

Dodge Charger 2006-2008 Stage II System **Installation Guide**





The Intercooled Supercharging Experts!®

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TORQUE SPECIFICATION CHART	 GRADE 5			 GRADE 8		
	Torque (lb.ft.)			Torque (lb.ft.)		
1/4-20	11	8	7	16	12	10
1/4-28	13	10	8	18	14	11
5/16-18	23	17	14	33	25	20
5/16-24	26	19	15	36	27	22
3/8-16	41	31	25	58	44	35
3/8-24	47	35	28	66	49	39
7/16-14	66	49	40	93	70	56
1/2-13	101	75	60	142	106	85
1/2-20	113	85	68	160	120	96

INTRODUCTION

Congratulations on purchasing your ProCharger® Dodge Charger 2006-2008 Stage II 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.

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.

Required Tools and Supplies

- 3/8" & 1/2" Socket Sets (standard & metric)
- 1/2" Breaker Bar
- Open End Wrench Set (standard & metric)
- 3/8" Hex Bit Set (allen head)
- Flat & Phillips Screwdrivers
- Plier Set
- 3-Jaw Gear Puller
- Loctite



Warning: Your supercharged Charger must always be run on 91 octane or higher gas. Do not run vehicle at wide-open throttle if you have less than 1/4 tank of gas.

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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.

STOCK COMPONENT REMOVAL



Tech Tip: Spark plugs that are one heat range cooler than stock are recommended for use with this system. We suggest replacing your factory plugs at this time.

Engine Air Filter

- 1 Disconnect the battery ground.
- 2 Remove the Engine cover(s).
- 3 Remove the Engine Air Filter Assembly bolts with a 10mm socket.
- 4 Remove the PCV Tube from the intake manifold.
- 5 Remove the IAT (Intake Air Temperature) Sensor.
- 6 Remove the band clamp from the Air Filter housing.
- 7 Remove the entire Air Filter Assembly.



Engine Air Filter Removed



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.

Front Grill

- 1 Remove the radiator cavity covers by pulling up on the pieces until they unsnap.
- 2 Remove the body fasteners from the radiator internal side fairings that are behind the front fascia.
- 3 Remove the radiator internal side fairings from the radiator cavity.
- 4 Remove the four phillips head screws from the front grill by reaching behind the front fascia from the top.
- 5 Pull on the grill while releasing the four tabs and remove the grill.



Radiator Cavity Covers Removed



Front Grill Removed

Underside Body Cladding

- 1 Raise the vehicle.
- 2 Remove the six panel fasteners, three in each front fender well, with a flat head screwdriver.
- 3 Remove four 10mm bolts and remove the back cladding.
- 4 Remove ten 7mm bolts and remove the front cladding.



Underside Body Cladding



Underside Body Cladding Removed

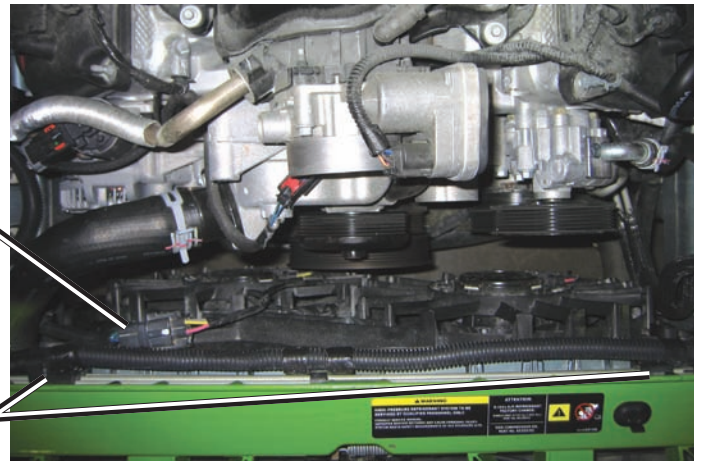
Fan Assembly

✓ **Tech Tip:** You must remove the fan and shroud assembly to install the crank pulley.

- 1 Disconnect the main electrical connection located on the top left of the fan housing.
- 2 With a 10mm socket, remove the top two bolts in the corners of the fan.
- 3 With a 10mm socket, remove the retaining screw from the clamp of the power-steering-line-to-frame to provide clearance for the fan assembly removal.
- 4 Lift the fan up past the hooks, lower the assembly to the floor and remove.

Main
Electrical
Connection

10mm
Bolts



Engine Fan

Radiator

✓ **Tech Tip:** You must remove the radiator for clearance to install the ATI Performance Products Damper (required on 6.1L vehicles).

- 1 Remove the coolant reservoir cap. Drain the radiator by opening the drain cock located on the bottom passenger's side of the radiator.
- 2 Disconnect the upper and lower radiator hoses from the radiator.
- 3 Remove the (4) 13mm bolts securing the radiator core support to the vehicle. Remove the core support.
- 4 Remove the (4) 10mm bolts holding the condenser to the radiator.
- 5 Carefully remove the radiator from the vehicle, allowing the A/C condenser to remain in the vehicle. It may be best to zip tie the condenser to the vehicle, out of the way.

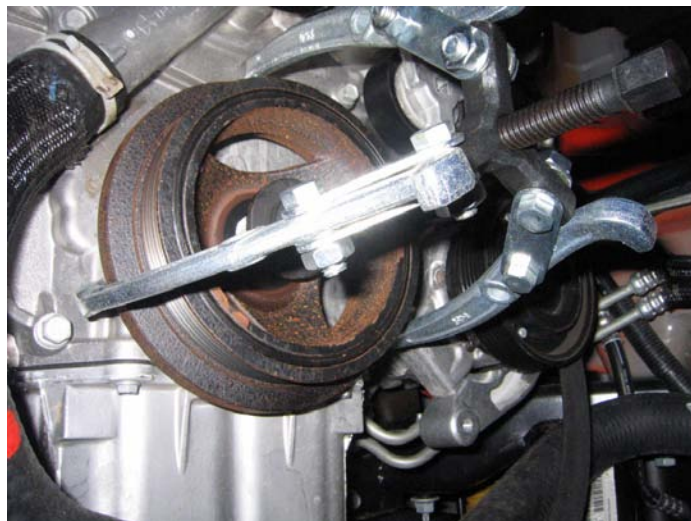


Radiator Core Support Bolts (Pass. Side)

SUPERCHARGER CRANK PULLEY

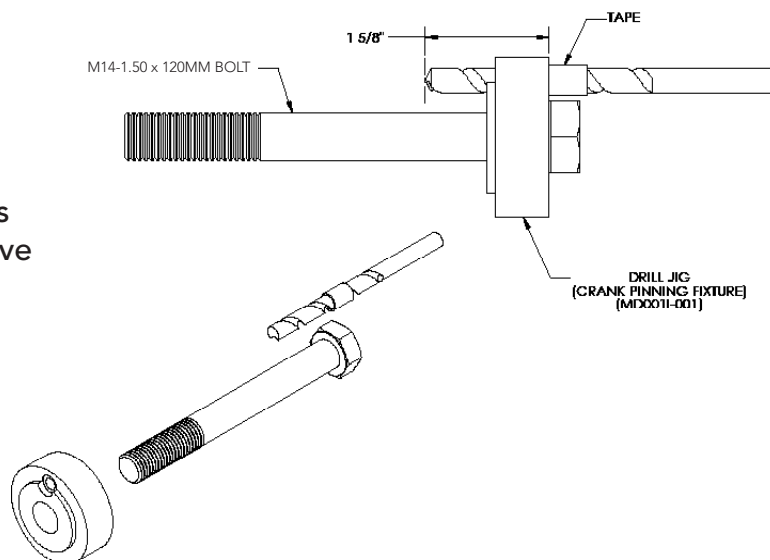


Tech Tip: If installing this system onto a 6.1L SRT8 vehicle, an ATI Performance Products Super Damper (part #918432) is required and must be purchased separately. Use of an aftermarket damper for the 5.7L is optional (use ATI Performance Products Super Damper part #918435).



Removing The Factory Balancer

- 1 With a 10mm socket, remove the transmission access cover to access the starter ring gear.
- 2 Lock the transmission using an appropriate tool (screwdriver, etc.).
- 3 Remove the bolt from the center of the balancer with a 21mm socket.
- 4 If installing the ATI Performance Products balancer, use a 3-jaw gear puller to remove the factory balancer.
- 5 Install the ATI Performance Products balancer (if using) according to the manufacturer's instructions.



Crankshaft and Harmonic Balancer Drill Jig

- 6 Place the drill jig onto the balancer hub, and tighten it into place using the supplied M14-1.50 x 120mm hex head bolt and washer.
- 7 Tape the supplied 1/4" HSS drill bit 1-5/8" from the tip. Using this taped bit, drill a hole in the crankshaft and harmonic balancer hub, stopping at the tape edge of the bit. The hole will be centered on the OD of the crankshaft. Do not drill deeper than .800" into the face of the crankshaft.
- 8 Remove the pinning tool and set it aside. Clean the chips from inside the drilled hole and the surrounding area thoroughly.
- 9 Install the supplied 1/4" OD x .75" long stainless steel dowel pin in the hole.



Drill Jig Installed/Drilling The Crank



Crank Pulley Pinned to Crankshaft

6.1L Crank Pinning

- 10 Using the original bolt, torque the balancer bolt to 129 ft-lb.
- 11 Attach the supplied supercharger crank pulley to the ATI Performance Products balancer using the supplied (3) 3/8-16 x 1-1/2" HHCS.
- 12 Re-install the transmission access cover.



Crank Pulley Installed

5.7L Crank Pinning

- 10** Install the supercharger crank pulley over the stock balancer and turn it counter clockwise until the crank pins stop against the balancer spokes.

! **Warning:** Viewing the engine from the front, the crank damper rotates clockwise. The crank pulley must be rotated counter-clockwise until the crank pins stop against the damper spokes before the bolt is tightened. If this is not done, permanent damage to the vehicle could occur!

