Mustang GT 2005-2010
Stage II & Race Intercooled System
Installation Guide

PROCHARGER®
SUPERCHARGER SYSTEMS

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.

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INTRODUCTION

Congratulations on purchasing your ProCharger® Mustang GT 2005-2010 Stage II or Race 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.

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

- 3/8" Socket Set (standard & metric)
- 1/2" Socket Set (standard & metric)
- 1/2" Impact Gun
- 1/2" Breaker Bar and 4" Extention
- #20 Torx Wrench
- Open End Wrench Set (standard & metric)
- 5/16" Nut Driver
- 3/8" Hex Bit Set (allen head)
- Flat Screwdrivers
- Phillips Screwdrivers
- Plier Set
- Soldering Iron and Solder
- Heat Gun
- Ford Engine Coolant

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

Table of Contents

PLEASE PROCEED TO THE TUNING SECTION FOR COMPLETE SYSTEM INSTALLATIONS. TUNING THESE VEHICLES IS A MULTI-STEP PROCESS THAT SHOULD BE INTIATED BEFORE SYSTEM INSTALLATION BEGINS. PLEASE ALLOW 24 HOURS TO RECEIVE YOUR MODIFIED TUNE FILE. CONTACT ATI WITH ANY QUESTIONS REGARDING TUNING FOR THESE VEHICLES.

Tuning

Note: This section only applies to full systems, which include a hand-held tuner. If you do not have a full system, additional tuning will be required before starting the vehicle.

inTune Programmer

Warning: Voltage fluctuations are a common cause of reflashing failure. Be sure your battery is fully charged, remove the cooling fan and fuel pump fuses, keep the stereo off, and do not open or close any doors or windows while reflashing.

Warning: During a reflashing, either stay in the vehicle or open a window prior to reflashing to prevent getting locked out.

1. Remove the inTune programmer from its box and review the included instructions for updating your device.

   1) Connect the inTune programmer to your PC with the provided USB cable. Allow the device to load drivers to the PC.

   2) Run the inTune updater software.

2. Connect the inTune programmer to the OBD-II port located below the steering column using the OBD-II cable included with your programmer.

3. Upload your stock tune from the ECM to the inTune programmer:

   1) Select Tune Vehicle

   2) When prompted turn the key to the on position without starting the engine

   3) Select Advanced Tune

   4) Select Install Standard Tune

   5) Select Modify Stock Tune

4. Follow the on screen prompts. Your original backup will be saved.

   1) Select Backup Only

5. Connect the inTune programmer to your PC with the provided USB cable. A window will appear showing the inTune as an additional storage device.

   1) Select Open Files

   2) Select Tunes

   3) Select VIN Folder

   4) Click and drag the Original Backup file to your PC's desktop or hard drive

6. Email the Original Backup file to tuning@procharger.com with the ProCharger serial number in the subject line.

7. You will receive the tune for your vehicle within 24 hours. Save the modified tune to your desktop or hard drive.

8 Connect the inTune programmer to your PC and open the inTune drive:

1) Click and drag the ProCharger Tune file from your desktop or hard drive to the inTune drive.

2) Allow the file time to load, do not disconnect before the file has finished loading

9 Connect the inTune programmer to the OBD-II port located below the steering column.

10 Download the modified tune from the inTune programmer to your vehicle:

1) Select Tune Vehicle

2) Select Advanced Tune

3) Install Custom Tune

4) Select Procharger

5) Select Apply Tune

11 Follow the on-screen prompts:

12 The ProCharger tune will now be written to your vehicle. This process can take several minutes.

Troubleshooting:

•If the programmer fails to install the tune to your vehicle for any reason, it will enter into "VEHICLE RECOVERY MODE." Reprogram the vehicle with the "RESTORE VEHICLE" option before attempting to install the ProCharger Tune again.

Supplemental Race/Off-road Notes:

Maintaining the proper air/fuel ratio is extremely important. Too much fuel will cause the car to hesitate, be sluggish, emit heavy black smoke and not attain proper boost levels. A lean condition will cause the car to detonate (which, under higher boost conditions, can cause engine damage), run hot or break up.

To get the most out of your system it will prove beneficial to utilize an air-fuel ratio meter. Wide band units are most ideal when tuning an engine for maximum performance. Usage of a wide band sensor will provide data that will allow you to achieve optimum performance throughout your engine's operating range. It is highly recommended that you monitor the air-fuel ratio during operation, and you should see proper fuel ratios throughout the RPM range. Installation of a boost pressure gauge is also recommended.

Off-road, high boost applications require high energy ignition systems for proper combustion. If you are using a stock ignition system on such an application, the plug gap must be reduced to approximately .035" to avoid extinguishing the arc discharge. The use of spark plugs one heat range cooler than stock is also advised.

ATI has made every effort to supply our customers with a complete power package. However, vehicles utilizing aftermarket components (exhaust, cylinder heads, cams, etc.) or extreme operating conditions (desert, high altitude, etc.) may respond differently to the PCM program supplied with your complete system.

Getting Started

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

(A) Throttle Body

(B) Flex Hose

(C) MAF Sensor/Intake Air Temp. Sensor

(D) Air Filter Housing

! 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.

1. With a 10mm socket and 5/16" nut driver, remove the stock air inlet tract and box. Set aside the stock airbox with Mass Air Flow Meter (MAF). It is used later in the installation.

2. Remove the fuel pump fuse.

3. Start the engine and allow to idle until it stalls. Crank the engine for 5 seconds after it stalls to purge the remaining fuel pressure from the fuel rails.

4. Lower both windows ½" to allow the door to close correctly after the battery is disconnected.

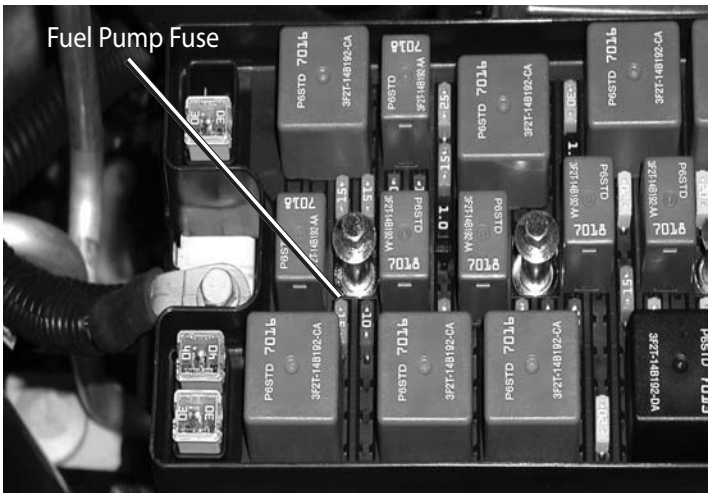
5. Turn ignition off.

6. Disconnect the battery ground.

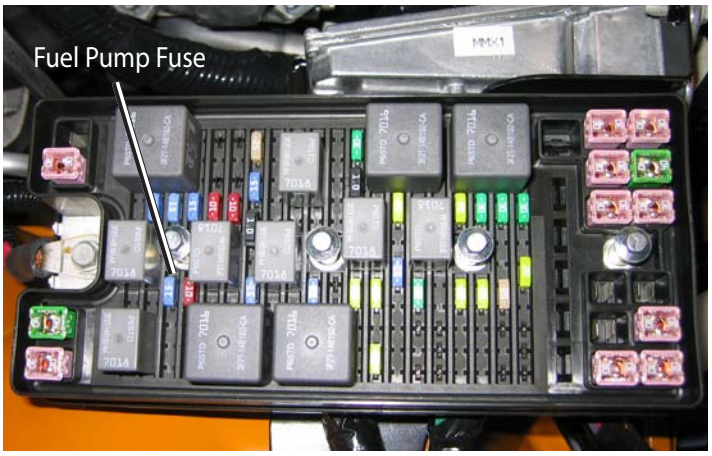
7. Replace the fuel pump fuse.

8. Remove the upper trim piece and set aside.

9. Raise the vehicle.



Bussed Electrical Center (2005-2006 Models)



Bussed Electrical Center (2007-2010 Models)


Upper Trim

10 Remove the lower trim with a 5.5mm socket.

11 Remove the inner fender well screws.

12 Remove the top two 10mm bolts on the bumper cover (front fascia).

13 Remove the two 10mm inner fender well nuts from each side by pulling the inner fender well out and reaching from the side into the area behind the headlights.

