

# 2012-2018 Jeep Wrangler JK 3.6L Intercooled System **Installation Guide**



The **ULTIMATE** Power Adder™

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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.

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.

# INTRODUCTION

Congratulations on purchasing your ProCharger® 2012-2018 Jeep Wrangler 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

- Open End Wrench Set (standard & metric)
- 3/8" & 1/2" Socket Sets (standard & metric)
- 3/8" Hex Bit Set (standard & metric)
- 8mm nut driver
- T30 Torx driver
- 1/2" Extension
- 1/2" Breaker Bar
- Plier Set
- WD-40



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



**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.*



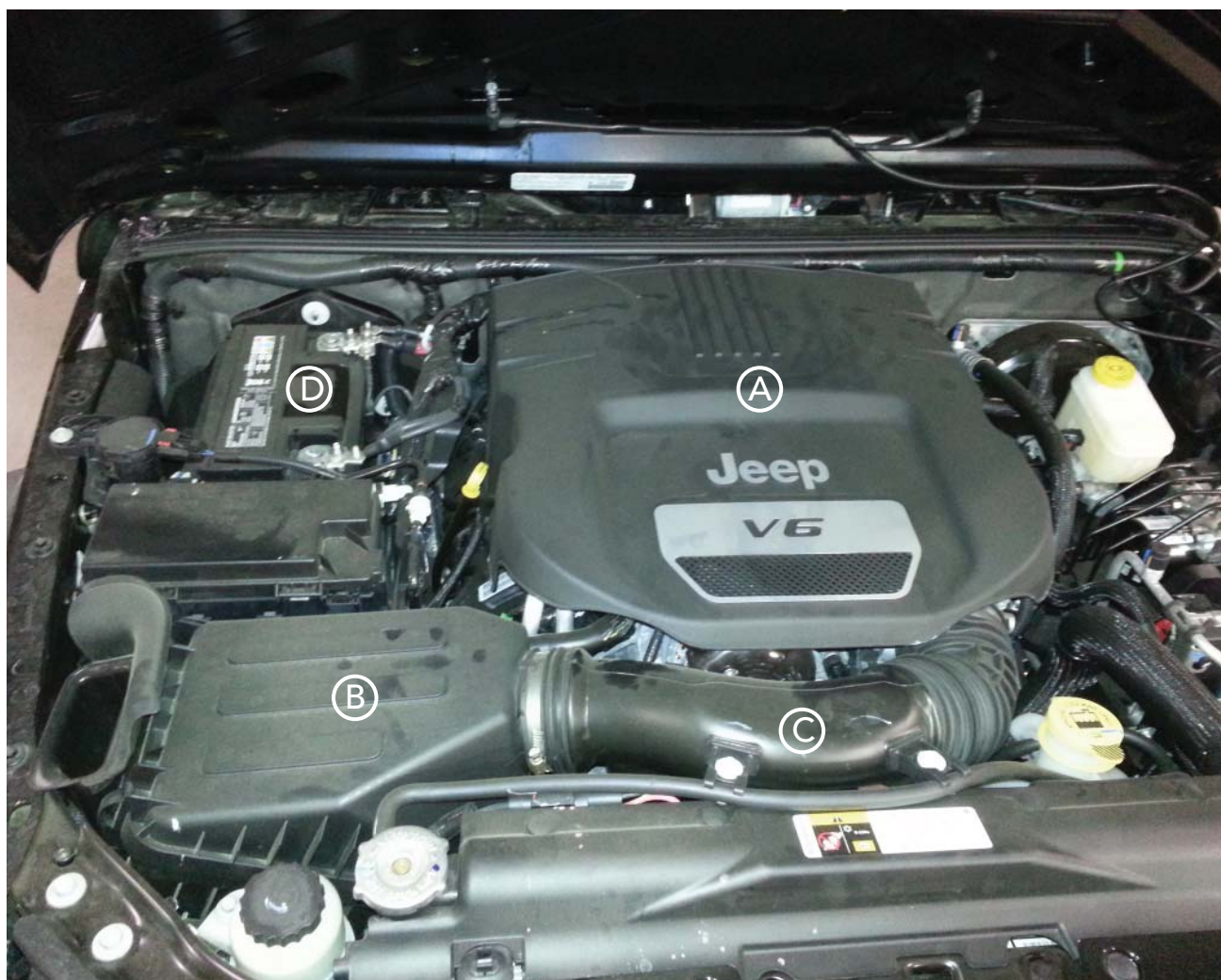
**Warning:** *Your supercharged vehicle must always be run on 91 octane or better gas. The best way to insure this is to run the tank near empty (below 1/4) and fill with 91 octane for several tanks prior to installing the supercharger.*

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**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.**

# GETTING STARTED



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

(A) Engine Cover

(B) Factory Air Filter Box

(C) Factory Air Inlet

(D) Battery

**!** 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.



## Getting Started

- 1 Use an 8mm to disconnect the negative battery terminal.
- 2 Pull up on the engine cover to remove it.
- 3 Use an 8mm to loosen the hose clamp connecting the air filter box and the inlet tube and the clamp connecting the inlet tube to the throttle body..



Loosen Inlet Tube Clamps

- 4 Use a 10mm to remove the (2) screws holding the inlet tube to the cooling fan.
- 5 Unplug the intake air temperature (IAT) sensor from the inlet tube by turning it counterclockwise and pulling it out.
- 6 Remove the air inlet tube.



Remove Inlet Tube Screws

- 7 Remove the PCV hose from the air filter box. Pull up on the air filter box and remove it from the vehicle.



Air Filter Box Removed

- 8 Insert a 1/2" breaker bar and extension into the square slot on the tensioner as shown. Push the breaker bar towards the driver's side. A constant, steady pressure on the breaker bar will slowly compress the tensioner. Once the tensioner is fully compressed, remove the belt from the power steering pulley.



Compress the Tensioner and Remove Belt

- 9 Unplug the alternator wiring connector. Make certain the battery is disconnected. Remove the plastic cover over the alternator power wire connection. Use a 13mm to remove the nut holding the power wire to the alternator.



Alternator Connections

- 10 Use a 13mm to remove the (2) lower alternator bolts.
- 11 Use a 15mm to remove the (2) upper alternator bolts and remove the alternator.



Alternator Bolts



## Getting Started

- 12** Use a 16mm to remove the upper alternator bracket bolt and a 13mm to remove the lower alternator bracket bolt. Remove the bracket.

- 13** Remove the factory belt.



Alternator Bracket Bolts

- 14** Disconnect the radiator overflow from the coolant overflow reservoir.

- 15** Remove the plastic push pin. Pull up on the coolant overflow reservoir to remove it from the vehicle.



Coolant Overflow Reservoir

- 16** Remove the (6) plastic push clips holding the front grille to the radiator core support.

- 17** Grabbing the grille near the bottom, pull out to release the clips. Unplug the turn signal connectors on each side and remove the grille from the vehicle.



