40-1

Front axle components, locations

WARNING!

- ***Do not re-use any fasteners that are worn or deformed in normal use.***

- ***Some fasteners are designed to be used only once, and are unreliable and may fail if used a second time. This includes, but is not limited to, nuts, bolts, washers, circlips and cotter pins. Always follow the recommendations in this manual-replace these fasteners with new parts where indicated, and any other time it is deemed necessary by inspection.***

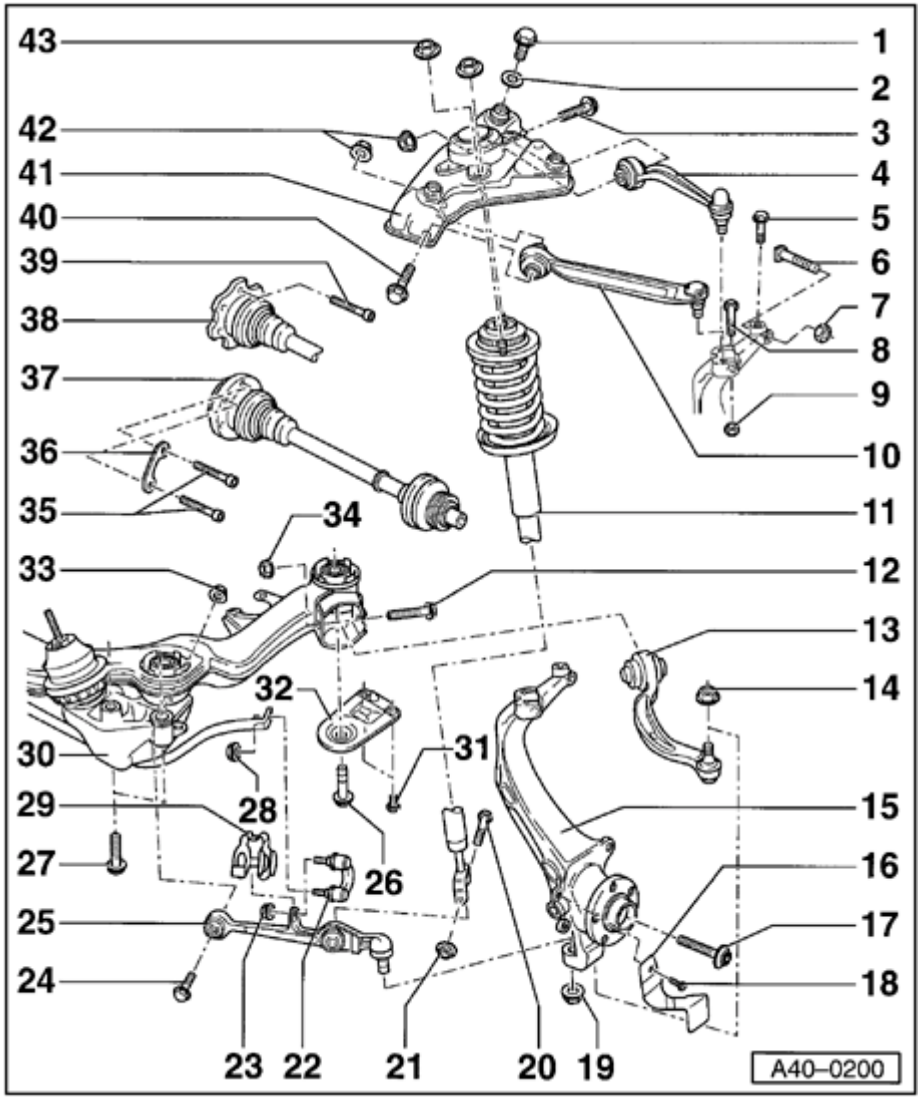
CAUTION!

