

Rear Axle Coil Spring

Vehicle Type: 911 Carrera (996)/911 Targa (996)/911 Millennium (996)

911 Carrera 4 (996)/911 Carrera 4S (996)

Model Year: As of 1999 up to 2005

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 incorporated into new sets.

Parts Info: The table below shows the incorporation of old coil springs (sets) to new coil springs (sets). A spring plate

(compensation part) may also have to be used.

Coil spring		Christ alata (companies and the mont)
Currently	New	Spring plate (compensation part)
996.333.531.03	996.333.531.23	No spring plate (compensation part) required
996.333.531.04		
996.333.531.36		
996.333.531.64		
996.333.531.37	996.333.531.23	996.333.511.08 – 8,5 mm, color: blue
996.333.531.65		
996.333.531.05	996.333.531.24	No spring plate (compensation part) required
996.333.531.25	996.333.531.24	996.333.511.08 – 8,5 mm, color: blue
996.333.531.38		
996.333.531.12	996.333.531.27	No spring plate (compensation part) required
996.333.531.13		
996.333.531.14		
996.333.531.40		

4272 ENU 20/17

Technical Information

996.333.531.27	996.333.511.08 – 8,5 mm, color: blue		
		996.333.531.30	No spring plate (compensation part) required
		996.333.531.63	No spring plate (compensation part) required
		996.333.531.63	996.333.511.08 – 8,5 mm, color: blue
996.333.531.56	996.333.511.08 – 8,5 mm, color: blue		
996.333.531.49	No spring plate (compensation part) required		
996.333.531.49	996.333.511.08 – 8,5 mm, color: blue		
		996.333.531.44	No spring plate (compensation part) required
996.333.531.44	996.333.511.07 – 5.0 mm, color: green		
		996.333.531.46	No spring plate (compensation part) required
996.333.531.59	996.333.511.08 – 8,5 mm, color: blue		
	996.333.531.30 996.333.531.30 996.333.531.63 996.333.531.63 996.333.531.49 996.333.531.49 996.333.531.44 996.333.531.44		

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 (\Rightarrow Workshop Manual '427119 Removing and installing rear spring strut').

WARNING

Preloaded or pressurized components

- · Risk of pinching or bruising
- \Rightarrow 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

- Shock absorber
- 2 Circlip
- Concave washer (lower)
- 4 Coil spring (new)
- 5 Protective bellows
- 6 Additional spring
- **7** Washer
- 8 Stop plate (identical part)
- 9 Spring plate
- Spring plate (compensation part),
 depending on coil spring if required (new)
- 11 Supporting mount (identical part left/right)
- **12** Lock nut, M12 x 1.5 (new)

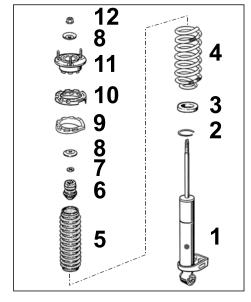


Figure 1

- 2.1 Assemble spring strut as follows (see also ⇒ Figure 1):
 - 1 Protective bellows
 - 2 Additional spring
 - 3 Piston rod
 - 4 Stop plate (identical part)
 - 2.1.1 Attach protective bellows to additional spring and fit on piston rod (⇒ Figure 2 (Boxster (986))).

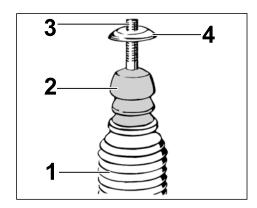


Figure 2 (Boxster (986))

- 2.1.2 Push washer and stop plate as far as they will go onto the piston rod at the correct position (⇒ Figure 3).
 - 1 Washer
 - **2** Stop plate
 - 3 Piston rod
 - 4 Coil spring (new)

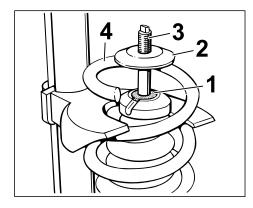


Figure 3



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.
 - 2.1.3 Pre-tension new coil spring using spring tensioner (⇒ Figure 3).Position new coil spring on the shock absorber as shown in Figure 3.The end of the coil spring is touching the stop on the concave washer.

