

Installation Instructions SHORT THROW SHIFTER

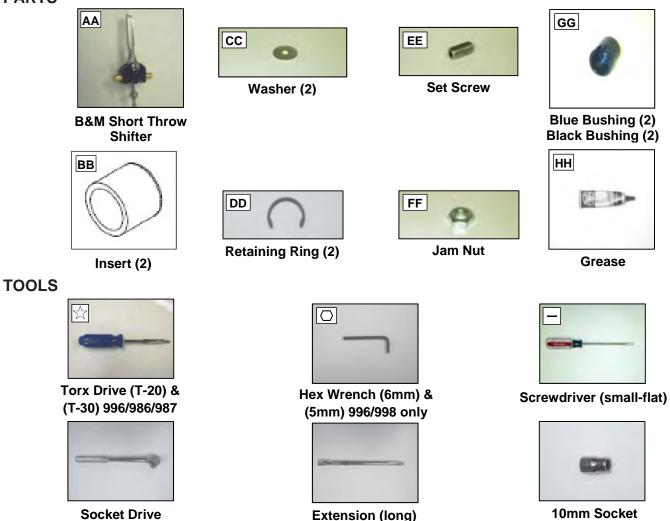
Fits: Porsche Boxter, Boxter S, 911, 996 Cayman & Cayman S models See Application Guide for specific year ranges and engine sizes Catalog # 45135

WORK SAFELY! For maximum safety, perform this installation on a clean, level surface and with the engine turned off. Place blocks or wedges in front of and behind both rear wheels to prevent movement in either direction.

CAUTION: To avoid any possibility of bodily injury or damage to vehicle, do not attempt installation until you are confident that the vehicle is safely secured and will not move.

This B&M Short Throw Shifter has been designed to work on most 1998-2004 Porsche 911 (996) (all models), 2005-2012 Porsche 911 (997) (all models), 2005-2012 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 Short Throw Shifter can be accomplished by anyone with minimal mechanical experience.

PARTS



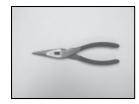
TOOLS (cont.)



Utility Knife



Wrench (19mm)



Needle Nose Pliers



Channel Locks



Hammer (soft)



Marker or Permanent

DISASSEMBLY

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



2. Remove knob.

996/986: TOOL: Hex Key (5mm)

- some knobs use set screw.

997: TOOL: Channel Locks

- twist collar 90° clockwise.



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.



4. 996/986: Unsnap side covers from center console.

997: Unscrew front screws from center console.

TOOL: Torx Drive (T-20)



5. Unsnap the lower center console cover.

(996/986 only)



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

TOOL: Torx Drive (T-20)

(996/986 shown - 997 similar)



7. Remove the screw in the glove box.

TOOL: Torx Drive (T-20)



8. Remove the coin holder.

TOOL: Screwdriver (small-flat)

(996/986 only)



9. Remove the screw under coin holder.

TOOL: Torx Drive (T-20)

(996/986 only)



10. Remove the ash tray and two (2) screws.

TOOL: Torx Drive (T-30)

(996/986 only)



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

TOOL: Torx Drive(T-20)



12. 996/986: Unsnap parking brake cover and remove screw.

TOOL: Torx Drive(T-20)



13. Remove the key wire, lighting wires, and wire bundle clips, lower right seat back, and remove center console.

(996/986 shown - 997 similar)



14. Unclip the window wire bundle.

(996/986 only)



15. Remove the shifter base cover.



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

997/996/986 Skip to Step #36

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



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

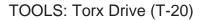


TOOLS: Channel Locks

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



19. Unscrew the T-20 bolt holding in the plastic trim.





20. Remove the power outlet panel and set aside.



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



TOOL: Torx Drive (T-30)

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



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



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

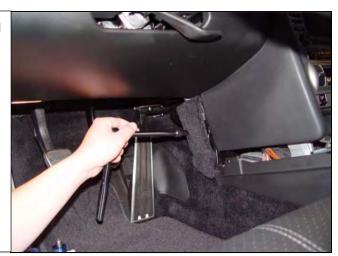
TOOL: Torx Drive (T-20)



25. On the driver's side, remove the T-30 bolt holding the cover panel.

NOTE: Screw is hidden in carpet.

TOOL: Torx Drive (T-30)



26. Unscrew the (2) bolts securing the center console.

NOTE: There is one located on each side.

TOOL: Torx Drive (T-20)



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

TOOL: Torx Drive (T-20)



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

TOOL: Torx Drive (T-20)



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



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

TOOL: Torx Drive (T-20)



31. Remove the trim piece under the parking brake.



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

TOOL: Torx Drive (T-20)



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



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



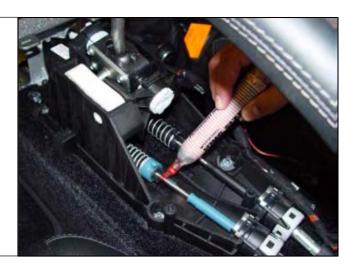
35. Remove the console entirely to expose the shifter.



