



QuickSilver Shifter

Installation Instructions

Part No. 80639

Part No. 80676

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The B&M QuickSilver Shifter is a dual action shifter incorporating straight gate operation and ratchet operation in one mechanism. The styling and appearance will definitely add to the interior of your vehicle.

The straight gate operation allows you to quickly and smoothly select any gear you want for daily driving from Park to Drive. The ratchet shift feature provides crisp, error free up-shifting and down-shifting on the street or track. In the ratchet shift mode, it is impossible to over-shift or miss a gear.

This shifter is designed to work with an automatic, manual/automatic or full manual valve body utilizing standard or reversed shift patterns. Your shifter also comes supplied with all brackets, levers, and parts to

work with all popular performance transmissions.

We feel that these instructions are as complete and clear as possible. The installation of this shifter can be handled by anyone with a minimum of mechanical experience and basic hand tools. It is important to closely follow the instructions. Read each step and if you don't understand it, go back and read it again.

Before beginning your installation, check the parts list on page 10 to see that all necessary parts have been included in your kit. If anything is missing, see your B&M dealer.

Also check the tool requirement list to make sure you have all the necessary tools and supplies before starting your installation.

INTRODUCTION

The main mechanical components of this shifter are precision factory assembled. Any modification or disassembly of these parts can cause shifter malfunction and will void the warranty. You should disassemble only that which is detailed in the instructions.

The vehicle should be off the ground for ease of installation. Jack stands, wheel ramps or a hoist will work fine. **Make sure the vehicle is firmly supported.**

Step 1. Remove stock shift linkage:

Column Shifters: Remove all rods, levers or cables from column and transmission. Place column shifter lever in **Park** position. Remove roll pin holding shift lever to column and remove shift lever assembly.

Console Shifters: Remove shifter mechanism from console. Disconnect and remove rod or cable from transmission. Remove cable bracket from transmission, if so equipped. Note: Shifter installation may require console modification or complete console removal depending on your vehicle and available space.

If your vehicle is equipped with a locking steering column, secure the column lock lever, in the engine compartment, in the full up position so the column will not accidentally lock on you.

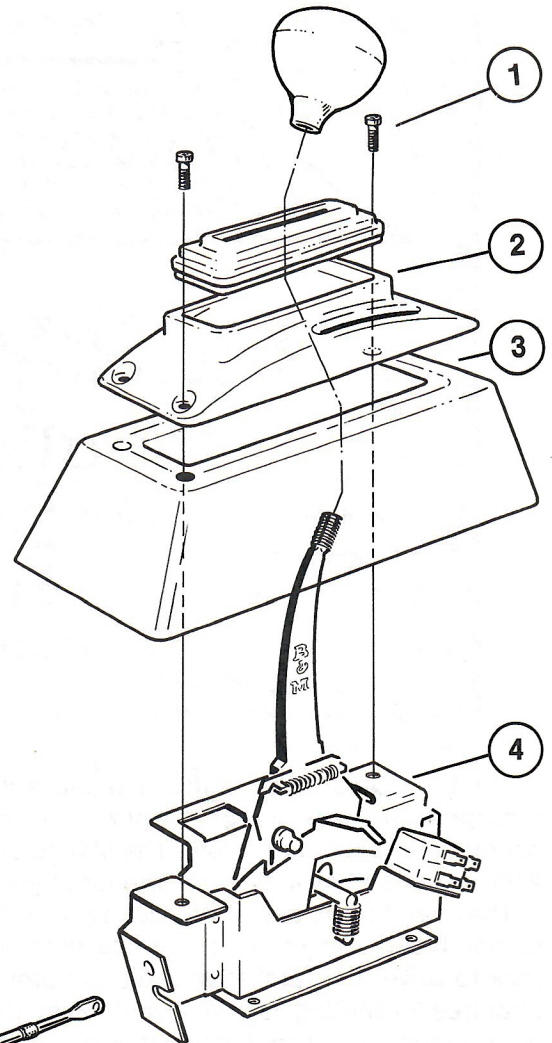


FIGURE 1

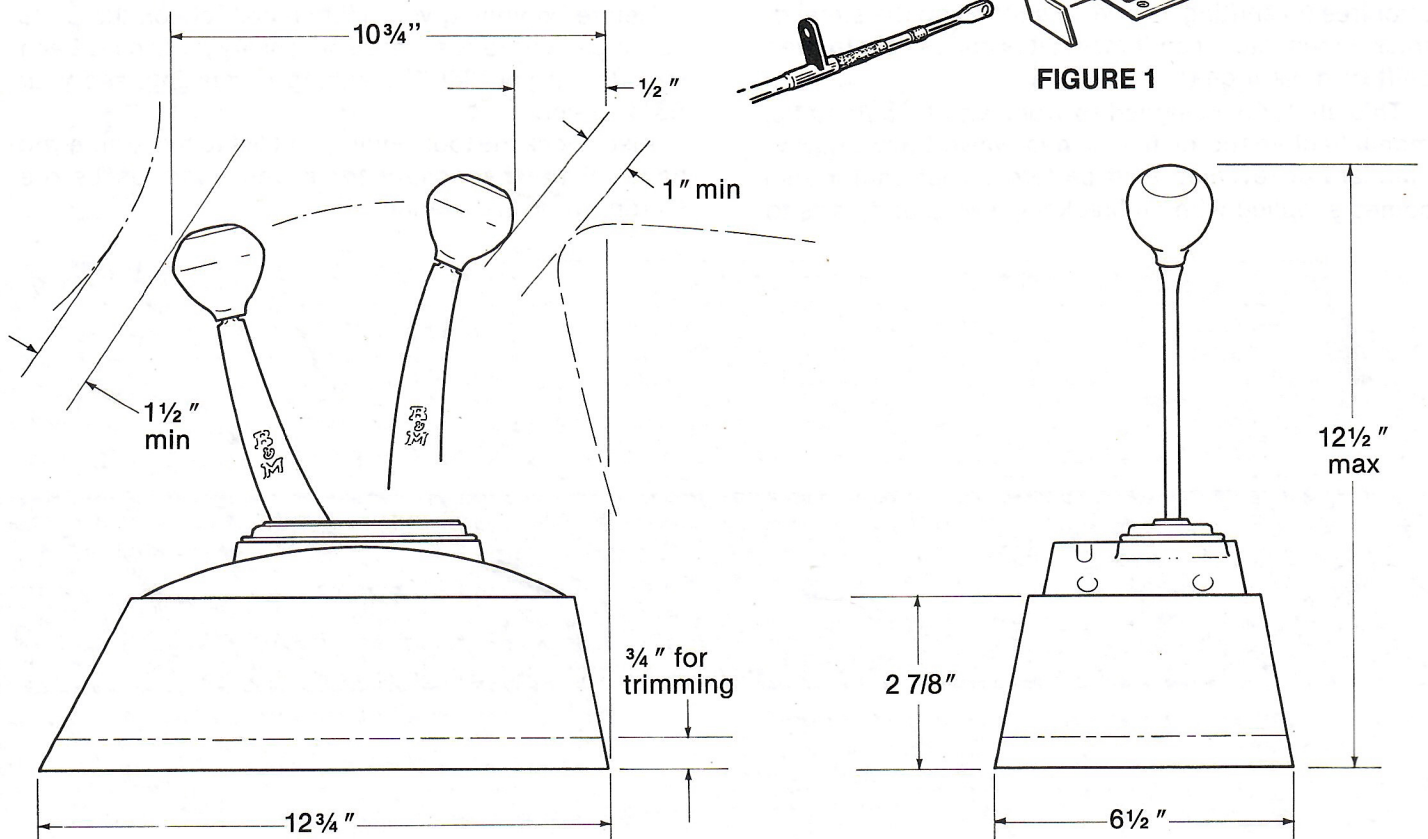


FIGURE 2

Step 2. Remove two cover plate screws (1), remove cover plate & boot (2), and tower (3) from shifter mechanism (4) (See Fig. 1).

Step 3. Pull carpet away from floorboard where shifter will be mounted. Locate shifter in vehicle (See Fig. 2). The rear mounting hole in the mechanism must be at least 1 3/4 inches from the front of the seat when the seat is in the full forward position. Locate the shifter for ease and convenience of operation. Make sure shifter knob clears dashboard in Park position. Mark the position of the four mounting holes in the floor.

Step 4. Remove the shifter mechanism and drill the four mounting holes using a 9/32" drill bit. Mark the position of the shifter cable hole. The cable hole must be 3 inches in front of the forward mounting hole and 1 7/8 inches to the left of the forward mounting hole. The cable hole must be 1 1/2 inches in diameter. Drill or cut cable hole in the floorboard.

Step 5. Install carpet back to original position. Do not secure carpet at this time. Cut holes in carpet at the mounting hole position. Cut a 1 1/2 inch slit in the carpet at the cable hole position.

