

# **Contents:**

Certificate ( removable) for:

- Mercedes Benz C-class (W205) B14/ B16 PSS10 -
- Mercedes Benz C-class (S205) B14/ B16 PSS10
  - mounting instruction -



# 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 installing and removal, 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.
- Directional references (left, right, front, rear) are always with reference to the driving direction.
  - Remove the negative battery pole. -
- The tested vehicles are left- hand drive vehicles.

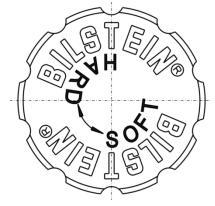
# After installation please observe the following points:

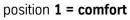
- Set the vehicle height by adjusting spring plates and lock nuts on the new dampers. Only use the supplied spanner wrenches.
- All rubber- mounted strut/ damper attachments must not be fully tightened until AFTER the suspension system is loaded (wheels on the ground). Other mounting fasteners (for example brackets) must be securely tightened BEFORE load is placed on the suspension system.
  - Because the vehicle has been lowered, freedom of movement for all wheel-/ tire- combinations must be checked.
    - Connect the negative battery pole. -
  - 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. -

All diagrams are generalized and not to scale! brackets, etc. specific to strut are not shown!



### instruction for force adjustment





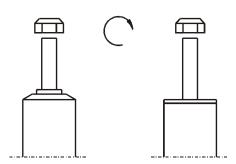
1

position **10 = sport** 

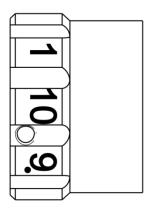
During the adjustment you will hear a positive " click" at each position of the adjustment.

#### Instruction for the rear axle

Adjusting position must aligned with the red mark below adjusting knob. Status of delivery is position 1.



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!



list of torques			-			
Thread	M 16	M 14	M 12	M 10	M8	
Torque Nm	110	72	45	25	13	
Torque ft lb	83	54	34	19	10	

mounting instruction for front axles B14

#### Removal

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

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



Pay attention that support wires of brake system are strain-free during removal. Stabilization by suitable means is demanded.

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

For fitting support bearing on shock absorber please choose flat fork spanner!

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



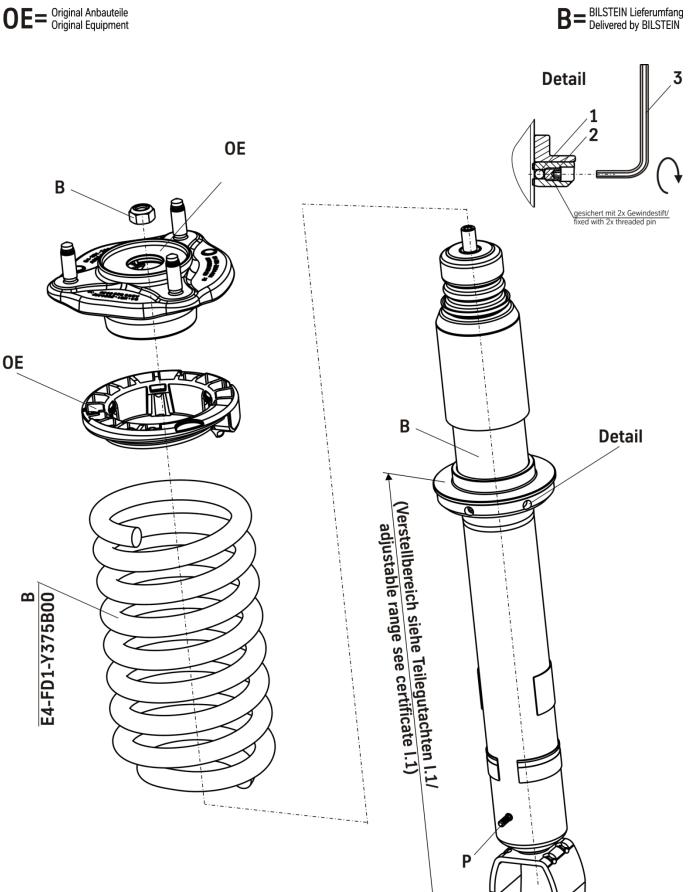
IMPORTANT! Spring plates must not be adjusted outside the ranges specified in the certificate!

