

# 2015+ C7 Z06 Corvette 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+ C7 Z06 Corvette 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

- Open End Wrench Set (standard & metric)
- 3/8" & 1/2" Socket Sets (standard & metric)
- 3/8" Hex Bit Set (standard & metric)
- 7mm & 8mm nut driver
- T15, T20, T25, T30 Torx driver
- Inch-Pound Torque Wrench
- Flat & Phillips Screwdrivers
- Plier Set

 **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 Corvette 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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# GETTING STARTED



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

(A) Factory Air Filter Box

(B) Mass Airflow (MAF) sensor

(C) Factory Air Inlet

(D) Factory Supercharger

**!** 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.



## Getting Started

- 1 Use a 10mm disconnect the negative battery cable from the battery.
- 2 Use a 7mm to remove the (4) screws holding the air scoop to the radiator.
- 3 Remove the coil covers on both sides.



Remove Air Scoop Screws

- 4 Disconnect the PCV hose attached to the air inlet tube..



Disconnect PCV Hose

- 5 Disconnect the MAF (Mass Air Flow) sensor.



Disconnect MAF Harness From Intake Tube

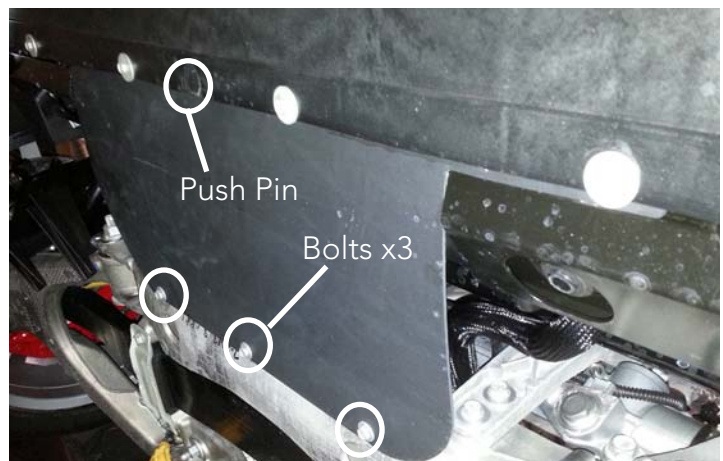
- 6 Use an 8mm to loosen the (2) hose clamps at the throttle body and at the MAF tube. Remove the air inlet tube.
- 7 Use a 10mm to remove the (2) bolts holding the air box to the fender. Remove the air filter box from the car.
- 8 Ensure the parking brake is fully engaged. Raise the front of the vehicle. Support with jack stands
- 9 Remove the front wheels from the vehicle.
- 10 Use a T20 torx to remove the (21) screws and a 10mm to remove the (4) bolts that hold the large plastic panel under the car.
- 11 Use a 7mm to remove the (4) screws holding the hard plastic panel to the fascia.
- 12 Use a 10mm to remove the (3) screws and (1) plastic push-pin that hold the rubber splash panel. Remove both the hard plastic panel and the rubber splash panel.
- 13 Use a 7mm to remove the (7) remaining screws on the underneath side of the fascia.



Loosen Clamps and Remove Fasteners



Front Fascia Lower Screws (x10)



Rubber Panel Screws



## Getting Started

- 14** Use a T15 Torx to remove the screws that attach the wheel liner to the fascia (3 per side).



Wheel Liner Screws

- 15** Depending on model, use either a 10mm or T30 torx to remove the (2 per side) screws that hold the air scoop to the fascia.



Air Scoop Bolts

- 16** Reach through the opening in the bottom of the wheel liner to gain access to the turn signal harness. Unlock the safety clip and unplug the connector on each side.

- 17** Use a 7mm to remove the (5) screws that hold the plastic shroud to the fascia.

- 18** In the engine bay, unclip and remove the plastic covers in the corner of the fascia and fender on each side.



Fascia to Shroud Screws (x5)

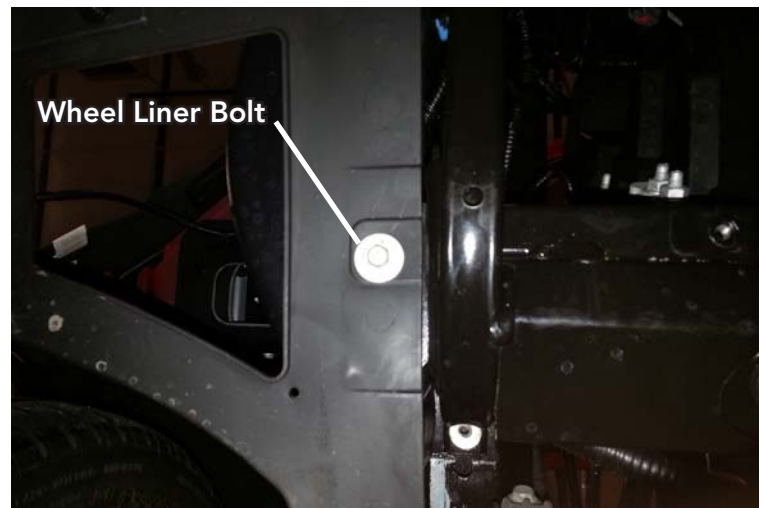


- 19 Remove the 2 plastic clips and (4) T30 Torx screws at the top of the fascia.
- 20 Pull up on the fascia near the headlights to unclip. Remove the fascia.



Top Fascia Fasteners

- 21 Use a 10mm to remove the bolt that attaches the wheel liner to the cradle (each side).



Wheel Liner to Cradle Bolt (x2)

- 22 Use a 10mm to remove the (2) bolts that holds the duct to the cradle and the front bumper (each side).
- 23 Use a T15 torx to remove the screw holding the duct to the wheel liner (each side). Remove the brake cooling ducts.



Brake Cooling Duct to Cradle Bolt

# HEAT EXCHANGER REMOVAL

- 1 Place a drain pan under the heat exchanger fluid reservoir. Turn the petcock counterclockwise to drain the fluid.



Heat Exchanger Fluid Reservoir

- 2 Remove the purple retaining clip to remove the heat exchanger fluid fill cap. This will help the fluid drain faster.
- 3 Use a flat screwdriver to remove the purple clips on the fluid lines going into the factory supercharger. Disconnect the lines from the supercharger.



Heat Exchanger Fluid Lines

- 4 Disconnect the fluid lines from the fan shroud.
- 5 Use a flat screwdriver to remove the purple clips on the fluid lines going into the heat exchanger on the driver's side. Disconnect the lines from the heat exchanger.



Lines Into Heat Exchanger

- 6 Unplug the electrical connector at the heat exchanger fluid pump. Disconnect the wiring harness from the pump bracket.
- 7 Use a 10mm to remove the (3) bolts holding the pump bracket to the cradle. Remove the bracket with pump and lines attached.
- 8 Use a flat screwdriver to remove the purple clips on the fluid lines going from the heat exchanger to the fluid reservoir on the passenger's side. Disconnect the lines from the heat exchanger.
- 9 Use a 10mm to remove the (3) bolts holding the fluid reservoir to the cradle. Remove the reservoir with lines attached.

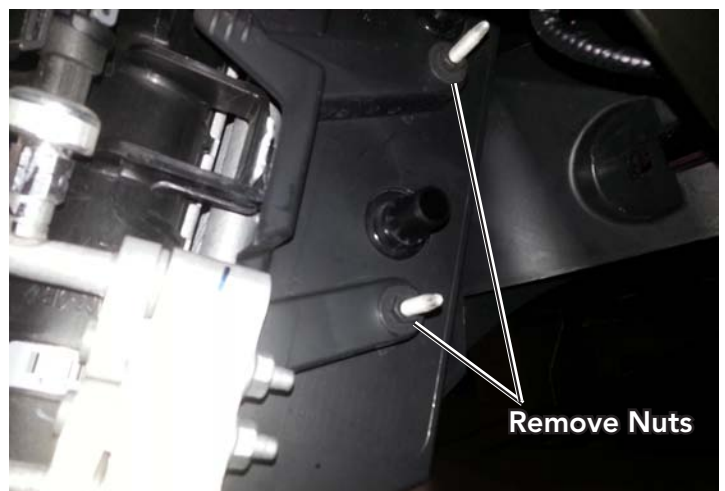


Pump Bracket Bolts



Reservoir Bolts

- 10 Use a 10mm to remove the (2) nuts holding the heat exchanger on the passenger's side.



