

4.7L Grand Cherokee Install

Preinstall

1. Tuning is required when using a pulley smaller than 3.00". An AFR gauge is recommended when tuning the fuel map. We are happy to assist in making tuning adjustments. Please contact us to setup an appointment.
2. Fuel
 - 2.1. Be sure to run highest octane available at the pump! This is critical for a forced-induction vehicle. If most of the tank is full of lower octane fuel, postpone install until filled up with high octane fuel.
 - 2.2. If you would like to replace your fuel injectors, replace them before installing the supercharger.
3. Tools needed
 - 3.1. Normal hand tools: Flat head screwdriver, 10, 12, 13, and 15mm sockets to remove the throttle body and power steering bolts.
 - 3.2. Fuel line disconnect tool (5/16") to remove the connector on fuel line
 - 3.3. All the Boosted Technologies parts use stainless allen head socket capscrews. You will need 4mm, 5mm, 6mm and 8mm sockets.
 - 3.4. Rags to clean gasket surfaces, duct tape to cover intake manifold inlet from dropped parts.
 - 3.5. Safety glasses to keep fuel out of your eyes when you disconnect the fuel line. It is under 50 PSI!

Stock Removal

<ol style="list-style-type: none">1. Disconnect positive (red) terminal on battery<ol style="list-style-type: none">1.1. Place non-conductive material over terminal	
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2. Remove filter housing and intake tube (
3. Figure 1)
 - 3.1. Loosen hose clamp on driver side of intake tube (8mm nut driver)
 - 3.2. Loosen clamp on fresh air vent hose at connection to plastic line (beneath intake tube) (8mm nut driver)
 - 3.3. Lift filter housing straight up to remove

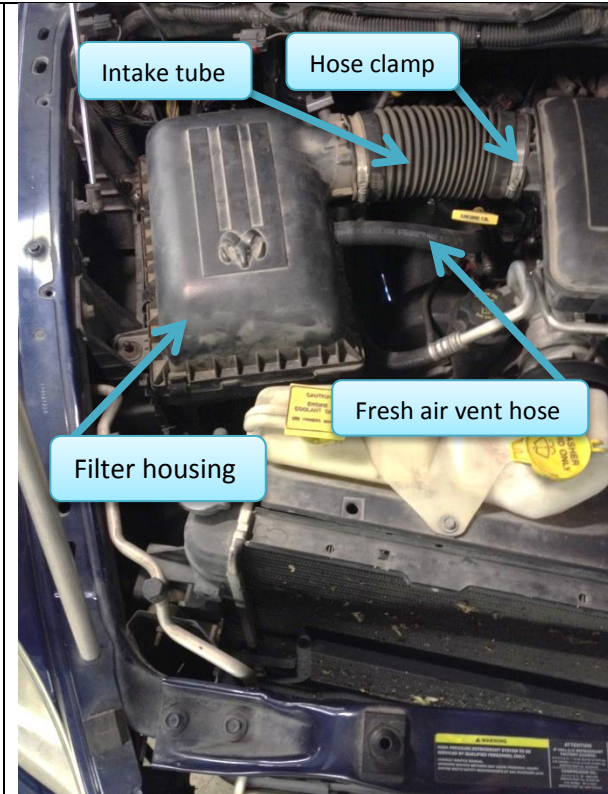


Figure 1: Filter housing and intake tube.

- 3.4. After removal (Figure 2)



Figure 2: Filter housing and intake tube removed.

- 4. Remove upper intake
 - 4.1. Disconnect IAT (Inlet Air Temperature) sensor
 - 4.2. Remove two bolts holding down upper intake
 - 4.2.1. One on passenger side (Figure 3)

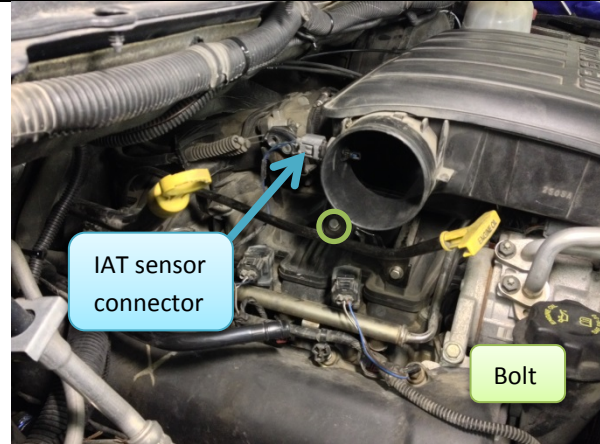


Figure 3: Passenger side upper intake.

- 4.2.2. One Driver side (Figure 4)

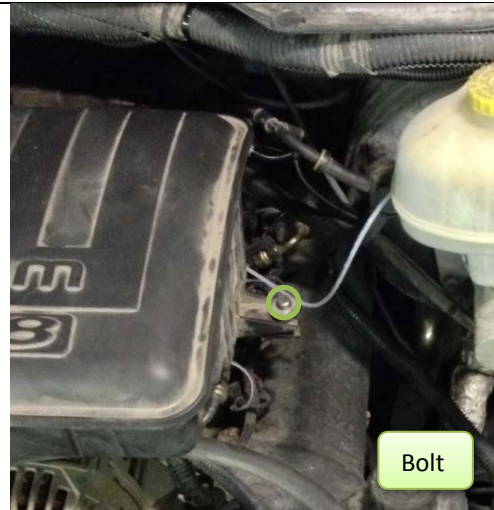


Figure 4: Driver side upper intake.

- 4.3. Loosen hose clamp on rear of intake box near throttle body (Figure 5)
 - 4.4. Slide upper intake forward and up to remove



Figure 5: Upper intake after removal.

5. Remove intake box support bracket
 - 5.1. Remove two 10 mm bolts (Figure 6)
 - 5.2. Lift support bracket up to remove

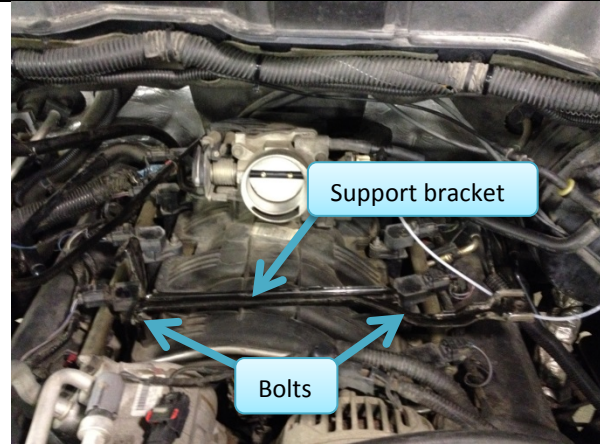


Figure 6: Upper intake support bracket.

6. Remove throttle body
 - 6.1. Disconnect throttle body wire connectors
 - 6.1.1. Slide red tab up then press black tab (black connector)
 - 6.1.2. Press tab and pull off (white connector)

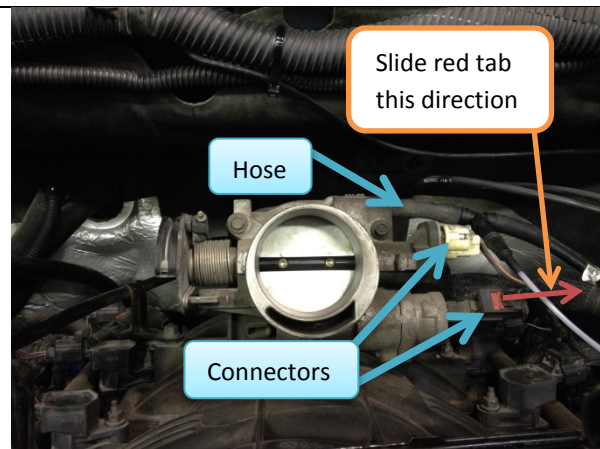


Figure 7: Throttle body hose and connectors.