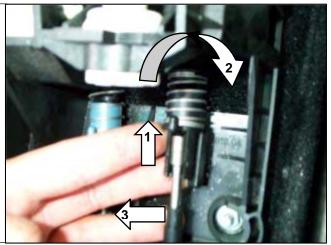
36. Mark both cable positions for later reference.

TOOL: Marker or Permanent Pen

(997 shown - 996/986/987 similar)

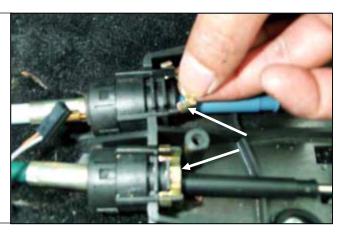


37. Remove the cable end attachments from the shift cables.

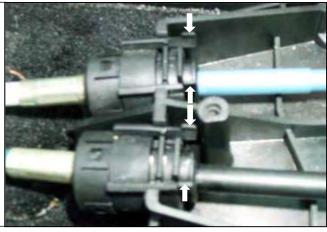


38. Remove the two cable clips.

TOOL: Screwdriver(small-flat)



39. Squeeze the cable tabs and lift out the cables.



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

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

(996/986 shown - 997/987 similar)

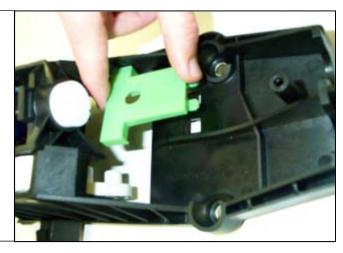


41. Remove the cable end from the stick.

(996/986 shown - 997/987 similar)



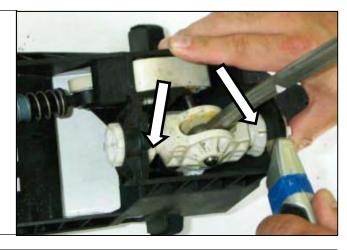
42. If present, remove the inner floor plate.



43. Cut the stock bushing clips.

TOOL: Utility Knife

(996/986 shown - 997/987 similar)



44. Twist the bushing to access all the clips.

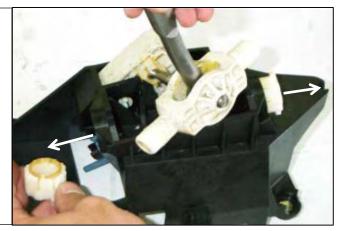
TOOL: Needle Nose Pliers

(996/986 shown - 997/987 similar)



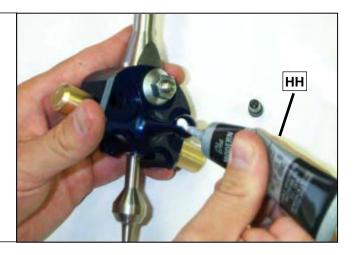
45. Remove the bushings and the stock stick assembly.

(996/986 shown - 997/987 similar)

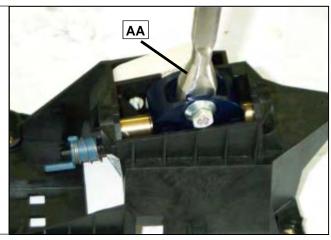


ASSEMBLY

46. Lubricate pivot ball.

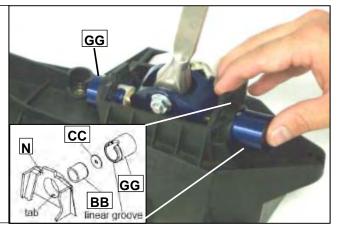


47. Insert the B&M Short Throw Shifter "AA".

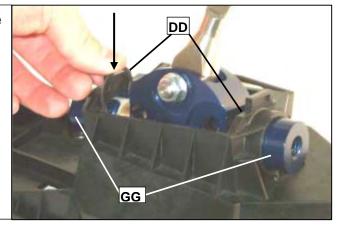


48. Assemble Blue Alum. Bushings, (2) "GG" with Washers (2) "CC", and Insert (2) ""BB" into the base (note alignment of the tab with the linear groove).

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



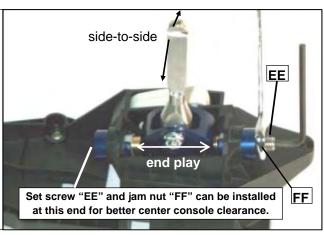
49. Slide Retaining Rings (2) "DD" into circular groove of Aluminum Bushings "GG".



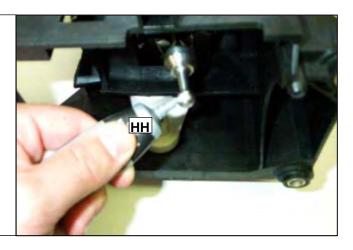
50. Thread Set Screw "EE" into Aluminum Bushing "GG" and reduce the "end play" by tightening (verify smooth side-to-side motion is retained). Loosen 1/4 to 1/2 turn and lock into place with Jam Nut "FF".

