

2014+ Dodge Ram 2500/3500 6.4L High Output Intercooled System **Installation Guide**



The **ULTIMATE** Power Adder™

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INTRODUCTION

Congratulations on purchasing your ProCharger® 2014+ Dodge RAM 2500/3500 6.4L 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.



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

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**TUNING THE VEHICLE REQUIRES UNLOCKING THE FACTORY ECU.
ACCESSIBLE TECHNOLOGIES INC. IS NOT RESPONSIBLE FOR ANY
MALFUNCTIONS ASSOCIATED WITH MODIFYING THE ECU.**

STOCK COMPONENTS

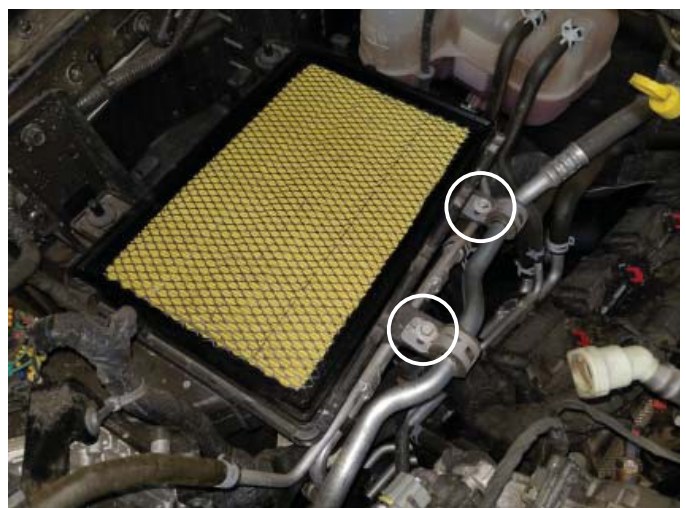
- 1 Remove the engine cover and set aside. Lift upward and slide towards the front of the vehicle.
- 2 Unplug the Intake Air Temperature sensor by pulling back on the red tab and then squeezing the release. Disconnect the PCV hose from the tube by pushing down and releasing the tab.
- 3 Some vehicles are equipped with a MAF sensor located on the air box lid. Unplug the sensor and it will be removed later.
- 4 Use a 5/16" to release the (1) hose clamp attaching the intake tube to the throttle body.
- 5 Remove the air box lid and intake tube assembly by releasing the (4) tabs surrounding the air box.
- 6 Remove the ac lines from the air box base by removing the (2) 10mm bolts. Remove the (2) hose clamps and (1) wiring harness.
- 7 Remove the air box base from the vehicle.



Engine Cover



Factory Air Box Assembly



Air Box Base

Removing Stock Components

- 8 Remove the top rubber radiator shroud by removing the (6) push pins.



Top Radiator Shroud

- 9 Remove the (4) 10mm bolts, (2) bolts per side, securing the grille to the core support.



Top Grille Mounts

- 10 If equipped with a larger grille that says RAM, remove (2) 8mm bolts. (1) on each side located in the bottom corners.



Bottom Grille Mounts

- 11 Release the (4) push pins, (2) per side from the bottom corners of the grille. It can be easily identified by looking down behind the grille.
- 12 Remove the grille from the truck by pulling firmly forward to pop loose.



Bottom Grille Mounts

- 13 Remove the lower rubber radiator shroud by removing the (6) pins, (4) uptop and (2) under. To remove the shroud from the vehicle, cut a slit to remove it from the cooler lines. It will not be reused.



Lower Radiator Shroud

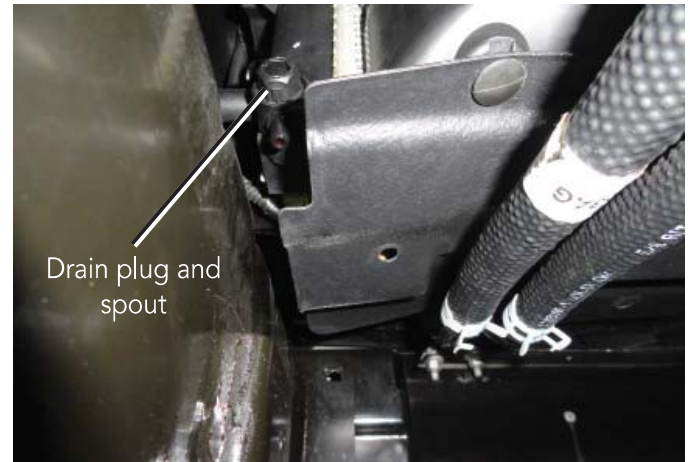
- 14 Remove the passenger side shroud by removing the (2) push pins. It will not be reused.



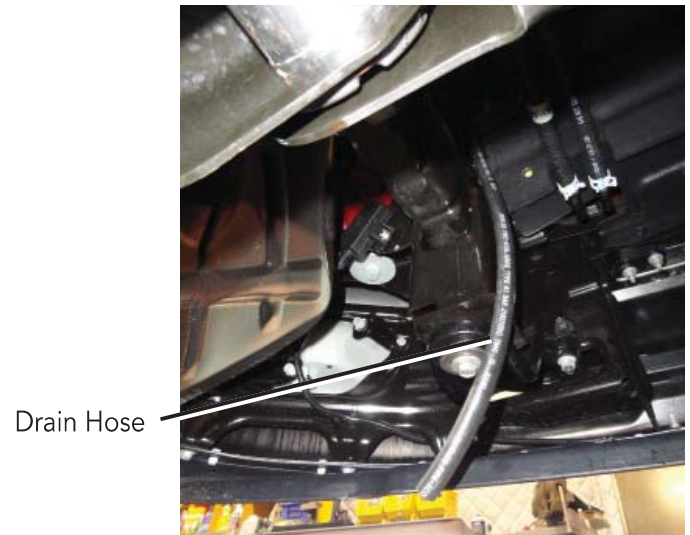
Passenger Side Radiator Shroud

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 from the radiator and the fan shroud.
- 5** Trim 3 inches off the end of the rupper radiator hose.



Radiator Drain Plug



Coolant Drain Hose



Upper Radiator Hose

- 6 Remove the lower fan shroud cover.

If equipped with D1SC skip to next section.

If equipped with P1X or D1X ONLY:

✓ **Tech Tip:** Removing the fan clutch assembly prior to removing the fan shroud will make the install easier.

- 7 Using a 13mm remove the (2) bolts from each side of the upper fan shroud.

