



# Installation Instructions

## Short Throw Shifter

1998-2004 Porsche 911(996)(all models)

2005-2007 Porsche 911 (997)(all models)

1997-2004 Porsche Boxster (986)(all models)

2005-2007 Porsche Boxster, Cayman (987) (all models)

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

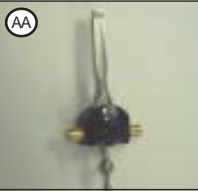


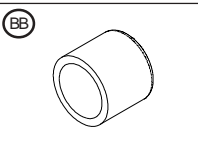




Part Number 45135







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This **B&M Short Throw Shifter** has been designed to work on most 1998-2004 Porsche 911 (996) (all models), 2005-2007 Porsche 911 (997) (all models), 2005-2007 Porsche Boxster, Cayman (987) 1997-2004 Porsche Boxster (986) (all models) equipped with a 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 Short Throw Shifter**. Installation of the **B&M Short Throw Shifter** can be accomplished by anyone with minimal mechanical experience.

### INTRODUCTION

The **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.

PARTS			
<b>B&amp;M Short Throw Shifter</b> 	Washer x 2 	Blue Alum. Bushing x 2 Black Alum. Bushing x 2 	
Insert x 2 	Retaining Ring x 2 	Grease 	
	Set Screw 		
	Jam Nut 		

TOOLS			
Torx Drive (T-20) &(T-30) 996/986/987 	Hex Wrench (6mm) & (5mm) 996/986 only 	Screwdriver(small-flat) 	
Socket Drive 	Extension (long) 	10mm Socket 	

## TOOLS (cont.)

Utility Knife



Needle Nose Pliers



Hammer (soft)



Wrench (19mm)



Channel Locks



Marker or Permanent Pen



## DISASSEMBLY

**STEP 1.** Unclip leather boot.  
(997 shown - 996/986 similar)  
(987 go to Step 16)



**STEP 2.** Remove knob.  
996/986: TOOL: Hex Key (5mm)  
- some knobs use set screw.  
997: TOOL: Channel Locks  
- twist collar 90° clockwise.



**STEP 3.** Remove screw. TOOL: Torx Drive (T-20)  
(996/986 shown - 997 similar)  
\*NOTE: This screw on 997 models is difficult to access. An angled tool or center stack console removal may be required.



**STEP 4.**

996/986: Unsnap side covers from center console.  
997: Unscrew front screws from center console.

TOOL: Torx Drive (T-20)

996/986



997



**STEP 5.** Unsnap lower center console cover.  
(996/986 only)

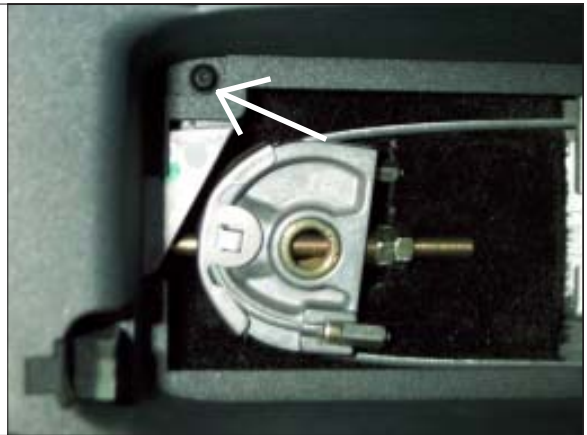


**STEP 6.** Remove mat, screw(s), and plastic floor in glove box.

TOOL: Torx Drive (T-20)  
(996/986 shown - 997 similar)



**STEP 7.** Remove screw in glove box .  
TOOL: Torx Drive (T-20)  
(996/986 only)



**STEP 8.** Remove coin holder.

TOOL: Screwdriver (small-flat)  
(996/986 only)



**STEP 9.** Remove screw under coin holder.

TOOL: Torx Drive (T-20)  
(996/986 only)



**STEP 10.** Remove ash tray and two (2) screws.

TOOL: Torx Drive (T-30)  
(996/986 only)



**STEP 11.** Lift control panel and unclip light wire, window wire harnesses(2),and remove screw.

TOOL: Torx Drive(T-20)  
(996/986 only)



**STEP 12.**

996/986: Unsnap parking brake cover.