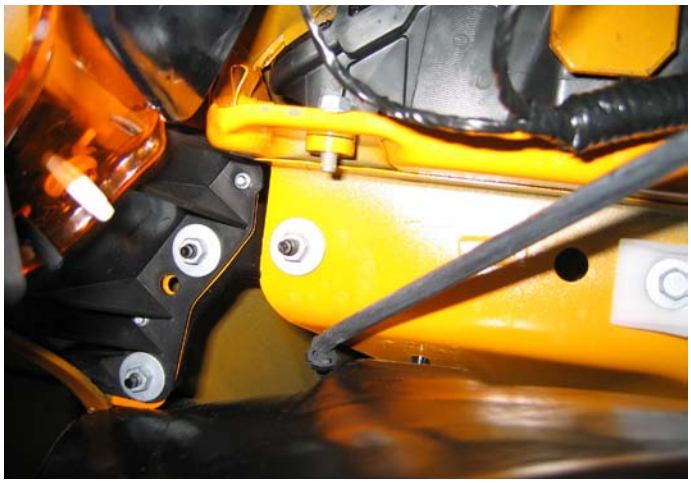
14 Remove the bumper cover by pulling it down and out at each wheel well. Pull the bumper cover forward several inches and unplug the fog lights and turn signals.

9 Lower the vehicle.

Lower Trim

Inner Fender Well Screws

Top Bumper Cover Bolt Driver's Side



Inner Fender Well Nuts (Passenger's Side)

Fuel Injectors

Full Systems Only

Note: This section only applies to full systems, which include replacement fuel injectors. If you do not have a full system, additional fuel system components will be required before starting the vehicle.

1. Verify that the fuel system is depressurized and the battery is disconnected.

2. Unplug the injectors from the wiring harness and remove the fuel rails and injectors from the engine.

3. Replace all stock injectors with 39 lb/hr injectors (blue). Remove the retaining clip that holds the injector to the fuel rail. Carefully pull the stock injector from the fuel rail.

4. Inspect the new injectors for damaged o-rings. Carefully insert the new injectors into the intake manifold and secure the fuel rail using stock hardware.

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

5. Reconnect the battery. Turn the ignition on, but do not start the car. Inspect the fuel rails and injectors for fuel leaks.

Stock Fuel Injectors Installed

39 lb Fuel Injectors Installed

39 lb Fuel Injectors & Fuel Rail Installed

Thermostat, Coolant Hoses and A/C Line

1. Remove the degas tank pressure cap and drain the coolant from the radiator. If your car has low miles and clean coolant, collect the coolant in a clean container for reuse.

2. Remove the Power Steering (P/S) reservoir from the fan shroud; do not disconnect the power steering fluid lines.

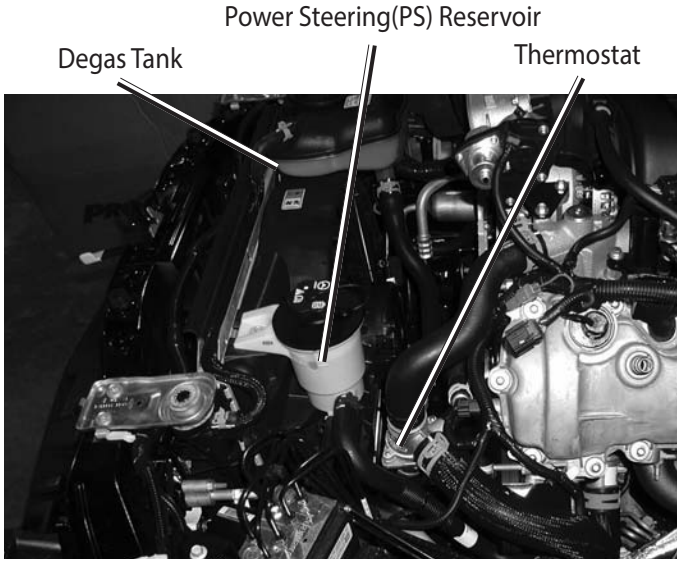
3. Remove the thermostat, associated hoses, and degas tank from the vehicle.

4. Unplug the fan controller from the wiring harness and remove the fan assembly from the car. Unplug and remove the fan controller from the fan. Retain the fan shroud bolts and fan controller for reuse.

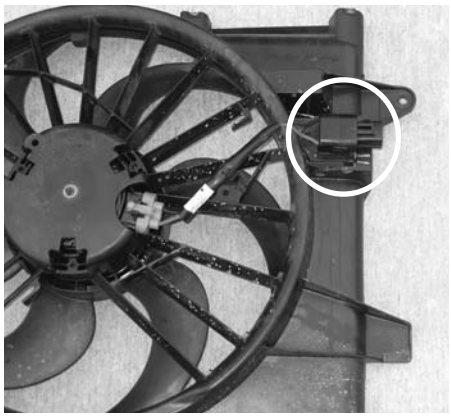
5. Disconnect the hoses from the lower radiator on the driver's side, the coolant crossover near the intake manifold, and the oil cooler below the exhausts on the driver's side.

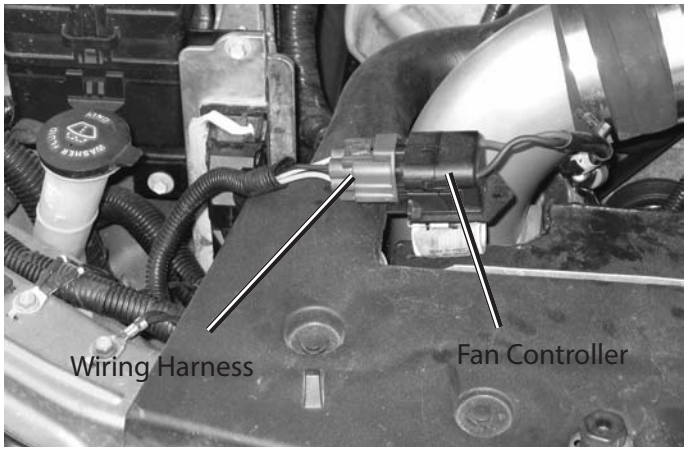
2005-2006 model years

6. With a 15mm socket, remove the coolant hose bracket and grounding lug.



Fan Shroud and Accessories


Fan Shroud w/Controller



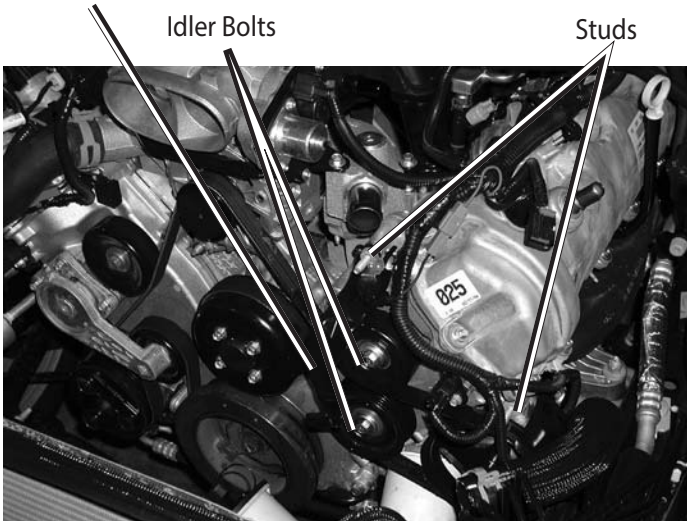
Fan Controller & Wiring Harness (Controller Removed From Shroud For Clarity)

7. Remove the 13mm bolts from the idler pulleys. Do not remove the idler pulleys.

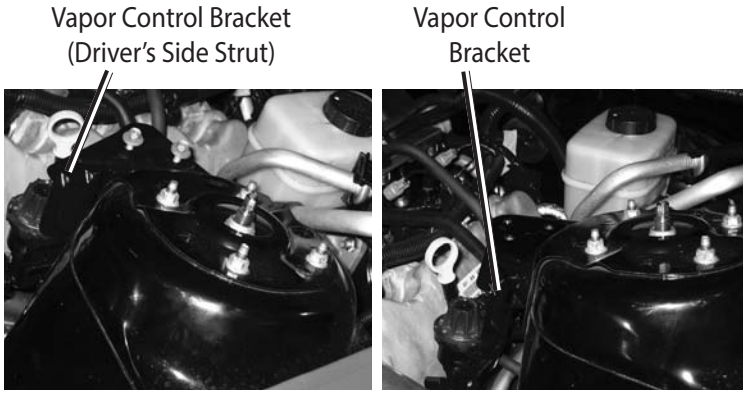
8. With a 19mm socket, remove the studs from the engine.

