

Tolerance groups of coil springs

General Information

The coil spring versions differ from each other by their length and hardness (spring rate). They are identified by corresponding color marks.

In addition, each spring version is also subdivided into two or three tolerance groups, respectively (tolerance of spring rate $\pm 4\%$).

Assembly notes

For repairs, always fit springs with identical color marks. Since the vehicle is subject to settling of the suspension with increasing mileage, this may result in uneven vehicle height if only one spring is replaced. We therefore recommend the **spring to be exchanged in pairs**. Replacing springs in pairs is not required in the case of vehicles with height adjustment facility (sport running gear M 030).

Survey

Coil spring part no. 477 411 105 Q, spring rate 21.8 N/mm, wire dia. 12.0 mm

Application: 944 / 924 S with standard and sport shock absorbers

Group	Length, removed	Spring force F at length $L_1 = 251$ mm	Color dot
1	approx. 381 mm	2727 - 2800 N	1 blue
2	approx. 381 mm	2800 - 2873 N	2 blue
3	approx. 381 mm	2873 - 2946 N	3 blue

Coil spring part no. 477 411 105 G, spring rate 24.1 N/mm, wire dia. 12.3 mm

Application: 924 S and 944 up to end of MY '86 with sport running gear M 030

Group	Length, removed	Spring force F at length $L_1 = 251$ mm	Color dot
1	approx. 359 mm	2502 - 2560 N	1 red
2	approx. 359 mm	2560 - 2629 N	2 red
3	approx. 359 mm	2629 - 2698 N	3 red

Coil spring, part no. 944 343 531 00, spring rate 28 N/mm,
inconstant wire dia. 11.7 - 12.2 mm

Application: 944 as of MY '87 with sport running gear M 030 (Koni shocks)

Group	Length, removed	Spring force F at length $L_1 = 220$ mm	Color dot
1	approx. 329 mm	2850 - 2950 N	1 x white 1 x blue
2	approx. 329 mm	2950 - 3050 N	2 x white 1 x blue

Coil spring, part no. 951 343 531 00

Application: 944 S with stand. shock abs. (unpress.), spring rate 21.8 N/mm, wire dia. 12.0 mm

Group	Length, removed	Spring force F at length $L_1 = 251$ mm	Color dot
1	approx. 407 mm	3265 - 3355 N	1 white
2	approx. 407 mm	3355 - 3445 N	2 white
3	approx. 407 mm	3445 - 3535 N	3 white

Coil spring, part no. 951 343 531 01, spring rate 21.8 N/mm, wire dia. 12.0 mm

Application: 944 S with sport shock absorbers (gas filled shock absorbers)

Group	Length, removed	Spring force F at length $L_1 = 251$ mm	Color dot
1	approx. 396 mm	3034 - 3118 N	1 yellow
2	approx. 396 mm	3118 - 3202 N	2 yellow
3	approx. 396 mm	3202 - 3286 N	3 yellow

Coil spring, part no. 944 343 531 02, spring rate 23.8 N/mm, wire dia. 11.3 mm

Application: 944 S₂ with standard shock absorbers

Group	Length, removed	Spring force F at length $L_1 = 244$ mm	Color dot
1	approx. 378 mm	_____	1 purple
2	approx. 378 mm	_____	2 purple
3	approx. 378 mm	_____	3 purple

Coil spring, part no. 944 343 531 03, spring rate 23.8 N/mm, wire dia. 11.3 mm

Application: 944 S2 with sport shock absorbers up to MY '89

Group	Length, removed	Spring force F at length $L_1 = 244$ mm	Color dot
1	approx. 367 mm	_____	1 turquoise
2	approx. 367 mm	_____	2 turquoise
3	approx. 367 mm	_____	3 turquoise

Coil spring, part no. 944 343 531 01, spring rate 28 N/mm, inconstant wire dia. 11.7 - 12.2 mm

Application: 944 S2 with sport running gear M 030 (Koni shock absorbers)

Group	Length, removed	Spring force F at length $L_1 = 220$ mm	Color dot
1	approx. 329 mm	3050 - 3150 N	1 white - 1 yellow
2	approx. 329 mm	3150 - 3250 N	2 white - 1 yellow

Coil spring, part no. 944 343 531 04, spring rate 28 N/mm, wire dia. 11.6

Application: 944 S2 with Turbo running gear tuning (M 031 / as of MY '90 / F + S shock abs.)

Group	Length, removed	Spring force F at length $L_1 = 241$ mm	Color dot
1	approx. 348 mm	2881 - 2961 N	1 beige
2	approx. 348 mm	2961 - 2040 N	2 beige
3	approx. 348 mm	3040 - 3120 N	3 beige