

# 2011+ Jeep 5.7L Grand Cherokee H.O. 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

All rights reserved. Accessible Technologies Inc. hereby grants permission to use and reproduce this document for personal use, provided that all copyright information be retained. Reproduction of this document for unauthorized commercial use is strictly prohibited.

Information in this document is subject to change without notice.

ProCharger is a registered trademark and The Intercooled Supercharging Experts!™ and Designed to Blow Away the Competition™ are trademarks of Accessible Technologies, Inc. and may not be used without express permission.

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® 2011+ Jeep 5.7L Grand Cherokee 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)
- Open End Wrench Set (standard & metric)
- 3/8" Hex Bit Set (allen head)
- Flat Screwdrivers
- 5/16 Nut Driver
- Torque Wrench
- Phillips Screwdrivers
- Plier Set
- Right Angle Drill
- Coolant
- Power Steering Fluid
- Pipe Thread Sealant



**Warning:** Your supercharged Jeep 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

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.

# TABLE OF CONTENTS

Introduction .....	i
Stock Component Removal.....	1
Crank Pulley.....	8
Power Steering .....	10
Supercharger Bracket Assembly .....	13
Procharger Head Unit .....	15
Tensioner .....	16
Intercooler .....	18
Washer Tank.....	29
Coolant Reservoir .....	31
Vacuum Manifold .....	33
Surge System .....	34
Fuel System .....	35
MAP Sensor .....	36
Finishing.....	37
Operation and Maintenance .....	41
Limited Warranty .....	43



**Tech Tip:** Installing spark plugs that are one heat range colder than stock and gapping your plugs to .035" is recommended.

**TUNING IS REQUIRED WHEN INSTALLING YOUR PROCHARGER SYSTEM. IF A COMPLETE SYSTEM WAS PURCHASED. SEE SUPPLEMENTAL TUNING GUIDE. IF A TUNER KIT WAS PURCHASED. TUNING WILL HAVE TO BE PERFORMED BEFORE OPERATING THE VEHICLE.**

# 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



**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.



### Engine Air Filter

- 1 Disconnect the battery ground located under the passenger seat.
- 2 Remove the engine cover from the vehicle by pulling upward.
- 3 Unplug the IAT sensor from the air box and remove the PCV hose from the air box.
- 4 Loosen the band clamp from the air filter assembly to throttle body connection with an 8mm nut driver. Remove air intake tube and air box lid from the vehicle.
- 5 Remove the bottom air box by removing the hood seal, use an 8mm socket to remove the (1) bolt, and unclip the wiring harness.
- 6 Remove IAT sensor from the air tube by lifting and turning the sensor.



IAT Sensor & PCV Connection



Air Intake Tube Removal



Airbox Assembly Removal

## Front Fascia

2011-2013 Skip to step 8.

- 7 2014+:  
Using a flat head screwdriver remove the (2) clips holding the core support cover to the radiator core support



Core Support Cover Clips

- 8 Using a jack raise the front of the vehicle and support with jack stands.

- 9 Release the wheel liner from the driver's side by removing (1) bolt using a 10mm from the top, cut (2) push clips off from the middle, and remove (1) turn clip from the bottom. Repeat on the other side.



Wheel Liner Clips/Bolt

- 10 Remove the (3) turn clips from the bottom of the front fascia.



Front Fascia Bottom Clips



## Stock Component Removal

- 11** Pull fender flare out far enough to be able to unclip fascia from the fender (each side).
- 12** On drivers side unplug the connectors for the fog lights and the turn signals.
- 13** On the passenger side unplug the fog light, turn signal and main fascia harness connector. Main fascia connector is on 2014+ models only.
- 14** Remove the fascia from the vehicle. Pull downward on both sides to release clip then pull fascia outward.
- 15** Remove the under splash panel from the vehicle by removing (2) bolts using a 13mm, remove (5) bolts using a 10mm, and remove (2) turn clips from either side.



Fog Light & Turn Signal Connectors (Drivers)



Fog, Turn Signal, Main Connectors (Pass)



Splash Panel Removal

**2011-13 Models continue to step 16.**

**2014+ Models skip to page 8.**



**2011-2013 models only.**

- 16** With a 13mm remove the (2) bolts holding the grill to the radiator support.
- 17** Pull up on the plastic covers on the top of the grill to release the clips there are (4) total. Remove the grill.



2012-2013 Grill Bolts

### Washer Reservoir

- 18** Remove the washer reservoir by removing the plastic clip with a flat head screwdriver near the fill cap.



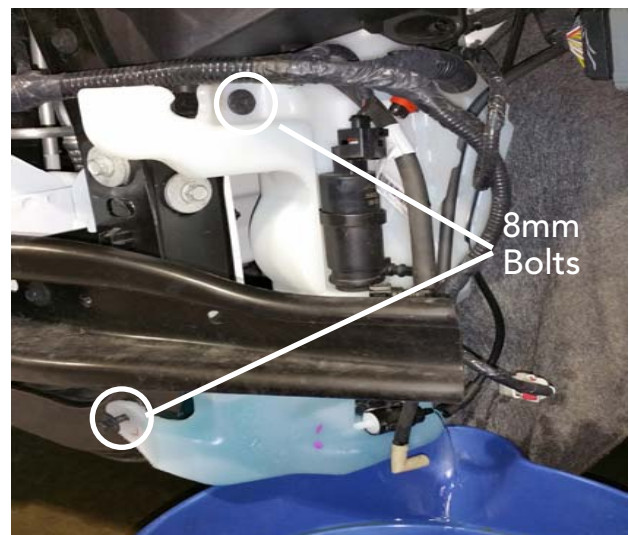
Plastic Clip At Fill Cap

- 19** Below the headlight unplug the (3) electrical connectors going to both pumps and the low level sender.
- 20** Place a drain pan underneath the washer reservoir and disconnect the hoses from the pumps (one pump for 2011-2013 models). Allow the reservoir to drain. Disconnect the push pin holding one of the hoses. And also unclip the hoses from the washer reservoir.



Washer Tank Hose & Electrical Connectors

- 21 2011-2013:**  
Using an 8mm remove the (3) screws holding the reservoir to the body. Remove the reservoir.
- 2014+:**  
Using an 8mm remove the (2) screws holding the reservoir to the body. Remove the reservoir.



Washer Tank Bolts

## Coolant Overflow

- 22 Disconnect the rubber hose going to the overflow tank from the radiator.
- 23 With an 8mm remove the (3) bolts holding the reservoir to the body.
- 24 Pull straight up and out on the overflow tank to remove it from the vehicle



Coolant Overflow Tank



## CRANK PULLEY

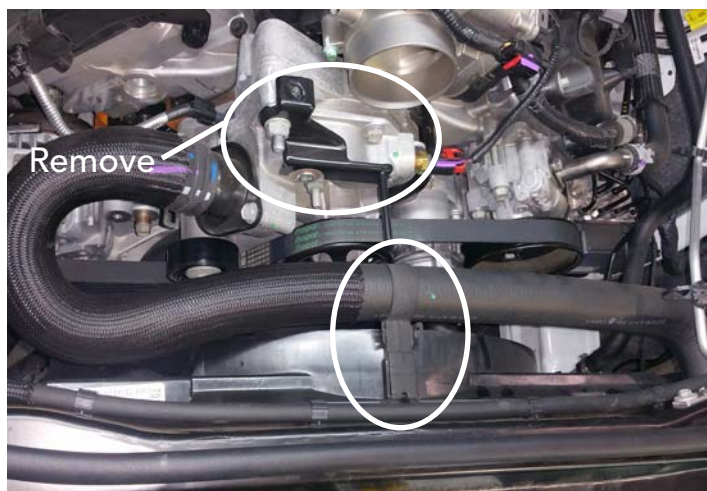
- 1 Place a drain pan under the radiator drain spout located on the drivers side of the radiator. Drain the radiator by loosening the knob on the drain spout.
- 2 To aid in radiator removal use a 10mm to remove the bolt holding the A/C line to the radiator support. Push the line to the drivers side.
- 3 Using a flat blade screwdriver pry up on the upper radiator hose hold down clamp attached to the fan assembly. Push the clamp towards the engine to unclip it from the fan.
- 4 Remove the upper radiator hose from the vehicle by releasing the clamps at the radiator and at the water pump.
- 5 Remove the black bracket located under the throttle body.
- 6 Disconnect the fan wiring connector from the passenger side of the fan. With a screwdriver disconnect the power steering line clips from the fan. Push the fan retaining clips in to release the fan and pull the fan straight up or down to remove it from the vehicle.