9. With a 10mm socket, relocate the ground under the manifold bolt.

10. Relocate the vapor control bracket under the original mounting location using the supplied M6 x 30 bolt and washer.



2005-2006 Front Driver's Side Engine View



2005-2006 Vapor Control Bracket
(Original Location) (Relocated)

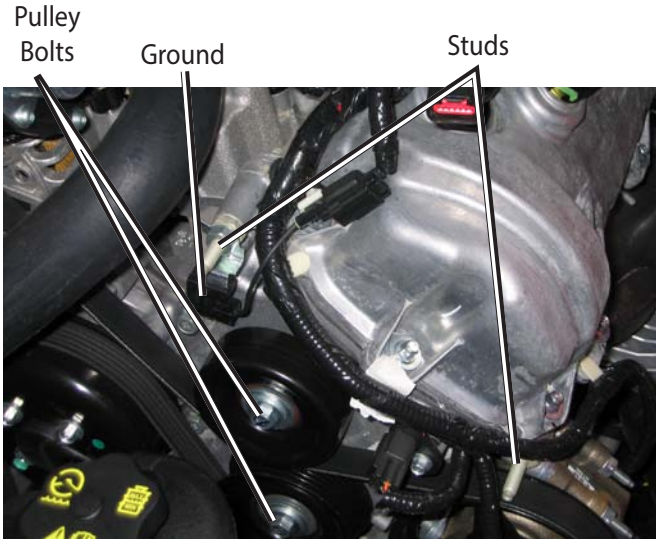
2007-2010 model years

6. Relocate the thermostat ground as shown.

7. Remove the two idler retaining bolts and the two studs as shown.

8. Relocate the A/C line forward using an 11mm socket.

2005-2006 Relocated Ground Connection



2007-2010 Ground, Studs, & Pulley Bolts

ProCharger Crank Pulley

Note: Serpentine and Cog Race kits require an ATI Performance Products Super Damper Part #918039. Attach the 12-rib crank pulley to the Super Damper with 3 bolts. Attach the cog crank pulley to the Super Damper by placing the adaptor over the damper, centering it over the pocket machined into the adaptor and sliding the cog pulley over the bore on the adaptor. Tighten with 3 bolts and washers.

1. Raise the vehicle.

2. Remove the harmonic damper bolt and washer with an 18mm socket.

   To stop the engine from turning:

   a. Put the vehicle in Reverse and set the Emergency Break.

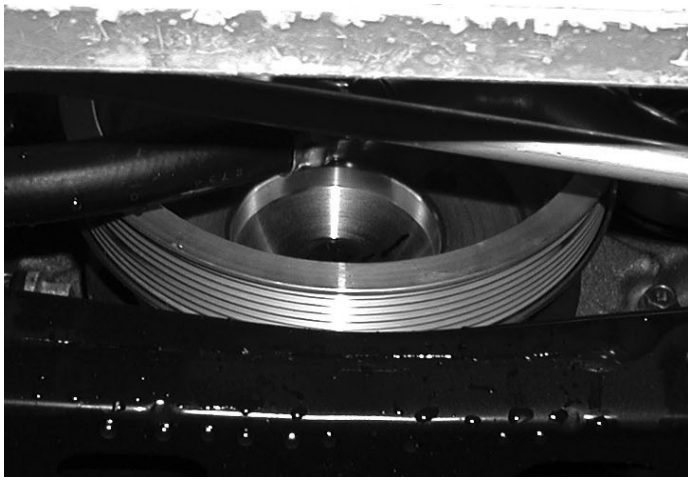
      Or

   b. Remove the Clutch Fork Cover and hold the flywheel/pressure plate with a pry bar. Then have a second person loosen the harmonic balancer bolt.

3. Clean out excess RTV from harmonic damper and install the ATI crank pulley into the harmonic damper.

4. Install the crank pulley using the supplied M12 x 1.5 x 65 bolt and stock washer. With a 19mm socket, rotate the crank pulley counter-clockwise until the pins seat on the harmonic damper. Torque the bolt to 35 ft-lb, then tighten the bolt an additional 90°.

Removing the Crank Pulley Bolt



ATI Crank Pulley

ProCharger Fan and Fan Shroud

1. Mount the supplied fan to the supplied fan shroud using (4) 1/4 - 20 x 3/4" bolts, (4) 1/4 - 20 nylock nuts, & (8) 1/4" washers. Note orientation of fan wiring harness.

2. Mount the fan controller to the fan shroud using the supplied 1/4 - 20 x 5/8" SHCS and washer. The SHCS will tap it's own threads in the fan controller plastic as you tighten the screw.

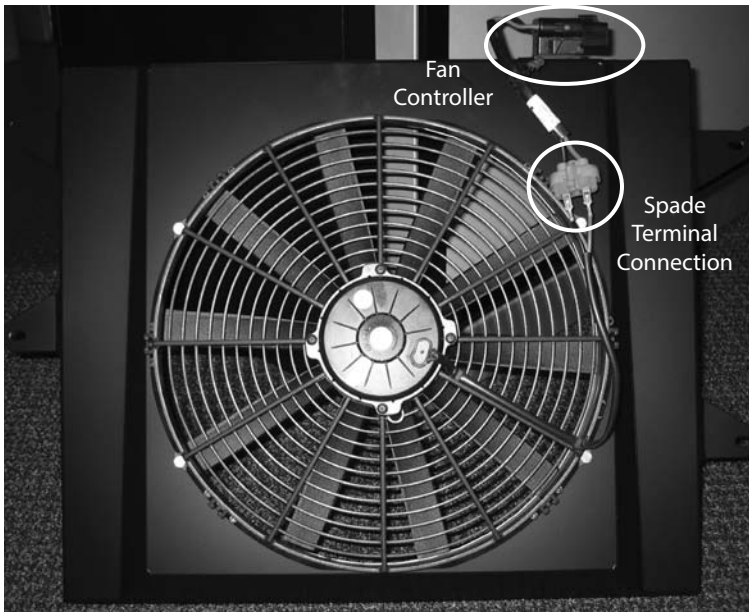
3. Connect the fan to the fan controller:

   a. Modify the spade terminals of the fan to fit into the stock fan controller by removing the spades from the fan plug using a small flat blade screwdriver and grinding the edges slightly to make it narrower until it plugs into the fan controller harness (red in red & black in black). Secure & insulate the spade terminals using electrical tape.

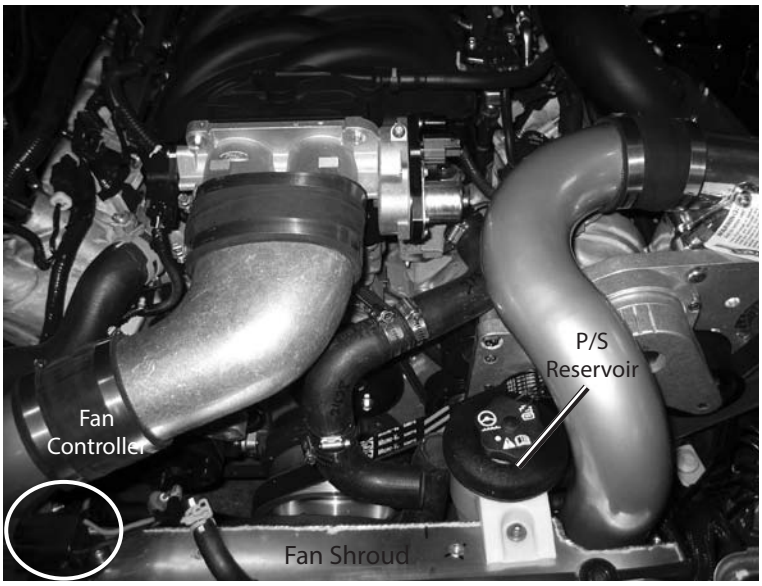
   Or

   b. Cut, strip, and solder together the fan and fan controller wires (red on red and black on black). Insulate solder joints using heat shrink insulation or electrical tape. Secure wires away from belts with zip ties.

4. Install the fan shroud in the same manner as the factory fan shroud and secure using the factory retaining bolts. Connect the Power Steering Reservoir to the fan shroud using 1/4 - 20 x 5/8" SHCS and washer.



Fan Shroud with Fan and Fan Controller Mounted (Spade Terminals Shown)



Fan Assembly, Fan Controller, & Power Steering Reservoir Mounted in Car

ProCharger Bracket and Head Unit

1. Mount the spacers to the main bracket loosely using four 5/16 - 18 x 1 SHCS as shown. The holes in the spacers and the holes in the main bracket only line up when the spacers are in the correct position.

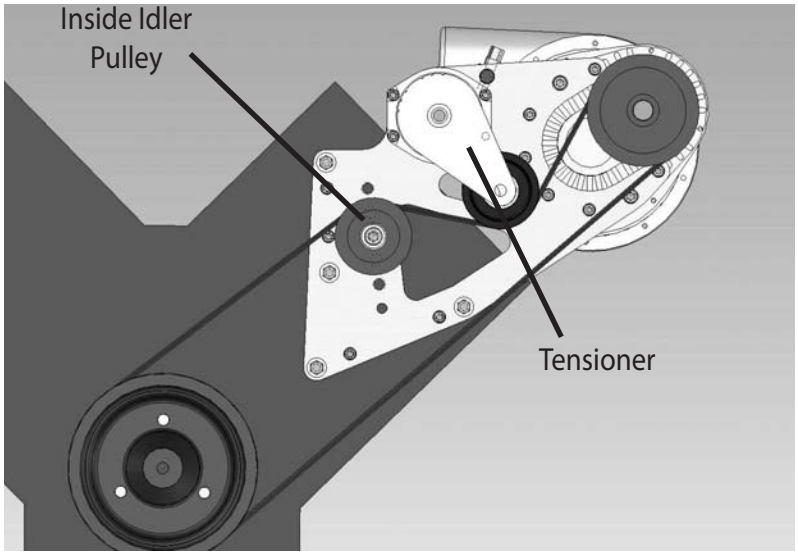
2. Mount the main bracket assembly to the engine using two M8 x 1.25 x 90 bolts, two M8 x 1.25 x 150 bolts, and four M8 washers as shown. Torque M8 bolts and 5/16 SHCS to 20 ft-lb.

