

Steering Assembly

Job No.

46-0

A. DB Re-Circulating Ball Steering Type LO (Previous Version)

Model 180 up to Chassis End No. 45 11768

Model 180 D up to Chassis End No. 45 07993

Like the 1st version of the standard re-circulating ball steering this version of the re-circulating ball steering has a gear ratio of 1 : 19.4. However, the construction of the steering differs from that of the standard re-circulating ball steering in the following details:

1. The steering worm is carried in angular contact bearings.
2. The cables for the horn and the flash direction signals are wound round the steering tube and emerge from the steering column jacket at the bearing assembly of the steering wheel gear shift mechanism.
3. The diameter of the serrated part of the steering worm is 15.4 mm.
4. The diameter of the bearing surfaces of the steering shaft was changed from 25.4 mm to 28.5 mm and later to 30.0 mm as on the standard re-circulating ball steering.
5. The set screw for the steering shaft has an M 24×1.5 thread (Fig. 46-0/1 and Table).

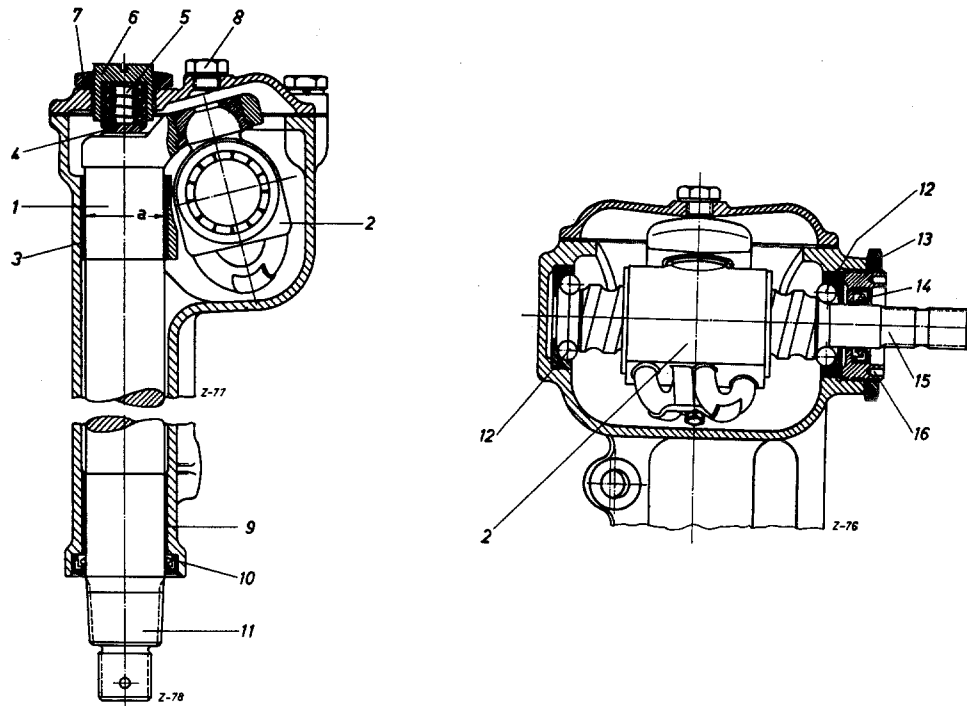


Fig. 46-0/1

DB Re-Circulating Ball Steering (Previous Version)

a Steering shaft diameter	5 Pressure spring	10 Sealing ring	14 Sealing ring
1 Steering shaft	6 Set screw	11 Serrations for steering gear arm	15 Steering worm
2 Steering nut	7 Hexagon nut	12 Angular contact bearing	16 Adjusting ring
3 Upper bearing bushing	8 Screw plug	13 Hexagon nut	
4 Pressure sleeve	9 Lower bearing bushing		

Model	Steering Assembly Part. No.	Version	Steering Shaft Mounting ϕ "a"	Remarks
180	120 460 11 01	1 st	25.4 mm	Installed up to Chassis End No. 35 00220
180	120 460 18 01	2 nd	28.5 mm	Installed from Chassis End No. 35 00221 to 35 00964
180 180 D	120 460 14 01	3 rd	30.0 mm	Installed on Model 180 from Chassis End No. 35 00965 to 45 11768, on Model 180 D up to Chassis End No. 45 07993

Gear Ratios of DB Re-Circulating Ball Steering Type LO (Previous Version)

Model	Steering Assembly		Steering Gear Arm		Overall Gear Ratio
	Part. No.	Steering Gear Ratio	Part No.	Length in mm	
180	120 460 11 01	1 : 19.4	120 463 02 01	152	1 : 15.3
	120 460 18 01		120 463 05 01		
	120 460 14 01				
180 D	120 460 14 01	1 : 19.4	120 463 08 01	140	1 : 16.6

Note: The gear ratio data are given with reference to the steering shaft in the dead center position. On lock the gear ratio is slightly smaller.

It is possible subsequently to replace the previous version of the re-circulating ball steering by the standard re-circulating ball steering provided that the steering tube, the steering coupling and the cable harness are replaced. In addition the steering assembly must have a steering gear arm Part No. 120 463 05 01 and a steering relay arm Part No. 120 460 10 19.

B. DB Re-Circulating Ball Steering Type LO

On Models 180 to 220 SE the DB standard re-circulating ball steering type LO is the same as on Model 190. On Models 180, 180 D, 190 SL, and 220 a two different versions of the standard re-circulating ball steering were installed:

The DB standard re-circulating ball steering type LO 1st version Part No. 120 460 24 01 with a gear ratio of 1 : 19.4 was installed in the following cars:

Model 180 from Chassis End No. 45 11769 to 55 16274
Model 180 D from Chassis End No. 45 07994 to 55 19025
Model 190 SL up to Chassis End No. 55 01501
Model 220 a up to Chassis End No. 55 18013