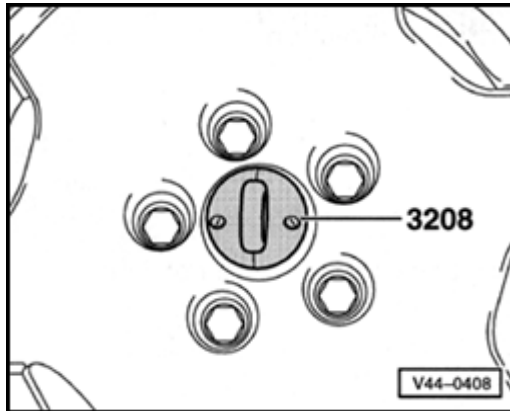


42-65

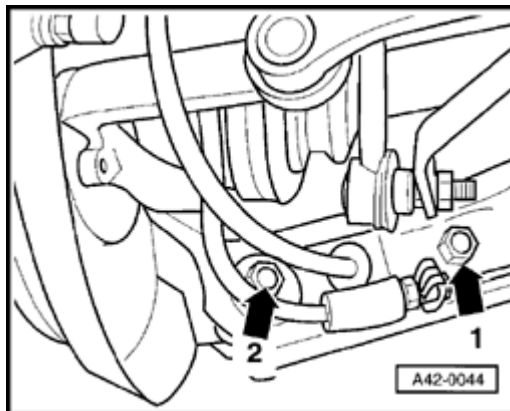
Suspension strut and upper control arm, removing and installing

Removing

- Vehicle must be standing on its wheels above vehicle lift

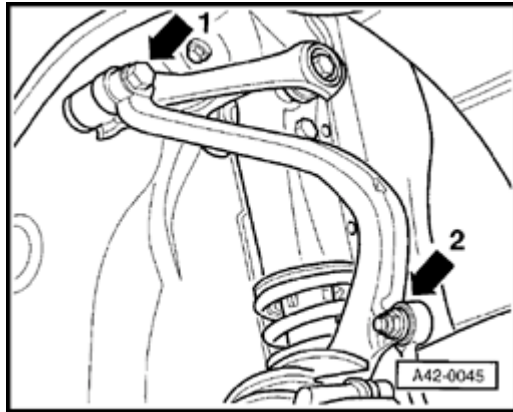
**A**

- Remove wheel trim.
On light alloy wheels use puller in vehicle tool kit to remove trim cap
- Loosen wheel bolts.
- Raise vehicle on lift.
- Remove wheel.

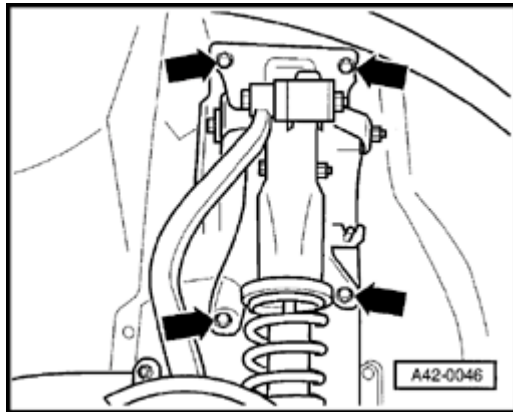
**A**

- Loosen bolted connection of lower control arm to suspension strut (arrow -1-) ⇒ [page 42-40](#) .

42-66



- A
- Loosen bolts from wheel bearing housing to upper control arm (arrow - 1-) ⇒ [page 42-42](#) .