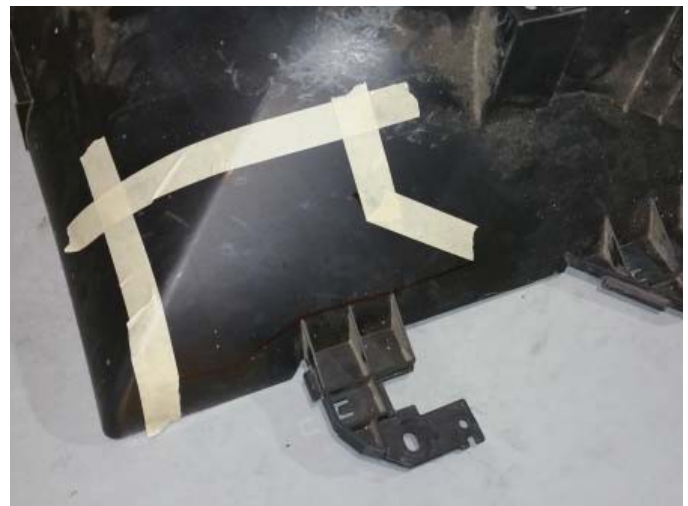
- 8 Push the fan shroud forward toward the engine and remove the electric fan.

- 9 Manipulate the fan shroud out of the top of the engine bay. Be careful not to bend the shroud too much, it is brittle plastic.

- 10 Trim the fan shroud as shown using a reciprocating saw or tool of choice. This will allow adequate clearance for the air inlet when the system is installed.



Upper Fan Shroud



Upper Fan Shroud Trimming

CRANK PULLEY

- 1 From beneath the vehicle, locate the flexplate access cover located between the oil pan and the transmission.
- 2 Using a 15mm socket remove the (8) bolts securing the flexplate access cover.
- 3 Use a screwdriver or a pry bar to prevent the engine from rotating.
- 4 Remove the 21mm crank pulley bolt.



Flexplate Access Cover



Factory Crank Pulley and Bolt

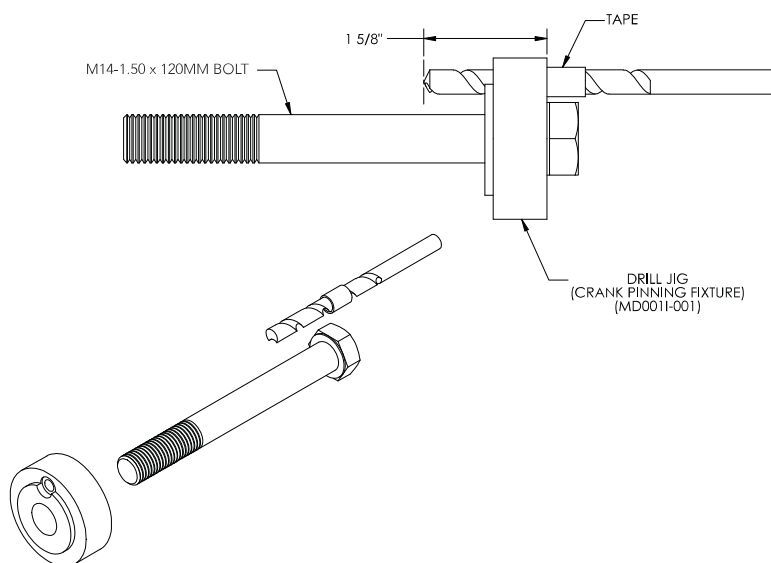
- 5 Place the drill jig onto the crank pulley, and tighten it into place using the supplied M14-1.50 x 120mm hex head bolt and washers.

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

- 6 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.

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

- 8 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.



