

## Short Shifter

PART# 994-065

### Installation Instructions For: Miata 2016+, 6 Speed only

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#### Tools:

- Ratchet
- 10mm deep socket
- #2 Philips screw driver
- Medium strength thread locker
- Grease
- 3mm Allen Wrench

**Read and understand these instructions before beginning work on the car.**

**Images may vary from actual product.**

#### Instructions

1. Remove the shift knob. It unscrews counter clock wise.
2. Remove the shift boot and surround by pulling up sharply at the rear. There are clips holding it down in the rear and sides. Once the rear pops up, pull rearward. There are two tabs engaging into the front center console. Once the front tabs are disengaged, the boot and bezel will be free to remove. Figure 2.



Figure 2b



Figure 2a -1-

## Installation Instructions

3. Pull up at the front and rear of the panel which has the volume and infotainment knobs. Once free, unplug the electrical connector by depressing the small tab. Figure 3.



Figure 3b

4. Remove the parking brake boot by pulling up at the front and rear. There is one tab on each end holding it into the console. Slide it off the parking brake handle. Figure 4.

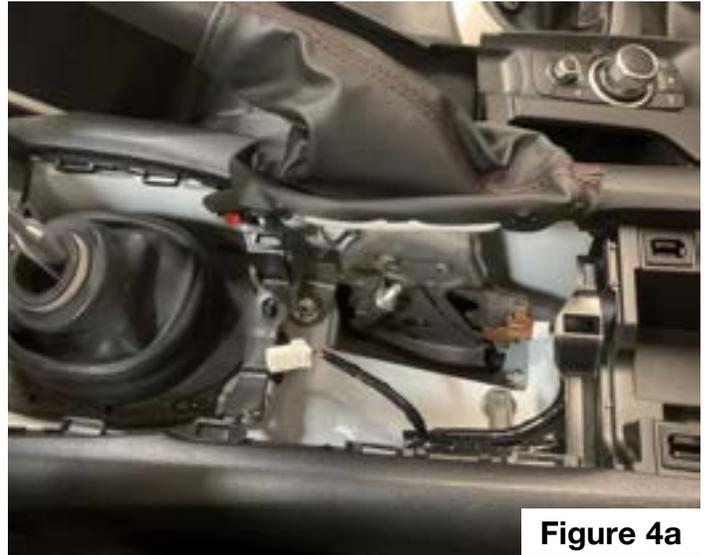


Figure 4a



Figure 3b



Figure 4b

5. Remove the two Phillips screws at the front of the center console. Pull up sharply at the rear of the console where two clips are holding down. Remove the console. Figure 5.



**Figure 5a**



**Figure 5b**

6. Using a 10mm deep socket, remove the four nuts holding rubber (inner) shift boot. Remove the shift boot. Figure 6.



**Figure 6**

7. Remove the three bolts around the shifter. Pull up on the shifter to remove it from the transmission. Have rag ready to catch any oil on the shifter. The plastic plate on top of the factory shifter (reverse lock out plate) will be reused with the short shifter. This plastic plate also acts as a shift gate which is very important to the function of the shifter. Inspect the plate closely. We recommend replacing if there is any sign of wear. Figure 7.



**Figure 7**

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8. The adapter block may already be assembled. If not, assemble it as follows: With the adapter block set upside-down, remove the set screws from the adapter block. Install the wavy washer into the adapter block. Install the shorter plastic adapter bushing on top of the wavy washer. In some cases the plastic bushing may be tight in the adapter housing, and will require some care to remove and install. The cupped side with notches should face up. Apply a small dab of thread locker to the set screws and install them into the adapter block. The set screws should be installed so that the top of the screw is flush with the chamfer in the adapter housing. The set screws will hold the bushing from falling out, and help locate the shifter. If you run the screws in too far, they will run into the plastic, half-moon shaped bushings in the shifter ball. This will pin the ball in place and not allow the shifter to move. Test-fit the shifter into the adapter block and make sure the shifter is free to move in the adapter block before installation. Figure 8.

