



# MASTERSHIFT

## INSTALLATION INSTRUCTIONS

U.S. Patent No. RE 25,561 & 3,052,135

### ATTENTION

DOE TO VARIATIONS IN AUTO MANUFACTURING TOLERANCES, THE TRANSMISSION RODS SUPPLIED WITH THIS KIT MAY REQUIRE SLIGHT BENDING TO CLEAR OBSTRUCTIONS, ETC. PROTECT THREADS FROM BENDING RODS. BEND RODS COLD - DO NOT APPLY HEAT

1. The stock 1st/Reverse linkage that activates the locking mechanism in the steering column must be altered to function with the HURST shifter. This is accomplished by clamping the two shifting levers in the steering column together with a spacer block between the column pick-up lever and the 2nd/3rd linkage lever as seen in Fig. 1. These levers are at the lower end of the steering column on the front side of the firewall (engine side).

Disconnect and remove all stock linkage between the 2nd/3rd column lever and transmission control shaft. Disconnect stock 1st/Reverse linkage from the transmission control shaft only. Do not disturb 1st/Reverse linkage connection at the steering column. Remove the rubber bushing from the stock 1st/Reverse transmission control arm. Press this bushing into the similar size hole in the lower end of the HURST 1st/Reverse arm.

2. Remove three of the stock bolts that fasten the extension housing to the transmission case. Assemble the mounting bracket, lower bracket leg, and stiffener brace together. Refer to the exploded assembly drawing for proper parts assembly. Fasten this assembly to the extension housing flange with the stock bolts. Tighten all bolts.

3. Punch a small hole through the floor 1" away from the side of the mounting bracket on centerline of top shifter mounting bolt. Use this hole as a center to locate and cut a two inch diameter hole in floor. The exact size of hole will be determined by operation of shifter stick after installation. Stick should have 1/4" clearance in every direction (in each gear position).

4. Install shifter on mounting bracket with hardware supplied as shown in exploded assembly drawing. Tighten nuts on bolts after both have been started.

5. Assemble rods with respective arms using bushings and spring clips. Refer to exploded assembly drawing for correct parts relationships. Assemble buttons onto rods with bushings and spring clips.

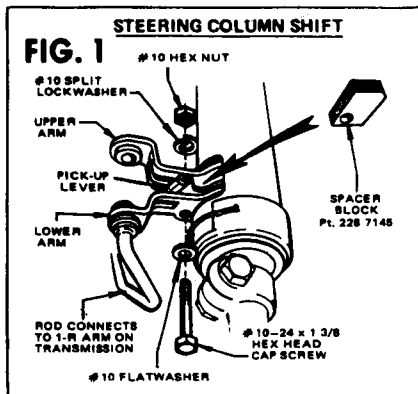
6. Install the arm/rod/button assemblies on their respective transmission shafts. Refer to exploded assembly drawing. Fasten with stock nuts and lockwashers.

7. Attach stick to shifter using bolts, plate and lockwashers supplied in separate bagged hardware package, Pt. 154 0071. Refer to separate instruction sheet, Form number 91 159 0091. Also install gear stop bolts with jam nuts, 91 159 0091.

8. Rotate arms of transmission to their neutral positions (mid-point of full travel of arms). Align levers of transmission and shifter as directed on separate instruction sheet. Refer to separate instruction sheet - "Mastershift Alignment Instructions" - Form No. 91 159 0020.

After installation has been completed according to the directions found on separate sheet (Mastershift Alignment Instructions), and shifter is functioning properly, check clearance of hole cut in floor for stick. (Refer back to paragraph 3.) Connect the stock 1st/Reverse linkage rod that remains attached to the lower lever at the steering column, to the lower end of the HURST 1st/Reverse transmission control arm (Pt. 105 7135). This is the hole that the stock rubber bushing was installed in paragraph 1, above. Adjust stock linkage as necessary to achieve function of Safety Steering Column Locking mechanism. The Safety Steering Column Lock MUST function exactly as it did with the original stock shifting operation.

