



Installation Instructions BILLET/PLUS SHIFTER

Fits: 2016 Camaro SS w/manual 6 Speed Transmission

Catalog # 3916031

WORK SAFELY! For maximum safety, perform this installation on a clean, level surface and with the engine turned off. Place blocks or wedges in front of and behind both rear wheels to prevent movement in either direction.

CAUTION: To avoid any possibility of bodily injury or damage to vehicle, do not attempt installation until you are confident that the vehicle is safely secured and will not move.

PARTS



Shifter Assembly



Link Bar



Upper Stick



Classic 6Spd Knob



9/16"-16 Jam Nut



Linkage Pin (2)



10mm Bushing (4)



1/4"x1/4" 10-32
Shoulder Bolt (2)



1/4" x 1/4" Isolation
Sleeve (2)



6" Tie Wrap



M6x10mm Counter
Sink Bolt (2)



Hurst Decal



Grease Pack

1. Start by removing the shift boot, Chrome bezel and shift knob, as one assembly



2. Using a trim tool, pry up on the back of the chrome bezel.



3. Raise the chrome bezel high enough to gain access to the T25 Torx bolt that mounts the shift knob. Remove the bolt.



4. The shift knob, boot and chrome bezel can now be removed



5. Using an extension and 10mm socket, remove the 4 bolts attaching the rubber boot to the transmission tunnel.

Note: A swivel works best for the two forward bolts.



6. Raise and support the vehicle using Jack stands or a hoist. Remove the (5) 13MM bolts from the cross brace.



7. Support the exhaust.



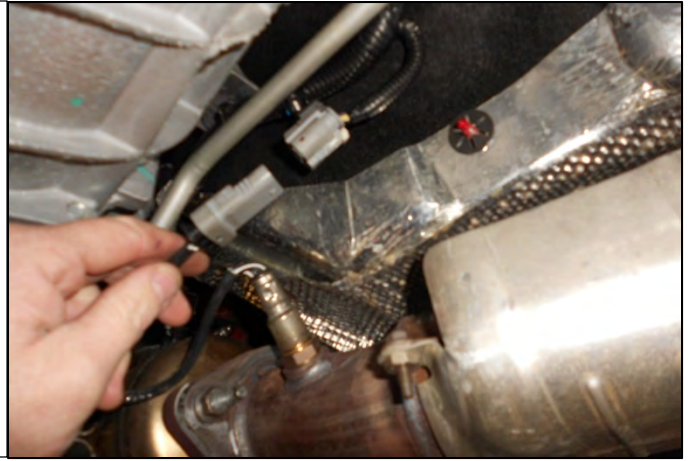
8. Loosen the 15mm nut attaching the left side exhaust flange to the catalytic converter.



9. Remove the two 15mm nuts from the right side exhaust flange connected to the catalytic converter.



10. Unplug the oxygen sensor that is attached to the right side exhaust. Make sure it is free and clear.



11. Remove the forward rubber isolators from the exhaust system on the left and right side.



12. At the rear of the vehicle there are two mounted hangers located on the left and right side. Remove the two 15mm nuts that attach each hanger then remove the hangers.

Note: A 15mm ratchet wrench works well in this area.



13. The left front exhaust flange is a ball socket you can pry between the transmission cross member and the exhaust to pop it out.

Note: A hammer handle works well for this.



14. Remove the mid hangers on the left and right side of the exhaust. The entire exhaust system can now be removed.

Note: On dual mode vehicles with manual transmission you will need to unplug the wire harness from the left and right side exhaust valve actuators located at the rear of the exhaust.