- ***Do not attempt to weld or straighten the load-bearing components or parts of the suspension.***

- ***Do not attempt to move a vehicle from which the drive axle has been removed. Otherwise wheel bearing damage will result. If the vehicle does have to be moved, install an outer CV joint in place of the drive axle and tighten to 50 Nm (37 ft lb).***

- ***The bonded rubber bushings can only be turned to a limited extent. The bolted connections on the suspension links should therefore only be tightened when the vehicle is standing on the ground.***

40-2



1 - Bolt

- 75 Nm (55 ft lb)

2 - Washer

3 - Bolt

- Always replace

Note different lengths:

- With steel mounting bracket: M10 x 60
- With aluminum mounting bracket: M10 x 62

4 - Upper link, rear

- Note different versions: with and without buffer stop ⇒ Figs. 1 and ⇒ 2
- Replacing bushing ⇒ page 40-75

5 - Bolt

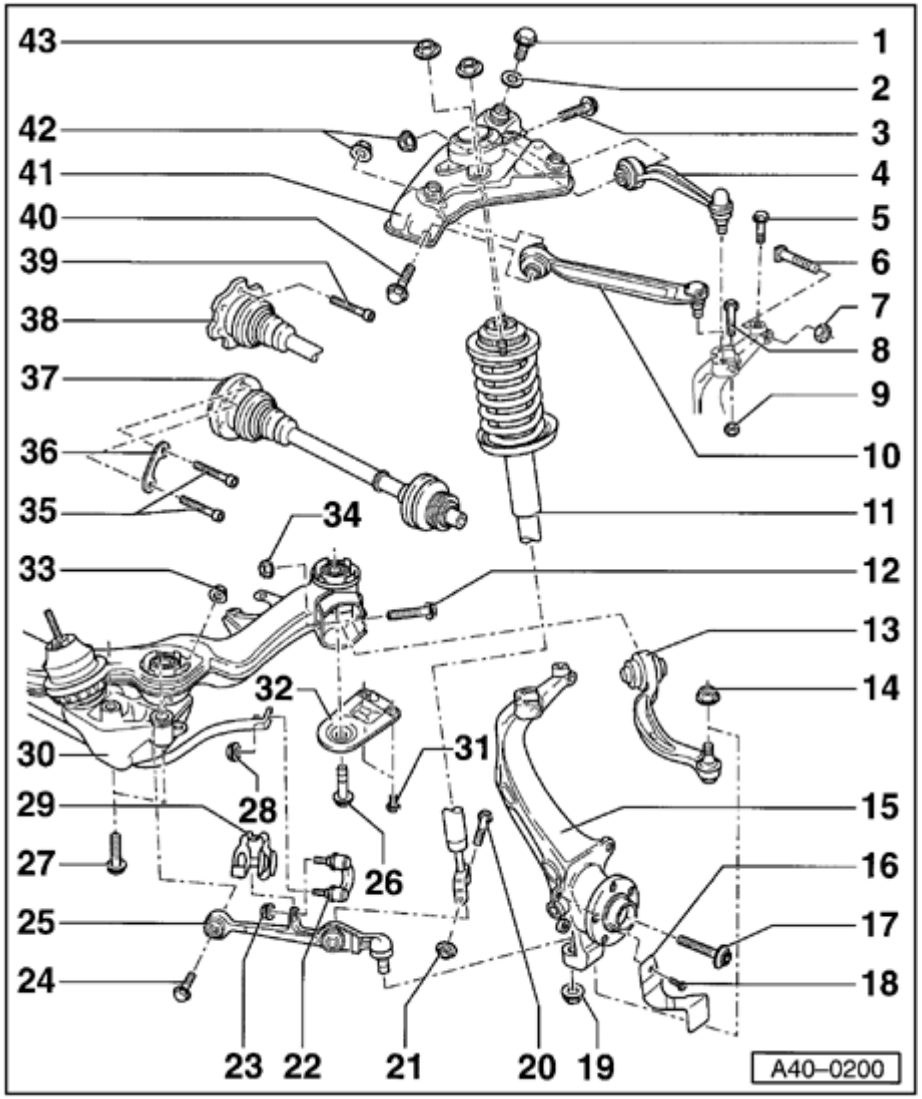
- 7 Nm (62 in. lb)
- Tighten until firm contact is made

