



Installation Instructions QUICKSILVER SHIFTER

Fits: 1973-1981 Chevrolet Camaro
1970-1981 Pontiac Firebird
Catalog # 80688

WORK SAFELY! For maximum safety, perform this installation on a clean, level surface and with the engine turned off. 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 installation until you are confident that the vehicle is safely secured and will not move.

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.

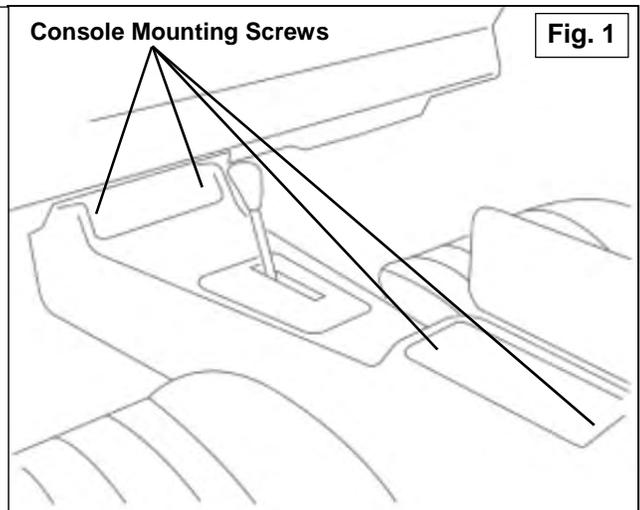
This shifter is designed to work with an automatic, manual valve body utilizing standard or reversed shift patterns. Your shifter also comes supplied with all brackets and parts to work with your transmission.

INTRODUCTION

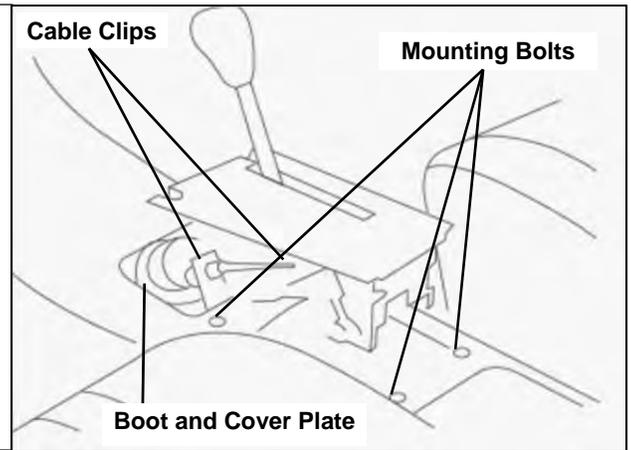
The main mechanical components of this shifter are factory assembled. Any modification or disassembly of these parts can cause shifter malfunction and will void the warranty.

NOTE: This shifter has been configured from the factory for 3-speed automatic transmissions. For 4-speed automatic transmission use, remove the E-clips at the back of the shifter and the attached cross-pin (See Figure #5). They will NOT be used in 4-speed operation.

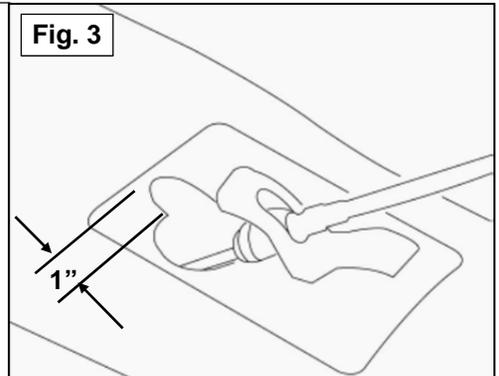
1. Disconnect the battery ground cable and place the shifter in Neutral. Remove the four Allen screws on the shifter cover plate (See Figure 1). Remove the two screws that fasten the front corners of the console to the instrument panel. Remove the two screws in the floor of the console glove box. Pull 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 through the hole in the console. Slide the console out.



