the new 3/4" hose along the bottom of the fan and up to the 90° brass fitting underneath the coolant reservoir. Secure all connections with #12 hose clamps.



Factory 3/4" Hose (5.7L)



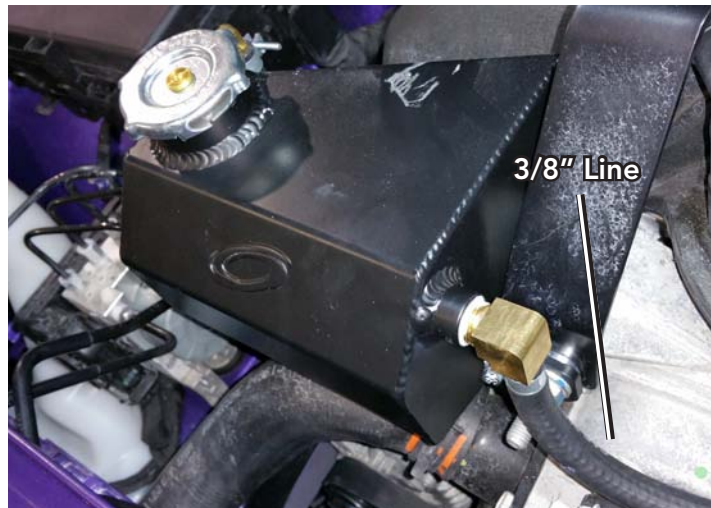
New 3/4" Hose Connected (5.7L)



### All Models

- 12 Install the 3/8" x 3/8" barbed fitting onto the 3/8" factory coolant line. Slide the longer supplied section of 3/8" hose onto the open end of the barb. Secure connections with #6 hose clamps.
- 13 Run the factory 3/8" line under the front of the intake manifold and to the side of the reservoir and slide the hose onto the barbed fitting. Secure the connection with a #6 hose clamp.
- 14 Slide the short section of 3/8" hose onto the open barb on the back side of the reservoir. Route the hose around the back of the reservoir, and down towards the ground for an overflow vent. Secure the hose to the filler neck with a #6 hose clamp.
- 15 Verify that all of the coolant lines are not kinked, and all have clearance from belts and pulleys. Zip tie lines for protection.
- 16 Fill the reservoir to line indicated on the label found on the side of the reservoir.
- 17 Place a vacuum pump on the coolant reservoir to remove any air from the cooling system. Refill the coolant as needed.
- 18 Install the new supplied 16 psi cap on the coolant tank.

✓ **Tech Tip:** Passenger side engine cover may need to be trimmed on some models to clear the coolant overflow tank.



Coolant Hose Routing



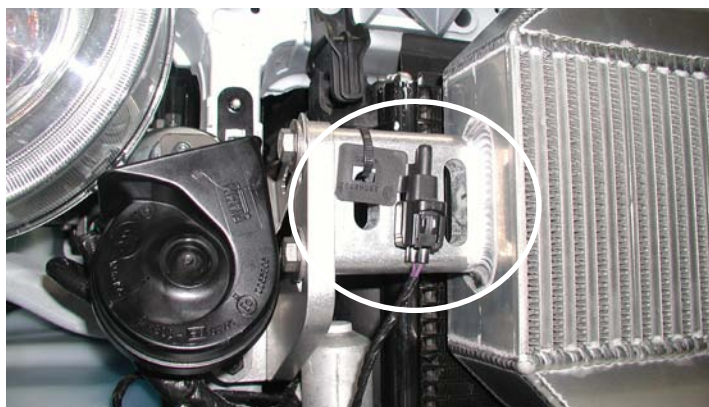
Pressure Relief Line Routing and Fill Line

**Warning:** Overfilling the coolant reservoir can cause permanent damage to the reservoir. Fill only to the indication line on the side of the reservoir.