6 - Bolt

7 - Self-locking nut

- Always replace
- 50 Nm (37 ft lb)

40-3



8 - Bolt M10 x 100

9 - Self-locking nut

- Always replace
- 40 Nm (30 ft lb)

10 - Upper link, front

- Remove together with mounting bracket
- Removing and installing mounting bracket ⇒ page 40-68
- Replacing bushing ⇒ page 40-75

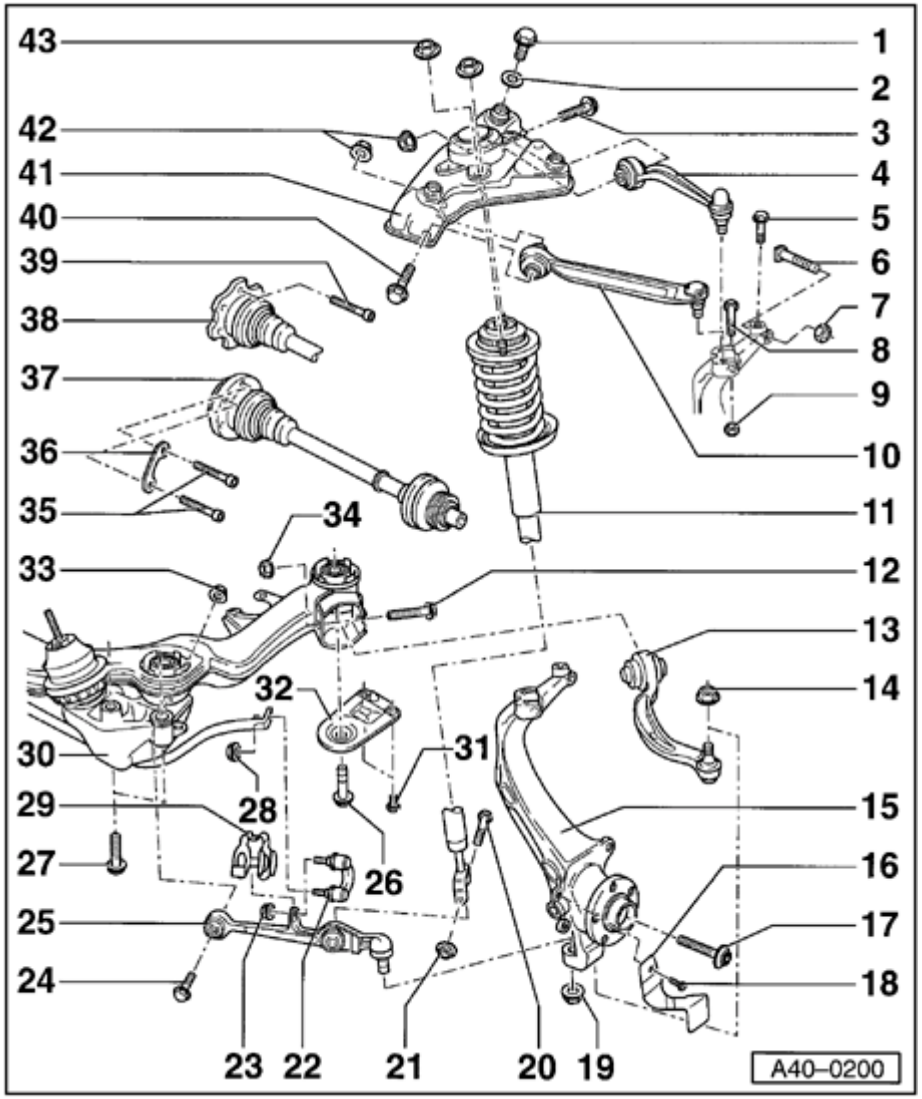
11 - Suspension strut

- Note different spring/shock absorber versions ⇒ vehicle data label, page 40-46
- Removing and installing ⇒ page 40-39
- Servicing ⇒ page 40-44