997: Unsnap parking brake cover and remove screw.

TOOL: Torx Drive(T-20)



**STEP 13.** Remove key wire, lighting wires, and wire bundle clips, lower right seat back, and remove center console. (996/986 shown - 997 similar)



**STEP 14.** Unclip window wire bundle. (996/986 only)



**STEP 15.** Remove shifter base cover. (996/986 only)



**STEP 16. STEPS #16-35 FOR 987 MODELS ONLY!**

**997/996/986 skip to Step #36**

Unclip leather shift boot starting from the front and working back.



**STEP 17.** Twist plastic boot collar 90° clock-wise and remove boot.

TOOLS: Channel Locks



**STEP 18.** On the passenger's side of the car, remove flap on footwell enclosure.



**STEP 19.** Unscrew T-20 bolt holding in plastic trim.

TOOLS: Torx Drive (T-20)



**STEP 20.** Remove power outlet panel and set aside.



**STEP 21.** Remove T-30 bolt holding enclosure to car's body.

TOOL: Torx Drive (T-30)



**STEP 22.** Slide enclosure towards seat and pull towards passenger side of car.



**STEP 23.** Separate and remove upper trim piece from lower. Parts are held together by vertical snap-clips



**STEP 24.** Unscrew (5) T-20 bolts holding shifter cover plate and remove.

TOOL: Torx Drive (T-20)



**STEP 25.** On driver's side, remove T-30 bolt holding cover panel.  
NOTE: Screw is hidden in carpet.

TOOL: Torx Drive (T-30)



**STEP 26.** Unscrew (2) bolts securing center console.  
NOTE: There is one located on each side.

TOOL: Torx Drive (T-20)



**STEP 27.** Remove (2) T-20 bolts holding side trim pieces. Pull panel toward rear of car and remove. Repeat for other side.

TOOL: Torx Drive (T-20)





**STEP 28.** Unscrew (2) T-20 bolts securing storage tray.

TOOL: Torx Drive (T-20)



**STEP 29.** Pop out switch panel located directly above storage tray to facilitate tray removal. It is not necessary to completely remove switches.



**STEP 30.** In center console, lift up rubber mat and remove (4) T-20 bolts.

TOOL: Torx Drive (T-20)



**STEP 31.** Remove trim piece under parking brake.



**STEP 32.** Remove (1) T-20 bolt securing console.

TOOL: Torx Drive (T-20)



**STEP 33.** Lift up console from the rear of car and slide back to unlatch front of console from car.



**STEP 34.** Unclip wiring harness located near the front of the console.



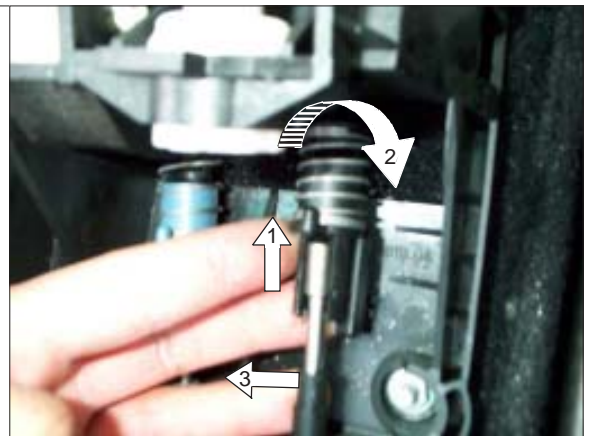
**STEP 35.** Remove console entirely to expose shifter.



