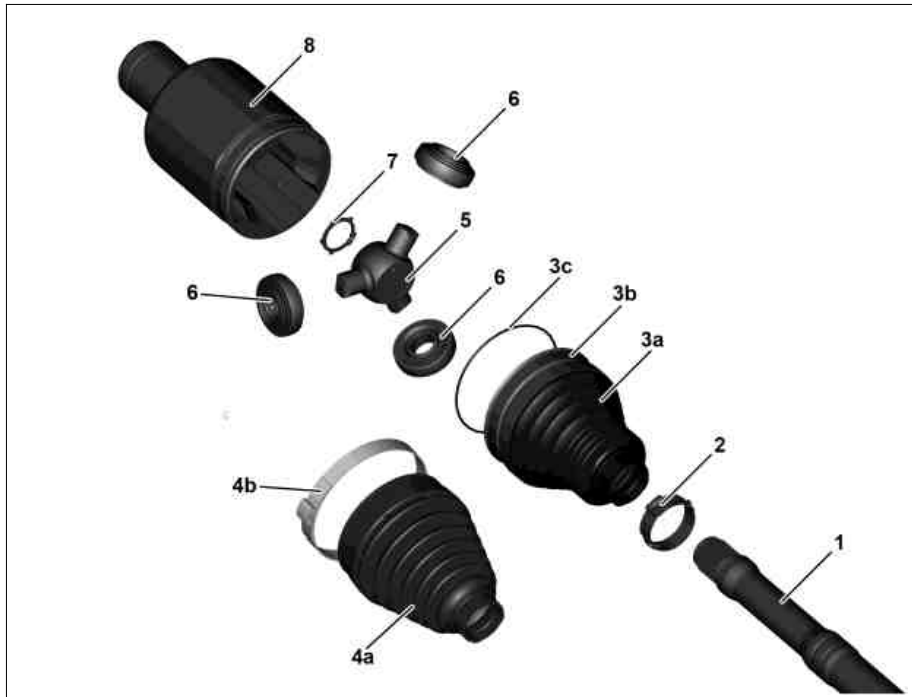


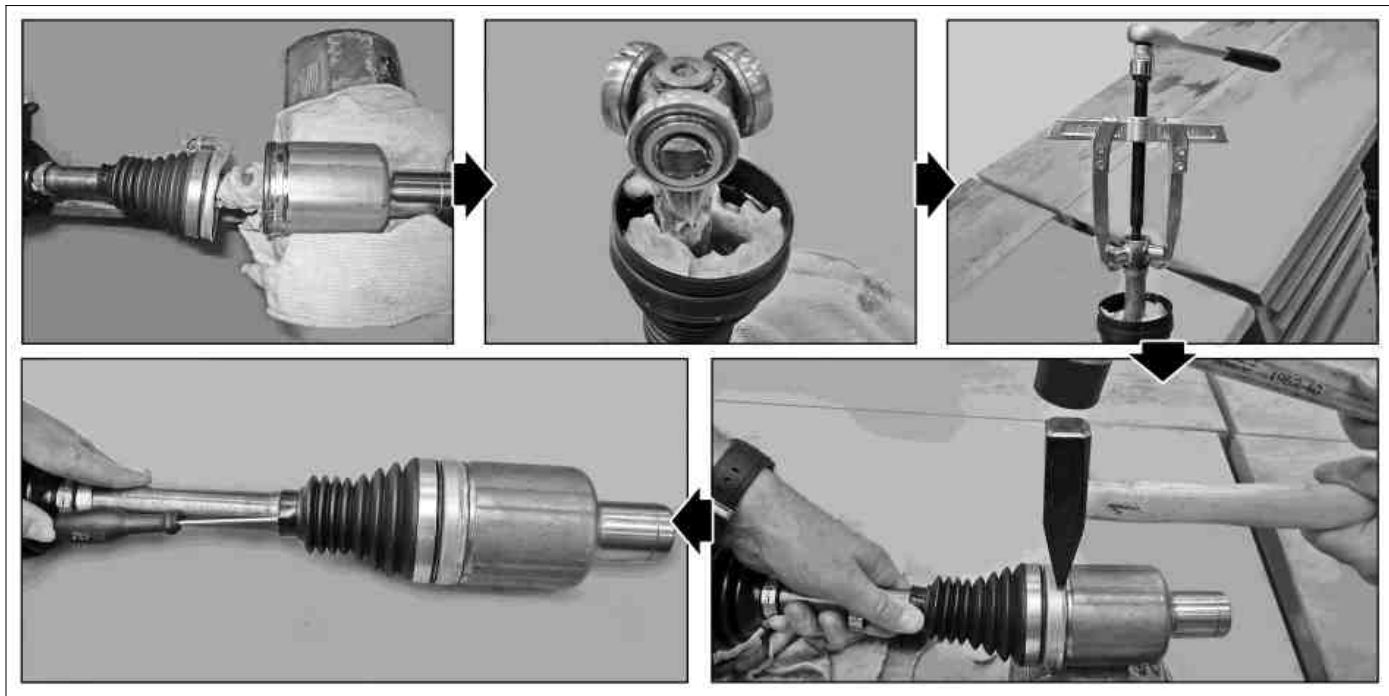
MODEL 203, 204, 211, 212, 216, 220, 221

Inner boot

- 1 Front axle shaft
- 2 Clamp
- 3a Boot
- 3b Cup seal
- 3c Sealing ring
- 4a Boot
- 4b Clamp
- 5 Internal spider
- 6 Bearing
- 7 Retaining ring
- 8 Joint hub




