3. Mount the ProCharger to the main bracket using 5/16 and 3/8 SHCS as shown.

4. Install the belt as shown. Note that the inside idler pulley is factory installed in the third hole down. This pulley location can be moved to allow a wide variety of belt and pulley combinations. Verify that all belt ribs are properly seated in their pulley's grooves before tensioning the belt.

ProCharger Bracket Installed

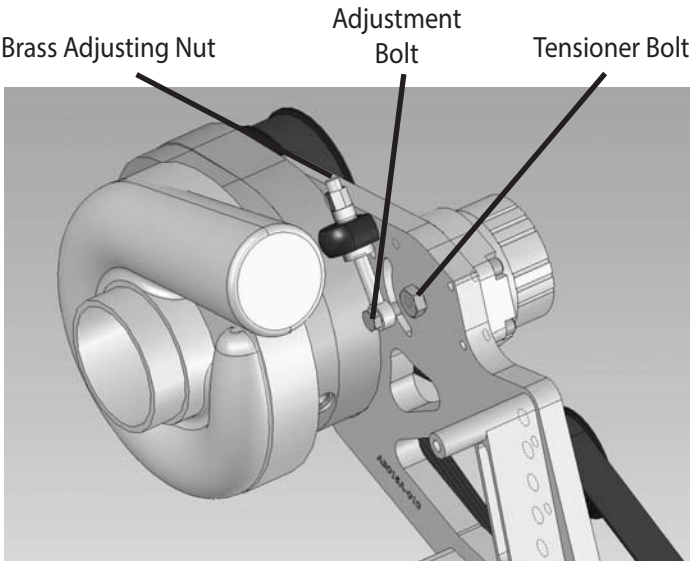
ProCharger Head Unit Installed



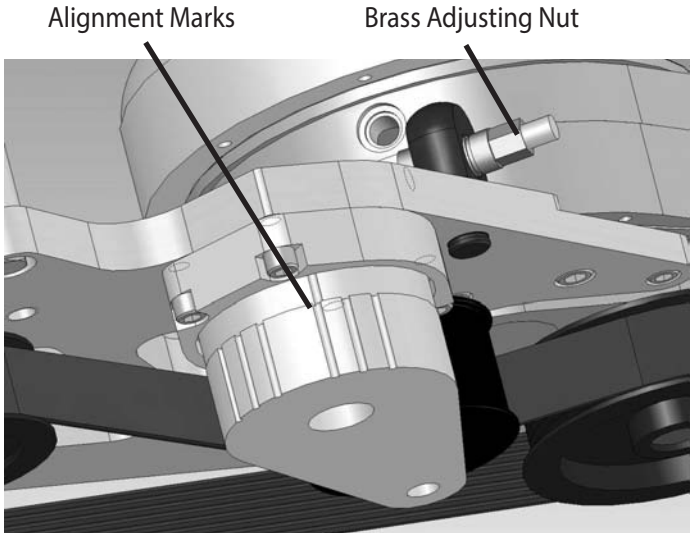
Main Bracket, ProCharger, Tensioner, & Belt Routing

5 To tension the belt, slightly loosen the tensioner bolt with a ¾" box end wrench and the adjustment bolt with a 9/16" box end wrench. Turn the brass adjusting nut with a ½" deep well socket counter-clockwise to tighten the belt. Pull up on the tensioner pulley (loosening the belt) to check the limits of the tensioner springs. Tighten the belt until the tensioner springs are almost bottomed out. The alignment marks should be as shown.

6 When the belt is properly tensioned, torque the tensioner bolt and the adjustment bolt to lock down the tensioner in the proper position.

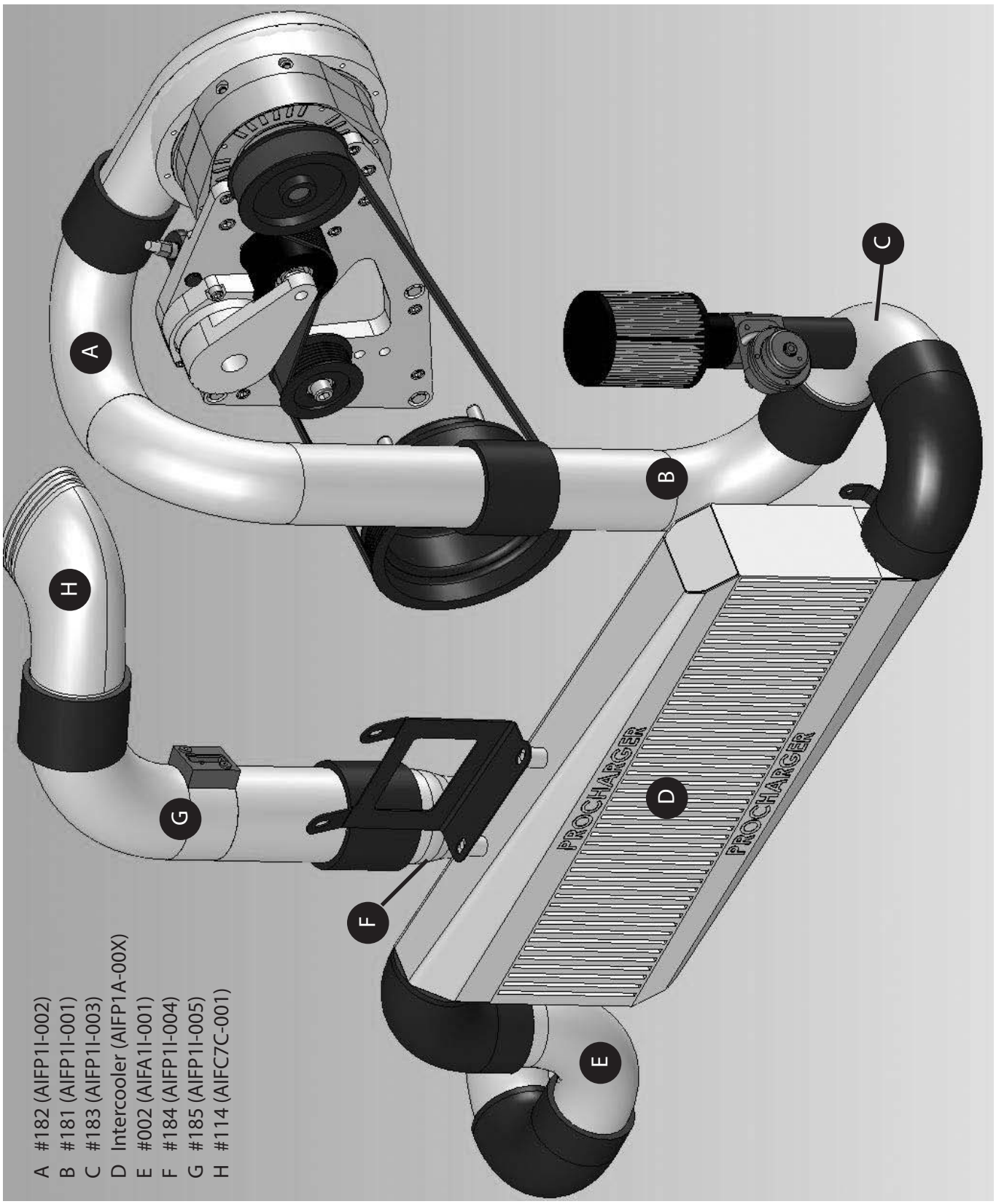


Tensioner Adjustment Bolts



Tensioner Setting

2005-2010 Mustang GT Intercooler and Tubing Schematic



A #182 (AIFP1I-002)
B #181 (AIFP1I-001)
C #183 (AIFP1I-003)
D Intercooler (AIFP1A-00X)
E #002 (AIFA1I-001)
F #184 (AIFP1I-004)
G #185 (AIFP1I-005)
H #114 (AIFC7C-001)

Intercooler and Tubing

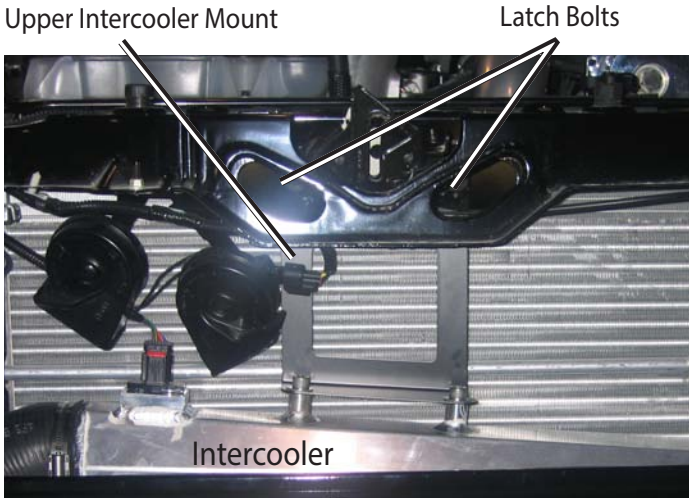
✓ Note: 2010 model year may require some front fascia modifications for best fit.

