

2016+ Mustang GT350 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® 2016+ Mustang GT350 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
- Pliers Set
- Ford Engine Coolant (Pink)
- Crankshaft Damper Removal Tool



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.



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

- 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.
- 4 Unplug the MAF connector by extending the red locking tab and squeezing the connector.



Wiring Harness Screw (Passenger's Side)



Strut Tower Bar (Passenger's Side)



MAF Connector

Air Inlet Removal

- 5 Remove the (2) hoses from the air inlet tube by squeezing the retaining clip and pulling back on the hose.
- 6 Using a 7mm nut driver, loosen the inlet connection to the throttle body.



Disconnect Air Inlet Hoses

- 7 Use a 10mm to remove the (4) studs holding the air filter seal.
- 8 Remove air filter inlet tube assembly.



Remove Air Filter Seal Studs

- 9 Use a 10mm to remove the screw in the back right corner of the air box.
- 10 Remove the air box.



Airbox Screw

FASCIA REMOVAL

1 Raise the vehicle just enough to access the undercladding hardware. Secure with jack stands.

2 Use a T30 torx to remove the (12) screws on the plastic skid plate.



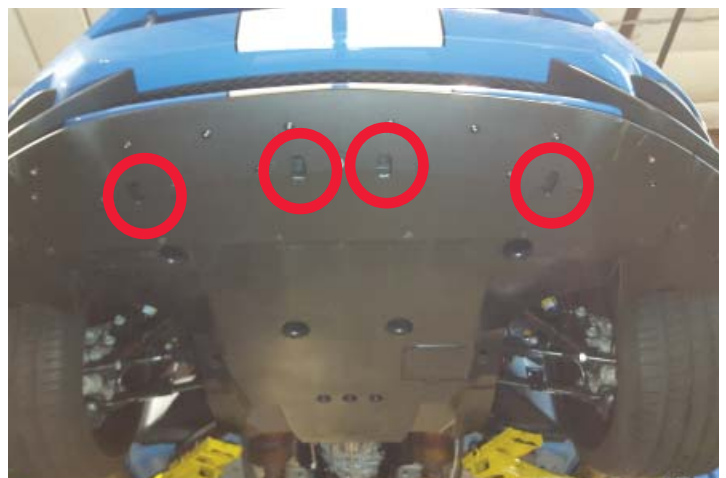
Skid Panel

3 In front of the tires, on each side, remove the (2) push clips.



Push Clips in Front of Tires

4 Use a 7mm to remove the (4) screws accessed through the holes in the valence. Remove the valence. Do not remove the valence on R models.



Valence Screws

Fascia Removal

- 5 **GT350:** Use a 7mm to remove the (18) screws holding the plastic skid panel. Remove skid panel.

GT350R: Use a 7mm to remove the (10) screws and (2) plastic clips holding the plastic skid panel. Remove skid panel.



Valence Removed

- 6 Use a flat screw driver to remove the plastic push clips holding the wheel liner to the fascia in front of the tires. (5 per side)

- 7 Disconnect the fascia wiring harness on each side.



Wheel Liner Push Clips

- 8 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)

✓ **Tech Tip:** Remove all of the liner clips to access the bolt easier.

- 9 Pull the fascia straight outward to unclip it from the fender. (Both sides)



Fender Screw

- 10 Underneath the car, remove the push clip going upward into each side brake duct.

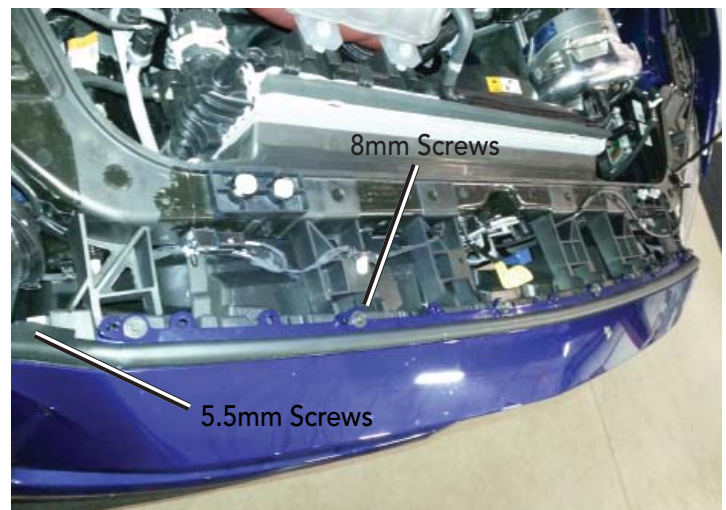


Brake Duct Push Clip

- 11 Use an 8mm to remove the (6) screws at the top of the fascia.

- 12 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.

- 13 Remove the fascia.

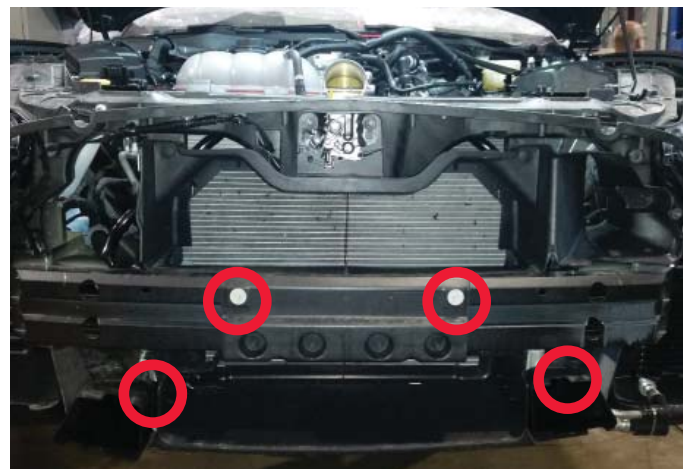


Top Fascia Screws

- 14 Remove the rubber air ducts on each side of the air shroud with a flat screwdriver.

