

Replacing front spring, spring strut mounting, shock absorber

Special tools: [999 5407](#) , [999 5466](#) , [999 5467](#) , [999 5468](#) , [999 5469](#)

Note! When replacing shock absorbers: Early versions of the shock absorber have been withdrawn as replacement part and are replaced by the 1994 version. When replacing on the 1992-1993 model the following components are supplied for each side: bracket for ABS line with screws, 3 mm thick washer (replaces existing 7 mm thick washer) see illustration for section [Check that the spring, spring strut mounting, spring seat, boot and bump stop are not damaged](#) and a tie strap to secure the ABS cable.

Remove:

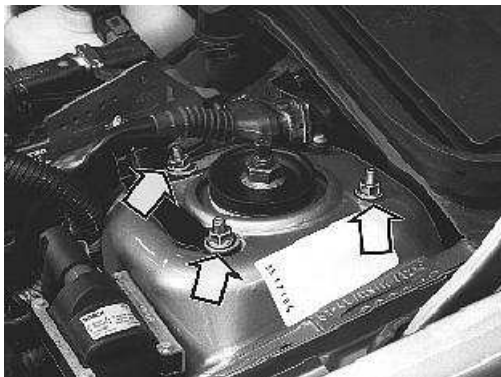
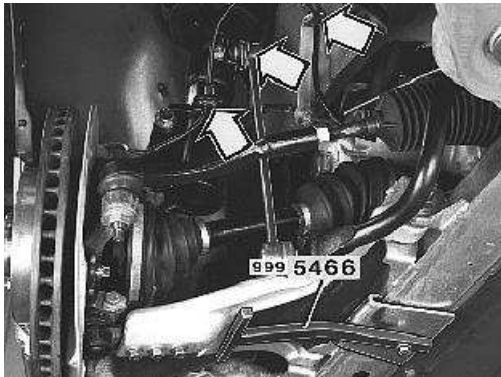
- the wheel
- anti-roll bar link from spring strut
- ABS sensor from the stub axle.

Remove the ABS sensor cable from the spring strut and brake bracket.

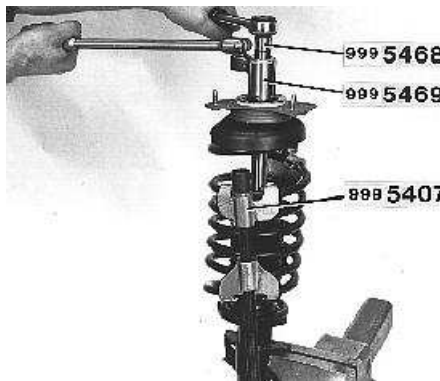
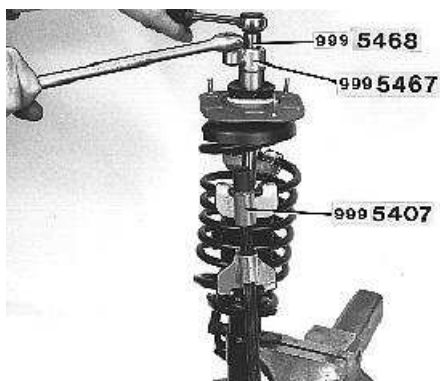
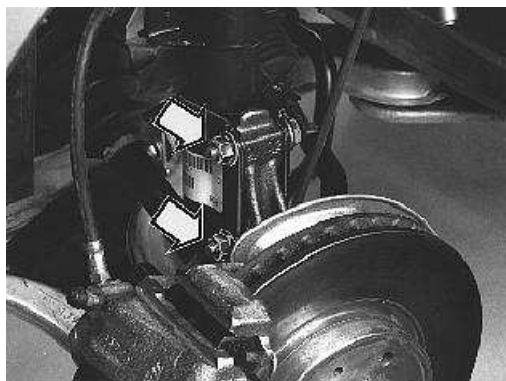
Caution! Do not disconnect connector.

Caution! Install on support [999 5466](#) under the control arm. The support should be used to avoid too large a joint angle at the drive shafts.

Remove the three screws holding the spring strut turret mounting in the body work



Remove the two screws retaining the spring strut in the stub axle. Then remove the spring strut



Secure the spring strut in a vise as illustrated

Take the load off the spring seat with the spring clamps [999 5407](#) . Set the clamps facing each other. Tighten the clamps alternately so that the spring seats have no load.

