

## **2010-2013 6.2L Chevrolet Camaro Supercharger Kit**

### **Important Notes:**

- The use of fuel additives (ie. octane boosters) is not recommended. There is a possibility that these chemicals can damage your engine and cause drivability issues with your vehicle.
- Operating your engine without the SLP Tune or Tuner Included in the package will result in engine damage or failure and will void your warranty.
- **FOLLOW INSTRUCTIONS included in the “INTUNE” Handheld Programmer before starting vehicle as engine damage will result and you WILL VOID your warranty.**

**IF YOUR CAR IS AN AUTOMATIC PLEASE CHECK YOUR DOD PLATE AS BELOW, THE PLATE ON THE LEFT - P/N 12571609 IS THE PLATE THAT WORKS WITH THE SLP SC KIT. IF YOU HAVE THE PLATE ON THE RIGHT SLP WILL SEND YOU A NEW PLATE FREE OF CHARGE. PLEASE CALL 732-240-3696.**



**The plate on the right has large bosses as circled in yellow. If you have this plate on your L99 Automatic Camaro please call SLP and we will send you the plate, free of charge, on the left to complete the installation.**

## Packaging List

<b>Intake Manifold Hardware</b>		<b>QTY</b>
Fuel Charging Assembly		1
SLP TVS2300 SC		1
Fuel Rail Assembly		1
Fuel Supply Line Jumper		1
Hardware Kit - Fuel Charging		1
	Bolts- Throttle body to S/C Inlet: M6 x 1.00 x 40	4
	Fuel Injectors (56 #/HR @ 4 Bar)	8
	Gasket - S/C to Upper	1
	Gasket - Supercharger Bypass	1
	Bolts - S/C to Intake (M8 x 1..25 x 53)	8
	Bolts - Fuel Charging to Cyl Head (M6 x 1.0 x 74.5)	10
	Bolt - Fuel Rail (M6x1.0 x32.5 )	4
	Bolt - TMAP to Upr (M6x1x16)	1
<b>Front Belt Drive</b>		<b>QTY</b>
Front Belt Drive Bracket		1
Hardware Kit - Front Belt Drive		1
	Idler - B/S Non-Flanged	1
	Bolt- S/C Pulley (M6X1.0X16)	5
	Bolt - Idler to Front Belt Drive Bracket (M8 x 1.25 x 28)	1
	Bolts - Idler Brkt to Engine (M8 x 1.25 x 95)	2
	Bolts - Idler Brkt to Engine (M8 x 1.25 x 130)	1
	Washer - M8 2MM Thick	3
<b>PCV &amp; Vacuum</b>		<b>QTY</b>
PCV & Vacuum System		1
	3/8" Bulk Hose SAE30R7 w/Clamps - PCV Fresh Air Inlet - 350mm	1
	3/8" Bulk Hose SAE30R7 w/Clamps- PCV Purge Tube - 520mm	1
	5/16" Bulk Hose SAE30R7 w/Clamps - VMV to S/C - 335mm	1
	1/2" Bulk Hose SAEJ1403 - Brake Booster - 710mm	1
	Constant Tension Clamp - 1/2"	2
	7/32" Vacuum Harness - S/C Bypass - 191mm	1
<b>Wiring</b>		<b>QTY</b>
HARDWARE KIT C - WIRING		1
Electrical Jumper - I/C Pump Wiring Kit		1
Fuse Connector		1

10 Amp Fuse	1
Self Tapping Fastener for Relay	1
TMAP Sensor Jumper	1
<b>Vehicle Hardware</b>	<b>QTY</b>
Degas Bottle	1
I/C Electric Water Pump	1
I/C System Hoses & Clamps	1
Degas to I/C Pump - 3/4" hose x 435mm (17.125")	1
I/C Pump to LTR - 3/4" hose x 622 mm(24.5")	1
LTR to CAC - 3/4" hose x 1524mm (60")	1
CAC to Degas - 3/4" hose x 800mm (31.5")	1
Clamps - 3/4" Constant Tension	8
Intercooler Low Temp Radiator (LTR) w/ Mtg Tabs	1
Hardware Kit F - Intercooler Circuit	1
I/C PUMP MOUNTING- P-CLIP 2.25" I.D. x 3/4" WIDTH	1
BOLT- I/C PUMP MOUNTING (Self Tapping M8x1.25x27)	1
Cap - Degas Bottle	1
Nut - M6x1.0 (Degas Bottle to Mtg Brkt)	2
J-Clip - Degas Bottle Mtg Brkt to Fan Shroud (M6x1.0)	1
Bolt - Degas Bottle Mtg Brkt to Fan Shroud (M6x1.0x14)	1
PLUG - 1/8" NPT	1
LTR BRKT FOAM TAPE- 25.4MM WIDE X 4.763MM THICK X 65MM LENGTH	2
LTR FOAM TAPE: 25.4MM WIDE X 12.7MM THICK X 570MM LENGTH	2
DEGAS BOTTLE FOAM TAPE: 25.4MM WIDE X 12.7MM THICK X 35MM LENGTH	1
<b>Miscellaneous</b>	<b>QTY</b>
Hardware Kit G - DECALS	1
OBD Cover	1
Decal - NO FLASH for OBD Cover	1
Decal - Belt Routing	1
<b>Accessories Kit</b>	
Tuner – "INTUNE" w/instructions in box	1
Sensor, TMAP	1
Tensioner, Serpentine	1
Pulley, SC, 98mm	1
Belt, Serpentine, 2010-2012	1
Belt, Serpentine, 2013	1
Degas Mounting Bracket 2010-2011	1

Degas Mounting Bracket 2012-2013	1
Badge, "TVS 2300"	1
Badge, "SLP Supercharged"	1
Screw, Allen Head, Black, M4	4
Gasket Set, Intake	1
Sensor, TMAP	1
Air Tube, Intake	1
Bellows, Air Tube	1
Worm Drive Clamp	2

## INFORMATION ABOUT THE SUPERCHARGER BYPASS OPERATION

There is a great deal of misinformation about the function of supercharger bypass systems. The supercharger is a positive-displacement pump; that is, so long as it is rotating, it is always pumping air. During low demand or high vacuum operation (i.e. idle, deceleration, and light throttle cruise), the pumping action is undesirable as it creates unwanted heat and noise. The bypass circuit, when open, prevents any pressure buildup across the supercharger and allows air to circulate through the rotors, allowing the supercharger to "idle" freely during these conditions. This results in reduced noise, and by reducing heat buildup in the intake, significantly improves street and strip performance. As throttle demand increases, the bypass circuit is closed, resulting in full performance from the supercharger. The bypass circuit is never used to limit or control boost during full-throttle operation and defeating or altering the bypass function will not result in improved performance in any condition, and will result in poor drivability.

