

2009-2010 Dodge Ram High Output Intercooled System **Installation Guide**



The ULTIMATE Power Adder™

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INTRODUCTION

Congratulations on purchasing your ProCharger® Dodge Ram 2009-2010 Supercharger 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.

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.

Required Tools and Supplies

- 3/8" Socket Set, standard & metric
- Open End Wrench Set, standard & metric
- 3/8" Hex Bit Set (allen head), standard & metric
- Flat Screwdrivers
- Phillips Screwdrivers
- Plier Set



Warning: Your supercharged Ram 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.

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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.

STOCK COMPONENTS

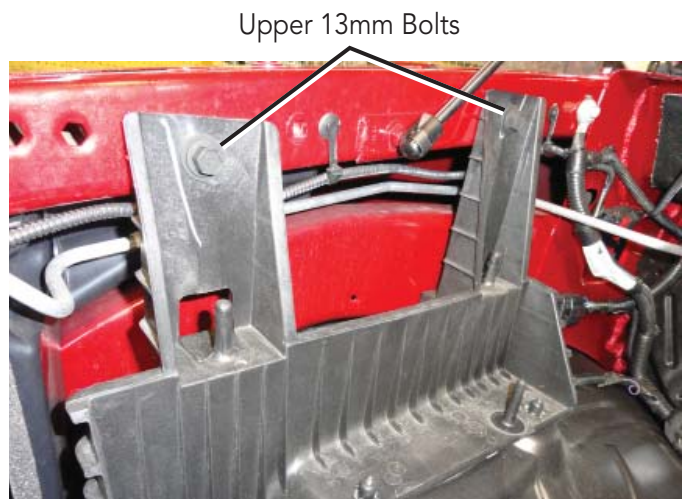
- 1 Use a 5/16" driver to remove the (2) hose clamps on the intake tube. Unlatch the air intake box from the passenger's side.
- 2 Disconnect the Intake Air Temperature sensor by pulling back on the red tab and then squeezing the release. Disconnect the air breather tube from the air box and throttle body.
- 3 Use a 13mm socket to remove the (2) upper bolts on the air box cradle. Use an 8mm socket to remove the (5) screws retaining the inner wheel well and remove the plastic retainer.



Intake Filter Assembly



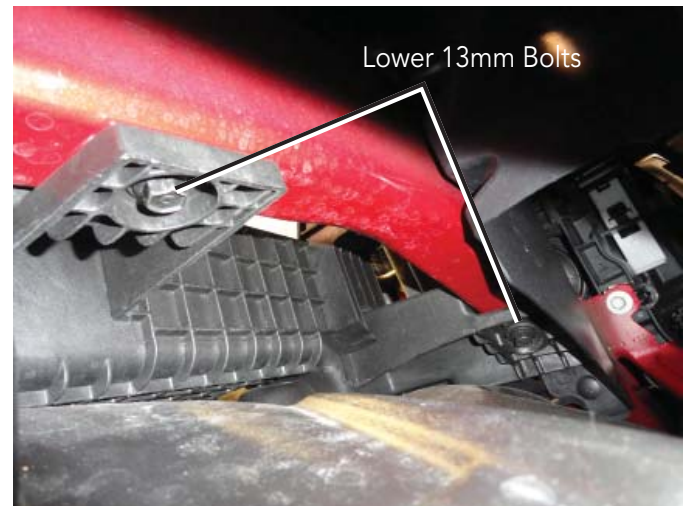
IAT Sensor



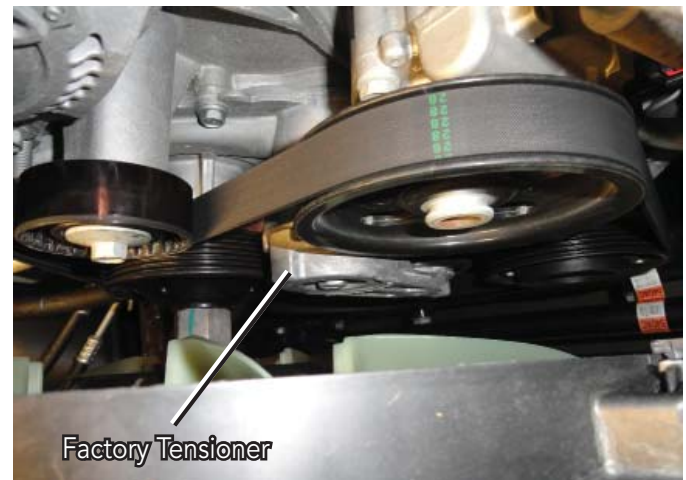
Air Box Cradle

Removing Stock Components

- 4 Remove the (2) lower 13mm bolts on the air box cradle. Re-install the fender lining.
- 5 Using a $\frac{3}{8}$ " socket wrench as a leverage tool, rotate the automatic belt tensioner clockwise to it's stop and remove the engine's 6-rib serpentine belt.
- 6 Remove the engine cover by pulling up on either side of the cover so it pops out of the plastic ball studs. Then pull the cover towards the front of the vehicle to finish removal.



Air Box Cradle



Factory Tensioner



Engine Cover

7 Remove the upper radiator plastic shield to gain access to the front grill bolts. The shield is held in place by (6) plastic ribbed rivets.

8 Remove the (4) 10mm bolts securing the top of the front grill to the radiator core support.

9 To remove the front grill, gently pull the grill away from the frame at the top. There are (4) tabs that attach the grill to the front bumper. Reach behind the grill and pull up on the (2) black tabs in the middle. With mild force, push out on each lower corner from the back side of the grill by reaching behind the grill.

✓ **Tech Tip:** The following step is for trucks which have grill shutters installed. Skip to the next step if your truck is not equipped with this option.

10 Remove the 2 upper screws with a 13mm socket. Remove the lower 2 screws with a 10mm socket. Disconnect the electrical connector located in the center of the shutter assembly. Remove the shutter assembly from the truck.



Radiator Shield



Front Grill Mounting Tabs



Grill Shutter Assembly

Removing Stock Components

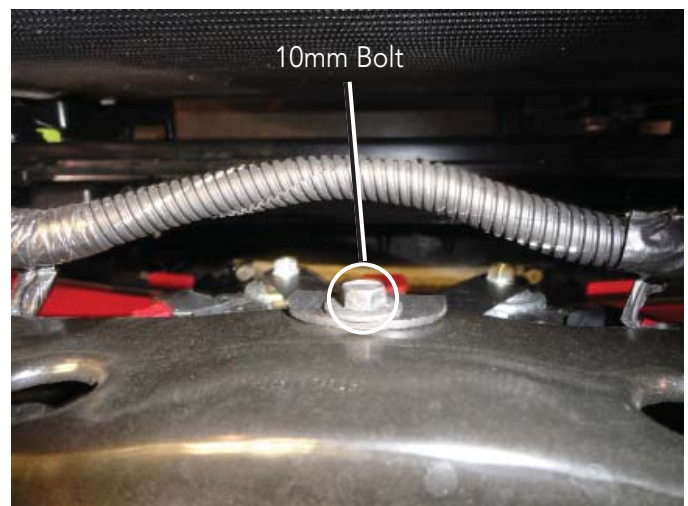
- 11** Disconnect the coolant overflow hose from the radiator cap neck. Remove the (2) 10mm bolts securing the coolant overflow tank to the vehicle. Slide the tank up and pull away from the vehicle to remove. The coolant tank will be relocated and installed at a later step.
- 12** For models equipped with a relay attached to the horn bracket, slide the relay off of the bracket. Disconnect the horns by pulling back on the red tab and then squeezing the release. Remove the 8mm nuts retaining the horns to the bracket by using a wrench or socket.
- 13** Use a 10mm wrench or socket to remove the horn bracket.



Coolant Overflow Tank



Horn Electrical Connectors



Horn Bracket

CRANK PULLEY

✓ **Tech Tip:** Remove lower fan shroud cover (if equipped) to access crank.