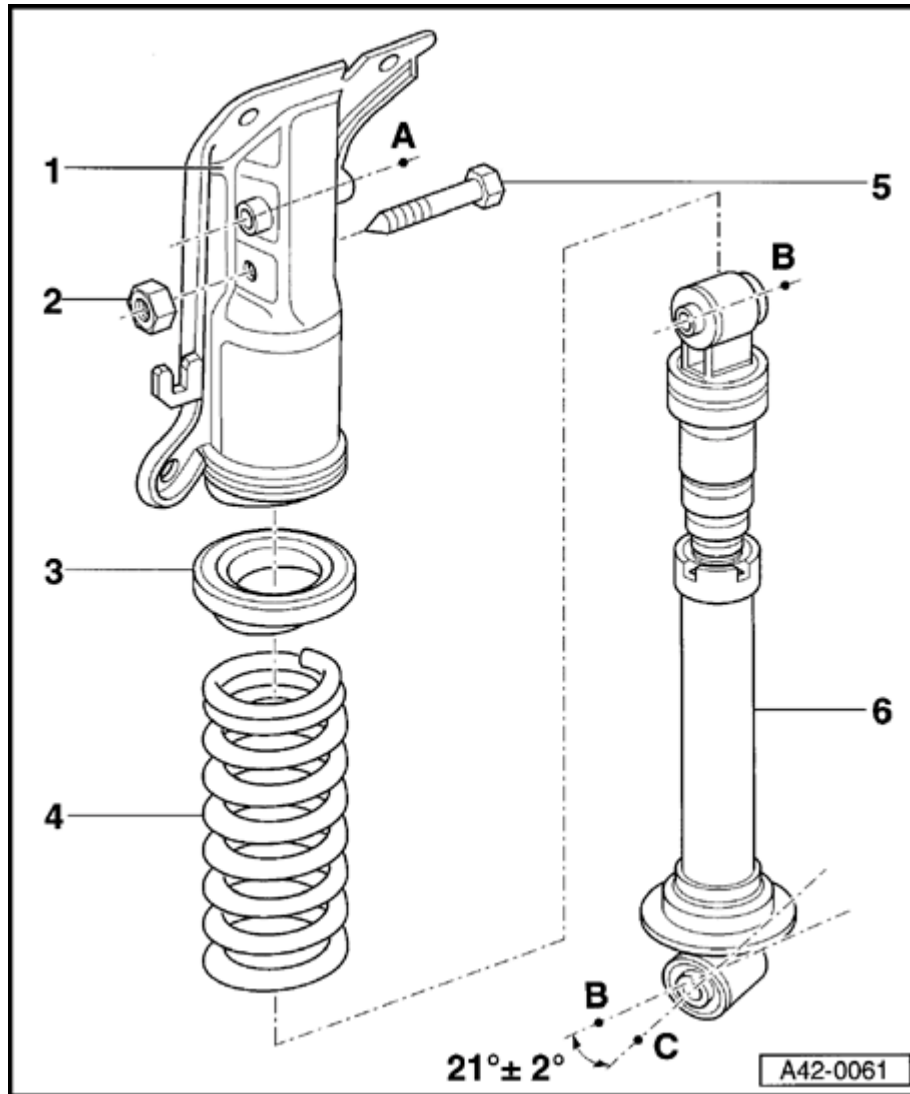
- A
- Remove suspension strut mounting bracket bolts (arrows), push wheel bearing housing down and remove suspension strut along with control arm.
 - Remove bolts from shock absorber to upper control arm (⇒ [page 42-42](#)), and remove control arm.

Installing

- Install in reverse order of removal.

CAUTION!

Bonded rubber bushings can only be turned to a limited extent. The bolted connection between the wheel bearing housing to upper control arm and the connection between the shock absorber to lower control arm must only be tightened when the vehicle is standing on the ground. Otherwise the bonded rubber bushings will be subjected to a torsional stress resulting in shortened service life



Suspension strut, servicing

Disassembling and assembling suspension strut ⇒ [page 42-71](#)