Grille Clips

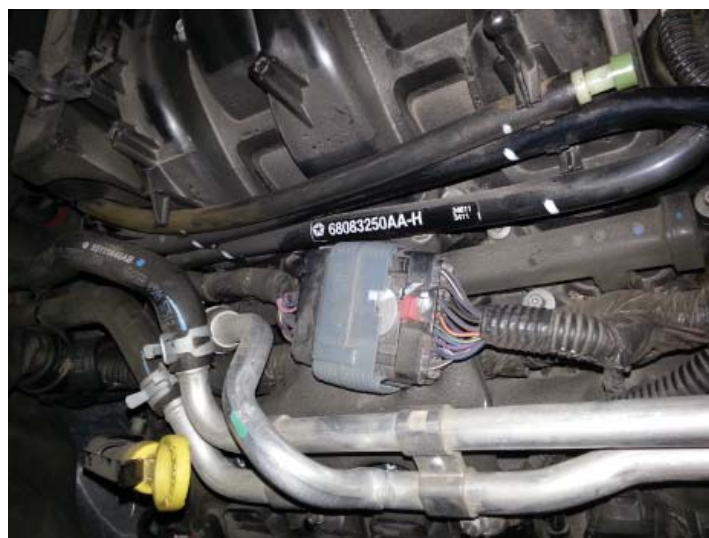


# FUEL INJECTORS

- 1 Disconnect the vacuum line and PCV line from behind the throttle body on the passenger's side.
- 2 Disconnect the MAP sensor and throttle body connectors. Disconnect the wiring harness push pins from the throttle body and intake manifold.
- 3 Locate the large connector on the passenger's side of the intake manifold. Pull back the red safety lock. Squeeze both sides of the grey connector cover and slide towards the front of the vehicle to disconnect.
- 4 Use a 10mm to remove the (2) screws holding the connector bracket to the intake manifold.



PCV & Vacuum Lines



Harness Connector



Connector Bracket Screws

## Fuel Injectors

- 5 Use a 10mm to remove the (2) nuts holding the heater hard lines to the bracket on the passenger's side valve cover.
- 6 Use a 10mm to remove the (2) nuts holding the bracket to the valve cover next to the battery tray.
- 7 Disconnect the push pins holding the connector to the bracket.
- 8 There are (2) brackets attached to the intake manifold on the driver's side. Use a 10mm to remove the (4) nuts holding the brackets to the manifold.
- 9 Disconnect the vacuum line from the intake manifold on the driver's side behind the throttle body.
- 10 Use a 8mm to remove the (7) intake manifold bolts.
- 11 Slide the manifold to the passenger's side to clear the studs from the brackets on the driver's side. Pull the manifold up and out of the vehicle.



Heater Line Nuts



Manifold Front Bracket Nuts



Intake Manifold Bolts



- 12 Remove the foam pad from on top of the driver's side valve cover.
- 13 Cover the lower intake manifold runners with tape or rags to prevent debris from falling into the runners.

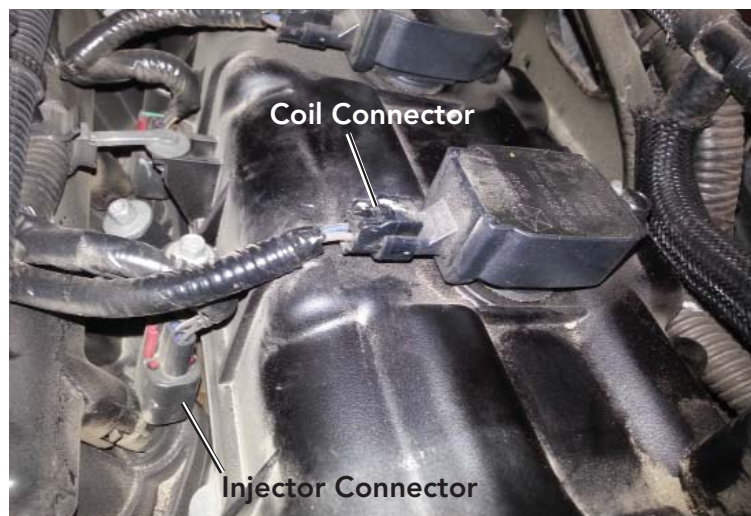


Intake Manifold Removed

- 14 Unplug all of the injector and coil connectors.
- 15 Use a 10mm to remove the coil bolts and remove the coils.



**Tech Tip:** Remove the plastic push pins holding the vacuum line that runs over top of the back 2 coils for easier removal.



Injector and Coil Connectors

- 16 Use a 5/8 spark plug socket to remove the spark plugs. Gap the spark plugs to .035".



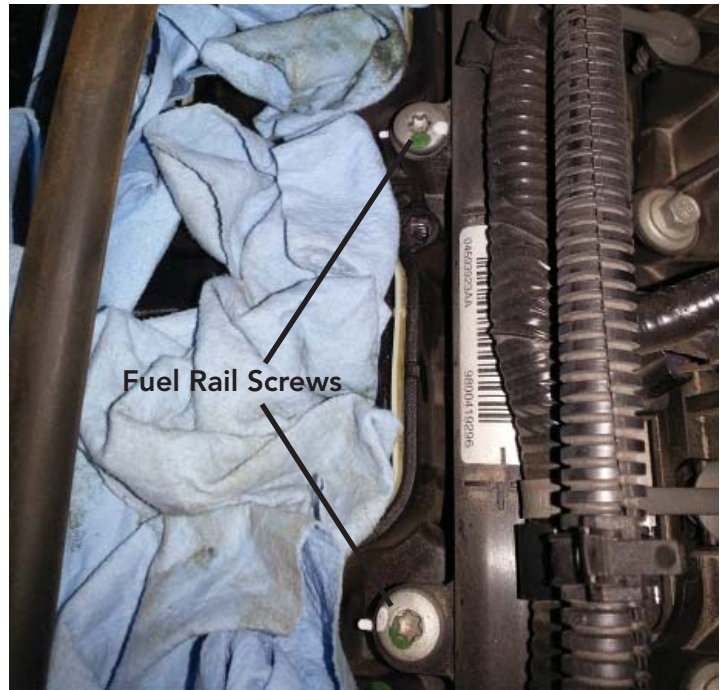
**Note:** If installing new spark plugs, use one heat range colder than the stock plugs. NGK 1422 plugs are recommended.

- 17 Apply anti-seize to the spark plug threads and reinstall.



## Fuel Injectors

- 18 Use a T-30 torx to remove the (4) fuel rail screws.
- 19 Pull up on the fuel injector rails to separate from the injectors. Have rags ready to soak up spilled fuel.
- 20 Flip fuel rail over. Remove the injectors from the rail. Remove any o-rings from the intake or the fuel rail that did not stay with the injector. Make sure ALL o-rings are accounted for.
- 21 Apply a small amount of grease to the o-rings of the new injectors. Insert the injectors into the lower intake manifold and push down until they are fully seated. Turn the injector connector to face away from the center of the engine.
- 22 Align the fuel rail with the injectors in the manifold and push the rail down until the injectors are seated into the rail. The mounting holes should sit flush with the lower intake manifold.
- 23 Reinstall the (4) T-30 torx screws that hold down the fuel rails.
- 24 Reinstall the coils and coil screws.
- 25 Reinstall the intake manifold. Installation is reverse of removal.



Transmission Cooler Line Connections



Fuel Rail Flush With Manifold



Injectors and Fuel Rail Finished

# TRANSMISSION COOLER

✓ **Tech Tip:** Lift the front driver's side of the vehicle until the left front wheel is off the ground. Support the vehicle with a jack stand under the frame (not under the axle) to allow the suspension to separate from the body and provide more room to work. Remove the left front wheel. (Not needed for lifted vehicles)

- 1 Remove the (2) plastic push pins holding the rubber flaps on each side of the radiator.
- 2 Pull on the flaps to remove them from the vehicle.

