



# HURST BILLET COMP/PLUS SHIFTER

FORM 159 6030 08/09

## 2010 and up Chevrolet Camaro &

## 2009 Pontiac G8 GXP

### Catalog #391 6030

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Thank you for purchasing the Hurst Billet Comp/Plus Shifter Shifter. This shifter is constructed of a solid billet steel and chrome plated upper stick, billet aluminum bearing housing, billet stainless steel adapter and high temperature Teflon® inserts. You can expect reduced shift throw (over 40%), increased strength and better, firmer, yet smoother and more precise feel thanks to extremely tight design and manufacturing tolerance over the stock factory pieces while utilizing an industry-first Teflon® lined spherical bearing as the main pivot; all while adding a classic or stock look to your vehicle's interior.

**IMPORTANT!** Installing the Hurst Billet Comp/Plus Shifter requires moderate mechanical ability. Read this instruction sheet completely first, so that you thoroughly understand it and can become familiar with the procedure before attempting installation. Furthermore, this shifter has been primarily designed as a “competition” and/or “race” shifter. As such, much of the isolation has been removed to give the driver the most direct and positive link to the transmission without compromise. In doing so, this does increase both tactile and sometimes audible levels of vibration. While every effort has been made to reduce the amount of objectionable transmission/driveline noise transmitted into the interior of the vehicle, some vehicles may experience greater amounts than others. If this is possibly objectionable or unsuitable to your intended type or style of driving, return this product to your retailer for refund prior to being installation.

**WORK SAFELY!** Perform this installation on a good clean level surface for maximum safety and with the engine turned “off”. Ensure that the parking brake is set and that the vehicle will not move if accidentally started. Allow sufficient time for the vehicle to cool prior to beginning installation.

**INSPECT!** Using the parts list below, ensure that all parts are present and free from objectionable defects and/or blemishes prior to beginning installation. Every effort has been made to ensure that these parts arrive to you in perfect and non-damaged order. However, Hurst Performance will not accept returned parts due to cosmetic defect after they have been installed in a vehicle.



**PARTS(continued)**



OEM Camaro Stick



Stick Mounting Screws (2)



Stick Mounting Washers (2)



Shifter Mounting Screws (2)



Boot Support (2)



Tie Wrap



Knob Nut



Grease



Thread Adhesive

**TOOLS**

Trim Tool



10mm, 15mm, Socket



Long Extension(s)



Torque Wrench



Ratchet



4mm Hex Drive



Hex Wrench 7/32"



Jack Stands



Phillips Screw-driver



Large Flat Blade Screw-drivers (x2)



Floor Jack



## Disassembly

**STEP 1.** Carefully unsnap the center console trim/gauge cluster (if so equipped) cover from center console.

TOOL: Trim Tool



**STEP 2.** Place the center console trim/gauge cluster (if so equipped) cover off to the side of the center console.

NOTE (Camaro): The wiring to this cover may be disconnected for better accessibility, however it is not necessary in most cases.

NOTE (G8 GXP): Disconnect wiring connectors for door lock, window controls, etc. Removal of front connectors to seat warmers & traction control is unnecessary.



**STEP 3.** Unscrew the shift boot ring from center console.

TOOL: Phillips Screwdriver



**STEP 4.** Remove shift knob and boot assembly by sharply pulling straight up. Also a slight twisting (side-to-side) motion may aid in the removal process.

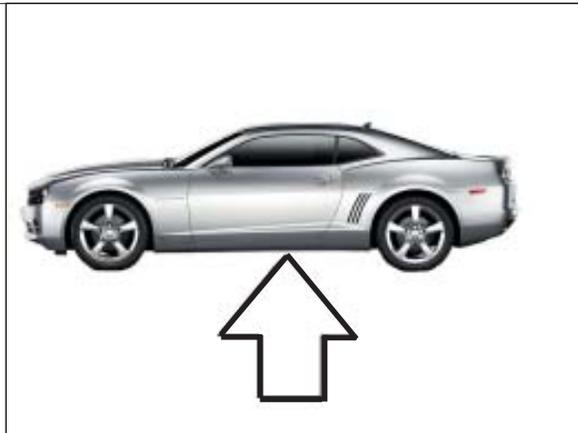
NOTE: In some instances the shift knob may be too firmly attached. In these cases a set of large screwdrivers can be used to carefully pry the knob free from underneath the leather boot.

TOOL: Large Flat Blade Screwdrivers



**STEP 5.** Carefully raise car for under vehicle access.

TOOLS: Floor Jack & Jack Stands



**STEP 6.** Evenly loosen the main rear transmission cross member bolts (4) being careful not to fully remove them. This should allow the transmission and drive shaft to move down slightly (1/2"-1") for better access and stock shifter removal.

TOOLS: Ratchet, Long Extension(s), & 15mm Socket

NOTE: In some instances disassembly and installation may be easier if the drive shaft is disconnected, however it is not absolutely necessary. Refer to your vehicles service manual.

