



JRB5060, JRB5061, JRB5062, JRB5063, JRB5065, JRB5066, JRB5067, JRB5068,  
JRB5069, JRB5070, JRB5076, JRB5080, JRB5085, JRB5088, JRB5089

## **NOTE**

Secure vehicle against rolling away.

Ensure proper cleanliness when working on the servo-steering.

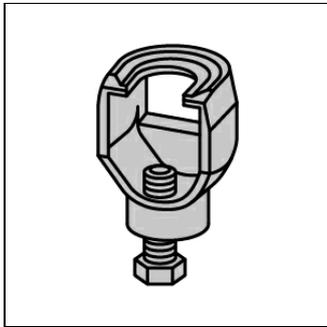
Cable connections must be cleaned before removing.

Use only fibre-free cleaning cloths.

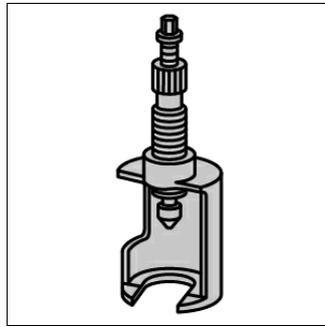
The hydraulic oil level must not drop below the minimum during bleeding.

The illustrations of these installation instructions are exemplary and are only intended for better understanding.

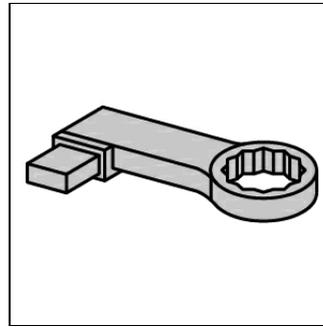
## **Required special tools**



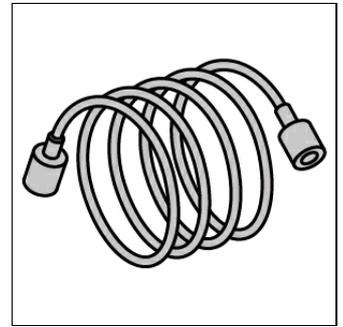
**Puller**  
OE (625 589 00 35 00)



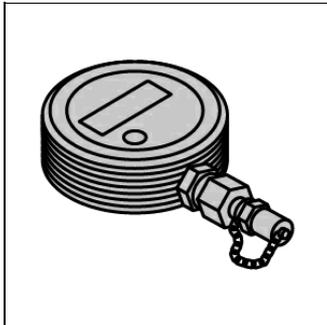
**Ball-joint puller**  
OE (655 589 00 35 00)



**Socket wrench**  
OE (765 589 01 03 00)



**Hose**  
OE (400 589 01 91 00)



**Pressure gauge**  
OE (000 589 06 21 00)

## **Required filling quantities/torques**

### **Filling quantities and specifications**

Power steering oil	<b>0,00 litres</b>
Power steering oil specification	<b>Observe manufacturer's specifications.</b>

### **Required torques**

**Self-locking screws and nuts must always be replaced.**

Steering column switch (1)	<b>(see figure 1) Use new nut(s)</b>	<b>Observe the vehicle manufacturers' instructions (expansion bolts, securing material).</b>
Steering rod (2)	<b>(see figure 1) Use new nut(s)</b>	<b>Observe the vehicle manufacturers' instructions (expansion bolts, securing material).</b>
Pressure line at steering gear		<b>Observe the vehicle manufacturers' instructions (expansion bolts, securing material).</b>
Return line to steering gear		<b>Observe the vehicle manufacturers' instructions (expansion bolts, securing material).</b>
Steering gear		<b>Observe the vehicle manufacturers' instructions (expansion bolts, securing material).</b>

## **Remove:**

Turn the steering to the right as far as the stop.

