



# Installation Instructions

## Precision Sport Shifter

**2006 and up BMW 3 Series 6 Spd. (E90)**


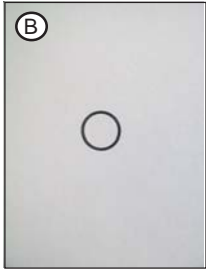
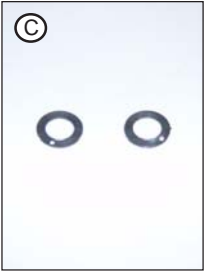
(see [www.bmracing.com](http://www.bmracing.com) for the latest fitment applications and model years)  
**Part Number 45123**

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This **B&M Precision Shifter** has been designed to work on most 2006 and up BMW 330i model vehicles equipped with a 6-speed manual transmission. It has been engineered to greatly reduce shift throw and improve shifter feel. Check the parts list and tool lists at the beginning of these instructions for the supplied parts and the tools required to install your **B&M Precision Shifter**. Installation of the **B&M Precision Shifter** can be accomplished by anyone with minimal mechanical experience.

### INTRODUCTION

The **B&M Precision 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.

PARTS		
B&M Shifter Assembly 	O-Ring 	Flat Bushings 

TOOLS		
Needle-nose Pliers 	Floor Jack 	Blunt-end Punch 
Jack Stands 	Hammer 	

## DISASSEMBLY

**STEP 1.** Remove shift knob. Firm pull upwards is required.



**STEP 2.** Squeeze together the sides of the shift boot and lift up to remove.



**STEP 3.** Lift up and remove shifter isolation boot.



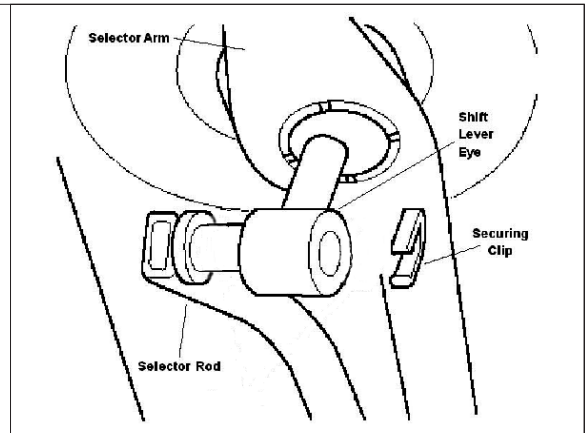
**STEP 4.** Raise and support car.

TOOLS: Floor Jack  
Jack Stands



**STEP 5.**

Reach through gap between heat shield and transmission brace to locate U-clip on bottom of stock shifter. Remove U-clip and unfasten selector rod.



**STEP 6.**

Spread the jaws of needle-nose pliers apart so that the tips fit in opposing slots of the plastic ball-clamp. Rotate 1/4 turn clockwise.

TOOL: Needle-nose Pliers



**STEP 7.**

Pull out stock shifter.



**STEP 8.**

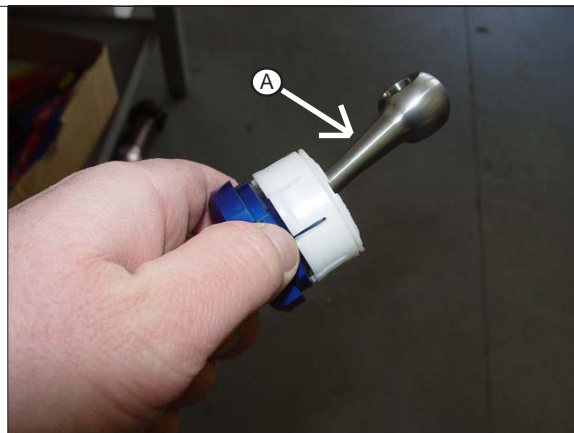
Pop off ball-clamp from the stock shifter. This will be used in with the B&M shifter.