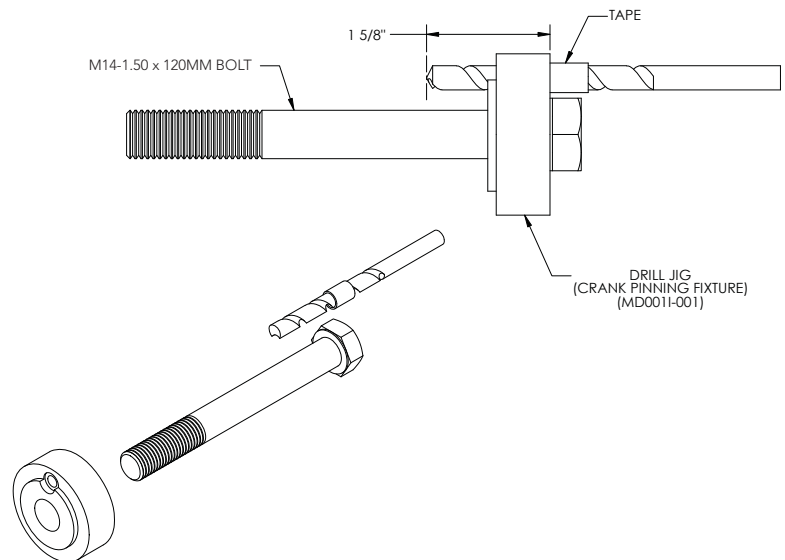
- 1 Remove the 21mm crank pulley bolt.
- 2 Place the drill jig onto the crank pulley, and tighten it into place using the supplied M14-1.50 x 120mm hex head bolt and washers.

✓ **Tech Tip:** Use an impact tool for ease of removal.



Factory Crank Pulley and Bolt

- 3 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.



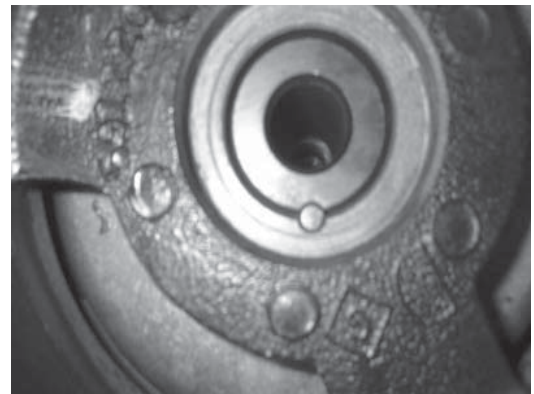
Crankshaft and Harmonic Balancer Drill Jig

Crank Pulley

- 4 Remove the pinning tool and set it aside. Clean the chips from inside the drilled hole and the surrounding area thoroughly.
- 5 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.

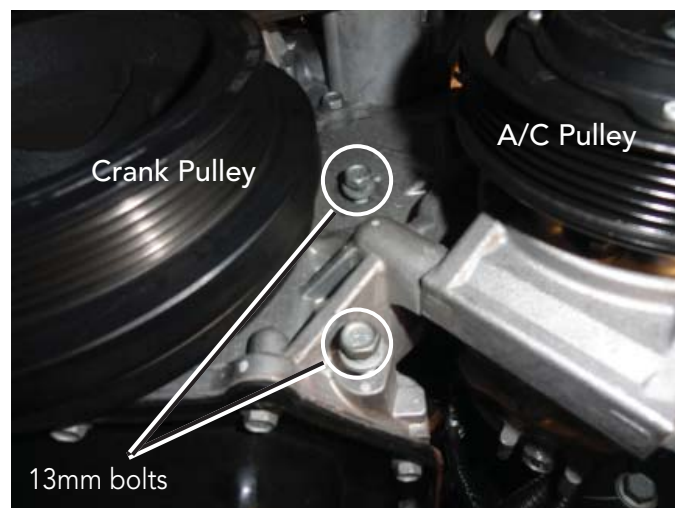


Drill Jig Installed



Crank Pulley Pinned to Crankshaft

- 6 Remove the (2) 13mm bolts from the front cover.
- 7 Install the idler bracket using the (2) supplied M8 x 130mm SHCS and 1.5" tube spacers.
- 8 Install the idler pulley using the supplied 5/16"-18 x 2" bolt, 1/2" flat washer, and the .470" idler shaft on the back side (snap ring side towards engine) of the idler pulley.



Front Cover Bolts



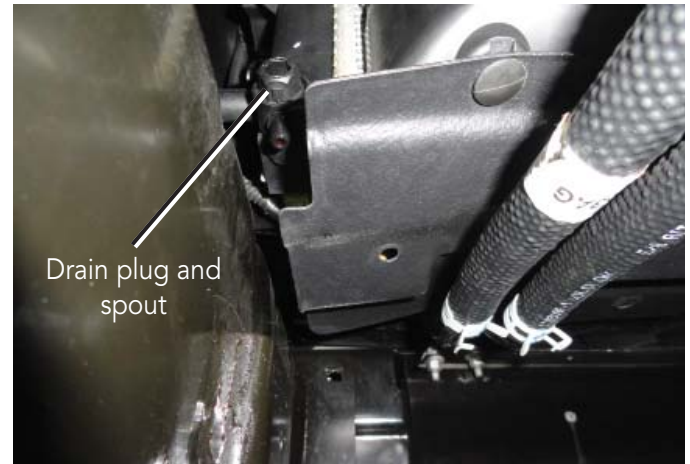
Idler Bracket Installed



Idler Pulley Installed

COOLANT SYSTEM

- 1 Raise the front of the vehicle and support it on jack stands to gain access to the radiator drain plug on driver's side. Refer to the vehicles owners manual for safe lifting points.
- 2 Place a drain pan below the vehicle to catch the coolant. Install a rubber hose as shown to help direct the coolant to the catch pan. Use a 10mm (some vehicles require a 16mm) hex bit socket to loosen the drain plug. Do not attempt to remove the drain plug. Remove the radiator cap to relieve pressure on the cooling system. Drain the coolant from the vehicle.
- 3 Re-tighten the radiator drain plug. Remove the drain hose installed earlier. Safely lift the vehicle to remove the jack stands and lower vehicle back down.
- 4 Remove the upper radiator hose.



Drain plug and spout

Radiator Drain Plug



Drain Hose

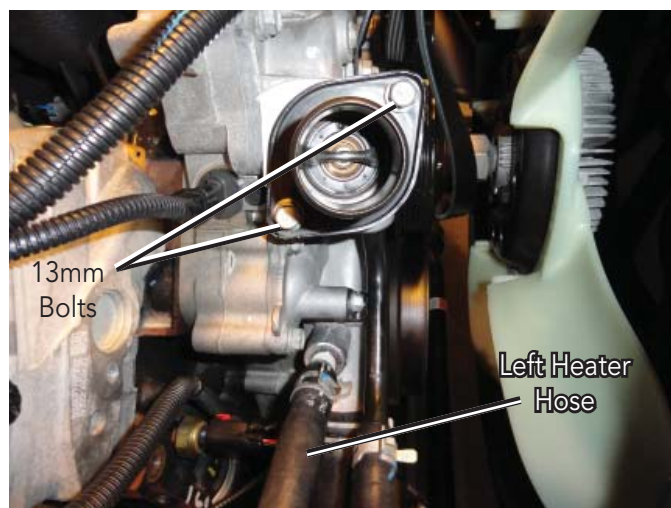
Coolant Drain Hose



Upper Radiator Hose

Upper Radiator Hose

- 5 Use a 13mm socket to remove the (2) thermostat housing bolts. Remove the thermostat housing.



Factory Thermostat Housing

- 6 Install the new 45° thermostat housing, reusing the factory bolts. The upper radiator hose will be installed at a later step.



Billet Thermostat Housing Installed

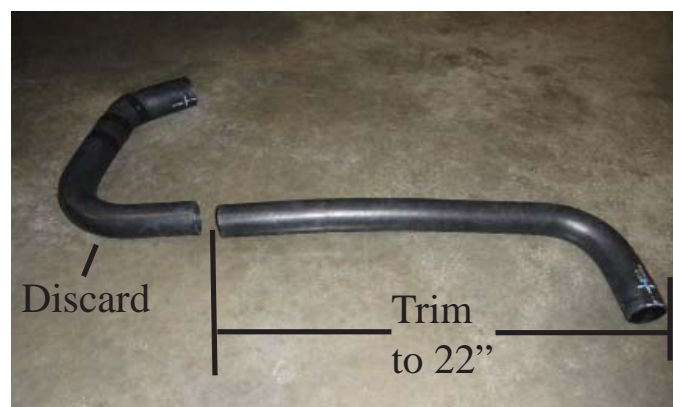
- 7 Install the supplied coolant hose reducer using the supplied #32 hose clamp.