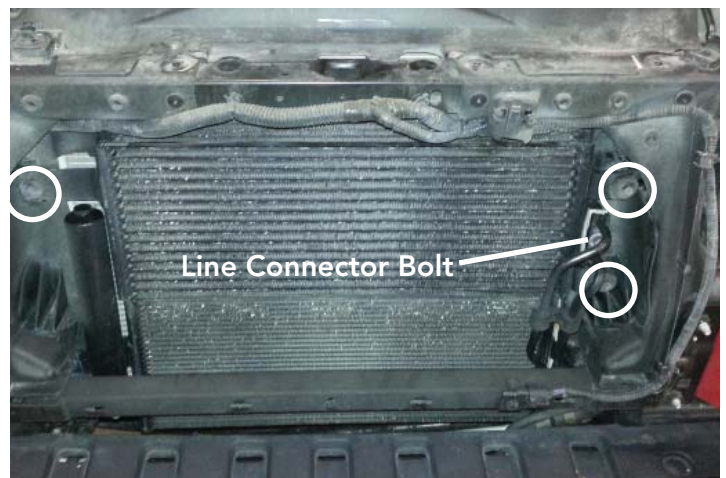


Push Pins Holding Rubber Flaps

## Automatic Transmission Only

Manual Transmission Skip to Next Section

- 3 Use a 10mm to remove the bolt that connects the transmission cooler lines to the cooler.
- 4 Use a 8mm and 10mm to remove the (3) transmission cooler mounting bolts and remove the cooler. Save these bolts as they will be used for mounting the intercooler.

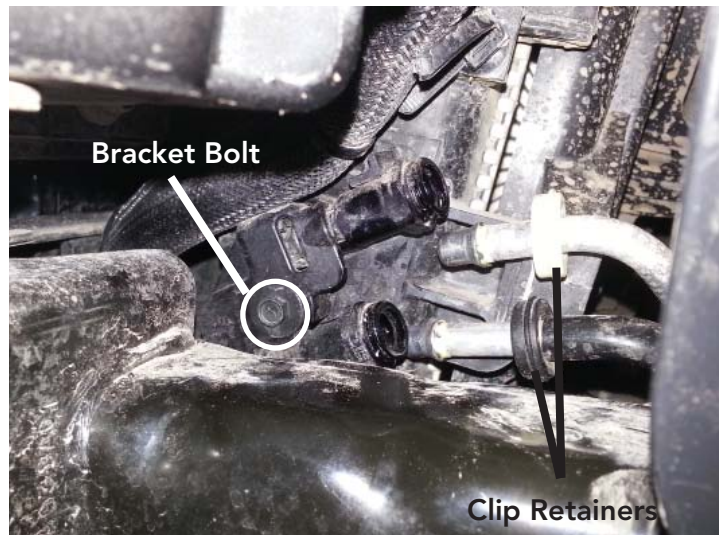


Transmission Cooler Bolts



## Transmission Cooler

- 5 Follow the transmission cooler lines around the side of the radiator. From the driver's side of the vehicle, locate the line connections.
- 6 The lines are held together by a metal clip. This clip is retained by a round plastic cover. Slide the cover back and remove the metal clip. Pull the lines apart.
- 7 If equipped, use a 8mm to remove the bracket holding the lines to the radiator.
- 8 Remove the section of lines that went to the transmission cooler from the vehicle.
- 9 Pull the remaining transmission cooler lines into the engine bay where they are more easily accessible.
- 10 Cut the rubber hose supplied with the new transmission cooler into (2) equal pieces.
- 11 Slide each rubber hose over the end of each transmission line. Make sure to slide the hose past the flare in the line. Use a 1/4" to secure the hose with the supplied hose clamps. Make sure the hose clamps are past the flare in the line.
- 12 Set the supplied transmission cooler in front of the condenser with the nipples pointed towards the driver's side. Slide the cooler down to where it is flush or slightly below the cross member.



Transmission Cooler Line Connections



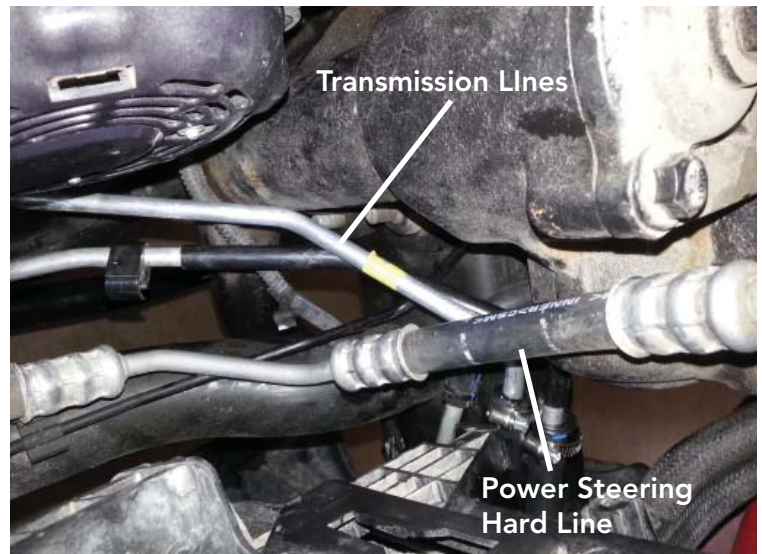
New Transmission Cooler Lines



New Transmission Cooler Mounting Location



- 13** Route the lines from the engine bay to the driver's side of the power steering hard line. Then route them around the bottom corner of the radiator and up to the cooler.



Transmission Cooler Line Routing

- 14** Cut the rubber hoses to the appropriate length and slide them over the cooler nipples. Make sure the rubber hoses are slid past the flare on the nipple.

- 15** Use a 1/4" to secure the hose to the nipple. Make sure the clamp is past the flare in the nipple.

- 16** Hold the transmission cooler in the desired location. Slide the supplied plastic mounting rods through the transmission cooler, the condenser, and the radiator.



Transmission Lines Connected to New Cooler

- 17** Ensure the battery is disconnected. Reaching in through the fan, slide the foam pads over the exposed ends of the mounting rods and against the radiator.

- 18** Slide the plastic retaining clips over the mounting rods with the flat surface towards the radiator. Cut off the excess rod material.



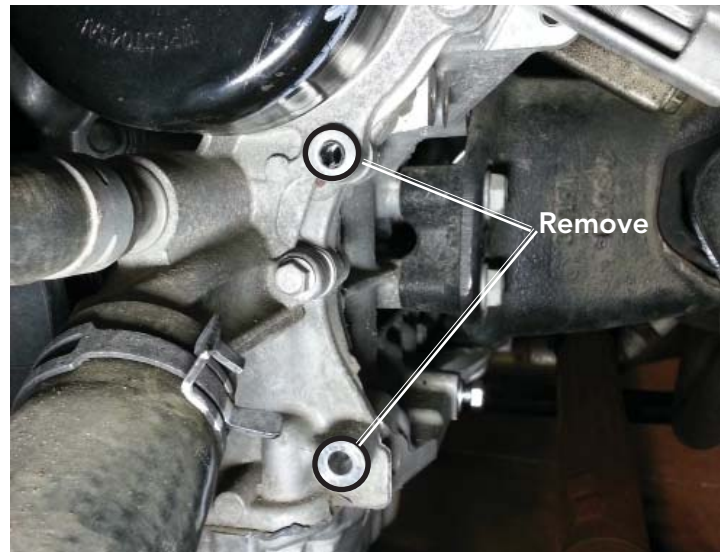
**Warning:** Do not over tighten the cooler mounting rods. This could damage the cooler, condenser, or radiator.



Cooler Mounting Rods Through Radiator

# ALTERNATOR RELOCATION

- 1 Use a 10mm to remove the bottom timing cover bolt on the driver's side.
- 2 Use a 10mm to remove the timing cover bolt just below the water pump pulley.



Timing Cover Bolts

- 3 Set the alternator bracket in front of the timing cover and insert the supplied M6 x 70mm bolts and washers through the bracket and into the timing cover. Tighten with a 10mm.



Alternator Bracket Mounted

- 4 Attach the alternator to the bracket using the supplied M10 x 110mm and M10 x 130mm SHCSs and washers. The longer M10 SHCS goes to the mounting point closest to the driver's side. Tighten with a 17mm.



