



QUARTER STICK

INSTALLATION INSTRUCTIONS

⚠ WARNING

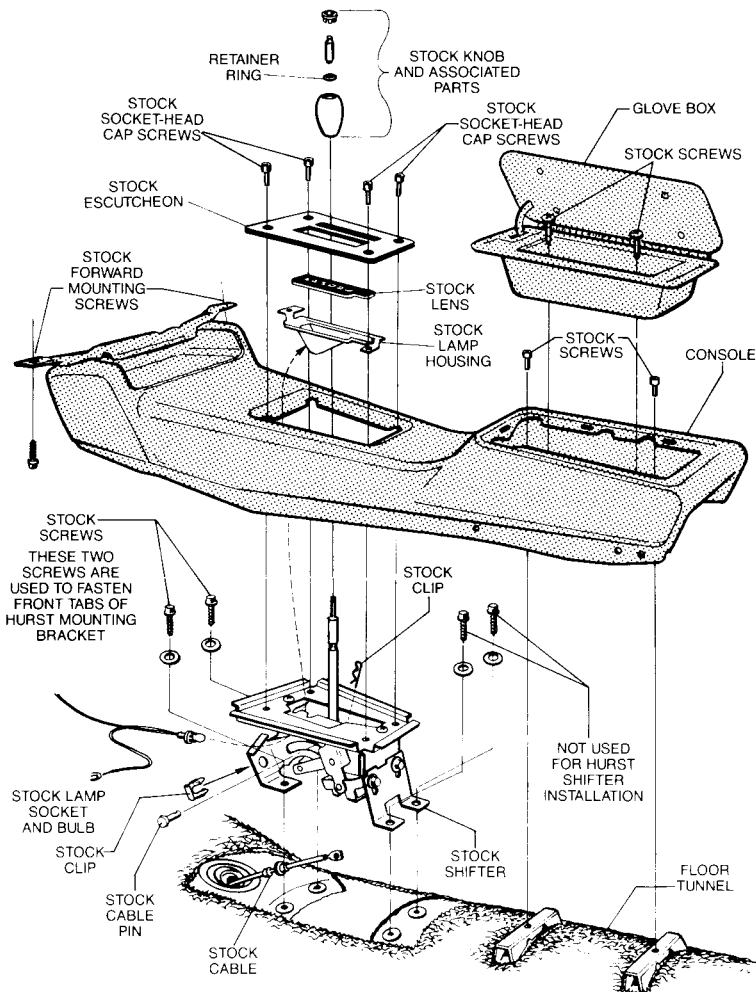
READ ALL OF THIS INFORMATION CAREFULLY

1. All adjustments must be made with shifter and transmission in *Neutral*.
2. Adjustments are critical and must be precise.
3. Do not mix components (all parts including cable must be Hurst components provided with kit).
4. If a shifter is removed and reinstalled adjustments must be checked and re-adjusted.
5. Always check cable for freedom of motion before connecting at shifter and transmission arm.
6. Routing of cable should avoid sharp bends — (permanent damage of cable will result).

Failure to comply with any of the above may result in malfunction of shifter operation. Damage to cable due to sharp bending or kinking is not covered by warranty.

REMOVAL OF CONSOLE AND STOCK SHIFTER

Shaded parts are those retained with installation of HURST QUARTER STICK SHIFTER



316 0016

WORK SAFELY

Part of this installation must be performed under the vehicle. Raise front of car by jacking at points specified by the vehicle manufacturer. Place blocks or wedges in front of and behind both rear wheels to prevent movement in either direction. Support the vehicle with approved automotive support stands. Do not get under vehicle until you are sure that it is safely supported and will not move or fall from its raised position.

DO NOT USE A BUMPER JACK

1. Disconnect battery. Refer to drawing on this page titled "Removal of Console and Stock Shifter". Move stick to "N" position. Remove the "PARK" release button on top of stock knob. Remove retainer ring (in well under release button) to free knob from stick. Remove 4 socket head hold-down screws and escutcheon plate. Remove 2 screws from bottom of console glove box. Remove glove box. Remove 2 rear hold-down screws from console. (These 2 screws are found in the opening where glove box was removed). Remove 2 screws from forward mounting bracket to underside of instrument panel. Wiring under console must be freed from console before console is removed. Remove console. Remove indicator light box from shifter. Pull lamp socket out of light box. (A lamp socket and bulb are included with this kit as a replacement in cases where original lamp has been lost or damaged). Disconnect cable clip and cable pin from shifter. Remove four (4) screws that fasten stock shifter to floor. Remove shifter. Remove screws that fasten stock cable boot to floor. Push cable and boot through opening to underside of car. (Stock cable is replaced with Hurst cable).

Remove stock transmission arm, transmission bracket and stock cable from transmission.

Apply solution of soap and water to the end of the stock cable to allow removal of the stock rubber boot without damaging it.