### LIMIT OF LIABILITY STATEMENT

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. SLP Performance Parts reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

**WARNING:** SLP Recommends allowing the vehicle to cool (not running) for five hours before beginning installation.

**WARNING:** To avoid the chance of electrical shock or damage to your vehicle's electrical system, disconnect both the negative and positive batter leads (in that order) at the battery.

## STOCK DISASSEMBLY

The following section will guide you through the disassembly of the stock components. Special care should be taken to label fasteners and parts that are taken off during this procedure since many will be reused:

**Note:** The intake manifold, throttle body, fuel injection rail and injectors should be removed as an assembly.

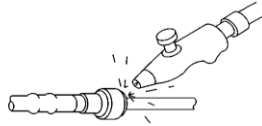
1. Remove the engine cover.
2. Remove the air cleaner resonator and outlet duct.

3. Disconnect the electrical connector for the fuel injectors.
4. Disconnect the electrical connectors from the throttle body.
5. Disconnect the fuel feed for the fuel injectors.
  1. Relieve the fuel system pressure.
  2. Remove the retainer from the quick-connect fitting.

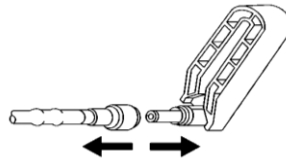


**Warning:** Wear safety glasses when using compressed air, as flying dirt particles may cause eye injury.

3. Blow dirt out of the fitting using compressed air.



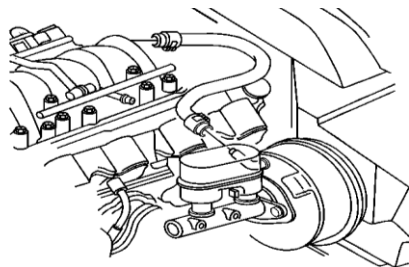
4. Using a *J 37088-A* fuel line disconnect tool or similar. Insert the *J 37088-A* fuel line tool into the female connector, then push inward to release the locking tabs.



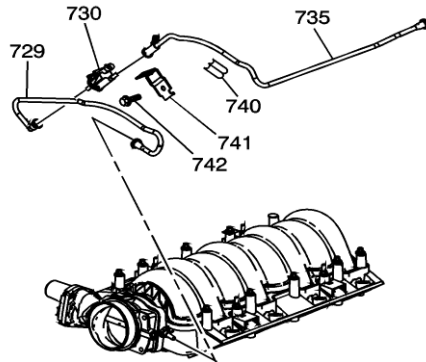
5. Pull the connection apart.

**Caution:** If necessary, remove rust or burrs from the fuel pipes with an emery cloth. Use a radial motion with the fuel pipe end in order to prevent damage to the O-ring sealing surface. Use a clean shop towel in order to wipe off the male tube ends. Inspect all the connections for dirt and burrs. Clean or replace the components and assemblies as required.

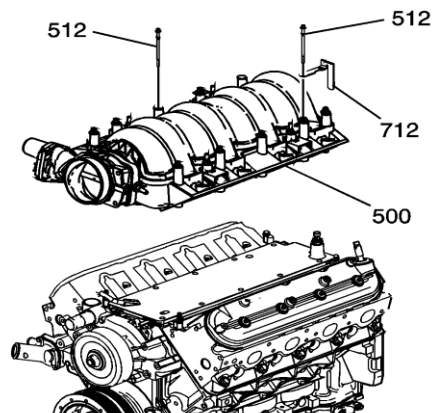
6. Using a clean shop towel, wipe off the male pipe end.
  7. Inspect both ends of the fitting for dirt and burrs.
  8. Clean or replace the components as required.
6. Remove positive crankcase ventilation hose/pipe/tube.
  7. Remove the vacuum hose from the brake booster.



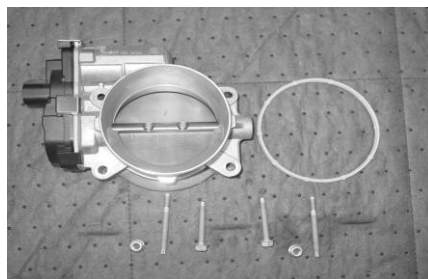
8. Disconnect the electrical connector from the manifold absolute pressure (MAP) sensor.
9. Remove the evaporative emission (EVAP) clip (740), bolt (742), bracket (741), valve (730) and tubes (729, 735).



10. Remove the intake manifold bolts (512) and the fuel rail stop bracket (712).
11. Remove the intake manifold (500).



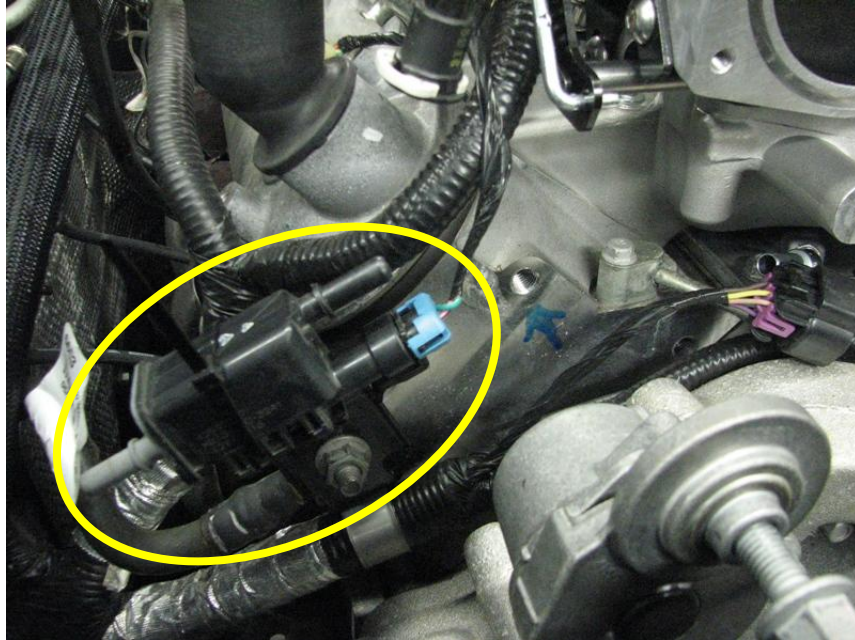
10. Use a 15mm socket to rotate the tensioner clockwise and remove the belt from engine.
11. Remove the throttle body, retain the bolts and gasket for use on new SC



**The following section will guide you through the required modifications of existing components and build up of the assemblies used to complete the installation.**

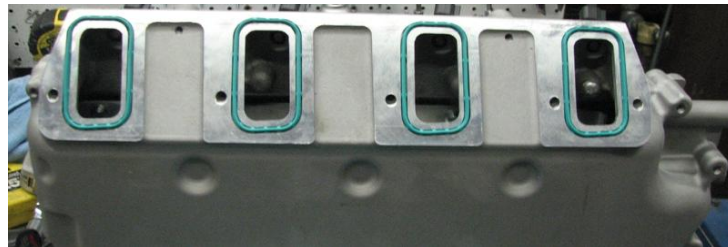
**EVAP Solenoid Relocation**

1. Move the EVAP solenoid from its stock location and mount to the front of the P-Side cylinder head, upside-down as shown in the photo below. Mount in front of the ground wire as shown below with a zip tie.



