

Before installation please observe the following points:

Read all information in this manual carefully. All suspension components are fitted and removed according to the manufacturer's specifications for fitting and removing, if not otherwise required in these instructions.

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.

Disconnect the negative battery cable.

The test vehicles are left-hand drive cars.

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 (brackets for example) 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 cable.

After installing the suspension system, caster and camber must be checked and adjusted according to manufacturer's specifications.

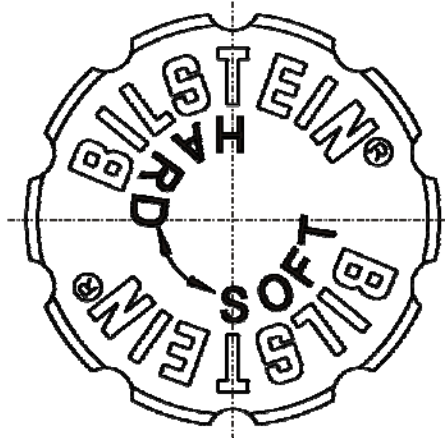
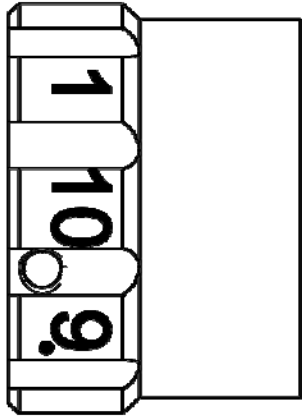
Check and reset load-dependent brake compensator and ABS system according to manufacturer's specifications.

Check and adjust headlight aim.

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

Instruction for force adjustment

position **1** = **comfort**
 position **10** = **sport**



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

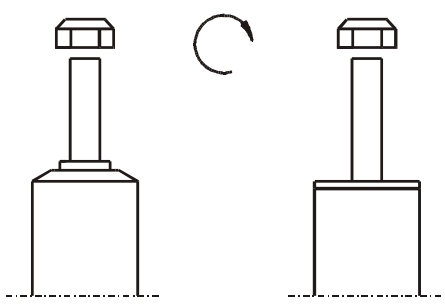
Instruction for the front axle

The adjusting element of the front struts is located at the bottom edge of the strut.

Adjusting position must be aligned with the red mark on outer tube.

The strut is delivered in position **1**.

-						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!

Strut Removal

Place vehicle on a chassis hoist, lift it and remove wheels.

For vehicles equipped with xenon headlights, the sensor for the headlamp levelling controller must be removed first.



The lower control arm must be supported by suitable means!

Remove bottom mount.

Remove top nuts from support bearing.

Do not remove center nut at this time!

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

Using a suitable spring compressor, compress suspension spring until tension on support bearing is released.

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

NOTE:

Remove original swaybar link and replace with swaybar link assembly provided by BILSTEIN (see figure on page 5).

