

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

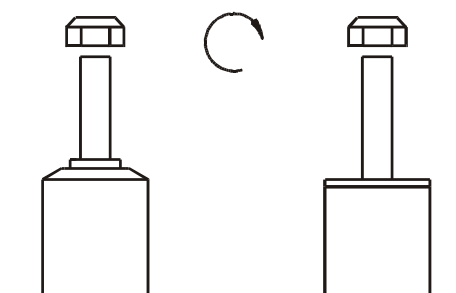
During the adjustment you will hear a positive „click“ at each position of the adjustment.

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

	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!**



**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 TIGHTENED BEFORE LOAD IS PLACED ON THE SUSPENSION SYSTEM.

ALL DIAGRAMS ARE GENERALIZED
AND NOT TO SCALE!
BRACKETS, ETC. SPECIFIC TO
STRUT ARE NOT SHOWN!

Removal

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

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



The lower control arm must be supported by suitable means!

Remove bottom mount.

Remove top fixing nut 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.

Installation

Assemble BILSTEIN and/ or original mounting parts, as well as the new BILSTEIN spring 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.

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

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

IMPORTANT! The adjustment range of the spring plates is only approved within the range of the values given in Point 1. Adjustment must be carried out 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).

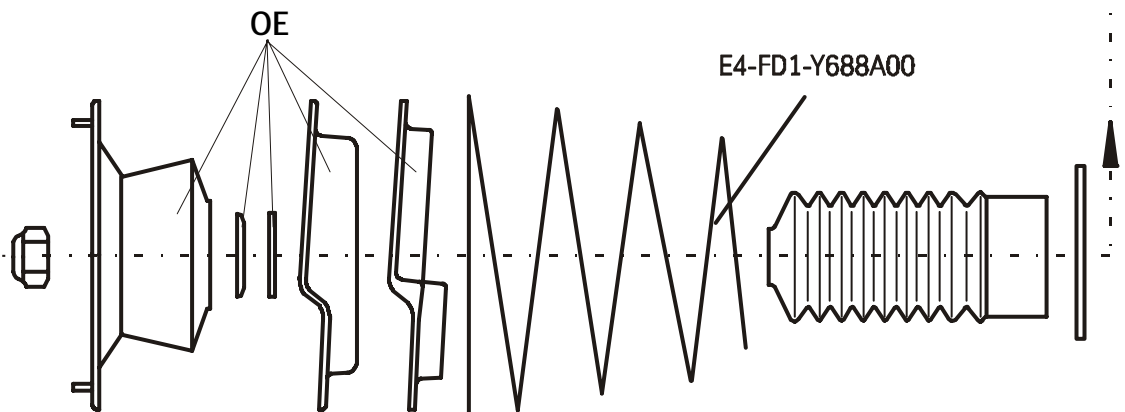
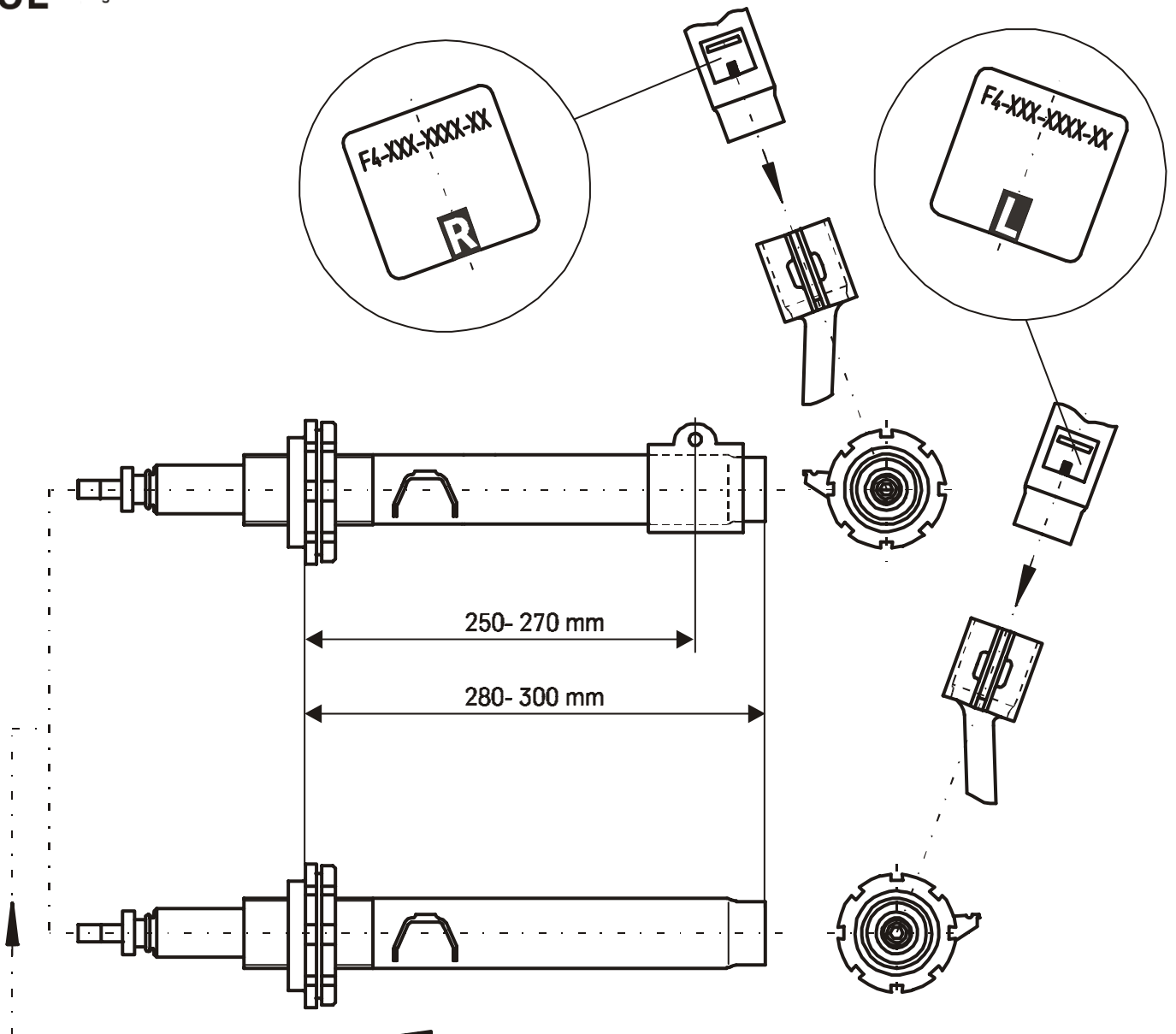
Manufacturer	BMW
ABE-/ EG- BE- No.	e1*2001/116*0219*..
type designation	Z85
model	Z4