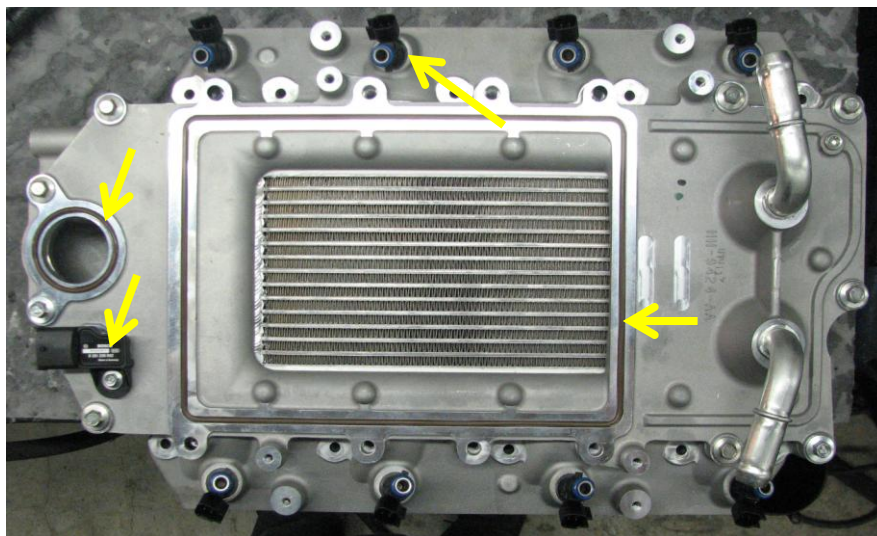
**Manifold Assembly**

1. Install the supplied eight (8) individual intake manifold gaskets as shown in the photo below.



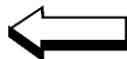
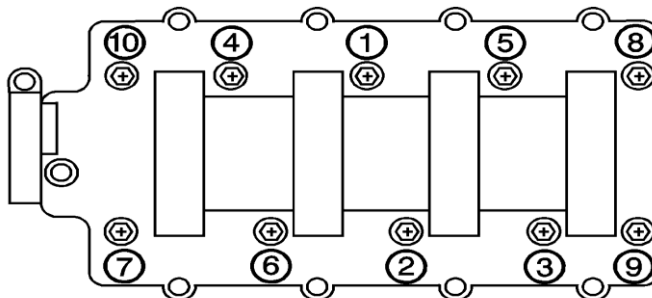


2. Install the NEW supplied Fuel Rails and bolts(torque to 7 ft-lbs) , NEW 2 Bar MAP sensor, NEW supplied eight (8) fuel injectors, bypass valve o-ring and main supercharger housing o-ring into the top of the intake manifold assembly as shown in the photo below.



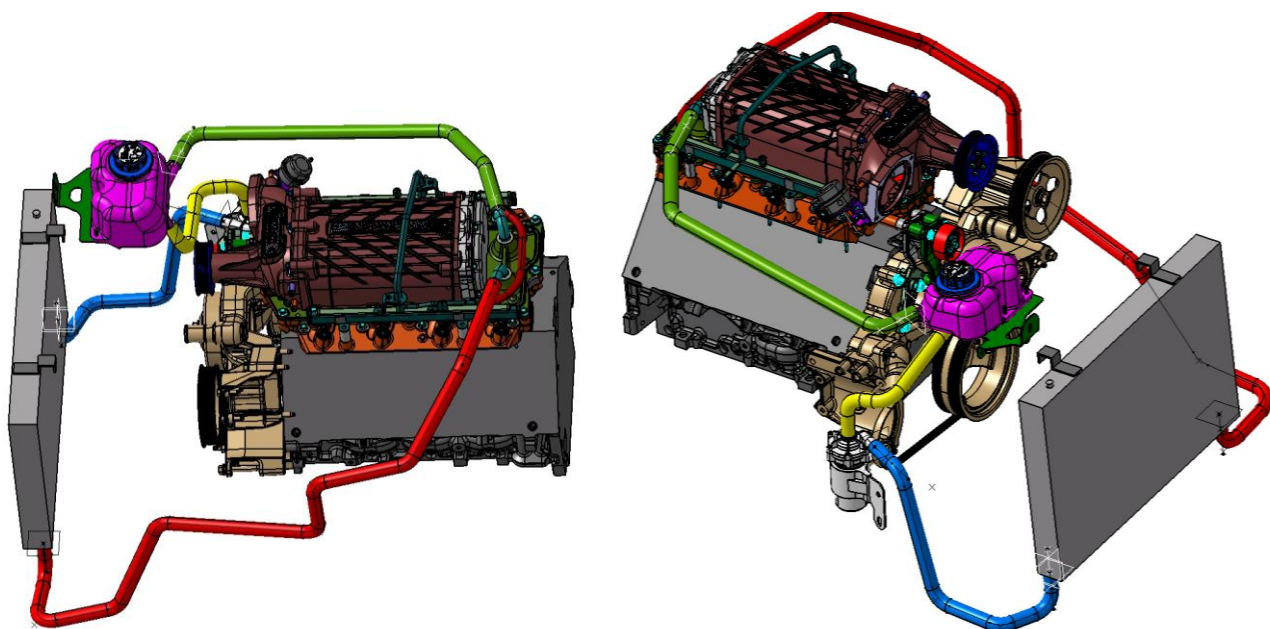
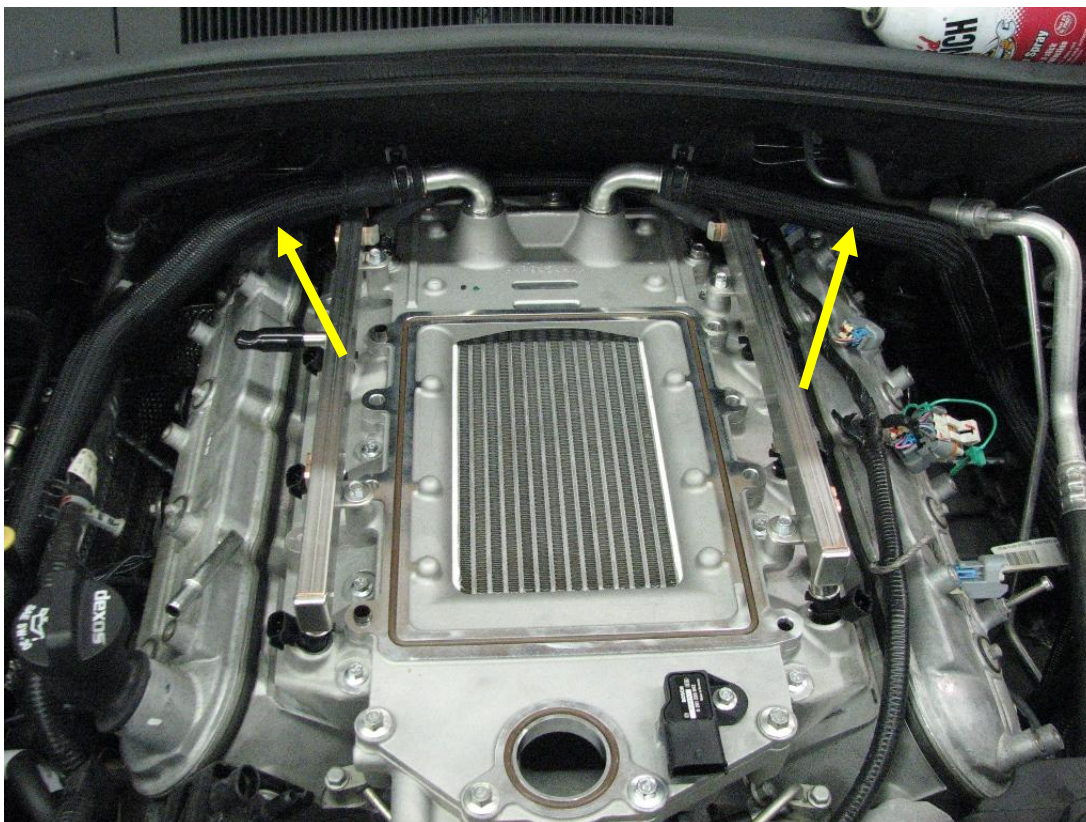
### Intake Manifold and SLP Charger Installation

