



# INSTALLATION INSTRUCTIONS



|                                  |            |                             |
|----------------------------------|------------|-----------------------------|
| <b>Installation Instructions</b> |            | <b>KW</b> <i>automotive</i> |
| Instruction No.                  | 686 61 001 |                             |



## INSTALLATION INSTRUCTIONS

**Before you start installation work,  
please read the following carefully:**

- Ensure that the TUEV certificate matches the vehicle specifications (front vehicle identification number (VIN)) etc...
- The suspension components must match the suspensions application specifications (springs and shock/struts identification numbers).
- The instructions have to be strictly observed.

KW Coilovers for automobile [suspensions](#) are designed for easy installation. If not otherwise stipulated in these instructions, all suspension components are installed and removed in accordance with the manufacturer's specifications for installing and removing standard springs and damper components. At the time of printing all instructions and specifications are correct.

|                                  |            |                             |
|----------------------------------|------------|-----------------------------|
| <b>Installation Instructions</b> |            | <b>KW</b> <i>automotive</i> |
| Instruction No.                  | 686 61 001 |                             |



### **Danger:**

1. Always follow the latest accident prevention regulations (not applicable for North America) for each step to prevent any serious bodily harm or injury.
2. We recommend the use of a vehicle hoist or lift when installing the suspension. If a lift is not available and jacking equipment is used, make sure that the vehicle is secured with commercial wheel blocks and jack stand to ensure safety.
3. The suspension components may only be installed by trained technical personnel using the proper tools.
4. The General Installation instructions, as well as the Technical Inspectorate (German TÜV) documents must be read BEFORE attempting installation.
5. Never use impact wrenches or guns to install or remove shock absorber piston hardware.
6. Never disassemble or cut open shock absorbers and/or shock absorber inserts. They contain oil under pressure. Danger of explosion.
7. The suspension regulation (when available) needs to be disabled through an authorized dealer.
8. Please take care in any case that fittings (for example fittings of shock absorber housings or fittings of the lower control arm in the housing of the wheel bearing) are free of dust and oil. (see manufacturer guideline)



### **General Mounting Instructions:**

1. The shock absorbers / struts should be removed as specified by manufacturer's instructions.
2. Mark the position of the springs at the top mount and the strut. Tense the spring by use of a suitable spring tensioner (TUEV/GS-approved) until the top mount is discharged
3. Remove the top mount and disassemble the strut.
4. Check the original suspension components, they have to be in perfect condition, otherwise replace worn out bump stops, damaged top mounts etc.
5. Replace the original suspension components with the supplied suspension components. All the parts that are not included in delivery need to be used from the original suspension
6. Assemble the struts in reverse order to the disassembly. Take care for the position of the spring.
7. Install the strut according to the manufacturer's instructions
8. The screws need to be replaced according to the vehicle manufacturer's specifications.

### **Check after installation:**

1. After the installation the vehicle needs to be aligned according to the vehicle manufacturer's specifications
2. The clearance of the wheels/tires to the suspension components need to be checked. The minimum clearance between the suspension and the wheels/tires is 5mm (0.2 Inches). The clearance of the wheels/tires to the car body needs to be checked and provided as well.
3. Adjust the brake power control and the head lights according to the vehicle manufacturer's specifications.

A technical inspector needs to check and approve the successful installed suspension components (might not be necessary in your country).

## Installation Instructions

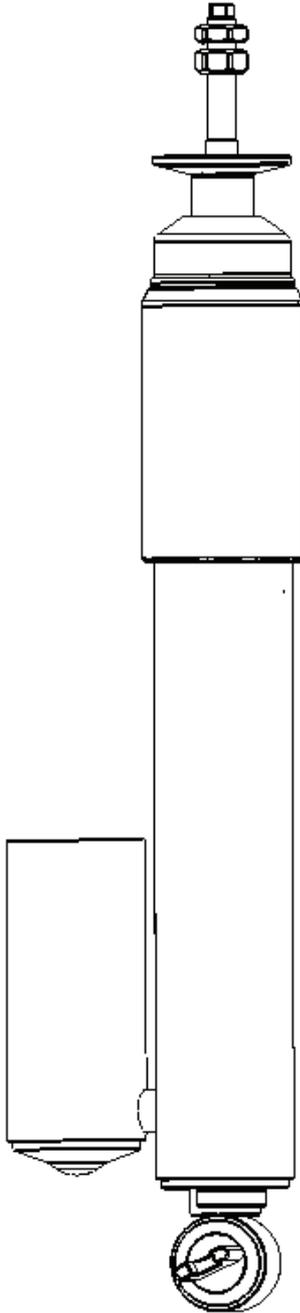
**KW** automotive

Instruction No.

686 61 001

### Front axle:

Supplied front axle damper.



Tightening torque for the piston rod nut is 20 Nm (15 ft-lb). The damper unit has to be installed according to manufacturers recommended settings regarding tightening torque and fixing specifications.



On damper versions with separate reservoirs, mount the reservoir facing the outside of the vehicle as shown on the picture.

## Installation Instructions

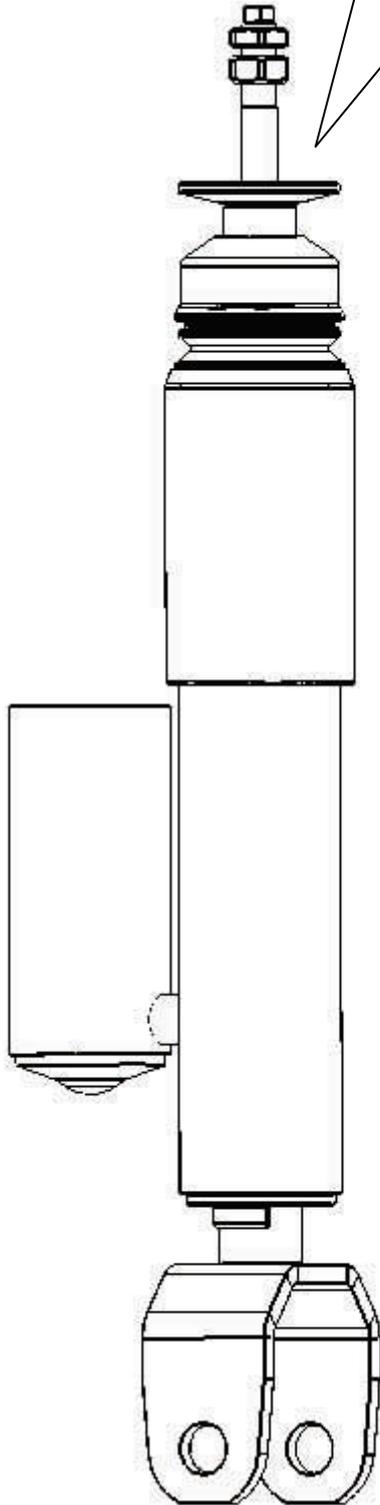
**KW** automotive

Instruction No.

686 61 001

### Rear axle:

Supplied rear axle damper.



Tightening torque for the piston rod nut is 20 Nm (15 ft-lb). The damper unit has to be installed according to manufacturers recommended settings regarding tightening torque and fixing specifications.



On damper versions with separate reservoirs, mount the reservoir facing the inside of the vehicle as shown on the picture.