Heat Exchanger Nuts



## Heat Exchanger Removal

- 11** Use a T25 torx to remove the screw on the heat exchanger cover. Remove the cover.



Heat Exchanger Cover

- 12** Use zip ties to hold the radiator in place before removing the cradle. Leave the zip ties very loose to allow for radiator movement in later steps.



Zip Tie Radiator

- 13** Use a 13mm to remove the (2) radiator to plastic shroud bolts.

- 14** Use a 10mm to remove the (2) cooling fan bolts. Detach the (2) radiator hose clips and wiring harness clips from the fan.

- 15** Remove the fan.



Radiator and Fan Bolts (x2)



- 16** If equipped with a transmission cooler, use a 10mm to remove the (4) screws holding the cooler to the plastic shroud. Hang the cooler out of the way.
- 17** Use a 10mm to remove the (2) bolts that hold the plastic shroud to the cradle from the back side.



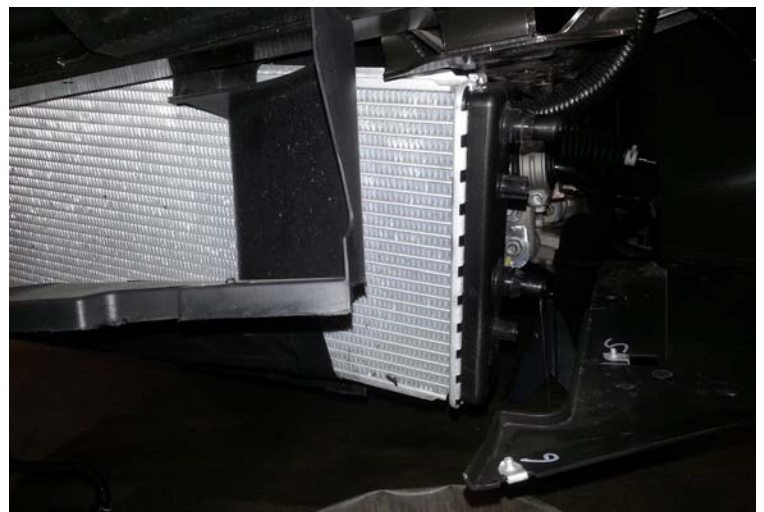
Shroud to Cradle Bolt (x2)

- 18** Detach the wiring harness from the cradle on the passenger's side. Use a 13mm to remove the (4) cradle bolts and remove the cradle.



Cradle Bolts (x4)

- 19** Slide the heat exchanger out of the plastic shroud.



Remove Heat Exchanger

## Heat Exchanger Removal

- 20** From the top, use a 13mm to remove the (3) bolts holding the shroud to the bumper support.



Shroud to Bumper Support Bolts

- 21** Remove the ambient air temperature sensor from the plastic shroud.

- 22** Push the radiator up and towards the engine. Maneuver the plastic shroud down and out of the car.

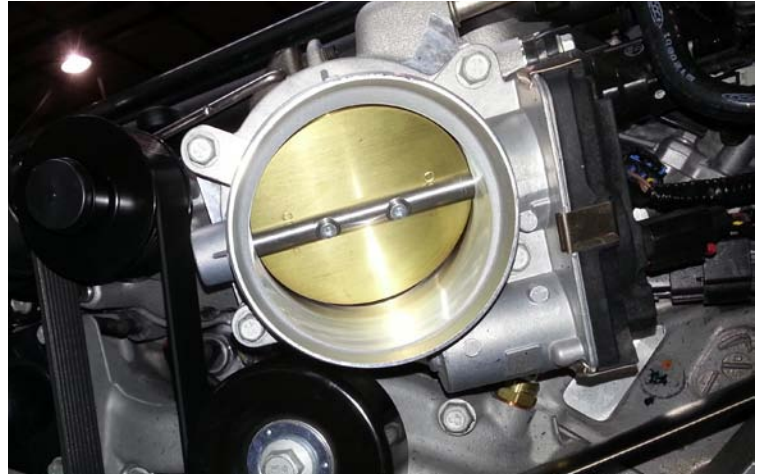


Ambient Air Temperature Sensor Removed

# FACTORY SUPERCHARGER REMOVAL

1 Unplug the throttle body connector by pulling back on the locking clip on the bottom of the connector, then squeezing the connector and pulling back.

2 Use a 10mm to remove the (4) throttle body bolts. Remove the throttle body.



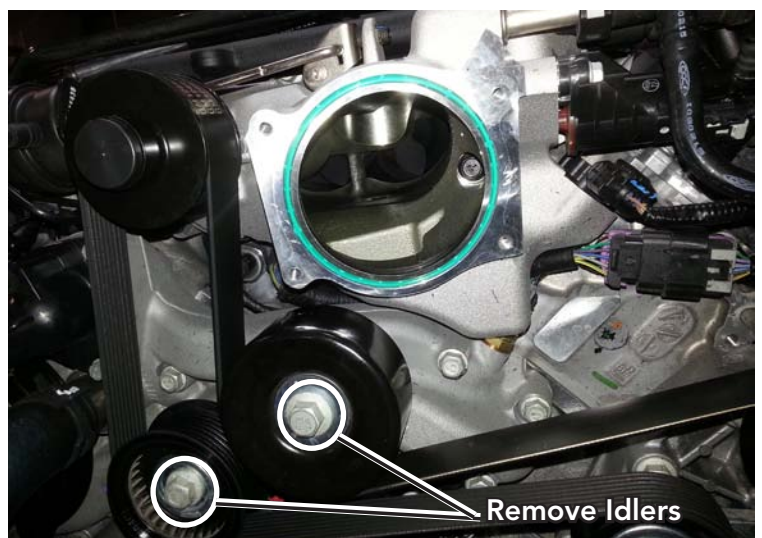
Remove Throttle Body

3 Use a 15mm wrench to rotate the factory tensioner towards the passenger's side. With tensioner relieved, remove the supercharger belt.



Remove Supercharger Belt

4 Use a 15mm to remove the (2) idler pulleys on the water pump.



Remove Idlers



## Factory Supercharger Removal

- 5 Use a 13mm to remove the (2) ABS bracket bolts. This will allow the ABS module to move in order to remove the tensioner and idler bracket.



ABS Bracket Bolts

- 6 Use a 13mm to remove the (3) bolts that hold the tensioner to the bracket. Remove the tensioner.
- 7 Use a 15mm to loosen the (2) larger idler bracket bolts.
- 8 Use a 13mm to remove the (2) smaller idler bracket bolts on the front side of the bracket.
- 9 Use a 13mm to remove the remaining bracket bolt on the driver's side of the engine. Remove the bracket.
- 10 Use a 13mm to reinstall the ABS bracket bolts.



Tensioner and Idler Bracket



- 11** Squeeze the clip and pull back to disconnect the PCV lines at the port above the throttle body and on the driver's side valve cover.



Disconnect PCV Lines

- 12** Disconnect the electrical connectors at the front MAP sensor and EVAP solenoid on the driver's side. Disconnect the vacuum line going to the EVAP solenoid.



Disconnect MAP and EVAP (Driver's Side)

- 13** Disconnect the electrical connector at the bypass solenoid on the passenger's side. Unhook the wiring harness push pin from the bypass solenoid bracket.



