

Rear Axle Coil Spring

Vehicle Type: **Boxster (986)/Boxster S (986)/Boxster "50 Years Spyder 550" (986)**

Model Year: **As of 1997 up to 2004**

Subject: **Replacing the coil spring on the rear axle during repairs**

Information: Coil spring for the respective chassis **no longer** available.

Notes: During repairs, the faulty coil spring will be replaced by a new coil spring of similar design. A spring plate (compensation part) may also have to be used (see Parts Info table).

The new coil spring has the same function as the coil spring installed in the vehicle.

A faulty coil spring must always be replaced on both sides of the axle.

Existing sets containing a coil spring that is no longer available will be interpreted into new sets.

Parts Info: The table below shows the interpretation of old coil springs (sets) to new coil springs (sets). A spring plate (compensation part) may also have to be used.

Coil spring		Spring plate (compensation part)
Currently	New	
986.333.531.34	986.333.531.04	986.333.504.05 – 6 mm, color: blue
986.333.531.35	986.333.531.05	
986.333.531.38	986.333.531.20	
986.333.531.39	986.333.531.21	
986.333.531.11	986.343.531.42	No spring plate (compensation part) required
986.333.531.13	986.343.531.36	
986.333.531.12	986.343.531.42	986.333.504.06 – 8.5 mm, color: red
986.333.531.43		
986.333.531.14		
986.333.531.37		
986.333.531.30	986.343.531.44	No spring plate (compensation part) required
986.333.531.32	986.343.531.40	

986.333.531.31	986.343.531.44	986.333.504.05 – 6 mm, color: blue
986.333.531.45		
986.333.531.33	986.343.531.40	
986.333.531.41		

Tools: **VAS 6908 - Stationary Spring Compressor**
9546 - Screwdriver
9560 - Press-out tool

Work Procedure: 1 Preparatory work

- 1.1 Raise the vehicle and remove wheels on the rear axle.
- 1.2 Remove rear spring strut (⇒ Workshop Manual '427119 Removing and installing rear spring strut').



WARNING

Preloaded or pressurized components

- Risk of pinching or bruising
- ⇒ Do not reach into the danger area.
- ⇒ Relieve the tension on components before starting work.
- ⇒ Secure components to prevent them from loosening suddenly.

- 1.3 Disassemble rear spring strut (⇒ Workshop Manual '42 Disassembling and assembling rear spring strut').



Information

- When installing new parts, refer to the allocations described in the Porsche Electronic Parts Catalog (PET).
- A different spring plate (compensation part) than the one used before may have to be used.

2 Assembling spring strut

Exploded view of spring strut on rear axle

- 1 – Shock absorber
- 2 – Coil spring (new)
- 3 – Protective bellows
- 4 – Additional spring
- 5 – Stop plate
- 6 – Spring plate (compensation part, depending on coil spring – if required – new)
- 7 – Support ring
- 8 – Sealing ring (new)
- 9 – Spring strut supporting mount
- 10 – Lock nut, M14 x 1.5 (new)

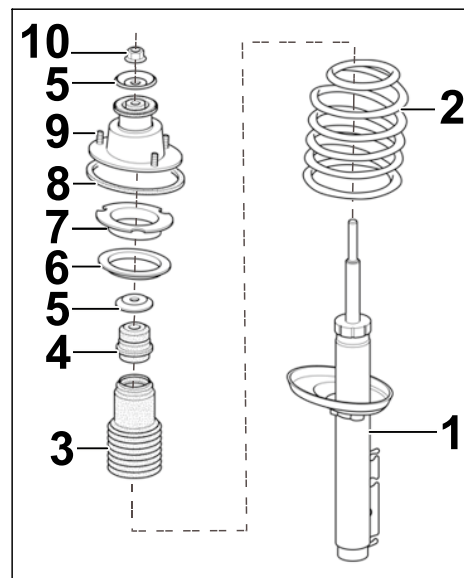


Figure 1

2.1 Assemble spring strut as follows (see also ⇒ Figure 1):

- 1 – Protective bellows
- 2 – Additional spring
- 3 – Piston rod
- 4 – Stop plate

2.1.1 Attach protective bellows to additional spring and fit on piston rod (⇒ Figure 2).

2.1.2 Push stop plate (⇒ Figure 2-4-) as far as it will go onto the piston rod at the correct position.

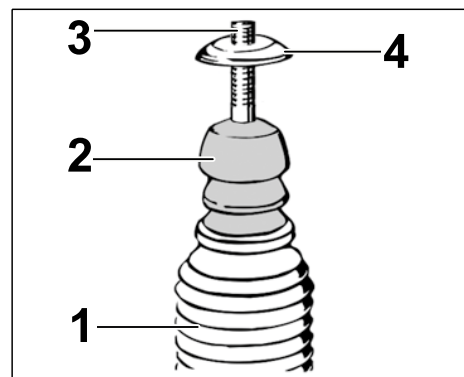


Figure 2

⚠ WARNING

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2.1.3 Pre-tension new coil spring using spring tensioner (⇒ *Figure 3*).