12 - Bolt w/washer M12 x 1.5 x 120

- Always replace

40-4



13 - Guide link with hydraulic bushing

- Removing and installing ⇒ page 40-97
- Replace hydraulic bushing if leaking ⇒ page 40-99

14 - Self-locking nut

- Always replace
- 100 Nm (74 ft lb)

15 - Wheel bearing housing

- Removing and installing on vehicles with headlight range control ⇒ page 40-14
- Removing and installing ⇒ page 40-54
- Servicing ⇒ page 40-60

16 - Splash shield

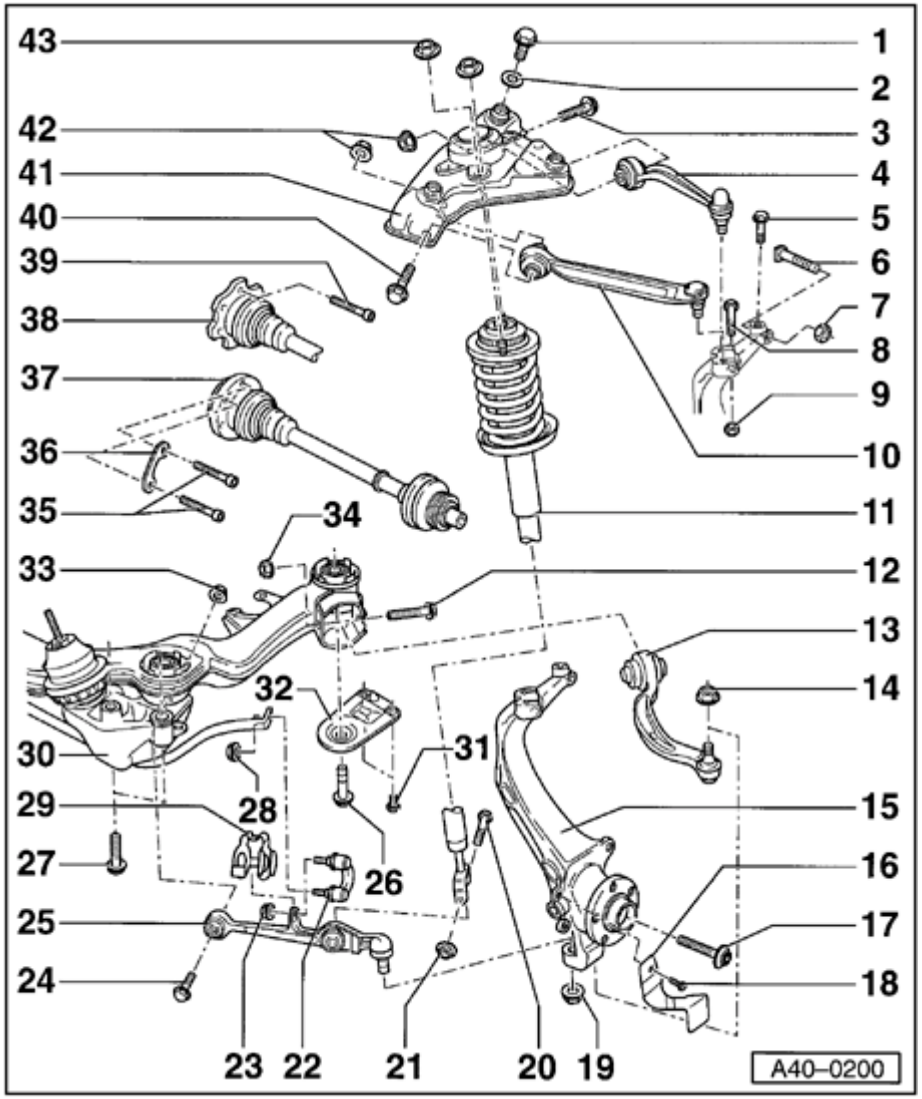
17 - Collar bolt

- Always replace
- When tightening, vehicle must be standing on its wheels

Tightening torques:

- M14: 115 Nm (85 ft lb) + 1/2-turn (180°)
- M16: 190 Nm (140 ft lb) + 1/2-turn (180°)