- 15 Disconnect the ambient air temperature sensor from the air shroud.

- 16 Remove (4) 8mm bolts from the air shroud. Pull air shroud straight out to remove.

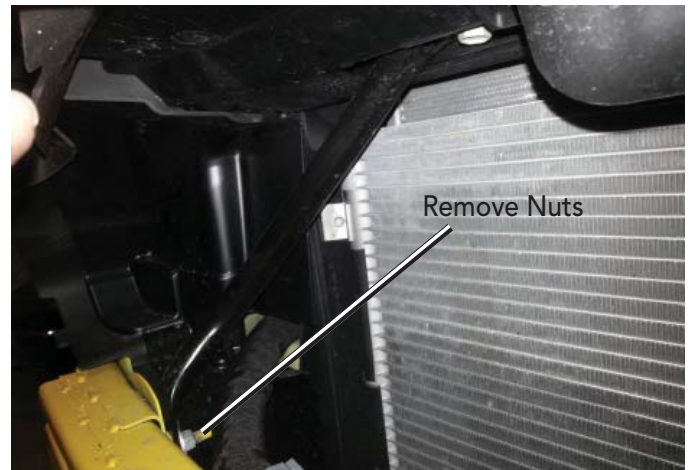


Air Shroud

- 17 Use a flat screw driver to unclip the main wiring harness behind the bumper.

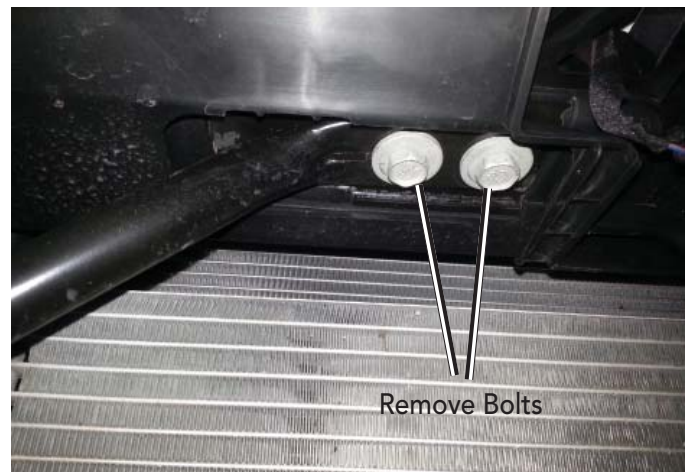
Fascia Removal

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



Bumper Brace Nuts

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



Radiator Core Support Bolts

- 21** Use a flat screwdriver to unclip the wiring harness retainers.



Unclip the Harness Retainers

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 coolant line guides. Remove the guides.
- 3 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.
- 4 Move the coolant lines that run over the top of the fuel rails out of the way.

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.
- 6 Unplug the fuel rail pressure sensor.



Remove Coolant Line Guides



Adjust Coolant Lines For Fuel Rail Removal



Disconnect Fuel Supply Line

Fuel Injector Installation

- 7 Remove the fuel rail attaching bolts with a 10mm socket (4X).
- 8 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.
- 9 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.

- 10 Push each injector into the fuel rail injector socket with the electrical connector facing outward.
- 11 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 a hose clamp compressor to remove the clamp holding the radiator hose to the thermostat housing neck and at the radiator. Remove the hose.
- 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 Locate the (2) supplied radiator hose pieces. Attach the hose with multiple bends to the outlet on the radiator. Secure with a #24 hose clamp.
- 7 Place the 1.5" aluminum coupler in the open end of the hose.



Thermostat Housing



New Thermostat Housing Neck Installed



Lower Hose and Coupler

Cooling System

- 8 Attach the 90° section of hose from the coupler to the thermostat housing. Trim each end of the hose for proper fitment. Secure with the provided #24 hose clamps.



Upper Hose Section Installed

- 9 Use pliers to disconnect the (3) hoses attached to the coolant reservoir.
- 10 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.



Factory Coolant Reservoir

CRANK BALANCER

- 1 Use a 15mm to compress the factory tensioner and remove the factory belt.
- 2 Pull the plastic wiring harness holder off of the front lower A/C compressor bolt.
- 3 Use a 13mm to remove the (3) A/C compressor bolts.
- 4 Pull the back of the A/C compressor away from the engine and remove the A/C belt.
- 5 Use an 18mm to remove the front sway bar to frame bolt on the driver's side. The rear bolt under the alternator may need to be removed if extra room is needed during balancer installation.
- 6 Use an 18mm to remove both sway bar to frame bolts on the passenger's side.
- 7 Slide the sway bar toward the front of the vehicle to gain clearance around the crankshaft balancer.
- 8 Use an 18mm and a breaker bar to remove the factory crankshaft balancer bolt.



Remove A/C Compressor Bolts



Driver's Front Sway Bar Bolt Removed



Passenger's Sway Bar Bolts Removed

Crank Balancer

- 9 Use an 18mm and a breaker bar to remove the factory crankshaft balancer bolt.
- 10 Use a crankshaft balancer removal tool to pull the factory balancer off of the crankshaft.