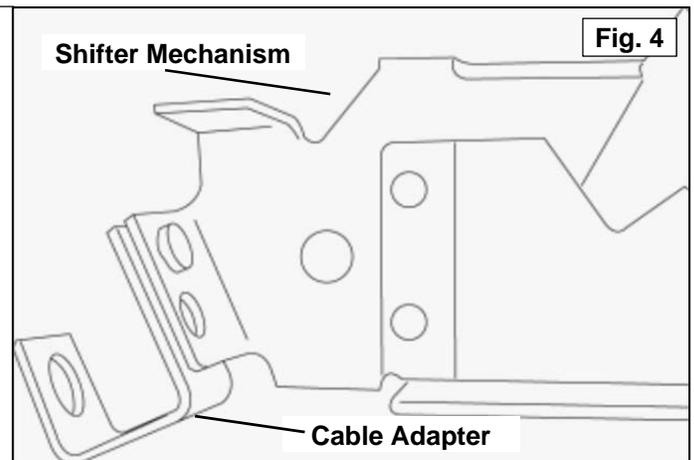
2. Remove the control cable clips (See Figure #2). Remove the four 5/16" shifter mounting bolts and remove the light bulb and socket (if equipped). Remove the shifter mechanism. Remove the boot cover plate screws and the plate.



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.



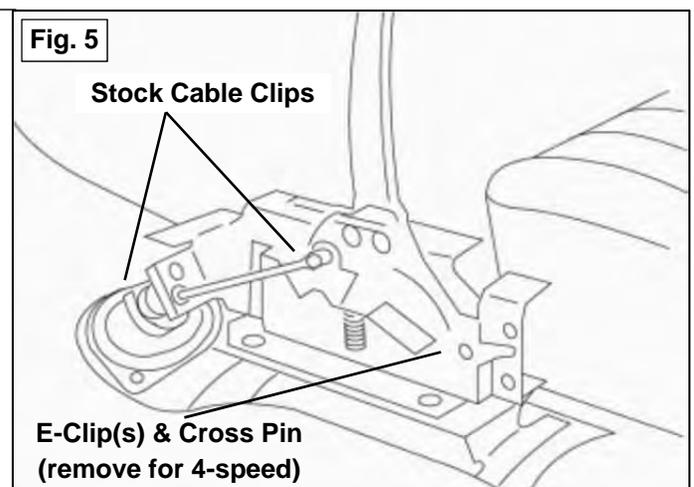
4. Align the cable adapter holes with the U-shaped notch on the B&M QuickSilver shifter and fasten it with one of the 1/4" bolts, washers, lockwashers, and nuts supplied with the kit (See Figure #4). Place the B&M QuickSilver shifter in Neutral (See Shifter Operation).



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.

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.



7. Bolt the shifter to the mounting bracket finger tight, using two 1/4" bolts, washers, 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, enlarge the hole in the bracket. Install the two remaining mounting bolts and tighten all four bolts.

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.

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

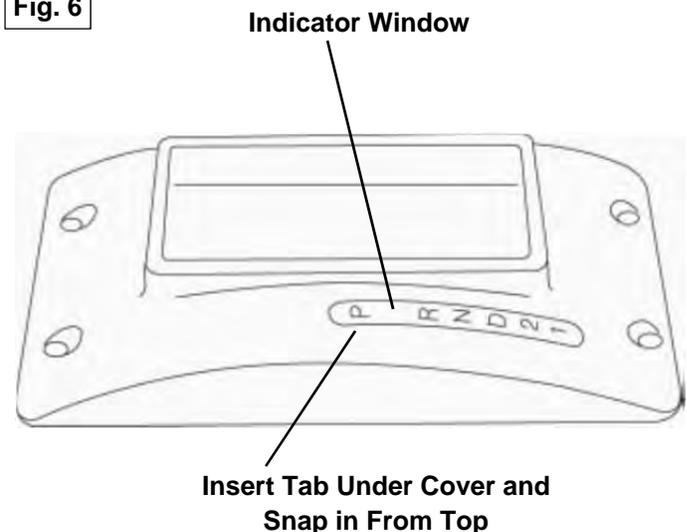
Note: The light socket may be installed on top of the console plate or underneath, depending on brightness desired.

