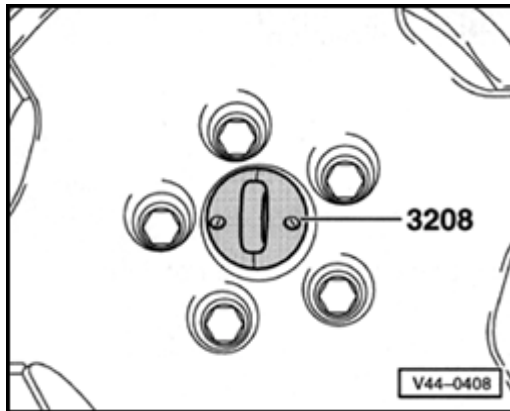


42-24

Suspension strut, removing and installing

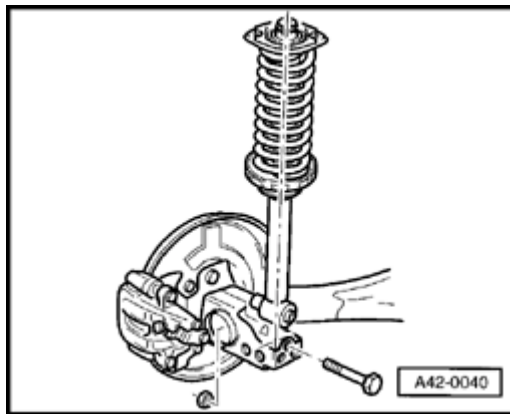
Removing

- 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
- Raise vehicle.
- Remove wheel.



A

- Unbolt suspension strut from axle beam ⇒ [page 42-2](#) , items -6- and -8-.
- Remove rear seat backrest side bolster cover or backrest:

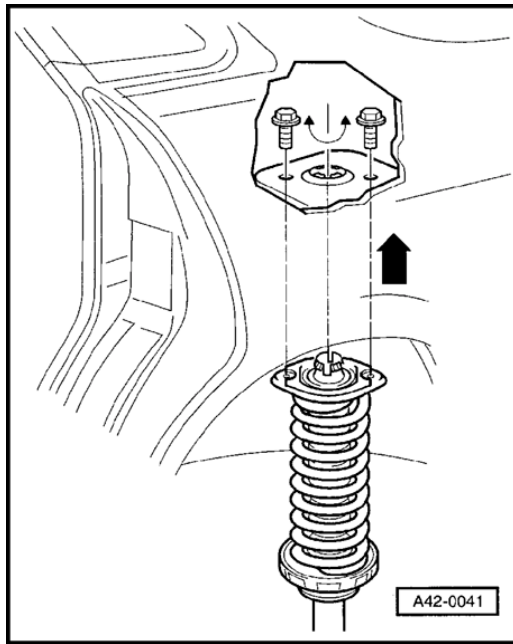
⇒ [Repair Manual, Body Interior, Repair Group 72](#)

- Unbolt upper suspension strut mount ⇒ [page 42-2](#) .

Note:

In addition to the bolted connection, the suspension strut is also attached to the body by four retaining lugs.

42-25



A

- Turn suspension strut until retaining lugs are positioned above recesses.
- Pull suspension strut downward out of its mount.

