# Flyin' Miata Installations



# FM DOOR BUSHINGS M21-97105



Thanks for purchasing our door bushings. Installation is quick and easy. If you have any questions during installation or suggestions for improvement to the product or the instructions - please don't hesitate to call or email.



WARNING: Not everyone can perform every installation. It is critical that you be honest with yourself in regards to your ability. We're more than happy to help, but there are only so many things we can do from the other end of a phone / computer. If in doubt, discuss the install with us before you dive in. Improper installation could cause injury and / or death!

## Required tools:

10mm socket or Phillips screwdriver

### **Torque specs**

- Retaining bolt: 9 lb-ft
- 1. Make sure that your car is parked on flat, level ground. This will make sure the alignment done later on locates the bushings properly.
- 2. Using a 10mm socket or Phillips screwdriver, remove the two bolts that retain the factory rubber door bushing and remove the it.
- 3. If you opted for our new hardware (36-19400), the original bolts can get tossed into your spare parts bin. Otherwise you will need to reuse the original bolts.
- 4. Line up the new bushing with the FM logo facing outside of the car and install the two bolts. Snug down the bolts to an initial torque being high enough to keep the bushing from slipping due to gravity. You should still be able to move it by hand, but it should take some effort.
- 5. To align the bushing, gently open and shut the door a couple times. The receiver cup on the door will force the bushing up or down as necessary until it is in the ideal position.
- 6. Tighten down the two bolts to 9 lb-ft. Over torquing the bolts can distort the base of the bushing and cause fitment issues.
- 7. After the final torque, check the alignment by checking that the door opens and closes smoothly. If not, loosen the hardware back to 'snug' and repeat steps 5-7.
- 8. On rare occasions, rattling or clunking may be heard after installing the bushings. We've found that this is often caused by a considerable variance in the width of the door "cup" that the bushing fits into.





- 9. If you are experiencing noisy door bushings, start by removing the door bushings, hold them into the door cup, and check for excessive play. Can you move them up and down vertically (as indicated by the red arrows)?
- 10. If there is excessive play, lightly bend the door cup inwards by tapping inward on the top and bottom flanges with a rubber mallet (as indicated by the green arrows). Be sure to periodically check the width by inserting the bushing and checking for play. Once satisfied, reinstall the bushings following steps 5-7.
- 11. If you've adjusted the gap and everything feels snug and are still getting noise, one last thing you can try is to apply non-acidic grease to the door bushings and/or cup. White lithium or silicone-based greases would be recommended, as some greases may "swell" the bushing, causing worse fitment issues. Note: We've also heard of people using candle wax for this since it's less likely to rub off on your clothes.