✓ **Tech Tip:** It may be necessary to remove the upper flap from the radiator for removal.

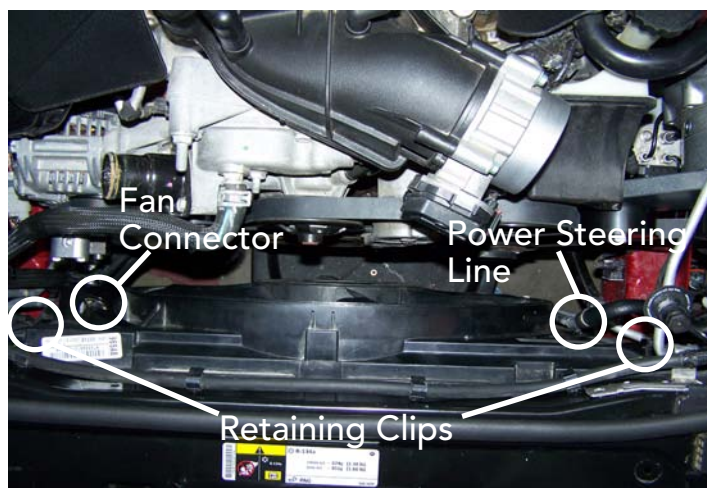
- 7 Use a 15mm to remove the (8) bolts securing the torque converter access bracket under the vehicle.



A/C Line Bolt



Radiator Hose Hold Down Clamp



Fan Connections

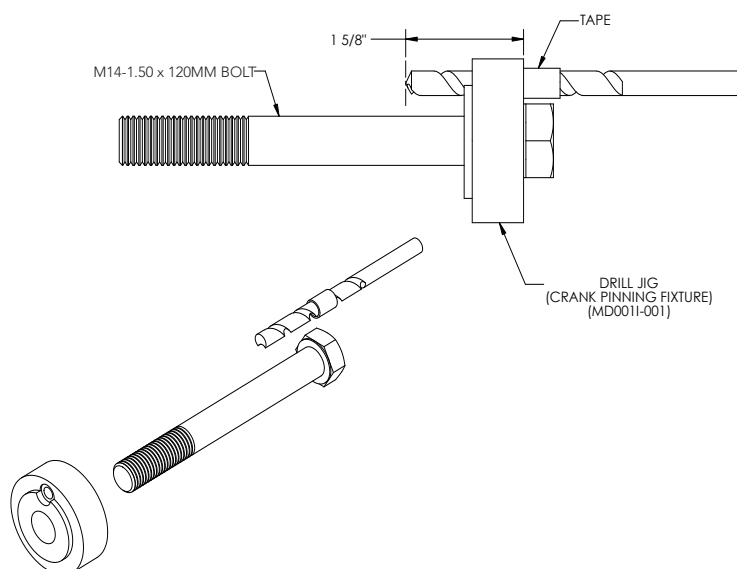
- 8 Use a breaker bar between the torque converter bolts and the engine block to keep engine from rotating.
- 9 Use a 21mm with a breaker bar to remove the crank bolt.
- 10 Place the drill jig onto the crank pulley, and tighten it into place using the supplied M14-1.50 x 120mm hex head bolt and washer.
- 11 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
- 12 Remove the pinning tool and set aside. Clean the chips from inside the drilled hole and the surrounding area thoroughly.
- 13 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.
- 14 Reinstall the converter access bracket and hardware.



Drilling the Crank



Crank Pulley Pinned to Crankshaft



Crankshaft and Harmonic Balancer Drill Jig



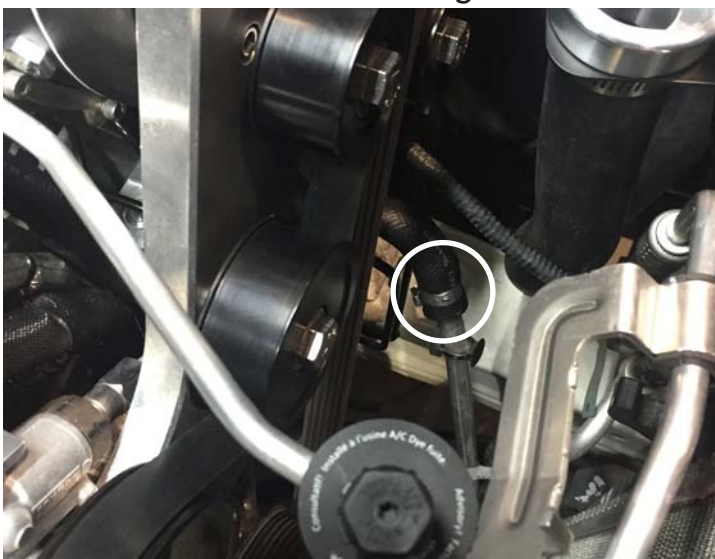
# POWER STEERING

**Electric Power Steering Models Skip This Section, Proceed To Page: 13**

- 1** Using a 13mm remove the (1) bolt securing the power steering seservoir.
- 2** Remove both lines from the power steering reservoir and drain the fluid into a clean drain pan.
- 3** Remove the large 5/8" power steering line from the pump. Install the supplied 5/8" rubber caps on the pump and reservoir to prevent fluid loss.
- 4** Remove the smaller 1/2" power steering line from the hardline in front of the radiator. Use a pair of snips to cut the factory clamp off.



Remove Power Steering Reservoir



Power Steering Line Removal

- 5** Using the factory bolt and (1) supplied nut and washer secure the power steering reservoir to the bracket.
- 6** Place the 0.350" tube spacer over the M6 stud. Then secure the bracket to the shock tower as shown using the (2) provided lock nuts and washers.



Power Steering Reservoir Mounted



- 7 Using a 12mm socket remove the bolt from the power steering line in the pump.



Power Steering Line Removal

- 8 Resecure the power steering line to the pump using the provided bracket and 8mm x 20mm bolt and lock washer. The bracket turns the hose counter clockwise to allow adequate room for the new power steering line to be routed.



Power Steering Line Re-Positioned

- 9 Trim the larger factory 5/8" power steering hose as shown. Secure it to the pump and reservoir using (2) provided #10 hose clamps.

✓ **Tech Tip:** Verify all hoses are not pinched and secure with zip ties as needed.



Power Steering Line Trim

## Power Steering

- 10 Secure it to the pump and reservoir using (2) provided #10 hose clamps.



Power Steering Line Install

- 11 Secure the provided 1/2" rubber hose to the hardline in front of the radiator. Secure with a #6 hose clamp.
- 12 Route the 1/2" rubber hose along the ac line to the power steering reservoir. Secure the rubber hose to the ac line using the provided zip ties.
- 13 Secure the 1/2" rubber hose to the power steering reservoir using a #6 hose clamp.



Power Steering Line Install

✓ **Tech Tip:** Verify all hoses are not pinched and secure with zip ties as needed.



# SUPERCHARGER BRACKET ASSEMBLY

**Electric Power Steering Vehicles Skip this Step:**

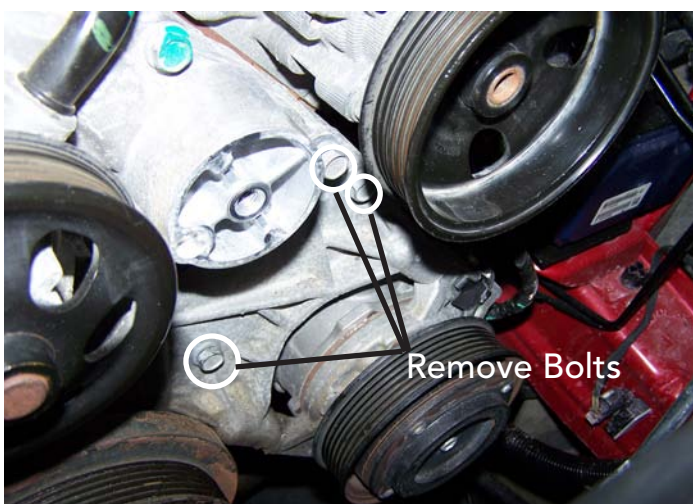
- 1 To make room for the main bracket use a 16mm wrench to loosen the line at the bottom of the power steering pump and rotate it towards the engine. Retighten the line.
- 2 Using a 3/8" breaker bar rotate the tensioner counter-clockwise to remove the factory serpentine belt.
- 3 With a 16mm remove the factory belt tensioner assembly.
- 4 Use a 13mm to remove the (4) bolts shown below in order to mount the supercharger main bracket to the vehicle.
- 5 Remove the smaller idler pulley from the supercharger main bracket using a 3/4" socket.