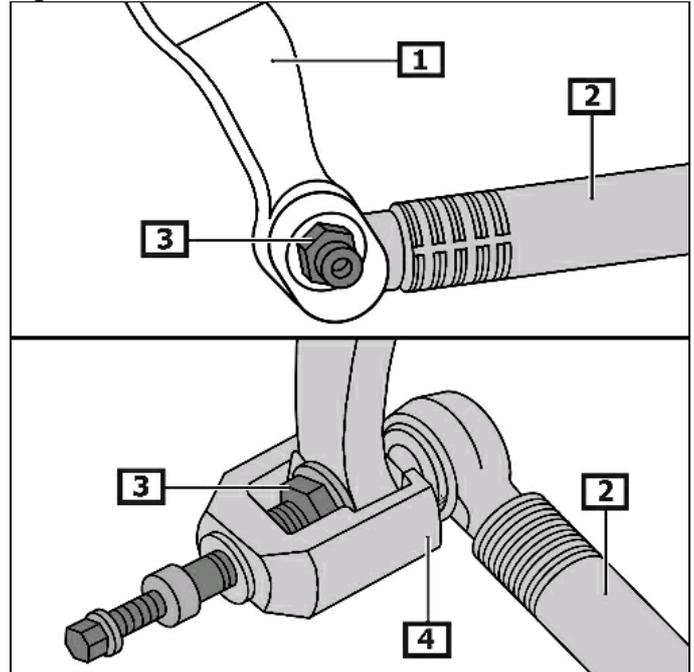
### **Tilt driver's cab.**

- Nut - loosen steering track rod end. **(3)**
- Pull off the steering rod head using a puller. **(4)**
- Unscrew the steering rod head nut. **(3)**
- Remove steering rod from steering arm. **(2)**

### **Required special tools**

Puller **(4)** OE (625 589 00 35 00)  
**(see figure 1)**

**Figure 1**



**1** Steering column switch

**2** Steering rod

**3** Steering rod head nut

**4** Puller

Disconnect hydraulic line(s) from steering gear.

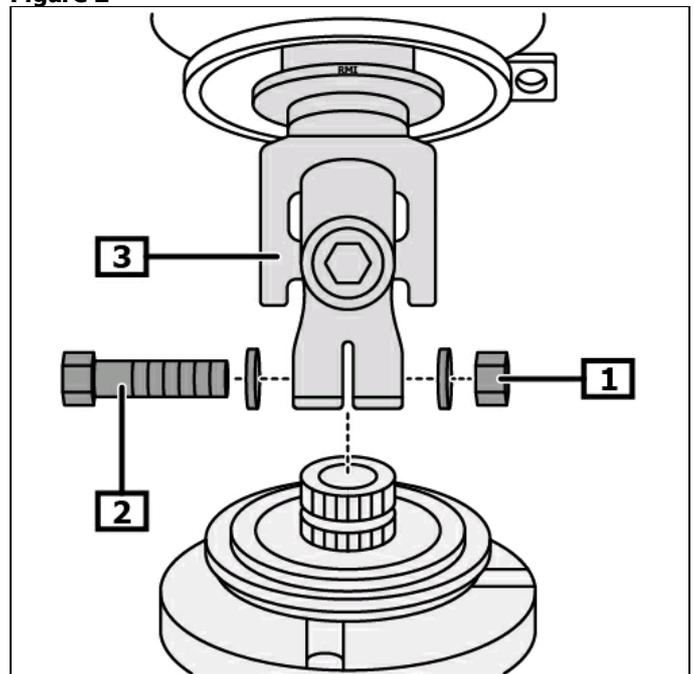
### **Collect draining fluid.**

#### **Observe disposal regulations!**

Loosen power steering expansion tank and put aside.  
Turn the steering gear to the central position.  
Secure steering wheel against unintentional turning.

- Unscrew and remove lower steering column joint nut. **(1)**
  - Unscrew and remove lower steering column joint screw. **(2)**
  - Loosen lower steering column joint from steering gear. **(3)**
- (see figure 2)**

**Figure 2**



**1** Steering column joint nut lower

**2** Lower steering column joint  
screw

**3** Lower steering column joint

Mount tightening belt to steering gear.  
Unscrew steering gear bolt(s).  
Remove steering gear using suitable lifting tool.