2. Refer to Fig. 1 on page 3. Upon removing shifter from carton, observe assembly of black

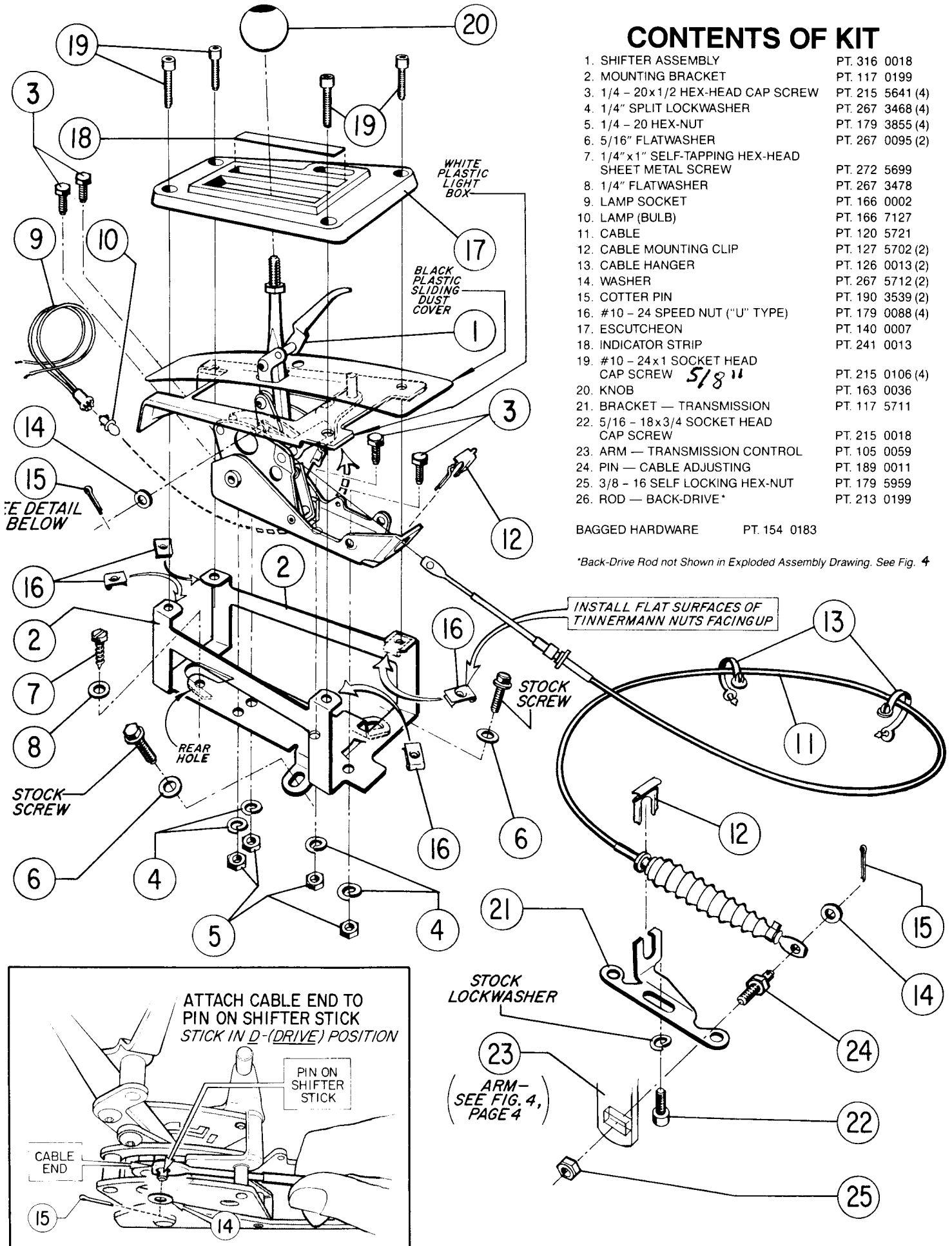
Continued on page 3

CONTENTS OF KIT

1. SHIFTER ASSEMBLY	PT. 316 0018
2. MOUNTING BRACKET	PT. 117 0199
3. 1/4 - 20x1/2 HEX-HEAD CAP SCREW	PT. 215 5641 (4)
4. 1/4" SPLIT LOCKWASHER	PT. 267 3468 (4)
5. 1/4 - 20 HEX-NUT	PT. 179 3855 (4)
6. 5/16" FLATWASHER	PT. 267 0095 (2)
7. 1/4"x1" SELF-TAPPING HEX-HEAD SHEET METAL SCREW	PT. 272 5699
8. 1/4" FLATWASHER	PT. 267 3478
9. LAMP SOCKET	PT. 166 0002
10. LAMP (BULB)	PT. 166 7127
11. CABLE	PT. 120 5721
12. CABLE MOUNTING CLIP	PT. 127 5702 (2)
13. CABLE HANGER	PT. 126 0013 (2)
14. WASHER	PT. 267 5712 (2)
15. COTTER PIN	PT. 190 3539 (2)
16. #10 - 24 SPEED NUT ("U" TYPE)	PT. 179 0088 (4)
17. ESCUTCHEON	PT. 140 0007
18. INDICATOR STRIP	PT. 241 0013
19. #10 - 24x1 SOCKET HEAD CAP SCREW <i>5/8"</i>	PT. 215 0106 (4)
20. KNOB	PT. 163 0036
21. BRACKET — TRANSMISSION	PT. 117 5711
22. 5/16 - 18x3/4 SOCKET HEAD CAP SCREW	PT. 215 0018
23. ARM — TRANSMISSION CONTROL	PT. 105 0059
24. PIN — CABLE ADJUSTING	PT. 189 0011
25. 3/8 - 16 SELF LOCKING HEX-NUT	PT. 179 5959
26. ROD — BACK-DRIVE*	PT. 213 0199