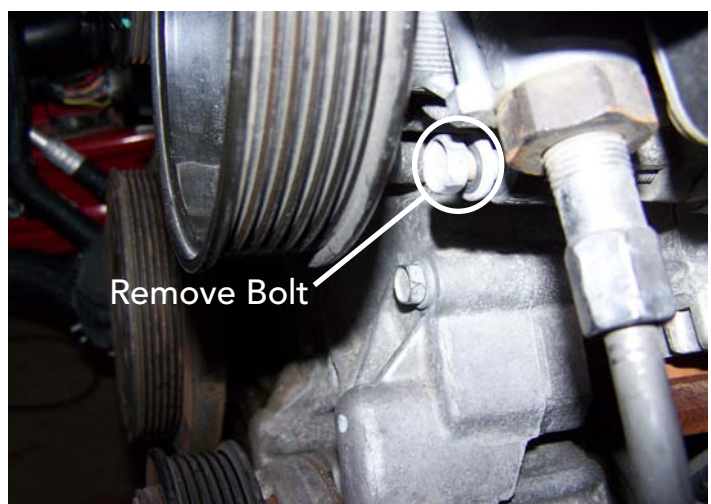
Power Steering Lines



Factory Tensioner



Bracket Mounting Points



Bracket Mounting Points

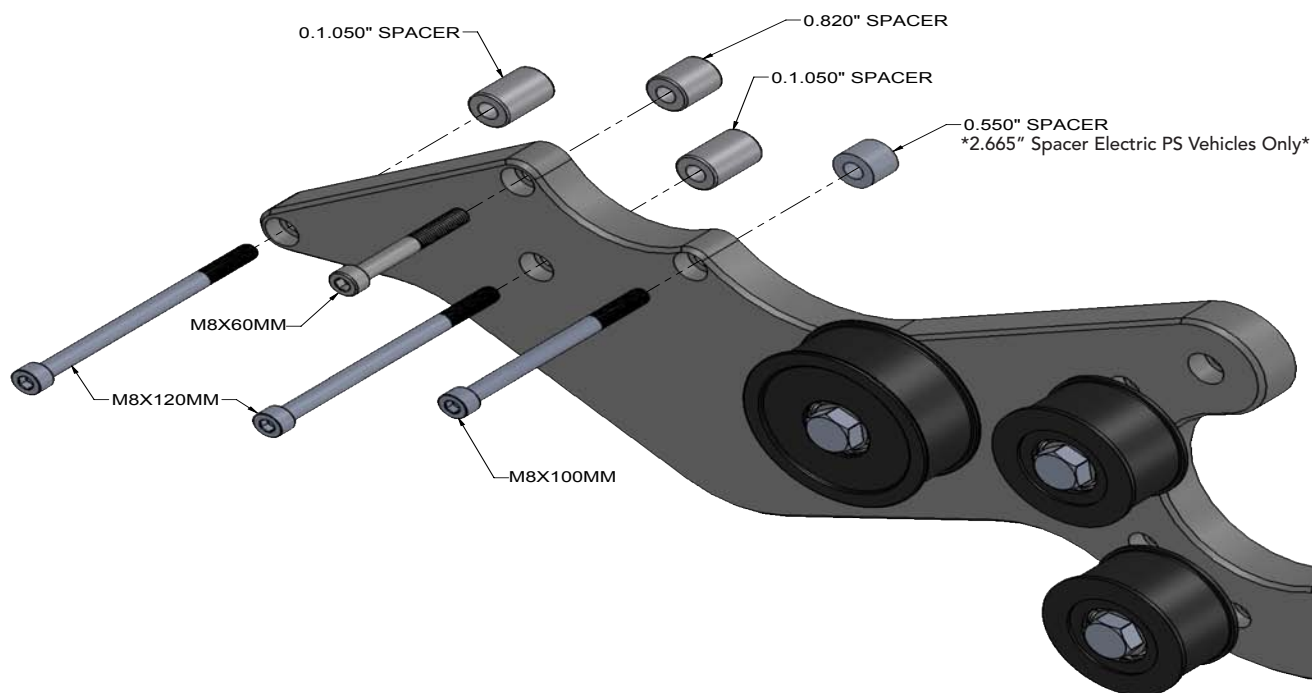


## Supercharger Bracket Assembly

- 6 Refer to the schematic below for bolt and spacer lengths for proper bracket installation.
- 7 Starting with the upper left bolt (M8X 60) and spacer loosely mount the bracket, followed by the other bolts and spacer. The M8x100 bolt will have to be installed through the power steering pulley. Tighten all hardware.
- 8 Reinstall the factory tensioner.



Main Bracket Installed



## PROCHARGER HEAD UNIT

- 1 Remove the ProCharger oil fill reminder tag from the head unit. Install the supplied drain line and tighten the fittings.
- 2 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.
- 3 Fit the supercharger into the bracket.
- 4 With the  $\frac{3}{8}$ -16 x 1" SHCS, start mounting the supercharger onto the bracket. Thread in the remaining four  $\frac{5}{16}$ -18 x 7/8" SHCS. Tighten all SHCS.
- 5 Reinstall the small idler.



Procharger Head Unit Installed

# TENSIONER

- 1 Using a 13mm remove the (1) bolt shown to mount the tensioner bracket. The tensioner mounts to this hole and the existing tapped hole below it.

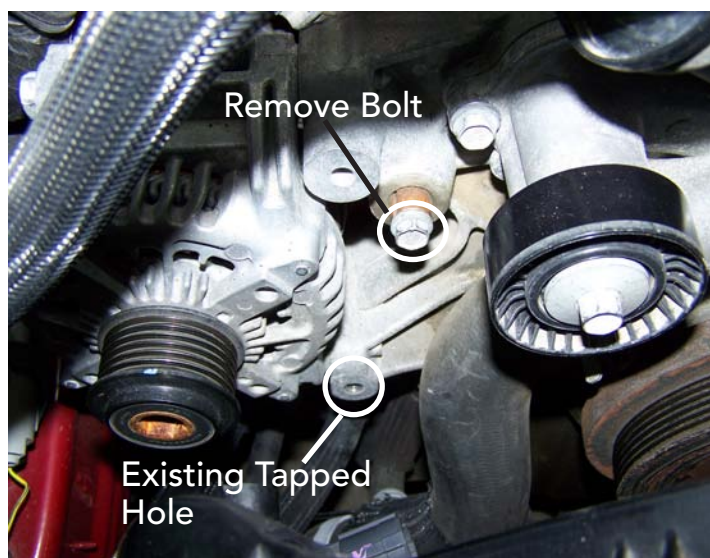
✓ **Tech Tip:** The top bolt and spacer must be pre installed into the bracket prior to mounting.

- 2 Mount the bottom tensioner bracket bolt and spacer loosely. Route the supplied belt around the tensioner and alternator. Install the top bolt and spacer, tighten the hardware. Refer to the picture to the right for proper bolt and spacer configuration.

