

Front 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 front 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 how the old coil springs (sets) are interpreted into the new coil springs (sets) and which spring plate (compensation part) may also have to be used:

Coil spring		Spring plate (compensation part)
Currently	New	
986.343.531.05	986.343.531.01	996.343.511.03 – 8 mm, color: red
986.343.531.07		
986.343.531.06	986.343.531.02	996.343.511.03 – 8 mm, color: red
986.343.531.08		
996.343.531.02	996.343.531.01	996.343.511.03 – 8 mm, color: red
996.343.531.15		
996.343.531.16		
996.343.531.03	996.343.531.04	996.343.511.03 – 8 mm, color: red
996.343.531.17		
996.343.531.18		
996.343.531.11	996.343.531.12	No spring plate (compensation part) required
996.343.531.19		
996.343.531.23		

986.343.531.11	996.343.531.12	996.343.511.03 – 8 mm, color: red
996.343.531.20		
986.343.531.15	996.343.531.13	No spring plate (compensation part) required
996.343.531.14	996.343.531.13	996.343.511.03 – 8 mm, color: red
996.343.531.21		
996.343.531.22	986.343.531.12	No spring plate (compensation part) required
986.343.531.16	986.343.531.12	996.343.511.03 – 8 mm, color: red

Tools: **VAS 6908 - Stationary Spring Compressor**

Work Procedure: 1 Preparatory work

- 1.1 Raise the vehicle and remove wheels on the front axle.
- 1.2 Remove front spring strut (⇒ *Workshop Manual '408519 Removing and installing front 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 front spring strut (⇒ *Workshop Manual '4000 Disassembling and assembling front 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 front axle

- 1 – Shock absorber
- 2 – NEW coil spring
- 3 – Protective bellows
- 4 – Additional spring
- 5 – Cone washer
- 6 – Spring plate (compensation part, depending on coil spring)
- 7 – Support ring
- 8 – Deep-groove ball bearing
- 9 – Stop plate
- 10 – Spring strut supporting mount
- 11 – Stop plate
- 12 – Lock nut M14 x 1.5

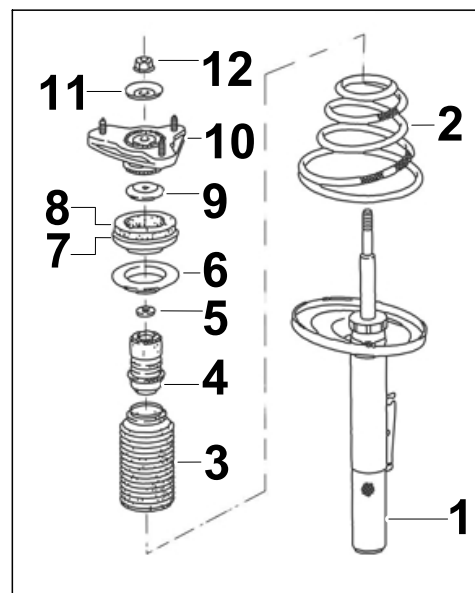


Figure 1

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

- 1 – Protective bellows
- 2 – Additional spring
- 3 – Cone washer
- 4 – Stop plate
- 5 – Shock absorber piston rod

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

2.1.2 Push cone washer and stop plate as far as they will go onto the piston rod at the correct position (⇒ Figure 2).

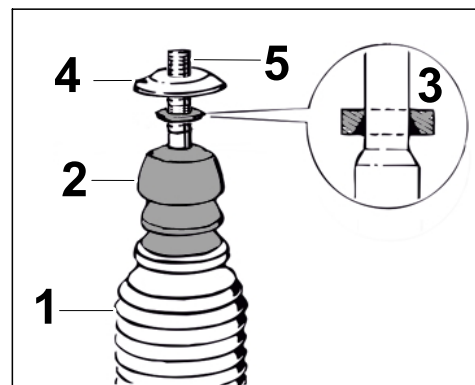


Figure 2

2.1.3 Pre-tension new coil spring using spring tensioner (\Rightarrow Figure 3).

- 1 – New coil spring
- 2 – Spring tensioner



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.

