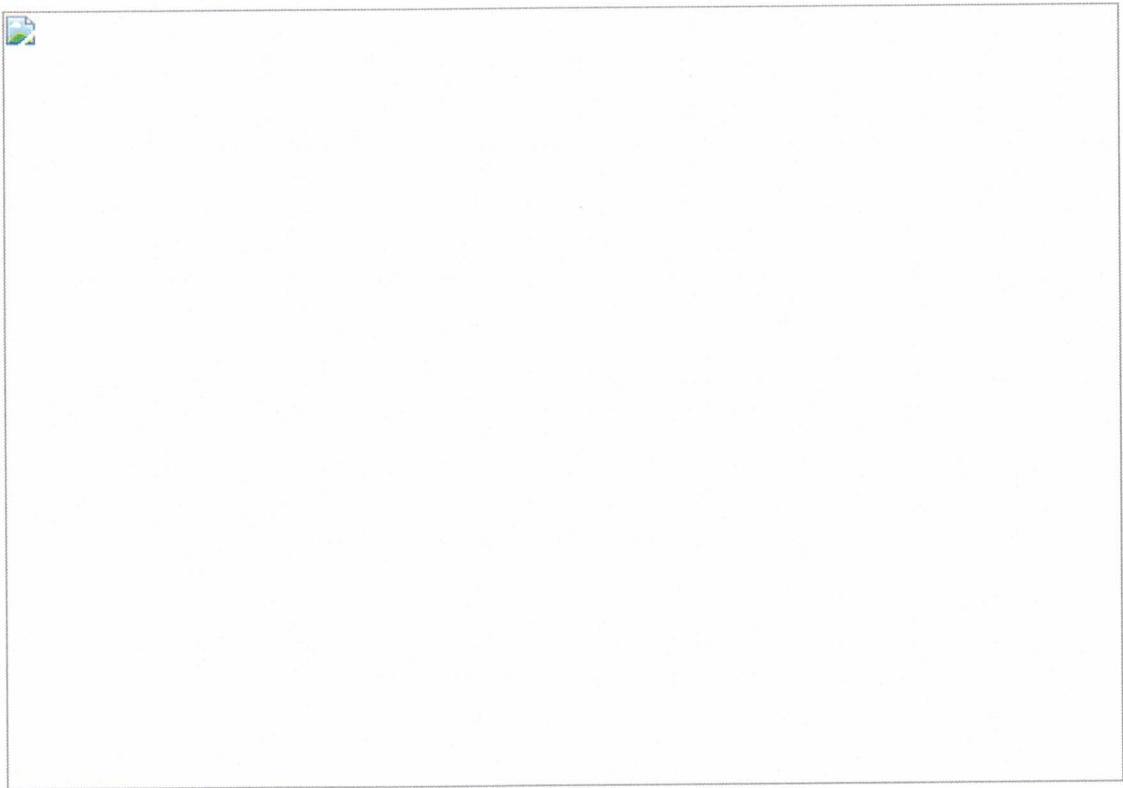


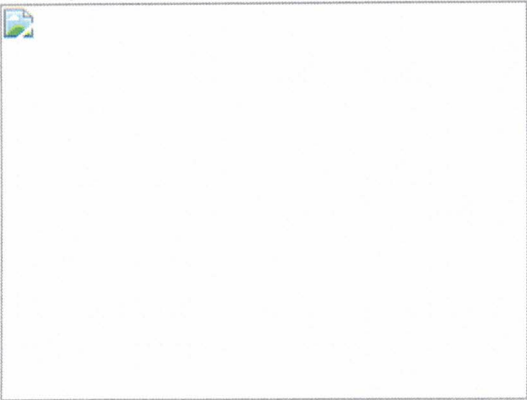
INSTALLATION INSTRUCTIONS

2001 Bullitt® Mustang Supercharger Kit

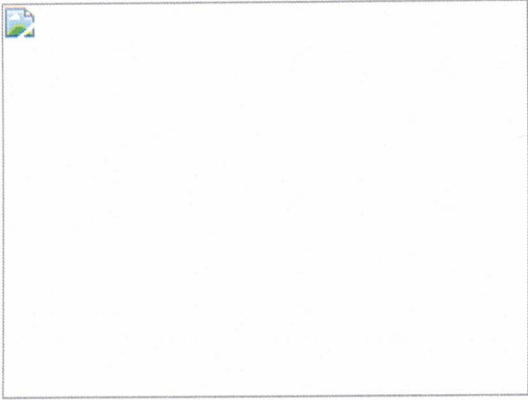
Congratulations on choosing what we feel is the best supercharger kit on the market. Proper installation is the key to long and trouble free operation. Please read and understand thoroughly all of the instructions presented here. We have made major improvements on the Rev II Kit, especially on issues associated with installation time. Every possible effort has been made to assure a quality and complete product. Please check the completeness and condition of your kit as received. If there are any missing or damaged parts, please call us. We will make every effort to remedy the situation in a timely manner. Please note that the water tank in some kits has a dent in the bottom, not to worry. This is supposed to be there to clear the brake system accumulator.



Many thanks to Michael O'Donnell for use of his Bullitt DHG1005 for this instruction manual.



1.



4.

- 1. Disconnect negative ground cable from battery.

2. Remove passenger side door sill and kick panel. The sill just snaps out, while the kick panel has some push pins holding it in place.
3. Remove the EEC processor. A few electrical connectors and mounting brackets must be removed and unplugged to accomplish this. Put in a safe place for later service.
4. Remove mass air sensor to throttle body tube.



5.



6.

5. Disconnect vehicle wiring harness connectors from ignition coils; throttle position sensor, idle air, EGR solenoid valve, EGR Pressure Transducer, Temperature Sensors, fuel pressure, and fuel injector connections.
6. Remove PCV hose from vehicle.



7.



10.

7. Remove ignition coils.
8. Remove idle air valve, hose and silencer from vehicle.
9. Remove crankcase vent hose from vehicle.
10. Disconnect throttle cable (and cruise control cable if equipped) and mounting bracket from intake manifold. The cables can now be easily detached from bracket with a pair of plyers.
11. Remove vacuum hoses from vehicle.
12. Drain engine coolant from petcock valve on bottom of radiator.



13.



14.

13. Relieve fuel system pressure and disconnect spring lock couplings. A special tool is required for this.

14. Disconnect water heater hose (rear on manifold to firewall) from firewall. (snap connector)

15. Remove accessory drive belt.



16.



