Installation Instructions

Short Throw Shifter

1998-2003 Porsche 911(996) (all models)
1997-2003 Porsche Boxster (986)(all models)

Part Number 45135

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This **B&M Short Throw Shifter** has been designed to work on most 1998-2003 Porsche 911 (996) (all models) & 1997-2003 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&M Short Throw Shifter (AA)

Insert x **2** (BB)

Washer x **2** (CC)

Retaining Ring x **2** (DD)

Set Screw (EE)

Jam Nut (FF)

Aluminum Bushing x **2** (GG)

Grease (HH)

TOOLS

Torx Drive (T-30&T-20)

Hex Wrench (5&6mm)

Screwdriver(small-flat)

Socket Drive

Extension (long)

10mm Socket

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TOOLS (cont.)

Utility Knife

Needle Nose Pliers

Hammer (soft)

Wrench (19mm)

DISASSEMBLY

STEP 1. Unclip leather boot Ⓐ .

STEP 2. Remove screw Ⓑ . TOOL: Torx Drive (T-20)

STEP 3. Remove knob Ⓒ . TOOL: Hex Key (5mm) - some knobs use set screw

STEP 4. Unsnap side covers Ⓓ from center console Ⓔ.

STEP 5. Unsnap lower center console cover Ⓕ.

STEP 6. Remove mat Ⓖ, screw Ⓗ, and plastic floor Ⓘ in glove box Ⓙ. TOOL: Torx Drive (T-20)

STEP 7. Remove screw Ⓚ in glove box Ⓙ.
TOOL: Torx Drive (T-20)

STEP 8. Remove coin holder Ⓛ. TOOL: Screwdriver (small-flat)

STEP 9. Remove screw Ⓜ under coin holder.
TOOL: Torx Drive (T-20)

STEP 10. Remove ash tray and two (2) screws Ⓝ .
TOOL: Torx Drive (T-30)

STEP 11. Lift control panel Ⓞand unclip light wire Ⓟ , window wire harnesses(2)Ⓠ,and remove screwⓇ.TOOL: Torx Drive(T-20)

STEP 12. Unsnap parking brake cover Ⓢ.

STEP 13. Remove key wire Ⓣ, lower right seat back Ⓤ, and remove center console Ⓥ.

STEP 14. Unclip window wire bundle Ⓦ.

STEP 15. Remove shifter base cover Ⓧ.

STEP 16. Remove cable end attachments Ⓨ from shift cables Ⓩ.

STEP 17. Remove two cable clips Ⓐ .TOOL: Screwdriver(small-flat)

STEP 18. Squeeze cable tabs Ⓑ and lift out cables Ⓒ .

STEP 19. Remove four (4) nuts Ⓓ and lift out shifter.
TOOL: Socket Drive, Extension(long), and 10mm Socket

STEP 20. Remove cable end Ⓔ from stick.

STEP 21. If present, remove inner floor plate Ⓕ.

STEP 22. Cut stock bushing clips Ⓖ. TOOL: Utility Knife

STEP 23. Twist bushing Ⓗ to access all clips.
TOOL: Needle Nose Pliers

STEP 24. Remove bushings Ⓘ and stock stick assembly Ⓙ.

ASSEMBLY

STEP 25. Lubricate pivot ball Ⓚ. PART: Grease ⓗⓗ

STEP 26. Insert **B&M Short Throw Shifter** ⓐⓐ.

STEP 27. Assemble Aluminum Bushings (2) ⓖⓖ with Washers (2) ⓒⓒ and Insert (2) ⓑⓑ into base Ⓝ (note alignment of tab with linear groove).

STEP 28. Slide Retaining Rings (2) DD into circular groove of Aluminum Bushings GG .

STEP 29. Thread Set Screw EE into front 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 .

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

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

STEP 30. Lubricate stick lower pivot ball P . PART: Grease HH

STEP 31. Tap cable end Q onto lower pivot ball R.

TOOL: Hammer (soft)

STEP 32. Place shifter assembly in vehicle.

STEP 33. Snap shifter cables Ⓢ into base

STEP 34. Replace cable clips Ⓣ .

STEP 35. Replace four (4) nuts Ⓤ to attach base Ⓥ .
TOOL: Socket Drive, Extension (long), & 10mm Socket

STEP 36. Snap in shift cables Ⓦ to cable ends Ⓧ and secure by twisting spring - back and closed (adjustment shown).

STEP 37. Test shifter through all gears. If interference occurs, go to step 35 and adjust shift cable to cable end length.

STEP 38. Snap on shifter base cover Ⓨ and clip in window control wires Ⓩ .

STEP 39. Plug in key wire Ⓐ and reinstall center console Ⓑ .

STEP 40. Reinstall screw Ⓒ under coin holder, then snap in coin holder. TOOL: Torx Drive (T-20)

STEP 41. Reinstall screw Ⓓ inside glove box Ⓔ. TOOL: Torx Drive (T-20)

STEP 42. Insert plastic floor Ⓕ, affix with screw Ⓖ, and replace rubber mat Ⓗ. TOOL: Torx Drive (T-20)

STEP 43. Snap in parking brake cover Ⓘ.

STEP 44. Install screw Ⓙ below control panel, window wire harnesses (2) Ⓚ, and light wire Ⓛ. TOOL: Torx Drive (T-20)

STEP 45. Snap in control panel Ⓜ and install two (2) screws Ⓝ.

STEP 46. Install screw Ⓞ into front of center console Ⓟ.
TOOL: Torx Drive (T-20)

STEP 47. Snap in front side covers (2) Ⓠ.

STEP 48. Push on knob Ⓡ , tighten set screw Ⓢ (if equiped), and snap in leather boot Ⓣ . TOOL: Hex Wrench (5mm)

STEP 49. Reinstall lower center console cover Ⓤ .

STEP 50. 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 51. ENJOY!