

EAST COAST SUPERCHARGING



C6 Corvette Supercharger Kit Instructions



ECS SC 600 Instructions (C6)

These instructions are meant to serve as a guide to the installation of the ECS SC600 Supercharging kit. Please be sure to use all safety equipment including gloves, and eye protection. Please use proper techniques to capture and dispose of, or reuse factory fluids. Utilization of the proper tools will make the install smoother and faster.

If you are having ECS provide you with a start up tune, your first step should be to remove your PCM, and ship immediately so that you can have it back ready for start up. Our shipping address is 562 Rt. 539, Cream Ridge, NJ, 08514.

Installation should take between 10 to 15 hours for a qualified mechanic. Do not rush the install. If need technical support please call the shop at 609-752-0321.

ECS SC600 Kit Installation:

- Remove fuel Rail covers, and disconnect battery terminals with 10 MM wrench.
- Remove cap from coolant reservoir and proceed to drain coolant by turning radiator drain cock one ¼ turn to the left.



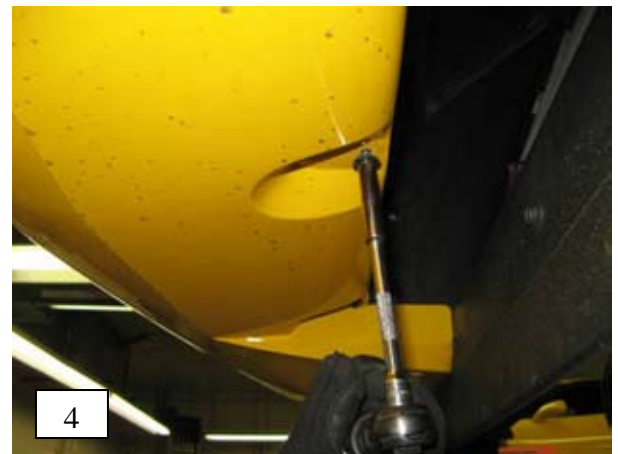
- Remove stock serpentine belt by placing 15mm wrench on tensioner bolt and press towards intake and pulling bet forward off tensioner
- Remove stock tensioner by removing the 2 15mm bolts with socket. Save bolts for later use.
- Remove hard plastic vacuum line from passenger side valve cover (Fig.1)

- Remove 15 mm bolt and bracket holding Evap solenoid to passenger side head and discard. Evap solenoid stays in place. (Fig.2)
- Disconnect MAF and then remove stock air bridge and filter assembly from car by loosening clamps and pulling forward and up off throttle body.





- Unclip coolant line from top radiator shroud, and remove upper radiator shroud by removing 4 retaining bolts (10mm) (fig. 3a & b) Upper shroud will not be reused.
- Raise car, remove wheels from car.
- From below, we will be removing the hardware holding the front fascia to the radiator support and intake air shroud. The front fascia will NOT be removed. To allow for access to this area, remove the following :
 - The 5 - 7mm screws from lower intake area of front fascia (Fig 4)



- Remove 2 – 10mm nuts from behind air dam (fig. 5)

- Remove center section of front air dam by removing 3-10mm screws in front of air dam, (pic) and 2 - 7mm underneath fascia. Remove front air dam from car. (fig. 6)



- Remove passenger side brake duct housing by removing the two retaining clips. Outermost 7mm screw, and 3rd screw from side of car. (Fig. 7)

- We are now removing the intake shroud and horns inside the nose. Using a fork tool, remove 8 black retaining clips (on sides) (fig. 8), and 4 - 7mm screws on lower front air shroud. (fig. 9). Remove shroud from car. (fig 9a)



- Moving under the passenger side, remove the horn assembly with a 13mm socket (fig.10)



- Behind the horns, and attached to the intake shroud is the outside air temperature sensor. Unclip and free sensor from passenger side of front air shroud. (fig. 11)



- Use fork tool to unclip two black retaining clips from main upper air shroud. (fig 12)



- Remove front sway bar from car by removing the 2 -18mm nuts on lower control arms, and 4- 13mm bolts from engine cradle. Save all parts for reinstallation.
- Unplug electric fan harness located on passenger side fan assembly. Remove oil cooler lines and any other lines attached to fan assembly. (varies by year and transmission option)
- Remove 2 10mm screws on either side of fan assembly. (fig. 13).

- From the top of the car, remove upper radiator shroud taking care not to damage AC condenser or lines. Take the time to clean any debris from AC condenser and radiator area at this point.
- Unclip front 1 inch coolant line from top front shroud, as well as fan harness from passenger side of shroud. Do not remove from car as we are preparing for the removal of fan assembly.
- Remove oil cooler lines (if so equipped) from radiator by using a pick tool to remove retaining clip and pull lines straight out from radiator. Save clips for reinstallation. Use catch basin to capture any draining oil. (fig 14)



- Z51 cars, or cars equipped factory transmission coolers may need to remove 10mm retaining clip from oil pan accessible between leaf spring and front engine cradle. (fig 15) Save all hardware for reinstallation

- Carefully remove fans from bottom of car. This is a tight area. Be sure not to pinch any lines or harnesses during removal. Save all hardware for reinstallation. (fig 16)
- **ATTENTION:** Z06, Z51 and Grand Sport models equipped with auxiliary oil coolers, now is the time to remove them and set aside for relocation later.



Pinning the Crank



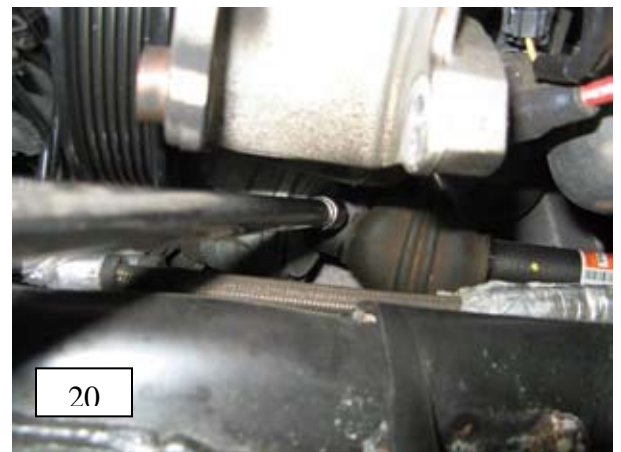
- Loosen the 4 nuts supporting the front engine cradle assembly with a 21mm socket. DO NOT REMOVE NUTS FROM SUPPORT BOLTS. The goal is to drop the front cradle assembly approximately 3/4 of an inch to prepare for removal of the rack. Use a chisel or socket to space down cradle as shown. (fig 17)

- If equipped remove the two 10mm bolts that hold the power steering cooler to the engine cradle and set aside for later use (fig. 18)



- Remove tie rod ends (18mm socket) and remove from spindles. (fig 19)

- Remove 11mm bolt from steering knuckle (pic). Slide knuckle off of rack. **DO NOT TURN STEERING WHEEL AFTER REMOVAL OF NUT.** (fig. 20)





- With an 18mm wrench remove top pressure line from power steering rack. (fig. 21)



- Remove 10mm bolt holding drivers side front brake line to engine cradle. (fig 22) Free bracket from cradle. Save all hardware for reinstallation.



