## Lubricants

Centering sleeve, per sleeve approx. 6 grams	
	Molykote Longterm 2
Clamp connection	

Tightening Torques		Nm	(kpm)
Self-locking nuts for attachment of companion plates	M 10	45	(4.5)
	M 12	65	(6.5)
Clamping nut to universal shaft		30-40	(3-4)
Combination hex. bolt to universal shaft intermediate bearing	25	(2.5)	
	M 8	25	(2.5)
Hex. bolt for attaching tunnel closing plate to frame floor	M 10	45	(4.5)
Hex. bolt for attaching engine mount to tunnel closing plate		25	(2.5)

## Special Tools

Torque wrench 20-100 Nm (2-10 kpm)	001 589 35 21 00
Special open end wrench 46 mm SW	000 589 13 01 00

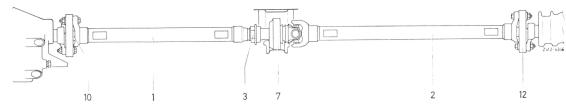


Fig. 1

- 1 Front universal shaft
- 2 Rear universal shaft
- 3 Clamping nut
- 7 Universal shaft intermediate bearing
- 10 Centering sleeve
- 12 Universal plate

## Removal

- 1 Remove exhaust system ("Engines" 49.1–100).
- 2 Unscrew shielding plate.
- 3 Support transmission on intermediate flange.
- **4** Loosen clamping nut of universal shaft for about 2 turns without pushing back rubber sleeve (slides along).
- **5** Unscrew hex. bolts on tunnel closing plate as well as those for rear engine mount and remove tunnel closing plate (Fig. 2 and 3).
- **6** Unflange universal shaft on transmission and on rear axle (Fig. 4).
- 7 Unscrew hex. bolts for attaching universal shaft intermediate bearing on frame floor.

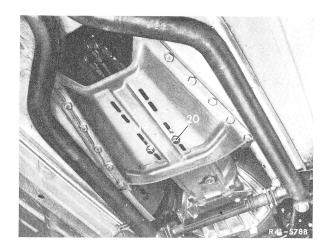


Fig. 2

19 Tunnel closing plate

20 Hex. bolt for attaching engine mount

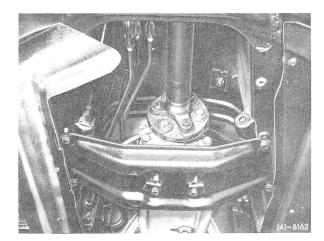


Fig. 3

8 Remove universal shaft from centering pin of rear axle and pull out in rearward direction (Fig. 5), making sure that the universal shaft is not separated.

**Important Note!** If the universal shaft must be separated, mark components in relation to each other for subsequent reassembly, so that the completely balanced shaft will not become unbalanced.

**9** Check universal plates, centering sleeves and universal shaft intermediate bearing for damage. Replace damaged parts.

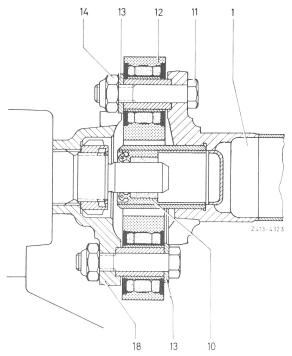


Fig. 4

- 1 Front universal shaft
- 10 Centering sleeve
- 11 Hex. bolt
- 12 Companion plate
- 13 Washer
- 14 Self-locking nut
- 18 Three-legged transmission flange

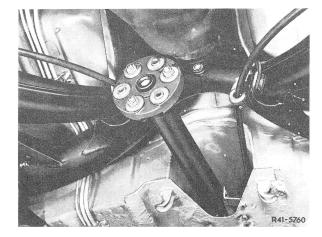


Fig. 5

## Installation

- **10** Fill cavities of two centering sleeves with Molykote longterm 2.
- 11 Slide universal shaft complete with companion plates on centering pins on transmission and on rear axle.

- **12** Lightly attach universal shaft intermediate bearing.
- **13** Flange universal shaft to transmission and to rear axle (Fig. 6), Tightening torques refer to page 1.

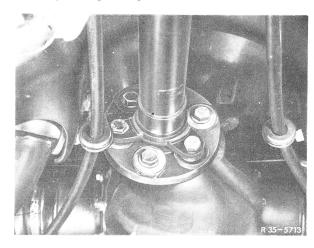


Fig. 6

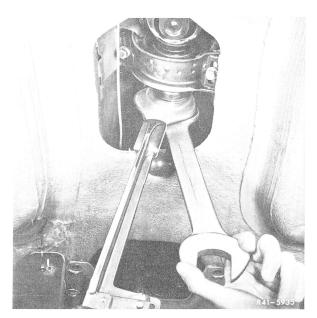


Fig. 7

- **14** Attach tunnel closing plate to frame floor (Fig. 2 and 3). Tightening torques refer to page 1.
- **15** Remove transmission from support, position hex. bolts for rear engine mount and tighten to 25 Nm (2.5 kpm).

- **16** Move vehicle ready for driving back and forth several times. Only this will adjust the universal shaft for correct length and installation free of tensions is assured.
- 17 Tighten clamping nut on universal shaft, watching out for good seat of sleeve (Fig. 7). Tightening torque 30–40 Nm (3-4 kpm).

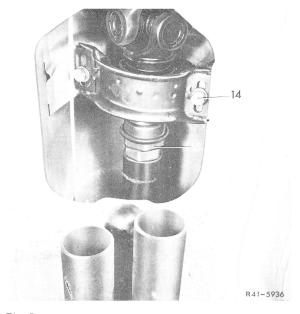


Fig. 8

14 Combination hex. bolt 15 Clamping nut

- **18** Tighten hex. bolts for attaching universal shaft intermediate bearing to frame floor to 25 Nm (2.5 kpm) (Fig. 8).
- 19 Mount shielding plate (Fig. 9).
- 20 Install exhaust system ("Engines" 49.1–100).

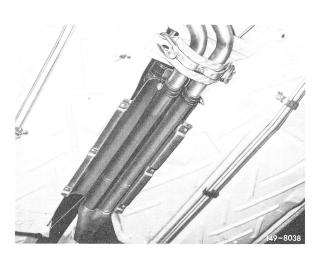


Fig. 9