

5th GEN CAMARO LS3 – L99 INSTALLATION INSTRUCTIONS



THANK YOU FOR PURCHASING THE NOWEEDS EXHAUST DIVERTER SYSTEM. THIS PRODUCT WAS DESIGNED TO BE EASY TO INSTALL AND JUST AS EASY TO OPERATE. PLEASE READ INSTRUCTIONS FULLY IN ADVANCE AND CALL US WITH ANY QUESTIONS BEFORE YOU INSTALL THIS PRODUCT. 605.830.1146 WE LOVE FEEDBACK FROM YOU SO SHOOT US A COMMENT, PICTURE, OR VIDEO TO INFO@NOWEEDS.NET THANKS AGAIN. PATENT #6,584,767

- INCLUDED IN KIT -

2EA DIVERTER VALVE ASSEMBLIES
1EA DAKOTA DIGITAL 3100 CONTROLLER W/SWITCH
1EA HARDWARE PACK W/HARNESS SWITCH PLATE T-SPLICERS
2EA BAND CLAMPS FOR BUTT JOINT *LS3 ONLY *
4EA BAND CLAMPS FOR LAP JOINT *L99 ONLY *
1EA VELCRO – ZIP TIES PACK
1EA 2" MASKING TAPE FOR CUT GUIDE *LS3 ONLY *
1EA 1 1/2" MASKING TAPE FOR CUT GUIDE *L99 ONLY *
1EA INSTRUCTION MANUAL

1 Remove the drivers seat and center console cover. Slide the drivers seat all the way

forward, then using a T-50 Torx bit remove the 2 bolts located on the back of the rails which go into the floor pan. Fig 1 Slide the entire seat assembly backwards and it will dis-engage out of two slots at the front of the rails. Then tip the seat backwards and unplug the seat wiring from the harness by sliding the outside retaining clip toward the door and the clip will separate. Fig 2. Lay out a blanket on the floor and lift the seat out and lay it on its back. Fig 3. Then remove the center console cover which is held in place with 7 metal clips that snap into openings. Starting at the front edge under the dash, gently tug on the panel until it pops loose at that point then slowly and carefully work your way back until its totally loose and set aside. Fig 4.



Fig 1



Fig 2



Fig 3

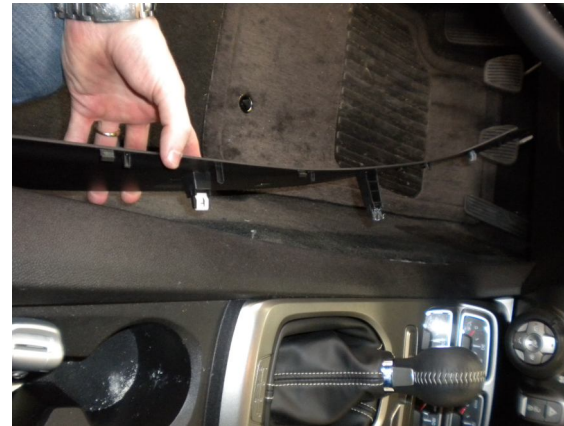


Fig 4

2 Lift car on hoist or lift and support on jack stands. Please use common sense and be careful when doing this.

3 Mark location of cuts on factory 'S' pipes and cut pipes. Using supplied 2" tape for the LS3 or the 1.5" for the L99, wrap around the pipes in front of the weld on the leading edge of the 'H' pipe on the LS3 or resonator on the L99. Fig 5. Then with a reciprocating saw carefully cut the both pipes at the front edge of the tape. Fig 6. Then loosen the clamp holding this piece, rotate the 'S' pipe down and remove from clamp. For the L99 you can remove the front clamps as they won't be used. A lap clamp will be used in place of it. **Also on the L99** you should carefully grind off the index tab on the top of the passenger side pipe coming out of the catalytic converter because we will slip the diverter pipe over this one and it would be an interference.

Save the clamps and "S" pipes because if for some reason you need to revert back to factory exhaust these will easily go back into position.

