

# Installation Instructions Short Throw Shifter

1998-2004 Porsche 911(996)(all models)
2005 Porsche 911 (997)(all models)
1997-2004 Porsche Boxster (986)(all models)

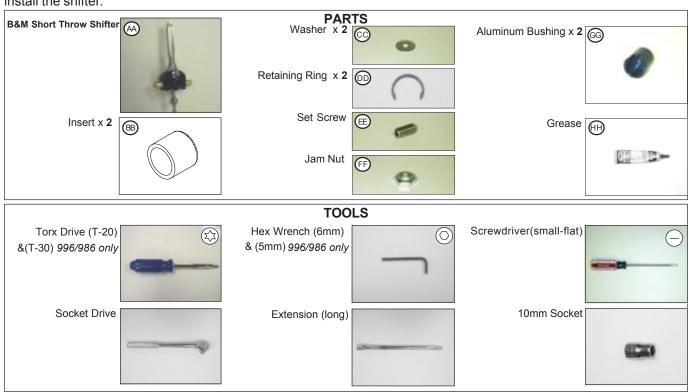
(see www.bmracing.com for the latest vehicle fitment applications and model years)

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
Porsche 911 (997) (all models) & 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.



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# TOOLS (cont.)

Utility Knife



Needle Nose Pliers



Hammer (soft)



Wrench (19mm)



Channel Locks



Marker or Permanent Pen



### **DISASSEMBLY**

STEP 1. Unclip leather boot (A).
(997 shown - 996/986 similar)



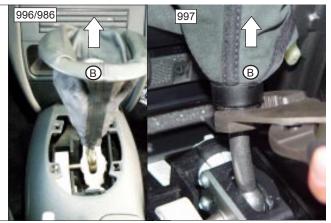
STEP 2. Remove knob (B).

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)

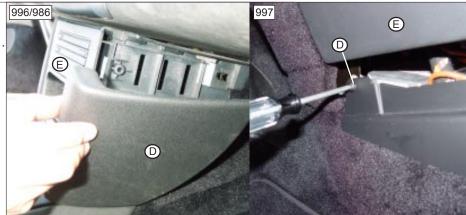
\*NOTE: This screw on 997 models is difficult to access. An angled tool or center stack console removal may be required.



STEP 4.

996/986: Unsnap side covers (D) from center console (E)

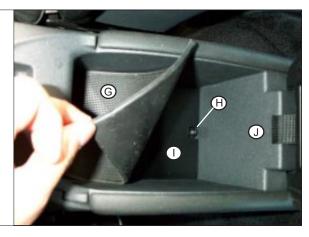
997: Unscrew front screws (1) from center console (2).
TOOL: Torx Drive (T-20)



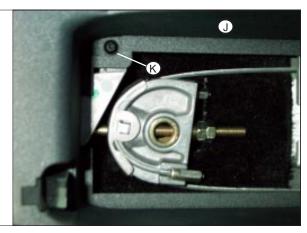
STEP 5. Unsnap lower center console cover (5). (996/986 only)



STEP 6. Remove mat ⑤ , screw(s) ① , and plastic floor ①in glove box ①. TOOL: Torx Drive (T-20) (996/986 shown - 997 similar)



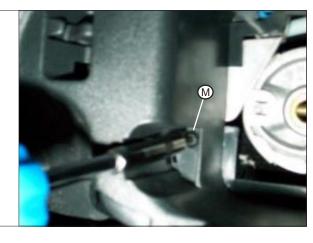
STEP 7. Remove screw (Sin glove box (J).
TOOL: Torx Drive (T-20)
(996/986 only)



STEP 8. Remove coin holder (D. TOOL: Screwdriver (small-flat) (996/986 only)



STEP 9. Remove screw (1) under coin holder.
TOOL: Torx Drive (T-20)
(996/986 only)



STEP 10. Remove ash tray and two (2) screws (1).

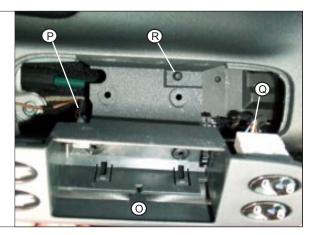
TOOL: Torx Drive (T-30)

(996/986 only)



STEP 11. Lift control panel ②and unclip light wire ② , window wire harnesses(2)③,and remove screw ② .

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



**STEP 12.** 

996/986: Unsnap parking brake cover ⑤.

997: Unsnap parking brake cover (S) and remove screw (1).
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)



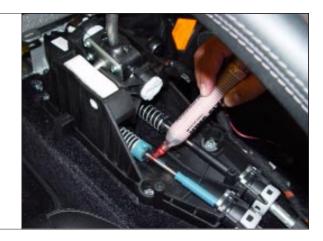
STEP 14. Unclip window wire bundle W . (996/986 only)



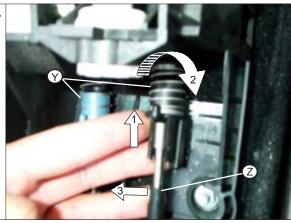
**STEP 15.** Remove shifter base cover (3). (996/986 only)



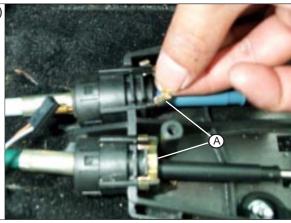
STEP 16. Mark both cable positions for later reference.
TOOL: Marker or Permanent Pen
(997 shown - 996/986 similar)

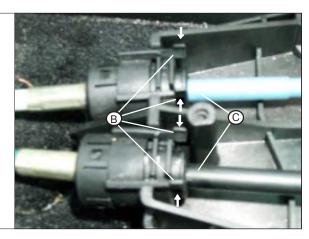


STEP 17. Remove cable end attachments  $\bigcirc$  from shift cables  $\bigcirc$ .