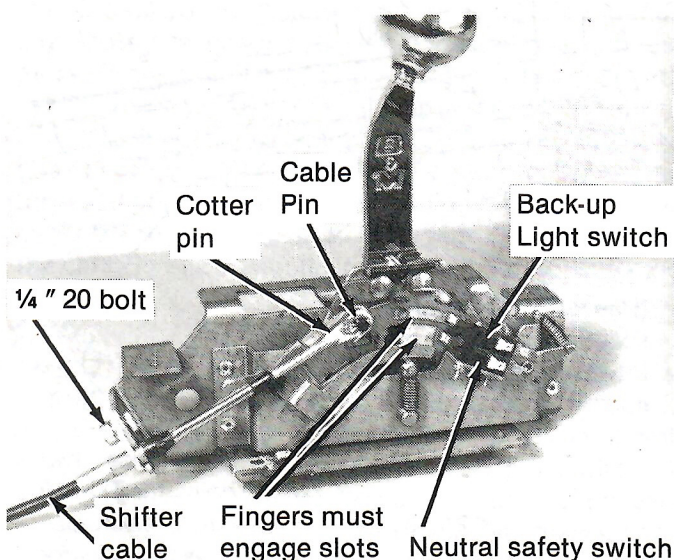


FIGURE 3

Step 6. Install cable onto shifter mechanism. One end of the cable has a threaded housing and a threaded cable end. This is the transmission end of the cable. The other end of the cable has a bracket and a flat cable end with a hole. Fit the cable housing groove into the U-shaped notch in the shifter mechanism and fasten the bracket with the 1/4"-20x1/2" bolt, lockwasher, and nut supplied with the shifter (See Fig. 3). Slip hole in flat end of cable over cable pin in shifter. Install cotter key to retain cable. Note: B&M shifters come with 5 ft. (80605) cable standard. Cables are also available in 2 ft. (80602), 4 ft. (80604), 8 ft. (80608), and 10 ft. (80610) lengths. Contact your B&M dealer.

Step 7. Install back-up light and neutral safety micro switches in place on shifter mechanism (See Fig. 3). Install two #4-40x1 1/4" screws through both switches and shifter. Install a lockwasher and nut on each screw and tighten snugly. Do not overtighten the nuts as you may crack the switches. Make sure switch fingers on micro switch properly engage operating slots. If necessary bend fingers up or down slightly to engage slots.

Use cable clamps or tie-wraps to secure cable to avoid contact with hot engine or exhaust system.

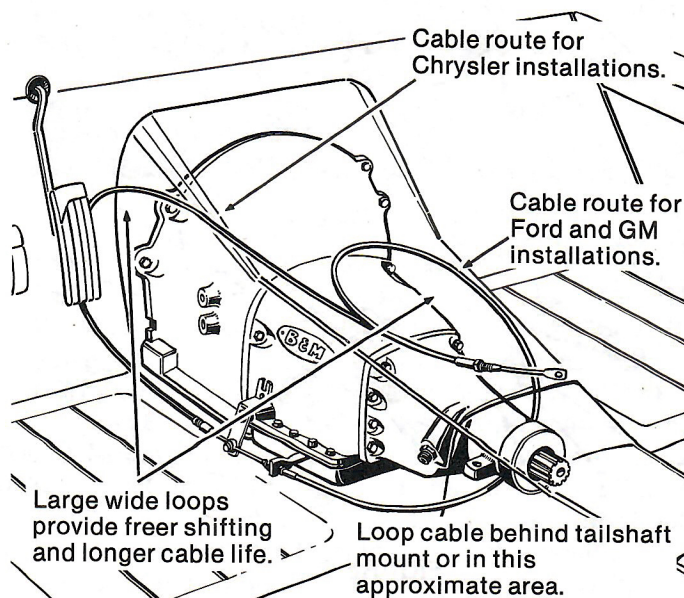


FIGURE 4

Step 8. Install shifter mechanism into vehicle. Slide shifter cable through carpet and cable hole in floor. Shifter mechanism should be level when installed. Inspect bottom of chrome shifter handle for interference with floor. If there is interference with the floor, use 1/4" flat washers as shims to raise and level the shifter mechanism as necessary when installing it. **Make sure cable is routed according to Figure 4 to avoid sharp bends or damaged to the cable.** Install 1/4"x1" bolts, washers, lockwashers, and nuts (supplied) through the shifter and floorboard and tighten securely. Note: Some floorboards are extremely thin and will not adequately support the shifter mechanism when bolted to the floor, resulting in excessive shifter wobble. For those vehicles, we recommend you fabricate a stiffener plate for additional strength. Seal cable shut securely to prevent entry of exhaust gases.

Chrysler Vehicles; go to Step 9

GM Vehicles; go to Step 14

Ford Vehicles; go to Step 18

CHRYSLER

Step 9. If you have not already done so, loosen pinch bolt on throttle lever on transmission. This is the lever on the small diameter shaft. Pry the lever off with a screwdriver and allow linkage to hang free. Remove and

discard stock shift lever and stock shift linkage. Install B&M selector lever (2) in position and tighten pinch bolt (1) securely. (See Fig. 5) Make sure lever is not pushed down so far as to touch the transmission case. This will cause the lever to bind on the case. The lever should travel smoothly from front to back with a positive click in each gear position. Install stock throttle lever in position on small diameter shaft as removed and tighten pinch bolt securely. Throttle lever must operate smoothly.

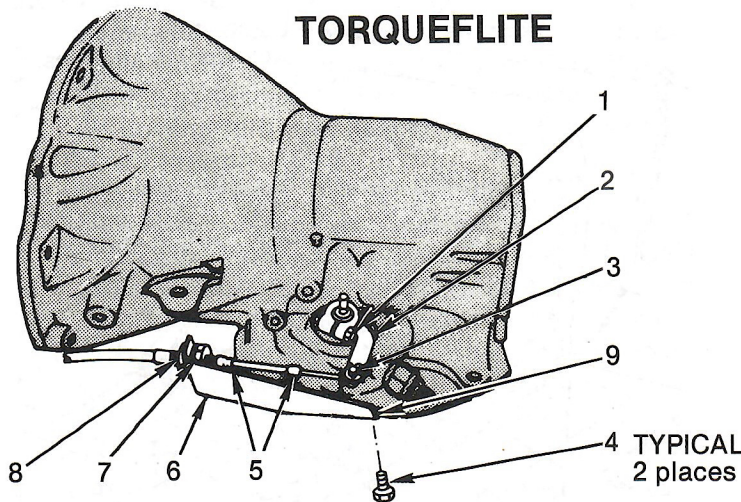


FIGURE 5

Step 10. Remove the two transmission oil pan bolts (4) directly below the shift lever. Install cable bracket (6) in position (See Fig. 5) with two spacers (9) between the pan and bracket. (If your transmission is equipped with a cast aluminum oil pan these spacers (9) can be omitted) install the two pan bolts as removed and tighten to 12-13 ft-lbs. **Do not overtighten as this can damage pan gasket.**

Step 11. Remove two boots (5), one large nut (7), and a large lockwasher from the end of the shifter cable. Route the shifter cable according to figure 4. **Avoid sharp bends and route the cable away from hot engine and exhaust parts.** Cable may be secured up out of the way with nylon cable ties.

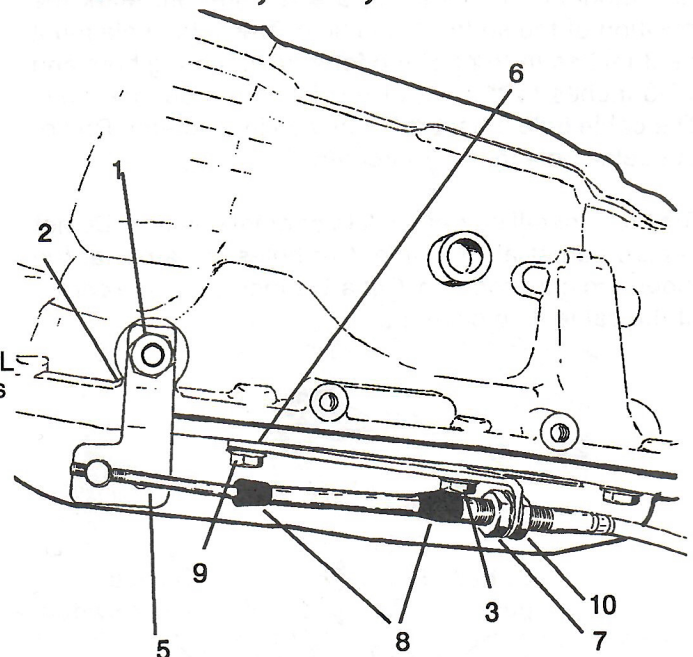
Slide the end of the cable through the cable bracket. As you slide the cable into the cable bracket, install lockwasher and large nut over end of cable. Loosen large nut (8) and position cable so the threaded portion of the cable housing is centered in the cable bracket. Tighten both large nuts (7) and (8) to hold the cable in this position. Install two boots (5) over end of cable and into position.