19.

16. Loosen 2 alternator bolts and remove Alternator. (Set aside)

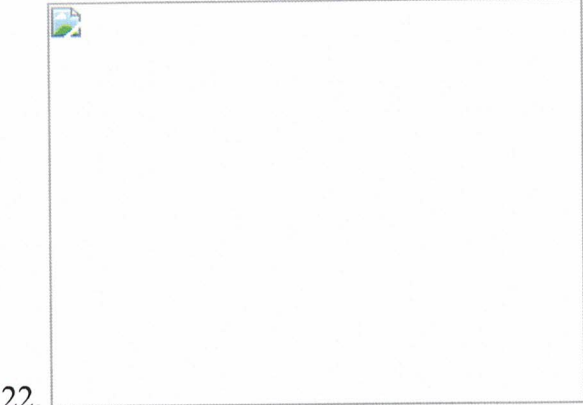
17. Remove EGR Solenoid and Transducer from mount.

18. Loosen EGR tube retaining nut at EGR Valve.

19. Remove Intake Manifold bolts, including the ones retaining the water outlet.

20. Remove water outlet and upper radiator hose.

21. Remove thermostat and O-Ring from the Intake manifold.

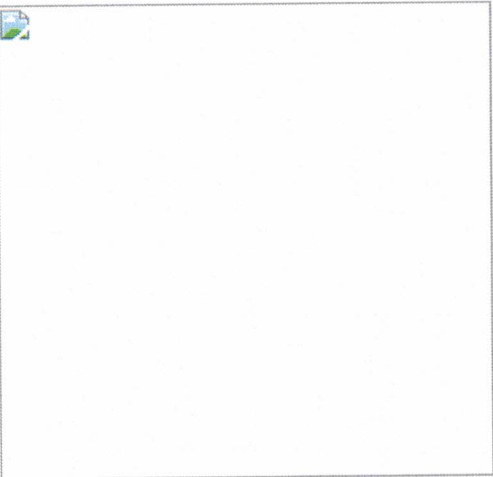


22.

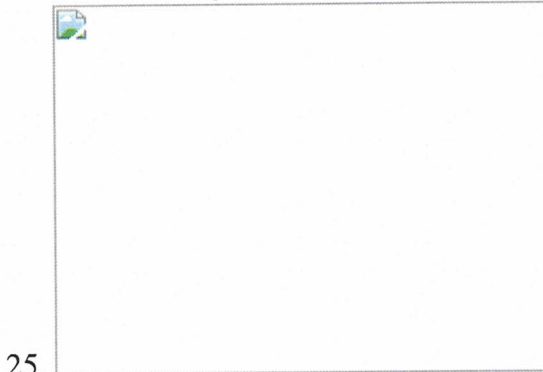
22. Remove Intake Manifold.

23. Remove Intake Manifold Gaskets.

24. Vacuum any dirt or debris from the Intake Manifold flanges and cover with duct tape or equivalent.



24.



25.

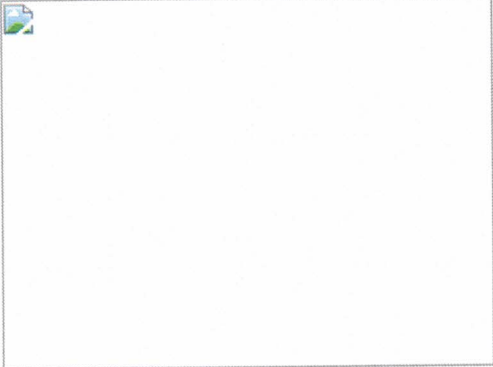
25. Remove water pipe in engine valley and bracket at the back of the cylinder head.

26. Install the supplied water tube in the valley.

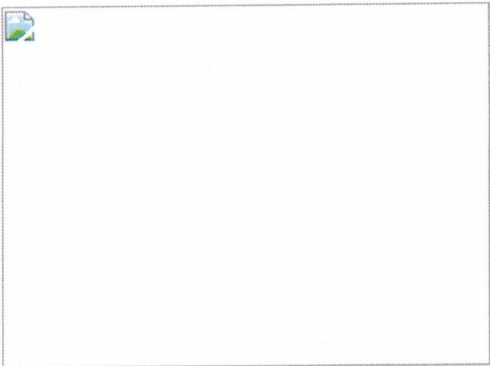
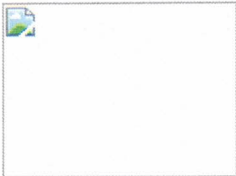
27. Remove the formed rubber hose (5/8”) from the firewall and water pump inlet tube.

28. Detach the snap connector from the hose (5/8”) and install onto the short end of the supplied L shaped hose.

29. Install the L shaped hose onto the vehicle using the spring hose clamps.

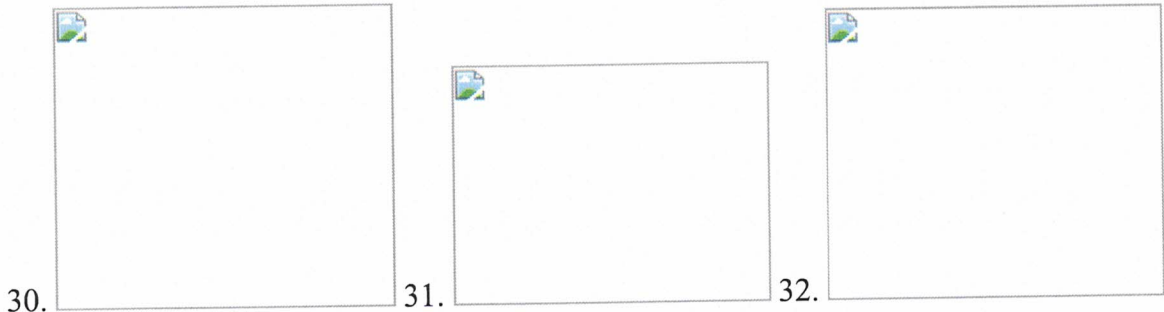


26.