Strut Installation

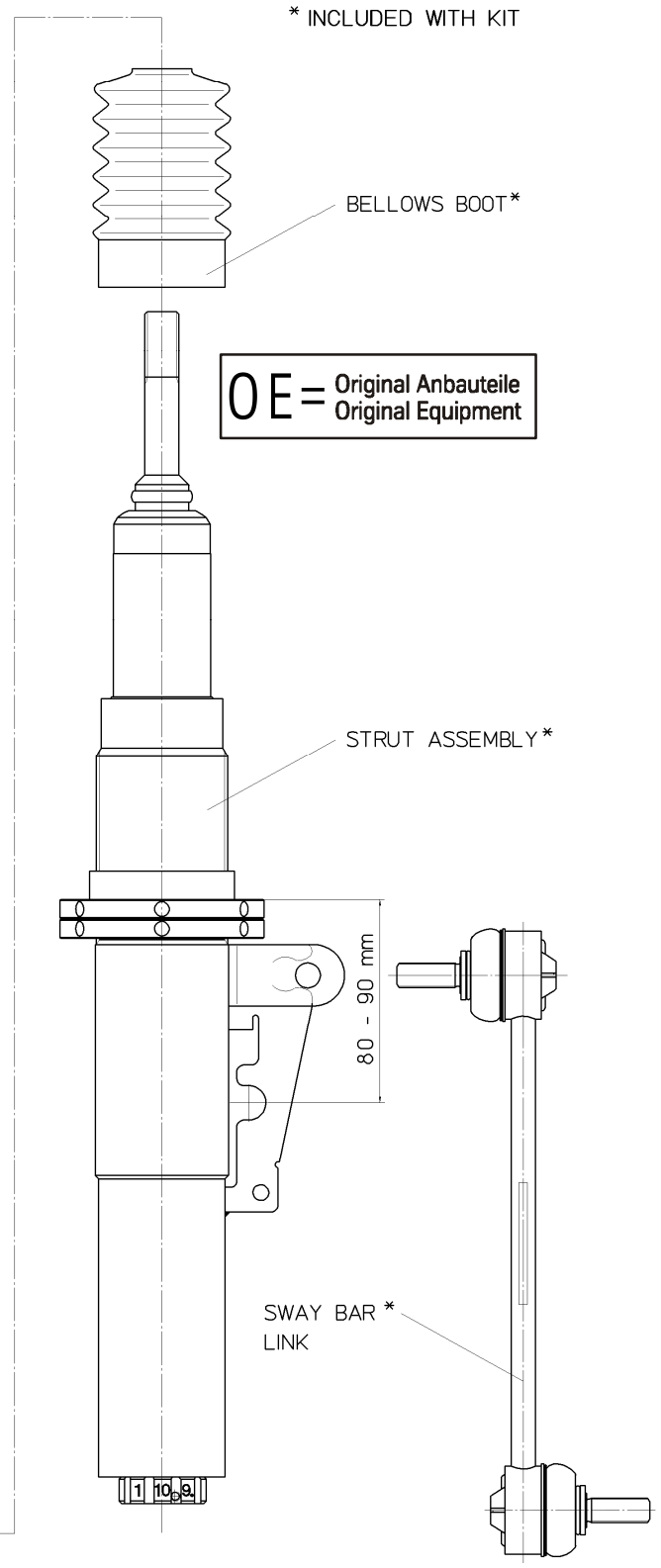
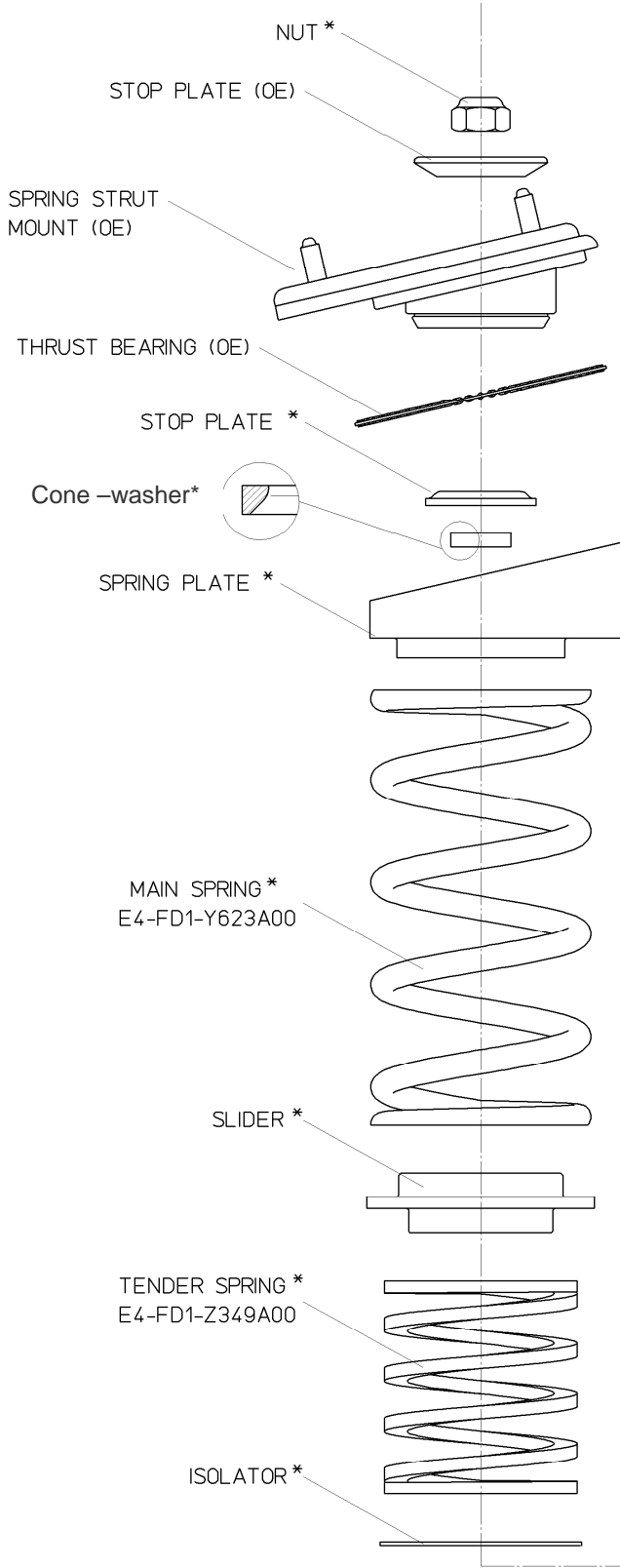
Assemble BILSTEIN and/or original mounting parts, as well as the new BILSTEIN springs on the BILSTEIN strut in reverse sequence of removal.