20/17 ENU 4272

2.1.4 **ONLY** for the relevant coil spring (see table):

Press compensation part into the spring plate at the correct position (not twisted).

- Compensation part (new)
- 2 Spring plate
- **3** Spring-strut mount



Information

None of the 7 cut-outs (\Rightarrow Fig. 4, arrow) on the spring plate must be left free!

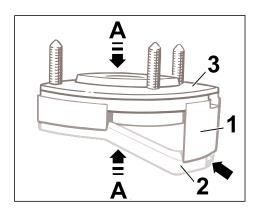


Figure 4

- 2.1.5 Connect spring strut/supporting mount assembly with spring plate (compensation part) (\Rightarrow *Figure 4* -**A**-).
- 2.1.6 Fit spring strut/supporting mount assembly (spring-strut mount/compensation part/spring plate) on shock absorber piston rod (⇒ Figure 5).

Make sure that the end of the coil spring is touching the stop on the spring plate (\Rightarrow *Figure 5* -arrow-).

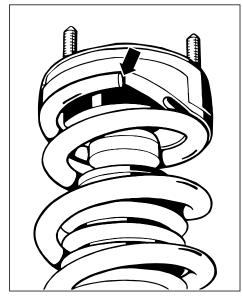


Figure 5

Technical Information

- 2.1.7 Position stop plate (⇒ Figure 6 -1-) above the spring strut supporting mount on the piston rod at the correct position.
 - 1 Stop plate
 - **2** Lock nut, M12 x 1.5 (new)

Fit new lock nut (M12 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 (\Rightarrow Figure 6).

- 2.1.8 Position/align spring strut supporting mount with respect to the shock absorber bracket as follows (⇒ Figure 7):
 - Threaded bolt for spring strut supporting mount
 - Shock absorber bracket
 - Check installation position in the vehicle (left/right side)
 - One threaded bolt on the spring strut supporting mount must be flush with the shock absorber bracket
 - Perform a visual inspection to check that the coil spring is still touching the stop at the top and bottom

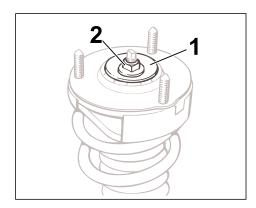


Figure 6

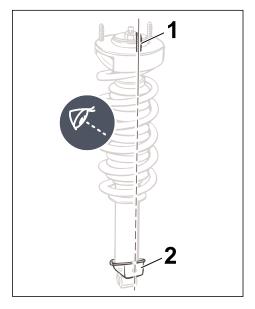


Figure 7

Technical Information

911 (996)

20/17 ENU 4272

4

- 2.1.9 Tighten new lock nut (M12 x 1.5) on the thread of the shock absorber piston rod.
 - 1 Torque wrench
 - **2** Open-ended wrench, a/f 7
 - 3 Shock absorber piston rod

Tightening torque 58 Nm (43 ftlb.)

Counter with an open-ended wrench (a/f 7) if necessary.

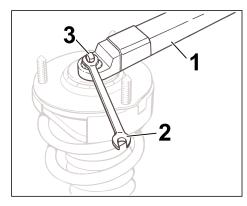


Figure 8

Labor time: 130 TU

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: **ONLY** for Coupé:

-Removing and installing rear spring strut (2 x)-

Includes: Removing and installing wheels

42 71 20 03: **ONLY** for Cabriolet:

-Removing and installing rear spring strut (2 x)- Labor time: **140 TU**

Includes: Removing and installing wheels

42 71 38 50: –Disassembling and assembling rear spring strut (2 x)– Labor time: **80 TU**

Includes: Removing and installing coil springs

44 90 03 00: -Performing rear suspension alignment- Labor time: **90 TU**

Includes: Checking height, camber, toe and steering-angle sensor actual

value

Without: Adjusting vehicle at rear. Separate LO No.!