2019+ Dodge Ram 1500
High Output Intercooled System
Installation Guide

PROCHARGER®
SUPERCHARGER SYSTEMS

The **ULTIMATE** Power Adder™

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Introduction

Congratulations on purchasing your ProCharger® 2019+ Dodge RAM 1500 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.

Required Tools and Supplies

- ⅜" Socket Set, standard & metric
- Open End Wrench Set, standard & metric
- ⅜" 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.*

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

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

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

Gauges should be of a type that can be read from the cockpit while performing a wide-open throttle road test. Cockpit or hood-mounted gauges are preferable. In order to obtain usable readings, the gauges should measure pressure at the intake manifold and fuel rail. IF VEHICLE DOES NOT MAINTAIN PROPER FUEL PRESSURE (50-65 PSI), DECREASE THROTTLE APPLICATION IMMEDIATELY. In some cases, extra vehicle modifications can strain the stock fuel pump. If your vehicle has difficulty retaining adequate fuel pressure, contact ATI ProCharger about the availability of an upgraded fuel system.

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

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

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TUNING IS REQUIRED WHEN INSTALLING YOUR PROCHARGER SYSTEM. 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.

Intake Filter Assembly

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.

IAT Sensor

3. Pull up on the air inlet assembly to remove it from the air box cradle.

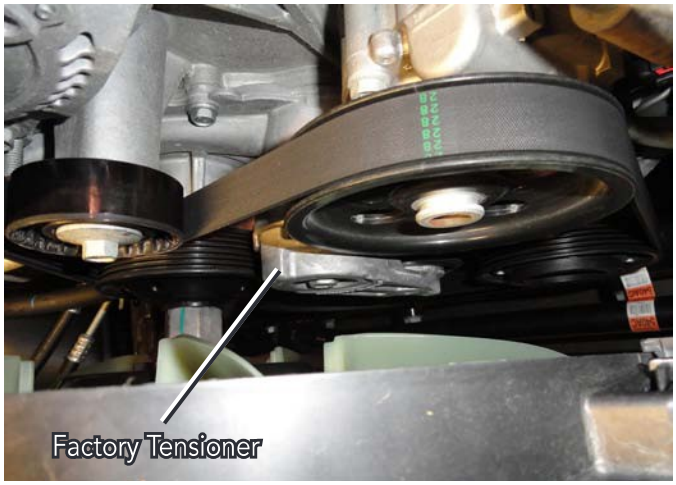
4. Use a 13mm socket to remove the (4) upper bolts on the air box cradle. Use an 8mm socket to remove the (2) screws retaining the inner wheel well.

Air Box Cradle

5 Remove the (2) lower 13mm bolts on the air box cradle.

Air Box Cradle Lower Bolts

6 Using a ⅜" 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.



Factory Tensioner

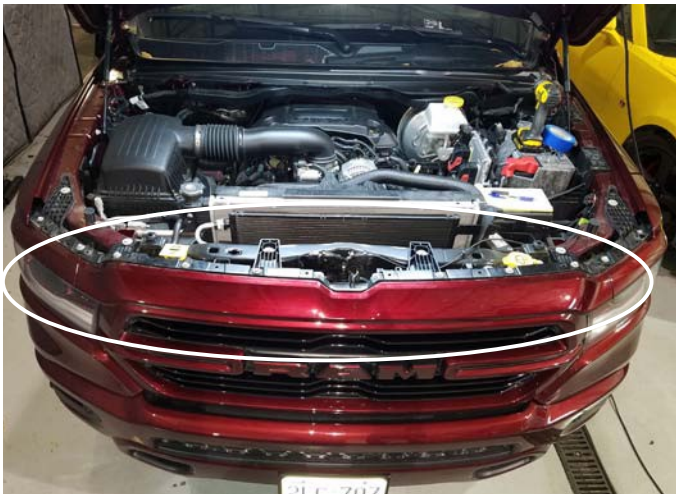
7 Remove the engine cover by pulling up on either side of the cover so it pops out of the plastic ball studs. Then pull the cover towards the front of the vehicle to finish removal.

Engine Cover

8 Remove the radiator shroud from the vehicle by removing the (12) push-pins.

Remove Radiator Shroud

9 Remove the top grille cover using a 10mm to remove the (12) bolts.



Remove Top Grille Cover

10 **Once all (8) bolts and (2) push pins are removed slide the top grille cover out as shown and set aside.**

Slide Top Grille Cover Out

11 If equipped remove the fender flares from both the driver's side and passenger's side of the vehicle. Begin by pulling outward be careful not to break any clips.

Remove Fender Flares Both Sides

12 Pull back the inner wheel liner to access the back of the bumper moulding. Remove the (1) 10mm bolt from the back side of the bumper moulding.

13 Pull out the bumper moulding as shown.

Tech Tip: *This was very difficult to break loose from the vehicle. As long as the (1) bolt is remove the moulding should pull outward.*

Pull Out Bumper Moudling

14 Remove the (3) 10mm bolts on both the driver's side and passenger's side. They are located just under the headlight and next to the grille.

Remove (3) Bolts

15 If equipped unplug the front camera from the vehicle.

Unplug Front Camera

16 Remove the (4) bolts securing the grille to the core support.

Remove Active Grille Shutters

17 Lift up the top mounts of the grille and remove the assembly from the vehicle as shown.

Remove Grille Assy

18 Remove the active grille shutters from the vehicle using a 10mm to remove the (4) bolts shown.

Remove Active Grille Shutters

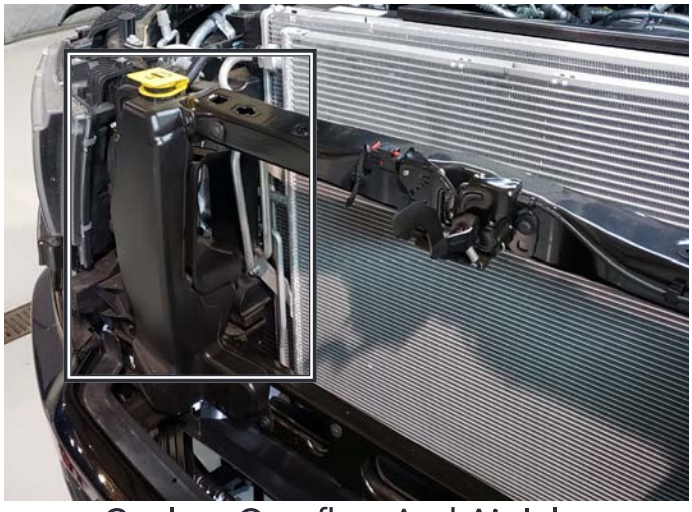
19 Unplug the active grille shutters.

20 Unclip the harness from the grill shutters.

Unplug Active Grille Shutters

21 Using a 10mm remove the (1) bolt securing the horns to the core support. Unplug and set aside.

22 Remove the coolant overflow tank and the plastic air intake tube as shown below.



Coolant Overflow And Air Inlet

Horn Removal

Crank Pulley

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

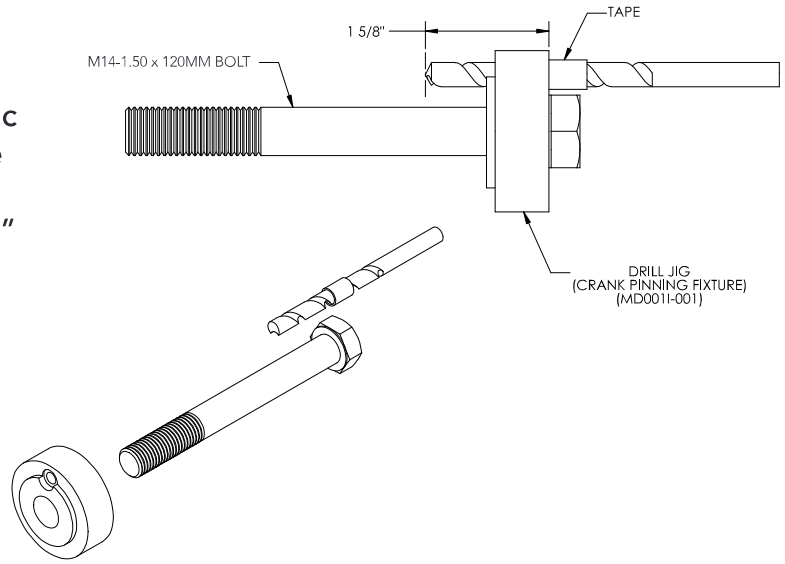
1. Remove the 21mm crank pulley bolt.