Crankshaft Balancer Removal Tool



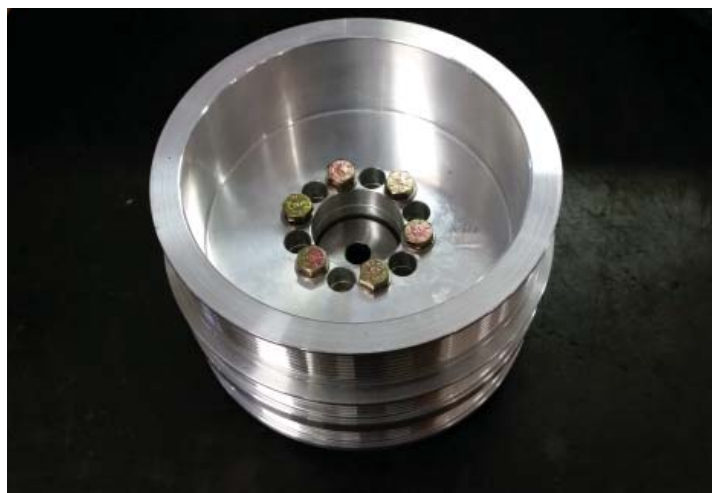
Crankshaft Balancer Removed

- 10 Locate the new Innovators West balancer and crank pulley bag.



New Balancer, Pulley, and Hardware

- 10** Bolt the crank pulley to the balancer using the (6) 5/16 grade-8 bolts and washers. Make sure the bolts go through the smaller-diameter set of holes in the pulley. Insert the thick crank bolt washer into the center, with the flat side facing outward.



Balancer and Pulley Assembled

- ✓ **Tech Tip:** The pulley is centered in the balancer with a precision fit. If the pulley fit is too tight, apply a small amount of heat to the outer set of ribs on the balancer. This will cause the balancer i.d. to grow and provide enough clearance to install the pulley into the balancer.

- 11** Install the new balancer. Follow the instructions included with the balancer for proper installation.

- ✓ **Tech Tip:** Ensure the crankshaft keyway is lined up with the slot on the new balancer before pulling the balancer onto the crankshaft. An M12 x 120mm bolt is included to pull the balancer on if an installation tool is not available. **DO NOT** pull the balancer all the way on with this bolt. It is too long. After pulling the balancer on 1/2 way, remove the bolt and finish installing the balancer with the shorter bolt included with the Innovators West balancer.

- 12** Reinstall the A/C belt by turning the engine over and walking the belt onto the A/C compressor.

- ✓ **Tech Tip:** A second person is usually needed to help with the A/C belt installation. There is also a Ford special tool for installing this belt if needed.

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.



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



Uppermost Timing Cover 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.

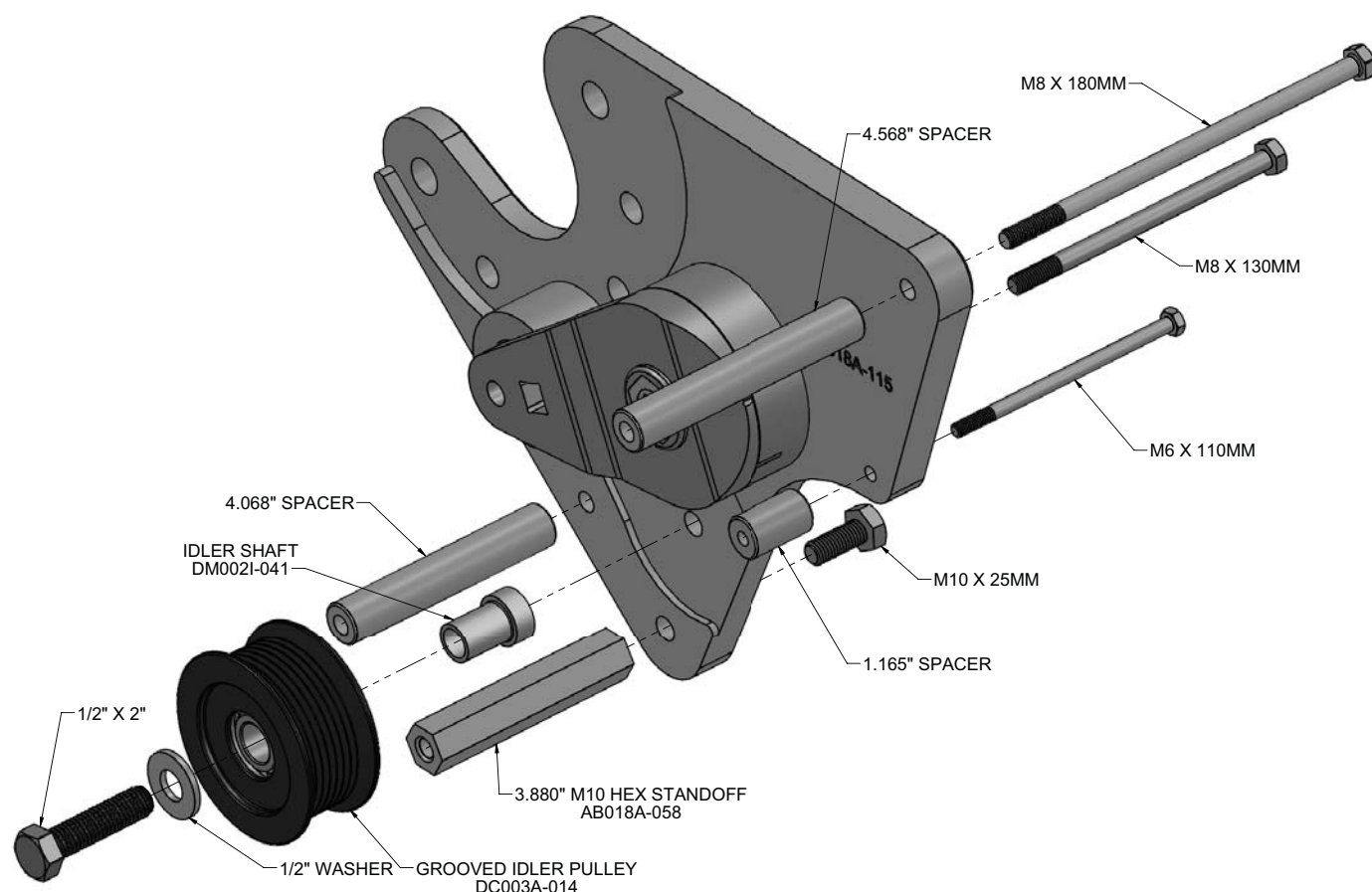


Cam Sensor Wiring Harness

- 6 Use a 10mm to remove the (2) screws holding the factory upper radiator brackets (each side).
- 7 Use a T30 to remove the (2) screws holding the metal radiator cover to the brackets.
- 8 Remove the brackets from the car sliding them upward off the radiator.