Installing

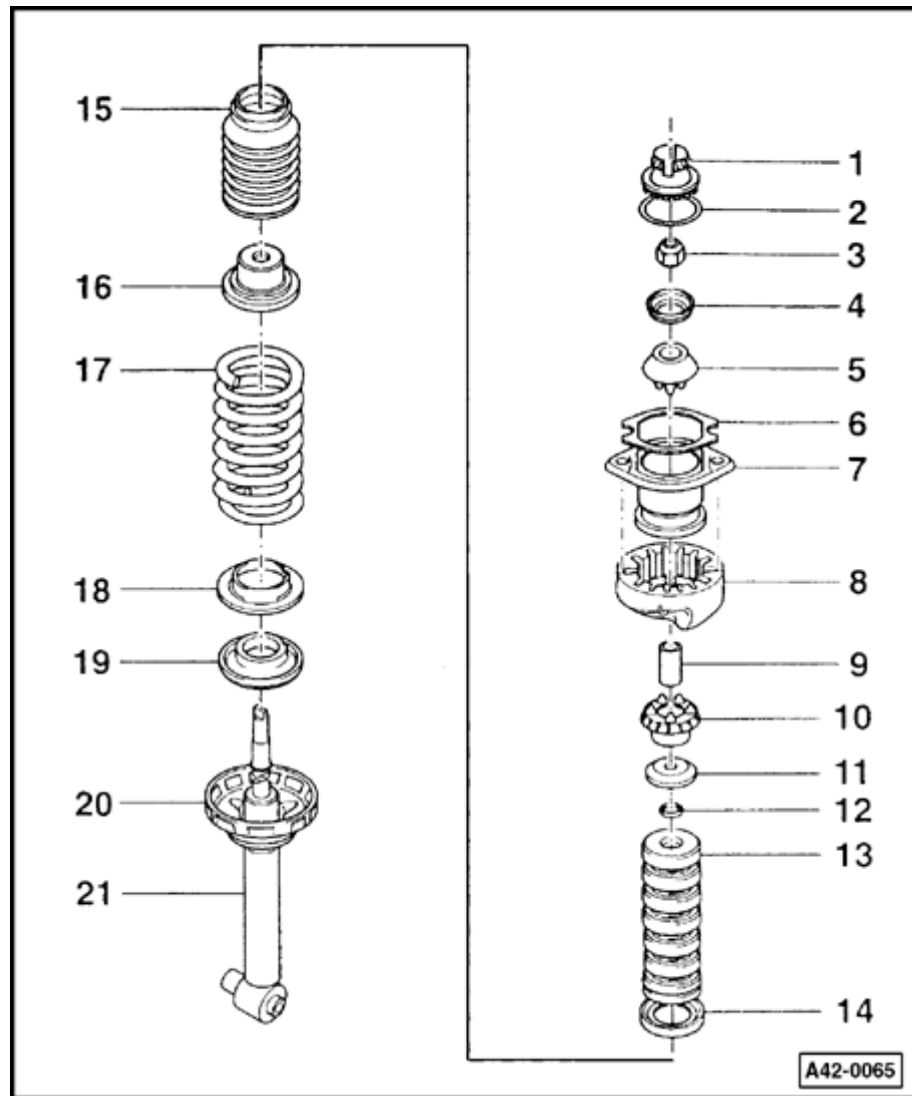
- Install in reverse order of removal.
- Replace gasket on upper spring plate. Thoroughly clean all sealing surfaces

Note:

When installing, make sure that the retaining lugs engage properly.

CAUTION!

The bonded rubber bushings can only be turned to a limited extent. The bolted connections between the shock absorbers and the rear axle should therefore 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

Component locations

1 - Cap

2 - O-ring

- ◆ Coat with silicone grease, Part No. G 000 405 A2

CAUTION!

Part numbers are listed here for reference only. Always check with your Parts department for the latest information.

3 - Self-locking nut

- ◆ Always replace
- ◆ 25 Nm (18 ft lb)

