

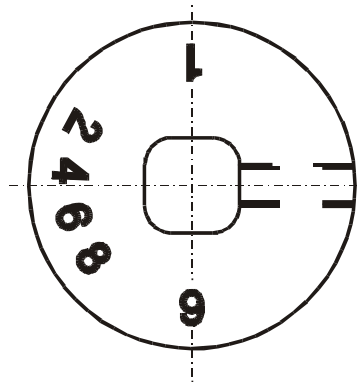


Before installation please observe the following points:

- 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 your vehicle type is listed in the certificate as being released 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.
- Remove the negative battery pole.
- 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:

- Set the vehicle height by adjusting spring plates and lock nuts on the new dampers. Only use the supplied spanner wrenches.
- 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. Connect the negative battery pole.
- All diagrams are generalized and not to scale! brackets, etc. specific to strut are not shown!



position **9** = **comfort** (clockwise direction)
 position **1** = **sport** (counter- clockwise direction)

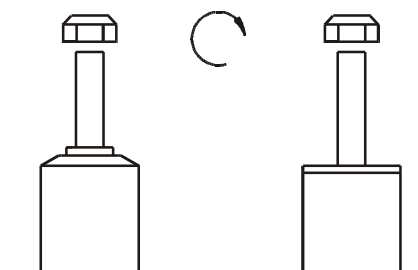
During the adjustment you will hear a positive „click“ at each position of the adjustment.

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

	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!



Removal

Place vehicle on a chassis hoist, lift it and remove wheels. Remove socket plug for ABS- sensor. Vehicles equipped with **xenon headlight** the sensor for the headlamp levelling controller must be removed.



The lower control arm must be supported by suitable tools!

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.

Installing

Assemble BILSTEIN and/ or original mounting parts, as well as the new BILSTEIN spring on the BILSTEIN strut in reverse sequence of removal.
Do not reuse spacer for off- road package.



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.

The adjustment range of the spring plates is only approved within the range of the values given in Point I. 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	Volkswagen, VW	
ABE-/ EG- BE- No.	e1*96/79*0071*..	e1*98/14*0152*..
type designation	e1*98/14*0071*..	9CR
model	e1*2001/116*0071*.. 1J GolfIV 4motion, Golf R32 Bora 4motion	Beetle Allrad

Manufacturer	SEAT	
ABE-/ EG- BE- No.	e9*97/27*0026*..	
type designation	e9*98/14*0026*..	
model	1M Leon 4WD	