1. Carefully clean the cylinder head to intake manifold mating surfaces using brake clean or rubbing alcohol.
2. Carefully place the intake manifold assembly down onto the cylinder heads. Be careful not to damage your sealing surfaces or gaskets during this step. Fasten the intake using (10) M6 x 1.0 x 74.5mm bolts. Torque to 88 in-lbs in the sequence shown.

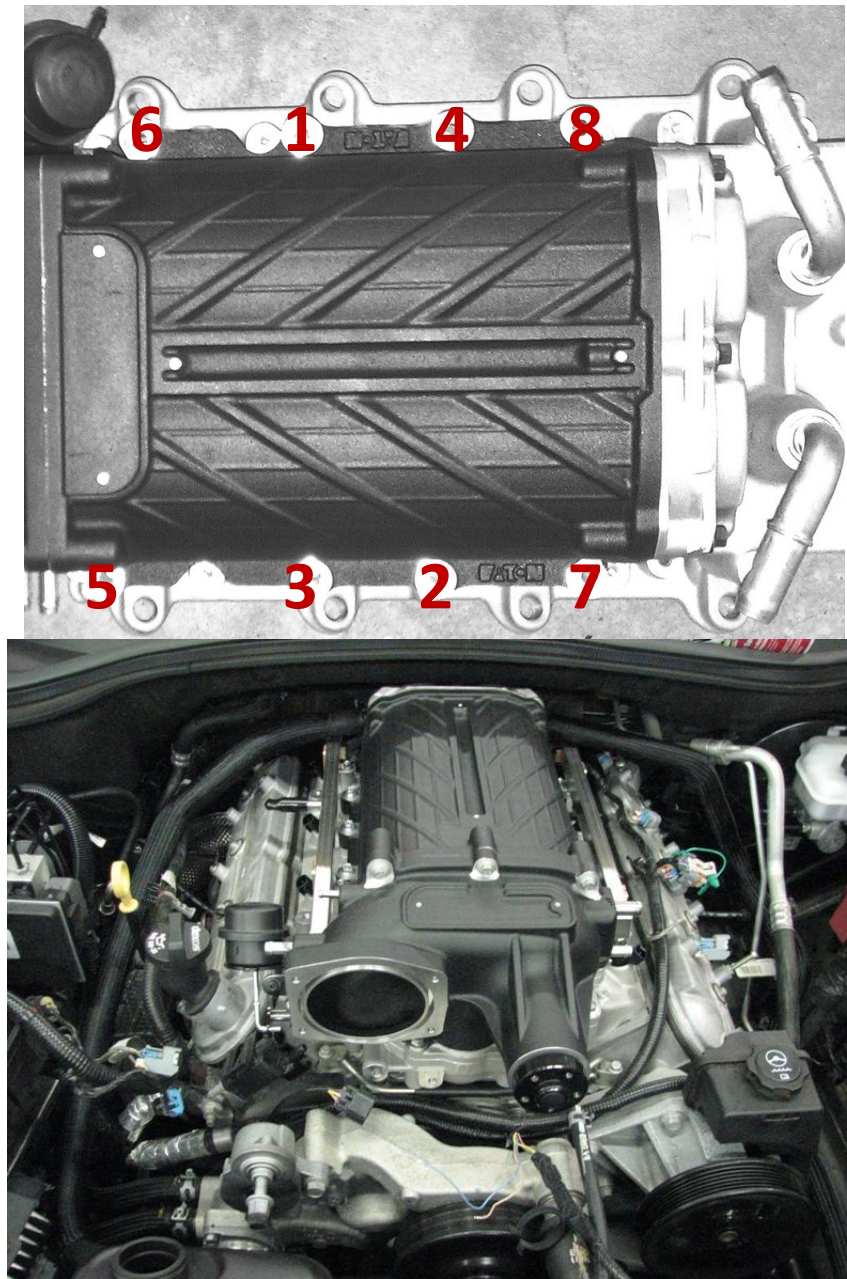




3. Attach the supplied intercooler hoses to the back of the intake as shown in the photo below. The P-Side hose goes to the reservoir that will be installed later. The D-Side hose goes to the Low Temp Radiator at the front of the car that will be installed later. See photos below.