- 11** Using the original bolt, torque the balancer bolt to 129 ft-lbs.
- 12** Re-install the transmission access cover.



Drill Jig Installed



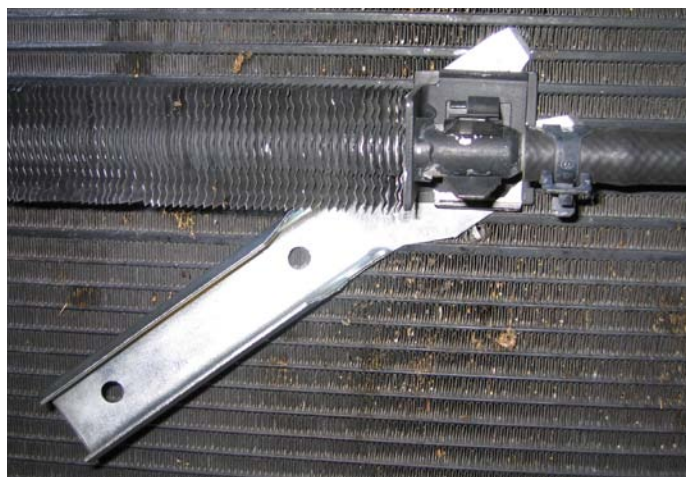
Drilling the Crank



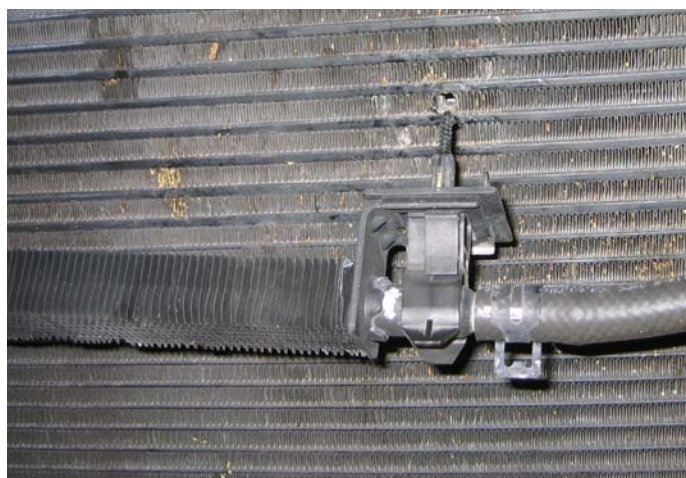
Supercharger Crank Pulley Installed

INTERCOOLER

- 1 Remove the power steering cooler from the condenser by placing the appropriate tool behind the bracket and prying off. Do not damage the condenser core.
- 2 Remove the horns and brackets with a 10mm socket.
- 3 Disconnect the hose from the driver's side of the power steering cooler and re-route it under the frame rail. Reconnect the hose.



Power Steering Cooler Removal Tool



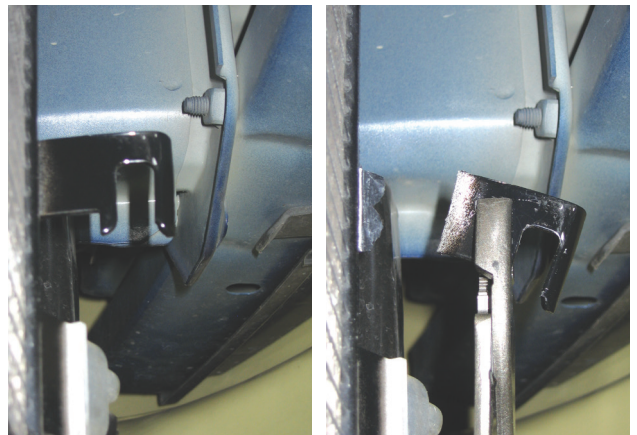
Power Steering Cooler Detached



Horn Locations

Intercooler

- 4 Remove the metal tab on the driver's side of the condenser. Bend it back and forth until it breaks off.
- 5 Temporarily remove the outside air temperature sensor for easier installation of the intercooler.
- 6 Assemble the intercooler brackets as shown using thread locker.
- 7 Remove the frame bolt with a 13mm socket.



Condenser's Metal Tab Removal



Intercooler Brackets



Frame Bolt

- 8 Install the intercooler brackets as shown using the supplied hardware (place the supplied 3/8" washers behind each intercooler bracket for proper spacing).

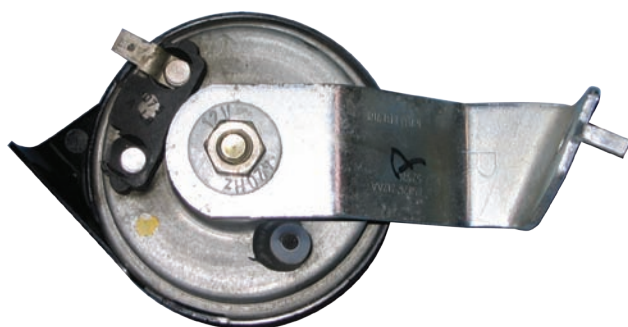


Tech Tip: If installing this system onto a 5.7L vehicle, omit the 3/8" washers.

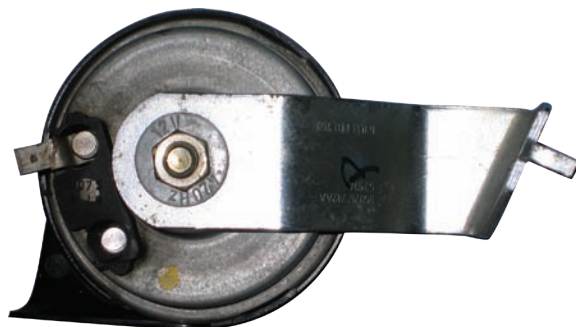
- 9 Rotate the horn mounting positions on brackets. The horn exit needs to be perpendicular to the bracket's mounting surface as shown.



Driver's Side
Intercooler Bracket Installed



Original Horn Configuration



New Horn Configuration

- 10 The passenger's side horn now mounts on the driver's side and vice versa. Mount as shown using the supplied black locking flange nut.
- 11 Route the horn wire extension below the intercooler and behind the front bumper from the passenger's side to the driver's side. You may tuck the wire between the bumper and bumper cladding.
- 12 Pull the intercooler out away from the condenser as far as possible. Also, be sure the intercooler is pushed down as low as possible; this will allow proper clearance for the radiator covers, which will be re-installed later. Tighten the intercooler with the supplied bolts.
- 13 Re-install the outside air temperature sensor.



Horn Re-installed



Intercooler Installed

Re-Installing Components

- 1 Re-install the radiator and radiator cradle.
- 2 Zip tie the A/C lines down and out of the way.
- 3 To provide additional belt clearance, rotate the passenger's side fan motor so the plug is on the opposite side. Some modification of the driver's side fan shroud might be required for belt clearance. This can be accomplished by sanding or grinding the fan shroud as needed.
- 4 Re-install the fan.
- 5 Re-install the fan bolts and reconnect the electrical connection.
- 6 Adjust the power steering line by unbolting the clamp holding the power steering line. Slide the line towards the driver's side as far as possible and tighten the clamp. Do not disconnect the line.



AC Lines Zip Tied Out of Way



Reconfigured 6.1L Fan

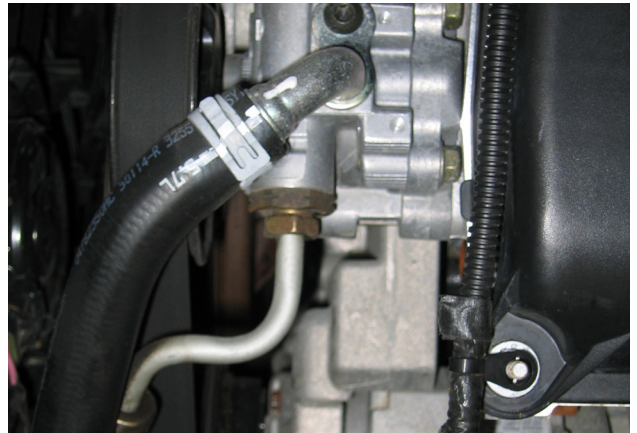


Power Steering Line's New Position

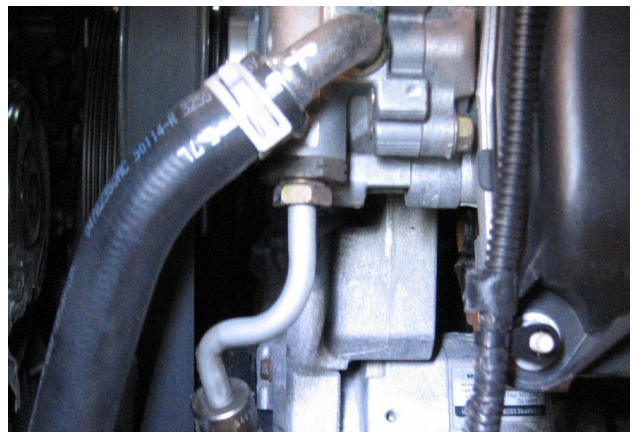
SUPERCHARGER BRACKET

Power Steering Hose

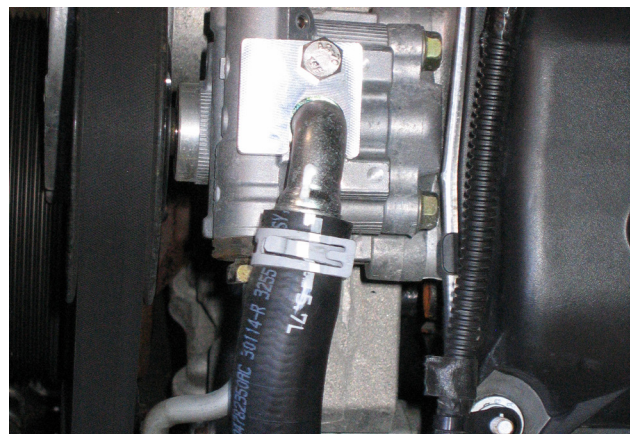
- 1 With an 18mm wrench, loosen the power steering pressure side hose. Rotate the hose as shown.
- 2 With a 5mm hex bit socket, remove the SHCS from the power steering return hose. Rotate the power steering return line and install the retaining bracket (3DDPS-001) with a 13mm socket as shown.



