

E4-WM5-Y180A00 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 fitting and removing, if not otherwise required in these instructions.
- 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.
- The test vehicles are left- hand drive cars.

After installation please observe the following points:

- 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.
- 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 tight-ened BEFORE load is placed on the suspension system.

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

E4-WM5-Y180A00 MOUNTING INSTRUCTION



1. BILSTEIN shock absorber with original spring
2. BILSTEIN shock absorber with BILSTEIN spring
3. Original shock absorber with BILSTEIN spring

Removal

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

Disconnect the negative battery pole.



The lower control arm must be supported by suitable means!

Remove bottom mount.

If necessary release brake hose/ brake hose holder/
stabilizer/ ABS- hose and/ or swing- support at strut.
At support suspension arm, screw on top,
inside must be released a little.

Remove top fixing 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 compress and 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.

ATTENTION: Some models are equipped with
plastic- dustcover cap also. This cap **do not** reuse!

Install

Fit original/ BILSTEIN mounting parts on BILSTEIN-
strut in reverse sequence to removal, except for dust
cover and bump stop, since BILSTEIN- strut has built
in bump stop. If there is no dust cover delivered by
BILSTEIN, the original one is to be reused.



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

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.

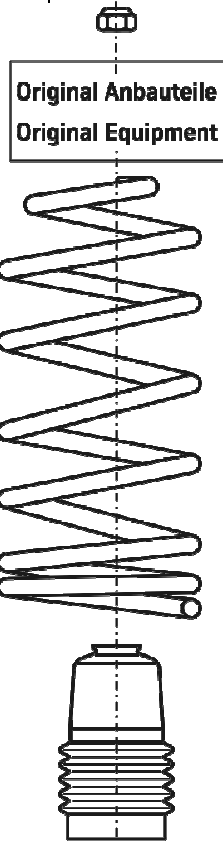
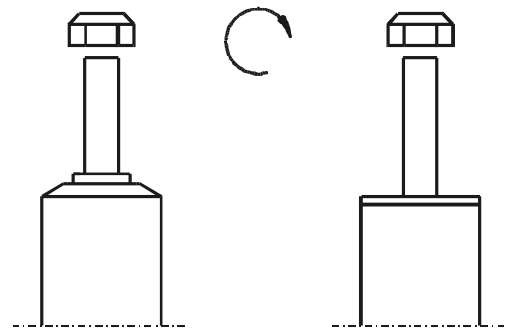
Connect the negative battery pole again.



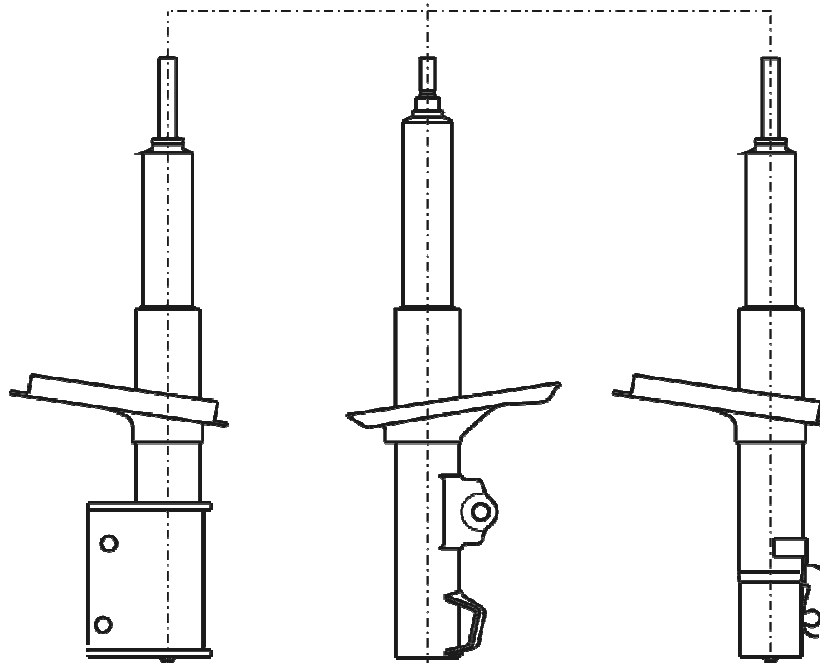
MOUNTING INSTRUCTION

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!

