



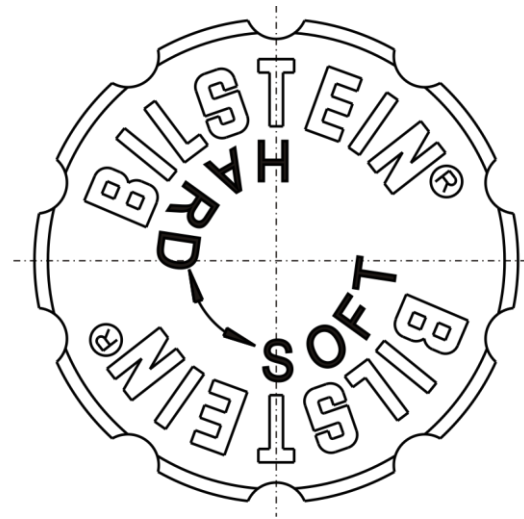
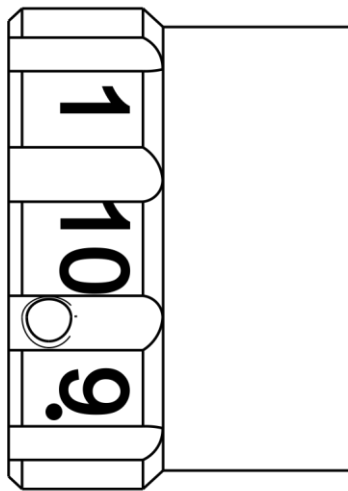
**Before installation please observe
the following points:**

- 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!



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

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

Status of delivery is position 1.

Instruction for the front axle

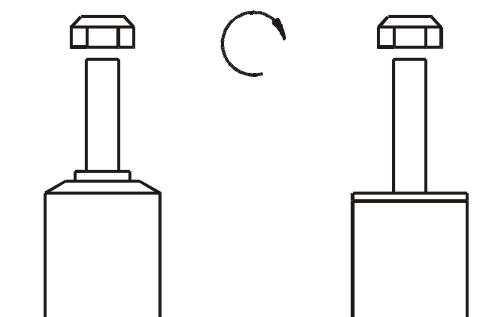
The adjusting element of the front struts is located at the bottom edge of the strut.

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

Take care that the adjustment position is the same on both sides of vehicle (left/ right)

list of torques

	M8	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!



mounting instruction for front B16 axle left/ right

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 remove before.

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

Remove bottom mount.

If necessary release brake hose/ brake hose holder/ stabilizer/ ABS- hose and/ or swing-support at strut.

Remove top mount from support bearing.