Crankshaft and Harmonic Balancer Drill Jig



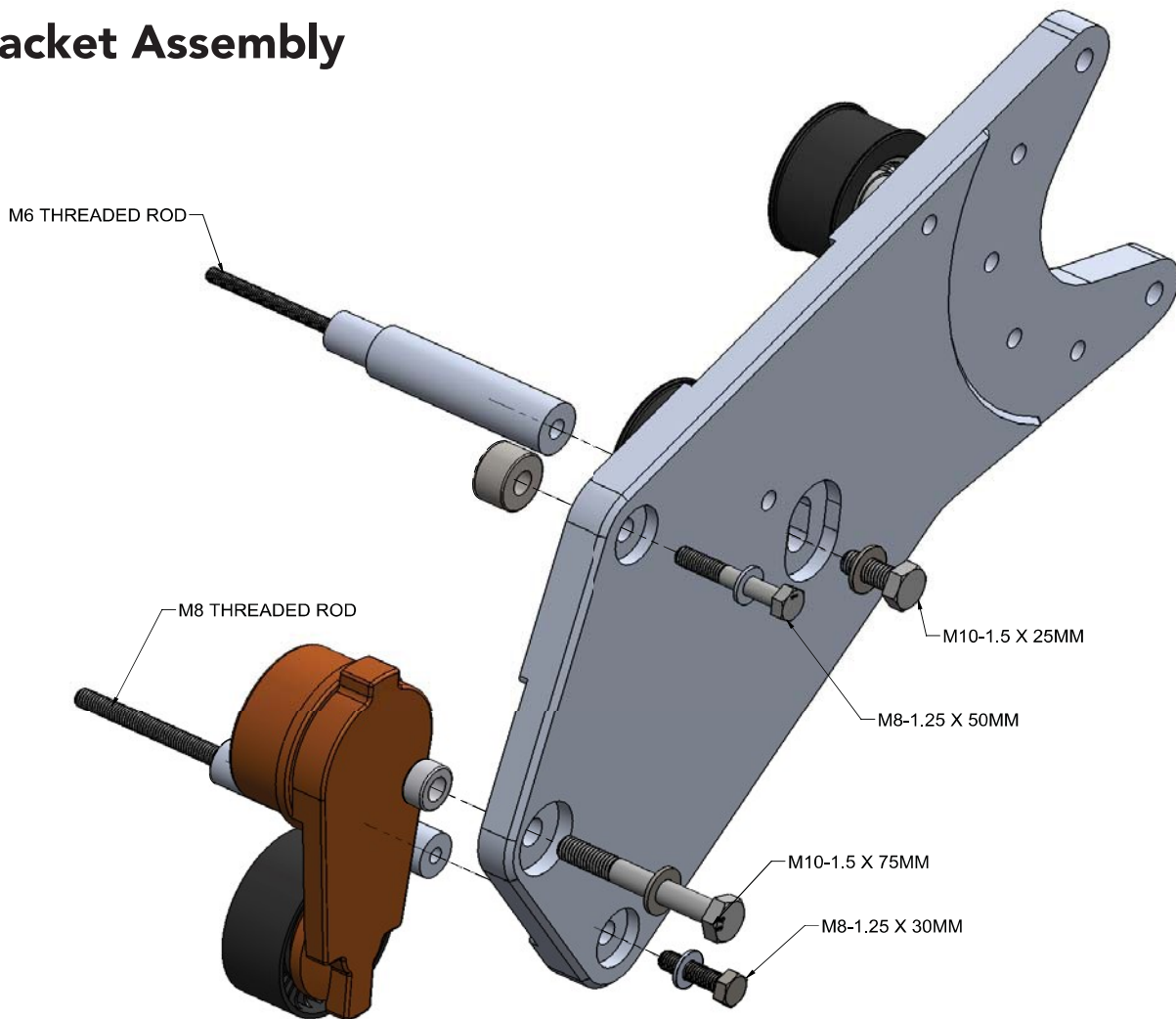
Drill Jig Installed



Crank Pulley Pinned to Crankshaft

MAIN BRACKET INSTALLATION

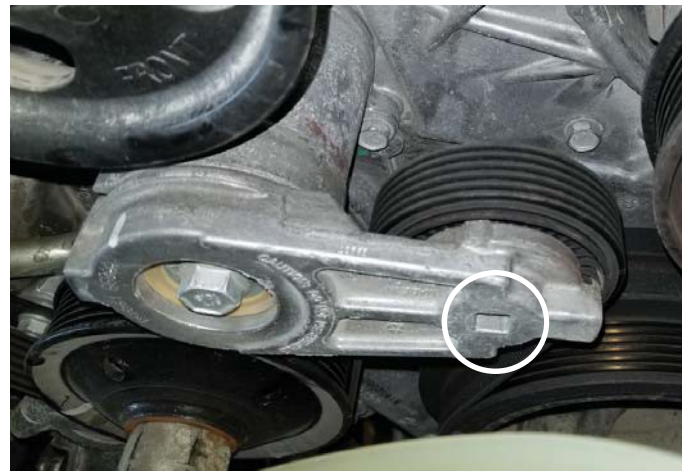
Bracket Assembly



Tech Tip: It may be easier to complete this install if you remove the upper fan shroud. Although it does not have to be done. If you choose to do so you can follow the steps on page 5 of the manual.

1

Using a 3/8 drive ratchet and rotate the factory tensioner clockwise and remove the factory serpentine belt from the vehicle.



Remove Factory Belt

- 2 Use a 13mm to remove the factory idler pulley bolt. Use a 10mm to remove the timing cover bolt and grounding lug.



Main Bracket Mounting Locations

- 3 Use a 16mm to remove the bolt retaining the factory tensioner. Use a 13mm to remove the timing cover bolt located behind the AC pulley.



Main Bracket Mounting Locations

- 4 Install the stepped spacer with the M6 threaded rod into the top hole as shown. Resecure the grounding lug previously removed with the threaded spacer.



M6 Threaded Spacer Installed

Main Bracket

- 5 Install the spacer with the M8 threaded rod into the bottom hole as shown.
- 6 Prior to installing the main bracket route the new serpentine belt per the belt schematic.
- 7 Install the main bracket to the vehicle as shown in the bracket assembly using both a 13mm and 17mm socket. In the following order. Do not tighten the hardware.
- 8 Resecure the factory tensioner using the bottom M10 bolt and spacer.
- 9 *The top M8 bolt and spacer should be installed through the factory idler pulley. The small diameter of the spacer should rest inside the bearing of the idler pulley.*
- 10 *Install the M8 bolt on the bottom and the M10 bolt into the slotted hole. Tighten all of the hardware securing the bracket to the engine.*



M8 Threaded Spacer Installed



Main Bracket Mounted



Serpentine Belt Installation

- 11 Remove the oil fill reminder tag from the head unit. Fill the supercharger with (1) 6 ounce bottle of the supplied blower oil.
- 12 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.
- 13 Install belt per schematic.

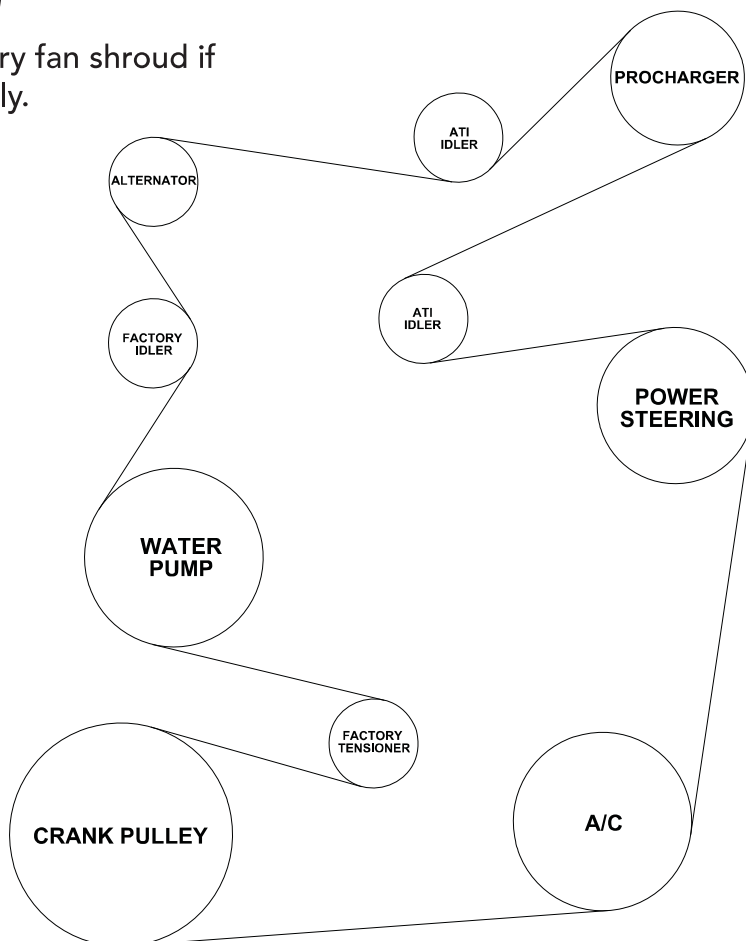


ProCharger Mounted

✓ **Tech Tip:** It may help to remove the top idler pulley if belt is tight.