Alternator Mounted to Bracket

- 5 From underneath the vehicle, insert the supplied M8 x 20mm bolt and washer through the alternator brace and into the tapped hole on the block. Leave loose.
- 6 Slide the other end of the brace over the exposed alternator mounting bolt. Start the washer and locknut over the bolt. Leave loose.
- 7 Adjust the brace so that it fits flush against both the block and the alternator bracket. As the bolt and nut are tightened, the brace should not be in a bind. Use a 17mm to tighten the nut and a 13mm to tighten the bolt.



Alternator Brace Installed



# COOLANT RESERVOIR RELOCATION

- 1 Apply thread sealer to the supplied 90° 3/8 NPT brass fitting. Install the fitting into the bung on the bottom of the new coolant reservoir. The fitting will need to be clocked as shown.
- 2 Insert the straight 3/8 NPT brass fitting into the bung on the top of the reservoir.
- 3 Locate the vacuum line bracket that is attached to the fuse block base with a plastic push clip. Separate the bracket from the fuse block base and move temporarily out of the way.



Brass Fitting Installed



Vacuum Line Bracket

- 4 Use a 10mm to remove the bolt in front of the fuse box on the passenger's side.
- 5 Set the coolant reservoir in place and reinstall the factory bolt through the reservoir bracket and into the hole from which it was removed.



Coolant Reservoir Mounting Location #1

- 6 Fasten the other coolant reservoir bracket to the hole on the fuse block base using the supplied 1/4-20x3/4" bolt, washers, and locknut.
- 7 Insert the push pin on the vacuum line bracket into the open hole on the reservoir bracket.



Coolant Reservoir Mounting Location #2

- 8 Route the radiator overflow hose from the radiator cap down against the fan and over to the bottom fitting on the coolant reservoir. Cut to the proper length. Secure with a #4 hose clamp.
- 9 Attach the cut section of hose to the straight brass fitting behind the filler neck. Secure with a #4 hose clamp and route down towards the ground.



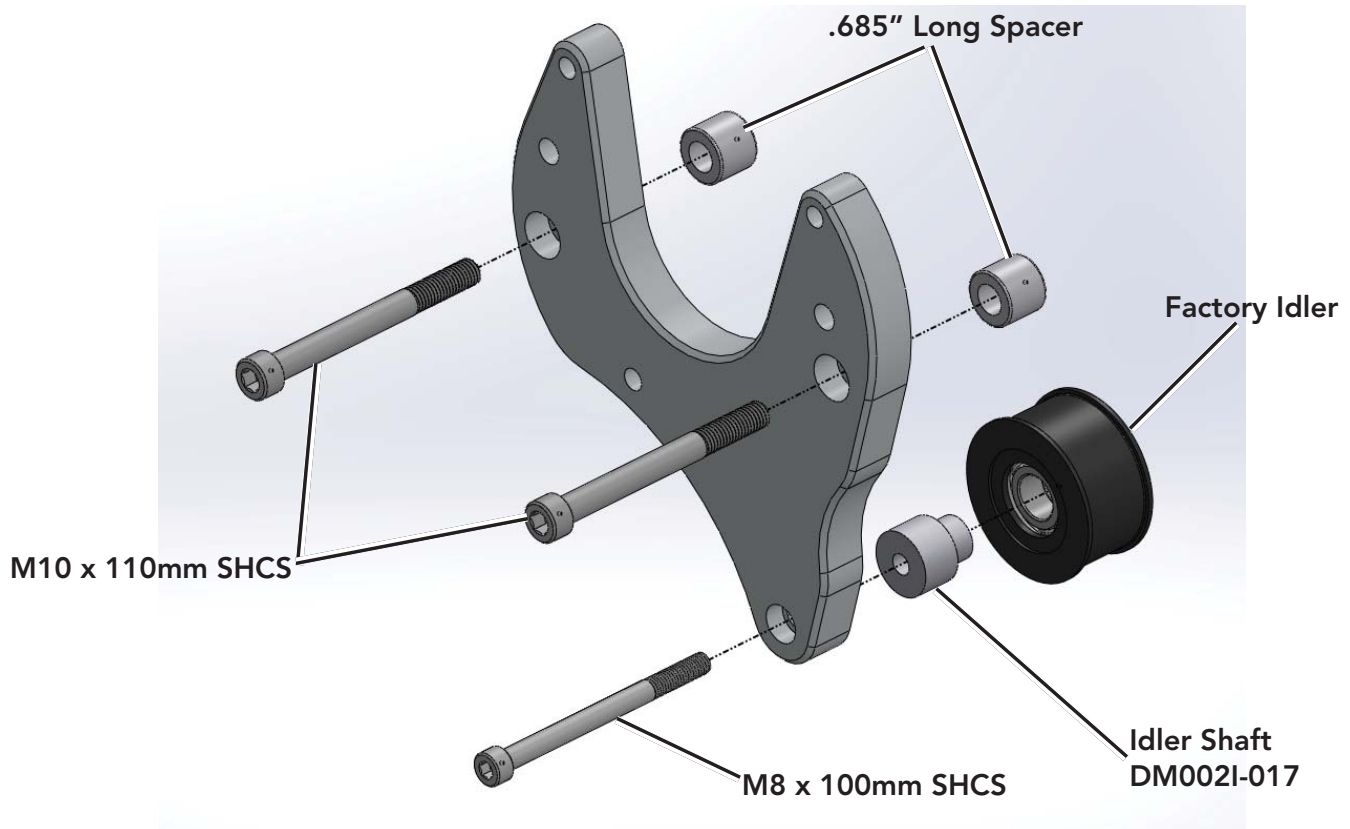
Coolant Hose Routing

- 10 Remove the factory coolant reservoir cap from the factory reservoir. Install it on the new reservoir. If the cap does not stay tight, cut the "ring" portion of the cap off and place the cap without the ring on the reservoir.
- 11 Fill the new reservoir with coolant up to the fill line. Do not overfill.

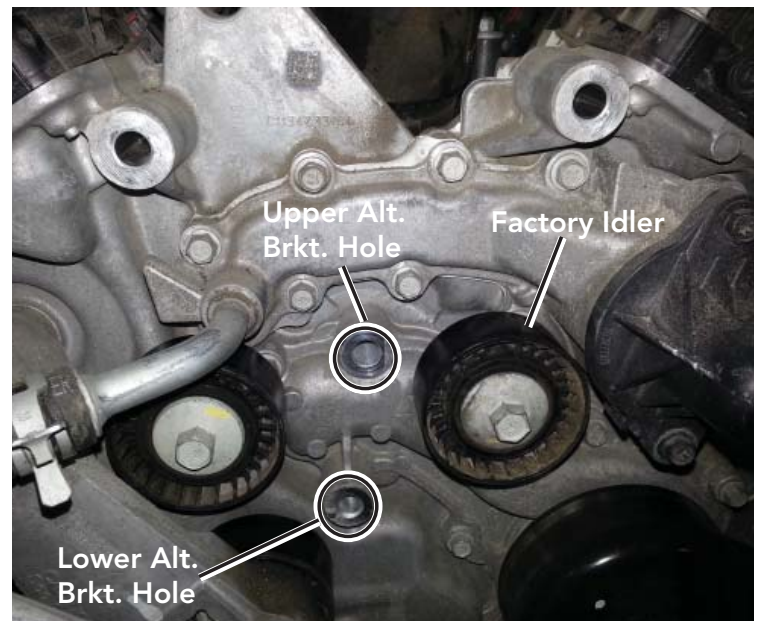


Coolant Reservoir Mounted

# MAIN BRACKET ASSEMBLY



- 1 Use a 13mm to remove the driver's side idler pulley. Note which side of the pulley sits against the timing cover. Separate the pulley from the shouldered bolt. The pulley will be reused, the bolt will not be reused.
- 2 Use a 17mm to install the supplied M10x60mm bolt and washer into the upper alternator bracket hole.
- 3 Use a 13mm to install the supplied M8x70mm bolt and washer into the lower alternator bracket hole.



