



Installation Instructions

Short Shifting System

2002-2004 Porsche 911 (996 Carrera)(all)

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

Part Number 45183

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This **B&M Short Shifting System** has been designed to work on most 2002-2004 Porsche 911 (996 Carrera) (all) 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 Shifting System**. Installation of the **B&M Short Shifting System** can be accomplished by anyone with minimal mechanical experience.

INTRODUCTION

The **B&M Short Shifting System** 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 Wedge

(AA)



Flat Plate

(BB)



Guard Plate

(CC)



Cable Bracket

(DD)



Spacer Ring

(EE)



Ball Joint

(FF)



Screw x4
(M5x16)

(GG)



Screw x 2
(M5x8)

(HH)



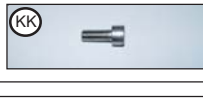
Washer x 2
(5 mm)

(JJ)



Extended Length
Screw

(KK)



TOOLS

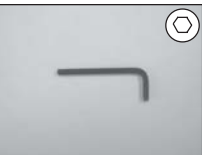
Torx Drive
(T-55 & T-20)



Socket Drive



Allen Wrench
(4mm & 8mm)



Extension (long)



Screwdriver
(Slotted)



Socket
(15mm)



TOOLS (cont.)

Floor Jack



Channel Lock Pliers



Open-ended
Wrench
(10mm)



Jack Stands

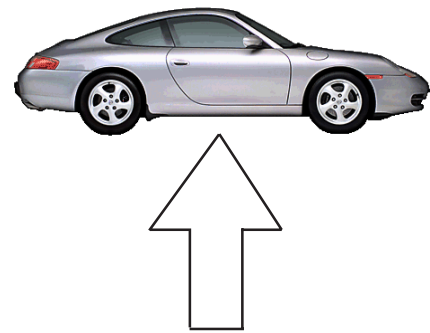


DISASSEMBLY

STEP 1.

Raise vehicle and support securely.

TOOLS: Jack
Jack Stands



STEP 2.

Remove (2) Torx bolts holding rear plastic undercarriage panel.

TOOLS: Socket Drive
Extension
T-20 Bit



STEP 3.

Remove (2) bolts holding chassis cross-brace.

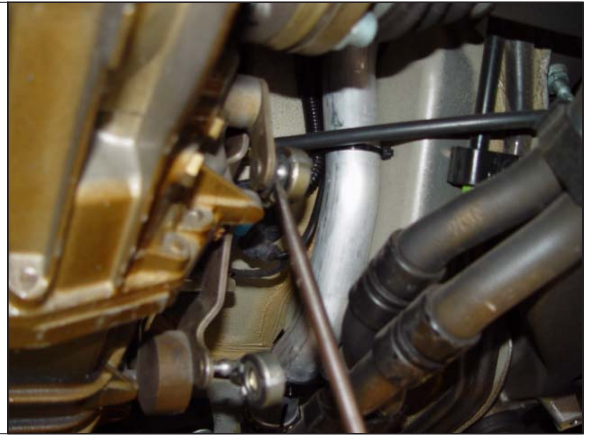
TOOLS: Socket Drive
Extension
15mm Socket



STEP 4.

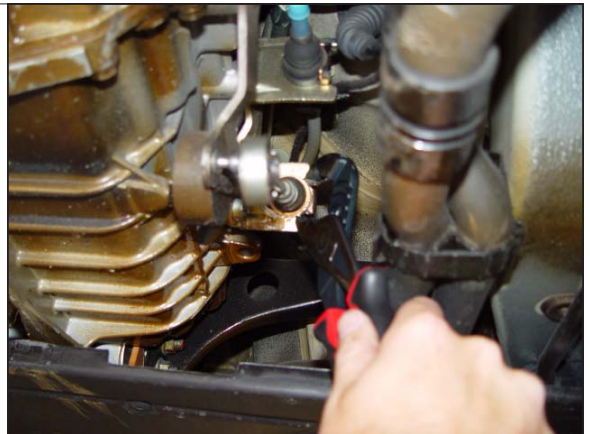
Unsnap the ball-joint connector from the ball-joint.

