

**Universal Flange on Drive Pinion**

	new	40.00
Diameter of running surface for sealing ring on universal flange		39.84
	minimum dia. for repairs <sup>1)</sup>	39.6
Spiral on running surface of universal flange		lefthand spiral
Perm. vertical runout of sealing surface of universal flange		0.06

1) Machine running surface for seal only in an emergency

**Special Tools**

Holding wrench for counter-holding on flange of differential pinion	115 589 00 07 00
Slotted nut wrench	115 589 01 07 00
Installation and removal tool for pinion	116 589 12 61 00
Tool for forcing tapered roller bearing from drive pinion	large center housing <sup>1)</sup> 116 589 00 33 00 small center housing <sup>1)</sup> 108 589 00 33 00
Assembly fixture for rear axle center piece	116 589 00 59 00

1) See installation survey for axle center housing 35.1-R 500.

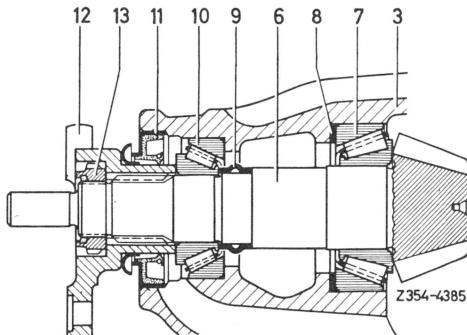


Fig. 1

3 Rear axle housing	10 Tapered roller bearing
6 Drive pinion	11 Sealing ring
7 Tapered roller bearing	12 Universal flange
8 Compensating washer	13 Self-locking slotted nut
9 Spacer sleeve	

**Removal**

- 1 Attach holding wrench to universal flange and loosen self-locking slotted nut with slotted nut wrench (Fig. 2).
- 2 Mark universal flange in relation to drive pinion.
- 3 Pull universal flange from drive pinion.
- 4 Force drive pinion out of rear axle housing with conventional puller (Fig. 3).
- 5 Force sealing ring out of rear axle housing with screw driver and remove tapered roller bearing inner race (Fig. 4).