Disconnect Bypass Solenoid (Pass. Side)

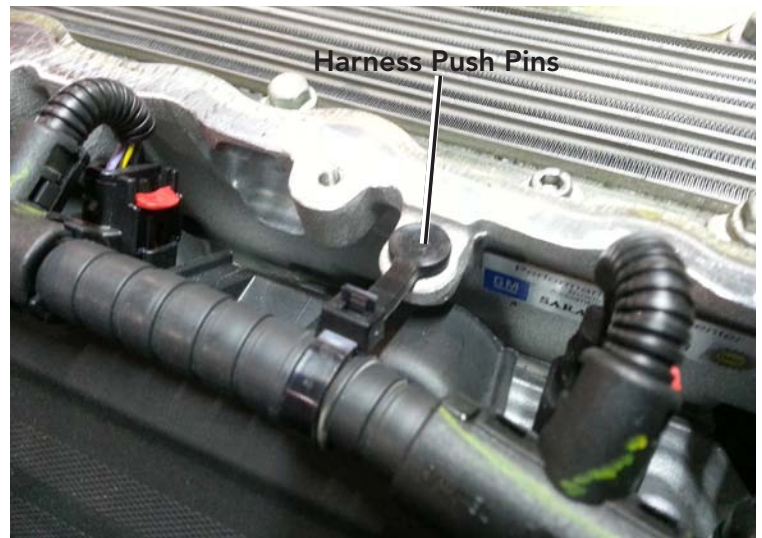
## Factory Supercharger Removal

- 14 Use a 10mm to remove the (20) bolts on the supercharger lid.



Supercharger Lid Bolts

- 15 Disconnect the (5) wiring harness push pins from the supercharger housing.



Disconnect Wiring Harness From Supercharger

- 16 Use a 10mm to remove the (10) bolts holding the supercharger to the cylinder heads.



**Tech Tip:** The back (2) bolts are underneath the cowl.



Supercharger to Head Bolts

- 17 Lift up on the supercharger and slide it forward a few inches.
- 18 Locate the rear MAP sensor on the back side of the supercharger. Release the lock clip and disconnect the sensor.
- 19 Remove the supercharger from the vehicle.
- 20 Remove the foam insulator from underneath the supercharger.



Disconnect Rear MAP Sensor

✓ **Tech Tip:** Placing tape over the cylinder head ports will reduce the likelihood of debris entering the engine.



# PROCHARGER INSTALLATION

- 1 Use a 13mm socket to remove the water pump bolt pictured to the right. When removing the 13mm bolt make sure to not lose the rubber sealing washer from the water pump (sealing washer is in the bolt hole).



Sub Bracket Mounting Holes

- 2 Using the 1.340" Spacer, M10x 25 SHCS, and M8x120 SHCS, mount the sub bracket to the water pump as shown.



Sub Bracket Installed



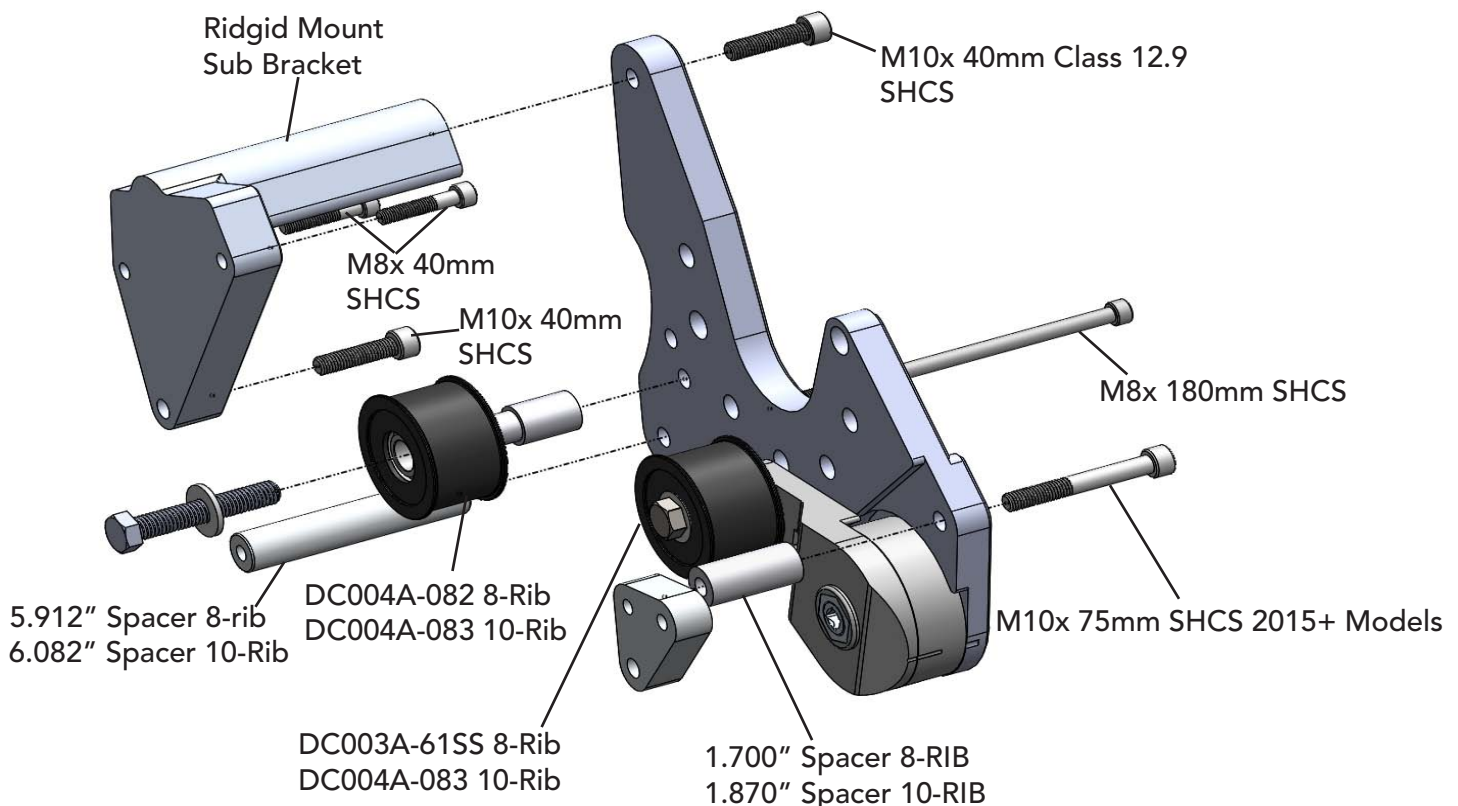
- 3 Install the supplied supercharger belt around the crankshaft damper.
- 4 Install the oil drain line onto the supercharger. Fill the supercharger with (1) 6 ounce bottle of supplied blower oil.
- 5 Mount the ProCharger onto the main bracket using the provided 5/16" and 3/8" SHCS's. Tighten the fasteners.



ProCharger Mounted to Bracket

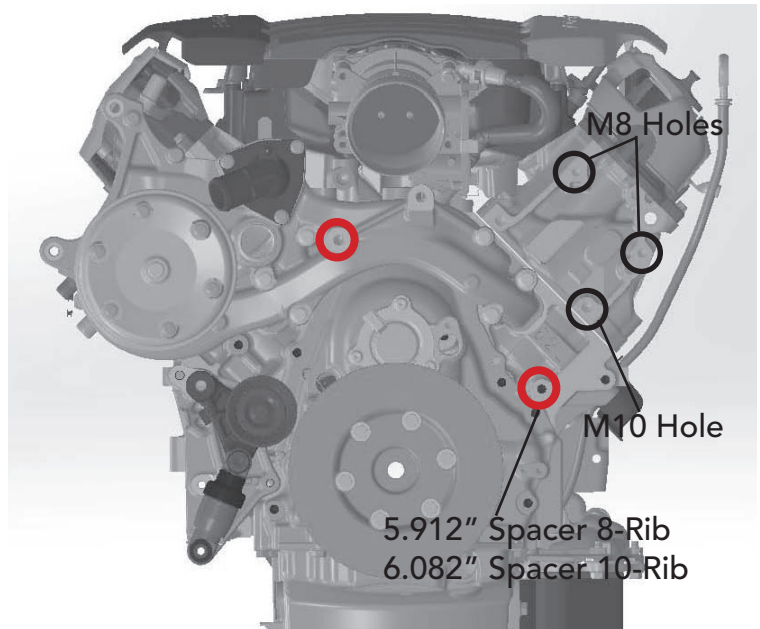
✓ **Tech Tip:** The tensioner will have to be rotated up and down to gain clearance for the supercharger bolts. Insert a 3/8 driver ratchet into the center of the tensioner and rotate clockwise.

✓ **Note:** The idler does not need to be installed at this time.