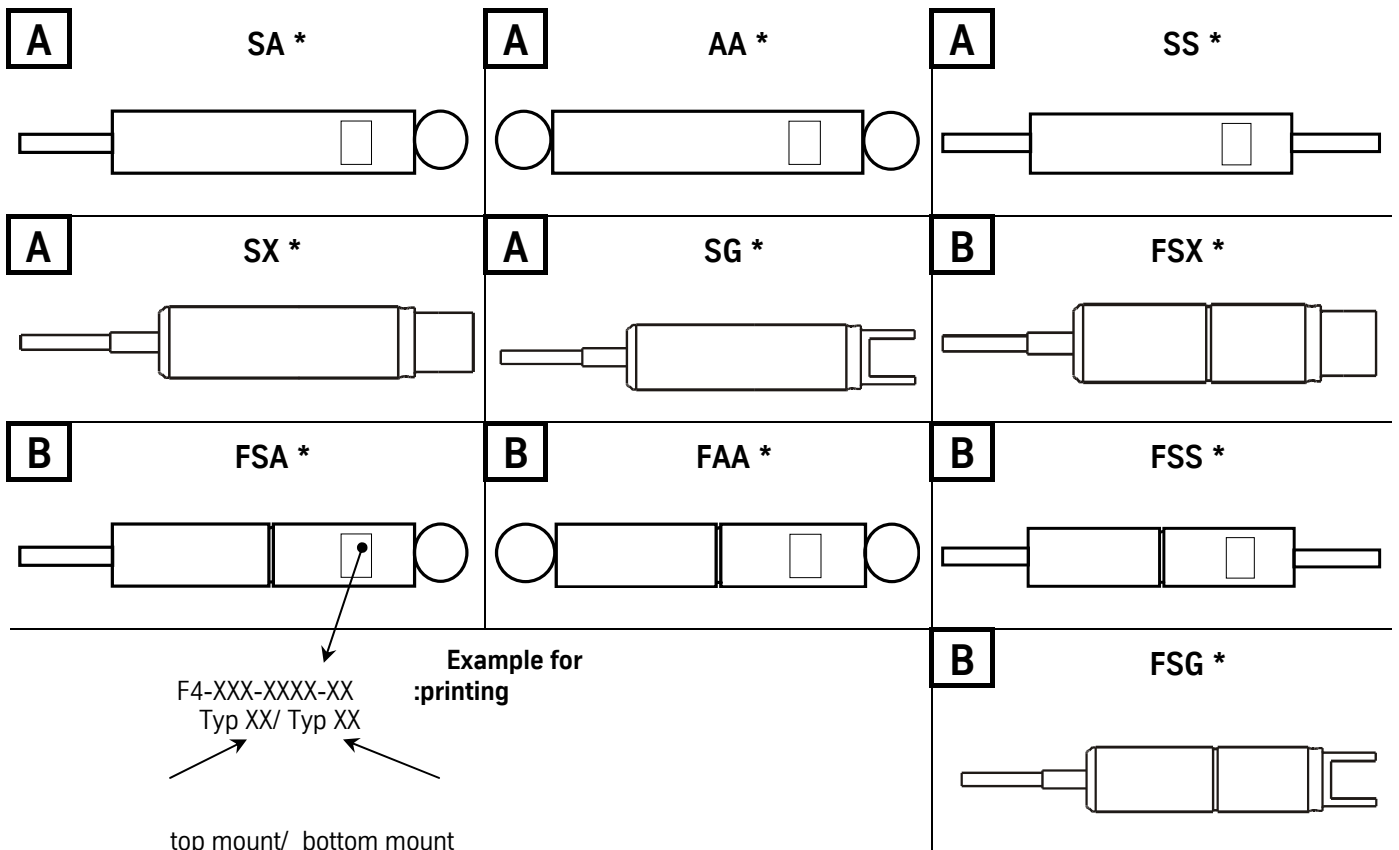




ALL DRAWINGS ARE GENERALIZED!
BRACKETS, ETC. SPECIFIC TO
STRUT ARE NOT SHOWN!

