2016+ Toyota Tacoma 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+ Toyota Tacoma 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.



Tech Tip: Installing spark plugs that are one heat ranger colder than stock (NGK 7505 recommended) 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.

Required Tools and Supplies

- Open End Wrench Set (standard & metric)
- 3/8" & 1/2" Socket Sets (standard & metric)
- Hex Bit Set (standard & metric))
- 7mm & 8mm nut driver
- Torx bit Set
- Pry Bar
- 1/2" Breaker Bar
- Flat & Phillips Screwdrivers
- Plier Set
- Hose cutter
- Air Saw or Hack Saw
- Drill Bit Set and Drill
- Torque Wrench



Warning: Your supercharged Tacoma 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. IF A COMPLETE SYSTEM WAS PURCHASED, SEE SUPPLEMENTAL TUNING GUIDE. IF A TUNER KIT WAS PURCHASED, TUNING WILL HAVE TO BE PERFORMED BEFORE OPERATING THE VEHICLE.

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 Inlet Tube



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 Remove the positive and negative battery cables.
- 2 Using a 10mm remove the nut securing the battery hold down. Remove the battery along with the threaded rods and plastic battery tray. The rods, tray and hold down will not be reused.
- 3 Lift up on the front of the engine cover and pull forward to remove.
- 4 Unhook the PCV line from the air inlet tube. Unhook the MAF harness from the air baffle.
- With a 10mm loosen the hose clamps at the throttle body and the airbox. Remove the air intake tube.

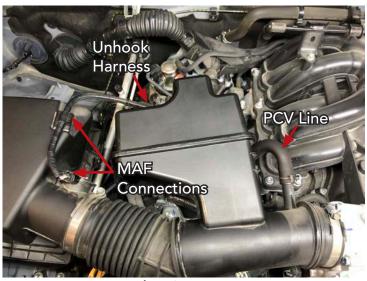


- 6 Unplug the MAF harness from the Mass airflow sensor and the lid of the air box.
- Remove the airbox lid and the air filter.
 With a 12mm remove the (3) bolts
 securing the airbox to the fender. Remove
 the airbox.

Proceed to next step.



Battery Hold Down

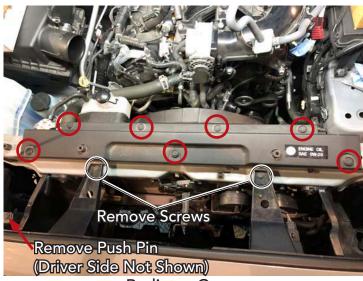


Air Inlet Connections



Airbox Bolts

- 8 Remove (7) push pins from the radiator cover and remove the cover shown to the right in red.
- 9 Using a 10mm remove the (2) screws securing the grill to the radiator support. remove the (2) push pins on each side of the grille.



Radiator Cover

If equipped unplug the harness found on the drivers side of the grill. Unclip the harness from the plastic bracket (shown to the right). Lift up on both top plastic brackets to release from the radiator support, pull straight out on the grill to remove it from the vehicle.



Unplug Harness

Remove the pin from the passenger side air deflector. Remove the deflector. Repeat for the other side.



Remove Air Deflector

Getting Started

- 12 Drain the coolant from the radiator.
- Remove the coolant overflow hose and the upper radiator hose.
- Unhook the cooler lines from the drivers side bottom of the fan shroud (automatic transmission only).



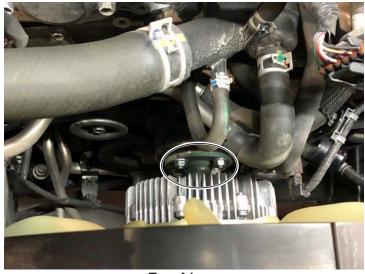
Unhook Cooler Lines

With a 10mm remove (2) bolts (one on each side of the shroud) securing the fan shroud to the radiator.



Radiator Connections

Using a 12mm remove (4) nuts securing the fan to the water pump. Carefully pull the fan off of the studs and pull the fan shroud and fan up and out of the vehicle.



Fan Nuts

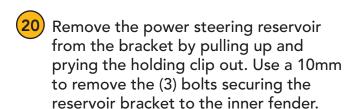
Remove the lower radiator hose from the thermostat housing.

Models With Passenger Side ABS Modules Using The Factory Air Filter Box Only, All Others Proceed To The Next Page.

Using a 10mm remove the (2) bolts securing the windshield washer reservoir.

Lift the washer reservoir up and out of the fender just enough to access the plugin and the hose on the washer motor.

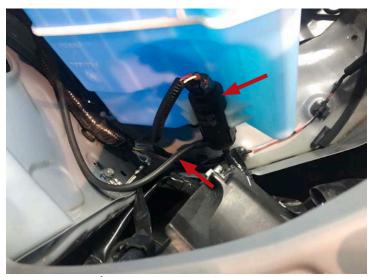
Disconnect the hose and the plug-in from the reservoir. Remove the reservoir.







Remove Reservoir Bolts



Washer Reservoir Connections



Power Steering Reservoir Connections

CRANK PULLEY

1 Use a 22mm and an impact gun to remove the balancer bolt.

Tech Tip: Using a torch to heat the crank balancer bolt makes removal easier. If an impact gun won't remove the balancer bolt, use a universal pulley holder (example below) and a breaker bar to loosen the balancer bolt.



Balancer Bolt



2 Loosely install the supplied crank pulley onto the factory balancer pulley with the factory balancer bolt. Place a small amount of red thread locker onto the supplied M8 Bolts and washers and loosely install them into the threaded holes on the balancer. Tighten the crank bolt to 205FT-lbs and the M8 bolts to 100 in-lbs.



Crank Pulley Installed

PROCHARGER INSTALLATION

Using a 10mm remove the (2) nuts retaining the oil fill neck to the cam cover. Remove the fill neck.



Remove Oil Fill Neck

Remove the o-ring from the bottom of the factory oil fill neck and install it onto the provided billet oil fill neck.