40-5



18 - Bolt

- 10 Nm (7 ft lb)

19 - Self-locking nut

- Always replace
- 100 Nm (74 ft lb)

20 - Bolt M12 x 1.5 x 85

21 - Self-locking nut

- Always replace
- 90 Nm (66 ft lb)

22 - Connecting link

- Arrow faces direction of travel

23 - Self-locking nut

- Always replace
- 40 Nm (52 ft lb) + 1/4-turn (90°)
- Underside of nut is ribbed
- Replace only with exact same type of special nut

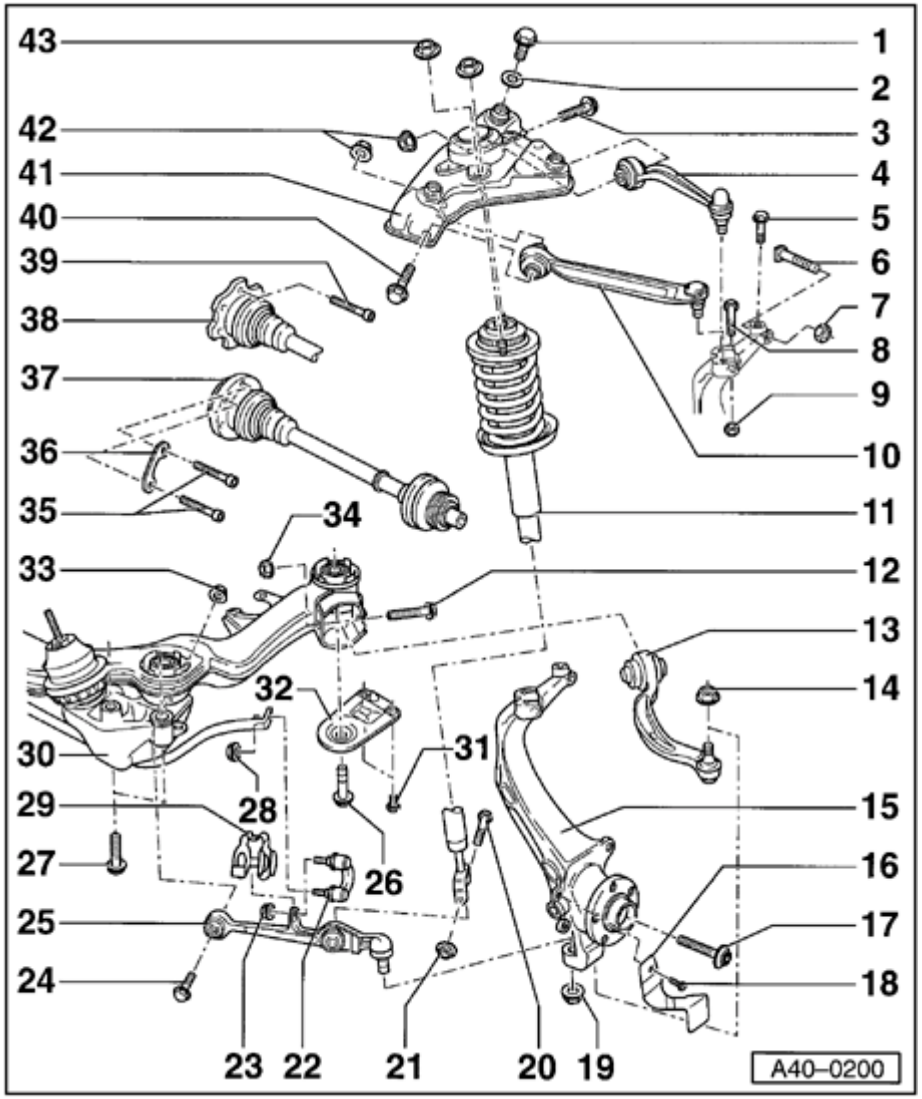
24 - Bolt M12 x 1.5 x 100

- Always replace

25 - Lower track control link

- Removing and installing on vehicles with headlight range control ⇒ page 40-14
- Replacing bushing ⇒ page 40-94