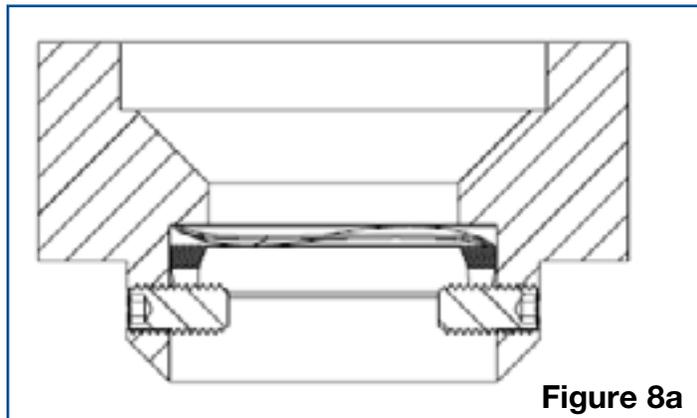


Figure 8a

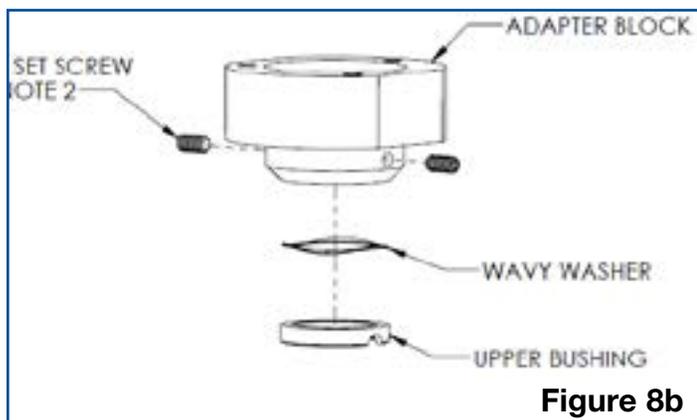


Figure 8b



Figure 8c



Figure 8d

9. Confirm the shifter is assembled. The half-moon shaped bushings should be installed into both sides of the shifter's large center pivot ball. The small lower bushing should be installed onto the smaller lower ball on the shifter. If it is not installed, set the bushing up on a table, line up the shifter in place and push it on or tap it on with a soft-faced hammer. Figure 9.



Figure 9

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10. Install the large adapter bushing into the transmission turret. The deeper round notches face down into the transmission. The shallower notches and the chamfered inner diameter face up away from the transmission. Installing this bushing upside down will lock the shifter and you will not be able to move it. Figure 10.



**Figure 10**

bolts. The torque spec is only 7 ft-lbs. for these bolts. Over-tightening can easily strip out the aluminum threads in your transmission or can lead to the shifter being too tight. Figure 13



**Figure 13**

11. Use a little grease to lube the contact points of the shifter and bushings. This includes the center pivot ball and the both plastic adapter bushings. Also, the half-moon bushings and set screw area. This will cut down on the friction between these parts, and help with the feel and smoothness of the shifter. Figure 11

12. Install the shifter into the top of the transmission. It can be a little tricky to get the cup bushing into the socket in the transmission. Make sure it is lined up and perfectly level as you guide it into the socket inside the transmission. When the shifter is properly installed, the center pivot ball should sit on the chamfered part of the large adapter bushing and the half moon cutouts should be horizontal. Figure 12



**Figure 12**

14. Install the foam tube about halfway through the hole in the factory rubber insulator, and then install onto the shifter. Make sure the foam tube is clear of the octagonal lockout feature on the shifter. This tube will provide sound deadening and fill the gap between the shifter and the factory rubber insulator. Figure 14a & b



**Figure 14a**

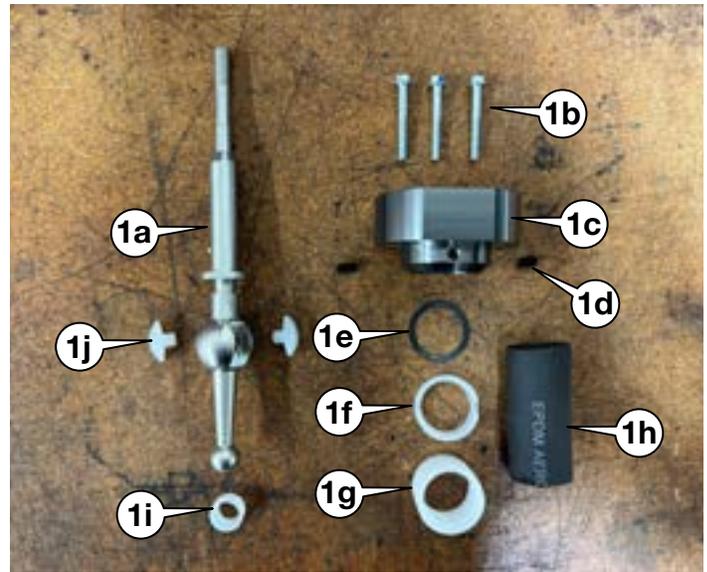
13. Install the adapter block over the shifter onto the transmission. You may need to hold it at 45 degrees to get past the set screws before you rotate it into place. Install the factory top plate (reverse lockout) on top of the adapter block. Install the provided longer

# Installation Instructions



**Figure 14b**

## Kit Contents



Ref	Description	Quantity
1a	Shifter Assembly	1
1b	Bolts	3
1c	Adapter Block	1
1d	Set Screws	2
1e	Wavy Washer	1
1f	Small Upper Adapter Bushing	1
1g	Large Lower Adapter Bushing	1
1h	Foam Insulator Tube	1
1i	Lower Cap Bushing	1
1j	Pivot Ball Side Bushings	2

15. At this point the shifter is installed. Temporarily install the shift knob and make sure the shifter is free moving. It should spring back to the center neutral point, and shift into all gears. If the shifter is stuck, take it apart and look at the set screws in the adapter block and both adapter bushings. Those items can stick the shifter in one place if not installed properly. In some cases, it may be necessary to disassemble the adapter block and remove the wavy washer from the stack. Once you have confirmed that the shifter is functioning properly, remove the shift knob, and move on to the next step.
16. Install the factory center console and other components in reverse order of disassembly. Don't forget electrical connectors.
17. Enjoy your new Cobalt Short-Shifter!

***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.***

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