Door Bushing

Installation Instructions

For: Mazda Miata 1990-2016+

PART # 910-803
440 Rutherford St. Goleta, CA 93117
1-800-667-7872 • FAX 805-692-2525 • www.MossMotors.com

Tools required:

- 10mm deep socket
- Ratchet
- 120 grit sand paper
- Correction fluid (such as White Out)
- Removable thread locker (Blue Loc-tite)
- Grease - Silicone base is best but any will work

Notes:

A) The purpose of these hard plastic door bushings is to reduce noise due to the door moving around when driving down the road. The stock rubber bushing is very soft in comparison and allows the door to move around a lot more. In order for the harder plastic door bushing to work correctly, it must be a tight fit in the bushing cup which is bolted to the door. Due to tolerance in manufacturing and the condition of your door cup, sanding on the bushing may be required.

B) This installation should be completed on flat level ground.

Installation

1) Open the door and inspect the door cup condition. Sometimes foreign objects, such as seat belt buckles accidently closed in the door, can cause damage to the cups. You will want to straighten, fix or replace the door cup if damage is present. Figure 1 shows a good door cup.

Figure 1

2) Test fit the door bushing in the door cup as if it were installed on the B-pillar (slide it in from side). It should take some force to slide the bushing into the cup. You want the cup to hold the bushing in place by itself. Figure 2.

   If the bushing cannot be slid into the cup or takes excessive force, the door cup may be damaged. Or you may have to lightly sand on the two outside edges, until the bushing can be slid into the cup as stated above.

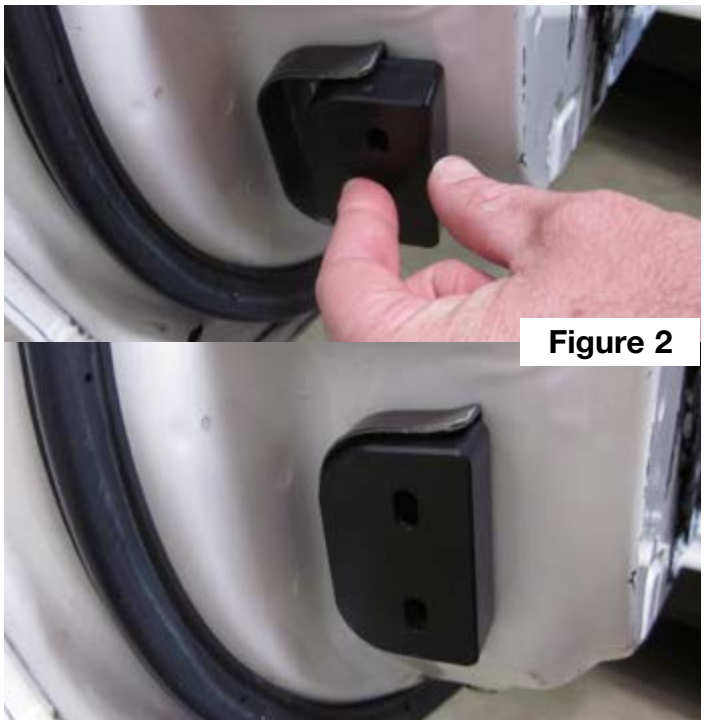

Figure 2

3) Remove the old door bushings from the car using the 10mm socket and ratchet. Wipe down the surface to remove the grit from the paint. Figure 3