- Remove power steering return line with 18mm wrench.
- Remove clamp that holds power steering lines (fig 23) to cooler and remove cooler. Retain return line from cooler to rack for future installation.
- Unplug electrical connector from rack. (fig 23)

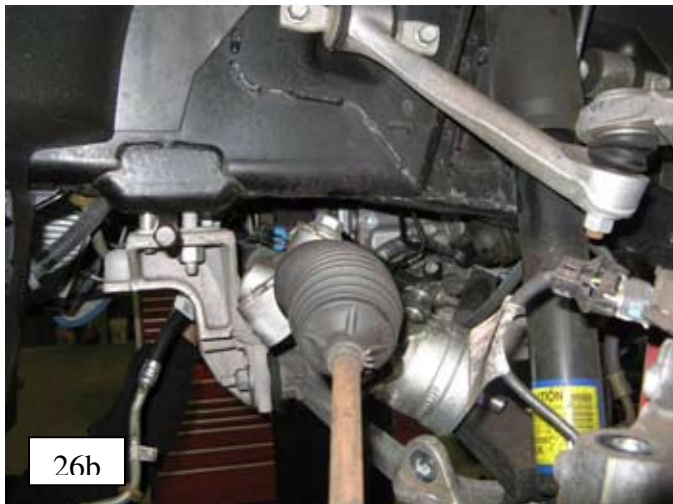
- Remove two 13mm bolts holding ABS bracket to engine cradle. (fig 24)





- Remove 2 18mm bolts holding the power steering rack in place. (fig 25)

- If all clips are removed, as previously described, you should be able to clear the rack snout of the lines. Rotate rack and remove between frame and engine cradle as shown in pictures below.

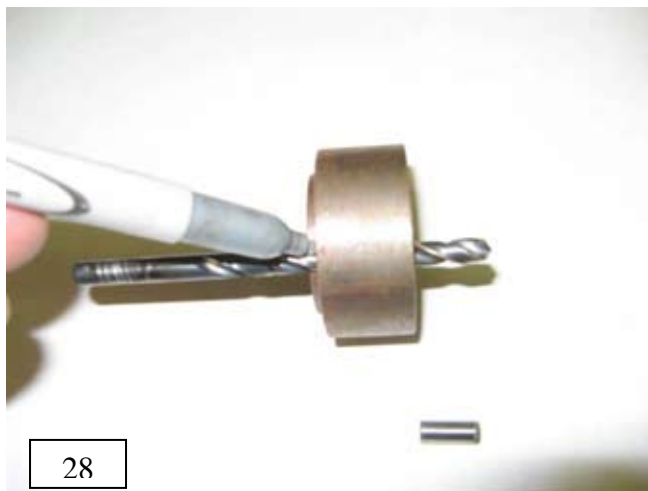
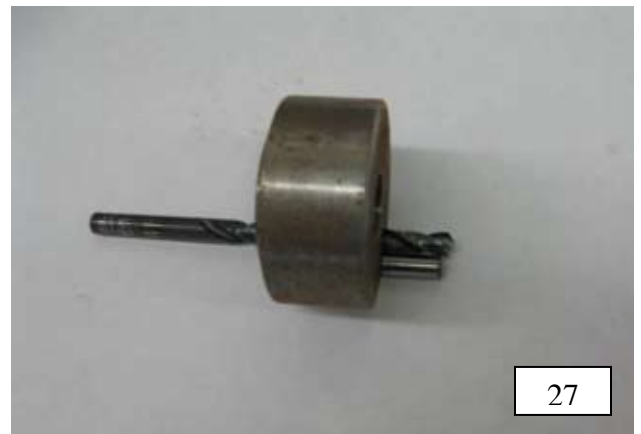




- Rack is out of the car and you are ready to pin the crank now.

Pinning the Crank

- Remove 24mm stock crank bolt with impact gun. DISCARD STOCK BOLT!!! DO NOT REUSE!!!
- On a workbench slide $\frac{1}{4}$ in drill bit through pin fixture and slightly past crank pin as shown (fig 27)

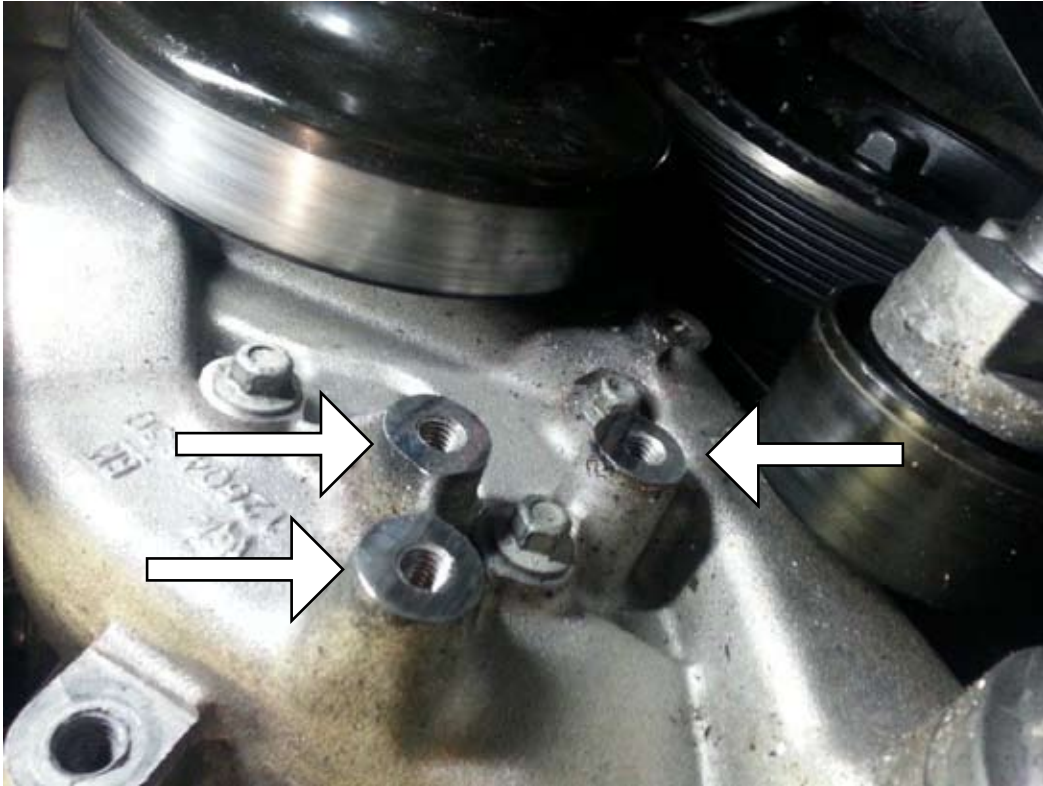


- Mark the front side of the drill bit with a marker to set the depth that you will need to drill the crank as shown (fig 28)
- Wrap drill bit with a piece of tape at the marked spot.

- Screw the supplied bolt with the pin fixture into the crank and snug up.
- Wearing safety glasses, drill pin hole in crank until tape touches fixture as shown.(pic)



ATTENTION: Some 2010+ C6 models or C6 cars that have had a recent water pump upgrade may need to modify the water pump bolt bosses as shown below. To do so, you must remove approximately 1/4-inch off of the top bosses and about 1/2-inch or as much as possible off the bottom boss. This can be done using a small airsaw or equivalent. Smooth out the edges for a nice finish.



- Remove crank fixture
- Lightly blow out crank threads and pin hole to remove any metal shavings or chips. **(BE SURE THE ENGINE AND THROTTLE BODY ARE CAPPED OFF AND THAT YOU ARE WEARING SAFETY GLASSES.)**

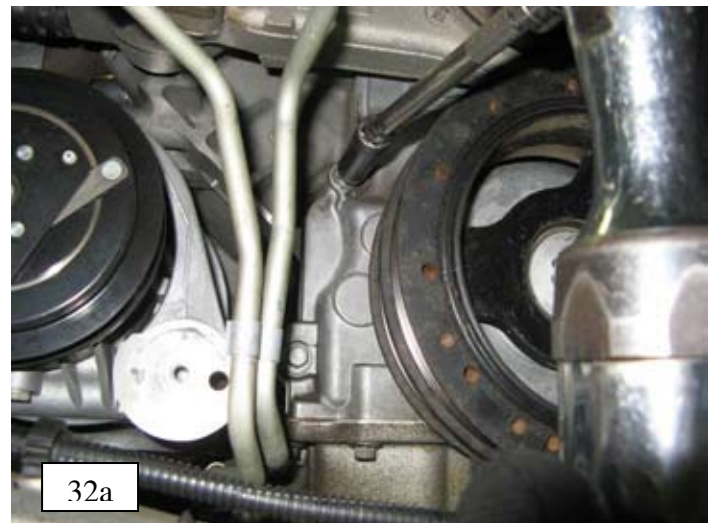
Insert supplied pin in the new hole.

