

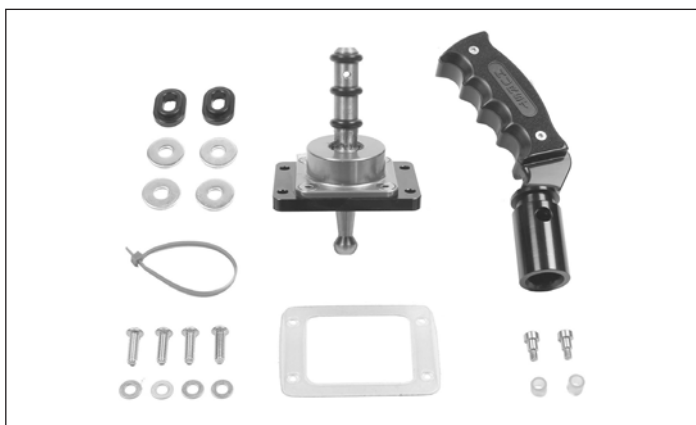


INSTALLATION INSTRUCTIONS

Part No. 3916042

BILLET/PLUS® PISTOL GRIP SHIFTER

for 1997-2019 Chevrolet Corvette (C5, C6 & C7)
with manual transmission



PARTS LIST

| DESCRIPTION | QTY |
|---|-----|
| BUSHING, ANODIZED | 2 |
| WASHER, FLAT M8 OVERSIZED | 4 |
| SHIFTER ASSEMBLY | 1 |
| GASKET, SHIFTER | 1 |
| SCREW, BUTTON-HEAD 1/4-20 × 3/4" | 4 |
| WASHER, FLAT 1/4" | 4 |
| PISTOL GRIP ASSEMBLY | 1 |
| CABLE TIE, 6" | 1 |
| ISOLATION SLEEVE, BLUE VINYL 1/4" I.D. × 1/4" L | 2 |
| SHOULDER SCREW, 10-32 × 1/4" O.D. × 1/4" L | 2 |

BEFORE STARTING

Take a moment to read and understand the instructions for your vehicle. C5 instructions start on this page; C6 starts on p. 8, and C7 starts on p. 15.

Use the parts list to verify your kit's contents. In the unlikely event that any parts are missing, please contact Hurst Technical Support for replacements.

We recommend that you retain all factory parts.

WORK SAFELY! Park the vehicle on a clean, level surface. Turn the ignition switch OFF. Chock the wheels, and set the parking brake before starting.

NOTES

- Installation requires moderate mechanical skill. If this job is beyond your abilities, seek the services of a qualified technician.
- The shifter mechanism is precision-assembled at our factory. **Any modification or disassembly of the shifter will void its**

warranty, and may cause it to malfunction. Disassemble items **only** where specified in the instructions.

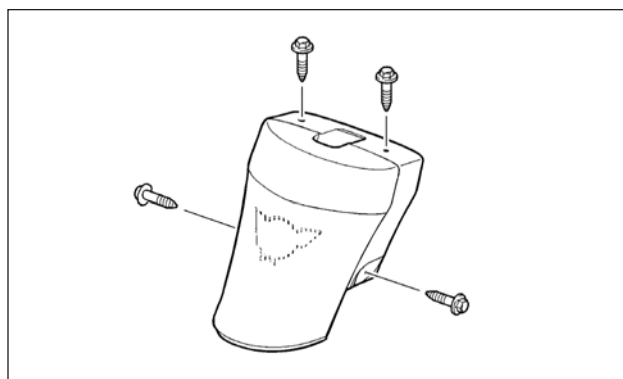
- If you do not understand any part of these instructions, please call **Hurst Technical Support** at (866) 464-6553 for assistance.

REQUIRED ITEMS

- White lithium grease
- Medium-strength thread locking compound (Permatex Blue or similar)
- Plastic trim tools (for removing interior panels)

1997-2004 (C5) MODELS

REMOVE THE STOCK SHIFTER



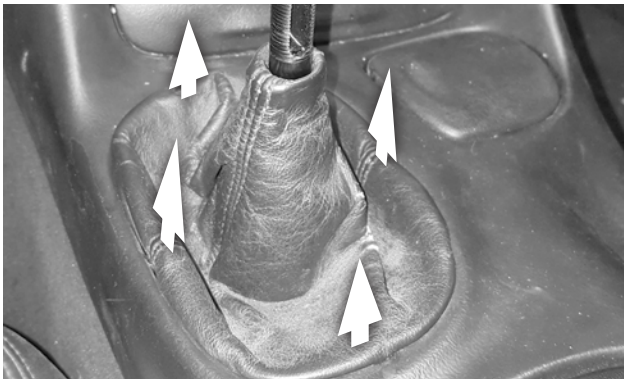
- 1. CONVERTIBLES ONLY:** Remove the "waterfall" (the plastic panel between the seat backs). For access, put the top down, but leave the deck lid up. Remove the 2 screws on top of the waterfall, and 1 screw on each side (4 screws total). Then remove the waterfall.



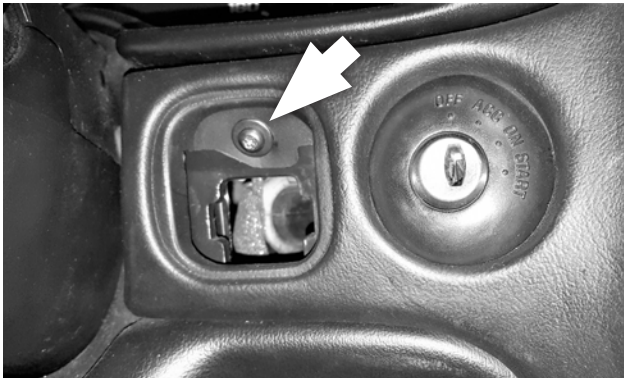
- 2. Remove the shift-pattern insert** from the shift knob with a small, flat-tipped screwdriver.



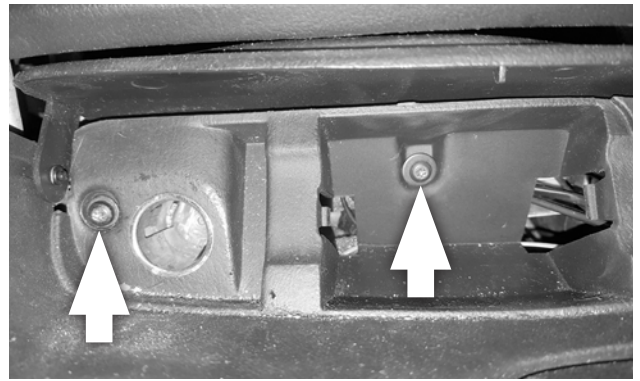
3. **Remove the T-shaped key from the knob.** (It may be pried up with 2 flat-tipped screwdrivers — one on each side of the key's T-shaped head — or pulled out with locking pliers.) Then unscrew the knob from the shift lever.



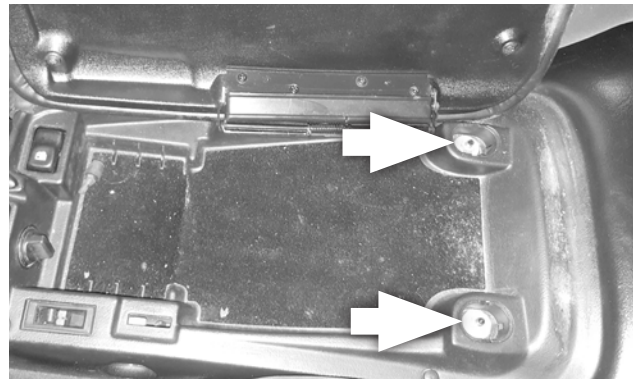
4. **Separate the shift boot frame from the front console,** lift the boot over the lever, and set it aside.



5. **Remove the small grille to the left of the ignition switch,** then remove the screw behind it.



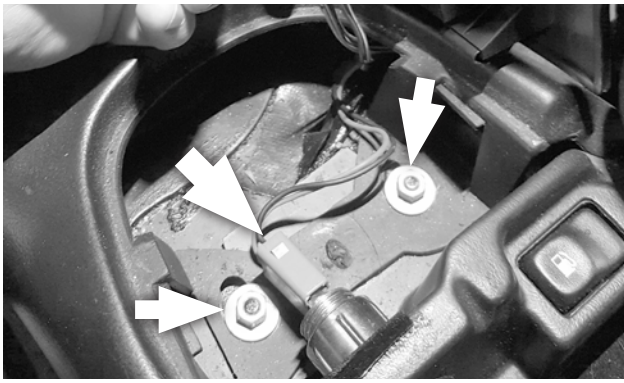
6. **Remove the ash tray.** Then remove 1 screw behind the ash tray, and 1 screw next to the cigarette lighter.



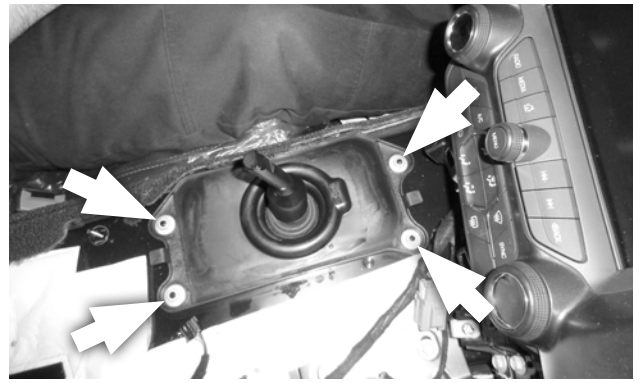
7. **Open the center console lid.** Remove the 2 plastic trim covers and the 2 nuts at the rear of the storage compartment.



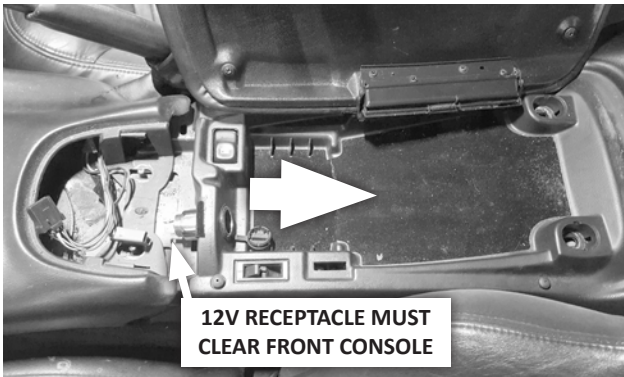
8. **At the front edge of the storage compartment,** lift up on the rear edge of the half-round panel to detach it from the front console. Disconnect any electrical plugs, and set the panel aside.