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

Using a suitable, licensed 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

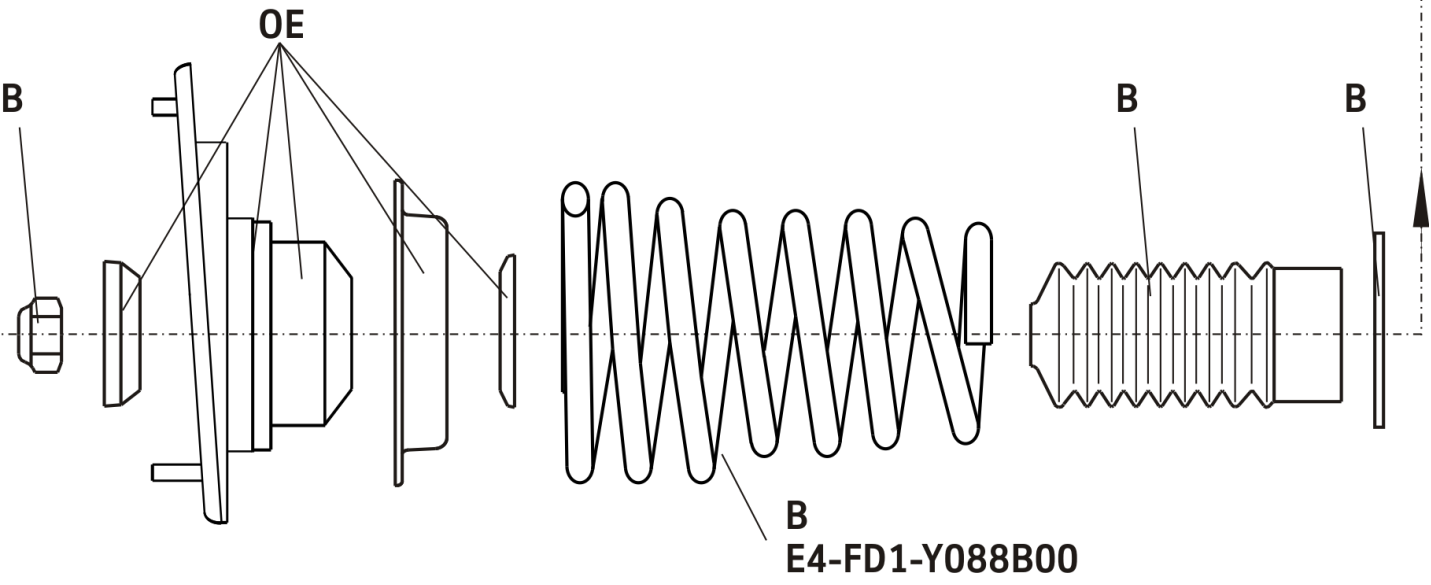
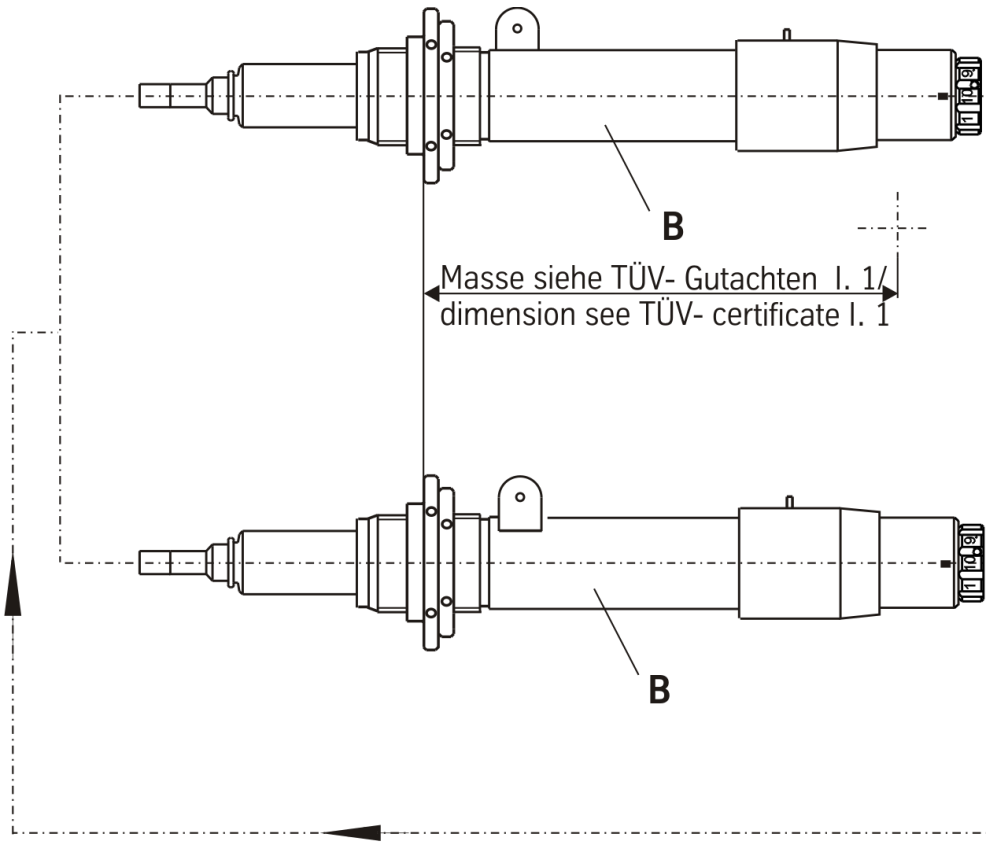
Do not reuse original- bumper, since BILSTEIN- strut has built in bump stop.

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.





mounting instruction for front DampTronic axle left/ right

Removal

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 bottom mounting.

If necessary release brake hose/ brake hose holder/ stabilizer/ ABS- hose and/ or swing-support at strut.