# 35.1 Removal and Inspection of Drive Pinion

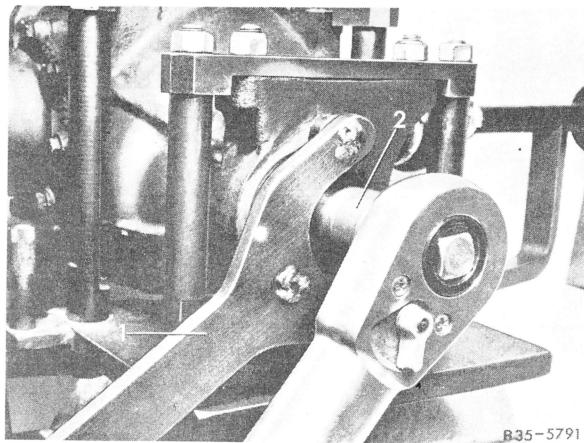


Fig. 2

1 Holding wrench

2 Slotted nut

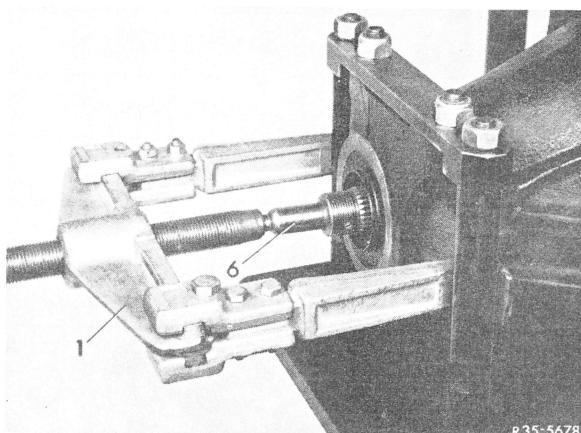


Fig. 3

1 Puller

6 Drive pinion

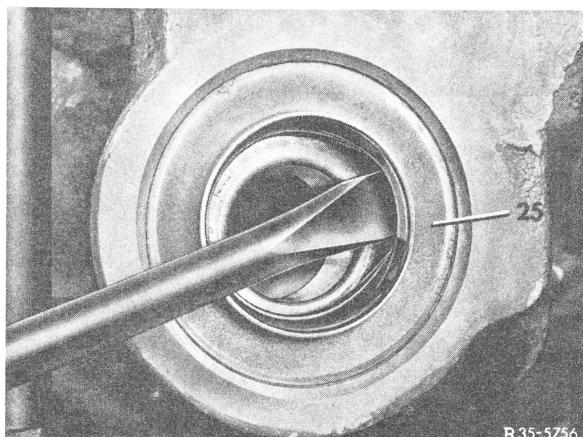


Fig. 4

25 Sealing ring

**6** Screw installation and removal tool to rear axle housing and pull inner tapered roller bearing outer race from housing by means of pulling member (Fig. 5).

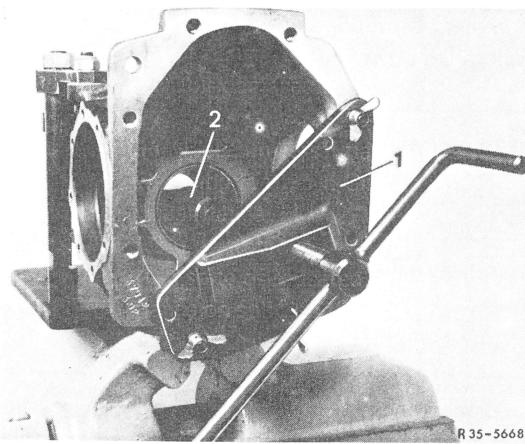


Fig. 5

1 Removal and installation tool

2 Pulling member

116 589 12 61 00 Part 18 (large center housing)

116 589 12 61 00 Part 7 (small center housing)

**7** Force outside tapered roller bearing outer race out of rear axle housing with pushing member (Fig. 6).

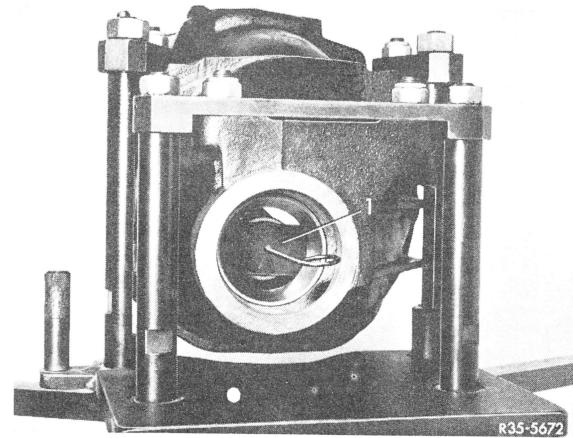


Fig. 6

1 Pushing member 116 589 12 61 00 part,5

**8** Press rear tapered roller bearing inner race from drive pinion by means of pressing-off tool (Fig. 7).

**Inspection**

**9** Check all parts for reuse. Check bearing seats for vertical and lateral runout.

**10** Check running surface for sealing ring on universal flange. If running surface is worn or oil return spiral is damaged replace universal flange.

**11** Place universal flange on drive pinion while watching for mark. Check vertical runout of universal flange.

If in spite of repeated displacement of universal flange on splining the vertical runout is more than 0.06 mm, replace universal flange.

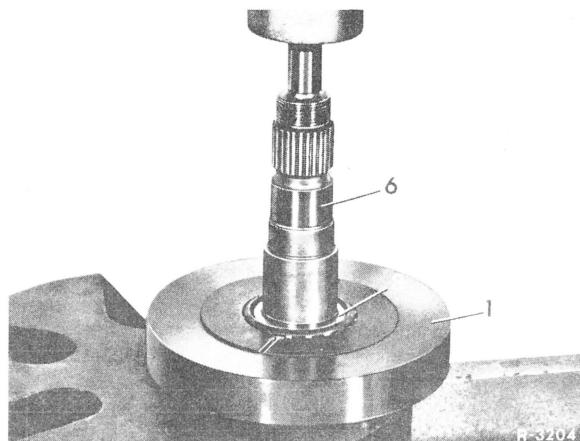


Fig. 7

- 1 Pressing-off tool
- 6 Drive pinion
- 8 Tapered roller bearing inner race

