



Installation Instructions

QuickSilver Shifter

'73-'81 Camaro & '70-'81 Firebird

Part Number 80688

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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 upshifting and downshifting on the street or track. In the ratchet shift mode, it is impossible to overshift or miss a gear. The vertical lockout design prevents accidental engagement of Reverse during ratchet shifting.

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

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 6 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 factory assembled. Any modification or disassembly of these parts can cause shifter malfunction and will void the warranty.

Step 1. Disconnect the battery ground cable and place the shifter in Neutral. Remove the four Allen screws on the shifter cover plate (**See Figure #1**). Remove the two screws that fasten the front corners of the console to the instrument panel. Remove the two screws in the floor of the console glove box. Pull the glove box straight up to remove it. Remove the two or four screws in the metal brackets under the glove box. Lift console at rear and fit the shifter cover plate thru the hole in the console. Slide

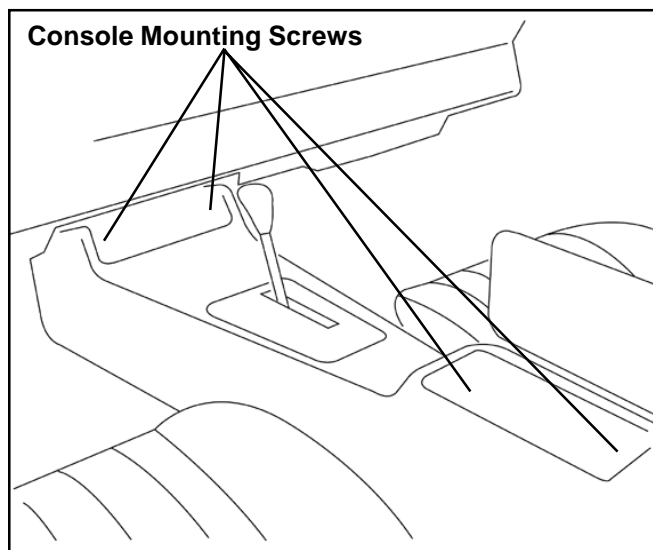


Figure #1

the console out.

Step 2. Remove the control cable clips (**See Figure #2**). Remove the four 5/16" shifter mounting bolts and remove the light bulb and socket (if equipped). Remove the shifter mechanism. Remove the boot cover plate screws and the plate.

Step 3. Enlarge the cable hole in the floor with a hacksaw or sheet metal cutters as shown in **Figure #3**. The enlarged portion should be at least 1" forward of the existing hole. Pull the cable boot up over the lower portion of the metal fitting on the cable. Replace the cable boot plate and leave it loose.

Step 4. Align the cable adapter holes with the U-shaped notch on the **B&M QuickSilver** shifter and fasten it with one of the 1/4 bolts, lockwashers, and nuts supplied with the kit (**See Figure #4**). Place the **B&M QuickSilver** shifter in Neutral (**See Shifter Operation**).

Step 5. Install the **B&M** shifter mounting bracket on the floor. Fasten it with the four stock 5/16" bolts. The bracket must be level from side to side.

Step 6. Slide the **B&M QuickSilver** shifter over the control cable and install the stock cable clip on the cable fitting. Slip the cable eyelet over the cable pin on the shifter and install the stock clip (**See Figure #5**).

Note: You may have to enlarge the cable eyelet slightly. Use a round file and do not enlarge the hole any more than necessary to make it fit.

Step 7. Bolt the shifter to the mounting bracket finger tight, using two 1/4" bolts, lockwashers, and nuts in the kit. Check for clearance between the cable and the enlarged hole in the floor. Also check for clearance between the bottom of the chrome shifter handle and the mounting bracket. If the cable contacts the edge of the hole, unbolt the shifter and enlarge the hole to clear the cable. If the bottom of the chrome shifter handle interferes with the mounting bracket, place a 1/4" thick washer (included in kit) between the mounting bracket and the base of the shifter at each bolt location. Install the two remaining mounting bolts and tighten all four bolts.