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

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 sequence of removal.



Shock Absorber Removal

Place vehicle on a chassis hoist, lift it and remove wheels.



The lower control arm must be supported by suitable means!

Remove bottom mount.

Remove top nuts from support bearing. Do not remove center nut at this time!

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

Compress suspension spring until tension on support bearing is released.

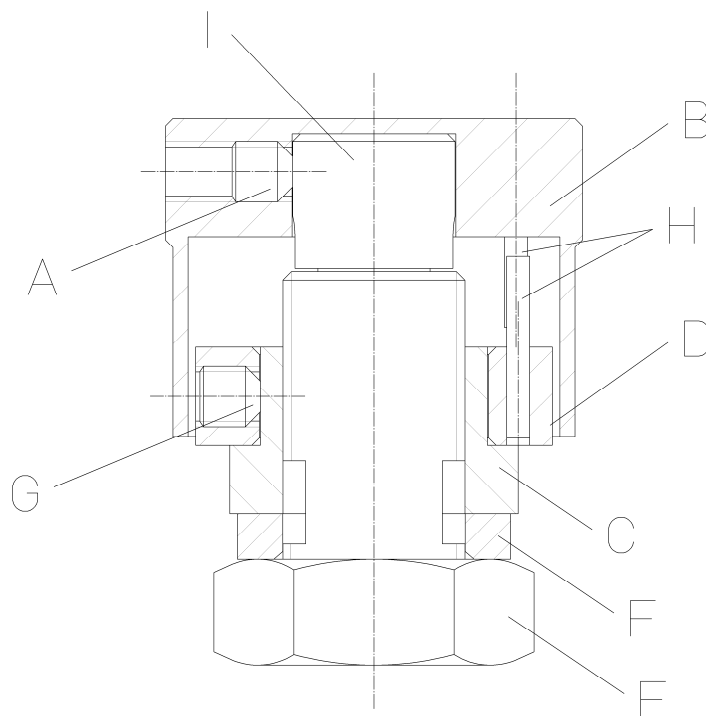
Release center nut and remove original mounting parts and coil spring. Please refer to diagram to identify which parts will be replaced with BILSTEIN- supplied components.

