



INSTALLATION INSTRUCTIONS
Part No. 80850
**PRO GATE™ SHIFTER
SWITCH KIT**

INTRODUCTION

The B&M Pro Gate™ Switch Kit adds Neutral Safety and Backup Light functionality to B&M Pro Gate shifters, to make them suitable for street use.

Before starting, take the time to read and understand these instructions.

NOTES

- Installation requires better-than-average mechanical knowledge and skills. If this job is beyond your abilities, seek the services of a qualified technician.
- If you do not understand any part of these instructions, please call **B&M Technical Support** at **(866) 464-6553** for assistance.

SAFETY WARNINGS

- **WORK SAFELY!** For maximum safety, perform this installation on a clean, level surface, with the engine turned off. Chock the wheels to prevent vehicle movement. To avoid bodily injury or vehicle damage, do not begin work until you are confident that the vehicle is safely secured and will not move.
- **AVOID SERIOUS INJURY OR DEATH BY CRUSHING!** If you have to raise the vehicle to work under it, securely support it on a lift or jack stands. **NEVER work under a vehicle that is supported only by jacks!**

INSTALLATION

1. If your shifter is not yet installed in the vehicle, install it completely according to its instructions.

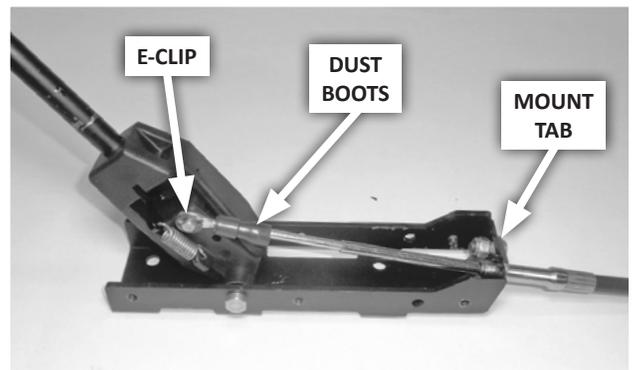
NOTE: The shifter must be mounted in the vehicle before installing the switch kit.



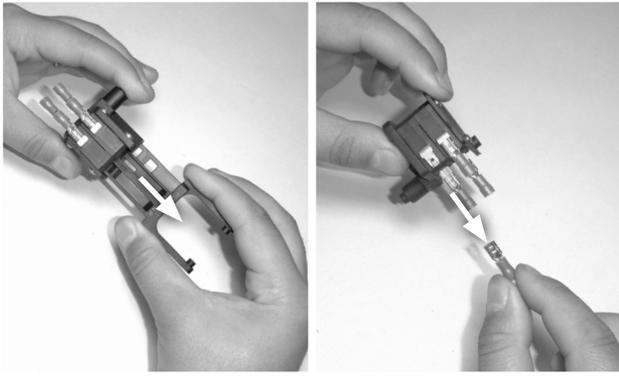
2. Remove your shifter's handle according to its instructions.



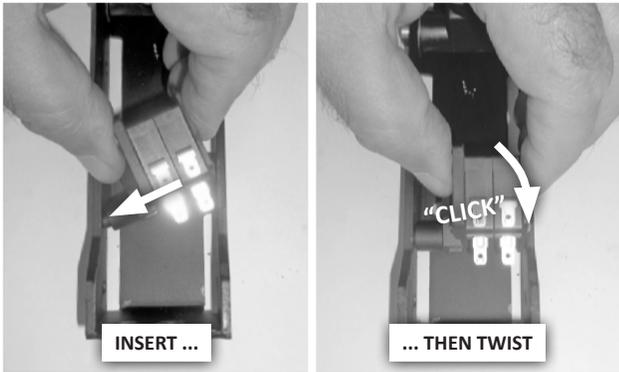
3. Remove the gate plate and cover assembly (3 bottom screws on each side).