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.

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.

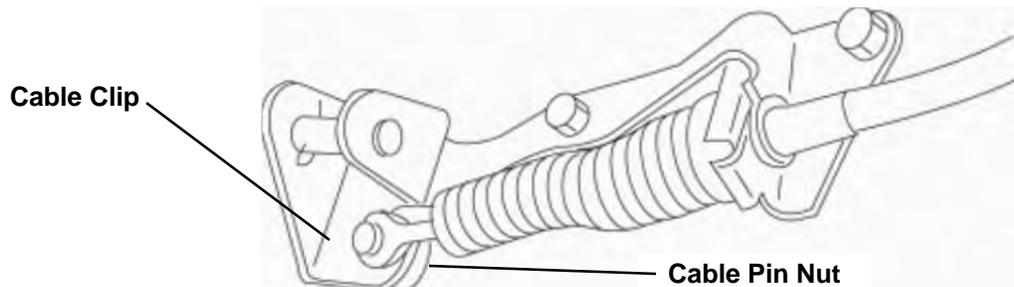
Note: The windows supplied are the standard PRND21 or PRND321 shift pattern. If you have a reverse pattern valve body (PRN123 or PRN123D), the correct window, is available from your dealer. Insert the black boot into the lip of the chrome cover. Make sure it is retained on all four sides. Slip the cover 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.

Fig. 6



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.



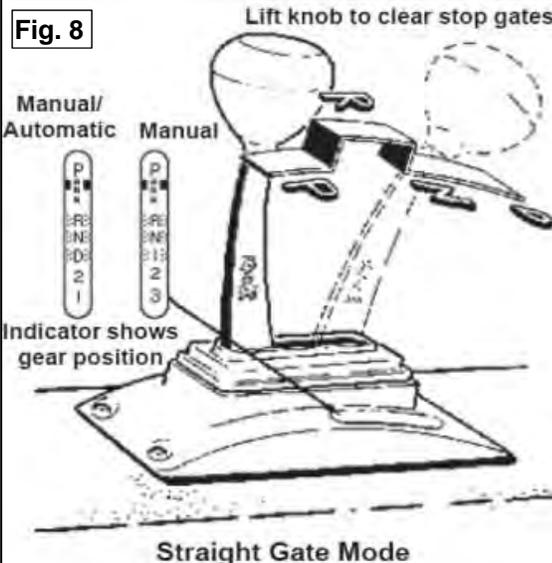
13. Lower the vehicle. Reconnect the battery ground cable and set the parking brake. Start the engine and check the shifter installation. The engine must start in Park or Neutral only. The backup lights should work in Reverse only. Turn the lights on and check the indicator light. If your B&M QuickSilver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

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.

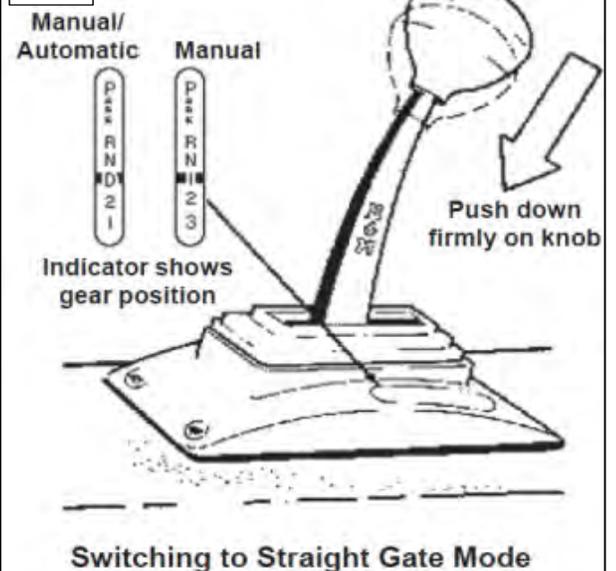
Drive: Move the shifter handle to Drive. You do not have to raise the shifter handle unless you are in Park.