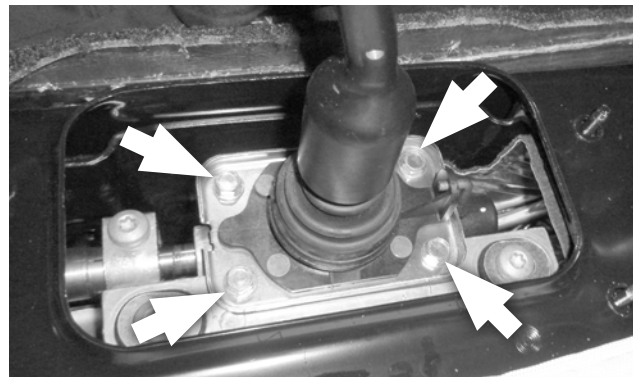
9. Disconnect the electrical plug from the 12v receptacle, then remove the two nuts.



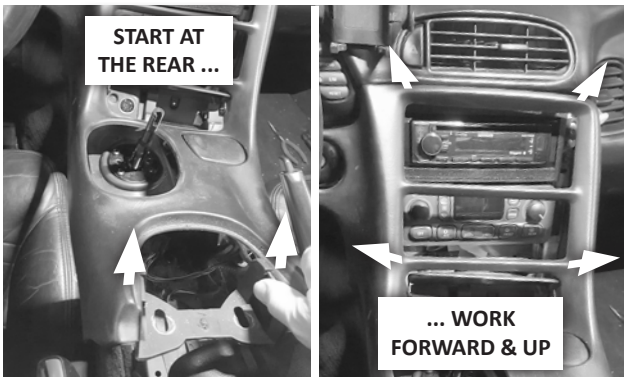
12. Remove the 4 nuts and the rubber dust boot and set them aside.



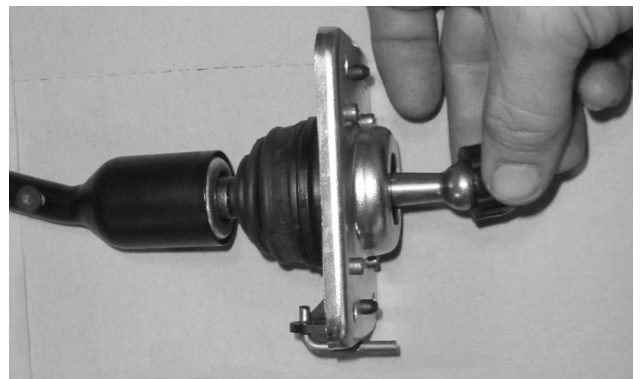
10. Lift the rear of the center console and move it back just far enough for the 12v receptacle to clear the front console.



13. Put the shifter in Neutral. Then remove the 4 mount bolts and the shifter assembly, and remove any gasket material from the mount pad.



11. Starting at the rear and working forward, detach the front console from the console base and dash. Disconnect the cigarette lighter plug, and set the front console aside.



14. Remove the plastic pivot cup from the shift lever.

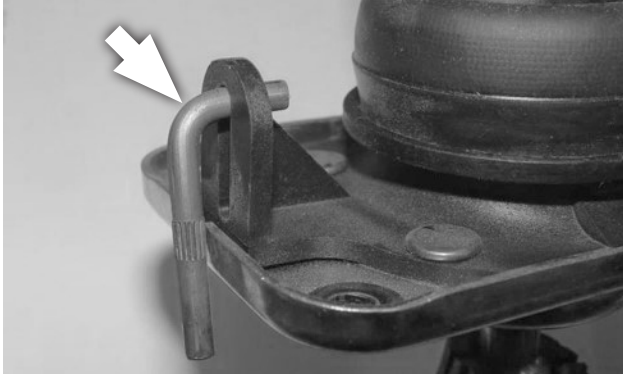
CAUTION: The pivot cup will be re-used. It should snap off by hand, but if you use pliers, take care not to damage it.

OPTIONAL: REPLACE RUBBER STOCK BUSHINGS

This section (**Steps 15-20**) describes the replacement of the rubber stock bushings with the optional metal bushings included in this kit. (This does not apply to the Z06, which already uses metal bushings.)

Use of the metal bushings provides a more solid-feeling shift. However, it also transmits more noise and vibration to the passenger compartment. If a quieter, smoother shift is preferred, skip this section and proceed to **Step 21**.

NOTE: Handle all hardware with care to prevent it from falling into the shifter cavity.



- 15. Remove the L-shaped alignment pin from the front of the stock shifter.**



- 16. Insert the "L" pin FULLY into the hole in the shift linkage support in front of the shift box.**

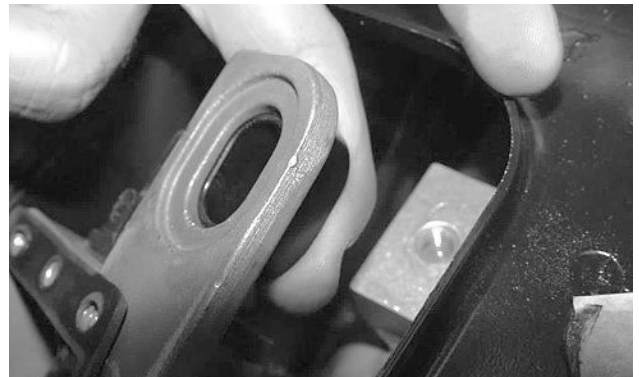
CAUTION: Full insertion is required to maintain shift linkage alignment while replacing the bushings.



- 17. Remove the two screws that secure the shift box to the vehicle.**



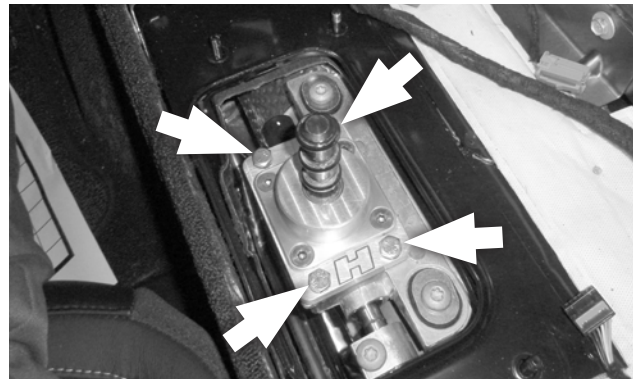
- 18. Remove the metal spacers and rubber bushings from both holes.**



- 19. Lift the right side of shift box slightly, insert the kit's 2 metal bushings into the holes from the underside, then return the box to its normal position.**



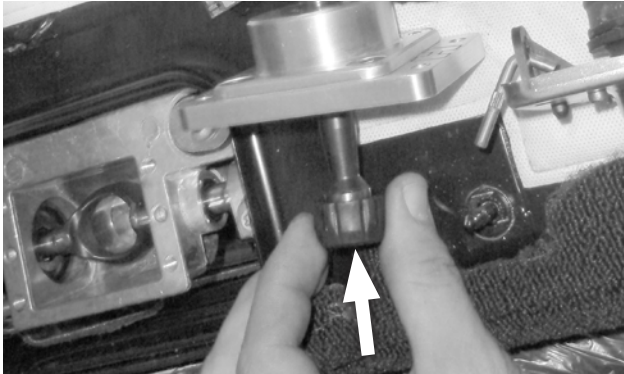
20. Apply medium-strength thread locker to the stock screws and reinstall them, along with the kit's 4 **washers** (2 per screw). After tightening both screws, remove the "L" pin.



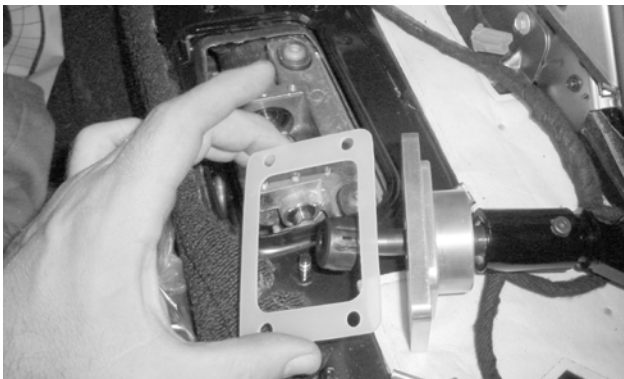
23. Place the shifter on the shift box, inserting the pivot cup into the shift linkage. Apply medium-strength thread locker to the four **1/4-20 button-head screws**, and secure the shifter to the shift box with the screws and **1/4" washers**.

INSTALL THE HURST BILLET/PLUS SHIFTER

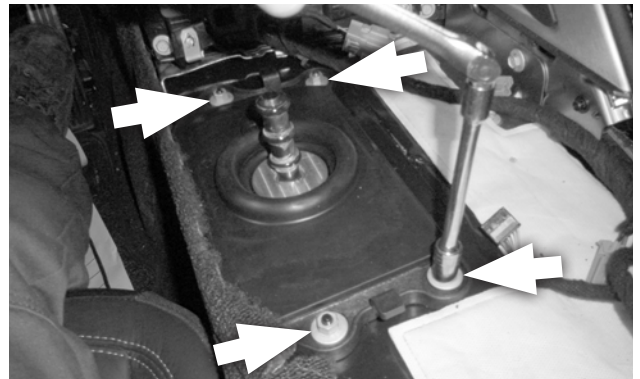
CAUTION: To avoid cracking the plastics during reassembly of the vehicle interior, do not over-tighten the screws.



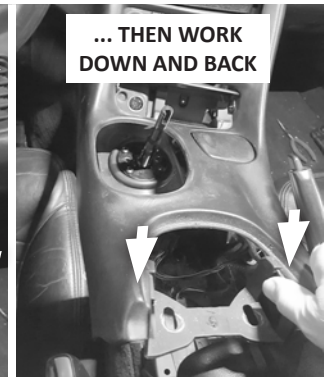
21. Grease the pivot ball at the bottom of the Hurst shifter's lever. Then snap the stock pivot cup onto the pivot ball.



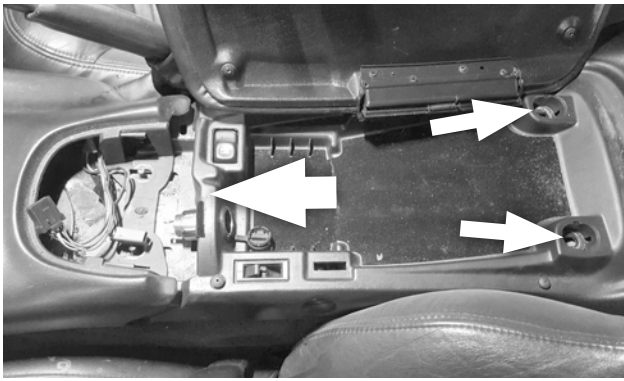
22. Install the new gasket on the mount pad.