Install Oil Fill Neck O-ring

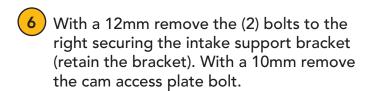
3 Install the supplied oil fill neck to the cam cover using the factory hardware. Install the provided oil fill cap onto the neck.



Oil Fill Neck Installed

Procharger Installation

- 4 Using a 14mm rotate the factory belt tensioner and remove the accessory belt from the alternator top idler pulleys (do not fully remove belt).
- 5 Using a 14 mm remove the (2) bolts shown to the right. Retain the Idler pulley once the bolt on the left is removed.



- Install the sub bracket to the engine by inserting the supplied M6 bolt with washer through the bracket followed by .580 spacer, loosely install the bolt into the cylinder head where the cam access bolt was removed. Insert a supplied M8X 30mm bolt and washer through the bottom hole of the intake support bracket and through the hole on the sub bracket and into the hole on the cylinder head.
- 8 Insert the remaining M8X 30mm bolt and washer through the top intake support bracket hole followed by a .450" spacer and into the intake. Tighten all hardware at this time being sure to not overtighten the M6 bolt.



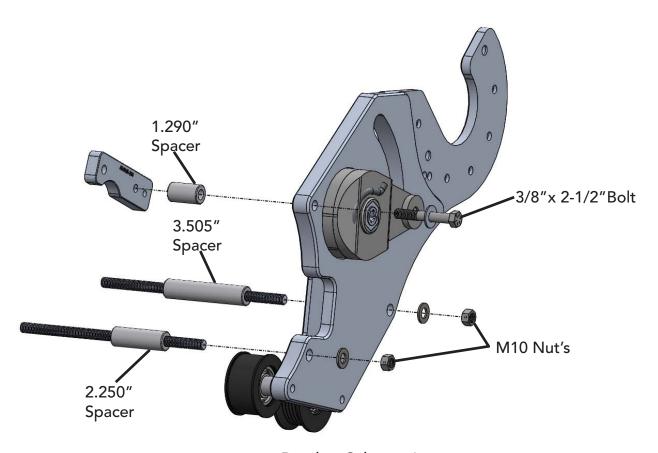
Remove Bolts



Remove bolts



Sub Bracket Installed



Bracket Schematic

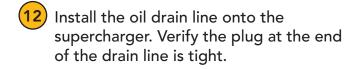
9 Apply a small amount of red thread locker onto the end of the 8-1/2" long piece of supplied all thread. Insert the all thread into the open hole where the bolt was taken out of the alternator leaving 4-3/4" of thread exposed as shown to the right.

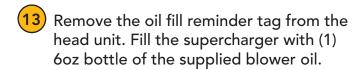


Alternator All Thread Installed

Procharger Installation

- 10 Apply a small amount of red thread locker to the end of the remaining supplied all tread. Thread the all thread into the hole where the bolt was removed securing the idler. Leave 4" of thread sticking out for mounting.
- Slide the factory idler pulley over the stud on the motor followed by a supplied 2.250" spacer. and the 3.505" spacers onto the all thread studs, their locations are shown to the right.

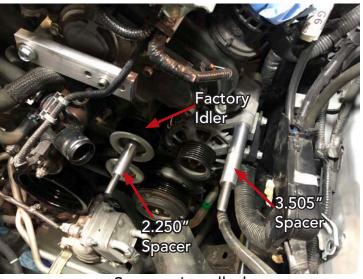




- If installed on the bracket remove the smooth idler pulley shown to the right with a 9/16".
- Install the supercharger to the bracket using (2) 3/8" SHCS and (5) 5/16" SHCS.
- Re-install the smooth idler pulley onto the bracket. Use red thread locker on the threads.



Idler All Thread Installed



Spacers Installed



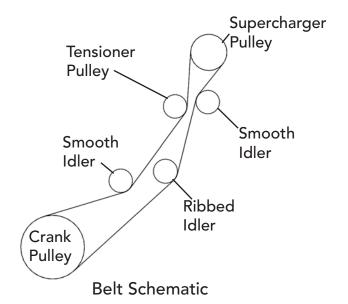
Supercharger Installed Onto Bracket

- 17 Slide the supercharger/ bracket assembly onto the threaded studs, loosely secure with the provided M10 washers and nuts.
- Insert a 3/8" x 2-1/2" bolt with washer through the hole in the corner of the bracket followed by a 1.289" spacer. Secure the bolt to the threaded hole on the sub bracket. Tighten the M10 nuts at this time.



Supercharger Installed

- 19 Re-install the factory accessory belt.
- Route the supplied supercharger belt following the schematic to the right. Start with the crank pulley, route the belt around the ribbed idler between the tensioner and smooth idler pulley. Rotate the tensioner counter-clockwise with a 1/2" drive and wrap the belt around the supercharger pulley, release the tensioner once the belt is placed on the pulleys.
- Re-install the lower radiator hose, fan, fan shroud and upper radiator hose at this time (models with passenger side ABS modules and factory airbox will need to trim 1" off the upper radiator hose at the motor side).



INTERCOOLER AND TUBING

- 1 With a 10mm remove the upper a/c condenser bolts. Loosely secure the supplied upper intercooler brackets to the consensor brackets using the factory hardware.
- 2 Loosely mount the passenger side lower intercooler bracket to the bumper support as shown to the right using the supplied M6 bolt, washer and lock-nut. Repeat for the other side.
- 3 Loosely mount the intercooler to the brackets using the supplied 3/8" bolts and washers. Center the intercooler and tighten all hardware.