Power Steering Hose's Original Position



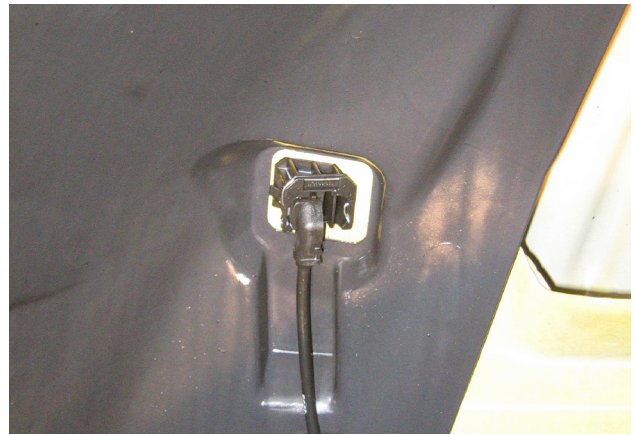
Power Steering Hose's New Position



Power Steering Return Hose's New Position with Retaining Bracket

Driver's Side Brake ABS Sensor

- 1 Unplug and remove the connection from the fender by pressing down on the wire clip and gently pulling on the plug.
- 2 Remove the tabs from the female connection.



ABS Sensor Connector Fender Side



ABS Sensor Connector with Tabs



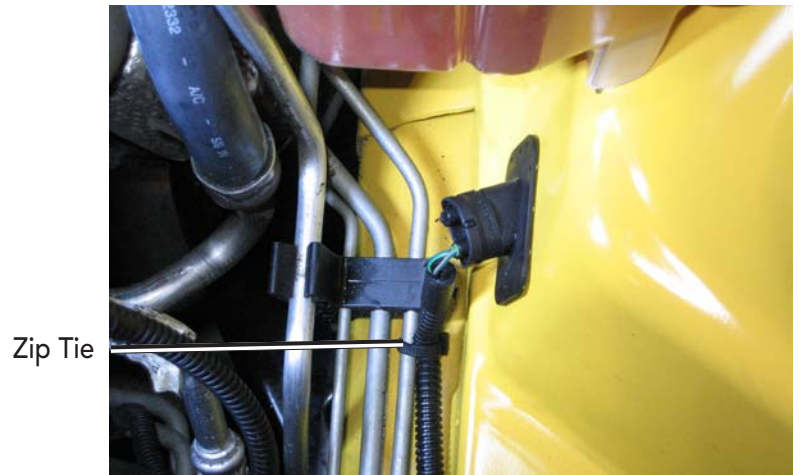
ABS Sensor Connector without Tabs

Driver's Side Brake ABS Sensor (continued)

- 3 Zip-tie the connector back into the hole from the tire side so the secondary flange engages the fender on the inside of the engine compartment.
- 4 Zip-tie the harness down to the brake lines as shown.



ABS Sensor Connector Zip Tied



ABS Sensor Zip Tied to Brake Line

Tensioner and Belt

- 1 Remove the factory automatic belt tensioner using a 15mm socket.
- 2 Remove the front cover bolts with a 13mm and a 15mm socket.
- 3 Install the lower sub-bracket, as shown, using a 6mm hex bit socket.
- 4 Install the upper sub-bracket, as shown, using an 8mm hex bit socket.
- 5 Align the brackets and tighten the SHCS.
- 6 Re-install the factory tensioner.
- 7 Install the supplied serpentine accessory belt and verify the belt is correctly aligned on each pulley (see belt routing diagram on next page).

13mm Bolt

15mm Bolt



Supercharger Bracket Bolts

Lower Bracket

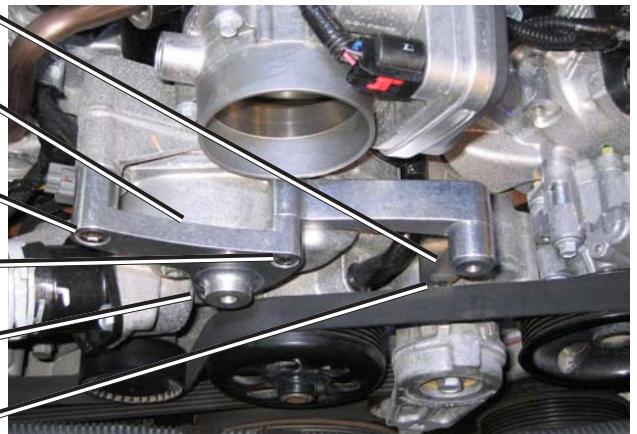
Upper Bracket

M10 x 45mm

M8 x 130mm

M8 x 120mm

M8 x 100mm

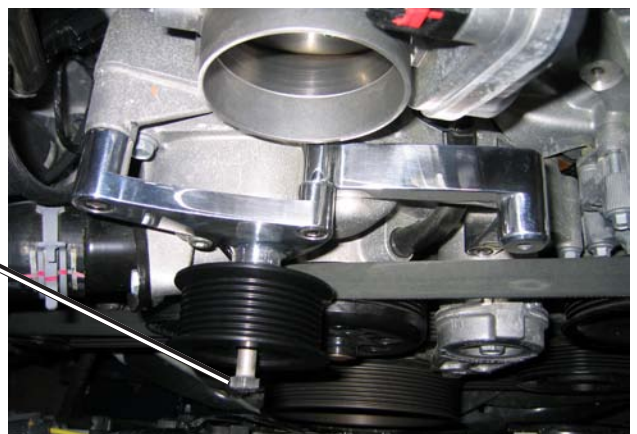


Upper and Lower Sub-Brackets Installed

✓ **Tech Tip:** If installing onto a 5.7L vehicle, re-install the factory 6 rib belt.

- 8 Install the idler pulley and idler shaft onto the upper bracket with a $\frac{1}{16}$ " socket.

$\frac{1}{16}$ " Bolt



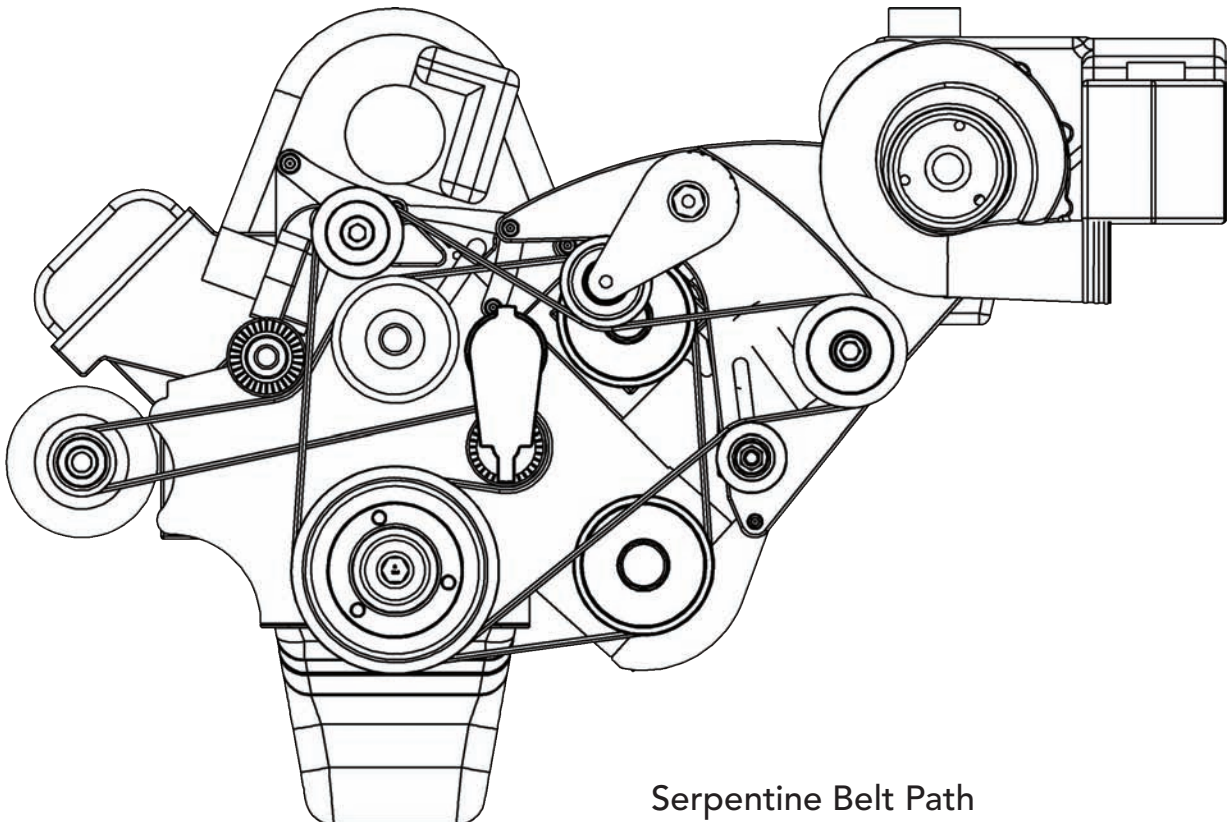
Idler Pulley

Lower Bracket

- 1 Raise the vehicle in order to access the A/C compressor.
- 2 Remove two air conditioner compressor bolts from the front of the unit using a 15mm socket.
- 3 Install the lower bracket as shown using the two M10 SHCS with an 8mm hex bit socket. Tighten to 37 ft-lb (50 N-m).



