



# Installation Instructions

## Suspension Bushings MX-5 NC

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<b>Editer:</b>	Nico Hafner	<b>Vehicle:</b>	Mazda MX-5 NC

### Scope of delivery:

- 1x Suspension bushing set MX-5 NC
- Installation grease for the bushings

### 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 editer</b>	<b>Signature</b>

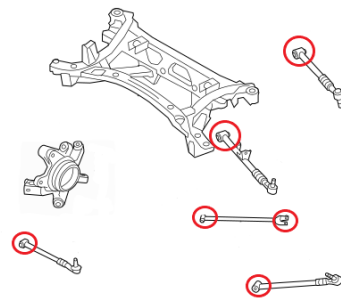


### Preparation:

- Park the vehicle, switch off the engine and let the engine cool down
- Lift the car up
- Remove all 4 wheels

### Removing the wishbones on the rear axle:

- Lift the car fully up
- Remove the coupling rod of the anti roll bar from the lower wishbone
- Secure the wheel hub and brake system from falling down. Do not let the hub hang on the brake lines
- Loosen and remove the lower suspension screw
- Loosen and remove the screws of the wishbones. They most likely are rusted and hard to remove, but should work with a little patience. In case you can not remove it, try to spray some rust solvent on the screw and let it work over night
- You should now be able to remove the wishbones
  - ➔ Check your secure method of the wheel hub to avoid damage to those parts

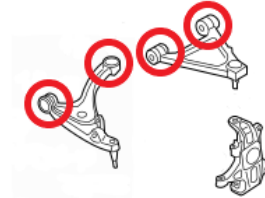
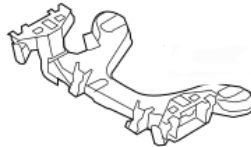


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### Removing the wishbones on the front axle:

- Lift the car half way up so you can work from the wheel arches
- Remove the castle nuts of the upper and lower ball joints
- In case the ball joints don't come off of the wheel hub on their own, use a hammer on the hub connection to loosen them
- Secure the wheel hub and brake system from falling down. Do not let the hub hang on the brake lines
- Remove the coupling rod of the anti roll bar from the lower wishbone
- Loosen and remove the lower suspension screw
- Loosen and remove the inner eccentric screws of the lower wishbone
- You should now be able to remove the lower wishbone
- Loosen and remove the inner screws for the upper wishbone
  - ➔ Check your secure method of the wheel hub to avoid damage to those parts



Nico Hafner	gez. Nico Hafner
Name of editer	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)



### **Rebuilding the suspension bushes:**

- Remove the old bushes using a hydraulic press. Watch out not to damage the wishbone itself while doing this
- Clean the rust off the inner surface of the wishbone so your new bushes can sit nice, clean and tight
- Put some grease on the inside of the wishbone where your new bushes will fit in
  - ➔ From now on you'll better work on one wishbone after the other, because these bushes are easy to accidentally swap
- Put some grease on the outside of the respective bushes and press them into the wishbone using a vice. Always watch out for installation directions if applicable
- Put some grease on the inside of the bushes and the metal sleeve
- Put the metal sleeve on the inside of the bushing
- Check the correct fit of the bushing and the metal sleeve

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



### **Installation of the wishbones on the rear axle:**

- Place all wishbones in the car and secure it from falling down with the fastening screws. Don't tighten them yet. At the same time connect the ball joints to the wheel hub. You can tighten the ball joints now
- Tighten the lower suspension screw
- Tighten the coupling rod to the lower wishbone
- Tighten all fastening points of the wishbones

### **Installation of the wishbones on the front axle:**

- Place the upper wishbone in the car and secure it from falling down with the fastening screws. Don't tighten these screws yet. Also place the ball joint in the wheel hub
- Place the lower wishbone in the car and secure it from falling down with the fastening screws. Don't tighten these screws yet. Also place the ball joint in the wheel hub
- Tighten the lower suspension screw
- Connect the coupling rod to the lower wishbone
- Tighten the screws of the wishbone's fastening points
- Tighten the nuts of the ball joints

### **Final work on the vehicle:**

- Install the wheels and tighten the nuts
- **AN WHEEL ALIGNMENT IS NECESSARILY NEEDED!**

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)



## Our Alignment overview:

### Daily Driver Alignment:

#### Rear axle:

- Toe: +18 minutes total (+9 minutes per side)
- Camber: -1°30 per side

#### Front axle:

- Caster: 6°00 minutes
  - Camber: -1°20 per side
  - Toe: +12 minutes total (+6 minutes per side)
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### Sport Alignment:

#### Rear axle:

- Toe: +20 minutes total (+10 minutes per side)
- Camber: -2°00 per side

#### Front axle:

- Caster: 6 ° 30 minutes
  - Camber: -1°45 per side
  - Toe: +12 minutes total (+6 minutes per side)
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### Racing Alignment:

#### Rear axle:

- Toe: +20 minutes total (+10 minutes per side)
- Camber: -2°30 per side

#### Front axle:

- Caster: 7°30 minutes
- Camber: -2°45 per side
- Toe: -10 minutes total (-5 minutes per side)

Nico Hafner	gez. Nico Hafner
Name of editör	Signature