- Insert new Crank Bolt (supplied in kit) and tighten to 235ft/lbs.

At this point you are ready to install the supplied ECS heavy duty belt tensioner assembly (fig. 30)



- From under the car, loosen AC Belt by placing a 15mm socket on the AC Tensioner and turning to right. This will release the tension on the belt. Pull belt over AC pulley. Leave belt in place, we are only removing the tensioner. Remove AC tensioner by removing the 13mm retaining bolt. (fig. 31)



Remove the two 10mm left, bottom timing cover bolts and discard. Install timing cover sub-tensioner bracket with new supplied bolts (fig. 32a, 32b)





Install supplied 3/8" thick washer on the AC tensioner pulley bolt as shown in picture to the left.



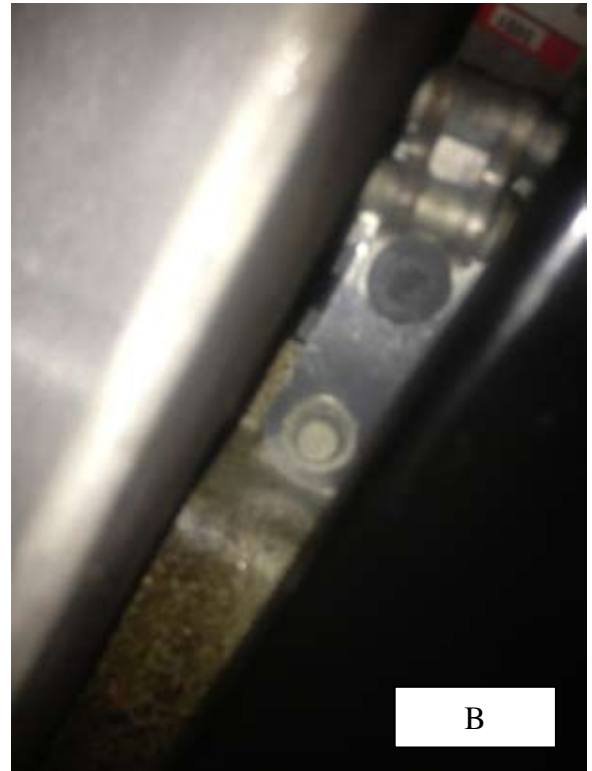
MAIN TENSIONER BRACKET INSTALL

With AC belt still in place, install the preassembled AC tensioner and the main tensioner bracket at the same time using the new supplied 8mm bolt to tighten the AC tensioner in place and at the same time, thread in the 10mm upper bracket bolt into the already installed timing cover sub tensioner bracket. Tighten top bolt but leave bottom 8mm bolt slightly loose to allow for belt adjustment in a future section. Once belt adjustment is done, this bolt must be final torqued. (fig. 33a&b)

- Use a 15mm socket to unload tensioner and replace AC belt.(fig 33b)



- Reinstall Rack and pinion, brake lines, PS lines, tie rods ends, and steering shaft to factory torque specifications. All electrical connections associated with the rack and pinion can now be re attached. Re tighten the 4 - 21mm nuts supporting front engine cradle.

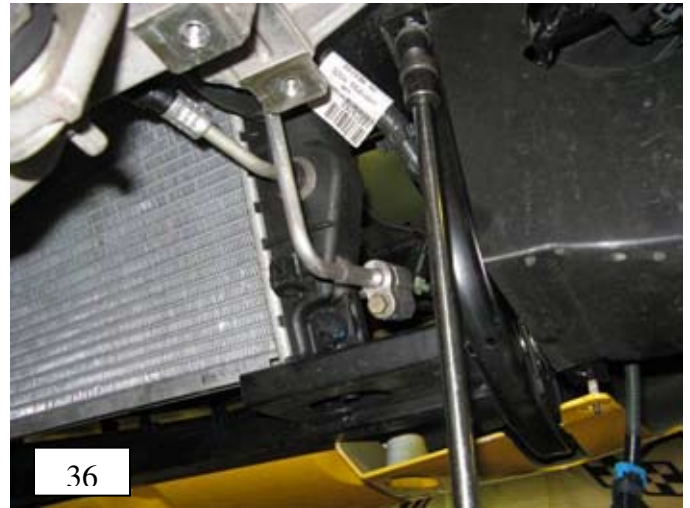


Using the supplied relocation bracket in picture A and one of the 7mm fascia speed nuts and bolts, you will need to relocate the transmission cooler lines away from the motor. Use one of the oil pan bolts, as in picture B, and relocate the transmission line bracket away from the engine oil pan, as in picture C.

Next, install the supplied heavy duty tensioner and pulley assembly using the supplied 9/16 bolt on to the previously installed bracket, as shown in picture D.

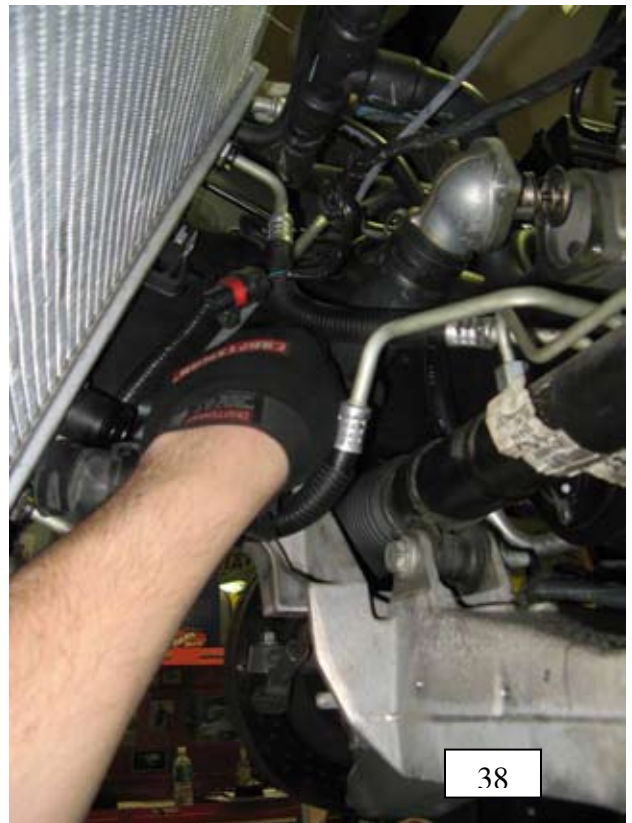


- Remove the 4 – 13mm bolts holding in the radiator support cradle to frame. Do not remove frame from car, just drop approx 1-2 inches to allow for installation of radiator relocation bars included in kit.(fig 36).