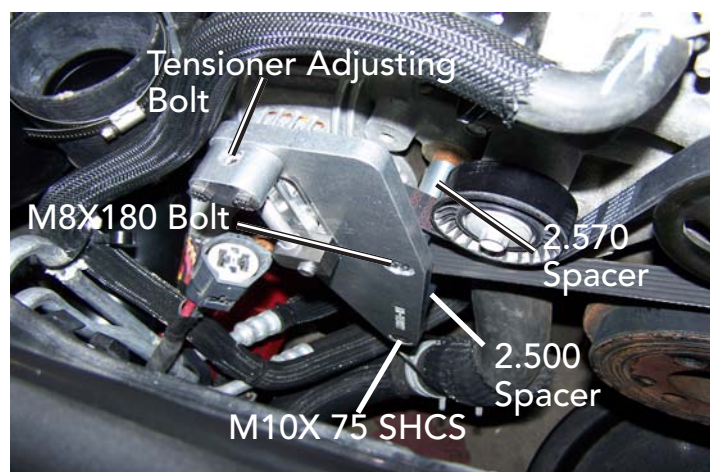
✓ **Tech Tip:** Route the belt prior to installing the top bolt and spacer. The lower radiator hose may need to be twisted to clear the bracket.

- 3 Refer to the belt schematic on the next page for proper belt routing.

- 4 Tension the belt using a 5/16" Allen socket on top of the tensioner turning it clockwise. Adjust the belt until the factory tensioner is at maximum travel. Tighten the tensioner idler pulley bolt with a 5/8" wrench.



Tensioner Bracket Mounting Holes

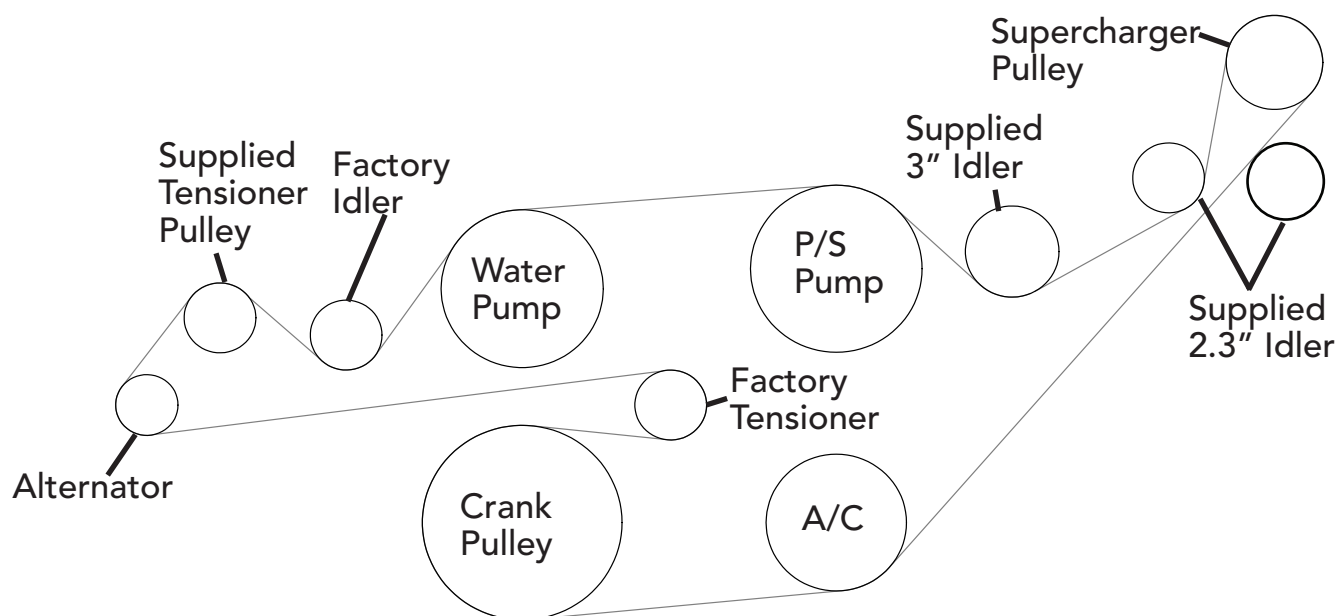


Tensioner Bracket Mounted



Belt Tensioned





Belt Schematic

- 5 Reinstall the factory fan and upper radiator hose at this time. Make sure to reattach all of the electrical connectors, lines and brackets.
- 6 Reinstall the (1) 10mm bolt previously removed to secure the hard AC line. Manipulate the hose in order for it to clear the supercharger.



Belt Installed



Move AC Line As Needed

# Intercooler

## 2011-2013 Model Years

2014-2015 Model Year Skip to Page 23

- 1 Remove the Ambient air temp sensor from the driver's side plastic air diverter held in place by (1) push pin.
- 2 Remove driver's side plastic air diverter by detaching the (1) plastic clip holding it to the radiator core support. Reattach the clip(s) after removing the diverter.
- 3 Detach the harness clip from the passenger side air diverter. Remove passenger diverter. Reattach the clips after removing the diverter.
- 4 Using a 10mm remove the drivers side horn. Unclip the wiring harness from the radiator support and unplug the horn. Use pliers to flatten the tab on the horn bracket. Use a 10mm to remove the horn from the horn bracket. Repeat for the passenger side.
- 5 Using a 10mm install the passenger side horn on the driver's side horn bracket.
- 6 Remove the 10mm bolt near the headlight on the passenger's side. This will be used to mount the horn. Mount the horn and the passenger's side bracket in the hole and position the horn as shown to the right. Tighten the horn to the bracket.



Ambient Air Temp Sensor / Air Diverter



Driver's Side Horn Removal



Passenger Side Horn Mounted



- 7 Using a 13mm remove the (1) top bolt holding both radiator support brackets as shown to the right.

- 8 With an 8mm remove the driver's side bottom radiator support bracket bolt and remove the bracket from the vehicle.



Remove Driver Radiator Support Brackets

- 9 Using a 13mm remove the (1) top bolt holding both radiator support brackets as shown to the right.

- 10 With an 8mm remove the passenger's side bottom radiator support bracket bolt and remove the bracket from the vehicle.



Remove Pass. Radiator Support Brackets

- 11 To make room for the intercooler unclip the wiring harness from the top of the bumper shown to the right, and move the harness down and behind the bumper. Zip-tie the harness to the bumper.

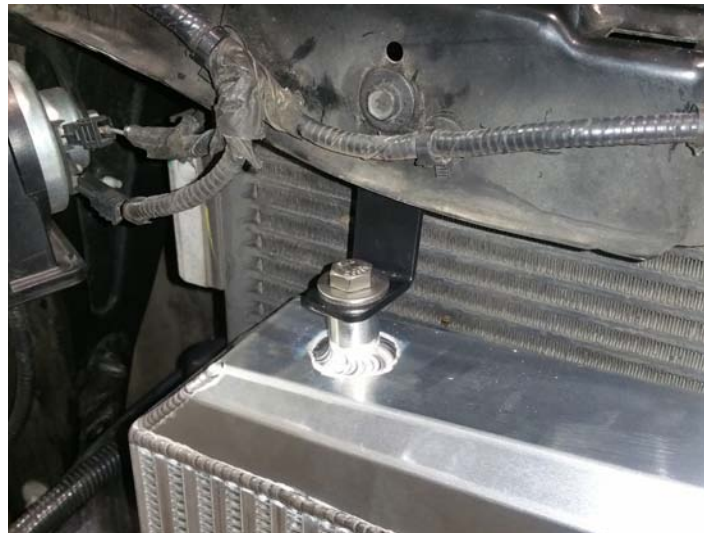


Move Wiring Harness



## Intercooler

- 12** Insert the (2) factory horn mounting bolts into their original holes and tighten.
- 13** Using the (2) supplied M6 nut and washer secure the intercooler brackets on the backside of the core support as shown. The passenger mount should be down as far as possible. The driver mount should be up as far as possible.
- 14** With the supplied 3/8" bolts and washers, attach the intercooler as shown to the right. Push the intercooler back towards the radiator to ensure plenty of grill clearance. Secure with a 9/16.
- 15** With a 13mm remove the bumper support bolt and attach the bottom intercooler bracket. Attach the bracket to the intercooler with the supplied 3/8" bolt and washer. Tighten all hardware.
- 16** With a 10mm secure the driver's side horn to the lower intercooler bracket and plug it in.