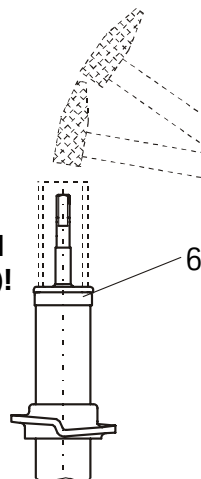
TYPES OF SHOCK ABSORBER

• see application guide side 1

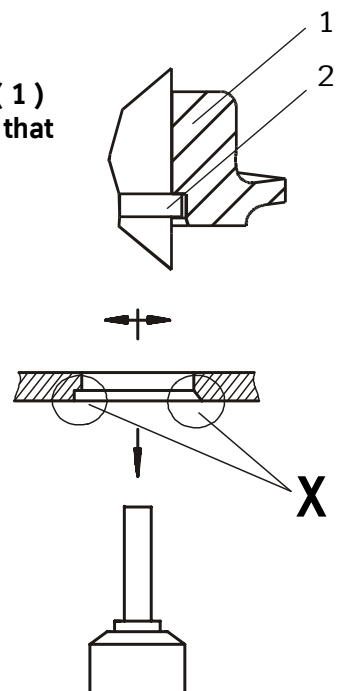


If no dust cover is delivered by BILSTEIN, original dust cover must be reused or replaced.

Do not damage the piston rod when knocking a top cap (6)!



When fitting the spring plate (1) care must be taken to ensure that the circlip ring (2) is seated correctly!



X = Fitting of plates with chamfer (if exist)



A SPRING CARRIED SHOCK ABSORBER

(FSA *, FAA *, FSS *, FSX *)

1. BILSTEIN shock absorber with original spring
2. BILSTEIN shock absorber with BILSTEIN spring
3. Original shock absorber with BILSTEIN spring

Remove

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 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 ten-
sion on support bearing is released.

Release nut and remove original (mounting
parts) just as original spring. Please check,
which original mounting parts will be renewed
with mounting parts supplied by BILSTEIN.

Fitting

Fit BILSTEIN and/ or original mounting parts
just as the new BILSTEIN spring on the strut
in reverse sequence of removal.



Before releasing the spring, care is to be taken to ensure that the ends of the spring rest in the cut outs of the top and bottom spring plates.

The mounting position of the suspension
springs can be read by the imprint- have
them installed just the way you read the imprint.

Fit assembled shock absorber to the vehicle in
reverse sequence of removal. For to guarantee
correct fitting of mounting parts, it is necessary
to compare the Type- No, printed on damper-
label with the charts on the following pages.

All self- locking nuts must be replaced.
Tightening torques see list on page 3.

E4-WM5-Y217A00 MOUNTING INSTRUCTION



B

STANDARD SHOCK-ABSORBER

(SA *, AA *, SS *, SX *)

1. BILSTEIN shock absorber with original spring
2. BILSTEIN shock absorber with BILSTEIN spring
3. Original shock absorber with BILSTEIN spring

Removal

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

Remove bottom mount.



The lower control arm must be supported by suitable means!

Remove top fixing mount.

Remove shock absorber from vehicle.

Remove original mounting parts.

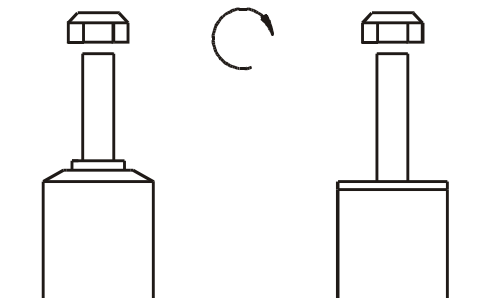
Installing

Fit BILSTEIN and/ or original mounting parts on shock absorber in reverse sequence of removal.