- Install the (2) radiator cradle relocation bars with the 4 factory 13mm bolts that held the cradle in place. Bolt Radiator support cradle to relocation bars with the 4 supplied 8 mm x 25mm bolts with flat and lock washers in place. (fig 37)

- Remove lower radiator hose and thermostat from car by removing spring clamp from radiator and 2 10mm thermostat housing retaining bolts. There will be some residual coolant in the hose. Protect eyes and face. Capture any coolant with catch basin or rags. Remove Thermostat housing from hose. (fig 38)
- Remove thermostat from housing, and replace with supplied 160 degree thermostat, and reinstall in water pump with factory 10mm bolts. (fig39)



- Place lower radiator hose on workbench, and cut hose in middle as shown. Install supplied worm clamps and insert the supplied radiator hose extension pipe into hose as shown. Tighten top worm clamp, leaving lower portion loose until reinstallation in car. (fig 40)

INSTALLATION NOTE: If the radiator hose extension seems to be loose fitting on radiator hose, it could be due to hose swelling over time. If rad hose extension is loose it is recommended you replace the radiator hose with a new one.



40

- Set radiator and AC condenser into lower radiator support mounts, and reinstall lower radiator hose. Be sure to tighten lower worm clamp and re spring clamps at this point. (fig 41)



41

- Taking one intercooler support bracket, measure $\frac{1}{2}$ in from radiator cradle mounting tab. Mark holes and drill radiator support bracket with supplied Q drill bit. The support is hollow. You only need to drill through back side of support, not all the way through the tubing. (fig 42)



42

- Install supplied rivet nuts into holes, and insert supplied $\frac{1}{4}$ in allen bolt with nut as shown. Holding allen wrench in bolt, turn 11mm nut clockwise to compress rivet nut inside radiator support frame. (fig 43)



43

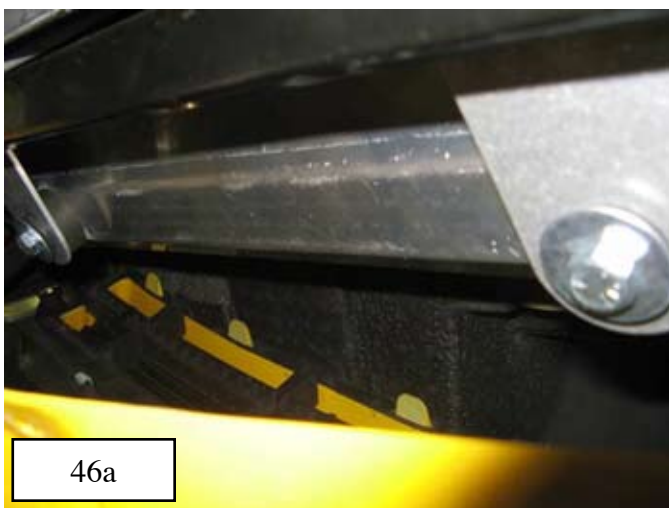
- Install bracket with supplied $\frac{1}{4}$ in bolts (fig 44)



- From left edge of installed bracket measure 13 inches to right and mark support with a line to guide installation of right side intercooler support bracket. Place the intercooler support bracket against line as shown, mark holes and drill frame (with the supplied Q bit), to accept rivet nuts. Insert rivet nuts into holes and set in place following the same procedure as left side support. (fig 45)



- From the top of the car, set intercooler assembly in intercooler brackets being sure that rubber grommets are centered in lower brackets. BOV should on drivers side of the car. From the bottom of the car insert the supplied $\frac{3}{8}$ x $\frac{3}{4}$ long bolts with washers securing the intercooler into the lower brackets. (fig 46)



INSTALL NOTE: When installing the Tial BOV be sure to use the supplied O ring on the intercooler flange and locate the clamp in a way that makes it easy to access for future service.



Relocate the outside air temperature sensor from your previous removed radiator shroud. Reattach to plastic air dam shroud located right in front of the radiator cradle as shown in picture 48.

- On the lower, passenger side of the radiator support cradle, locate horn wires and plug. Approximately 1 ¼ inches up from plug cut wires as shown. Be sure to leave enough room to attach supplied horn extension wires and butt connectors. Unwrap wires, and strip ends on both sides. Attach corresponding color wires via butt connectors to horn wiring harness and plug end as pictured. (fig 49) Cover with supplied wire loom, and tape if desired.



To relocate the horns, after extending the wires, move horn assembly to fiberglass shelf right below headlight by drilling a 1/4" hole and using the factory bolt with the supplied nut, as shown in picture 50.

- Towards the back of the passenger side, rear leg of the radiator support cradle, there is a hole from the factory that is approximately a ¼ in diameter. Drill this hole out with the supplied Q drill pit. Insert rivet nut following same instructions as above. This location is used to support the lower intercooler charge tube (fig 51).





- Install 3 in. rubber coupler onto intercooler using supplied 3 in clamps. Do not tighten worm clamps as of yet. We will be fitting the charge tubes and will need to adjust fitment as we go along.
- Next, slide 3 in aluminum “U tube” to coupler through end of radiator cradle and attach with supplied $\frac{1}{4}$ x 1 in bolt to mounting point on back side of radiator cradle as pictured. (fig 52).

- Next, take your fan assembly and notch the upper most right hand corner. From right side of shroud measure approximately 4 $\frac{1}{2}$ inches towards left and about a $\frac{1}{2}$ in. down. Use the photos below as a guide. (fig 53a,b).



- Reinstall fans, being sure to tighten the 2 - 10mm bolts on either side and reconnecting the fan wiring harness.
- Reinstall oil lines previously removed from radiator at this point of the installation. (Z51 equipped cars)

Auxillary Oil Cooler Relocation Brackets



If your car comes equipped with an auxillary oil cooler, you will need to use the supplied brackets and hardware to relocate the cooler from the factory location. Refer the the pictures on this page to install the ECS supplied relocation brackets using the driver's side and passenger side front sway bar mount 13mm bolt and using the stock mounting bolts for the oil cooler.