BAGGED HARDWARE PT. 154 0183

*Back-Drive Rod not Shown in Exploded Assembly Drawing. See Fig. 4



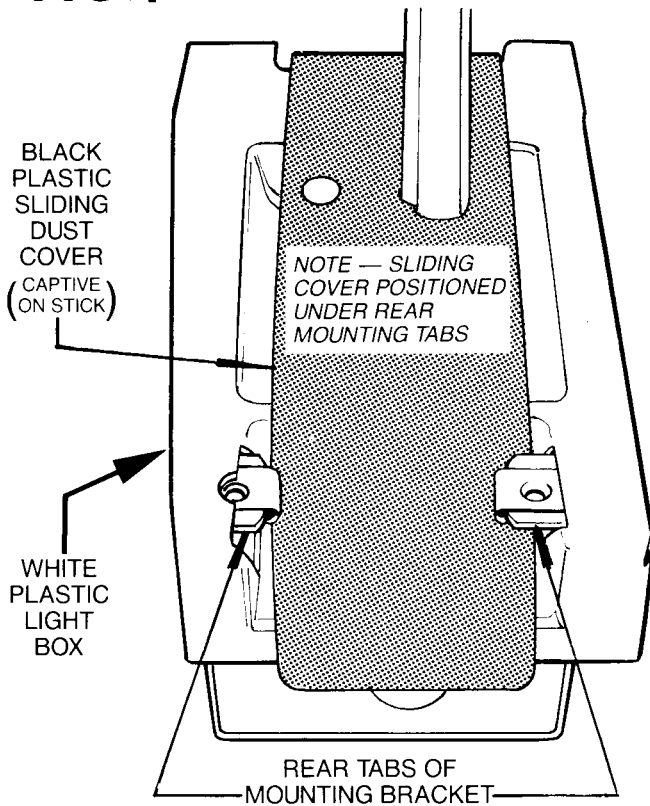
ATTACH CABLE END TO PIN ON SHIFTER STICK
STICK IN D-(DRIVE) POSITION

PIN ON SHIFTER STICK

CABLE END

ARM - SEE FIG. 4, PAGE 4

FIG. 1



CORRECT ASSEMBLY OF WHITE PLASTIC LIGHT BOX AND BLACK PLASTIC SLIDING DUST COVER WITH MOUNTING BRACKET & SHIFTER

Continued from page 1

plastic sliding dust cover (captive on shifter stick), white plastic light box and metal mounting bracket. These parts are to be assembled in the same relative manner when installed in car.

Separate the mounting bracket from the shifter and white plastic light box carefully.

Refer to Fig. 2 which shows where new hole must be cut in floor for cable to pass through. Cut new hole and cover original hole as directed in Fig. 2.

3. Place the Hurst mounting bracket, Item #2, on the floor tunnel at the same position formerly occupied by the stock shifter. Fasten the front legs of the bracket to the threaded inserts in the floor using the stock screws. Spot drill a 1/8 diameter hole through the floor tunnel at the rear hole. This is identified in the exploded assembly drawing on page 2. **Exercise caution when drilling to avoid striking anything below the floor tunnel.** Install 1/4 x 1 self-tapping sheet metal screw into hole to establish threads in sheet metal of floor tunnel. Trace an outline around the rear hole mounting tab on the insulating material on the floor. Remove screws and bracket from floor. Cut the insulating material about 1/8" outside the outline you traced. Use a razor or sharp knife. The mounting bracket must be fastened directly against the sheet metal of the floor.

4. Two modes of operation of the featured reverse lock out release can be selected. Units are shipped in automatic, reset mode. If you desire to change mode, do so at this time. Refer to Fig. 3 on page 4 for modification procedure.

