

2015-17 Mustang GT Stage 2 Intercooled System **Installation Guide**



The **ULTIMATE** Power Adder™

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

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

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

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

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

INTRODUCTION

Congratulations on purchasing your ProCharger® 2015-17 Mustang GT Stage 2 Intercooled System. Read this entire manual before you attempt to install your ProCharger kit. It is imperative that you follow all of the instructions in the order they appear in this installation guide. If you have any questions regarding any aspect of this installation, call us at (913) 338-2886.

For best results, we recommend reviewing the installation instructions beforehand, and following the installation instructions closely and in sequence. A detailed packing list has been provided to assist you in identifying the components of your ProCharger system.

Required Tools and Supplies

- $\frac{3}{8}$ " Socket Set (standard & metric)
- Torx set
- Open End Wrench Set (standard & metric)
- $\frac{5}{16}$ " Nut Driver
- Hex Bit Set (allen) (standard & metric)
- Flat Screwdrivers
- Phillips Screwdrivers
- Plier Set
- Ford Engine Coolant (Pink)



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



Warning: Read and understand all safety precautions in this manual before installation. Failure to comply with instructions in this manual could result in personal injury, property damage, and/or voiding your warranty.



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

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TUNING IS REQUIRED WHEN INSTALLING YOUR PROCHARGER SYSTEM. SEE SUPPLEMENTAL TUNING GUIDE FOR INSTRUCTIONS.

GETTING FAMILIAR



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

- (A) Engine Cover
- (B) Factory Air Inlet
- (C) Radiator Cover
- (D) Fascia
- (E) Mass Air Flow (MAF) Sensor

! *Read and understand all safety precautions in this manual before installation. Failure to comply with instructions in this manual could result in personal injury, property damage, and/or voiding your warranty.*

AIR INLET REMOVAL

Models Equipped With a Strut Tower Bar:

- 1 Use an 8mm to remove the screw holding the wiring harness to the passenger's side strut tower.
- 2 Unhook the plastic wiring harness holder from the passenger's side strut tower stud.
- 3 Use a 15mm to remove the (4) nuts holding the strut tower bar. Remove strut tower bar.



Wiring Harness Screw (Passenger's Side)



Strut Tower Bar (Passenger's Side)

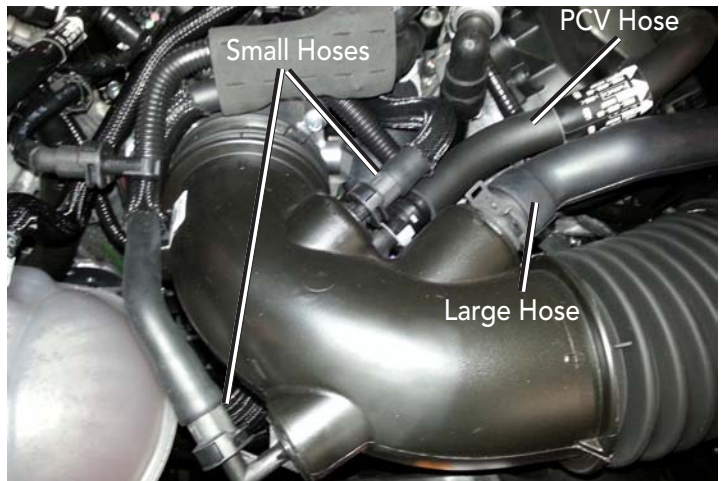
All Models:

- 4 Remove the engine cover. Pull the cover straight up and remove from the vehicle.
- 5 Unplug the MAF connector by extending the red locking tab and squeezing the connector. Disconnect the harness from the front side of the airbox.



MAF Connector and Harness Connection

- 6 Remove the (2) smaller hoses from the air inlet tube by squeezing the retaining clip and pulling back on the hose.
- 7 Disconnect the medium-size PCV hose by rotating the locking clip up and pulling back on the hose.
- 8 Use pliers to compress the clamp holding the large hose to the inlet tube. Disconnect the hose.
- 9 Using a 7mm nut driver, loosen the inlet connection to the throttle body.
- 10 Use a 10mm to remove the screw holding the air box to the body.
- 11 Remove airbox and inlet tube assembly.
- 12 Remove the plastic clip holding the air tube to the driver's side strut tower.
- 13 Locate the tab holding the air tube to the fuel line. Squeeze the tab to disconnect.
- 14 Locate the nut holding the air tube to the firewall, behind the engine on the driver's side. Using a 10mm socket, swivel, and extensions, remove the nut. Pull the air tube out of the driver's side firewall by pulling gently outwards.
- 15 Insert the supplied grommet found in the air inlet bag into the hole in the firewall.



Disconnect Air Inlet Hoses



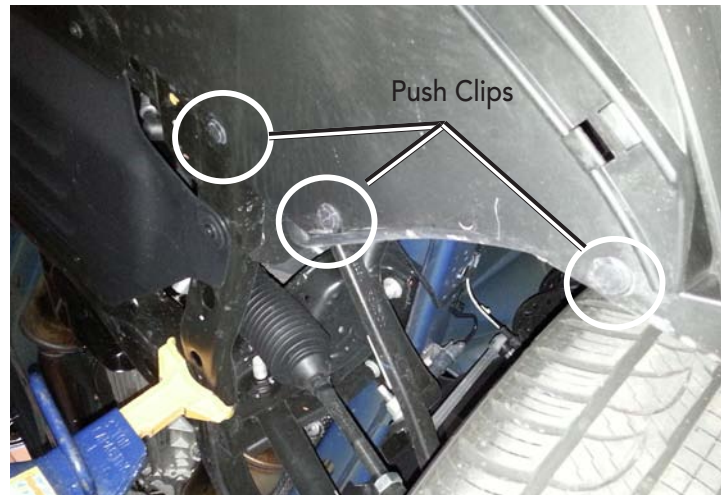
Airbox Screw



Firewall Nut

FASCIA REMOVAL

- 1 Raise the vehicle just enough to access the undercladding hardware. Secure with jack stands.
- 2 Use a flat screw driver to remove the (8) plastic clips that secure the radiator cover. Remove cover.
- 3 Use a flat screw driver to remove the (6) undercladding plastic push-clips. (3 per side)
- 4 Use a 7mm to remove the 18 screws holding the undercladding. Remove the undercladding.
- 5 Disconnect the fog light and turn signal connectors. (3 per side)
- 6 Use a flat screw driver to remove the plastic push-clips holding the wheel liner to the fascia in front of the tires. (3 per side)



Driver's Side Push Clips



Remove Undercladding



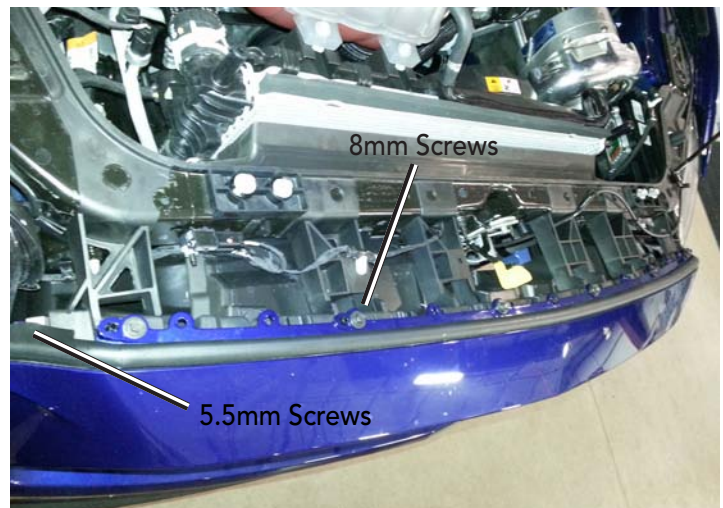
Fog Light and Turn Signal Connectors

- 7 Pull back the wheel liner to gain access to the screw attaching the fascia to the fender. Use a 7mm to remove the screw. (Both sides)
- 8 Pull the fascia straight outward to unclip it from the fender. (Both sides)



Fender Screw

- 9 Use an 8mm to remove the (6) screws at the top of the fascia.
- 10 There are (2) screws (1 on each side) under the weather seal near the headlight. Pull back the weather seal and use a 5.5mm to remove the screws.
- 11 Remove the fascia.