4 - Dished washer

5 - Mounting ring

- ◆ Make sure installation position is correct when installing

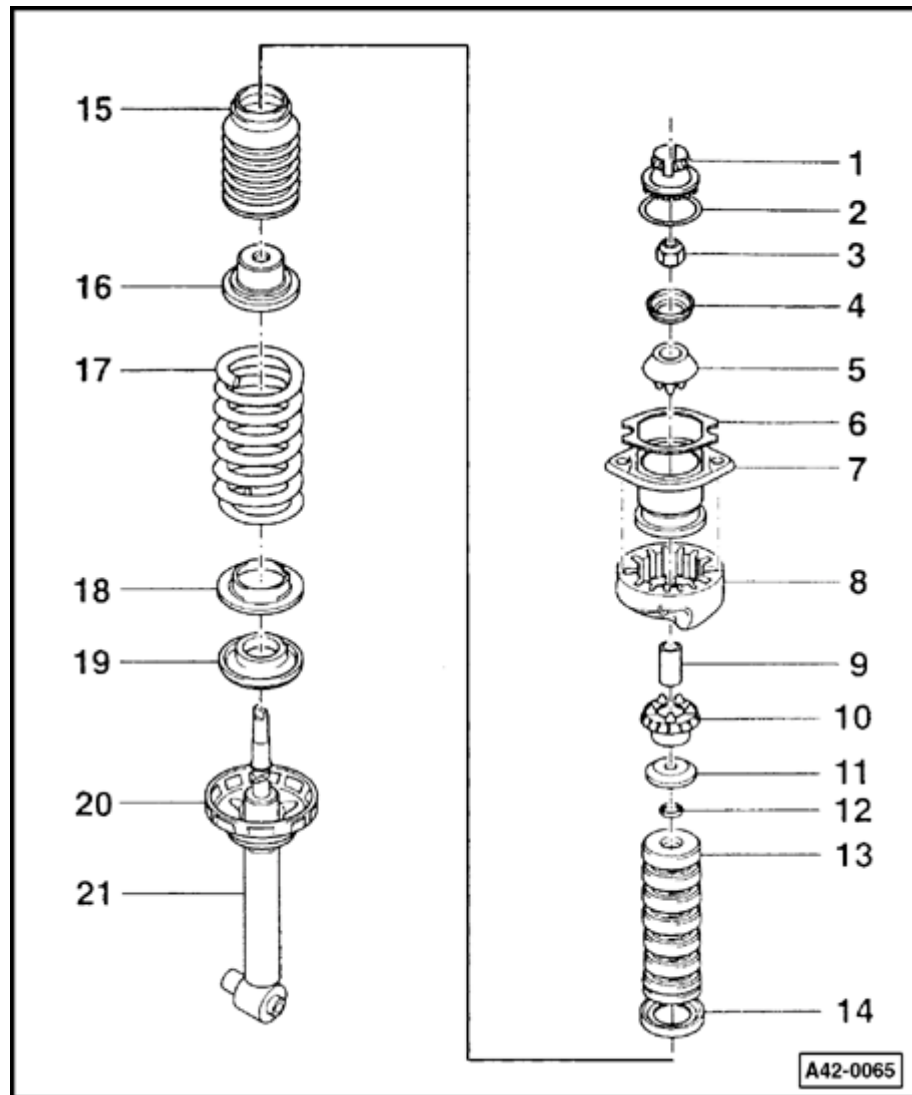
6 - Gasket (foam)

- ◆ Always replace

7 - Upper spring retainer

8 - Upper spring mount

42-27

**9 - Spacer tube****10 - Mounting ring**

- ◆ Make sure installation position is correct when installing

11 - Lower washer or cup

- ◆ Suspension versions 1BA, 1BP and 1BE have lower washer
- ◆ Suspension version 1BB has cup