Original rubber spring pad at rear axle must be replaced by Bilstein part.

PSS10 10 Step - Adjustment

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

- A-** Gewindeschraube
Set screw
- B-** Verstellkopf
Adjusting head
- C-** Kontermutter M12x 1
lock nut M12x 1
- D-** Anschlagscheibe
End stop disc
- E-** Mutter M12x1
Nut M12x1
- F-** sleeve
- G** Set screw
- H** End stop pin
- I** screw



position **1** = **comfort**
position **10** = **sport**

Instruction for the rear axle

The shock is delivered in position **10**.

Adjustment Unit Removal PSS10 (page 7)

Loosen setscrew (A), then remove adjusting head (B).

Remove the locknut (C) together with end stop disc (D).

Remove sleeve (F) and nut (E).

Remove all original mounting parts and fit Bilstein and/or original mounting parts in reverse sequence of removal (see figure on page 9).

Adjustment Unit Installation PSS10

Tighten nut (E)

Fit sleeve (F), nut (C), together with end stop disc (D) and counter lock nut (C).

To set the initial position of the adjusting head (B) relative to the adjusting mechanism, loosen the set screw (G) and turn the end stop disc (D) to a self assigned position where the set screw lines up with a body point and can be seen. Tighten the set screw. Pins (H) are end stops.

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

Fix the adjusting head (B) with setscrew (A).

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

Shock Absorber Installation

Assemble BILSTEIN and / or original mounting parts, as well as the new BILSTEIN springs on the BILSTEIN shock in reverse sequence of removal.