Top Fascia Screws

Track Pack Models:

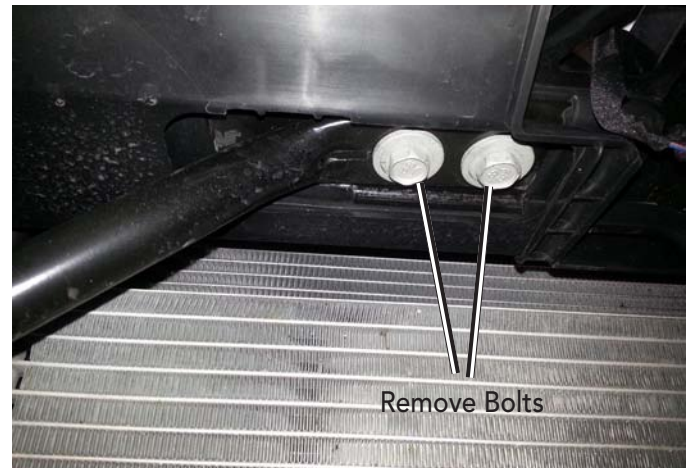
- 12** Use a 13mm to remove the (2) nuts holding the bumper brace to the back side of the bumper (each side).



Bumper Brace Nuts

- 13** Use a 13mm to remove the (2) bolts holding the bumper brace to the radiator core support (each side).

- 14** Remove each side bumper brace.



Radiator Core Support Bolts

All Models:

- 15** Remove the driver's and passenger's side plastic radiator shrouds by removing the (2) push pins and pulling the shrouds out the front of the vehicle.
- 16** If equipped, remove condensor end tank cover.



Passenger's Radiator Shroud

FUEL INJECTOR INSTALLATION

- 1 If you have not already done so, de-pressurize the fuel system.
- 2 Using a 10mm socket, remove the (4) nuts securing the plastic fuel rail insulation bracket. Remove the bracket along with the foam insulators wrapped over the fuel rails. Pull the insulators up and out of the vehicle for removal.



Remove Fuel Rail Insulation Nuts (4x)

- 3 Move the coolant lines that run over the top of the fuel rails out of the way.
- 4 Place a shop towel underneath the fitting on the driver's side fuel rail where the stainless steel fuel supply line and fuel rail join. Push the two tabs on the fitting together and pull the supply line from the fuel rail, being careful to minimize fuel leakage.



Adjust Coolant Lines For Fuel Rail Removal

CAUTION: The fuel system should be de-pressurized, but some fuel may leak out when the lines are disconnected. Take the necessary precautions to avoid injury or fire.

- 5 Disconnect the fuel injector electrical connectors one at a time, labeling them by their corresponding injector location, to ensure proper sequential injector firing order after re-assembly.



Disconnect Fuel Supply Line

Fuel Injector Installation

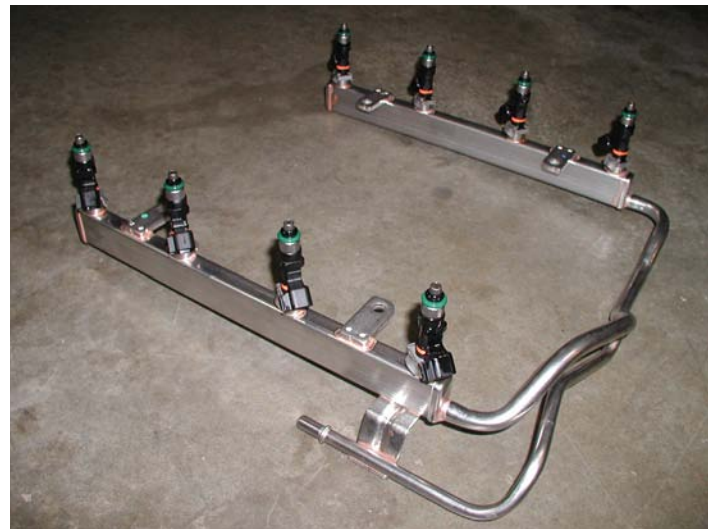
- 6 Remove the fuel rail attaching bolts with a 10mm socket (4X).
- 7 Remove the fuel rail assembly as one piece with the injectors still attached and place on a clean work surface, making sure to support the assembly to avoid damaging any of the components.
- 8 Spread the injector retainer clips to release each injector from the fuel rail. Remove the old injectors and set aside. Lubricate each new injector o-ring seal with several drops of clean engine oil.

! CAUTION: Never re-use fuel injector o-ring seals, as they lose elasticity over time and could cause a fuel leak and/or potential fire.

- 9 Install the retainer clips onto the new injectors. Push each injector into the fuel rail injector socket with the electrical connector facing outward. The retainer clip should lock onto a flange on the fuel rail.
- 10 Reclip the electrical connectors to each fuel injector. Plug the supply line back into the rail. Re-install the fuel rail insulation and plastic brackets at this time..



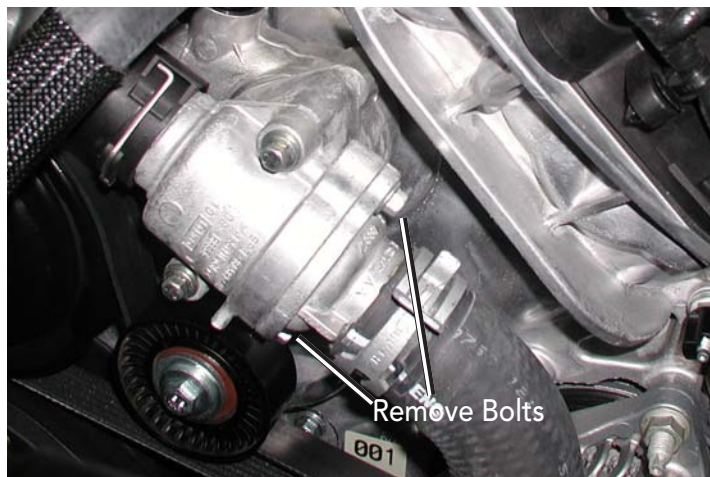
Remove Fuel Rail Mounting Bolts (4x)



New Fuel Injectors Installed
Onto Fuel Rail Assembly

COOLING SYSTEM

- 1 Drain the cooling system by loosening the petcock near the bottom passenger's side of the radiator. Save the coolant as it will be reused to refill the system.
- 2 Use pliers to compress the clamp holding the radiator hose to the thermostat housing neck. Disconnect the hose from the housing.
- 3 Use a 8mm to remove the (2) bolts attaching the thermostat housing neck to the housing body. Remove the lower housing neck.
- 4 If the thermostat comes out of the housing, put it back in place.
- 5 Using the factory hardware, install the new supplied thermostat housing neck.
- 6 Reinstall the coolant hose onto the new thermostat housing neck. Trim the hose at the housing connection if there is a kink in the hose after installation.
- 7 Use pliers to disconnect the (3) hoses attached to the coolant reservoir.
- 8 Use a 10mm to remove the (2) screws holding the coolant reservoir to the fan shroud. Save these screws as they will be used in a later step. Remove the coolant reservoir.



