

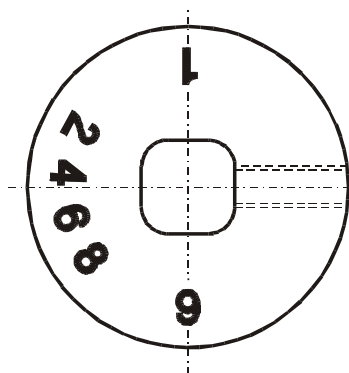


**Before installation please observe
the following points:**

- Read all information in this manual carefully.
All suspension components are fitted and removed acc. to the manufacturer's specifications for fitting and removing, if not otherwise required in these instructions.
- Check that your vehicle type is listed in the certificate as being specified for this kit.
- Check the product for all components before starting installation!
- Check that dimensions and fastening points are comparable between the original and Bilstein shock absorbers.
- Remove the negative battery pole.
- Directional references (left, right, front, rear) are always with reference to the driving direction.
- The test vehicles are left- hand drive vehicles.

**After installation please observe
the following points:**

- Set the vehicle height by adjusting spring plates and lock nuts on the new dampers. Only use the supplied spanner wrenches.
 - After installing [the suspension system](#), caster and camber must be checked and adjusted according to manufacturer's specifications.
Check and reset load- dependent brake compensator and ABS system according to manufacturer's specifications.
Check and adjust headlight setting.
 - Because the vehicle has been lowered, freedom of movement for all wheel-/ tire- combinations must be checked.
 - All rubber- mounted strut/ damper attachments must not be fully tightened until AFTER the suspension system is loaded (wheels on the ground). Other mounting fasteners (for example brackets) must be securely tightened BEFORE load is placed on the suspension system.
 - Connect the negative battery pole.
- All diagrams are generalized
and not to scale!
brackets, etc. specific to
strut are not shown!



position **9** = **soft** (clockwise direction)
position **1** = **firm** (counter- clockwise direction)

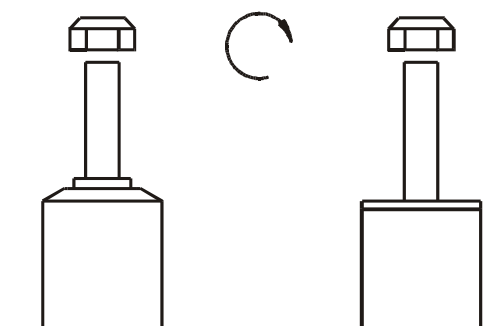
During the adjustment you will hear a positive „click“ at each position of the adjustment.

Instruction for the front axle

The adjusting element of the front struts is located at the bottom edge of the strut, covered by a blue plastic cap. That cap must be removed before adjusting. After the adjustment the cap must be replaced again.

list of torques

	M 8	M 10	M 12	M 14	M 16	Thread
	13	25	45	72	110	Torque Nm
	10	19	34	54	83	Torque ft lb



Do not use an impact tool to loosen or tighten fasteners due to possible damage to the product.
Self- locking nuts must only be used once!

Removal

Place vehicle on a wheel-free car hoist, lift it and remove wheels.

Vehicles equipped **with xenon headlight** the movable element of sensor for the headlamp levelling controller must removed before.



The lower control arm must be supported by suitable means!

Remove bottom mount.

Remove top fixing nuts from support bearing.

Do not remove central nut at this time!

Remove complete strut and clamp it in an appropriate strut vice.

Using a suitable spring compressor, compress suspension spring until tension on support bearing is free to move.

Release central nut and remove original mounting parts and coil spring. Please refer to diagram to identify which parts will be replaced with BILSTEIN- supplied components.

Installation

Assemble BILSTEIN and/ or original mounting parts, as well as the new BILSTEIN spring on the BILSTEIN strut in reverse order as removal.

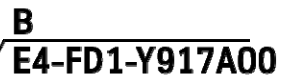
IMPORTANT! Spring plates must not be adjusted outside the ranges specified in the certificate!



The correct mounting position of the suspension springs can be determined by the printing on the springs; install them with the print upright.

Do not reuse original- bumper, since BILSTEIN- strut has built in bump stop.

Fit assembled BILSTEIN strut to the vehicle in reverse order as removal.



Removal

Place vehicle on a wheel-free car hoist, lift it and remove wheels.