Bracket Mounting Holes



- 4 Assemble the main bracket by inserting the (2) supplied M10x110mm SHCSs (Socket Head Cap Screws) through the bracket as shown.
- 5 Slide the (2) .685" long spacers over the SHCSs on the back side of the main bracket.
- 6 Set the bracket assembly up to the timing cover. Align the bolts with the alternator mounting holes. Start the bolts, but leave loose.
- 7 Insert the supplied idler shaft into the factory idler pulley with the idler shaft on the side of the pulley opposite timing cover.
- 8 Align the pulley and idler shaft with the idler pulley hole in the timing cover and with the lower mounting point on the main bracket.
- 9 Slide the supplied M8x100mm SHCS through the main bracket, the idler shaft, the idler, and into the timing cover.
- 10 Use an 8mm allen to tighten the M10 SHCSs. Use a 6mm allen to tighten the M8 SHCS.

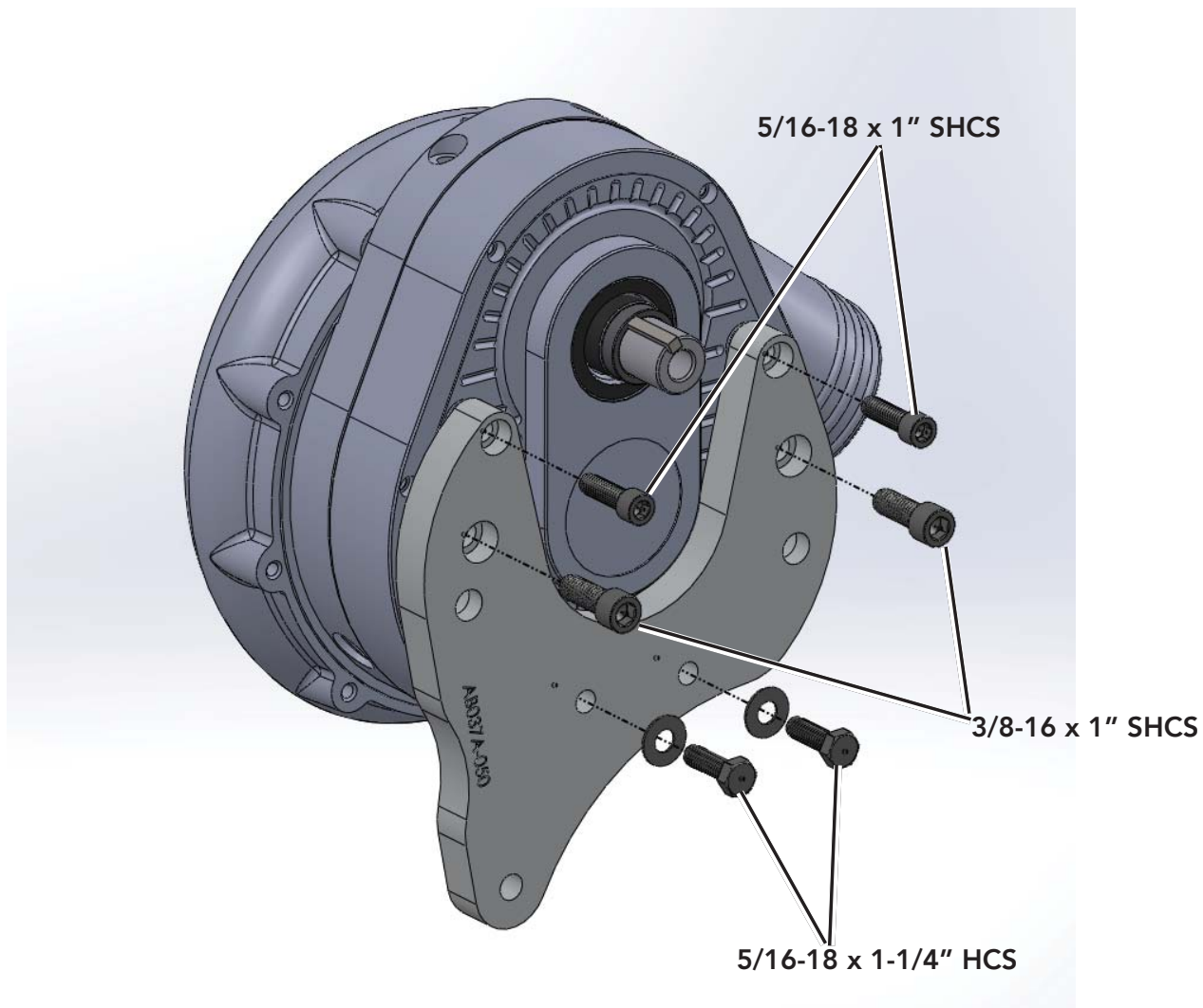


Main Bracket Mounted



Idler Shaft In Factory Pulley

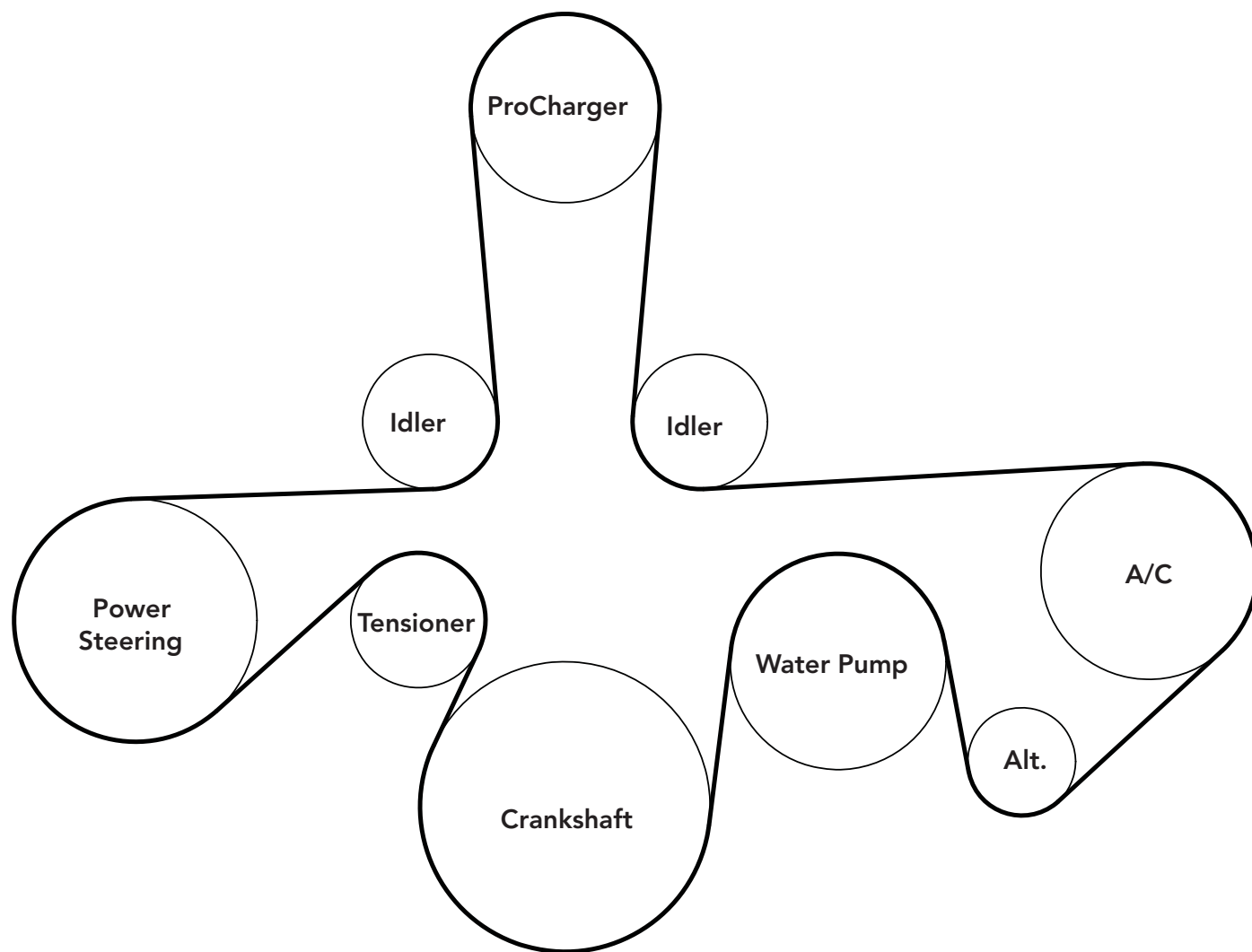
# ProCharger Head Unit



- 1 Install the oil drain line onto the supercharger. Ensure all fittings are tight. Fill the supercharger with (1) 6 ounce bottle of supplied blower oil.
- 2 Mount the ProCharger onto the main bracket using the provided 5/16" SHCS's on the top (2) holes, the 3/8" SHCS's on the middle (2) holes, and the 5/16" bolts in the bottom (2) holes. Tighten the fasteners with a 5/16 allen, 1/4 allen, and a 1/2".



**Tech Tip:** The bottom (2) bolts are most easily accessed from the bottom side of the bracket using a 1/2" ratcheting wrench.

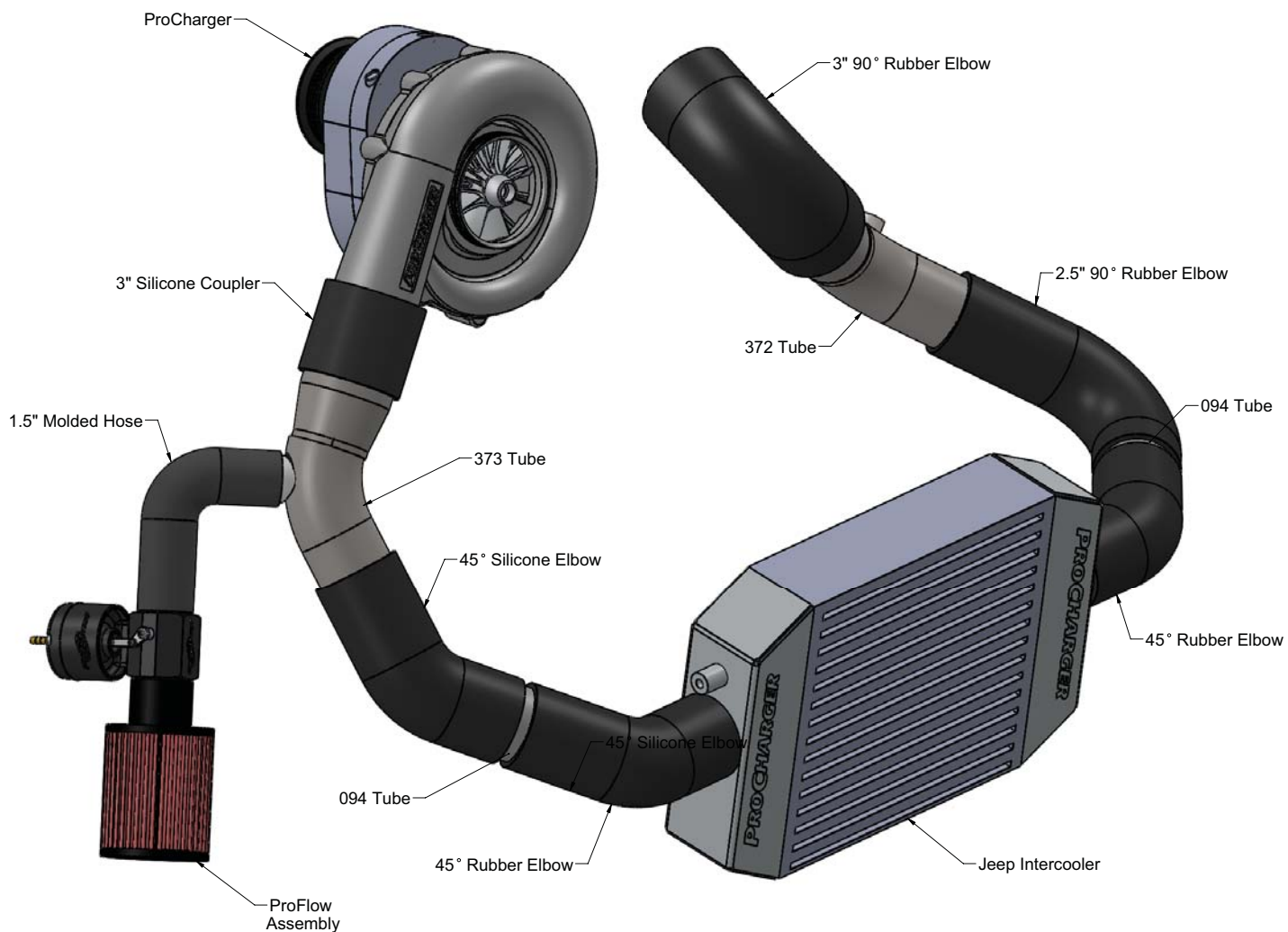


## Belt Routing

- 3** Install the supplied belt. Start by feeding the belt down between the ProCharger and the timing cover. Push a section between the passenger's idler and the tensioner, then wrap the section around the power steering pulley.
- 4** Next, pull a section of belt down and wrap around the crankshaft pulley, then route it overtop the water pump pulley. Hook the belt around the alternator pulley and A/C pulley.