40-6



26 - Bolt M12 x 1.5 x 110

- Always replace
- 110 Nm (81 ft lb) + 1/4-turn (90°)

27 - Bolt M10 x 70

- Always replace
- 75 Nm (55 ft lb)

28 - Self-locking nut

- Always replace
- 100 Nm (74 ft lb)
- Replace only with exact same type of special nut

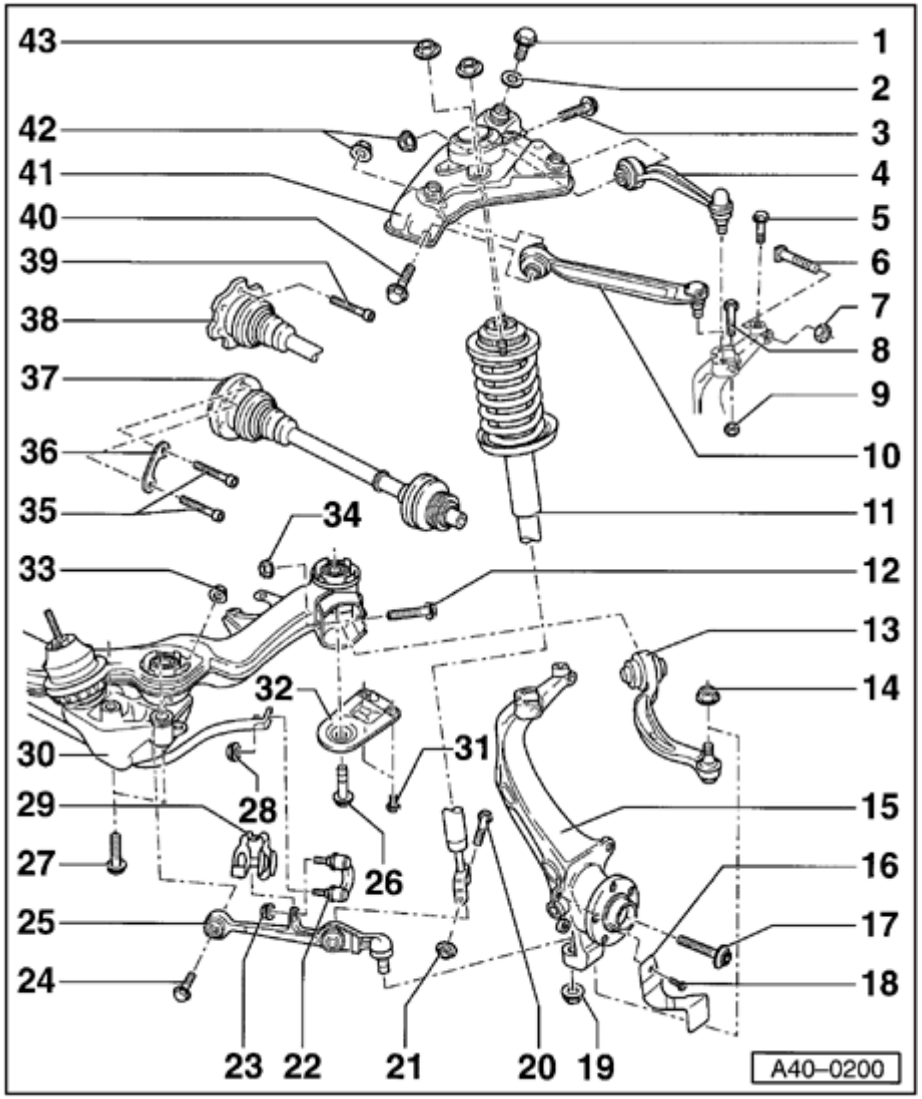
29 - Clamp

- Always replace
- Attached onto lower track control link - 25 -

30 - Subframe

- Removing and installing on vehicles with headlight range control ⇒ page 40-14
- Removing and installing ⇒ page 40-77
- Replacing bushing ⇒ page 40-86