Continued on page 5

FIG. 2

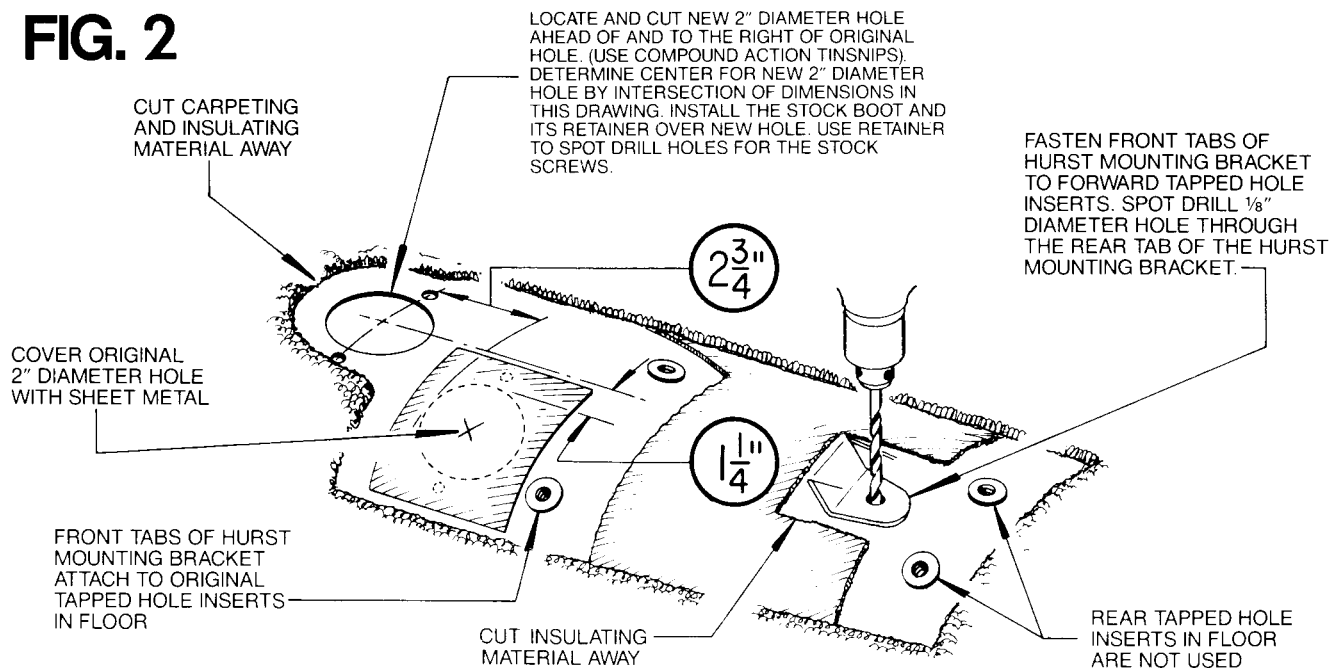
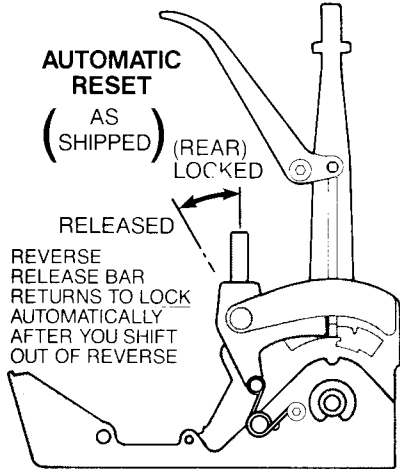


FIG. 3

THIS SHIFTER FEATURES A POSITIVE REVERSE LOCK-OUT

REVERSE GEAR CANNOT BE ENGAGED FROM ANY FORWARD GEAR WHEN THE REVERSE RELEASE BAR IS AT THE REAR POSITION.



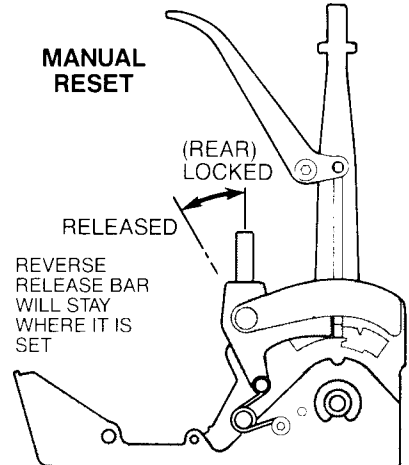
AUTOMATIC RESET
(AS SHIPPED)

REVERSE RELEASE BAR RETURNS TO LOCK AUTOMATICALLY AFTER YOU SHIFT OUT OF REVERSE

TWO MODES OF OPERATION OF THE REVERSE LOCK-OUT RELEASE ARE OFFERED. UNITS ARE SHIPPED WITH OPERATION TO BE AUTOMATIC RESET.

REVERSE RELEASE BAR WILL AUTOMATICALLY RETURN TO LOCK-OUT POSITION WHEN STICK IS SHIFTED BACK TO DRIVE.

YOU CAN CHANGE THE LOCK-OUT OPERATION TO MANUAL RESET BY MOVING ONE SCREW ON THE SHIFTER TO AN ALTERNATE TAPPED HOLE. REMOVE SPACER AND LOCKWASHER AS SHOWN IN ILLUSTRATION BELOW.



MANUAL RESET

REVERSE RELEASE BAR WILL STAY WHERE IT IS SET

IMPORTANT

IF YOU MODIFY REVERSE LOCK-OUT TO OPERATE IN MANUAL MODE, THE AUTOMATIC REVERSE BLOCK IS DEFEATED. UNINTENTIONAL SHIFTING FROM A FORWARD GEAR PAST NEUTRAL INTO REVERSE IS POSSIBLE

TRANSFER THE SPRING ANCHOR SCREW (SOCKET HEAD SHOULDER SCREW) FROM THE HOLE IT IS IN (SHOWN AT LEFT) TO THE HOLE IT IS SHOWN IN THE VIEW AT THE RIGHT.