✓ **Tech Tip:** Due to inconsistencies in the factory casting in the alternator bracket. A 0.100" blower pulley shim is provided to account for this difference. We recommend checking the belt alignment from the ProCharger to the alternator using a laser alignment tool. If necessary swap out the shim.

- 14 Reinstall the factory fan shroud if removed previously.



Belt Routing Schematic

INTERCOOLER INSTALLATION WITHOUT WINCH

- 1 Install the upper IC brackets on the truck as shown using the provided 0.500" mock-up tube spacers and factory grille bolts (10mm). The brackets should slide back against the core support.



Upper IC Brackets Installed

- 2 Remove the (2) cooler bracket bolts shown using a 10mm.



Cooler Bolts Removed

- 3 Install the intercooler to the top mounts using the (2) provided 3/8-16 bolts, washers, and nuts.

✓ **Tech Tip:** For proper intercooler orientation bottom out the bolt in the slot on the passenger side.



Upper IC Mounts

- Secure the intercooler to the (2) cooler bolt locations using the provided 0.65" spacers and M6-1.0 x 50mm bolts and washers.



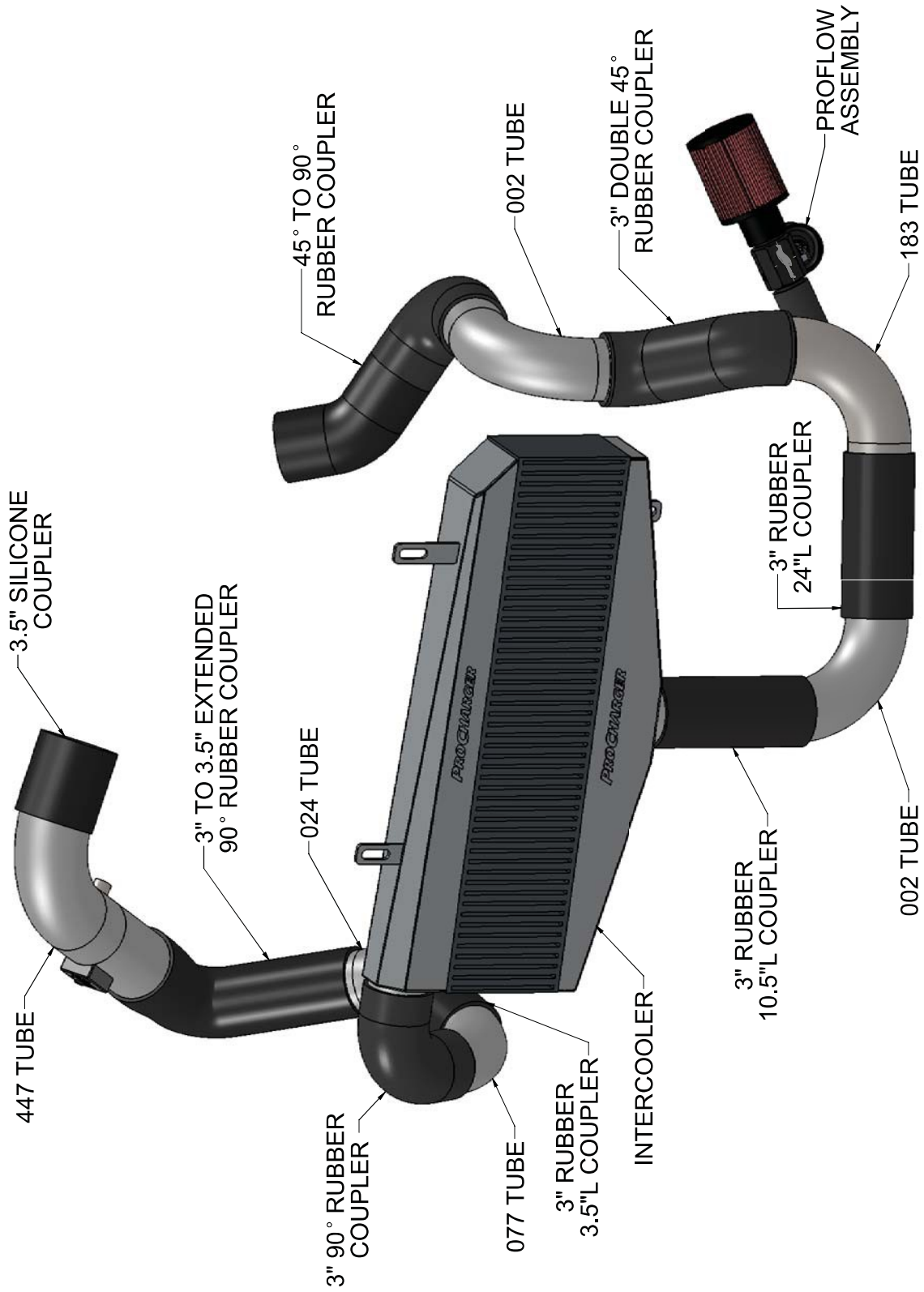
Bottom IC Mounts

- Tighten all hardware securing the intercooler.



Intercooler Installed

INTERCOOLER WITHOUT WINCH SCHEMATIC



INTERCOOLER WITHOUT WINCH 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.*

1 Unclip the factory wiring harness from the front of the fuse box on the driver's side. Reposition the plug connection underneath the fuse box.

2 Release the driver's side wheel liner to gain access to the area behind the front bumper. Pull the (1) push pin out and pull liner outward.

✓ **Tech Tip:** *To make the install even easier you may want to totally remove the wheel liner and the driver's side front wheel.*



Remove Harness

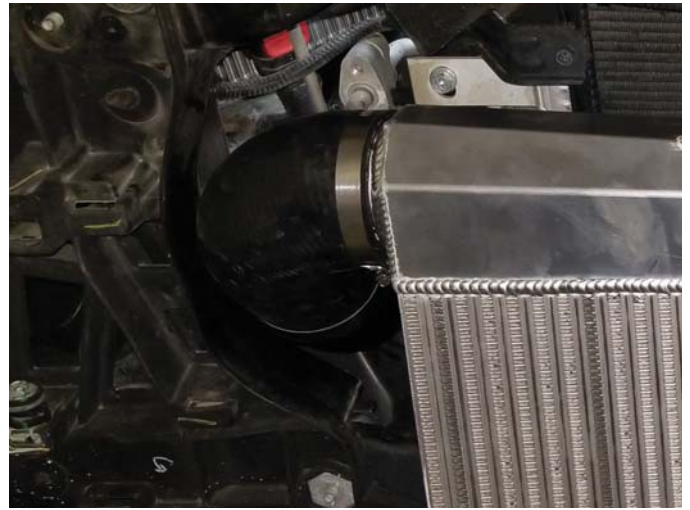


Driver's Side Wheel Line

Intercooler Installation

- 3 Install the 90° rubber elbow on to the outlet of the intercooler. Use the supplied #52 hose clamp to secure.