TOOL: Screwdriver (slotted)

**STEP 5.**

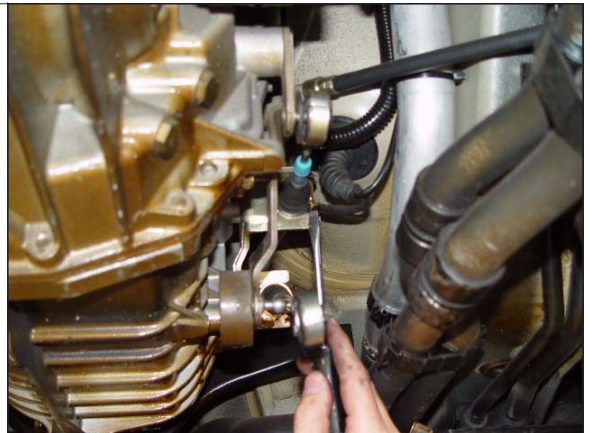
Remove cable retaining clip from the cable bracket by squeezing the clip ends towards one another.

TOOL: Channel Lock Pliers

**STEP 6.**

Repeat Step 5 for remaining cable until both cables are loose.

TOOL: Channel Lock Pliers

**STEP 7.**

Remove cable bracket from car by removing (2) Torx bolts.

TOOLS: Socket Drive
T-55 Bit

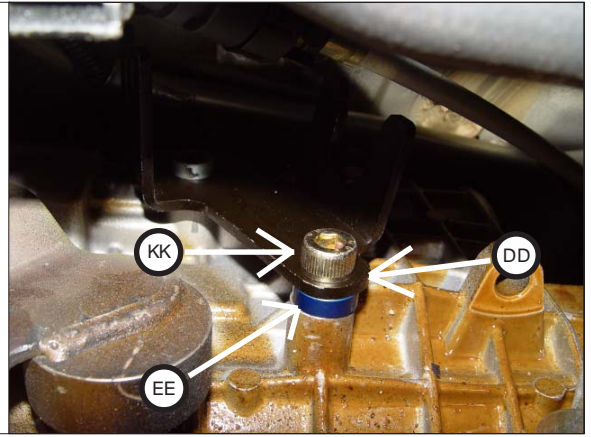


ASSEMBLY

STEP 8.

Place the spacer ring in the indentation on the outside of the cable bracket. Use included extended length screw to tighten to lower hole of transmission.

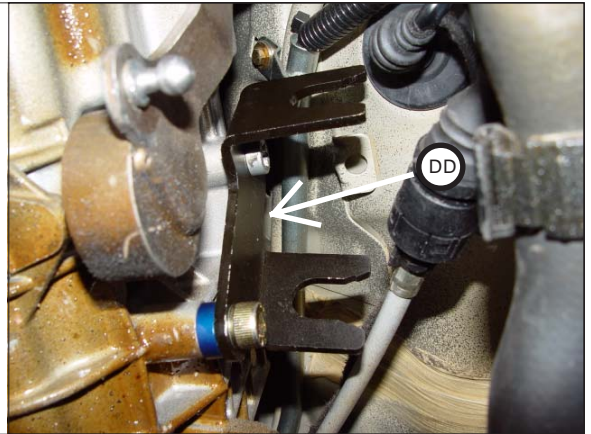
TOOLS: Socket Drive
Extension
8mm Allen Key



STEP 9.

Replace original screw in upper hole of the cable bracket and secure to transmission.

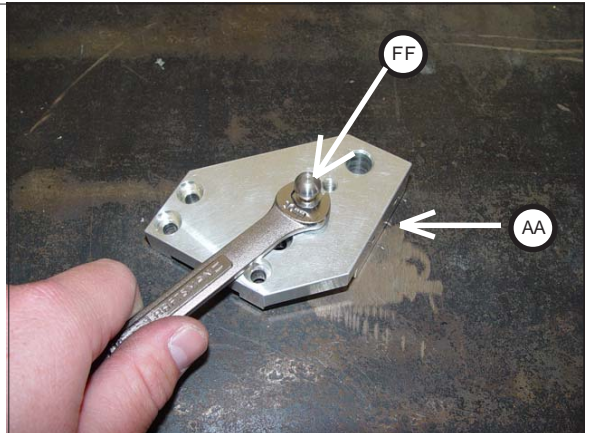
TOOLS: Socket Drive
Extension
T-55 Bit



STEP 10.