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.

Factory Crank Pulley and Bolt

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

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.

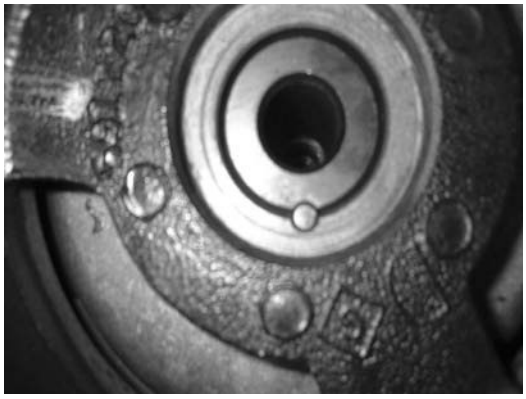


Crankshaft and Harmonic Balancer Drill Jig

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

Drill Jig Installed

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.



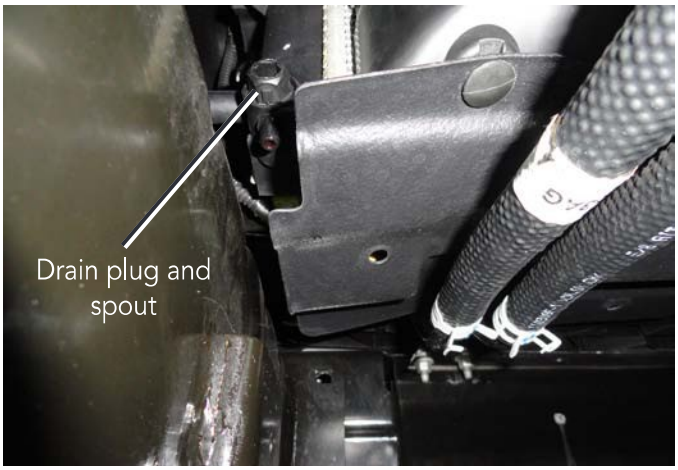
Crank Pulley Pinned to Crankshaft

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.

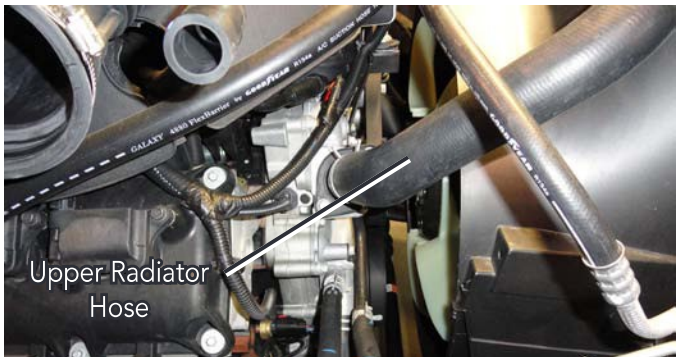


Radiator Drain Plug

Coolant Drain Hose

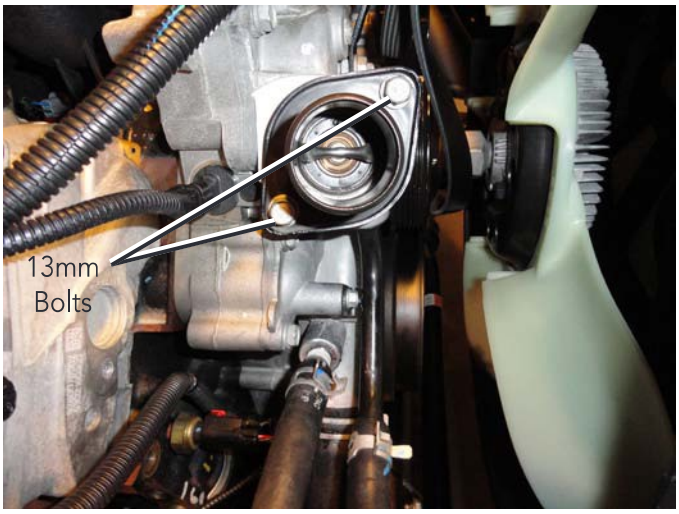
4. Remove the upper radiator hose.

5. With a pair of pliers remove the 5/8"coolant hose attached to the thermostat housing.



Upper Radiator Hose

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



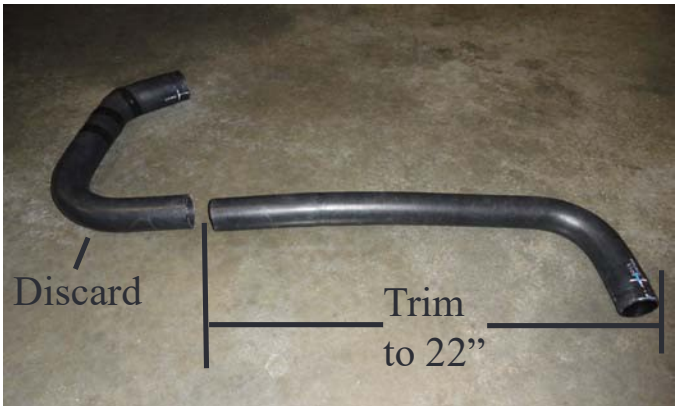
Remove Factory Thermostat Housing

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

8 Install the supplied coolant hose reducer using the supplied #32 hose clamp.

9 Cut the factory upper coolant hose as shown below.

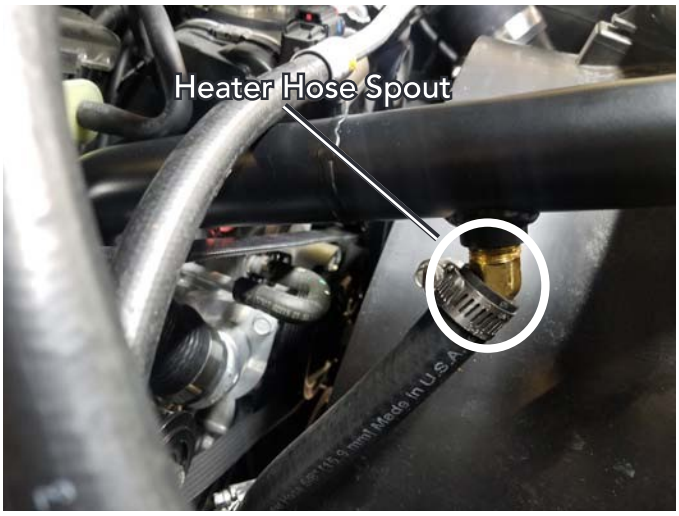

Install Billet Thermostat Housing



Trimmed Upper Coolant Hose

Coolant Hose Reducer

10 Install the supplied 45 degree brass barb fitting into the coolant transfer tube supplied using thread sealant. Tighten the fitting.



Transfer Tube Installed

11 Install the supplied coolant transfer tube into the rubber reducer on the new thermostat housing using the supplied #24 hose clamp.