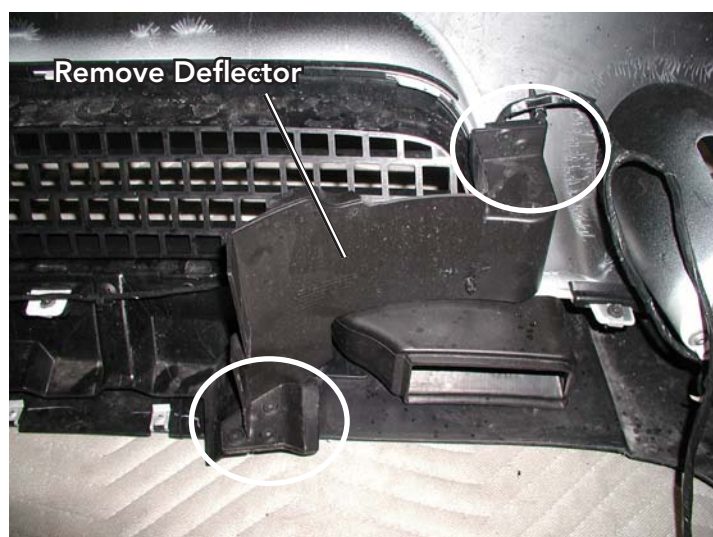
## FINISHING

- 1 Locate the ambient air temperature sensor on the passenger's side of the vehicle. Zip tie the sensor to the passenger's side intercooler bracket (note the image at right).



Ambient Air Temp Sensor Mounted

- 2 On the back side of the front fascia, the two plastic deflectors must be removed to gain clearance for the intercooler and tubing (some models will not have to be trimmed). Cut the heads off of the five plastic rivets on each deflector (note location on image at right). Unclip the harnesses attached to the deflectors and remove them from the fascia.



Fascia Deflector Removal (Passenger's Side)

- 3 Re-install the front fascia onto the vehicle in the reverse order it was taken off. Connect the wiring harness on the passenger's side of the vehicle that is attached to the fascia. Tighten all hardware.

✓ **Tech Tip:** Use the provided push pins in the air inlet bag to replace any plastic rivets that had to be drilled out.

- 4 Replace the factory underside cladding using the factory hardware.
- 5 Place the radiator cavity covers in position and snap them into place.

### 6.4L Models Only

5.7L Models Skip to Next Page

- 6** Drill a 1/2" hole in the end of the supplied air filter. Slide the provided 5/8" 90° plastic barb into the hole.
- 7** Using a # 60 hose clamp to secure the rotomold tube to the supercharger. Secure the air filter to the rotomold tube using a #64 hose clamp.
- 8** Route the provided molded rubber hose to the factory PCV fitting from the plastic fitting on the end of the air filter. Trim as needed.



Air Inlet Installed

## 5.7L Models Only

6.4L Models Skip to Next Page

- 9 Drill a 1/2" hole in the end of the supplied air filter. Slide the provided 5/8" 90° plastic barb into the hole.
- 10 Using a # 60 hose clamp to secure the rotomold tube to the supercharger.
- 11 Route the provided molded rubber hose to the factory PCV fitting from the plastic fitting on the end of the air filter. Trim as needed.
- 12 Set the engine cover over engine. Trim the cover to clear the new coolant reservoir.
- 13 Place the supplied air filter onto the plastic inlet tube. Install the plastic inlet tube onto the supercharger. Mark the engine cover where it will need to be trimmed for the air filter and plastic tube.
- 14 Remove the inlet tube and trim the engine cover. Reinstall the inlet tube. Attach the PCV hose to the plastic barb. Secure the filter and plastic inlet tube with hose clamps.



Air Inlet Installed



5.7L Cover Trimmed for Coolant Reservoir



5.7L Cover Trimmed for Air Inlet



### All Models

- 15 Reconnect the battery.
- 16 Start the vehicle and let it go through one heat cycle. After the engine has cooled down, recheck fluid levels.

### Shaker Models Only

- 17 Using a cutoff wheel remove the tab on the bottom of the shaker assembly shown to the right. Cut the tab flush with the bottom.
- 18 Re-install the shaker assembly.
- 19 Locate the CARB Executive Order sticker included with your system. This sticker must be installed in an underhood location that is readily visible.