Attach included ball-joint to the flat-side of wedge. The hole closer to the center of the piece give 30% reduction and the outer yields 15% reduction.

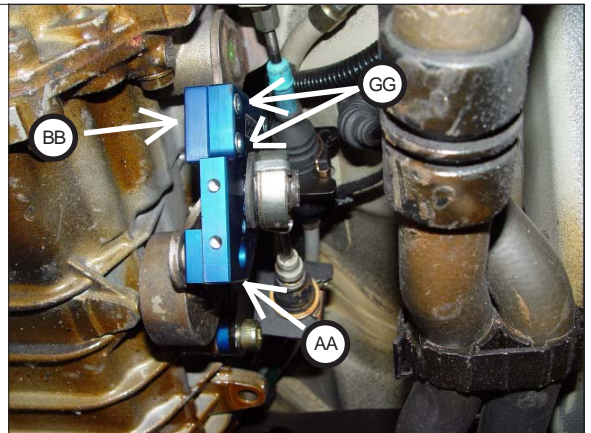
TOOL: 10 mm wrench



STEP 11.

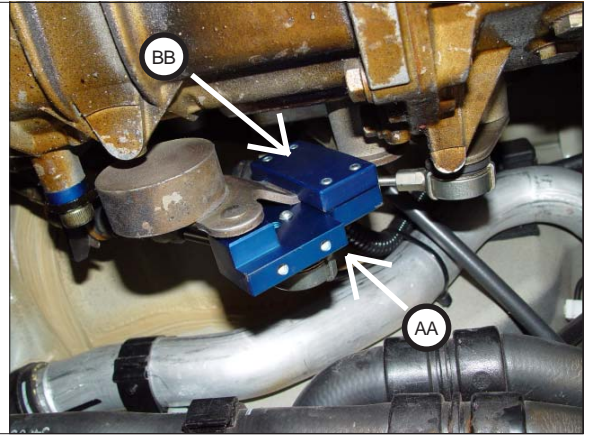
Attach wedge plate to lower ball-joint arm with the B&M logo towards the passenger side of the car. Secure the wedge to the arm with the flat-plate and the (4) allen screws included.

TOOL: 4mm Allen Key

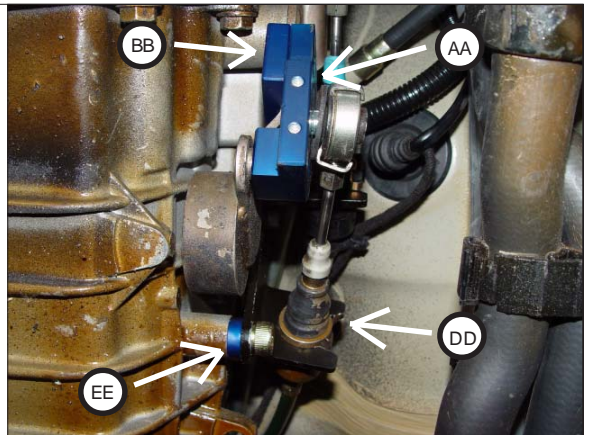


STEP 12.

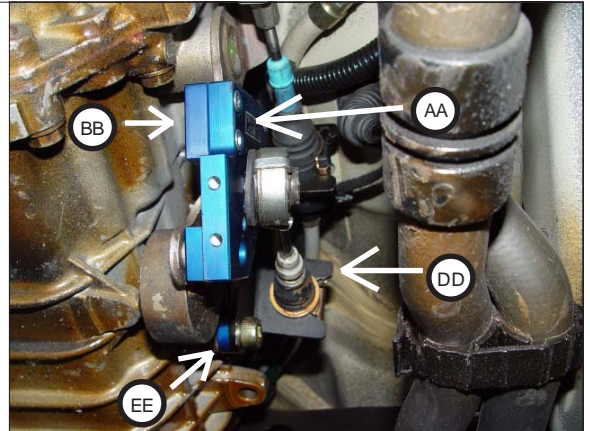
Be sure that the ball-joint arm is securely sandwiched between the flat plate and the wedge.