Step 12. Move selector lever to full **forward** position. Refer to **Shifter Operation** on page 8 of the instructions and operate shifter to the First (low) gear position. Install swivel fitting (3) onto end of shifter cable and adjust until small end of swivel will slide freely in and

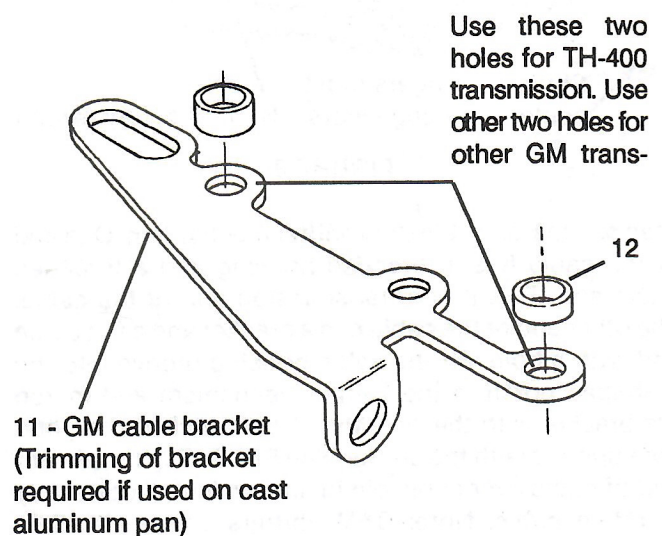
out of selector lever hole. Operate shifter through all gear positions. Check to make sure swivel will slide in and out of selector lever hole in each gear position. Note: Swivel may have to be adjusted one turn in either direction. Install cotter key supplied with shifter into swivel and spread key ends.

Step 13. Check operation of throttle linkage again. Linkage must operate smoothly with no bind. **All transmissions using automatic valve bodies must have the throttle linkage connected or transmission damage will result.** Go to step 23.

GM 200, 250, 350 & 400



(Use rear hole for three speed transmissions the forward hole is for four speed transmissions)



11 - GM cable bracket (Trimming of bracket required if used on cast aluminum pan)

FIGURE 6

GM

Step 14. If you have not already done so, remove the stock selector lever nut and selector lever. Discard stock lever and stock shift linkage. Install B&M selector lever (2) in position. Install stock selector lever nut (1) and tighten securely. (See Fig. 6) Lever must be installed so it can travel its full arc equally in both directions across center. If the lever is installed backwards, the swivel will hit the oil pan during the rearward travel arc. The lever should travel smoothly from front to back with a positive click in each gear position.

Step 15. Remove the two transmission oil pan bolts (3 or 9) from the middle of the left side of the oil pan. Install cable bracket (6, TH-400) or (11, TH-200 and TH-350) in position. (See Fig. 6) The TH-400 bracket must be installed with two spacers (12) between the pan and bracket. (If your transmission is equipped with a cast aluminum oil pan, these spacers (12) can be omitted.) Install the two 5/16"-18x3/4" bolts supplied and tighten 12-13 ft.-lbs. **Do not overtighten as this can damage pan gasket.**

Step 16. Remove two boots (8), one large nut (7), and a lockwasher from the end of the shifter cable. Route the shifter cable according to figure 4. **Avoid sharp bends and route the cable away from hot engine exhaust parts.** Cable may be secured up out of the way with nylon cable ties. Slide the cable into the cable bracket, install lockwasher and large nut (7) over end of cable. Loosen large nut (7 or 10) and position cable so the threaded portion of the cable housing is centered in the cable bracket. Tighten both large nuts (7 or 10) to hold the cable in this position. Install two boots (8) onto end of cable.

Step 17. Move selector lever to full rear position. Refer to **Shifter Operation** on page 8 of the instructions and operate shifter to the First (low) gear position. Install swivel fitting (5) onto end of cable and adjust until small end of swivel will slide freely in and out of selector lever hole in each gear position. Note: Swivel may have to be adjusted one turn in either direction. Install cotter key supplied with shifter into swivel and spread key ends. Go to step 23.

FORD

Step 18. If you have not already done so, remove the nut and lockwasher holding the downshift linkage onto the downshift lever shaft. (See Fig. 7) Pull the lever off the shaft and allow the linkage to hang free. Remove and discard stock shift linkage rods. Some C-6 and C-4 transmissions have a neutral safety and back-up light switch on the transmission. (See Fig. 7) If your transmission is so equipped, remove the two bolts holding the switch in place and slide it off the shift shaft. Disconnect the switch at the factory plug and discard it.

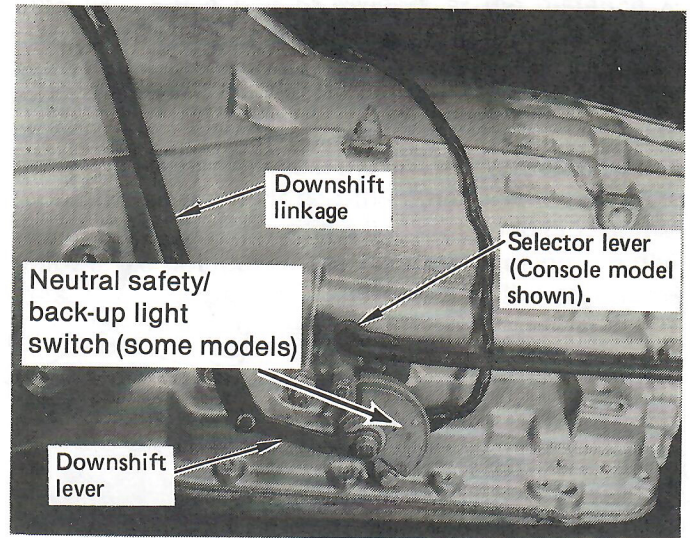


FIGURE 7

Step 19. Install the B&M selector lever. Note: The B&M lever must point downward for proper operation. If the stock shift lever on your transmission points down, you will have to remove the lower part of the stock arm (13) by cutting it off (14) to clear the B&M lever. (See Fig. 8) Install B&M selector lever (8) onto shift shaft of transmission. Align selector lever so lever can travel its full arc equally in both directions across center and tighten 1/4"-20x1-1/2" pinch bolt and nut (9). The lever should travel smoothly from front to back with a positive click in each gear position. Make sure O-ring is in position on downshift shaft and install downshift lever in position on shaft. (See Fig. 7) Install lockwasher and nut and tighten securely. Downshift lever must operate smoothly.

FORD C-4

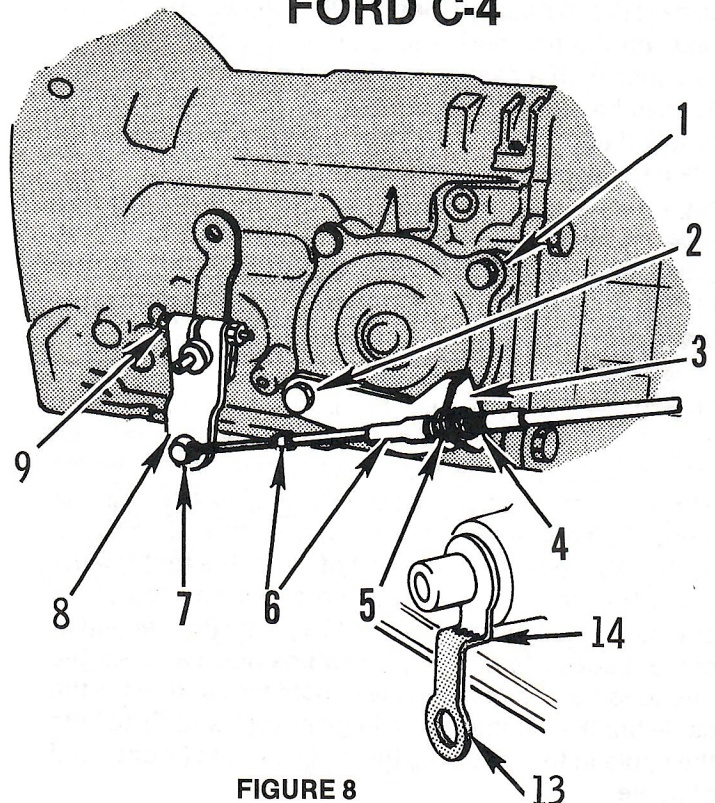


FIGURE 8

FORD C-6

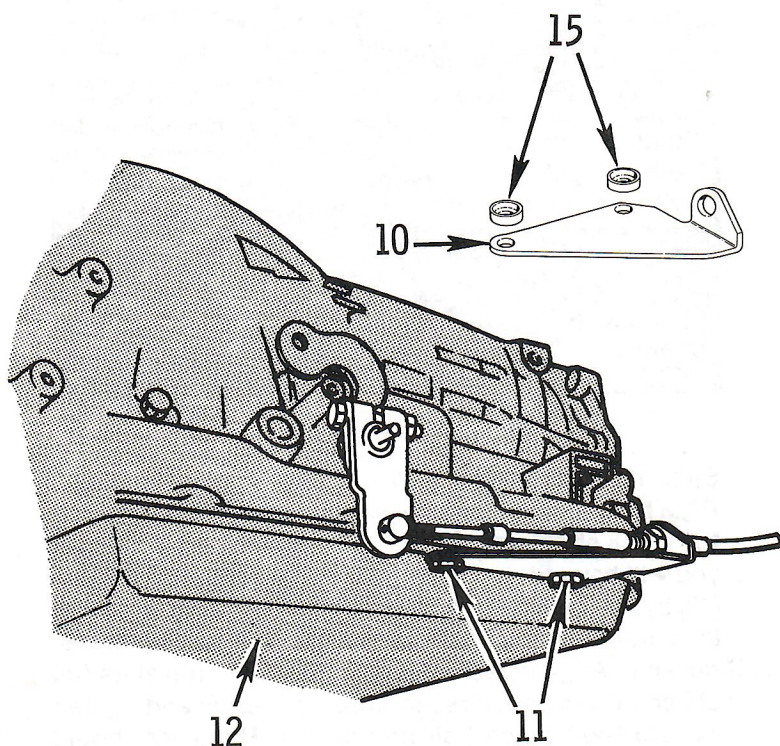


FIGURE 9

Step 20.