7. Release throttle cables (Figure 8)
 - 7.1. Release throttle cable
 - 7.1.1. Rotate throttle counter clockwise to release cable tension

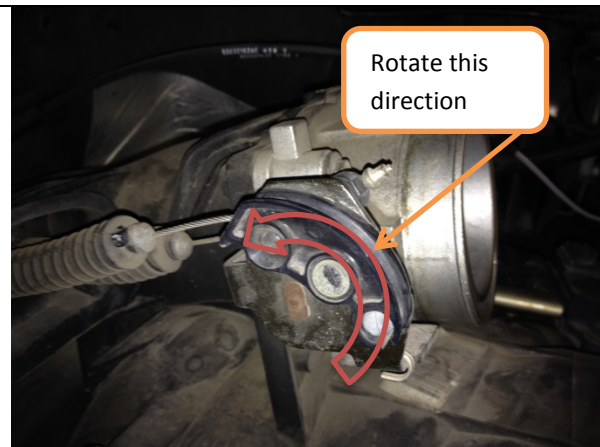

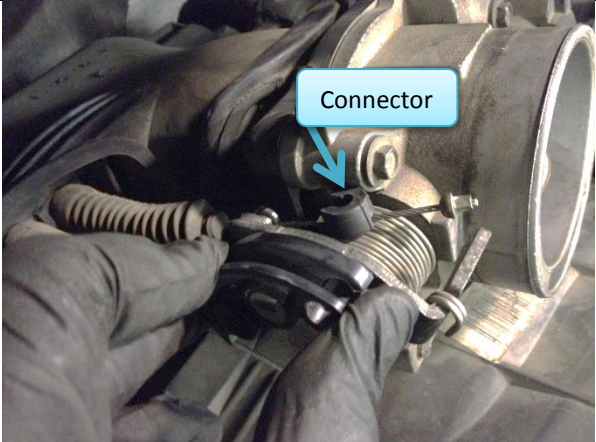
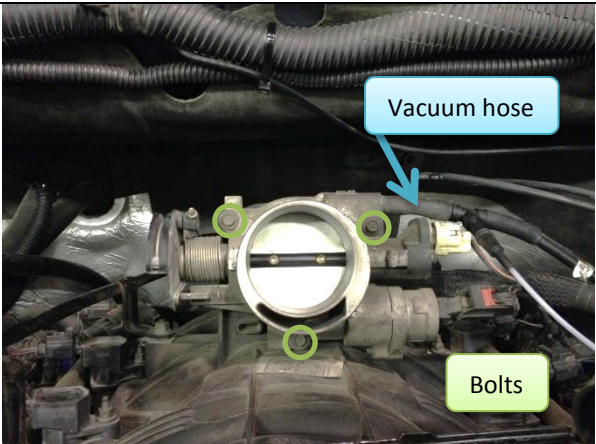


Figure 8: Throttle cables on side of throttle body.

<p>7.1.2. Lift cable out of channel and place as shown in Figure 9 with cable in notch</p> <p>7.1.3. Slide cable barrel end out through hole</p>	 <p>Figure 9: Throttle cable out of channel.</p>
<p>7.2. Disconnect cruise control wire</p> <p>7.2.1. Again, rotate throttle to allow cable removal</p> <p>7.2.2. Slide connector off</p> <p>7.2.2.1. Slide parallel to cable</p>	 <p>Figure 10: Cruise control connector after disconnecting.</p>
<p>7.3. Disconnect vacuum hose</p> <p>7.4. Remove three 8mm bolts (Figure 11)</p> <p>7.5. Pull throttle body forward to remove</p>	 <p>Figure 11: Throttle body bolts.</p>

8. Disconnect vacuum hoses at locations shown in Figure 12

8.1. Hoses may differ from photo

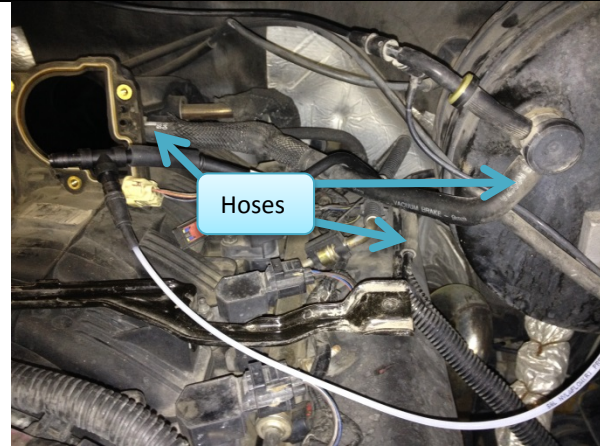


Figure 12: Vacuum hoses to disconnect.

9. Remove EGR tube when removing intake
- 9.1. Disconnect tube from EGR valve on rear of engine

9.1.1. Two bolts hold the tube to the valve

9.1.2. Save the gasket if reusing rather than buying a new gasket



Figure 13: EGR hose on intake.

10. Remove dip stick hold down nut and coil pack bolts

10.1. Remove oil dip stick nut (10mm)

10.2. Remove eight bolts holding down coil packs (10mm)

10.2.1. Four on each side of engine

10.3. Disconnect coil pack wire connectors

10.3.1. Press tab and pull off

10.4. Lift coil packs up to remove

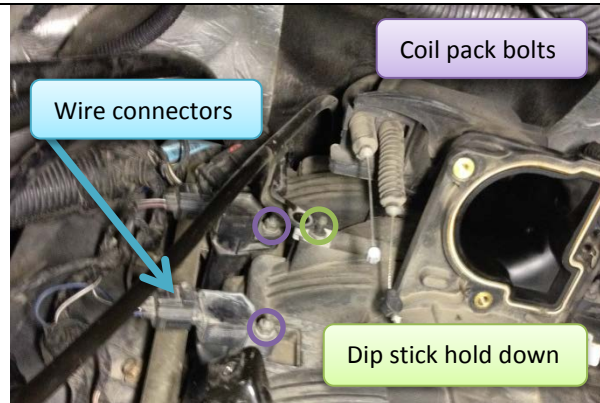





Figure 14: Coil pack bolts, wire connectors and oil dip stick nut.

<p>11. Disconnect fuel line and remove fuel rail</p> <p>11.1. Remove fuel line safety clip</p> <p>11.1.1. Place a flathead screwdriver under clip at location as shown in Figure 14 and rotate and lift clip up</p>	 <p>Figure 15: Fuel line safety clip.</p>
<p>11.1.2. Safety clip removed (Figure 15)</p>	 <p>Figure 16: Fuel line safety clip after removal.</p>
<p>11.2. Disconnect fuel line</p> <p>11.2.1. Use 5/16" fuel line disconnect tool to release</p>	
<p>11.3. Disconnect fuel injector connectors</p> <p>11.3.1. Slide red tab up (Figure 16) and press black tab while pulling off</p>	 <p>Figure 17: Fuel injector wire connectors.</p>

- 11.4. Remove four fuel rail bolts (Figure 17)
11.5. Lift fuel rail up with injectors vertically to remove
11.5.1. Lift rail evenly straight up to keep injectors from tweaking sideways while removing

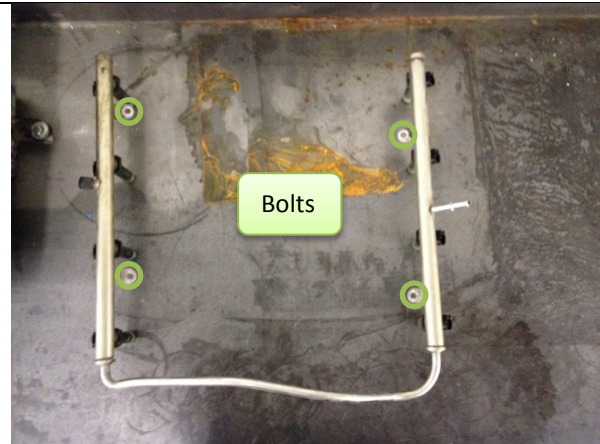


Figure 18: Fuel rail bolt hold down locations.

12. Disconnect MAP sensor connector and remove from intake manifold

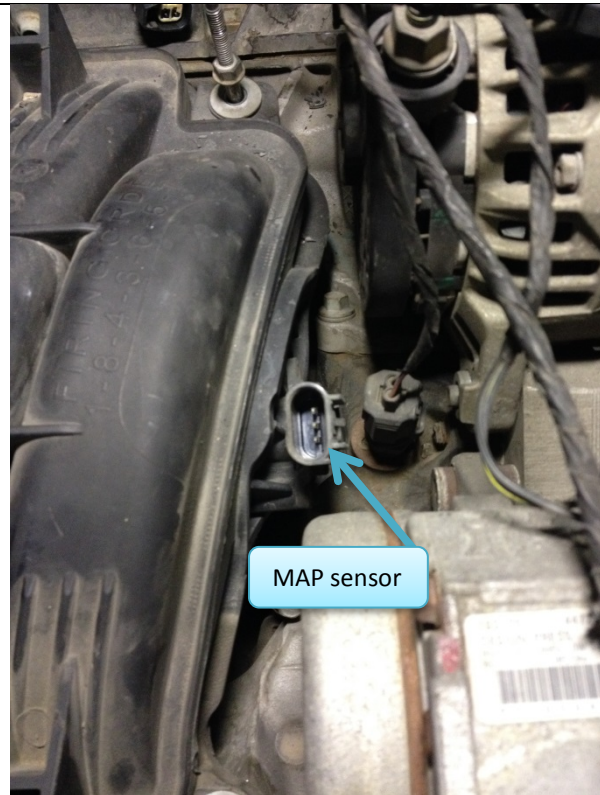


Figure 19: MAP sensor connector on intake manifold.