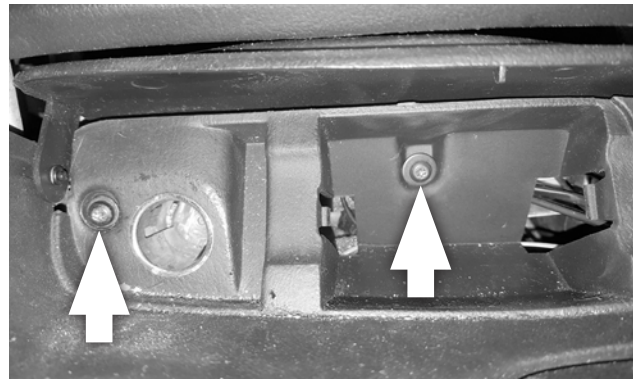
24. Reinstall the rubber dust boot using the 4 stock nuts. Then grease the 3 o-rings on the shift lever.



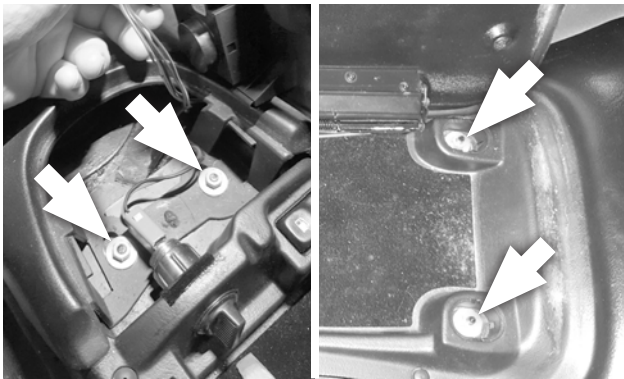
25. Move the front console close to the dash and console base, and reconnect the cigarette lighter plug (front of console). Reassemble the console to the dash first, then to the console base.



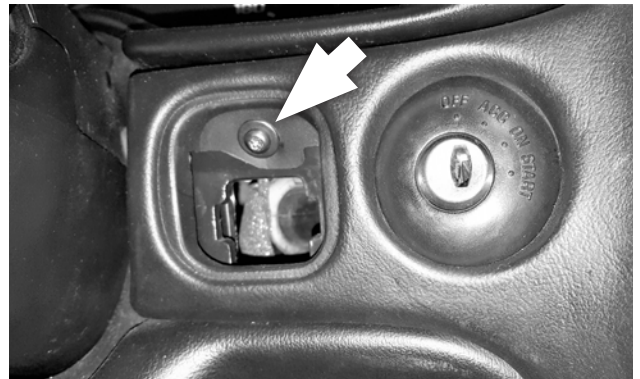
26. Slide the center console forward and lower the rear mount holes onto their studs.



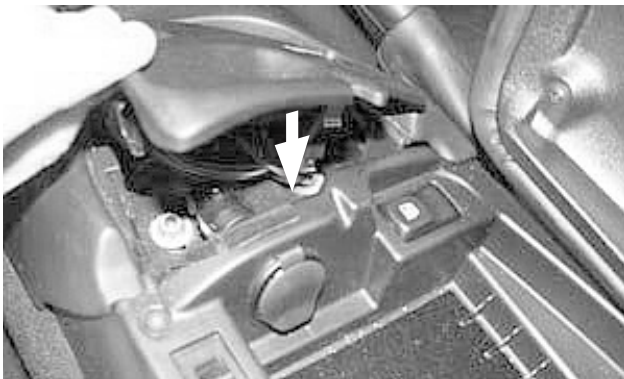
29. Reinstall the 2 lower screws (at the ash tray and cigarette lighter), then reinstall the ash tray.



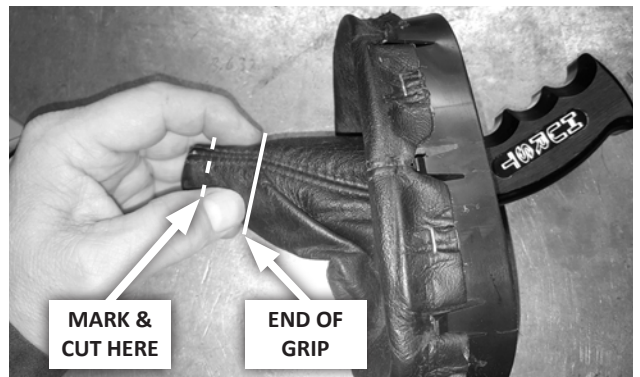
27. Hand-start the 2 front and 2 rear center console nuts, then tighten them all down. Reconnect the plug to the 12v receptacle, and reinstall the trim covers over the rear nuts.



30. Reinstall the upper screw (next to the ignition switch), then reinstall the small grille.

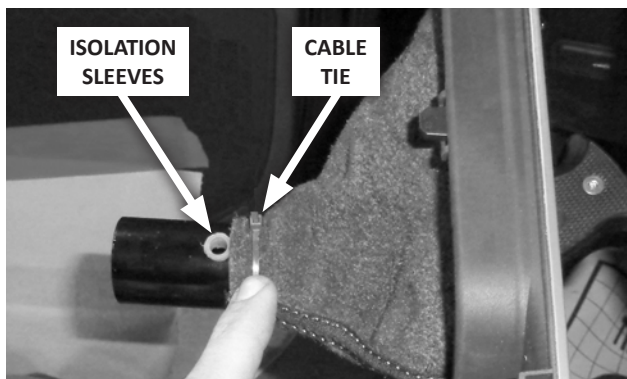


28. Reconnect any electrical plugs to the half-round panel, then reinstall the panel in the console.



31. Place the bottom (round) end of the pistol grip into the leather boot until it stops. Mark the boot about 3/4" away from where the pistol grip touches it. Remove the pistol grip, and cut off the tip of the boot at the mark.

NOTE: Cut the tip off the boot closer to the opening at first, so as to make a smaller hole. The hole will likely stretch over the end of the pistol grip. If it doesn't, you can cut off a little more material as needed.



- 32. Push the end of the pistol grip through the boot opening from the top (finished) side, until the edge of the opening is over the groove. Secure the boot to the pistol grip with the cable tie and trim off the excess. Insert the 2 isolation sleeves in the holes on each side of the pistol grip.**



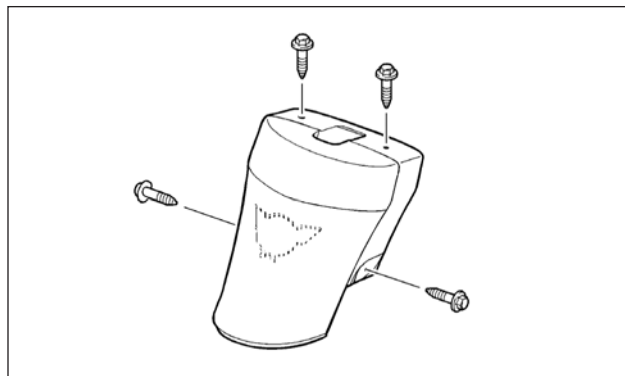
- 33. Flip the boot so that its finished side and the pistol grip are exposed, and align the pistol grip's finger grooves toward the front of the boot.**



- 34. Push the pistol grip down over the shift lever and align the screw holes in both parts. Apply medium-strength thread locker to the 2 shoulder screws, and use them to secure the pistol grip to the lever.**



- 35. Snap the shift boot back into place in the front console.**



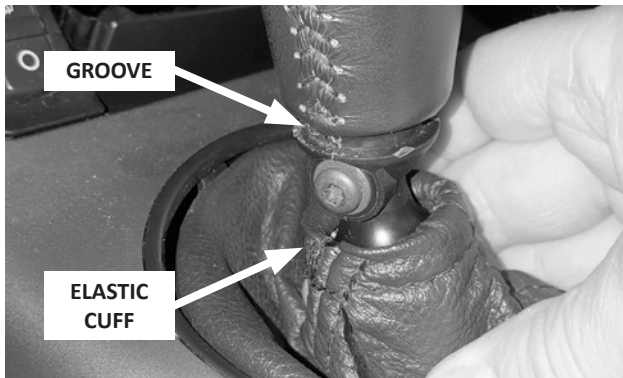
- 36. CONVERTIBLES ONLY: Reinstall the "waterfall" panel.**

Congratulations, your Hurst Billet/Plus® shifter is now installed and ready to enjoy!

2005-2013 (C6) MODELS

REMOVE THE STOCK SHIFTER

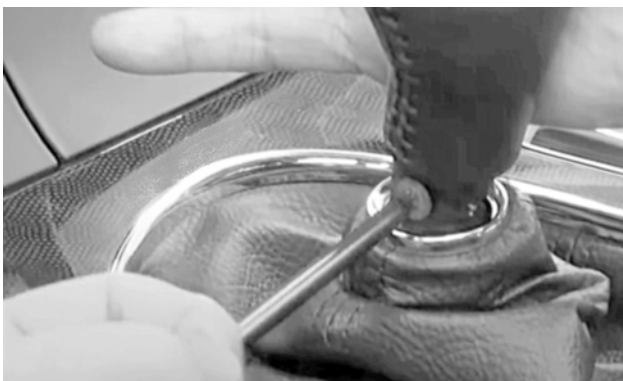
37. Separate the leather boot from the shift knob as follows:



A. **EARLY C6 (2005-2007):** Work the boot's elastic cuff out of its groove, and push it down to expose the screw.

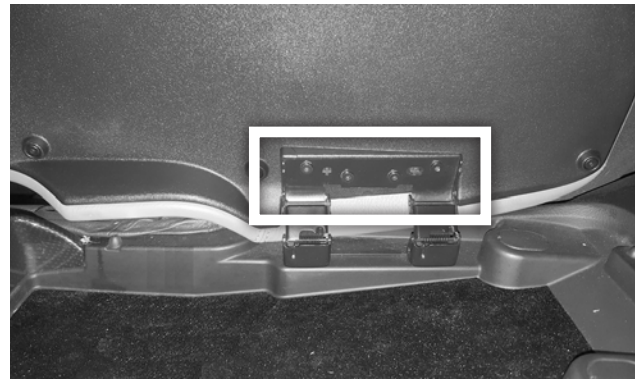


B. **LATE C6 (2008-2013):** Firmly grasp the chrome ring below the knob, and turn it 1/4-turn counter-clockwise while pushing it down to expose the screw.



