



# Installation instructions

## Coolerworx Shortshifter Mazda MX-5 NA/NB/NBFL

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<b>Editor:</b>	Nico Hafner	<b>Vehicle:</b>	Mazda MX-5 NA/NB/NBFL

### Scope of delivery:

- Shortshifter incl. installation material fitting the chosen gearbox



### Warning:

Please read this instruction before installation and get in touch with the work on the car! Ideally, have the installation done by a professional workshop. Tighten all screws with the torque recommend by the manufacturer. The assembling company is liable for installation mistakes. In case of manufacturing defects, the corresponding components will be replaced without any costs within the warranty period.

Nico Hafner	gez. Nico Hafner
<b>Name of editor</b>	<b>Signature</b>



### **Preparation:**

- Park the vehicle, switch off the engine and let the engine cool down
- Shift gearbox into neutral

### **Disassembling:**

- Remove the OEM shift knob
- Remove the screws of the center console. Those are left and right of the center console, below the ash tray and inside of the storage of the center console
- Carefully lift up the center console, remove the connector of the power window switch and remove the center console from the car
- Remove the 4 screws of the large shifter cuff and lift the cuff
- Remove the 3 screws below this that hold the gear lever to the gearbox and pull the lever out of the gearbox
- Remove the 4 screws of the gearbox's shifting unit cover and remove the cover
  - ➔ *Because this cover is assembled with silicone sealant, it might be necessary to hammer it from below the car. We recommend careful and light hammering from below using a screwdriver*
- Compare the shifters lower ball to the ball joint used in the gearbox to make sure you chose the right shifter ball
- Dichtfläche auf dem Getriebehals von Rückständen alter Dichtmasse sowie Ölen und Fetten befreien und so die Dichtfläche für den neuen Schalthebelfuß vorbereiten
- Remove all sealant and oils from the gearbox shifting unit to prepare it for your new shifter

### **Assembling:**

- Remove the Coolerworx shifter foot from the shifter body and make sure, that the sealing surface is free of oils
- Prepare the shifter foot with a thin layer of silicone sealant on the sealing surface (we recommend Elring Dirko HT)
- Place the shifter foot on the gearbox and tighten the screws
- Place the delivered cuff on the shifter foot and secure it
- Loosen the shifter ball and retighten it using Loctite
- Prepare the shifter body with a thin layer of silicone sealant on the sealing surface (we recommend Elring Dirko HT)
- Carefully place the shifter with the housing to the back of the car in the gearbox and tighten the screws. Please note, that you need 4-5mm of space between the shifter housing and the gearbox tunnel
  - ➔ *To change this space you'll need to loosen the front screws of the PPf frame and lift or lower the gearbox, after this, retighten the screws*

Nico Hafner	gez. Nico Hafner
Name of editor	Signature

SPS Motorsport GmbH  
Im Petersfeld 4  
65624 Altendiez

Telefon: 06432/6409960  
Fax: 06432/6409966  
Web: <http://sps-motorsport.com>  
E-Mail: [info@sps-motorsport.com](mailto:info@sps-motorsport.com)



### **Adjusting the shifter:**

#### **Basic adjustment of the shifter:**

- Shift into neutral
- Loosen the spring stopping screw (Lens head screw on the left of the shifter)
- Shift the gearbox into third or fourth gear
- Tighten the spring stopping screw

#### **Adjustment for 1st/2nd gear alley:**

- Here you'll need the grub screw on the rear right
- Select first or second gear and screw in the grub screw, that there is about 0.5mm space between grub screw and the locking bolt for reverse lock, after this tighten the lock nut
- Check if shifting into first and second is clean, otherwise readjust

#### **Adjustment for 5th/6th gear alley:**

- Here you'll need the grub screw on the front left
- Select fifth or sixth gear and screw in the grub screw, that there is about 0.5mm space between grub screw and the locking bolt for reverse lock, after this tighten the lock nut
- Check if shifting into fifth and sixth is clean, otherwise readjust

#### **Adjustment for reverse:**

- Here you'll need the grub screw on the rear left
- Pull up the locking sleeve and select reverse, screw in the grub screw, that there is about 0.5mm space between grub screw and the locking bolt for reverse lock, after this tighten the lock nut
- Check if shifting into reverse is clean, otherwise readjust

Nico Hafner	gez. Nico Hafner
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SPS Motorsport GmbH  
Im Petersfeld 4  
65624 Altendiez

Telefon: 06432/6409960  
Fax: 06432/6409966  
Web: <http://sps-motorsport.com>  
E-Mail: [info@sps-motorsport.com](mailto:info@sps-motorsport.com)



**Final work on the car:**

- If you choose to reuse your center console, you'll need to make cutouts for the shifter
- Refit your cutted center console and tighten it
- Check your adjustments while driving
  - ➔ *In case that it's difficult or hard to shift readjust your adjustments, otherwise your shifter or gearbox could get damaged*

Nico Hafner	gez. Nico Hafner
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