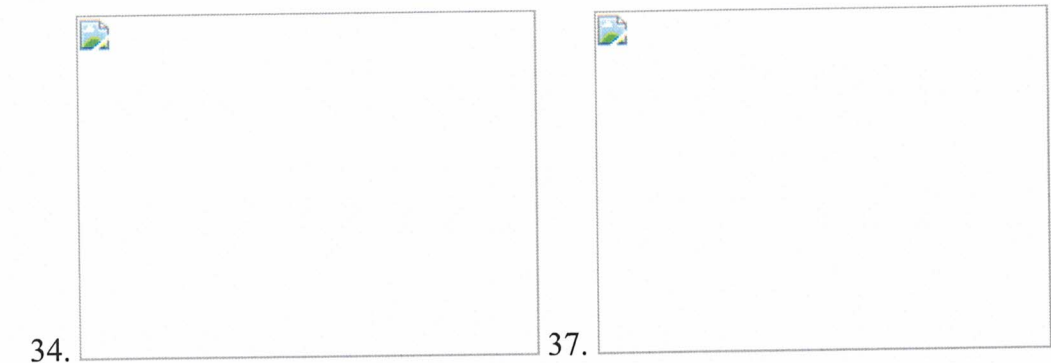
28-30.

- 30. Remove 2 nuts and 1 bolt from power steering reservoir mount on front cover. Remove lower stud replace it with a new stud, without the integrated nut. (supplied in kit)
- 31. Remove front cover bolts, which will need to be replaced for the mounting of the Idler Pulley Mount. To determine which bolts need to be removed, If not obvious to you, hold the mount up to the front cover and position the hole over the stud you just replaced.
- 32. Position Idler Pulley Mount and retain with bolts provided. (Torque to 17-22 ft-lb.)

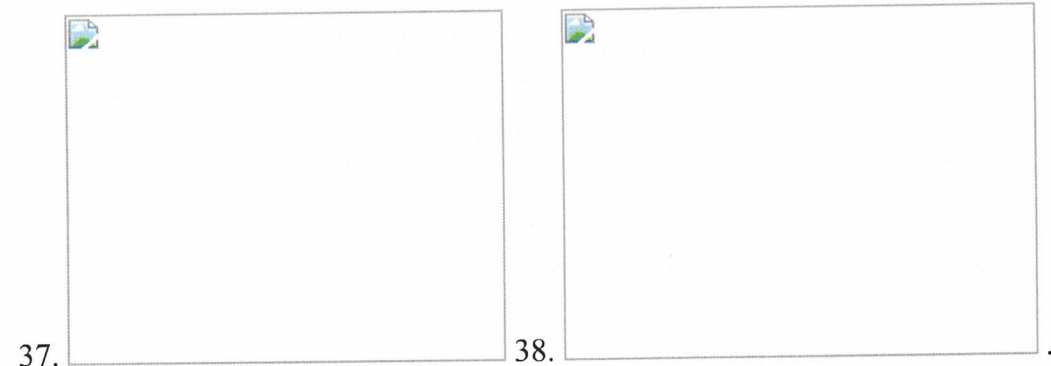


- 33. Attach Pulley to Mount and retain with provided bolts. (Torque to 17-22 ft-lb.) Reinstall power steering reservoir bolt and nut.

- 34. Remove belt tensioner from vehicle.

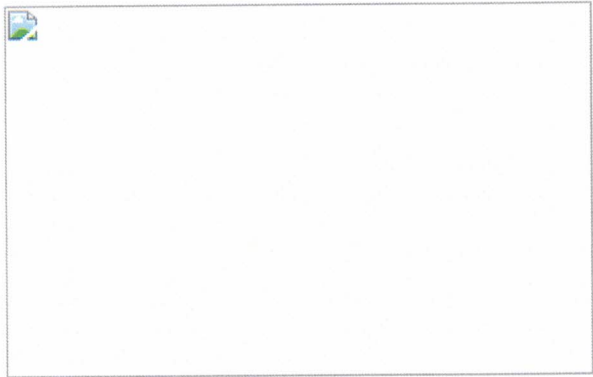


- 35. Remove pulley from tensioner.(do not discard!)

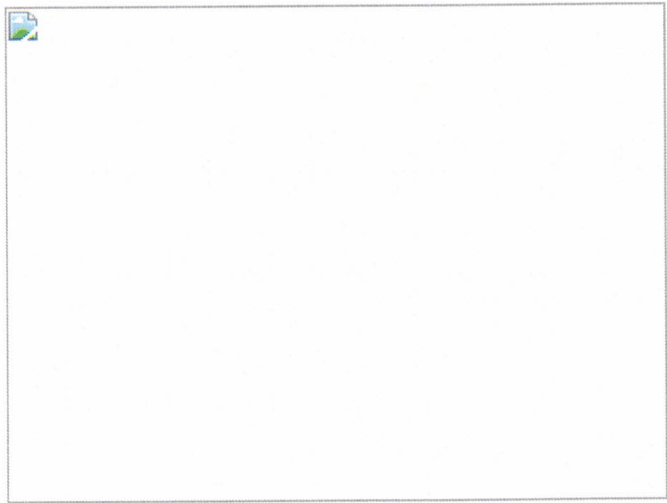


- 36. Install supplied pulley onto tensioner.
- 37. Install the supplied “phaser” in between tensioner and front cover. (use supplied longer bolt and washer)

38. Install the pulley removed from the tensioner onto the supplied Idler bracket. (use supplied bolt and washer)

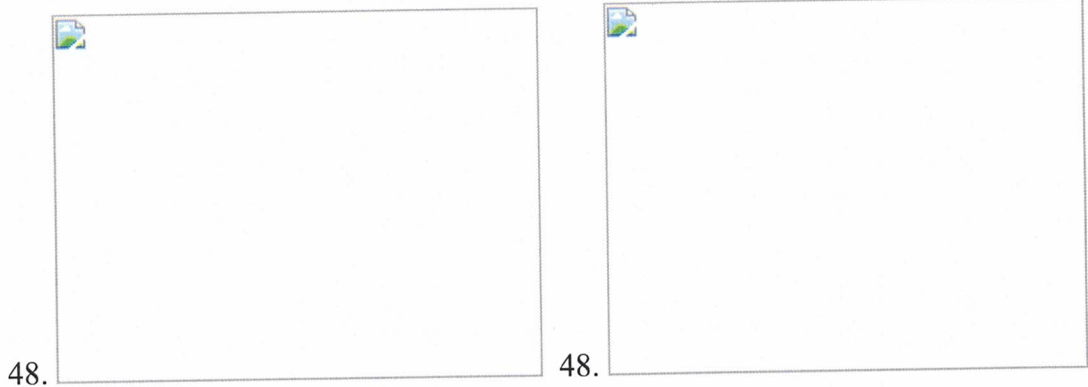


- 39.
39. Transfer the EGR Valve valve from the stock manifold to the new manifold with bolts and gasket provided. (Torque to 17-22 ft-lb.) Be sure to replace the gasket to assure proper functioning.
40. Transfer the throttle body from the stock manifold to the new manifold using stock bolts. Reuse the gasket as long as it is not damaged.
41. Transfer the Idle air control valve from the stock manifold to the new manifold using supplied bolts. Reuse the gasket as long as it is not damaged.
42. Transfer the engine temperature sensor from the old manifold, to the new one. (Use Teflon sealant)
43. Remove heater hose from stock intake manifold and attach it to the new manifold using the supplied clamp.