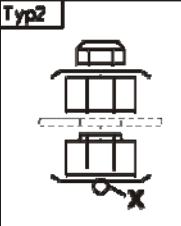
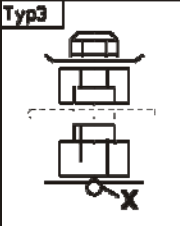

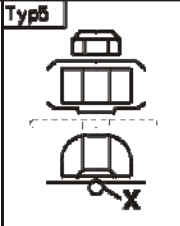
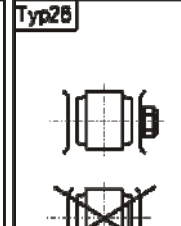
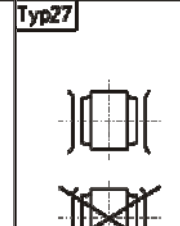
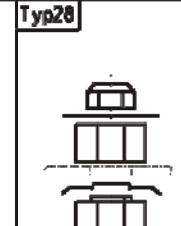
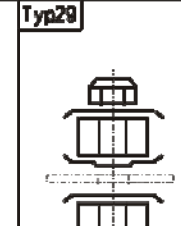
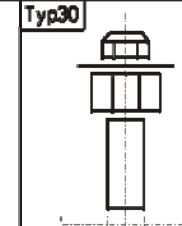
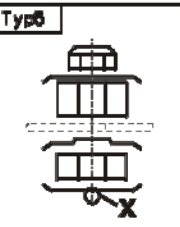
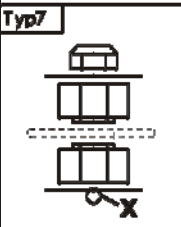
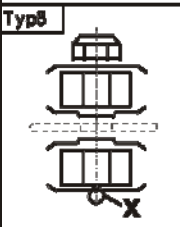
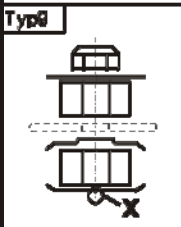
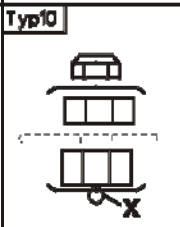
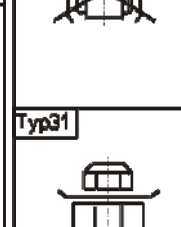
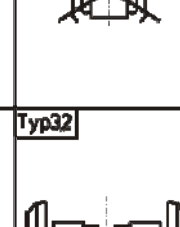
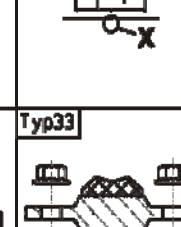
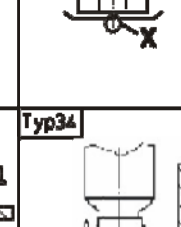
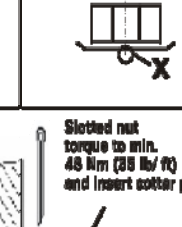
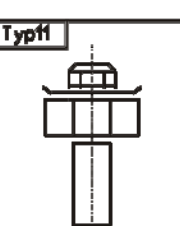
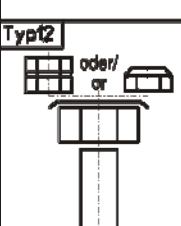
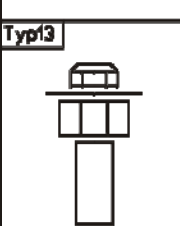
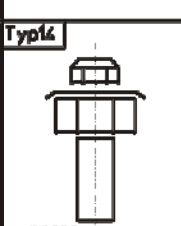
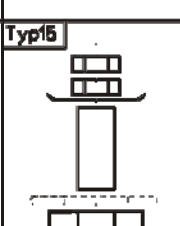
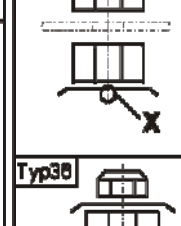
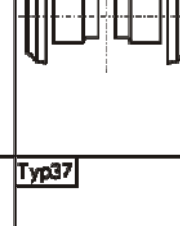
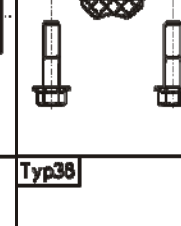
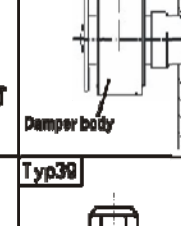
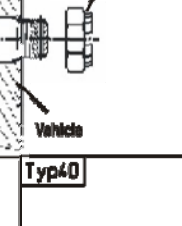
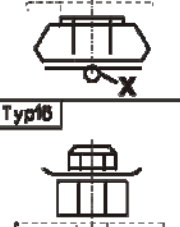
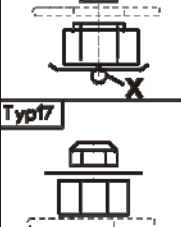
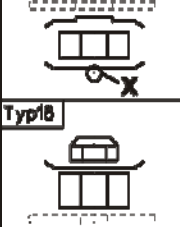
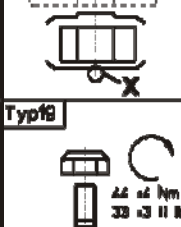
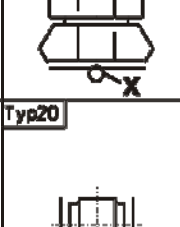
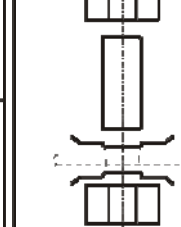
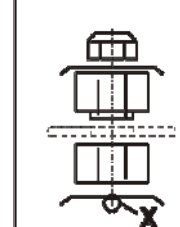