38. Remove the shift knob screw, then lift the knob off of the shift lever.

CAUTION: Avoid damaging the screw. Push firmly against the right side of the knob, and keep the screwdriver firmly inserted during removal.

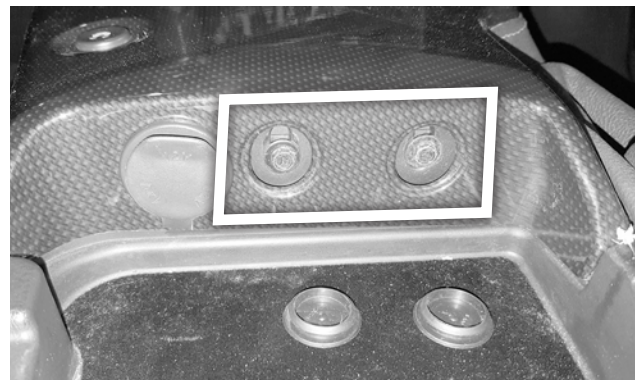


39. Open the center console lid, remove the 4 hinge screws, remove the lid, and close the hinge.

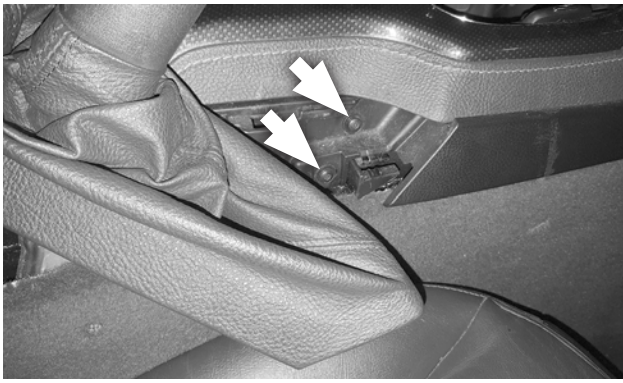
CAUTION: Avoid damaging the screw holes. Support the door while removing the last 2 screws.



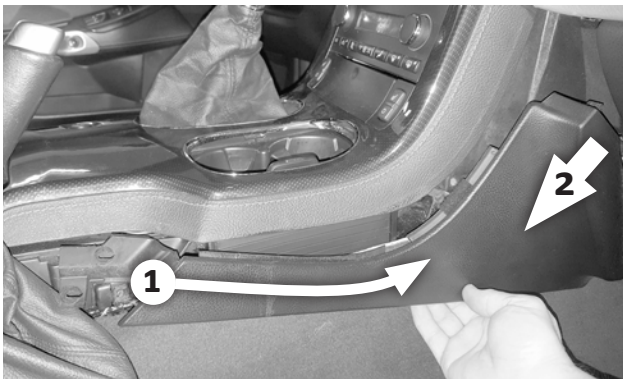
40. **EARLY C6 (2005-2007) ONLY:** At the front edge of the storage compartment, lift up on the rear edge of the half-round panel to detach it from the front console. Disconnect any electrical plugs, and set the panel aside.



41. At the front of the storage compartment, remove the 2 trim covers (if applicable) and 2 screws next to the 12v receptacle.



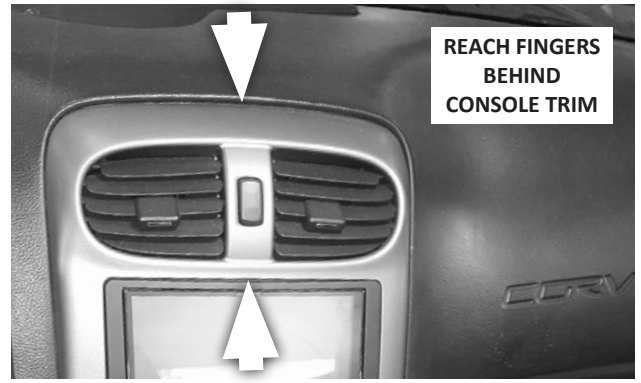
42. On the left side of the parking brake, feel down through the boot, and separate the 2 friction clips from the console base. Then on the right side of the boot, release the 2 plastic tabs. Move the boot aside, and remove the 2 trim panel screws.



43. Starting at the rear of the right side trim panel and moving forward, gently work it out from between the carpet and the console. After freeing about half of the panel (to just past the curve), pull it down at a rearward angle to release 2 friction clips at the front, then set the panel aside.



44. Put the shifter in 4th gear and lift the boot opening off the end of the shift lever (to prevent it from catching). Starting at the rear of the front console and working forward, detach it from the console base and dash. Lift up on the rear edges first, then gently pull back on the front edges, just until all the friction clips have been released.



45. At the hazard light button, reach your fingers behind the front console from the top and bottom. Support the top of the hazard light plug with one hand, release the locking tab on the bottom of the plug with the other, and disconnect the plug from the switch.

46. Disconnect the heated seat plugs (if applicable). The locking tabs are on the bottom of each plug.

47. Disconnect the cigarette lighter plug (at the front of the console, behind the ash tray).

NOTE: The plug at the rear 12v receptacle (at the front of the console storage compartment) may remain connected.

48. Carefully move the front console cover around the parking brake handle and set it on the passenger seat.

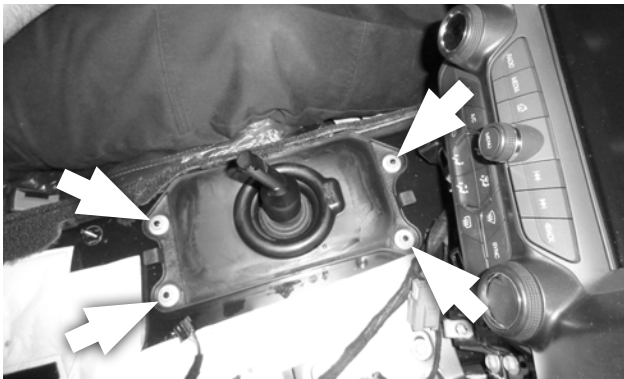


49. Release the sound insulation from its 2 tabs, lift it over the shift lever, and set it aside.

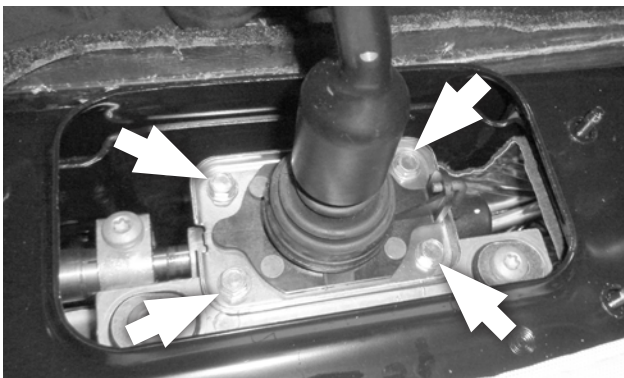
50. Remove the leather shifter boot from the front console and set it aside.



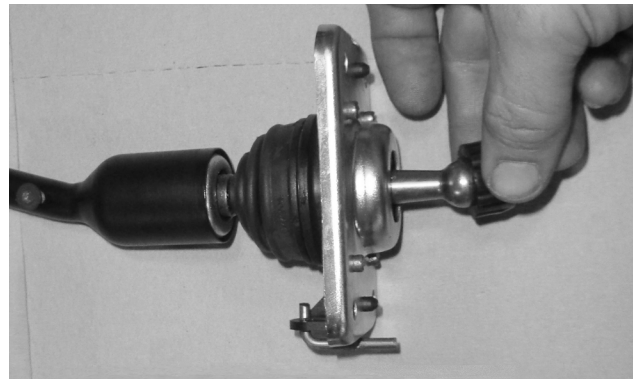
51. **LATE C6 (2008-2013) ONLY:** Turn the shift boot inside-out, and carefully remove the o-ring securing the chrome collar to the boot. Then separate the ring from the boot.



52. Remove the 4 nuts and the rubber dust boot and set them aside.



53. Put the shifter in Neutral. Then remove the 4 mount bolts and the shifter assembly, and remove any gasket material from the mount pad.



54. Remove the plastic pivot cup from the shift lever.

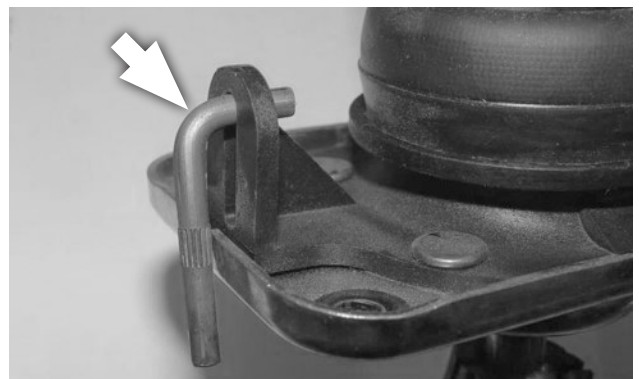
CAUTION: The pivot cup will be re-used. It should snap off by hand, but if you use pliers, take care not to damage it.

OPTIONAL: REPLACE RUBBER STOCK BUSHINGS

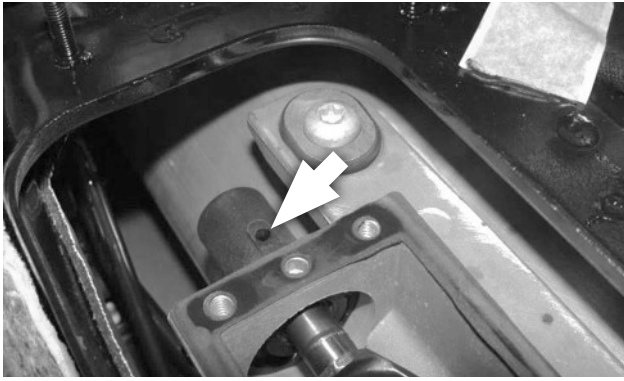
This section (**Steps 55-60**) describes the replacement of the rubber stock bushings with the optional metal bushings included in this kit. (This does not apply to the Z06, which already uses metal bushings.)

Use of the metal bushings provides a more solid-feeling shift. However, it also transmits more noise and vibration to the passenger compartment. If a quieter, smoother shift is preferred, skip this section and proceed to **Step 61**.

NOTE: Handle all hardware with care to prevent it from falling into the shifter cavity.