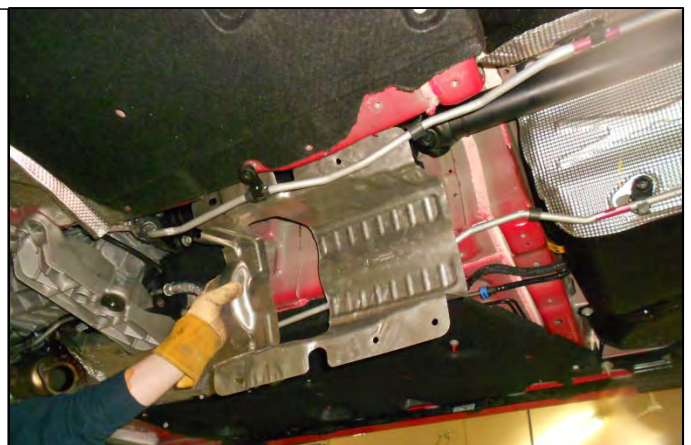
Automatic vehicles with dual mode have 4 exhaust valve actuators and would all need to be unplugged.



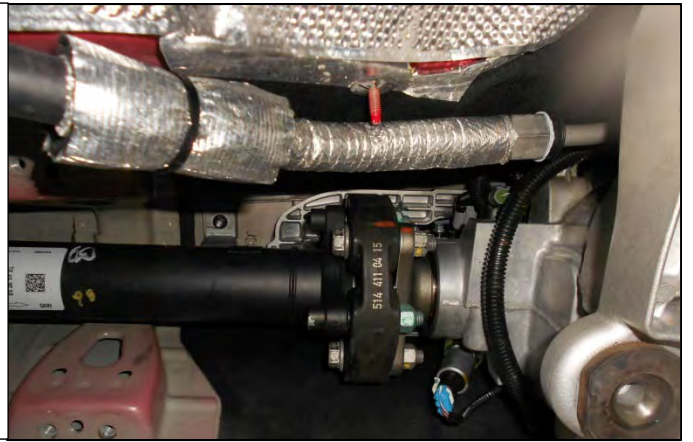
15. Remove the four 13mm bolts from the tunnel brace and remove the brace.



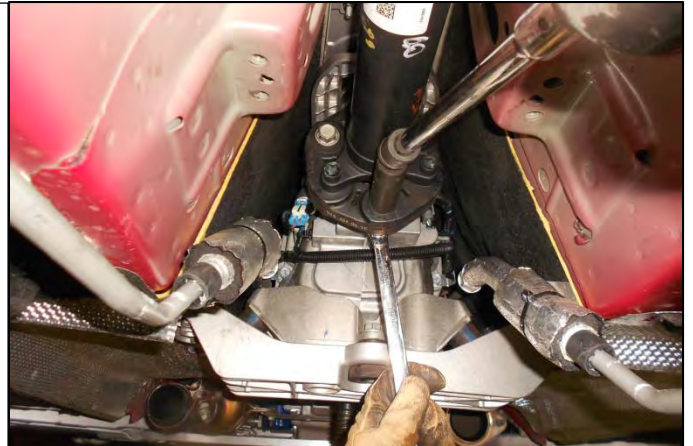
16. Remove the three 10mm bolts from the right and left side of the heat shield. Remove the heat shield.



17. The drive shaft must be removed. Start by making an alignment mark on the flex coupling and the transmission flange.



18. Remove the three 18mm bolts and nuts from the flex coupling at the transmission.



19. Remove the three 18mm bolts and nuts from the flex coupling and differential flange.



20. Support the drive shaft. Remove the two 15mm bolts from the center carrier bearing. This will allow the drive shaft to be removed from the vehicle.



21. The drive shaft can be squeezed together in order to clear the transmission and differential flange.



22. Support the transmission with a screw or hydraulic jack.



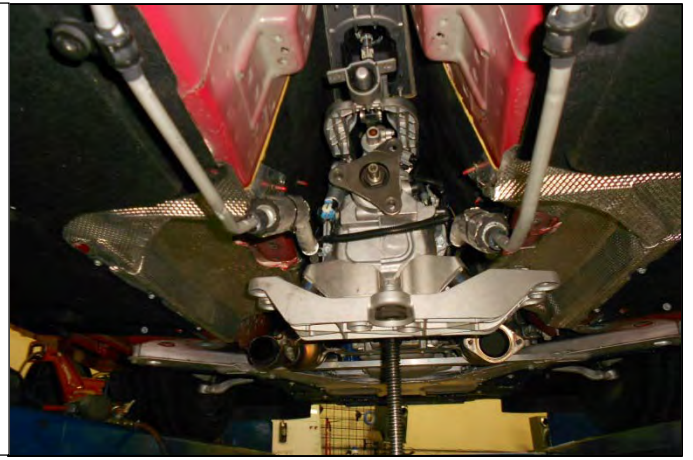
23. Remove the two 10mm bolts from the rear of the shifter housing.