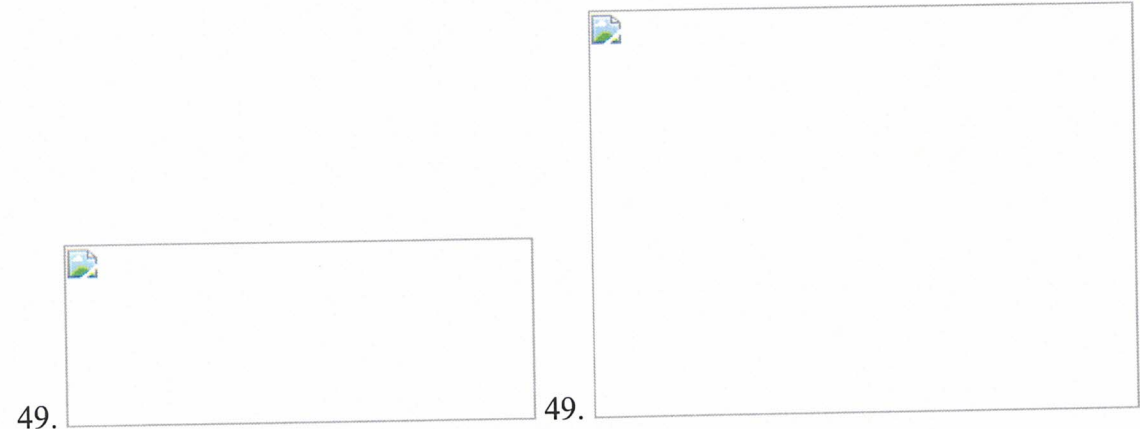


- 44-47.
44. Transfer one fuel rail bolt from the old manifold to the rear of the new manifold (driver side). Be sure to retain the phenolic spacer supplied to insulate the fuel rails from the manifold. (See 72)
45. Transfer EGR solenoid to new manifold using the bolts supplied, and attach the hose from the manifold to the lower port. Connect the upper port to the EGR valve with supplied hose.
46. Transfer fuel pressure test (schraeder) valve from old fuel rail to new fuel rail (driver side). Use Teflon tape.

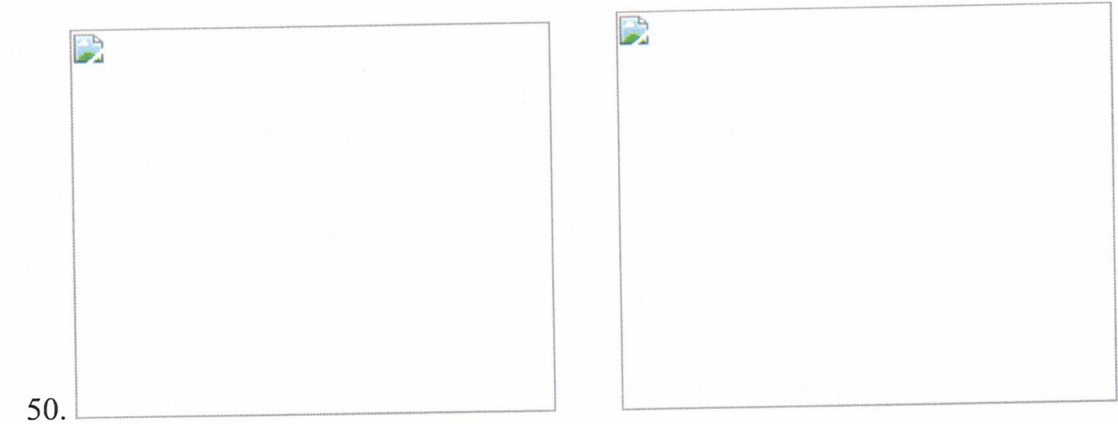
47. Transfer the fuel pressure transducer to the new fuel rail and retain with the supplied bolts. Connect the hose to the plenum.



48. Since the EGR Valve has been re-located, the EGR Tube must be “Modified”. This can be done with common hand tools. (shown Sears 51252 tubing cutter) The tube must be cut in two (2) places and mended with brass crush collars on the end of a flexible stainless steel tube.

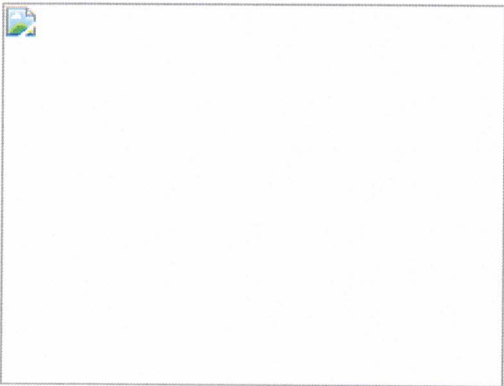


49. Tighten all EGR feed tube connections. The photos are shown without the woven heat shield for clarity. (Be sure to install hear shield before continuing)

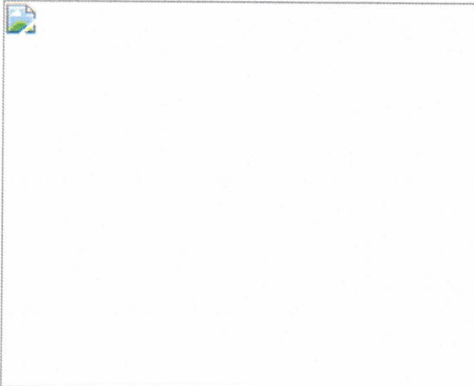


50. The new location of the EGR valve requires a stand-off for the wiring loom running across the firewall. Snap the harness out of the firewall mount (passenger side) and place standoff (supplied) in between. Reinsert harness into standoff.