Detach cable connection from dome inside engine compartment. Remove plastic cover and remove cable connection from strut.

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 support bearing is free to move.

Fit original/ BILSTEIN mounting parts on strut in reverse order as removal. Please refer to diagram to identify which parts will be replaced with BILSTEIN- supplied components.

The original spring pad must be reused!

Installing

Assemble BILSTEIN and/ or original mounting parts to the BILSTEIN strut in reverse order as removal.

Before releasing the spring, care is to be taken to ensure that the spring rests in the cut outs of top and bottom spring plate!

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

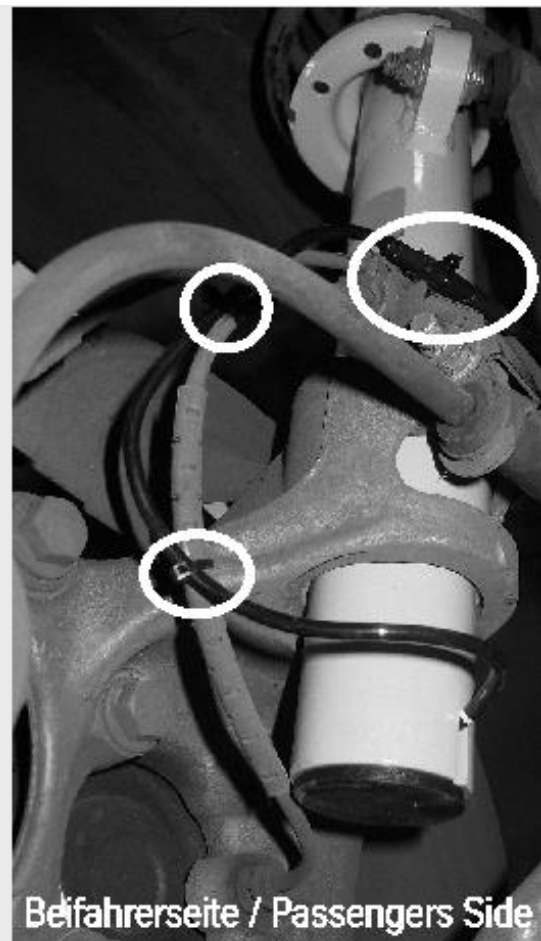
Installation of the cable harness for front axle

Guide the cable from bottom edge of strut along ABS-sensor cable until range of plug housing box (pic.3). Continue guiding between body post and inner fender into the engine compartment. e.g. the plug can be attached to the uprated coating of the sensor cable.