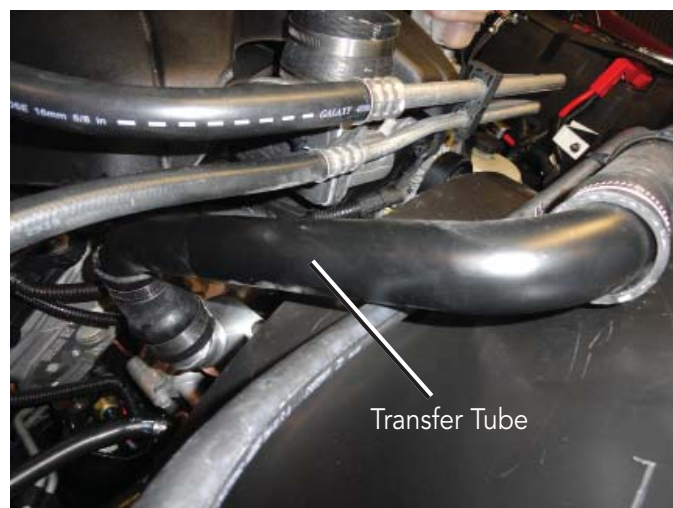
Coolant Hose Reducer

Coolant System

- 8 Cut the factory upper coolant hose as shown.
- 9 Install the supplied coolant transfer tube using the supplied #24 hose clamp.
- 10 Reinstall the upper radiator hose using the factory hose clamp at the radiator neck. Connect the hose to the coolant transfer tube using the supplied #24 hose clamp.



Trimmed Upper Coolant Hose

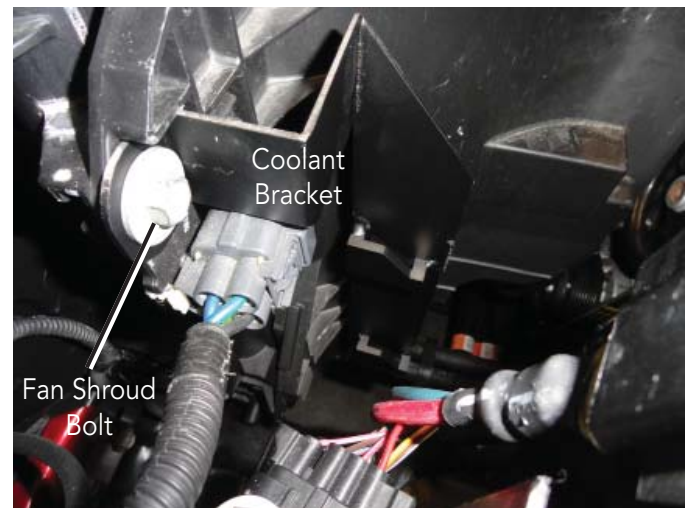


Transfer Tube Installed

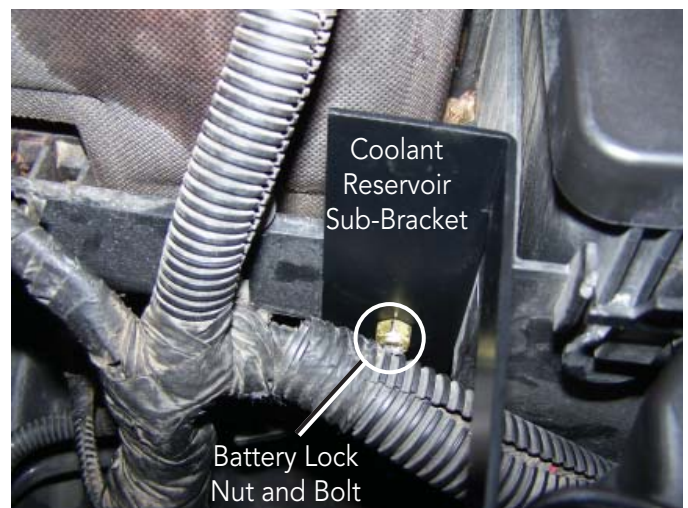


Upper Coolant Hose Installed

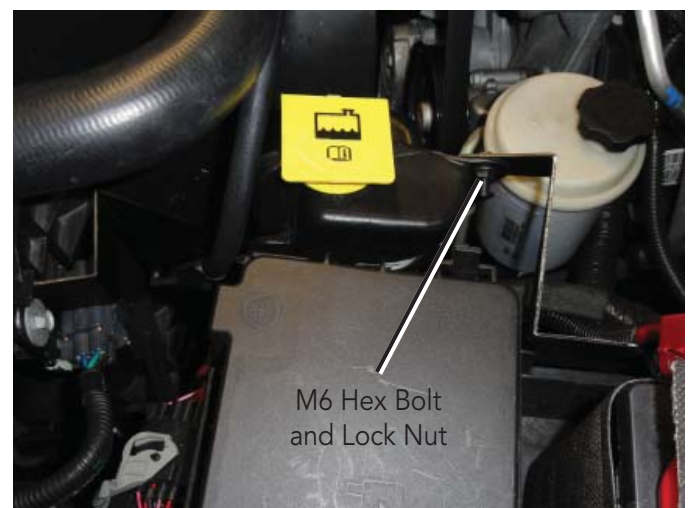
- 11** Use a 13mm socket to remove the driver's side fan shroud bolt. Install the coolant reservoir main bracket as shown, re-using the fan shroud bolt.
- 12** **(2009 Model)** Remove the plastic push pin rivet located on the battery tray closest to the fuse box. Install the coolant reservoir sub-bracket as shown, using the supplied 1/4-20 x 1/2" bolt and lock nut.
- (2010 Model)** Use a 8mm socket to remove the bolt located on the battery tray closest to the fuse box. Install the coolant reservoir sub-bracket as shown, re-using the factory bolt.
- 13** Install the coolant reservoir as shown. Use the supplied M6 hex bolt and flanged locknut to secure the reservoir to the sub-bracket using a 10mm socket.



Coolant Reservoir Bracket Installed



Coolant Reservoir Sub-Bracket Installed



Coolant Reservoir Installed

Coolant System

- 14** Install the 3/8" x 3' rubber hose, connecting the reservoir and radiator. Route the hose along the back side of the upper radiator hose securing it with the supplied zip ties.



Coolant Overflow Hose



Coolant Overflow Hose Routing

INTERCOOLER INSTALLATION

- 1 Remove the (2) 10mm bolts retaining the hood latch bracket.
- 2 Install the upper intercooler brackets and horn bracket as shown with the M6-1.00 x 60mm bolts and washers and 1/4" spacer. Leave the brackets loose to help with installation of the horns.
- 3 Once the horns are installed, finish tightening the bolts. Fasten the hood latch bracket using the supplied nylon locking nut and washer. For models equipped with a relay attached to the horn bracket, zip tie the relay to the horn bracket with the supplied zip ties.