Main Bracket Assembly

- 6 Assemble the main bracket as shown. The longest spacer (5.912" 8-Rib, 6.082" 10-Rib) goes on the bottom and aligns with a threaded hole near the balancer. Slide the rigid mount sub bracket between the main bracket and the cylinder head and secure to the holes circled in black to the right using the stainless steel SHCS. The M10x 40mm Class 12.9 SHCS bolts secure the top corner of the bracket to the rigid mount sub bracket. The shortest spacer goes in the middle on the passenger's side and aligns with a tapped hole on the water pump.



Bracket Mounting Holes

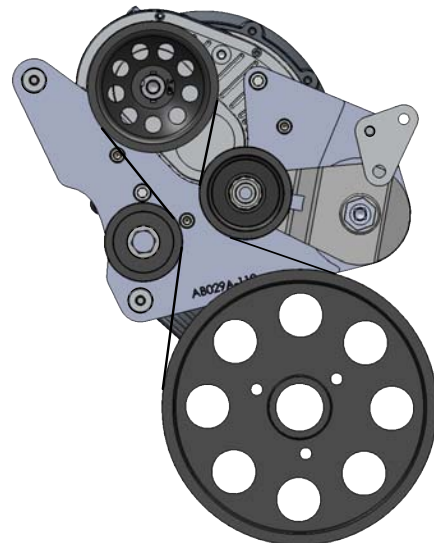
- 7 Use a 6mm on the M8 SHCS and a 8mm allen on the M10 SHCS. Tighten these bolts down evenly.

- 8 Insert a 1/2 drive ratchet/extension into the tensioner through the bracket as shown. Rotate the tensioner counter clockwise.



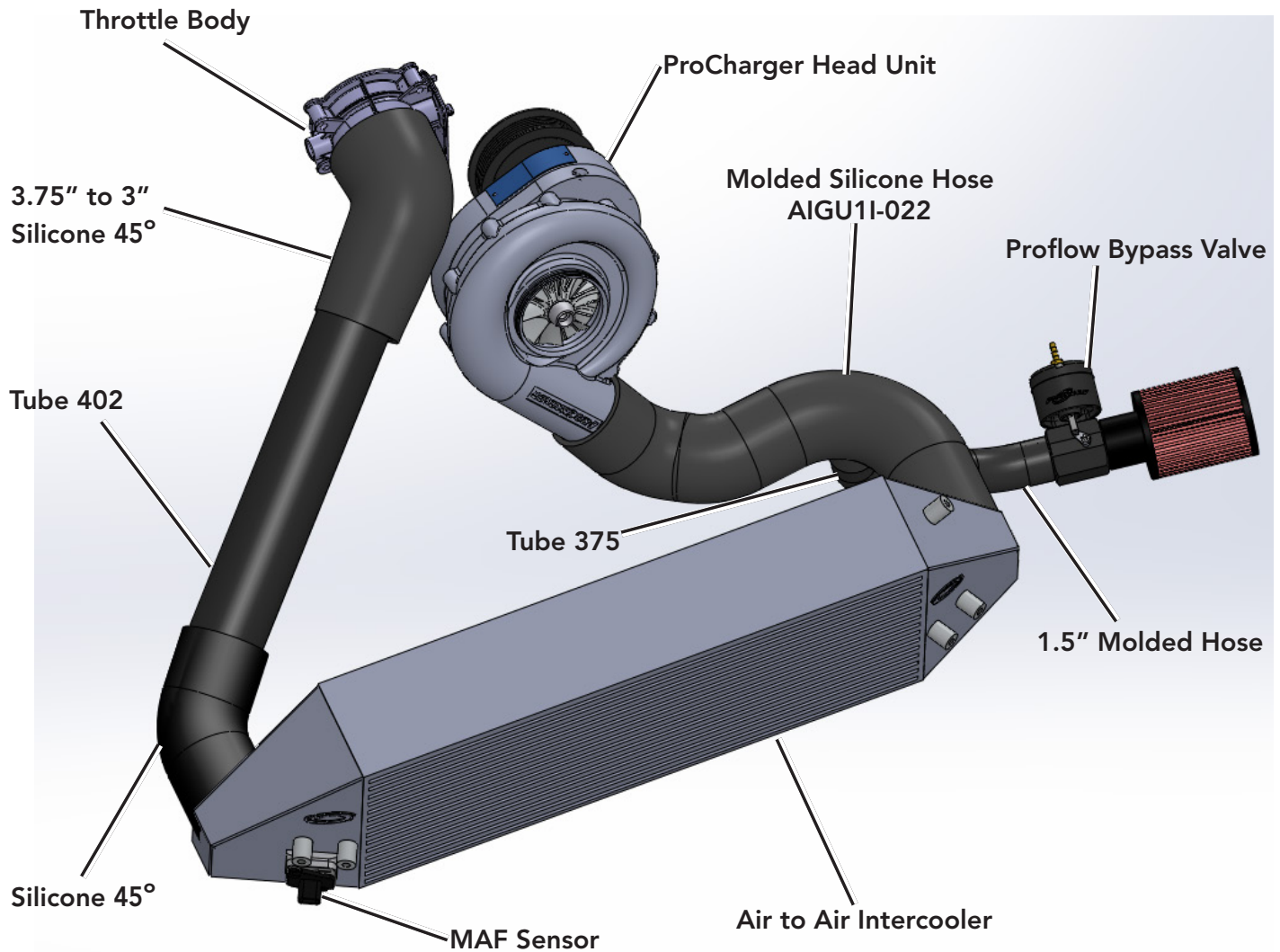
Rotate Tensioner Counter Clockwise

- 9 Wrap the belt around the supercharger pulley.
- 10 There are 2 holes for mounting the idler. If possible, mount the idler on the innermost hole. Tighten with a 3/4".
- 11 Release the tensioner and remove the ratchet/extension.



Belt Routing

# VERTICAL INTERCOOLER AND TUBE ROUTING



**Tech Tip:** Use the supplied rubber tape to eliminate possible vibrations.



### Vertical Intercooler Only

For Horizontal Intercooler Option, Skip to Step 8

- 1 Install the supplied modified plastic shroud. It does not need to be bolted down at this time.



Modified Plastic Shroud Installed

- 2 If equipped with a factory transmission cooler, route the cooler and lines through the cradle before mounting the cradle.



Transmission Cooler Lines

- 2 Install the intercooler brackets by placing them between the cradle and the frame.
- 3 Use a 13mm to reinstall the cradle using the (4) factory bolts. Leave the bolts loose to allow intercooler adjustment.

✓ **Tech Tip:** Ensure the wiring harness on each side does not get caught between the intercooler bracket and the frame.



Intercooler Bracket Installed (Driver's Side)



- 4 Set the intercooler in place. Use a 9/16" to start (2) of the supplied intercooler bolts (3/8 x 3/4" long HCS) in the lower mounting locations.



Lower Intercooler Bolts Installed

- 5 Start the other (2) supplied intercooler bolts (3/8 x 3/4" long HCS) in the upper mounting locations.



Upper Intercooler Bolts Installed

- 6 Adjust the intercooler as high and back as possible without contacting the condenser. Use a 13mm to tighten the (4) cradle bolts. Use a 9/16" to tighten the (4) intercooler bolts.

- 7 Reinstall the ambient air temperature sensor.



Intercooler Installed

## Intercooler and Tubing

- 8 If equipped with a factory transmission cooler, attach the trans cooler brackets to the bungs on the intercooler using the supplied 3/8" bolts and washers.



