



### **Replacing bellows kit JBE209**

Instructions for replacing the bellows (JBE209) on a hydraulic steering gearbox.

The described work process can vary depending on the bellows kit and the supplied accessories.



For safety reasons, all maintenance and repair work may only be carried out by trained professionals. Steering and suspension parts are safety relevant parts and may only be installed by trained professionals. Observe the vehicle manufacturer's instructions.

Before starting repairs, check that all parts of the steering system and suspension which will not be replaced are in perfect working order. This includes the steering gearbox with track rods, transverse control arms, trailing arms and all joints and rubber bearings. Inform your customer about any existing or other damage on the vehicle.

#### Tools

Using the correct tools prevents leaks after replacing the bellows. This applies in particular to special pliers for correctly closing the clamps.



Correct tools ensure proper repairs. This avoids leaks after replacing parts.

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- 1. Removal
- **(**)

For clarity, these instructions show how to replace a bellows on a steering gearbox that has been removed from the vehicle.

### 1.1 Removing the track rod end



Spray the axial joint with penetrating oil and release the lock nut on the track rod end. Remove the track rod end and clean the thread of the axial joint.

1.2 Removing the metal clamp



Remove the metal clamp of the bellows on the steering gearbox side.

1.3 Removing the plastic clamp



Remove the plastic clamp of the bellows on the side with the track rod end.

1.4 Removing the seal



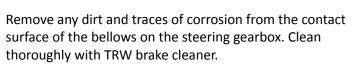
Remove the seal on the steering gearbox.

## NOTE

- Damage to the rack.
- ► Cover the rack with a cloth.

# TRW – Safety

- 2. Cleaning and checking
- 2.1 Sealing surface on the steering gearbox



2.3 Sealing surface on the axial joint



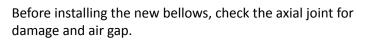
Remove any dirt and traces of corrosion from the contact surface of the bellows on the axial joint. Clean thoroughly with TRW brake cleaner.

3. Installing



The bellows kits from TRW are supplied with the complete accessories and installation instructions.

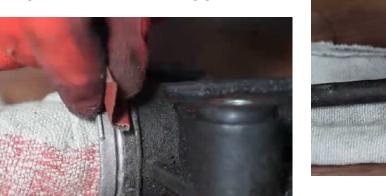
2.2 Axial joint





If necessary, replace axial joint and track rod end.









#### 3.1 Installing the seal



Install the seal from the installation kit on the steering gearbox.

3.2 Greasing the axial joint



Apply the supplied installation grease to the contact surface of the bellows on the axial joint.

## NOTE

#### Damage through ingress of moisture and dirt.

► Only use the supplied grease.

3.3 Installing the bellows



Pull the bellows over the axial joint. The bellows has to engage in the groove of the axial joint. Push the bellows onto the steering gearbox, ensuring that the seal remains in its installed position.

3.4 Installing the clamp on the steering gearbox end



Install the clamp on the steering gearbox end using suitable special pliers.

### NOTE

Damage through ingress of moisture and dirt.

► Only use the supplied clamps.

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3.5 Installing the clamp on the axial joint end



Install the clamp on the axial joint end using suitable special pliers.

# NOTE

Damage through ingress of moisture and dirt.

- ► Only use the supplied clamps.
- 3.6 Installing the track rod end



Install the lock nut and the track rod end.