Thermostat Housing



New Thermostat Housing Neck Installed



Factory Coolant Reservoir

CRANK PULLEY

- ✓ **Note:** Sway bar removal (steps 1-3) may not be required on some models.
- ✓ **Tech Tip:** The sway bar will have to be removed when running the 10-rib crank pulley. If it is not removed the sway bar could contact the pulley.
- 1 Use an 18mm to remove the front sway bar to frame bolt on the driver's side. The rear bolt under the alternator does not need to be removed.
 - 2 Use an 18mm to remove both sway bar to frame bolts on the passenger's side.
 - 3 Slide the sway bar toward the front of the vehicle to gain clearance around the crankshaft balancer.
 - 4 Use an 18mm and a breaker bar to remove the factory crankshaft balancer bolt.
- ✓ **Tech Tip:** For vehicles utilizing an aftermarket ATI Performance Products balancer (part #918047), refer to the manufacturers installation instructions. The supplied crank pulley mounts to the damper using the (3) supplied 3/8-16 x 2.5" bolts and washers.
- 5 Attach the cam locks to the back side of the crank pulley using the supplied 5/16 x 1-3/4 bolts and washers. Make note of the 3 pairs of holes that are closer to one another. Each of these close pairs will straddle one of the balancer's webs. Rotate the cam locks to point away from its paired cam lock as shown. Snug the cam lock bolts.



Driver's Front Sway Bar Bolt Removed



Passenger's Sway Bar Bolts Removed

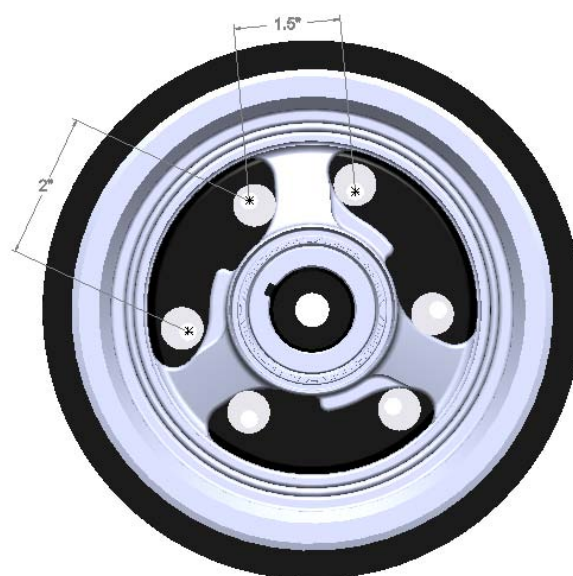


Cam Locks Pointed Away From Each Other

- 6 Mount the supplied crank pulley to the factory balancer. Insert the supplied M12-1.5 x 120mm balancer bolt and washer, but do not tighten. Loosen the cam lock bolts to allow the cam locks to relax.
- 7 Rotate the crank pulley counterclockwise until the cam locks stop it from rotating.
- 8 Lightly tighten the supplied balancer bolt. Tighten the (6) cam lock bolts with a 1/2" socket.



Back View of Crank Pulley and Cam Locks



Detailed View of Proper Cam Lock Orientation

- 9 Tighten the supplied balancer bolt using a 19mm socket, torque to 35 ft-lbs, then tighten the bolt an additional 90°.
- 10 Use an 18mm to reinstall the sway bar bolts



Crank Pulley Installed

PROCHARGER BRACKET AND HEAD UNIT

- 1 Remove the (2) timing cover bolts and the alternator nut labeled in the image at right. The alternator nut can be removed by using a 15mm socket, the remaining (2) bolts use a 13mm socket (the lower right bolt will have a plastic cap that needs to be pulled off before accessing the bolt).



Remove Factory Hardware (Driver's Side)

- 2 Use a 13mm to install the sub bracket with the supplied M8x70mm bolts and washers.



Sub Bracket Installed

- 3 Use a 13mm to remove the uppermost timing cover bolt on the driver's side, behind the coolant tube.



Uppermost Timing Cover Bolt



Tech Tip: The upper coolant tube may need to be bent slightly to remove the upper bolt.

- 4 Use an 8mm to remove the upper thermostat housing bolt.



Thermostat Housing Bolt

- 5 Unplug the intake camshaft position sensor on the driver's side. Reroute the harness so that it is away from the front of the engine. This will ensure the harness does not interfere with the belt.