Lower Bracket Installed



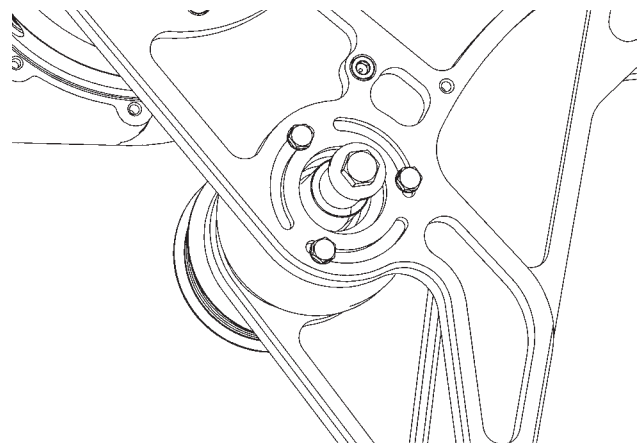
Serpentine Belt Path

Main Bracket

- 1 Verify the three drive transfer bolts on the back of the main bracket are loose. You will tighten the drive transfer bolts after the cog belt is installed.
- 2 Lower the main bracket assembly into the location as shown.
- 3 From beneath the car, insert the lower $\frac{5}{16}$ - 18 x 4.0" SHCS with the 1.72" spacer using a $\frac{1}{4}$ " hex bit socket. Do not tighten.
- 4 From above the car, insert the top rear M8 - 1.25 x 40mm SHCS with the 0.65" long spacer using a 6mm hex bit socket. Do not tighten.
- 5 With a 6mm hex bit socket, insert the top front M8 - 1.25 x 30mm SHCS. Align the brackets and tighten all bolts.



Main Bracket Installed



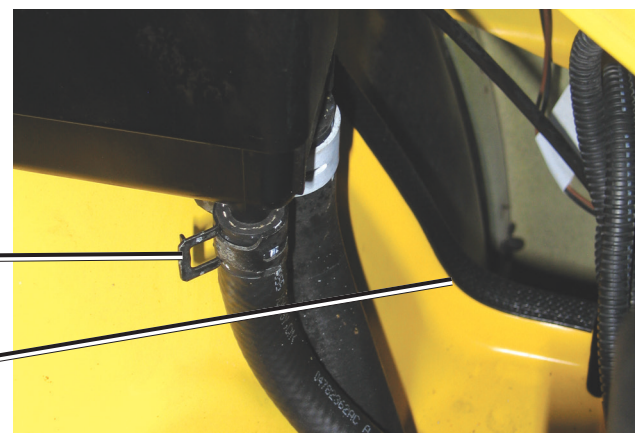
Drive Transfer Bolts

✓ **Tech Tip:** The lower drive transfer bolt may be removed to make the cog belt adjustment easier. Use thread locker when re-installing the cog pulley!

- 6 To provide clearance for the ProCharger head unit, rotate the power steering reservoir clamps as shown.

Rotate
Clamp

Rubber
U-Channel



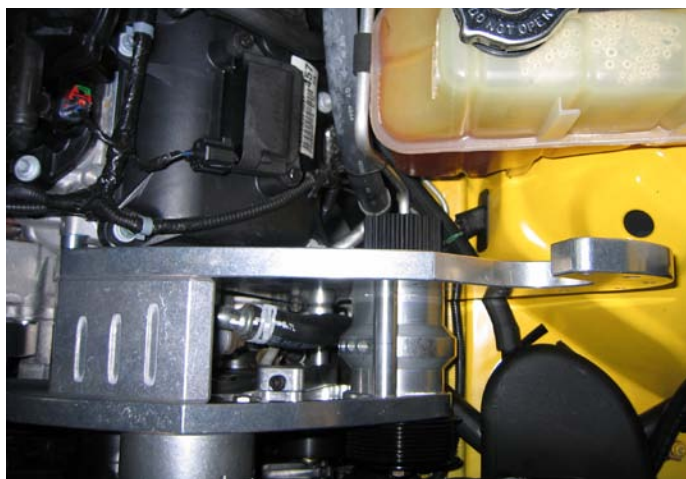
Rubber U-Channel Installed

PROCHARGER HEAD UNIT

- 1 Install the PCV Hose onto the driver's side valve cover bung and route it to the front of the vehicle. Secure it in a position that aims straight down at the ground. Use the supplied zip ties to secure the line out of the way of moving components (belts/pulleys/etc.)

✓ **Tech Tip:** The PCV line can be attached to a catch can (not included) for oil collection.

- 2 Before installing the supercharger, attach the 45° hose, slightly rotated, onto the supercharger, using a #52 band clamp as shown.



Main Bracket



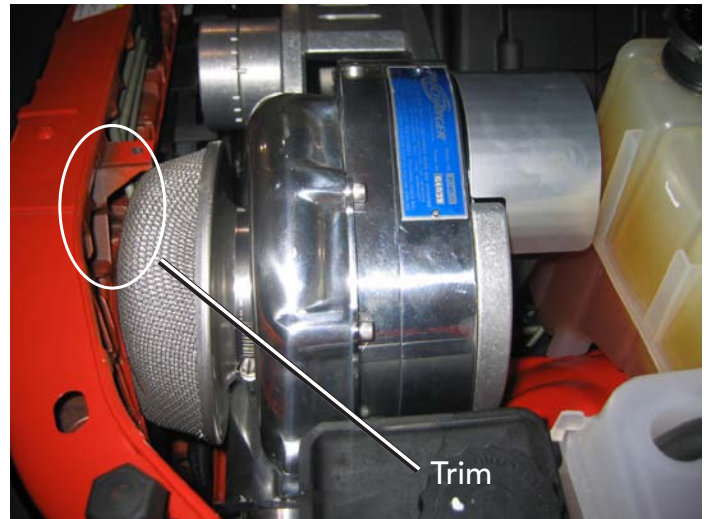
ProCharger Head Unit

- 3 Fit the supercharger into the bracket.
- 4 With the two $\frac{3}{8}$ -16 x 1 $\frac{1}{4}$ " SHCS, start mounting the supercharger onto the bracket. Thread in the remaining $\frac{5}{16}$ -18 x $\frac{3}{4}$ " SHCS. Tighten all SHCS.



Tech Tip: *Trimming the air box mounting tab will make installing the bellmouth assembly easier.*

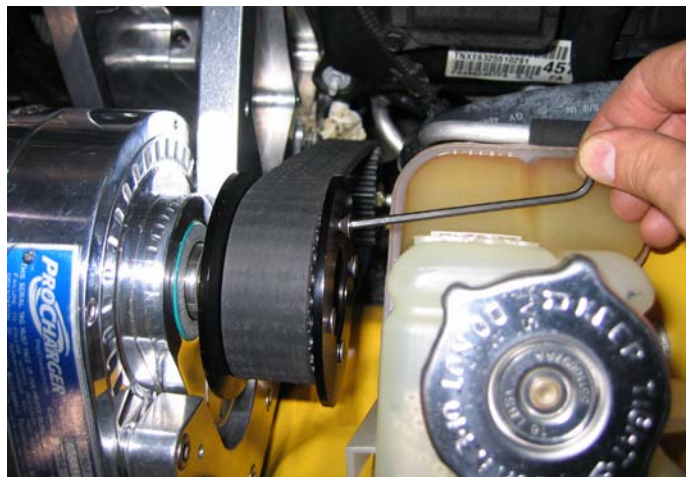
- 5 Install the supplied intake bellmouth assembly onto the inlet of the supercharger. Secure the connection with the supplied #60 hose clamp.



Head Unit with Bellmouth Installed

PROCHARGER COG BELT

- 1 Position the lower cog pulley in the loose position by rotating the drive transfer housing counter-clockwise.
- 2 Remove the outer flange from the ProCharger cog pulley to make belt installation easier.
- 3 Feed the cog belt onto the lower cog pulley.
- 4 Roll the cog belt onto the upper cog pulley.
- 5 Re-install the flange to the upper cog pulley, using Loctite on each of the screws.
- 6 To tighten the cog belt, rotate the drive transfer housing clockwise and align the first marks on the housing and bracket. After approximately 1,000 miles, re-tension the cog belt by rotating the drive transfer housing to the second mark.
- 7 With a $\frac{7}{16}$ wrench, tighten the three $\frac{1}{4}$ -20 x $\frac{5}{8}$ " bolts located on the back bracket to lock in the drive transfer housing.
- 8 Install the cog guard.