STEP 18. Remove two cable clips (A). TOOL: Screwdriver(small-flat)



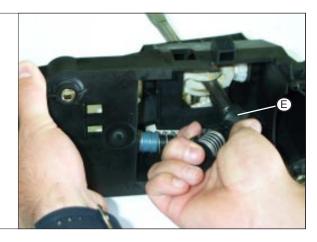


STEP 20. Remove four (4) nuts and lift out shifter.

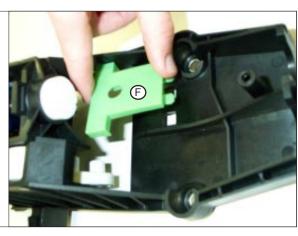
TOOL: Socket Drive, Extension(long), and 10mm Socket (996/986 shown - 997 similar)



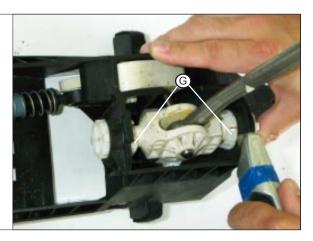
STEP 21. Remove cable end (a) from stick. (996/986 shown - 997 similar)



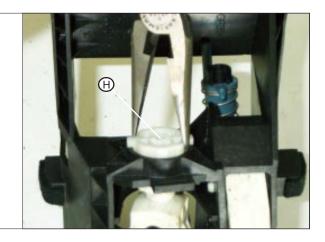
STEP 22. If present, remove inner floor plate (F).



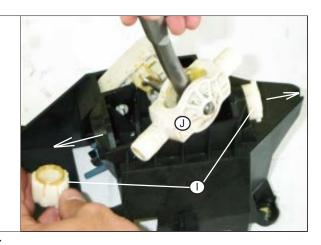
STEP 23. Cut stock bushing clips ③ . TOOL: Utility Knife (996/986 shown - 997 similar)



STEP 24. Twist bushing (1) to access all clips.
TOOL: Needle Nose Pliers
(996/986 shown - 997 similar)

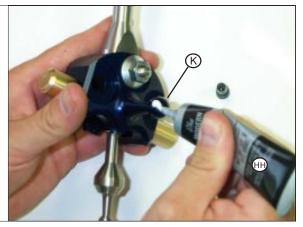


STEP 25. Remove bushings (1) and stock stick assembly (1). (996/986 shown - 997 similar)

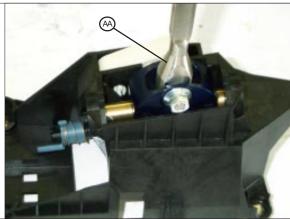


## **ASSEMBLY**

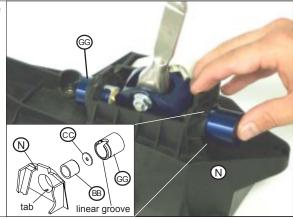
STEP 26. Lubricate pivot ball ( ). PART: Grease



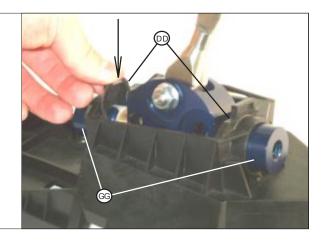
STEP 27. Insert B&M Short Throw Shifter (A) .



STEP 28. Assemble Aluminum Bushings (2) (a) with Washers (2) (a) and Insert (2) (b) into base (n) (note alignment of tab with linear groove).



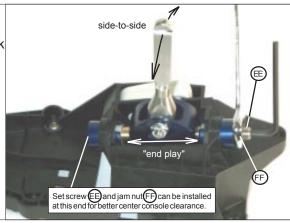
STEP 29. Slide Retaining Rings (2) (10) into circular groove of Aluminum Bushings (60).



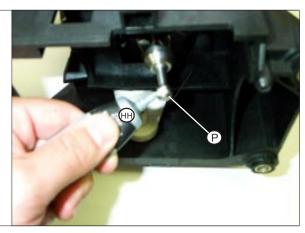
STEP 30. Thread Set Screw (E) into Aluminum Bushing (G) and reduce "end play" by tightening (verify smooth side-to-side motion is retained). Loosen 1/4 to 1/2 turn and lock into place with Jam Nut (F).