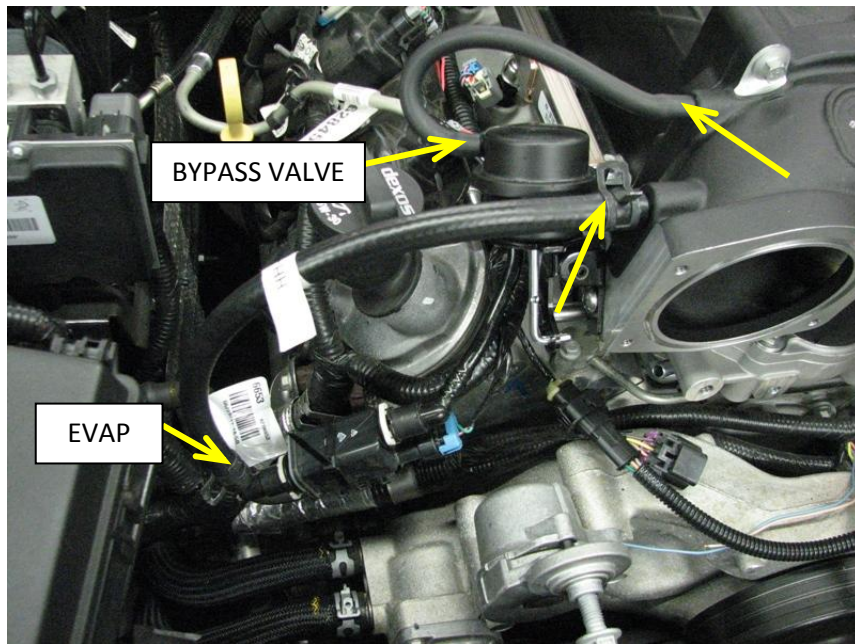


4. Remove the SLP Black Charger from the packaging. Install the “TVS 2300” and “SLP Supercharged” badges with the Allen head M4 black bolts provided. Next, install the unit using (8) M8 x 1.25 x 84mm bolts. Torque to 19 ft-lbs in the sequence shown.



5. Install the 8” vacuum line provided from the port on the bypass valve to the port on the side of the supercharger assembly. Cut the 90 degree fitting from the factory EVAP solenoid line and use the provided hose and one constant tension clamp as shown below to connect the EVAP solenoid to the supercharger assembly. Make sure hose on “grey” side of EVAP solenoid goes to the fitting on the side of supercharger (vacuum side).

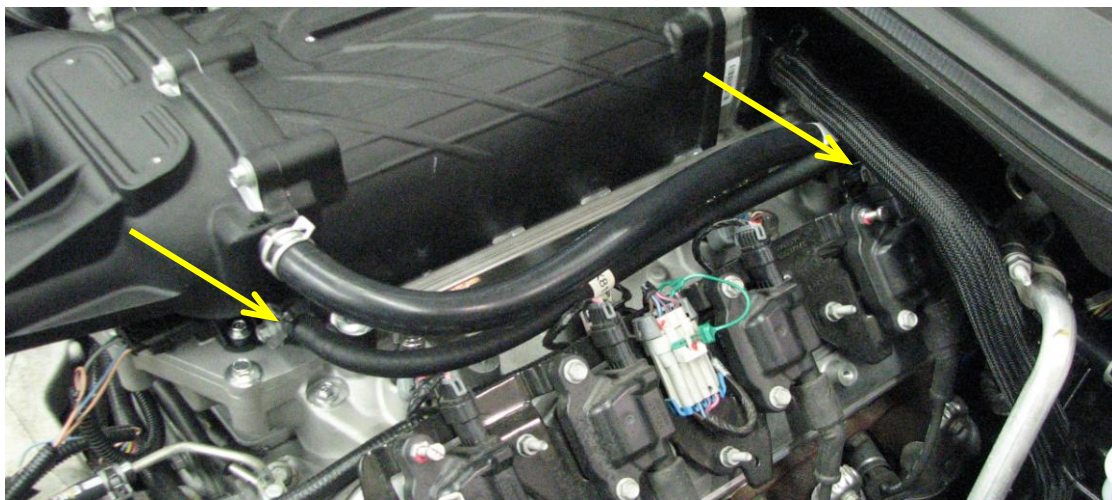




6. Install the brake booster vacuum line as shown below



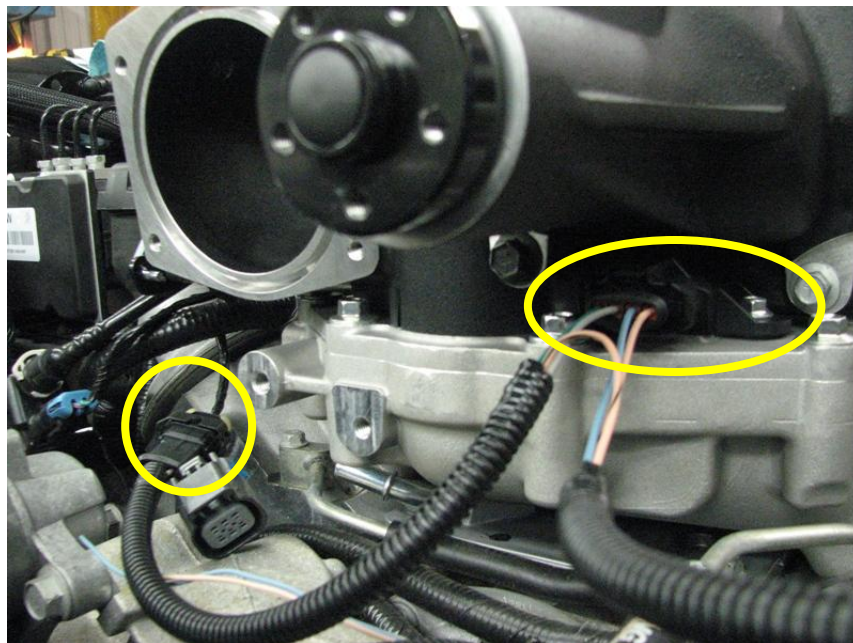
7. Connect PCV line from back of D-Side valve cover to D-Side port on supercharger case as shown below.



8. Plug the valley cover breather fitting below with the plug taken off the D-Side valve cover breather fitting above if you have an LS3 Manual Trans Camaro. A L99 Auto Camaro will NOT have the fitting below.