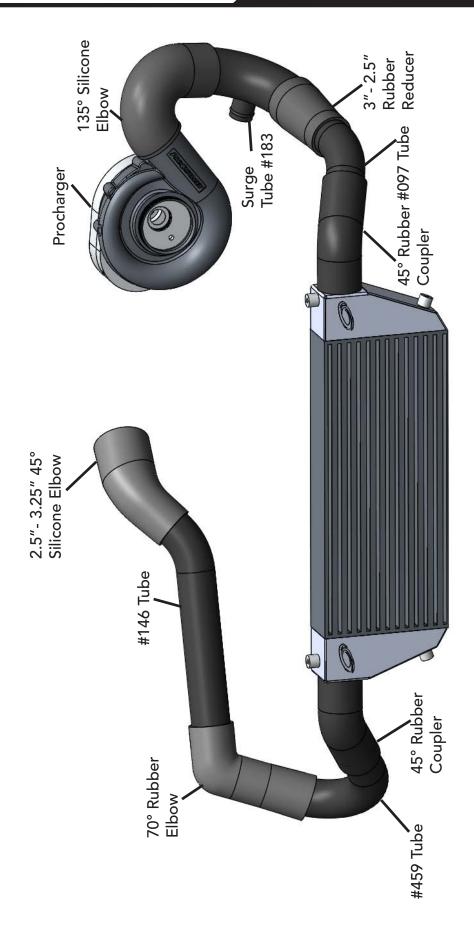
Lower Intercooler Bracket Installed (Passenger Side)



Upper Intercooler Brackets Installed



Intercooler Installed



INTERCOOLER SCHEMATIC PASSENGER SIDE ABS MODULE AND FACTORY AIRBOX

135° Silicone 3"-2.5" Rubber Reducer #097 Tube Surge Tube #183 Procharger 45° Rubber Coupler 2.5" - 3.25" 45° Silicone Elbow #149 Tube 45° Śilicone Coupler 45° Rubber #459 Tube Coupler



Tech Tip: Reference the schematic on page 13 and 14 when installing the intercooler tubing.

- Starting with the outlet of the supercharger, install the short leg of the 135° silicone elbow followed by surge tube #183 (surge bung towards supercharger). Route the tubing to the hole under the headlight. Use a 3.38" T-bolt clamp on the supercharger connection and a 3.25" T-bolt clamp on the tube connection
- 5 Slide a 3"-2-1/2" rubber reducer over the end of tube #183. The 3" connection will get a #52 hose clamp.
- 6 Insert tube #097 into the rubber reducer.
- 7 Finish the connection to the intercooler by sliding the long leg of the trimmed 45° rubber connector over tube #121 and onto the inlet of the intercooler.
- 8 Position the tubing and secure all of the previous connections with #40 hose clamps.



Tubing Out Of Supercharger



Tubing To Intercooler Installed

Intercooler And Tubing

Models With Passenger Side ABS Modules With Open Air Filter and Models With **Drivers Side ABS Modules Only, All Others** Proceed To The Next Page.

Slide a short end of the remaining 45° rubber elbow onto the outlet of the intercooler followed by the short leg of tube #459. Use the supplied rubber trim guard on the sharp edge of the radiator support as shown to the right.



Tubing Out Of Intercooler Installed

- 10) Insert the long leg of the 70° rubber elbow onto tube #459.
- 11) Insert the straight section of tube #146 into the rubber connector.



70° Rubber Elbow Installed

Finish the connection to the throttle body by inserting the 2.5" end of the 45° silicone elbow onto tube #146 then onto the throttle body. Use a 3.38" T-bolt clamp at the throttle body and a 2.65" T-bolt clamp on the tube. Position all the tubing and secure with #40 hose clamps.



Tubing To Throttle Body Installed



Tech Tip: The dipstick tube may need to be bent slightly to clear the throttle body tube.

Continue To Page: 18

Models With Passenger Side ABS Modules Using The Factory Air Filter Box Only, All Others Proceed To The Next Page.

Slide a short end of the 45° silicone elbow onto the outlet of the intercooler followed by the long leg of tube #459. Use the supplied rubber trim guard on the sharp edge of the radiator support as shown to the right.



Tubing Out Of Intercooler Installed

- 14) Slide the 45° rubber coupler onto the end of tube #459 followed by the long leg of tube #149.
- Slide another 45° rubber coupler onto the end of tube #149 followed by tube #097.



Tube #149 Installed

Finish the connection to the throttle body by inserting the 2.5" end of the 45° silicone elbow onto tube #149 then onto the throttle body. Use a 3.38" T-bolt clamp at the throttle body and a 2.65" T-bolt clamp on the tube. Position all the tubing and secure with #40 hose clamps.

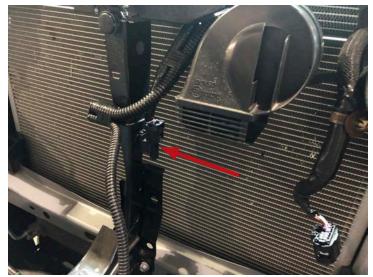


Tubing To Throttle Body Installed

Continue To Next Page.

Intercooler And Tubing

Unhook the ambient air temperature sensor from the middle radiator support beam.



Ambient Air Temp Sensor

Connect the air temp sensor to under the hood latch as shown to the right (model shown had a slot to mount to).



Ambient Air Temp Sensor Relocated

SURGE SYSTEM

1 Assemble the vacuum manifold as shown to the right.



Tech Tip: If installing a boost gauge replace the brass plug with the additional provided barb fitting. Route a vacuum line from the barb to the boost gauge.



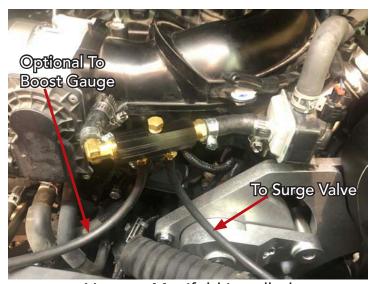
Vacuum Manifold Assembled

Remove the vacuum hose going to the purge solenoid.

Slide a supplied section of 3/8" hose over the vacuum port of the intake manifold, secure with a #06 hose clamp. Slide the other section of 3/8" hose over the port of the purge solenoid, secure with a #10 hose clamp. Insert the 90° fitting of the vacuum manifold into the hose coming out of the intake manifold and the straight fitting into the hose going to the purge solenoid. Secure the connections with the 3/8" hose clamps.