**STEP 36.** Mark both cable positions for later reference.  
TOOL: Marker or Permanent Pen  
(997 shown - 996/986/987 similar)

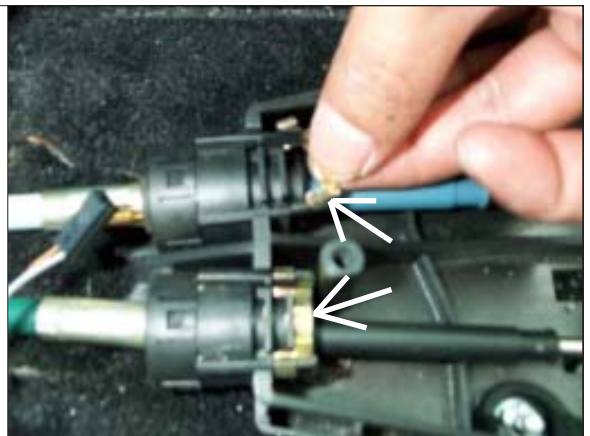


**STEP 37.** Remove cable end attachments from shift cables.

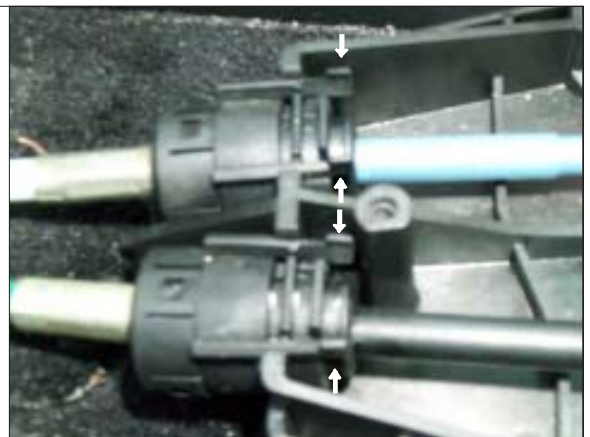


**STEP 38.** Remove two cable clips.

TOOL: Screwdriver (small-flat)



**STEP 39.** Squeeze cable tabs and lift out cables.



**STEP 40.** Remove four (4) nuts and lift out shifter.

TOOL: Socket Drive, Extension(long), and 10mm Socket  
(996/986 shown - 997/987 similar)



**STEP 41.** Remove cable end from stick.

(996/986 shown - 997/987 similar)

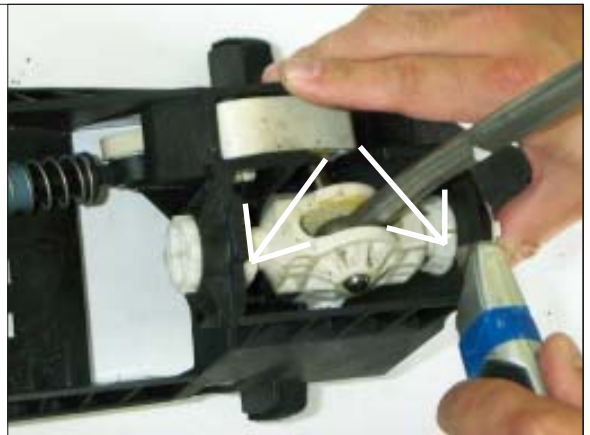


**STEP 42.** If present, remove inner floor plate.



**STEP 43.** Cut stock bushing clips.

TOOL: Utility Knife  
(996/986 shown - 997/987 similar)



**STEP 44.** Twist bushing to access all clips.

TOOL: Needle Nose Pliers  
(996/986 shown - 997/987 similar)