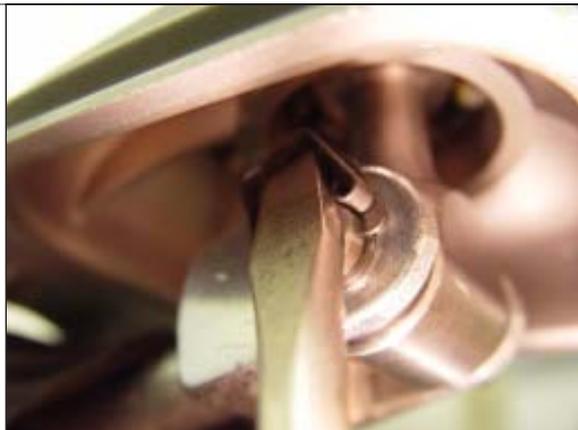


**STEP 7.** Pull forward the lower dust boot at the bottom of the shifter assembly casting just above the driveshaft/transmission tail housing to expose the lower shifter change rod connection.



**STEP 8.** Remove the connection pin clips on both sides of the lower shifter lever and pin connection being careful not to damage them as they will be re-used.

TOOL: Flat Blade Screwdriver.



**STEP 9.** Push out the cross pin and disconnect the change rod from the shifter allowing it to hang out of the way.



**STEP 10.** Unscrew the two (2) mounting screws holding the mounting plate and shift lever into the shifter assembly casting.

TOOLS: Ratchet, Long Extension and 10mm Socket



**STEP 11.** Remove mounting plate and pull shift lever firmly downward to disengage it from the shifter assembly casting. Work the shift lever down past the drive shaft on the driver's side of the vehicle and remove.

NOTE: On the V6 Camaro vehicles it will be necessary to work the centering springs free from the shifter from inside the vehicle either by flexing them free from the shift lever or by removing them entirely to allow shift lever removal.



## Assembly

**STEP 12.** Grease the o-rings on the aluminum Hurst shifter pivot housing.

NOTE: DO NOT grease the main pivot Teflon® lined spherical bearing and DO NOT grease the lower white Teflon® bushings. All bearing surfaces have been specifically designed for smooth maintenance free operation without the use of outside lubrication that will only attract dust and dirt which will limit performance.

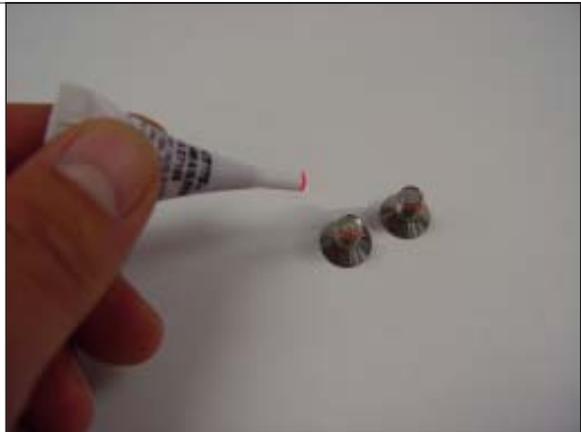


**STEP 13.** Push the Hurst Shifter up into the main center hole of the cast aluminum shifter assembly, aligning the mounting holes with the thread screw holes in the bottom.

NOTE: Camaro V6- the original centering springs can be permanently removed for use with the Hurst Shifter or they can be repositioned and reused on the Hurst Shifter depending on the driver's preference.



**STEP 14.** Place a drop of thread adhesive onto the threads of each (2) of the counter-sunk mounting screws.

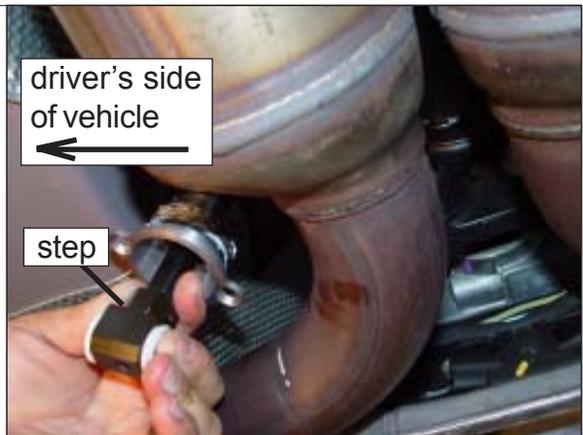


**STEP 15.** Tighten the mounting screws into the cast shifter assembly to 3.0-4.5 ft-lbs. (4-6 N-m) to secure the Hurst Shifter.

TOOLS: Torque Wrench, Long Extension, 4mm Hex Drive Socket



**STEP 16.** Ensure that the Hurst Shifter is positioned correctly with the longer stepped side of the lower bushings towards the driver and the ridges of the upper stick connection holes facing the passenger side.



**STEP 17.** Push the change rod up to the lower bushings in the Hurst Shifter and slide the cross pin through the change rod and the bushings in the Hurst Shifter to connect the linkage.