Vacuum Port Hose



Vacuum Manifold Installed

Surge System

- Attach one end of the 1-1/2" rubber 90° elbow onto the bung of the surge tube. Attach the surge valve onto the end of the rubber elbow. Position the valve as shown to the right, secure with #24 hose clamps.
- Attach one end of the supplied 1-1/2" flexible hose onto the end of the surge valve, secure with a #24 hose clamp. Route the hose in front of the supercharger and onto the top of the fan shroud keeping the hose as low as possible in front of the supercharger.

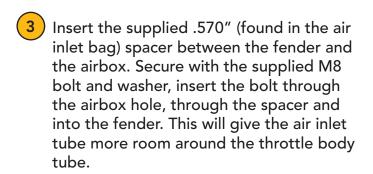
Surge Valve And Flexible Hose Installed

Route the 3/16" vacuum line from the open port on the vacuum manifold to the barb port on the surge valve, cut to length and attach to the valve. Secure the line with zip-ties keeping it away from any sharp edges, the belt or exhaust components.

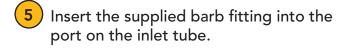
AIR INLET

Models With Drivers Side ABS Modules Only, Models With Passenger Side ABS Modules And Open Air Filter Proceed To Page: 23. Models With Passenger Side ABS Modules and Factory Air Box Proceed To Page: 26

- 1 Remove the lid of the factory airbox and remove the air filter.
- Using a 12mm remove the bolt in the bottom of the air box that is closest to the engine.









Remove Airbox Bolt



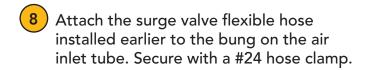
Spacer Under Airbox

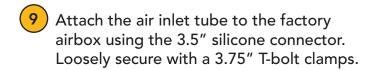


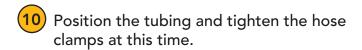
Barb Fitting Installed Into Inlet Tube

Air Inlet

- Place the rotomold inlet onto the inlet of the supercharger followed by the silicone 45° elbow (short leg goes to rotomold inlet). Loosely secure the rotomold inlet to the supercharger with a #64 hose clamp.
- \checkmark
- **Tech Tip:** The plastic on the radiator may need to be trimmed slightly to make room for the inlet.
- Insert the air inlet tube into the silicone elbow, with the bung facing down on the supercharger side. Loosely Secure the silicone connections with a 3.75" T-bolt clamp on the air inlet tube and a #60 hose clamp at the rotomold connection.







Flip the factory PCV hose on the passenger side valve cover over and attach the long end to the barb fitting on the inlet tube with the factory hose clamps.

Continue To Next Section.



Inlet Tubing Connected To Supercharger



Air Inlet Tube Installed



PCV Hose Connected

Passenger Side ABS Modules With Open Air Filter Only.

- 1 Using a phillips screwdriver remove the (2) screws securing the MAF sensor to the airbox lid.
- 2 Insert the MAF sensor into the supplied MAF housing and secure using the (2) supplied M4 bolts and washers (the arrows will point the same direction).

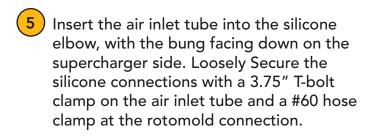


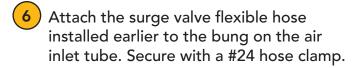
MAF Sensor Installed In Housing

- 3 Insert the supplied barb fitting into the port on the inlet tube.
- Place the rotomold inlet onto the inlet of the supercharger followed by the silicone 45° elbow (short leg goes to rotomold inlet). Loosely secure the rotomold inlet to the supercharger with a #64 hose clamp.



Tech Tip: The plastic on the radiator may need to be trimmed slightly to make room for the inlet.







Barb Fitting Installed Into Inlet Tube



Inlet Tubing Connected To Supercharger

Air Inlet

- 7 Slide one end of the 45° silicone elbow onto the air inlet tube, followed by the MAF sensor assembly. Be sure the arrow on the MAF sensor faces the inlet tube. Loosely Secure the silicone connections with 3.75" T-bolt clamps.
- 8 Install the supplied air filter onto the end of the MAF sensor housing. Secure with the air filter hose clamp.



MAF Sensor And Filter Installed

9 Using a 10mm remove the bolt on the passenger side valve cover shown to the right.



Remove Bolt

Using the factory bolt removed in the previous step, loosely secure the provided inlet tube brace to the valve cover. Place the tab of the other end of the brace under the T-bolt clamp on the inlet tube. Position the tubing and secure the hose clamps.



Tube Brace Installed

Plug-in the MAF wiring harness to the MAF sensor. Use the provided zip-ties to secure the harness.



PCV Hose Connected

Flip the factory PCV hose on the passenger side valve cover over and attach the long end to the barb fitting on the inlet tube with the factory hose clamps.

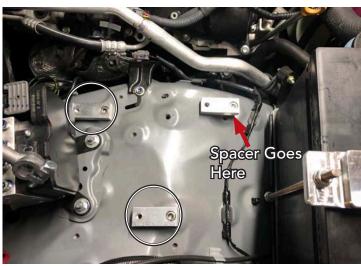
Continue To Next Section.



Air Inlet Installed

Passenger Side ABS Modules With Factory Air Box Only.

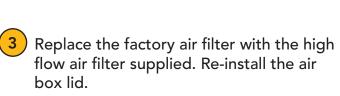
Bolt the air box relocation tabs to the factory air box mounting holes as shown to the right. Starting at the upper right hand corner, place an M8x 30mm SHCS through the tab followed by a 0.65" spacer and into the fender. Mount the other two tabs straight to the fender using the supplied M8x 20mm SHCS. This will move the air box over to gain clearance for the battery.