Radiator Bracket Removal



- 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" spacer between the bracket and the thermostat housing. Fasten with the M6x110mm bolt.
- 12 Place the 4.568" 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" 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. Flip the pulley over and insert it back on its mount.



Idler Pulley Flipped

- 19** Locate the supplied idler shaft. Insert the short recessed portion of the shaft into the factory idler pulley.

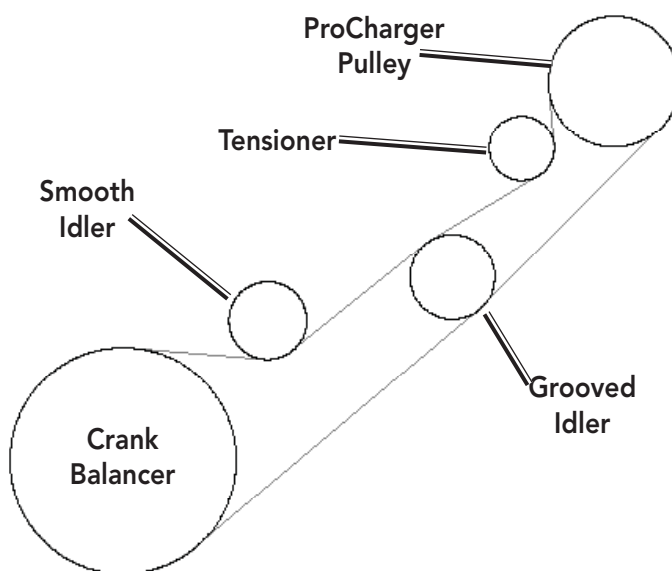
- 20** Slide the supplied idler pulley over the longer recessed portion of the shaft and secure with the supplied M8x70mm bolt and washer.



Smooth Idler Pulley

- 21** Reinstall the factory accessory belt.

