



Billet/Plus SST Shifter

1983-2001 Ford Mustang
Equipped with Borg-Warner T5 or T45
5-Speed Manual Transmission

Catalog # 391 5071 Installation Instructions

Thank you for choosing the Hurst Billet/Plus SST Shifter for your Mustang!

This Hurst Billet/Plus SST 5-speed shifter is designed specifically for racing and features a super short throw for quicker shifts, precisely balancing distance, effort, comfort, and control to give you the most satisfaction from a performance shifter. You will probably notice a slight increase in effort while shifting due to the shorter throw. It is constructed of a CNC machined **BILLET ALUMINUM** mounting base and heat treated **BILLET STEEL** gear selector for ultimate strength. This shifter incorporates gear stops to help prevent internal transmission damage and features easily adjustable bias springs to allow stick tension to be tailored to driver's preference. An exclusive oil control seal prevents transmission fluid loss and leakage.

IMPORTANT!

Read this instruction sheet completely so that you thoroughly understand it and can become familiar with the procedure before attempting installation.

WORK SAFELY!

Perform this installation on a good clean level surface for maximum safety and with the engine turned "off". Apply parking brake and 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.

FACTORY SHIFTER REMOVAL

1. Place shifter into neutral position.
2. Remove shifter knob from stick by turning counter-clockwise.
3. Using both hands, place fingers underneath each side of shifter boot grasping boot rim and pull up to remove boot from console . (Refer to Fig. 1 & 2). **Note: On some models there is a layer of sound deadening material inside console. Remove and save it for reassembly to reduce engine and road noise.**



FIG. 1

4. Remove four (4) screws that secure factory inner shifter boot to floor tunnel and remove boot (Refer to Fig. 3).
5. Using a 13mm socket, remove four (4) hex head bolts that fasten stock shifter assembly to transmission. Discard bolts, new ones are supplied. Lift shifter assembly straight up and



FIG. 2

off. Note: you may have some difficulty in removing stock shifter from transmission due to adhesive sealant applied at factory.

6. Remove and inspect plastic cup bushing inside transmission, replace if worn or damaged. This part is available from Ford dealers. Re-install bushing in transmission (Refer to Fig. 4).

BILLET/PLUS SHIFTER INSTALLATION

IMPORTANT! CHECK YOUR TRANSMISSION!

On vehicles equipped with Borg-Warner T-45 transmission used in most 94-2001 Mustangs, you **MUST** use the metal spacer provided between the Billet/Plus shifter mounting base and the transmission mounting surface. On vehicles equipped with the Borg-Warner T-5 transmission used in most 83-93 Mustangs, **DO NOT** use the spacer.

1. Clean shifter mounting surface on transmission and apply RTV or similar sealant on mating surfaces of shifter mounting base and transmission.

2. Install Billet/Plus shifter assembly onto transmission making sure that ball on stick bottom fits properly into plastic cup bushing. **IMPORTANT!** If plastic cup bushing is retained on factory shifter during removal, remove and install onto Hurst shifter.

Note: On applications with Borg-Warner T-45 transmission, use spacer provided and apply sealant to both mating surfaces of spacer.

3. Fasten Billet/Plus shifter to transmission using new hex head bolts and flat washers supplied. **Note: DO NOT USE ORIGINAL BOLTS.** Tighten bolts evenly to 15-20 lbs. ft. torque.

4. Loosen hex nuts on shifter stop screws and using a 3/16" hex key wrench, turn screws out until they are flush with inside of aluminum housing. Test shifter operation. Move stick through entire gearshift pattern, making sure it engages each gear fully and that stick moves freely from side to side in "neutral" position.

