

Suspension, assembly overview



- Strut
 - Can be replaced individually
 - Application ⇒ Electronic Parts Catalog "ETKA"
- Buffer stop
- Protective sleeve
- Coil spring
 - Removing and installing ⇒ <u>40-6, Coil spring, removing</u>
 - Observe color coding

 Application ⇒ Electronic Parts Catalog "ETKA"

Spring allocation via PR no.

These numbers can be found on vehicle data plate.

- Surface of the winding must not be damaged
- Axial groove ball bearing
- Suspension strut bearing
 - Observe installed location ⇒ <u>40-6, Installation position of</u> <u>spring retainer</u>
- Hex nut
 - Torque specification \Rightarrow <u>Topic</u> <u>40-3</u>
 - Self-locking
 - Always replace after removal
- Suspension strut dome
- Hex bolt
 - Torque specifications ⇒ <u>Topic 40-3</u>
 - Always replace after removal
- Protective cap

Suspension strut, removing and installing

Removing

3424	V.A.G 1332
	<u>er</u>
V.A.G 1383 A	T10149
	C.o
	W40-10003

Special tools, testers and auxiliary items required

- Spreader 3424
- Torque wrench V.A.G 1332
- Engine/transmission jack V.A.G 1383 A
- Wheel hub support T10149

- Loosen drive axle hex bolt \Rightarrow <u>40-7</u>, <u>Drive axle hex bolt</u> <u>connection, loosening and tightening</u> .

- Remove wheel.



- Remove coupling hex nut - **arrow** - from suspension strut.

- Disengage wire for wheel speed sensor from suspension strut.



- Remove bolts - Arrows - .

- Pull wheel bearing housing with ball joint out of control arm.

- Pull drive axle outer joint out of wheel hub.
- Secure drive axle to body using wire.

Note:

- Drive axle must not hang down, otherwise inner joint may be damaged when over bent.
- Bolt ball joint onto control arm again.



- Secure engine/transmission jack V.A.G 1383 A with Wheel Hub Support T10149 to wheel hub using one wheel bolt.



- Separate wheel bearing housing/suspension strut bolt connection - **arrow** - .



- Insert spreader 3424 into wheel bearing housing slot.

- Turn ratchet around 90 $\,^\circ\,$ and remove from spreader 3424 $\,$.

- Press brake disc in direction of suspension strut by hand.

Otherwise strut tube may be canted in hole of wheel

bearing housing.

- Pull wheel bearing housing downward off strut tube and lower using engine/transmission jack V.A.G 1383 A until strut tube hangs free.

- Tie wheel bearing housing onto console/subframe using wire.

- Remove engine/transmission jack V.A.G 1383 A under wheel bearing housing.

- Remove wiper arms

⇒ Repair Manual, Electrical Equipment, Repair Group 92,

- Remove plenum chamber cover.



- Remove hex bolts - **arrows** - for upper strut mounting and remove suspension strut.

Installing

- Insert suspension strut, one of the two markings - **arrows** - must point in direction of travel when doing this.



Installation position of spring retainer



Tighten hex bolts - arrows - for upper strut mount.

- Install plenum chamber cover.
- Install wiper arms
- ⇒ Repair Manual, Electrical Equipment, Repair Group 92,



- Secure engine/transmission jack V.A.G 1383 A with wheel hub support T10149 to wheel hub using a wheel bolt.

- Position suspension strut on wheel bearing housing.
- Remove wire on wheel bearing housing.

- Carefully lift wheel bearing housing with engine/transmission jack V.A.G 1383 A enough so that the suspension strut/wheel bearing housing bolt can be inserted.

- To do so, press brake disc by hand in direction of suspension strut while lifting.

Otherwise strut tube may be canted in hole of wheel bearing housing.

- Remove spreader 3424 .



- Tighten wheel bearing housing/suspension strut bolt connection - **arrow** - .



- Remove nuts arrows .
- Install drive axle in wheel hub.

- Install wheel bearing housing with ball joint in control arm.

- Bolt ball joint to control arm.

Note:

• Check boot for damage or twisting.

Rest of installation is performed in the reverse order of removal.

Torque specifications \Rightarrow <u>40-3</u>, Front axle, tightening torques

- Install and fasten wheel, torque specification \Rightarrow <u>44-2</u>, <u>Torque specification for wheel bolts</u>.

Suspension strut, servicing

V.A.G 1332	V.A.G 1752
T 10001	
	W40-0119

Special tools, testers and auxiliary items required

- Torque wrench V.A.G 1332
- Spring compressor V.A.G 1752/1
- Shock absorber set T10001
- Spring holder V.A.G 1752/5
- Ratchet (commercially available)

Coil spring, removing



- Pretension coil spring using spring compressor V.A.G 1752/1 until upper axial groove ball bearing is free.

- Spring compressor V.A.G 1752/1
- Torque wrench V.A.G 1332
- Bit XZN 18 T10001/8
- Ratchet T10001/11
- Bit XZN 18 T10001/5
- Spring holder V.A.G 1752/4

Caution!

First, pretension spring until upper spring plate is no longer burdened!



- Be sure coil spring is properly seated in spring holders V.A.G 1752/4 - arrow - .

- Remove hex nut from piston rod.

Coil spring, installing

- Place coil spring with spring compressor V.A.G 1752/1 on lower spring plate.



End of spring coil must rest against stop - arrow - .

- Tighten new hex nut on piston rod.

- Release spring compressor V.A.G 1752/1 and remove from coil spring.

- Install suspension strut \Rightarrow <u>40-6</u>, <u>Installing</u>.

Torque specifications \Rightarrow <u>40-3</u>, Front axle, tightening torques