24. Remove the four 15mm bolts from the transmission cross member



25. Lower the rear of the transmission enough to gain access to the front of the shifter housing.



26. The shifter housing is connected to the transmission with a pin on the left and right side. The pin has a spring lock at the end of it as shown here.

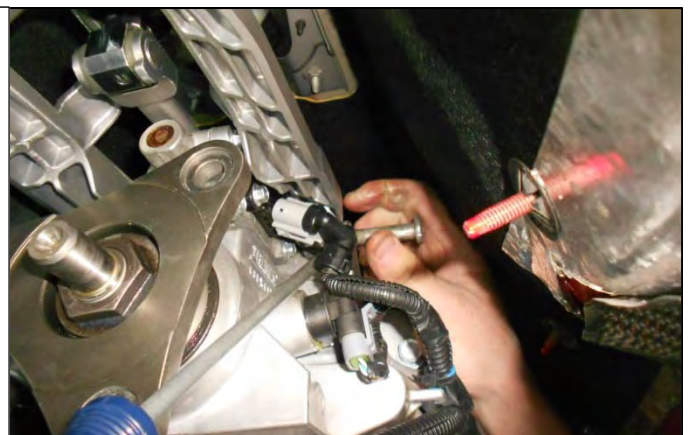


27. Remove the pin on the left and right side by pushing the spring lock down while using a screw driver to pull the pin out until it stops.



Note: The pin can be rolled to gain access to the spring lock.

28. Reposition the screw driver between the rubber isolator on the shifter housing and push the spring lock in and remove the pin.

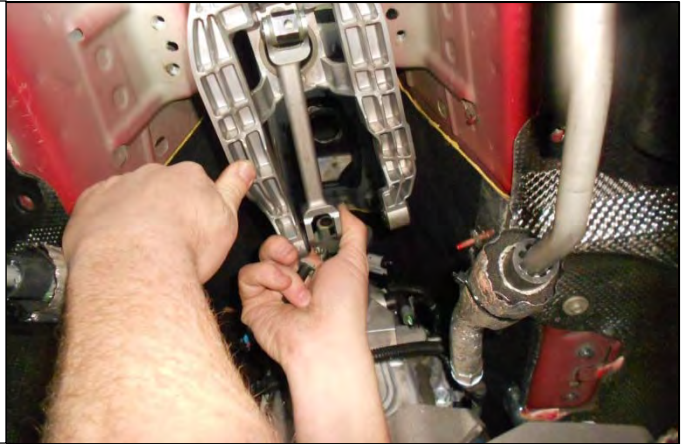


29. Remove the spring loaded clip from the cross pin that attaches the shift rod to the transmission and remove the pin.

Note: there are two spring loaded C clips set these aside the clips will be reused.



30. You can now remove the entire shifter assembly from the vehicle.



31. Remove the rubber boot.



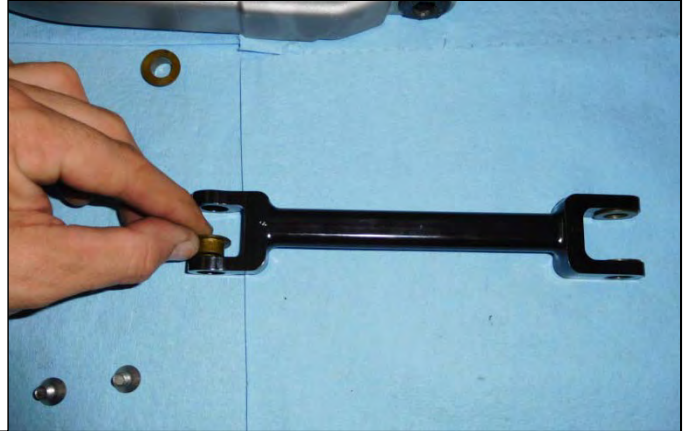
32. Remove the two 4mm allen bolts that hold the factory stick assembly in place.