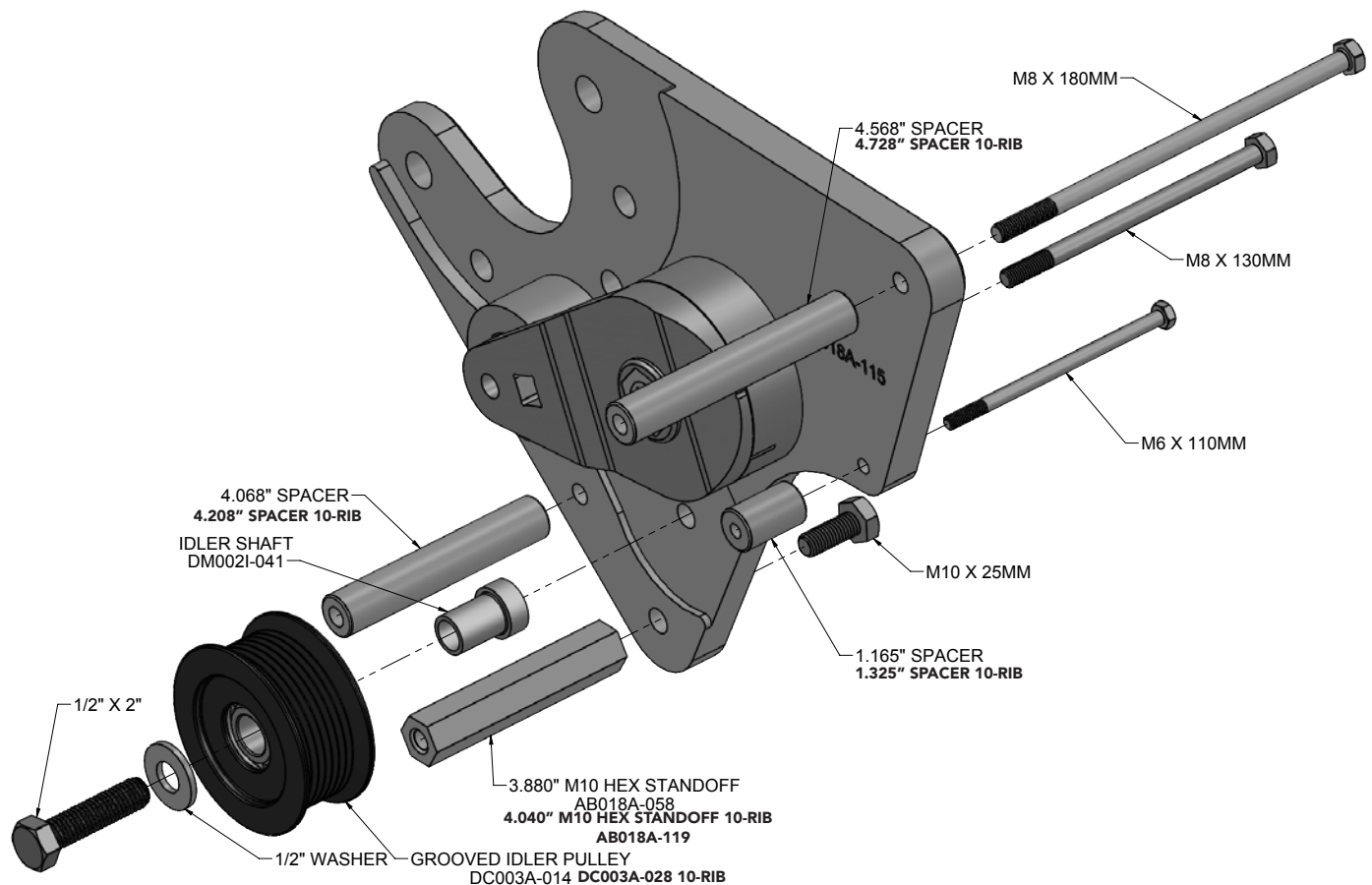


Cam Sensor Wiring Harness

- 6 Use a 10mm to remove the (2) screws holding the factory upper radiator brackets (each side). Remove the brackets
- 7 Install the supplied rubber isolators over the top radiator mounting posts. The rubber should sit approximately 1/2" down from the top of the post.
- 8 Install the supplied radiator brackets using the factory hardware.



Radiator Bracket Installed



- 9 Install the hex standoff onto the alternator stud. Hold the bracket assembly in place in front of the motor.
- 10 Insert the M10x25mm bolt and washer through the bracket and into the hex standoff.
- 11 Place the 1.165" (1.325" 10-rib) spacer between the bracket and the thermostat housing. Fasten with the M6x110mm bolt.
- 12 Place the 4.568" (4.728" 10-rib) spacer between the bracket and the upper timing cover bolt hole near the coolant tube. Fasten with the M8x180mm bolt.
- 13 Place the 4.068" (4.208" 10-rib) spacer between the bracket and the sub bracket. Fasten with the M8x130mm bolt.
- 14 Install the oil drain line onto the supercharger. Verify the plug at the end of the drain line is tight.
- 15 Remove the oil fill reminder tag from the head unit. Fill the supercharger with (1) 6 ounce bottle of the supplied blower oil.
- 16 Mount the ProCharger onto the main bracket using the provided (4) 5/16-18 x 5/8" and (2) 3/8-16 x 7/8" SHCS's. Actuate the tensioner using a 1/2" socket on the brass collar to gain access to all of the supercharger bolts.
- 17 Route the oil drain line to the front of the vehicle under the driver's side headlight, and secure it with zip ties.

- 18 Use a 15mm to remove the bolt holding the idler pulley next to the water pump. Do not remove the pulley.
- 19 Locate the supplied idler shaft. Insert the short recessed portion of the shaft into the factory idler pulley.



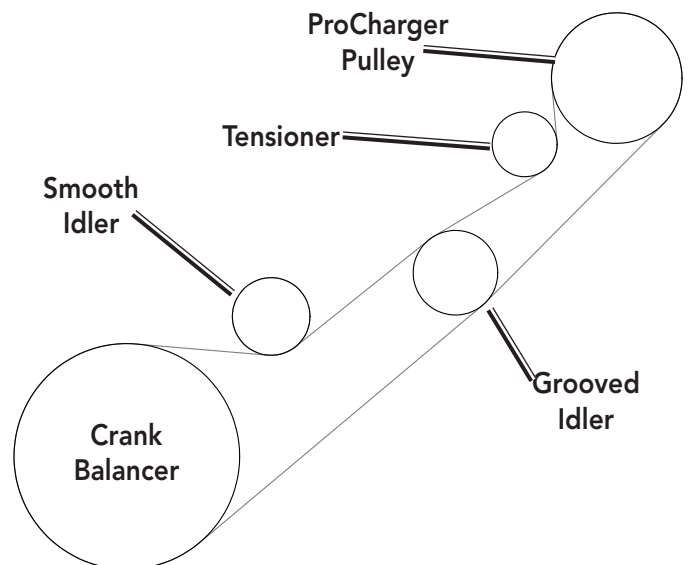
New Idler Shaft Installed

- 20 Slide the supplied idler pulley over the longer recessed portion of the shaft and secure with the supplied M8x70mm bolt and washer.



Smooth Idler Pulley

- 21 Route the belt over the crank pulley and up to the ProCharger pulley as shown.