**STEP 45.** Remove bushings and stock stick assembly.  
(996/986 shown - 997/987 similar)

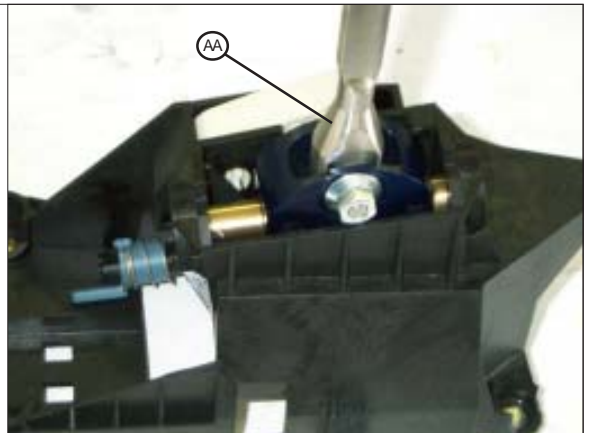


### ASSEMBLY

**STEP 46.** Lubricate pivot ball.

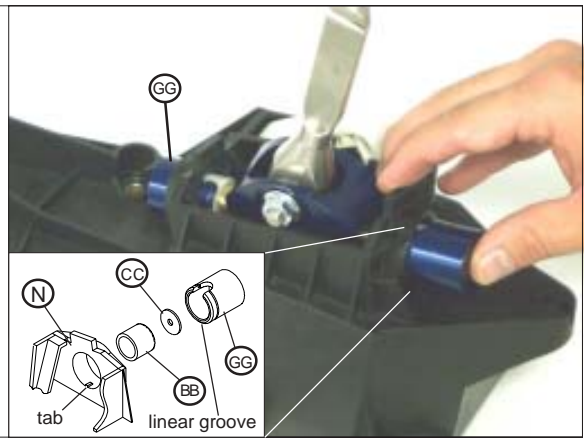


**STEP 47.** Insert B&M Short Throw Shifter (AA) .

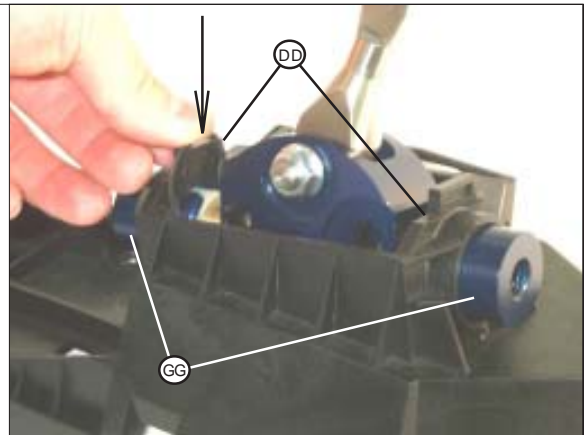


**STEP 48.** Assemble Blue Alum. Bushings (2) (GG) with Washers (2) (CC) and Insert (2) (BB) into base (note alignment of tab with linear groove).

NOTE: Some newer model vehicles require the use of the slightly smaller Black Alum. Bushings (2) (GG) in place of the Blue Alum. Bushings.



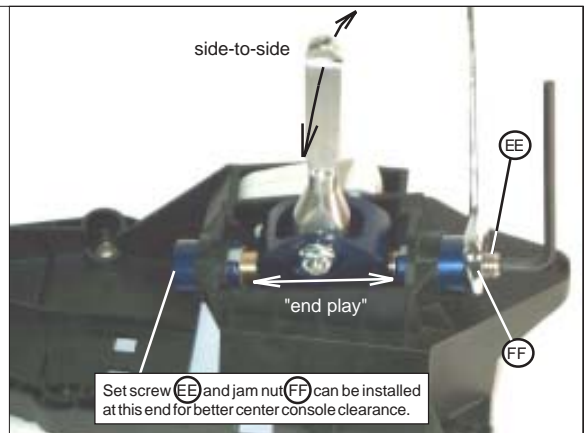
**STEP 49.** Slide Retaining Rings (2) (DD) into circular groove of Aluminum Bushings (GG) .