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

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



51. Lubricate stick lower pivot ball.



52. Tap cable end onto lower pivot ball.

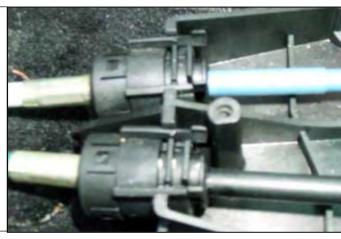
TOOL: Hammer (soft)



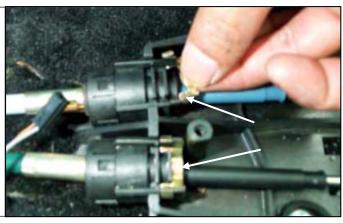
53. Place shifter assembly in vehicle.



54. Snap shifter cables into base.



55. Replace cable clips.

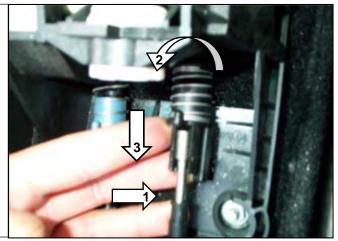


56. Replace four (4) nuts to attach base.

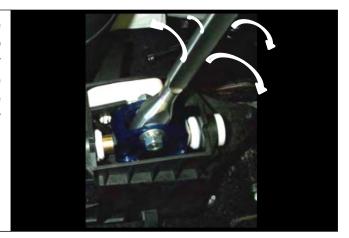
TOOL: Socket Drive, Extension (long), & 10mm Socket



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



58. Test the shifter through all gears. If interference occurs, repeat step 57 and readjust the shift cable to the 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.



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

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



60. Plug in the key wire, lighting wires, and wire bundle clips and reinstall the center console.

(997 shown - 996/986 similar)

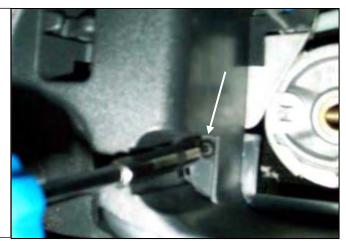
*NOTE: 997 models may require some manipulation of the center console by lifting vertically and "working" the front portion under the front aluminum bushing.



61. Reinstall the screw under the coin holder, then snap in the coin holder.

(996/986 only)

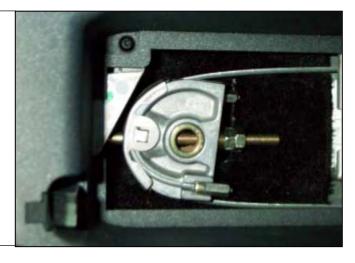
TOOL: Torx Drive (T-20)



62. Reinstall screw inside glove box.

(996/986 only)

TOOL: Torx Drive (T-20)



63. Insert the plastic floor and affix with screw(s). Replace the rubber mat.

(996/986 shown - 997 similar)

TOOL: Torx Drive (T-20)



64.

996/986: Install the parking brake cover.

997: Install the parking brake cover and remove the screw.

TOOL: Torx Drive(T-20)



65. Install the screw below the control panel, window wire harnesses (2), and light wire.

(996/986 only)

TOOL: Torx Drive (T-20)



66. Snap in the control panel and install the two (2) screws.

(996/986 only)

TOOL: Torx Drive (T-20)



67. Install the screw into the front of the 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.



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



69. Install the knob, then snap in the leather boot.

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

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



70. Reinstall lower center console cover.

(996/986 only)



71. STEPS #71-88 FOR CAYMAN (987) ONLY!

997/996/986 Skip to Step #89

Place the center console back into position and reconnect the wiring harness.



72. Replace the T-20 bolt under the parking brake.

TOOL: Torx Drive (T-20)



73. Replace the lower parking brake cover.



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

TOOL: Torx Drive (T-20)



75. Remove the switch panel and replace the lower storage tray. Reinstall the switch panel.



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



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

TOOL: Torx Drive (T-20)



78. Replace the (2) T-20 bolts securing the center console.

Note: There is (1) located on each side.



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

TOOL: Torx Drive (T-30)



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

TOOLS: Torx Drive (T-20)



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



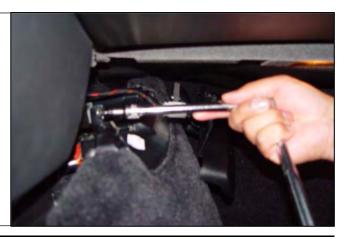
82. Replace the passenger footwell enclosure. Push the

enclosure flush to the car's tunnel and slide towards the front of the car. Metal latch should catch onto the enclosure.



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

TOOLS: Torx Drive (T-30)



84. Replace power outlet panel.



85. Re-attach the T-20 bolt holding in the plastic trim.

TOOLS: Torx Drive (T-20)



86. Replace the cover on the footwell enclosure.



87. Replace the boot and twist the plastic boot collar 90° counterclockwise to secure.

TOOLS: Channel Locks



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



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



IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

Technical Service

A highly trained technical service department is maintained by Hurst Performance to answer your technical questions, provide additional product information and offer various recommendations.

Technical service calls, correspondence, and warranty questions should be directed to:



B&M Racing & Performance Products

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