51.



52.



53.



51. Loosen 4 bolts retaining water pump pulley, and remove stock pulley.
52. Remove black plastic protective sleeve on water pump shaft. This may require a hammer and sharp chisel or a sharp knife. Try not to mar the precision machined surface under the sleeve.
53. Attach the intercooler water pump and the new supplied water pump pulley with the 4 supplied bolts. These can be tightened with a standard 8mm box end wrench. A pair of water pump pliers (spanning 2 of the bolts) can be used to keep the assembly still while tightening each bolt.
54. Re-install the intake manifold gaskets on to the cylinder heads. Make sure they have not been damaged in any way. (Protective tape or equivalent must be removed now)



55.

55. Set the Intake manifold / Supercharger assembly onto the engine. Be sure not to damage the gaskets during this procedure. The wiring harness will need to be lifted slightly at the rear of the engine to allow it back into the proper position. This is best performed with a person on each side of the vehicle to gently guide it into place.



56.



57.

56. Install the intake manifold bolts supplied (9 hex flange, and 1 long cap screw) and tighten in a crisscross pattern. Repeat this procedure until all bolts are snug and then torque to 17-22 ft-lbs.
57. Connect feeder tube fitting to EGR Valve and tighten. There may be some slight alignment of the flexible stainless steel tube required before this is achievable.
58. Re-install ignition coils and retaining bolts, and tighten.
59. Plug in electrical connectors for the ignition coils, fuel injectors, throttle body, idle air control valve, etc.
60. Re-connect heater hose to firewall connector.



60.



61.

61. Attach the Evaporative canister hose to the passenger side 3/8" vacuum tube. (See Figure 1) The existing hose may need to be shortened slightly for a proper fit.

62. Using supplied hose, connect the hose from PCV valve to the driver side 3/8” vacuum tube. (See

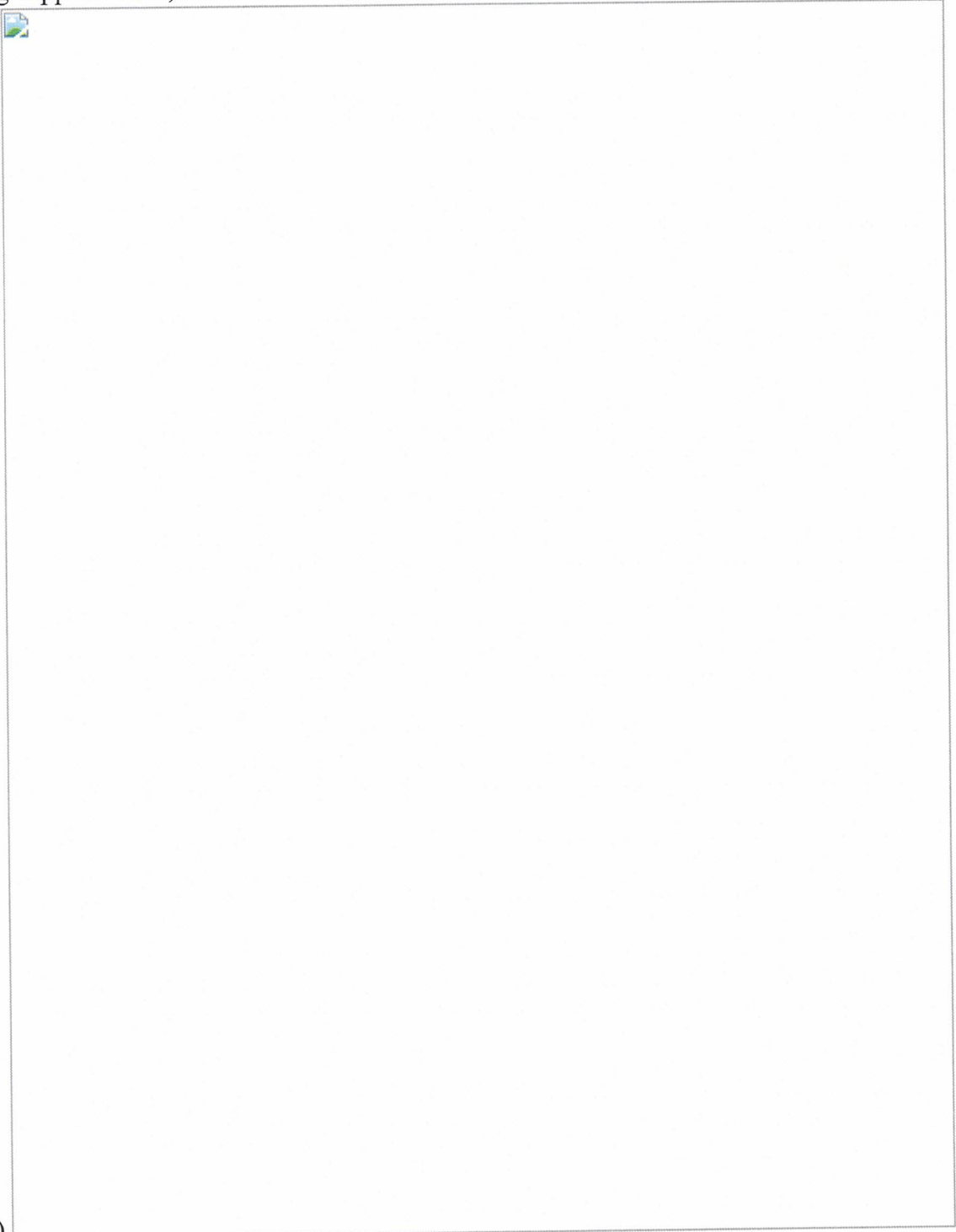


Figure 1)



63.



64.

63. Connect vacuum hoses to heater and purge canister. These hoses have brass reducers attached to them to accommodate the mating hose size. (See Figure 1)

64. The wires for the inlet air temperature sensor need to be lengthened. Supplied in the kit are color-coded wires and crimp connectors as well as black corrugated split loom. We recommend soldering and shrink-tubing the connections if possible. Connect the wire to the new temperature sensor located in the plenum.