12 Reinstall the upper radiator hose using the factory hose clamp at the radiator neck. Slide the hose over the coolant transfer tube using the supplied #24 hose clamp.

Upper Coolant Hose Installed

13 Insert the supplied 5/8"-5/8" barb fitting into the 5/8" rubber coolant hose that was removed from the factory thermostat housing. Slide the supplied 5/8" coolant hose onto the 5/8" barb fitting and over the 45 degree brass fitting located on the coolant transfer tube. Secure all connections with the supplied #8 hose clamps.

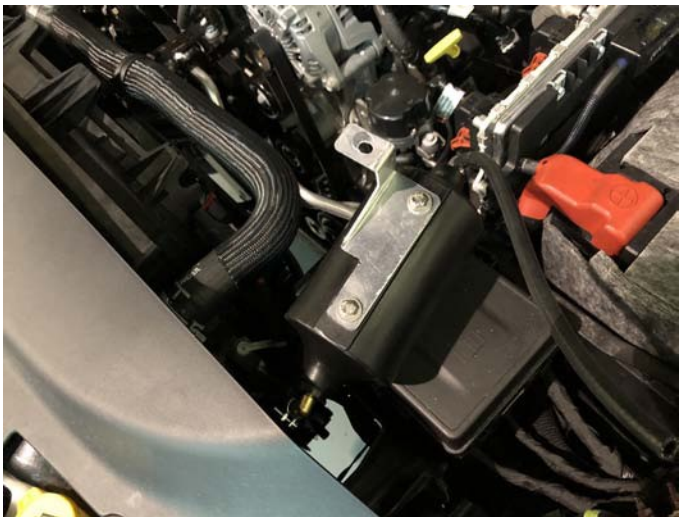

5/8" Hose Installed

14 Use a 13mm socket to remove the drivers side radiator bolt shown in the picture to the right.

Remove Radiator Bolt

15 Mount the supplied bracket to the supplied coolant bottle as shown using the 1/4"-20 x 1/2" bolts with washers.

16 Install the coolant bottle into the vehicle as shown (smaller 1/4" vent line on top) using the factory hardware previously removed.



Bracket Mounted onto Bottle

17 Attach the 3/8" supplied hose to the bottom of bottle to the radiator overflow nipple. Secure the hose to the fan shroud and used the supplied hose clamps on the fittings. Route the 1/4" vent hose down as shown.

Overflow Hose Installed

Coolant Bottle Installed

18 Some models have a small coolant hose coming off of the top of the thermostat housing. Using a pair of pliers remove the hose from the fitting and remove the fitting. With the supplied 45° barb fitting apply teflon tape to the threads and screw it into the housing point it down as shown to the bottom right. This will allow room for belt routing.

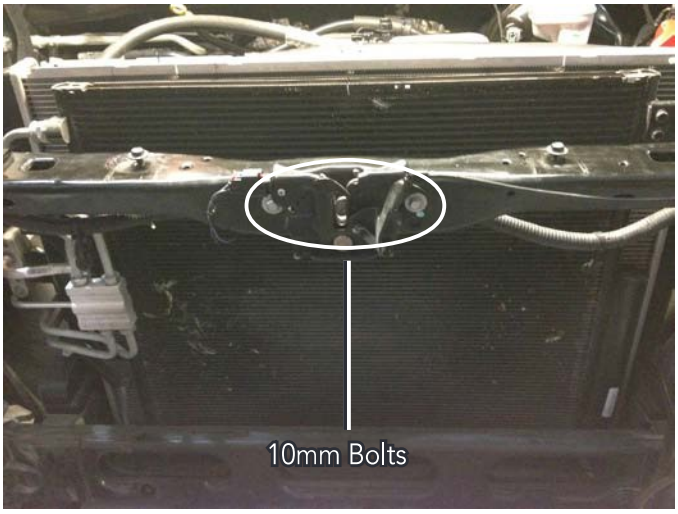
Tech Tip: *Make sure to position hose clamps away from the belt.*

Coolant Hose Fitting

45° Hose Fitting Installed

Intercooler Installation

1. Mark the location of the hood latch and remove the (2) 10mm bolts retaining the hood latch bracket.



Hood Latch Bracket

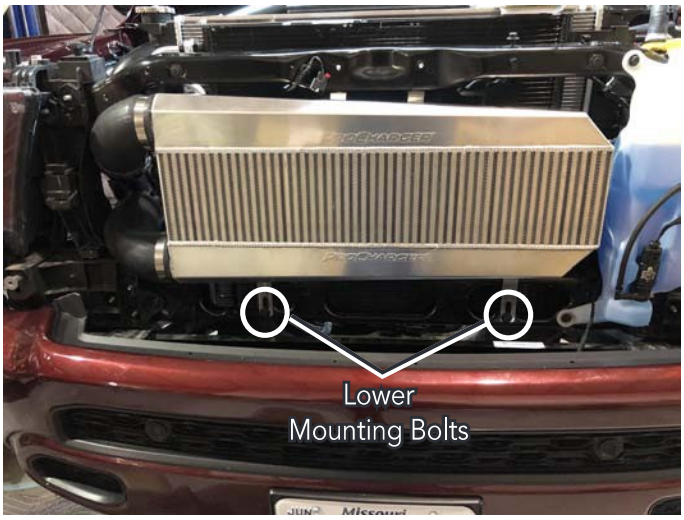
2. Using a 10mm socket, install the upper intercooler brackets as shown with the M6-1.00 x 55mm bolts, and washers (install the bolts from the back side). Install the hood latch on the front side with the washers and lock nuts. Leave the brackets loose to help with installation of the intercooler.


Upper Brackets Installed

3. Using a 9/16" wrench, fasten the intercooler to the upper brackets using the supplied (2) 3/8"x 3/4" bolts and washers.

4. Using a 1/2" wrench, fasten the lower intercooler brackets to the vehicle using the supplied (2) 5/16-18 x 1" bolts and washers.

5. Check to be sure the intercooler is level and the hood latch is lined up to the marks made earlier. Tighten all hardware