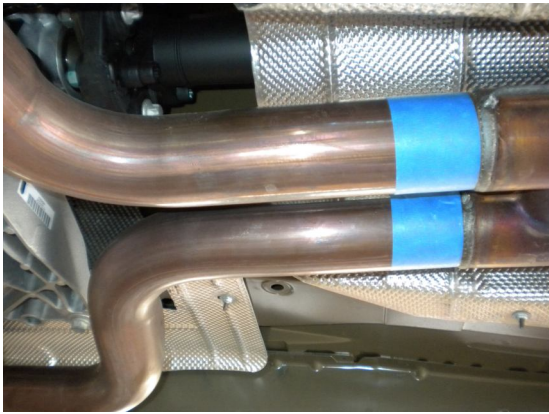


Fig 5

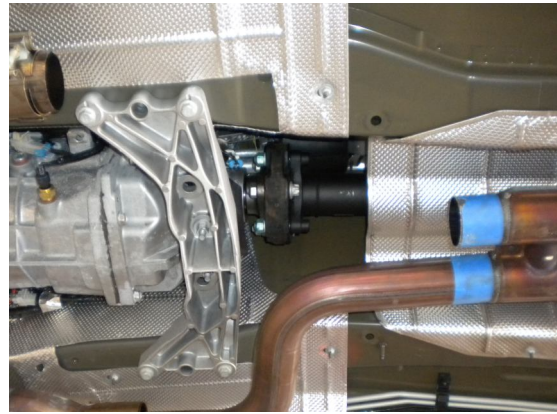


Fig 6

4 Drill hole for wiring. **FOR THE LS3-** Looking up at the driveshaft tunnel (drivers side) locate and drill a 3/8" hole 2.5" back from the edge of the heat shield and 1.5" up from the body seam. Fig 7. Carefully drill this hole as to just push through the sheet metal to prevent damage to carpet pad on the other side. Clean burrs from drilled hole and insert supplied grommet. Fig 7. **FOR THE L99-** a visual reference point is shown in Fig 8. As the heat shield is not there to measure from.

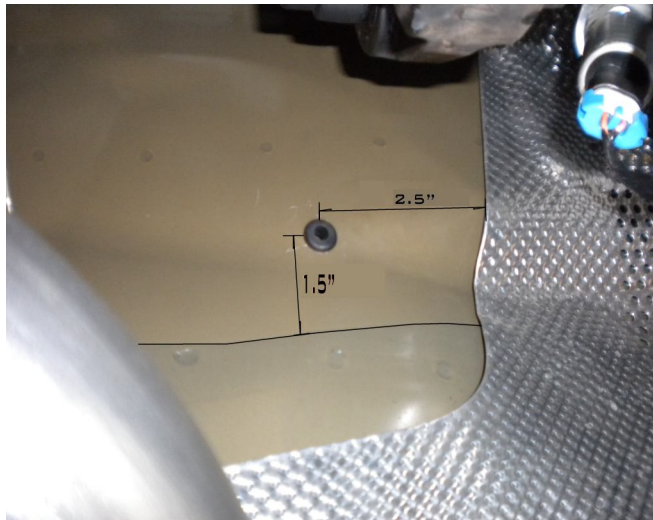


Fig 7

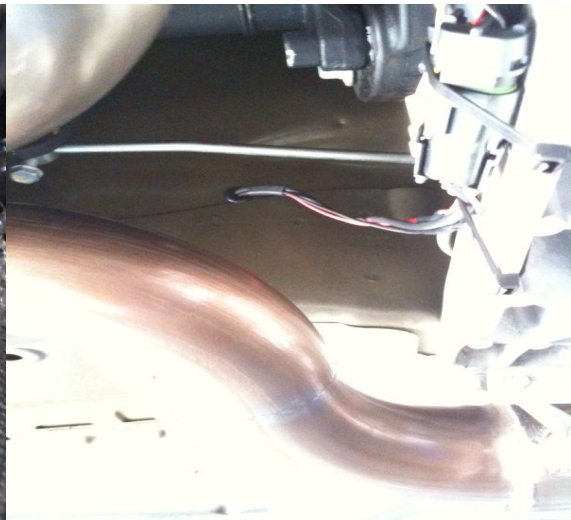


Fig 8

5a - LS3 Install both diverters. Remove tape from the pipes that you cut earlier, assemble and slide supplied clamp over this cut and push back to 'H' pipe. Grab driver side diverter slide into rear clamp, hold front edge up to front pipe and slide front clamp back and center it on the seam. Rotate diverter up into place so you have nice close clearances on the transmission cross member and tighten clamps. Repeat for the passenger side. Fig 9&10