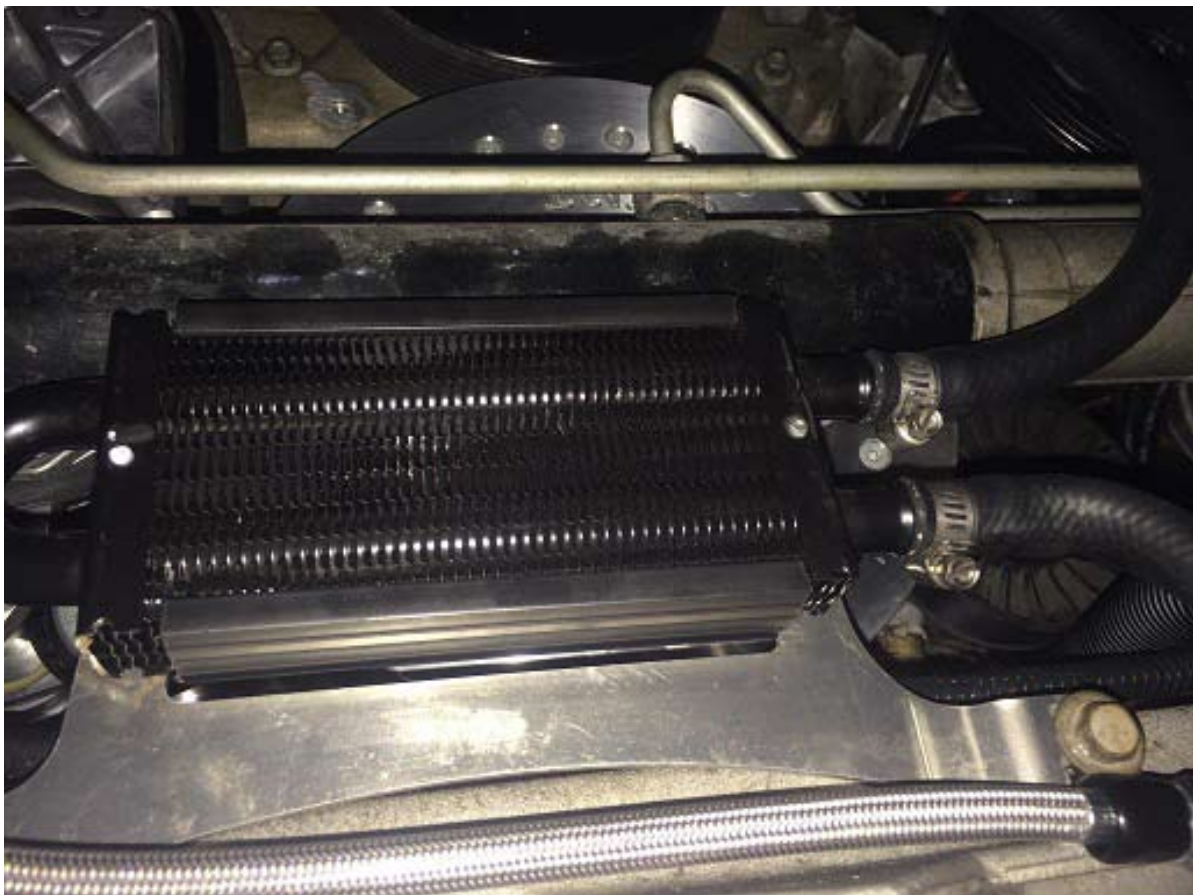




Power Steering Cooler Relocation Kit

Using the supplied 3/8 power steering hose, cut two pieces (one 5-inch, other 15-inch). These will be used to route the factory power steering lines into the new power steering cooler.

Next, mount the supplied auxillary power steering cooler and bracket assembly onto the existitng cradle holes from the factory power steering cooler as shown in the pictures below.



Installation Note: Some cradles will have holes that are not fully tapped, which is OK because the factory bolt will self-tap as it is installed into the cradle.

Next, route the 15-inch piece of power steering hose to the factory line coming from the power steering pump and route the 5-inch section of hose to the factory line coming from the steering rack. Secure both hoses with the four supplied 3/8 hose clamps.



- To allow for clearance of the air intake and charge tube, gently take a hammer or mallet and tap down the top rails of the radiator as shown. On the passenger side you will find a split in the top rail that measures aprox. 4 ¾ inches from the right tank, and in the center, between the intercooler and throttle body will need to be clearance. (fig 55a, b)

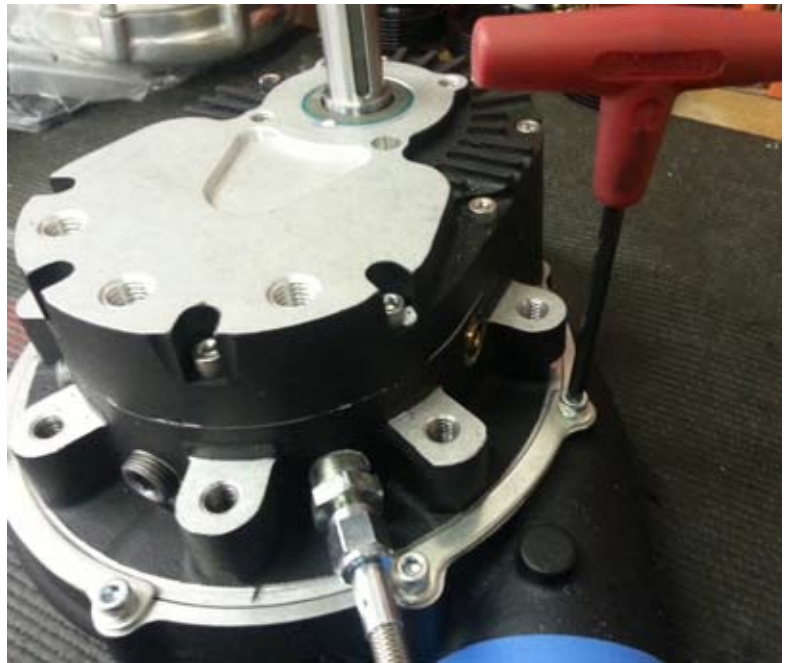


- Install drivers side upper radiator support bracket with stock 10 mm bolts from previously removed radiator support. (fig 56) (we will install the passenger side later during the installation.)

Clocking of the Supercharger Head Unit

If your supercharger unit did not come preassembled, you will need to clock the supercharger discharge for proper alignment upon installation. This can be done by simply loosening the three retaining straps that hold the inlet volute using a 3/16 allen wrench and removing them. Rotate the volute until the discharge lines up with the oil drain line as shown in the pictures on this page.

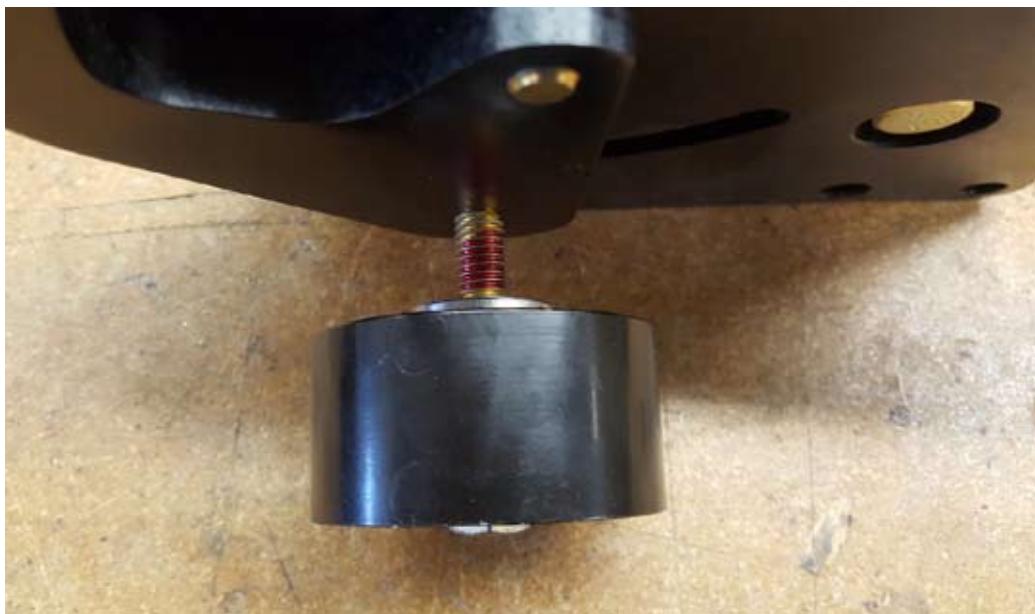
Once the proper clocking is achieved, reinstall the retaining straps and tightening the 3/16 hardware.





Make sure the main supercharger bracket is secured with the four 3/8 bolts and now is a good time to make sure the 3/8 studs thread into the head unit.

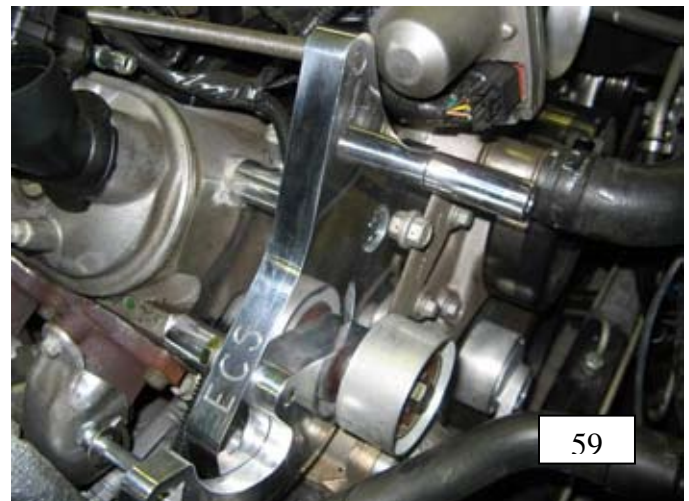
Your bracket assembly should come preassembled from ECS. If you are assembling this for the first time, be sure to use red locktite when installing the fully threaded bolt on the adjustable swing arm bracket.