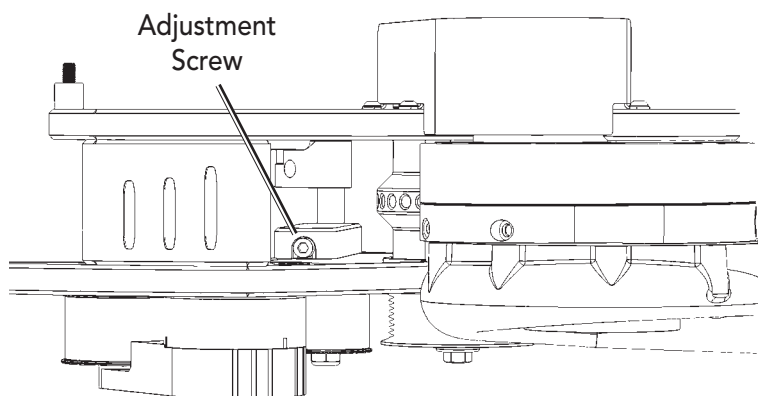
Cog Pulley Outer Flange



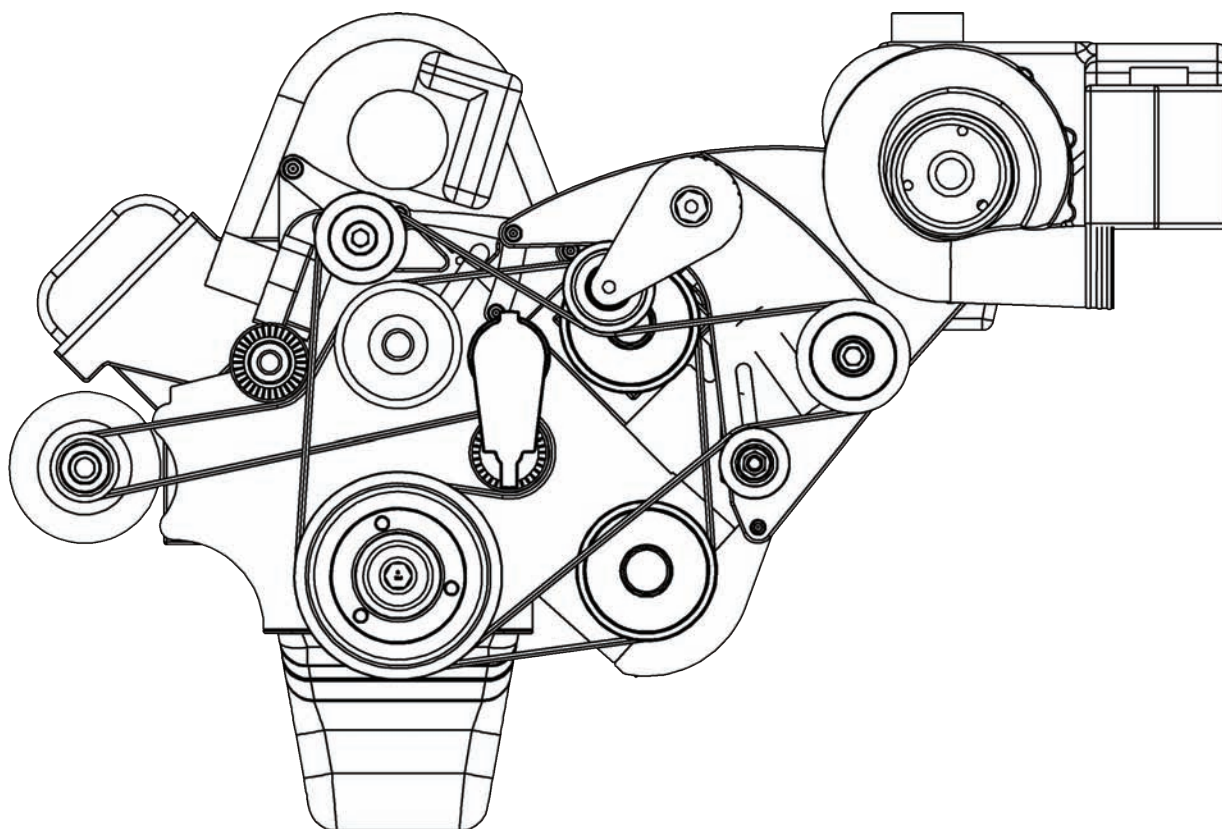
Cog Pulley Guard

SERPENTINE BELT

- 1 Make sure the adjustable idler pulley is in the lower location and install the serpentine belt as shown below.
- 2 Tension the serpentine belt by adjusting the idler pulley adjustment screw.
- 3 Using a $\frac{3}{4}$ " wrench, tighten the brass nut at the front of the pulley to lock the idler pulley in place.



Serpentine Belt Adjustment Pulley



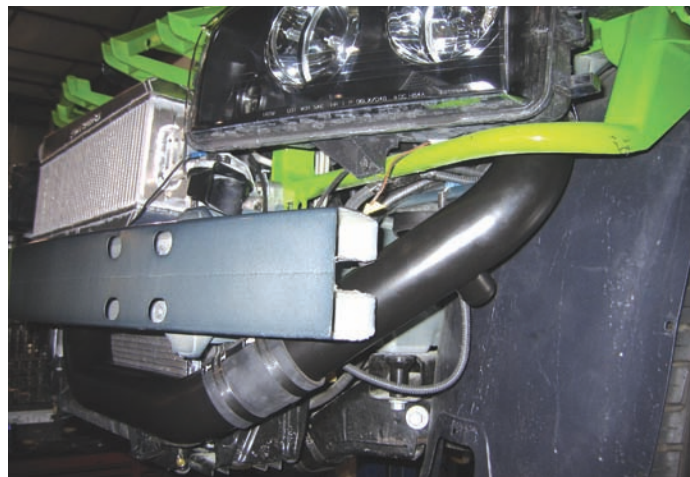
Serpentine Belt Path

TUBING AND HOSES

Intercooler Tubing

! **Warning:** *Inspect the inside of each tube for any foreign debris. Remove any debris from the interior of the tubes before installing.*

✓ **Tech Tip:** *The driver's side brake cooling duct needs to be removed or trimmed for intercooler tubing clearance.*

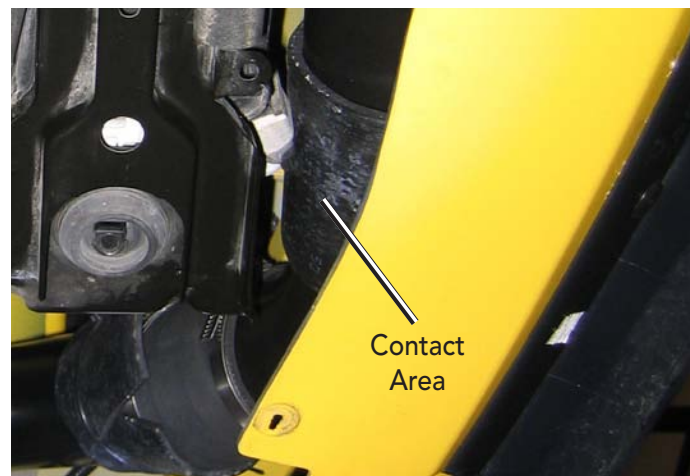


Intercooler Tubing

1 Install tube AIDD11-007. Use the supplied rubber coupler and #52 hose clamps to secure the tube.

2 Install tube AIDD11-006. Use the supplied rubber coupler and #52 hose clamps to secure the tube.

✓ **Tech Tip:** *Extra hose is included for use as an insulator between the A/C line and the intercooler tubing. The hose should slide onto the tube, and be positioned to eliminate any wear that may take place.*



A/C Line and Tube AIDD11-006

ProFlow

- 1 Trim the elbow hose to the minimum length and install onto the ProFlow.
- 2 Mount the ProFlow on the tube as shown using the supplied hose clamps.
- 3 Mount the supplied air filter onto the end of the ProFlow and secure with the provided hose clamp.



ProFlow Installed

POWER STEERING COMPONENTS

- 1 Remove the plastic retainers from the power steering cooler ends.
- 2 Clip the bosses.
- 3 Drill pilot holes into the bottom of the plastic retainer using a $\frac{3}{16}$ " bit.
- 4 Re-install the plastic retainers onto the power steering cooler.
- 5 Mount the bracket to the power steering cooler using the supplied phillips head screws.
- 6 Bend the tabs on the radiator support.
- 7 Loosen the clamp and rotate the cooler.
- 8 Install the bracket for the power steering cooler on the two tabs located at the bottom of the condenser.

✓ **Tech Tip:** If installing onto a 6.1L SRT8 vehicle, the power steering bracket must be spaced out using the supplied 4" tube spacers and supplied longer bolts.

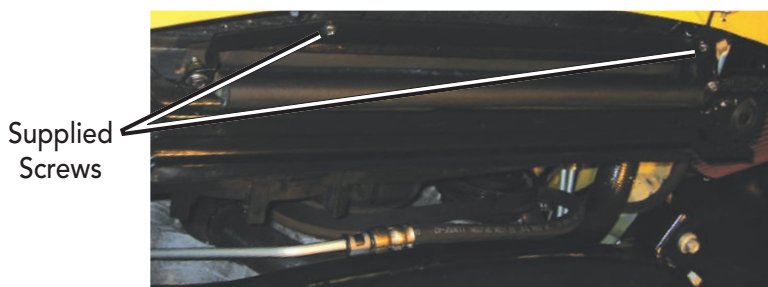
- 9 Stabilize the power steering line by mounting the bracket as shown.



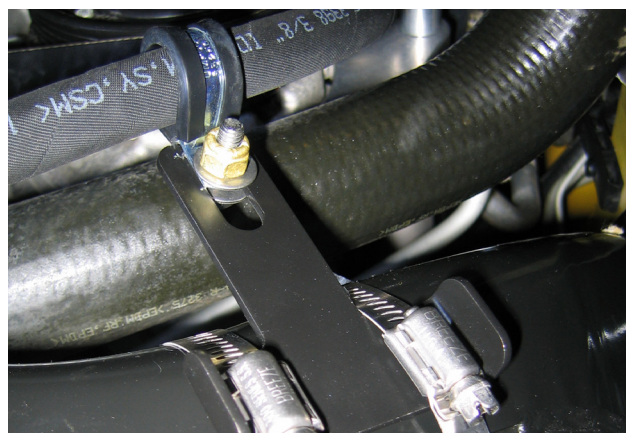
Power Steering Cooler



Plastic Retainer Clips



Power Steering Cooler



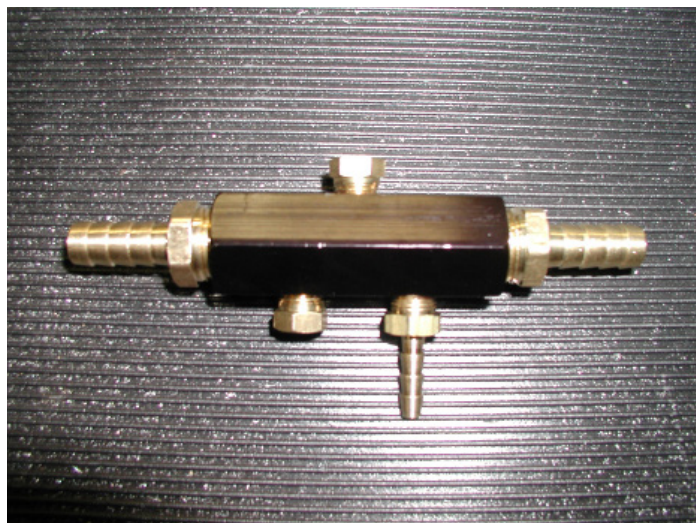
Power Steering Line

VACUUM LINE

- 1 Assemble the supplied vacuum manifold as shown. If you have or are installing a boost gauge, do not install the plug, use an additional barb fitting. Thread each fitting into the manifold. Thread the 3/8" barbed fittings onto each end of the manifold.
- 2 Locate the brake booster hose on the driver's side near the firewall. Remove a 3-1/2" section of this hose in order to place the manifold in-line.
- 3 Mount the manifold by sliding each barbed fitting into the open ends of the brake booster hose. Secure the connections with the provided #06 hose clamps.
- 4 Be sure the brake booster hose connections are tight; verify the connection to the booster did not come loose as well.