Hood Latch Bracket



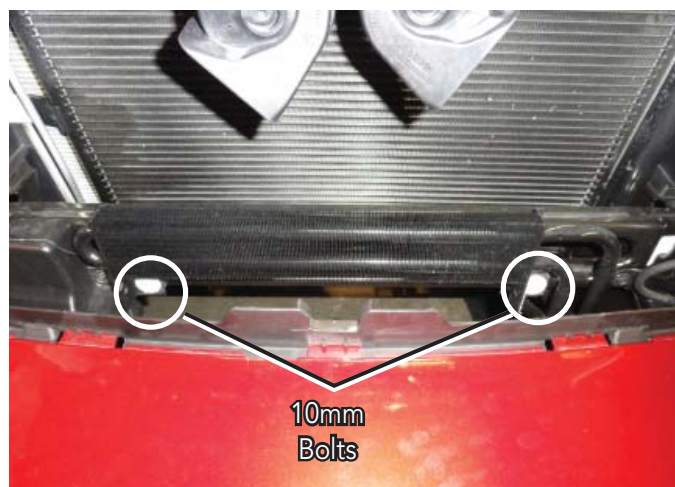
Intercooler Brackets and Horn Bracket



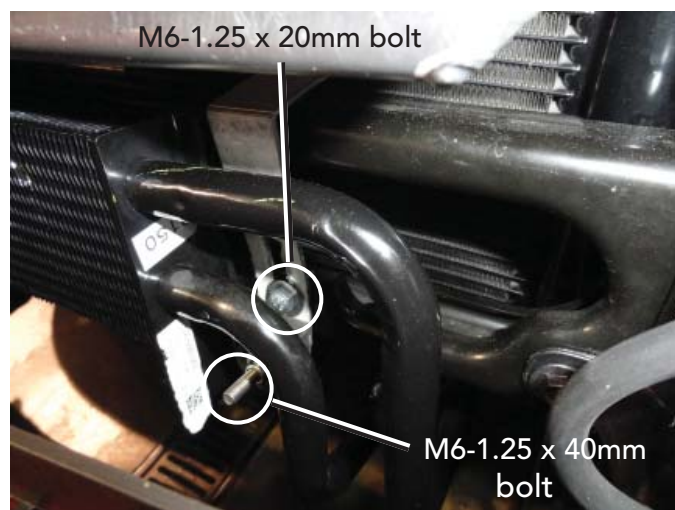
Horns Installed

Intercooler Installation

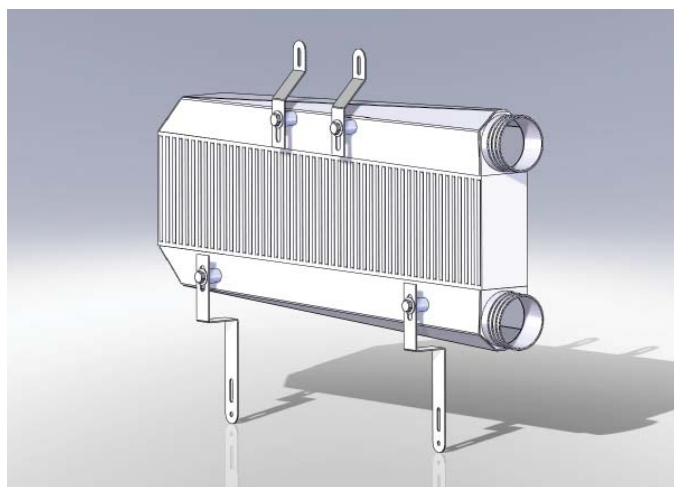
- 4 Remove the (2) 10mm bolts retaining the power steering cooler.
- 5 Install the lower intercooler brackets as shown using the supplied M6-1.00 x 20mm bolts and washers through the slotted hole.
- 6 Reinstall the power steering cooler onto the lowest hole of the lower intercooler bracket using the supplied M6-1.00 x 40mm bolts, washers and nylon locking nuts.
- 7 Fasten the intercooler to the brackets using the supplied (4) 3/8" x 3/4" bolts and washers.



Power Steering Cooler

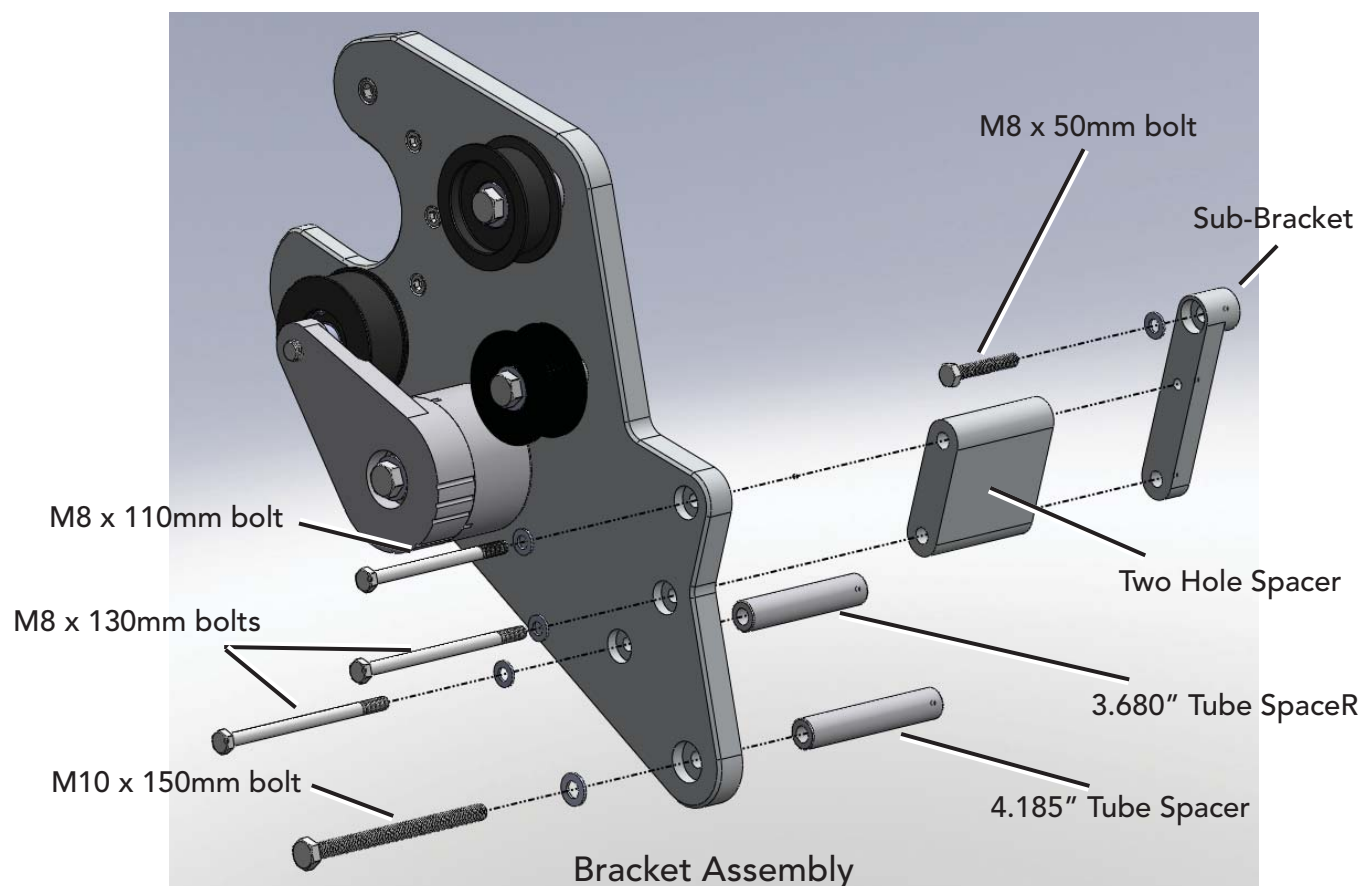


Lower Bracket and Power Steering Cooler Installed (Driver's Side)



Intercooler Mounting

MAIN BRACKET INSTALLATION



- 1 Prior to installing the main bracket, the sub-bracket and two hole spacer must be assembled. The figure above and photo at right shows how the components are fastened together using a 13mm socket to secure the M8 x 110mm bolt and washer.



Main Bracket to Sub-Bracket Assembly

Main Bracket

- 2 The photo at right shows the mounting locations for the main and sub-brackets.

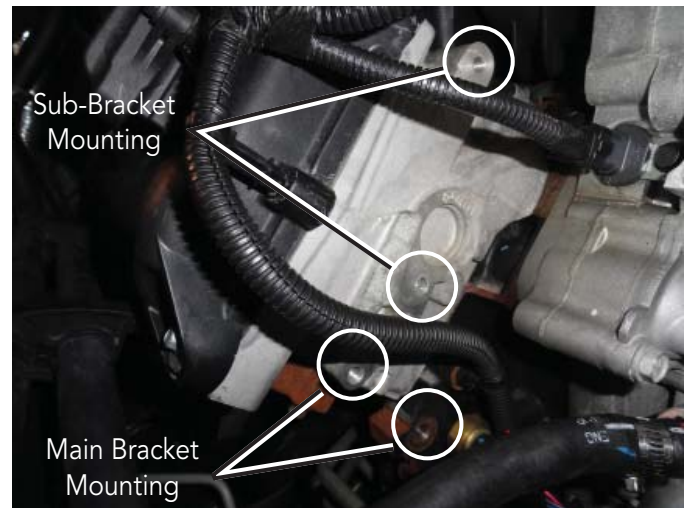
✓ **Tech Tip:** If required, disconnect the coolant temp sensor when installing the bracket assembly.

- 3 The main bracket will sit in between the (2) heater hoses. Use the 4.185" tube spacer with the M10 x 150mm bolt (15mm socket) and washer at the lowest hole of the main bracket connecting the main bracket to the engine block. Do not tighten until all bolts have been installed.