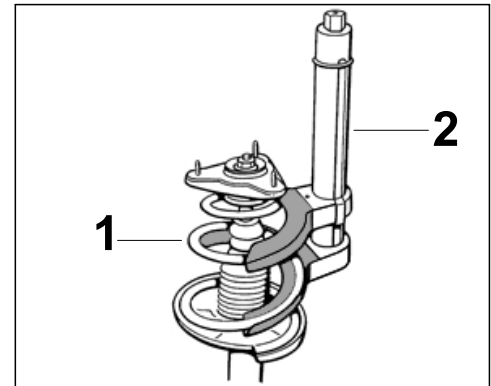


Figure 3

2.1.4 Position new coil spring on the shock absorber as shown in Figure 3 (\Rightarrow Figure 3). The end of the coil spring is touching the stop on the concave washer.

2.1.5 **ONLY** for the relevant coil spring (see table):
Press spring plate (compensation part \Rightarrow Figure 4-1-) into the support ring/deep-groove ball bearing assembly (\Rightarrow Figure 4-2-).

- 1 – Spring plate (compensation part)
- 2 – Support ring/deep-groove ball bearing assembly
- 3 – Spring strut supporting mount

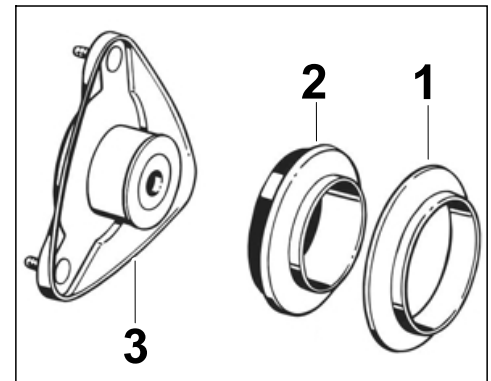


Figure 4

2.1.6 Complete support ring/deep-groove ball bearing/spring plate (compensation part) assembly with spring strut supporting mount.

2.1.7 Fit spring strut supporting mount assembly on the piston rod. Make sure that the end of the coil spring is inside the spring plate (underside of spring strut supporting mount).

- 1 – Spring strut/supporting mount assembly
- 2 – End of coil spring

2.1.8 Position stop plate at the correct position above the spring strut supporting mount and fit new lock nut (M14 x 1.5) on the thread of the shock absorber piston rod.

Tightening torque 80 Nm (59 ftlb.)

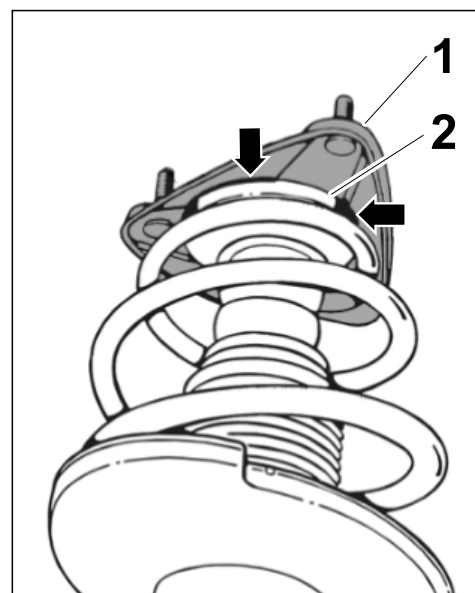


Figure 5

3 Concluding work

- 3.1 Install front spring strut (⇒ *Workshop Manual '408519 Removing and installing front spring strut'*)
- 3.2 Fit wheels on the front axle and lower the vehicle.
- 3.3 Check wheel alignment values on the front axle and make adjustments if necessary.

<p>40 85 20 00: —Front spring strut (2 ea.) removed and installed— Includes: Removing and installing wheels, loosening and securing lower control arms, loosening and securing connecting link from anti-roll bars, front brake calipers and tie rods Without: Performing suspension alignment and adjusting the vehicle. Separate LO no.!</p>	<p>Labor time: 220 TU</p>
<p>40 85 38 50: —Front spring strut (2 ea.) disassembled and assembled— Includes: Removing and installing coil spring</p>	<p>Labor time: 80 TU</p>
<p>44 85 03 00: —Front suspension alignment performed— Includes: Checking height, camber, toe, caster and toe difference angle Without: Adjusting vehicle at the front. Separate LO no.!</p>	<p>Labor time: 70 TU</p>

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