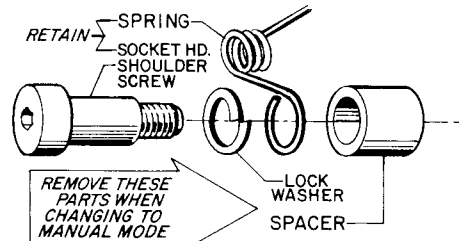
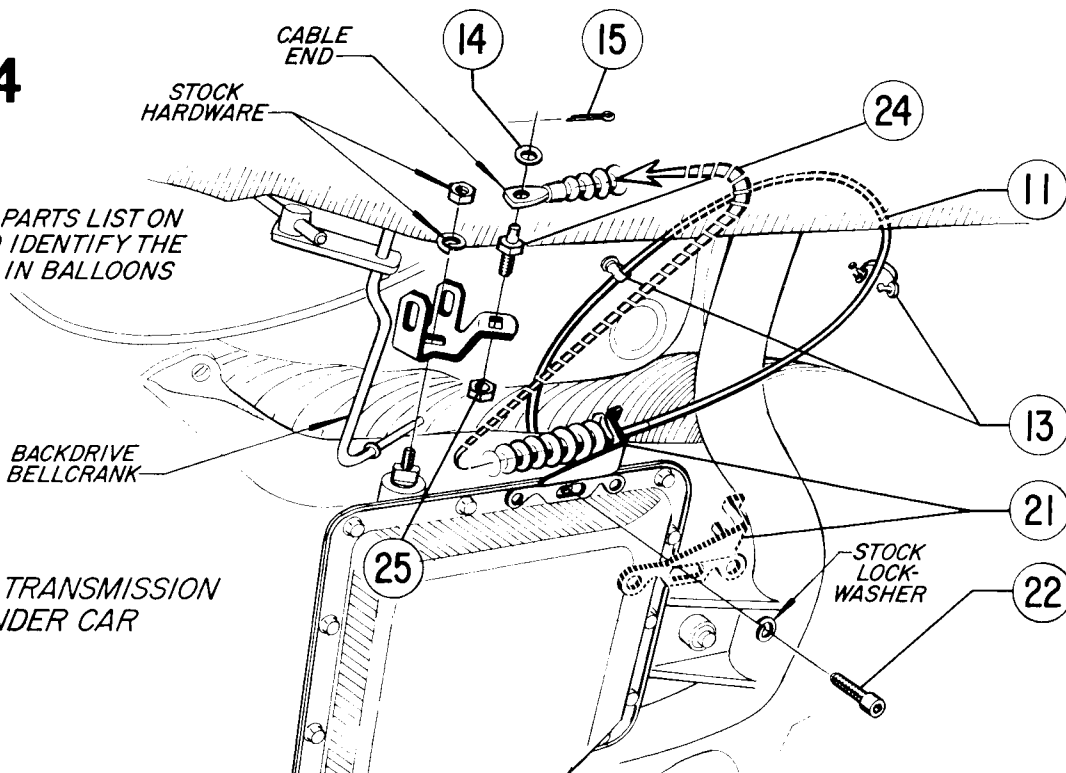


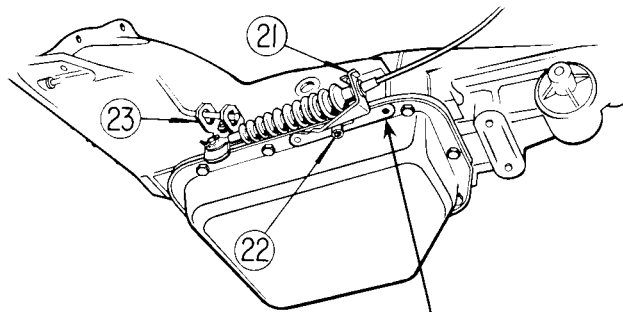
FIG. 4

REFER TO PARTS LIST ON PAGE 2 TO IDENTIFY THE NUMBERS IN BALLOONS



VIEW OF TRANSMISSION FROM UNDER CAR

FIG. 5A 200 METRIC TURBO-HYDRAMATIC



OPTIONAL

INSTALL BRACKET WITH 5/16-18 X 3/4 SOCKET HEAD CAP SCREW. ALLOW BRACKET TO LOCATE ITSELF BY INSTALLING CAP SCREW LOOSELY. CONNECT CABLE END TO PIN IN ARM, WITH SHIFTER & TRANSMISSION ARM IN NEUTRAL. THEN TIGHTEN SOCKET HEAD CAP SCREW.

AFTER INSTALLATION IS COMPLETED, DRILL A 21/64" DIAMETER HOLE THROUGH THE TRANSMISSION CASE THROUGH REAR MOUNTING HOLE IN BRACKET (USE BRACKET HOLE AS DRILL GUIDE). FASTEN REAR END OF BRACKET TO TRANSMISSION WITH A SUITABLE 5/16" DIAMETER BOLT, LOCKWASHER AND NUT.

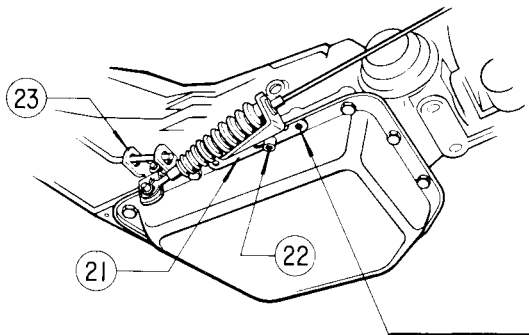
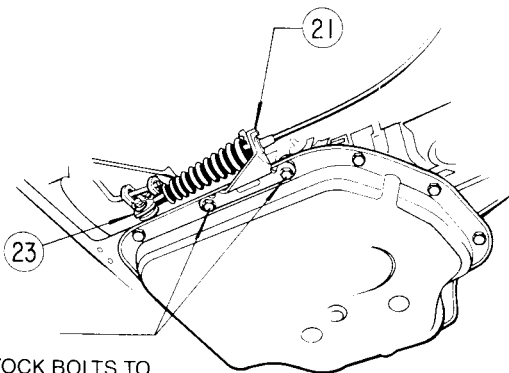