40-7



31 - Bolt M8 x 25

Note different tightening torques ⇒ Fig. 3 :

- 25 Nm (18 ft lb)
- 75 Nm (55 ft lb)

32 - Support for subframe

33 - Self-locking nut

- Always replace
- 80 Nm (59 ft lb) + 1/4-turn (90 °)

34 - Self-locking nut

- Always replace
- 90 Nm (66 ft lb) + 1/4-turn (90 °)

35 - Socket-head bolts

- M8 x 48: 40 Nm (30 ft lb)
- M10 x 48: 80 Nm (59 ft lb)

36 - Spacer plate

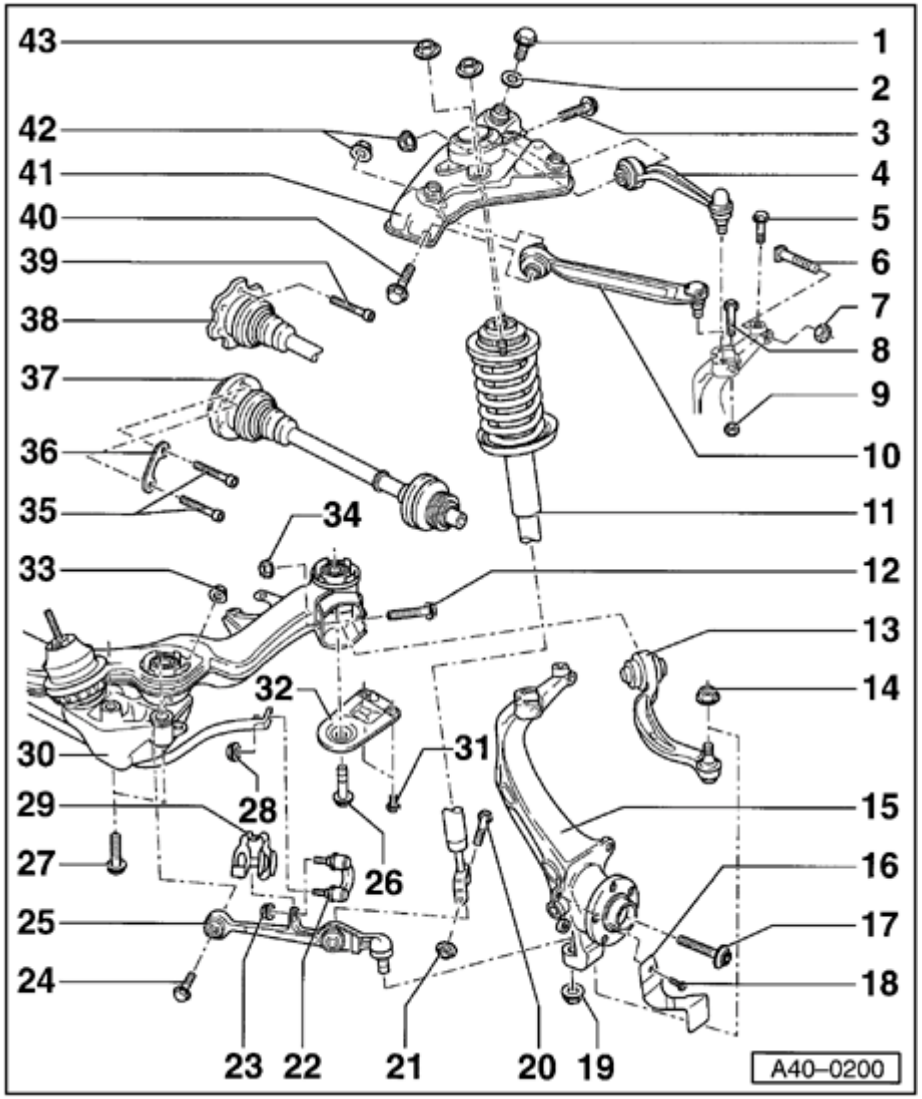
37 - Drive axle with Constant Velocity (CV) joint