✓ **Tech Tip:** Trim the intercooler side of the rubber elbow as needed.



Intercooler Outlet

- 4 Install tube #077 into the 90° rubber elbow as shown. Secure with the supplied #52 hose clamp.
- 5 Install tube #024 to tube #077 using the 3.5" long 3" rubber coupler. Secure with the supplied #52 hose clamps.
- 6 Slide the long 3" end of the 3" to 3.5" extended 90° rubber coupler over tube #024. Secure with the supplied #52 hose clamps.



Short 3" Rubber Coupler

- 7 Insert the long end of tube #447 into the 3" to 3.5" extended 90° rubber coupler. Secure with the supplied t-bolt clamp.
- 8 Secure tube #447 to the throttle body using the 3" long 3.5" silicone coupler. Secure with the supplied t-bolt clamps.



Throttle Body Tube #447

- 9 Install the intake air temp sensor into the bung on tube #447. 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.



Insert IAT Sensor



IAT Sensor Locking Tab

- 10 Slide the 3" 45° side of the 45° to 90° rubber coupler over the outlet of the ProCharger, with the 90° going under the fuse box. Secure with the supplied #52 hose clamps.
- 11 Insert tube #002 into the 3" 45° to 90° rubber coupler as shown. Secure with the supplied #52 hose clamps.
- 12 Slide the 3" double 45° rubber elbow over tube #002 and around the frame rail. Secure with the supplied #52 hose clamps.



Blower Outlet

Intercooler Installation

- 13 Insert the surge tube, tube #183 into the 3" double 45° rubber coupler. Secure using the supplied #52 hose clamp.



Tube #077

- 14 Slide the 24" long 3" rubber coupler over tube #183. Route around the frame support and towards the inlet of the intercooler. Secure using the supplied #52 hose clamp.

✓ **Tech Tip:** The 24" long rubber coupler should rest on top of the plastic moulding of the front bumper to support it.



Surge Tube #183

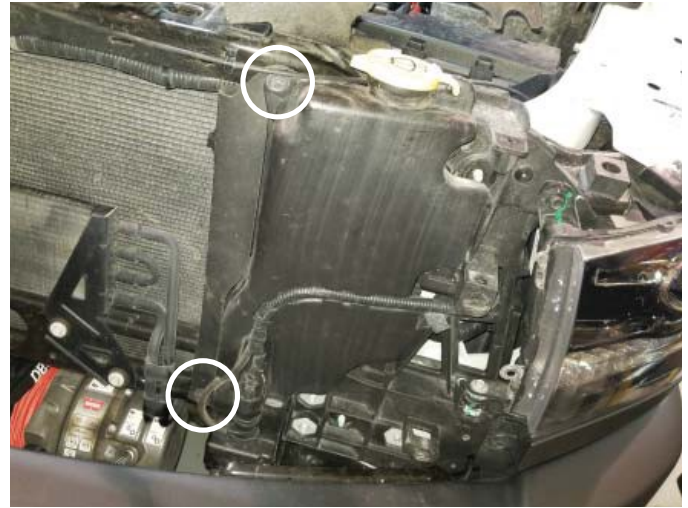
- 15 Insert tube #002 into the 24" long rubber coupler using the supplied #52 hose clamps.
- 16 Finish the connection to the intercooler using the 10.5" long 3" rubber coupler. Secure using the supplied #52 hose clamp.



Intercooler Inlet

INTERCOOLER INSTALLATION WITH WINCH

- 1 Remove the (2) bolts securing the washer tank using a 10mm.



Washer Tank Removal

- 2 Lift tank up and away from the vehicle. Release the wiring harnesses from the washer pump and level sensor. Remove the rubber hose from the washer pump.



Remove Washer Pump Hose

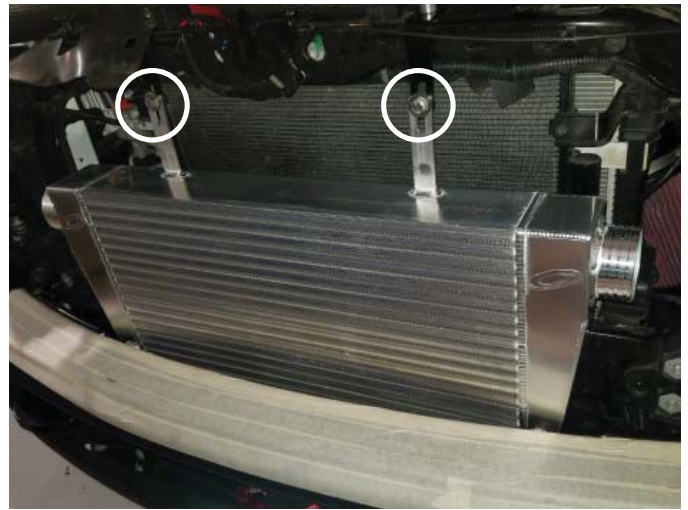
- 4 Install the upper IC brackets on the truck as shown using the provided 0.500" mock-up tube spacers and factory grille bolts (10mm). The brackets should slide back against the core support.



Upper IC Brackets Installed

Intercooler Installation

- 5 Install the intercooler to the top mounts using the (2) provided 3/8-16 bolts, washers, and nuts. Do not tighten yet.



Upper IC Mounts

- 6 Secure the intercooler to the front bumper using the (2) provided 3/8-16 bolts and washers.



Lower IC Mounts

- 7 Tighten all hardware securing the intercooler.



Intercooler Installed

- 8 Remove the (26) bolts securing the plastic grille mount to the grille.