13. Remove serpentine belt
 - 13.1. Remove tension on belt
 - 13.1.1. Use 15mm socket over bolt head on tensioner pulley
 - 13.1.2. Rotate clockwise to remove tension on belt
 - 13.2. Slide belt off a pulley to remove



14. Remove alternator
 - 14.1. Disconnect alternator charging wire nut (Figure 19)
 - 14.2. Disconnect alternator wire connector (Figure 19)

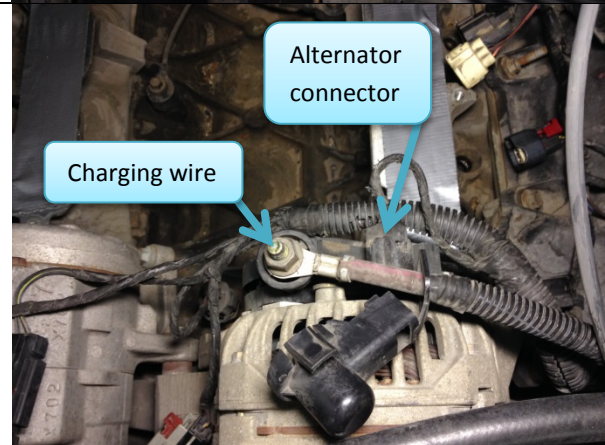


Figure 20: Alternator wire connector and charging wire.

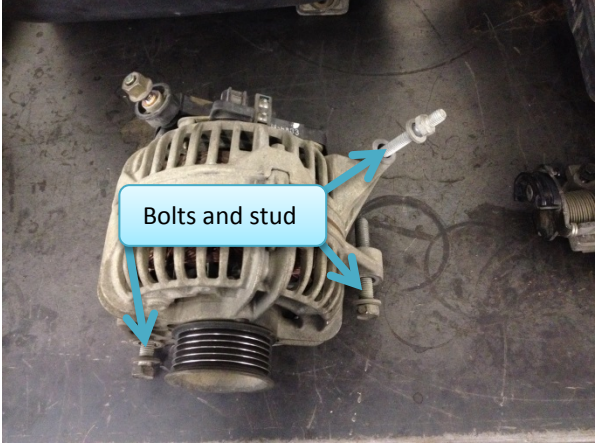
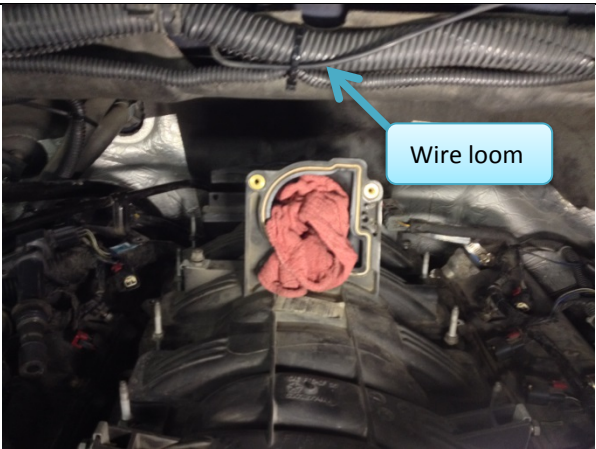

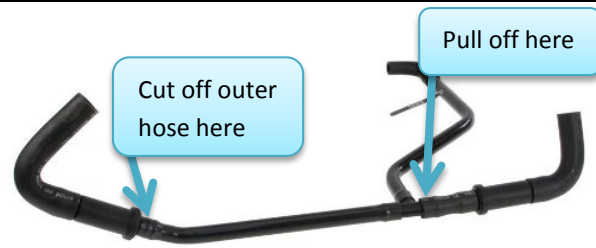
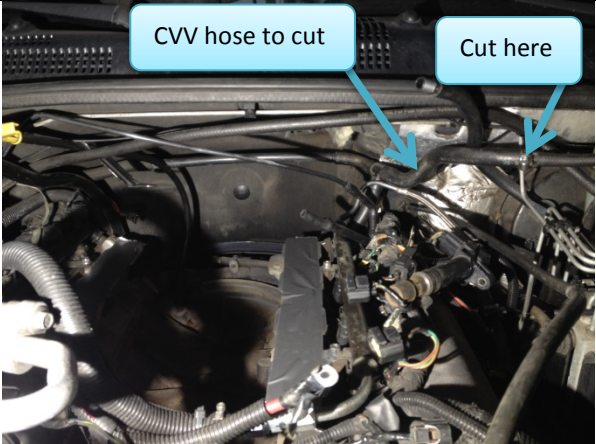
<p>14.3. Remove alternator bolts and stud (Figure 20)</p> <p>14.3.1. Remove two bolts on front</p> <p>14.3.2. Remove stud facing driver side</p>	 <p>Figure 21: Alternator bolt locations.</p>
<p>15. Remove intake manifold</p> <p>15.1. Slide throttle cables out from slot on intake manifold</p> <p>15.2. Place throttle cables out of the way over to driver side</p> <p>15.3. Disconnect any hoses on intake manifold</p> <p>15.4. Lift out intake manifold</p> <p>15.4.1. Raise up front first to clear AC compressor</p> <p>15.4.2. Slide out keeping rear down</p> <p>15.4.3. Slide under wire loom on firewall (Figure 21)</p>	 <p>Figure 22: Intake manifold with wire loom above.</p>
<p>16. Clean intake ports</p> <p>16.1. Place lint free cloths into each port</p> <p>16.2. Clean top area of ports with brake cleaner and a lint free cloth</p> <p>16.2.1. Ensure debris does not fall into ports</p>	
<p>17. Cover intake ports with tape</p>	

	Figure 23: Intake ports covered.
<p>18. Check spark plugs and gaps</p> <p>18.1. Check spark plugs condition and replace if needed</p> <p>18.2. Spark plugs should be gapped to 0.030"</p>	
<p>19. Remove rear Crank Case Vent Valve hose assembly (Only if hose looks like Figure 23, typically 2002+ only)</p> <p>19.1. Pop off two hoses from rear of engine</p> <p>19.2. Pull Teed section out of hose on driver side of assembly</p> <p>19.3. Carefully cut off outer plastic hose from breather</p> <p>19.3.1. Damage to breather may prevent proper seal with new hose. Replace if damaged.</p>	 <p>Figure 24: Late model CVV hose assembly.</p>
<p>20. Install included CVV teed section of hose in place of plastic section that was removed in step 18 (2002+ only)</p> <p>20.1. Secure new hose out of the way, up on windshield</p>	
<p>21. Install CVV hose extension (1999-2001 only)</p> <p>21.1. Cut stock hose coming from rear CVV vents about 24" from rear vent</p>	 <p>Figure 25: CVV hose stock line cut.</p>

Supercharger installation

22. Prepare fuel line

- 22.1. Cut and remove section of hard tube between rails
 - 22.1.1. Leave at least 3" of tube on each side
 - 22.1.2. Deburr inner and outer edges of tube after cutting
 - 22.1.3. Ensure cut is as square as possible to ensure a good seal and prevent a fuel leak
 - 22.1.3.1. Recommended cut to within $\pm 1^\circ$ of square
 - 22.1.4. Remove debris from tube
 - 22.1.4.1. Flush tube out multiple times to ensure all particles are removed
 - 22.1.4.2. Any debris in fuel rail can clog injectors and lead to engine damage

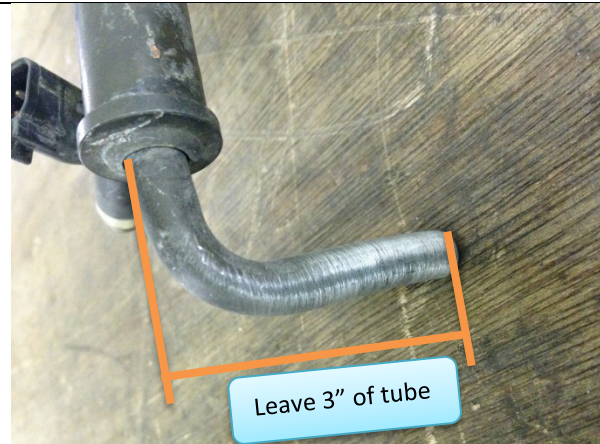


Figure 26: Fuel crossover after cutting.