65. Re-attach the throttle and cruise control cables and return spring.



66.



67.

66. Snap the fuel line connector into the rear of the driver side fuel rail.

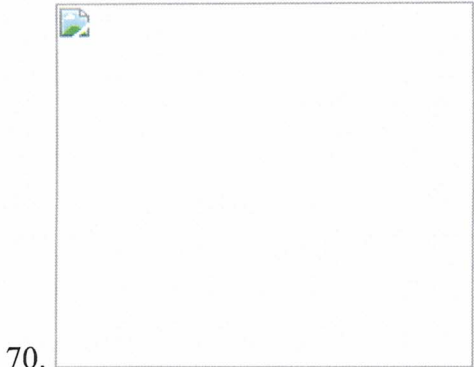
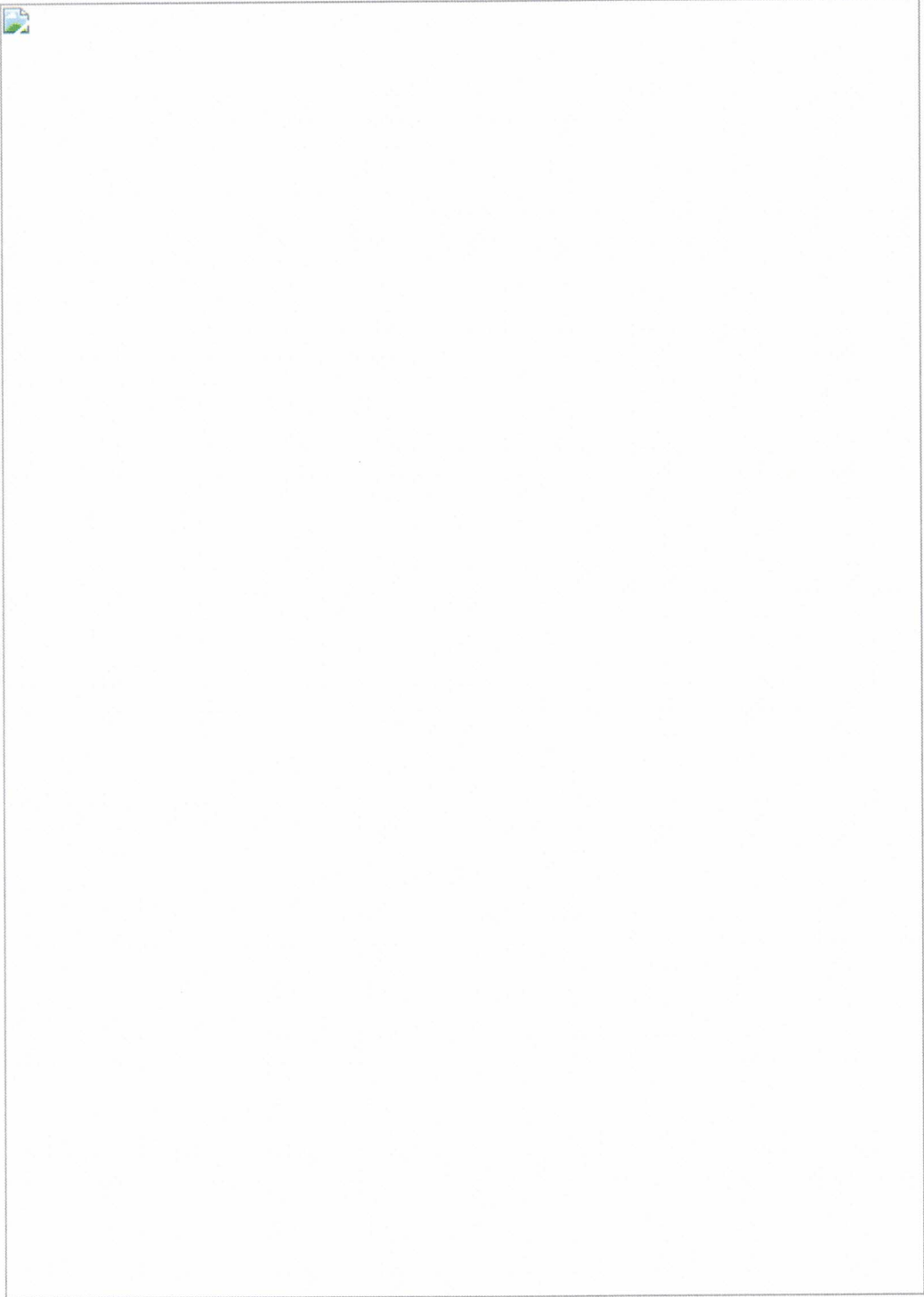
67. Install the supplied rubber air inlet tube from the mass air flow sensor to throttle body and tighten clamps.

68. Re-attach formed rubber hose from air inlet to idle air valve. This may require some trimming!

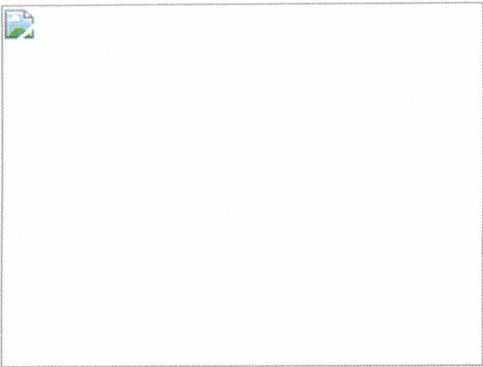
69. Connect valve cover breather hose from driver side valve cover to air inlet tube with 5/8" hose and 90° elbow.

70. Mark hole locations in windshield wiper motor cover using pattern supplied on Figure 2. Check for proper location using tank, and drill holes (1/4" drill).