C-6: Remove the two transmission oil pan bolts (11) from the left rear corner of the oil pan. Install cable bracket (10) in position (See Fig. 9) with two spacers (15) between the pan and bracket. (If your transmission is equipped with a cast aluminum oil pan, these spacers (15) can be omitted.) Install the two 5/16"-18x3/4" bolts supplied and tighten 12-13 ft-lbs. **Do not overtighten as this can damage pan gasket.**

C-4: Remove the two lower bolts (2) from the rear servo cover (1). Install cable bracket (3) in position. (See Fig. 8) Install two servo cover bolts as removed and tighten 12-13 ft-lbs. **Do not overtighten as this can distort servo cover.**

Step 21. Remove two boots (6), one large nut (5), and a lockwasher from the end of the shifter cable. Route the shifter cable according to Figure 4. **Avoid sharp bends and route the cable away from hot engine and exhaust parts.** Cable may be secured up out of the way with nylon cable ties. Slide the end of the cable through the cable bracket. As you slide the cable into the cable bracket, install lockwasher and large nut (5) over end of cable. Loosen large nut (4) and position cable so the threaded portion of the cable housing is centered in the cable bracket. Tighten both large nuts (4) and (5), to hold the cable in this position. Install two boots (6) onto end of cable.

Step 22. Move selector lever to full rear position. Refer to **Shifter Operation** on page 8 of the instructions and operate shifter to the First (low) gear position. Install swivel fitting (7) onto end of cable and adjust until small end of swivel will slide freely in and out of selector lever hole in each gear position. Note: Swivel may have to be adjusted one turn in either direction. Install cotter key into swivel and spread key ends. Go to step 23.

Step 23. Neutral Safety Switch:

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66-68: The neutral safety switch is located on the transmission and will continue to function normally. It will not be necessary to hook the neutral safety wires to the switch on the QuickSilver Shifter. Disconnect battery ground cable before wiring the back-up light. The back-up light wires connect to a switch on the steering column or the stock console shifter. Run these wires to the upper micro switch on the QuickSilver Shifter (See Fig. 9). Use the two 3/16" slip-on terminals supplied with the shifter. Reconnect ground cable.

69 and later: The neutral safety/back-up light switch is located on the transmission and will continue to function normally. It will not be necessary to connect any wires to the QuickSilver Shifter.

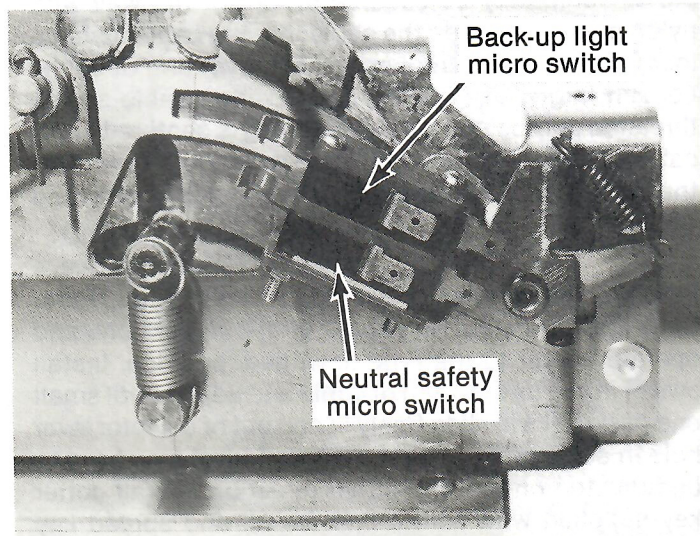


FIGURE 9

GM

On GM vehicles, the neutral safety/back-up light switch is located on the shifter (Steering column or console). Locate and identify the neutral safety wires (engine will not crank unless these wires are connected together) and back-up light wires (back-up lights work when these wires are connected together with key on). Disconnect battery ground cable to prevent accidental shorts and reroute wires to QuickSilver Shifter. Bare 1/4" from the ends of the wires and install 3/16" slip-on terminals supplied with shifter. Crimp terminals

securely to wires. Connect neutral safety wires to the terminals of the **lower** micro switch (See Fig. 9). Connect the back-up light wires to the terminals of the **upper** micro switch. Reconnect ground cable. Set parking brake and check operation of neutral safety and back-up lights. **The engine must start in Park or Neutral only.** Tape any exposed connections to prevent shorts.

FORD

On Ford vehicles, the neutral safety/back-up light switch is located on the transmission or the steering column. Locate and identify the neutral safety wires (engine will not crank unless these wires are connected together) and back-up light wires (back-up lights work when these wires are connected together with key on). Disconnect battery ground cable to prevent accidental shorts and reroute wires to QuickSilver Shifter. Bare $\frac{1}{4}$ " from the ends of the wires and install $\frac{3}{16}$ " slip-on terminals supplied with shifter. Crimp terminals securely to wires. Connect neutral safety wires to the terminals of the **lower** micro switch (See Fig. 9). Connect the back-up light wires to the terminals of the **upper** micro switch. Reconnect ground cable. Set parking brake and check operation of neutral safety and back-up lights. **The engine must start in Park or Neutral only.** Tape any exposed connections to prevent shorts.

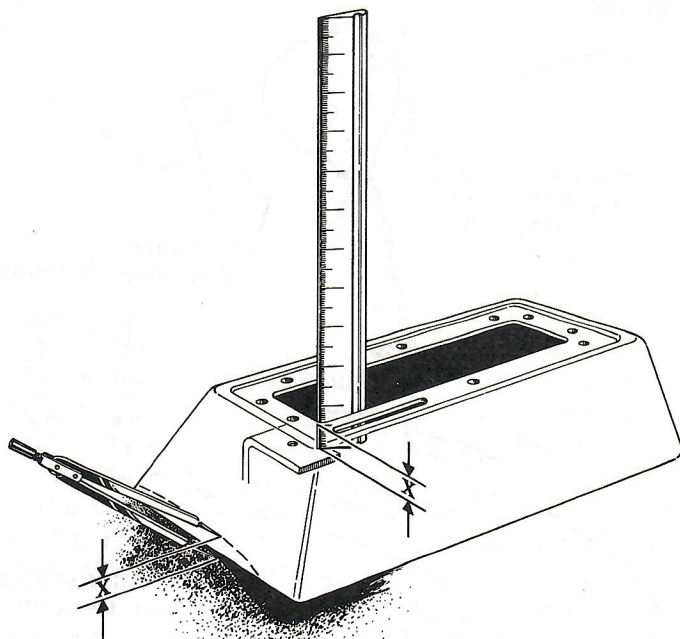


FIG. 10

Step 24. Place tower over shifter mechanism until the bottom edge of the tower touches the floor of the vehicle. Hold the tower level to the shifter with the bottom of the tower touching the highest surface of the floor it will come in contact with (See Fig. 10) Use a ruler to measure the distance X from the underside of the tower to the tower mounting surface on the shifter mechanism.

Step 25. Set a pair of dividers at the distance X, measured in Step 24. Hold the tower in position over the shifter mechanism. Hold the tower level to the mechanism with the bottom of the tower touching the highest surface of the floor it will come in contact with. Holding the tower in position, hold the dividers vertically so one end touches the floor and the other end touches the tower. (See Fig. 10) Scribe a line around the tower that follows the contour of the floorboard, using the dividers. Remove the tower and trim it at the scribe line using tin snips or cutters.

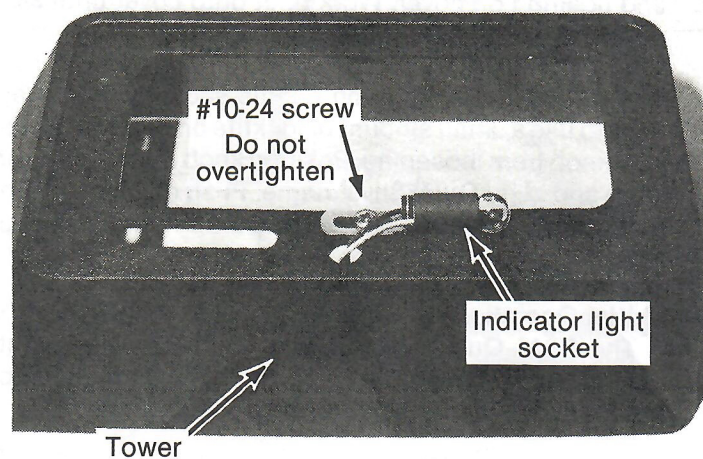


FIGURE 11

Step 26. Mount indicator light onto tower (See Fig. 11) Light socket can mount on top or bottom of tower depending on brightness desired. Mount socket so bulb is to rear of tower and secure using one 10-24 self-tapping screw. Do not overtighten as you may strip out hole in tower. Place tower in position on shifter. Connect one wire from the light socket to a good chassis ground. A shifter mounting bolt should be satisfactory. Run a length of wire from the vehicle's instrument light circuit to the other wire from the light socket. Secure and tape all wires. The indicator light will work with the instrument lights.