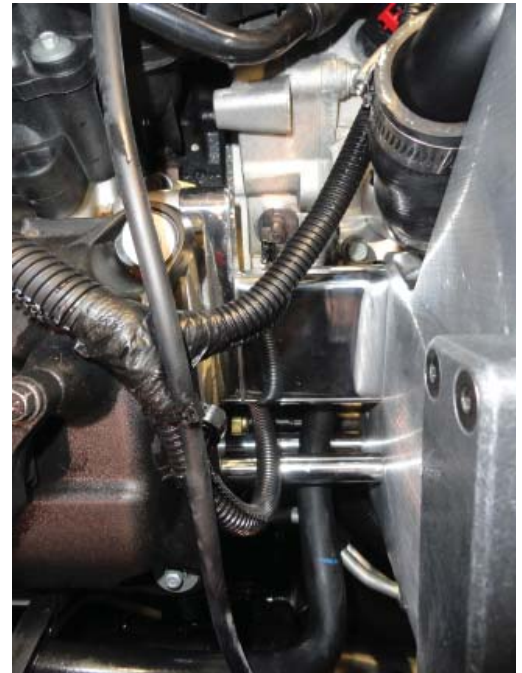
- 4 Use the 3.68" tube spacer with the M8 x 130mm bolt (13mm socket) and washer at the second lowest hole of the main bracket connecting the main bracket to the cylinder head.

- 5 Use the remaining M8 x 130mm bolt (13mm socket) and washer at the remaining open hole of the main bracket connecting the main bracket to the cylinder head through the two hole spacer.

- 6 Install the M8 x 50mm bolt (13mm socket) and washer at the top hole of the sub-bracket, connecting it to the cylinder head. Tighten all bolts on the main bracket and sub-bracket.



Bracket Assembly Mounting Locations

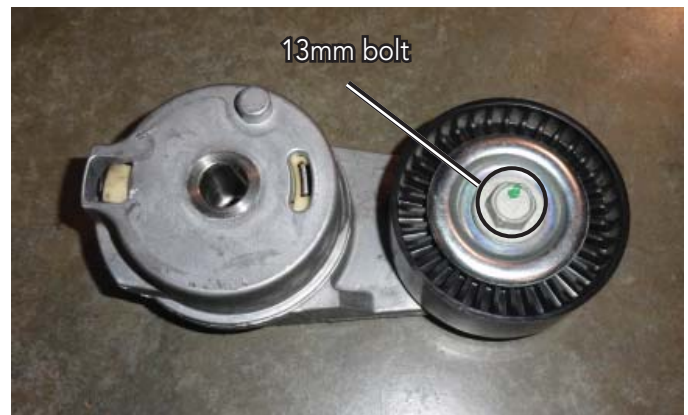


Bracket Assembly Mounting

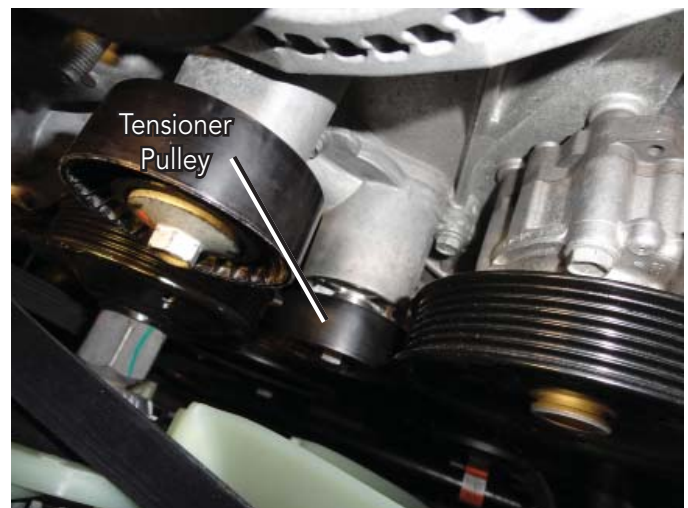
- 7 Remove the bolt retaining the factory belt tensioner with a 16mm socket.
- 8 Remove the bolt retaining the tensioner pulley with a 13mm socket.
- 9 Install the tensioner pulley in place of the factory tensioner as shown, using the supplied M10 x 50mm bolt (17mm socket), M10 flat washer, and .625" idler shaft.



Factory Belt Tensioner



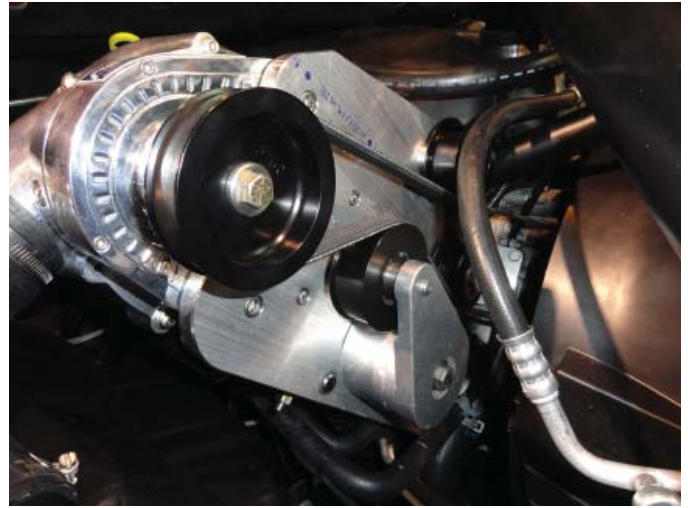
Tensioner Pulley Bolt



Installed Tensioner Pulley

PROCHARGER HEAD UNIT & AIR INLET INSTALLATION

- 1 Remove the oil fill reminder tag from the head unit. Fill the supercharger with (1) 6 ounce bottle of the supplied blower oil.
- 2 Place the ProCharger onto the main bracket and screw in (4) $\frac{5}{16}$ " and (2) $\frac{3}{8}$ " SHCS through the main bracket and into the ProCharger. Tighten all screws.
- 3 Drill an $\frac{9}{16}$ " hole in the back side of the 45° rubber elbow (before the bend), as shown. Install the $\frac{5}{8}$ " 90° plastic barb.



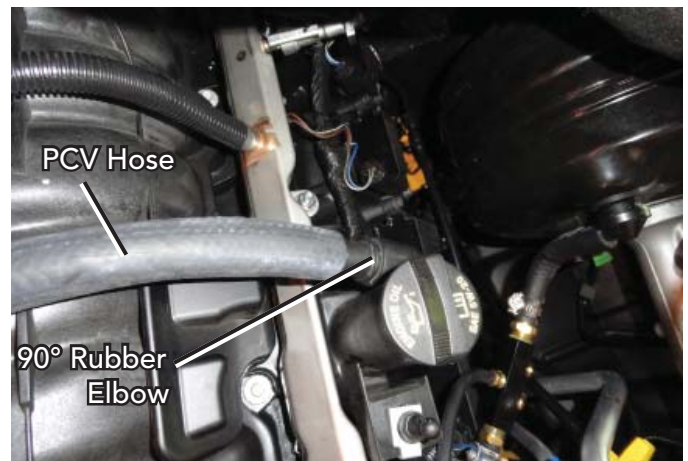
ProCharger Mounting

✓ **Tech Tip:** Factory wiring harness along passenger side inner fender may need to be relocated to provide clearance for air filter.

- 4 Install the billet 4-3.5" reducer in the opposite end of the rubber 45° elbow. Secure the reducer to the elbow using the 4" hose clamp. Install the air filter onto the reducer, securing it with the supplied #56 clamp.
- 5 Install the air filter assembly onto the blower, securing it with the supplied #56 hose clamp. Connect the PCV hose to the $\frac{5}{8}$ " connector on the air filter elbow.
- 6 Replace the factory PCV hose with the supplied $\frac{5}{8}$ " hose. Re-use the 90° rubber elbow from the factory PCV hose and install the $\frac{3}{4}$ " x $\frac{5}{8}$ " straight plastic reducer barb into the 90° PCV elbow. Connect the open end of the supplied $\frac{5}{8}$ " hose into the other end of the reducer.