71. Attach Intercooler coolant tank to firewall cover with supplied hardware.

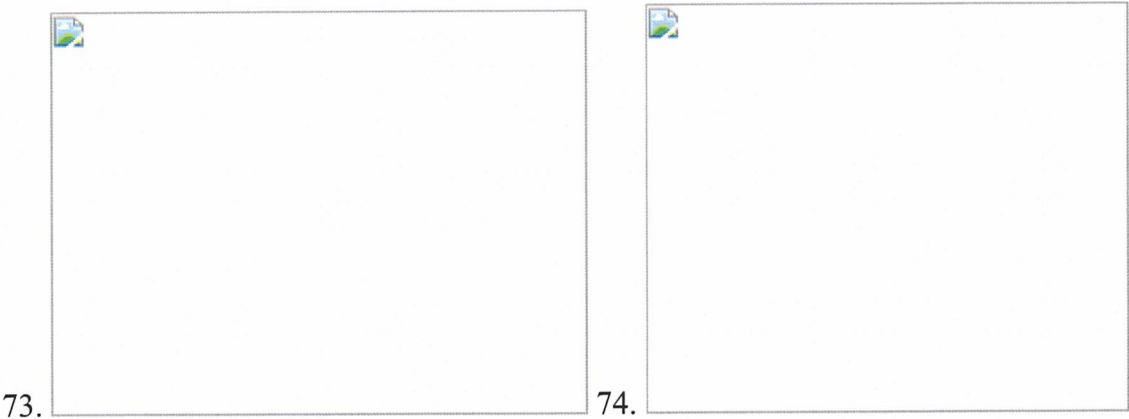


70.

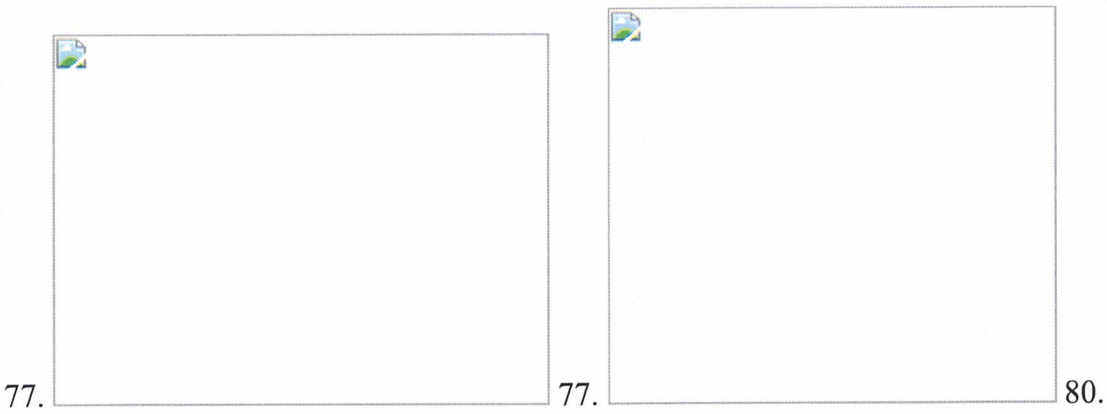


72.

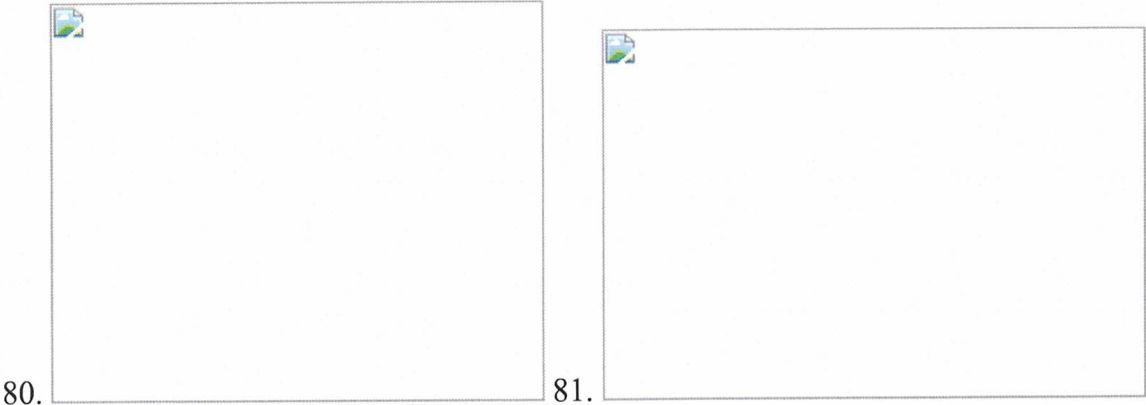
- 72. Attach EGR pressure transducer to supplied bracket. Then attach bracket to fuel rail. Make sure the hoses and electrical connector are not twisted or disconnected.



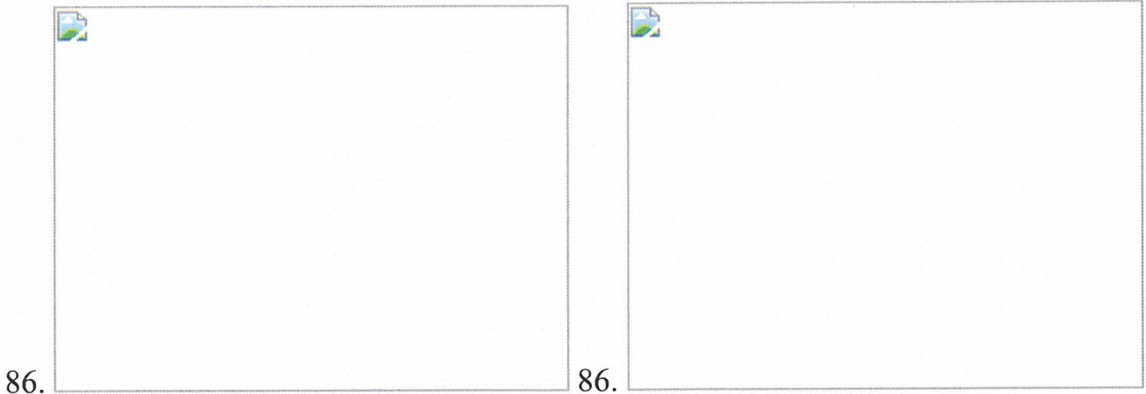
- 73. Route the supplied drive belt appropriately and position the alternator bracket. Retain with 2 bolts and loosely tighten. (Study Figure 2 thoroughly before attempting this step.)
- 74. Install the Drive Housing Clamp and tighten bolts to 7-10 ft lbs.
- 75. Now the alternator bracket can be tightened to 17-22 ft-lbs.
- 76. Thread bolts (and washers) into the alternator bracket top left and lower right as viewed from front of car.