23. Add AN-06 adapters to rails

- 23.1. Watching an instructional video of this process is recommended. Instructions and videos can be found by searching the internet for "Assembly Instructions for Versil-Flare Tube Fitting".
- 23.2. Hose and fittings should arrive assembled. Take note of how the parts are ordered and their orientation.
- 23.3. Remove the hose and two black fittings as one piece from between the two adapters
- 23.4. Slide the nut then the ferrule over the tube where the cut was made in step 21
 - 23.4.1. The ferrule's tapered edge must face the nut
- 23.5. Hold tube against adapter and finger tighten nut
- 23.6. Mark a straight line across both the nut and adapter
- 23.7. While holding tube against adapter, tighten nut 1 1/4 turns total
- 23.8. Hose clamps are not required
- 23.9. The Versil-Flare fitting is designed for a maximum of 10 reassemblies.

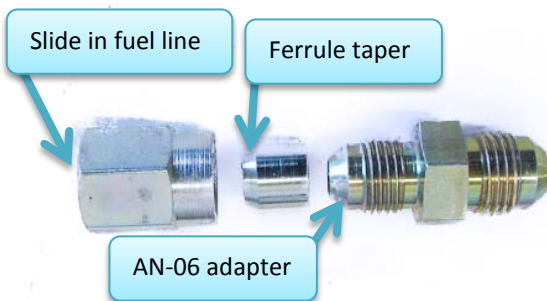


Figure 27: Correct orientation of ferrule with tapered edge towards nut.

24. Prepare intake ports

24.1. Remove lint free cloths from ports



Figure 28: Clean intake ports.

25. Install eight O-rings on bottom of intake tub

25.1. Ensure o-rings are not damaged when installing and they are all the way in the gland



Figure 29: O-rings on bottom of intake tub.


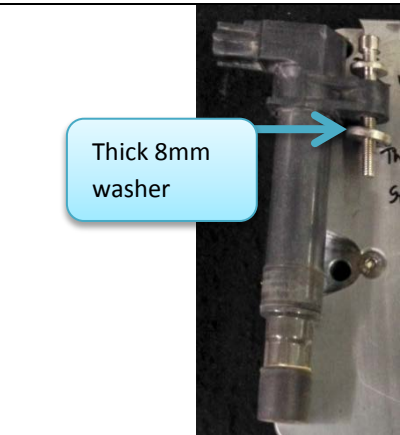

26. Install intake tub assembly


26.1. Carefully lower the intake assembly over the ports

26.2. Install included 6x45mm FHCS bolts in the two corners, do not torque yet



Figure 30: Intake tub assembly installed.

<p>27. Install fuel injectors and rail</p> <p>27.1. Lubricate fuel injector top and bottom O-rings and install</p> <p>27.2. Install each separated fuel rail over injectors</p> <p>27.3. Use included four bolts and washers to secure fuel rail</p> <p>27.4. Install crossover hose between fuel rails</p> <p>27.4.1. Form an S-bend with the passenger side up and driver side straight (Figure 28)</p> <p>27.4.2. This will allow the fuel hose to pass under the supercharger nose</p>	 <p>Figure 31: New fuel crossover hose in an "S" bend under supercharger nose.</p>
<p>28. Install coil packs</p> <p>28.1. Thick 8mm washers act as a spacer and go under coil support, while thin washers go above support (Figure 29)</p> <p>28.2. Install coil packs over sparkplugs and tighten bolts</p> <p>28.2.1. Torque all bolts and FHCS from step 25</p> <p>28.2.2. On either rear passenger side coil pack place braided ground wire ring terminal under thin washer to secure it (Figure 30)</p> <p>28.3. Connect wire connectors to coil packs and press on till they click</p> <p>28.3.1. Check they are locked on by gently trying to pull the connectors off</p>	 <p>Thick 8mm washer</p> <p>Figure 32: Coil pack with washers installed correctly.</p>  <p>Ground terminal</p> <p>Figure 33: Ground wire terminal secured to coil pack.</p>
<p>29. Bend oil dip stick tube out of the way</p> <p>29.1. Bend dip stick towards passenger side of engine bay an inch or two</p>	

<p>29.2. If it is in the way during the supercharger install bend it till it clears</p>	
<p>30. Route throttle cable around back side intake plate and lay out of the way on the driver side</p> <p>30.1. These should sit between intake plate and rear intake tube once it is installed</p>	
<p>31. Install supercharger gasket</p> <p>31.1. Place supercharger gasket on intake plate with red rings facing up (Figure 32)</p> <p>31.1.1. Use RTV to hold gasket in place with three small spots</p> <p>31.2. Carefully slide supercharger in place</p> <p>31.2.1. This is easier with two people</p> <p>31.2.2. The gasket is delicate and can tear</p>	<div data-bbox="812 525 1234 619" data-label="Text"> <p>Apply RTV on aluminum plate here, below gasket</p> </div>  <p>Figure 34: Supercharger gasket aligned and red rings facing up.</p>

32. Test fit supercharger and bend AC lines if needed
- 32.1. Place the supercharger on the intake plate and line up bolt holes in front
 - 32.2. If AC line prevents alignment with holes bend it with gentle hits with a soft hammer or a tube bending tool
 - 32.2.1. The lines may need to be bent over about 1/4" to 1/2" towards the passenger side
 - 32.2.2. Be careful, the aluminum pipes are soft and can kink or split by bending too far or using a hard object to hit it
 - 32.3. Remove supercharger to install intake tube

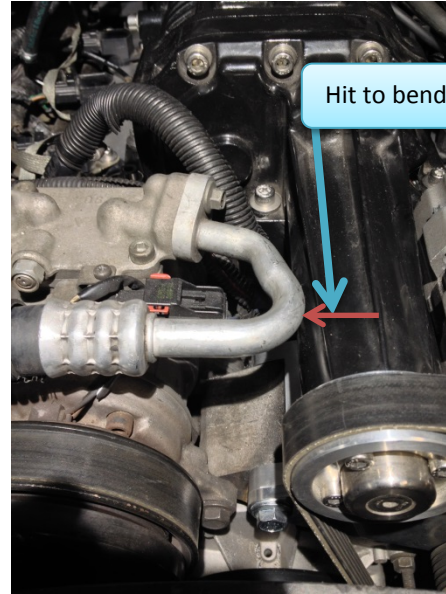


Figure 35: AC line may interfere.

33. Attach intake tube to supercharger (Intake matches non-EGR one shown in Figure 35)
- 33.1. Install intake gasket on supercharger flange (Figure 37)
 - 33.2. Insert rear tube bolts through intake tube flange and gasket holes.
 - 33.3. Thread bolts into rear supercharger flange
 - 33.4. Torque bolts



Figure 36: Non-EGR intake hose, sits on driver side.

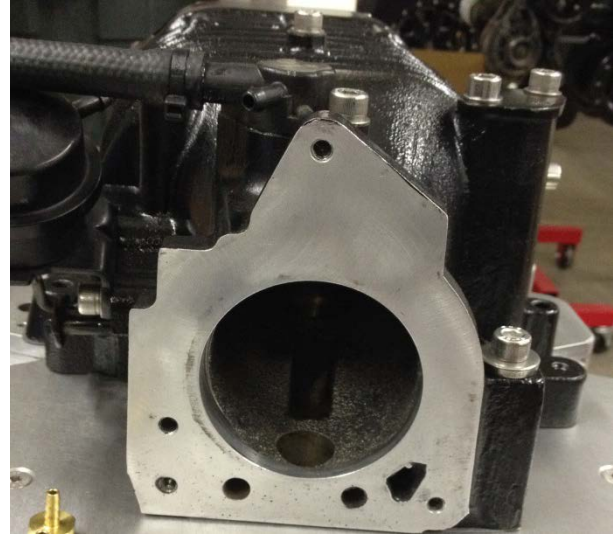


Figure 37: Rear supercharger flange.