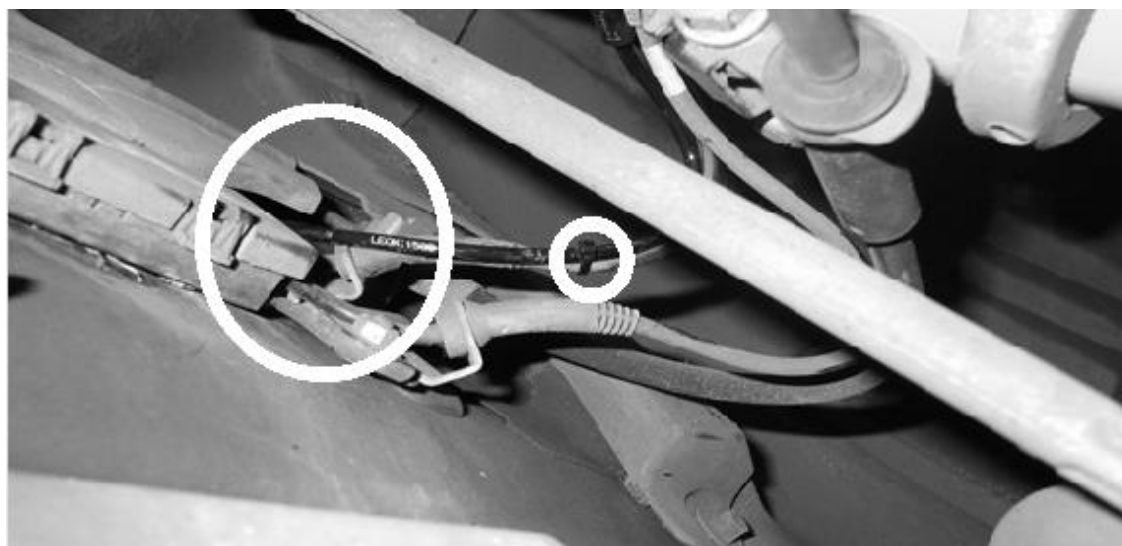
1



2



3



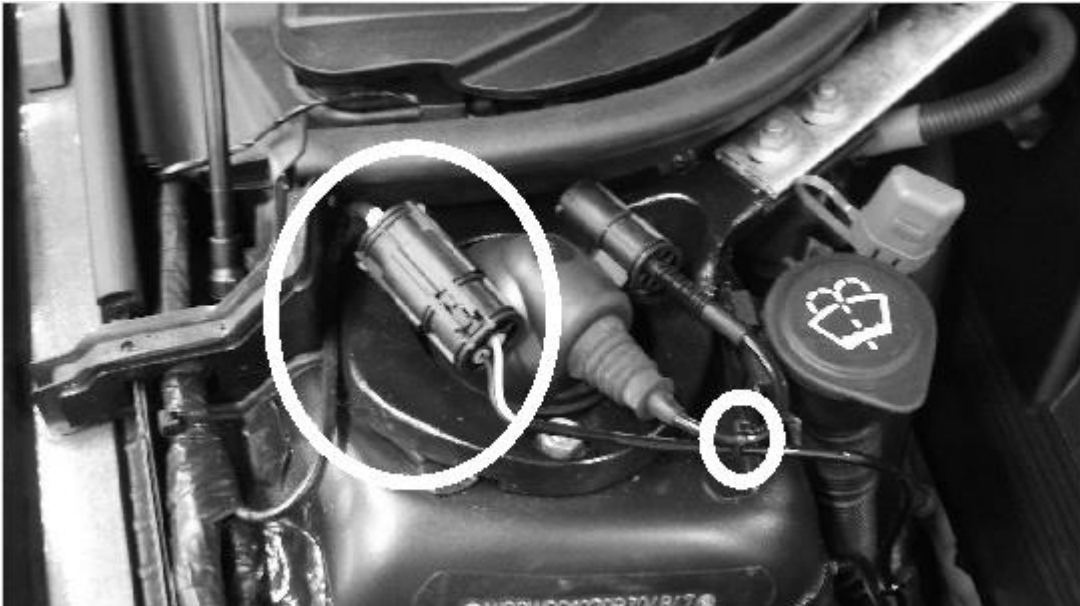
Guide the cable parallel to the filler neck of wipe-and-wash system at passenger's side and attach it with cable strips delivered by BILSTEIN on the threaded pin beneath the ground connection.

4



Replace the plastic cover of the strut on the dome. Attach the new plug housing of the adapter cable to the free slot on opposite side. The original plug housing remains in its original place.

5



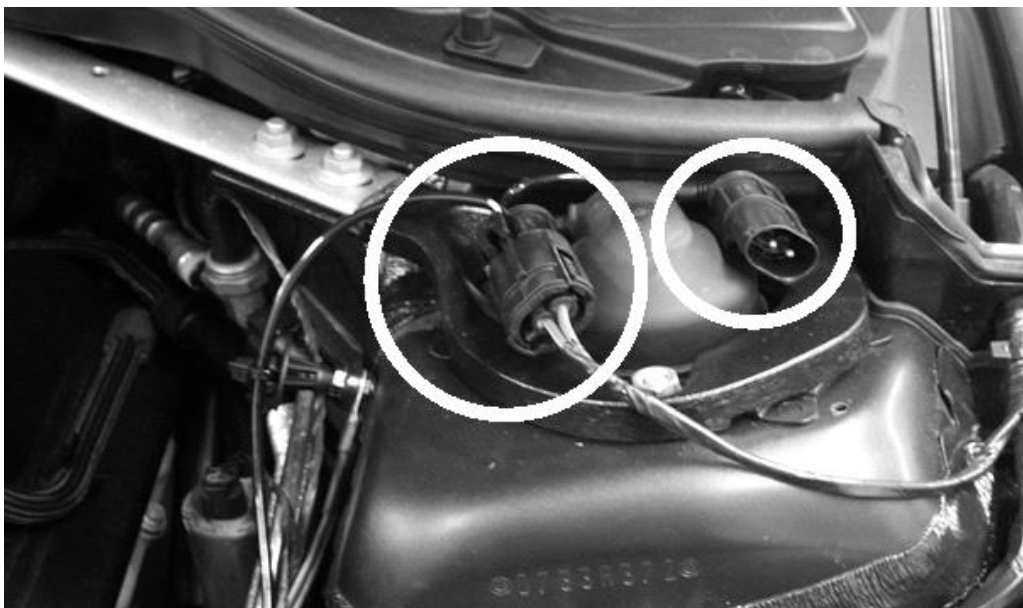
Secure the cable on driver's side to the cable holder of an original cable harness and guide it parallel to the air condition wire. Finally secure it by using a cable strip to the threaded pin of ground terminal. Before the installation of the front cable harness it might be helpful to remove the air- cleaner box.