! **Warning:** Improper clamping of the splice into the brake booster hose could cause a vacuum leak and could cause the power brakes to become inoperable. Use extreme caution in installing the vacuum manifold to prevent any possible leaks.

- 5 Using the provided 3/16" vacuum line, connect one end onto the barb located on the surge valve, and route it to the open barb located on the vacuum manifold. Be sure to zip tie the line for clearance from moving components, as well as the exhaust manifold.



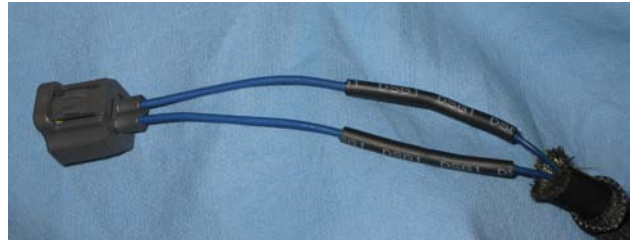
Vacuum Manifold Assembled



Vacuum Manifold Installed

IAT SENSOR

- 1 Tape the IAT (Inlet Air Temperature) sensor's braided sleeve back and out of the way with electrical tape.
- 2 Cut off the IAT sensor and strip ~¼" of insulation from the wires.
- 3 Slide heat shrink over the wires.
- 4 Connect the blue with green striped wire to the #1 and the blue wire to the #2 plug positions.
- 5 Solder the new IAT sensor to the wires.
- 6 Insulate the solder joints with heat shrink and replace the braided sleeve.



IAT Sensor Modification

FUEL SYSTEM

✓ **Note:** This section only applies to full systems, which include upgraded fuel system components and tuning. If you do not have a full system, an upgraded fuel system and tuning will be required before starting the vehicle.

Fuel Injectors

- 1 Reconnect the battery.
- 2 Remove relay 46 from the panel in the trunk.
- 3 Crank the engine for 15 seconds.
- 4 Disconnect the battery.
- 5 Unclip the wiring harnesses from each injector. Remove the four 10mm bolts securing the fuel rails to the manifold. Pull the fuel rails up off of the manifold to gain access to the fuel injectors.
- 6 Remove the fuel injector retaining clips from the injectors and rails. Remove the injectors by pulling them straight out of the rails.

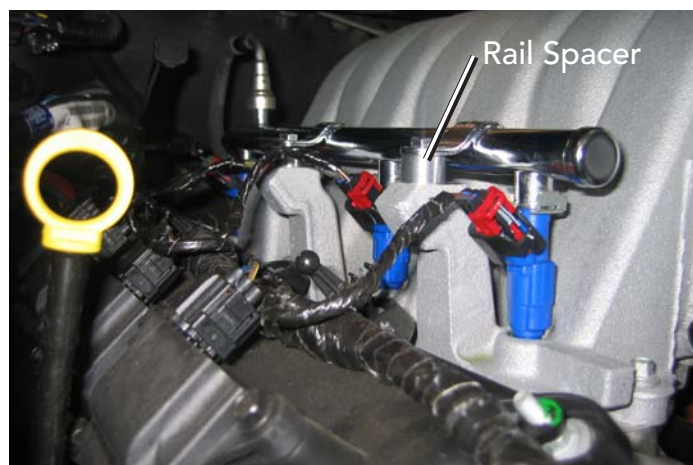
✓ **Tech Tip:** Lightly oiling the injector o-rings eases installation.

Relay 46



Electrical Panel

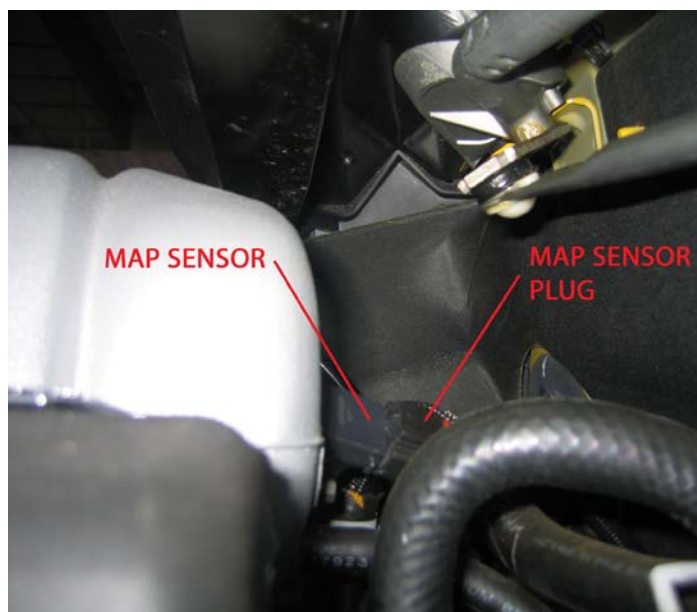
- 7 Install the new injectors, followed by the factory retaining clips.
- 8 Mount the spacers on the manifold, push the injector and rail assembly into place, and tighten the rails with the new hardware. Re-install each wiring harness to each injector.



Fuel Rails Installed

Map Sensor (6.1L SRT8 Models)

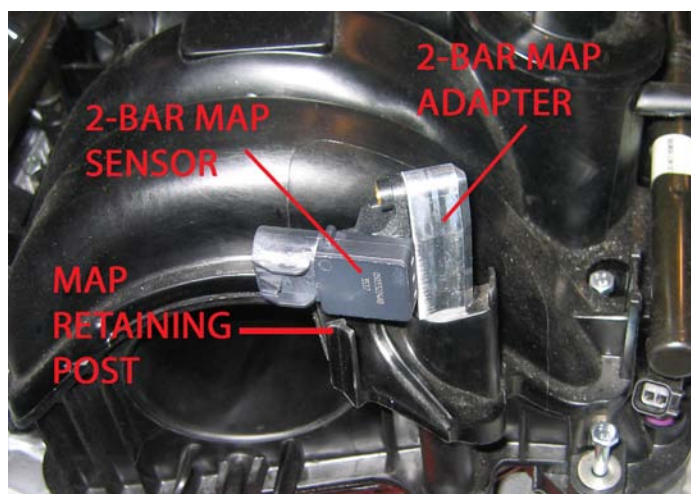
- 1 Remove the factory MAP sensor located on the back side of the intake manifold. Remove the electrical harness by sliding the red retaining tab back and disconnecting it from the sensor. Remove the two 8mm bolts and pull the factory MAP sensor out of the vehicle.
- 2 Install the new 2 bar MAP sensor (05033224AB), tighten the 8mm bolts, and connect the harness to the new sensor.



2 Bar MAP Sensor Installed (6.1L SRT8 Model)

Map Sensor (5.7L Models)

- 1 Remove the factory MAP sensor located on the back side of the intake manifold. Remove the electrical harness by sliding the red retaining harness tab back and disconnecting it from the sensor. Remove the two 8mm bolts and pull the factory MAP sensor out of the vehicle.
- 2 Install the supplied o-ring onto the MAP adaptor. Install the MAP adaptor onto the manifold, followed by the supplied 2 bar MAP sensor (05033224AB). Re-install the 8mm bolts, and plug in the harness.



2 Bar MAP Sensor Installed (5.7L Model)

Fuel Pump (6.1L SRT8 Models Only)

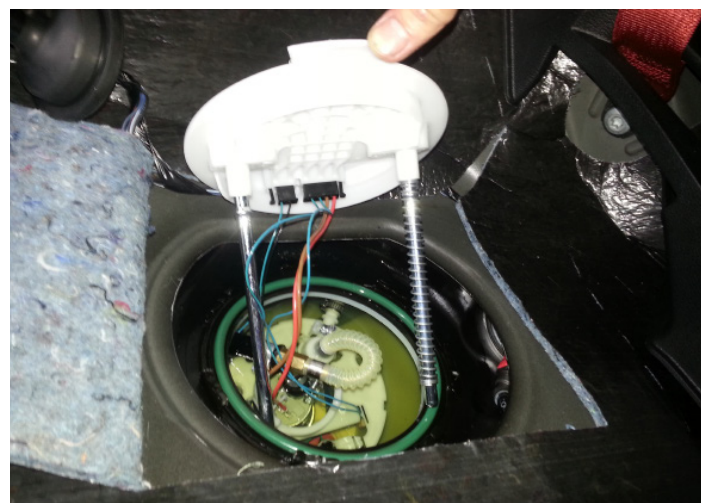
- 1 Make sure the ignition is off and the key is removed from the ignition.
- 2 Pull up on both sides of the rear seat cushion to remove.
- 3 Remove the plastic cover over the pump. Disconnect the fuel pump electrical connector.
- 4 Use a hammer and a punch to rotate the fuel pump locking ring counterclockwise.
- 5 Pull the fuel pump lid up to gain access to the (2) electrical connectors. Disconnect them.
- 6 Push the clip on the fuel pump feed line to disconnect it from the pump.