55. Remove the L-shaped alignment pin from the front of the stock shifter.



56. Insert the "L" pin **FULLY** into the hole in the shift linkage support in front of the shift box.

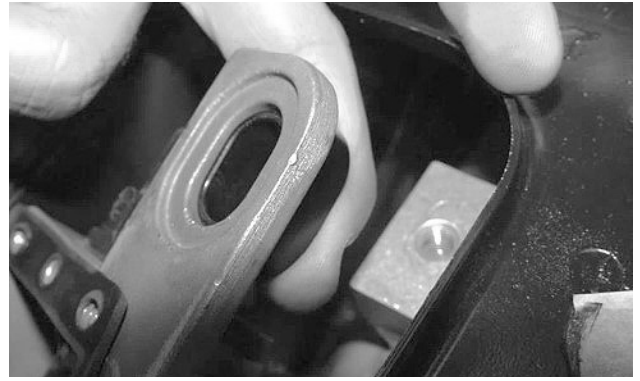
CAUTION: Full insertion is required to maintain shift linkage alignment while replacing the bushings.



57. Remove the two screws that secure the shift box to the vehicle.



58. Remove the metal spacers and rubber bushings from both holes.



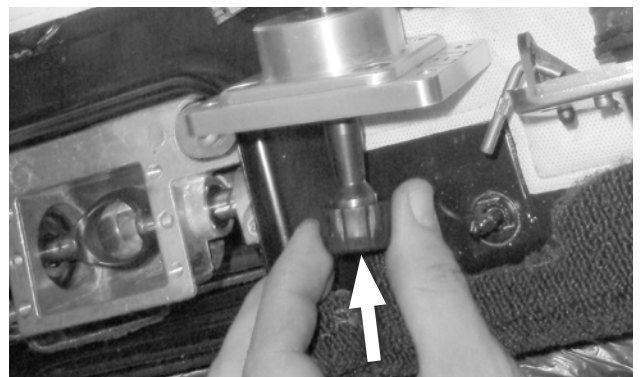
59. Lift the right side of shift box slightly, insert the kit's 2 metal bushings into the holes from the underside, then return the box to its normal position.



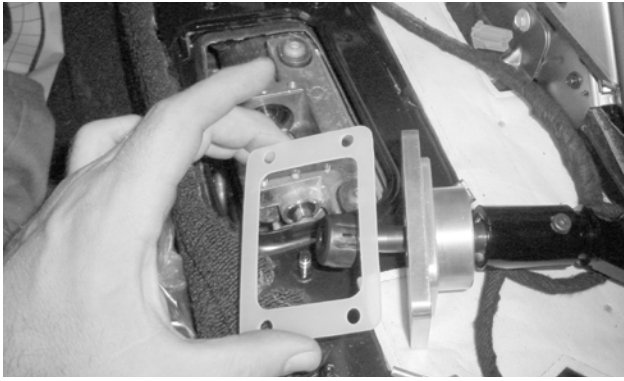
60. Apply medium-strength thread locker to the stock screws and reinstall them, along with the kit's 4 washers (2 per screw). After tightening both screws, remove the "L" pin.

INSTALL THE HURST BILLET/PLUS SHIFTER

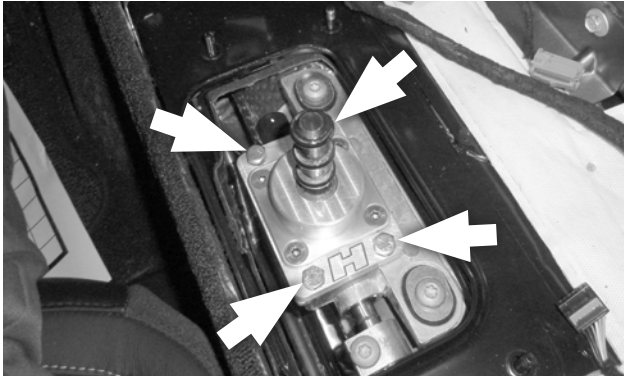
CAUTION: To avoid cracking the plastics during reassembly of the vehicle interior, do not over-tighten the screws.



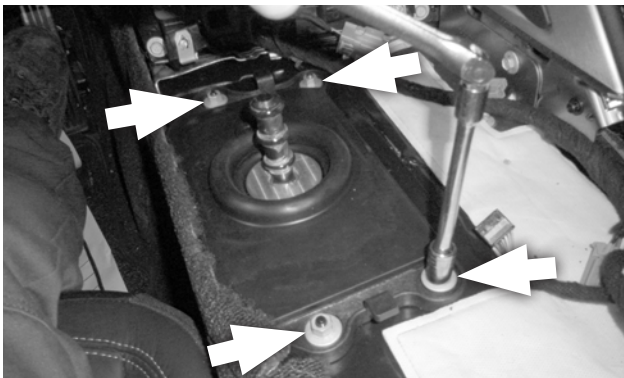
61. Grease the pivot ball at the bottom of the Hurst shifter's lever. Then snap the stock pivot cup onto the pivot ball.



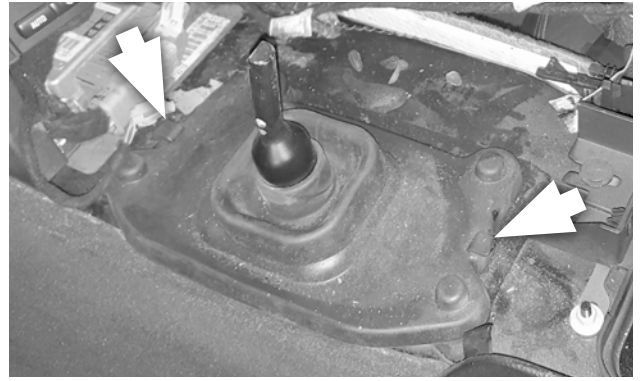
62. Install the new gasket on the mount pad.



63. Place the shifter on the shift box, inserting the pivot cup into the shift linkage. Apply medium-strength thread locker to the four **1/4-20 button-head screws**, and secure the shifter to the shift box with the screws and **1/4" washers**.



64. Reinstall the rubber dust boot using the 4 stock nuts. Then grease the 3 o-rings on the shift lever.



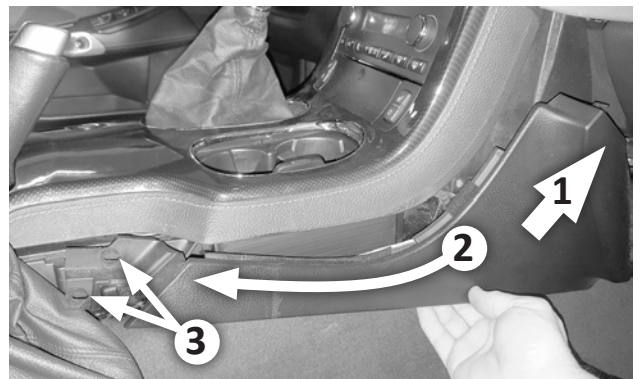
65. Reinstall the sound insulator, pushing its slots down over the tabs on the dust boot.

66. Move the front console close to the dash and console base.

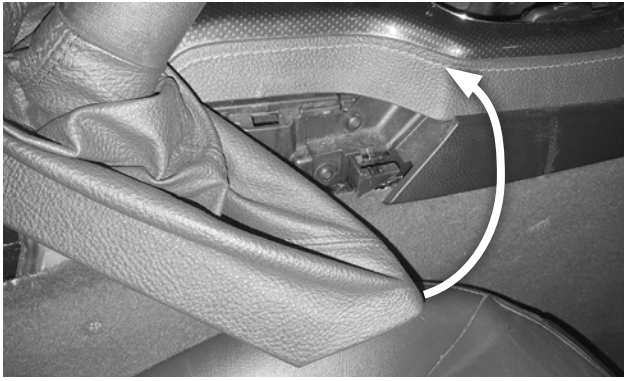
67. Reconnect the cigarette lighter plug, the heated seat plugs (if applicable), and the hazard light button, and check the security of the connections.



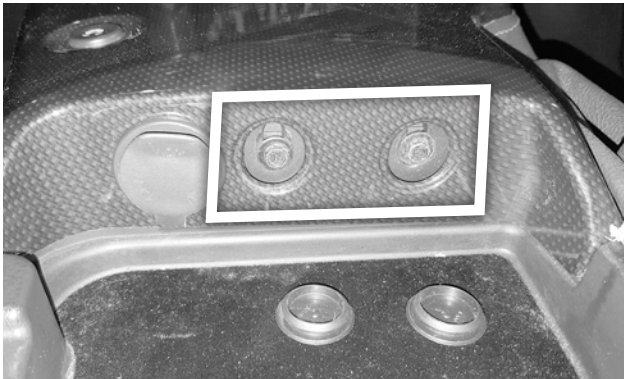
68. Starting at the front of the front console and working down and rearward, reattach it to the dash and console base.



69. Reinstall the right side trim panel. First reattach the 2 front friction clips, then gently work it back in between the carpet and the console base. Finally, reinstall the 2 screws at the rear of the trim panel.



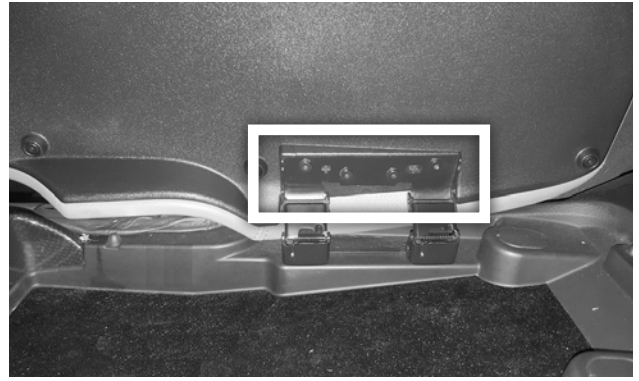
- 70. Reinstall the parking brake boot.** First install the 2 plastic tabs on the right side of the boot, then reattach the 2 friction clips on the left side to the console base.



- 71. Reinstall the 2 screws** at the front edge of the storage compartment (next to the 12v receptacle), and the 2 trim covers (if applicable).



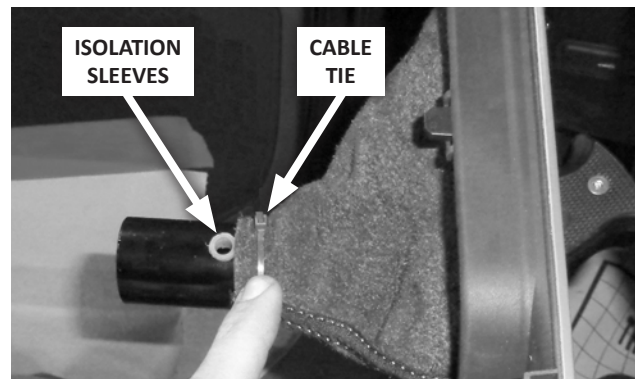
- 72. EARLY C6 (2005-2007) ONLY: Reconnect any electrical plugs** to the half-round panel, then reattach the panel to the front console.