Passenger Side Intercooler Mounted



Driver's Side Intercooler Mounted



Intercooler Mounted



Bottom Intercooler Bracket Mounted

## 2014-2015 Model Years

2011-2013 Model Year Skip to Page 27

- 1 Remove the Ambient air temp sensor from the driver's side plastic air diverter held in place by (2) push pins.
- 2 Remove driver's side plastic air diverter by detaching the (2) plastic clips holding it to the radiator core support. Reattach the clip(s) after removing the diverter.
- 3 Detach the harness clip from the passenger side air diverter. Remove passenger diverter. Reattach the clips after removing the diverter.
- 4 Using a 10mm remove the drivers side horn. Unclip the wiring harness from the radiator support and unplug the horn. Use pliers to flatten the tab on the horn bracket. Use a 10mm to remove the horn from the horn bracket. Repeat for the passenger side.
- 5 Using a 10mm install the passenger side horn on the driver's side horn bracket.
- 6 Remove the 10mm bolt near the headlight on the driver's side. This will be used to mount the horn. Mount the horn and the driver's side bracket in the hole and position the horn as shown to the right. Tighten the horn to the bracket.



Ambient Air Temp Sensor / Air Diverter



Driver's Side Horn Removal



Passenger Side Horn Mounted



- 7 Using a 13mm remove the (2) top bolts holding both radiator support brackets as shown to the right.



Radiator Support Brackets

**Standard intercooler only, for race**

**Intercooler proceed to step: 10**

- 8 Rotate the support brackets and bring them to the back side of the radiator support. The brackets will reattach to the back side of their original mounting location using the existing hardware. The hardware will also thread in from the back side.



Radiator Support Brackets Relocated

**Standard Intercooler, proceed to step: 12**

**Race intercooler only.**

- 9 With an 8mm remove the driver's side bottom radiator support bracket bolt and remove the bracket from the vehicle.



Passenger Side

Remove Driver Radiator Support Brackets



- 10** With an 8mm remove the passenger's side bottom radiator support bracket bolt and remove the bracket from the vehicle.



Remove Pass. Radiator Support Brackets

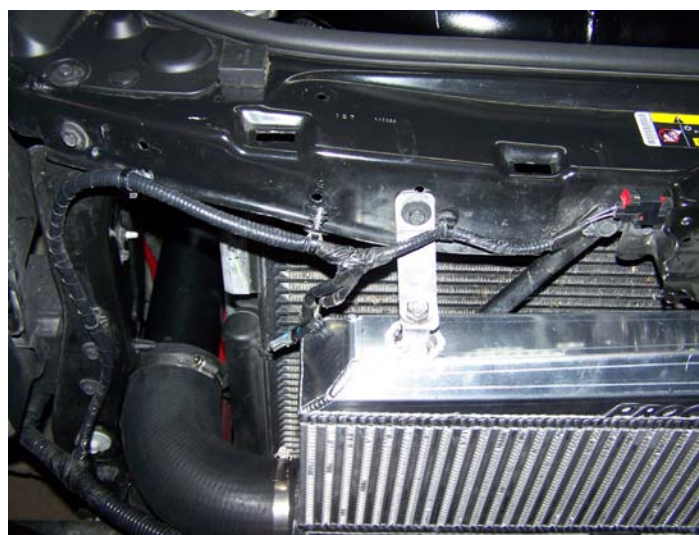
- 11** To make room for the intercooler unclip the wiring harness from the top of the bumper shown to the right, and move the harness down and behind the bumper. Zip-tie the harness to the bumper.



Move Wiring Harness

### Both Intercooler Options

- 12** Mount the supplied intercooler brackets to the factory horn mounting locations, use the factory horn mounting hardware to loosely mount the brackets.



Passenger Side Intercooler Mounted

## Intercooler

- 13 With the supplied 3/8" bolts and washers, attach the intercooler as shown to the right. Push the intercooler back against the radiator support brackets to ensure plenty of grill clearance. Secure with a 9/16.
- 14 With a 13mm remove the bumper support bolt and attach the bottom intercooler bracket. Attach the bracket to the intercooler with the supplied 3/8" bolt and washer. Tighten all hardware.
- 15 With a 10mm secure the driver's side horn to the lower intercooler bracket and plug it in. Zip-tie the ambient air temp sensor to the lower part of the bracket.



Driver's Side Intercooler Mounted



Bottom Intercooler Bracket Mounted



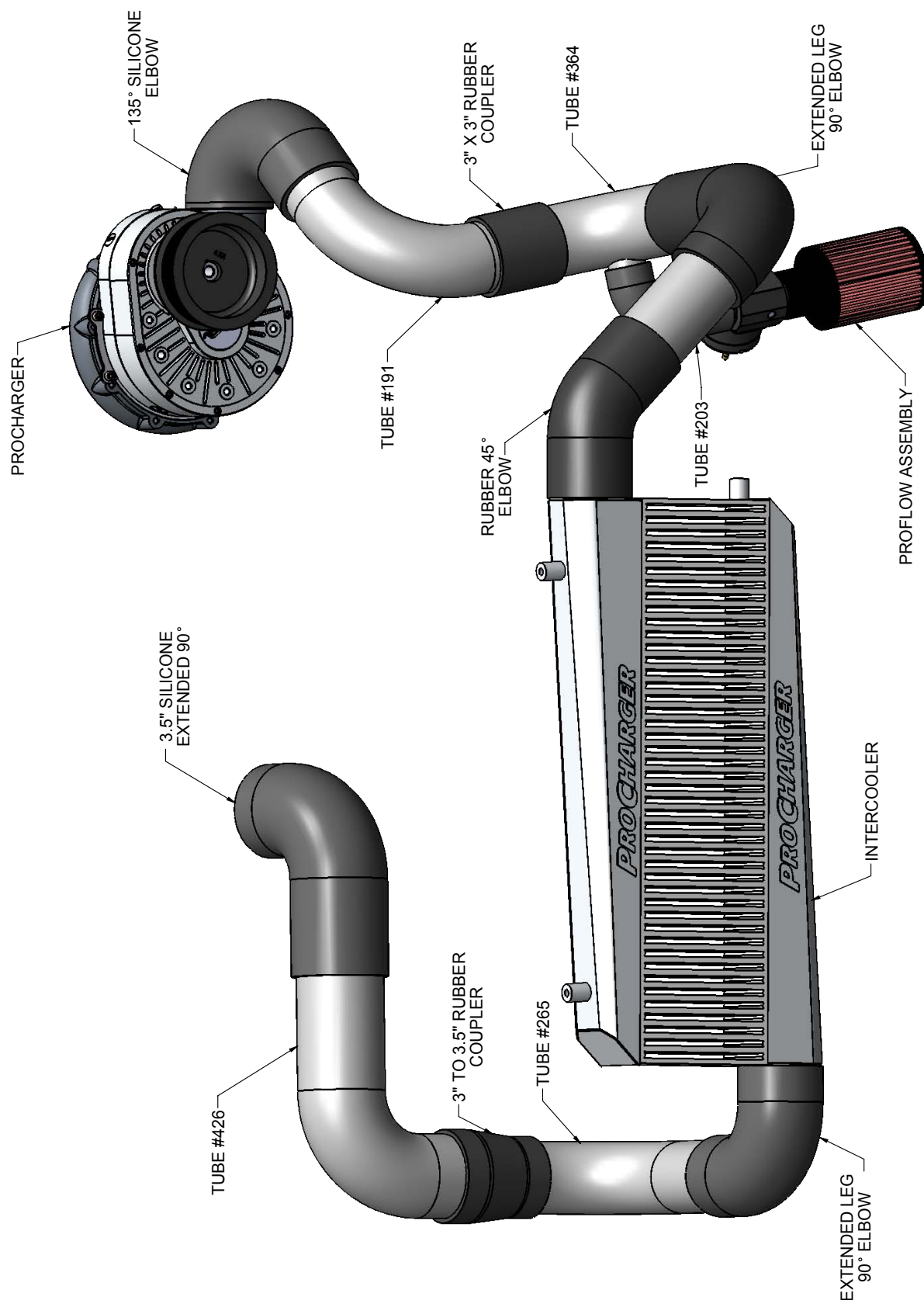
Intercooler Mounted



Horn Mounted To Intercooler Bracket



# INTERCOOLER AND TUBING SCHEMATIC





✓ **Tech Tip:** For easy adjustments, leave the clamps loose until the entire tube and hose assembly has been installed. Some trimming of rubber couplers may be needed. #52 hose clamps are used for all connections except on the silicone hoses.