Air Box Relocation Tabs

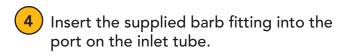
Remove the airbox diverter (shown to the right) then bolt the air box bottom the relocation tabs using the factory bolts.

flow air filter supplied. Re-install the air





Remove Airbox Diverter



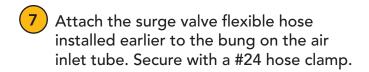


Barb Fitting Installed Into Inlet Tube

- Place the rotomold inlet onto the inlet of the supercharger followed by the silicone 45° elbow (short leg goes to rotomold inlet). Loosely secure the rotomold inlet to the supercharger with a #64 hose clamp.
- $\sqrt{}$

Tech Tip: The plastic on the radiator may need to be trimmed slightly to make room for the inlet.

Insert the air inlet tube into the silicone elbow, with the bung facing down on the supercharger side. Loosely Secure the silicone connections with a 3.75" T-bolt clamp on the air inlet tube and a #60 hose clamp at the rotomold connection.



- 8 Attach the air inlet tube to the factory airbox using the 45° 3.5" silicone connector (trimmed end goes onto the airbox). Loosely secure with 3.75" T-bolt clamps.
- Position the tubing and tighten the hose clamps at this time.
- 10 Flip the factory PCV hose on the passenger side valve cover over and attach the long end to the barb fitting on the inlet tube with the factory hose clamps.

Continue To Next Section.



Inlet Tubing Connected To Supercharger



Air Inlet Tube Installed



PCV Hose Connected

FUEL PUMP BOOSTER

VELCRO BENEATH DRIVERS SEAT

FUEL PUMP VOLTAGE BOOSTER

BLACK GROUND WIRE

RED WIRE

BLUE WIRE

FACTORY PINK WIRE TO FUEL PUMP

FACTORY PINK WIRE TO FUEL PUMP CONTROL MODULE

- 1 Find a suitable spot under the drivers seat to mount the Fuel Pump Voltage Booster.
 Use the supplied velcro to secure the box to the carpet.
 - Warning: Be sure to mount the Fuel Pump Booster Box to where the wires will not get damaged or disturbed.
- 2 Connect the supplied wire harness to the open plug-in on the Voltage Booster Box.



Voltage Booster Mounted

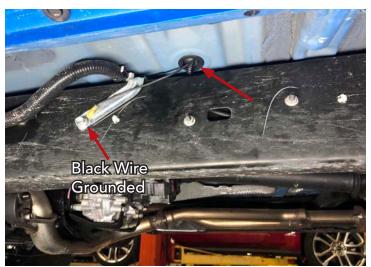
From under the vehicle, located the rubber grommet under the drivers seat along the frame. Cut a hole through the grommet and the carpet. Run the Red, Blue and Black wires through the hole.

- 4 On the back side of the frame on the driver side, locate the fuel pump control module. Peel back the tape and the wire loom from the grey plug-in to expose the wires.
- 5 Cut the pink wire leaving enough wire to connect to. Using the provided solder connector, connect the Blue wire to the pink wire going into the fuel pump control module plug-in. Connect the red wire to the pink wire going to the fuel pump.



Tech Tip: Use a heat source such as a heat gun to melt the solder in the solder connector, the casing on the connector will shrink around the wire to seal the connection. Be sure the wires have a solid connection.

- 6 Ground the black wire to the frame using the provided ring terminal.
- 7 Use the provided wire loom and zip-ties to protect the wiring.



Wires Routed Through Grommet



Wires Connected

BATTERY RELOCATION

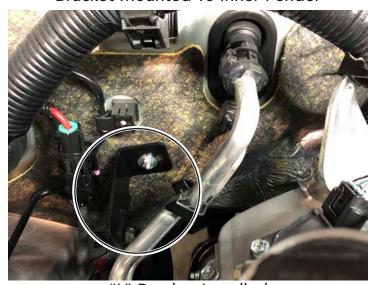
Models With Drivers Side ABS Modules Only, Models With Passenger Side ABS Modules And Open Air Filter Proceed To Page: 33. Models With Passenger Side ABS Modules and Factory Air Box Proceed To Page: 37

On the passenger rear corner of the engine bay, attach the supplied bracket to the factory tapped holes on the inner fender as shown to the right using the supplied M6 X 25mm cap screws.



Bracket Mounted To Inner Fender

Remove the plastic nut from the firewall and loosely install the "L" bracket using a 6mm nut and washer.



"L" Bracket Installed

Attach the all thread studs to the battery tray. Thread one 5/16" flange nut onto the stud upside down, leave 1/2" of thread exposed past the nut. Place the stud through the hole on the battery tray and install another nut to secure the stud to the tray. Repeat for the other side of the battery tray.



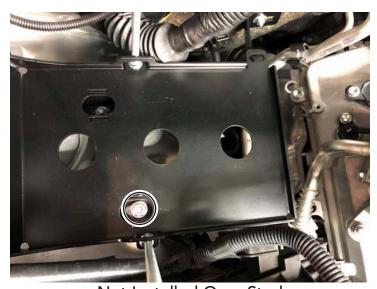
Studs Mounted To Battery Tray

Install the tray into the engine compartment as shown to the right. Position the front slot on the bottom of the tray over the stud coming out of the fender.



Battery Tray Placed In Engine Compartment

5 Loosely Install the 8mm nut onto the stud on the bottom of the tray.



Nut Installed Over Stud

Install the M10 Bolt with washer through the "L" bracket from the bottom and through the battery bracket. Loosely secure with a M10 locknut and washer.



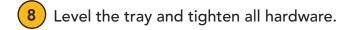
M10 Bolt Securing "L" Bracket

Battery Relocation

7 Secure the side of the battery tray by installing the (2) 6mm bolts into the threaded holes in the bracket mounted earlier on the side of the fender as shown to the right.



Tech Tip: The horn bracket behind the tray (red arrow to the right) may need to be bent back as to not contact the battery tray.