- 73. Reinstall the center console lid.** Support the door with one hand while installing the 4 hinge screws.

CAUTION: Avoid damaging the screw holes. Do not over-tighten the screws.

Verify that the door latches shut when closed. (Loosen the screws and adjust cover alignment, if necessary.)



- 74. Push the end of the pistol grip** through the boot opening from the top (finished) side, until the edge of the opening is over the groove. Secure the boot to the pistol grip with the **cable tie** and trim off the excess. Insert the 2 **isolation sleeves** in the holes on each side of the pistol grip.



- 75. Flip the boot** so that its finished side and the pistol grip are exposed, and align the pistol grip's finger grooves toward the front of the boot.



- 76. Push the pistol grip down over the shift lever** and align the screw holes in both parts. Apply medium-strength thread locker to the 2 **shoulder screws**, and use them to secure the pistol grip to the lever.

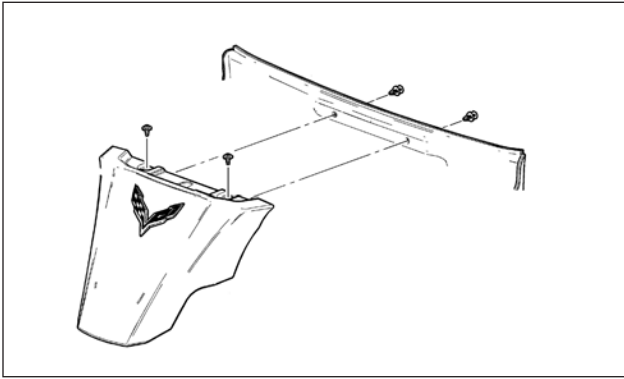


- 77. Snap the shift boot back into place** in the front console.

Congratulations, your Hurst Billet/Plus® shifter is now installed and ready to enjoy!

2014-2019 (C7) MODELS

REMOVE THE STOCK SHIFTER



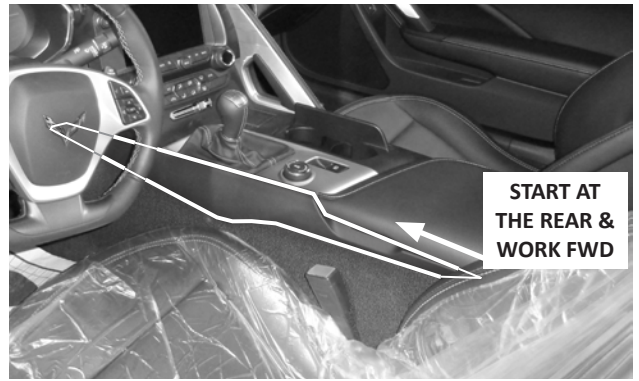
- 78. CONVERTIBLES ONLY:** Remove the “waterfall” (the plastic panel between the seat backs). For access, put the top down, but leave the deck lid up. Remove the 2 screws on top of the waterfall, and the 2 plastic push rivets at the top edge of the fiber panel behind the waterfall. Then remove the waterfall.



- 79. Open the center console lid, remove the 3 hinge screws, remove the lid, and close the hinge.**



- 80. At the rear of the storage compartment, remove the plastic trim cover, then remove the 2 nuts underneath.**

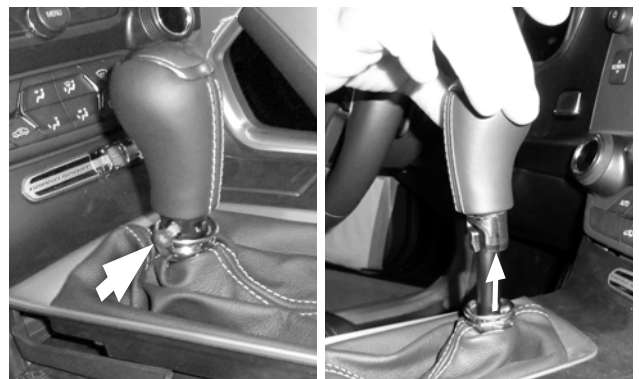


- 81. Starting at the rear of the left side trim panel and moving forward, detach 5 friction clips to remove the panel from the console.**

CAUTION: After detaching the 5th (front) clip, move the panel rearward slightly to avoid damaging the plastic hook at the front.



- 82. Separate the leather boot from the shift knob** by firmly grasping the chrome collar, turning it 1/4 turn counter-clockwise, and pushing it down to expose the screw.



- 83. Remove the shift knob screw, then lift the knob off of the shift lever.**

CAUTION: Avoid damaging the screw. Push firmly against the right side of the knob, and keep your screwdriver firmly inserted during removal.



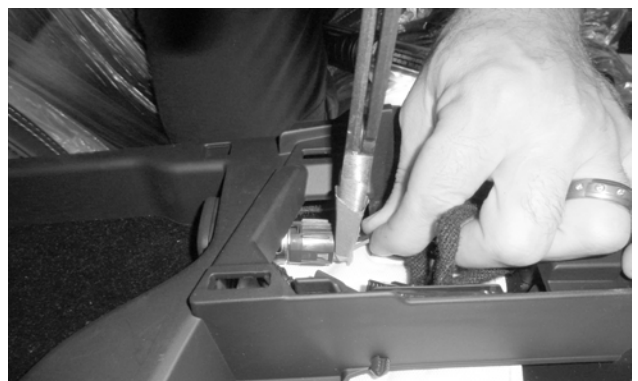
84. Put the shifter in 4th gear, then use a plastic trim tool to separate the back and sides of the console panel from the console base.



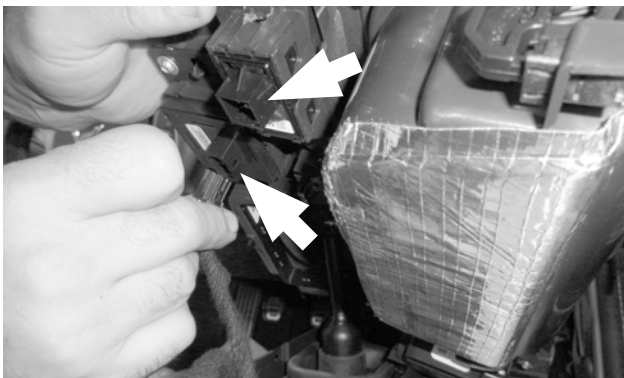
87. Disconnect the 12v receptacle plug by gently squeezing its sides with pliers while pulling the plug out of its receptacle. Then set the console panel aside.



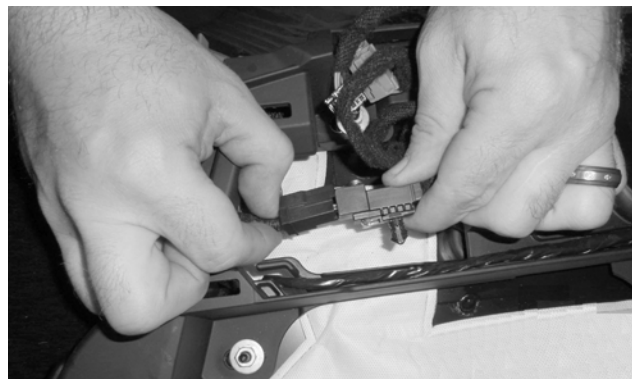
85. Lift up on the back and sides of the console panel, then gently pull rearward to free its front end from the console base.



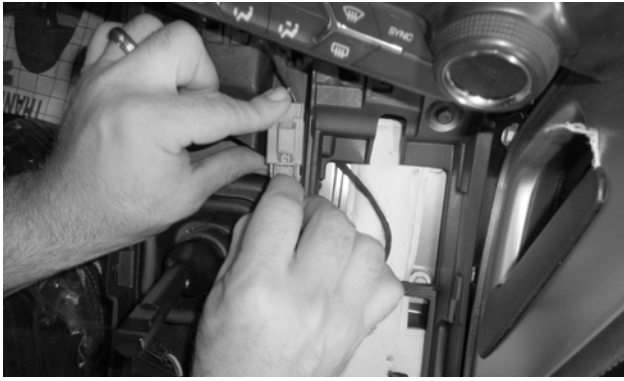
88. At the rear of the console base, disconnect the 12v receptacle plug by gently squeezing its sides with pliers while pulling the plug out of its receptacle.



86. Carefully tilt the console panel forward to view the 2 rear electrical plugs. Disconnect the Mode Select and parking brake plugs by squeezing their locking tabs.



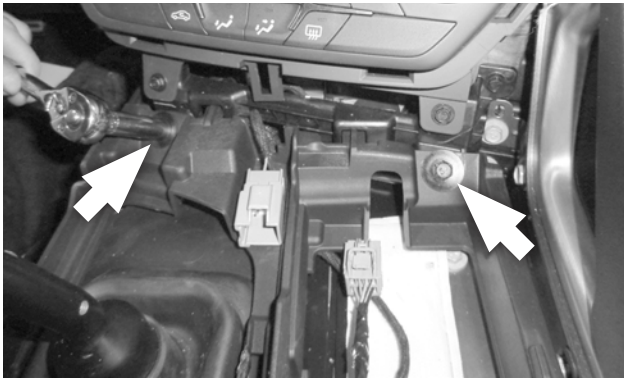
89. Release the USB receptacle from the console base, then disconnect the plug from the receptacle by squeezing its locking tabs.



90. At the front of the console base, disconnect the plug from the receptacle by squeezing its locking tab, then release the receptacle from the console base.



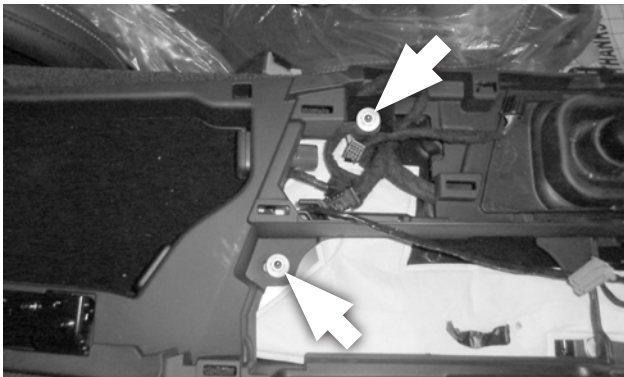
93. Carefully remove the console base and set it aside.