**Required special tools**

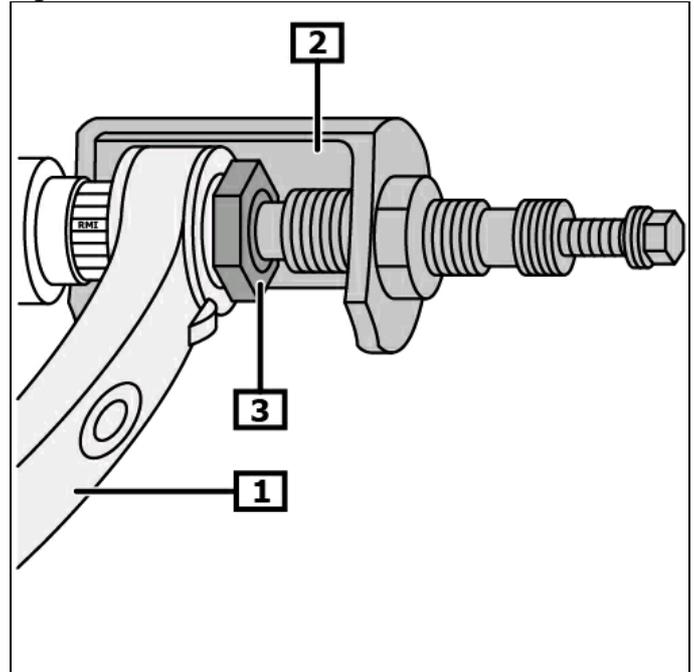
Socket wrench **OE (765 589 01 03 00)**

Loosen steering arm lever nut. **(3)**  
Remove the steering arm lever from the steering gear using a puller. **(1)(2)**  
Unscrew the steering arm lever nut(s). **(3)**  
Remove steering column control stalk. **(1)**

**Required special tools**

Ball-joint puller **(2) OE (655 589 00 35 00)**  
**(see figure 3)**

**Figure 3**



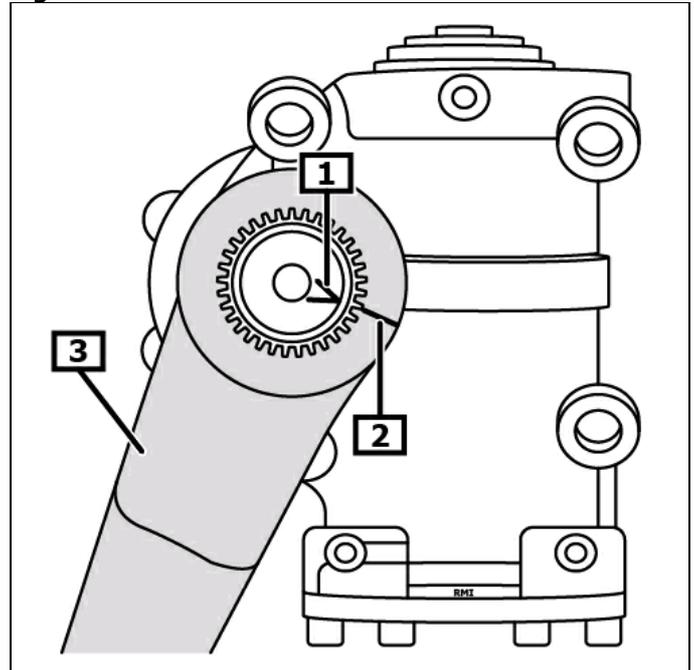
- 1 Steering column switch
- 2 Ball-joint puller
- 3 Steering arm lever nut(s).

**Install:**

Install steering column control stalk. **(3)**  
Markings must align. **(1)(2)**  
**(see figure 4)**

