

4. If the front propeller shaft is to be replaced, remove the center cross (4) (Fig. 41 — 4/3).

Note: This is necessary, since the front propeller shaft is supplied without center cross.

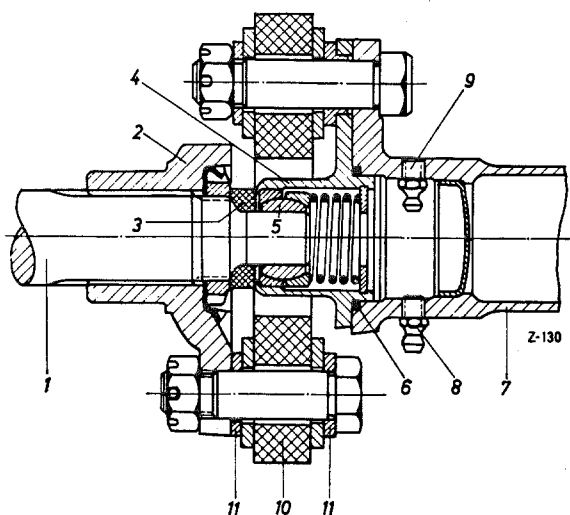


Fig. 41 — 4/3

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|----------------------------------|-----------------------------|
| 1 Transmission main shaft | 7 Propeller shaft |
| 2 Three-way flange on main shaft | 8 Pinion rim grease fitting |
| 3 Sealing ring | 9 Relief grease fitting |
| 4 Center cross | 10 Shaft plate |
| 5 Locating ball | 11 Washer 187 990 14 40 |
| 6 Sealing ring | |

5. Check the center cross (4).

If the locating ball (5) is worn or if the spring is broken, replace the center cross assembly (see Fig. 41 — 4/3).

Reassembly:

6. Screw the two propeller shaft halves together, using new locking plates.
7. Slide a new rubber sealing ring onto the center cross (see Fig. 41 — 4/3) and insert the center cross in the front propeller shaft.

Note: A pinion rim grease fitting (8) is screwed in at the front of the propeller shaft, lubricating the locating ball (5) and the center cross of the transmission main shaft.

The pinion rim grease fitting (9) inside the propeller shaft operates as a relief valve so that the air can escape during lubrication.

The lubrication operation is completed as soon as grease emerges from the pinion rim grease fitting (9) (see Fig. 41 — 4/3).

B. Removal and Installation of the Annular Grooved Bearing of the Intermediate Bearing

Removal:

8. Pull the slip coupling off the splined journal of the rear propeller shaft.

Note: Both slip coupling and splined journal must be marked before the propeller shaft is removed from the vehicle (see Job No. 41 — 1, Paragraph 4).

9. Tap up the locking plate (7) and unscrew the grooved nut (6) by means of Special Wrench 187 589 06 07 (Fig. 41 — 4/4) and pull off the flange (5).

10. Unscrew the pinion rim grease fitting.

Then pull out the bearing bracket (3) and the rubber mounting (4) toward the front (see Fig. 41 — 4/4).

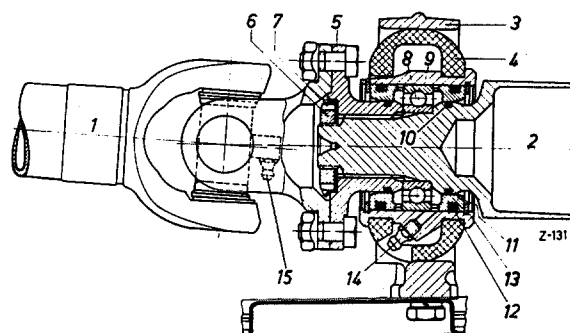


Fig. 41 — 4/4

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|--|
| 1 Front propeller shaft yoke |
| 2 Rear propeller shaft |
| 3 Bearing bracket |
| 4 Rubber mounting |
| 5 Flange |
| 6 Grooved nut |
| 7 Locking plate |
| 8 Annular grooved bearing |
| 9 Housing of propeller shaft intermediate bearing |
| 10 Oil ring |
| 11 Spacer ring |
| 12 Rubber sealing ring |
| 13 Snap ring |
| 14 Pinion rim grease fitting for annular grooved bearing |
| 15 Pinion rim grease fitting for universal joint |

11. Pull off the housing (9) of the propeller shaft intermediate bearing, together with spacer rings (11) and annular grooved bearing (8), by means of a suitable puller (see Fig. 41 — 4/4).

12. Take the oil rings (10) off the propeller shaft and the flange (see Fig. 41 — 4/4).

13. Remove the snap rings (13) on both sides of the housing (9) and press the two spacer rings (11), together with the annular grooved bearing, out of the housing (see Fig. 41 — 4/4).

14. Remove the two rubber sealing rings (13) from the spacer rings.

Checking:

15. Check the housing (9) for cracks.

16. Check the annular grooved bearing for serviceability.

Note: When new, the annular grooved bearing DIN 6006—C3 has a radial play of 0.020 to 0.037 mm and an end play of approx. 0.20—0.37 mm. In judging the serviceability of the bearing, apply the standards laid down in Job No. 35—5 for Ball and Roller Bearings.

17. Check the spacer rings (11) for wear (see Fig. 41 — 4/4). Worn spacer rings must be replaced.

18. Check the rubber mounting (4) for cracks. If the rubber mounting is cracked or has deteriorated as a result of contact with grease, it must be replaced.

19. Check the bearing bracket (3) for cracks.

Installation:

20. Insert the front snap ring (13) in the housing (9).

21. Press the spacer ring (11) with a new rubber sealing ring (12) into the housing in such a way that the beveled side points toward the outside (see Fig. 41 — 4/4).

The spacer ring must fit snugly against the snap ring.

22. Press the annular grooved bearing into the housing.

23. Press the second spacer ring (11) with a new rubber sealing ring (12) into the housing in such a way that the beveled side points toward the outside and a recess at the inside of the spacer ring lies above the bore for the grease passage (see Fig. 41 — 4/4).

24. Insert the rear snap ring (13) (see Fig. 41 — 4/4).

25. Install a new oil ring (10) on the propeller shaft and on the flange (see Fig. 41 — 4/4).

26. Carefully tap the housing (9), together with the annular grooved bearing, onto the splined journal of the propeller shaft.

27. Slide the rubber mounting (4) and the bearing bracket (3) onto the housing (9) of the propeller shaft intermediate bearing (see Fig. 41 — 4/4). Screw in the pinion rim grease fitting.

28. Tap the flange (5) onto the splined journal and install a new locking plate (7).

29. Screw on the grooved nut (6) by means of Special Wrench 187 589 06 07 and tighten firmly (Fig. 41 — 4/4).

30. Tap over the locking plate (7) in the direction of the grooved nut and the flange (see Fig. 41 — 4/4).

31. Slide the slip coupling onto the rear splined journal, paying attention to the markings made during removal.

Note: If necessary, replace the felt ring in the slip coupling.