12 - Ring

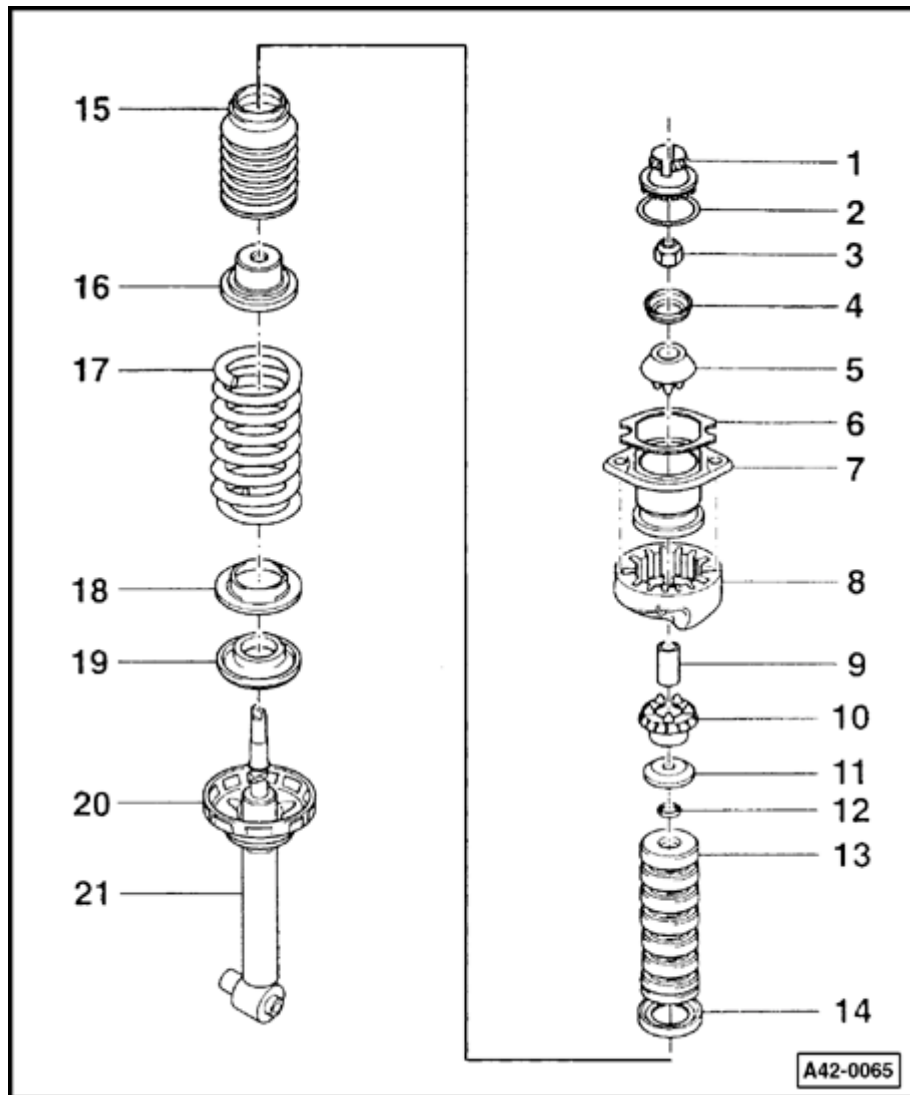
- ◆ Suspension version 1BB has different version

13 - Auxiliary spring**14 - Boot mounting ring****15 - Boot****16 - Protective cap**

- ◆ Suspension version 1BB has different version

17 - Spring

- ◆ Different versions depending on suspension version ⇒ [vehicle data label, page 42-5](#)
- ◆ Always replace springs in pairs
- ◆ Install with color marking at bottom



