33–425 checking upper and lower ball joints

Bearing	Ball joint		
	Ball dia.	Ball cups	Checking instructions
Supporting joint	32	Plastics	Ball pin should permit moving back and forth without clearance, but also without binding and without rasping noises.
Guide joint	30		

Note

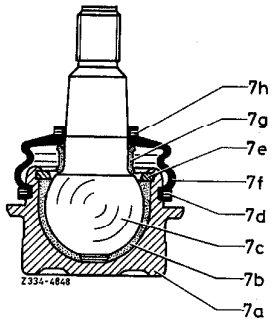
The supporting joint (below) and the guide joint (top) of the steering knuckle bearing are ball joints supported in plastic shells.

The housing of the supporting joint is pressed into the steering knuckle, while the guide joint is located in the upper control arm.

The ball joints require no maintenance, that is, they are provided with lubricant for life. In a service-free joint the seal against the penetration of dirt and sand is of decisive importance for the life of the joint. For this reason, the joints must be carefully checked at regular intervals. If dirt enters through a leaking sleeve while driving, the dirt will inevitably result in early wear of respective joint.

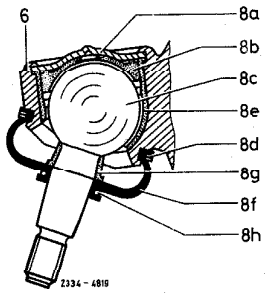
A rubber sleeve damaged during assembly jobs should therefore be immediately replaced. **A joint found operating with a leaking sleeve must be replaced on principle.**

When the guide joint is defective, the complete upper control arm must be replaced.



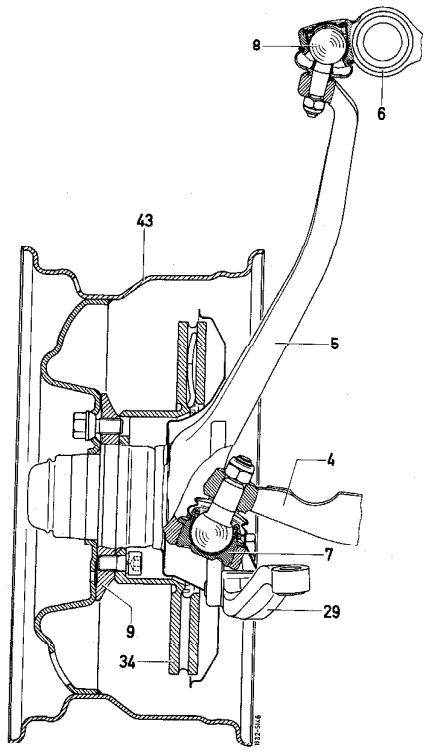
Supporting joint

7a	Housing	7e	Washer
7b	Ball cup	7f	Sleeve
7c	Ball pin	7g	Supporting ring
7d	Wire tensioning ring	7h	Wire tensioning ring



Guide joint

6	Lower control arm	8e	Ball cup
8a	Closing cover	8f	Sleeve
8b	Upper ball cup	8g	Supporting ring
8c	Ball pin	8h	Wire tensioning ring
8d	Wire tensioning ring		



4 Lower control arm
5 Steering knuckle
6 Upper control arm
7 Supporting joint
8 Guide joint
9 Front wheel hub
29 Steering knuckle arm
34 Brake disc
43 Rim

Checkup

1 Check ball joints. For this purpose, place tube approx. 150 mm long on ball pin, refer to checking instructions.

2 Check supporting joint for tight seat in steering knuckle.

3 Check sleeves (7f or 8f) for cracks and damage. Check wire tensioning ring (7d or 8d) and wire tensioning ring (7d or 8h) for correct seat.

Attention!
The interface of the wire tensioning ring (8d) on guide joint should point in driving direction.