1 - Suspension strut mounting bracket

- ◆ Different versions on left and right-sides

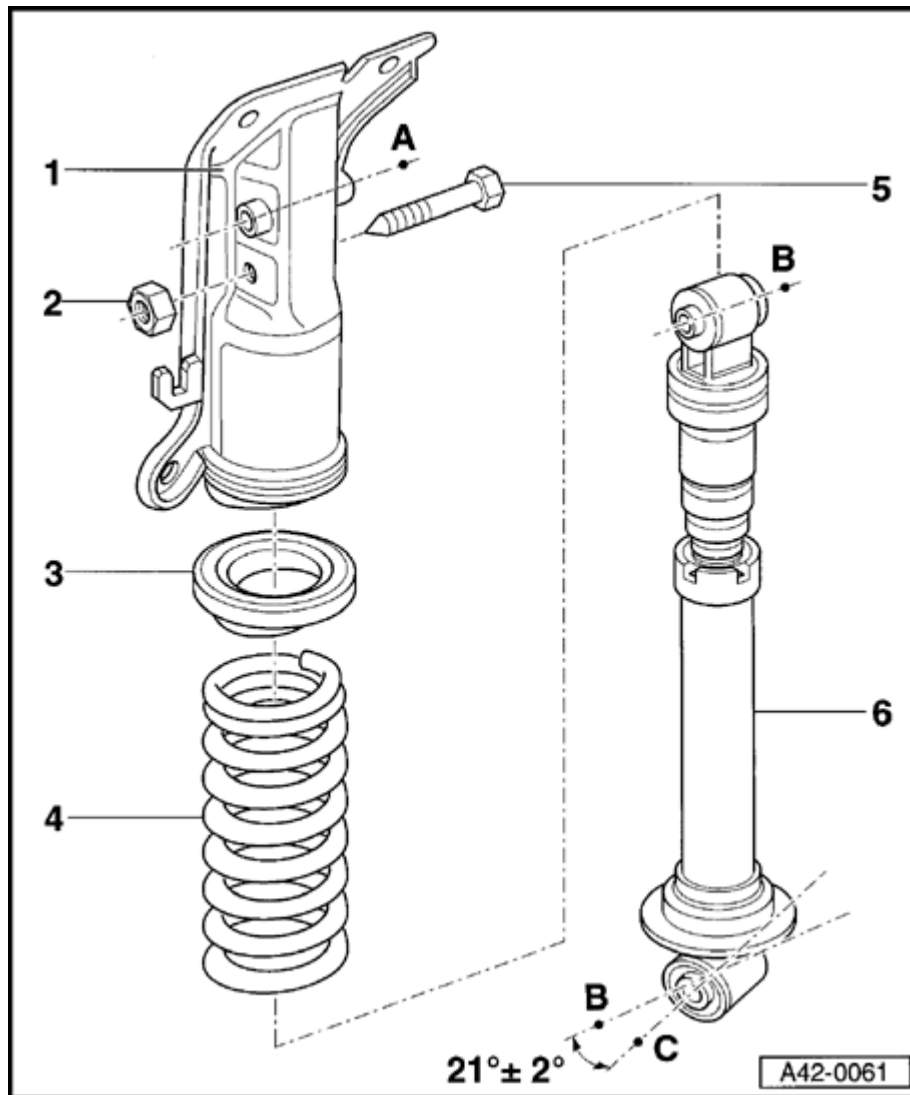
2 - Self-locking nut

- ◆ Always replace
- ◆ 70 Nm (52 ft lb) + 1/4-turn (90°)

