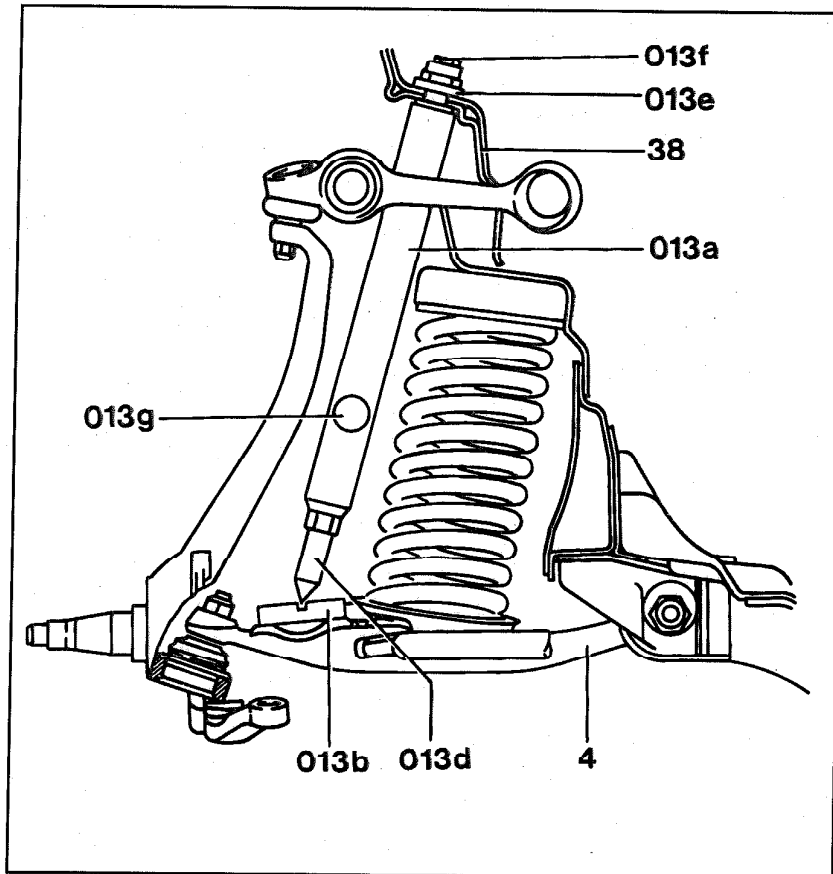


32-125 Checking alignment of front shock absorbers

Preliminary work:

R and R front shock absorbers (32-100).



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Testing and straightening tool (013)

(special tool 123 589 052 100)

attach to top mounting point for shock absorber.

Test plate (013b)

position on bottom control arm.

Front spring

compress with spring compressing tool
000 589 46 31 00 and compressing plate
140 589 07 63 00 until load is relieved on
control arm (32-200).

32-125 Checking alignment of front shock absorbers

Control arm lift slightly and check alignment of testing and straightening pin (013d) with center of test plate (013b).

Note

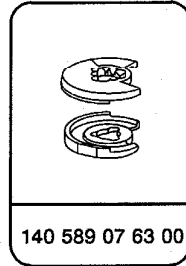
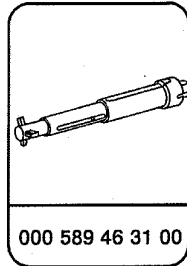
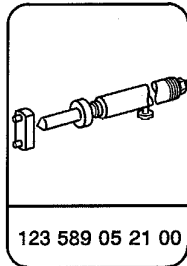
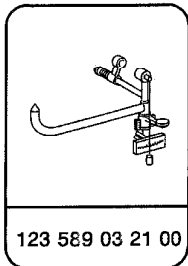
Observe vehicle level at front axle.

