

Disassembly and Reassembly of Propeller Shaft

Job No.

41 — 4

Note: As a rule no repairs should be carried out on the universal joints. If the universal joints are damaged in any way, the front or rear propeller shaft should be replaced.

For this reason either the propeller shaft assembly, including the intermediate bearing, or the front or rear propeller shaft, is available as a replacement part. The spiders should only be replaced in exceptional cases, and only if the bores in the shaft yokes are still fully serviceable.

For such cases the spiders are supplied as part No. 180 410 01 31 complete with needle bearing bushings, bearing needles, sealing ring retainer, sealing ring, and pinion rim grease fitting.

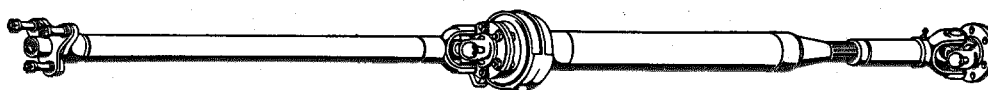


Fig. 41 — 4/1

A. Disassembly and Reassembly of Front and Rear Propeller Shaft

Disassembly:

1. Tap up the locking plates for the fixing bolts at the flange (5) and unscrew the hexagon nuts (Fig. 41 — 4/2).
2. Tap back the hexagon bolts and separate the front and rear propeller shafts (Fig. 41 — 4/2).
3. If the rear propeller shaft or the complete propeller shaft assembly is to be replaced, remove the bearing bracket (3) and the rubber mounting (4) of the intermediate bearing toward the rear (see Fig. 41 — 4/2).

Note: Replacement supply procedures have recently been changed in so far as both the propeller shaft assembly and the rear propeller shaft are supplied without bearing bracket (3) and without rubber mounting (4) (see Fig. 41 — 4/2).

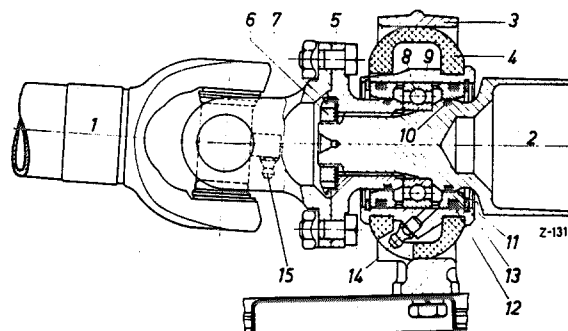


Fig. 41 — 4/2

- 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

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.

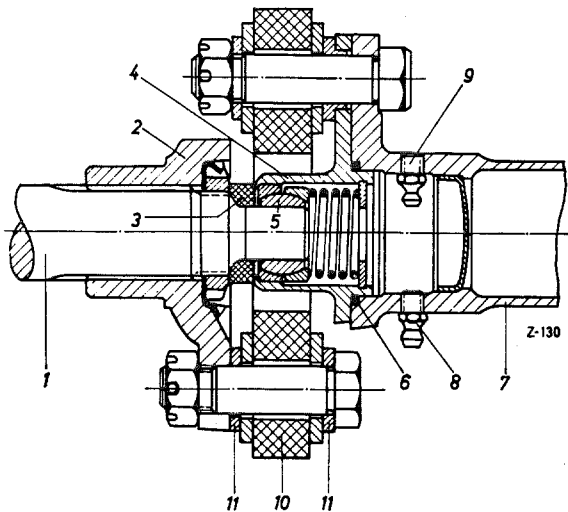


Fig. 41 — 4/3

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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).

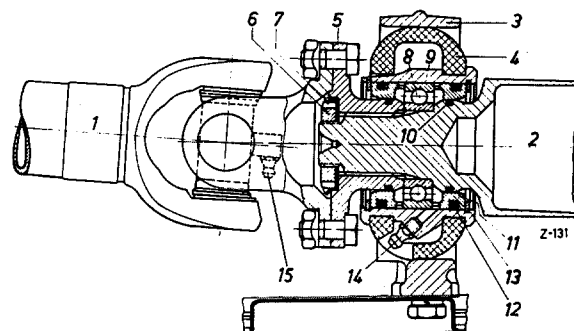


Fig. 41 — 4/4

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| 1 Front propeller shaft yoke |
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