P33.30-2142-06




P33.30-2143-09


☒	Removing		
1	Clamp front axle shaft (1) in vise	ⓘ Use protective jaws.	
2	Remove hose clamp (2)		
3.1	Detach clamp (4b)	Model 204, 212, 216, 220, 221	
3.2	Detach cup seal (3b) from joint hub (8)	Model 203, 211 ⓘ Saw cup seal (3b) at crimped part and pull up or roll up crimped part with pliers. ⚠ Do not damage joint hub (8). Dismantle analog to rear axle shaft: ↓ Remove/install cup seal (3b) on joint ring.	AR35.30-P-0661-01P
4.1	Cut open boot (4a) and remove	Model 204, 212, 216, 220, 221	

4.2	Cut open boot (3a) with cup seal (3b) and remove	Model 203, 211	
5	Mark joint hub (8) relative to front axle shaft (1)	 Before dismantling the ball joint all parts must be marked relative to each other. A different assignment during assembly can lead to noise or increased wear.	
6	Remove joint hub (8) from front axle shaft (1)	 Hold front axle shaft (1) vertical.	
7	Mark bearing (6) relative to inner star (5)		
8	Remove bearing (6) from inner star (5)	 Handle bearing (6) carefully. Do not replace bearing individual parts amongst each other.	
9	Remove retaining ring (7)		
10	Detach inner star (5) from front axle shaft (1) using a suitable puller		
11	Check bearing (6) and joint hub (8) for wear	 If damaged, replace front axle shaft (1).	
12	Clean all parts carefully	 Do not remove the markings.	
	Install		
13	Slide clamp (2) onto front axle shaft (1)		
14.1	Slide boot (4a) with clamp (4b) onto front axle shaft (1)	Model 204, 212, 216, 220, 221	
14.2	Slide boot (3a) with cup seal (3b) onto front axle shaft (1)	Model 203, 211  The boot (3a) and cup seal (3b) are preassembled and must not be disconnected.	
15	Mount inner star (5) on front axle shaft (1)	 Observe installation position of inner star (5) relative to front axle shaft (1). Use a suitable plastic mallet and sleeve.	
16	Fit retaining clip (7)	 Replace locking ring (7).	
17	Grease bearing (6)	 Only use grease from the repair kit. 	*BF33.30-P-1002-02B
18	Slide bearing (6) onto inner star (5)	 Hold front axle shaft (1) vertical. Observe assignment of bearing (6) relative to inner star (5).	
19	Replace sealing ring (3c) of joint hub (8)	Model 203, 211  Do not grease or oil sealing ring (3c) otherwise cup seal (3b) on joint hub (8) can twist.	
20	Pack joint hub (8) half-full with grease	 Only use grease from the repair kit. 	*BF33.30-P-1002-02B
21	Slide joint hub (8) onto front axle shaft (1)	 Observe installation position of joint hub (8) relative to front axle shaft (1).	
22	Pack joint hub (8) with remaining grease	 Only use quantity of grease from repair kit. 	*BF33.30-P-1002-02B
23.1	Slide boot (4a) with clamp (4b) onto joint hub (8)	Model 204, 212, 216, 220, 221  Position raised bead of boot (4a) in the radial groove of joint hub (8).	
23.2	Slide boot (3a) with cup seal (3b) onto joint hub (8)	Model 203, 211  Pay attention to the sealing ring (3c) during assembly. Slide cup seal (3b) on as far as the end stop on joint hub (8). Check position of sealing ring (3c) in the groove of joint hub (8) (visual inspection in the gap between cup seal (3b) and joint hub (8)).	
24.1	Mount boot (4a) with clamp (4b) on joint hub (8)	Model 204, 212, 216, 220, 221	
24.2	Fix cup seal (3b) in position on joint hub (8)	Model 203, 211  Crimp cup seal (3b) in the groove of the joint hub (8). It must no longer be possible to turn the cup seal (3b).  The ball joint is sealed by the sealing ring (3c). Assemble analog to rear axle shaft: Remove/install cup seal (3b) on joint ring. ↓	AR35.30-P-0661-01P
25	Align boot (3a, 4a) relative to front axle shaft (1)	 Position raised bead of boot (3a, 4a) in the radial groove of front axle shaft (1).	


26	Ventilate ball joint	 Through pressure compensation the joint hub (8) is brought into the correct position relative to the front axle shaft (1).  Do not damage raised bead and radial groove.	
27	Install clamp (2)		
28	Remove front axle shaft (1) from vise		

 **Front axle shaft**

Number	Designation	Model 203.08/09/28/29	Models 204.08/09/28/29	Model 204.98
BF33.30-P-1002-02B	Inner joint (transmission side)	Filling capacity g 120	120	140
	Specifications for Operating Fluids	Sheet -	-	-

 **Front axle shaft**

Number	Designation	Model 211.08/09/ 28/29	Model 212.08/09/28/29
BF33.30-P-1002-02B	Inner joint (transmission side)	Filling capacity g 120	120
	Specifications for Operating Fluids	Sheet -	-

 **Front axle shaft**

Number	Designation	Model 216 with 4MATIC	Model 220.08/18	Model 221 with 4MATIC
BF33.30-P-1002-02B	Inner joint (transmission side)	Filling capacity g 120	120	120
	Specifications for Operating Fluids	Sheet -	-	-