Remove Tab



**CONGRATULATIONS! YOU HAVE SUCCESSFULLY COMPLETED THE INSTALLATION OF YOUR NEW PROCHARGER SUPERCHARGER SYSTEM. PLEASE CONTINUE READING THE FOLLOWING PAGES FOR IMPORTANT INFORMATION ABOUT HOW TO MAINTAIN YOUR SUPERCHARGER SYSTEM.**

# 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 re-installing 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.

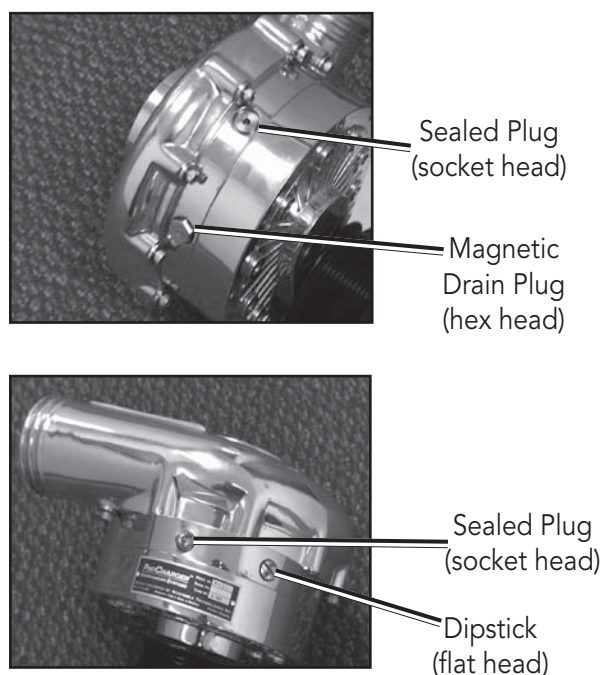
## ProCharger Oil Change Intervals

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

### ProCharger Oil Level

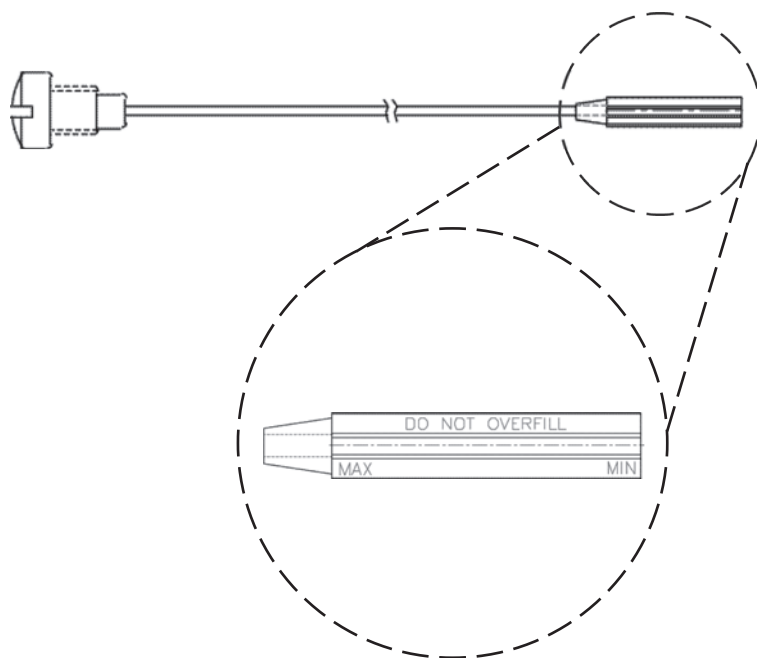
The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.

**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 warning tag, 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.





## 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**

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**Accessible Technologies, Inc.**  
**14801 W. 114th Terrace**  
**Lenexa, KS 66215**  
**Phone: 913.338.2886**  
**Fax: 913.338.2879**  
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**Part Number PMDG1A-007 Rev. G**