5b – L99 **Install both diverters.** With the L99 you need to install both

diverters at the same time because of the lap clamp design. Remove tape from the pipes that you cut earlier, then slide each diverter on to the resonator pipes. With some help push the exhaust back and rotate diverters up into place and engage the front pipe into the entry pipes. Note you may need to remove rear exhaust rubber hangers to gain enough room to push diverters up into place. Rotate diverters up so you have nice close clearances on the transmission cross member and tighten clamps. Fig 9&10

NOTE>>> when rotating drivers side diverter up into place be sure to leave enough room to slide knuckle of your index finger between transmission cross member bolt and diverter to prevent a vibration noise over rough roads.

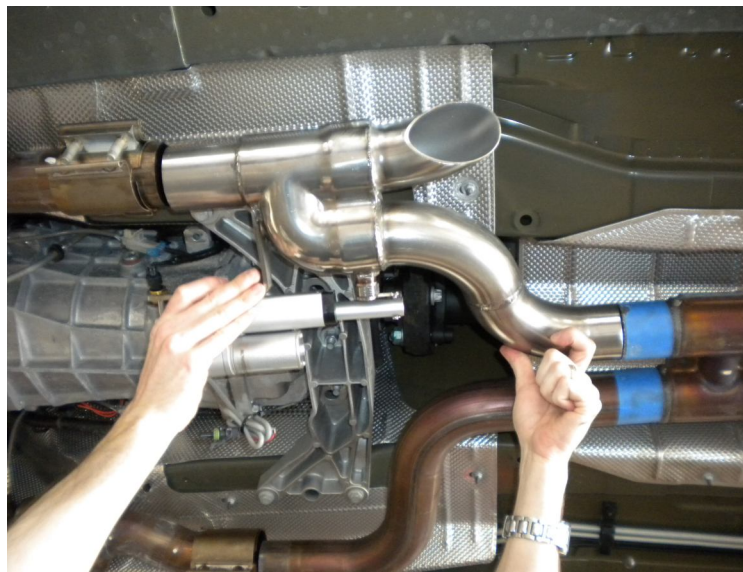


Fig 9



Fig 10

6 Install wiring harness. Now you are ready to run some wires. Take the 5 wires from the supplied harness and run the pinned ends through the grommet from the bottom side. These will be 2 heavier 18 gauge Black and Red wires as well as 3 lighter 22 gauge wires. Feed these through the grommet until all the wire has been fed through and the connectors are next to the floor pan. Then connect the actuators to the connectors (3 connections) and use supplied wire ties to tie the loose wires together to any nearby harness or basketry to keep wires from touching exhaust pipes or driveshaft. Take your time and make sure this is done correctly. You can then set the car back down on the ground. Fig 11