3 - Damper ring

- ◆ Install with stop resting against end of spring

42-69

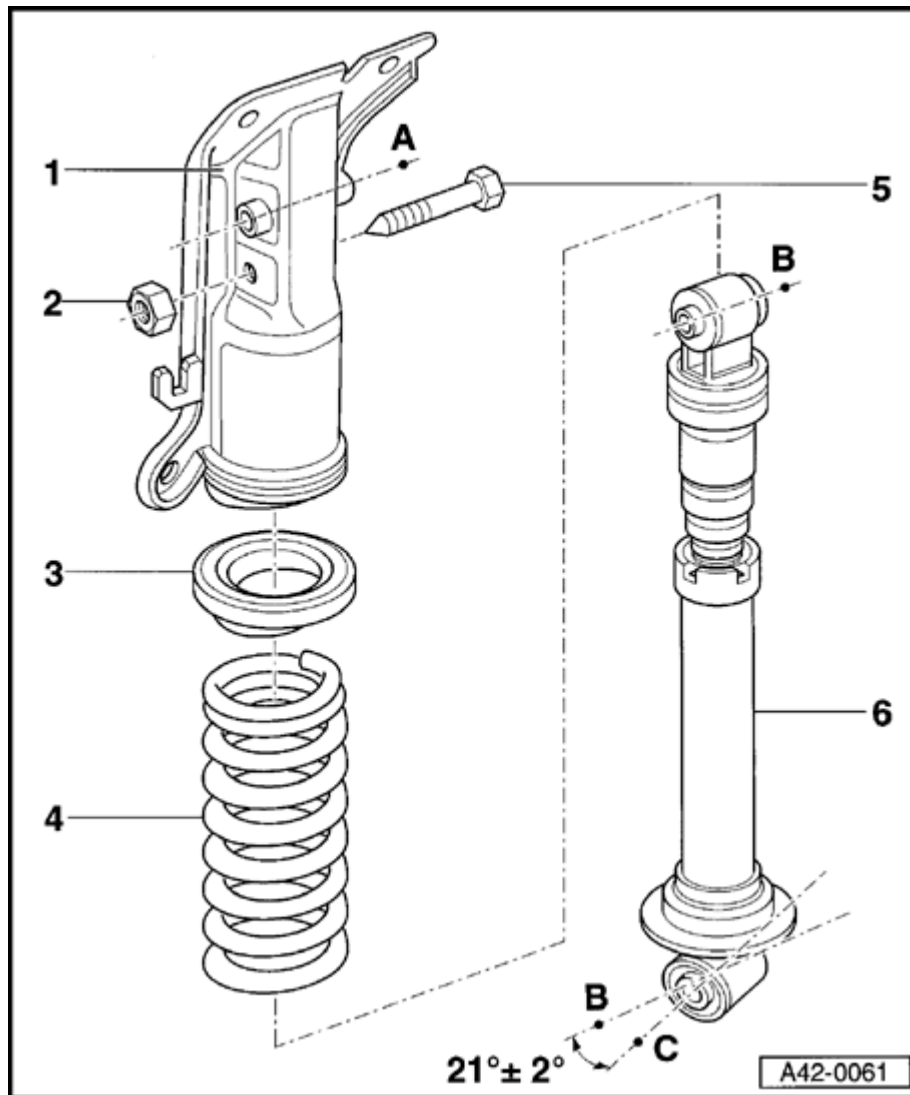


4 - Coil spring

- ◆ Always replace on both sides
- ◆ Different versions depending on suspension version ⇒ [vehicle data label, page 42-46](#) to determine correct spring version
- ◆ Install on shock absorber and turn so that end of spring coil is resting against stop of lower spring retainer
- ◆ Installation position: colored marking on spring faces down toward spring retainer
- ◆ If suspension strut is correctly installed, bottom end of spring on left side faces toward rear; bottom end on right-side faces toward front

5 - Bolt

- ◆ Always replace



6 - Gas shock absorber

- ◆ Different versions ⇒ parts catalog microfiche
- ◆ Supplied as replacement part with lower spring retainer pressed on
- ◆ Different versions depending on suspension version ⇒ vehicle data label, page ⇒ [Page 42-46](#)
- ◆ Malfunctioning shock absorbers must be disposed of properly
- ◆ Checking for leaks and noises ⇒ Special Information binder

Installation position:

- ◆ Angle between suspension strut mounting bracket axis -A- and shock absorber axis -B- = 0°
- ◆ Angle between axis -B- and axis -C- = $21^\circ \pm 2^\circ$; Pay attention to this when assembling