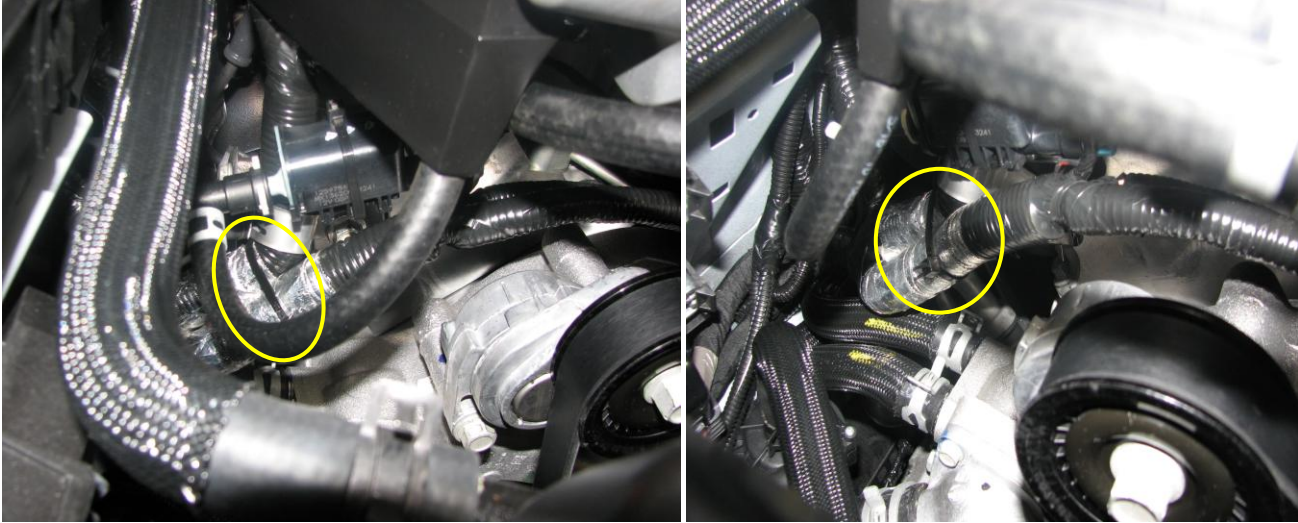


9. Plug in MAP wire harness.

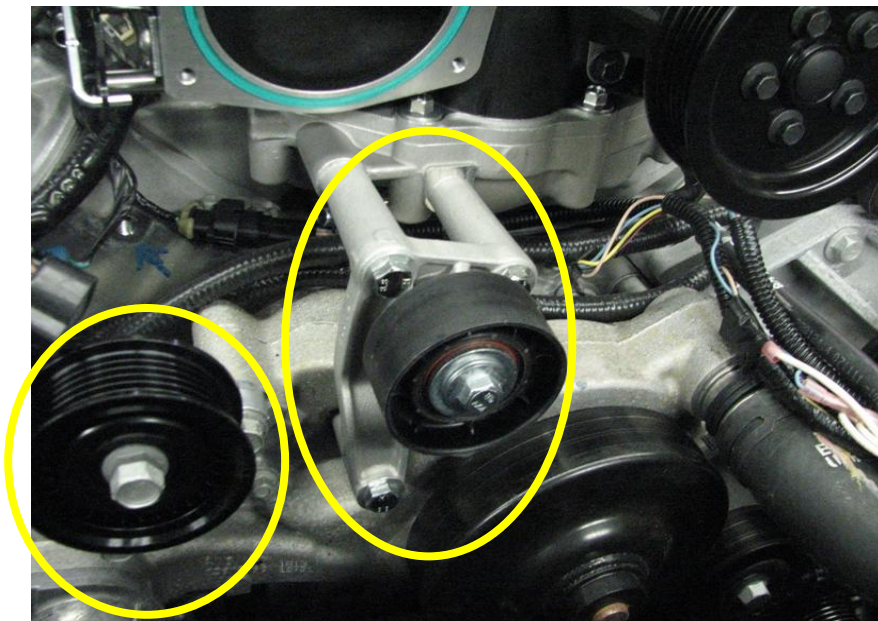




10. Install the stock throttle body with O-Ring and plug in connector. To allow the TB connector to reach you must remove the metal strap from the cylinder head and harness that holds the wiring trunk containing the throttle body harness then zip tie the TB trunk to the wiring trunk going behind the EVAP solenoid. See photos below.



11. Install new supplied tensioner in place of stock GM Camaro tensioner and install new idler bracket and idler pulley. Torque bolts to 18 ft-lbs.



12. Install the supplied 98mm SC pulley with NUMBERS facing backwards. Tighten the 5 bolts to 7.5 ft-lbs.
13. Install the supplied serpentine belt. Belt routing can be found on the sticker included in the kit for the underside of the hood.

<u>Vehicle Year</u>	<u>Belt Size</u>
2013	5061000/ 6PK2540
2010-2012	5061038 /6PK2635

## Intercooler-Low Temp Radiator Loop Installation

\*NOTE\* If you have a convertible camaro, you must permanently remove the front brace for proper LTR installation.

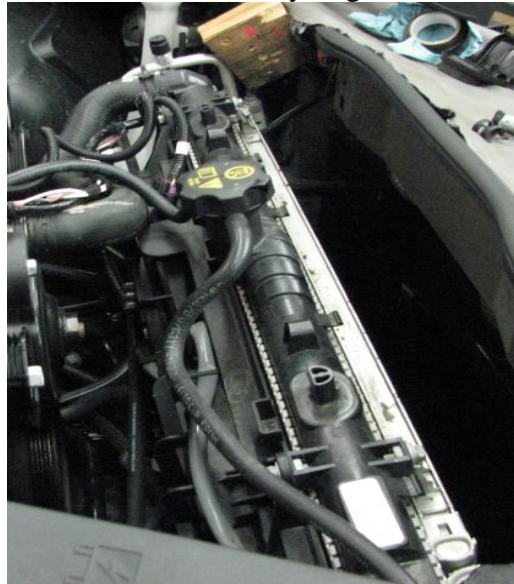
1. Install the supplied foam onto the inside of the low temp radiator brackets as shown below.



2. Install the supplied foam strips onto the low temp radiator as shown below.



3. Remove radiator hold down brackets on vehicle as shown below and carefully prop radiator assembly forward as shown. Removal of air box is necessary to get radiator into position as shown below.

