

2007-2009 MazdaSpeed3 Full Replacement Short Shifter Installation Manual

Begin the installation by parking on a flat surface, as you will have to engage and disengage the hand brake and shift from gears to neutral. If you cannot do so and are obliged to install the short shifter on a slightly inclined surface, place wooden blocks in front or behind the wheels to prevent the car from moving while you're working.

Please read this installation manual completely before installing the short shifter. Make sure to let the car cool down before you do the install as you will be working on and around the exhaust line.

This manual is available for download in color at www.twmperformance.com.

	<p>Estimated Installation Time: 60-75 minutes</p> <p>Tools required:</p> <ul style="list-style-type: none"> ▪ Ratchet ▪ Ratchet extension ▪ 8 mm socket ▪ 10 mm socket ▪ 4 mm Allen wrench ▪ Flat head screwdriver ▪ Needle Nose Pliers ▪ 10 mm wrench
	<p>1. Remove the shift knob by rotating counter clockwise. Put it aside for re-install later.</p>
	<p>2. Open the storage compartment in the center console and remove the foam rubber mat in the bottom to access the 2 bolts. Use an 8mm socket and ratchet with an extension to remove the 2 bolts.</p>
	<p>3. Lift up on the rear half of the console to begin removal. The rear portion can be removed from the car and put in a safe place.</p>
	<p>4. Continue console removal by lifting the front of the console with the shift boot attached. The front portion of the console can now be removed and put in a safe place.</p>



5. Unscrew the two 8mm bolts at the front of the console with an 8mm socket and ratchet or a Philips head screwdriver.



6. Remove the ashtray (if equipped) by pulling up and out and remove the lighter face plate by pulling up and out. Use both hands to remove the plate, one below the small door and one above. The cables connected to the back of the plate can be left connected, simply set the face plate aside on the driver's side so it is out of the way of the center console.



7. Disconnect all 4 wires. The two shown here on the upper left of the picture can be disconnected by pushing on a small tab and pulling them out of their socket. The two others have two small tabs on each side that need to be pushed toward the center of the plug while you pull on them. Use a small flat head screwdriver for these two.



8. Use a ratchet and an 8 mm socket to remove the 2 bolts exposed by removing the lighter face plate.

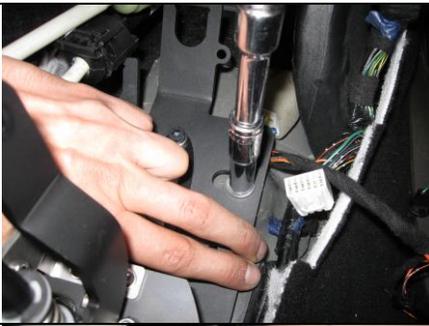


9. The center console can now be backed up a few inches to access the white plastic connector which provides power to the rear compartment in the center console. Disconnect the white plastic connector to free the center console from the harness and enable it to be removed from the car.



10. Remove the entire center console from the car by lifting up and back.

			<p>11. Use the provided tool to pry the cables off the stock shifter. Repeat for the second cable.</p>
			<p>12. Unclip the cables from the stock assembly using needle nose pliers and work them out by pushing up on the cables. There are tabs on both sides of the cable, you need to squeeze them with the pliers to be able to lift the cables up.</p>
			<p>13. Unscrew the four (4) base bolts using a ratchet, a ratchet extension and a 10 mm socket. These bolts are needed for the short shifter installation, keep them in a safe place.</p>
			<p>14. Lift the stock shifter assembly. It will not be re-installed however should be kept in case you revert back to stock.</p>
			<p>15. Mount the TWM Full Replacement Assembly onto the included base bushings. (Note: The rear right hole isn't the one used by the stock assembly.)</p>
			<p>16. Use the stock base bolts with included base bushing washers (the larger ones) to tighten down the assembly using a 10 mm socket, a ratchet and a ratchet extension.</p>



17. Hold the assembly as far to the left as possible while you finish tightening down the assembly.



18. Clip the shifter cables back into the TWM assembly by pushing down on them. They need to “click” in place to be properly secured.



19. Secure the cable ends with the clips on the assembly. Tighten down with a 4 mm Allen Wrench and a 10 mm wrench.



20. Clip the shifter cable ends onto the TWM assembly.



21. Shift into reverse and adjust the the side to side movement by pulling back on the spring at the cable end.



22. Pull up on the orange tab on the cable and adjust the side to side movement until there is about 1 mm between the shifter shaft and the cable end. It is very important that this step is done while in reverse. Once the right adjustment is found, push down on the orange tab and let go the cable end spring to lock the orange tab in place.



23. Adjust the reverse lockout plate.

a) Loosen the 4 bolts holding the reverse lockout plate in place, using a 4 mm Allen wrench.

b) Shift into first gear. Adjust the position of the plate in order for it to be in contact with the reverse lock pin on the left of the shaft. Tighten the 4 bolts lightly using a 4 mm Allen Wrench.

c) Shift between first and second gear and make sure the feel is good. If not, readjust the bolts by repeating steps a) and b).

d) Tighten the 4 bolts using a 4 mm Allen Wrench.

e) Apply grease to the nylon pad on the reverse lockout plate.



24. Go through all the gears and make sure they all engage correctly. Re-install the center console and shift boot to make sure the shifter shaft clears everywhere. If it doesn't, re-adjust by going back to step 21. When you are done verifying, re-install everything by reversing steps 1 to 10.

Thank you, for choosing



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- Installation costs and vehicle down time
- Mounting hardware and bearings