Step 8. Relocate the cable boot and boot cover plate (**See Figure #5**). Drill the floor with a #32 drill and install the stock screws. Make sure the hole is covered to prevent entry of exhaust gasses. You may have to add some tape or silicone sealer.

Step 9. Install the **B&M** console plate on the shifter with the wide end forward. Fasten it with the two #10 flat head self-tapping screws in the kit. Mount the indicator light socket on the console plate using the other #10 screw. Connect one wire from the socket to a shifter mounting

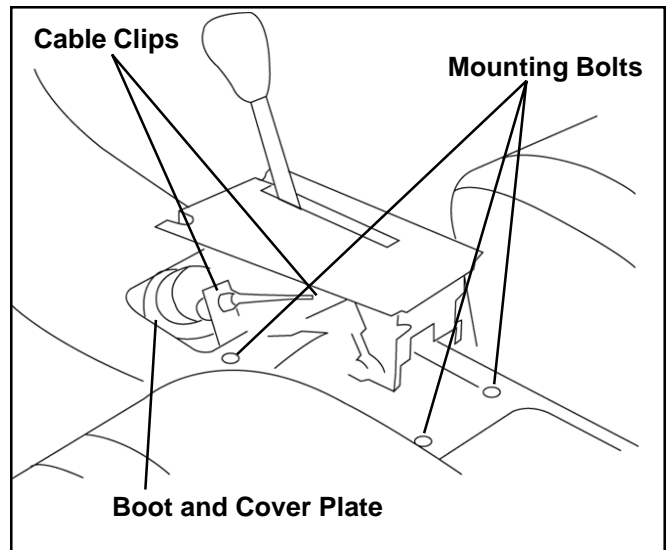


Figure #2

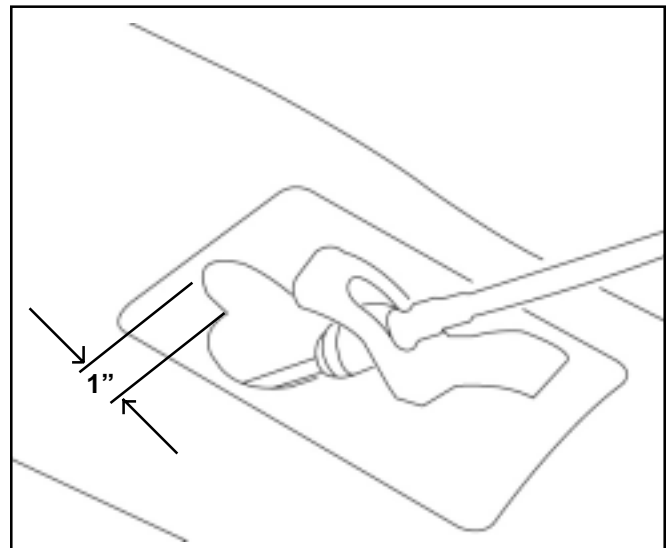


Figure #3

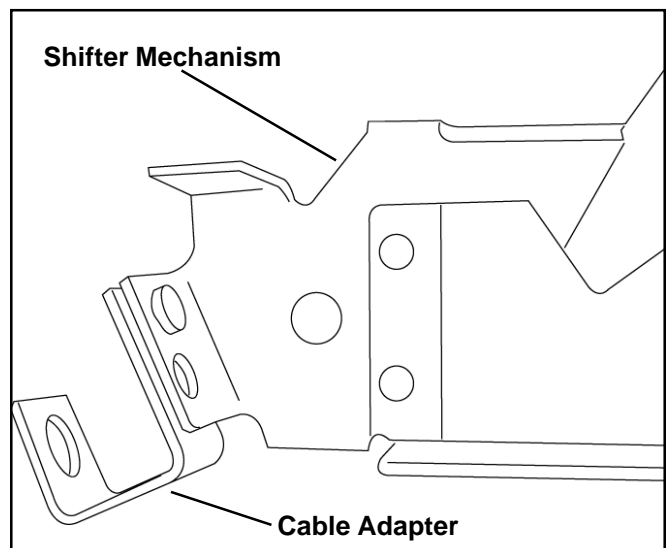


Figure #4

bolt. If your car had an indicator light on the shifter, cut the old socket off and connect the wire to the new light socket. Otherwise, run a length of wire from the instrument panel light switch to the new light socket. Tape all connections and splices to avoid shorts. Install the light bulb.