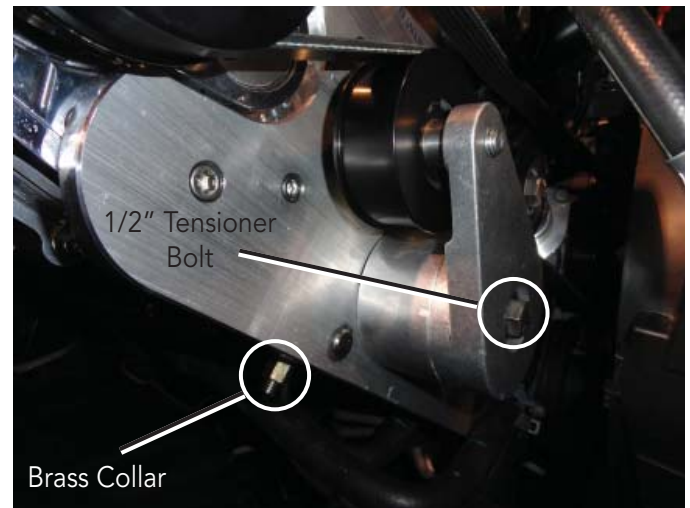
PCV Connection Location



PCV Hose & Elbow

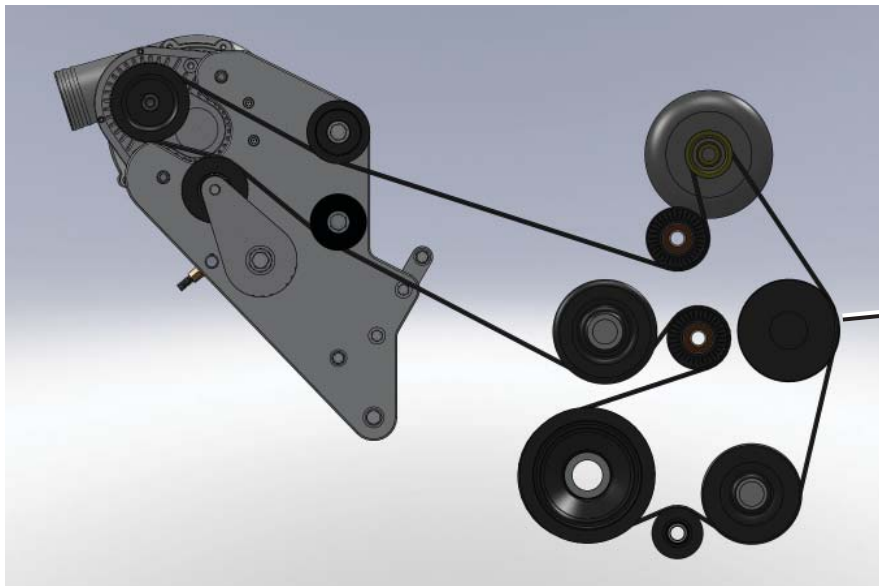
Warning: Do not attempt to adjust the idler pulley without loosening the brass lock nut or damage will occur!

- 7 Loosen the tensioner by first loosening the 1/2" bolt located on the front of the tensioner with a 3/4" socket. Loosen the jackscrew mounting bolt located in the back of the main bracket assembly with a 9/16" wrench. Loosen the tensioner by rotating the brass collar on the bottom of the bracket assembly clockwise.



Tensioner Assembly

- 8 Install belt per schematic.



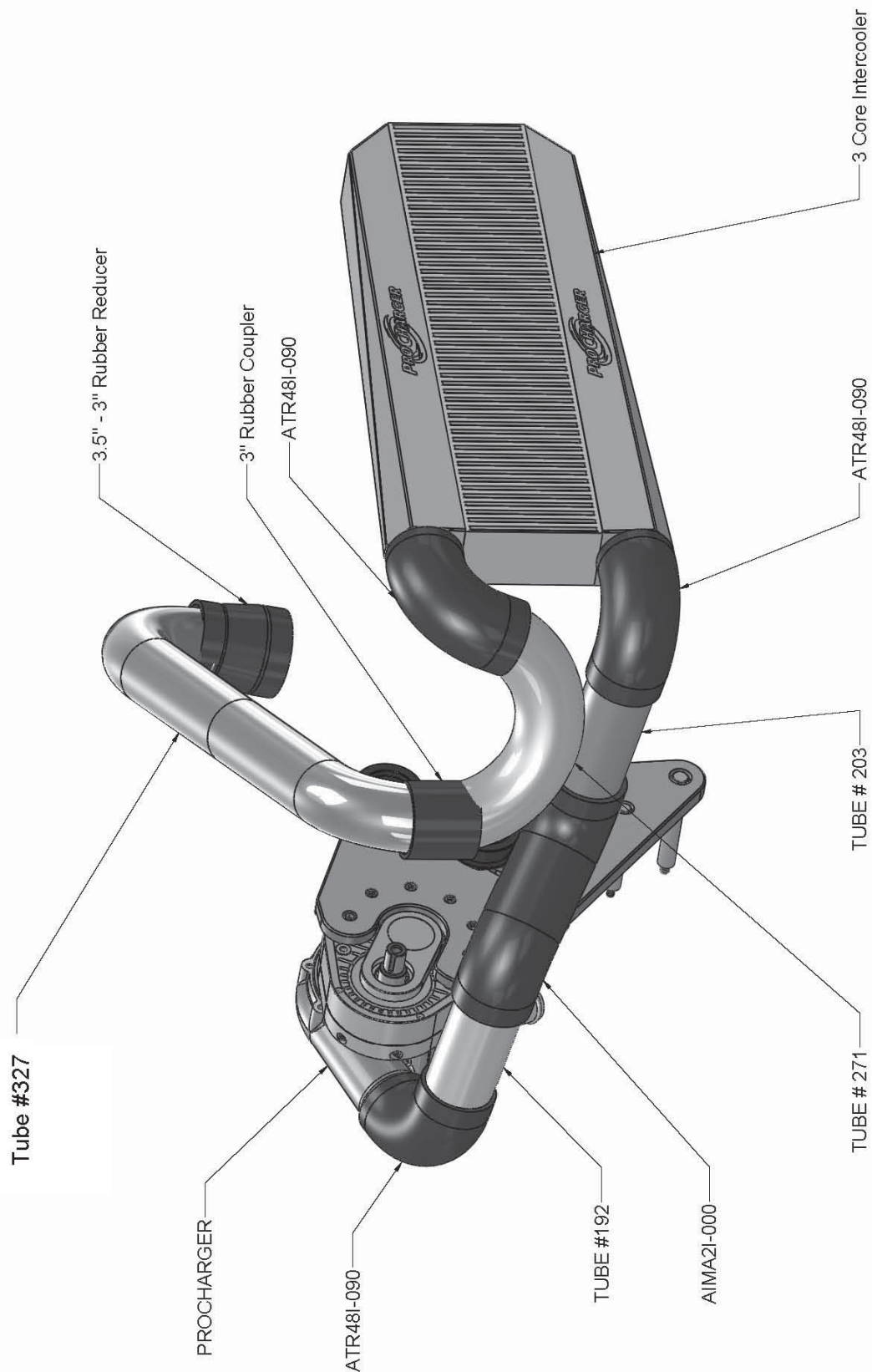
Belt Routing Schematic

- 9 Tighten the belt by rotating the brass collar counter clockwise until the first set of etched marks on the tensioner body align. Tighten the front and rear tensioner bolts to secure the tensioner into place.

Warning: Do not attempt to adjust the idler pulley without loosening the 1/2" tensioner bolt and 9/16" jackscrew mounting bolt or damage will occur!



Proper Tensioner Position
(View From Below)



INTERCOOLER SCHEMATIC

INTERCOOLER TUBING INSTALLATION

Warning: *Inspect the inside of each tube for any foreign debris. Remove any debris from the interior of the tubes before installing.*

Tech Tip: *Leave hose clamps loose until final adjustments have been made unless otherwise instructed.*



Trimmed 90° Rubber Elbow

- 1 Trim 1" off of the short end of (2) 90° rubber elbows as shown.
- 2 Install (1) of the recently cut elbows on the lower inlet of the intercooler as shown. Position it so the elbow points through the radiator core support opening. Use the supplied #52 hose clamp to secure the elbow to the intercooler inlet.
- 3 Install tube #203 into the lower elbow as shown. Use the supplied #52 hose clamp to secure the tube and hose together.

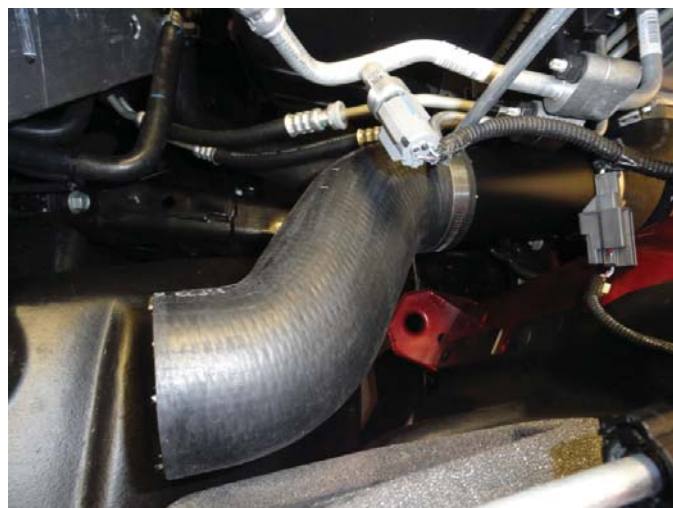


Intercooler Inlet Elbow



Tube #203

- 4 Install the double 45° rubber hose onto tube #203 as shown. Use the supplied #52 hose clamp to secure the tubes together.
- 5 Install surge tube #192 onto the double 45° rubber hose as shown. Secure both tubes together using the supplied #52 hose clamp.
- 6 Install the un-trimmed rubber elbow onto surge tube #192 and connect it to the outlet of the supercharger as shown. Secure both tubes together using (2) supplied #52 hose clamps.