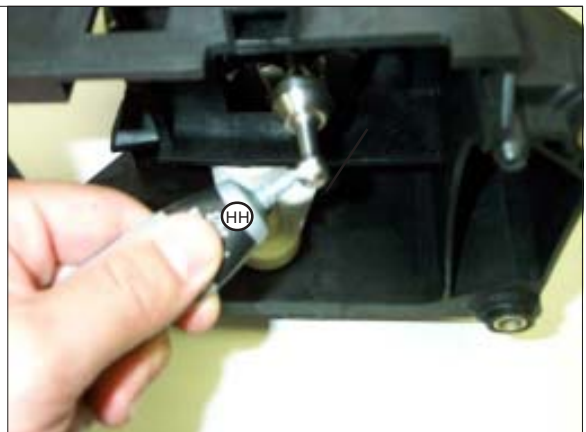
**STEP 50.** Thread Set Screw (EE) into Aluminum Bushing (GG) and reduce "end play" by tightening (verify smooth side-to-side motion is retained). Loosen 1/4 to 1/2 turn and lock into place with Jam Nut (FF) .

TOOLS: Hex Wrench (6mm), Wrench (19mm)

NOTE: Aluminum expands with heat. If shifter does not self center during extreme condition usage, additional loosening of Set Screw (EE) may be needed.



**STEP 51.** Lubricate stick lower pivot ball.



**STEP 52.** Tap cable end onto lower pivot ball.

TOOL: Hammer (soft)



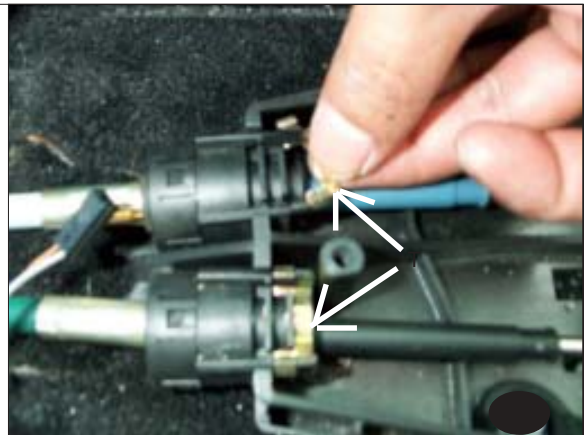
**STEP 53.** Place shifter assembly in vehicle.



**STEP 54.** Snap shifter cables into base.



**STEP 55.** Replace cable clips.

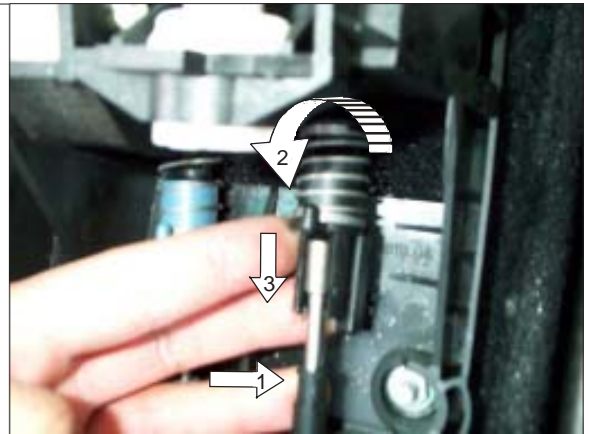


**STEP 56.** Replace four (4) nuts to attach base.

TOOL: Socket Drive, Extension (long), & 10mm Socket



**STEP 57.** Snap in shift cables to cable ends and secure by twisting spring - back and closed (use your markings from step 16 as a reference point - the adjust as needed).



**STEP 58.** Test shifter through all gears. If interference occurs, repeat step 57 and re-adjust shift cable to cable end length. The shifter should move freely without contacting either the black plastic base or blue aluminum pivot. There should be no audible noise coming from the shifter when engaging a gear - only the transmission.



**STEP 59. 987 MODELS SKIP TO STEP 71**

Snap on shifter base cover Y and clip in window control wires Z.