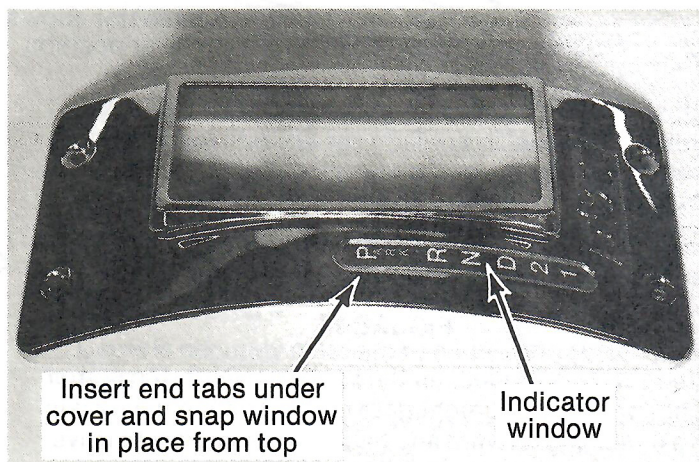


FIGURE 12

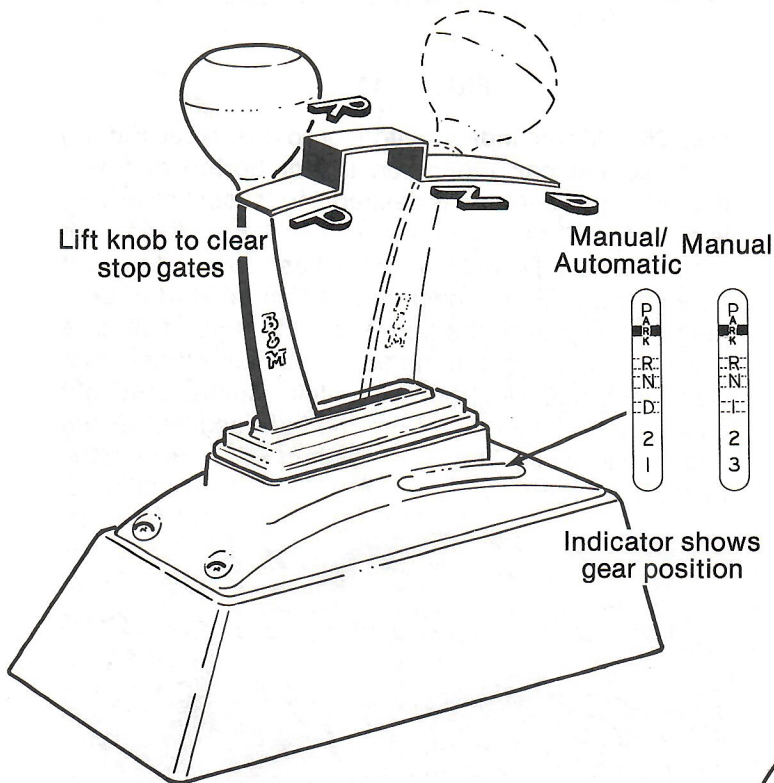
Step 27. Snap indicator window in place on cover (See Fig. 12). Window snaps in from top with tabs inserting under cover. The indicator window supplied with the shifter works with standard shift pattern automatic valve bodies. If your vehicle is equipped with a reverse pattern manual valve body, Manual Indicator Window, P/N 80618, is available from your B&M dealer.

Step 28. Install cover in position on shifter. Install four 10-24 self-tapping screws in place on cover and tighten snugly. Do not overtighten cover screws as you may distort or crack the cover and/or tower. Slip boot over knob and position on cover. Work boot onto cover until slot on edge of boot fits into lip of cover.

Step 29. Tighten knob on handle securely. You may wish to use a small amount of locktite on threads to prevent knob from loosening. Position knob insert on top of knob and align QuickSilver name. Push down on insert to snap it into place. Secure carpet to floorboard and door edges.

Shifter Operation

The B&M QuickSilver Shifter combines a straight gate and a ratchet shifter into one mechanism. Refer to the following instructions for proper operation:



STRAIGHT GATE MODE

FIGURE 13

Straight Gate Mode: In the upper position, the shifter functions in the straight gate mode. The handle travels in a direct line forward and backward from Park to Drive. The shifter handle must be raised up to clear the stop gates while going through the gear positions. (See Fig. 13)

Park: To get to Park from any straight gate position, lift the handle all the way up and push forward. The transmission will find its own Park position. Release the handle and the shifter is locked in Park. To get to any other gear position, you must raise the shifter handle to clear the stop gate.

Reverse: Raise the shifter handle to clear the stop and move the shifter handle to the Reverse position.

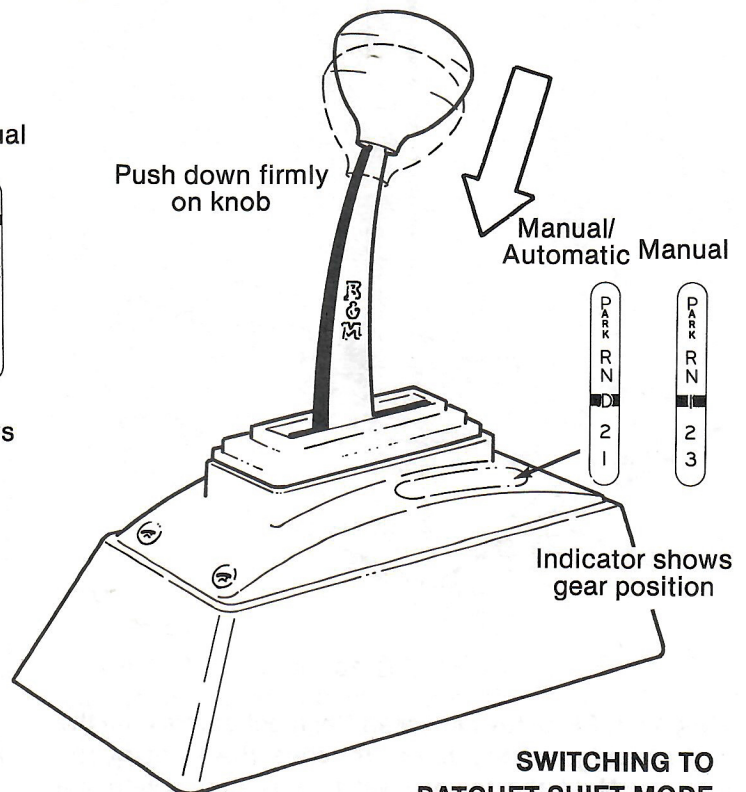
Neutral: Move the shifter handle to Neutral. You do not have to raise the shifter handle unless you are in Park.

Drive: Move the shifter handle to Drive. You do not have to raise the shifter handle unless you are in Park.

Second and First gear cannot be selected with the shifter in the straight gate mode.

Ratchet and Shift Mode: The ratchet shift mode allows firm, positive, no-miss upshifts and downshifts in First, Second, Third (Drive) and Neutral. Reverse and Park cannot be selected in the ratchet shift mode.

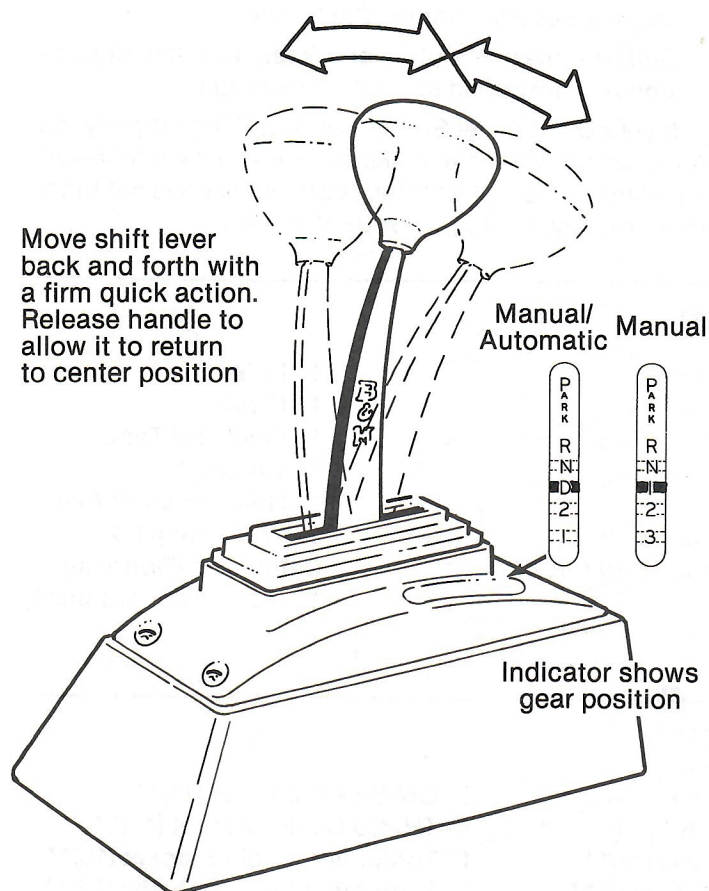
To switch from straight gate to ratchet operation, first have the shifter handle in the Drive position. With the shift handle in the Drive position, push down firmly on the knob to engage the ratchet mode. The handle will snap down approximately 3/4". The shifter is now in the Drive (Third) gear position for automatic valve bodies or the First gear position for full manual valve bodies. (See Fig. 14)



SWITCHING TO RATCHET SHIFT MODE
FIGURE 14

Shifting in the ratchet mode: Move the shift handle forward or backward with a quick firm action until it hits the internal stop. **Caution:** Do not lift the shifter handle

when making ratchet shifts. Release the shifter handle and allow it to spring return to the center position. The shifter is now ready for the next shift. (See Fig. 15) Refer to the shift indicator for gear position in the ratchet mode.