1. Install the upper intercooler mount underneath the hood latch. Mark the top edge of the latch assembly before loosening the bolts.

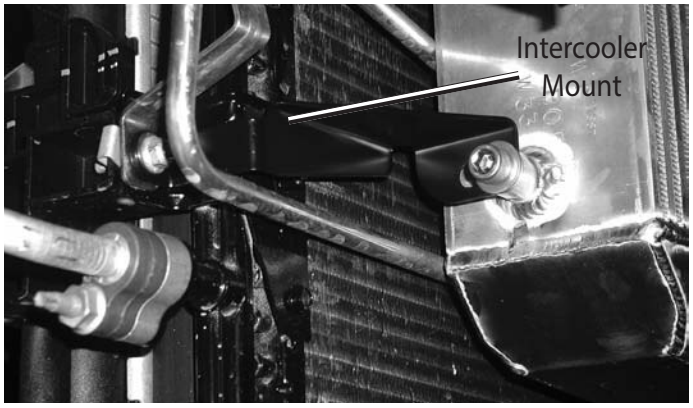
2. Hang the intercooler from the upper intercooler mount using two ⅜- 16 x ¾ SHCS and washers but do not fully tighten. The intercooler mounts in front of the power steering cooler. The power steering cooler mount may need to be slightly bent back, towards the AC condenser, to fit behind the intercooler.

3. Remove the stock nuts from both sides of the lower condenser mount. Place the passenger's side and driver's side lower intercooler mounts in their respective positions as shown. Replace, but do not fully tighten, the factory nuts with an ATI supplied ¼" washer between the factory nut and intercooler mount. Attach the lower mounts to the intercooler using two ⅜- 16 x ¾" SHCS and washers, but do not fully tighten.

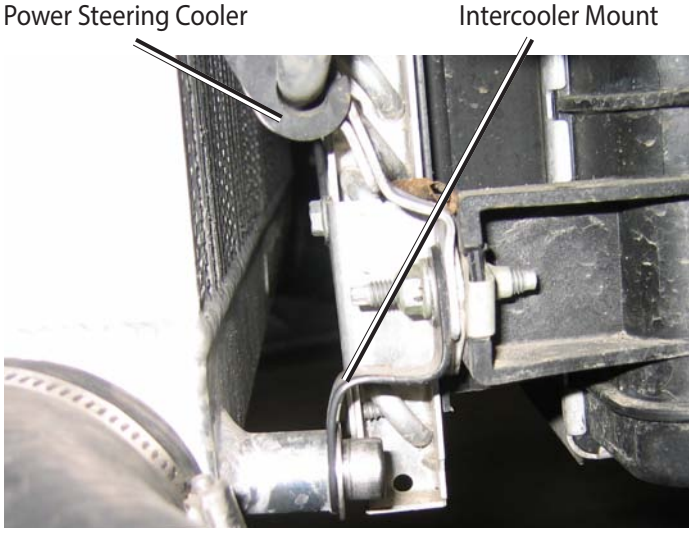
4. Note that the driver's side intercooler mount may need to be slightly bent as the intercooler is pulled toward the condenser. Tighten all intercooler mounting nuts and bolts after the tubing is fully installed.



Intercooler & Upper Intercooler Mount



Intercooler Mount Passenger's Side



Intercooler Mount Driver's Side

5. Install steel and rubber tubing from the ProCharger to the Intercooler as shown. Position all hose clamps so they are accessible to tighten and adjust after installation.

6. Install the ProFlow anti-surge valve. Route the manifold reference hose (3/16"x 5') from the ProFlow to the manifold reference area between the ProCharger and the intake manifold. Secure the manifold reference hose clear of all belts and pulleys.

7. Install the tubing from the intercooler to the intake manifold. Position the hose clamps so they are accessible for adjustment and tightening. Do not tighten the hose clamps until all hoses are in place.

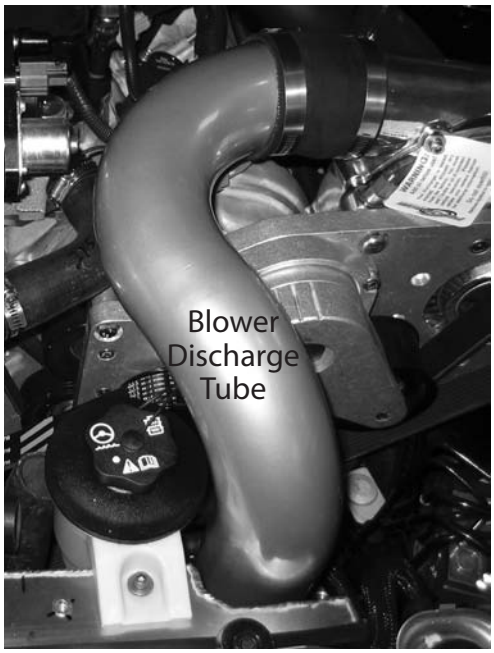
8. Make final adjustments on all tubes to maximize clearance from chassis, belts, hoses, and ground. Tighten all hose clamps. Hose clamps must be very tight to prevent blowing off under boost conditions.

9. Tighten all intercooler mounting fasteners.

10. Install the inlet system. Secure with hose clamps. Thread the 3/8" 90° barbed fitting into the intake. Adjust the inlet duct and air filter as necessary to clear the hood.

11. For the race inlet, drill a hole in the end of the filter and use the 3/8" 90° barbed fitting to connect the filter with the PCV hose. Secure using hose clamps.

ProFlow Installed Driver's Side

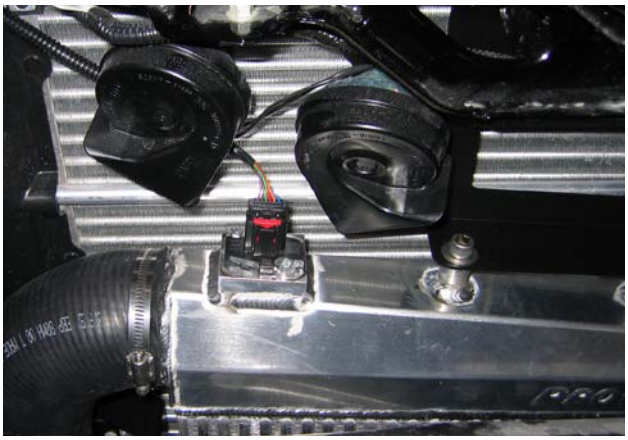


Inlet System Installed

MAF Meter

1. Install the supplied ProCharger MAF into the intercooler.

2. Connect the MAF Extension to the MAF Sensor and the factory wiring harness.



Intercooler MAF Plug

Cooling System

2005-2006 Model Years

(12-rib Serpentine Race pg. 19)

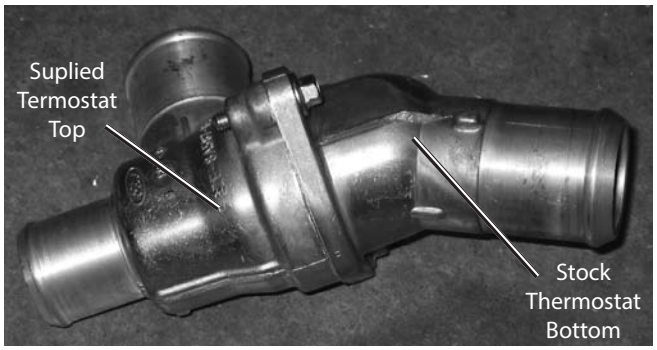
1. Assemble the thermostat and housing as shown using the supplied thermostat housing top and stock thermostat and housing bottom.

2. Install the thermostat in the car as shown using the supplied hoses and clamps. The figure below shows the general thermostat and hose positions.

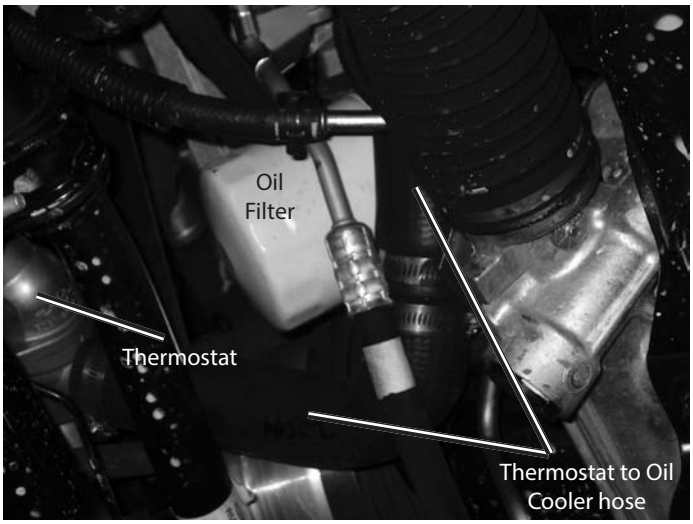
3. Connect the degas tank to the thermostat hoses at the 1-1/4" tee and the radiator purge hose.