16 Cut the air box stud off using a reciprocating saw, this will allow clearance for tube coming out of supercharger.



Cut Air Box Stud

17 Relocate main wiring harness below the intake air box stud.



Reroute Wiring Harness

18 Slide the silicone 135° elbow onto the outlet of the supercharger the short leg goes onto the supercharger. Secure with a 3.38" T-bolt clamp.

19 Insert tube #191 into the silicone elbow. Secure with a 3.25" T-bolt clamp.



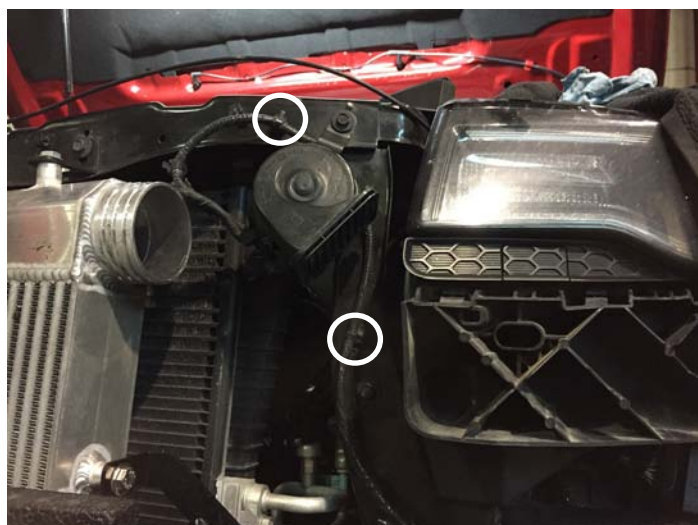
Silicone 135° Elbow

- 20 Slide the 3"x 3" Rubber connector onto tube 191.
- 21 Insert surge tube #364 into the 3"x 3" connector with the surge bung facing the frame rail.
- 22 Unclip the horn harness from the radiator support to give slack in the main harness for tubing clearance.



3"x 3" Connector / Surge Tube

- 23 Slide the 90° extended leg elbow onto surge tube #364. Short leg connects to tube #364. Make sure the main harness is routed under the tubing as shown. Tubing and wiring harness must be positioned as pictured to the right to clear the front fascia. Secure the horn harness to the radiator support.
- 24 Insert tube #203 into the extended leg 90° elbow.
- 25 Finish the connection by attaching the 45° rubber connector into tube #203. The short leg of the connector attaches to the intercooler.



Horn Harness Clips

✓ **Tech Tip:** The 45° rubber connector may need trimmed for grille fitment.

- 26 Tighten all hose clamps at this time.



Wiring Harness Under Tubing

Tubing To Intercooler Installed



- 27 Slide the extended leg 90° rubber elbow onto the outlet of the intercooler. The shorter end connects to the intercooler.
- 28 Insert tube #265 into the rubber 90° elbow. The long leg goes into the rubber 90. Point the end of the 90° tube straight up.
- 29 Slide the 3.5"-3" rubber reducer onto tube #265.
- 30 Plug the IAT sensor into tube #426. Lube the O-ring with dielectric grease. Push the sensor into the IAT bung and twist clockwise to lock it into place.
- 31 Plug the supplied IAT extension harness into the IAT sensor and into the factory harness. Zip tie the harness out of the way of the belt.
- 32 Insert tube #426 into the 3.5"-3" rubber reducer. Secure with a #64 hose clamp.
- 33 Slide the silicone 90° elbow onto tube #426 and onto the throttle body. Secure both connections with 3.75" T-bolt clamps.
- 34 Tighten all hose clamps at this time.



Tubing Out Of The Intercooler Installed



IAT Sensor Installed



Throttle Body Tube #426 Installed



## WASHER TANK

- 1 Remove the pump(s) (2012-2013 models have one pump) from the factory windshield washer tank by first pulling outwards on the pump(s) to release them from the locking tabs, then pull up to remove them from the grommets. Remove the grommets.

- 2 Remove the level sender by carefully prying it out from the grommet. Remove the grommet.

- 3 2012-2013:  
Install the level sender and pump into the supplied washer tank as shown. The open hole gets plugged by the supplied plug (use silicone sealant on the plug to aid the seal). Lithium grease may need to be added to the pump grommet to aid in pump and grommet installation. Install the provided pump hold down using the supplied 5/16 bolt and washer.

2014+:

Install the level sender and pump's into the supplied washer tank as shown. Lithium grease may need to be added to the grommet's to aid in pump and grommet installation. Install the provided pump hold down using the supplied 5/16 bolt and washer.

- 4 Install the washer tank. The tank connects to the factory bolt and stud on the drivers side of the radiator support as shown to the right.

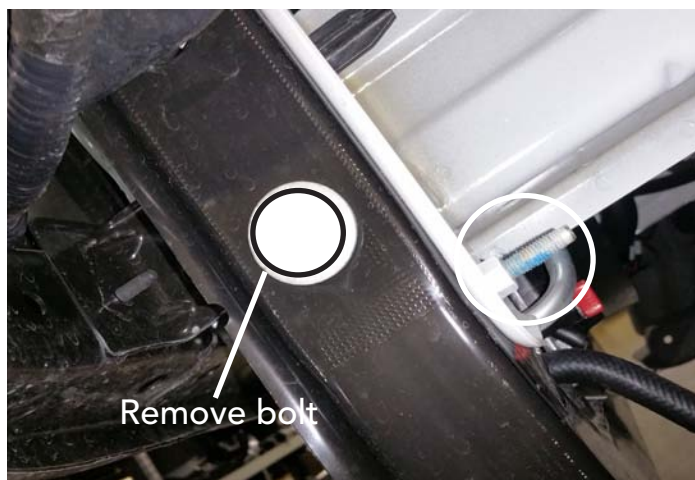
- 5 With a 13mm remove the bolt on the radiator support.



Washer Tank With Pumps And Hold Down Installed 2014+



Washer Tank With Pump And Plug 2012-13 (Shown Without the Pump Hold down)



Washer Tank Mounting Points

## Washer Tank

- 6 Insert the supplied M8 X 100 bolt and 5/16" washer through the washer tank bracket and install the bolt into the radiator support while sliding the other bracket over the stud sticking out of the radiator support. Tighten the bolt with a 13mm. Secure the other bracket with the supplied M8 nut and washer on the factory stud.



Washer Tank Installed

- 7 Plug in all of the factory connectors and hoses to the washer tank pump(s) and level sender.

- 8 Slide the supplied molded hose up between the supercharger and the radiator support. Secure the hose to the washer tank with a #24 hose clamp.

✓ **Tech Tip:** Trim molded hose on the tank side in such that it does not have an uphill slope. This will ensure fluid flow when needed.

- 9 Insert the supplied washer neck into the washer neck bracket and onto the molded hose.

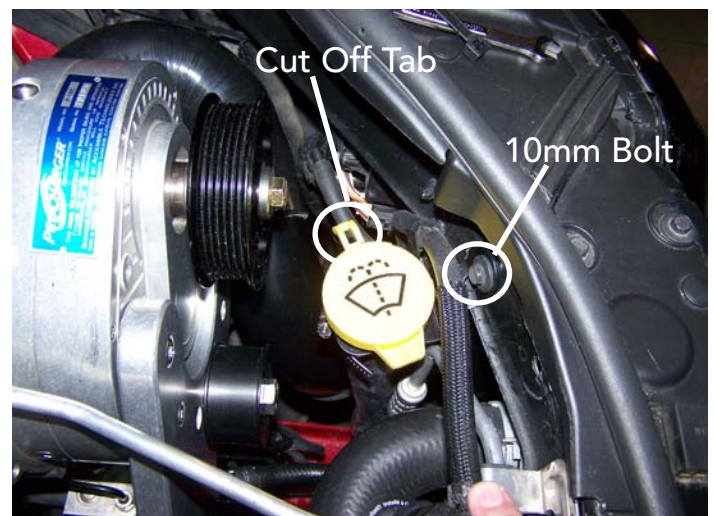


Molded Hose Attached To Washer Tank

✓ **Tech Tip:** Push tank towards the inner fender to clear the fascia on some models.