Battery Tray Secured To Fender Bracket



Battery Hold Down Installed

9 Carefully install the battery into the tray. Place the provided battery hold down over the (2) studs on the tray and evenly secure with the provided 8mm Nuts. Be sure to not over tighten the nuts.

Proceed To Page: 43

Passenger Side ABS Modules With Open Air Filter Only.

1 Attach the all thread studs to the battery tray. Thread one 5/16" flange nut onto the stud upside down, leave 1/2" of thread exposed past the nut. Place the stud through the hole on the battery tray and install another nut to secure the stud to the tray. Repeat for the other side of the battery tray.



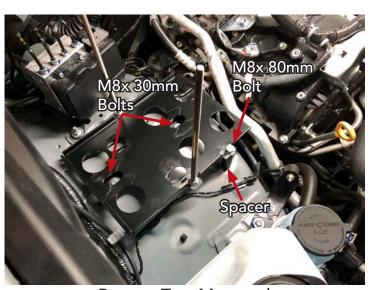
Studs Mounted To Battery Tray

The battery tray will mount to the (3) threaded holes shown to the right.



Battery Tray Mounting Locations

3 Starting with the 2 slots in the battery tray loosely secure the tray to the inner fender with (2) M8x 30mm bolts and large washers. Insert the M8x 80mm bolt with small washer through the tab on the front of the tray followed by the 2.20" spacer. Align the tray and secure the hardware.



Battery Tray Mounted

Install the factory plastic battery tray onto the metal battery tray as shown to the right. It will only sit flat in one direction.



Plastic Battery Tray Installed

Carefully install the battery into the tray. Place the provided battery hold down over the (2) studs on the tray and evenly secure with the provided 8mm Nuts. Be sure to not over tighten the nuts.



Battery And Hold Down Installed

6 Remove the positive battery cable end clamp with a 12mm. Also remove the rubber battery end cover.

7 Attach the supplied positive battery cable to the factory cable using the supplied M8 bolt and locknut.



Remove Battery Cable End Clamp



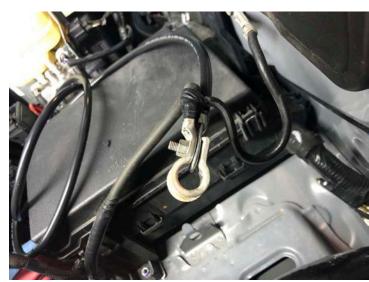
Positive Battery Cable Installed

8 With a 10mm remove the bolt and nut from the negative battery cable.



Remove Battey Cable Bolt And Nut

- 9 Use a screwdriver to pry the negative battery clamp apart, insert the supplied negative battery cable in between the prongs of the cable end. Secure the wire using the factory clamp and nut as shown to the right.
- Use the supplied cloth sleeves to wrap around the exposed battery cable connections. Use electrical tape for extra security if needed.



Negative Battery Cable Secured

Install spark plugs that are one heat ranger colder than stock (NGK 7505 recommended) and gap them to .035".

- Wrap the cables with the supplied braided sleeving and route over to the battery tray. Secure the cables with zip ties.
- Place the rubber battery end cover (removed earlier) over the end of the positive battery cable.

Proceed To Page: 43



Route Cables Behind Fuse Box



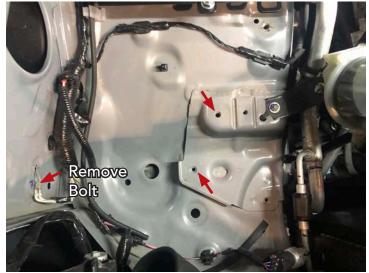
Battery Cables Routed

Passenger Side ABS Modules With Factory Air box Only.

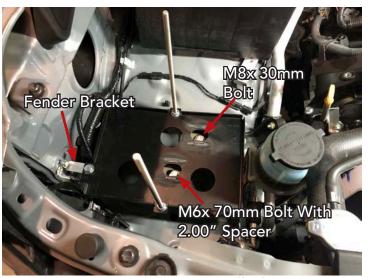
- 1 Attach the all thread studs to the battery tray. Thread one 5/16" flange nut onto the stud upside down, leave 1/2" of thread exposed past the nut. Place the stud through the hole on the battery tray and install another nut to secure the stud to the tray. Repeat for the other side of the battery tray.
- 2 The battery tray will mount to the (3) spots shown to the right. Using a 10mm remove the factory bolt from the ground wires as shown to the right.
- 3 Loosely mount the battery tray fender bracket to the battery tray using the supplied M8x 16mm bolt, washers and lock-nut.
- Reference the pic to the right for installing the battery tray to the vehicle.
- Starting with the battery tray slots insert an M6x 70mm bolt with washer through the front slot of the tray and through a 2.00" spacer, loosely mount it to the inner fender. Mount the back slot to the fender using the supplied M8x 30mm bolt with washer. Use the factory ground wire bolt to secure the fender bracket to the ground wires. Straighten the battery tray and secure the hardware.



Studs Mounted To Battery Tray

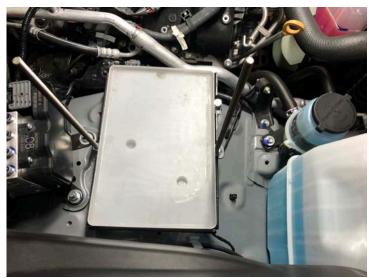


Battery Tray Mounting Points



Battery Tray Installed

6 Install the factory plastic battery tray onto the metal battery tray as shown to the right. It will only sit flat in one direction.



Plastic Battery Tray Installed

7 Carefully install the battery into the tray. Place the provided battery hold down over the (2) studs on the tray and evenly secure with the provided 8mm Nuts. Be sure to not over tighten the nuts.



Battery Hold Down Installed

Remove the positive battery cable end clamp with a 12mm. Also remove the rubber battery end cover.

9 Attach the supplied positive battery cable to the factory cable using the supplied M8 bolt and locknut.



Remove Battery Cable End Clamp



Positive Battery Cable Installed

With a 10mm remove the bolt and nut from the negative battery cable.