Intercooler Installed

6 Unclip the wiring harness on the drivers side radiator support shown to the right.

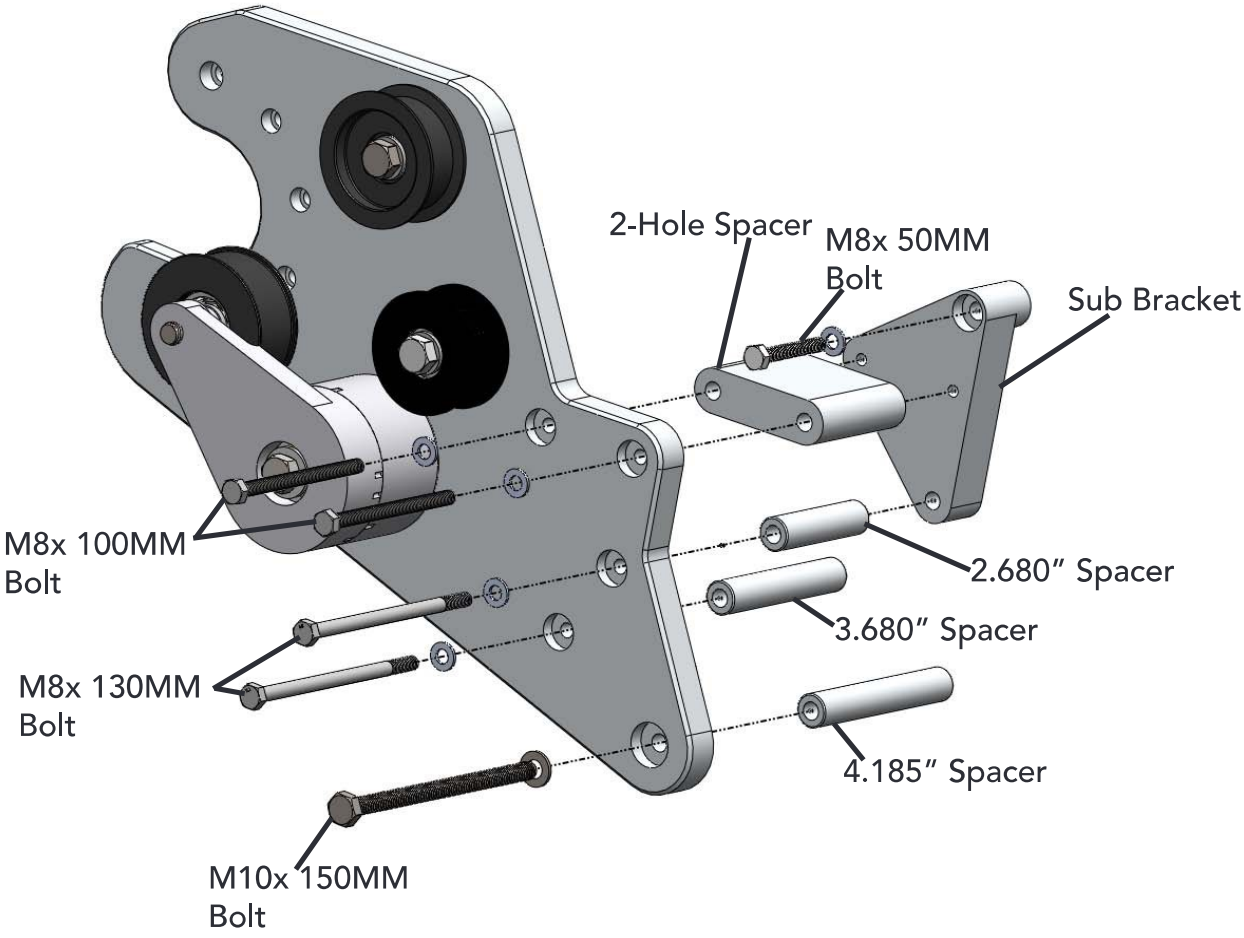
Unclip Harness

7 Position the horns as shown to the right, use the supplied self tapping screw (in the hole where the harness clip was) to mount the horns to the radiator support.

8 Plug the harness into the horns.

Horns Mounted

Main Bracket Installation



Bracket Assembly

1. Prior to installing the main bracket, the sub-bracket and two hole spacer must be assembled. Loosely mount the sub bracket and the 2-hole spacer to the main bracket using the (2) M8 x 100mm bolts and washers.

Tech Tip: *If replacing the spark plugs now would be the perfect opportunity.*

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.*

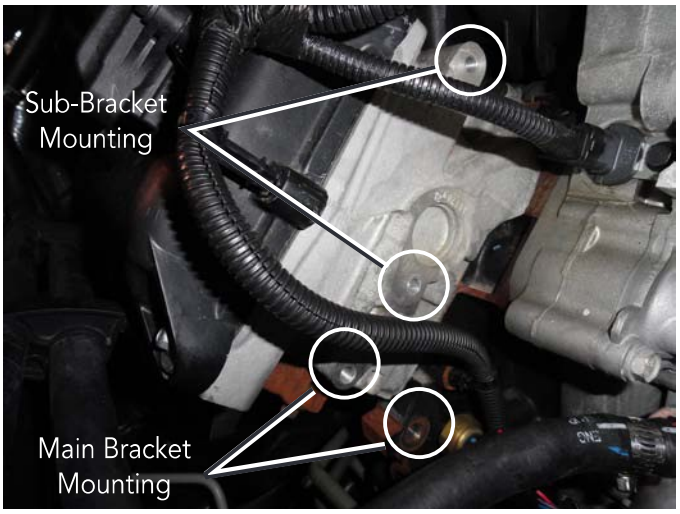
✓ ***Tech Tip:*** *Some models are equipped with a ground wire attached to the top sub-bracket mounting hole. Remove the lock-nut with a 10mm and remove the bolt with a 13mm. With an 8mm remove the corner valve cover bolt. Flatten out the ground strap and slide it between the valve cover and the cylinder head. Insert the bolt back into the valve cover and through the ground strap. Secure with an 8mm.*

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), washer and 2.680" spacer at the remaining open hole of the main bracket connecting the main bracket to the cylinder head through the sub bracket.

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.

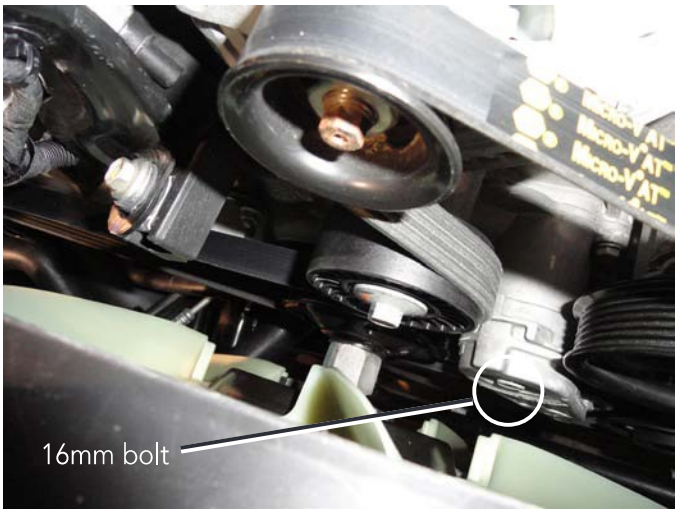


Bracket Assembly Mounting Locations


Ground Attached To Valvecover

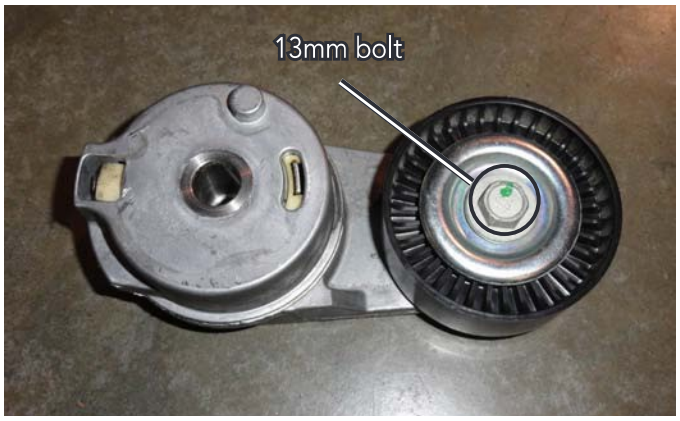

Bracket Assembly Mounting

7 Remove the bolt retaining the factory belt tensioner with a 16mm socket.



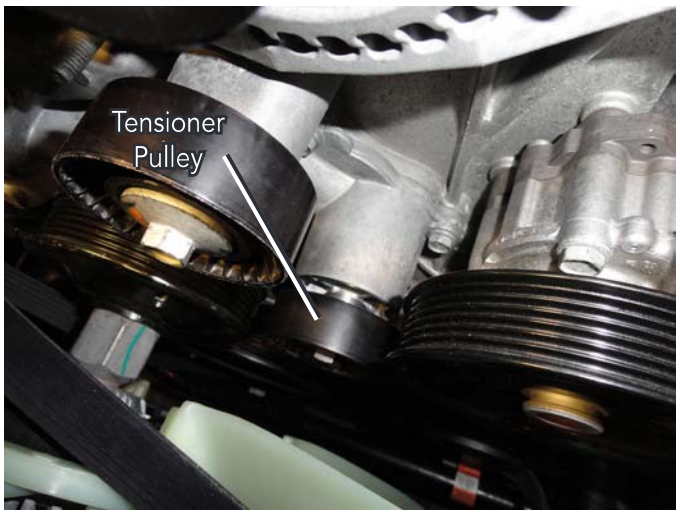
Factory Belt Tensioner

8 Remove the bolt retaining the tensioner pulley with a 13mm socket.



Tensioner Pulley Bolt

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.