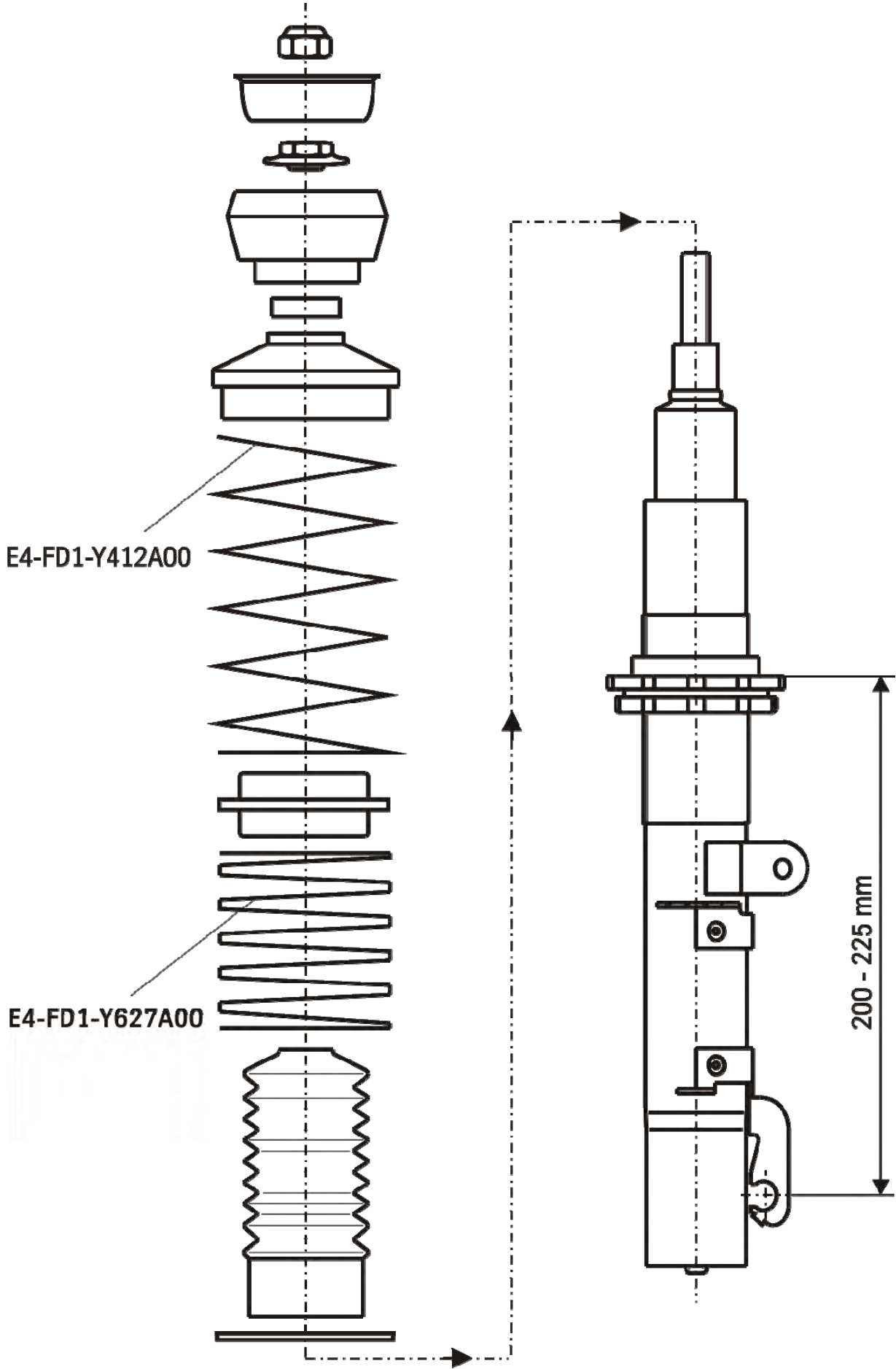
Manufacturer	AUDI	
ABE-/ EG- BE- No.	e1*95/54*0042*..	e1*97/27*0089*..
type designation	e1*98/14*0042*..	e1*98/14*0089*..
model	8L AUDI A3 Quattro, S3	e1*2001/116*0089*.. e1*2001/116*0247*.. 8N TT Quattro

I.

FRONT	maximum permissible axle load 1110 kg (2442 lb)	
spring part number	main spring E4-FD1-Y412A00	helper spring E4-FD1-Y627A00
shock absorber part number	VE3-4694 without damping force adjustment or VM3-4695 with damping force adjustment	
permissible adjustment range	200 – 225 mm* = 25 mm range	
* measurement: top edge of spring seat down to the center of bottom mounting screw		

REAR	maximum permissible axle load 920 kg (2024 lb)	maximum permissible axle load 1080 kg (2376 lb)
	for AUDI TT Quattro	for all other types
spring part number	main spring E4-FD1-Y008B00	
shock absorber part number	BE5-6145 without damping force adjustment or BM5-6146 with damping force adjustment	
permissible adjustment range	15 – 25 mm* = 10 mm range	
* measurement: top edge of spring seat down to original spring seat		

- If vehicle is equipped with a spoiler, lower rear panel and/ or special exhaust system, be aware of reduced slope angle available (be careful of ramps, etc.)
- because of the upsized compression travel at front axle (axle 1) all registered special- wheel/ tire combinations must be checked after modification in reference to the freedom of motion. Critical location: clearance of outer tire sidewall on top of wheel center, drive shaft and stabilizer.
- Until this check is done the vehicle can only be operated with production wheel/ tire combinations.
- ground clearance of tested vehicle: **105 mm**





Removal

Place vehicle on a chassis hoist, lift it, remove wheels and wheel-house liner.