91. Remove the 2 screws at the front of the console base.



94. Release the sound insulation from its 2 tabs, lift it over the shift lever, and set it aside.

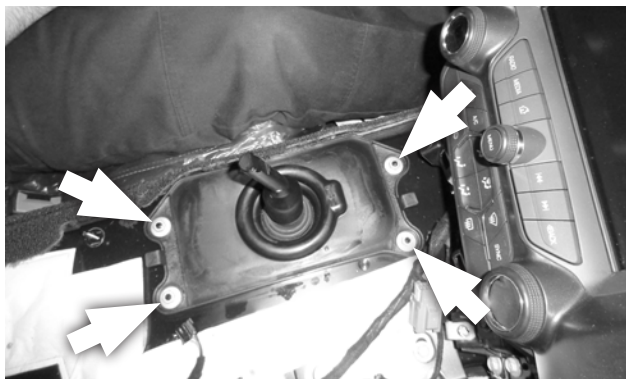


92. Remove the 2 nuts at the middle of the console base.

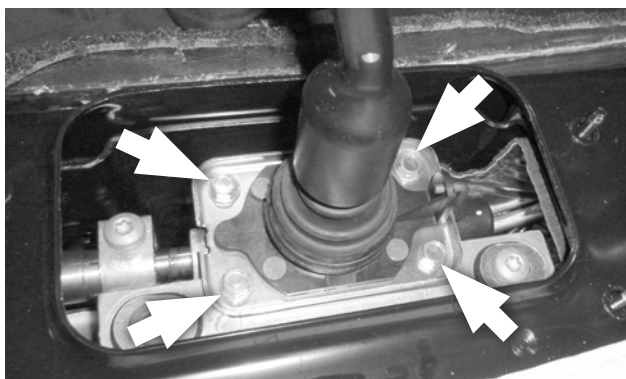


95. Carefully separate the chrome collar from the boot.

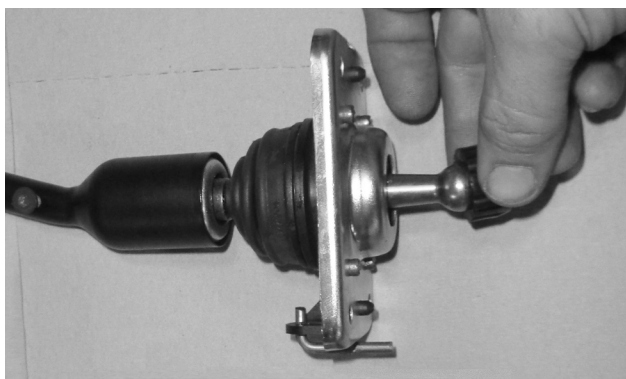
CAUTION: The collar is stapled to the boot. Use care not to tear the boot.



96. Remove the 4 nuts and the rubber dust boot and set them aside.



97. Put the shifter in Neutral. Then remove the 4 mount bolts and the shifter assembly, and remove any gasket material from the mount pad.



98. Remove the plastic pivot cup from the shift lever.

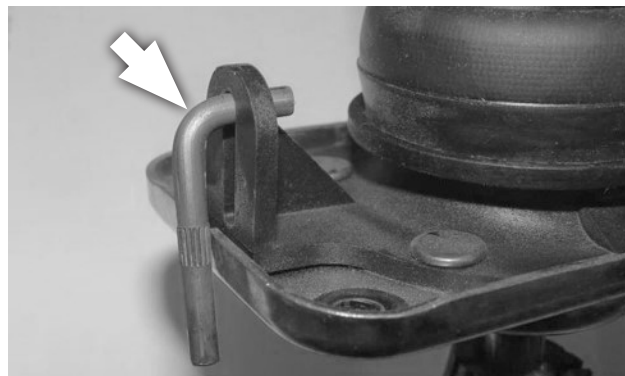
CAUTION: The pivot cup will be re-used. It should snap off by hand, but if you use pliers, take care not to damage it.

OPTIONAL: REPLACE RUBBER STOCK BUSHINGS

This section (**Steps 99-104**) describes the replacement of the rubber stock bushings with the optional metal bushings included in this kit. (This does not apply to the Z06, which already uses metal bushings.)

Use of the metal bushings provides a more solid-feeling shift. However, it also transmits more noise and vibration to the passenger compartment. If a quieter, smoother shift is preferred, skip this section and proceed to **Step 105**.

NOTE: Handle all hardware with care to prevent it from falling into the shifter cavity.



99. Remove the L-shaped alignment pin from the front of the stock shifter.



100. Insert the "L" pin FULLY into the hole in the shift linkage support in front of the shift box.

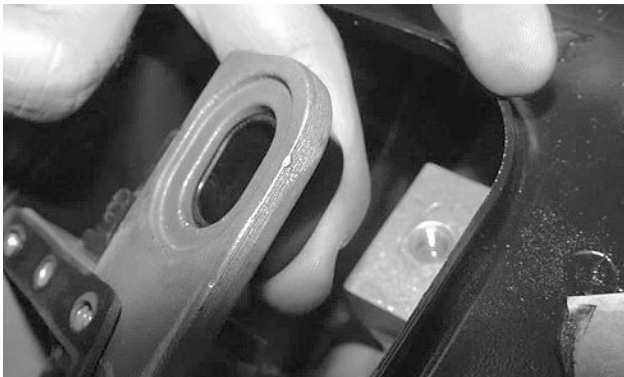
CAUTION: Full insertion is required to maintain shift linkage alignment while replacing the bushings.



101. Remove the two screws that secure the shift box to the vehicle.



102. Remove the metal spacers and rubber bushings from both holes.



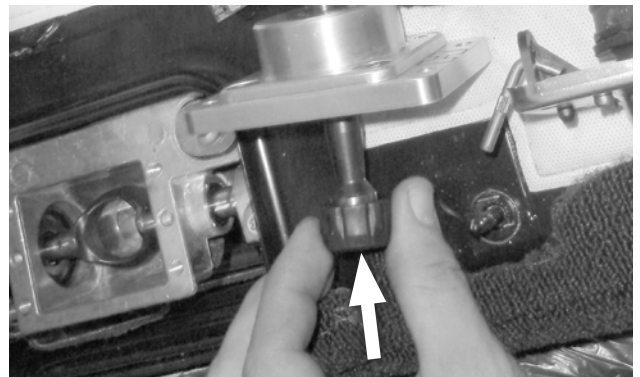
103. Lift the right side of shift box slightly, insert the kit's 2 **metal bushings** into the holes from the underside, then return the box to its normal position.



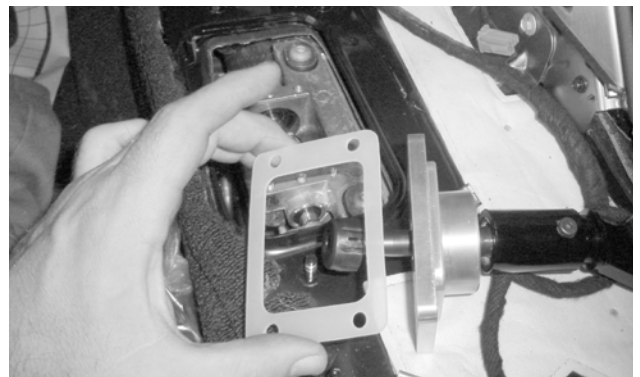
104. Apply medium-strength thread locker to the stock screws and reinstall them, along with the kit's 4 **washers** (2 per screw). After tightening both screws, remove the "L" pin.

INSTALL THE HURST BILLET/PLUS SHIFTER

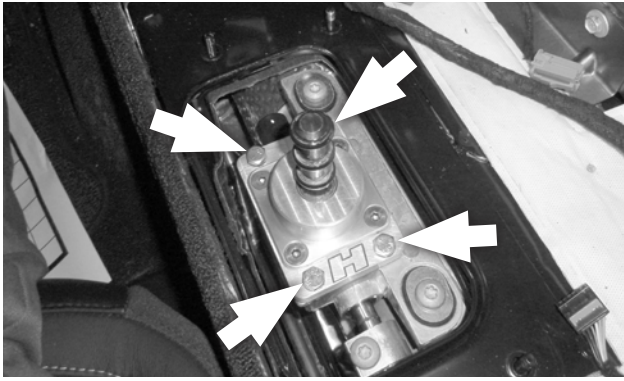
CAUTION: To avoid cracking the plastics during reassembly of the vehicle interior, do not over-tighten the screws.



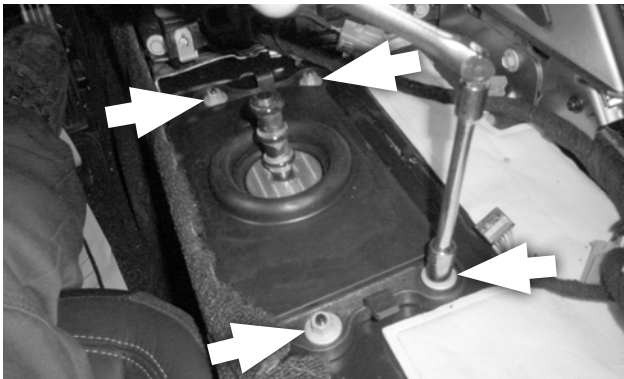
105. Grease the pivot ball at the bottom of the **Hurst shifter's** lever. Then snap the stock pivot cup onto the pivot ball.



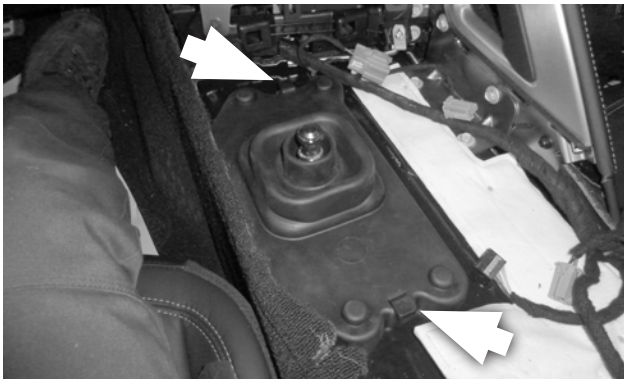
106. Install the new gasket on the mount pad.



107. Place the shifter on the shift box, inserting the pivot cup into the shift linkage. Apply medium-strength thread locker to the four **1/4-20 button-head screws**, and secure the shifter to the shift box with the screws and **1/4" washers**.