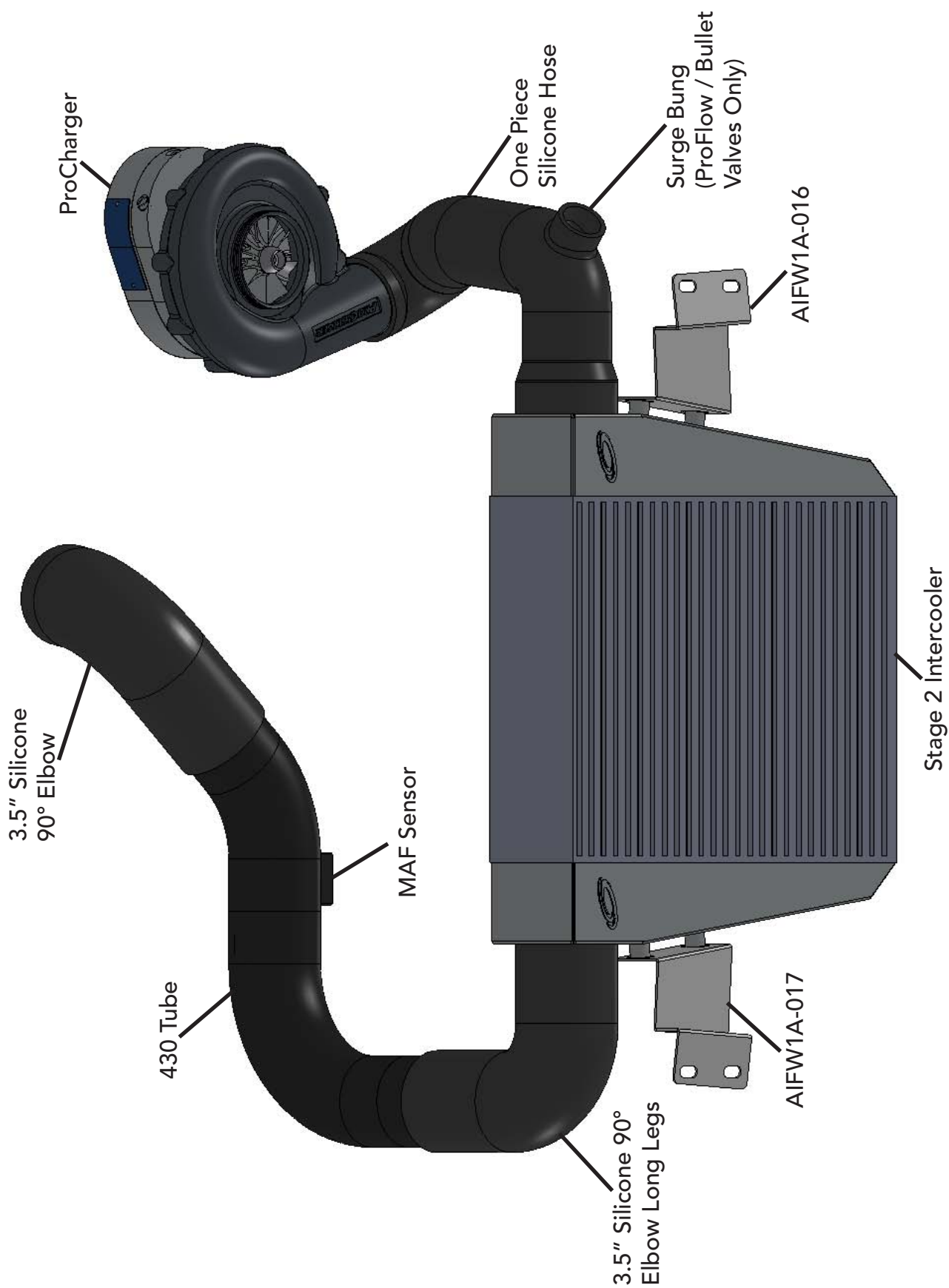
Belt Routing

- 22** Insert a 1/2 drive ratchet/extension through the front hole of the main bracket and into the tensioner.
- 23** Rotate the tensioner counter clockwise.
- 24** Wrap the belt around the supercharger pulley.
- 25** Release the tensioner and remove the ratchet/extension.



Rotate Tensioner Counter Clockwise

STAGE 2 INTERCOOLER SCHEMATIC



Intercooler and Tubing

- 1 Use a 8mm to remove the screw attaching the horns to the body.
- 2 Remove the panel nut and install it in the hole a few inches below at the bottom of the frame.
- 3 Use a 10mm to loosen the (2) nuts on each horn. Mount the horns to the panel nut using the factory bolt. The body of the horns should be faced toward the center of the car. Rotate the horns so they are pointing downward. Tighten the 10mm nuts.
- 4 Disconnect the wiring harness retainers holding the main wiring harness behind the front bumper. Set the harness on top of the bumper to provide clearance for the intercooler.
- 5 *If optioned with a race valve:* Install the 90° pushlock fitting onto the valve.
- 6 *If optioned with a race valve:* Mount the race valve to the plenum on the intercooler using the supplied #10 screws and o-ring. Orient the pushlock fitting so it is towards the back side of the intercooler.



Horn Nut Relocated



Horns Relocated



Race Valve Mounted (Optional)



Wiring Harness Retainers (Stage 2 ONLY)

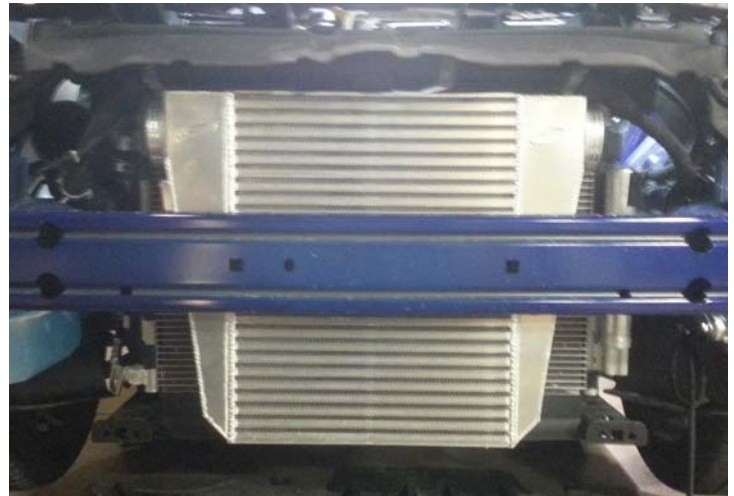
7 Use the supplied 3/8" bolts and washers to attach the brackets to the intercooler mounting bosses using a 9/16. Leave these bolts loose.

8 Slide the intercooler up between the bumper and the condenser.

✓ **Tech Tip:** It may be necessary to loosen the (8) bumper to frame bolts using a 13mm to gain clearance for the intercooler and brackets.

9 The intercooler brackets slide over the end of the bumper to frame bolts on the back side of the bumper. Thread the supplied M8 nuts with washers onto the bumper bolts with a 13mm. (Both sides)

✓ **Tech Tip:** Leave the intercooler bracket hardware loose until all hardware has been installed and the intercooler has been adjusted. Adjust the intercooler as high and as far forward as possible before tightening.



Intercooler Mounted



Driver's Side Intercooler Bracket

10 Use a T15 torx to remove the (2) screws retaining the factory MAF sensor to the factory inlet tube.



MAF in Factory Air Inlet

Intercooler and Tubing

- 11 Insert the MAF sensor into tube #430. The mounting holes are offset so the sensor can only be installed in one direction. Secure with the supplied M4 screws using a 7mm socket.



MAF Installed Into Tube #430

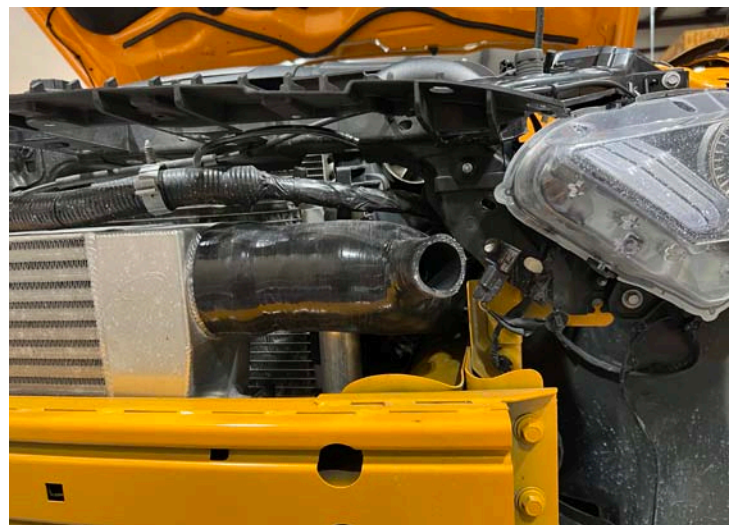
For Bullet And Proflow Valves Only, Race valve Equipped Cars Skip this Step.

- 12 Install the 1.5" connector tube (found in the surge valve bag) into the bung on the one piece silicone hose. Secure with a #24 hose clamp.



1.5" Connector Tube Installed

- 13 Slide the large end of the one piece silicone hose over the inlet of the intercooler and pull the other end up onto the inlet of the supercharger.
- 14 Secure the supercharger connection with a 3.38" T-bolt clamp and the intercooler connection with a 3.75" T-bolt clamp.