- 1 – Coil spring (new)
- 2 – Spring tensioner

Position new coil spring on the shock absorber as shown in *Figure 3* (⇒ *Figure 3*).

The end of the coil spring is touching the stop on the concave washer (⇒ *Figure 3 -arrow-*).

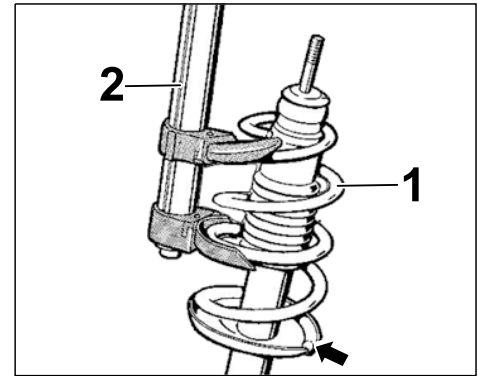


Figure 3

2.1.4 **ONLY** for the relevant coil spring (see table):
Press spring plate (compensation part) into the support ring (⇒ *Figure 4-A-*).

- 1 – Spring plate (compensation part)
- 2 – Support ring
- 3 – Sealing ring (new)
- 4 – Spring-strut mount

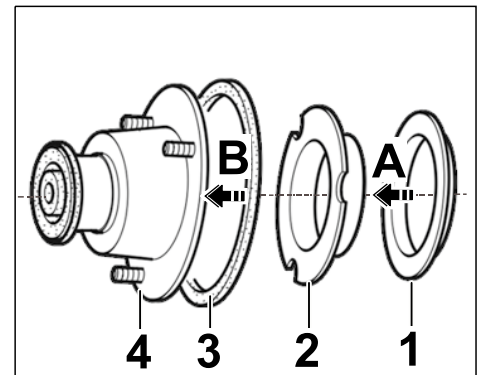


Figure 4



Information

Check cut-outs (3 x) in the support ring for the spring strut supporting mount!

2.1.5 Complete the support ring/spring plate (compensation part) assembly using a new sealing ring and spring strut supporting mount (⇒ *Figure 4-B-*).

2.1.6 Fit spring strut supporting mount assembly on the shock absorber.

Position stop plate above the spring strut supporting mount on the piston rod at the correct position.

2.1.7 Fit new lock nut (M14 x 1.5) on the thread of the piston rod on the shock absorber and tighten it until 1–2 threads of the piston rod are visible.

- 1 – Stop plate
- 2 – Lock nut, M14 x 1.5 (new)
- 3 – Deepest threaded bolt on spring strut supporting mount
- 4 – Retaining bracket for shock absorber

2.1.8 Position/align spring strut supporting mount with respect to the shock absorber retaining bracket as follows:

- Check installation position in the vehicle (left/right side)
- Deepest threaded bolt on the spring strut supporting mount must be aligned with the shock absorber retaining bracket (⇒ *Figure 5*)
- Perform a visual inspection to check that the coil spring is still touching the stop at the top and bottom

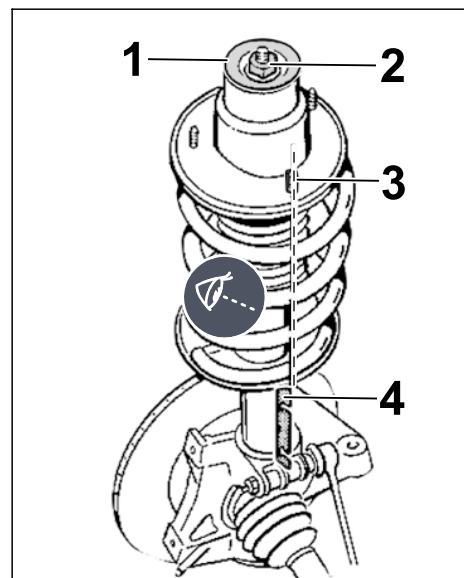


Figure 5

2.1.9 Tighten new lock nut (M14 x 1.5) on the thread of the shock absorber piston rod.

Tightening torque 60 Nm (44 ftlb.)

Counter with Allen key a/f 7 if necessary.

3 Concluding work

- 3.1 Install rear spring strut (⇒ Workshop Manual '427119 Removing and installing rear spring strut')
- 3.2 Fit wheels on the rear axle and lower the vehicle.
- 3.3 Check wheel alignment values on the rear axle and make adjustments if necessary.

- 42 71 20 00: –Rear spring strut (2 ea.) removed and installed– Labor time: **350 TU**
Includes: Removing and installing wheels, removing and installing rear wall cover, removing and installing rear wheel suspension and adjusting brake cables.
Without: Performing suspension alignment and adjusting the vehicle. Separate LO No.!
- 42 71 38 50: –Rear spring strut (2 ea.) disassembled and assembled– Labor time: **80 TU**
Includes: Removing and installing coil springs
- 44 90 03 00: –Rear suspension alignment performed– Labor time: **70 TU**
Includes: Checking height, camber and toe
Without: Adjusting vehicle at rear. Separate LO No.!

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