- 5** The remaining section should be between the two idlers and near the ProCharger pulley. Insert a 1/2" breaker bar and extension into the square slot on the tensioner. Push the breaker bar towards the driver's side. A constant, steady pressure on the breaker bar will slowly compress the tensioner. Once the tensioner is fully compressed, slide the belt over the ProCharger Pulley. Release the tensioner. Ensure the belt is properly over each pulley and that it is aligned with each pulley rib.



## INTERCOOLER AND TUBE ROUTING



✓ **Tech Tip:** Applying a small amount of WD40 or glass cleaner on the connections will help with adjustment. Leave all hose clamps loose until all tubes have been installed and adjusted.

- 1 **Manual Transmission Only:**  
Insert the supplied clip nuts on the condenser tabs.



Clip Nuts on Condenser Tabs

- 2 Use an 8mm to remove the screw that holds the condenser to the radiator on the top passenger's side. Install the passenger's side intercooler bracket using that mounting location. Reinstall the factory bolt, but leave loose for adjustment.



Passenger's Side Intercooler Bracket

- 3 Use a 10mm to install the (2) driver's side intercooler brackets using the supplied M6 x 20mm flange bolts. The bolts thread into the clip nuts on the condenser tabs. Leave loose for adjustment.



Driver's Side Intercooler Bracket



## Intercooler and Tubing

- 4 Set the intercooler up to the condenser with the single bung oriented in the upper passenger's side.
- 5 Use a 9/16 to start the (3) supplied 3/8 x 3/4" bolts through the intercooler brackets and into the bungs on the condenser.
- 6 Adjust the intercooler so that it is centered and not touching the condenser. Tighten all mounting hardware.
- 7 Slide the short end of the rubber 45° coupler onto the passenger side of the intercooler as shown. Secure with a #40 hose clamp.