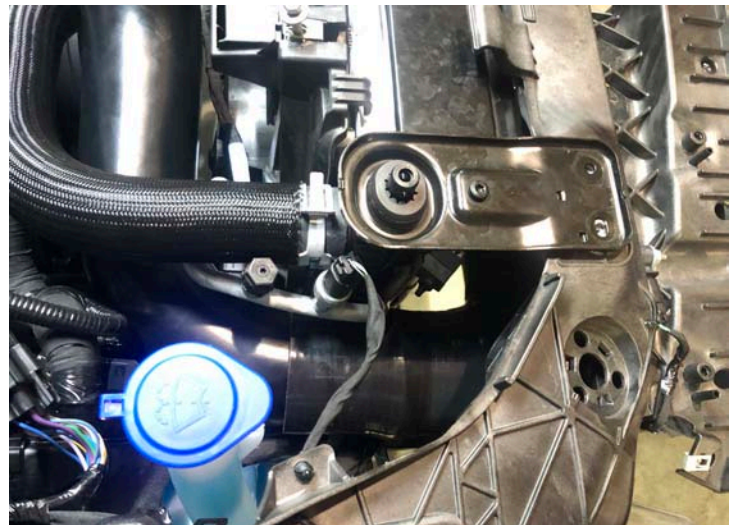
One Piece Silicone Hose Installed

- 15** Insert the short leg of the 3.5" 90° silicone elbow onto the passenger's side intercooler outlet. Secure with a 3.75" T-bolt clamp.



3.5" 90° Rubber Elbow Installed

- 16** Insert the 90° leg of tube #430 into the open end of the 3.5" 90° rubber coupler. Secure with a 3.75" T-bolt clamp.



Tube #430 Installed

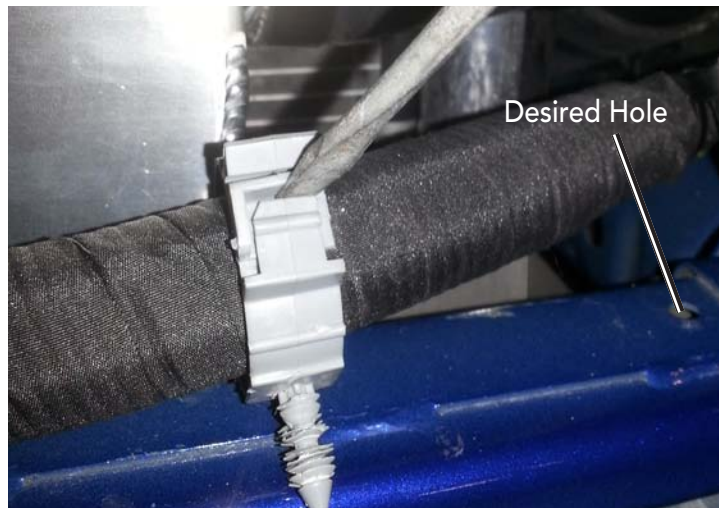
- 17** Connect tube #430 to the throttle body using the 3.5" 90° silicone elbow. Secure with 3.75" T-bolt clamps



Throttle Body Elbow Installed

Intercooler and Tubing

- 18 Use a flat screwdriver to unclip the driver's side wiring harness retainer. Slide the retainer down to line up with the hole on the top of the bumper.
- 19 Use a flat screwdriver to unclip the center wiring harness retainer. Remove the retainer. It will not be reused.



Unclip the Driver's Side Harness Retainer

- 20 Insert the passenger's side wiring harness retainer into the existing hole on the top of the bumper.



Note: Some factory bumpers do not have available holes. If this is the case, remove the harness retainers and let the wiring harness sit on top of the bumper. No further retaining is necessary.



Wiring Harness Relocated

- 21 Use the supplied MAF extension harness to connect the factory MAF harness to the MAF sensor.

SURGE SYSTEM

- 1 Unwrap the foam covering the factory vacuum tree.
- 2 The port on the lower passenger's side has a line that previously ran to the factory air inlet tube. Remove this line from the vacuum tree.



Factory Vacuum Tree

- 3 Assemble the vacuum manifold using the provided barb fittings and plugs as shown.

✓ **Tech Tip:** If installing a boost gauge, replace one of the 1/8" plugs with the additional provided barb fitting. Route a vacuum line from the barb to the boost gauge.



Vacuum Manifold Assembled

✓ **Note:** For the Race Valve option, the supplied fitting are push-lock style instead of hose barb.

- 4 Attach the supplied 3/8" vacuum hose to the open port on the factory vacuum tree. Cut the hose to proper length and install the vacuum manifold onto the end of the hose. Secure with #6 hose clamps.



Vacuum Manifold Installed

Proflow / Bullet Surge Valve Only

For Race Valve Option Proceed to Step 9

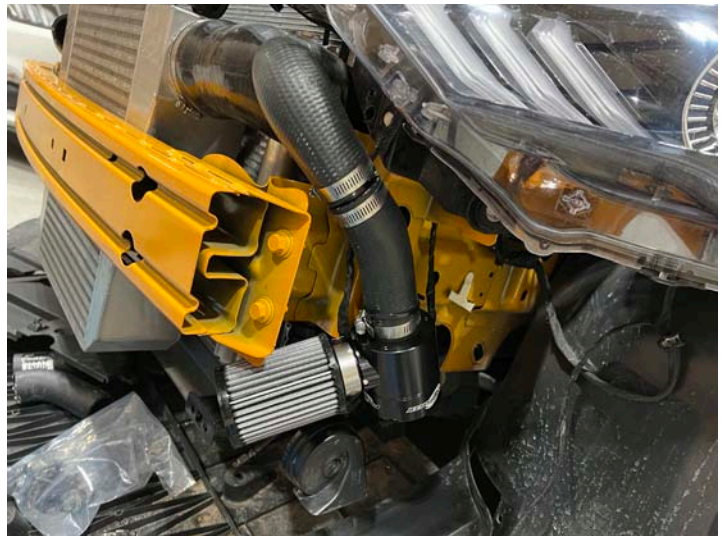
- 5 Install the 90° end of the 1.5" 90° rubber hose over the bung on the one piece silicone hose. Loosely secure with a #24 hose clamp.
- 6 Insert a 1.5" connector tube into the end of the 90° rubber hose, followed by the remaining section of rubber hose. Rotate the hose as shown to the right and loosely secure with #24 hose clamps.
- 7 Insert the surge valve into the open end of the 1.5" hose. Loosely Secure with #24 hose clamps.
- 8 Position the hose and the surge valve and secure the hose clamps at this time. Use the included zip-ties to secure the valve and hose to the radiator support.

ProFlow / Closed Bullet Valve's Only, Open Bullet Skip This Step.

- 9 Install the filter on the open end of the surge valve. Secure with a #24 hose clamp.

✓ **Tech Tip:** Ensure the ProFlow surge valve's actuator linkage and vacuum barb are unobstructed when fascia is reinstalled.

- 10 Attach the supplied 3/16" vacuum hose to the 3/16" barb fitting on the vacuum manifold, then route and attach to the surge valve vacuum port. Ensure the surge valve line is free of any sharp bends and is clear of any moving parts.



Surge Valve Installed (Closed Bullet Shown)



Surge Valve Installed (ProFlow Shown)

Race Valve Option

- 11 Route the supplied 1/4" nylon hose from the push-lock fitting on the vacuum manifold to the fitting on the race valve.

AIR INLET AND PCV SYSTEM

- 1 Locate the plastic inlet tube. Install the 90° brass fitting into the tube as shown.
- 2 Cut a 4" piece off the long end of one of the supplied 5/8 rubber hose sections in the PCV bag. Insert it onto the end of the brass fitting.
- 3 Install the supplied 5/8 plastic "T" fitting onto the other end of the 4" piece of hose. Secure with the provided hose clamps.
- 4 Install the air filter onto the open end of the plastic inlet tube. Secure with the provided hose clamp.
- 5 Install the inlet tube onto the ProCharger inlet. Secure with a #60 hose clamp.