33. Remove the stick assembly from the shifter housing.



34. Inset all four flange bushings into the supplied link bar. Ensure that the flange portion of the bushing is on the inside of the rod.



35. The Hurst shifter assembly and the link bar can now be assembled.

Note: The shifter assembly must be oriented so that the offset is to the right of the link bar looking forward.

Note: The link bar is marked with an S and a T these letters face up and indicate the shifter side and the transmission side.



36. Apply grease to the bushings. Insert the supplied linkage pin from the right side of the shifter looking forward. Secure this into place using one of the two factory spring clips that were put aside.

Apply grease to the o rings on the shifter assembly.



37. Insert the Hurst shifter assembly into the factory housing. Install the supplied bolts. Bolt it in place using a 4mm allen wrench.



38. Grease the forward bushings on the shift rod and reinstall the factory rubber boot.



39. Reinstall the shifter assembly into the vehicle.



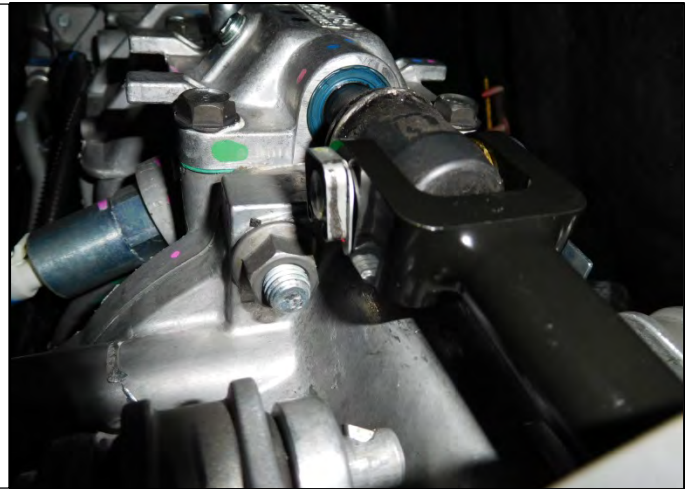
40. Reinstall the two spring pins that attach the shifter housing to the transmission.



41. Align the link bar with the shift rod on the transmission. Install the supplied linkage pin.



42. Secure the linkage pin into place by using the remaining factory spring clip that was put aside.



Working in reverse order starting from page 8 step 25 to page 3 step 5 reinstall the following:

1. Transmission cross member, Torque to factory specifications.
2. Driveline, Torque to factory specifications.
3. Heat shield, Torque to factory specifications.
4. Tunnel brace, Torque to factory specifications
5. Exhaust system, Torque to factory specifications.

43. Remove the factory shift knob from the shift boot. Invert the shift boot and pry in on the two plastic tabs that secure the shift knob to the shift boot ring.

Note: Hook tools work good for this.



44. Remove the boot ring from the shift boot.

Note: This is glued on so take care not to rip the shift boot.



45. With the boot inverted install the Hurst upper stick through the boot.



46. Ensure that boot is past the machined groove on the upper stick. Secure the shift boot to the Hurst upper stick using the supplied tie wrap.

Note: The upper stick is designed so that the tie wrap tightens down in the machined groove.



47. Using grease or soap and water place some lubricant on the o rings located on the lower stick. With the shift boot still inverted slide the upper stick down over the top of the lower stick. Ensure to align the two holes on the upper stick to the two threaded holes on the lower stick.



48. Place the ¼" isolation sleeves over the 1/4"x1/4"10-24 shoulder bolts.



49. Install the shoulder bolts into the upper stick. Using an 1/8" allen wrench, tighten the shoulder bolts into place.



50. Align the chrome bezel to the center console and snap back into position. Push the shift boot back down around the Hurst shifter.



51. Install the Jam nut.



52. Install the Hurst shift knob. The height of the Hurst shift knob can be adjusted. Position the shift knob the desired orientation then tight the jam nut up against the shift knob.