Figure 38: Supercharger intake gasket installed.

34. Attach intake tube to supercharger (**Intake matches EGR one shown in Figure 38**)

- 34.1. Remove PCV cover plate on supercharger (Figure 38), this will go on top of support bracket
- 34.2. Install intake gasket on supercharger flange (Figure 37)
- 34.3. Insert rear tube bolts through intake tube flange and gasket holes.
- 34.4. Thread bolts into rear supercharger flange
- 34.5. Install bolts and PCV plate on support bracket
- 34.6. Torque bolts

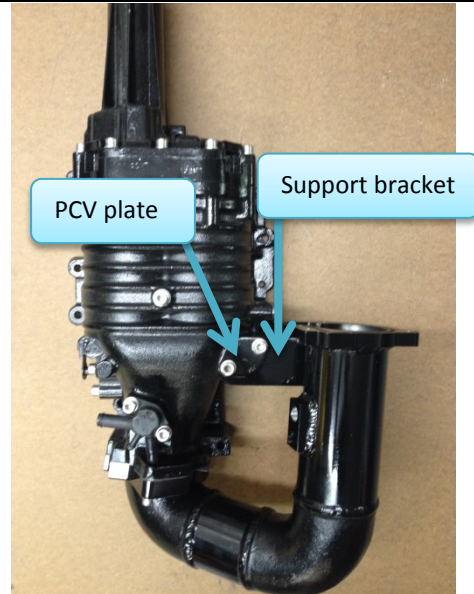


Figure 39: Supercharger intake EGR, sits on passenger side.

- 34.7. Install EGR fitting on intake tube
 - 34.7.1. Thread fitting into port on lower side of intake tube until tight
 - 34.7.2. Fitting is tapered and will get tighter/seal better as it is threaded on
- 34.8. Install EGR hose on fitting till very snug and bend out of way for install in vehicle
- 34.9. Install EGR plate on EGR
 - 34.9.1. Reuse or use new EGR gasket under provided adapter plate
 - 34.9.2. Ensure adapter fitting is tight on plate and facing up as shown in Figure 39
 - 34.9.3. Torque bolts

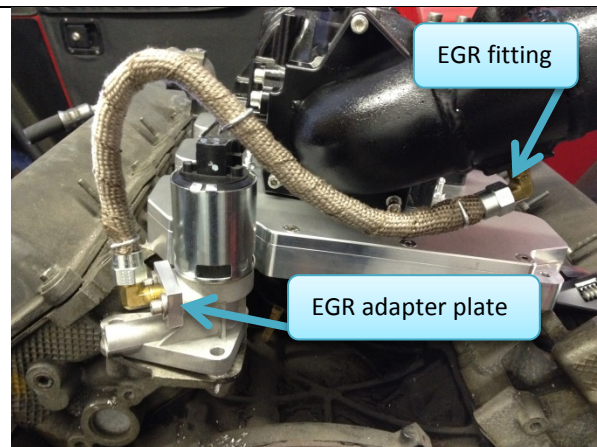
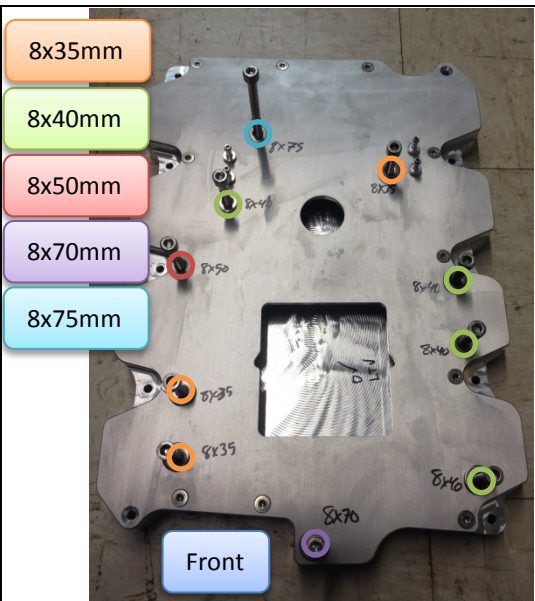
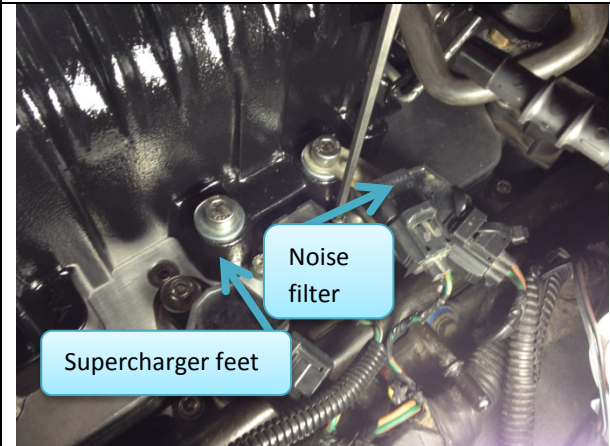
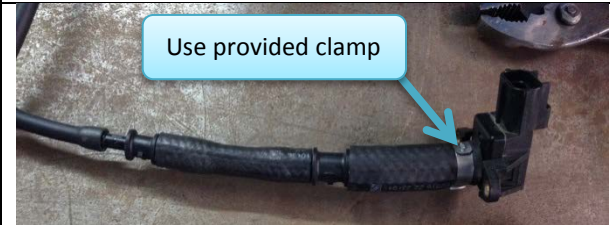


Figure 40: EGR hose and fittings installed.

<p>35. Install supercharger</p> <p>35.1. Install bolts starting from the back and working forward, do not torque yet</p> <p>35.1.1. Apply Loctite 243 to lower threads on all bolts</p> <p>35.1.2. Shifting the supercharger may be required to align all bolts and holes</p> <p>35.1.3. Once all bolts are threaded in, torque bolts</p> <p>35.2. Install EGR hose to EGR adapter/fitting on rear driver side of engine as shown in Figure 38</p>	 <p>Figure 41: Bolt locations and sizes for supercharger hold downs.</p>
<p>36. Reinstall fuel line and clip on fuel rail</p> <p>36.1. Ensure connector clicks and is secure</p> <p>36.2. Test connection by pulling on it to ensure it does not pull off</p>	
<p>37. Attach two noise filters to bolts on supercharger feet</p>	 <p>Figure 42: MAP and knock sensors on driver side.</p>
<p>38. Install MAP sensor hose and wire connector</p> <p>38.1. Use provided hose clamp to secure hose to MAP sensor port</p> <p>38.2. Attach small hose to port (boost) on intake plate</p>	 <p>Figure 43: MAP sensor hose connection.</p>

39. Install included alternator and brackets
 - 39.1. Ensure they are not mixed up during installation
 - 39.2. There is one bracket for each side of the alternator
 - 39.3. Install idler pulley or check that bolt is torqued
 - 39.4. Install brackets onto engine as shown in the figures to the right
 - 39.5. Install alternator as low as possible and not touching supercharger nose
 - 39.6. Reattach alternator charge wire and torque nut
 - 39.6.1. Ensure nothing conductive can contact exposed charge wire/nut
 - 39.7. Place alternator wire connector out of the way since it is not attached to new alternator
 - 39.8. Torque all bolts



Figure 44: Alternator bracket installed.

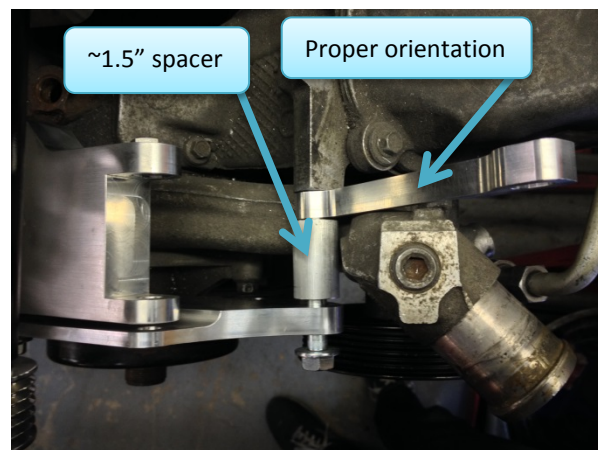


Figure 45: Alternator bracket installed without alternator.