Double 45° Rubber Hose



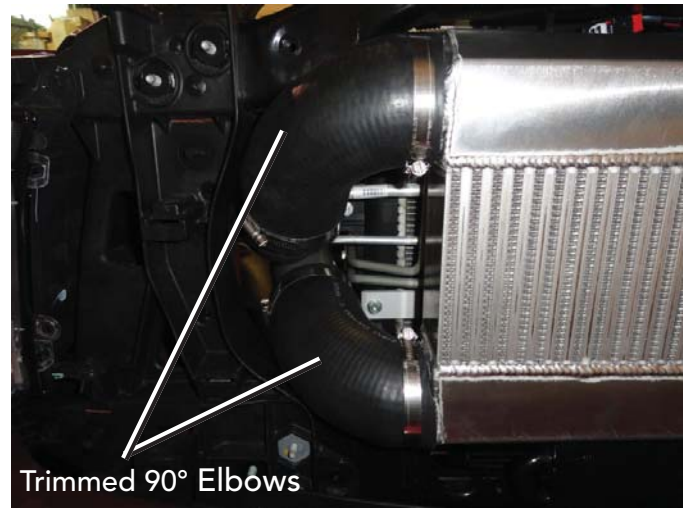
Surge Tube #192



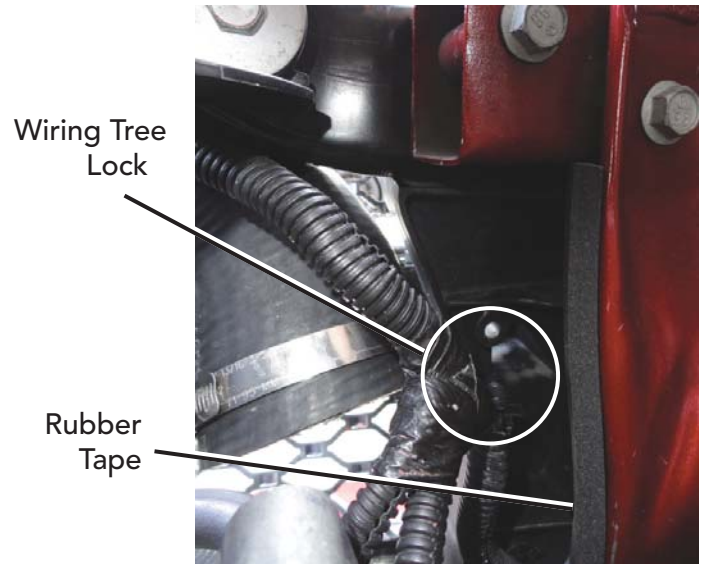
Rubber Elbow

Intercooler Tubing

- 7 Tighten all hose clamps installed up to this point.
- 8 Install the remaining trimmed 90° elbow onto the discharge of the intercooler as shown. Secure the elbow using the supplied #52 hose clamp.
- 9 Remove the A/C pressure switch wiring tree lock from the radiator core support to allow for proper installation of tube #271. Place rubber tape onto the core support as shown for vibration reduction.
- 10 Install tube #271 onto the 90° rubber elbow as shown. Secure the tube using the supplied #52 hose clamp.



Intercooler Discharge Elbow



Wiring Tree Lock & Rubber Tape

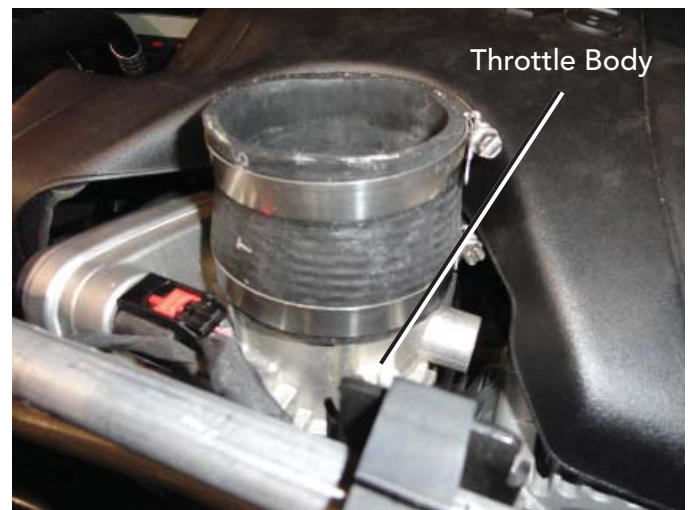


Tube #271

- 11 Install the 3" rubber coupler onto tube #271 as shown. Secure the coupler using the supplied #52 hose clamp.
- 12 Trim 1/2" from each end of the 3.5" to 3" rubber reducer. Install the trimmed reducer onto the throttle body as shown. Secure the reducer using the supplied #56 hose clamp.



Rubber Coupler



3.5" to 3" Reducer

- 13 Install the supplied rubber grommet onto the hole located on tube #327. Install the intake air temp sensor into the rubber grommet. Use a small amount of WD-40 or silicon paste on the inside diameter of the rubber grommet to assist installation of the sensor.



IAT Sensor Installed in Grommet
(2009-2012)

Intercooler Tubing

- 15** Install the intake tube connecting the throttle body to the intercooler tubing. Secure the tube with (2) supplied #52 hose clamps.



Intake Tube Installed

- 16** Reconnect the intake air temp sensor.

✓ **Tech Tip:** Wiring harness may need to be unclipped from bracket to allow connection to re-installed air temp sensor.

- 17** Tighten all remaining hose clamps installed up to this point.



IAT Sensor Connector

ANTI-SURGE SYSTEM

- 1 Assemble the anti-surge system as shown. Use the supplied #24 hose clamps to secure the ProFlow Valve to the air filter and surge hose.
- 2 Install the ProFlow Assembly onto the surge tube as pictured. Secure the assembly using the supplied #24 hose clamp.
- 3 Assemble the supplied vacuum manifold as shown. Install the (2) 3/8" barbs into the vacuum manifold ends. Install the (2) 3/16" plugs. Install (1) 3/16" barb.



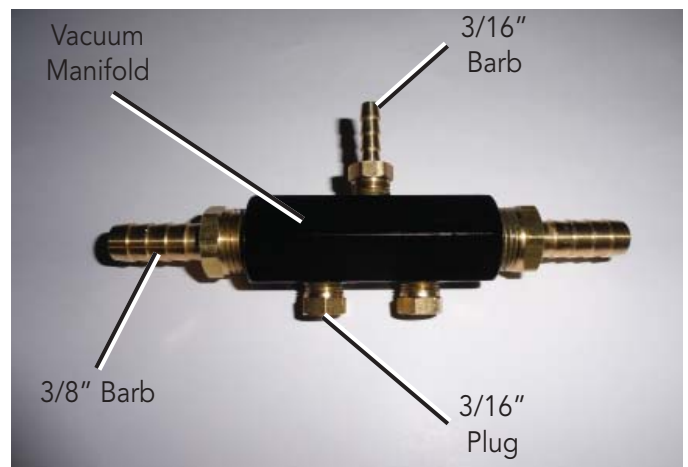
Tech Tip: Additional 3/16" barbs are included to allow for additional vacuum connections.