FRONT	maximum permissible axle load 790 kg (1738 lb)
spring part number	main spring E4-FD1-Y688A00
shock absorber part number	VM3-A474/ VM3-A475 left/ right with damping force adjustment
permissible adjustment range	250 – 270 mm* = 20 mm range
* measurement: top edge of spring seat down to the center of bottom mounting screw	

REAR	maximum permissible axle load 890 kg (1958 lb)
spring part number	main spring E4-FD1-Y517A00
shock absorber part number	BM5-2957 with damping force adjustment
permissible adjustment range	8 – 25 mm* = 17 mm range
* measurement: top edge of spring seat down to original spring seat in wishbone	

- There are no technical objections against the use of all O.E. wheel-/ tyre combinations.
- There is also no technical reason to object to the use of special wheel/tyre combinations, provided the following conditions are met:
 - Special TÜV assessments or approvals have been obtained for the relevant wheel/tyre combination and the necessary conditions are met.
 - If the series bump travel limitation has to be modified as a result of conditions laid down in these test reports (e.g. change of O.E. bump stops or installation of additional bump travel limiters), the characteristic line of the axle suspension has to be verified and assessed new (assessment acc. to §21 StVZO).
- The ground clearance in unladen state is reduced by the installation of special springs. It is the approximate equivalent of that of a partially laden series vehicle. When the vehicle is loaded to the admissible axle loads the ground clearance does not change as compared to the series vehicle. If spoilers, rear aprons and special exhaust systems are mounted, however, the reduced angle of slope must be noted (travelling on ramps etc.).
- The specified minimum height of the coupling ball above the road surface with the permissible total weight of the vehicle (acc. DIN 74058) is 350 mm.

OE = Original Anbauteile



Removal

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



The lower control arm must be supported by suitable means!

Remove top and bottom fixing mount.

Remove shock absorber and
original mounting parts.

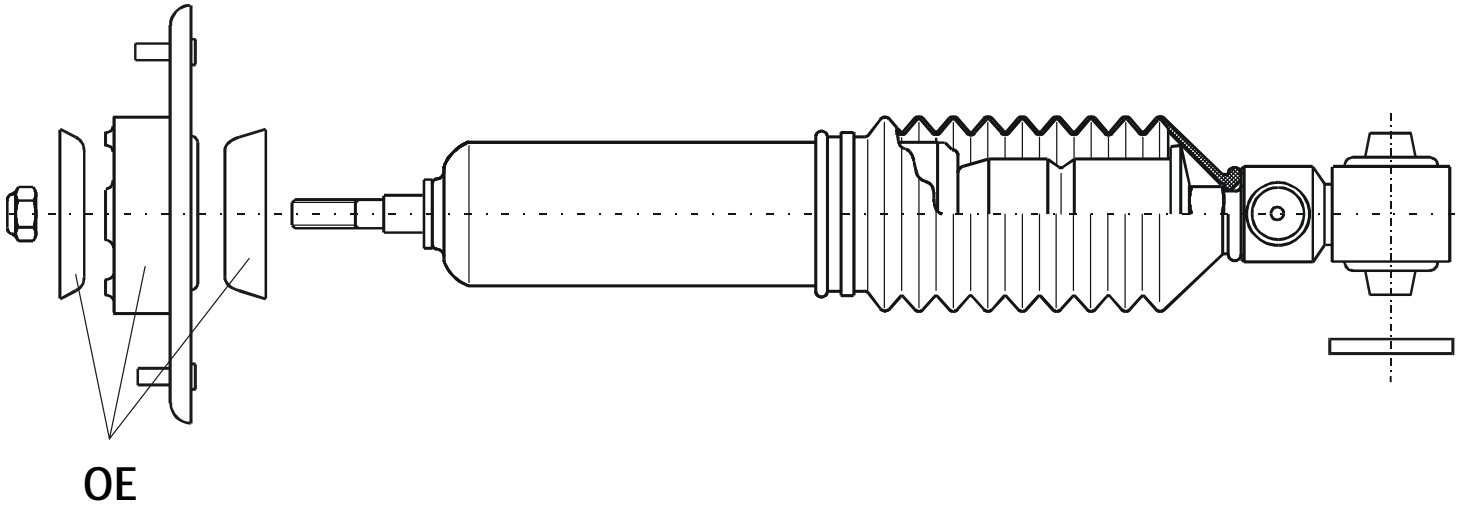
Installation

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

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

To reach lowest adjusting point for spring
seat, locknut must no be used.

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- mounting instuction for rear axle height adjustment

B4-KT3-Z007A00