Installed Tensioner Pulley

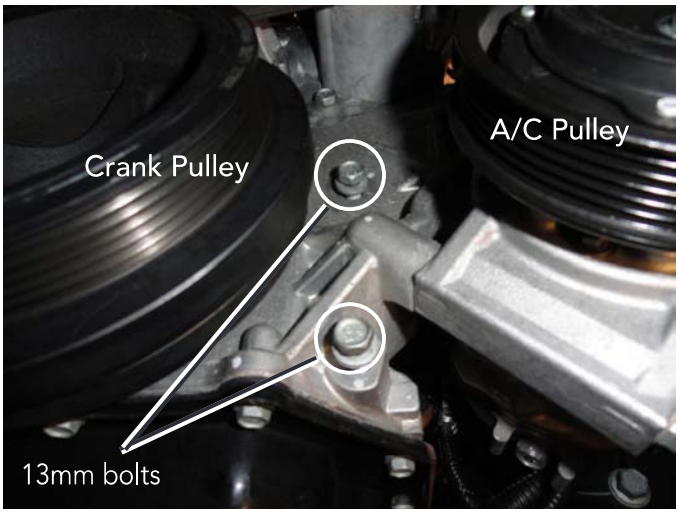
10 Using a 13mm remove the bolt and idler pulley below the alternator as shown to the right.

Remove Idler Pulley

11 Replace the idler removed in the previous step with the supplied smooth steel idler (concave surface towards engine). Secure with the factory bolt and a 13mm.

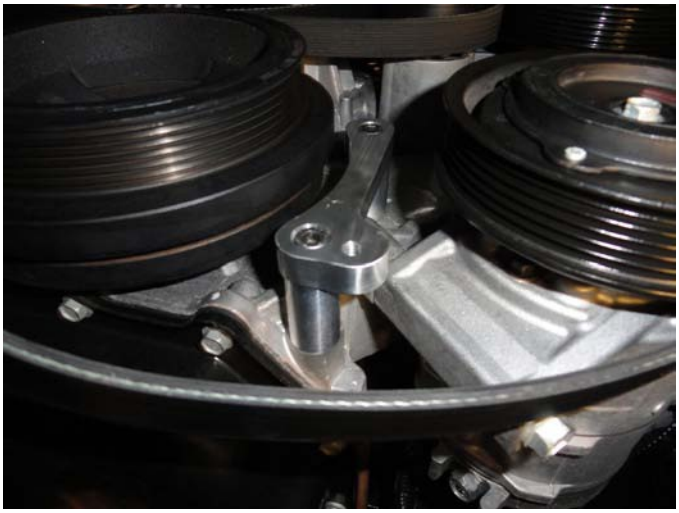
Idler Pulley Replaced

12 Remove the (2) 13mm bolts from the front cover.



Front Cover Bolts

13 Install the idler bracket using the (2) supplied M8 x 130mm SHCS and 1.5" tube spacers.


Idler Bracket Installed

14 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.


Idler Pulley Installed

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.

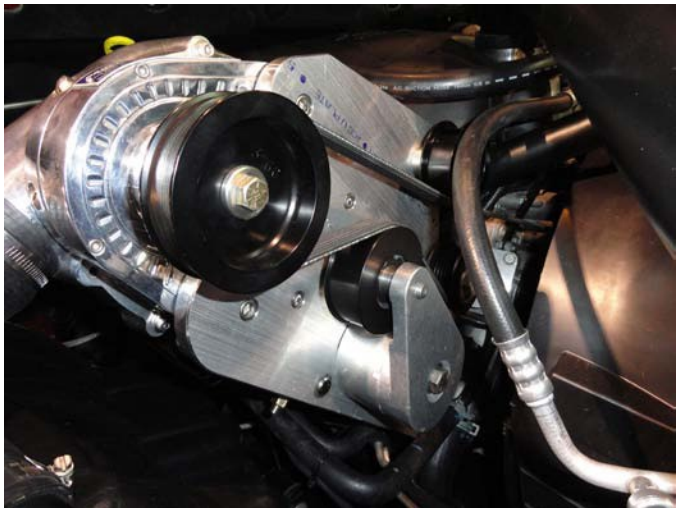
2. Place the ProCharger onto the main bracket and screw in (4) 5/16" and (2) 3/8" SHCS through the main bracket and into the ProCharger. Tighten all screws.

3. Drill an 11/16" hole in the back side of the 45° rubber elbow (before the bend), as shown. Install the 3/4" 90° plastic barb.

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

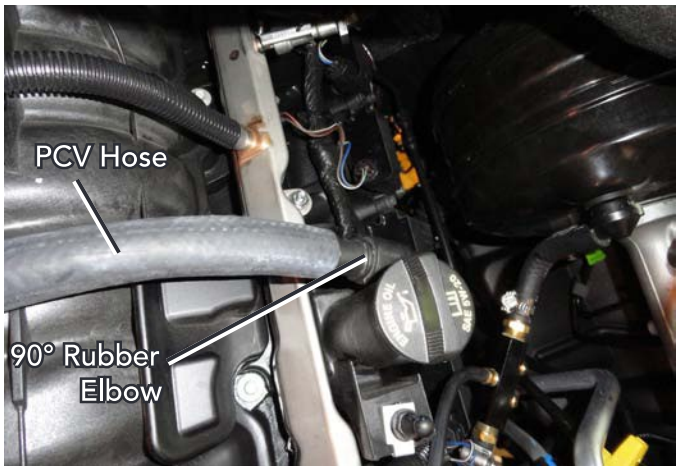
4. Slide tube #384 into the 45° rubber elbow. Secure with a #64 hose clamp. Install the air filter onto tube #384 secure with the provided hose clamp.

5. Install the air filter assembly onto the blower, securing it with the supplied #56 hose clamp. Connect the PCV hose to the 3/4" connector on the air filter elbow.



ProCharger Mounting

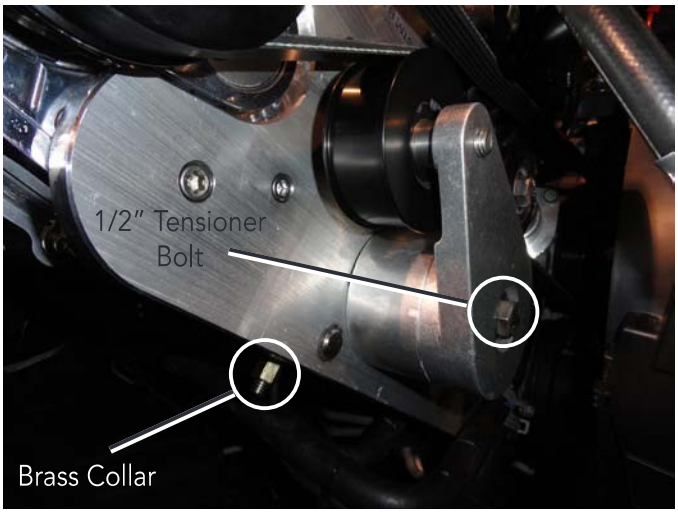
PCV Connection Location



PCV Hose & Elbow

6 Replace the factory PCV hose with the supplied 3/4" hose. Re-use the 90° rubber elbow from the factory PCV hose and install the 3/4" straight plastic barb into the 90° PCV elbow. Connect the hose to both 3/4" plastic barbs.