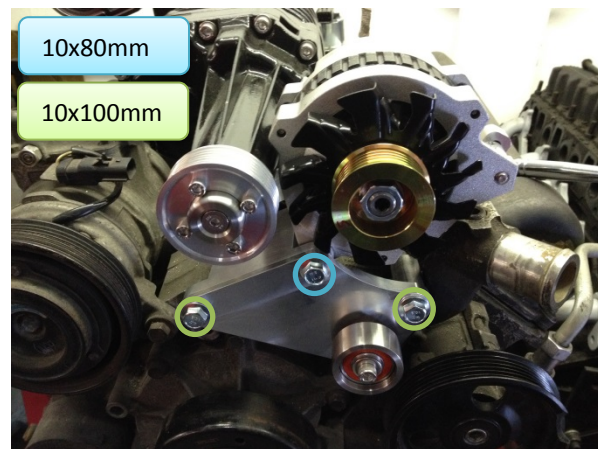
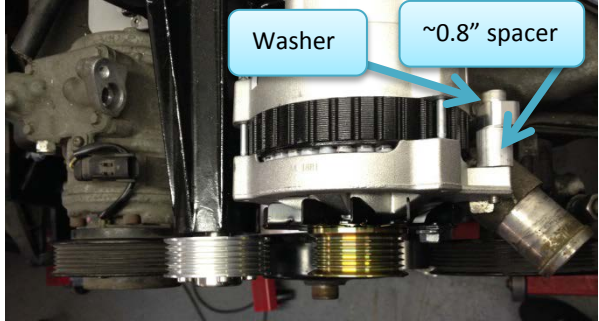
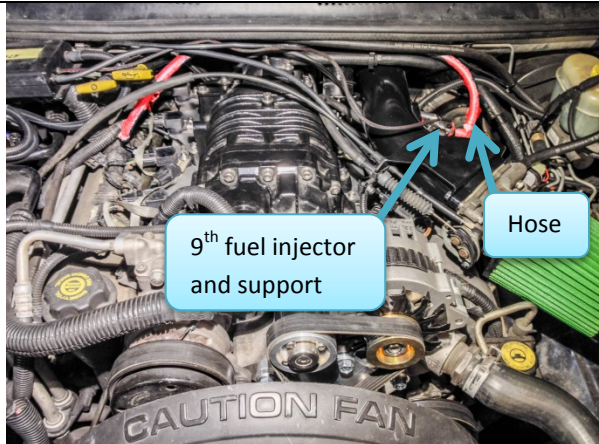
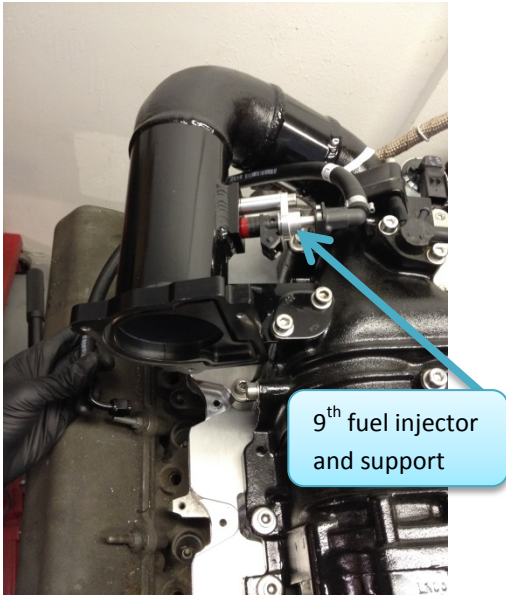
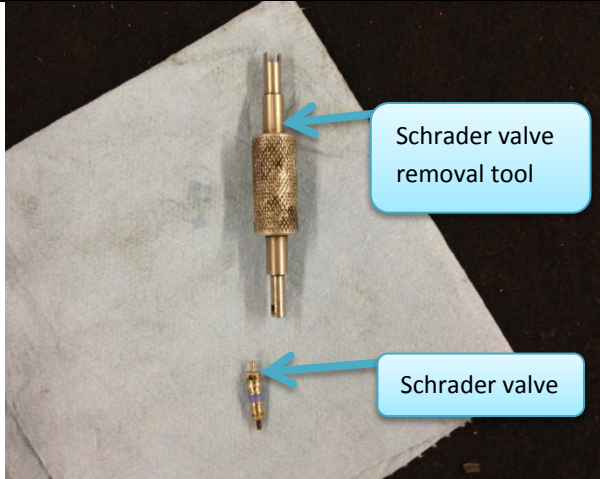


Figure 46: Alternator and bracket installed.

	 <p>Figure 47: Alternator support bracket.</p>
<p>40. Install 9th fuel injector</p> <p>40.1. Fuel injector and stand come pre-assembled</p> <p>40.1.1. Remove rubber piece on bottom of bolt</p> <p>40.2. Lubricate O-rings on fuel injector with Vaseline or similar lubricant</p> <p>40.3. Slide fuel injector into port on intake tube</p> <p>40.4. Slide fuel line adapter over fuel injector</p> <p>40.5. Slide bracket and standoff with bolt over adapter</p> <p>40.6. Thread bolt into threads on side of intake tube</p> <p>40.6.1. Make sure the bolt is not cross threaded before tightening this down</p> <p>40.7. Torque the bolt</p> <p>40.7.1. Fuel injector may rotate while tightening bolt</p>	 <p>Figure 48: Properly installed 9th fuel injector and hose, non-EGR intake tube.</p>  <p>Figure 49: Properly installed 9th fuel injector and hose, EGR intake tube.</p>

<p>41. Install 9th fuel injector fuel hose</p> <p>41.1. Remove cap over port from side of fuel rail on passenger side</p> <p>41.2. Remove valve with Schrader valve removal tool (Figure 38)</p> <p>41.2.1. This is very important, if this step is missed fuel will not reach 9th fuel injector</p> <p>41.3. Attach 90° screw on fitting of fuel hose to port on fuel rail</p> <p>41.4. Slide 90° push connect fitting over fuel line adapter on 9th fuel injector</p> <p>41.4.1. Ensure both clips snap on</p> <p>41.4.2. Test that connector is on all the way by gently trying to pull connector off</p> <p>41.5. Tighten screw on fitting to fuel rail till tight</p> <p>41.6. Zip tie fuel line out of the way, to prevent it rubbing or touching anything hot</p>	 <p>Schrader valve removal tool</p> <p>Schrader valve</p> <p>Figure 50: Schrader valve and removal tool.</p>
<p>42. Test fuel system for leaks</p> <p>42.1. Clean battery terminals, reconnect positive terminal and tighten nut</p> <p>42.2. Switching key to on for several seconds to pressurize fuel system</p> <p>42.2.1. Do this several times</p> <p>42.2.2. Do not start engine</p> <p>42.3. Check for fuel smell or liquid at all fuel injectors and fuel line connections</p> <p>42.4. Disconnect battery cable again</p>	

43. Install throttle body

43.1. Install throttle body o-ring from stock intake in intake tube flange

43.2. Install three bolts and 6mm washers

43.2.1. Place one washer between bolt head and throttle body holes

43.2.2. Place two washers between throttle body and flange to space it away

43.2.3. 8mm washers and serrated nuts are used to install throttle cable bracket

43.3. Torque bolts

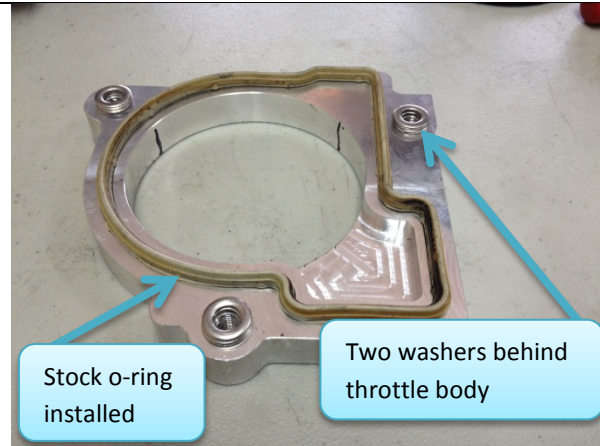


Figure 51: Rear intake tube throttle body flange.