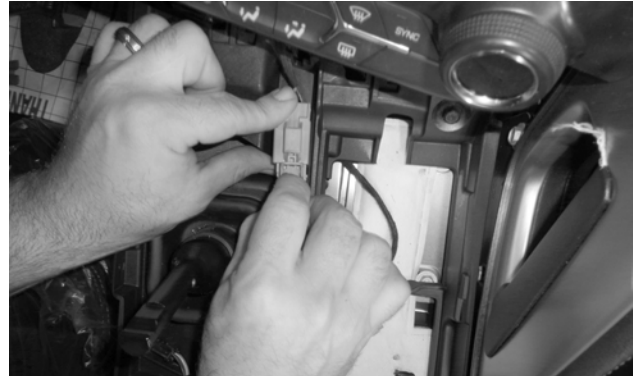
108. Reinstall the rubber dust boot using the 4 stock nuts. Then grease the 3 o-rings on the shift lever.



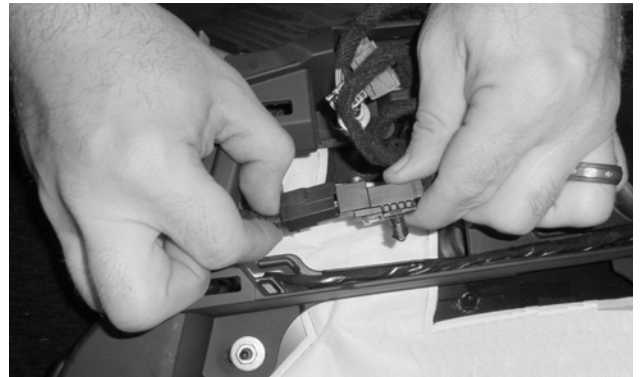
109. Reinstall the sound insulator, pushing its slots down onto the tabs on the dust boot.



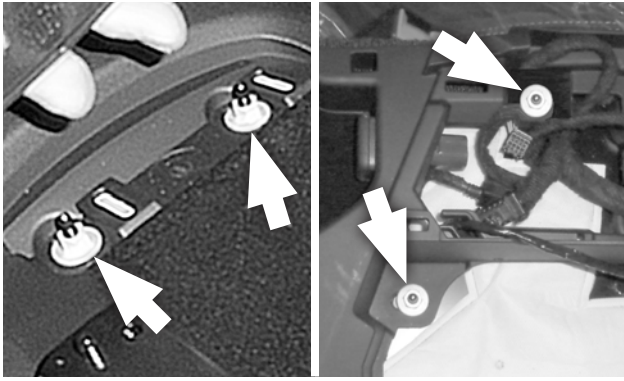
110. Carefully return the console base to the vehicle.



111. Reattach the front harness receptacle to the console base, reconnect the electrical plug, and check the security of the connection



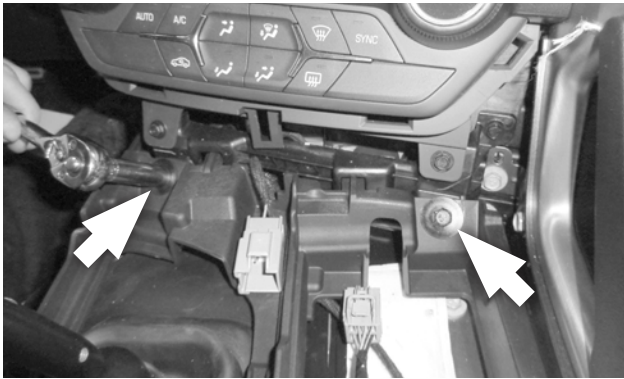
112. Reattach the rear harness receptacle to the console base, reconnect the electrical plug, and check the security of the connection.



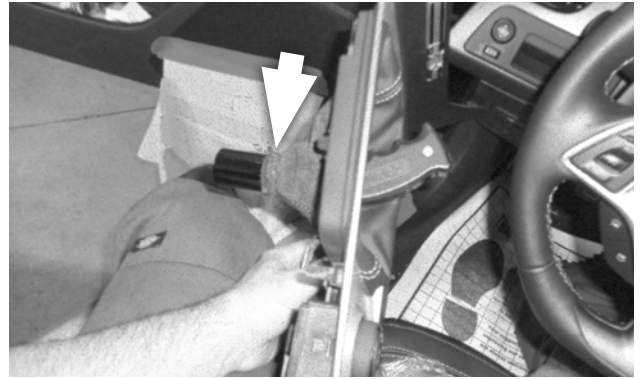
113. Hand-start the 2 nuts at the rear and the 2 nuts at the middle of the console base.



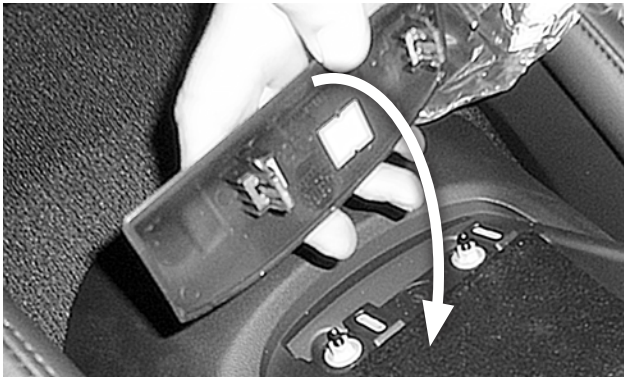
116. Reconnect the 12v power plug, and check the security of the connection.



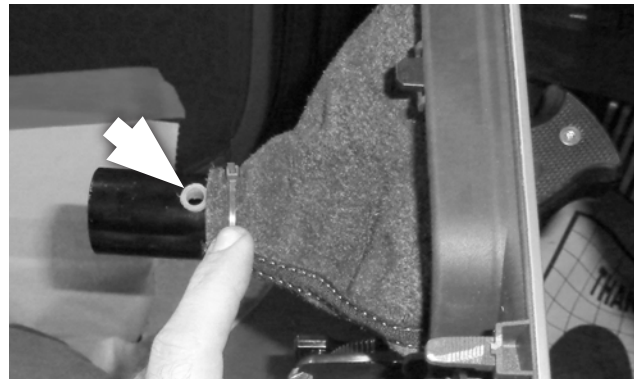
114. Hand-start the 2 screws at the front of the console base, then tighten the 2 screws and 4 nuts.



117. Push the end of the pistol grip down through the boot opening until the edge of the opening is over the groove. Secure the boot to the pistol grip with the cable tie, trim off the excess, and align the pistol grip's finger grooves toward the front of the boot.



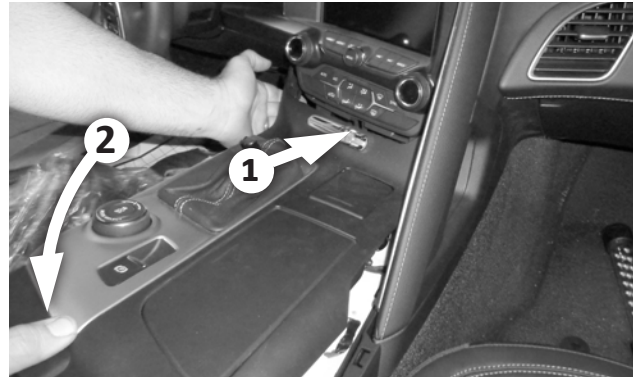
115. Reinstall the plastic trim cover over the rear nuts.



118. Insert the 2 isolation sleeves in the holes on each side of the pistol grip.



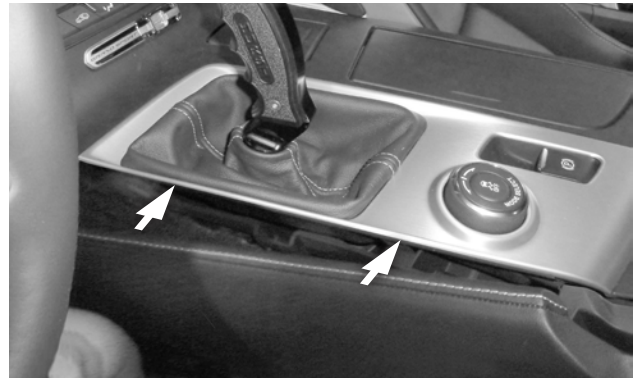
119. Bring the center console panel back into the vehicle and tilt it toward the passenger side. Reconnect the cigarette lighter plug, and check the security of the connection.



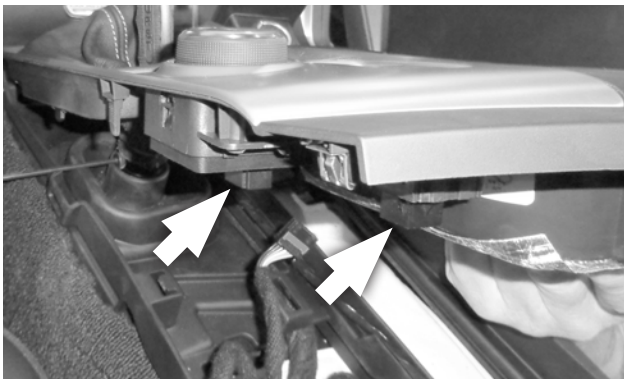
122. Starting at the front and working back, reinstall the console panel, ensuring that it is securely snapped into place on all four sides.



120. Push the pistol grip down over the shift lever and align the screw holes in both parts. Apply medium-strength thread locker to the 2 shoulder screws, and use them to secure the pistol grip to the lever.



123. Reinstall the left side trim panel. First engage the plastic tab at the front. Then, starting at the front of the panel and moving rearward, reattach the 5 friction clips to the console.

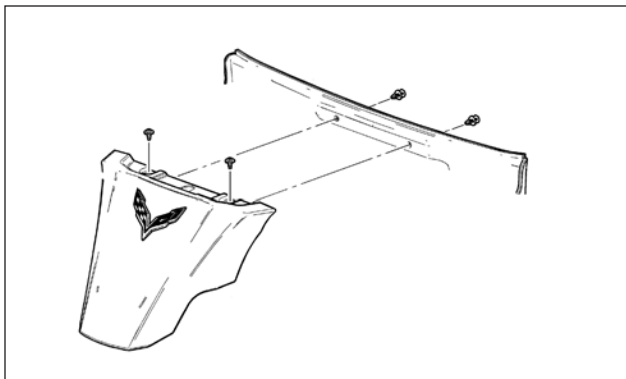


121. Reconnect the parking brake and Mode Select plugs, and check the security of the connections.



124. Reinstall the center console lid with its 3 screws

CAUTION: Avoid damaging the screw holes. Do not over-tighten the screws.



125. CONVERTIBLES ONLY: Reinstall the “waterfall” panel.

Congratulations, your Hurst Billet/Plus® shifter is now installed and ready to enjoy!

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

Hurst Performance maintains a highly-trained technical service department to answer your technical questions, provide additional product information and offer various recommendations.

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