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!*

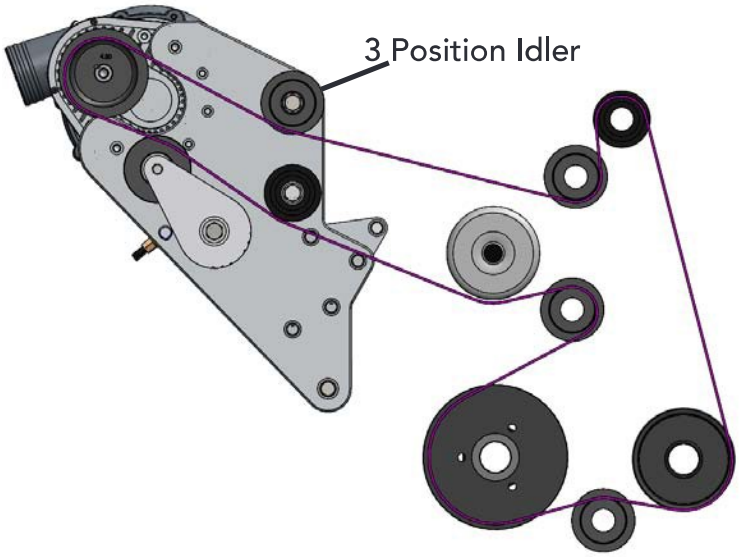


Tensioner Assembly

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.

Tech Tip: *If the belt is too loose/ tight to install, remove the top idler pulley. Mount the belt onto the crank, accessories, blower and tensioner pulleys. Slide the idler pulley over the belt and into place. There are (3) locations for the idler pulley to mount to. Use red thread locker on the bolt before tightening*

8 Install belt per schematic.

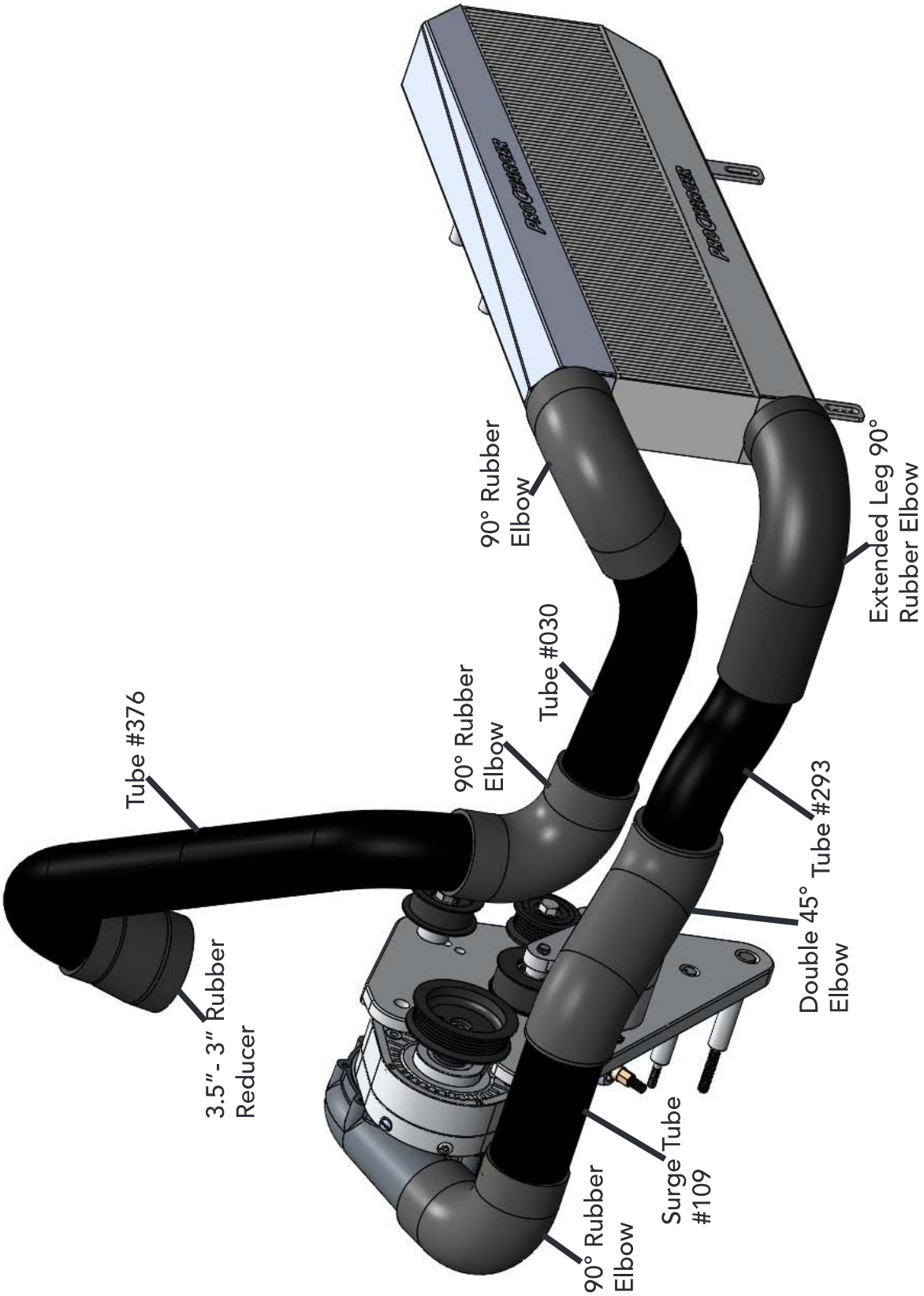


Belt Routing Schematic

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.

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.*

Tech Tip: *There are 3 90° rubber hoses, two have 1" trimmed off one end and one has 2" trimmed off one end.*

1. Insert the short leg of the extended leg 90° elbow onto the lower inlet of the intercooler.

2. Insert tube #293 into the end of the extended leg 90° rubber elbow followed by the double 45° rubber elbow.

3. Insert surge tube #109 into the double 45° elbow. The surge bung will need to go towards the supercharger.

4. Finish the connection to the supercharger by sliding the 1" trimmed side of a 90° rubber elbow onto the open end of surge tube #109.

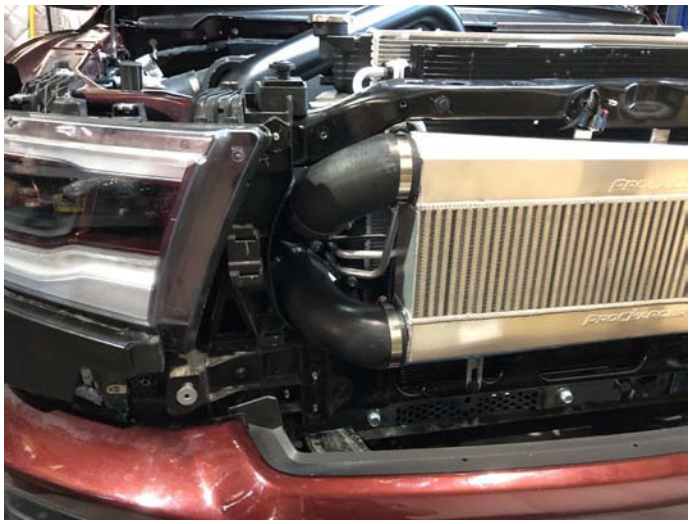
5. Position the tubing and secure with #52 hose clamps.