- 10 With a 10mm remove the bolt shown on the radiator support. Mount the washer neck bracket to the radiator support with the bolt removed earlier. Secure the hose to the neck with a #24 hose clamp.

- 11 Remove the cap from the factory washer tank. Cut off the mounting tab from the cap and install it onto the supplied washer neck.



Washer Neck Installed

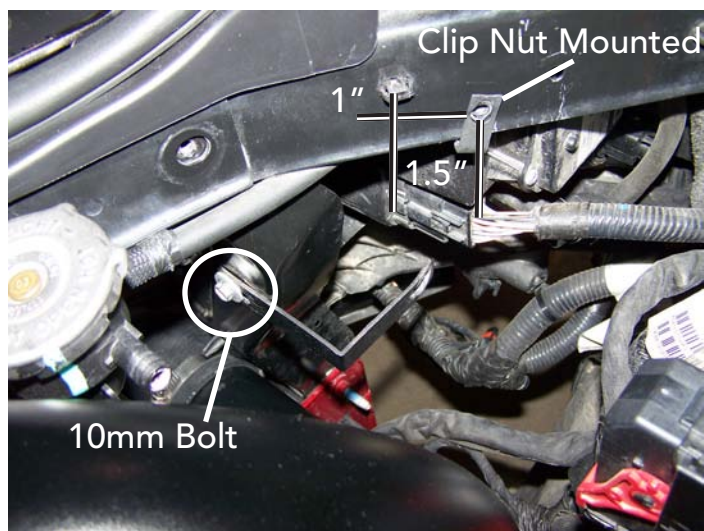


## COOLANT RESERVOIR

- 1 If equipped with a relay as shown, drill out the spot welds and zip tie in another location.
- 2 Install the supplied clip nut onto the radiator support as shown. Some models do not have a hole for the clip nut, use a 1/4" drill bit to drill a hole using the dimensions to the right for location.
- 3 Loosely mount the long leg of the coolant tank bracket to the radiator support utilizing the existing 10mm bolt.
- 4 Secure the 9" long piece of 3/8" rubber hose to the bottom of the coolant reservoir.
- 5 Attach the long end of the molded rubber hose to the 3/8" rubber hose using the 3/8" brass hose mender. Secure with hose clamps.
- 6 Mount the reservoir to the clip nut using the supplied 1/4-20 bolt and washer. Attach the reservoir to the bracket using the supplied 8mm bolt and washer. Tighten all hardware.
- 7 Secure the short 90 degree end of the molded rubber hose over the nipple on the radiator and secure with a hose clamp. The remaining 3/8" hose needs to be routed towards the ground away from any moving objects (this hose is for venting purposes).



Factory Relay Relocation



Coolant Tank Mounting Points



Coolant Hose Mounted



## Coolant Reservoir

- 8 Remove the cap from the factory overflow bottle by pulling straight up on it. Install the cap onto the new supplied coolant reservoir.

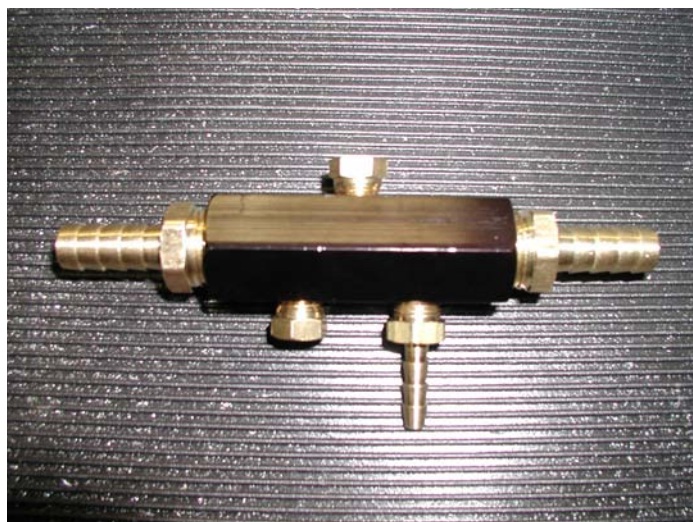


Coolant Tank Installed

## VACUUM MANIFOLD

- 1 Assemble the supplied vacuum manifold as shown. If you have or are installing a boost gauge, 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.



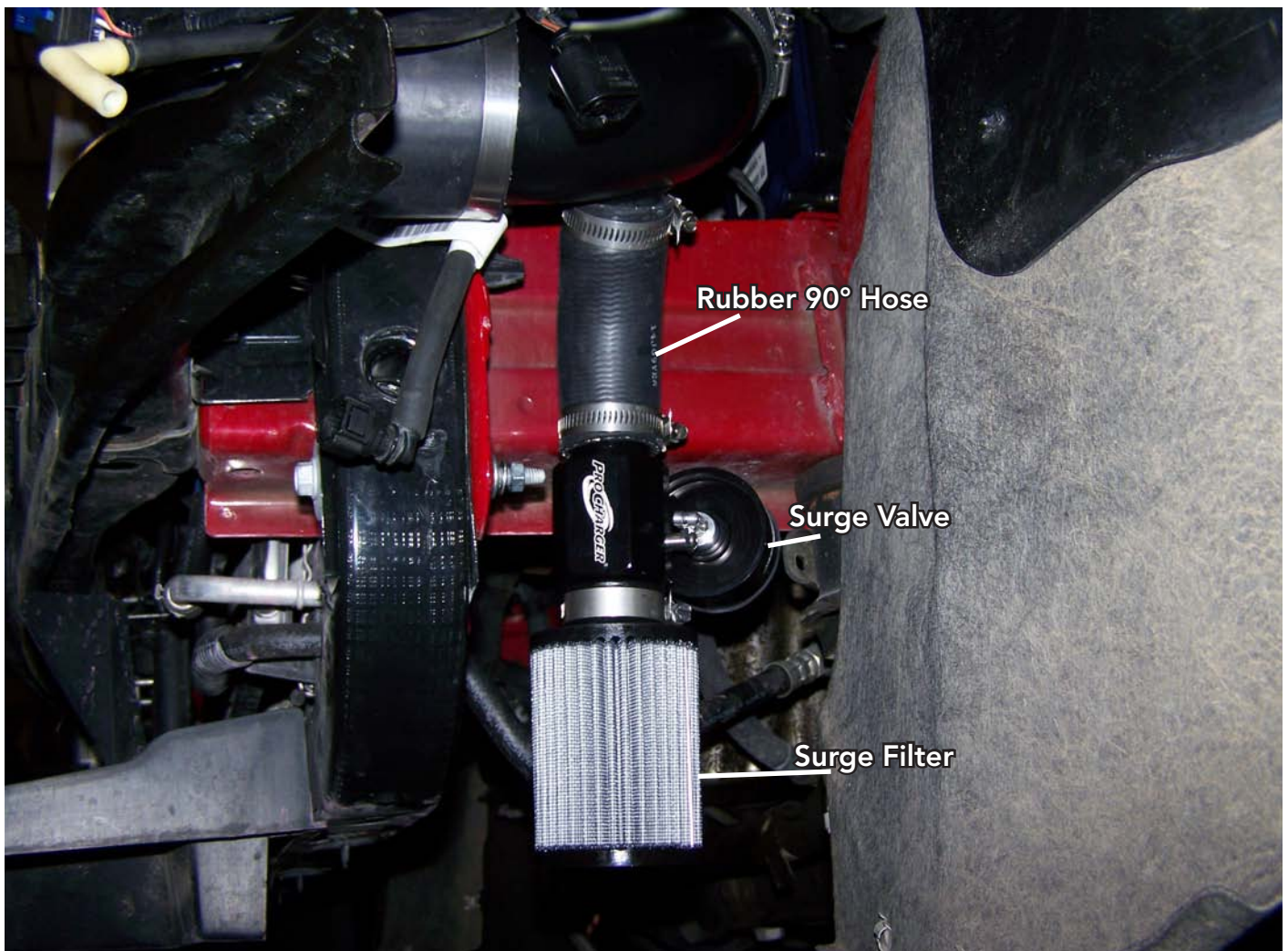
Vacuum Manifold Assembly



Vacuum Manifold Installed

# SURGE SYSTEM

- 1 Slide the provided 90° rubber elbow onto the open 1-1/2" bung located on the surge tube #364.
  - 2 Slide the surge valve onto the open end of the rubber elbow in the orientation shown below. Ensure the surge valve linkage is free from obstruction. Place the filter onto the end of the valve.
  - 3 Secure the connections with #24 hose clamps.
  - 4 Using the provided 3/16" vacuum line, connect one end onto the barb located on the surge valve, and route it under the blower. Connect 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.
- ✓ **Tech Tip:** Trim the 90° rubber elbow as needed for fitment.