Fuel Pump Cover

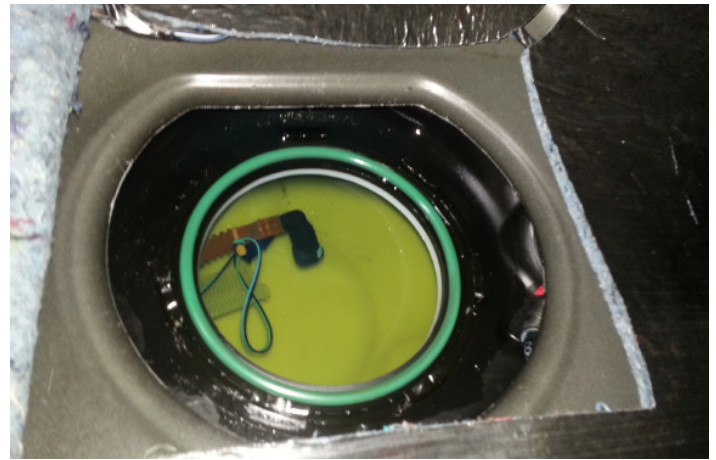


Fuel Pump Locking Ring



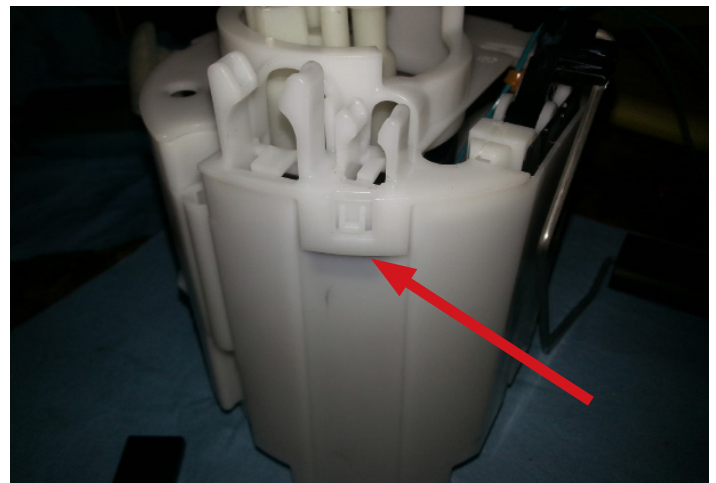
Electrical Connectors Under Pump Lid

- 7 Pop the (2) plastic lines off the top of the pump.
- 8 Pull up on the fuel pump basket assembly and remove it from the tank.



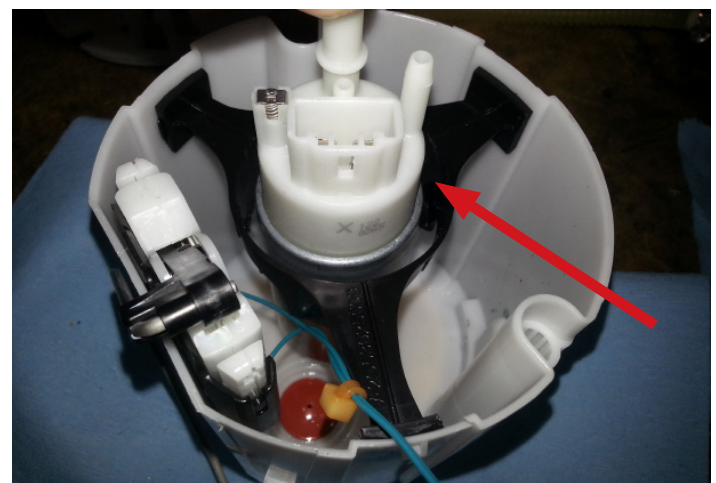
Fuel Pump Removed

- 9 Disconnect the fuel pump electrical connector.
- 10 Remove the plastic pump cover by pulling out on the (3) locking tabs.



Cover Locking Tab

- 11 Use a pick tool to pry back the fuel pump locking tabs and slide the pump up as far as it can go.
- 12 Reach into the basket and pop the fuel pump sock and the blue plastic siphon part. Remove pump from basket.



Fuel Pump Locking Tabs

- 13 Trim fuel pump locking tabs to accept the new larger fuel pump.



Trimmed Tabs

- 14 Use a pick tool to compress the locking tabs on the fuel pump spade connectors. Slide the spade connectors out of the connector housing



Spade Connectors Removed

- 15 Snap the new fuel sock onto the new pump.



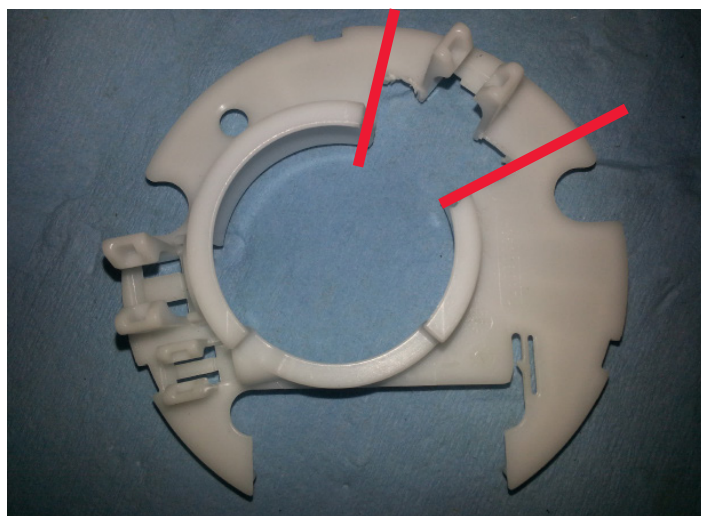
New Fuel Sock Installed

- 16 Insert the new pump into the fuel basket, oriented as shown.



Fuel Pump Orientation

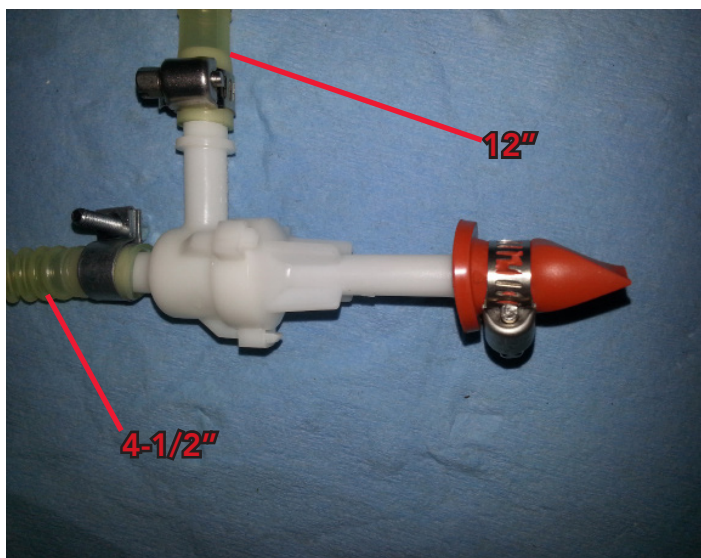
- 17 Trim the pump cover as shown (trim where the red lines are shown). Removing the section in between the two lines. Reinstall the cover.



Cut and Remove Pump Cover Section

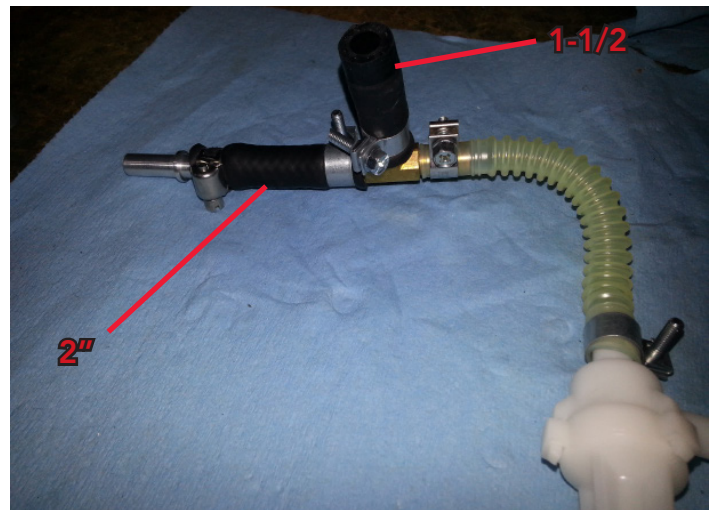
- 18 Trim the siphon tube back to where the ribs end. Connect the orange rubber damper to the end of the siphon tube. Secure with a hose clamp.

- 19 Connect the 12" section of flexible fuel hose to the perpendicular barb on the jet siphon. Connect the 4-1/2" section of flexible hose to the parallel barb on the siphon. Secure with hose clamps.



Siphon Tube Trimmed & Damper Installed

- 20 Insert the supplied brass "T" into the open end of the 4-1/2" section of flexible hose on the siphon tube.
- 21 Locate the supplied sections of submersible 3/8 fuel hose. Slide the 1-1/2" section onto the perpendicular barb of the "T". Slide the 2" section of hose onto the parallel barb of the "T". Secure with hose clamps.
- 22 Slide the aluminum adapter into the open end of the 2" hose. Secure with a hose clamp.
- 23 Slide the jet siphon into the fuel basket. The orange damper should be pointing downward.