Tubing Into Intercooler

Tube #293 Installed

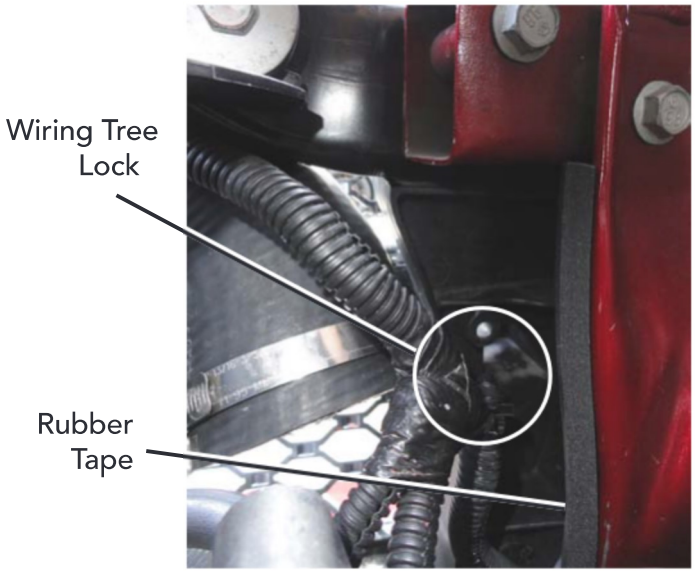
Tubing To Supercharger Installed

6 Install the short end of the 1" trimmed 90° rubber elbow onto the outlet of the intercooler.



Intercooler Outlet

7 Remove the A/C pressure switch wiring tree lock from the radiator core support to allow for proper installation of tube #030. Place rubber tape onto the core support as shown for vibration reduction.



Wiring Tree Lock & Rubber Tape

8 Insert the short end of tube #030 into the end of the 90° rubber elbow followed by the long end of the remaining 90° rubber elbow.

Tube #030 & 90° Rubber Elbow Installed

9. 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.

3.5" to 3" Reducer

10. Remove the factory air temp sensor from the factory air inlet tube and Install it into the bung on tube #376. Use a small amount of WD-40 or silicon paste on the sensor o-ring to assist installation of the sensor. Note the orientation of the locking tab on the sensor and the notch on the bung. The sensor must be inserted into the bung, then turned clockwise until the sensor locking tab slides over the notch on the bung.


IAT Sensor Locking Tab

11. Install the throttle body tube #376 connecting the throttle body to the intercooler tubing.

12. Position the tubing and secure the connections with #52 hose clamps

13. Reconnect the intake air temp sensor.

Tech Tip: *Wiring harness may need to be unclipped from the throttle body connection to re-installed air temp sensor.*


Throttle Body Tube Installed

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.

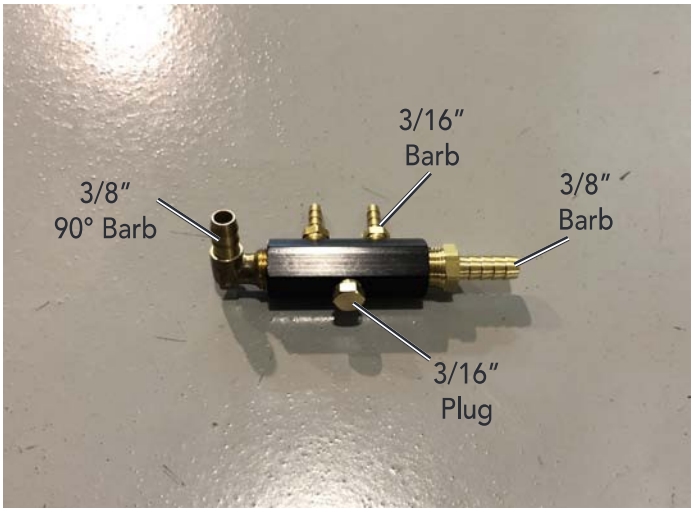
ProFlow Assembly

2. Install the ProFlow Assembly onto the surge tube as pictured. Secure the assembly using the supplied #24 hose clamp.

ProFlow Assembly Installed

3. Assemble the supplied vacuum manifold as shown to the right. Install (1) 3/8" barb into one vacuum manifold ends. Install the 90° 3/8" barb into the other end. 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.*



Vacuum Manifold

4. Locate the plastic vacuum line shown to the right. Unplug the 3/8" rubber hose from the nipple on the intake manifold.

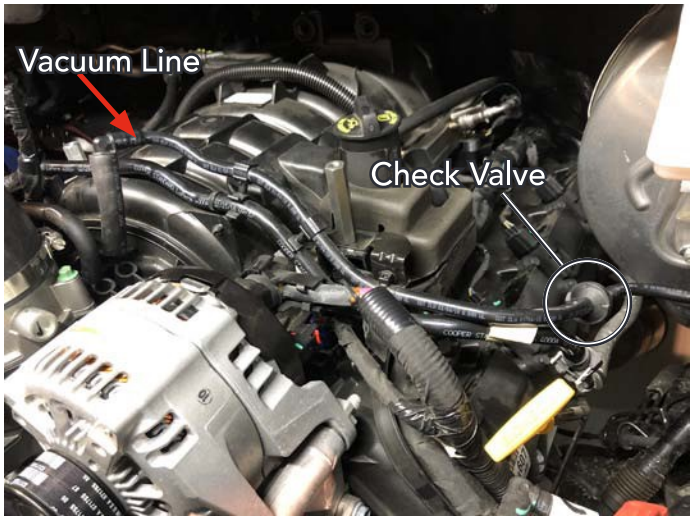
5. Carefully cut the plastic line at the check valve leaving the barb section of the check valve. Remove the vacuum line. DO NOT REMOVE THE ONE WAY CHECK VALVE.

6. Cut a 2" section of supplied 3/8" vacuum hose and install it to the nipple on the intake manifold. Plug the 90° barb fitting on the vacuum block into the section of hose.

7. Plug the remaining section of 3/8" rubber hose into the other end of the vacuum manifold, route the hose to the one way check valve and cut to length. Plug the hose into the check valve. Secure connections with the suppled hose clamps.

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 ProCharger 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.*

8. 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.



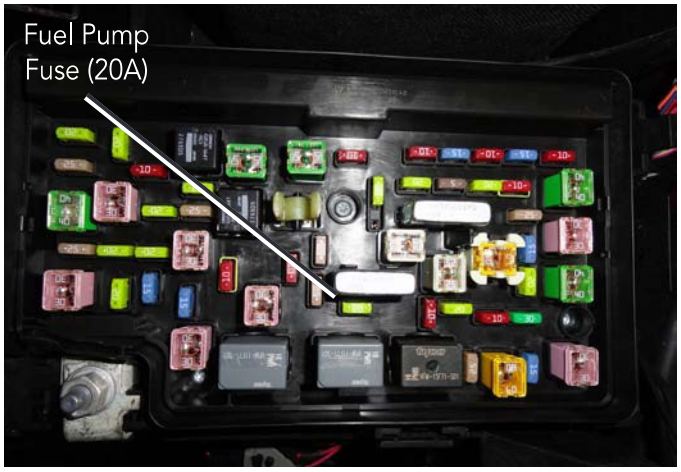
Plastic Vacuum Line


Vacuum Manifold Installed

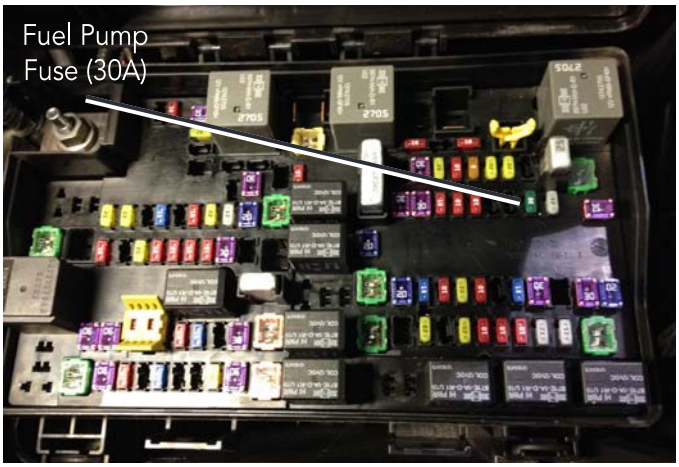
Fuel System

Note: *This section only applies to full systems, which include 39.5 lb/hr fuel injectors. If you do not have a full system, additional fuel system components will be required before starting the vehicle.*

1. Remove the fuel cap.
2. Disconnect the battery.
3. Remove the M22 fuse (2009-2012) or F70 fuse (2013+) 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 (some models with have studs remove with a 4mm) 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 injectors.