If a replacement ball-clamp is needed, refer to BMW part#:25111220600

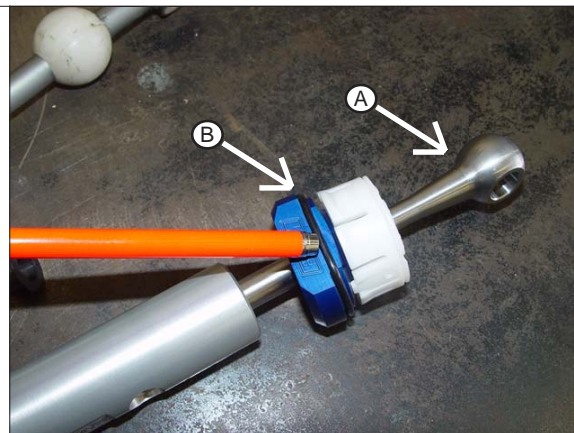


## ASSEMBLY

**STEP 9.** Place ball-clamp onto B&M shifter pivot cup. Align so that tabs of the ball-clamp are underneath the B&M logo.

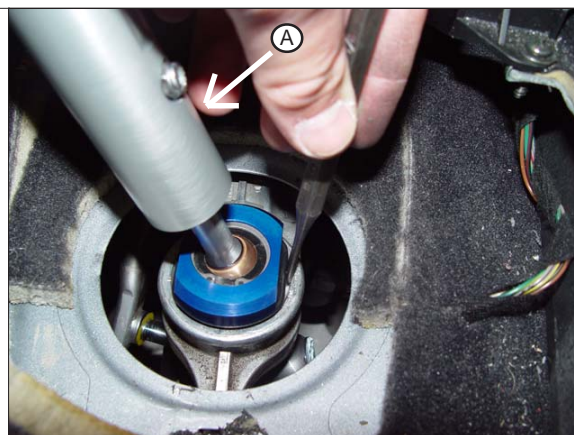


**STEP 10.** Place the included O-ring around the neck of the pivot cup.

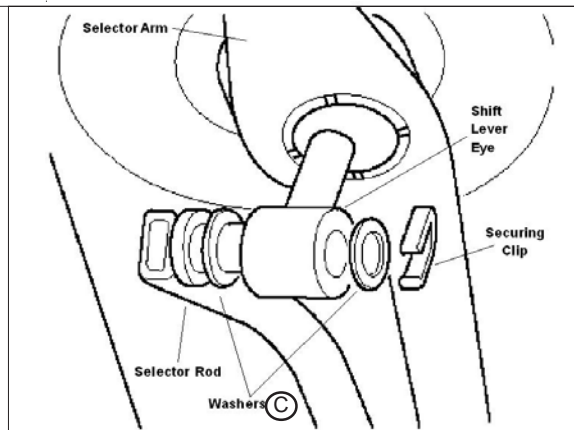


**STEP 11.** Place the shifter assembly into the carrier of the car with the bend towards the driver's side/rear of the car. Gently tap the tabs of the ball-clamp until they snap into the carrier. Ensure that ball-clamp is securely affixed to the carrier.

TOOLS: Blunt-end Punch  
Hammer



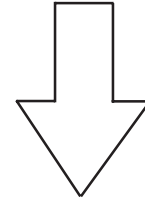
**STEP 12.** Replace selector arm through bottom of shifter. Place included B&M washers on either side of B&M shifter. Replace U-clip.



**STEP 13.**

Lower car.

TOOLS: Floor Jack  
Jack Stands



**STEP 14.**

Replace rubber boot around base of shifter.  
Internal ridge of boot should sit under upper  
portion of stick.



**STEP 15.**

Replace shift boot.



**STEP 16.**

Replace shift knob.



**STEP 17.** Be sure all the parts have been securely tightened and shifter engages into each gear.



**STEP 18.** Enjoy short, precise shifts.