(996/986 only)





**STEP 60.** Plug in key wire, lighting wires, and wire bundle clips and reinstall center console.  
(997 shown - 996/986 similar)

\*NOTE: 997 models may require some manipulation of the center console by lifting vertically and "working" the front portion under the front aluminum bushing.



**STEP 61.** Reinstall screw under coin holder, then snap in coin holder.  
(996/986 only)

TOOL: Torx Drive (T-20)



**STEP 62.** Reinstall screw inside glove box.  
(996/986 only)

TOOL: Torx Drive (T-20)




**STEP 63.** Insert plastic floor, affix with screw(s), and replace rubber mat.  
(996/986 shown - 997 similar)

TOOL: Torx Drive (T-20)



**STEP 64.**

996/986: Install parking brake cover.

997: Install parking brake cover and remove screw .

TOOL: Torx Drive(T-20)



**STEP 65.** Install screw below control panel, window wire harnesses (2), and light wire.  
(996/986 only)

TOOL: Torx Drive(T-20)



**STEP 66.** Snap in control panel and install two (2) screws.  
(996/986 only)

TOOL: Torx Drive(T-20)



**STEP 67.** Install screw into front of center console.  
(997 shown - 996/986 similar)

TOOL: Torx Drive (T-20)

\*NOTE: This screw on 997 models is difficult to access. An angled tool or center stack console removal may be required.



**STEP 68.** Snap in front side covers (2).  
(996/986 only)



**STEP 69.** Install knob, then snap in leather boot.  
996/986: TOOL: Hex Key (5mm)  
- some knobs use set screw.  
997: TOOL: Channel Locks  
- twist collar 90° counter-clockwise to lock in place.



**STEP 70.** Reinstall lower center console cover.  
(996/986 only)



**STEP 71. STEPS #71-88 FOR CAYMAN (987) ONLY!**  
**997/996/986 Skip to Step #89**  
Place center console back into position and reconnect wiring harness.



**STEP 72.** Replace T-20 bolt under parking brake.

TOOL: Torx Drive (T-20)



**STEP 73.** Replace lower parking brake cover.



**STEP 74.** Replace (4) T-20 bolts in center console.

TOOL: Torx Drive (T-20)



**STEP 75.** Remove switch panel and replace lower storage tray.  
Reinstall switch panel.



**STEP 76.** Screw in (2) T-20 bolts to secure storage tray.



**STEP 77.** Reposition side trim pieces in place and secure with (2) T-20 bolts on each side. Repeat for opposite side.

TOOL: Torx Drive (T-20)



**STEP 78.** Replace (2) T-20 bolts securing center console. Note: there is (1) located on each side.



**STEP 79.** On driver's side, replace side carpet trim panel. Secure with (1) T-30 bolt.

TOOL: Torx Drive (T-30)



**STEP 80.** Replace (5) T-20 bolts holding shifter cover plate and replace.

TOOLS: Torx Drive (T-20)



**STEP 81.** Replace upper shifter cover plate and snap back into place.



**STEP 82.** Replace passenger footwell enclosure. Push enclosure flush to the car's tunnel and slide towards the front of the car. Metal latch should catch onto enclosure.



**STEP 83.** Secure enclosure to car with (1) T-30 bolt.

TOOLS: Torx Drive (T-30)



**STEP 84.** Replace power outlet panel.



**STEP 85.** Reattach T-20 bolt holding in plastic trim.

TOOLS: Torx Drive (T-20)



**STEP 86.** Replace cover on footwell enclosure.



**STEP 87.** Replace boot and twist plastic boot collar 90° counter-clockwise to secure.

TOOLS: Channel Locks



**STEP 88.** Place the rear teeth of the boot into position and snap boot into position.



**STEP 89.** Test the **B&M Short Throw Shifter** through all gears. Check for binding, rough movement, interference, and full engagement of gears. Correct any problems BEFORE starting the vehicle!



**STEP 90.** Enjoy your new B&M Precision Shifter.



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