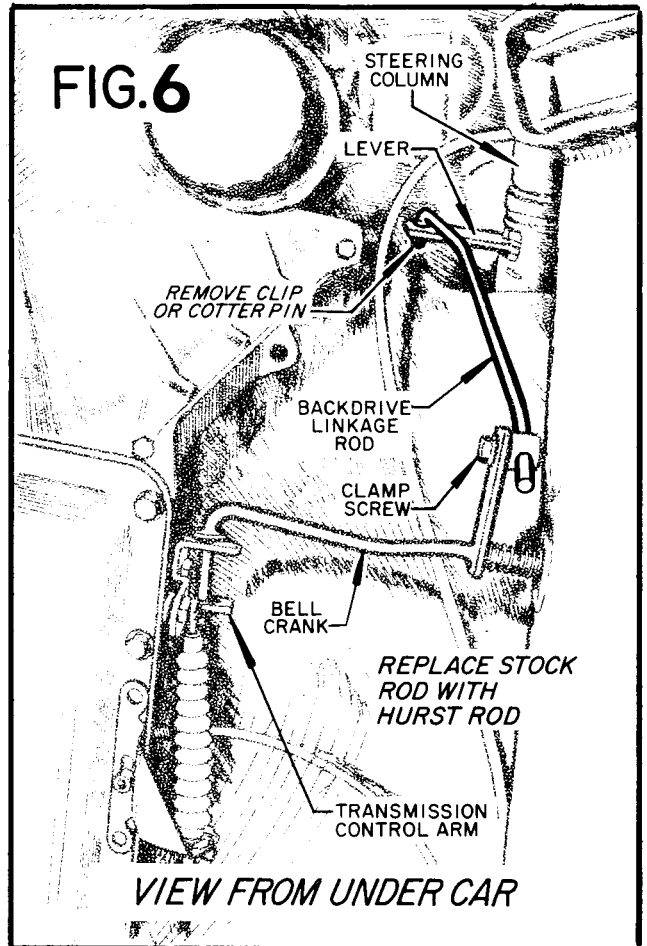
FIG. 5B 350 TURBO-HYDRAMATIC

FIG. 5C 400 TURBO-HYDRAMATIC



USE STOCK BOLTS TO FASTEN END HOLES OF BRACKET TO TRANSMISSION

FIG. 6



VIEW FROM UNDER CAR

Continued from page 3

IMPORTANT

If you modify reverse lock out to operate in manual reset mode, the automatic reverse lock is defeated. *Unintentional shifting from a forward gear past neutral into reverse is possible.*

CAUTION

5. AVOID SHARP BENDING OF CABLE. CABLE WILL BE PERMANENTLY DAMAGED BY ANY SHARP BENDING.

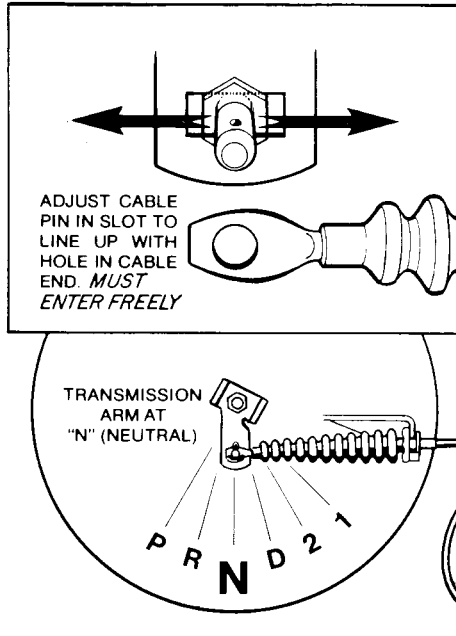
Refer to exploded assembly drawing on page 2 to identify cable ends. Insert shifter end of Hurst cable (Item 11) through the stock boot. Use a solution of soapy water as lubrication. The stock boot is replaced into new hole cut in floor exactly as it was originally installed. Place the boot retainer on the cable. Install the cable in the shifter. Fasten with cable mounting clip (Item 12). Drive clip on with hammer. Move shifter stick to **D (drive)** position. Attach cable end to pin on shifter stick. See detail drawing at the bottom of exploded assembly drawing on page 2. Fasten with flat washer and cotter pin (Items 14, 15).

6. Install four (4) Tinnerman nuts (Item 16) on the four (4) top tabs of the mounting bracket. Assemble shifter with mounting bracket. The rear end of the white plastic light box must be reassembled

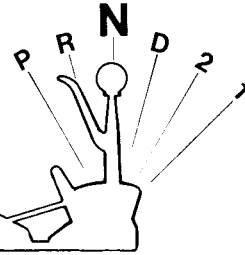
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ALIGNMENT PROCEDURE

ALL INSTALLATIONS



1. POSITION SHIFTER STICK AT "N" (NEUTRAL)
2. POSITION TRANSMISSION ARM AT "N" (NEUTRAL).
3. ADJUST CABLE PIN IN SLOT IN ARM AS SEEN IN ENLARGED DRAWING ("ADJUST CABLE PIN") TIGHTEN LOCK-NUT ON PIN.
4. FASTEN CABLE END ON PIN WITH FLATWASHER AND COTTER PIN.



IMPORTANT

Cable pin must be free to slide in the slot in the transmission control arm — (hex-nut on pin MUST BE LOOSE).