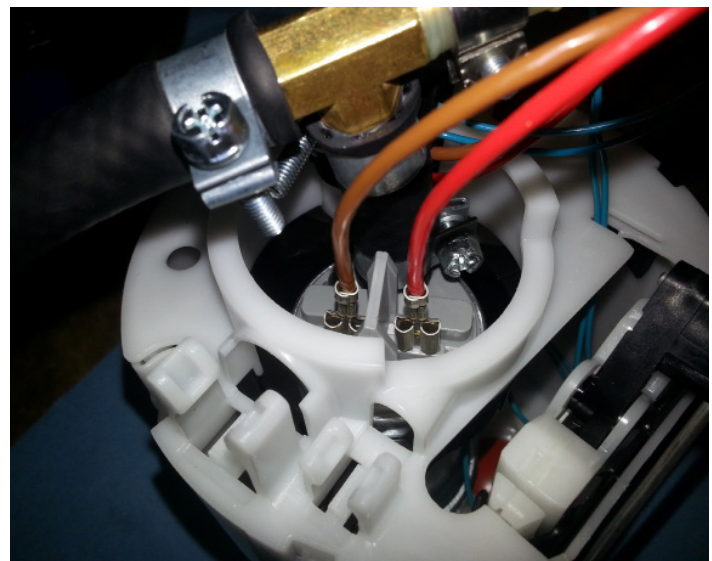


Fuel Hose Routing



Jet Siphon Installed in Basket

- 24 Slide the shorter section of rubber 3/8 hose over the fuel pump outlet. Secure with a hose clamp.
- 25 Connect the fuel pump wires. The orange wire is positive (+), the brown wire is negative (-).



Pump Hose & Wiring Connections

- 26** Drill a small hole in the base of the basket. Use a zip tie to attach the 12" section of flexible hose to the basket as shown. This will keep the hose in an optimal position to reach the fuel.



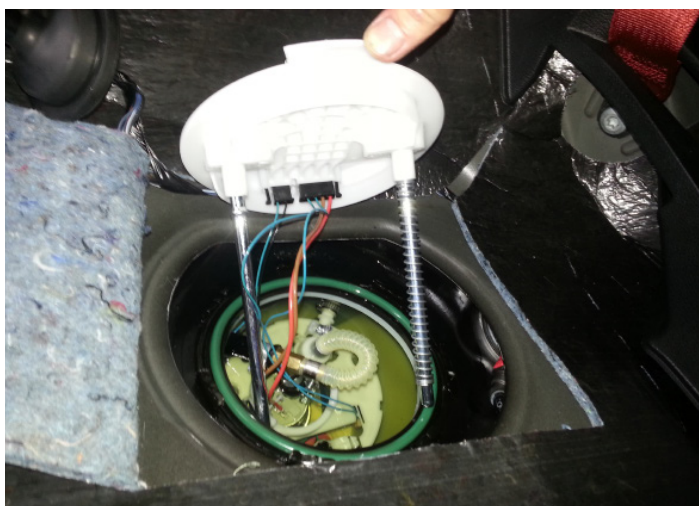
Suction Hose Attached to Basket

- 27** Drop the fuel pump assembly down into the tank.
- 28** Reconnect the factory fuel feed line to aluminum fitting.
- 29** Reconnect the electrical connectors.



Pump Assembly Into Tank

- 30** Line up the lid with the basket and push the lid on.
- 31** Reinstall the locking ring. Make sure it is fully seated.
- 32** Reinstall the plastic cover. Reconnect the electrical connector.
- 33** Reinstall the rear seat cushion.

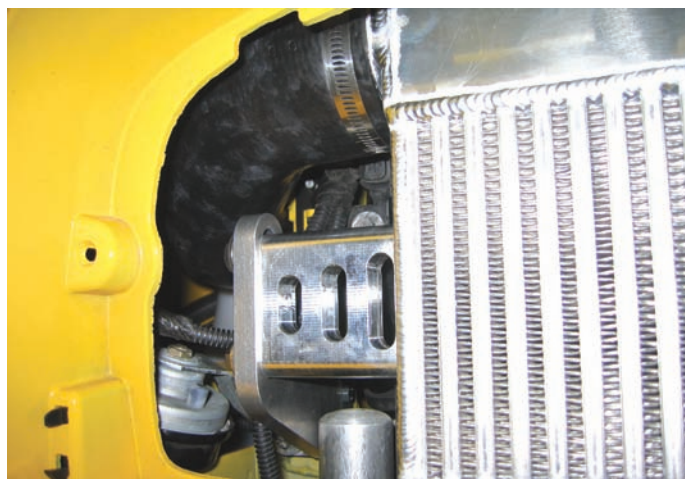


Reinstall Lid

ENGINE INTAKE

- 1 Disconnect the ABS wiring harness from the ABS module located by the passenger's side fender.
- 2 Slide the molded hose into position and mount to the intercooler's coupler using a #52 band clamp. The clamp can be tightened from the top.

✓ **Tech Tip:** Shape a second #56 band clamp into an oval before sliding it onto the molded hose.



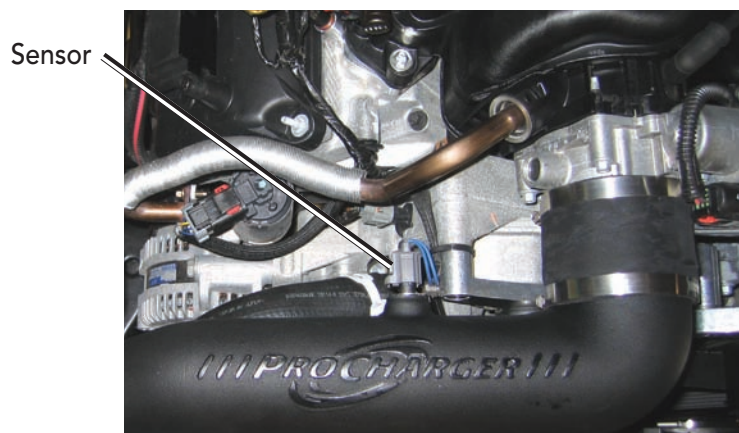
Intercooler Hose Installed

- 3 Install the molded plastic intake by first inserting it into the molded hose. Use tire shine on mating components to make assembly easier.
- 4 Connect the engine intake with a 3-¾" rubber hose and secure it with two #56 band clamps.
- 5 Install the supplied sensor and connect the wire harness.



Intake Tube

- 6 Reconnect the ABS wiring harness. The ABS block is mounted on the rubber grommets; it may be necessary to flex the ABS block out to provide clearance.



ABS Wiring Harness

FINISHING



Tech Tip: Trim the engine cover as shown (5.7L engine cover only).

- 1 Re-install the engine cover(s).
- 2 Re-install the front grill.
- 3 Re-install the underside cladding.
- 4 Clear the system of any installation debris.
- 5 Reconnect the battery.



Engine Cover



CONGRATULATIONS!
YOU HAVE SUCCESSFULLY COMPLETED THE INSTALLATION
OF YOUR NEW PROCHARGER SUPERCHARGER SYSTEM!

PLEASE CONTINUE READING THE FOLLOWING PAGES FOR
IMPORTANT INFORMATION ABOUT HOW TO MAINTAIN
YOUR SC SYSTEM.

OPERATION AND MAINTENANCE

Cold Starting

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

Fuel Quality

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

Ignition System Maintenance

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

Air Filter Maintenance

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

Belt Replacement

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

ProCharger Oil Change Intervals

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

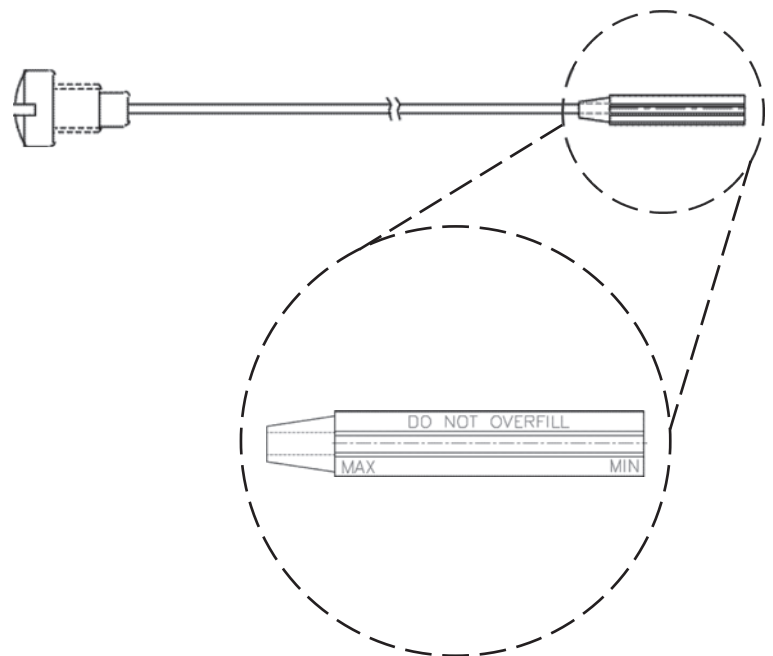
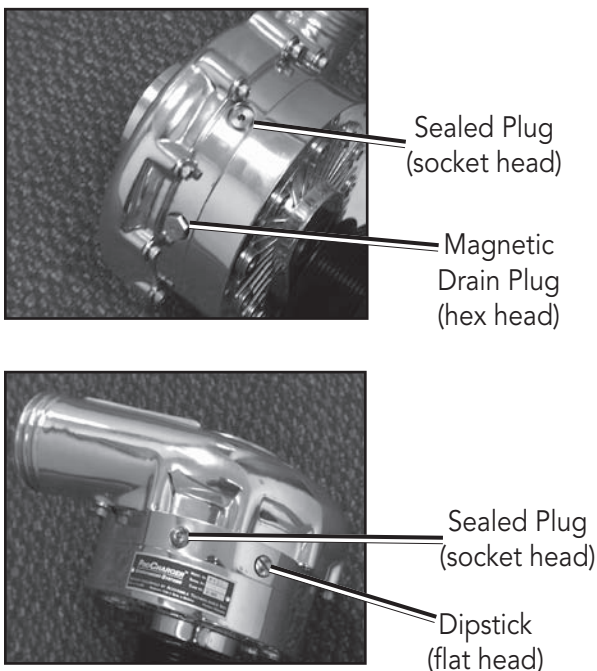
ProCharger Oil Level

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**



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

Accessible Technologies, Inc.
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Part Number PMDD1A-001 Rev. O