Disassembling and assembling suspension strut

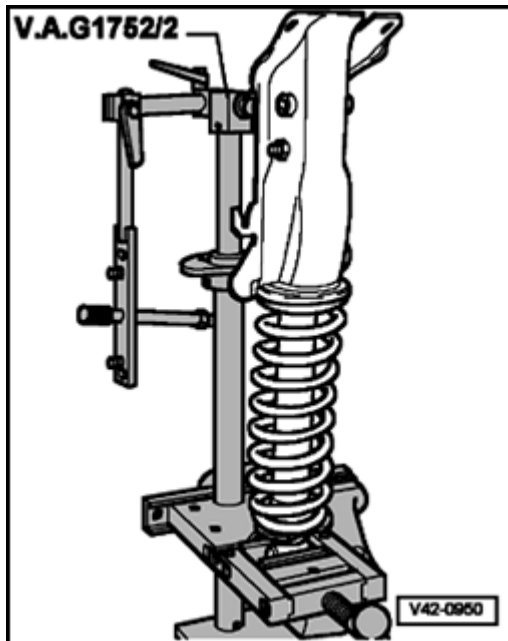
Disassembling

- Remove suspension strut ⇒ [page 42-65](#) .

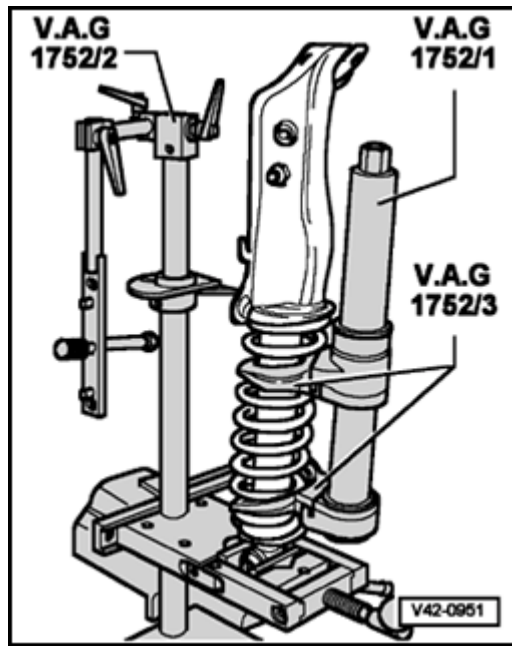
A - Install suspension strut into VAG1752 spring tensioner.

Note:

Illustration shows left-hand suspension strut.



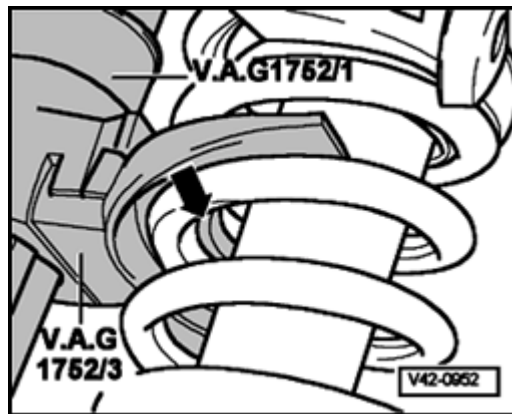
42-72



- A - Insert VAG1752/1 spring compressor.

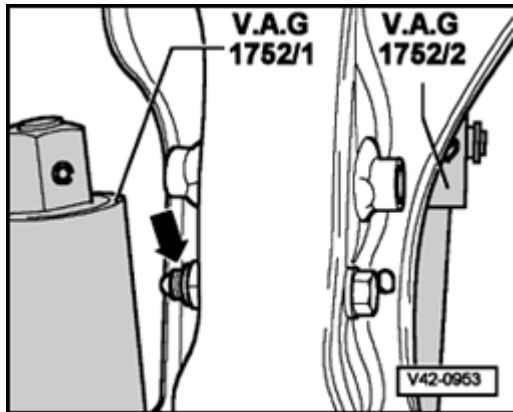
WARNING!

Make sure the coil spring is seated correctly in the VAG1752/3 adapter (arrow).