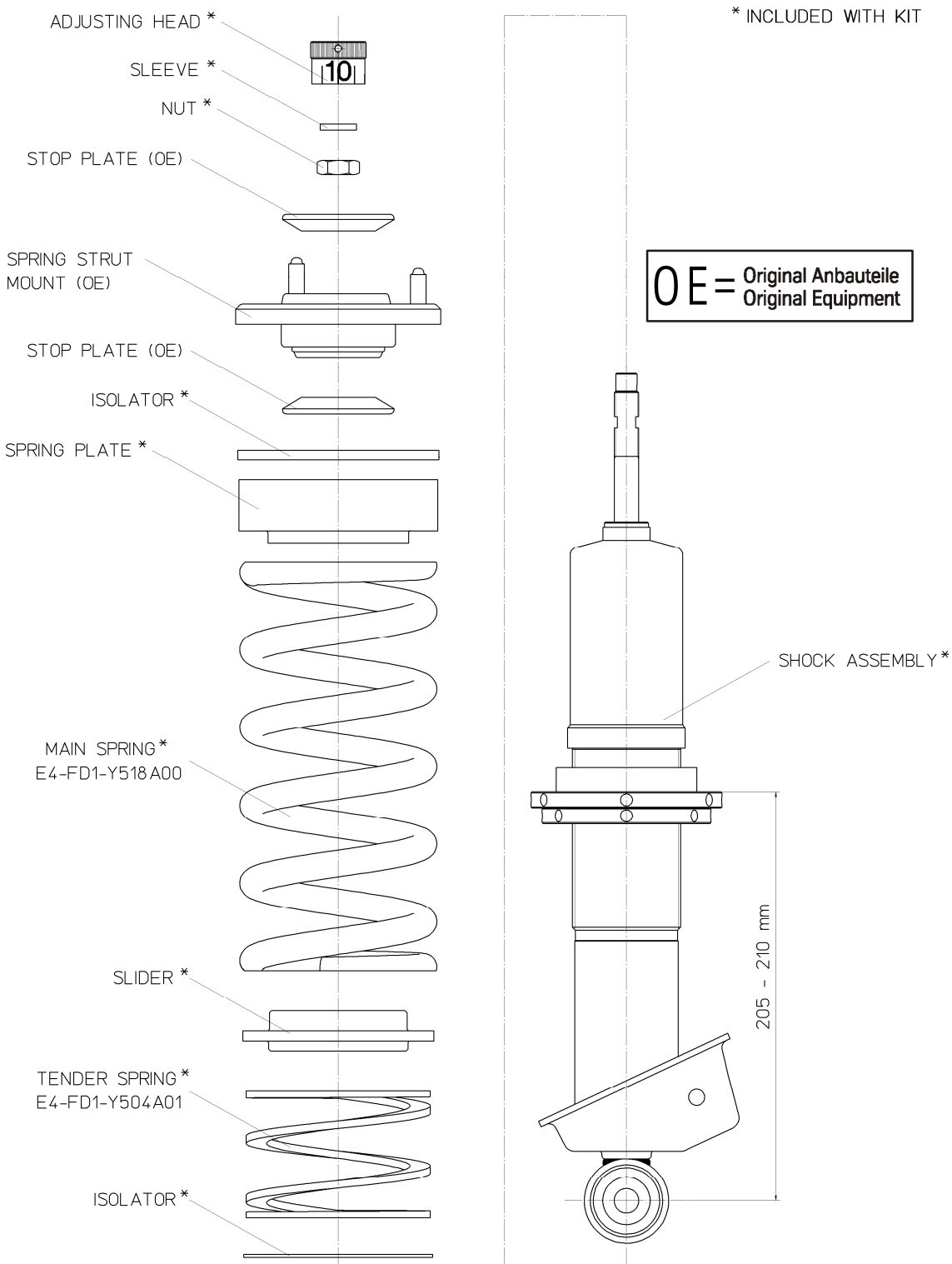


IMPORTANT! Spring plates must not be adjusted outside the ranges specified below!

Fit assembled shock absorber to the vehicle in reverse sequence of removal.

Rear

The adjustment range of the spring plates is only approved within the range of the values given in the table below. Adjustments must be set so that the body is level when the vehicle is empty apart from the driver. The lowest approved adjustment and the permissible adjustment range are to be entered, stating the fixed axle reference points. (Example, see below).



Parts identification

The adjustment range of the spring plates is only approved within the range of the values given in the table below. Adjustments must be set so that the body is level when the vehicle is empty apart from the driver. The lowest approved adjustment and the permissible adjustment range are to be entered, stating the fixed axle reference points. (Example, see below).

Manufacturer	PORSCHE
ABE-/ EG- BE- No.	e13*98/14*0031*
type designation	996 C4 (4WD)
model	996

FRONT	according to permissible axle load and adjusting dimensions	
spring part number	Hauptfeder/main spring E4-FD1-Y623A00	Helferfeder/helper spring E4-FD1-Z349A00
shock absorber part number	Mit Kraftverstellung/with damping force adjustment VM3-E714	
permissible adjustment range	maximum permissible axle load 825 kg (1815 lb) 80 – 90 mm* = 10 mm range	
* measurement: Oberkante Federtelle- Mitte Bolzen/top edge of spring seat down to the center of mounting screw		

REAR	according to permissible axle load and adjusting dimensions	
spring part number	Hauptfeder/main spring E4-FD1-Y518A00	Helferfeder/helper spring E4-FD1-Y504A01
shock absorber part number	Mit Kraftverstellung/with damping force adjustment BM5-D540	
permissible adjustment range	maximum permissible axle load 1250 kg (2750 lb) 205 - 210 mm* = 5 mm range	
* measurement: Oberkante Federtelle- Mitte Bolzen/top edge of spring seat down to the center of mounting screw		

- There are no technical objections against the use of all O.E. wheel/tire combinations.
- The ground clearance in unloaded state is reduced by the installation of special springs. It is the approximate equivalent of that of a partially laden stock vehicle. When the vehicle is loaded to the permissible axle loads the ground clearance does not change as compared to the stock vehicle. If spoilers, rear aprons and special exhaust systems are mounted, however, the reduced angle of slope must be noted (travelling on ramps etc.).