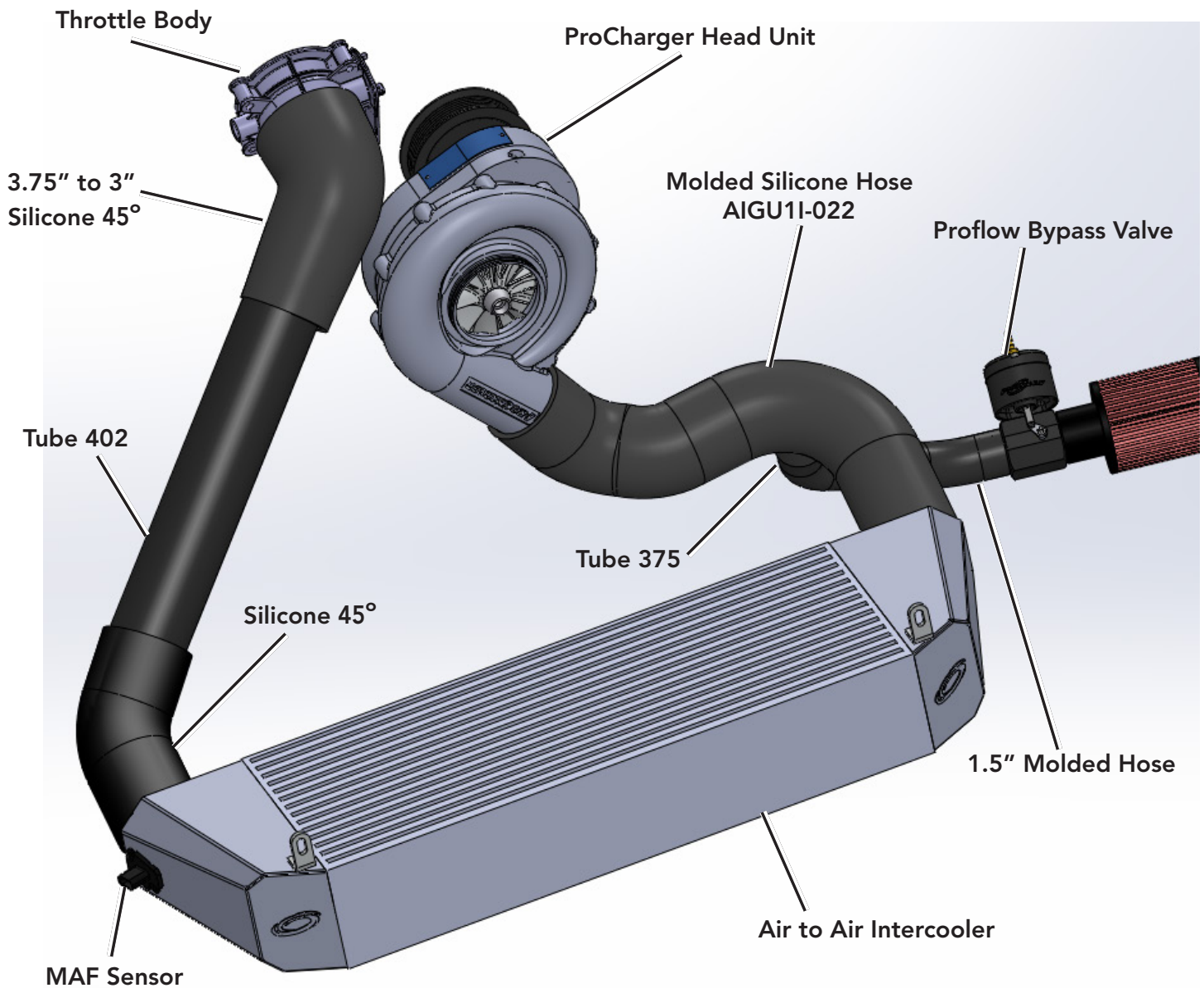
Trans Cooler Brackets

- 9 Use a 7/16 to mount the transmission cooler to the brackets using the supplied 1/4" bolts, washers, and locknuts.



Trans Cooler Mounted (If Equipped)

# HORIZONTAL INTERCOOLER AND TUBE ROUTING



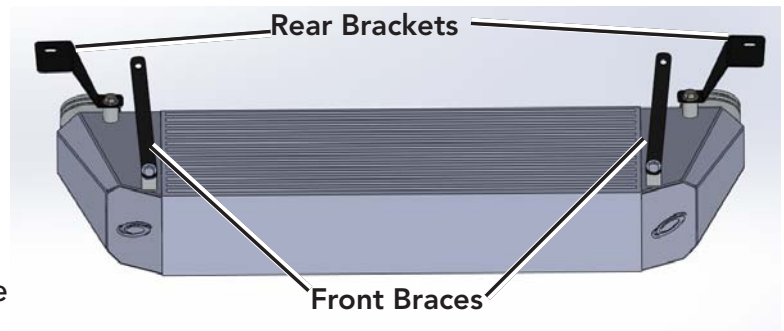
**Tech Tip:** Use the supplied rubber tape to eliminate possible vibrations.



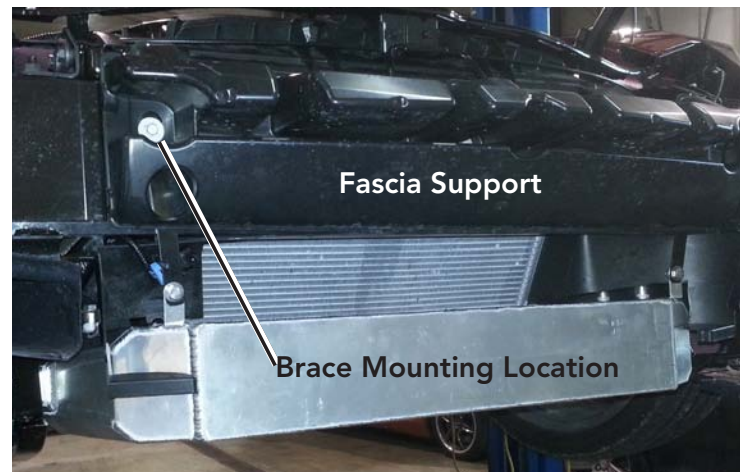
### Horizontal Intercooler Only

For Vertical Intercooler Option, Skip to Step 17

- 10** Install the supplied modified plastic shroud. It does not need to be bolted down at this time.
- 11** Install the rear intercooler brackets by placing them between the cradle and the frame at the front bolt on each side.
- 12** Use a 13mm to reinstall the cradle using the factory bolts. Leave the bolts loose to allow intercooler adjustment.
- 13** Use a 10mm to remove the (2) outer bolts that fasten the plastic fascia support. Slide the supplied braces behind the fascia support and reinstall the factory bolt. Leave the bolts loose for adjustment.
- 14** Set the intercooler in place. Use a 9/16" to start (2) of the supplied 3/8 x 3/4" long bolts in the rear mounting locations. Connect the braces to the front intercooler tabs using the provided 5/16" bolts, washers, and nuts using a 1/2" socket and wrench.
- 15** Adjust the intercooler and tighten the hardware. The bolts for the rear brackets can be reached from above the car.
- 16** Use a zip tie to secure the ambient air temperature sensor to the intercooler brace.



Horizontal Intercooler with Brackets



Intercooler Installed



Ambient Air Temperature Sensor Installed

## All Models

- 17** Bolt down air shroud using the factory hardware. (3) bolts on top of bumper, (2) bolts at the radiator, and (2) bolts at the cradle.

✓ **Tech Tip:** Applying a small amount of WD40 on connections will help with installation.

- 18** Locate the molded silicone hose. Slide the 90° end onto the intercooler inlet on the driver's side.

- 19** Slide the other end onto the discharge of the ProCharger. Secure both ends with #52 hose clamps. The hose may be trimmed on the supercharger end to reduce contact with the sway bar.

✓ **Tech Tip:** If equipped with the race valve option, the molded silicone hose will need to be cut to install tube #368. Install the valve onto the tube at this time using the supplied o-ring and (6) #10 SHCSs.

✓ **Tech Tip:** For F-1X systems, install the supplied 3.5" to 3" 45° rubber coupler on the outlet of the supercharger. Install the straight section of 3" rubber hose on to the intercooler outlet. Connect using tube #414. Install the valve onto the tube at this time using the supplied o-ring and (6) #10 SHCSs.



Top View of Driver's Side I/C Hose



Optional Race Valve Installed



Tube #414 Installed (F-1X option only)



## Intercooler and Tubing



**Optional:** Cut the (2) bosses shown on the cooling fan flush with the body of the fan. Cut the rib above the fan motor (not present on some models) flush with the surrounding material. Unclip the fan electrical connector from the fan's base. This will provide easier fan installation and more room for tubing.