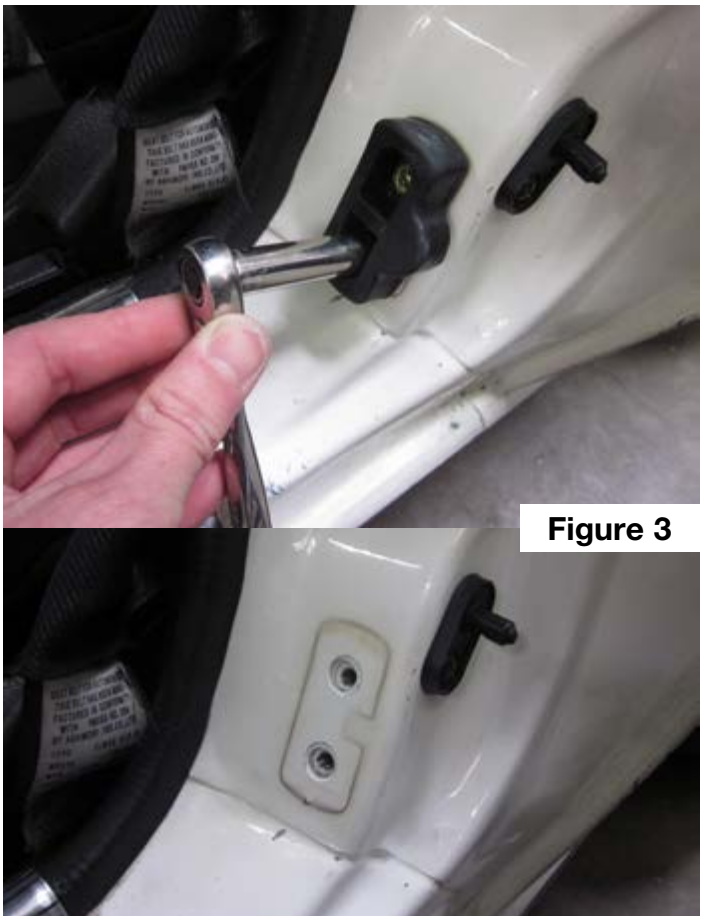

Figure 3

4) Install the new bushing using the supplied bolts. Use the witness marks in the paint from the old door bushing to align the new bushing. Only finger tighten the bolts for now. The bushing must be able to move up and down on the bolts to allow for adjustment. Figure 4.

Figure 4

5) With the door bushing installed finger tight, gently close the door. This should align the bushing as the cup will move the bushing into place as the door closes. Open the door and snug the bolts down a little more and close the door again to ensure alignment. Open the door one final time and tighten the bolts to 7.8 ft.-lbs. (93 in-lbs.) making sure the bushing doesn't move. Figure 5 shows the door cup closing down on the bushing.

Figure 5

6) Test opening and closing the door. It should sound different than with the stock rubber bushing. The door should take a little bit more force to open and to close. You should not have to slam the door. You should still be able to pull the door open by the handle. If your door opens and closes as described:

- Remove one bolt
- Apply thread locker to the bolt
- Reinstall and torque the bolt to7.8 ft.-lbs. (93 in-lbs.)
- Repeat with the other bolt.
- Removing only one bolt at a time ensures the block stays put.

  Repeat steps 1 through 6 on the opposite door. If you feel the door requires too much force to open or close, move onto step 7.

7) Apply a little grease to the door cup and or around the out side of the door bushing. Silicone based grease will last the longest but any grease will work. Repeat step 6. If the door does not open or close satisfactory after lube, move onto step 8.

8) If the door is too hard to close, paint correction fluid on the face of the door bushing that points outward (toward the door skin). See figure 8a.

Figure 8a

If the door is too hard to open, paint correction fluid on the top and bottom of the faces of the door bushing. See figure 8b.

Figure 8b

If the door is too hard to close and open paint all three surfaces.

Next close the door several times. Open the door and inspect the areas you painted. The correction fluid should be wiped away in the areas the bushing is touching the cup. Remove the bushing form the car and sand the areas on the bushing where it touched the door cup. Figure 8c shows the areas where the cup and bushing touched. See figure 8c.

Note: We recommend correction fluid such as White Out. Tape will add friction and leave a sticky residue. Correction fluid cleans easily with rubbing alcohol.

Figure 8c

Remember, you want the bushing to touch the cup, so don't remove too much material. Once some material has been removed, repeat steps 1 through 8. You may need to paint and sand the door block several times to get a really good fit. The door should feel as described in step 6. The door bushing and cup in figure 8c allowed the door to open and close perfectly and did not need any sanding.

Once you have a good fit, apply thread locker and torque the bolts, one at a time as described in step 6. Next, move on to the other door bushing.

9) The bushings are designed to physically touch the door cup making the door and chassis move together, rather than having the door move independently from the chassis as with the stock rubber mounts. The Maita chassis is flexible. The more miles on the chassis and the fewer chassis strengthening parts (such as frame rail braces, door bars, ect.) your car has, the more flexible it will be. You may find that when the car is on uneven ground (or while jacked up, on a lift, ect) the door is harder to open and or close. This is normal. You can always sand more from the bushings if you desire, but you will gain the most benefit from a tighter fit.

10) Enjoy your new door bushings.

Bill of Materials

Item No.	Description	Quantity
772-918	DELRIN DOOR BUSHING	2
052-014	BOLT, HEX FLANGE, M6 X 1.0 X 20	4

Although every effort has been made to ensure the accuracy and clarity of this information, any suggestions that you may have that will improve the information (especially detailed installation notes and photos) are welcome. These instructions were developed and written by Moss Technical Support. If you have any questions or difficulties with your installation of this product, telephone 800-667-7872 between 7:00 a.m. and 4:00 p.m., Pacific Time for assistance.

Moss Motors, Ltd.
440 Rutherford Street, Goleta, California 93117
In the US & Canada Toll Free (800) 667-7872
LOCAL (805) 681-3400 FAX (805) 692-2510

Moss Europe Ltd.
Hampton Farm Industrial Estate
Hampton Road West, Hanworth Middlesex, TW13 6DB
In the UK: 020-8867-2020 FAX:- 020-8867-2030