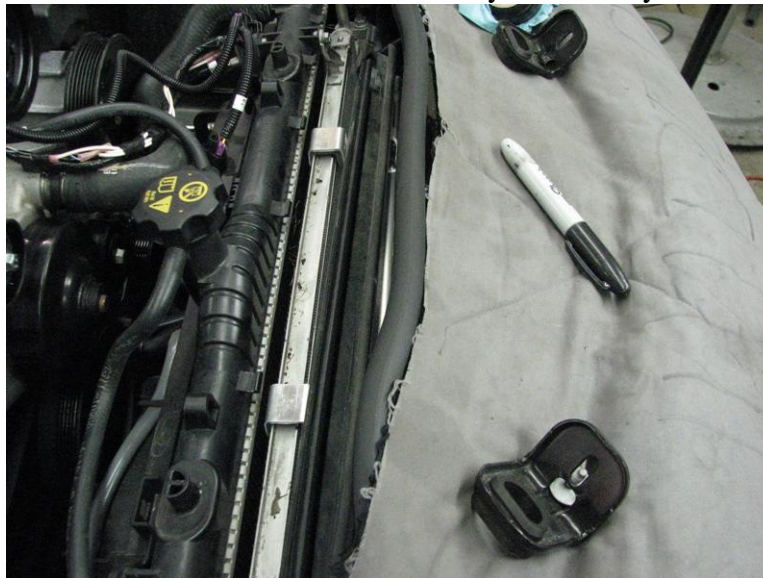


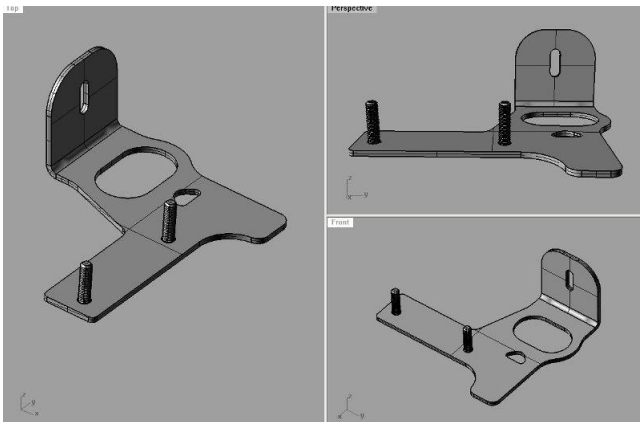
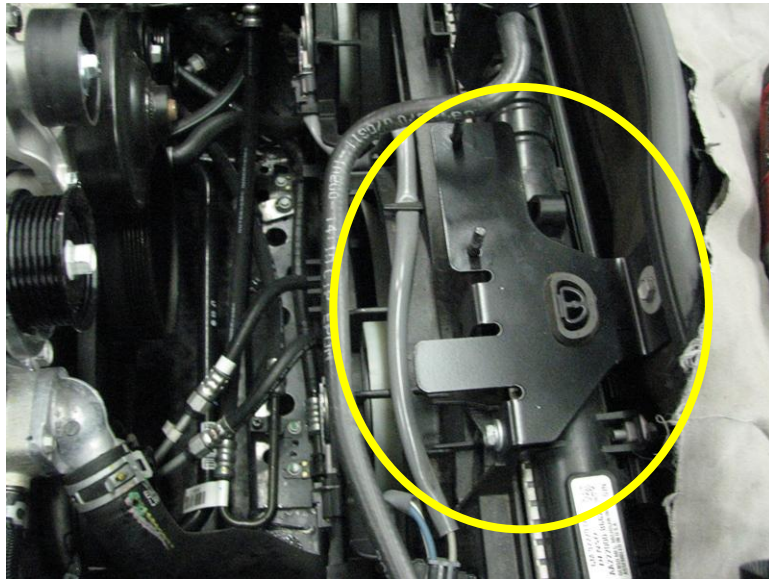


4. Cut holes in the bottom shroud so that the new Low Temp Radiator fits as shown below.

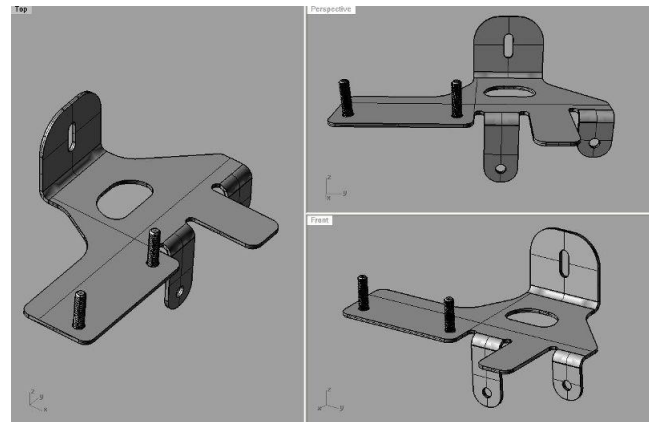


5. Install the new Low Temp Radiator, plastic cover and reservoir bracket as shown in the next three photos. Be sure to use the correct reservoir bracket for your model year. See 4<sup>th</sup> photo below.



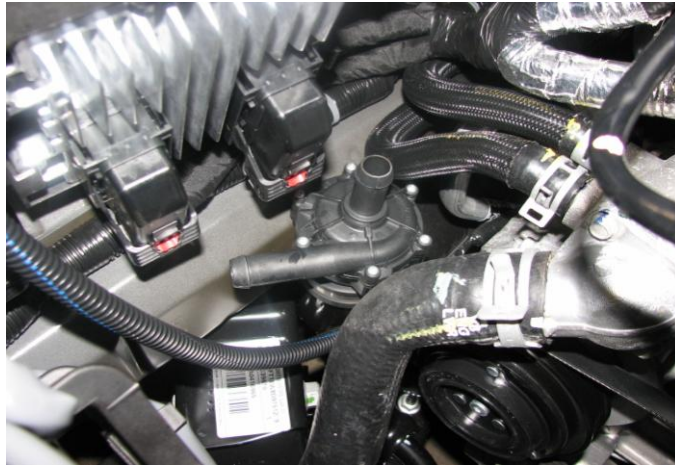
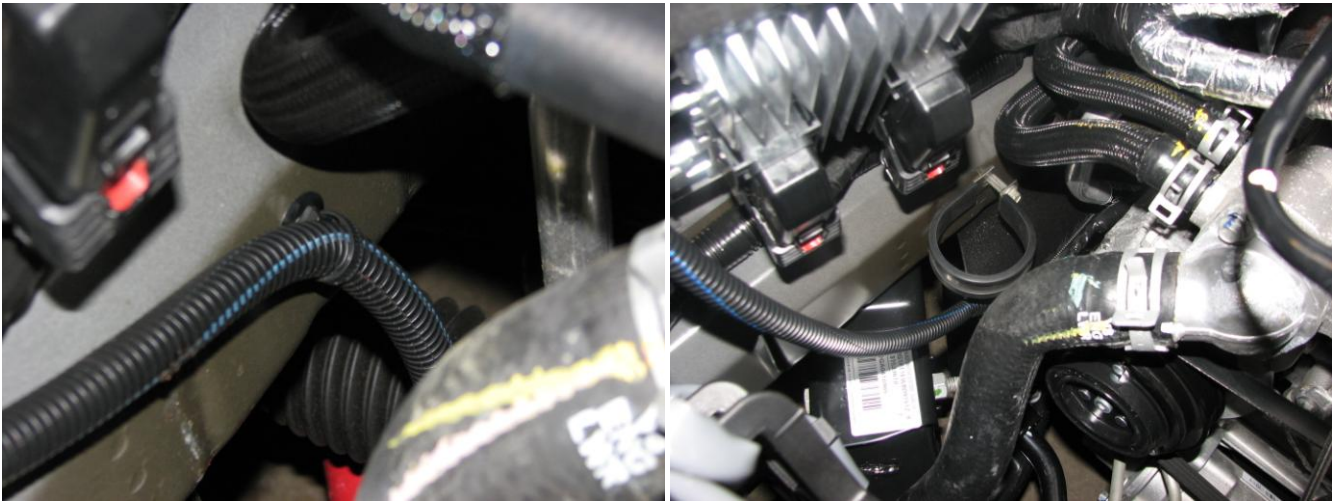