9. Install boot according to directions on separate instruction sheet.



### IMPORTANT WARNING

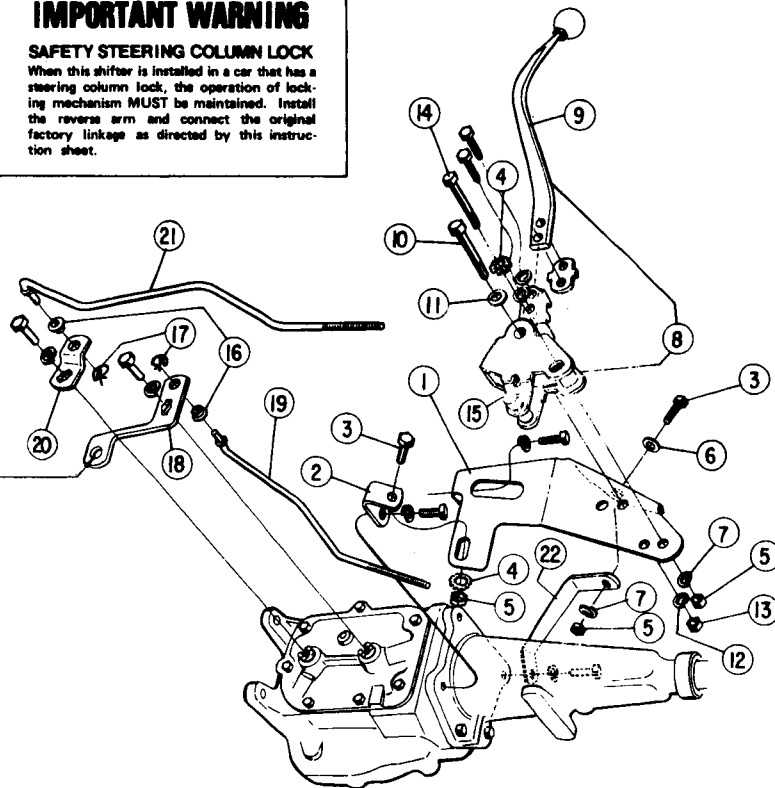
#### SAFETY STEERING COLUMN LOCK

When this shifter is installed in a car that has a steering column lock, the operation of locking mechanism MUST be maintained. Install the reverse arm and connect the original factory linkage as directed by this instruction sheet.

### CONTENTS OF KIT

- |  |                  |
|--|------------------|
| 1. BRACKET                                 | Pt. 117 0045     |
| 2. BRACKET LEG                             | Pt. 117 0044     |
| 3. 3/8"-16 x 7/8 HEX HEAD CAP SCREW        | Pt. 215 3425 (2) |
| 4. 3/8" INTERNAL/EXTERNAL TOOTH LOCKWASHER | Pt. 267 3487 (2) |
| 5. 3/8"-16 HEX NUT                         | Pt. 96000502 (3) |
| 6. 3/8" FLATWASHER                         | Pt. 267 3477     |
| 7. 3/8" SPLIT LOCKWASHER                   | Pt. 97000359 (2) |
| 8. SHIFTER & STICK ASSEMBLY                | Pt. 366 6809     |
| 9. STICK                                   | Pt. 238 4331     |
| 10. 7/16"-20 x 2-3/4 HEX HEAD CAP SCREW    | Pt. 215 7553     |
| 11. 7/16" FLATWASHER                       | Pt. 96000561     |
| 12. 7/16" SPLIT LOCKWASHER                 | Pt. 97000404     |
| 13. 7/16"-20 HEX NUT                       | Pt. 97000467     |
| 14. 3/8"-16 x 2-3/4 HEX HEAD CAP SCREW     | Pt. 215 3448     |
| 15. ROD ADJUSTING BUTTON                   | Pt. 119 3783 (2) |
| 16. BUSHING                                | Pt. 119 1681 (4) |
| 17. SPRING CLIP                            | Pt. 97000015 (4) |
| 18. ARM 1ST/REVERSE                        | Pt. 105 7135     |
| 19. ROD 1ST/REVERSE                        | Pt. 213 0024     |
| 20. ARM 2ND/3RD                            | Pt. 105 7130     |
| 21. ROD 2ND/3RD                            | Pt. 213 0025     |
| 22. BRACE                                  | Pt. 118 0007     |
| 23. SPACER BLOCK                           | Pt. 228 7146     |
| 24. #10-24 x 1 3/8 HEX HEAD CAP SCREW      | Pt. 271 7151     |
| 25. #10 FLATWASHER                         | Pt. 97000205     |
| 26. #10 SPLIT LOCKWASHER                   | Pt. 267 3818     |
| 27. #10-24 HEX NUT                         | Pt. 179 7149     |

BAGGED HARDWARE PT. 154 0063



IF VEHICLE EQUIPPED WITH SAFETY STEERING COLUMN LOCK, ATTACH STOCK 1ST/REVERSE LINKAGE TO THIS HOLE. USE STOCK BUSHING & RETAINING CLIP TO FASTEN.

367 0006