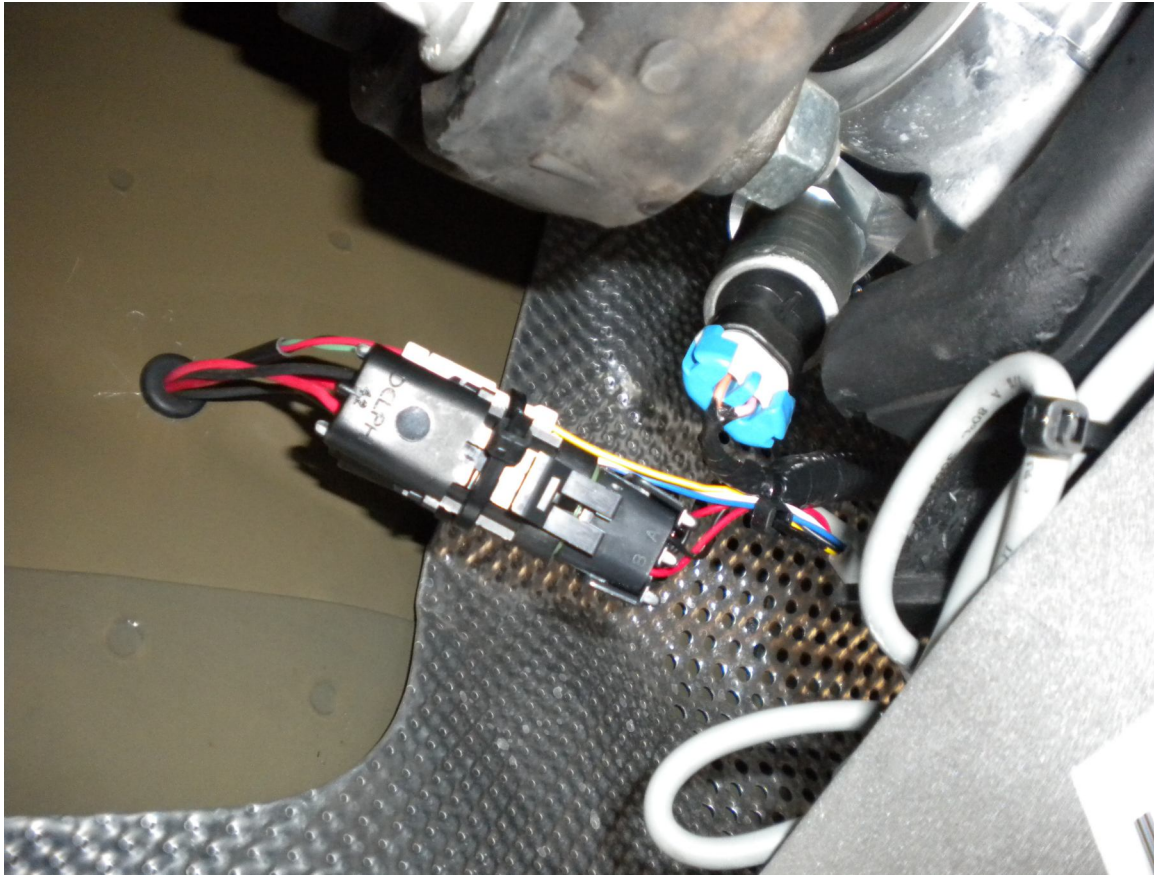


Fig 11

7 Install wires into connectors. Thread the wire under carpet and bring it out next to the seating wiring harness. Pin the connectors at the controller by inserting pins as shown (into supplied connectors) and pushing in on wires until you hear a “click”. Insert pins with the crimp tabs up or towards the lock tab on the connectors as shown. Fig 12 Fig 13. Please verify connections and double check as pins are very hard to remove, so you’ve only got one shot. The 2 pin housing is the motor power which are the heavier 18 gauge black and red wires. Fig 14. The 4 pin housing is the motor position sensor which are lighter 22 gauge red black and green wires. Fig 15 Fig 16.

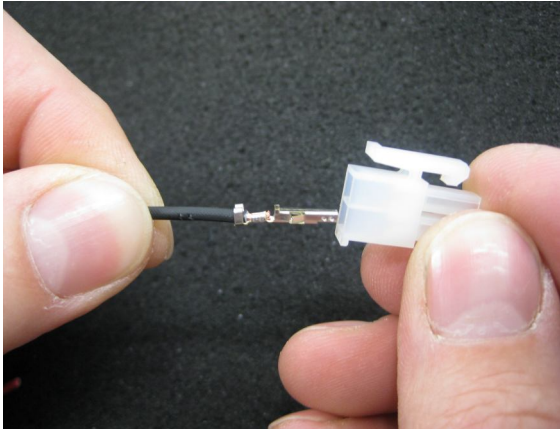


Fig 12

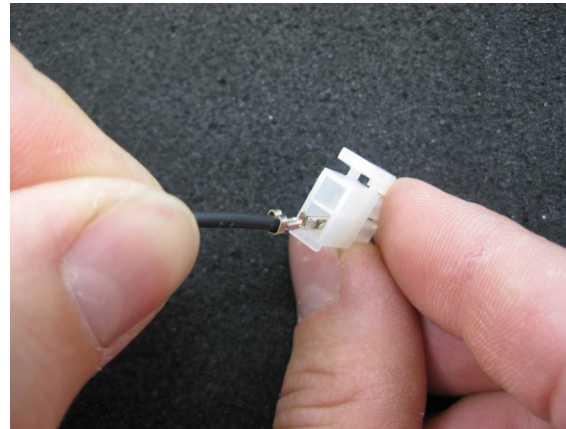


Fig 13

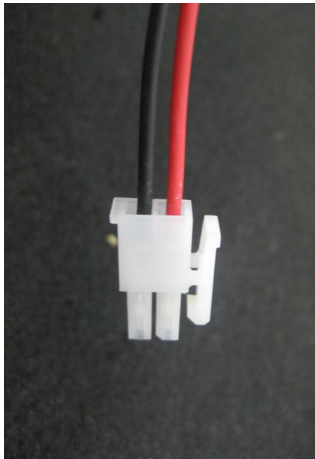


Fig 14

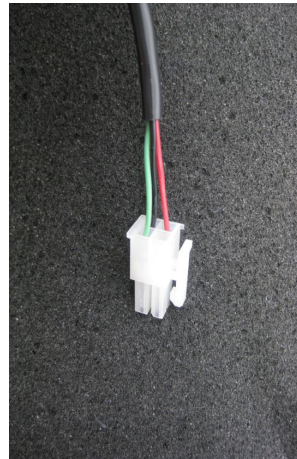


Fig 15



Fig 16

Pin 1 **BLACK** - Pin 2 **RED**

Pin 1 **GREEN** - Pin 2 **BLACK** - Pin 3 blank - Pin 4 **RED**

8

Pull fuse and plug in harness. Now you can pop the hood and pull fuse #35 on the fuse panel located on the drivers side. Fig 17. This should be labeled for the power seat. Now plug in all plugs you just pinned into the diverter controller and plug in the power feed plug as well. Fig 18. Now you can take the black and red power feed wires and splice them into the side of the power wires going to the seat. These wires are 12v+ Red with white stripe, and 12v- black. Strip the side insulation of these wires, solder the Red power wire to the red with white stripe, and black to black, solder the connection, and tape them up with electrical tape. Be very certain that you tie into the right wires! These two wires are coming out of the top of the seat harness connection. Fig 19.