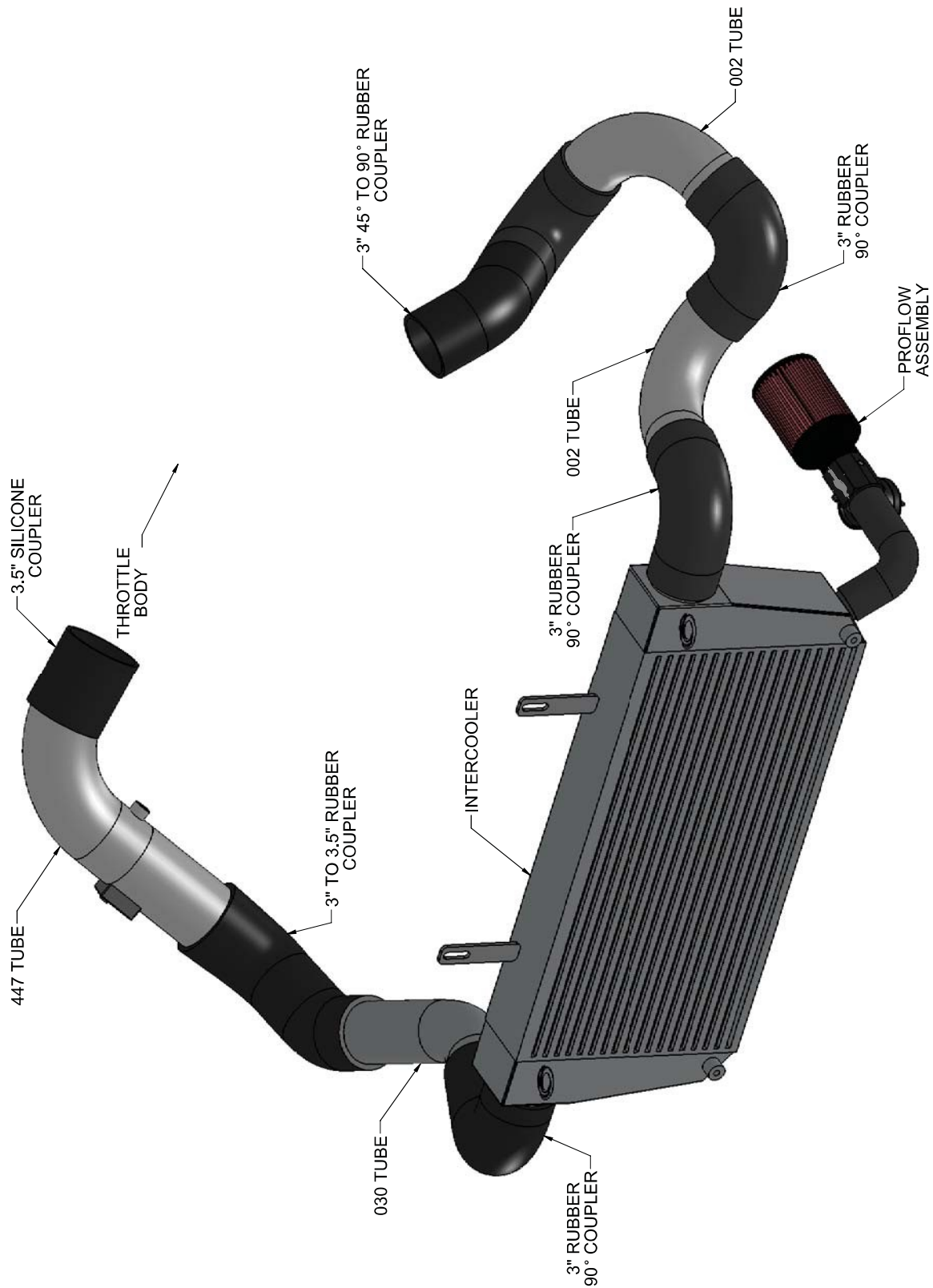
Grille Disassembly

- 9 Trim the plastic grille mount as shown to the right with white lines.
- 10 Resecure the plastic grille mount to the grille.



Grille Trimming

INTERCOOLER WITH WINCH SCHEMATIC



INTERCOOLER WITH WINCH 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.*

1 Release the driver's side wheel liner to gain access to the area behind the front bumper. Pull the (1) push pin out and pull liner outward.

✓ **Tech Tip:** *To make the install even easier you may want to totally remove the wheel liner and the driver's side front wheel.*

2 Trim the short leg of the extended leg 3" 90° rubber elbow on to the outlet of the intercooler. Use the supplied #52 hose clamp to secure.

✓ **Tech Tip:** *Trim the intercooler side of the rubber elbow as needed.*



Driver's Side Wheel Line



Intercooler Outlet

Intercooler Installation

- 3 Install the short end of tube #030 into the long leg of the extended 3" 90° rubber elbow. Use the supplied #52 hose clamp to secure.



Intercooler Outlet

- 4 Install the 3" end of the 3" to 3.5" rubber coupler over tube #030 as shown. Secure with the supplied #52 hose clamp.



Short 3" Rubber Coupler

- 5 Insert the long end of tube #447 into the 3" to 3.5" extended 90° rubber coupler. Secure with the supplied t-bolt clamp.
- 6 Secure tube #447 to the throttle body using the 3" long 3.5" silicone coupler. Secure with the supplied t-bolt clamps.



Throttle Body Tube #447

- 7 Install the intake air temp sensor into the bung on tube #447. 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.



Insert IAT Sensor



IAT Sensor Locking Tab

- 8 Trim one leg of the 3" 90° rubber elbow on to the inlet of the intercooler. Use the supplied #52 hose clamp to secure.

✓ **Tech Tip:** Trim the intercooler side of the rubber elbow as needed.



Blower Outlet

Intercooler Installation

- 9 Insert tube #002 into the 3" 90° rubber coupler as shown. Secure with the supplied #52 hose clamps.
- 10 Slide the 3" 90° rubber elbow over tube #002 as shown. Secure with the supplied #52 hose clamps.
- 11 Insert tube #002 into the 3" 90° rubber coupler as shown and point towards the ProCharger. Secure with the supplied #52 hose clamps.
- 12 Slide the 3" 45° side of the 45° to 90° rubber coupler over the outlet of the ProCharger, with the 90° going under the fuse box. Secure with the supplied #52 hose clamps.
- 13 Insert tube #002 into the 3" 45° to 90° rubber coupler as shown. Secure with the supplied #52 hose clamps.



Tube #077



Surge Tube #183

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.

Without Winch:

- 2 Trim the short end of the surge hose so it doesn't push the wheel liner out.
- 3 Install the ProFlow Assembly onto the surge tube as pictured. Secure the assembly using the supplied #24 hose clamp.