18 - Spring retainer

19 - Lower spring base

20 - Lower spring seat

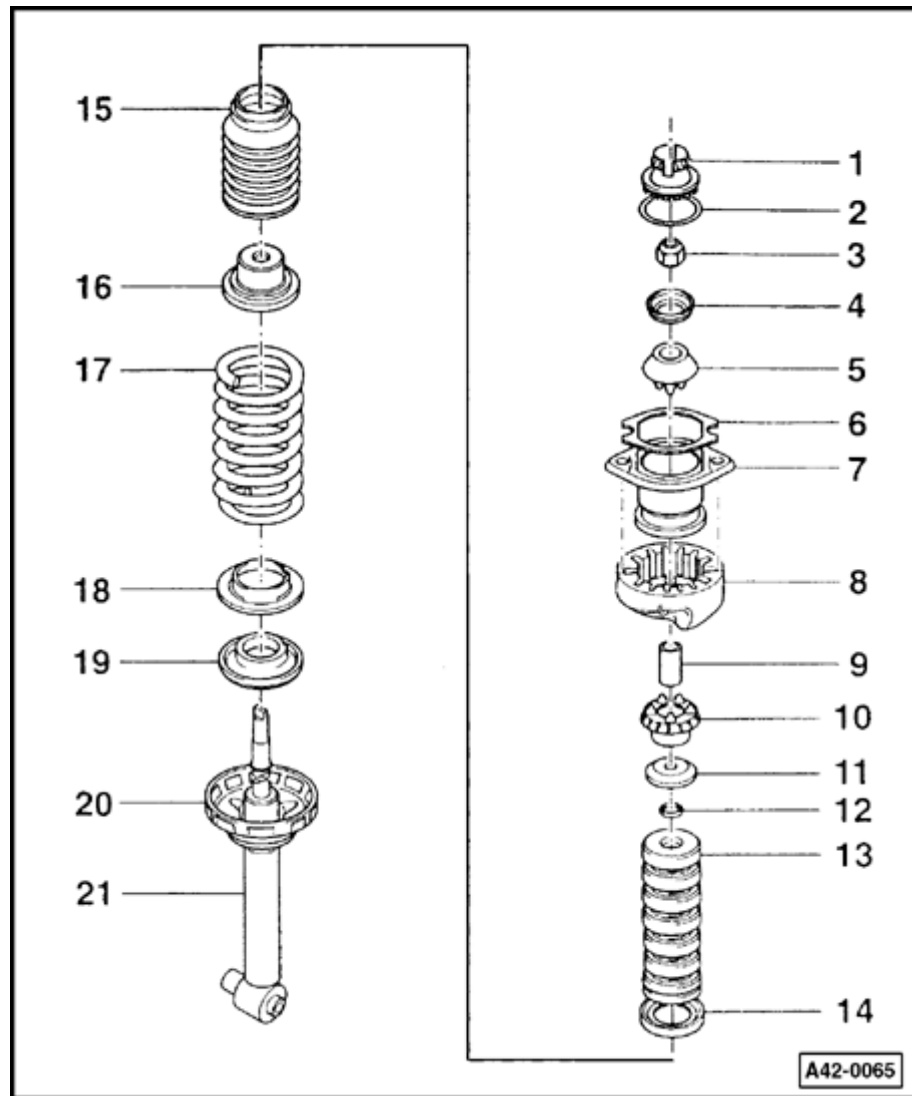
CAUTION!

Do not damage the surface of the spring when driving on the lower spring base - 19 - and the spring retainer - 18 - during assembly.

21 - Gas shock absorber

- ◆ Different versions ⇒ parts catalog microfiche
- ◆ Can be replaced individually
- ◆ Supplied as replacement part with lower spring retainer pressed on
- ◆ Different versions depending on suspension version ⇒ [vehicle data label, page 42-5](#)
- ◆ Malfunctioning shock absorbers must be disposed of properly

42-29



Checking:

- Compress shock absorber by hand. Do not press piston rod with excessive force against end stop otherwise valves could be damaged.
- Piston rod must move evenly and smoothly over entire stroke
 - Release piston rod.
- Piston rod returns automatically back to starting position if gas charge is adequate
- Visually inspect shock absorber mount for settling and position of circlip on shock absorber piston rod should be checked ⇒ Special Information binder

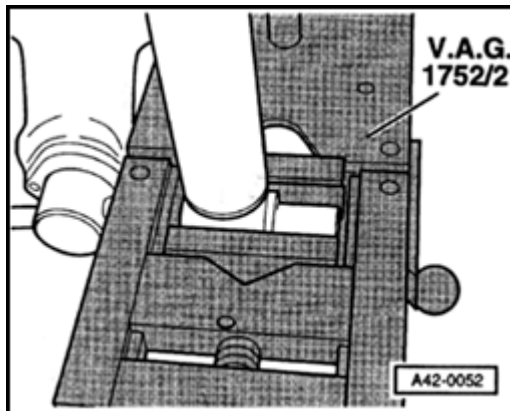
Disassembling and assembling suspension strut

Note:

Pay attention to the different components used in the various suspension versions (e.g. "Standard", "Sport" and "Heavy Duty" suspensions).

Disassembling

- Clamp VAG1752/2 spring mounting tool in vise.



- A** - Install shock absorber into VAG1752/2 spring mounting tool.
- Use screwdriver to pry out cap ⇒ [page 42-26](#) , item -1-.