The lower control arm must be supported by suitable tools

Remove top and bottom fixing mount from support bearing.

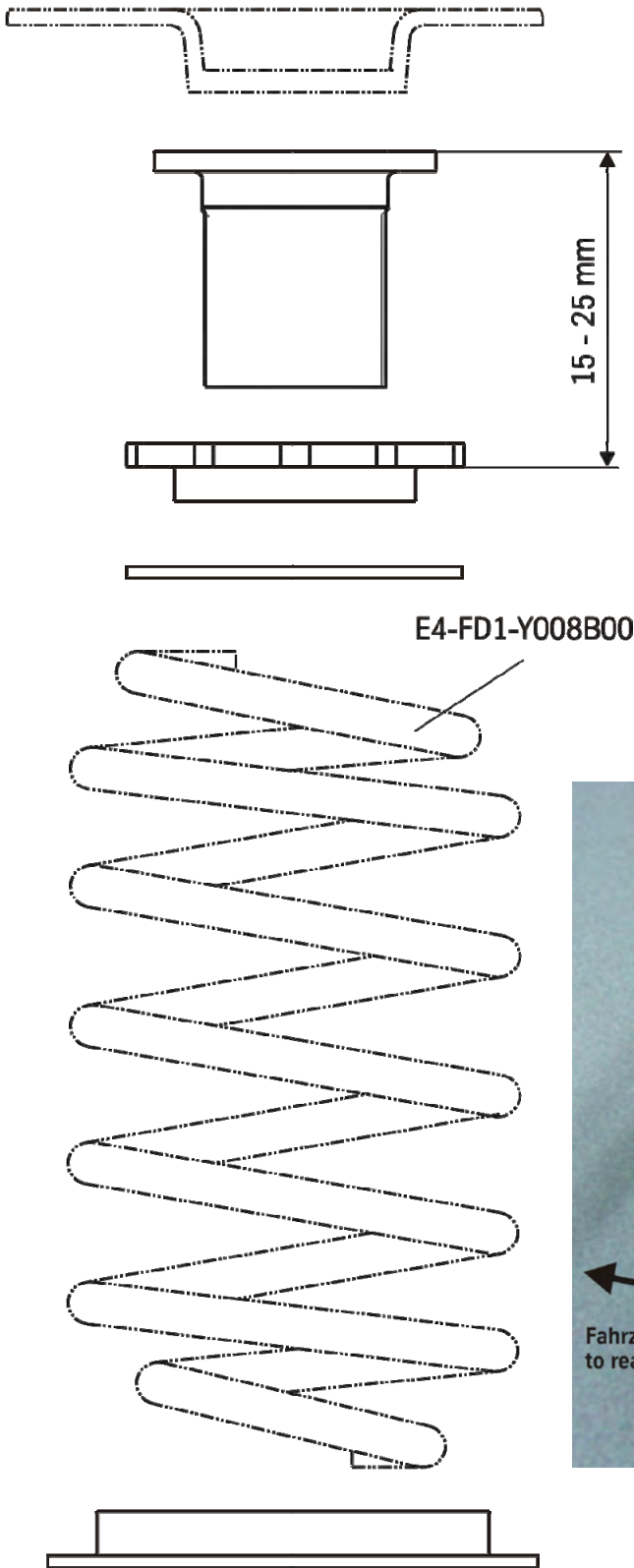
Remove shock absorber and original mounting parts.

Installing

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

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

mounting instnction for rear axle height adjustment



ACHTUNG/ ATTENTION

**EINBAULAGE DER HA- FEDER BEACHTEN!
FITTING POSITION OF REAR COIL
SPRING MUST BE OBSERVED!**

(Ansicht der Hinterachs- Feder von oben/
Top View of rear coil spring)