***** YOU CAN NOW USE INCLUDED 3M T-SPLICE CONNECTORS AS CONNECTION OPTION INSTEAD OF SOLDERING IF YOU WISH.*****



Fig 17



Fig 18

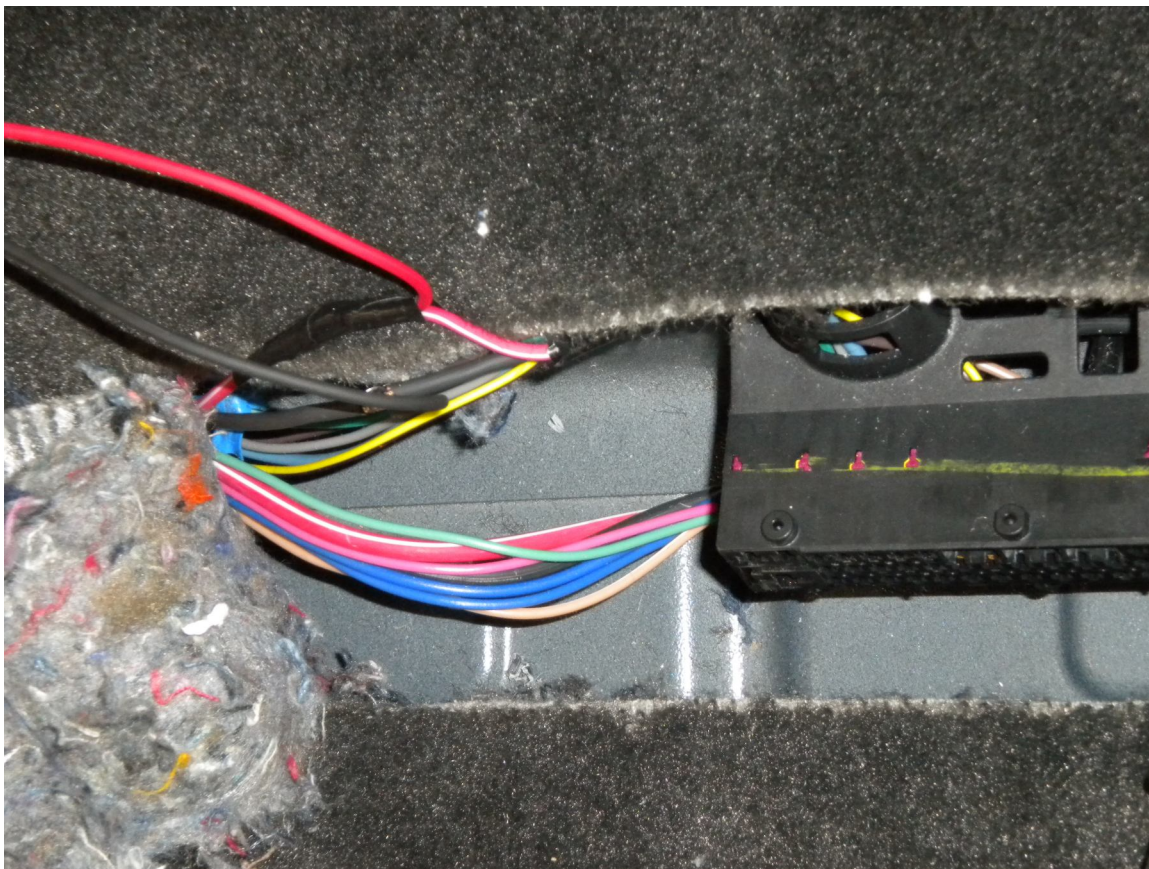


Fig 19

9 **Mounting the seat switch.** Back to the seat. On the right side of the drivers seat there is an open mounting hole that we will attach the switch plate to. Insert the supplied clip nut over the opening. Fig 20. Mount the switch to the supplied switch plate, and thread the supplied screw into plate and into the clip nut – making sure the plate is square and level, and tighten down. Fig 20. You can also re-install the center console side panel at this time.

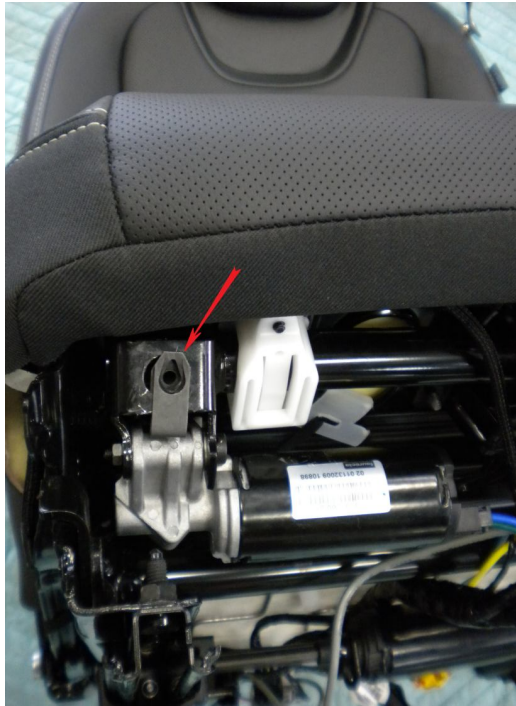


Fig 20



Fig 21

10 Re-install seat. Set the seat back into the car and tip it back so you can re-connect the seat harness. Plug the harness in and slide the connector clip back into place. Plug the diverter switch wire into the controller and mount it with supplied Velcro in the position shown in figure 22.



Fig 22

11 **Finish up install.** Now you can slide the seat back into position and re-install the 2ea. T-50 Torx screws and tighten them down. Re-insert the fuse into position 35. Look under the seat and be sure there is clearance for the controller and that no wires are hanging up, getting pinched, or stretched in any way. Run seat back and forth several times to verify this. Fix any obstructions you find and that is it! – you are done.

12 **Operation.** The switch contains 3 LED pushbuttons with the outside two being full open and full close with a single touch. These are factory set and cannot be changed. The center button though, can be user defined. To program this button, stop the diverter at the desired position by pushing any of the three buttons while the actuators are in motion. Then push and hold the center button for 4 seconds to program this position. This is useful if you find that the interior noise of full open is too much for a long trip but closed is too quiet as well. Remember, the actuators can always be stopped in any position by touching any button while they are in motion, and each position change only requires a single touch. There is no need to hold the buttons down.