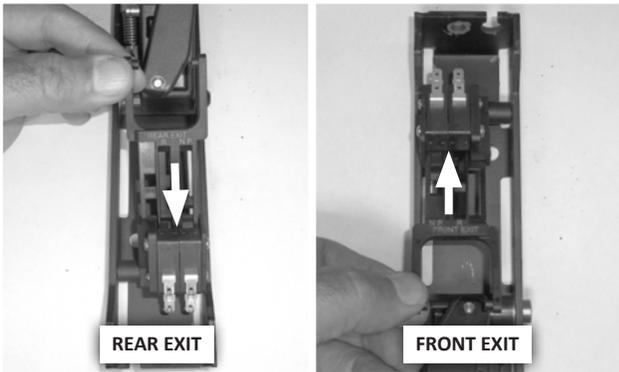
4. Slide the two plastic dust boots off their joints all the way to the cable end. Then disconnect the cable from the shifter at both the cable eye (e-clip) and the cable mount tab (nut and bolt). Lift the cable out of the shifter and set it aside.



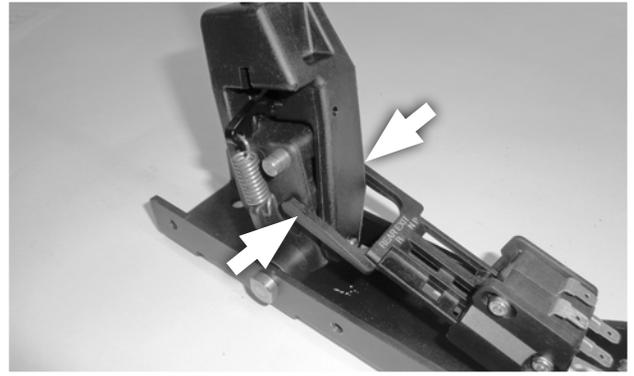
5. Remove the cam plate and 4 wire terminals from the switch assembly.



6. Lower the switch assembly into the shifter base slightly diagonally, with the terminals pointed toward the cable exit. Insert the long pivot pin into its hole, then twist the switch until the short pivot pin “clicks” into its hole.



7. Orient the cam plate for your type of shifter (rear or front cable exit), then slide it into the switch assembly.

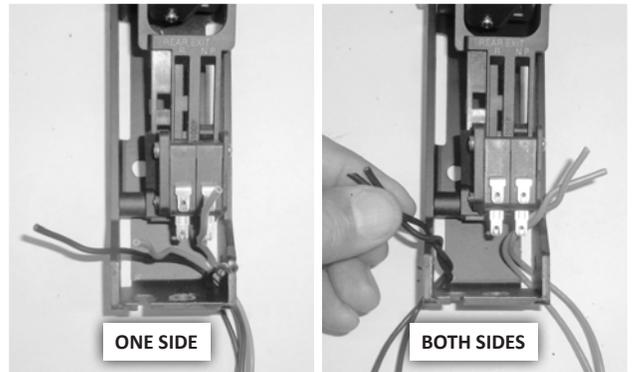


8. Snap the cam plate pins into their holes on the shift lever.

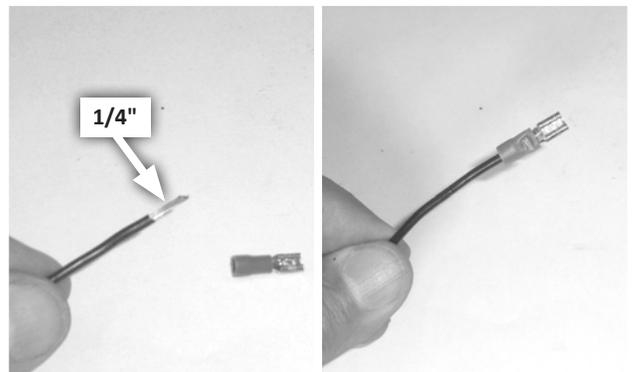
9. Route the switch wires to the shifter: Use an applicable electrical schematic to locate and identify:

- the two Neutral Safety wires (which prevent cranking unless the transmission is in NEUTRAL or PARK); and
- the two Backup Light wires.

Disconnect the battery ground cable, and route both pairs of wires to the shifter.