- Removing and installing ⇒ page 40-17
- Servicing ⇒ page 40-20

38 - Drive axle with triple-rotor joint

♦ Servicing ⇒ page 40-29

40-8



39 - 12-point socket-head bolt M10 x 20

- 80 Nm (59 ft lb)
- For vehicles with triple-rotor joint

40 - Bolt

- Always replace

Note different lengths:

- With steel mounting bracket: M10 x 60
- With aluminum mounting bracket: M10 x 62

41 - Mounting bracket

- Removing and installing ⇒ page 40-68
- Aluminum bracket m.y. 1998 ➢
- Note changes to wheel alignment ⇒ pages 44-15 and ⇒ Page 44-16
- Do not mix steel and aluminum brackets

42 - Self-locking nut

- Always replace
- 50 Nm (37 ft lb) + 1/4-turn (90°)

43 - Self-locking flanged nut

- Always replace
- 20 Nm (15 ft lb)

As of chassis number 8DTA 321 912, stop plates were installed as end stops for vehicles with sport suspension.

Note:

Do not remove the stop plates.

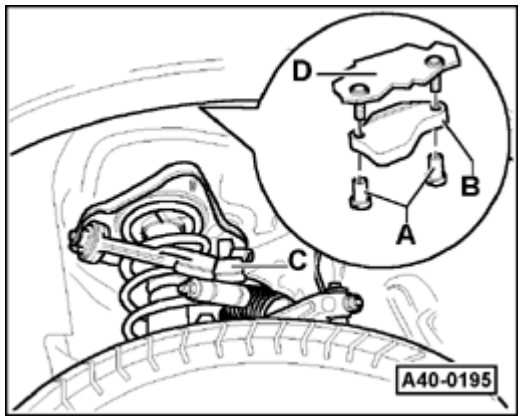


Fig. 1 Stop plates

A - Caps

B - Stop plate

C - Rear upper link

D - Bodywork

From m.y. 1997 ➢, buffer stops are installed at the rear upper links.

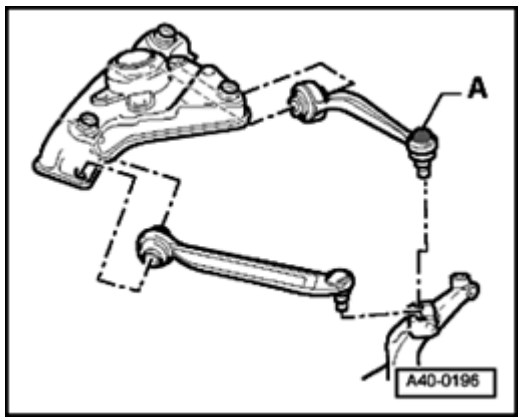


Fig. 2 Buffer stop

Rear upper link with buffer stop -A-

Note:

When replacing a rear upper link on a vehicle without a stop plate, always install the new version of the link.

CAUTION!

- ***Upper links without buffer stops are installed on vehicles with stop plates.***
- ***Do not remove the stop plate.***

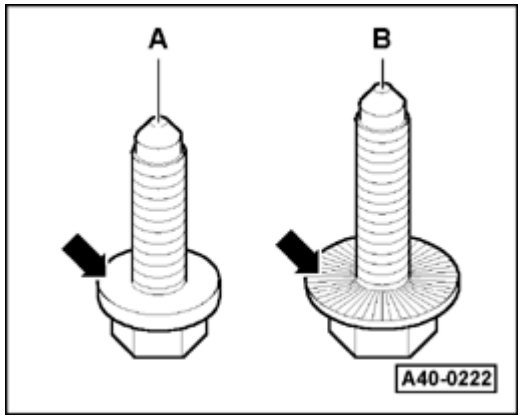


Fig. 3 Note different tightening torques

Only ribbed bolts are installed from m.y. 1998 ➢; this bolt can also be installed on older models.

- Bolt -A- not ribbed (arrow) tightening torque: 25 Nm (18 ft lb)
- Bolt -B- ribbed (arrow) tightening torque: 75 Nm (55 ft lb)