- A - Compress coil spring using VAG1752/1 spring compressor until upper shock absorber mount is free.

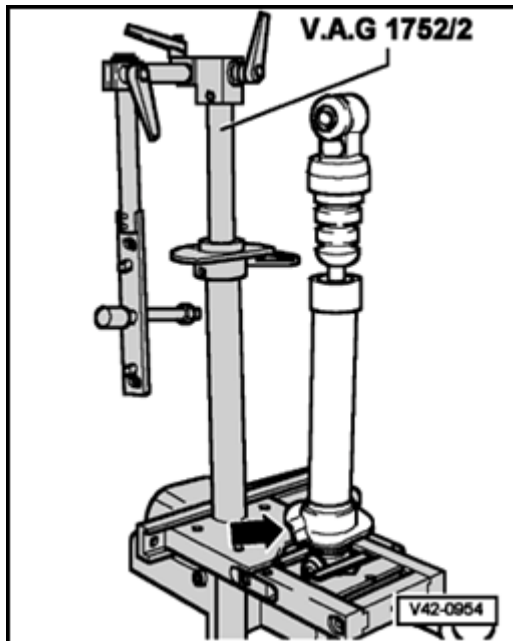
42-73



A

- Remove nut (arrow) and bolt.
- Remove suspension strut mounting bracket and damper ring.
- Remove compressed spring together with VAG1752/1 spring compressor.
- Remove faulty shock absorber from VAG1752 suspension strut tensioner and dispose of properly.

Assembling



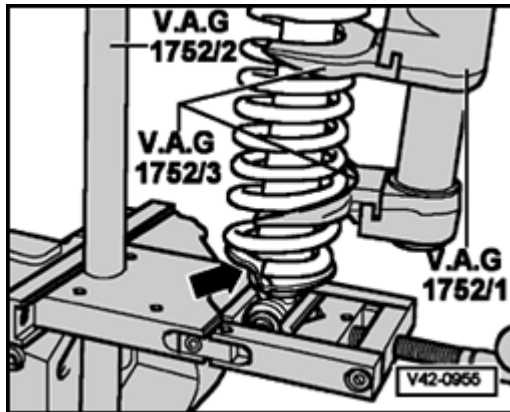
A

- Clamp new shock absorber into VAG1752 suspension strut tensioner, as shown.

Note:

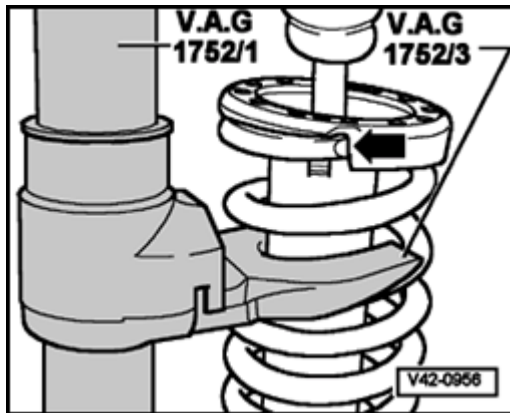
Pay attention to the position of the step on the lower spring retainer (arrow).

42-74



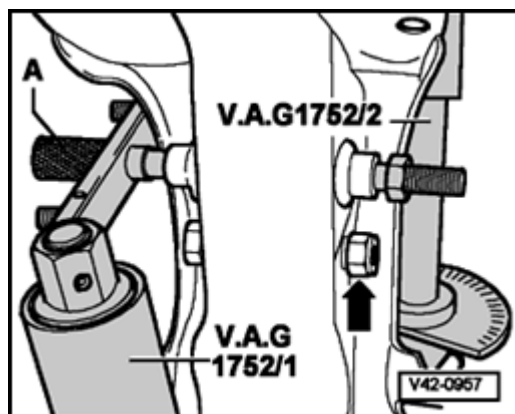
A

- Compress new coil spring using VAG1752/1 spring compressor.
- Fit compressed coil spring onto shock absorber.
 - Colored marking on coil spring must be facing down toward spring retainer
 - End of spring coil should be resting against stop of spring retainer (arrow)



A

- Install damper ring so that end of spring coil is resting against stop of damper ring (arrow).