ProFlow Assembly



ProFlow Assembly Installed



Vacuum Manifold

Anti-Surge System

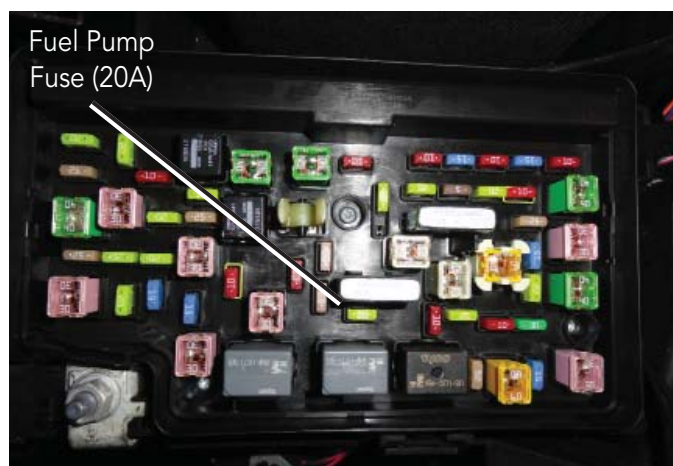
- 4 Using a utility knife or razor blade, remove a 3" long section from the vacuum hose attached to the brake booster.
 - 5 Install the supplied vacuum manifold and securely clamp in place using the supplied #6 hose clamps, making sure that there are no vacuum leaks at the splice points.
 - 6 Attach the 3/16" vacuum hose to one of the 3/16" barb fittings on the installed vacuum manifold, then route and attach to the ProFlow anti-surge valve vacuum port if not already done.
- Warning:** Ensure the vacuum line is free of kinks and is not pinched by zip ties or the ProFlow will be inoperable, which may result in damage to the Pro-Charger from surging. 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

FUEL SYSTEM

- 1 Remove the fuel cap.
- 2 Disconnect the battery.
- 3 Remove the M22 fuse from the fuse block located in the engine compartment next to the battery.
- 4 Reconnect the battery.
- 5 Crank the engine to depressurize the fuel rails.
- 6 Disconnect the battery. Leave the battery disconnected for the remainder of the installation.



2009-2012 Fuel Pump Fuse



2013+ Fuel Pump Fuse



Fuel Rail (Passenger's Side)

- 7 Unclip the wiring harnesses from each injector by pulling back on the red tab. Remove the (3) 10mm bolts securing the fuel rails to the manifold. Remove the plastic engine cover retainer stud on the passenger's side using a 13mm wrench or socket. Pull the fuel rails up off of the manifold to gain access to the fuel
- 8 Remove the fuel injector retaining clips from the injectors and rails. Remove the injectors by pulling them straight out of the rails.
- 9 Install the new injectors, followed by the factory retaining clips.

✓ **Tech Tip:** Lubricate the o-rings of the new fuel injectors with synthetic o-ring lube prior to installation to prevent damage to the o-rings.

- 10 Install the supplied 1/4-20 full thread stud into the manifold where the factory plastic engine cover retainer was removed. Install the supplied 3/4" x .450" spacers prior to installing the fuel rail. Push the injector and fuel rail assembly into place, and secure the fuel rails using the supplied 1/4-20 x 1-1/2" bolts and washers. Install the supplied engine cover retainer and 3/4" x .250" spacer onto the stud. Re-install each wiring harness to each injector.



Fuel Rail Installed (Passenger's Side)

MAP SENSOR INSTALLATION

- 1 Remove the factory MAP sensor located on the passenger's side rear of the intake manifold. Remove the electrical harness by sliding the red retaining tab back and disconnecting it from the sensor. Remove the factory map sensor by twisting it counter-clockwise.
- 2 Install the o-ring onto the adapter. Install the supplied MAP sensor adapter into the intake manifold.
- 3 Install the supplied 2-bar MAP sensor into the adapter, securing it with the (2) supplied 10-24 x 1/2" SHCS. Re-connect the electrical harness.



Factory MAP Sensor



2-Bar MAP Sensor & Adapter Installed

FINISHING

✓ **Tech Tip:** The following steps are for trucks which have grill shutters installed. Skip to step 4 if your truck is not equipped with this option.

1 Remove the electric motor from the shutter assembly by pulling up and removing the shutter motor cover and removing the (2) screws with a 10mm deep socket. Carefully pull the motor out of the assembly.

2 The motor is encased by (2) plastic halves which are retained by 3 tabs. Use a small flat blade screwdriver to compress the tabs and remove the motor.

✓ **Tech Tip:** Be careful not to allow the rotating arm on the electric motor to fall out or be removed from the motor.

3 Mount the motor to the supplied bracket using the (3) supplied 8-32 screws and washers and tighten with a 5/32" allen. Mount the bracket under the intercooler and secure it to the vehicles tapped hole using the supplied M8 screw. Plug in the motor to the factory harness and zip tie the harness out of the way.



Remove Shutter Motor Cover and Screws



Shutter Motor Mounted To Bracket



Shutter Motor Mounted To Vehicle

- 4 If equipped, the inner air deflectors must be removed before re-installing the grill. Remove the (10) 8mm screws from the upper grill support. Remove the support to allow access to the clips that retain the air deflectors. Unclip both of the deflectors from the grill, then re-install the support, securing with the factory hardware. Re-install the grill.
- 5 Reconnect the battery.
- 6 Refill the cooling system. Ensure all air pockets have been bled from the system.
- 7 Re-install the engine cover.
- 8 Check all of the fluid levels.
- 9 Verify you are only using **91 octane** or higher fuel.
- 10 Start your vehicle and check for fuel



Prepare to Remove Air Deflectors (if equipped) by Removing the Upper Grill



Unclip & Remove Both Grill Air Deflectors



CONGRATULATIONS! YOU HAVE COMPLETED THE INSTALLATION OF YOUR NEW PROCHARGER SUPERCHARGER SYSTEM. FOR FULL SYSTEMS, TUNING INSTRUCTIONS ARE ON THE FOLLOWING PAGE. IF YOU DO NOT HAVE A FULL SYSTEM, ADDITIONAL TUNING WILL BE REQUIRED BEFORE STARTING THE VEHICLE. 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 drain plug after every oil change. Drain oil by removing the drain plug. Clean off drain plug before re-installing.

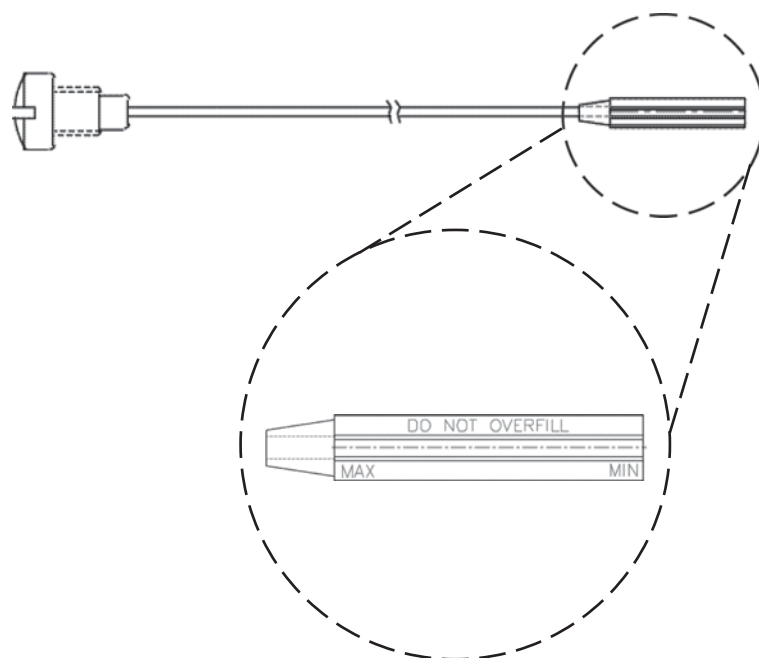
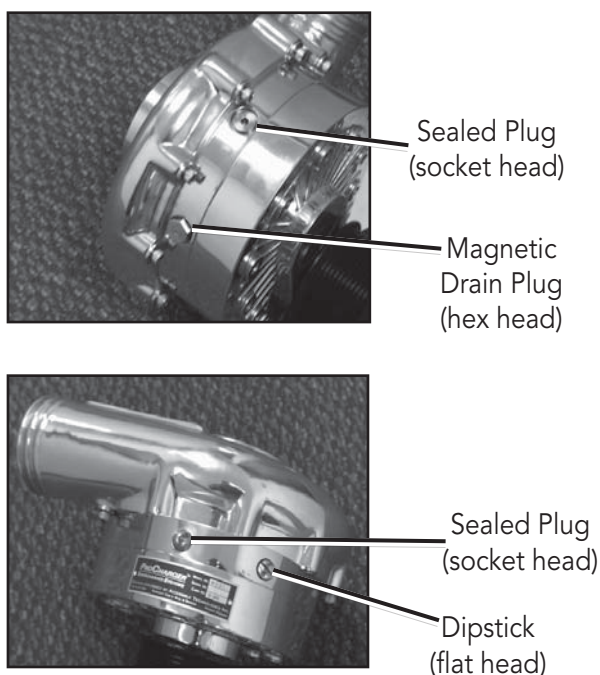
ProCharger Oil Level

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 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.



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**



Accessible Technologies, Inc.
14801 W. 114th Terrace
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