Fan Modification

- 20** Reinstall the fan. This is most easily done by sliding the driver's side down first. Keep the radiator hose on the driver's side pulled up and out of the way during installation. Pull the radiator hose on the passenger's side towards the fender to allow the mounting ears on the fan to pass by. Make sure the tabs on the lower part of the fan get set into the hooks on the radiator. Tighten the (2) fan bolts with a 10mm.



Cooling Fan Installed

- 21** Slide the silicone 45° coupler onto the outlet of the intercooler.

- 22** Slide tube #402 into the 45° coupler.



**Tech Tip:** Rotating the passenger's side coolant hose at the radiator connection may help gain additional clearance for tubing.

- 23** Adjust tubes and tighten all hose clamps.



Tube #402 Installed



- 24** From underneath the vehicle, slide tube #375 into the molded silicone hose. Secure with a #24 hose clamp. (N/A if equipped with a race valve)



Tube #375 Installed

- 25** Use a Phillips screwdriver to remove the factory MAF (Mass Air Flow) sensor from the factory inlet tube.
- 26** Using a 7mm, install the MAF sensor into the bung on the intercooler with the supplied M4 screws. Note the airflow direction of the MAF sensor.
- 27** Use the supplied MAF extension harness to connect the MAF sensor to the factory harness connector.



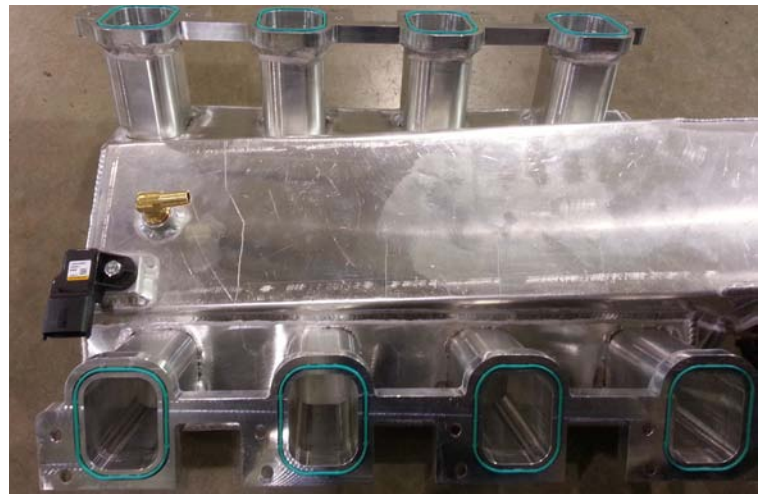
MAF Sensor Installed (Vertical I/C Shown)

# INTAKE MANIFOLD

- 1 Remove the intake port o-rings from the factory supercharger and install them into the intake manifold.
- 2 Remove the front and rear MAP sensors and the EVAP solenoid from the factory supercharger. Inspect the o-rings and apply a small amount of oil to the o-rings. Use a 10mm to install the front and rear MAPs onto the intake manifold using the supplied M6x20mm bolts, and the EVAP using the supplied M6x25mm bolt.
- 3 Apply thread sealer to the supplied 3/8 NPT x 3/8 barb fitting and install it into the port on the bottom side of the intake manifold. Point the barb end towards the throttle body.
- 4 Remove the throttle body gasket from the factory supercharger. Install the gasket into the intake manifold.
- 5 Apply thread sealer to the supplied 90° 1/8 NPT x 3/8 barb fitting. Use pliers to hold the supplied adapter fitting around the larger diameter. Do not damage the surface of the smaller outside diameter. Thread the barb fitting into the adapter. Tighten only by hand.



EVAP, MAP and Throttle Body O-ring Installed



Rear MAP, O-rings, and Barb Fitting Installed



Adapter Fitting Installed on Barb Fitting



- 6 Remove the steel fitting on the top of the valley cover. Use a small flat screw driver and hammer to work around the fitting and pry it up evenly.
- 7 With the barb pointed towards the rear of the car, install the fitting and adapter into the port that the factory steel fitting was removed from. Use a hammer to lightly tap the fitting until the larger diameter is flush with the valley cover.



Barb Fitting Installed In Valley Cover

- 8 Assemble the vacuum manifold with a straight 3/8" barb fitting on each end. Plug (2) of the 1/8" ports with the 1/8" brass plugs. Install the 1/8" barb fitting in the remaining 1/8" port. If installing an aftermarket boost gauge, replace (1) of the plugs with a supplied 1/8" barb fitting.



Vacuum Manifold Assembled

- 9 Attach supplied 2" long section of 3/8 rubber hose to the fitting in the valley cover. Secure with a #04 hose clamp.
- 10 Insert the supplied inline check valve into the open end of the 3/8 hose, with the arrow on the check valve pointing AWAY from the valley cover fitting.



**Warning:** The check valve must be installed in the correct direction. Failure to do so may result in engine damage. Installation can be checked by sucking on the open end of the check valve. You should be able suck air from the valley cover, and you should NOT be able to blow air into the valley cover.



Check Valve Installed



## Intake Manifold

- 11** Insert the remaining piece of 2" long 3/8 hose onto the open end of the check valve. Connect the hose to one of the 3/8 barbs on the vacuum manifold. Secure both ends with a #04 hose clamp.
- 12** Insert the supplied 1/8" vacuum hose onto the 1/8 barb on the vacuum manifold. Route the hose to the front of the vehicle.
- 13** Insert the 6-3/4" long 3/8 rubber hose section onto the open 3/8 barb on the vacuum manifold. Secure with a #04 hose clamp.
- 14** Set the intake manifold on top of the engine. Lift the manifold up and connect the open end of the 3/8 hose to the fitting on the bottom of the manifold. Secure with a #04 hose clamp.
- 15** Connect the rear MAP sensor to the factory harness.



Vacuum Manifold Installed



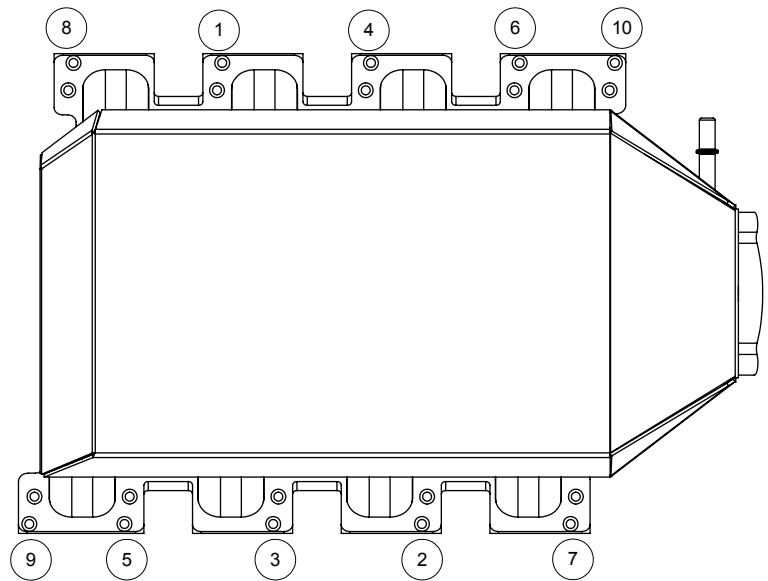
Vacuum Manifold Connected to Intake



MAP Sensor Connector

- 16** Bolt the intake manifold to the cylinder heads using the supplied M6x25mm flange head bolts and a 10mm socket. The inner set of holes will not be used.

**!** **Attention:** Start ALL manifold bolts before torquing. The manifold should be torqued in 2 passes according to the sequence shown. On the first pass, torque to 20 inch pounds. On the second pass, torque to 50 inch pounds.



Intake Manifold Torque Sequence



Intake Manifold Install

- 17** Route the factory EVAP line and valve cover PCV line under the intake and to the driver's side. Connect the EVAP electrical connector and vacuum line to the solenoid. Connect the driver's valve cover PCV line. Make sure this hose does not kink. Connect the driver's side vacuum line to the port behind the throttle body. Connect the front MAP sensor.