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

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









#### front axle hight adjustment

Install the hight adjustment as it is shown in sketch for front axles. Fix the spring plate with the the rubber balls (1) and set screws (2) by using hex key (3) delivered by BILSTEIN.

Torque 12 +3 Nm

After several adjustments (approx. 5-10 times) the rubber bullets should be replaced, otherwise the thread on damper tube might be damaged.

#### mounting instruction for front axles B16

### **Removal shock absorber**

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

Vehicles equipped with xenon headlight the sensor for the headlamp levelling controller must removed before.

#### Pay attention that support wires of brake system are strain-free during removal. Stabilization by suitable means is demanded.

Remove bottom mounting.

Remove top fixing nuts from support bearing. Do not remove central nuts at this time!

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

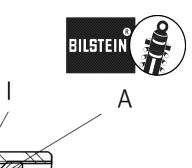
Using a suitable spring compressor, compress suspension spring until tension on support bearing is free to move.

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.

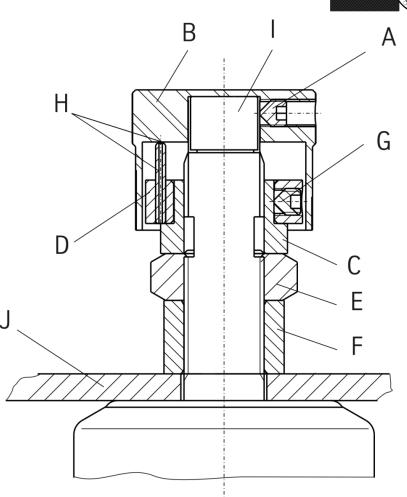
#### PSS10- 10 step- pin adjustment

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





- A- Set screw
- B- Adjusting head
- C- lock nut M12x 1
- D- stop disc
- E- lock nut M12x 1
- F Support ring
- G Set screw
- H End stop pin
- Adjusting screw
- J OE Support bearing



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position **1 = comfort** ( counter-clockwise direction) position **10 = sport** ( clockwise direction)

#### Note

Status of delivery is position 10.

#### front axle left/ right

Remove original ABS clips and fit ABS wire and/ or sensor bracket strain-free by using cable clips (pic 1) delivered by Bilstein.

The cable clip sockets (H) must snap into the bolts (P) positioned on strut.

You can remove the cable clip sockets from bolts non- destructive by rotation.

Do the fitting with maximum steer angle!



## **Removal Adjustment Unit PSS10**

(see sketches on page 19/21)

To remove the adjusting head ( B) the set screw ( A) must loose.

Remove end stop disc ( D) together with lock nut ( C). Remove support ring ( F) and nut ( E).

Now remove all original mounting parts and fit BILSTEIN and/ or original mounting parts in reverse order to removal.

# Installation Adjustment Unit PSS10

For fitting support bearing on shock absorber please choose flat fork spanner!



# Support bearing must be drilled to 12,1mm!

After installing support bearing( J) tighten nut ( E) with support ring ( F) to block. Tighten lock nut ( C).

Pins (H) are end stops.

Place the adjusting knob (A) flat on the adjusting screw (I) and turn it clockwise to end stop.

Fix the adjusting head ( B) with set screw ( A).

The adjusting head should move easily and with distinct "clicks" at each adjustment position. If not, disassemble the adjustment unit and reassemble acc. to the instruction.