Attach the cable end to the cable pin that is assembled in the slot in the transmission control arm. Fasten with cotter pin. Both shifter and transmission arm must be in neutral.

Tighten hex-nut on cable pin in transmission control arm. Be careful to avoid disturbing the position the cable pin located by the cable end. Test operation of shifter. Refer to drawings titled: "Explanation of Shifting-Pattern."

Continued from page 5

with the rear tabs of the bracket just as they were in the package. Refer to Fig. 1 on page 3. This requires patient maneuvering. Place the bottom of the shifter flush against the base of the mounting bracket at the position where four (4) holes in the shifter bottom line up with the four (4) holes in the bracket. Fasten the shifter and bracket together with four screws (Item 3), four (4) lock washers (Item 4), and four (4) hex nuts (Item 5). Refer to exploded assembly drawing on page 2. Tighten all fasteners.

7. Feed cable through hole in floor tunnel. Install shifter, bracket and cable assembly on floor tunnel. Fasten mounting bracket to floor tunnel. Use stock screws at forward end. Use 1/4 x 1 self-tapping sheet metal screw and flat washer (Items 7 & 8) to fasten rear of bracket to floor. Tighten all fasteners. Fasten stock boot and retainer over new hole in tunnel with stock screws. Spot drill new holes through retainer plate for original retaining screws. Push stock lamp into hole in light

box. Connect ground clip to shifter mounting bracket. Check shifter for free operation. Shifter should operate freely through complete shifting pattern.* Test operation of lamp by turning instrument panel lamp switch on. (Connect battery for this test, disconnect after test.)

A lamp with leads and bulb (Items 9 & 10) are supplied. These can be used if the stock lamp is missing or is incorrect and will not fit in the light box. Stripped lead is spliced to original lead. Clip lead is fastened to ground (such as the shifter mounting bracket). Wrap all bare wire joints with plastic tape. Replace console in original installed position.

8. Press console down. Check the relationship of top surface of white plastic light box to the underside of console. This should be equal at all four corners. If it is not equal, remove console and insert flat washers between the mounting bracket and floor at the corner (or corners) where the problem exists. Replace console.

Continued on page 7

*See Page 8 "EXPLANATION OF SHIFTING PATTERN"

9. Peel protective backing off of indicator strip (Item 18) and carefully place the strip into recessed opening in escutcheon (from top). Press strip down firmly at extreme edges to make adhesive stick to ledge around bottom of opening. Minor trimming of indicator strip may be necessary for an easy fit. Remove material from one side and one end with a smooth file or fine sandpaper. Be careful to keep surfaces parallel. Remove just enough to allow strip to fit.

Install escutcheon. Fasten escutcheon with four (4) screws (Item 19). Test operation of shifter through full pattern.* Stick should move freely. If it does not, refer to separate section "HAVING DIFFICULTY?"

10. Test for 3rd gear stop. Shift forward from 1st to 2nd, then squeeze trigger, shift forward from 2nd to 3rd. Release trigger and stick. A definite audible "click" should be heard and the trigger should return to release position. If 3rd gear stop fails to release after hand is removed, refer to separate section "HAVING DIFFICULTY?" (WHAT TO DO IF: 2)

11. Replace knob, adjust knob to align decorative insert and fasten with lock nut. Replace glove box. Replace all stock fasteners that were removed from console. Refer back to drawing on page 1, "Removal of Console and Stock Shifter". Re-install in reverse order

UNDER CAR.

12. Refer to Fig. 6. Loosen clamp screw that fastens stock backdrive linkage rod to bellcrank. Remove clip or cotter pin at steering column lever and remove stock backdrive rod. Install Hurst backdrive rod in place of stock rod. Fasten top end at steering column with stock clip or cotter pin. Do not tighten clamp screw at this time.

13. Refer to Fig. 4 on page 4 and also to Fig. 5A, 5B, or 5C on page 5. Assemble cable adjusting pin (Item 24) in slot in transmission control arm (Item 23). Install lock nut (Item 25), but do not tighten. Install arm on transmission control shaft. Fasten with stock hardware. Slide hooked end of bellcrank into slots in control arm (Item 23). Install bracket (Item 21) on transmission.

200 METRIC AND 350 TRANSMISSION

Use socket head cap screw (Item 22) to fasten bracket through slot at middle of the bracket. Refer to Fig. 4.

400 TRANSMISSION

Use two stock screws removed from transmission to fasten bracket through the holes at the front and rear ends of bracket. Refer to Fig. 5C

Loop cable around as shown in Fig. 4, page 4. Fasten cable in bracket with cable mounting clip (Item 12). Move shifter stick through full pattern, then place stick at "N" (Neutral). Rotate transmission control arm through its full travel to determine detenting. See "Alignment Procedure" page 6. Position transmission control arm at "N" (Neutral). Allow the cable end to locate the cable

Continued on page 8

HAVING DIFFICULTY?

Operation of this shifter can be adversely affected IF certain dimensional relationships in your car are at extreme limits.

The thickness of the stock console opening can cause the moving dust cover to bind (if opening is not thick enough).

The height of the console from the floor level can cause problems if it is extremely high or low.

The relationship of the opening in the console to the stock mounting holes in the floor can dislocate escutcheon.