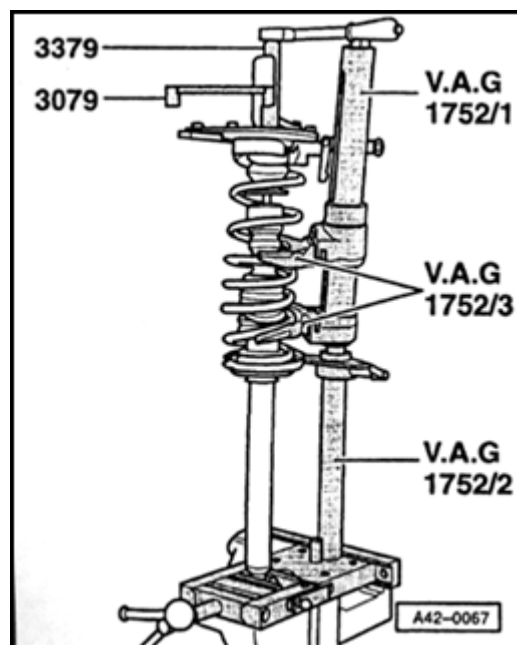
- A** - Place VAG1752/1 spring compressor onto coil spring.

WARNING!

Make sure the coil spring is seated correctly in the VAG1752/3

adapter (arrow).

42-31



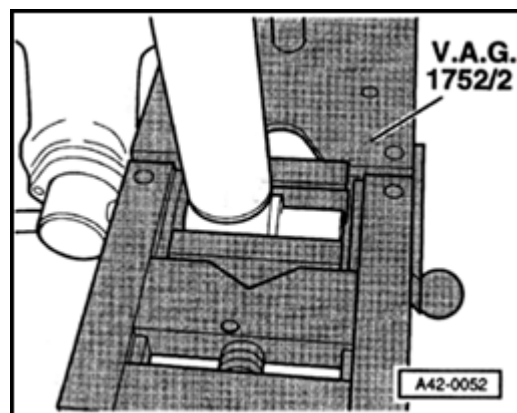
A

- Compress coil spring using VAG1752/1 spring compressor until upper spring retainer is free.
- Remove self-locking nut from piston rod (counter hold using hex wrench).
- Remove appropriate components.

Assembling

Note:

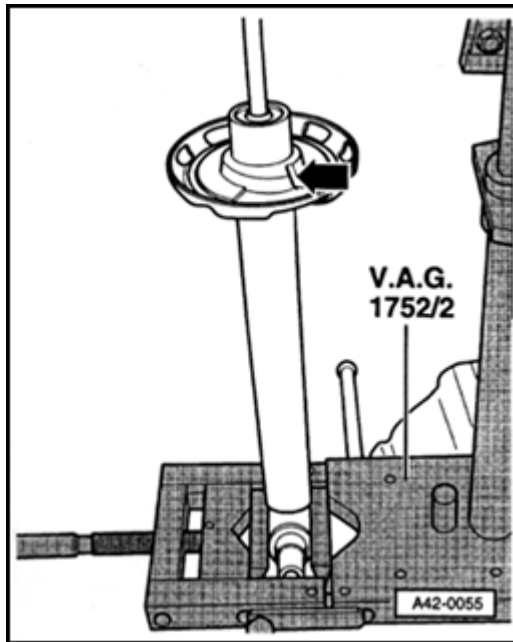
The left and right-side suspension struts are identical parts.



A

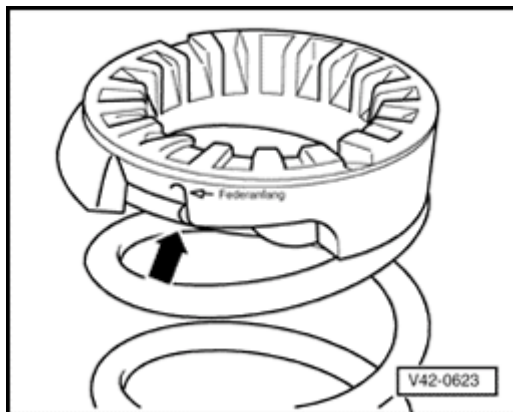
- Clamp shock absorber in VAG1752/2 spring mounting tool.