Remove the nut and washer from the spring strut mounting. Use socket [999 5467](#) and counterhold [999 5468](#) .

Caution! If only the spring strut mounting is to be installed, continue to section 11 in [Reassembly](#) and then [Installation](#) .

Remove the mounting nut on the shock absorber

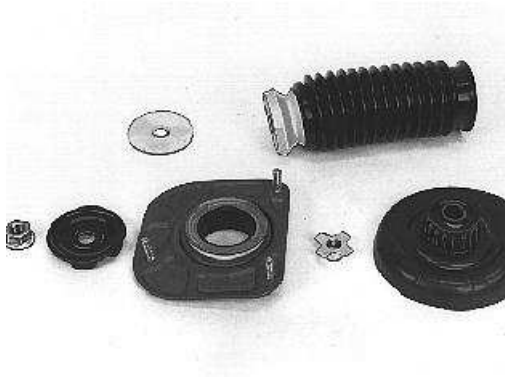
Use socket [999 5469](#) and counterhold [999 5468](#) .

Remove:

- the spring seat
- rubber bump stop and gaiter
- spring
- holder for the ABS cable (from 1994 model year).

Check that the spring, spring strut mounting, spring seat, boot and bump stop are not damaged

Note! The following applies when replacing the shock absorber:



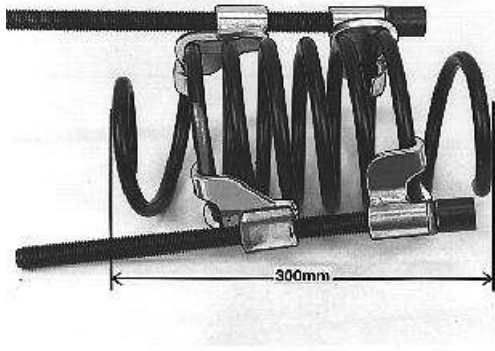
Model year 1992-1993: Replace the existing washer **A** in the illustration (thickness 7 mm) to one which is 3 mm thick. P/N 3546520-2. The 3 mm version washer is introduced on the 1994 model year.

See also information for replacing shock absorber .

When replacing the spring:

Compress the new spring to a length of approximately 300 mm

Use spring clamps [999 5407](#) .



Reassembly

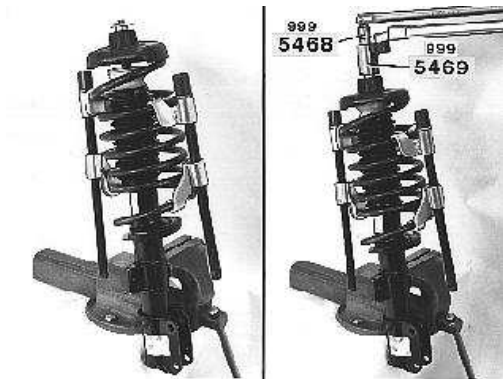
Install on shock absorber:

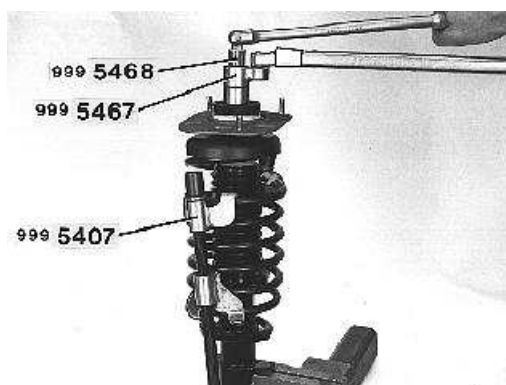
- bump stop with boot
- the washer (when replacing the shock absorber, replace the existing washer with a **3mm** thick washer, see **Check that the spring, spring strut mounting, spring seat, boot and bump stop are not damaged**)
- the spring compressed to approximately **300 mm** in length
- the spring seat.

Locate the spring ends in the spring seats.

Install the mounting nut

Tighten it to **70 Nm**. Use socket [999 5469](#) and counterhold [999 5468](#) .