ProFlow Assy Installed Without Winch

With Winch:

- 4 Trim the short end of the surge hose so it doesn't push into the frame rail.
- 5 Install the ProFlow Assembly onto the intercooler, as pictured. Secure the assembly using the supplied #24 hose clamp. Be sure the linkage can move freely.

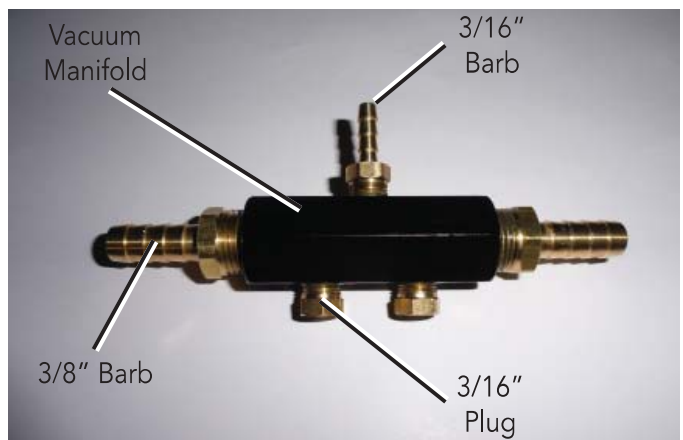


ProFlow Assy Installed Without Winch

All Applications:

- 6 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.



Vacuum Manifold

Anti-Surge System

- 7 Remove the factory 3/8" vacuum hose going to the EVAP canister solenoid on the passenger side of the manifold.



Factory Vacuum Hose

- 8 Trim the factory 3/8" hose as needed to properly install the vacuum manifold as shown. Secure with the provided hose clamps.
- 9 Route the 3/16" hose from the open barb on the manifold to the ProFlow Assembly.



Factory Vacuum Hose Trimmed

- ✓ **Tech Tip:** In order for the vacuum manifold to fit better you may want to trim the foam piece slightly.



Vacuum Manifold Installed

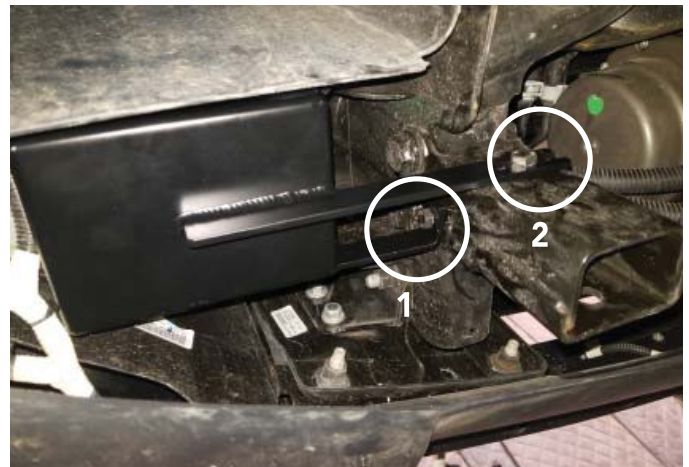
WINDSHIELD WASHER TANK

FOR APPLICATIONS WITH A WINCH ONLY

- 1 Remove the pump from the factory windshield washer tank by first pulling outwards on the pump to release them from the locking tabs, then pull up to remove them from the grommets. Remove the grommets.
- 2 Remove the level sender by carefully prying it out from the grommet. Remove the grommet.
- 3 Install the level sender and pump into the supplied washer tank as shown. The open hole gets plugged by the supplied plug (use silicone sealant on the plug to aid the seal). Lithium grease may need to be added to the pump grommet to aid in pump and grommet installation.
- 4 Install the washer tank as shown inside the wheel well to the frame rail by installing a provided bolt, washer and nut in position (2) as shown.
- 5 Mark the location of the strap in position (1) and remove the tank from the truck. Drill the marked location using a 13/32 drill bit.
- 6 Install the washer tank as shown securing both the provided nuts, washers, and bolts in positions (1) and (2).



Washer Tank With Pump And Plug



Washer Tank Mounting Points



Washer Tank Mounted

Windshield Washer Tank

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



Factory Vaccum Hose

- 8 Insert the supplied washer neck into the washer neck bracket.
- 9 Remove the cap from the factory washer tank. Cut off the mounting tab from the cap and install it onto the supplied washer neck.



Factory Vaccum Hose

- 10 Route the provided rubber moulded hose from the tank to the washer neck as shown. Secure with #24 hose clamps.
- 11 Use the provided wire to extended the level sensor harness. Plug all other connectors in also.



Factory Vaccum Hose

AIR INLET

- 1 Install the supplied brass 3/8 NPT plug into the plastic inlet tube till it is flush.



Air Inlet Tube

- 2 Install the plastic inlet tube onto the procharger and secure it with the provided hose clamp.
- 3 Reinstall the upper radiator hose and trim if needed.
- 4 Drill a 3/4 inch hole in the end of the filter.
- 5 Install the provided air filter on the plastic air inlet installed on the procharger.
- 6 Remove the factory pcv line from the rubber elbow going into the intake manifold.



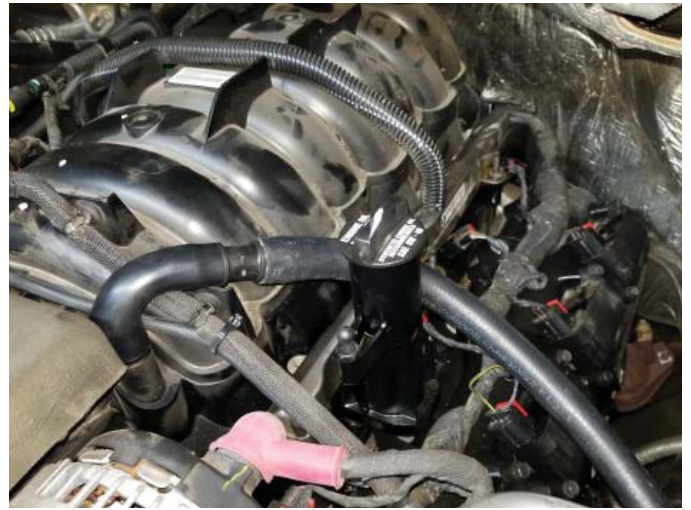
Air Inlet Installed



FactoryPCV Hose

Air Inlet

- 7 Trim the factory elbow such that it will sit as low as possible.
- 8 Insert the plastic 5/8" -3/4" hose barb into the factory elbow.
- 9 Route the provided 3/4" hose from the factory elbow down to the end of the air filter.
- 10 Attach the 3/4" hose to the air filter using the provided plastic 3/4" 90° barb.
- 11 Install the 6" long of corrugated wrap onto the radiator hose where it comes in contact with the air inlet.