42-32



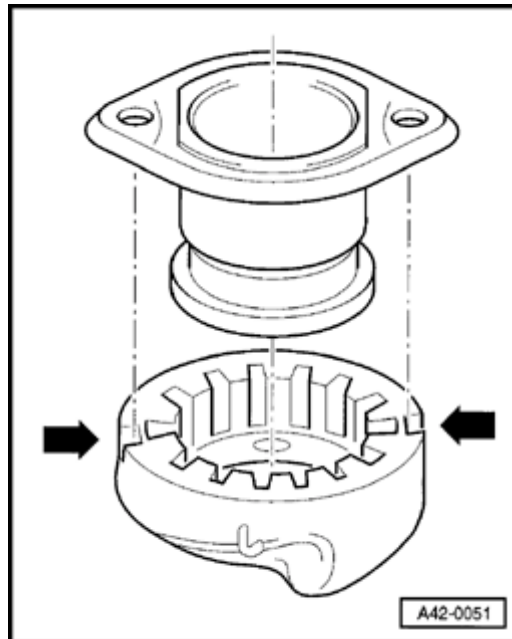
A

- Align lower spring base and spring retainer in direction of shock absorber eye, as illustrated.
- Install compressed coil spring.
 - End of spring coil must lie against stop on spring retainer (arrow).
- Install protective cap, boot, boot mounting ring, auxiliary spring, ring, mounting ring and spacer tube.
- Install upper spring base.



A

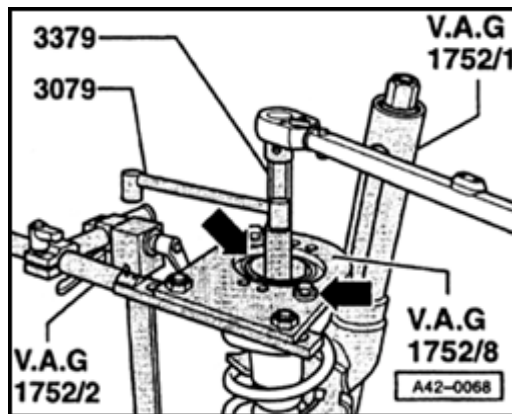
- End of coil spring ("Federanfang") must lie against recess of upper spring base (arrow).



- Install upper spring retainer.

A

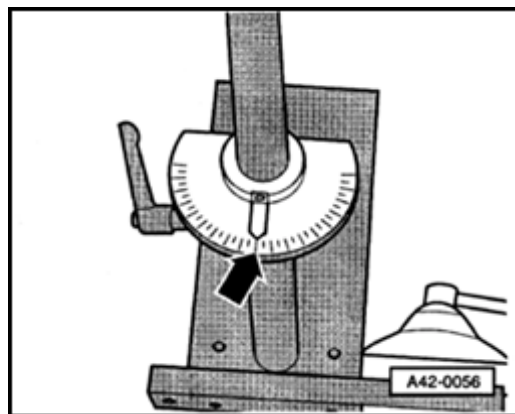
- Stamped nuts of spring retainer (arrows) must be located in recesses of spring base.
- Install mounting ring, dished washer and self-lock-nut.
- Mount VAG1752/8 adjustment gauge for struts onto VAG1752/2 spring mounting tool.



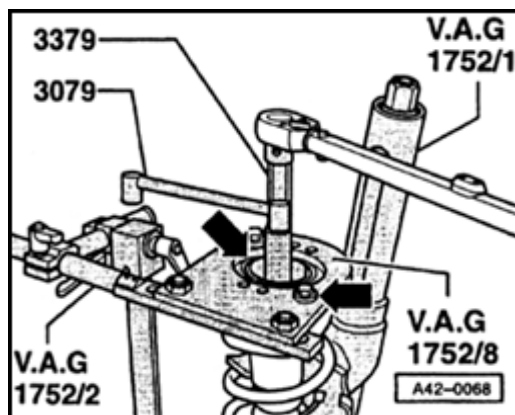
A

- Mount VAG1752/8 gauge onto upper spring retainer and tighten bolts.
- Lock VAG1752/2 spring mounting tool upper levers into position.