Note: The light socket may be installed on top of the console plate or underneath, depending on brightness desired.

Step 10. Position the console over the shifter and fasten it to the instrument panel with the stock screws, finger tight. The inner lip on the console should nest into the shifter console plate on all four sides. If not, adjust the console or the shifter. Replace the two or four screws in the metal brackets under the glove box, and tighten all console mounting screws. Replace the glove box with the two stock screws.

Step 11. Snap the indicator window in place on the chrome shifter cover (See Figure #6). The window snaps in from the top with the tabs inserted under the cover. **Note:** The window supplied is the standard PRND21 shift pattern. If you have a reverse pattern valve body (PRN123), the correct window, **B&M #80618**, is available from your dealer. Insert the black boot into the lip of the chrome cover. Make sure it is retained on all four sides. Slip the cover over the shifter handle and fasten it to the console with the four #6 self-tapping screws in the kit. **Do not overtighten the screws** or you may crack the cover.

Step 12. With the **B&M QuickSilver** shifter in the Neutral position, check the cable adjustment on the transmission (See Figure #7). If you must raise the vehicle, use jack stands, wheel ramps or a hoist and make sure the vehicle is well supported. Remove the cable clip and pull the cable eyelet off. The eyelet must slide off and on the pin without binding. If not, adjust the cable pin by loosening the nut and moving the cable pin until the eyelet will slide on. Retighten the cable pin nut. Move the shifter to the First Gear position. (Third Gear on reverse pattern valve bodies.) Recheck the cable pin to eyelet fit. Readjust if necessary, and check the Park position. Install the cable clip.

Note: The stock linkage to the steering column must be left intact or the neutral safety switch, backup light switch, and column lock will not function.

Step 13. Lower the vehicle. Reconnect the battery ground cable and set the parking brake. Start the engine and check the shifter installation. **The engine must start in Park or Neutral only. The backup lights should work in Reverse only.** Turn the lights on and check the indicator light. If your **B&M QuickSilver** shifter is not working properly, do not drive your vehicle. Make certain you have followed all instructions. If the shifter is broken or