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



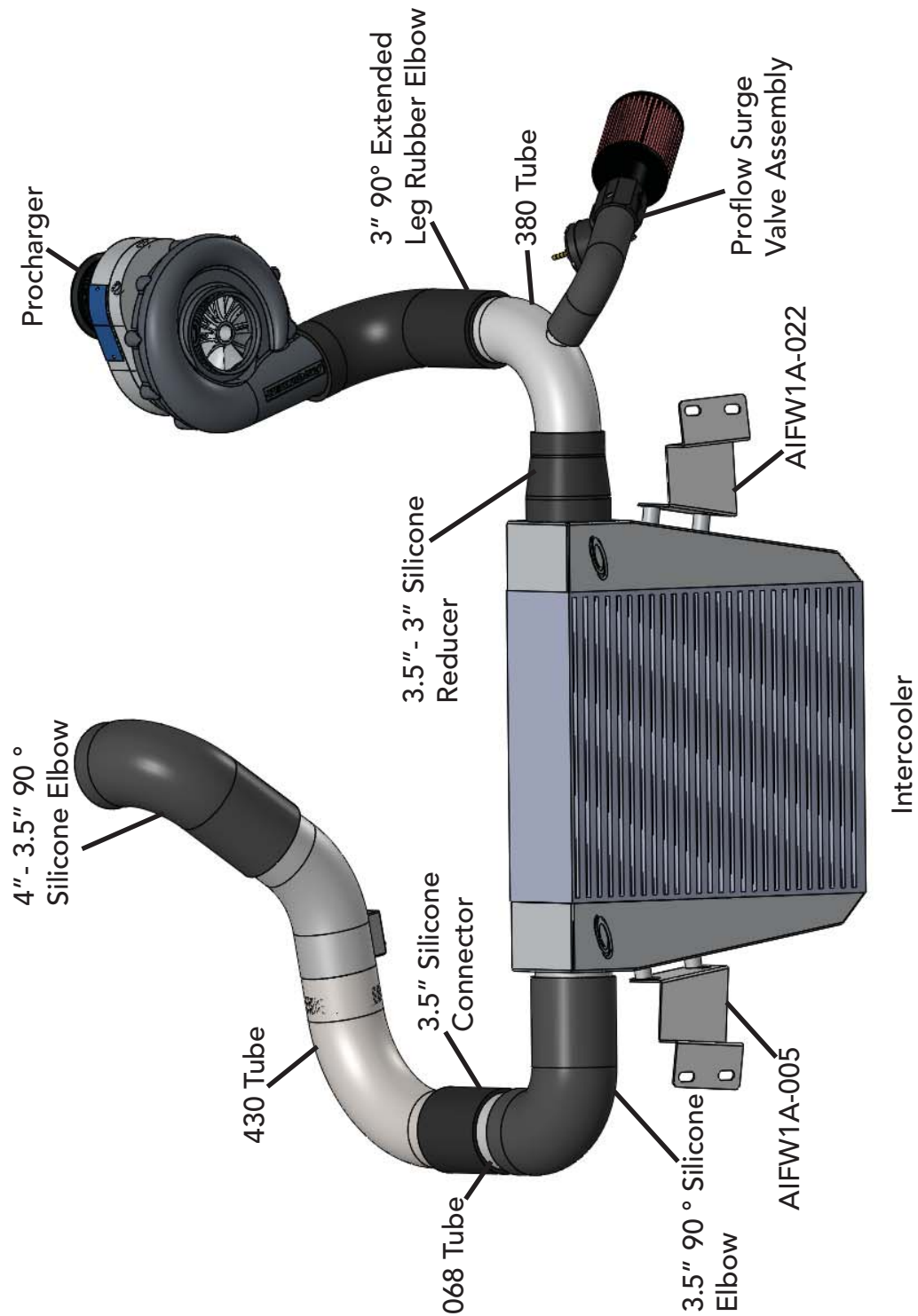
Belt Routing

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

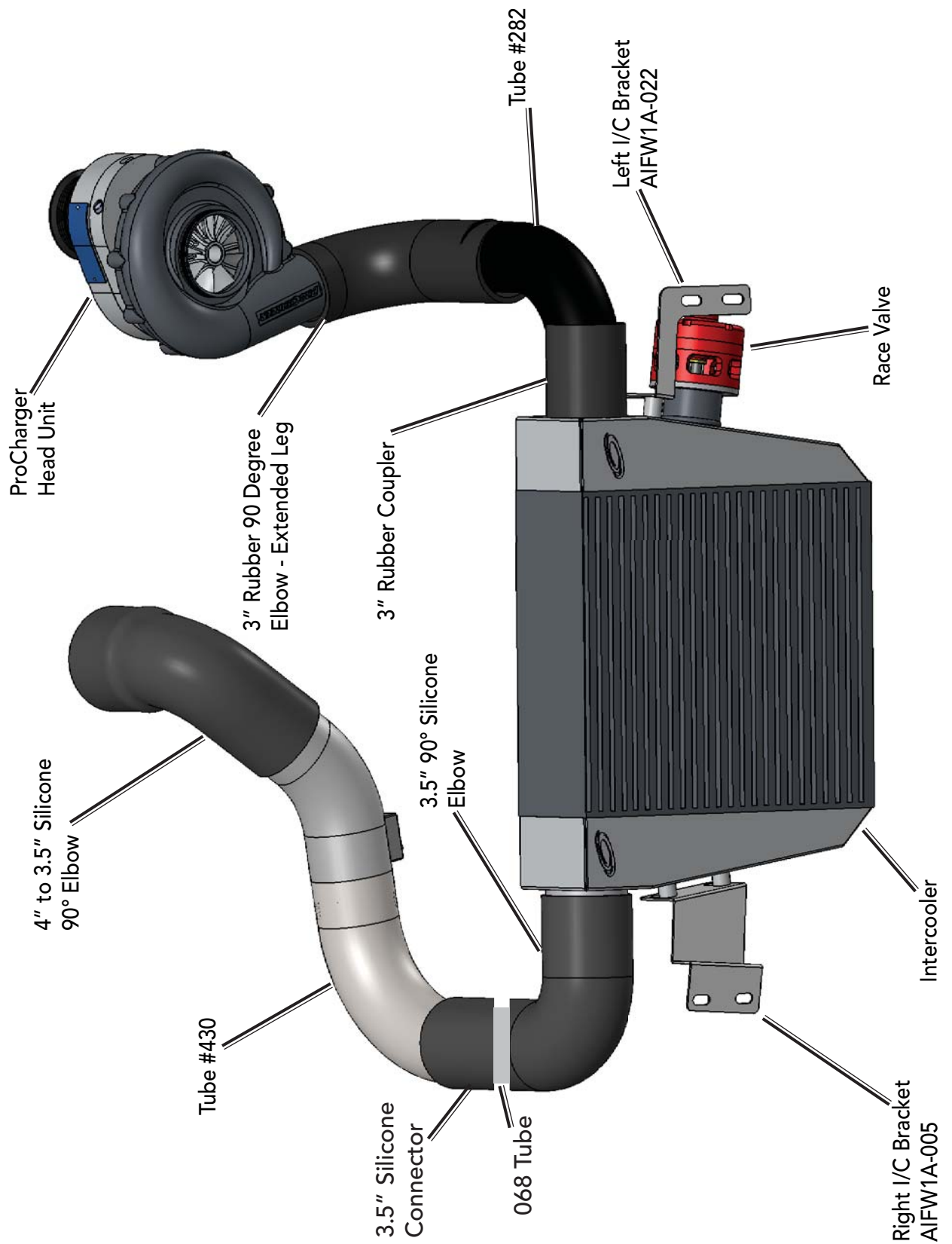


Rotate Tensioner Counter Clockwise

INTERCOOLER SCHEMATIC WITH ProFlow



INTERCOOLER SCHEMATIC WITH RACE VALVE



1 If optional with a race valve: Install the 90° pushlock fitting onto the valve.

2 If optional 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.

✓ **Note:** 2020 model years will have the race valve located lower on the intercooler plenum.

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

4 Using a 13mm remove the (4) inner bumper support bolts shown.

5 Slide the intercooler up between the bumper and the A/C condenser. Support the intercooler until the brackets are attached.