MAP, EVAP and PCV Lines Connected



## Intake Manifold

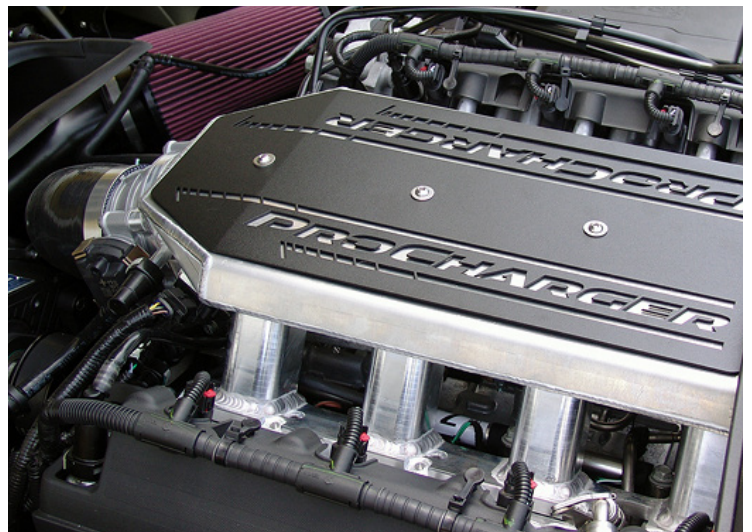
- 18 Use a 10mm to install the throttle body onto the intake manifold using the factory bolts. Plug in the electrical connector.
- 19 Install the silicone 3.75" to 3" 45° reducer onto tube #363, then onto the throttle body.
- 20 Tighten the provided 4.25" T-bolt clamp on the silicone coupler at the throttle body. Tighten the 3.38" T-bolt clamp on the silicone coupler at the connection with tube #363.
- 21 Set the (3) rubber washers provided over the threaded holes on the top of the intake manifold.
- 22 Align the holes of the intake cover with the rubber washers. Set the intake cover on the manifold and secure using the supplied 1/4" button head screws and washers.



Throttle Body and Tube Installed



Rubber Washers



Rubber Washers



## Intakes with Port Injection:

✓ **Note:** Intakes with fuel rails are set up for injectors with a 38mm o-ring to o-ring height, using the standard size fuel injector o-rings on both the fuel rail and intake manifold side of the injector.

23 Use a small amount of silicone grease to lubricate the injector o-rings. Insert the injectors into the intake manifold bungs.



Injectors Installed

24 Place the fuel rail over the top of the injectors. Align the injectors with the fuel rail ports and push the rail down over the injectors.

25 Use the provided 1/4 x 1-1/4 long SHCS to secure the rails to the threaded bosses on the intake manifold.

26 Route the fuel lines and regulator as suggested by your fuel system supplier.



Fuel Rails Mounted

✓ **Tech Tip:** Cutting the wiper cowl will allow for a true return-style fuel system. If leaving the cowl un-cut, plug the back of each rail and plumb the regulator before the fuel rails. Consult your fuel system supplier to determine which components you will need and how they should be plumbed.



Wiper Cowl Cut

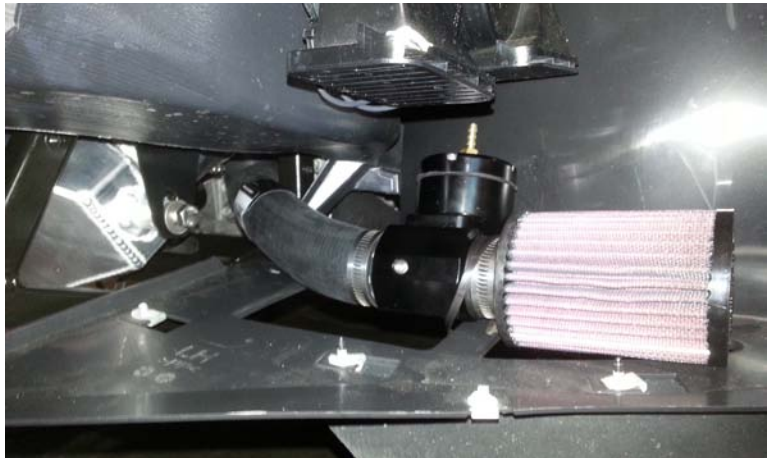
# SURGE SYSTEM

- 1 Install the supplied 1-1/2" rubber hose onto tube #375 and route around the cradle in front of the driver's wheel liner. Tighten with a #24 hose clamp.



Surge Valve Hose Routing

- 2 Install the surge valve onto the end of the rubber tube. The tube may need to be cut down for proper fitment. Install the filter on the other end. Point the barb fitting to where it can be reached by a vacuum line. Tighten both # 24 hose clamps. Ensure the actuator's movement is not obstructed.



Surge Valve Installed

✓ **Tech Tip:** When installing a race valve, the assembly utilizes push lock fittings and nylon hose, replacing the standard barb fitting and rubber hose. Thread the push lock fitting onto the vacuum manifold and race valve, and simply push the nylon line into each fitting to create a secure connection.

- 3 Route the vacuum line from under the intake manifold down to the barb fitting on the Proflow valve. Ensure the line is clear of any moving parts and free of any kinks.

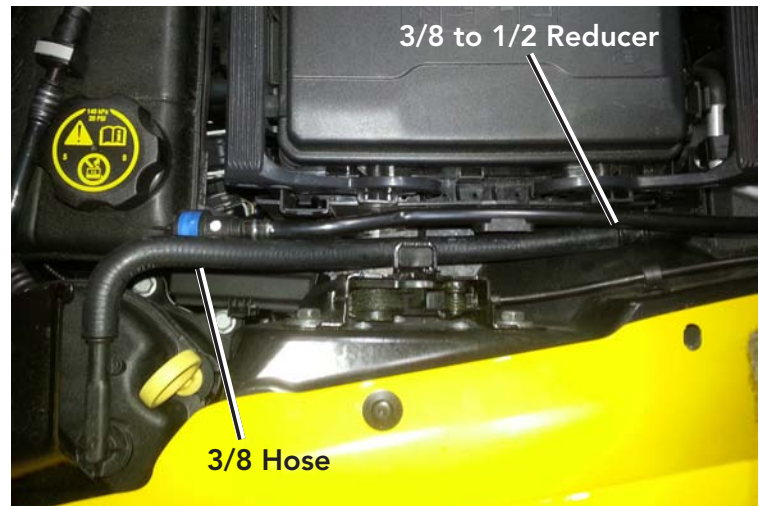
## PCV SYSTEM

- 1 Locate the PCV hose on the dry sump container. Squeeze the connector to disconnect. Remove this line from the vehicle, it will not be reused.



Disconnect Factory PCV Line

- 2 Cut the short end of the supplied 3/8" rubber hose to properly fit over the open port on the dry sump reservoir.
- 3 Route the 3/8 hose along the fender towards the front of the car. Insert the 3/8 to 1/2 plastic reducer in the open end of the hose.
- 4 Attach the supplied section of 1/2" hose to the plastic reducer. Route the hose in front of the cooling fan. This will be connected to the inlet tube in a later step.



New PCV Hose Installed



# AIR INLET

## Stage 2 Inlet

All Other Options Proceed to Next Section

✓ **Note:** If optioned with a stage 2 inlet and a 4" inlet supercharger (F1A-94, F1C, F1C-94, or F1R), you will receive universal inlet components.

- 1 Locate the plastic air inlet tube. Install the brass hose barb fitting into the threaded port on the tube.
- 2 Slide the supplied air filter onto the 45 ° end of the plastic inlet tube.
- 3 Slide the 90° end of the plastic inlet elbow onto the inlet of the supercharger.
- 4 Attach the hose from the PCV "T" to the barb fitting on the inlet tube. Secure with a hose clamp.
- 5 Adjust the inlet tube and filter for best fitment and secure with the provided hose clamps.



Stage 2 Air Inlet Installed

## Rotomold Air Inlet

All Other Options Proceed to Next Section

### F1, F1A, F1A-94, F1D, F1C, F1C-94, F1R

- 1 Secure the inlet adapter to the supercharger using the supplied T bolt clamp.
- 2 Secure the rotomold tube to the adapter using the supplied T bolt clamp.
- 3 Secure the air filter to the rotomold tube using the supplied hose clamp.



Rotomold Air Inlet Installed

### F1X, F2

- 1 Secure the rotomold tube to the supercharger using the supplied T bolt clamp.
- 2 Secure the air filter to the rotomold tube using the supplied hose clamp.