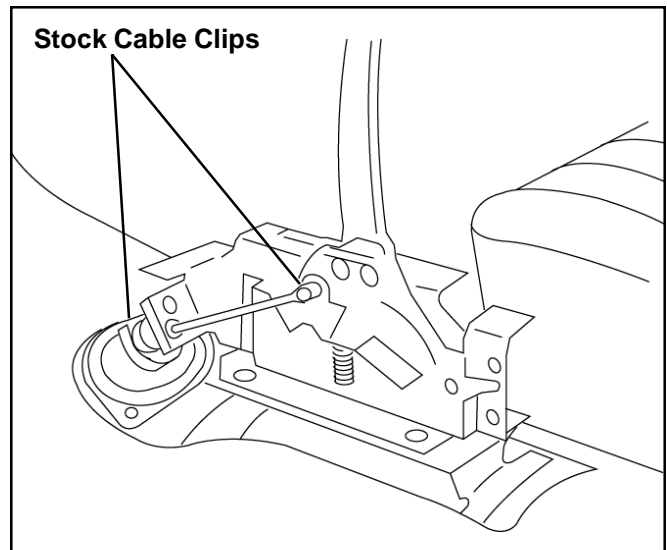


Figure #5

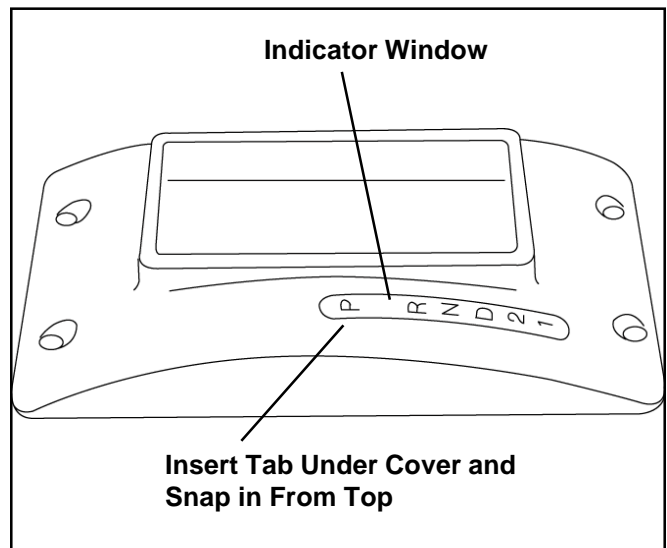


Figure #6

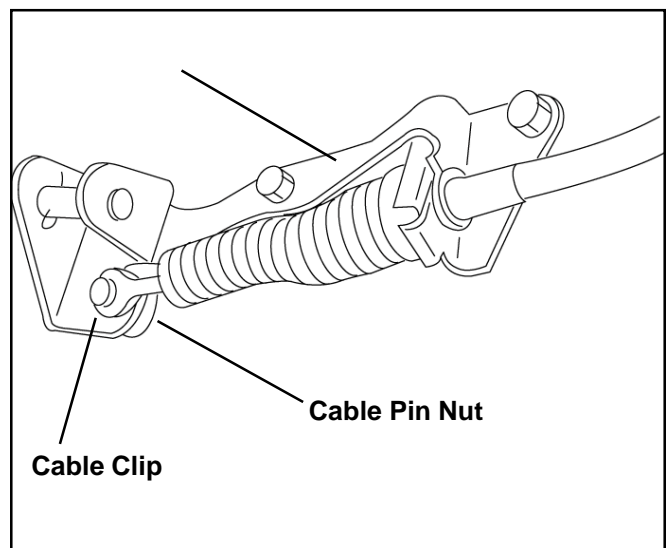


Figure #7

does not function properly, contact your **B&M** dealer.

Step 14. Tighten the knob on the handle. You may wish to use a small amount of Loctite or a similar product on the threads to keep the knob tight. Position the knob insert and align the **B&M QuickSilver** name, push down on the insert to snap it in place.

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: 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 Figure #8**).

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 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 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 Figure #9**).

Shifting and 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 Figure #10**). Refer to the shift indicator for gear position in the ratchet mode.

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. Ford and Chrysler applications have only one ratchet step between the Reverse and Park position. General Motors applications require two ratchet steps between Reverse and Park. Do not attempt to force the shift lever ratchet steps on Ford or Chrysler applications as this may cause damage to the cable and/or shifter mechanism.

To switch the shifter from the Ratchet mode back to straight gate operation, operate the shifter to the Drive (automatic valve bodies) or the First (manual valve bodies) gear position, pull 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 Figure #11**).

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 the First (manual valve bodies) gear position. Refer to the shift indicator for the gear position (**See Figure #9 & #11**).

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.

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

CHECK LIST

Cable is securely fastened to shifter and cotter key is in place.
Shifter and brackets are securely mounted to the floorboard by all eight mounting bolts.
Cable hole is sealed shut.
Cable is routed clear of exhaust system and moving parts.
Shifter is adjusted properly and spring clip is in place on transmission cable swivel.

The neutral safety switch is connected and functioning to prevent engine starts in drive gears and reverse. There is no debris or trash in the shifter mechanism. Indicator clearly visible. Knob is tight on shifter handle.

Shifter locks in Park and handle must be lifted to engage Reverse. Shifter moves smoothly and freely through all positions as described in Shifter Operation.