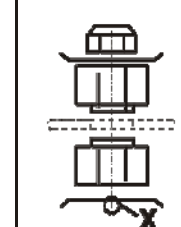
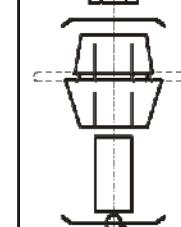
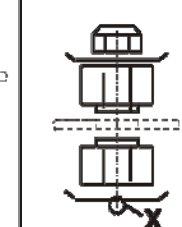
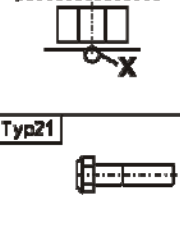
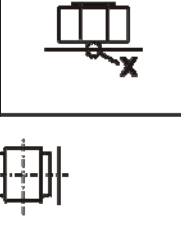
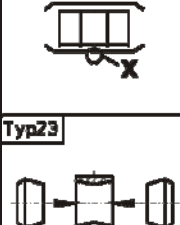
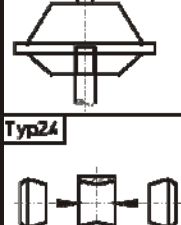
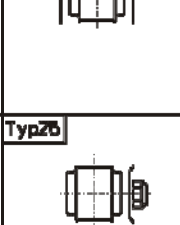
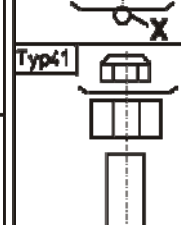
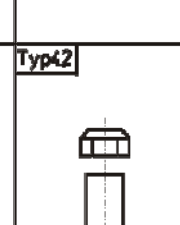
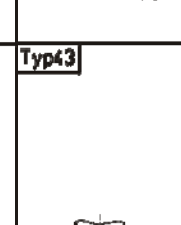
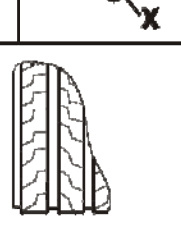
Fit assembled shock absorber to the vehicle in reverse sequence of removal. For to guarantee correct fitting of mounting parts, it is necessary to compare the Type- No, printed on damper- label with the charts on the following pages.

All self- locking nuts must be replaced.
Tightening torques see list below.

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



**E4-WM5-Y217A00
MOUNTING INSTRUCTION**

Typ1 	Typ2 	Typ3 	Typ4 	Typ5 	Typ26 	Typ27 	Typ28 	Typ29 	Typ30 
Typ6 	Typ7 	Typ8 	Typ9 	Typ10 	Typ31 	Typ32 	Typ33 	Typ34  <p>Sloated nut torque to min. 48 Nm (35 lbf ft) and insert cotter pin</p> <p>Damper body Vehicle</p>	Typ30 
Typ11 	Typ12 	Typ13 	Typ14 	Typ15 	Typ36 	Typ37 	Typ38 	Typ39 	Typ40 
Typ16 	Typ17 	Typ18 	Typ19 	Typ20 	Typ36 	Typ37 	Typ38 	Typ39 	Typ40 
Typ21 	Typ22 	Typ23 	Typ24 	Typ25 	Typ41 	Typ42 	Typ43 	Typ44 	Typ44 <p>DC "G" - Typ Bei Fahrzeugen mit Kurzschass entfernen die beiden Schrauben ø 22/5 durch!</p>