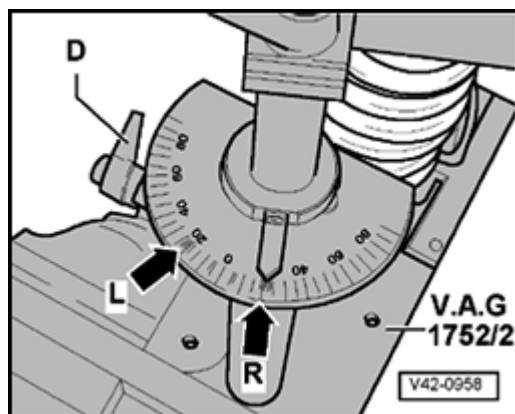


- Install suspension strut mounting bracket.
- A** - Install securing bolt into suspension strut mounting bracket and screw on nut (arrow) loosely.

Note:

Nut faces in direction of travel!

- Install locating bolt -A- into suspension strut mounting bracket and secure loosely with nut.



- A** - Turn suspension strut mounting bracket until pointer on degree scale (on VAG1752 suspension strut tensioner) is pointing to $21^{\circ} \pm 2^{\circ}$ (with locking bolt -D- loose) and ...

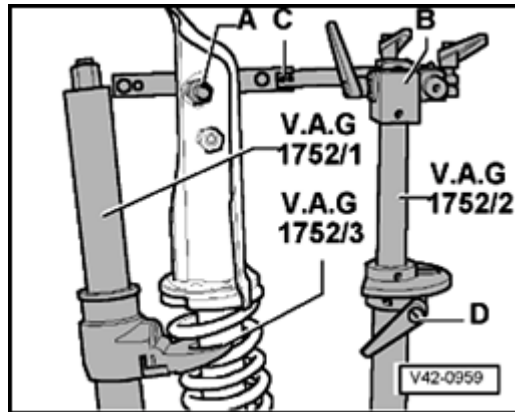
L - left-hand suspension strut

R - right-hand suspension strut

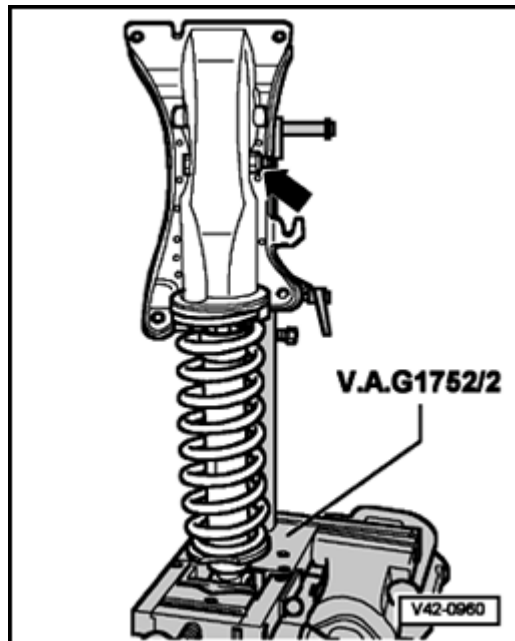
Note:

Illustration shows the position of the degree scale when assembling the right-hand suspension strut.

42-76



- A**
- ... move lever arm -C- with locating bolt -A- perpendicular to height adjuster -B-.
 - Tighten locking bolt -D-.
 - Relieve tension from compressed coil spring and remove VAG1752/1 spring compressor.
 - Remove locating bolt -A- from suspension strut mounting bracket.



- A**
- Tighten nut (arrow).
 - Tightening torque: 70 Nm (52 ft lb) + 1/4-turn (90°)
 - Remove suspension strut from VAG1752 suspension strut tensioner.

Note:

Illustration shows right-hand suspension strut.