Remove Battey Cable Bolt And Nut

- Use a screwdriver to pry the negative battery clamp apart, insert the supplied negative battery cable in between the prongs of the cable end. Secure the wire using the factory clamp and nut as shown to the right.
- Use the supplied cloth sleeves to wrap around the exposed battery cable connections. Use electrical tape for extra security if needed.



Negative Battery Cable Secured

13 Install spark plugs that are one heat range colder than stock (NGK 7505 recommended) and gap them to .035".

- Wrap the cables with the supplied braided sleeving and route over to the battery tray, best route is through the front around the radiator support. Secure the cables with zip ties.
- Place the rubber battery end cover (removed earlier) over the end of the positive battery cable.

WASHER TANK RELOCATION

Models With Passenger Side ABS Modules and Factory Air box Only. All Others Skip To next Section.

1 Install the washer tank plastic bracket (needs to be removed from the supplied washer tank) to the supplied sheet metal bracket using the supplied M6x 10mm bolts and lock-nuts.



Washer Tank Bracket Mounted

Bolt the bracket assembly to the fender as shown to the right using the (2) supplied M8 x 16mm bolts and washers.



Washer Tank Bracket Mounted To Fender

Plug in the short clear tubing supplied with the washer tank into the front of the motor and into the bottom of the reservoir as shown to the right



Windhsield Washer Hose Routing

Washer Tank Relocation

- Mount the supplied washer tank to the bracket by sliding the tank over the black plastic bracket till it clips into place.
- 5 Plug the supplied wiring harness into the factory washer tank motor plug-in that was disconnected earlier.
- Insert the supplied 3/16"-3/16" connector into the factory washer tank hose followed by the supplied 3/16" hose.



Washer Tank Mounted

- 7 Route the wiring harness and hose to the washer reservoir. Connect the rubber hose to the open port on the washer tank reservoir.
- Tech Tip: Use a heat source such as a heat gun to melt the solder in the solder connector, the casing on the connector will shrink around the wire to seal the connection. Be sure the wires have a

solid connection.

- 8 Connect the wiring harness to the plugin on the washer reservoir using the supplied solder connectors. Be sure to connect the red wire to the red wire on the pump and the black wire to the black wire.
- 9 Use the supplied wire loom and zip-ties to secure the harness and hose away from any heat sources or moving parts.

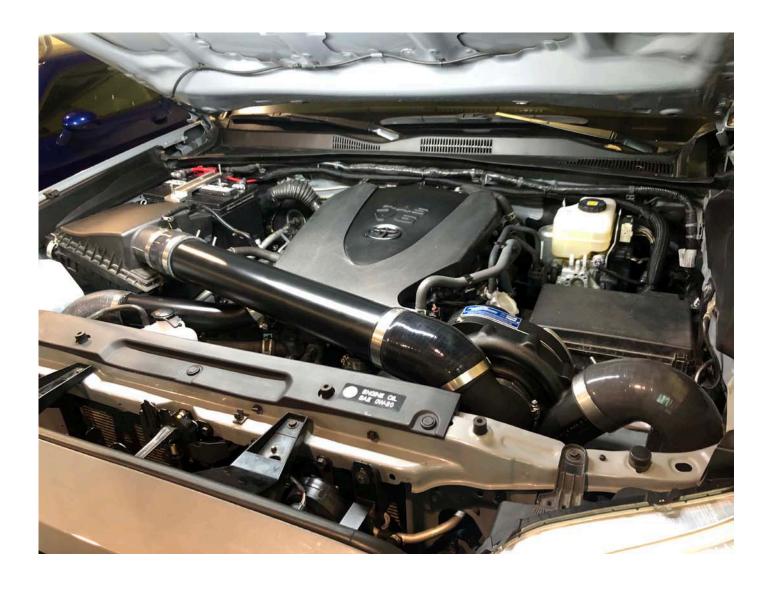
FINISHING UP

1 Trim the engine cover as shown to the right. Fit the cover to the engine and make several small cuts till clearance is made around the supercharger and intake tubing.



Engine Cover Trimmed

- 3 Install the engine cover onto the engine. Install the radiator cover.
- 4 Refill the engine coolant.
- 5 Attach the battery cables.
- 6 Do a final check of the supercharger system before starting the vehicle.



CONGRATULATIONS! YOU HAVE COMPLETED THE INSTALLATION OF YOUR NEW PROCHARGER SUPERCHARGER KIT. READ THE FOLLOWING PAGES CAREFULLY FOR OPERATION AND MAINTENANCE INSTRUCTIONS, AS WELLAS 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 reinstalling 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.



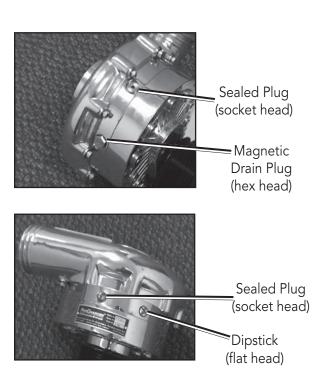
Warning: Filling the ProCharger higher than the maximum level on the dipstick can lead to bearing and seal damage. The supercharger is a sealed unit and should not normally require the addition of oil between service intervals. If excessive usage is noted, the unit should be sent to ATI for inspection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

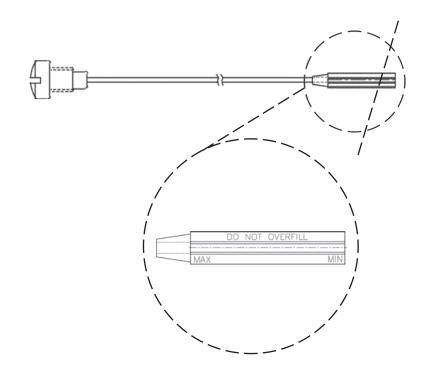
General

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.