5. **Stop Screw Adjustments-** Pull shifter stick firmly into 2nd gear position and adjust rear



FIG. 3

Factory Inner Boot

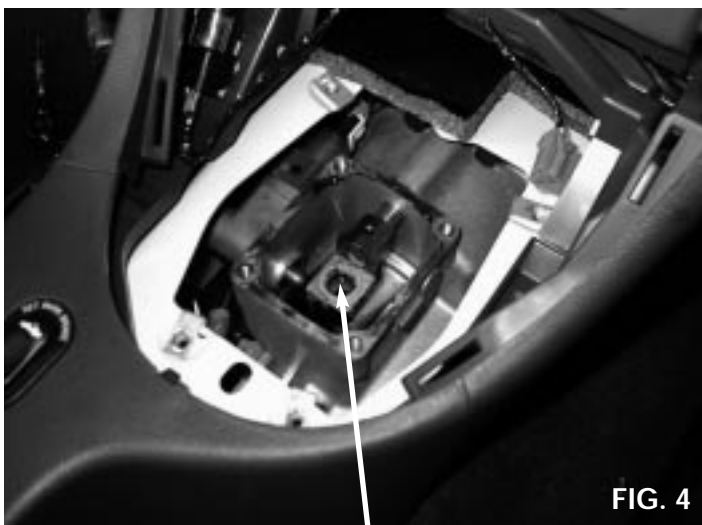


FIG. 4

Plastic Cup Bushing

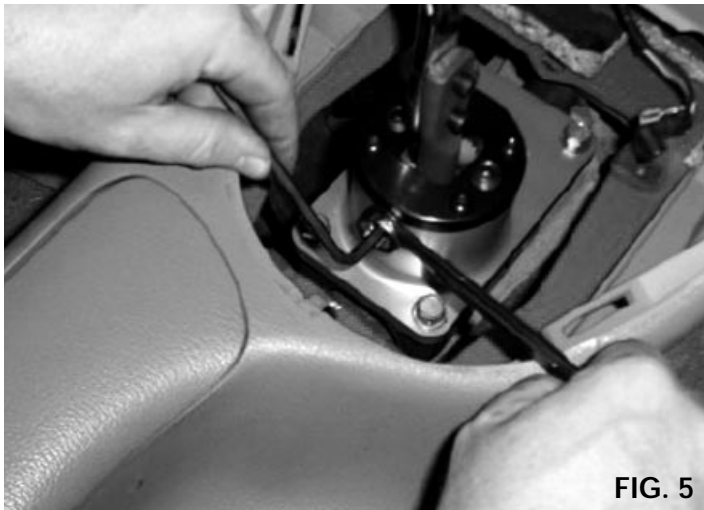


FIG. 5

stop screw by turning in until it makes contact with shifter stick. Hold screw in position using a 3/16" hex key wrench and tighten jam nut using a 9/16" open end or box wrench. (Refer to Fig. 5). Push shifter stick firmly into 3rd gear position and repeat adjustment on front stop screw. **IMPORTANT! This adjustment is very critical and must be done correctly!** A small amount of thread locker is highly recommended on stop bolt and jam nut threads to prevent loosening.

OPTIONAL BIAS SPRING ADJUSTMENT

If desired, shifter stick "side to side" tension can be tailored to driver preference and comfort by adjusting the bias springs. Using a 1/4" hex key wrench, turn the hex socket screws on top of the shifter base clockwise to increase tension or counter-clockwise to decrease tension.



FIG. 6

Plastic Tie Strap

IMPORTANT! Do not turn adjuster screws more than 1 full turn in either direction from the factory preset.

Note: Whenever the bias spring screws are adjusted, it is recommended to apply thread locker to the threads to keep screws in place and maintain spring tension.

- Slide rubber boot, supplied, over shifter stick and down over the stop screws. Secure at bottom using supplied plastic tie strap. (Refer to Fig. 6).

IMPORTANT! This boot must be installed to prevent dirt and moisture from entering shifter base housing which can cause premature wear of shifter.

- Replace the stock factory inner boot. Secure to floor tunnel with four (4) screws previously removed. (Refer to Fig. 7).



FIG. 7

- Replace console top plate/shifter boot into console by carefully pushing down firmly until it snaps into place.
- Install jam nut and shifter ball onto stick. Turn to correct position and tighten jam nut against knob.



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 allowing the driver to tailor the vehicle to their 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:

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10601 Memphis Ave. #12
Cleveland, Ohio 44144
Phone (216) 688-8300 Ext. 500
Monday-Friday 8:30 A.M. to 5:00 P.M. E.S.T.
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NOTE: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE