



BILLET/PLUS™ COMPETITION SHIFTER
CAMBIO DE MARCHAS DE COMPETICIÓN BILLET/PLUS™
LEVIER DE VITESSES DE COMPÉTITION BILLET/PLUS™

For 1993-98 Camaro/Firebird equipped with Borg-Warner T-56 Six-Speed Manual Transmission

Para los automóviles Camaro/Firebird 1993-98 equipados con la transmisión manual de seis velocidades Borg-Warner T-56

Pour les voitures Camaro et Firebird de 1993 à 1998 pourvues d'une transmission manuelle à six vitesses T-56 de Borg-Wagner

These instructions apply to the following HURST products:

391 5060/391 5061 - Billet/Plus™ Competition Shifter

Estas instrucciones corresponden a los siguientes productos HURST:

391 5060/391 5061 - Cambio de marchas de competición Billet/Plus™

Ces directives s'appliquent aux produits HURST suivants :

391 5060/391 5061 - Levier de vitesses de compétition Billet/Plus™

391 5060 - Black Round Stick. Palanca redondeada negra. Levier circulaire noir

391 5061 - Chrome Flat Stick. Palanca plana de cromo. Levier plat chromé

ENGLISH INSTALLATION INSTRUCTIONS

THANK YOU FOR CHOOSING HURST PRODUCTS

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

See your local Hurst retailer for specific prices.

Mr. Gasket Performance Group
10601 Memphis Ave. #12
Cleveland, OH 44144
www.MRGASKET.com

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 shifter installation until you are confident that vehicle is safely secured and will not move.

NOTE: The factory console will have to be removed in order to install the Hurst Billet/Plus shifter. Due to differences in design, options available, electrical wiring and model year changes, we recommend that you refer to a factory service manual for your specific model year to determine the proper procedure for console removal.

FACTORY SHIFTER REMOVAL

1. Disconnect the negative (-) battery cable.

CAUTION: When removing or connecting the battery cable terminal, use care to avoid intermittent contact (arcing) between the battery post and terminal end. This generates voltage spikes that can damage sensitive ECM (Electronic Control Module) components or memory circuits.

2. Place the shifter into the neutral position.

3. Remove the shifter knob from the stick by turning it counter-clockwise.
4. Remove console shifter boot by pushing rear of boot forward until plastic tabs clear the console. Lift boot up in rear and pull back (rearward) to disengage front mounting tabs from console and set aside.
5. To remove the upper console, open the compartment lid and locate the mounting tabs in the front. NOTE: some model years use screws to fasten the tabs, be sure to remove the screws. To release the tabs, push the console forward and lift off.
6. Raise the console at the rear and disconnect the electrical wire socket located on the console. Pull the console toward the rear of the vehicle to release the front mounting tabs. Lay the console on its side and remove the ash tray light socket.
7. Using a 13 mm wrench, remove the two hex head bolts that attach the shifter stick to the shifter mechanism.
8. To remove the lower console, adjust both seats to the rear of the vehicle and fully recline backward. Parking brake handle must be in a vertical position for removal. To do so, insert a long screwdriver along the passenger side of the parking brake handle, depress the ratchet pawl and pull back on handle until it is vertical.
9. Remove the insert from the console by pulling up to release the Velcro fastener. Using a 10 mm socket, remove four console mounting screws.
10. Unplug the wiring attached to the cigarette lighter socket and check for any other wiring attached to console.
11. Lift lower console up in the rear and pull back slightly to disengage the front mounting tab. Pull the assembly up over the parking brake handle and remove it from the vehicle.
12. Using a 7 mm socket, remove the mounting screws that attach the lower shifter boot to the floor tunnel, remove the boot and set it aside.
13. Using a 13 mm socket, remove the four hex head bolts that fasten the stock shifter assembly to the transmission. Discard the bolts, new ones are supplied. Lift the shifter assembly straight up and off. (NOTE: you may have some difficulty in removing the stock shifter from the transmission due to the adhesive sealant applied at factory.)
14. Remove and inspect the plastic cup bushing. Replace it if it's worn or damaged. This part is available from GM parts sources. Re-install the bushing in the transmission.

BILLET/PLUS SHIFTER INSTALLATION

1. Clean the shifter mounting surface on the transmission and apply RTV or similar sealant between the mating surfaces of the shifter assembly and the transmission.
2. Install the Billet/Plus shifter assembly onto the transmission, making sure that the ball located on the stick bottom fits properly into the plastic cup bushing. (Refer to Fig. 2)
3. Fasten the Billet/Plus Shifter to the transmission using the new hex head bolts and hardened flatwashers supplied. DO NOT USE ORIGINAL BOLTS. Tighten bolts evenly to 15-20 lbs. ft. torque.
4. Test the shifter operation. Move the stick through the entire gear shift pattern, making sure it engages each gear fully and the stick moves freely from side-to-side in the neutral position.

NOTE: While engine is not running, "reverse" engagement will be difficult due to factory installed "reverse lockout" in transmission.

OPTIONAL ADJUSTMENT OF SHIFTER STICK TENSION

CAUTION: WEAR SAFETY GLASSES FOR EYE PROTECTION. Shifter operation can be made "softer" by removing the smaller spring (inner) from each side of shifter stick.

CAUTION: SUDDEN RELEASE OF SPRINGS THAT ARE UNDER COMPRESSION IS DANGEROUS. RELEASE SPRINGS CAREFULLY.

IMPORTANT: REMOVE SPRINGS ONE SIDE AT A TIME. SHIFTER CAN BECOME DISASSEMBLED IF BOTH SIDES ARE REMOVED AT THE SAME TIME.

Loosen and carefully remove both socket head cap screws. Remove the slide retainer plate to expose the springs. Remove the inner (smaller) spring only. Replace the retainer and the screws. Tighten both screws to 125-150 inch pounds. Repeat this procedure on the opposite side.

NOTE: If you are not satisfied with the "softer" shifter stick tension, re-install the inner springs.

5. Adjust the shifter stop screws. Pull the stick firmly into 2nd gear and hold it securely. Turn the rear stop screw in until the head contacts stick, then rotate the screw one half turn "out" (away from stick). Hold the screw secure with the hex key wrench and tighten the jam nut.

3. Test shifter operation. Move stick thru entire gear shift pattern, make sure it engages each gear fully and that stick moves freely from side-to-side in "neutral" position. While vehicle is not running "reverse" engagement will be difficult due to factory installed "reverse lockout" in transmission.

OPTIONAL ADJUSTMENT OF SHIFTER STICK TENSION

CAUTION! WEAR SAFETY GLASSES FOR EYE PROTECTION

Shifter operation can be made "softer" by removing the small spring (inner) from the LEFT side of the shifter stick. Remove four (4) retainer plate screws, swing plate away to expose springs. Remove inner spring only. Return retainer to base and tighten the four (4) screws to 120-150 inch pounds. (Refer to Fig. 4)

Note: If you are not satisfied with the "softer" shifting operation, re-install inner spring.

4. Remove stick from shifter assembly. Slide the lower shifter boot over the shifter mechanism, leaving mounting holes exposed for stick. Re-install the factory lower boot mounting screws and tighten securely.

5. Re-install lower and upper console in vehicle and re-connect electrical wiring. Secure console re-using factory mounting screws.

6. Remove knob from shifter stick, re-install stick to shifter mechanism (be sure to engage serrations) and tighten securely.

7. Lowering the parking brake handle will re-engage ratchet pawl.

8. Re-install factory shifter boot on console. Install knob onto shifter stick, turn to desired position and tighten jam nut against knob. Re-connect negative (-) battery cable.