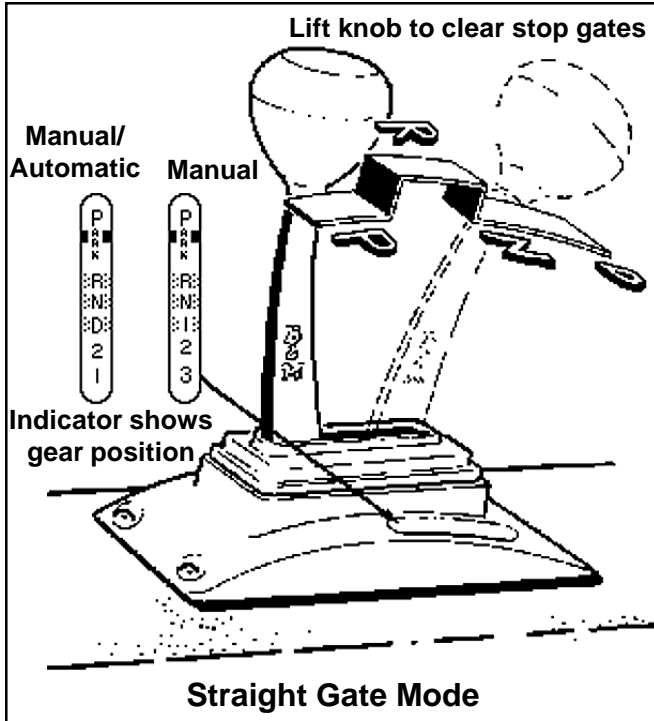


Figure #8

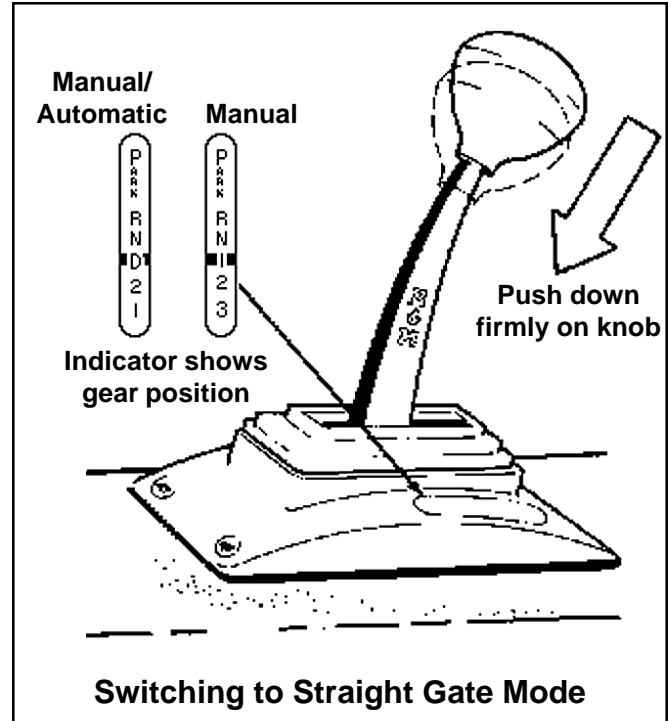


Figure #9

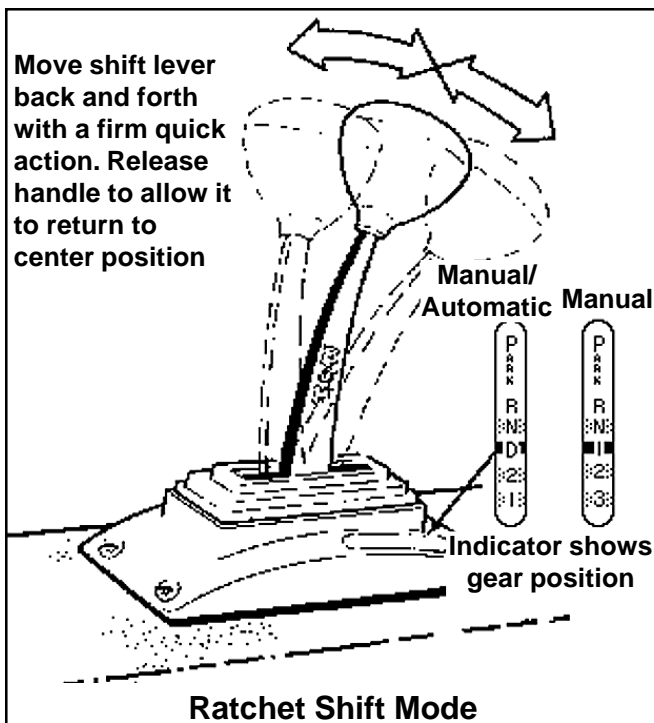


Figure #10

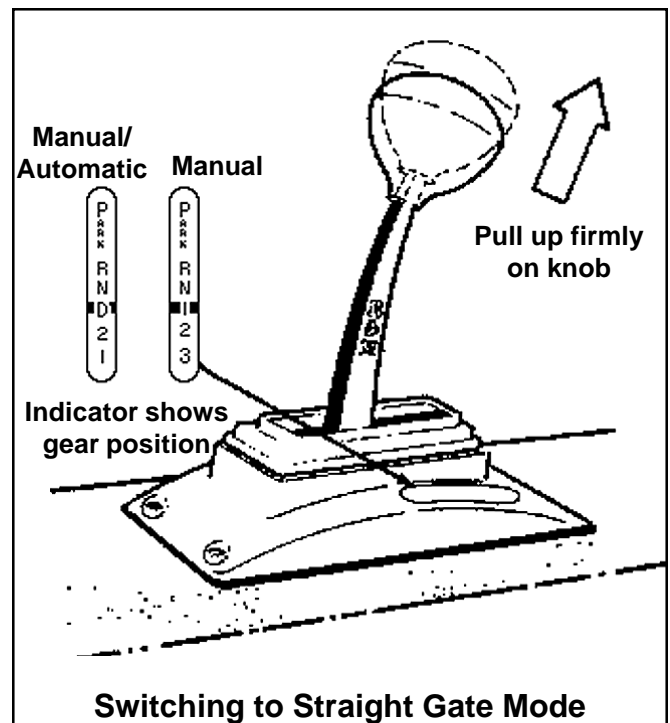


Figure #11

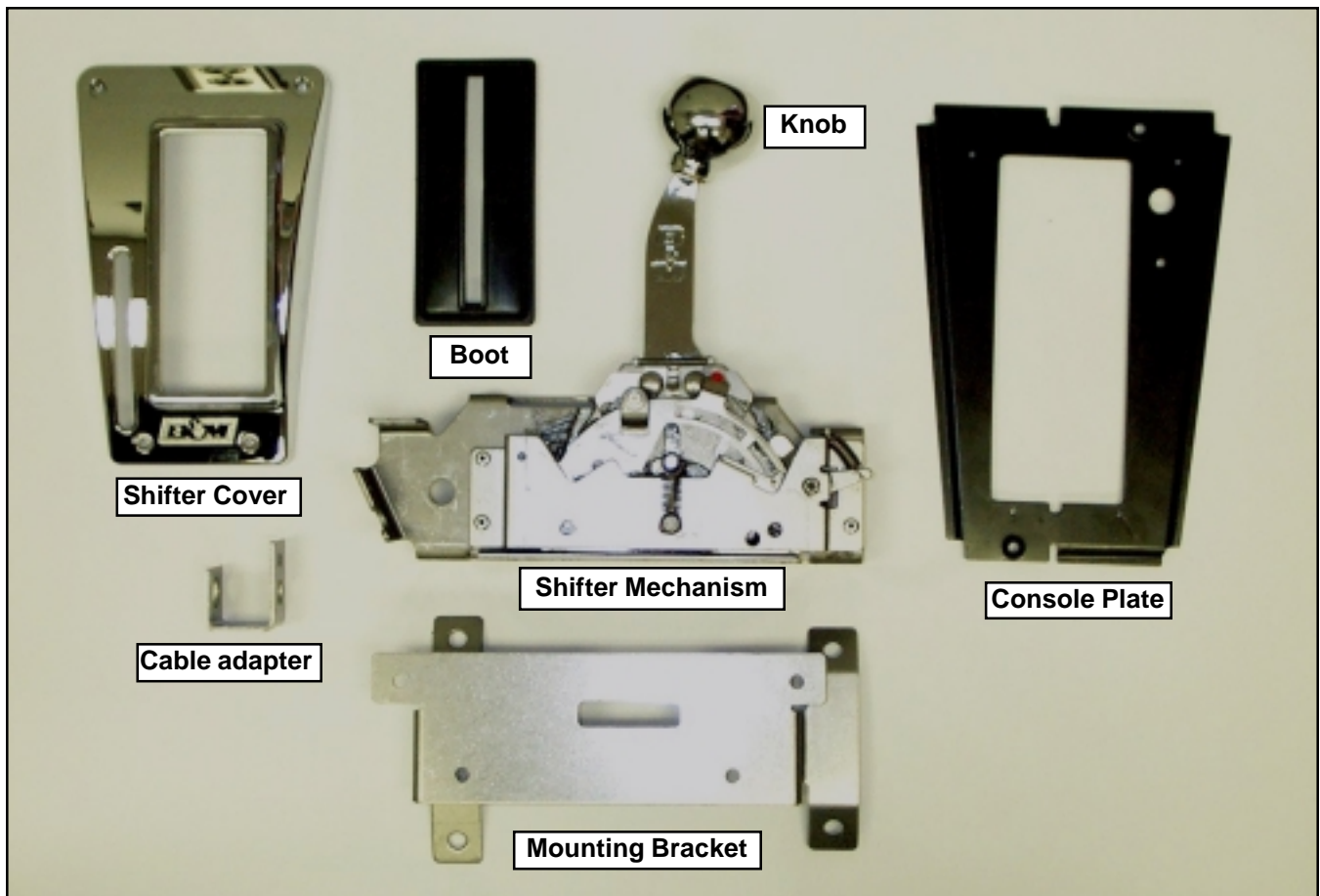
TOOL LIST

- | | | |
|-----------------------------|---------------------|-------------------------------------|
| (1) 5/32" Allen Wrench | (1) 1/2" Wrench | (1) Electrical Tape |
| (1) 5/16" Socket | (1) 9/16" Wrench | (1) Hacksaw |
| (1) 7/16" Socket | (1) Round File | (1) Silicone Sealer (optional) |
| (1) 1/2" Socket | (1) #32 Drill | (1) Phillips Screwdriver |
| (1) Ratchet or Speed Handle | (1) #Drill Motor | (1) Sheet Metal Cutters |
| (1) 5/16" Wrench | (1) Electrical Tape | Jack Stands, Wheel Ramps or a hoist |
| (1) 7/16" Wrench | | |

NOT SHOWN (Items In Poly Bag)

- | | | |
|--------------------------------------|-----------------------------------|----------------------|
| (5) 1/4" - 20 Hex Nuts | (4) #6 - 32 x 3/4" Screws | (1) Light Bulb |
| (5) 1/4" - 20 x 3/4" Hex Bolts | (2) #10-24 x 3/8" Flathead Screws | (1) Knob Insert |
| (5) 1/4" Lockwashers | (1) Light Socket | (1) Indicator Window |
| (1) #10-24 x 5/8" Self Tapping Screw | | |

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



WARNING!

Periodic inspection and maintenance of your **B&M Quicksilver** shifter is recommended to ensure that the mechanism is well lubricated, free from dirt or rust and the cable is properly adjusted. Lack of maintenance could result in a failure including a failure of the reverse lockout safety feature.