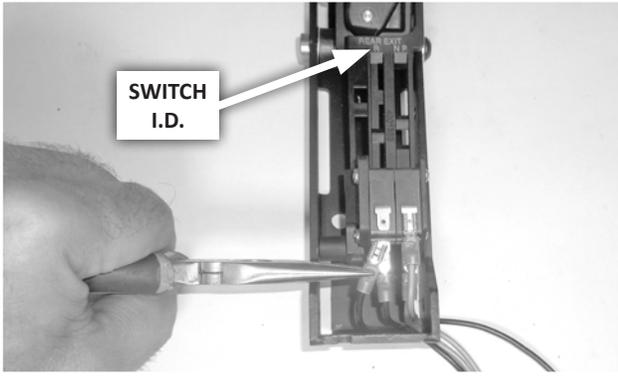
10. Route the Neutral Safety and Backup Light switch wires up through either / both of the gaps in the shifter base.



11. Strip 1/4" of insulation off each wire, and attach a terminal to it, using an appropriate crimping tool.

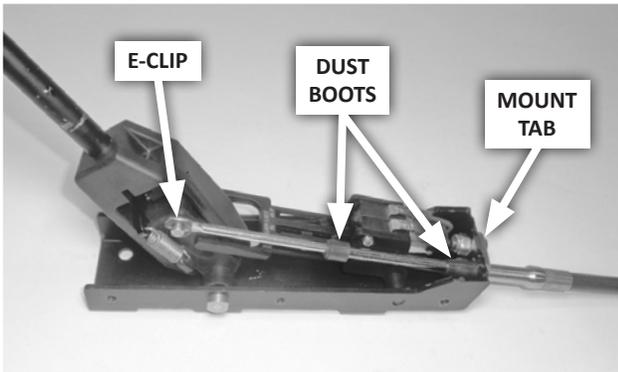
CAUTION: Failure to use an appropriate crimping tool to attach the terminals may result in defective, unreliable connections.

Tape or heat-shrink the wire-terminal connections for added protection of the crimps.



12. Install the wire terminals on their respective switches.

NOTE: The switches are identified on the cam plate by "R" (Backup Light) and "NP" (Neutral Safety).



13. Reassemble the cable to the shifter at both the cable mount tab (nut and bolt) and the cable eye (e-clip). Then push both plastic dust boots back over their joints.



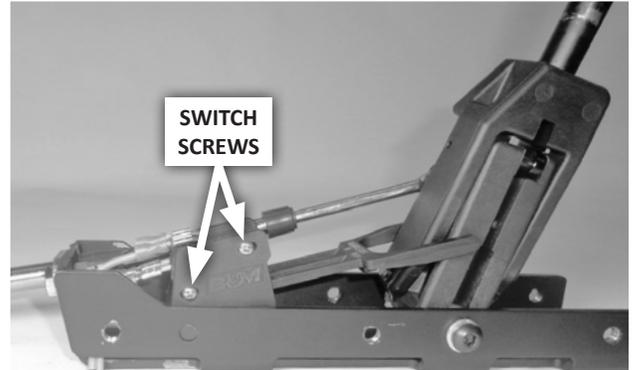
14. Ensure there is no debris in the shifter mechanism. Then reinstall the gate plate and cover assembly on the shifter (6 screws, 3 on each side) according to your shifter's instructions.

15. Reinstall the shifter handle (knob or pistol grip) according to your shifter's instructions.

16. Check both switches for proper operation:

NOTE: Since the gate plate determines the physical location of the shift lever and cam plate, **switch operation must always be checked with the gate plate installed.**

Reconnect the battery ground cable, disconnect the ignition coil, and set the parking brake. **Check the Neutral Safety switch** by attempting to crank the starter in each shifter position. The starter must crank only when the shifter is in either PARK or NEUTRAL. **Check the Backup Light switch** by moving the shifter to REVERSE and verifying that the backup lights illuminate.



In the unlikely event that the switches should require adjustment, the 2 adjustment screws are shown above.

After verifying correct switch operation, reconnect the ignition coil.

Congratulations! Your B&M Pro Gate Shifter Switch Kit is now installed and ready to use.

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE

B&M Performance & Off-Road maintains a highly-trained technical service department to answer your technical questions, provide additional product information and offer various recommendations.

B&M TECHNICAL SUPPORT: (866) 464-6553