- From shipped head unit assembly, remove cylinder head mounting bracket (with engraved ECS) from assembly. Place your 2 -15mm belt tensioner bolts through front of mounting plate with the 2 supplied .070 water pump spacers as shown, leaving the two 17mm bolts with polished aluminum spacers, as well as the two 14mm bolts and washers in place (see fig 57). Take your time with this step. Placing hardware in the improper holes, or leaving a bolt out of the assembly will necessitate removal of the mounting plate!



After main head bracket has been bolted on to head and water pump, you can reattach the swing arm adjuster assembly (fig 58a). Install assembly with supplied 3/8 bolt and lock washer and by sliding the fully threaded bolt attached to the idler through the opening on the bracket and secure with 3/8 nut and lock washer. (fig 58b) Be careful not to back out the fully threaded bolt when tightening the nut.



- Slide one head unit spacer over the 3/8ths bolt closest to upper radiator hose as shown. (fig 59)

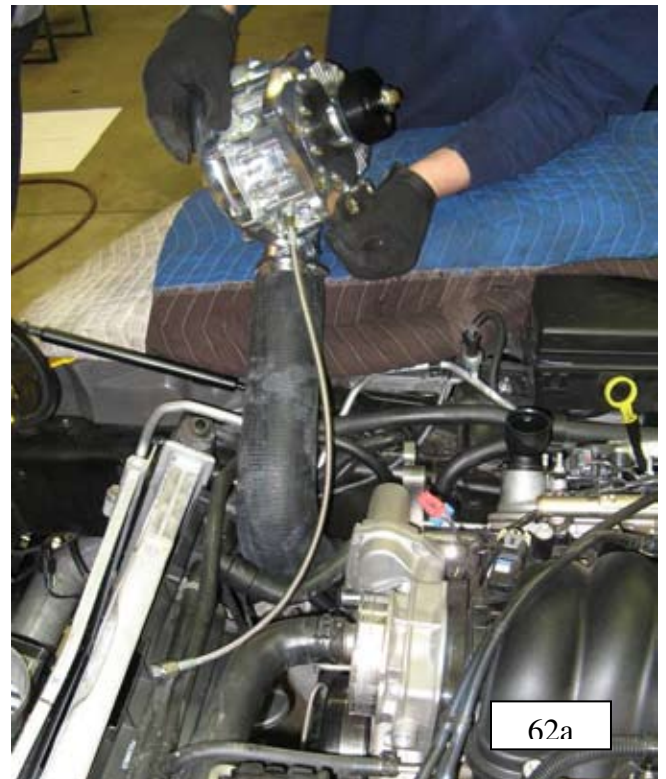


- Remove all remaining hardware from head unit assembly (noting location). Do not remove the head unit bracket itself from head unit. (fig 60)

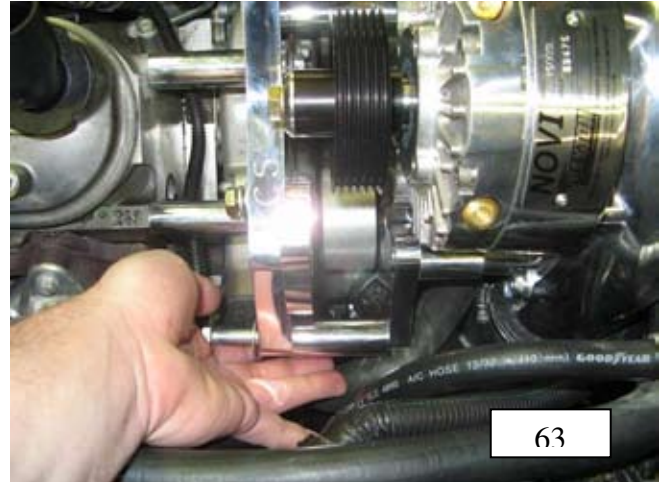


- Install supplied 3 in rubber 90 degree hose to head unit with a 5-10 offset towards front of car as shown. (fig 61) Be certain to tighten worm clamp.

- Slide head unit and 90 degree hose into car as shown. Sliding hose between passenger side fender and 1 in cooling hose. Guide rubber hose in front of steering rack and engine cradle. Be sure to slide worm clamp over charge tube prior to connecting. (fig 62a,b,c)



- Install 2nd head unit spacer on the previously installed lower passenger side 3/8ths bolt as shown. (fig 63)
- Install the two remaining 3/8ths studs and head unit spacers to head unit and mounting bracket with supplied washers and lock nuts as shown. (fig 64)



63



64

- Tighten ALL Head unit/bracket hardware.
- On top of head unit, remove top plug and install the head unit vent with a 3/16ths allen wrench.
- Your head unit was pre-filled from the factory, but take a moment to check for proper oil level by removing the dipstick – located on the passenger side of the head unit right below the vent plug. (fig 64 see arrows)



65

- Install the passenger side upper radiator support bracket with the 10mm factory radiator support bolts. (fig 65)

Belt Installation

Loosen the head unit adjustable idler all the way by loosening the two 9/16" lock nuts on the swing arm (fig. 67b).

Route belt through the accessories and the head unit pulley, leaving off the water pump pulley.



Using a 3/8" drive ratchet with a 3" long extension, insert in the 3/8" square slot on the tensioner. Release the tensioner counter clockwise to open it up and give the belt some slack. At this point, you want to slide the belt on to the water pump pulley and slowly release the tensioner back down. (fig. 67a)

Using a 1/2" ratchet, adjust upper swing arm so the tensioner is at the 1 o'clock position. Lock the two 9/16" lock nuts in place.

Checking Belt Alignment

The ECS tensioner bracket base is made to be adjustable to fine-tune your belt alignment. To adjust, loosen the 1" jam nut and turn the adjustable cone with a 5/8" wrench. Use the following as a guide to adjust your tensioner:

- Adjustable cone moves in, top of tensioner moves out towards the radiator
- Adjustable cone moves out, top of the tensioner moves in towards the engine

Ideally, you want your belt to rest in the middle of both the tensioner idler and head unit adjustable idler.



The tensioner should be at the 1 o'clock position once the belt is tightened to achieve the best possible belt tension.



Once all of the tensioner bolts are tight, install the 90 degree discharge tube coming off of the supercharger. **Some trimming off both ends of the elbow will be needed in order to fit the elbow without it kinking at the bend.** Install supplied 3.12 t-bolt clamp on the head unit side and supplied 3.38 t-bolt clamp on the u-tube side of the elbow.

- Use supplied zip tie to attach drain line to power steering rack to ensure easy access for future head oil changes. (fig 69)

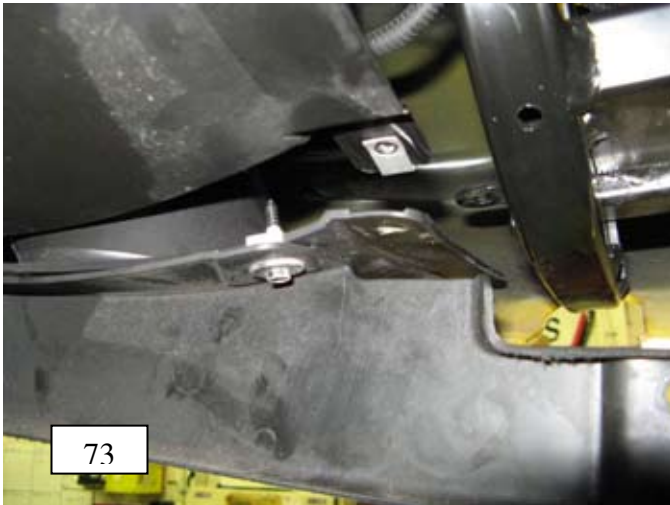
Install 2 fascia extension tabs into existing tabs on radiator support as shown. (fig 71)



Installation Note: After relocating your front cradle, you will need to clearance the front fascia around the area where the front cradle comes out. This can be done using a trimmer or a 1-3/4-inch hole saw. Also, you will need to drill a small 1/4-inch hole on the front fascia for the fascia mount stud to come through the fascia and be bolted from underneath as shown in the pictures below.