WHAT TO DO IF (1)

Opening in escutcheon prohibits full stick travel at both ends of opening:

Remove escutcheon, console and shifter/bracket assembly from floor. Disassemble shifter from mounting bracket. Install a 1/4" flat washer between bracket and shifter. Reassemble shifter and bracket and tighten all fasteners. Reinstall shifter, console and escutcheon. Check for interference. If interference persists, add more washers. (Do Not Exceed 2 Washers at Each Hole.)

Opening in escutcheon prohibits full stick travel at one end only:

Note which end of opening is interfering. Remove escutcheon, console and shifter. Disconnect cable end and free shifter from cable (Remove cable mounting clip). Disassemble shifter from mounting bracket. Use a 1/4" diameter coarse round file to elongate the holes in the mounting bracket *only*. Elongate the four holes toward the opposite direction of the interference. Elongate holes toward *front* if interference occurs at *rear* (and vice versa). Elongate holes about 1/8". Reassemble shifter and mounting bracket with fasteners positioned at the elongated ends of the holes. Tighten all fasteners. Reinstall shifter/bracket assembly, console and escutcheon.

WHAT TO DO IF: (2)

Stick does not move freely after escutcheon is installed and hold-down screws are secure (See paragraph 9 of instructions).

and/or

Trigger and stick fail to release from 3rd gear stop after hand is removed. *Definite audible "click" and trigger reflex fail to occur.* (See paragraph 10 of instructions).

Loosen four hold-down screws (Item 19). (Back off 3/4 turn). Test for free movement. If loosening the four (4) screws does not remedy the problem, remove the screws and escutcheon and place a thin 1/4 flat washer between the escutcheon and shifter bracket at each of the four (4) hold down locations. Add a second washer on each screw if problem persists.

Continued from page 7

pin in the adjusting slot in arm. (Shifter stick is at "N" — transmission arm is at Neutral.) Tighten the lock nut on cable adjusting pin. Fasten cable end on pin with the cotter pin (Item 15). Test operation of shifter. Readjust the cable pin in the transmission control arm if necessary.

14. Connect battery cable. Move stick of Hurst shifter to "P" (Park). Place key in switch on steering column and turn it to first position (to unlock). An assistant seated in driver's seat must operate key lock and detect adjustment while you push the Hurst replacement backdrive rod upward (under car) until steering column can be locked by rotating key to "Lock" position. Steering wheel should lock and key should withdraw freely out of lock. Tighten clamp screw at lower connection of backdrive rod (under car). See Fig. 6, page 5

WARNING — SAFETY PRECAUTION

NO PERSON SHOULD REMAIN UNDER CAR WHEN FOLLOWING TESTS ARE PERFORMED. APPLY BRAKE PEDAL PRESSURE WHEN TESTING STARTER MOTOR OPERATION.

Momentary starter operation is sufficient for testing. DO NOT START ENGINE. Replace key in lock and rotate it to first position. Steering column lock should release. (Steering wheel rotates freely.) Rotate key to "START" position. Starter motor should operate when shifter stick is at "P" (Park) and "N" (Neutral) ONLY. Back-up lights

should operate at "R" (Reverse) ONLY. Readjust backdrive rod at clamp screw if starter or back-up lights do not operate correctly.

SHIFTING PATTERN

Familiarize yourself with the operation of this shifter by moving the stick backward and forward through pattern.

CAUTION — Parking brake should be applied. Car must be in safe location. Engine must be turned OFF (NOT RUNNING) to prevent damage to transmission. Starting from "P" (Park) squeeze trigger and pull stick back — release trigger as soon as stick becomes free. Stick can now be moved to R, N or D. Trigger may be squeezed at D to allow stick to shift back to 2nd with downshift stop. Trigger must then be released before stick can be moved back to 1.

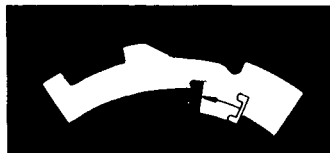
Stick can be up-shifted from 1 to 2 without trigger. Trigger must be squeezed to move up from 2 to 3. 3rd gear feature inhibits accidental forward shifting beyond 3rd until pressure is relaxed from trigger and hand is completely removed from stick. Hand must be removed before stick can be moved forward.

1 FIRST GEAR



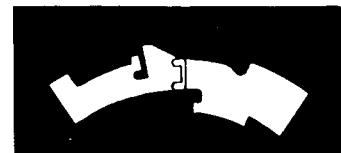
PULL STICK ALL THE WAY BACK

4 THIRD GEAR



HOLD TRIGGER AND PUSH STICK FORWARD

7 REVERSE



PUSH REVERSE LOC/OUT LEVER DOWN, AND PUSH STICK FORWARD

2 SECOND GEAR



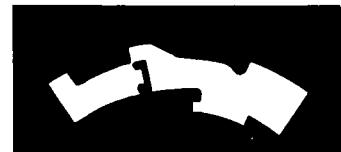
PUSH STICK FORWARD

5



RELEASE TRIGGER AND RELAX STICK

8



PULL TRIGGER BACK
PUSH STICK FORWARD

3



PULL TRIGGER

6 NEUTRAL



PUSH STICK FORWARD TO NEUTRAL

9



PUSH STICK FORWARD ALL THE WAY AND RELEASE TRIGGER.

HURST PERFORMANCE, INC., WARMINSTER, PENNSYLVANIA 18974-9990