RATCHET SHIFT MODE

FIGURE 15

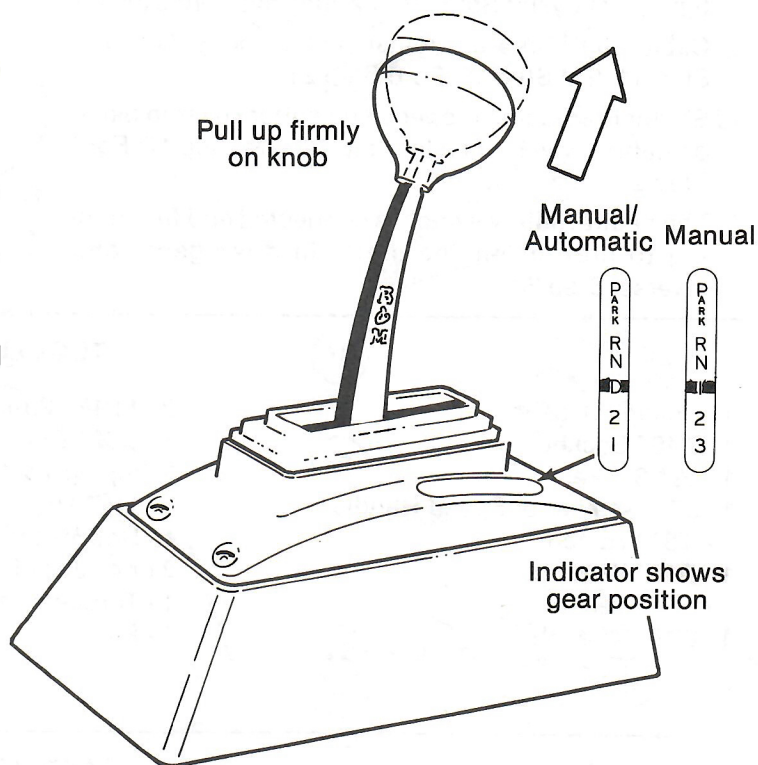
When the shifter has reached the extreme rear gear indicator position, the shift lever will contact an internal stop and you will not be able to ratchet the shift handle towards the rear.

The shifter is capable of ratcheting all the way to neutral. When the shifter has reached the neutral position, the handle will no longer push forward.

To switch the shifter from the Ratchet mode back to straight gate operation, operate the shifter to the Drive (automatic valve bodies) or First (manual valve bodies) gear position, pull up firmly on the knob to engage the straight gate mode. You are now in Drive (automatic valve bodies) or First (manual valve bodies) in the straight gate mode. (See Fig. 16)

Remember: To switch from Straight Gate to Ratchet mode or Ratchet mode to Straight Gate you must be in the Drive (automatic valve bodies) or First (manual valve bodies) gear position. Refer to shift indicator for gear position. (See Fig. 14 & 16)

SPECIAL NOTE: If the instructions for operating your shifter seem complicated, do not be alarmed. You will find that, in actual use, the shifter will be extremely easy to operate after a minimal amount of experience.



SWITCHING TO STRAIGHT GATE MODE

FIGURE 16

Caution: The shifter is an important controlling mechanism of your vehicle and can create serious driving hazards when any part is loose, missing or mis-adjusted. After you have installed your QuickSilver Shifter we recommend you review the following check list and mark each point to assure a complete and proper installation.

CHECK LIST

- Locking steering column lock lever is permanently fastened in the **full up** position. (Caution: Steering column must **never** be allowed to lock at any time.) Step 1
- Shifter is convenient to reach and has ample room for your hand in both extreme front and back handle positions. Step 3
- Cable is securely fastened to shifter and cotter key is in place. Step 6
- Shifter is securely mounted to the floorboard by all four mounting bolts. Step 8
- Carpet covers floorboard holes and cable hole is sealed shut. Step 8

- Cable is routed clear of engine, exhaust system, and moving parts. Step 8
 - Shift lever and throttle lever are tight on transmission Chrysler Step 9; GM Step 14; Ford Step 19
 - Oil pan bolts are tightened to 12-13 ft-lbs. Do not over-tighten. Chrysler Step 10; GM Step 15; Ford Step 20
 - Cable end boots are reinstalled properly. Chrysler Step 11; GM Step 16; Ford Step 21
 - Shifter is adjusted properly and cotter key is in place on cable swivel. Chrysler Step 12; GM Step 17; Ford Step 22
 - The neutral safety switch is connected and functioning to prevent engine starts in drive gears and reverse. Step 23
 - There is no debris or trash in the shifter mechanism.
 - Boot, tower, and cover effectively cover and protect the shifter mechanism. Steps 24-28
 - Indicator clearly visible.
 - Knob is tight on shifter handle. Step 29
 - Shifter locks in Park and handle must be lifted to engage Reverse. Shifter Operation
 - Shifter moves smoothly and freely through all positions as described in Shifter Operation.
- If your QuickSilver Shifter is not working properly, do not drive your vehicle. Make certain you have followed all instructions. If the shifter is broken or does not function properly, contact your B&M dealer.

TOOL LIST

- | | | |
|----------------------------------|--------------------------------|-------------------------|
| 1 - Phillips Screwdriver | 2 - 11/16" Wrenches | 1 - Ruler |
| 1 - 7/16" Socket | 1 - 9/32" Drill Bit | 1 - Dividers |
| 1 - 1/2" Socket | Crimping Tool or Pliers | 1 - Electrical Tape |
| 1 - 3/8" Ratchet or Speed Handle | 1 - 1 1/2" Hole Saw | 1 - Tin Snips |
| 1 - 3/8" Wrench | 1 - Drill Motor | 1 - Hole Punch or Awl |
| 1 - 7/16" Wrench | 2 or 4 - Jack Stands | 1 - Wire Strippers |
| 1 - 1/2" Wrench | 1 - Torque Wrench 0-50 ft-lbs. | Cable Ties (Optional) |
| 1 - 9/16" Wrench | 1 - File | 1 - Hacksaw (Ford only) |

PARTS LIST

- | | | |
|--|---------------------------------|---------------------------------------|
| 1 - Shift Knob (1)* | 1 - Shifter Cable (7) | 1 - GM Selector Lever (13)** |
| 1 - Boot (2)* | 1 - Cable Swivel (8)** | 1 - TH-350 Cable Bracket (14)** |
| 1 - Cover (3)* | 1 - C-6 Cable Bracket (9)** | 1 - Torqueflite Cable Bracket (15)** |
| 1 - Tower (4)* | 1 - C-4 Cable Bracket (10)** | 1 - Torqueflite Selector Lever (16)** |
| 2 - #10-24x5/8" Self Tapping Screws (5)* | 1 - Ford Selector Lever (11)** | 2 - Cable Bracket Spacers (17)** |
| 1 - Shifter Mechanism (6)* | 1 - TH-400 Cable Bracket (12)** | |