Inlet Tube Assembled



Inlet Elbow Installed

Air Inlet and PCV System

- 6 Disconnect the line going to the port behind the throttle body on the passenger's side. Install the supplied 5/8" vacuum cap over the port and secure with a #10 hose clamp.
- 7 Disconnect the factory plastic lines that go to each side valve cover vent.



5/8" Vacuum Cap

- 8 Located the supplied 5/8 rubber hose that has not been modified. Cut the short leg of the hose to fit properly over the valve cover vent. *Optional: secure with a #10 hose clamp.*



Passenger's Side PCV Hose

- 9 Route the line in front of the radiator and across the front of the vehicle.
- 10 Place the supplied 5/8" brass union in the end of the 5/8 hose.

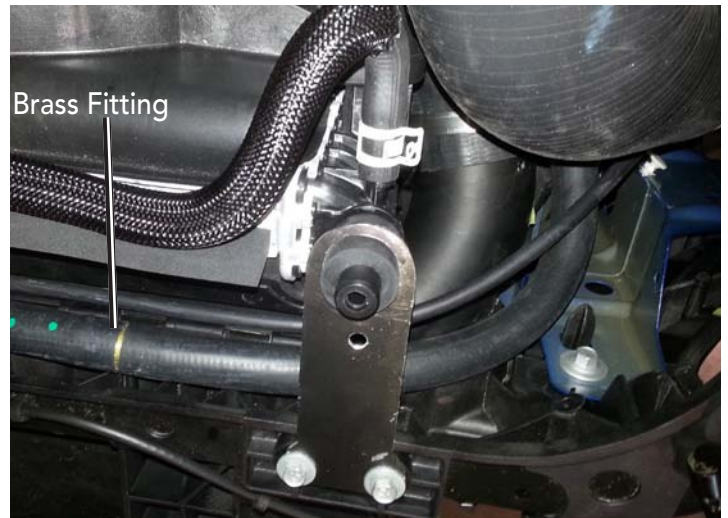


Passenger's Side PCV Hose Routing

- 11 Cut the short leg of the remaining 5/8" hose to properly fit over the driver's side valve cover vent.
- 12 Route the hose along the fender to the plastic "T" on the air inlet tube. Cut the hose to the appropriate length, and do not discard the remainder of the hose.
- 13 Attach the cut remainder of the driver's side hose to the open end of the 5/8 brass barb in the passenger's side hose.
- 14 Route the hose down to the remaining open port on the plastic "T" fitting on the inlet tube. *Optional: Secure all 5/8" hose connections with #10 hose clamps.*



Driver's Side PCV Hose



Passenger's Side PCV Hose to Air Inlet

2015-2016 Model Years Only

2017 Model Years Skip to Next Section

- 15 At the back of the engine, locate the vacuum "Y" going to the IMRC diaphragms. This is the diaphragm vent line.
- 16 Disconnect the line at the "Y".
- 17 The vent line goes from the "Y" at the back of the engine, through the intake manifold, up to the front of the engine. Remove the line completely.
- 18 Cut the driver's side 5/8" PCV hose as shown.
- 19 Insert the supplied 5/8 x 3/8 x 5/8 plastic "T" fitting where the cut was made.
- 20 Connect the supplied 3/8" rubber hose to the open barb on the "T". Route the hose around the back side of the engine and attach it to the diaphragm vent "Y". Optional: secure hose connections with #10 and #6 hose clamps.



IMRC "T" Fitting



IMRC Vent Line



Plastic "T" In Driver's Side PCV Hose

FINISHING UP

- 1 Locate the supplied coolant reservoir tank. Using thread sealer, install the (2) 3/8" brass barb fittings into the 1/4" NPT bungs.
- 2 Using thread sealer, install the 3/4" 90° brass barb fitting into the 1/2" NPT on the bottom of the tank. The fitting should be oriented so that it is pointing towards the throttle body when installed.
- 3 Mount the coolant reservoir using the factory mounting location on the fan shroud, using the factory hardware. Connect the coolant lines to the barbs on the new tank and secure with the factory hose clamps.



New Coolant Reservoir Mounted

✓ **Tech Tip:** The large (3/4") cooling hose may need to be re-routed to connect to the fitting on the bottom of the new coolant reservoir. Ensure this hose is out of the way of any moving parts.

- 4 Refill the cooling system. The coolant level should be approximately 2" below the cap.
- 5 Install the supplied coolant reservoir cap.

- 6 Inspect belts and pulleys for clearance from all wires and hoses. Adjust and secure any hoses or wires that may be caught or abraded by the belts or pulleys. Verify the belt is properly tensioned. Any locations where steel tubes could abrade on the chassis should be cushioned with the supplied self-adhesive rubber strips.
- 7 Using the factory hardware, re-install the front bumper cover. Plug the fog light and turning signal harnesses back into the proper locations on the front bumper cover.
- 8 Remount the plastic undercladding.
- 9 Re-install the plastic radiator cover using the factory hardware.
- 10 Re-install the engine cover by aligning the cover over the engine and pushing downward until all four corners of the cover snap into place.



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

OPERATION AND MAINTENANCE

Cold Starting

Never race your engine and ProCharger supercharger when your engine is cold. Allow the water temperature to climb into operating range for several minutes before driving above 2,500 rpm, to ensure adequate oil lubrication.

Fuel Quality

With a properly installed intercooled ProCharger supercharger system, detonation should not occur. For the best performance and reliability, use premium grade fuel (91 octane or higher). Listen for signs of detonation after refueling, and after replacement or modification of any fuel system component(s). If detonation occurs, reduce the throttle and locate the source.

Ignition System Maintenance

If your spark plugs are more than a year old or have more than 10,000 miles logged, you should consider changing them before driving your vehicle under load. Spark plug wires should be changed if visibly damaged or when resistance exceeds factory specifications.

Air Filter Maintenance

Your air filters should be cleaned periodically, potentially as often as every 10,000 miles or 6 months, even though a service interval of 50,000 - 100,000 miles is quoted by the manufacturer under normal driving conditions. A clogged air filter will result in decreased boost levels and vehicle performance. Be sure to re-oil the cleaned filter before re-installing. Always operate your vehicle with an air filter, failure to do so may result in damage to your ProCharger supercharger and/or personal injury!

Belt Replacement

The serpentine belt, which turns your ProCharger supercharger, will stretch after initial run-in, and should be re-tightened 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 purchased from ATI or from your local parts store.

ProCharger Oil Change Intervals

The first oil change should be performed at 500 miles and at 6,000 mile intervals thereafter. Clean the drain plug after every oil change. Drain the oil by removing the drain plug. Clean off the drain plug before re-installing.