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).

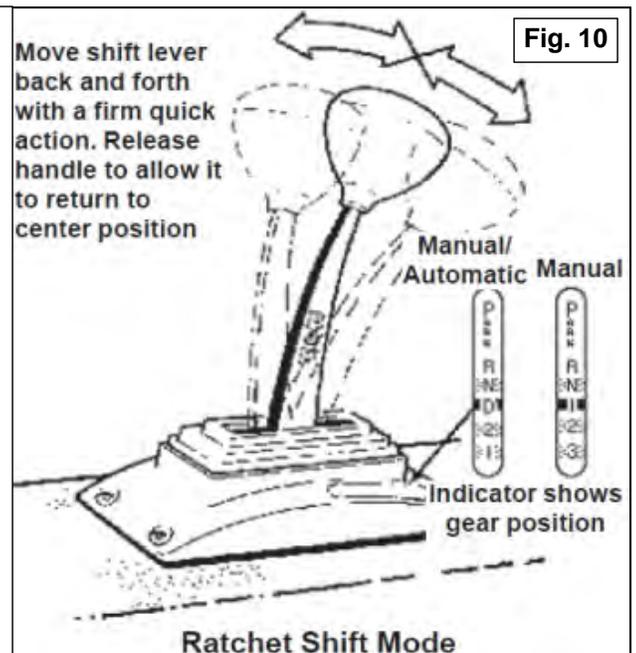
Fig. 9



10. 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.

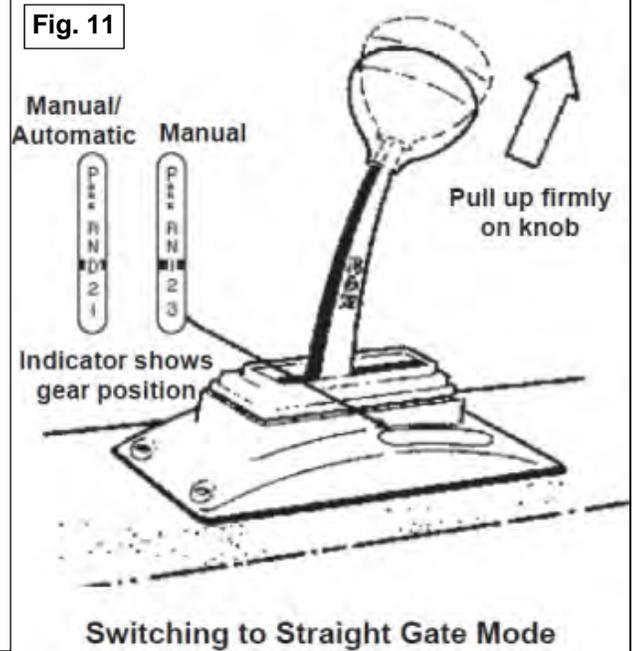
Fig. 10



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.