PARTS NOT SHOWN

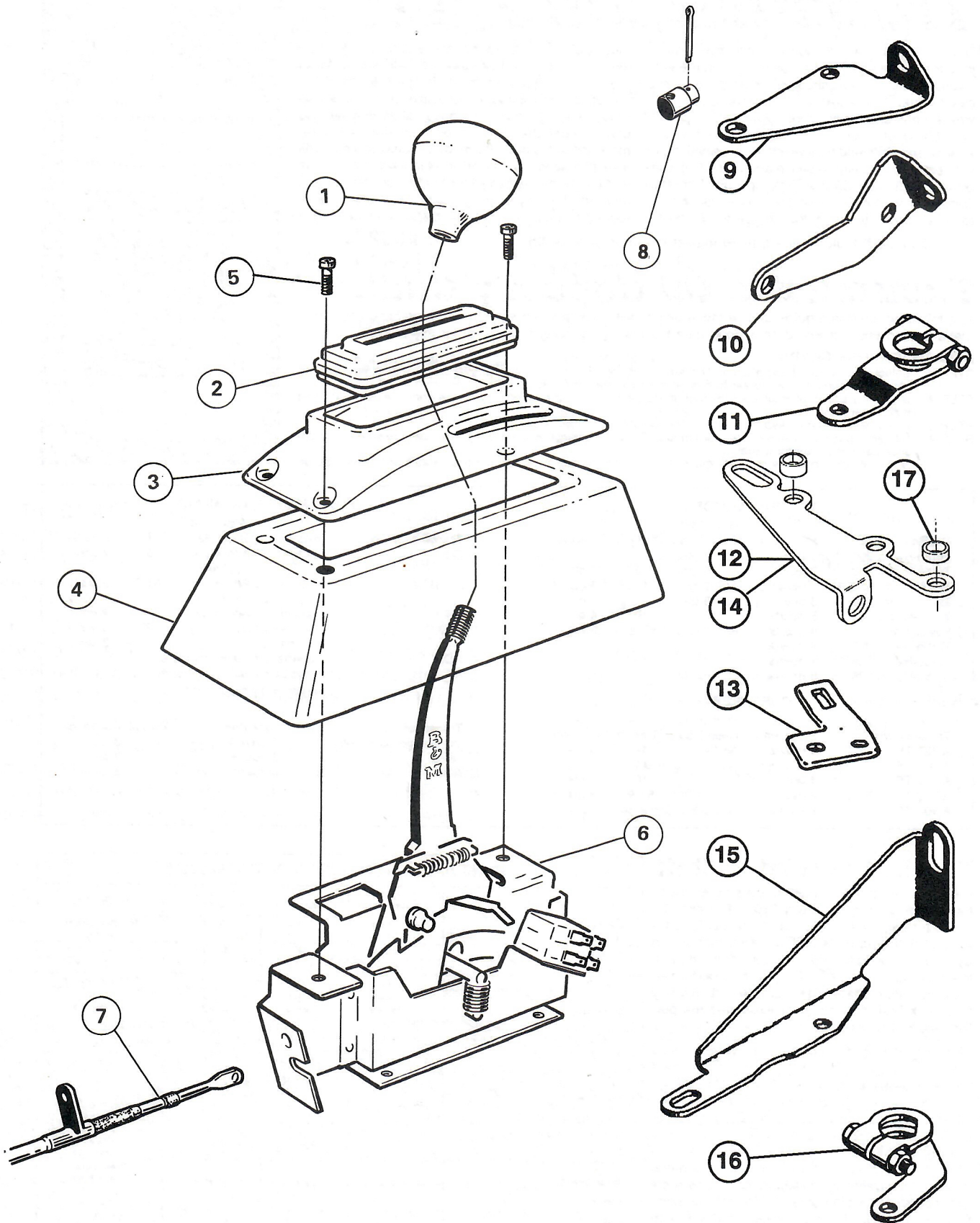
- | | |
|---|--------------------------------------|
| 2 - 1/4"-20 Hex Nuts** | 2 - #4-40x1 1/4" Screws** |
| 1 - 1/4"-20x1 1/2" Hex Bolt** (Ford Pinch bolt) | 2 - #4-40 Hex Nuts** |
| 1 - 1/4"-20x1/2" Hex Bolt** | 2 - #4 Lockwashers** |
| 5 - 1/4" Lockwasher** | 2 - Micro Switches** |
| 2 - 5/16"-18x3/4" Hex Bolts** | 4 - 3/16" Female Slip-on Terminals** |
| 1 - 1/16"x1" Cotter Pin (Cable Swivel)** | 1 - Knob insert** |
| 1 - 3/32"x3/4" Cotter Pin (Cable Pin)** | 1 - Indicator Window, Automatic** |
| 3 - #10-24x5/8" Self Tapping Screws** | 4 - Attaching Bolts 1/4"x1" |
| 1 - Light Socket** | 12 - 1/4" Flat Washers |
| 1 - Light Bulb** | 4 - 1/4" Nuts |

*Items on shifter mechanism

**Items in poly bag

Spare parts for your QuickSilver Shifter are available at your B&M dealer. If you encounter difficulty with your B&M QuickSilver Shifter, contact your local dealer.

PARTS LIST PICTURE



Trick Shift Automatic Transmission Fluid

Trick shift was originally developed by B&M in conjunction with a major oil company back in the early sixties for racing applications. Trick Shift was so successful that it found its way to street applications where it has been even more successful. Trick Shift is a blend of foam inhibitors, extreme pressure agents, and shift modifiers which in combination provide extended transmission life and dramatically improved shift feel. B&M's Trick Shift Performance Transmission Fluid is literally the least expensive way to measurably improve the transmission perfor-

mance of your vehicle. You can literally pour in performance. Trick Shift can be successfully mixed with other fluids. However, to attain the maximum improvement you should try to utilize Trick Shift exclusively. Since the converter does not drain when you drain the pan (half the converter will drain if you remove the valve body for modifications) you can drill a small hole in the converter, let it drain, tap threads in the hole, and utilize a small pipe plug. Not recommended on lockup or clutch converters. Ideal for towing light trucks and TV applications as well.

Trick Shift Fluid, 1 quart, (note master carton is case of 12)#80259



Transmission Oil Capacity Chart

The following chart is a guide to how much oil you will require when servicing or modifying your automatic transmission. It would be a good idea to obtain one extra quart of oil for insurance.

HOW TO USE THIS CHART:

- STEP 1. Select your model Transmission. The amount is for oil pan drain only. If you are changing or removing your valve body, this will drain half of your torque converter also.
- STEP 2. Select the size of your torque converter. If you plan to drain or change your torque converter, you will need that much more oil.
- STEP 3. If you have a B&M Deep Pan, refer to capacity under transmission model.
- STEP 4. Add all capacities to arrive at proper amount. **Caution:** Quantities are only approximate. Be sure to use dipstick calibration during actual fill.
- NOTE: When dipstick is at "Add" mark, it is one pint (½ quart) low. Do not overfill as foaming may occur.

GENERAL MOTORS				FORD MOTOR COMPANY			
Transmission	Stock Pan	With B&M Deep Pan	Torque Converter	Transmission	Stock Pan	With B&M Deep Pan	Torque Converter
Turbo-Hydro 700R4	5 quarts	Add 3 qts.		C-6	5 quarts	Add 4 qts.	13" 7 qts.
Turbo-Hydro 400	3 quarts	Add 2 qts.	13" 7 qts.			(40280)	
Turbo-Hydro 350	3 quarts	Add 3 qts.	12" 6 qts.			Add 3 qts.	11" 5 qts.
Turbo-Hydro 250	3 quarts	Add 3 qts.	11" 5 qts.			(40281)	
Turbo-Hydro 425	5 quarts		10" 4 qts.	C-4	3 quarts	Add 2 qts.	10" 4 qts.
Powerglide	4 quarts	Add 2 qts.	8" 9" 3 qts.	FMX	4 quarts		9" 3 qts.
Turbo-Hydro 200	3 quarts			C-3	3 quarts		8" 3 qts.
Turbo-Hydro 125	4 quarts			AOD	12 quarts, including converter		
Turbo-Hydro 325	5 quarts			ATX	10 quarts, including converter		
CHRYSLER				IMPORT AUTOMATICS			
Transmission	Stock Pan	With B&M Deep Pan	Torque Converter	Transmission	Stock Pan	Torque Converter	
A-727 TF	4 quarts	Add 4 qts.	12" 6 qts.	Volkswagen 3 speed	3 quarts		3 qts.
A-904 TF	4 quarts		11" 4 qts.	Jatco	3 quarts		3 qts.
A-998 TF	4 quarts		10" 4 qts.	A-40	3 quarts		3 qts.
A-999 TF	4 quarts		8" 9" 3 qts.				
A-404 TF	7.25 qts.	Including Converter					

Test Data on Trick Shift

B&M has had Trick Shift tested on a comparison basis with Dexron and Ford Type "F" fluids by two independent laboratories. We have also conducted shift time tests on our own transmission dyno. The results of these tests are tabulated on the right. As you can see, Trick Shift outperformed the other two fluids substantially. In fact, in every test Trick Shift either met or exceeded the performance of Dexron or Ford Type "F".

The 4-Ball Wear Test is an indication of the fluid's lubricating abilities. The smaller the diameter of the wear spot, the better the lubricant. As you can see Trick Shift was far better than either of the other two fluids. Many people mistakenly assume that because a transmission shifts more positively with Trick Shift, that whatever causes those firmer shifts also creates more friction on the metal parts and the transmission wears more. This is not the case as proven in our tests. The friction modifiers used in Trick Shift only react on the friction material on the clutches and bands in an automatic transmission.

TRANSMISSION FLUID COMPARISON TEST RESULTS

Test	Type "F" Ford Brand	Dexron II	Improved Trick Shift	Specifications	
4-Ball wear test (ave. wear spot dia., mm)	.38 mm	.39 mm	.36 mm	Ford Max. allowed .45 mm	
Flash Point	380° F	350° F	385° F	Ford Min. 350° F	
Fire Point	420° F	390° F	435° F	Ford Min. 380° F	
Pour Point	-70° F	-45° F	-45° F	Ford Min. -40° F	
Copper Strip Corrosion	Slight Tarnish 1A	Slight Tarnish 1A	Slight Tarnish 1A	Ford Max. 1B	
Viscosity @ 210° F	7.74 cs	7.36 cs	7.72 cs	Ford Min. 7.0 cs	
Viscosity @ 0° F	1,397 cs	Test ran at -10° F	1,180 cs	Phoenix Lab (Results Acceptable)	
Viscosity @ -40° F	38,081 cs	50,000 cps (max.)	22,640 cps		
Foaming Tendency And Stability	Acceptable	Acceptable	Acceptable	ASTM D692 Test Standards	
Rubber Swell % Buna N	- .51%	+ 2.5%	+ 3.80%	Phoenix Lab Positive Swell Acceptable	
Rubber Swell % Silicone	+ 18.21%	+ 6.5%	+ 13.11%	Phoenix Lab Positive Swell up to 20% Acceptable	
Dynamometer Shift Times With Stock TH-400 Trans	1 - 2	1.17 sec.	1.20 sec.	.99 sec.	B&M Dyno LAB
	2 - 3	.95 sec.	1.08 sec.	.65 sec.	B&M Dyno LAB



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Instruction Addendum Cable Bracket and Lever for GM TH-200, TH-200-4R, TH-250, TH-350, TH-400 and TH-700-R4

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A new cable bracket and lever are now included in all B&M shifters. This is a single cable bracket for use on all General Motors automatic transmissions (except Powerglide). This bracket and lever replaces the separate cable brackets for the TH-400 and for all other GM transmissions. The installation of this bracket and lever is described below.