4. Tighten all hose clamps and secure clear of belts and pulleys with zip ties.

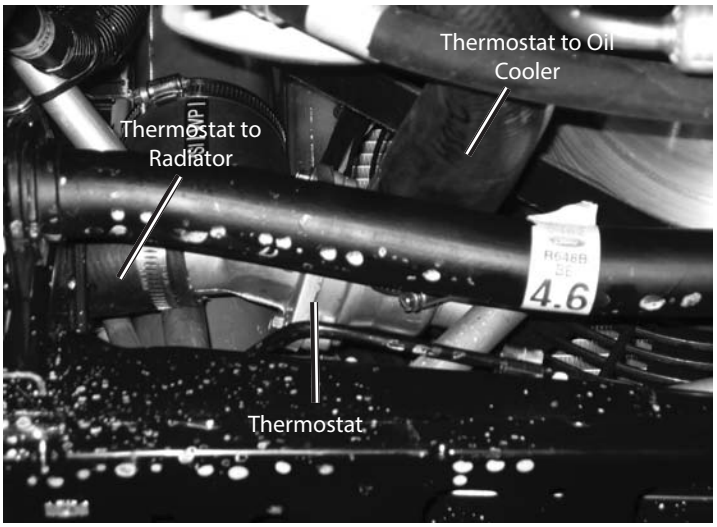
5. Bolt the degas tank to the fan shroud using (2) 1/4 - 20 x 5/8" SHCS and washers.



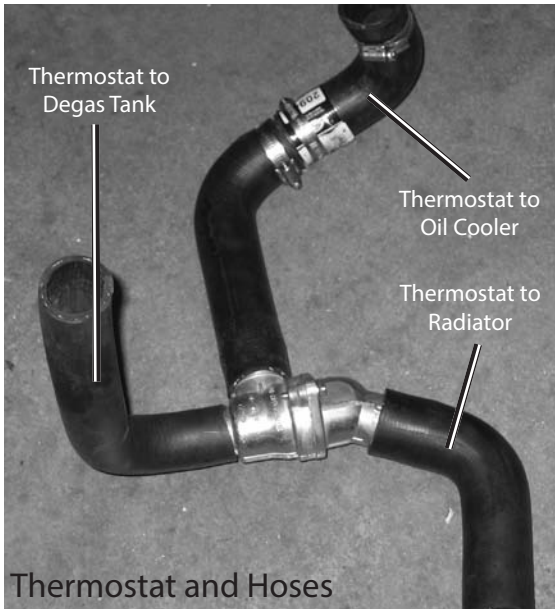
Thermostat Housing Assembly



Thermostat in Car, from Below

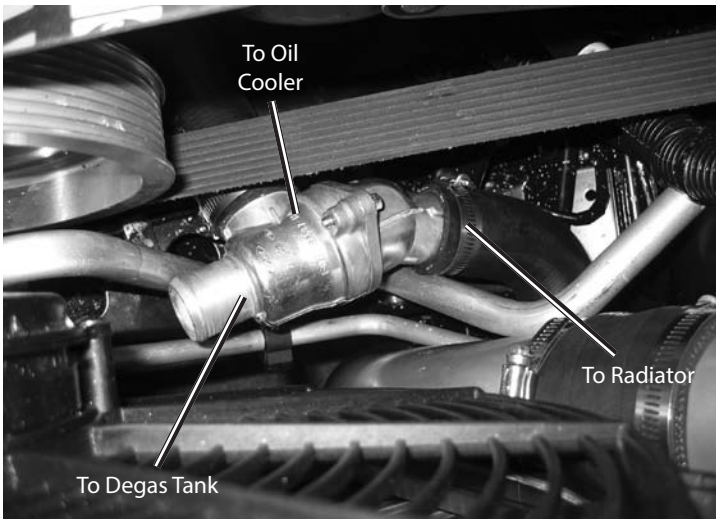


Thermostat in Car, from Below



Thermostat and Hoses

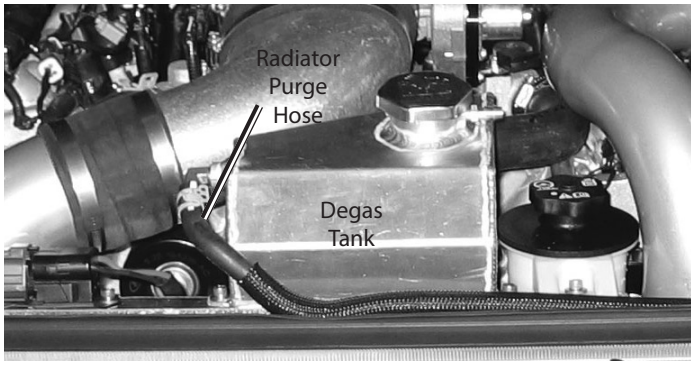

Hose from Thermostat to Oil Cooler



Thermostat from Above


Thermostat Hoses


Degas Tank and Thermostat Bypass Hose



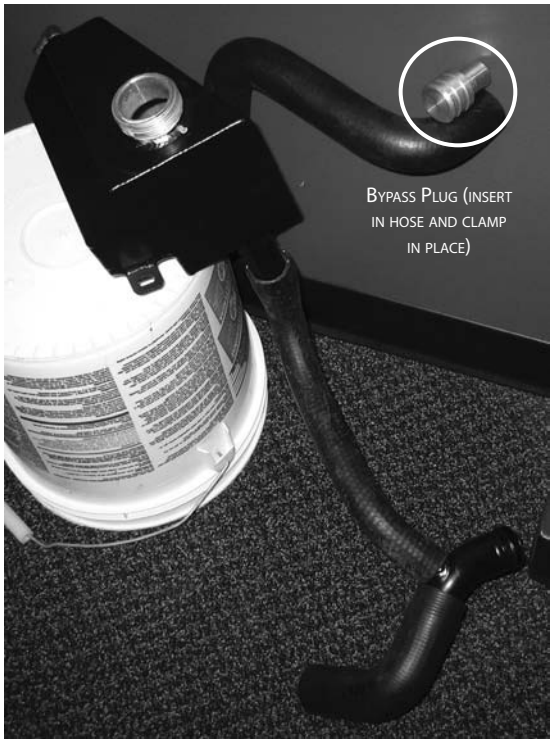
Degas Tank Installed

12-Rib Serpentine Race Only

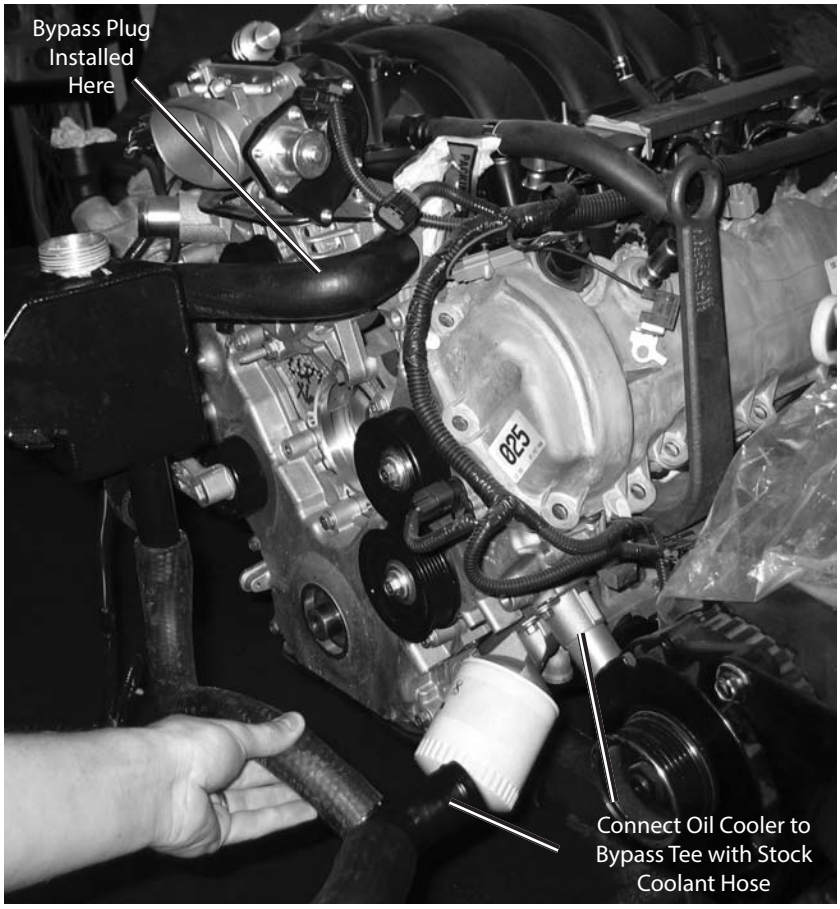
(2005-2006 Model Years)

The 2005 & 2006 12-rib drive replaces the thermostat with a bypass tee and blocks the radiator bypass with a plug to always force coolant through the radiator. The thermostat elimination provides additional room for belt clearance.