Intercooler Mounted



Passenger's Side I/C Connection

- 8 Insert tube #094 into the open end of the rubber 45° coupler. Secure with a #40 hose clamp.



Tube #094



- 9 Slide the silicone 45° coupler over tube #094 and position as shown. Secure with a #40 hose clamp.



Silicone 45° Coupler

- 10 Insert the surge tube #373 into the silicone 45° coupler as shown. Secure with a #40 hose clamp.
- 11 Complete the connection to the ProCharger using the 3" silicone coupler. Secure with the provided 3.25" T-bolt clamps.



Discharger Tubing Complete

- 12 Remove the IAT sensor from the stock inlet tube. Insert it into tube #372.



**Note:** The sensor can only be installed in one direction. Note the direction of the lock on the bung and on the sensor. The sensor must be inserted and turned until the locking tab slides over the bung lock.



IAT Sensor Lock Tab Direction

## Intercooler and Tubing

- 13** Slide the 45° rubber hose onto the driver's side of the intercooler. Insert tube 094 into the open end of coupler. Slide the 90° 2.5" rubber hose over tube 094. Secure with #40 hose clamps.
- 14** Insert the 2-1/2" end of tube #372 into the driver's side molded tube in the engine bay. Secure with a #40 hose clamp.
- 15** Slide the 90° rubber elbow over the 3" end of tube #372, then over the throttle body. Secure with 3.25" T-bolt clamps.
- 16** Plug the in the IAT sensor.



#372 Tube Installed



Throttle Body Tube Installed



## SURGE SYSTEM

- 1 Install the short end of the supplied 1-1/2" rubber hose onto the bung on the surge tube and route down and clear of any moving parts. Tighten with a #24 hose clamp.



Surge Valve Hose Routing

- 2 Install the surge valve onto the end of the rubber tube. Point the barb fitting to where it can be reached by a vacuum line. Ensure the valve linkage is unobstructed. Secure with a #24 hose clamps.



Surge Valve Installed



- 3 Install the short end of the supplied 1-1/2" rubber hose (hose #21528) onto the surge valve. Route the hose through the front passenger wheel well just behind the headlight. Secure with a #24 hose clamp (see picture below).



Short End Of Rubber Hose Installed

- 4 Install the filter on the end of the rubber hose #21528. Use the 3" long 1.5" connector tube and (2) #24 hose clamps.



Filter Installed Onto Surge Hose

- 5 Secure the filter into place using tie wraps if needed.



Filter Secured

- 6 Assemble the vacuum manifold with the 3/8" plug in one end and the 5/8 barb fitting in the other end. Plug (2) of the 1/8" ports with the 1/8" brass plugs. Install the 1/8" barb fitting in the remaining 1/8" port.



Vacuum Manifold Assembled

- 7 Disconnect the 5/8 plastic PCV hose from behind the throttle body on the passenger's side. Remove the rubber elbow from the end of the plastic hose.



PCV Elbow

- 8 Reinstall the rubber elbow onto the intake manifold and secure with a #10 hose clamp. Make sure the hose clamp is clear of the engine cover mounting stud.

- 9 Insert the 5/8 barb fitting on the vacuum manifold into the open end of the rubber elbow. Secure with a #10 hose clamp.

- 10 Route the supplied vacuum line from the 1/8" barb on the vacuum manifold down to the barb fitting on the Proflow valve. Ensure the line is free from any moving parts.



Vacuum Manifold Installed



# PCV SYSTEM

- 1 Install the (2) supplied #6 hose clamps onto the factory vacuum line rubber coupler behind the throttle body on the passenger's side.



Hose Clamps on Vacuum Hose

- 2 Install the supplied #8 hose clamp onto the vacuum line on the driver's side of the intake manifold.



Driver's Side Vacuum Line

- 3 Locate the supplied 5/8" molded rubber hose. Slide one end of the hose onto the open end of the factory plastic PCV line disconnected in the previous section. Secure with a #10 hose clamp

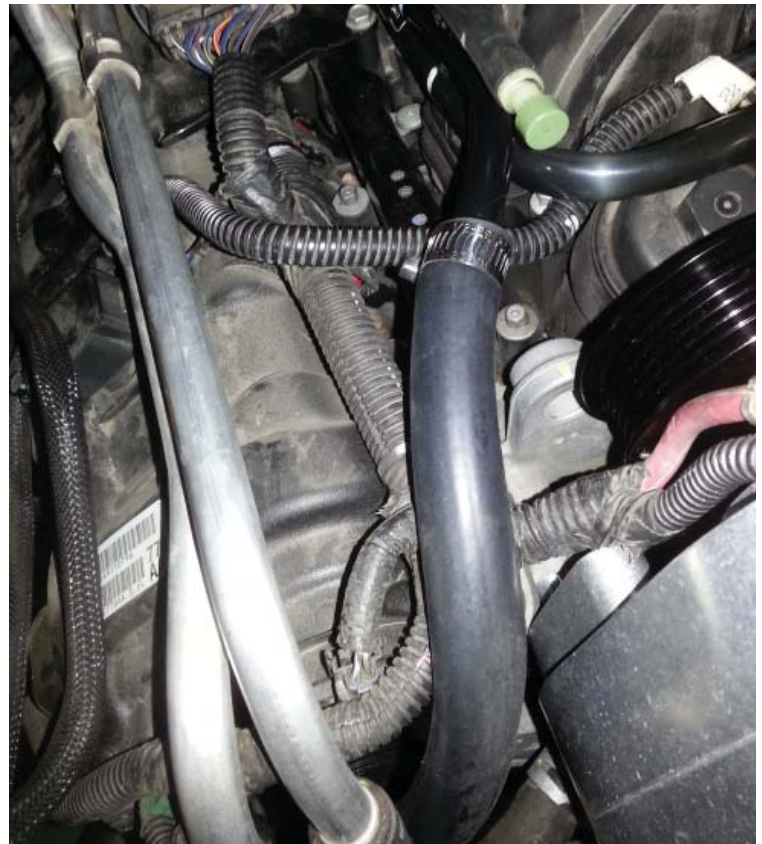
- 4 Route the hose between the ProCharger and the throttle body, then down below the ProCharger, staying clear of the belt path.



PCV Routing



- 5 Cut the 5/8 rubber hose 32" from the open end.
- 6 Locate the factory PCV hose that was connected to the factory air box. Remove the "S" shaped rubber hose connected to the open end of this hose.
- 7 Insert the 32" piece of 5/8 rubber hose over the open end of the plastic hose. Secure with a #10 hose clamp.



PCV Routing

- 8 Route the hose next to the ProCharger and behind the heater lines, then down towards the other section of rubber hose under the ProCharger.
- 9 Cut the hose to the proper length and insert the supplied 5/8 plastic "T" fitting between the two hoses. Secure with #10 hose clamps.
- 10 Insert the remaining piece of 5/8 rubber hose onto the open end of the "T" fitting. Secure with a #10 hose clamp. This will be connected to the air inlet in a later step.



5/8 "T" Fitting

# AIR INLET

- 1 Unclip (but do not unplug) the cooling fan connector from the fan housing and tuck down out of the way.

✓ **Tech Tip:** On some models the fan shroud may need to be trimmed for inlet clearance

- 2 Slide the 3-1/2" 90° rubber elbow over the inlet of the ProCharger. Secure with a #60 hose clamp. (On models with hood vents the rubber elbow will need to be positioned as low as possible)



90° Rubber Elbow

- 3 Install the supplied 3/8 NPT x 5/8 hose barb into the bung on tube #374.
- 4 Insert the supplied air filter over the longer leg of tube #374.
- 5 Insert the open end of tube #374 into the 90° rubber elbow. Tighten with a #56 hose clamp.
- 6 Adjust the air filter and tighten with the supplied hose clamp.
- 7 Slide the PCV hose over the bung on tube #374. Tighten with a #10 hose clamp.