STEP 1. Remove two transmission oil pan bolts from the middle of the left side of the oil pan. Install cable bracket in position, see figure 1.) The bracket must be installed with two spacers between the pan and bracket. (If your transmission is equipped with a cast aluminum oil pan, these spacers should be omitted however the cable bracket may have to be modified.) Install the two 5/16-18x1.00" bolts (Metric transmissions use the two 8mm x 25mm bolts) supplied and tighten 12-13 ft. lbs. Do not overtighten as this can damage pan gasket.

STEP 2. Remove the two rubber boots, one large nut, and a large lockwasher from the threaded end of the shifter cable. Route the shifter cable according to figure 2. Avoid sharp bends and route the cable away from hot engine exhaust parts. Slide the end of the

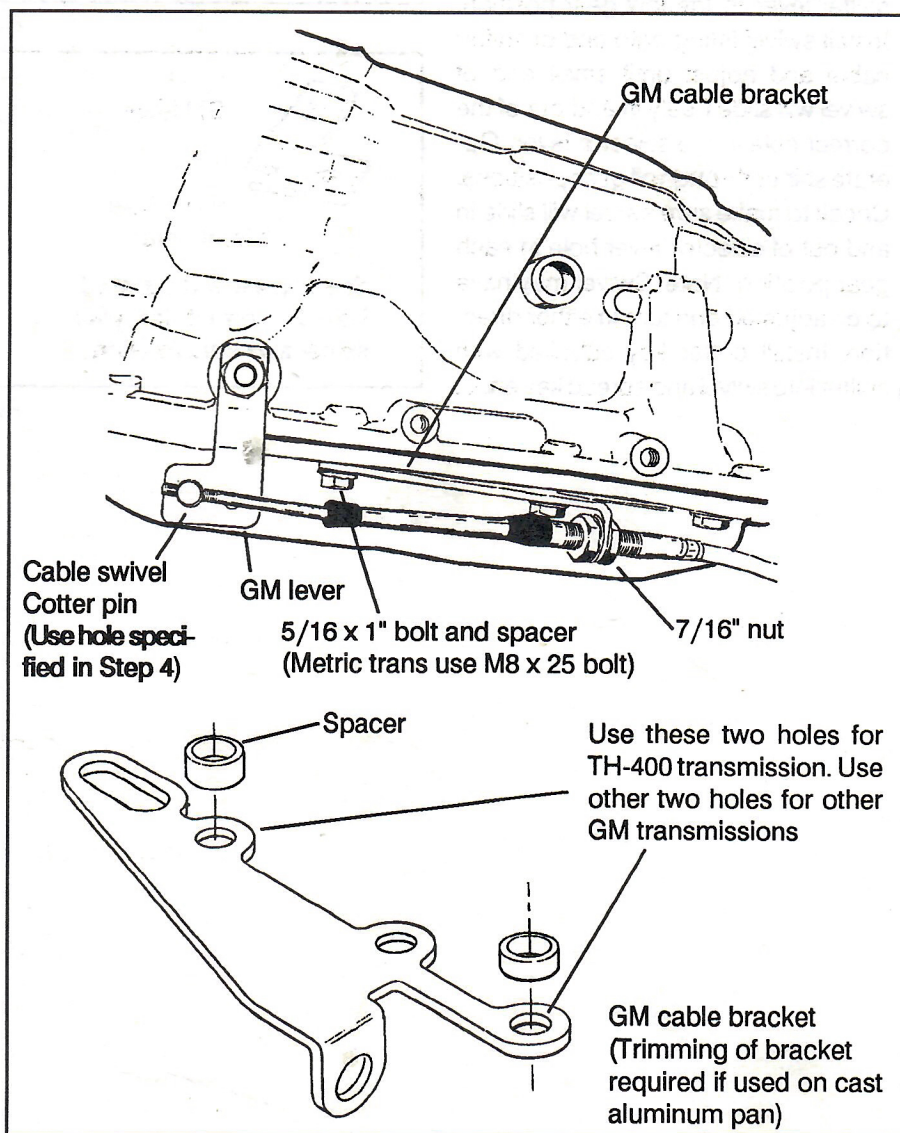


Figure 1

cable into the cable bracket, install lockwasher and large nut over end of cable. Position cable so the threaded portion of the cable housing is centered in the cable bracket. Tighten both large nuts to hold the cable in this position. Install two rubber boots onto end of cable.

STEP 3. There are two holes in the supplied transmission selector lever. The front hole is used for all four speed automatic transmissions. With a three speed automatic transmission the front hole in the lever is used with Pro Stick, Street Stick and Unimatic shifters. All other shifters use the rear hole in the transmission lever. (See figure 3.)

STEP 4. Move the transmission selector lever to full rear position. Place the shifter lever to the low gear position. Install swivel fitting onto end of shifter cable and adjust until small end of swivel will slide freely in and out of the correct hole in the selector lever. Operate shifter through all gear positions. Check to make sure swivel will slide in and out of selector lever hole in each gear position. **Note:** Swivel may have to be adjusted one turn in either direction. Install cotter key supplied with shifter into swivel and spread key ends.

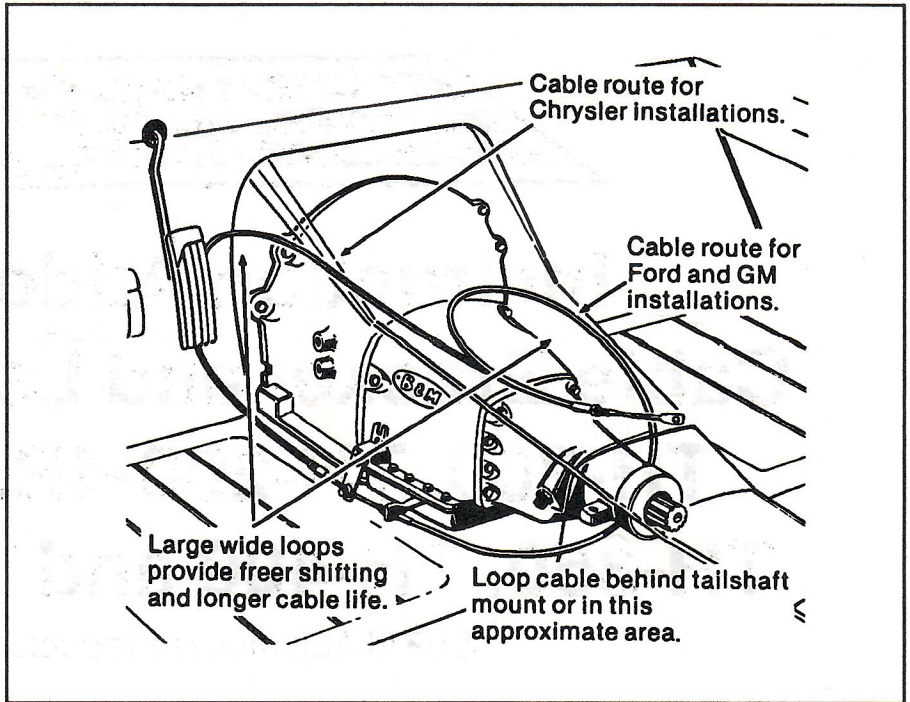


Figure 2

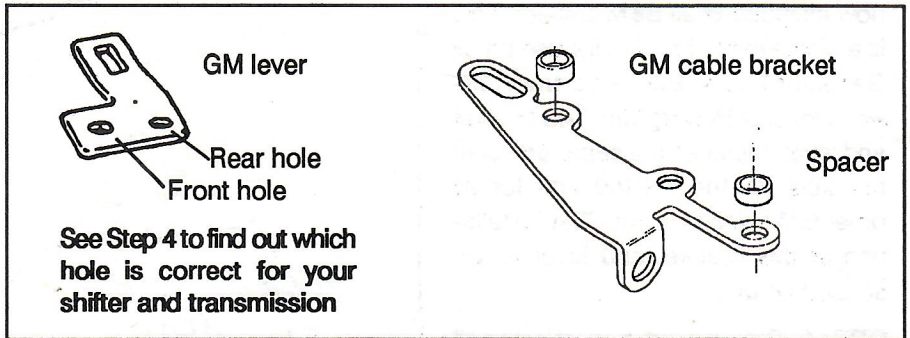


Figure 3

IMPORTANT

Before installing the T-handle or knob onto the stick of this shifter put a little grease on the threads of the stick. The aluminum of the T-handle or the insert in a plastic knob or T-handle may gall on the threads of the stick and make it impossible to remove the handle from the stick. If this occurs it can cause the stick to break if you use excessive force while attempting to remove the T-handle or knob from the stick.

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WARNING

PERIODIC INSPECTION AND MAINTENANCE OF YOUR B&M SHIFTER IS RECOMMENDED TO ENSURE THAT THE MECHANISM IS WELL LUBRICATED, FREE FROM DIRT OR RUST AND THAT THE CABLE IS PROPERLY ADJUSTED. LACK OF MAINTENANCE COULD RESULT IN A FAILURE INCLUDING A FAILURE OF THE REVERSE LOCK OUT SAFETY FEATURE.

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