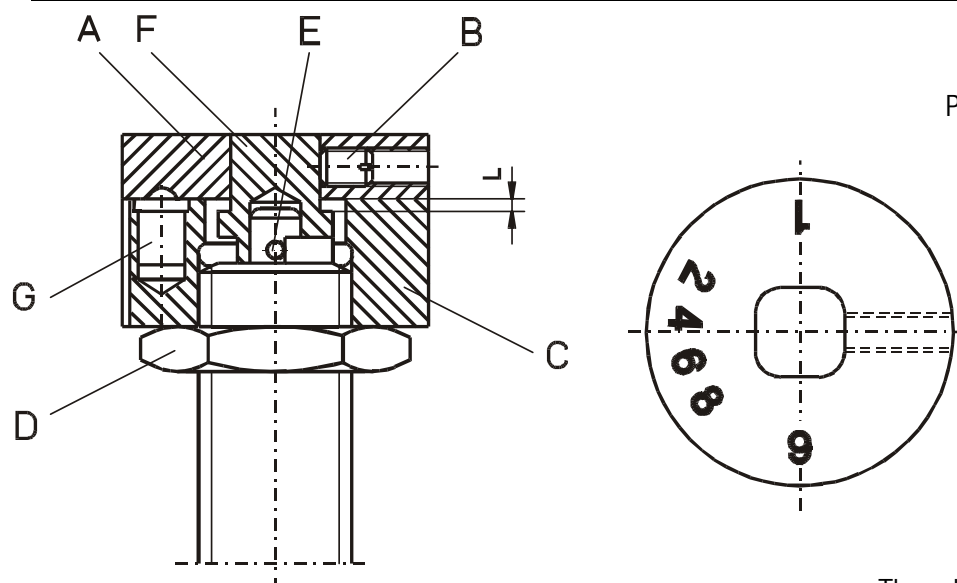
The lower control arm must be supported by suitable means!

Remove top and bottom fixing mount from support bearing.

Remove shock absorber and original mounting parts.

B16- 9 step- pin adjustment

The adjustment unit must be deinstall before the shock absorber installation can be completed in reverse order with BILSTEIN and/ or original mounting parts.



position **9** = **soft** (clockwise direction)
position **1** = **firm** (counter- clockwise direction)

Disassembly B16

The adjusting knob (A) must be positioned on 9 (see sketch).

Loosen the set screw (B) by an 1,5 mm hex key and remove the adjusting plate.

Hold the adjusting head (C) with an appropriate tool (SW 21 spanner), and loosen the lock nut (D ; SW 17).

Now the adjusting head and lock nut can be removed, to install the shock absorber.

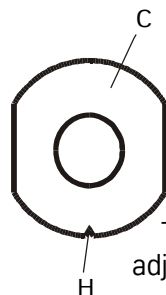
The installation of the shock absorbers must be done according to the mounting instructions.

Improper installation will render the adjustment function inoperative!!

Assembly B16

The square rod stop (F) must be turned in clockwise direction fully to its stop (soft).

Assemble first the lock nut, then the adjusting head. Do not thread the top of the adjusting head (C) past the stop at the bottom edge of the square section (F). A gap (L) of 0 to 1 mm is necessary!



Orient the score mark (H) on adjusting head in the centre of any of the four sides of the square rod stop. Then lock the parts together by screwing the lock nut up to the adjuster head.

The adjusting knob (A) must be placed flat on the adjusting head, so that the spring-loaded detent ball (G) is slightly preloaded. During adjustment the ball must snap with a positive „click“ into the notches on the lower side of the knob.

Position 9 must be positioned directly above the score mark on the adjusting head (C). Then tighten the set screw (B).

The adjusting knob (A) should move easily and with distinct „clicks“ at each adjustment position. If not, disassemble the adjuster mechanism and reassemble according to the instructions

Installing

Assemble BILSTEIN and/ or original mounting parts, as well as the new BILSTEIN spring on BILSTEIN shock absorber in reverse order as removal.

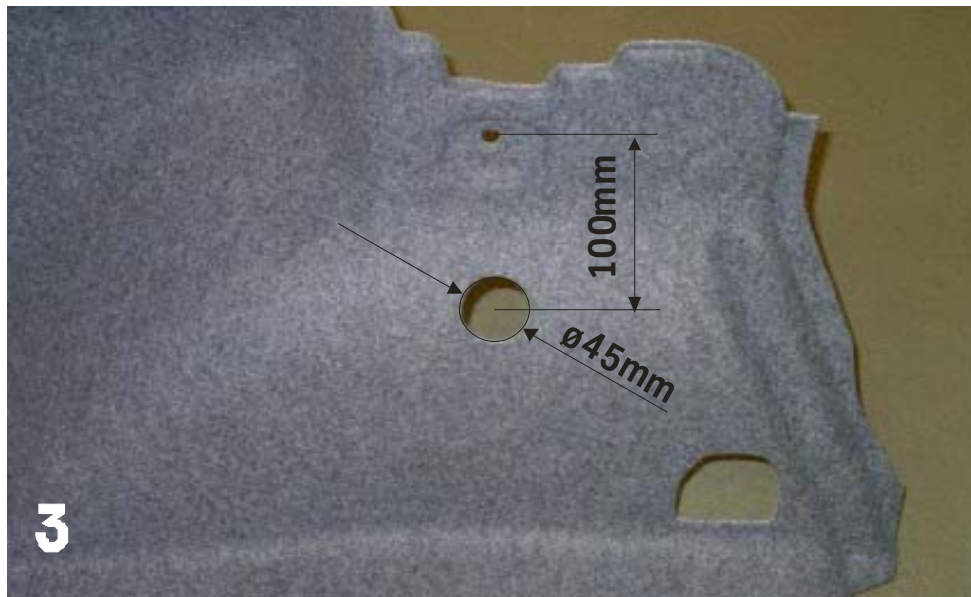


IMPORTANT! Spring plates must not be adjusted outside the ranges specified in the certificate!

Fit assembled shock absorber to the vehicle in reverse order as removal.

The correct mounting position of the suspension springs can be determined by the printing on the springs; install them with the print upright.





rear axle