6 Reinstall the bumper support bolts through the slots of the intercooler brackets. Thread the supplied M8 nuts with washers onto the bumper bolts with a 13mm. (Both sides)

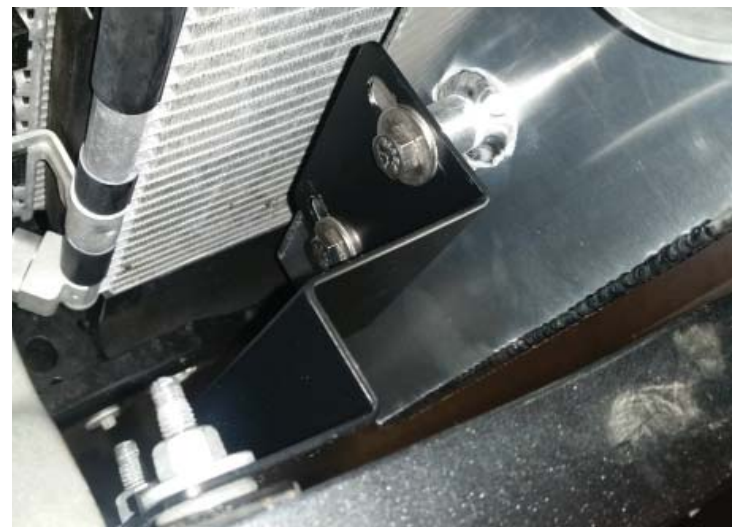
✓ **Tech Tip:** Leave the intercooler bracket hardware loose until all hardware has been installed and the intercooler has been adjusted. Adjust the intercooler up and as far forward as possible before tightening.



Race Valve Mounted (Optional)



Intercooler Mounting Location



Passenger's Side Intercooler Bracket

Intercooler & Tubing

- 7 Route the wiring harness in front of the intercooler.

✓ **Tech Tip:** Place provided rubber tape between A/C condenser and race valve to prevent vibration.



Wiring Harness Rerouted

- 8 **2020 Model Years Only:** Lift up the driver's side of the radiator. Place the supplied u-shaped aluminum spacer in between the radiator and the rubber bushing as shown.



Lower Radiator Spacer

- 9 Insert the (2) provided rubber grommets into the (2) upper radiator brackets as shown.



Upper Radiator Bracket Grommet

- 10 Install the metal factory radiator cover to the brackets as shown using the factory hardware. Leave loose.

- 11 Install the metal factory radiator cover and upper radiator brackets as shown sliding over the top of the radiator.

- 12 Pull the radiator as far forward as possible and secure with the factory hardware.



Upper Radiator Brackets Installed

- ✓ **Tech Tip:** Leave tubing connections loose to allow for adjustment.

- 13 Trim the short leg of the 3" 90° rubber elbow until it fits properly over the supercharger outlet. Secure with #52 hose clamp.



Blower Discharge Tube Installed

- ✓ **Tech Tip:** The short leg of the 3" 90° rubber elbow will need to be trimmed fairly short to clear the frame rail without causing a kink in the elbow.

- 14 Install tube #380 (tube #282 if optioned with a race valve) into the open end of the extended leg 90° rubber elbow. Secure with a #52 hose clamp.

- 15 Connect the tube to the intercooler using the 3" rubber coupler. Secure connections with #52 hose clamps.



90° Tube Installed

Intercooler & Tubing

- 16** Insert the long leg of the 3.5" 90° silicone elbow onto the passenger's side intercooler outlet. Secure with a #56 hose clamp.



3.5" 90° Silicone Elbow Installed

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

- 18** 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

- 19** Detach the cooling fan connector from the fan shroud. Slightly bend the A/C line towards the fan shroud to help provide additional clearance.



Cooling Fan Connector and A/C Line

20 Insert tube #068 into the silicone 90° elbow followed by the 3.5" silicone coupler. Secure with a #56 hose clamps.

21 Insert the 90° leg of tube #430 into the open end of the 3.5" silicone coupler. Secure with a #56 hose clamp.



Tube #430 Installed

22 Connect tube #430 to the throttle body using the 4" to 3.5" 90° silicone elbow. Secure with 4.25" and 3.75" T-bolt clamps.

23 Use the supplied MAF extension harness to connect the factory MAF harness to the MAF sensor.



Throttle Body Elbow Installed

SURGE SYSTEM

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

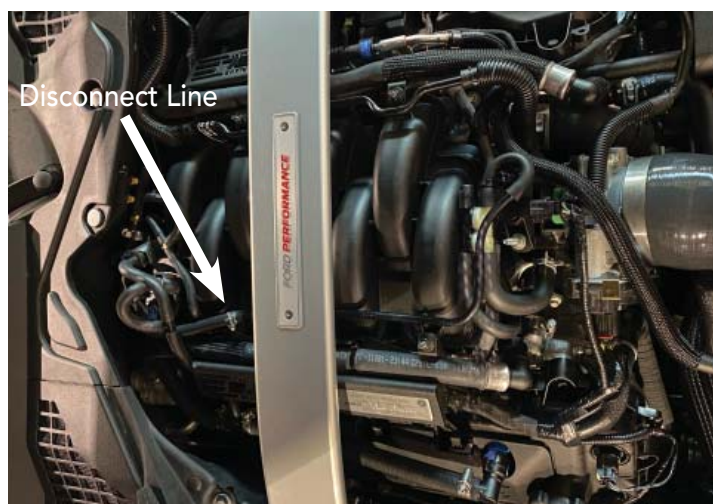
✓ **Tech Tip:** If installing a boost gauge, replace one of the 1/8" plugs with the additional provided barb fitting. Route a vacuum line from the barb to the boost gauge.

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

- 2 Locate the factory vacuum tree at the front of the intake. Disconnect the hose from the hard-line running down the passenger's side of the intake manifold shown.



Vacuum Manifold Assembled



Factory Vacuum Line Removal

- 3 Slide the supplied 3/8" vacuum hose over the hard line on the passenger's side of the intake manifold. Install the vacuum manifold onto the end of the hose. Secure with #6 hose clamps.



Vacuum Manifold Installed

- 4 Trace the factory vacuum line that was disconnected at the hard plastic line back to the IMRC solenoids. Disconnect the line at the tee. Discard the line.