Install:

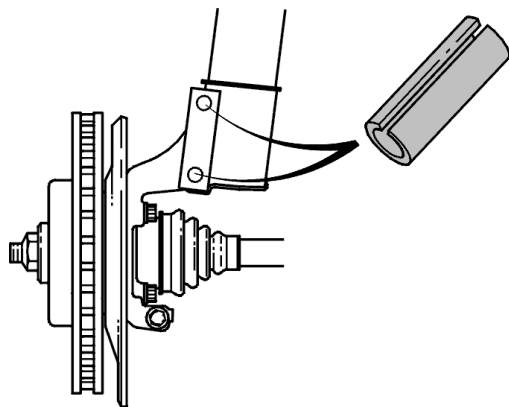
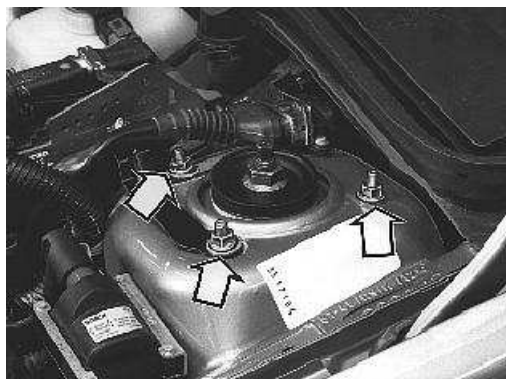
- the spring strut mounting
- washer and nut. Tighten the nut to **70 Nm**.
Use socket **999 5467** and counterhold **999 5468**.

Remove the spring clamps

Installation

Install the spring strut in the bodywork with the new nuts

Tighten the three spring strut mounting nuts to **25 Nm**.



1994 model year cars

On 1994 model year cars, the size of the holes in the stub axles for the shock absorber mounting screws has increased from **Ø12.1 mm** to **Ø13 mm**.

Note! Stub axles with Ø13 mm mounting holes are also introduced as replacement part and replace the earlier version.

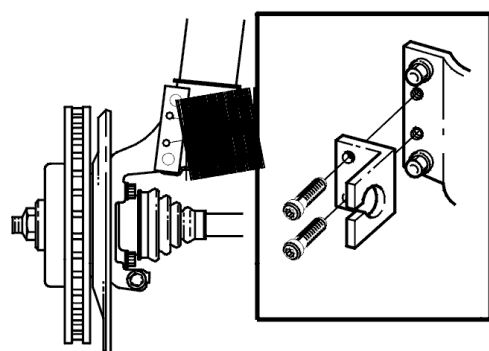
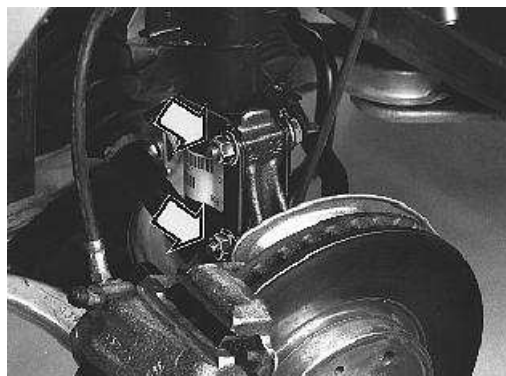
When replacing shock absorbers on cars with the new stub axles, two sleeves, P/N 9153007-1 should be installed. The sleeves should be installed in the stub axle screw holes, see illustration. This removes play between the screws and the holes and the correct camber

angle is retained.

Note! The screws can be stiff in the holes.

Install spring strut to the stub axle

Use new screws and nuts. Tighten to **65 Nm**.
Angle tighten **90°**.



Installing new bracket for the ABS cable

Model year 1992-1993

Install a new bracket on the new shock absorber

P/N	bracket (x 1)	9140102-6
	screws (x 2)	972408-9
	tie strap (x 1)	948211-8

Continue to "Install anti-roll bar link to spring strut with new nut"

Model year 1994-

Transfer the existing bracket to the new shock absorber

Install the anti-roll link to the spring strut with new nut

Note! On early models there is a stamped section for the link fastening in the spring strut.
Tighten to **50 Nm**.



Install the ABS sensor cable on the spring strut and to the brake line bracket

Secure the ABS line

On left-hand drive cars:

Secure any ABS line excess on the driver's side

of the engine compartment with a tie strap to the vacuum hose to the power brake booster. Secure any excess on the passenger side in the cable duct at the spring strut turret.

Right-hand drive car

Secure any ABS line excess in the engine compartment with a tie strap at the cable duct at the right and/or left spring strut turret.

Remove support 999 5466

Install wheel

Lubricate hub guide for rims with rustproofing agent, P/N **1161030-0**. Tighten studs lightly. Tighten crosswise to **110 Nm**.

Note! See also Wheels and hubs, front suspension