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

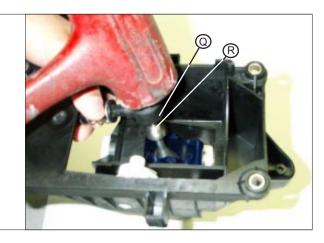
NOTE: Aluminum expands with heat. If shifter does not self center during extreme condition usage, additional loosening of Set Screw (E) may be needed.



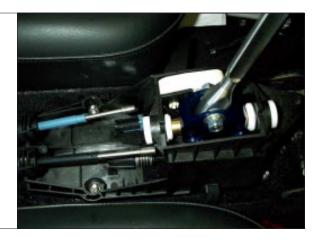
STEP 31. Lubricate stick lower pivot ball (P) . PART: Grease (H)



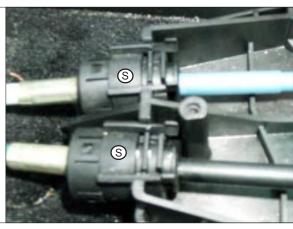
STEP 32. Tap cable end ② onto lower pivot ball ®. TOOL: Hammer (soft)



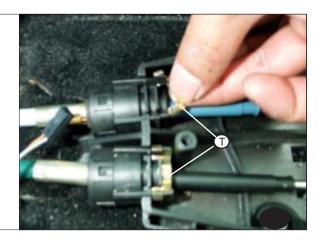
STEP 33. Place shifter assembly in vehicle.



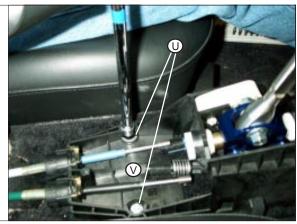
STEP 34. Snap shifter cables S into base



STEP 35. Replace cable clips ①.

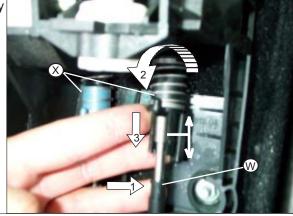


STEP 36. Replace four (4) nuts Û to attach base Û.
TOOL: Socket Drive, Extension (long), & 10mm Socket



STEP 37. Snap in shift cables 

twisting spring - back and closed (use your markings from step 16 as a referrence point - the adjust as needed).



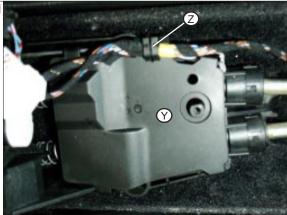
STEP 38. Test shifter through all gears. If interference occurs, go to step 37 and readjust shift cable to cable end length. The shifter should move freely without contacting either the black plastic base or blue aluminum pivot. There should be no audible noise coming from the shifter when engaging a gear only the transmission.



STEP 39. Snap on shifter base cover 

and clip in window control wires 

(996/986 only)



STEP 40. Plug in key wire, lighting wires, and wire bundle clips

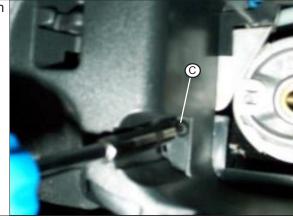
(A) and reinstall center console (B).

(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.



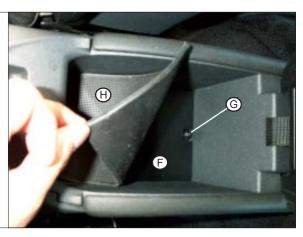
STEP 41. Reinstall screw © under coin holder, then snap in coin holder. TOOL: Torx Drive (T-20) (996/986 only)



STEP 42. Reinstall screw ① inside glove box ② .
TOOL: Torx Drive (T-20)
(996/986 only)



STEP 43. Insert plastic floor (a), affix with screw(s) (a), and replace rubber mat (b). TOOL: Torx Drive (T-20) (996/986 shown - 997 similar)



**STEP 44.** 

996/986: Install parking brake cover ①.

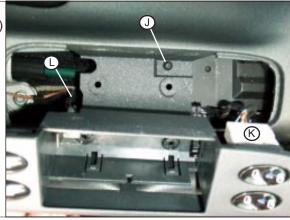
997: Install parking brake

cover and remove screw .

TOOL: Torx Drive(T-20)



STEP 45. Install screw below control panel, window wire harnesses (2) , and light wire . TOOL: Torx Drive (T-20) (996/986 only)



STEP 46. Snap in control panel (Mand install two (2) screws (N). (996/986 only)



STEP 47. Install screw (1) into front of center console (1).

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

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

may be required.



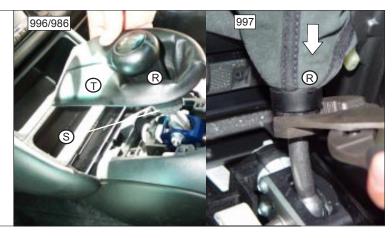
STEP 48. Snap in front side covers (2) Q. (996/986 only)



STEP 49. Install knob (R) then snap in leather boot (T).

996/986: TOOL: Hex Key (5mm)
- some knobs use set screw (S).

997: TOOL: Channel Locks - twist collar 90° counterclockwise to lock in place.



STEP 50. Reinstall lower center console cover ①. (996/986 only)



STEP 51. 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!