Fig. 1

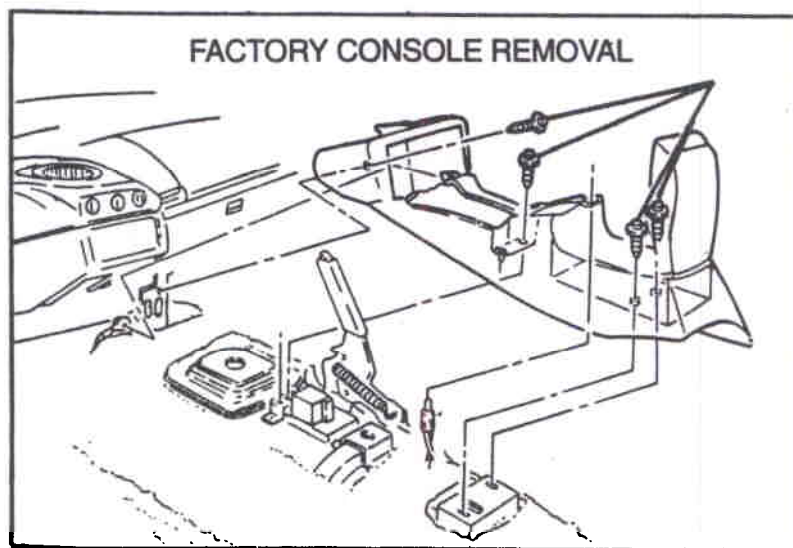


Fig. 2

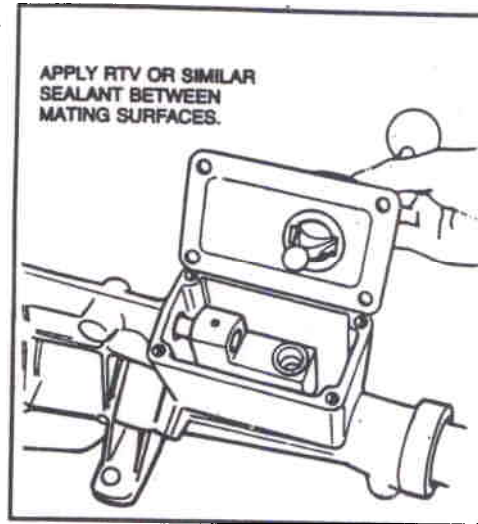


Fig. 3

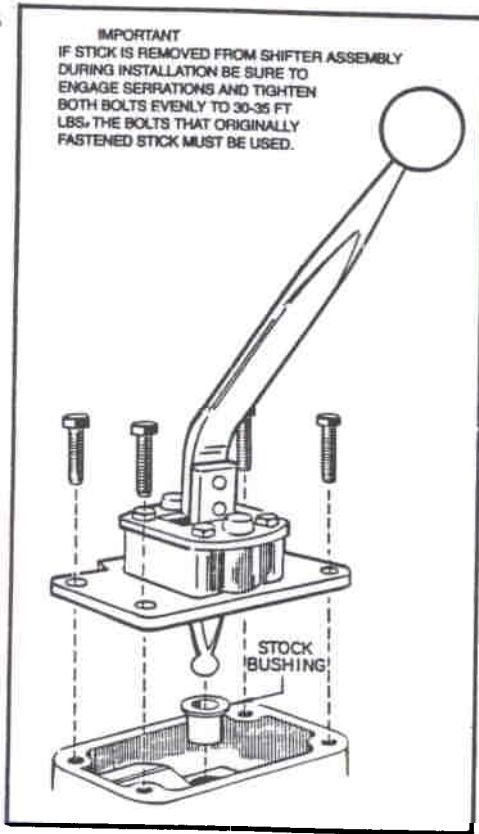
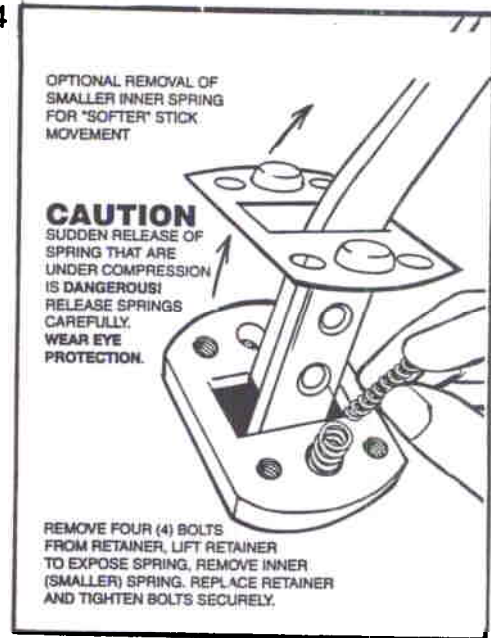


Fig. 4



TECHNICAL SERVICE

A highly trained Technical Service Department is maintained by Hurst to answer your technical questions, provide additional product information and offer various recommendations. See your local retailer of Hurst products for specific prices.

For best results, Technical Service calls, correspondence and warranty questions should be directed to the following address.