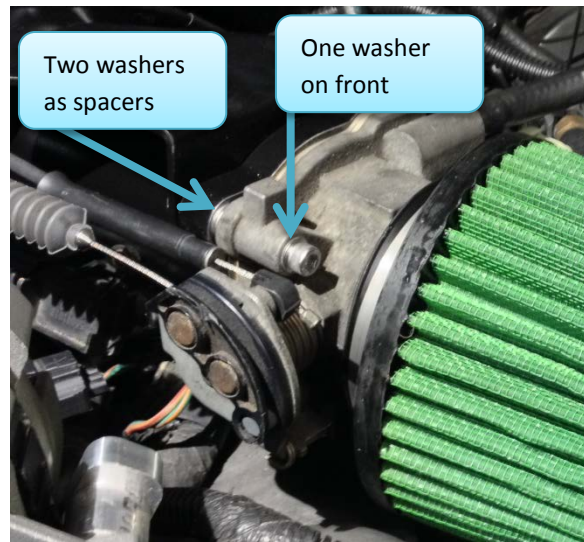


Figure 52: Throttle body installed

44. Install throttle cable bracket on intake tube
- 44.1. Install bracket as shown in Figure 52
 - 44.1.1. Bracket secures with end of the throttle body bolts from step 42.2
 - 44.1.2. Place 8mm washer over bolt first then install nut
 - 44.1.3. Torque nuts

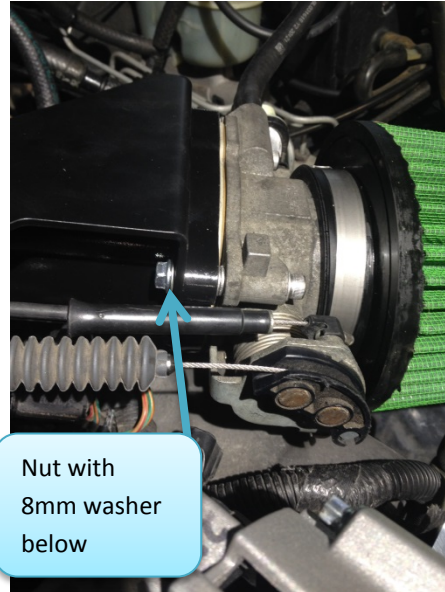
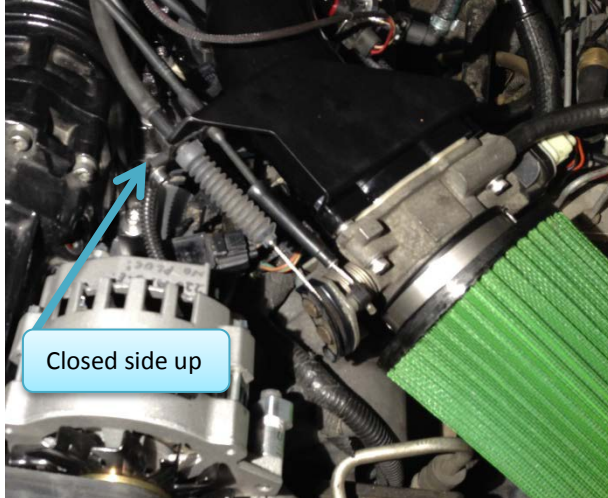
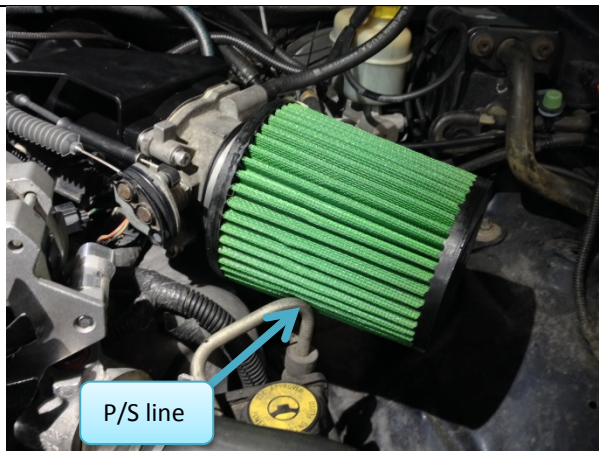



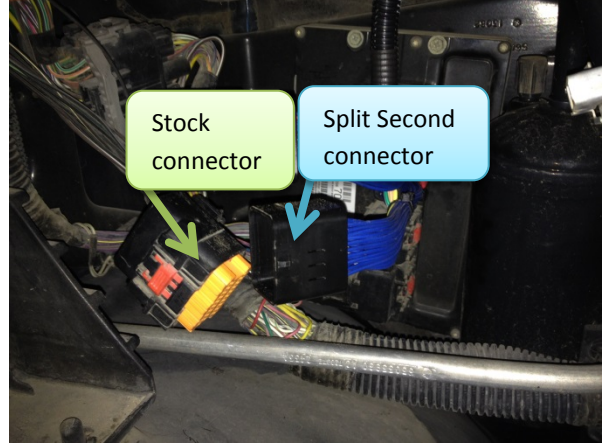
Figure 53: Throttle cable bracket installed.

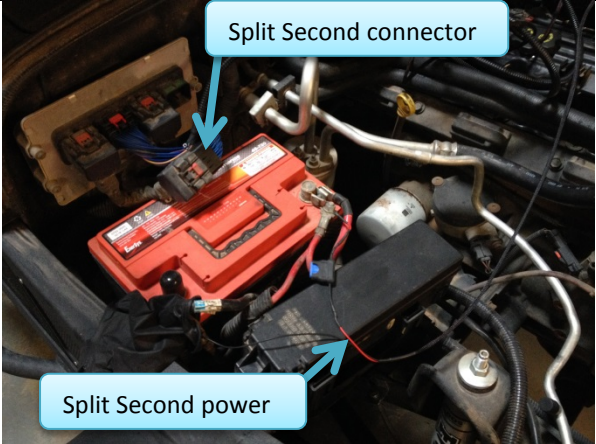
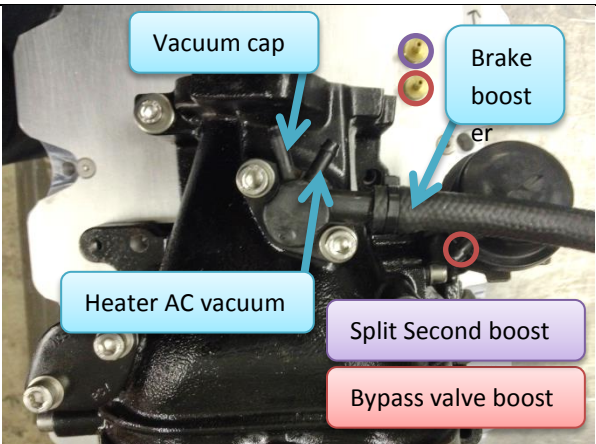

45. Attach throttle cables to slot on cable bracket
- 45.1. Slide cable with no boot in first
 - 45.2. Slide booted cable in slot till it stops
 - 45.3. Routing cables as shown in Figure 53
 - 45.4. Install cable retainer on tab with closed end upwards
 - 45.4.1. Install bolt/washer to secure it

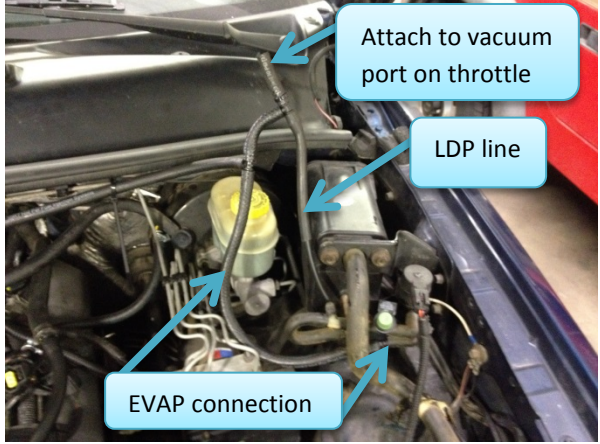
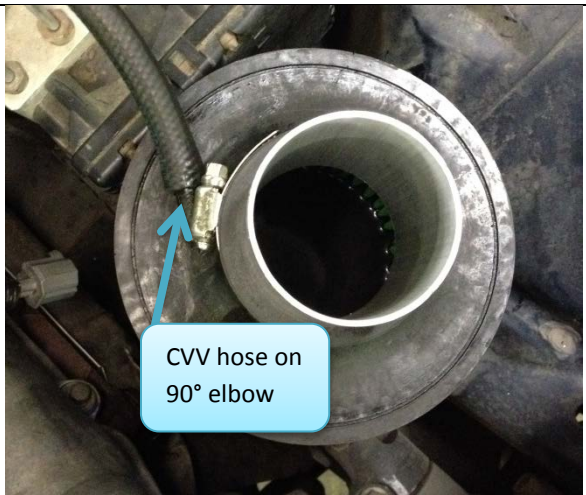


Figure 54: Throttle cables attached to bracket on intake tube.