2010-2011 Reservoir Bracket



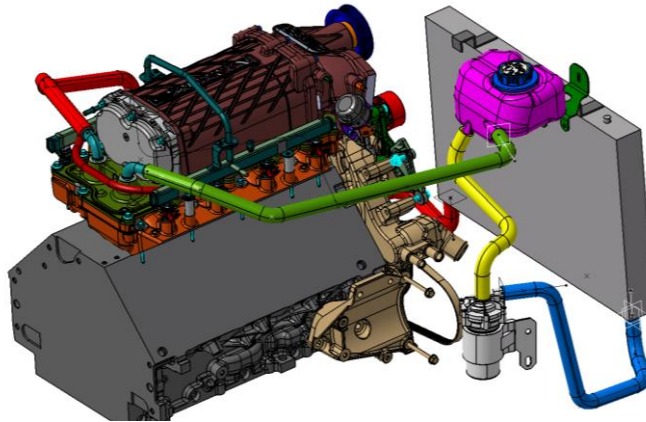
2012-2013 Reservoir Bracket

6. Remove the factory wire tie from the frame as shown below. Using the provided self tapping screw and intercooler pump mount, install the intercooler pump as shown below. Install the pump mount first and slightly tighten the screw. Use a little bit of WD-40 on the body of the pump to aid sliding into place. See next 3 photos.

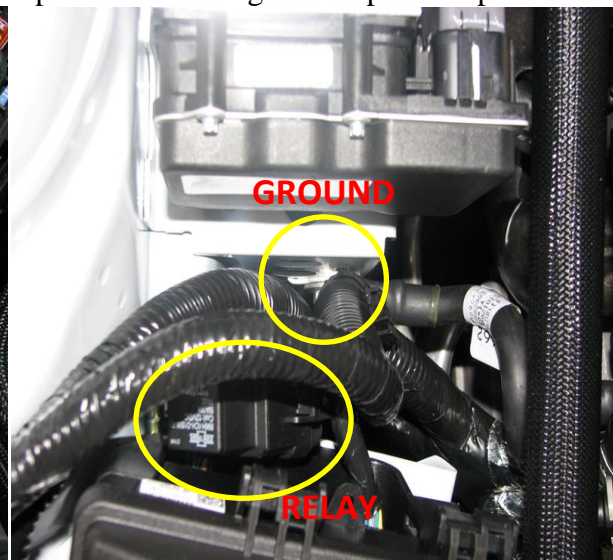


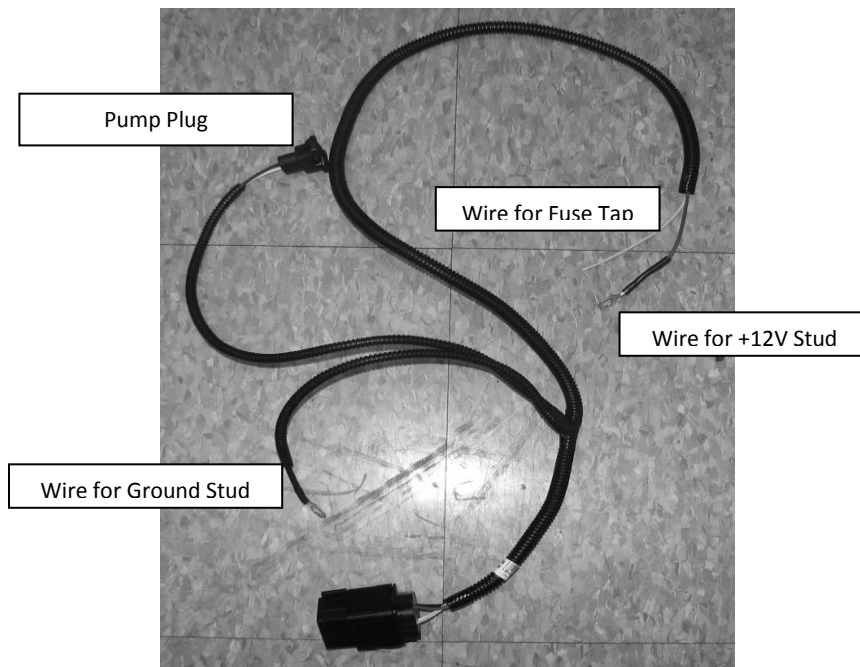
7. Install the reservoir with the two supplied nuts.
8. Run the hose that is already on the back of the D-Side intercooler fitting to the bottom of the D-Side Low Temp Radiator.
9. Run the hose that is already on the back of the P-Side intercooler fitting to the top-side of the reservoir bottle.
10. Run the short hose from the bottom of the reservoir to the top of the pump, and the last hose from the bottom of the pump to the P-Side bottom of the Low Temp Radiator. See photos below.





11. Fill the intercooler system reservoir 3/4 full with a 50/50 mix of Dexcool/ Deionized Water.
12. Install the wire harness relay for intercooler pump behind the rear P-Side of the fuse box as shown below. Connect “+12V” eyelet to 12V stud on front of fuse box. Install pigtail of “+12V” harness into the fuse box on #15 fuse using the fuse tap provided as shown below. Put the supplied 10 amp fuse on top and the 5 amp fuse pulled from the fuse box on the bottom of the fuse tap. Connect “GROUND” Eyelet to vehicle body just in front of and below the ABS module with 10mm bolt already in vehicle body. Plug the connector into the intercooler pump installed on Page 16 Step 6. See photos below.





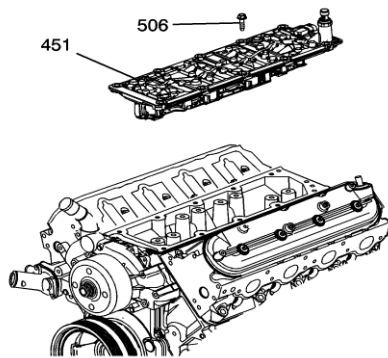
## **Air Tube Installation**

1. Install the supplied air tube with cuff clamp to the throttle body. Install the supplied bellows with worm drive clamps to the factory airbox top. Connect the final hose supplied from the nipple on the P-Side of the air tube to the front breather fitting on the P-Side valve cover.



***The below is only necessary if you had the L99 DOD plate shown on page 1***

### **L99 Camaro DOD Plate Installation**



1. Install the manifold (451) with gasket.
2. Install the manifold bolts (506) and tighten to **18 lb-ft.**
3. Remove old oil pressure sensor/switch from old cover and install in new cover. Use thread sealer on threads and tighten the engine oil pressure sensor to **15 lb-ft.**