**Continue assembly in reverse order of removal.**

**Figure 4**



- 1 Mark(s)
- 2 Mark(s)
- 3 Steering column switch

## **Bleed steering system**

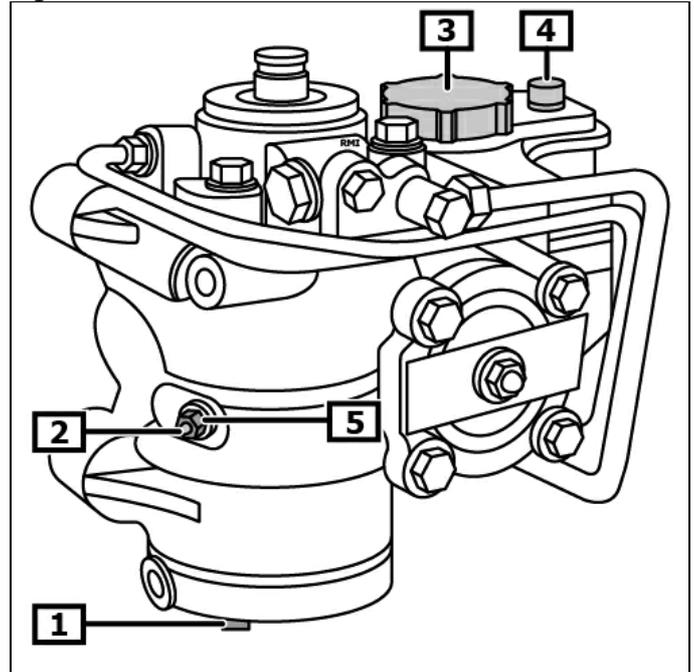
Lift the vehicle until the front wheels are off the ground.  
Check power steering oil level and correct if required.  
Start engine and run in idle.  
Turn the steering wheel to the central position.

Unscrew lock nut(s). **(5)**  
Screw in adjusting screw(s) up to the stop. **(2)**  
Tighten lock nut(s). **(5)**  
**(see figure 5)**

### **Left-hand steering**

Turn steering to the left and hold at the stop for approx. 5 s.  
With the engine running, rotate steering wheel several times from stop to stop, permanently checking the hydraulic fluid level in the process.  
The bleeding process is complete when no more air bubbles rise in the tank during the bleeding.

Figure 5



- |                                  |                   |
|----------------------------------|-------------------|
| 1 Adjusting screw                | 2 Adjusting screw |
| 3 Power steering fluid reservoir | 4 Dipstick        |
| 5 Lock nut(s)                    |                   |

### **Right-hand steering**

Turn steering to the right and hold at the stop for approx. 5 s.  
With the engine running, rotate steering wheel several times from stop to stop, permanently checking the hydraulic fluid level in the process.  
The bleeding process is complete when no more air bubbles rise in the tank during the bleeding.

### **Continuation for all vehicles**

Switch off engine.

**Air is still in the system and the bleeding process must be repeated if the oil level in the power steering expansion tank rises by more than 2 cm.**

Check power steering oil level and correct if required.

## **Check the final pressure limit.**

Position front wheels centrally onto the turntables.

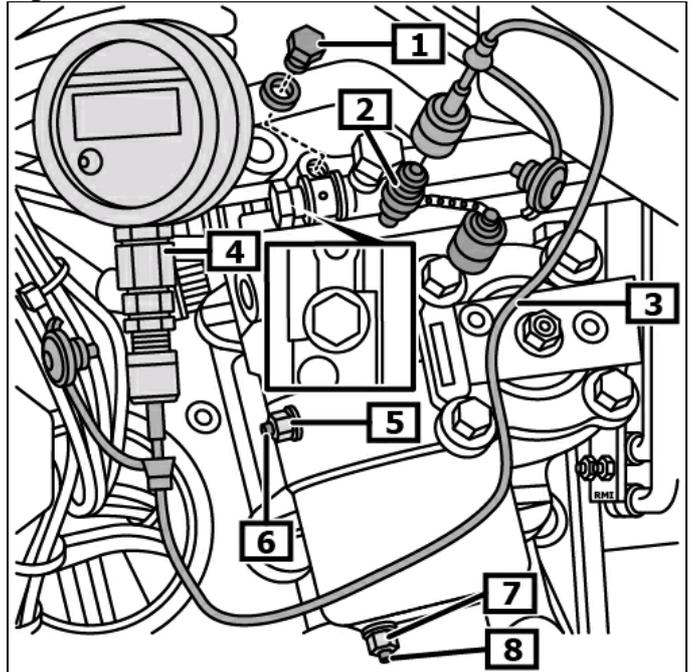
- Unscrew closing screw. **(1)**
- Screw in connecting piece. **(2)**
- Connect hose. **(3)**
- Connect the pressure gauge. **(4)**