**STEP 18.** Secure the cross pin with the locking clips (2) on both sides of the pin and change rod end.



**STEP 19.** Reposition the lower dust boot onto the shifter assembly casting.



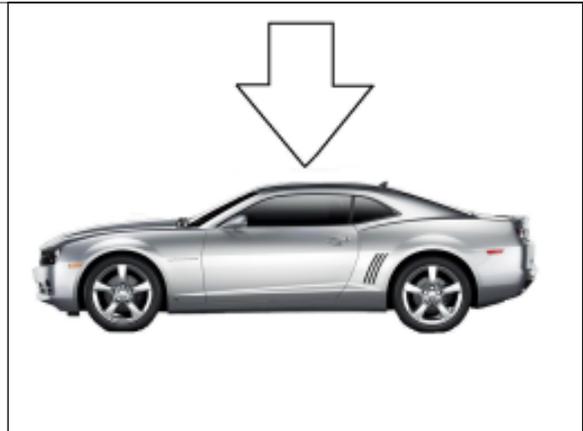
**STEP 20.** Evenly re-tighten the bolts to the transmission cross member to 43 ft-lbs. (58 N-m).

NOTE: If the driveshaft was removed, re-attach and torque connecting bolts to 85 ft-lbs. (115 N-m).

TOOLS: Torque Wrench, Long Extension, 15mm Socket



**STEP 21.** Carefully lower vehicle.



**STEP 24.** From inside the vehicle push one of the supplied boot supports onto the Hurst Shifter stub stick. Then work the rubber boot into the groove of the boot support.

NOTE: Make sure that the boot support and rubber boot is pushed down far enough to allow for upper stick attachment.



**STEP 25.** OEM Upper Stick/Knob Attachment (only):

Place the supplied stick mounting washers onto the threads of the stick mounting screws and attach the Camaro OEM Stick.

NOTE: G8 GXP owners who wish to utilize the OEM upper stick/knob option, please contact Hurst Performance Customer Service (see last page) and request an exchange for part number 2405065. The supplied Camaro OEM upper stick will not fit the G8 GXP knob.

TOOL: 7/32" Hex Wrench



**STEP 26.** OEM Upper Stick/Knob Attachment (only):  
Push the knob/boot assembly onto Camaro OEM Upper Stick, making sure it securely snaps into place and does on twist on the shaft.



**STEP 27.** Hurst Chrome Upper Stick/White Knob Attachment (only):  
Push the supplied boot support onto the chrome Hurst stick just below the "Hurst" lettering.



**STEP 28.** Hurst Chrome Upper Stick/White Knob Attachment (only):  
Place the supplied stick mounting washers onto the threads of the stick mounting screws and attach the Hurst Stick ensuring the ridges of upper and lower sticks mesh properly.

TOOL: 7/32" Hex Wrench



**STEP 29.** Hurst Chrome Upper Stick/White Knob Attachment (only):  
Trim the tie wrap that holds the original leather shift boot to the boot ring(Camaro) or knob (G8 GXP) and remove leather boot.

TOOL: Cutting Pliers



**STEP 30.** Hurst Chrome Upper Stick/White Knob Attachment (only):

Turn the leather boot inside-out and attach it to the boot support on the Hurst Stick with the supplied tie wrap. Trim away the excess "tail" of the tie wrap as necessary.

TOOL: Cutting Pliers



**STEP 31.** Screw in the leather shift boot ring into the center cosole.

TOOL: Phillips Screwdriver



**STEP 32.** Reconnect any of the center console connections that may have been disconnected from the center console trim piece.



**STEP 33.** Reinstall the center console trim piece by carefully snapping into place.



**STEP 34. Hurst Chrome Upper Stick/White Knob Attachment (only):**

Install the supplied jam nut all the way down onto the threads of the Hurst Stick. Then screw on the Hurst Knob aligning the gear pattern. While holding the knob in position tighten the jam nut against the knob to hold in position.

TOOL: 1/2" Wrench



**STEP 35.** Before operating the vehicle, test the shifter through all gears making sure that each gear including reverse and be engaged fully and smoothly without rough movement or binding. Also, ensure that the shifter fully and smoothly self-centers in the neutral position and does not hang in the reverse, 1st-2nd gear, or 5th-6th gear plane. Correct any problems before operating the vehicle.



**STEP 36. Enjoy!**



**NOTE:** The Hurst Billet Comp/Plus Shifter for the Chevrolet Camaro and Pontiac G8 GXP has been designed to fit any of Hurst's sticks, knobs (with 3/8"-16 thread), and handles (with 3/8"-16 thread). Check the Hurst website at [www.hurst-shifters.com](http://www.hurst-shifters.com) for various stick, knob, and handle options:

#1630140



#1630410



#1534813



#5388575



#1536030



#1536130



## Technical Service

A highly trained technical service department is maintained by Hurst Performance to answer your technical questions, provide additional product information and offer various recommendations.

Hurst offers a wide variety of custom T-Handles and knobs that can be used with this shifter to allow the driver to tailor the vehicle to his/hers personal liking. See your local retailer of Hurst products for specific prices.

Technical service calls, correspondence, and warranty questions should be directed to the following address:

Hurst  
9142 Independence Ave.  
Chatsworth, CA 91311  
Phone (818) 483-1366  
Monday-Friday 7AM to 4PM PST