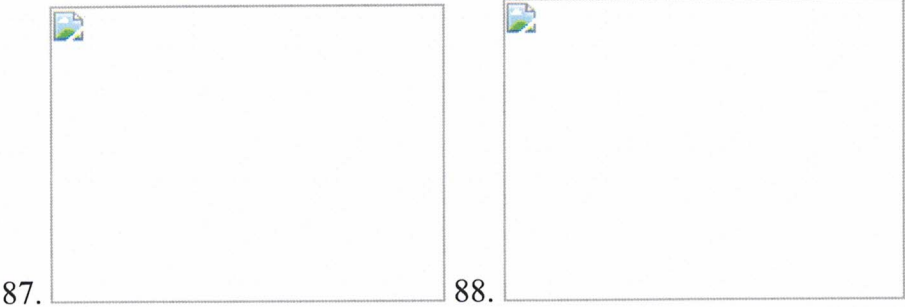
- 77. Replace the stock pulley on the alternator with the pulley supplied. Position alternator into bracket while placing the belt over the proper pulleys. The tensioner must be relieved to its slack position during this process. I may be easier to slip the water pump pulley on last as it has no flange. Once the belt is correctly positioned over all pulleys, tighten the supplied bolts to 17-22 ft-lbs.
- 78. This is a temporary position for the alternator! After initial test drive of 5-10 miles the belt will loosen slightly, allowing the alternator to be rotated into the next bolt hole on the driver side of the vehicle. (note: with 9 psi kit move up one extra hole on the driver side)
- 79. Re-install thermostat and o-ring.
- 80. Replace the upper radiator hose with supplied hose assembly. Be sure to rotate thermostat housing away from alternator pulley to insure proper working clearances.



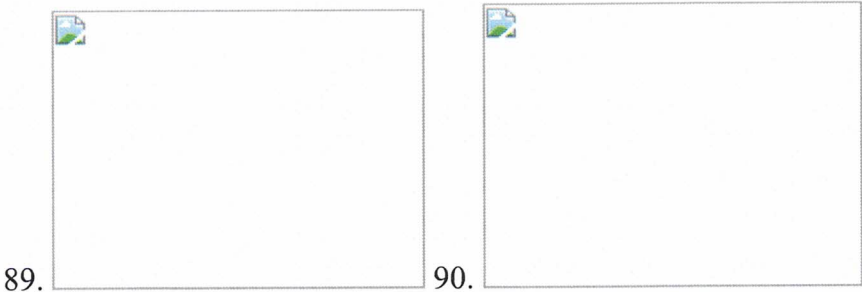
- 81. With the Heat Exchanger for the Intercooler bolted to its mounting brackets, position the assembly under the valence toward the passenger side of the opening and the fittings on the driver side. Mark hole positions using a magic marker. Remove assembly and drill holes using #29 drill bit (supplied) for the self tapping screws (supplied). Remove the mounting brackets from the Heat Exchanger. Now you can attach the mounting brackets to the cross-member using access through the hole in the bracket. The Heat Exchanger can now be bolted to the brackets.
- 82. Connect the hoses to heat exchanger, water pump, intercooler, and tank as shown in Figure 1.
- 83. Re-fill engine cooling system and re-install cap. Close the petcock first!
- 84. Fill the Intercooler water tank with coolant (50/50 Water Glycol mixture). It may be necessary to burp the system by loosening the petcock on the top of the water pump. Install the Radiator Cap.
- 85. If your kit is equipped with a high flow fuel pump, it can be installed now. Follow instructions included with pump.



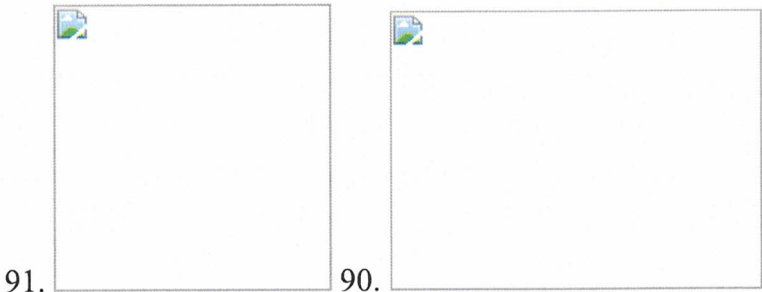
- 86. If your kit is equipped with a fuel pump voltage step up devise, it can be installed now. Mount unit in trunk, with the hobb switch in the engine compartment, as shown. Follow instructions included with the unit. Be sure to have a good ground.



- 87. Locate the EEC processor inside the passenger side kick panel, and remove from vehicle. Remove the cover bolts and cover.
- 88. Gently scrape away rubber coating from connector area using your finger nail, (Popsicle stick, or plastic fork broken in half work too).



- 89. Gently clean terminals with scotch brite pad provided, and clean with rubbing alcohol (or similar).
- 90. Plug in chip as shown.
- 91. Plug the EEC processor and other electrical connectors back into the vehicle harness. Leave the EEC laying on the floor until proper operation is verified. (shown in photo without chip)



- 92. The battery cable can now be connected.
- 93. Check for any stray tools or spare parts, which may hinder the starting of the vehicle.
- 94. Start engine and check for any fuel or coolant leaks, as well as adequate working clearance between parts. Remove intercooler tank cap, and verify flow, top off if necessary. Replace cap.
- 95. After initial test drive of 10+ miles the accessory drive belt will loosen slightly. The alternator must now be rotated into the next bolt hole, on the driver side of the vehicle. Both bolts holding the alternator to the bracket will need to be loosened to perform this operation. A small pry-bar or screwdriver may be necessary to rotate the alternator to position, as well as relieving the tensioner.

96. Re-tighten the bolts to 17-22 ft-lbs.
97. The chip operation being verified now, run a small bead of RTV Silicone along each edge of the chip. This will need to dry overnight to assure the chip is secured well and will not move and lose contact during installation in the kick panel or during vehicle operation.
98. The EEC processor can now be re-inserted into its mounting location.. The kick panel and door sill can now be replaced.
99. You're done!

Revision 1.00 08-30-02 SCG

Dear Customer:

Thank you for your recent purchase of the Allen Engine Development Inc. supercharger kit for your 2001 Bullitt®.

Your Kit serial #_____

Calibration Code_____

Kit Model 6 psi ____ 9 psi ____

Date purchased_____

Warranty period_____

Please keep this in your records in the event of a warranty claim.

[Back](#) to the Supercharger Information page.

Posted November 10, 2002