ProCharger Oil Level

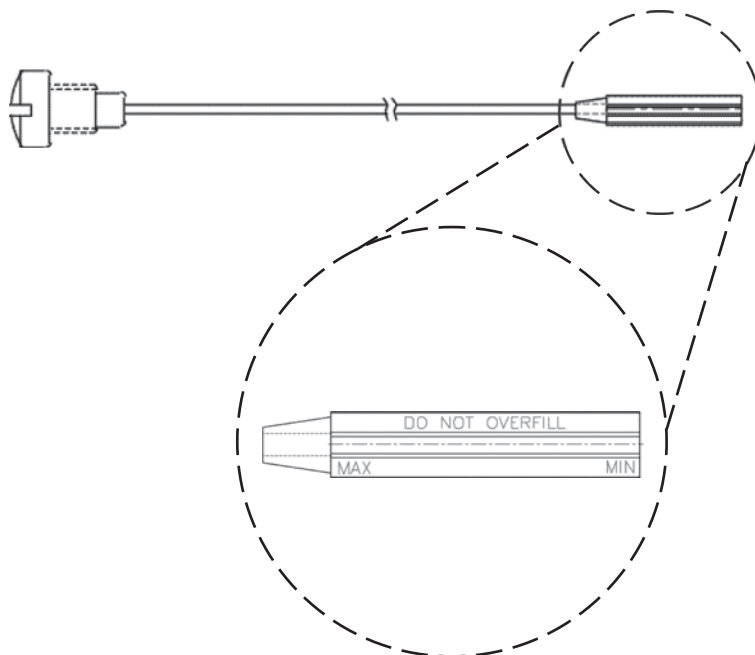
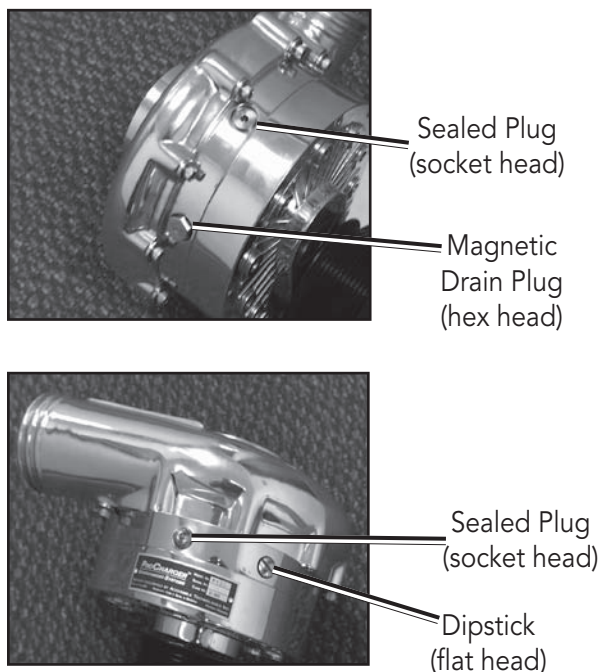
The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.

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

General

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

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



LIMITED WARRANTY

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

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

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

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

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

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

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

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

Include the following information inside the box with your product:

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

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

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

PROCHARGER EXTENDED COVERAGE

The ProCharger Extended Coverage Program extends the ProCharger warranty coverage for your supercharger an additional twenty-four (24) months, for a total of thirty-six (36) months or three years of coverage. This extended coverage applies to parts for the ProCharger supercharger head unit only and does not include other system components. With your extended coverage registration, you will receive two (2) additional boxes of ProCharger Supercharger oil.

Under the extended coverage program, Accessible Technologies, Inc. (ATI) will repair or replace any component within the supercharger head unit which is found to be defective. Only the supercharger head unit itself is included in the extended coverage.

Service under the extended coverage program is obtained through the same process as described in the Limited Warranty.

Race kits are not eligible for the ProCharger Extended Coverage Plan.

To qualify for the ProCharger Extended Coverage:

- Only the original owner of the ProCharger supercharger is eligible.
- Completion of the Extended Coverage Registration Form is required, along with a \$99 registration fee. This form must be completed in its entirety, and must be submitted along with payment within 30 days from the date of original purchase from your local dealer or date of shipment from the factory.
- Participants must have a ProCharger P-1SC, P-1SC-1, P1-X, C1, or C2 supercharger head unit using the maximum warranted boost level. All terms and conditions within "The Limited Warranty" apply. Acts resulting in disqualification include but are not limited to the following:
 - Disassembly or modification of the ProCharger supercharger.
 - Removal or attempted removal of the ProCharger drive pulley(s).
 - Removal or attempted removal of the ProCharger supercharger serial number plate.
 - Removal or attempted removal of the compressor housing or transmission case.
- Participants agree to properly maintain the ProCharger supercharger and provide proof of compliance with the following recommended maintenance:
 - Change the ProCharger supercharger oil after the initial break-in period of 500 miles (automotive) or 15 hours (marine).
 - Change the ProCharger supercharger oil every 6,000 miles after the initial break-in period.
 - Use only the specified amount of ProCharger Supercharger oil in the ProCharger supercharger.
 - Inspect and clean the magnetic drain plug at every ProCharger supercharger oil change.
 - Check the ProCharger supercharger oil level frequently.

ProCharger Extended Coverage Program Registration Form

Return this completed form and a \$99 check within 30 days of original purchase.

Name: _____

Date of Purchase: _____

Address: _____

Purchased From: _____

City: _____

ProCharger Serial #: _____

State: _____ Zip: _____

Vehicle Year: _____

Daytime phone: _____

Vehicle Make: _____

Evening phone: _____

Vehicle Model: _____

E-mail: _____

Please rank in order of importance starting with 1 being most important.

Age ☐ 18 - 24 ☐ 25 - 34 ☐ 35 - 44
☐ 45 - 54 ☐ 55 and up

Which information sources most influenced your decision to purchase a ProCharger system?

Income ☐ \$15,000 - \$29,000 ☐ \$30,000 - \$44,000
☐ \$45,000 - \$69,000 ☐ \$70,000 and up

___ Magazine advertising
___ Dealer recommendation
___ ProCharger Brochures
___ Witnessed performance on a car
___ Test drive
___ Magazine editorials
___ Friends
___ Conversations with ATI technicians
___ Web Site (please specify) _____
___ Other (please specify) _____

What magazines do you read?

- ☐ Car & Driver
- ☐ Car Craft
- ☐ Chevy High Performance
- ☐ Four Wheel and Off Road
- ☐ Hot Rod
- ☐ Motor Trend
- ☐ Muscle Mustangs and Fast Fords
- ☐ GM High-Tech Performance
- ☐ 5.0 Mustang
- ☐ Super Street
- ☐ Mustang Monthly
- ☐ Truck Trends
- ☐ Popular Hot Rodding
- ☐ Road & Track
- ☐ Super Chevy
- ☐ Truckin'
- ☐ Street Truck

What most influenced your decision to purchase a ProCharger system?

___ Reliability
___ Standard warranty
___ Extended coverage warranty
___ Performance
___ Quiet operation
___ Removability (ability to return car to stock)
___ Cost
___ Ease of Installation

Who installed your ProCharger system? ☐ Self ☐ Dealer ☐ Other _____

Have you own a forced induction system previously? ☐ Yes ☐ No

If yes:

Supercharger: Brand(s) _____ Vehicle(s) _____

Turbocharger: Brand(s) _____ Vehicle(s) _____

I have read and understand the policy for the ProCharger Extended Coverage Program. I have not and will not modify my ProCharger supercharger in any way during my participation in the extended coverage program. I have read and answered all questions on this form. I have enclosed my check for \$99, payable to ATI, for enrolling my ProCharger supercharger (serial number indicated above) in the extended coverage program for an additional twenty-four (24) months beyond the standard limited warranty period of twelve (12) months.

Signature _____ Date _____

Mail this completed registration form with a \$99 check to ATI at: 14801 West 114th Terrace, Lenexa, KS 66215. If you have any questions, contact us at techserv@procharger.com or (913) 338-2886 8:30 AM - 5:30 PM CST, Monday - Friday.

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Accessible Technologies, Inc.
14801 W. 114th Terrace
Lenexa, KS 66215
Phone: 913.338.2886
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Part Number PMFW1A-002 Rev. V