Test values:

Shock absorber alignment on front axle

Vehicle level at front axle	Permissible alignment deviation
+ 25 ± 5 mm	5 mm

Special tools



Note

Extremely high deviation in the alignment of the shock absorber mounting points can lead to excessive shock absorber wear resulting in rumbling noises and leakage at the piston rod seal. In extreme cases this can even negatively affect the driving comfort (suspension harder due to increased friction).

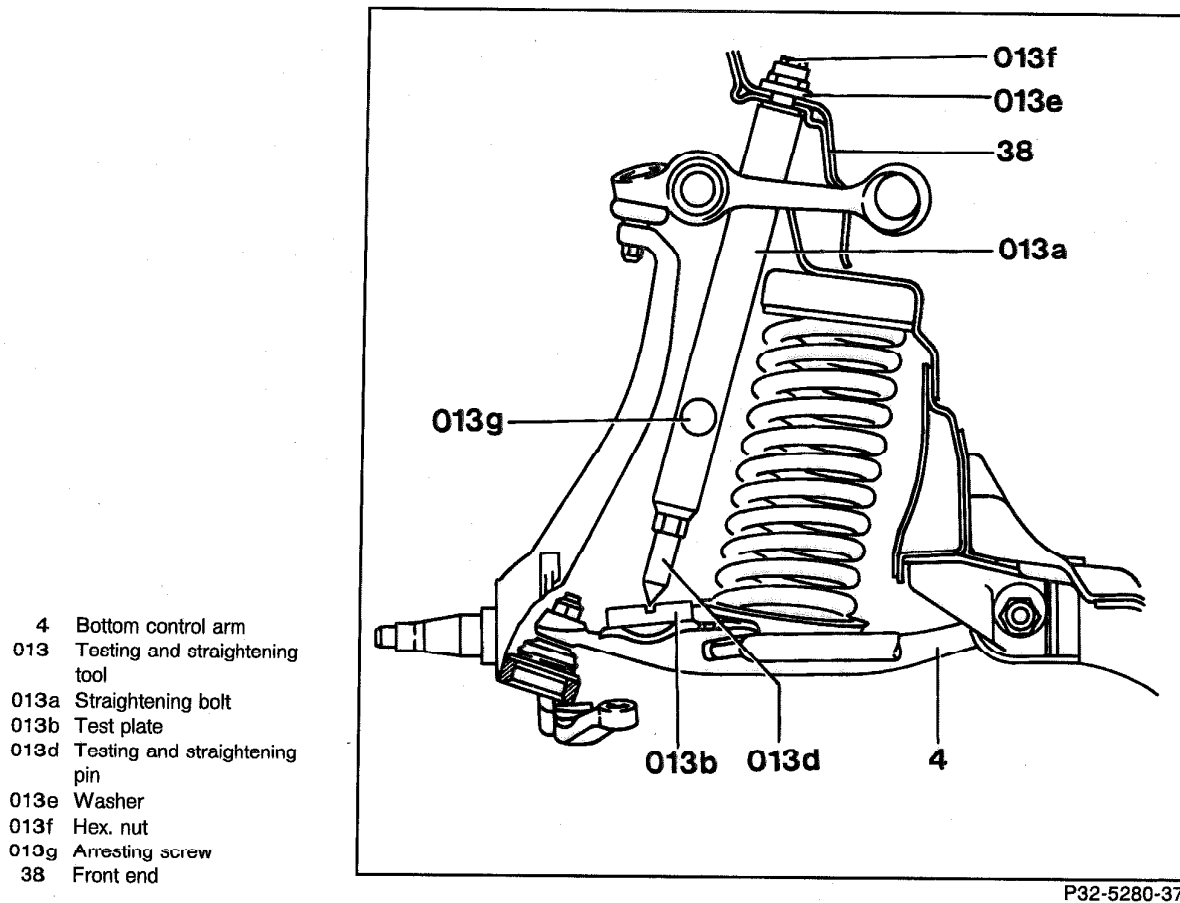
For this reason it is necessary to check and, if necessary, correct the shock absorber alignment following straightening and repair work on the affected front end frame parts.