1. The figures at right and below show how the hoses and bypass plug fit in relation to the engine. The bypass plug must be installed or coolant will not flow through the radiator.



12-Rib Cooling SystemThermostat Bypass Plug Shown with Hoses



12-Rib Cooling Hoses Shown on Engine. Bypass Tee to Oil Cooler uses Stock Hose (Not Shown).

2007-2008 Model Years

1. Install the hose barbs onto degas tank as shown. Be sure and use a thread sealant on pipe threads.

2. Cut the degas tank coolant hose to fit the supplied degas tank. Note the orientation needed for the 90° hose barb to clear the power steering reservoir. Be sure the hose is long enough to securely attach to the degas tank and short enough so it does not have any clearance issues with the belts or pulleys.

Cooling System Hoses

Cut End of Degas Tank Hose

Cooling System Hoses

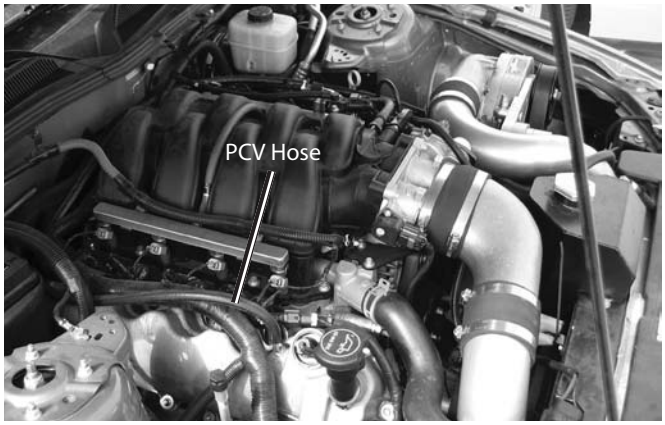
PCV and Air Filter

1. Assemble and install the manifold block as shown. Use teflon tape or other thread sealing compound. If you are using a boost gage, assemble the block with (2) 3/16" barb fittings; otherwise use only one 3/16" barb fitting.

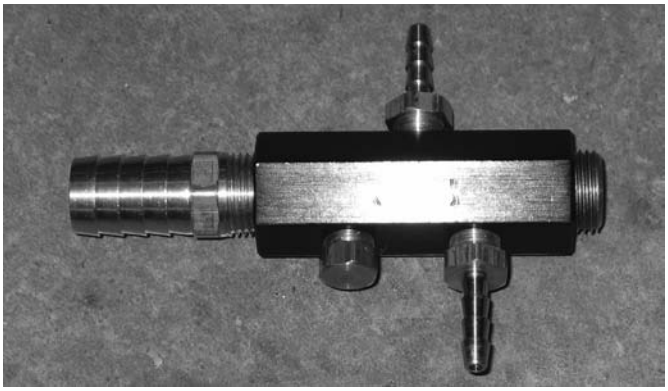
2. Install a ⅝" vacuum cap to the PCV port on the driver's side valve cover. Secure using a zip tie as a hose clamp.

3. Install ⅜" x 5' PCV hose from the passenger's side valve cover. Route between the back of the engine and the firewall and forward towards the ProCharger inlet. Trim the excess PCV hose and connect to the barbed fitting on the ProCharger inlet tube. Secure hose out of the way of moving parts and heat sources using wire ties.

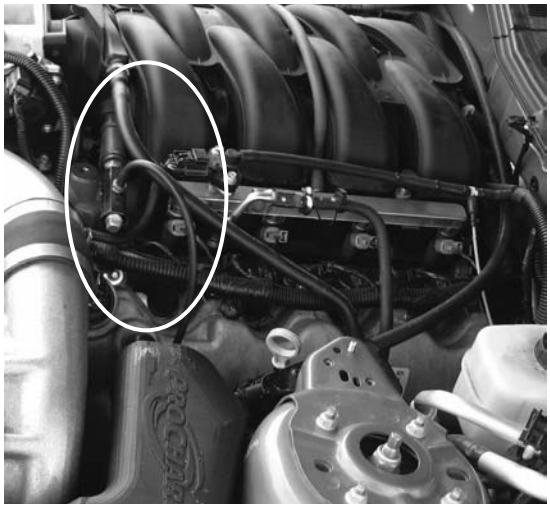
Manifold Reference Block and Vacuum Cap Installed



PCV Hose Installed on Passenger Side Valve Cover



Manifold Reference Block Assembled (shown set up for optional boost gauge)



Cold Air Intake, PCV Hose

Fuel Pump Upgrade

Full Systems or Requested Option Only

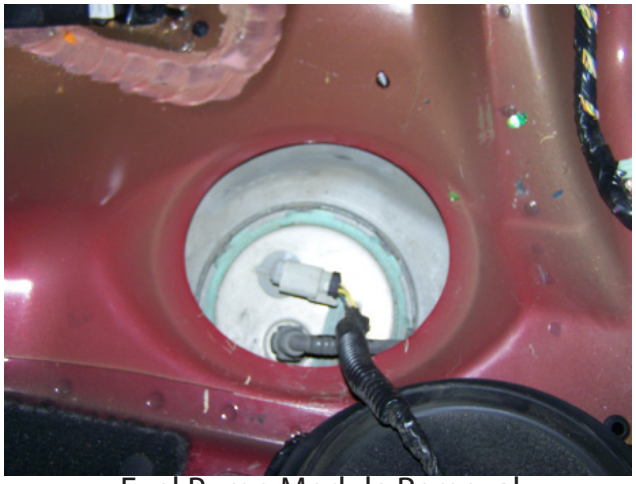
Note: This section only applies to full systems, which include a piggyback fuel pump. If you do not have a full system, additional fuel system components will be required before starting the vehicle.

1. Remove the rear seat from the vehicle.

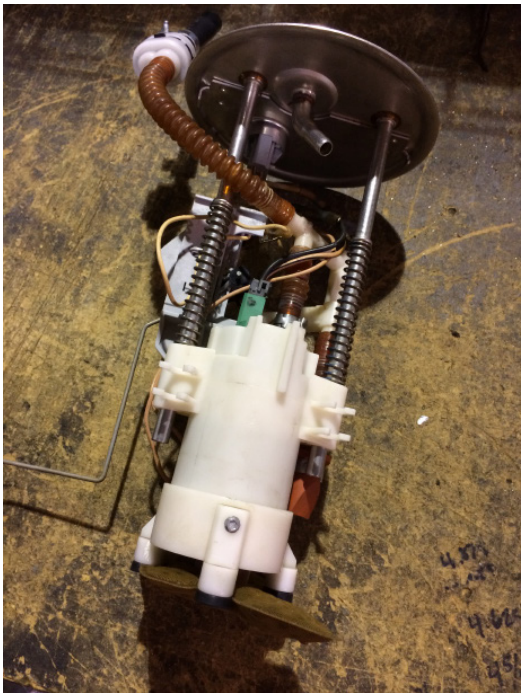
2. Remove the driver's side fuel pump module access hatch. From inside the fuel tank. unplug the fuel pump electrical connection and remove the fuel pump assembly from the vehicle.

3. Remove the sock from teh bottom of the fuel pump assembly. Remvoe the (2x) screws from the bottom of the basket with a 3/16" socket.

4. Carefully remove the fuel pump sending unit from the assembly. At this time, also remove the bottom of the basket, insulator, and fuel pump.



Fuel Pump Module Removal
Below the Driver's Side Rear Seat



Fuel Pump Assembly

5 Cut the corrugated line on the top of the fuel pump as shown in the image to the right. Remove the extra line on the tee fitting, this line will be replaced.

Warning: Do not use an open flame to activate the heatshrink/solder connections. An open flame can ignite fuel vapors!

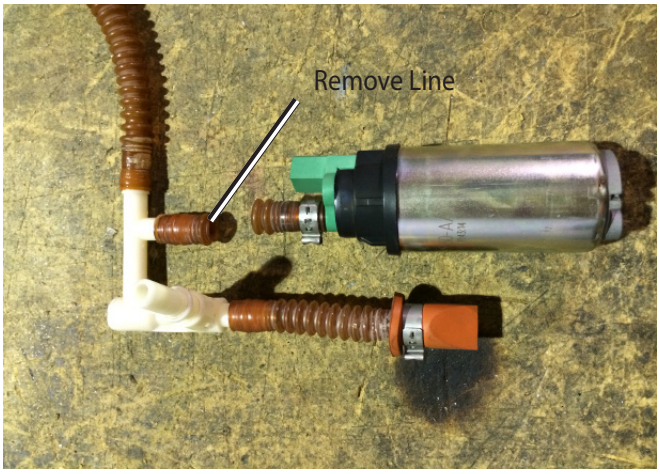
6 Cut the OEM connector from the harness and wire in the supplied connector, red wire to tan, black wire to black wire. Use heat shrink to secure each connection.