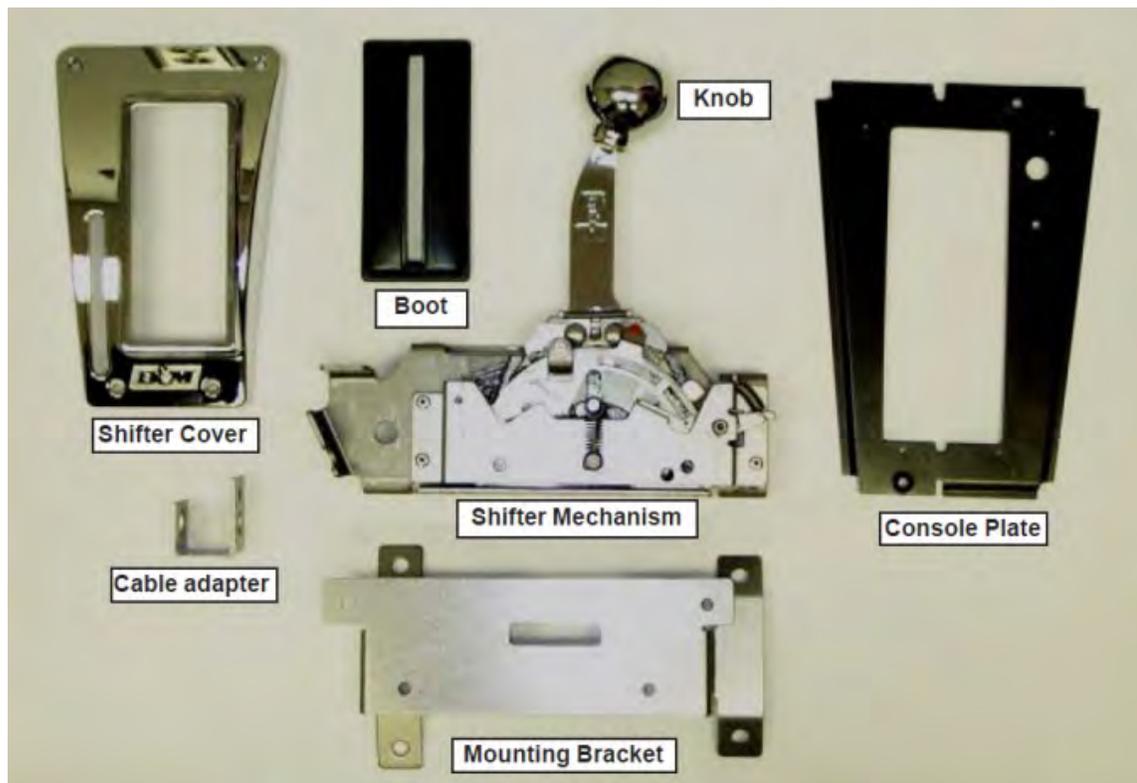
TOOL LIST

- | | | |
|-----------------------------|-------------------------|-------------------------------------|
| (1) 5/32" Allen Wrench | (1) 1/2" Wrench | (1) Duct or Sealing Tape (optional) |
| (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) Portable Hand Drill | (1) Sheet Metal Cutters |
| (1) 5/16" Wrench | (1) Electrical Tape | Jack Stands, Wheel Ramps or a hoist |
| (2) 7/16" Wrench | | |

ITEMS IN PLASTIC BAG (not pictured)

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|--------------------------------|--------------------------------------|----------------------|
| (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 |
| (12) 1/4" Flat Washers | (1) #10-24 x 1/2" Self-Tapping Screw | (3 speed) |
| (1) Indicator Window (4 speed) | | |

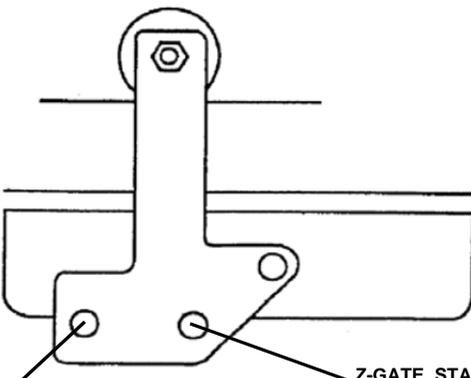
Spare parts for your B&M QuickSilver shifter are available at your B&M dealer. If you encounter difficulty with your B&M QuickSilver shifter, contact your local dealer.



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.