	 <p data-bbox="841 531 1036 583">Closed side up</p> <p data-bbox="841 695 1377 720">Figure 55: Throttle cables installed on non-EGR intake.</p>
<p data-bbox="191 762 776 972"> 46. Attach air filter assembly to throttle body 46.1. Install filter as shown in Figure 54 with metal pleat facing down 46.2. Angle filter away from power steering line if needed to prevent rubbing 46.3. Tighten clamp </p>	 <p data-bbox="906 1146 1003 1178">P/S line</p> <p data-bbox="841 1203 1382 1255">Figure 56: Air filter attached to throttle body in correct orientation.</p>
<p data-bbox="191 1299 781 1829"> 47. Install IAT sensor 47.1. Insert the IAT into provided hose which is about 3 in. long 47.1.1. Make sure the bottom of the IAT sensor are fully covered by the hose 47.2. Reattach the wire connector to the IAT sensor 47.3. The IAT is ideally located where: 47.3.1. The wire connector reaches 47.3.2. The sensor will not get too hot while the engine is running (<100°F) 47.3.3. Water and dirt will not get on the sensor or inside the rubber hose </p>	

<p>covering the sensor</p> <p>47.3.4. Use two zip ties to secure the IAT sensor</p>	
<p>48. Reattach TPS and IAC connectors to throttle body</p>	
<p>49. Reattach coolant temperature sensor connector and AC connector</p>	
<p>50. Install provided belt</p> <p>50.1. Belt routing for supercharger and alternator are shown in</p> <p>50.1.1. Belt come up from water pump to supercharger</p> <p>50.1.2. Passes over alternator</p> <p>50.1.3. Down to idler</p> <p>50.1.4. Then to power steering pump</p> <p>50.2. Use stock belt routing for all other pulleys</p>	 <p>Figure 57: Belt routing for supercharger and alternator.</p>
<p>51. Install Split Second box</p> <p>51.1. ***Ensure Split Second box is kept away from heat and water***</p> <p>51.1.1. Keep wires away from heat and prevent rubbing by securing wires with zip ties</p> <p>51.1.2. If the SS box is exposed to excess heat or water it may malfunction</p> <p>51.2. Refer to install instructions included with Split Second box</p> <p>51.3. Connect Split Second loom to stock ECU</p> <p>51.3.1. Disconnect C2 connector on ECU (orange)</p> <p>51.3.2. Match colors on Split Second connector to attach to stock ECU and stock connectors to female side of Split Second loom</p> <p>51.4. Install power leads to battery</p> <p>51.5. Connect Fuel injector wire to 9th fuel injector</p>	 <p>Figure 58: Split Second ECU connection.</p>

<p>51.5.1. Ensure it is all the way on and the metal clip snaps into place</p>	 <p>Figure 59: Split Second ECU and power connectors.</p>
<p>52. Attach vacuum and boost lines (Figure 44)</p> <p>52.1. Split Second box</p> <p>52.1.1. Hose goes to a port (boost) on intake plate</p> <p>52.2. Bypass valve hose on top front port goes to a boost port on rear driver side intake plate</p> <p>52.3. Heater AC hose with one way valve still attached goes to vacuum port on top rear of supercharger on driver side</p> <p>52.4. Brake booster hose attached to the port on the brake booster and large fitting on top of supercharger</p>	 <p>Figure 60: Vacuum ports on supercharger.</p>
<p>52.5. The large vacuum hose assembly has labels for each hose end (Figure 45)</p> <p>52.5.1. Attach the hose labeled vacuum to side of throttle body</p> <p>52.5.2. The EVAP adapter goes into the lower port on the canister</p> <p>52.5.2.1. Remove stock hose and insert new adapter</p> <p>52.5.3. Attach PCV hose end to port on side of oil filler</p>	 <p>Figure 61: Vacuum hose assembly.</p>

	 <p>Attach to vacuum port on throttle</p> <p>LDP line</p> <p>EVAP connection</p> <p>Figure 62: Vacuum hose assembly.</p>
<p>53. Install CVV hose (filtered air) to 90° elbow on air filter</p>	 <p>CVV hose on 90° elbow</p> <p>Figure 63: CVV hose attached to 90° elbow on filter.</p>

53.1.1. Leak detection pump (LDP) stock line needs to be removed

53.1.1.1. Replace with provided hose

53.2. Ensure all lines are routed out of the way of moving parts and areas that get hot

53.3. Use zip-ties to secure hoses

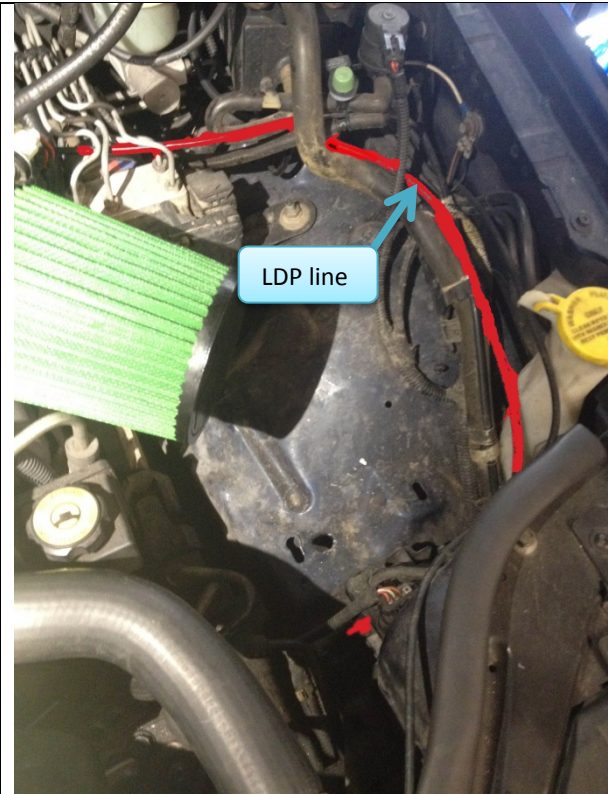


Figure 64: Stock LDP line to remove.

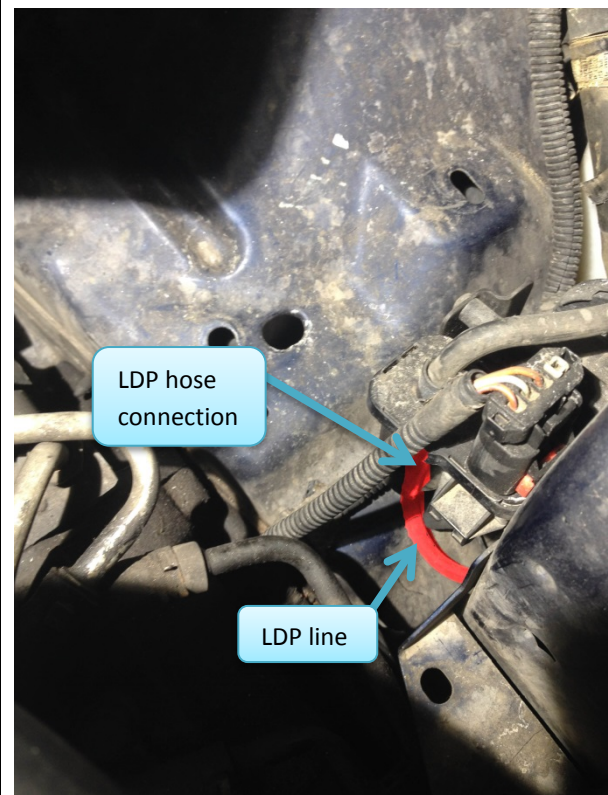


Figure 65: LDP hose connection bottom front of fender.

54. Ensure all bolts, connectors, hoses, and parts are tight and properly installed 54.1. Secure all wires and hoses with zip ties to prevent them from rubbing and keep them away from anything hot	
55. Reconnect battery	
56. Test fuel system again for leaks	

Note:

If any part of the instructions are not clear or are missing any information you would find helpful please let us know so we can update them.

Rev: 2018-09-06