7 Install the supplied fuel hose to the outlet of the pump and to the open end of the tee fitting. Use the supplied hose clamps to secure each connection. Hose may need to be trimmed for proper fitment.

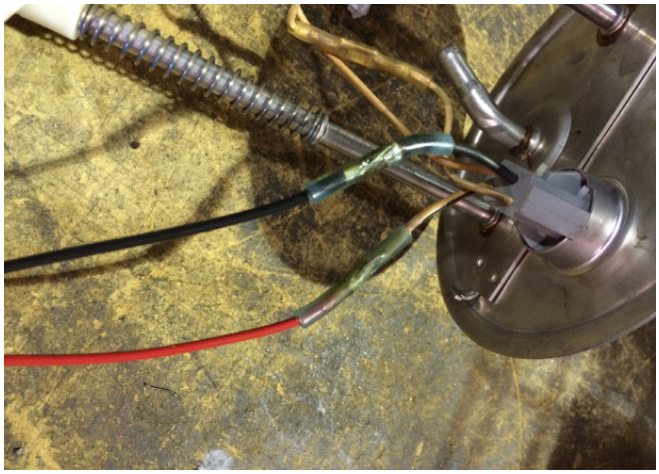
8 Reinstall insulator, basket bottom, and sock onto the new pump. Install the new pump into the basket. Install the sending unit at this time. Reinstall the (2x) screws with a 3/16" socket. Plug the connector into the pump.

9 Reinstall the assembly into the fuel tank, reinstall the hatch and backseat at this time.

Note: To eliminate excessive air in the fuel system, a short length of hose can be installed onto the outlet bung of the fuel pump, keep this hose inside the tank and aimed down. Cycle the key several times to prime the fuel pump. Remove the hose, reattach the fuel line to the pump.



Cut Fuel Pump Line


Wire In New Pump


Fuel Pump Assembly Reassembled

Finishing

1. Fill the degas tank with the proper coolant mix or recovered coolant, if saved during preparation. For now, leave the pressure cap off of the degas tank. Additional coolant may need to be added. Fill the power steering fluid reservoir. The fluid level will need to be topped off after the power steering is cycled back and forth a few times.

2. Add one bottle of the supplied oil to the ProCharger. Remove the oil warning tag from the ProCharger.

3. Reconnect the battery.

4. Inspect the vehicle for fluid leaks in the cooling system. If necessary, adjust hoses and tighten clamps.

5. Inspect the belts and pulleys for clearance from all wires and hoses. Adjust and secure any hoses or wires that may be caught or abraded by the belts or pulleys. Verify the belt is properly tensioned. Any locations where steel tubes could abrade on the chassis should be cushioned with the supplied self-adhesive rubber strips.

6. For complete systems, load the supplied tune using a hand held tuner (next page).

7. Verify that the car has the proper injectors and tune. Start the car and let it idle. Carefully inspect the fuel injectors and fuel rail for leaks.

8. Verify that the belt is tracking properly, without a tendency to try and climb any pulley shoulders, and check again for belt clearance. Do not touch moving belt or pulleys or allow clothing or hair to get caught in belt or pulleys.

9. Check the coolant level in the degas bottle. Add coolant if the level has dropped.

10. You need an assistant at this point. Check the anti-surge valve. Verify air is flowing out of the filter above the valve when the car is idling. Rev the engine to 3,000 rpm. Open the throttle quickly to prevent the engine from over revving. Watch the linkage on the anti-surge valve: when the throttle is snapped open, the anti-surge valve should close.

11. Turn on the air conditioner and verify that the cooling fan turns on as well.

12. Turn off the car. Replace the bumper cover, upper and lower trim. Cut the lower trim to allow for tube clearance. Mark trim lines and cut. Edges should be sanded for a nice finish.

! Warning: The car must be operated on 91 or higher octane fuel. Do not run your supercharged Mustang on any gas lower than 91 octane!

Operation and Maintenance

Cold Starting

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

Fuel Quality

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

Ignition System Maintenance

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

Air Filter Maintenance

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

Belt Replacement

The serpentine belt, which turns your ProCharger supercharger, will stretch after initial run-in, and should be re-tightened after the first hundred miles. Tighten the belt sufficiently to avoid slippage, but do not overtighten. Overtightening the belt could cause damage to the ProCharger supercharger's precision bearings. When re-installing the belt, use the belt routing diagram in this manual. If you reuse a thrown belt and find that it needs frequent re-tightening, the belt is damaged and should be replaced. Gates Micro-V belts can be bought from ATI or from your local parts store.

ProCharger Oil Change Intervals

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

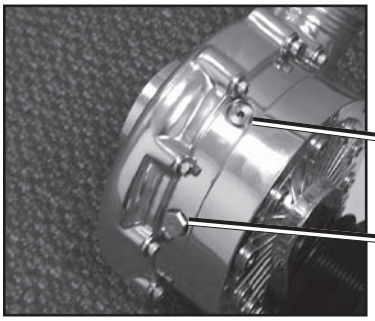
ProCharger Oil Level

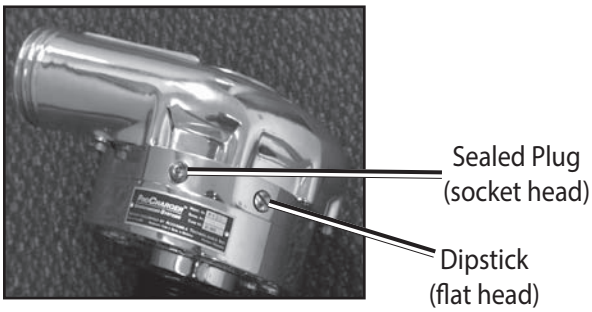
The ProCharger supercharger's oil level must be checked periodically to ensure the proper lubrication. The dipstick can be loosened using a flat blade screwdriver or a coin. When installed, the oil level should remain between the minimum (MIN) and maximum (MAX) indicators at all times.

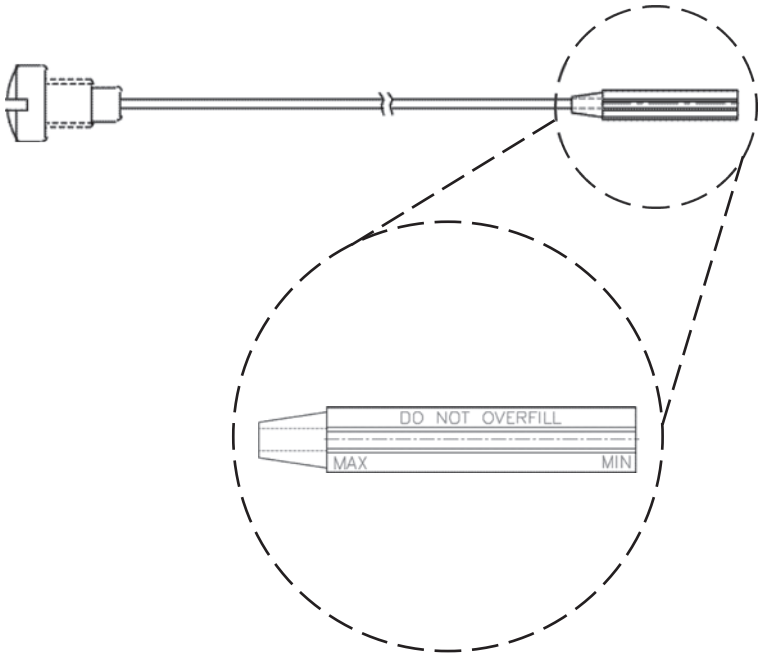
Warning: Filling the ProCharger higher than the maximum level on the dipstick can lead to bearing and seal damage. The supercharger is a sealed unit and should not normally require the addition of oil between service intervals. If excessive usage is noted, the unit should be sent to ATI for inspection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

General

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







Limited Warranty

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

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

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

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

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

Phone ATI (913-338-3086) and provide us with the following information:

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

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

Include the following information inside the box with your product:

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

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

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

ProCharger Extended Coverage

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

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

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

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

To qualify for the ProCharger Extended Coverage:

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

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ProCharger Extended Coverage Program Registration Form

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

Name:_____

Address:_____

City:_____

State:_____ Zip:_____

Daytime phone:_____

Evening phone:_____

E-mail:_____

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

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

What magazines do you read?

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

Date of Purchase:_____

Purchased From:_____

ProCharger Serial #:_____

Vehicle Year:_____

Vehicle Make:_____

Vehicle Model:_____

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

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

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

What most influenced your decision to purchase a ProCharger system?

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

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

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

If yes:

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

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

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

Signature_____ Date_____

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

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Accessible Technologies, Inc.
14801 W. 114th Terrace
Lenexa, KS 66215
Phone: 913.338.2886
Fax: 913.338.2879
techserv@procharger.com

Part Number PMFP1A-002 Rev. F