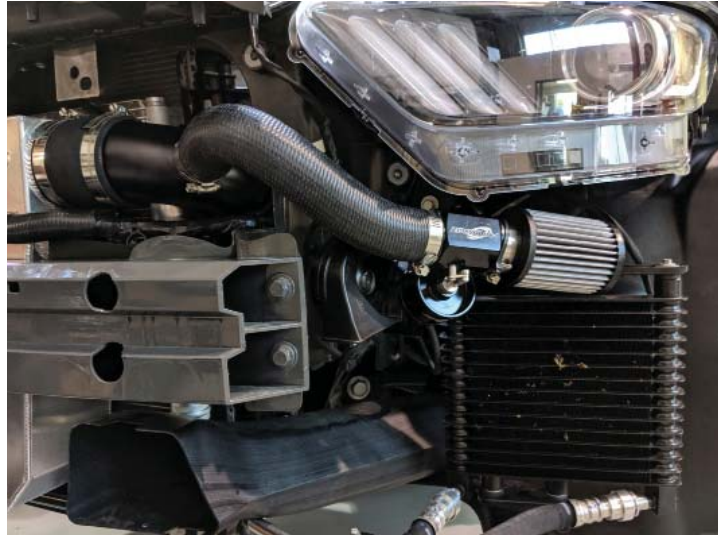


Factory Line Disconnected at "T"

Proflow Surge Valve

For Race Valve Option Proceed to Step 9

- 5 Install the 1.5" 90° rubber hose over the bung on tube #380. Secure with a #24 hose clamp.
- 6 Insert the ProFlow surge valve into the open end of the 1.5" hose. The valve can be installed in either direction. Secure with a #24 hose clamp.
- 7 Install the filter on the open end of the surge valve. Secure with a #24 hose clamp.



ProFlow Surge Valve Installed

✓ **Tech Tip:** Ensure the surge valve's actuator linkage and vacuum barb are unobstructed when the fascia is reinstalled. Adjustment of the horns may be needed for this.

- 8 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.

Race Valve Option

- 9 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 Drill a 1/2" hole in the end of the air filter. Install the 5/8" 90° barb fitting in the end of the air filter.

2 Install the 2-1/4" long 4" hose to the rotomold inlet tube as shown. Secure with a #60 hose clamp.



Plastic Inlet Installed

3 Slide the air filter behind the headlight as shown.

4 Slide tube #288 into the filter as shown and secure with a #60 hose clamp.



Tube #288 Installed

5 Slide the rotomold inlet tube and rubber coupler over tube #288. Secure with a #60 hose clamp.

6 Slide the rotomold inlet over the supercharger inlet. Secure with a #60 hose clamp.



Plastic Inlet Installed

Air Inlet and PCV System

- 7 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.



5/8" Vacuum Cap

- 8 Disconnect the factory plastic lines that go to each side valve cover vent.

✓ **Tech Tip:** Remove the hard plastic line from the fittings. As shown this will allow you to retain the factory fittings on both sides.



Hose Fitting Modification

- 9 Slide the supplied straight section of 5/8" hose over the fitting on the passenger's side. Route towards the back of the intake to the IMRC solenoid.



Passenger's Side PCV Fitting

- 10 Slide the supplied piece of 3/8" hose off the IMRC factory solenoid.
- 11 Insert the 3/8" end of the plastic "T" into the 3/8" hose off of the IMRC solenoid.



3/8 Vent Line

- 12 Route the hose along the passenger's side valve cover to the plastic "T" just off the IMRC solenoid behind the intake. Cut the hose to the appropriate length.
- 13 Route the remaining section of 5/8" rubber hose from the plastic "T" connected to the IMRC solenoid to the driver's side. Utilizing the 90 degree bend as shown.



Passenger's Side PCV Hose Routing

- 14 Insert the remaining 5/8" plastic "T" into the hose as shown. Trim the remaining hose to connect to the driver's side fitting.
- 15 Route the hose from the open port on the plastic "T" fitting to the air filter.
- 16 Use the supplied plastic 90 degree fitting to make bends to get to the air filter. Insert the 90 degree end of the hose on the air filter.



Driver's Side PCV Hose Routing

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.



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.