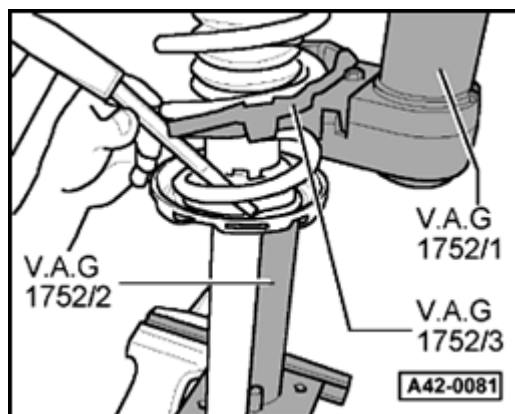
42-34



- A
- Loosen lower locking lever and turn upper spring retainer until scale of VAG1752/2 spring mounting tool is positioned at 0°.
 - Make sure that ends of springs lie against stops.
 - Secure locking lever in position.



- A
- Tighten self-locking nut using 3379 socket wrench insert and 3079 counter holder.
- Tightening torque: 25 Nm (18 ft lb)



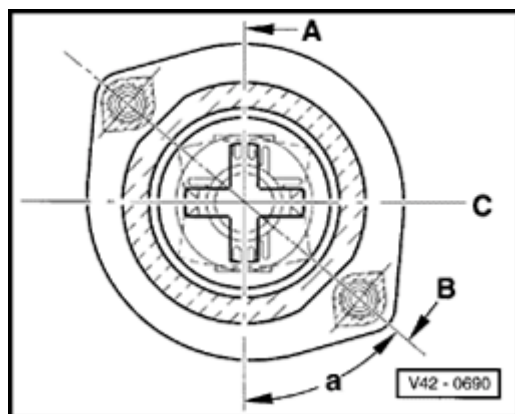
A

- Turn lower spring base and spring retainer (⇒ [page 42-28](#) , items - 18 - and - 19 -) as necessary so that end of spring contacts stop.

CAUTION!

Do not damage the surface of the spring when driving on the lower spring base - 19 - and the spring retainer - 18 -.

- Carefully release compressed coil spring.
 - Make sure that coil spring and upper and lower spring retainers are correctly positioned.
- Remove VAG1752/1 spring compressor after it is free.
- Unbolt VAG1752/8 adjustment gauge for struts and remove.
- Remove suspension strut from VAG1752/2 spring mounting tool.



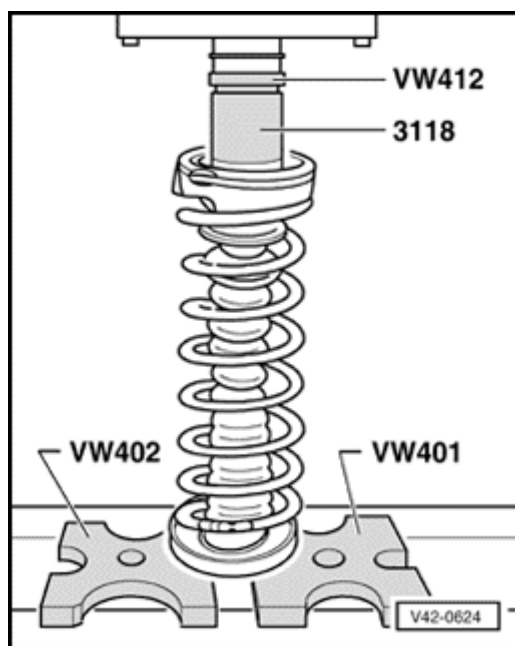
- ▲ Axis -C- of cap is offset 90° from axis -A- of shock absorber eye.
- Install cap onto upper spring retainer.

Note:

Lubricate O-ring with grease G 000 405 A2 before installing cap.

CAUTION!

Part numbers are listed here for reference only. Always check with your Parts department for the latest information.



- ▲ - Use special tools to press in cap.