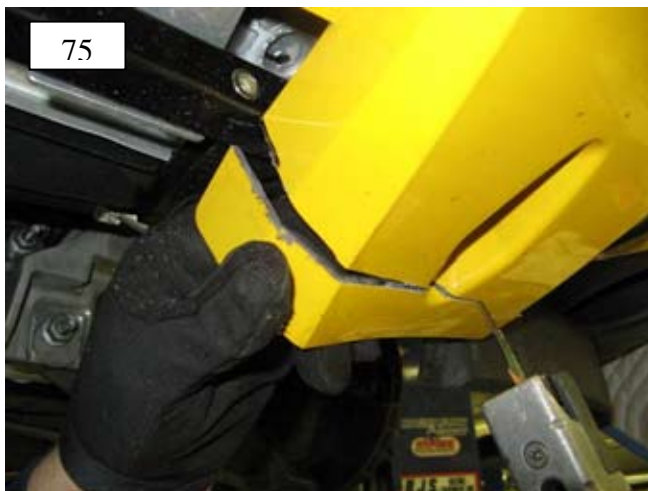
- Remove two screw tabs from previously removed lower front air shroud as shown (fig 72), and install on leading edge of front inner fender liners.(fig 73) Secure drivers side with factory 7mm bolt.



- Trim passenger side inner fender well clear charge tube. Reinstall factory brake duct and brake duct housing during reinstallation; securing with factory 7mm bolts. (fig 74)



- Measure overhang of front fascia to radiator support cross bar. No more than an inch or 1 ½ inches should need to be trimmed. Trim excess with air saw or razor knife and straight edge. (fig 75)





76

- Take front air dam and lay a straight edge across, from mounting tab to mounting tab. Score with a razor knife until through plastic. Remove and discard excess material and mounting tabs. (fig 76) Slide air dam between fascia and radiator support and attach to radiator cradle with factory 10mm bolts and plastic push in retaining clips. Attach front fascia to fascia extension tabs with factory 7mm bolts. (fig 77)

hile under the car, reattach factory sway bar taking care not to pinch or crush charge tube as shown. (fig 78)



78



77

- Install 4 in silicone coupler and tlbolt clamps to top of intercooler. Tighten with 11mm socket.



IC to Throttle Body Charge Pipe

LS2: Install silicone reducing coupler to MAF with 4.12 clamps as shown.

Install the other end of the reducing coupler to the 4-inch charge tube and insert the MAF and charge tube assembly into the intercooler using the other 4-inch coupler. Secure the charge tube to the intercooler and the remaining 4.38 clamps on the throttle body and the charge tube (fig 79a).



LS3: Begin by swapping over the factory card style MAF sensor to the new charge tube. This sensor can only bolt on one way. Be sure to notice the arrow pointing in the direction of the airflow to the throttle body and secure with supplied hardware.

Next, install the charge tube between the intercooler and throttle body using the two 4-inch sections of silicone and the supplied 4.38 t-bolt clamps and then connect MAF sensor. (fig 79b-d)



Restrictor Plate Installation



Your ECS kit is supplied with an air flow restrictor plate to regulate overall boost. This restrictor plate is strongly recommended on most stock applications.

Place restrictor plate inside of air filter, as pictured above, and let it rest inside the built-in groove of the air filter.

Next, attach the plastic inlet tube to the air filter and restrictor assembly, as shown below. Secure using the four self-tapping screws and the 4" worm clamp to the air filter side of the plastic inlet. Set assembly aside for later install.

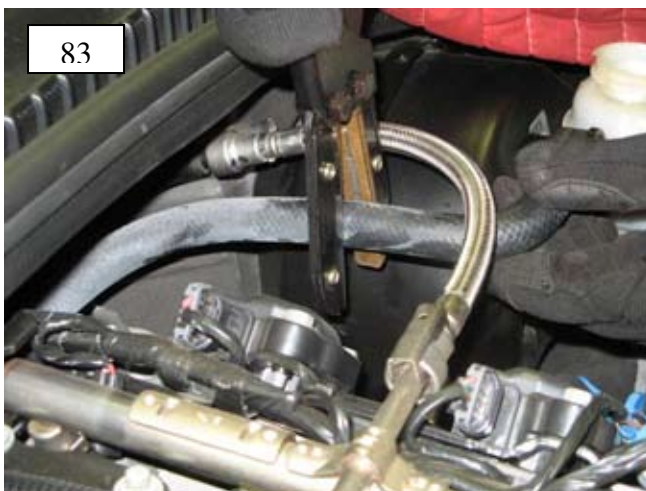


- At this point go back under the car, and tighten the t-bolt clamps on the 3 inch rubber coupler that attaches the intercooler to the U tube. (fig 80)



- Attach plastic inlet tube to air filter as shown, (fig 81) being sure that the aluminum restrictor plate is in place (restrictor plate is recommended in stock applications. DO NOT remove restrictor plate with out supporting modifications or engine damage can occur)

- Install inlet duct, filter end first then pulling back and attaching directly to blower with 10mm worm clamp. (fig 82)
- Remove vacuum hose from brake booster, cutting at shown. (figs 83, 84) Install supplied vacuum T fitting tightening with supplied ½ in worm clamps. These vacuum fittings will be used for your kits blow off valve and boost a pump.



- Install supplied 5/32nds hose on the forward vacuum barb fitting and run line around master cylinder and down drivers side inner fender well to vacuum fitting on blow off valve. Use supplied zip ties to secure line away from any heat sources or moving parts, being careful not to pinch or puncture line. (fig 84)



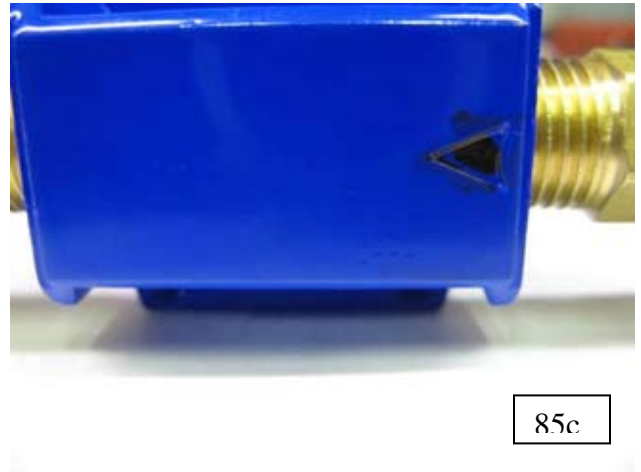


85a

- To install catch can assembly: Cut 2 – 2 ½ in pieces of supplied 3/8 fuel line and attach to either side of supplied PVC valve. Note directional arrow on PVC valve. Screw 3/8th barbed fittings into catch can with 9/16ths wrench. Attach PVC hose to barbed fitting on catch can again noting directional arrows on both PVC and catch can. Attach remainder of supplied 3/8th inch hose to opposite side of catch can. During installation, both arrows will be installed towards intake manifold vacuum port. (figs 85a,b,c)