Coolant Fitting Direction



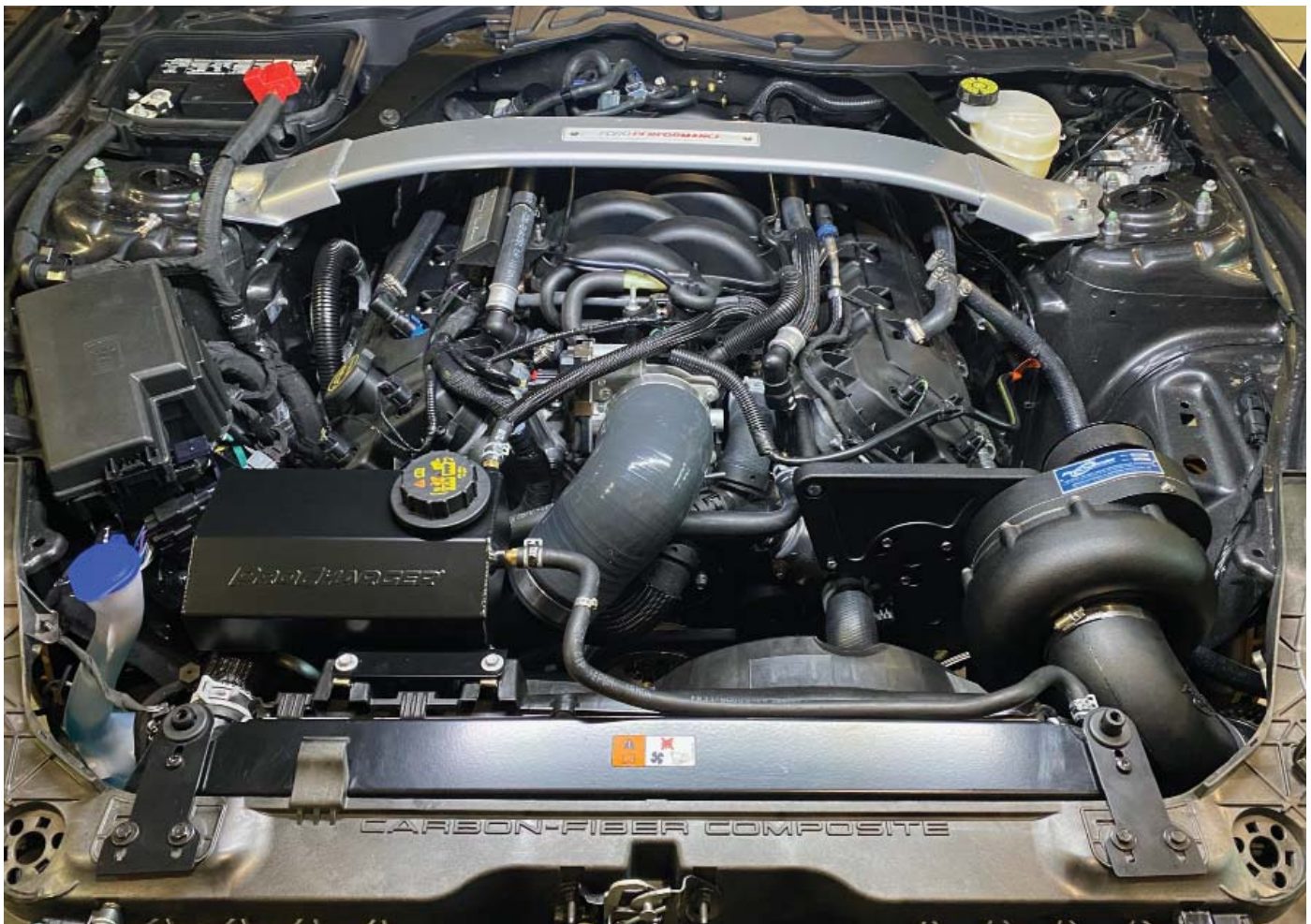
New Coolant Reservoir Mounted

- 4 Refill the cooling system. The coolant level should be approximately 2" below the cap.
- 5 Install the supplied coolant reservoir cap.
- 6 Use a zip tie to mount the ambient air temperature sensor.



Ambient Air Temperature Sensor Mounted

- 7 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.
- 8 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.
- 9 Remount the plastic undercladding.



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

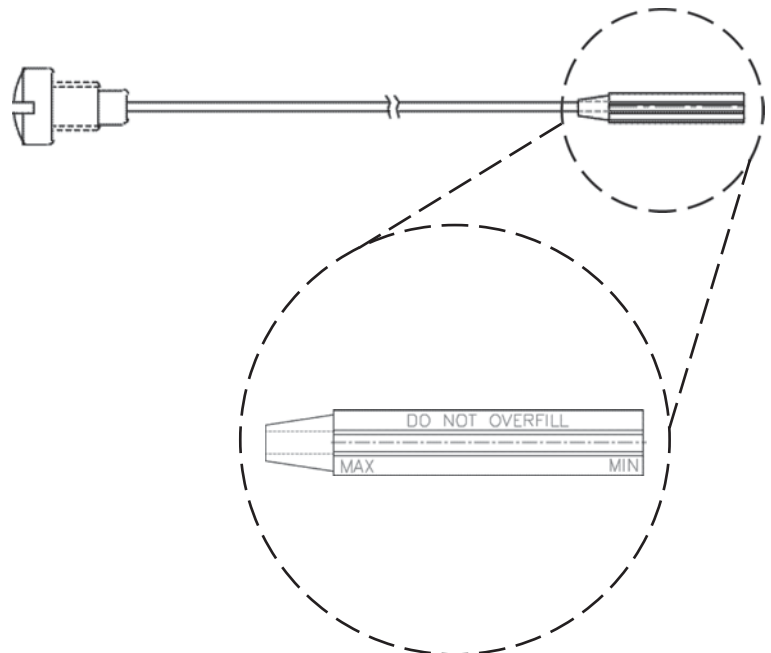
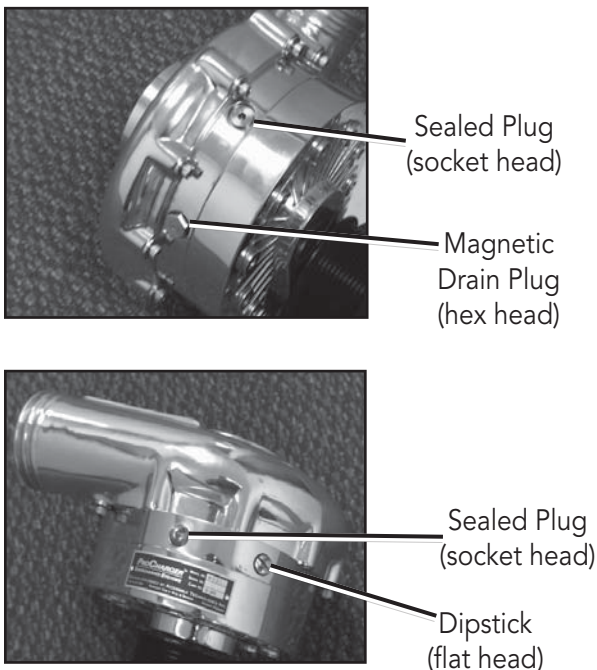
The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.

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, P-1X, 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.

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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
Fax: 913.338.2879
techserv@procharger.com

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Part Number PMFW1A-004 Rev. N