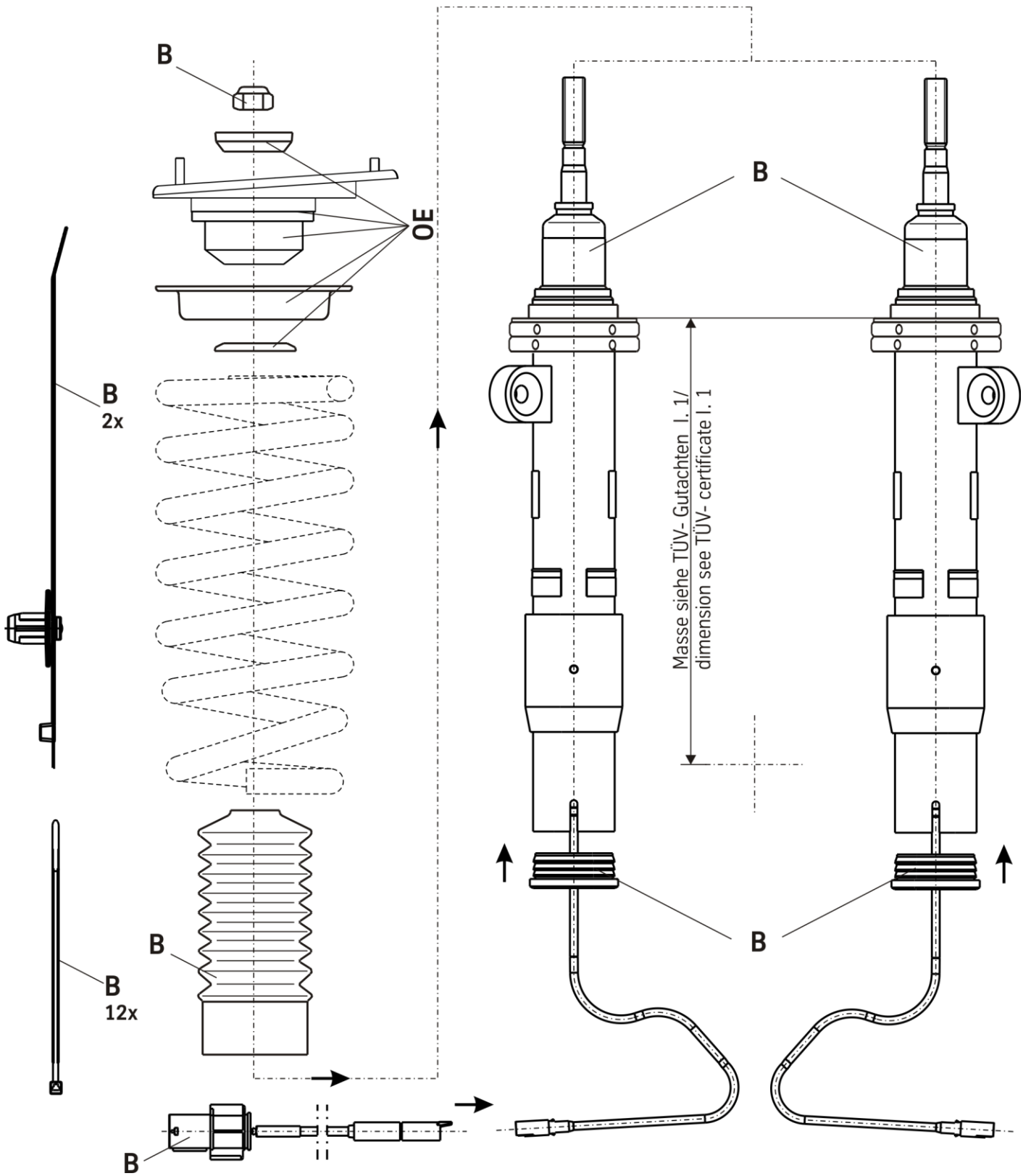
6



Connect the plug housing of the new adapter cable to the original plug and to the free slot at opposite side. Mounting to the original free slot is not possible because the cable harness will be kinked too much. So both slots at the driver's side must be interchanged while installing the system.

7





Removal shock absorber

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 bottom mount.

Remove top fixing nuts from support bearing.

Do not remove centre nut at this time!

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

Compress suspension spring until tension on support bearing is free to move.

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

B16- 10 step- pin adjustment

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

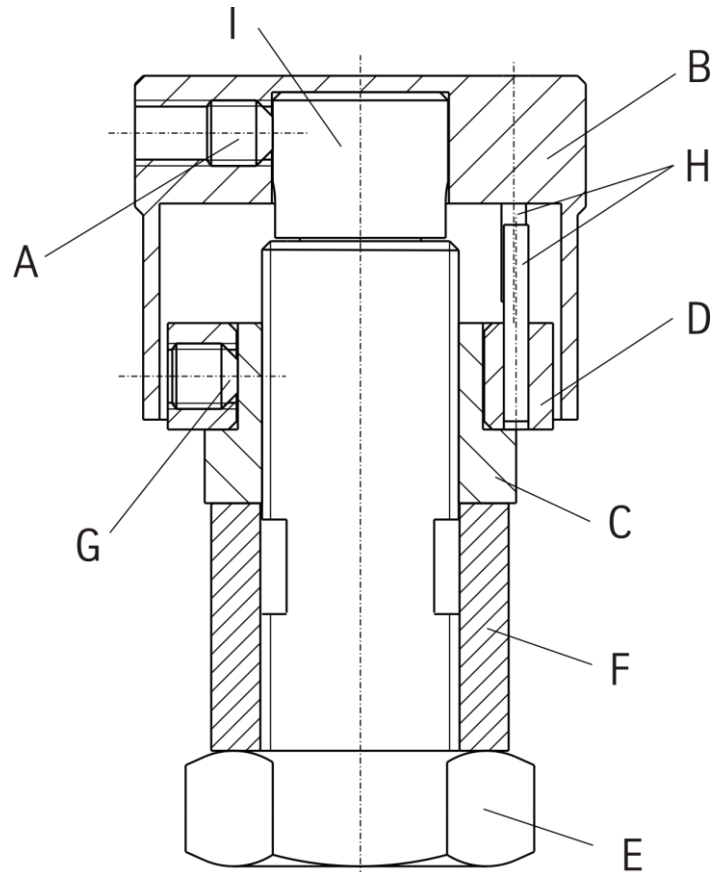
Removal Adjustment Unit B16

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

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

Now remove all original mounting parts and fit Bilstein and/ or original mounting parts in reverse order to removal (see fig. on page 19)

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



position **1** = **comfort** (CCW direction)
 position **10** = **sport** (CW direction)

Instruction for the rear axle
 Status of delivery is position **10**.



Installing Adjustment Unit B16

Tighten (E) to block and fit lock nut (C) together with end stop disc (D).

Getting an optimal fitting position for the adjustment unit you can also loose the set screw (G) and turn the end stop disc (D) in a position to a saliently mark at the chassis you have selected before. Fix the set screw again. Pins (H) are end stops.

Place the adjusting head (B) 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.

Installing shock absorber

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

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

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

Removal

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 and bottom mounting from support bearing.

Remove original shock absorber.

Installation

Fit BILSTEIN mounting parts on BILSTEIN shock absorber according to the sketch *below*.

ATTENTION: **Do not** reuse the original plastic- dustcover cap!