32-125 Checking alignment of front shock absorbers

The shock absorbers can be checked for proper alignment with the axle installed with the vehicle in the **design position** with the camber and caster adjusted to the specified values.

CAUTION!

When removing the shock absorber with the vehicle jacked up and load relieved on the suspension ensure that the piston rod does not turn while loosening the top mount. Since the extension stop in the shock absorber is against the operating piston in this state, the connection between the operating piston and piston rod could loosen. This would result in sudden extension of the piston rod and expulsion of the oil in the shock absorber.



32-125 Checking alignment of front shock absorbers

Checking

Note

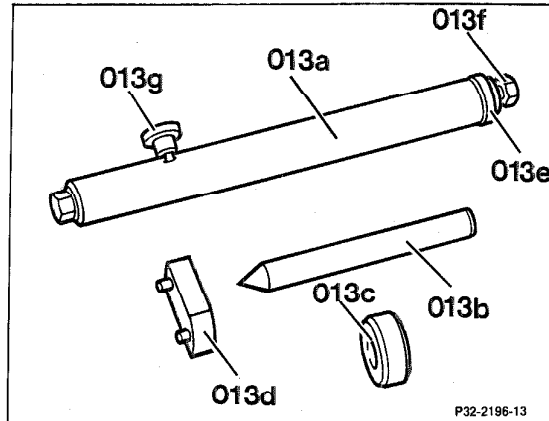
Front wheels must be adjusted to correct camber and caster.

- 1 Jack up vehicle at front, remove front wheels.
- 2 Fasten testing and straightening tool to top shock absorber mounting point, hold testing and straightening pin (013b) in place with arresting screw (013g) in the lifted position. Position test plate (013d) on bottom control arm.
- 3 Attach spring compressing tool with compressing plates for front springs (32-200) and compress front spring until load is relieved on control arm.
- 4 Simultaneously jack up front suspension with workshop jack at front wheel hub to specified vehicle level (see table).

WARNING!

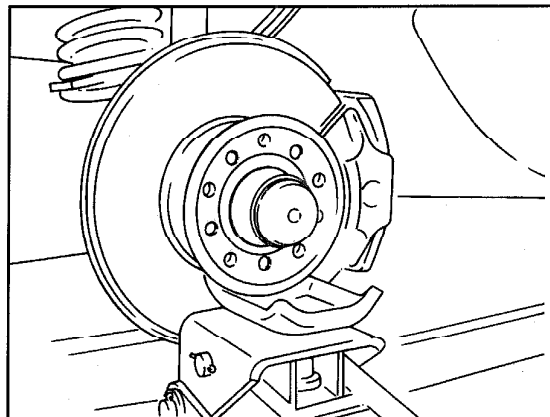
Body must not be lifted off of jack stands!

- 5 Check alignment with testing and straightening pin (013b), correct, if required. If the pin points to the center of the test plate (013d), this indicates a deviation of 0 mm.

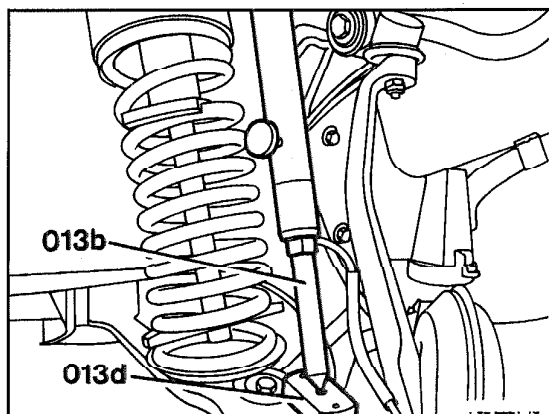


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013	Testing and straightening tool
013a	Straightening bolt
013b	Testing and straightening pin
013c	Test sleeve
013d	Test plate
013e	Washer
013f	Hex. nut
013g	Arresting screw



P32-2166-13



P32-2221-13