8. Remove the fuel injector retaining clips from the injectors and rails. Remove the injectors by pulling them straight out of the rails.

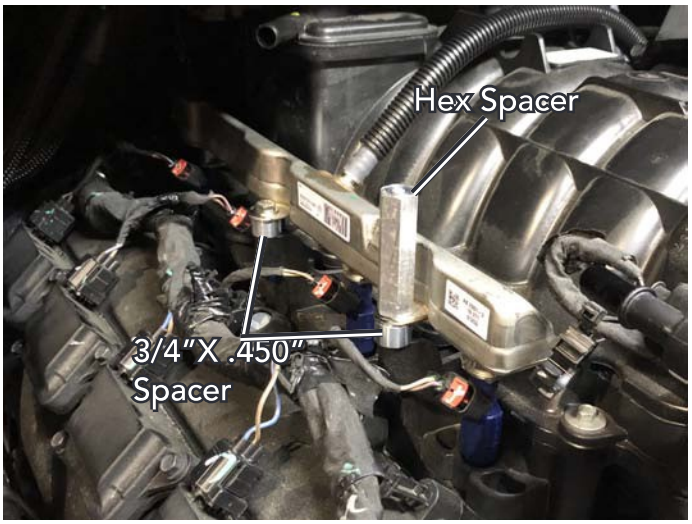
9. Install the new injectors, followed by the factory retaining clips.

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 M6 threaded rod into the suppled hex spacer.

11. 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 stud with threaded spacer into the passenger front fuel rail bolt hole. Re-install each wiring harness to each injector.

Stud Threaded Into Hex Spacer



Fuel Rail Installed

MAP Sensor Installation

Note: *This section only applies to full systems, which include a modified 2-bar MAP sensor. If you do not have a full system, additional fuel system components will be required before starting the vehicle.*

1. The factory MAP sensor is 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.

Factory MAP Sensor

2. Install the o-ring onto the adapter. Install the supplied MAP sensor adapter into the intake manifold rotate clockwise to lock it in.

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.

2-Bar MAP Sensor & Adapter Installed

Finishing

1. If equipped zip tie the shutter motor to the frame as shown to the right.

2. Reinstall the grill, radiator cladding and other previously removed body panels.

3. Reconnect the battery.

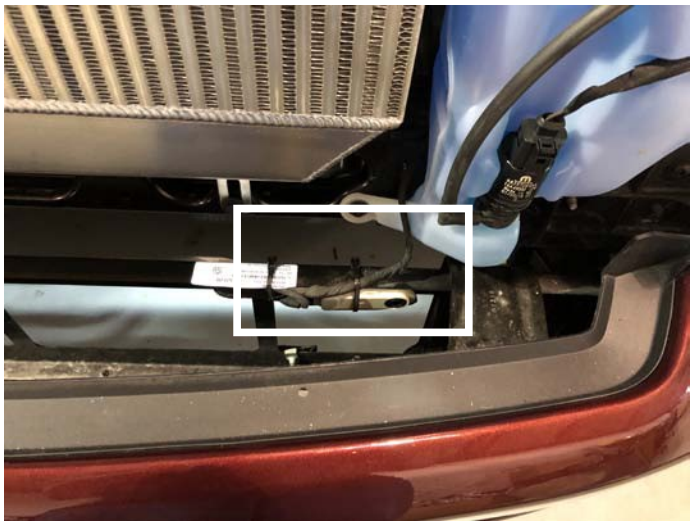
4. Refill the cooling system. Ensure all air pockets have been bled from the system.

5. Re-install the engine cover.

6. Check all of the fluid levels.

7. Verify you are only using **91 octane** or higher fuel.

8. Start your vehicle and check for fuel leaks.



Shutter Motor Zip Tied To Frame

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.

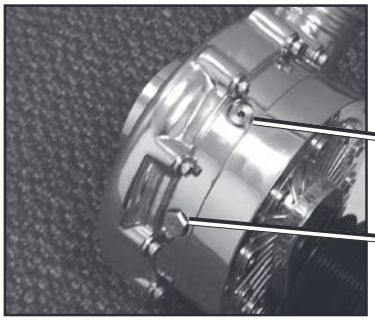
ProCharger Oil Level

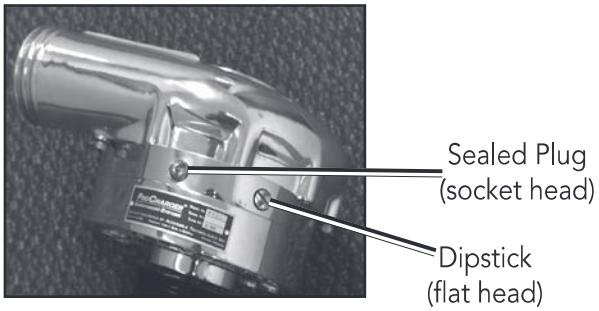
The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.

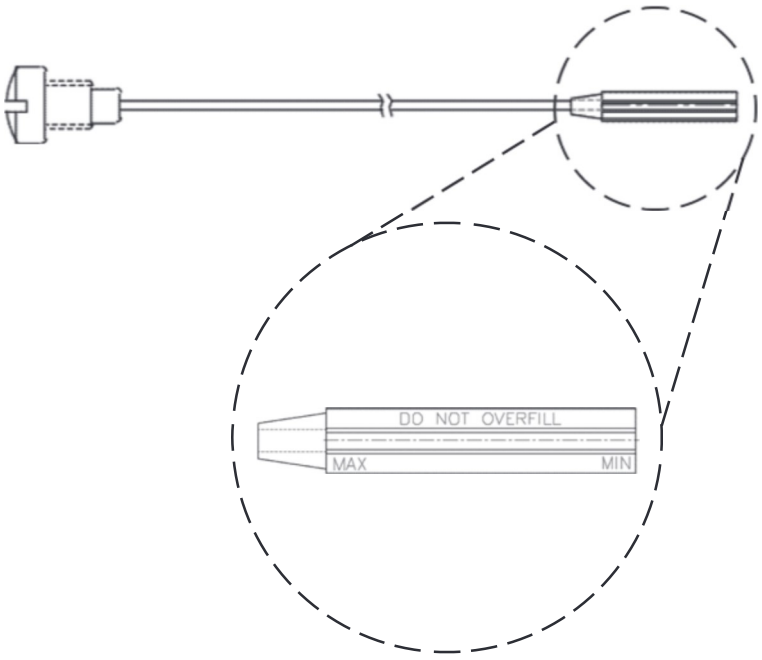
***Warning:** Filling the ProCharger higher than the maximum level on the dipstick can lead to bearing and seal damage. The supercharger is a sealed unit and should not normally require the addition of oil between service intervals. If excessive usage is noted, the unit should be sent to ATI for inspection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

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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

Part Number PMDP1A-001 Rev. D