### **Required special tools**

Hose **(3) OE (400 589 01 91 00)**  
Pressure gauge **(4) OE (000 589 06 21 00)**  
**(see figure 6)**

**Tilt back driver's cab.**

**Figure 6**



- |                        |                          |
|------------------------|--------------------------|
| <b>1 Locking screw</b> | <b>2 connection</b>      |
| <b>3 Hose</b>          | <b>4 Pressure gauge</b>  |
| <b>5 Lock nut</b>      | <b>6 Adjusting screw</b> |
| <b>7 Lock nut</b>      | <b>8 Adjusting screw</b> |

Start engine and run with idling speed at approx. 1400 - 1500 rpm.

Turn steering wheel several times back and forth to the limit positions until power steering oil temperature has reached approx. 50 °C.

- Turn the steering wheel to the left up to the stop.
- Read and note pressure on the pressure gage.
- Turn the steering wheel to the right up to the stop.
- Read and note pressure on the pressure gage.
- Turn the steering wheel to the central position.
- Switch off engine.

**The final limiting pressure must be 30 - 50 bar.**

**The final limiting pressure must be adjusted if it is out of tolerance.**

## **Set final limiting pressure**

### **Left-hand steering**

Unscrew lock nut(s). **(5)**

Screw in adjusting screw(s) up to the stop. **(6)**

Unscrew adjusting screw by 6 turns. **(6)**

Tighten lock nut(s). **(5)**

Start engine and run with idling speed at approx. 1400 - 1500 rpm.

Turn the steering wheel to the left up to the stop.

Read pressure on the pressure gage.

If final limiting pressure should be out of tolerance, screw adjusting screw by 1/4 turns in or out and check pressure again.

Switch off engine.

Tighten lock nut(s). **(5)**

Hold screw(s) in place. **(6)**

Turn the steering wheel to the central position.

Unscrew nut(s). **(7)**

Screw in adjusting screw(s) up to the stop. **(8)**

Unscrew adjusting screw by 6 turns. **(8)**

Tighten lock nut(s). **(7)**

Start engine and run with idling speed at approx. 1400 - 1500 rpm.

Turn the steering wheel to the right up to the stop.

Read pressure on the pressure gage.

If final limiting pressure should be out of tolerance, screw adjusting screw by 1/4 turns in or out and check pressure again.

Switch off engine.

Tighten lock nut(s). **(7)**

Hold screw(s) in place. **(8)**

**(see figure 6)**

### **Right-hand steering**

Unscrew lock nut(s). **(5)**

Screw in adjusting screw(s) up to the stop. **(6)**

Unscrew adjusting screw by 6 turns. **(6)**

Tighten lock nut(s). **(5)**

Start engine and run with idling speed at approx. 1400 - 1500 rpm.

Turn the steering wheel to the right up to the stop.

Read pressure on the pressure gage.

If final limiting pressure should be out of tolerance, screw adjusting screw by 1/4 turns in or out and check pressure again.

Switch off engine.

Tighten lock nut(s). **(5)**

Hold screw(s) in place. **(6)**

Turn the steering wheel to the central position.

Unscrew lock nut(s). **(7)**

Screw in adjusting screw(s) up to the stop. **(8)**

Unscrew adjusting screw by 6 turns. **(8)**

Tighten lock nut(s). **(7)**

Start engine and run with idling speed at approx. 1400 - 1500 rpm.

Turn the steering wheel to the left up to the stop.

Read pressure on the pressure gage.

If final limiting pressure should be out of tolerance, screw adjusting screw by 1/4 turns in or out and check pressure again.

Switch off engine.

Tighten lock nut(s). **(7)**

Hold screw(s) in place. **(8)**

**(see figure 6)**

### **Tilt driver's cab.**

#### **Continuation for all vehicles**

Remove special tools. **(2) - (4)**

Screw in closing screw. **(1)**

**(see figure 6)**

Check power steering oil level and correct if required.

### **Tilt back driver's cab.**

Carry out a test drive

Check steering components for tightness.