# FUEL SYSTEM

✓ **Note:** This section only applies to full systems, which include upgraded fuel system components and tuning. If you do not have a full system, an upgraded fuel system and tuning will be required before starting the vehicle.

## Fuel Injectors

- 1 Reconnect the battery.
- 2 Remove the fuel pump relay from the panel in the passenger side of the engine compartment.

✓ **Tech Tip:** Check your owners manual to ensure you are pulling the proper relay.

- 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.
- 8 Reinstall the fuel rail onto the vehicle. Inside the MAP bag utilize the 0.45" tube spacer and new fuel rail bolts and install the rails as shown.



Fuel Rail Removal



Fuel Rails Installed

✓ **Tech Tip:** Apply pressure when installing the new fuel rail bolts in order to create the new threads.

- 9 Re-install each wiring harness to each injector. Reinstall the fuel pump relay.

# MAP SENSOR

- 1 Remove the factory MAP sensor located on the passenger's back side of the intake manifold by twisting counter clockwise and pulling up. 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.
- 3 Install the new supplied MAP sensor into the MAP adapter fitting with the (1) supplied 10-24 x 0.5" screw and tighten.
- 4 Plug in the factory MAP sensor harness into the new supplied harness in the MAP adapter.
- 5 Insert the MAP adapter into the intake manifold and twist clockwise to secure it into place.
- 6 Secure the MAP tab to the MAP adapter using the (1) 10-24 x 0.375" long screw and tighten. This will straddle the small extrusion on the intake to prevent the sensor from vibrating loose.



Factory MAP Sensor



MAP Adapter Installed



## FINISHING

- 1 Locate the ambient air temperature sensor on the driver's side of the vehicle. Zip tie the sensor to the driver's side intercooler bracket .
- 2 Screw the supplied 3/8" MPT-1/2" 90° barb fitting into the supplied rotomold inlet. Slide the 1.5" section of 1/2" hose onto the barb fitting followed by the plastic 5/8" to 1/2" reducer as shown to the right.
- 3 Loosely place the supplied air filter onto the end of the rotomold inlet tube. Slide the inlet tube assembly onto the inlet of the supercharger, position the tube and secure with the supplied #64 hose clamp. Tighten the air filter hose clamp at this time.
- 4 Slide the factory PCV hose onto the plastic barb fitting on the inlet tube and secure with a #12 hose clamp.
- 5 The engine cover will need to be trimmed as shown to the right to clear the air inlet.



Fitting, Rubber Hose and Plastic Reducer Installed Onto Inlet



Air Inlet Installed

- 6 Reattach the battery connections.
- 7 Check for any fuel leaks.
- 8 Test fit the front fascia, 2011-13 Model Years proceed to the next step if it is hitting.

**2014+ Model Years Skip to Step 12.**

**2011-13 Model Years Only:**

- 9 Remove the driver side fog light by removing the (3) 7mm screws.
- 10 Disassemble the fog light from the plastic mount. Trim the plastic mount as shown to the right.
- 11 Reinstall the fog light into the plastic mount. Reinstall the fog light in the bumper.

✓ **Tech Tip:** Some models will need the upper grille on the drivers side trimmed to clear the intercooler tubing. See the picture to the right.

- 12 Reinstall the fascia using the supplied push pins on the wheel liner.



2011-13 Models: Driver Side Fog Light



2011-13 Models: Fog Light Trimmed



Grille Trimmed



- 13 Refill the coolant. Add coolant to the coolant tank to the cold fill line. Check coolant after first couple of drive cycles.
- 14 Replace any power steering fluid that was lost.
- 15 Let the vehicle go through one heat cycle. This will allow the fluids to settle.
- 16 After turning the vehicle off, check fluid levels and add the appropriate amount of fluids.



Wheel Liner Push Pins



**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.

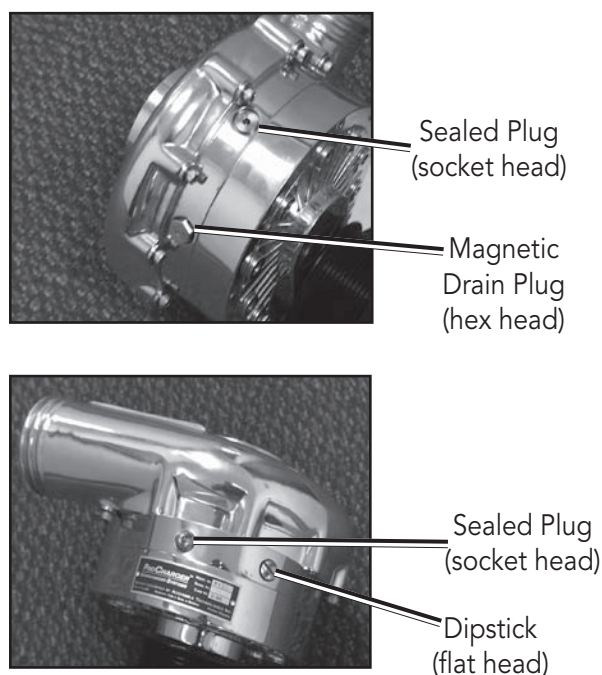
## ProCharger Oil Change Intervals

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

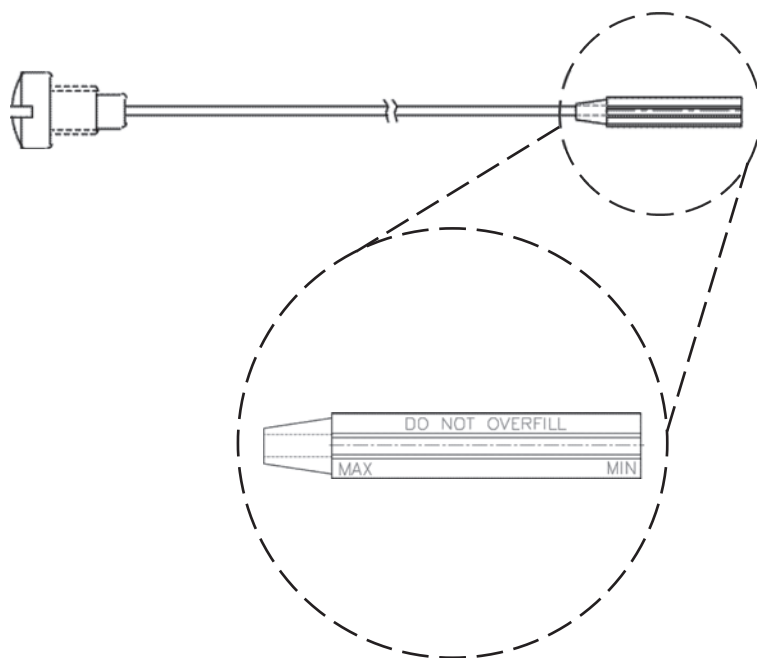
The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.

**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**

This Page Is Left Intentionally Blank.



This Page Is Left Intentionally Blank.



**Accessible Technologies, Inc.**  
**14801 W. 114th Terrace**  
**Lenexa, KS 66215**  
**Phone: 913.338.2886**  
**Fax: 913.338.2879**  
**techserv@procharger.com**

**Accessible Technologies, Inc.**  
**©2020 ATI, All Rights Reserved**  
**Part Number PMDM1A-001 Rev. H**