Inlet Tube Installed

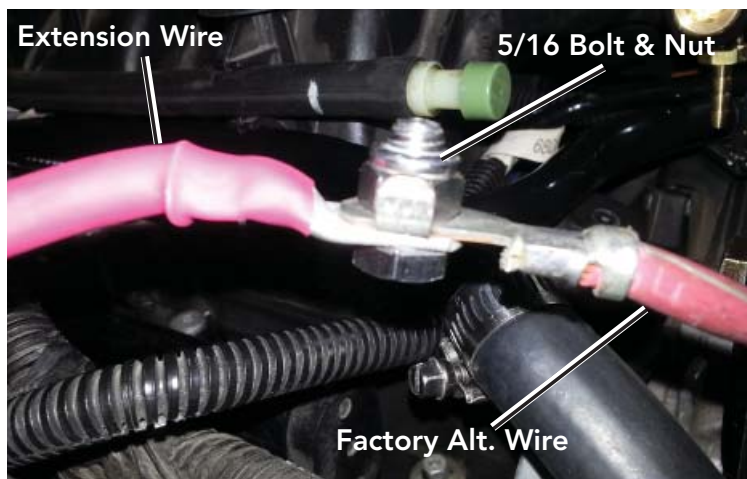


PCV Hose to Air Inlet



## FINAL ASSEMBLY

- 1 Locate the alternator power wire extension. Remove the black plastic power wire cover from the factory power wire. Use the supplied 5/16 bolt, washers and nut to connect the extension wire to the factory power wire.
- 2 Use electrical tape to wrap the exposed portions of the wire connection. Then wrap the connection area with the supplied insulation sleeve. Additional sleeve material is included if you want to double-wrap the connection.
- 3 Locate the alternator extension harness. Plug the factory connector into the extension harness.
- 4 Route the power wire and the harness extension down along the heater lines and to the alternator. Ensure the wires are clear of the belt and cooling fan.
- 5 Plug the harness into the alternator connector.
- 6 Slide the factory power wire cover over the end of the power extension wire. Slide the power wire over the power stud on the alternator and tighten down with the factory nut. Snap the power cover over the stud on the alternator.
- 7 Cover the extension harness and power wire with the supplied 5/8" wire loom. Secure with zip ties.



Extending the Alternator Power Wire



Harness and Power Wire at Alternator



Plastic Cover Installed Over Power Wire



- 8 Remove the factory MAP sensor. Carefully remove the o-ring from the sensor.
  - 9 Locate the supplied MAP sensor. Cut one ear off the sensor as shown.
  - 10 Insert the MAP sensor into the MAP sensor adapter. Secure using one of the supplied 10-24 x 1/2" SHCS. Insert the factory o-ring onto the adapter.
  - 11 Install the MAP sensor and adapter into the intake manifold and point towards the front of the vehicle.
  - 12 Install the MAP adapter tab to the MAP adapter using the other 10-24 x 1/2" screw. The MAP tab should straddle the tab on the intake manifold, preventing the MAP adapter from turning.
  - 13 Locate the MAP adapter harness. Plug the factory harness into the MAP adapter in the orientation shown. Plug the other end into the new MAP sensor.
- Note:** The MAP adapter harness must be connected in the orientation shown or the ECU will not receive a MAP sensor signal.
- 14 Remove the factory rubber grommets from the engine cover. Insert the supplied rubber grommets where the factory grommets were removed.
  - 15 Insert the engine cover extensions into the new grommets. Insert the factory grommets into the cover extensions.



MAP Sensor Installed On Adapter



MAP sensor Installed



MAP Adapter Harness Connector



New Grommet

Cover Extensions Installed

- 16 Reinstall the engine cover.
- 17 Use a 10mm to reattach the negative battery cable.
- 18 Locate the CARB Executive Order sticker included with your system. This sticker must be installed in an underhood location that is readily visible.



CONGRATULATIONS! YOU HAVE COMPLETED THE INSTALLATION OF YOUR NEW PROCHARGER SUPERCHARGER SYSTEM. READ THE FOLLOWING PAGES CAREFULLY FOR OPERATION AND MAINTENANCE INSTRUCTIONS, AS WELL AS WARRANTY INFORMATION.

# 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 the drain plug after every oil change. Drain oil by removing the drain plug. Clean off the drain plug before re-installing.



## ProCharger Oil Level

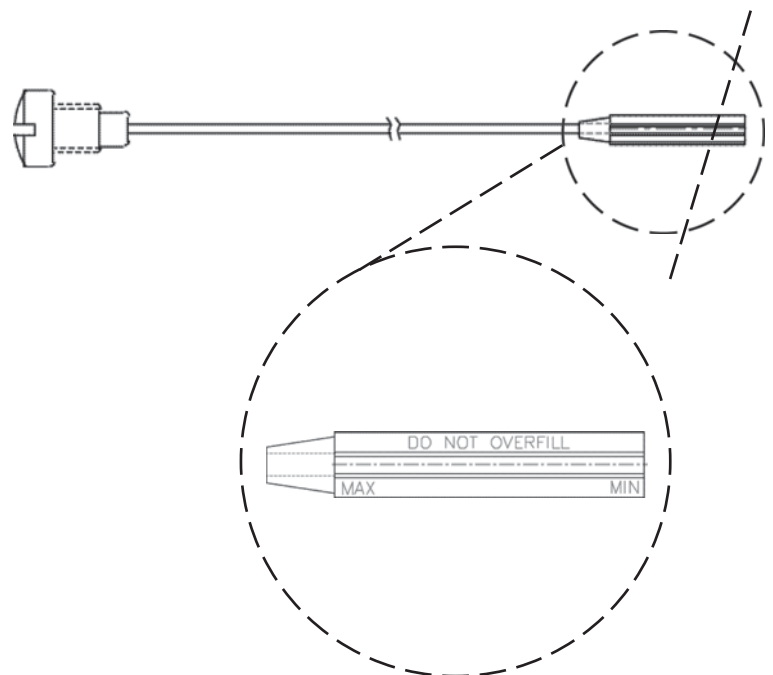
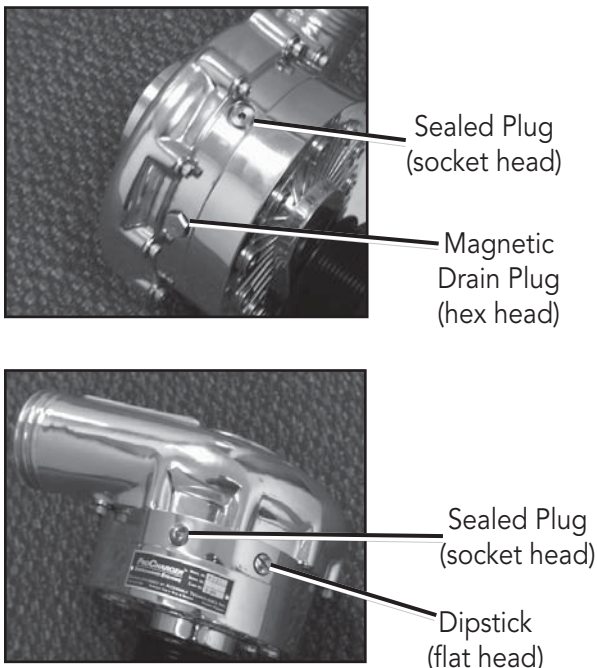
The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.

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

## General

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

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



# LIMITED WARRANTY

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

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

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

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

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

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

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

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

**Include the following information inside the box with your product:**

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

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

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

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

**Accessible Technologies, Inc.**  
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**Part Number PMJK1A-002 Rev. A**