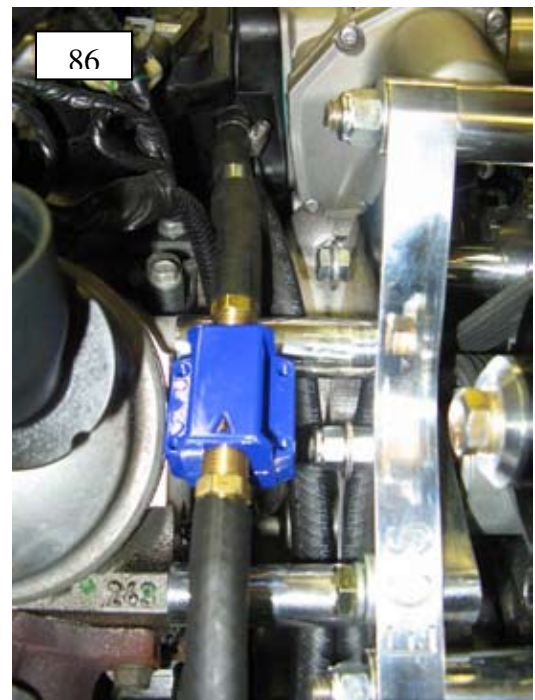


85b



85c

- Remove vacuum line, connecting intake manifold to valley cover, and attach catch can assembly with directional arrows pointing towards intake as shown. Use supplied 3/8th worm clamp to intake manifold fitting to secure. Catch can should rest in the middle of blower bracket as shown. (fig 86)



86



- Attach 3/8ths rubber hose from air cleaner, to the vent port on passenger side valve cover. Move EVAP solenoid back to factory location and reattach wiring harness to solenoid. (fig 87)



On dry sump equipped cars, you will route the 3/8 hose coming out of the air filter into the breather line coming out of the dry sump tank as shown as the pictures to the right.



Carefully remove factory spark plug wires and remove factory spark plugs. Install supplied NGK spark plugs. (TR-6 for LS2 and LS3 applications, TR-7 for LS7 applications) Verify gap is .038 on each. Install plugs and reattach factory spark plug wires. Use only these specific spark plugs if you ever need replacement.

Installing Injectors: Depending on motor, different injectors will be used. On LS2 cars, Siemens 60lb injectors and necessary spacers with hardware are supplied with the kit. LS3 and LS7 applications will receive stock height Siemens 60lbs injectors along with proper injector harness adapters.

- Remove electrical harness from fuel rail. (4 Harness clips) Disconnect the 8 fuel injector plugs from injectors. Remove 4 10mm studs attaching fuel rail to manifold. On drivers side of manifold, remove 2nd manifold bolt front of engine, and remove ground strap. Reinstall bolt and tighten. (fig 89)

- On the front of drivers side fuel rail remove black cap covering the fuel rail Schrader valve. Using a rag underneath Schrader, depress Schrader valve with a small screw driver releasing any remaining pressure in fuel rail. Replace cap on Schrader.



- With fuel line removal tool, remove braided fuel line on drivers side fuel rail.



- Remove fuel rail from intake manifold, pulling injectors from manifold. (fig 90)
- Using a screwdriver, slide injector retaining clips off injectors and remove stock injectors from rail. Using a small screwdriver or pick tool, carefully remove bottom o-rings from supplied Motron 60's, and replace with supplied (brown) o-rings. (This is necessary with all Motron injector applications). Be careful not to damage o-ring or injector during this process. (fig 91)

- Use WD-40 (or equivalent) to lubricate o-rings (both o-rings), and install injectors into fuel rail. Reinstall injector retaining clips on all injectors and seat fuel rail back on car, installing aluminum spacers and lock washers as shown (10mm socket). Apply pressure on fuel rail above each injector to ensure all injectors are seated properly. Use caution not to pinch or damage o-rings during this process. (fig 92)



- Install provided injector adapter harness' between injector and factory injector plugs. Using a small screwdriver, depress each injector harness plug, as shown until an audible 'click' is heard. This locks the harness on the factor injector plug.



- Reinstall fuel line and fuel line retaining clip. Reconnect the 4 factory harness clips to fuel rail.

ECS Fuel Pump Booster Instructions C6

Locate wiring harness going to fuse box. It should have blue tape wrapped around the plastic loom, find the heavy GRAY wire on either side of the connector.



Cut the heavy GRAY wire on either side of the connector leaving enough room to strip the wire for the new connector.

Mounting of ECS bap is really up to the installers imagination the following are just general guidelines:

Dry Sump Car: Mount ECS bap in the inner fender by the oil reservoir

Wet Sump Car: Mount ECS bap next to the battery on the inner fender



Now on the ECS bap locate the red wire with the fuse attached, using the supplied connectors run that wire to the end of the heavy GRAY wire going toward the fuse box.

Attach the ORANGE wire from the ECS bap to the other end of the heavy GRAY wire going toward the fuel pump.



Next using the supplied hardware ground the **BLACK** wire from the ECS bap to the existing stud on the frame

Find a suitable location for the supplied Hobbs switch near a vacuum source and install the supplied vacuum tee and run supplied 5/32 vacuum hose from the installed vacuum tee to the barb fitting on the hobbs switch.

The remaining brown wire from ECS bap goes to one of the hobbs switch terminals, it does **NOT** matter which one for polarity is not important.

Using the supplied **BLACK** wire and terminals run a ground up to the other hobbs switch terminal and to the same ground stud used for the BAP

Recover wiring harness with factory loom, and cover with electrical tape as necessary.

ECS BAP Installation Complete!!!

- Recover wiring harness with factory loom, and cover with electrical tape as necessary.
- Reinstall fuse panel cover
- Reinstall battery and battery hold down.
- Install front black shield with supplied dzus fasteners. (fig 104)
- Install supplied breather cap on oil filler neck
- Reinstall front tires.
- Reinstall Fuel rail covers.
- Refill factory fluids, including:
 - Anti-freeze
 - Power steering fluid
 - Engine oil
 - Head unit oil



Congratulations!!! The kit installation is complete.

DO NOT START YOUR CAR WITH OUT COMPUTER TUNING. ENGINE DAMAGE WILL OCCUR. PLEASE SEE A QUALIFIED TUNER IN YOUR AREA TO ENSURE ALL PARAMETERS ARE WITHIN TOLLERANCES.

Upon start up...

- Check for fuel leaks
- Belt tracking and alignment
- Oil leaks
- Any rattles or unusual noises

Thank you for purchasing the ECS Supercharger kit for your C6 Corvette. For more information on maintenance and care of your ECS kit and other upgrades available for your car, visit us online at www.eastcoastsupercharging.com.



Important Information
Urgent Reading

SALES ◊ COMPLETE SERVICES ◊ PARTS ◊ PHONE: 609-752-0321 ◊ FAX: 609-752-0320

Paxton 1500SL / 2200SL Maintenance Schedule

Check the fluid level using the dipstick periodically. Initial supercharger fluid change must be performed at 2,500 miles.

The supercharger fluid must be changed every 3,500 miles maximum thereafter. Drain the fluid and refill the unit with approximately 4 o.z. of Paxton SL lubricating fluid and then confirm proper oil level using the dipstick. Do not overfill.

1. Ensure that the .06 in. copper sealing washer is located on the dipstick base.
2. Thread the clean dipstick into the unit until it seals.
3. Once the dipstick has seated, remove the dipstick from the unit.
4. Fluid should register in the crosshatched area on the dipstick.
5. **DO NOT OVERFILL!** Drain excess fluid from the unit if it is above the maximum level on the dipstick.

WARNING: Use of any fluid other than special Paxton lubricant will void the warranty and may cause component failure.

Important Information ◊ ***Urgent Reading***

562 ROUTE 539 ◊ CREAM RIDGE, NJ, 08514 ◊ WWW.EASTCOASTSUPERCHARGING.COM