CABLE ADJUSTMENT WARNING

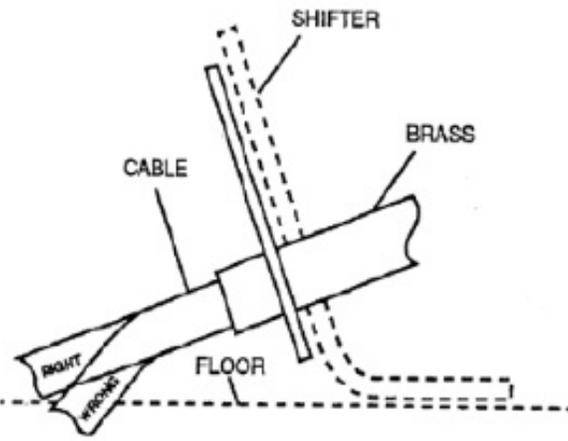


**Z-GATE, STARSHIFTER,
 QUICKSILVER #80683 W/3SPD,
 PRO RATCHET #80842 W/3SPD**

**MEGASHIFTER, UNIMATIC, PRO
 STICK, SPORT SHIFTER, HAMMER,
 QUICKSILVER #80683 W/4SPD, PRO
 RATCHET #80842 W/4SPD, STEALTH
 PRO RATCHET #81120 W/4SPD,
 BANDIT SHIFTER W/4SPD**

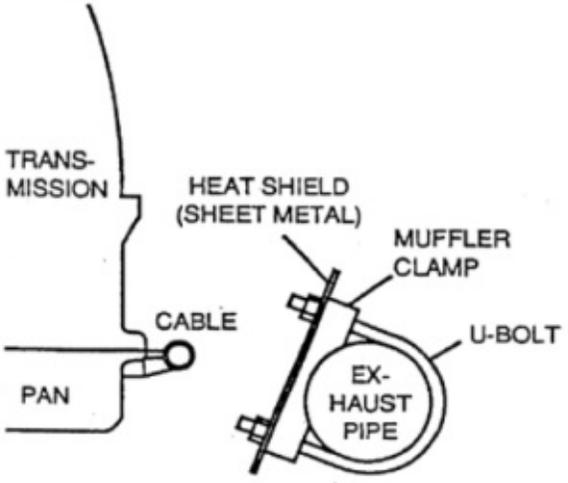
INSTALLATION

NOTE: Be careful. Select the correct hole for your shifter. Wrong hole **will** destroy the cable, shifter and/or transmission in **one** shift! (GM trans. only)



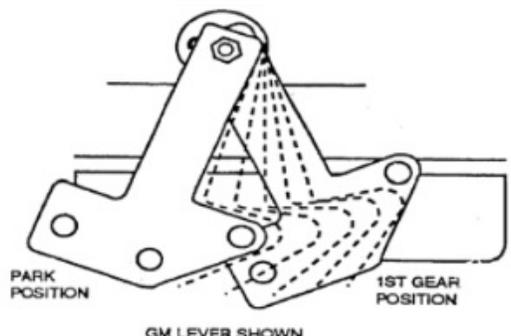
DO NOT KINK CABLE

Note: Do not kink cable anywhere along its length. If cable has a kink, it will lock up. Cable should be kept straight for 2 inches on each end where it leaves the brass. Any of the above **will** destroy the cable, shifter and/or transmission in **one** shift!



MELTED CABLES

Note: if your cable is close to your exhaust it will melt or become brittle. If this is the case, you will need to make a heat shield. **Do not wrap the cable, this retains heat.** Heat **will** destroy the cable!



CABLE ADJUSTMENT

Note: if you don't adjust the cable correctly, you will destroy the cable, shifter and/or transmission in one shift. Put the transmission in low gear and shifter in low gear, set the swivel so it slides in and out of the correct hole freely(See installation picture). Then move the transmission and shifter to park (all the way the other way) then rotate the cable swivel until it slips in and out of the hole freely. Now go back and forth between Park and low gear and fine tune the adjustment. See instructions for further details.

IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

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.

Technical service calls, correspondence, and warranty questions should be directed to:



B&M Racing & Performance Products

(707) 544-4761

www.bmracing.com