Factory Elbow Trimmed

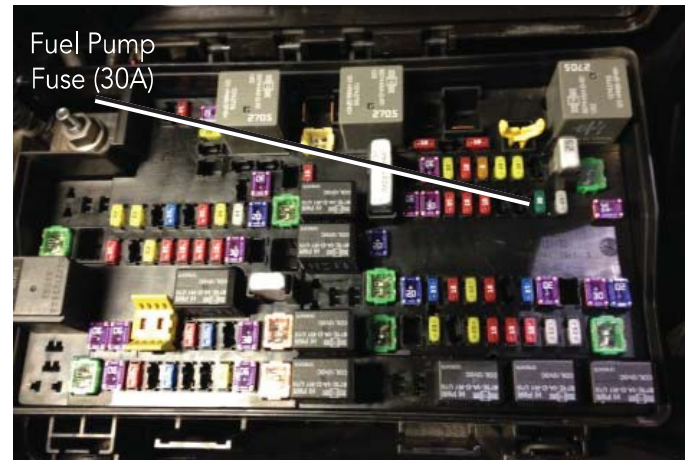


PCV Line Installed

FUEL SYSTEM

✓ **Note:** This section only applies to full systems, which include 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 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.
- 7 Unclip the wiring harnesses from each injector by pulling back on the red tab. Remove the (1) 10mm nut securing the dipstick tube to the fuel rail stud. Remove the (4) 4mm fuel rail studs from both rails.
- 8 Remove the EVAP solenoid from the tab on the passenger side. Pull the fuel rails up off of the manifold to gain access to the fuel.



2013+ Fuel Pump Fuse



Fuel Rail (Passenger's Side)

Fuel System

- 9 Remove the fuel injector retaining clips from the injectors and rails. Remove the injectors by pulling them straight out of the rails.
- 10 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.

- 11 Push the injector and fuel rail assembly into place. Reinstall the EVAP solenoid into the mounting tab. Secure the fuel rails with factory hardware and install each wiring harness to each injector.



Fuel Rail (Driver's Side)

MAP/MAF 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 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

If equipped with a MAF sensor:

- 4 Remove the MAF sensor from the factory airbox lid.
- 5 Install the MAF sensor using the provided M4 screws in tube 447 and plug it in.

If not equipped with a MAF sensor:

- 6 Install the provided MAF block-off plate using the provided M4 screws in tube 447.



2-Bar MAP Sensor & Adapter Installed

FINISHING

- 1 Reinstall the grille.
- 2 Reinstall the top radiator shroud.
- 3 Ensure proper radiator hose and brake booster line clearance.
- 4 Reconnect the battery.
- 5 Refill the cooling system. Ensure all air pockets have been bled from the system.
- 6 Re-install the engine cover.
- 7 Check all of the fluid levels.
- 8 Verify you are only using **91 octane** or higher fuel.
- 9 Start your vehicle and check for fuel



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.

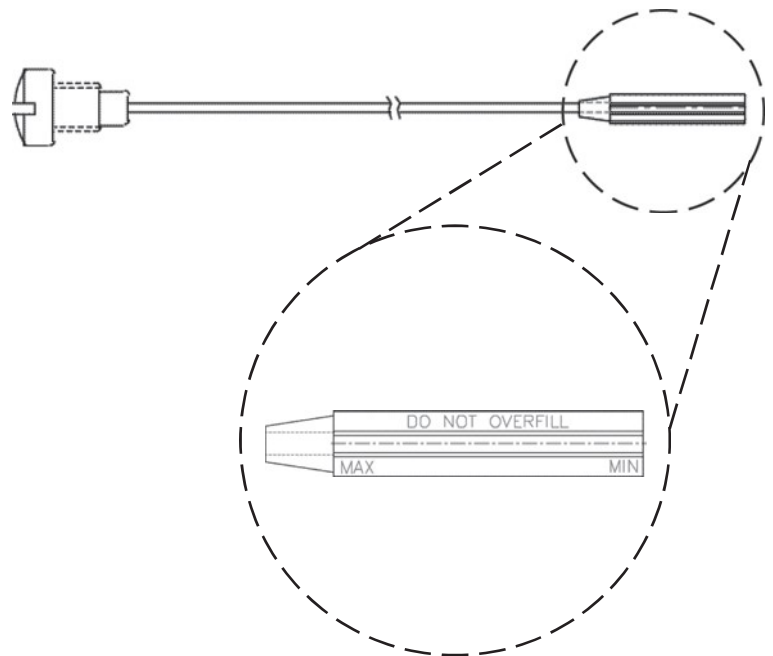
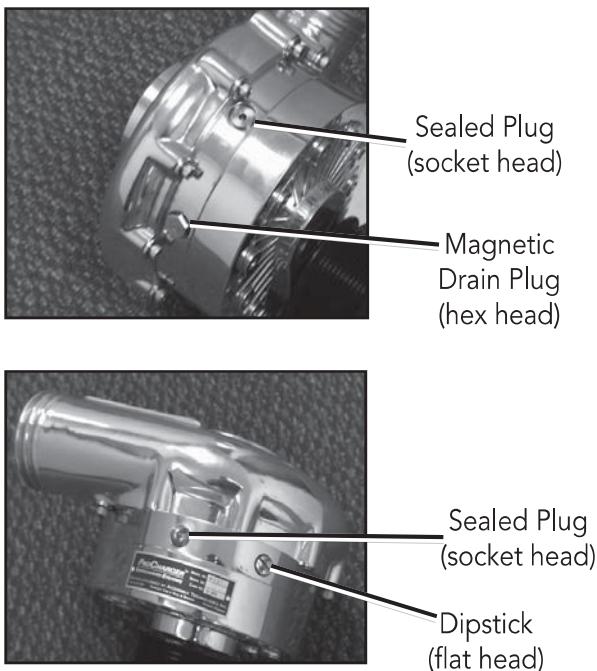
ProCharger Oil Level

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
Lenexa, KS 66215
Phone: 913.338.2886
Fax: 913.338.2879
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**Accessible Technologies, Inc.
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