## Installation shock absorber

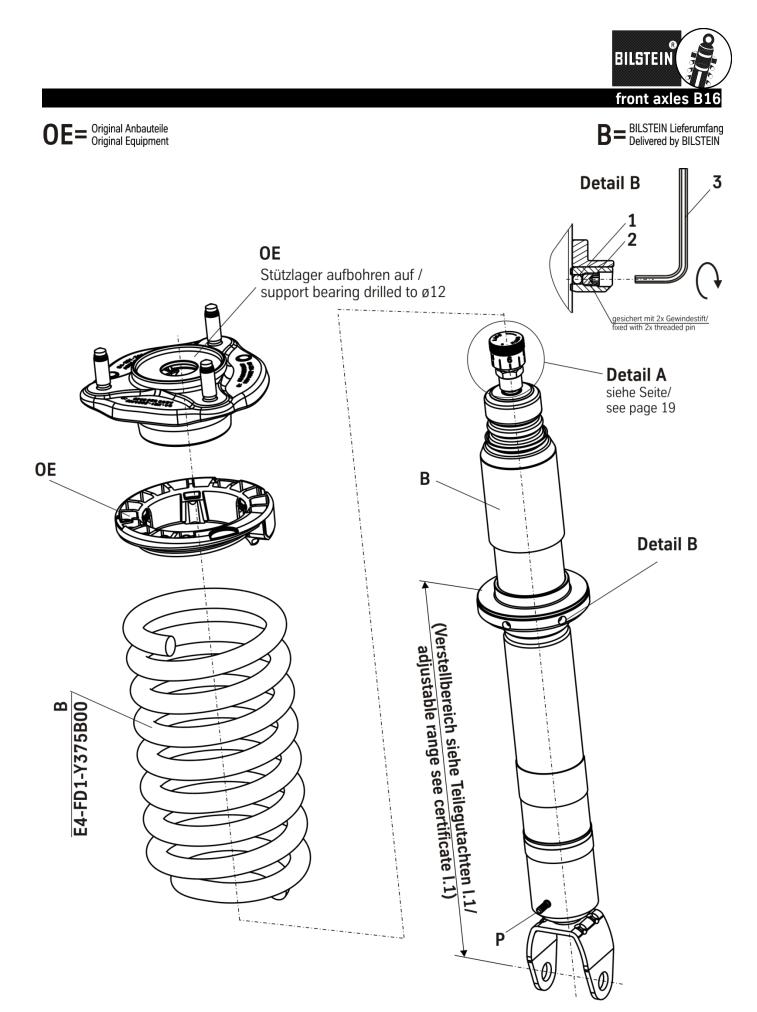
Assemble BILSTEIN and/ or original mounting parts, as well as the new BILSTEIN spring on the BILSTEIN strut in reverse order to removal.

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

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

The cable harness above the adjustment must be protected against damages by using appropriate aids.





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mounting instruction for rear axle B14/B16

## Removal

Ausbau

Fahrzeug auf eine radfreie Hebebühne stellen, anheben und Räder demontieren.



Beim Ausbau ist unbedingt darauf zu achten, dass die Zuleitungen der Bremsanlage immer spannungsfrei sind. Eine Abstützung ist mit geeignetem Hilfswerkzeug stets vorzusehen!

Untere Befestigung und obere Befestigung am Stützlager entfernen.

Anschließend den Original- Stoßdämpfer ausbauen.

## Einbau

Original-/ BILSTEIN Anbauteile in umgekehrter Reihenfolge, analog zum Ausbau, montieren.

BILSTEIN- Stoßdämpfer in umgekehrter Reihenfolge, analog zum Ausbau, montieren.



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

Pay attention that support wires of brake system are strain-free during removal. Stabilization by suitable means is demanded.

Remove top fixing mount and bottom fixing mount from support bearing.

Remove original shock absorber.

### Installation

Assemble BILSTEIN and/ or original mounting parts on BILSTEIN shock absorber in reverse order to removal.

Fit BILSTEIN shock absorber to the vehicle in reverse order to removal.



