

Installation Instructions *Precision Sport Shifter* 2003 and up Nissan 350Z/370Z 2003 and up Infiniti G35/G37

(see www.bmracing.com for the latest vehicle fitment applications and model years) Part Number 45163

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This **B&M Short Throw Shifter** has been designed to work on most 2003 and up Nissan 350Z/370Z and 2003 and up Infiniti G35/G37 model vehicles. It has been engineered to greatly reduce shift throw and improve shifter feel. Check the parts and tools lists at the beginning of these instructions for the supplied parts and the tools required to install your **B&M Short Throw Shifter**. Installation of this **B&M Short Throw Shifter** can be accomplished by anyone with minimal mechanical experience.

INTRODUCTION

This **B&M Short Throw Shifter** can be installed in less than an hour by carefully following the instructions. Read all instructions first to familiarize yourself with the parts, tools, and procedures. This kit contains all the parts necessary to install the shifter.

*NOTE: Do not attempt to disassmble shifter unit. This shifter has been precision assembled at B&M under exacting tolerances and at extreme pressures. Disassembly of the shifter unit will void warranty.





DISASSEMBLY

- STEP 1. Park vehicle on a level area and allow time to cool. Unscrew knob and remove. Also, remove small insert under knob (will not be used on new shifter). TOOLS: Channel Locks & Towel.
 - NOTE: In some vehicles it may be VERY difficult to remove the shift knob without damaging it. If this is the case in your vehicle, it may be possible to proceed through all the disassembly steps carefully lifting up on the center console plate and rubber boots to access the hardware. Then finally removing the knob as described in the final disassembly step 13.

STEP 2. Lift up console plate.





STEP 3. Unplug wiring harness from console plate and remove console plate.



STEP 4. Remove white foam cover (350Z/G35 only).



STEP 5. Remove shifter cover bolts and wire harness connections, then remove plate from vehicle.TOOLS: Socket(10 mm), Drive, and Extension.

NOTE: 370Z/G37 vehicles may require removal of the center console side covers and center console by removing several interior screws (use a Phillips screwdriver) to access the above bolts.



STEP 6. Remove rubber boot(s).

NOTE: 370Z/G37 vehicles have an extra outer boot that will also need to be removed in this step.



STEP 7. Remove bolts holding down metal shifter plate. TOOLS: Socket(10 mm), Drive, and Extension.





STEP 10. Remove shift linkage bolt. TOOLS: Socket(12 mm) and Drive



STEP 11. Remove shifter from car. (metal plate and spring will be used on new shifter)



STEP 12. File out approx. .125" from shifter casting in indicated area. Clean out metal chips and relube entire pocket with provided grease.

TOOLS: File and towel. **NOTE: This step allows for engagement of reverse.**



STEP 13. If you were unable to remove the shift knob in step 1, then carefully place the knob in a vise (shifter inverted) and using the long extension or other long tool through the lower connection hole, carefully rotate (unscrew) the shifter assembly off of the shift knob.

TOOLS: Long extension & Towel (to protect knob)



ASSEMBLY





STEP 16. Install stock spring and shifter using stock plate and M6 bolts, washers, then serrated washers D Make sure that reverse pin is turned towards passenger side of vehicle. TOOLS: Socket Drive, Extension, and Hex Drive(5 mm)

> NOTE: DO NOT TIGHTEN BOLTS FULLY AT THIS POINT. ENSURE SERRATED WASHERS ARE COM-PRESSED BETWEEN FLAT WASHER AND STOCK PLATE.



STEP 17. Reinstall shift linkage bolt. TOOLS: Socket(12 mm) and Drive



STEP 18. Reinstall soft rubber boot.



STEP 19. Adjust shifter plate so that reverse pin rides on stock stock plate while going into 6th gear. Shifter should need to be pushed down to engage reverse. Evenly torque bolts to 10 ft-lbs (13.6Nm).

> Test movement of shifter into all gears. DO NOT operate vehicle until all gears can be <u>fully</u> engaged smoothly. NOTE: This B&M Shifter has been designed to provide an audible click(noise) when the shifter pops out from the reverse-down position. This should signal that reverse has been "locked-out" until the shifter is once again depressed.

TOOL: Torque Wrench, Extension, & Hex Drive (5 mm)



STEP 20. Carefully lower vehicle. TOOLS:Floor Jack, Jack Stands (4)



STEP 21. Reinstall rubber boot(s).



STEP 22. Reinstall shifter cover and bolts. Caution- do not over tighten these bolts. Reinstall center console and console side plates (370Z/G37) if they had been removed. TOOLS: Socket(10 mm), Drive, and Extension.



STEP 23. Reinstall white foam (350Z and G35 only) and console plate, making sure to replug in wiring harness.



STEP 24. Reinstall knob. Take care not to screw knob down through shifter boot. ENJOY!!!