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

Installation of the cable harness for rear axle

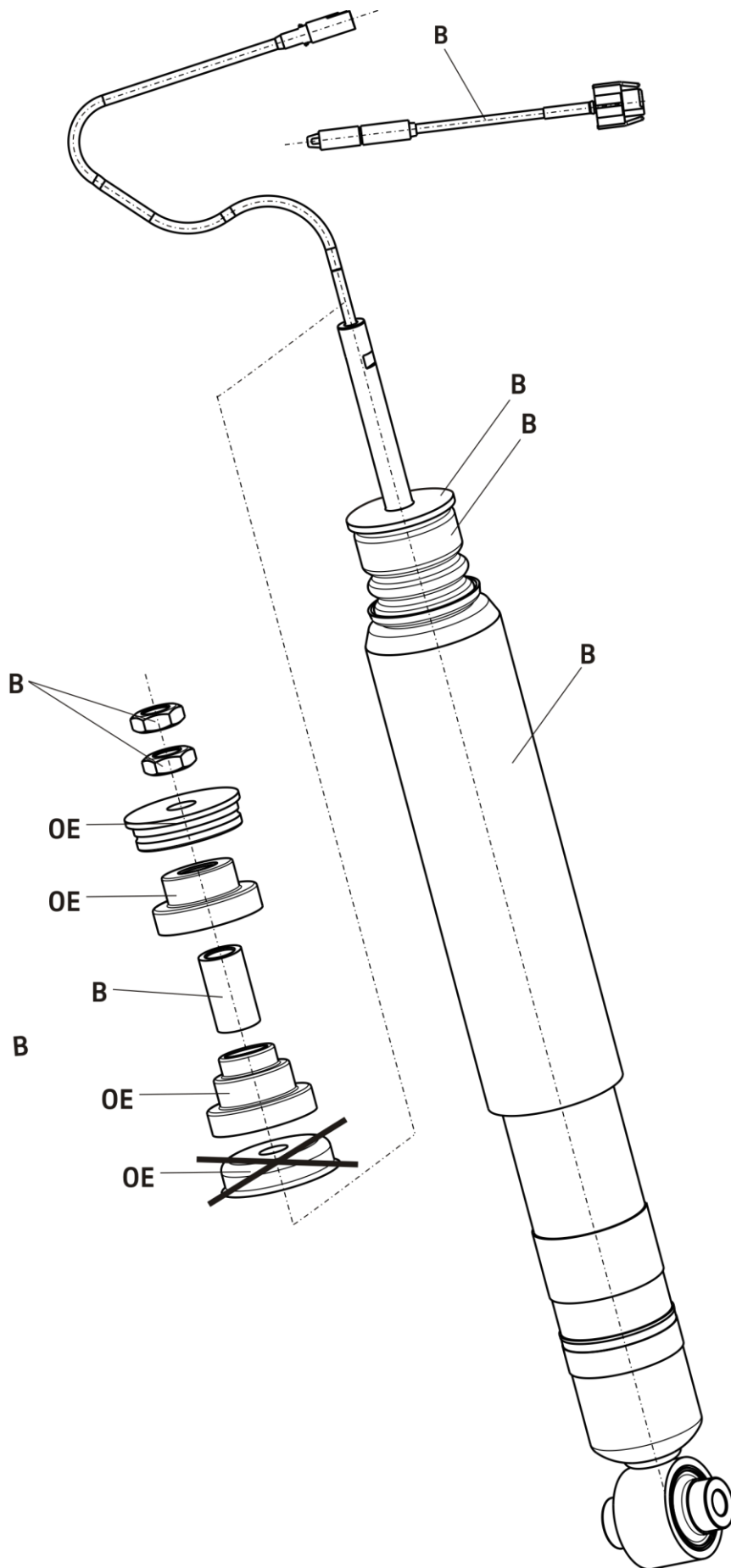
Remove original cable inside the plastic cover of the dome.

Expand the cross-section of the hole, pass the cable from BILSTEIN shock absorber through and attach the new cable together with the delivered adapter cable to the vehicle's cable harness.

Attach the adapter cable on drivers side as well as on passenger's side near the shock absorber's plug housing by using cable clips (delivered by BILSTEIN).



B= BILSTEIN Lieferumfang
Delivered by BILSTEIN



mounting instruction for rear axle height adjustment

B= BILSTEIN Lieferumfang
Delivered by BILSTEIN