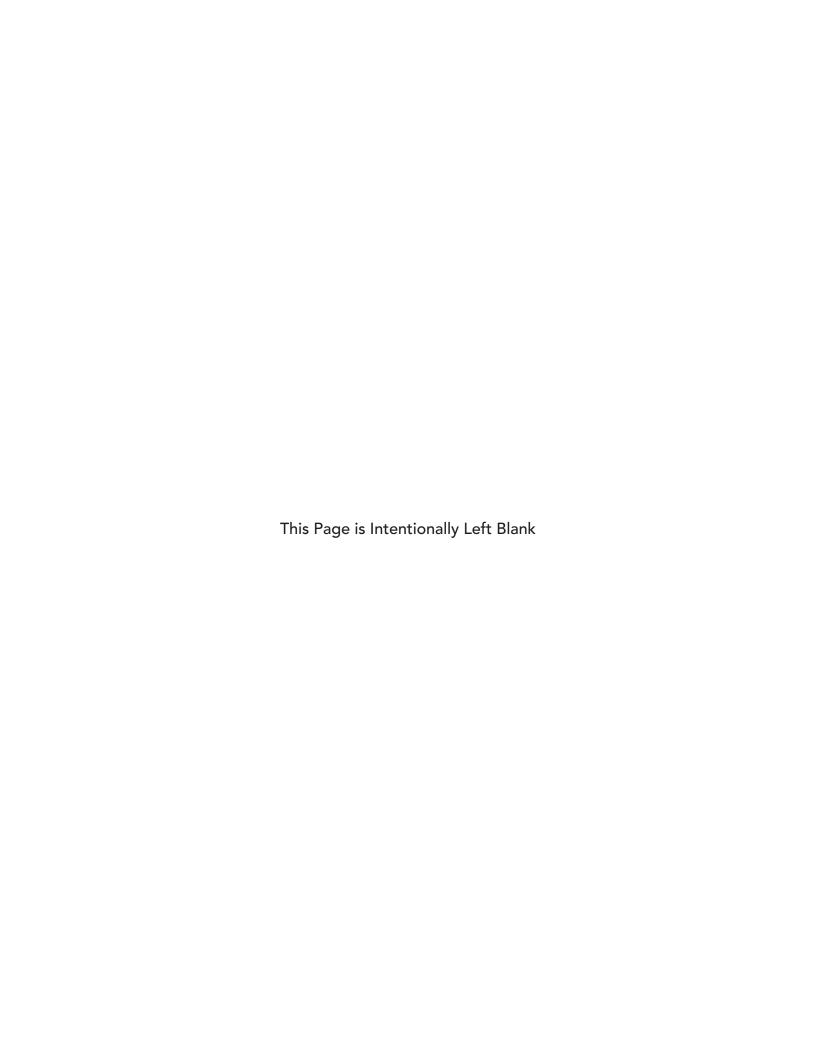
If a solution to your issue can not be found after the above phone consultation, you will be assigned a return authorization number (RMA). You must then properly package and ship your product, at your expense, to the ATI factory. The product should be carefully packaged in a rugged box.

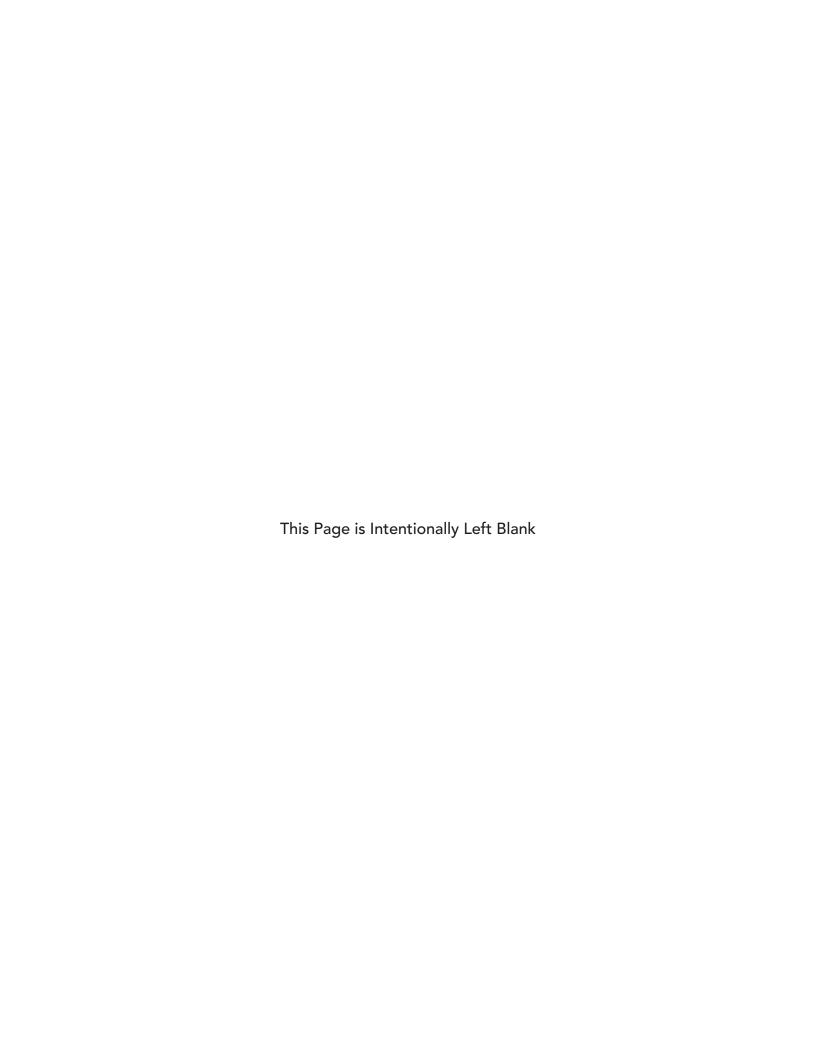
Include the following information inside the box with your product:

- 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







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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