**STEP 13.**

Slide cables into the corresponding support holes of the cable bracket and reattach clip. Blue-capped cable goes in the upper support and the white-capped cable goes in the lower.

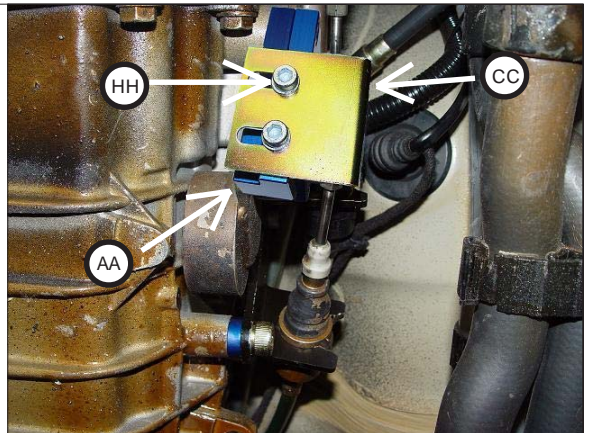
**STEP 14.**

Reattach ball-joint couplings to corresponding ball-joints. White-capped cable goes to the wedge and the blue-capped cable goes to the upper ball-joint.

**STEP 15.**

Attach guard plate to the wedge using the supplied screws and washers. Guard plate should conceal the ball-joint.

TOOLS: 4mm Allen key



STEP 16. Reattach cross-brace to chassis.

TOOLS: Socket Drive
Extension
15mm Socket



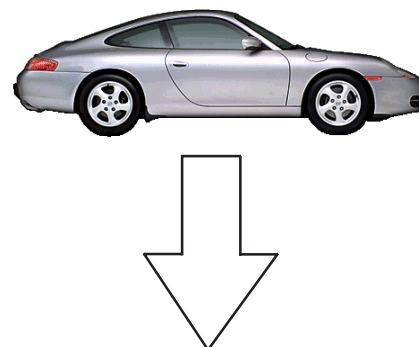
STEP 17. Reattach plastic undercarriage panel.

TOOLS: Socket Drive
Extension
T-20 Bit

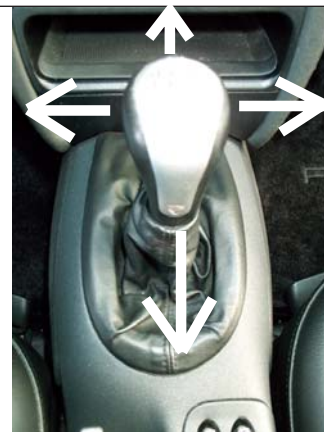


STEP 18. Lower car onto level surface.

TOOLS: Jack
Jack Stands



STEP 19. Before starting car, check that all parts have been securely tightened and shifter engages into every gear.



STEP 20. Enjoy short, precise shifts.



Manual Shift Knobs

B&M's **Manual Shift Knobs** are perfect when style and performance matter. Ergonomically correct and made from the highest grade materials, these sturdy knobs incorporate the latest styling as well as distinctive design. Each knob is designed to fit most vehicles equipped with a floor mounted manual gearbox stick. B&M knobs are mounted and tightly secured via an innovative stick locating/locking method that keeps the mounting method invisible. Fit up to 9/16" or 14mm thread diameter (except where noted).



These Hi-tech **Button Knobs** can be used to control any 12-volt function in your vehicle. They feature a momentary switch in a billet aluminum anodized knob. Suitable for nitrous or line lock systems. Fits metric thread sizes: M16x1.5, M12x1.75, M12x1.25, M10x1.5 and M10x1.25 shifter sticks. Knob measures 3.75" in height.

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