## Bellmouth Inlet

All Other Options Proceed to Next Section

- 1 If equipped with a bellmouth option, slide the bellmouth over the inlet of the supercharger. Tighten using the supplied T-bolt clamp.



Bellmouth Installed (F1X Option Shown)

## FINAL ASSEMBLY

- 1 Reinstall the front fascia.
- 2 Reinstall the plastic corner covers.
- 3 Use a 7mm to install the screws that hold the modified plastic shroud to the fascia (1 each side).



Plastic Shroud to Fascia Screw (x2)

✓ **Tech Tip:** If the supplied modified skid panel does not have panel nuts, remove the panel nuts from your factory skid panel and install them onto the new skid panel before installation.

- 4 Install the supplied modified skid panel. Use a 7mm to attach the skid panel to the fascia using the factory screws. Use a 10mm to secure the skid panel and the splash panel to the frame.



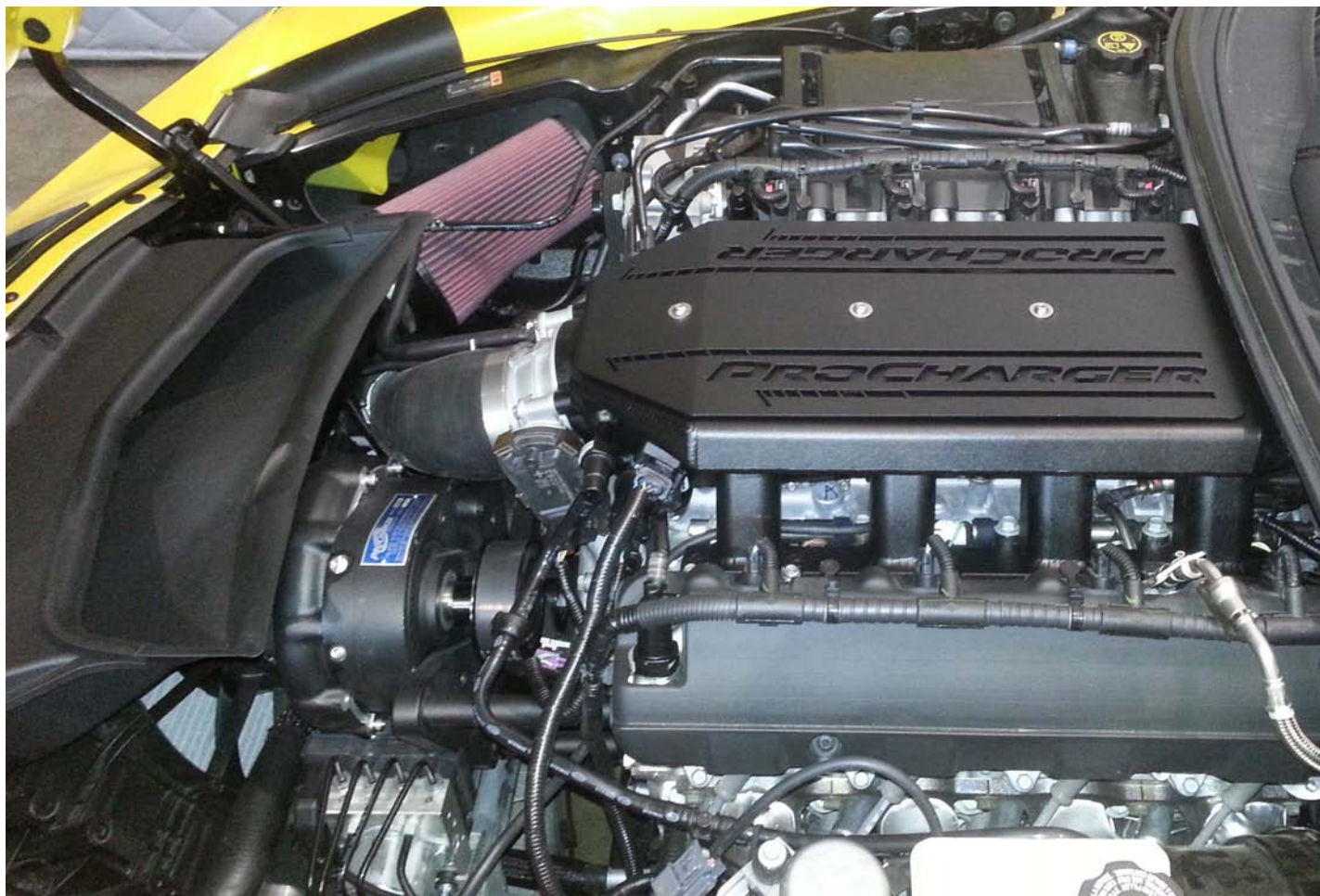
Modified Skid Panel Installed (Horizontal I/C)



Modified Skid Panel Installed (Vertical I/C)



- 5 Reinstall the air scoop.
- 6 Check hood clearance.



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 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 the drain plug after every oil change. Drain oil by removing the drain plug. Clean off the drain plug before re-installing.

## ProCharger Oil Level

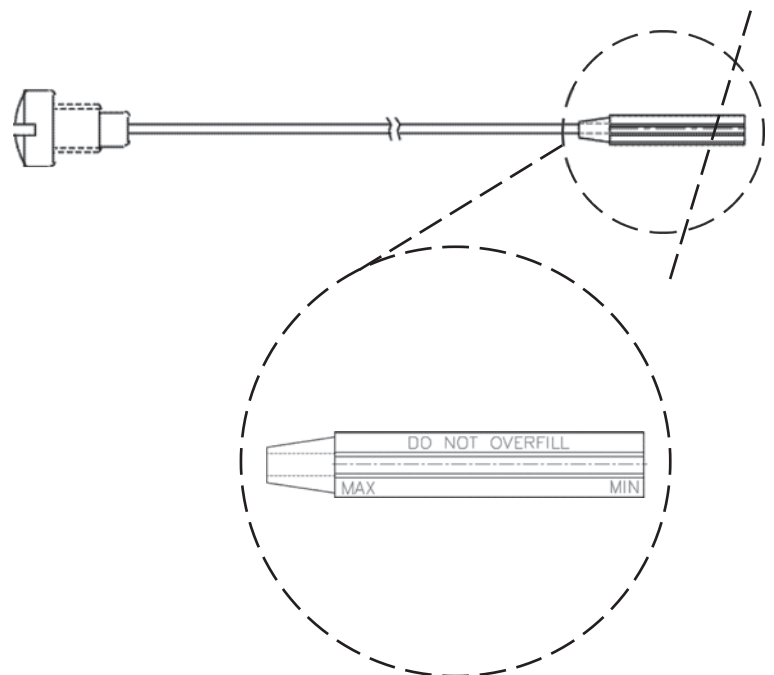
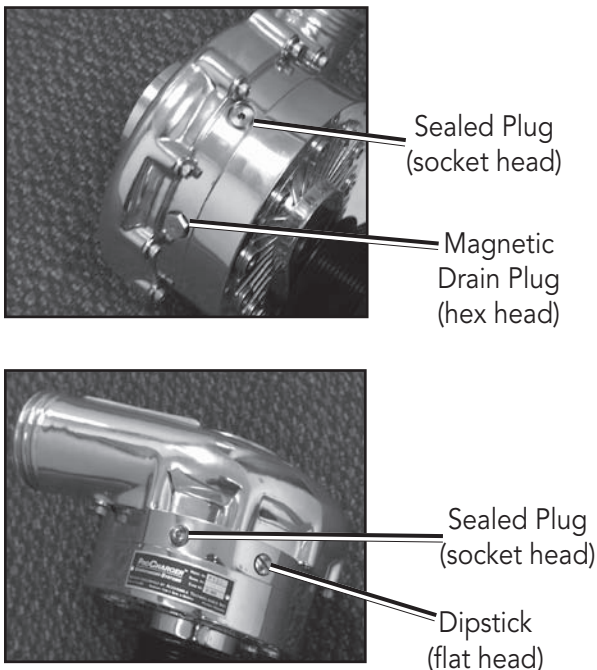
The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.

**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**

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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 PMGU1A-003 Rev. H**

