

Tightening Torques in kpm

Hex nut to drive shaft	6
Pipe nut of high-pressure expanding hose	5.5–6.0

Special Tool

Pulling fixture	108 589 02 33 00
-----------------	------------------

Removal

1 Unscrew knurled nut (8) on supply tank (2). Remove closing cover (3), compression spring and damping plate. Drain oil from supply tank with syringe (Fig. 1).

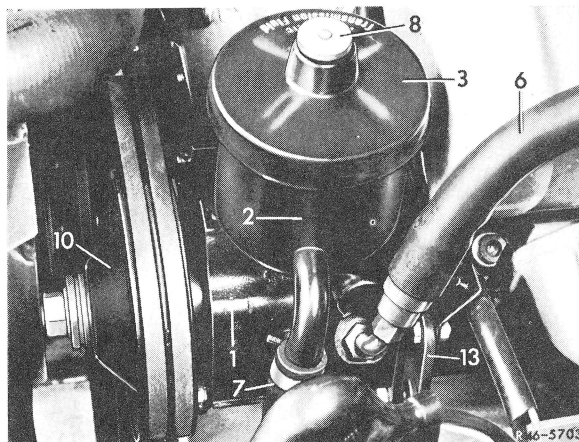


Fig. 1

- | | |
|--------------------------------|---------------|
| 1 High-pressure oil pump | 7 Return hose |
| 2 Supply tank | 8 Knurled nut |
| 3 Closing cover | 10 Pulley |
| 6 High-pressure expanding hose | 13 Carrier |

2 Loosen high-pressure expanding hose (6) and return hose (7) on high-pressure oil pump. Close connections on pump and on hoses with blind plugs (Fig. 1).

3 Loosen hex nut (22) on fastening plate and hex bolt (23) on support (14). Push high-pressure oil pump toward engine and remove both V-belts from pulley (10) (Fig. 2).

4 Unscrew hex bolts and nuts and remove high-pressure oil pump including carrier.

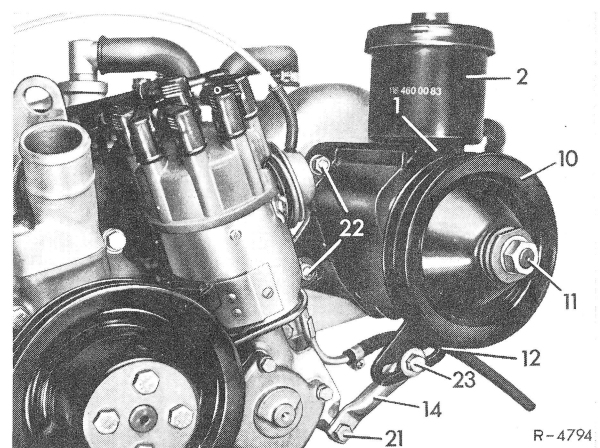


Fig. 2

- | | |
|---------------------------------------|--|
| 1 High-pressure oil pump | 21 Hex bolt with spring washer and hex nut |
| 2 Supply tank | 22 Hex nut with washer |
| 10 Pulley | 23 Hex bolt with washer, snap ring and hex nut |
| 11 Hex nut | |
| 12 Carrier for high pressure oil pump | |
| 14 Support | |

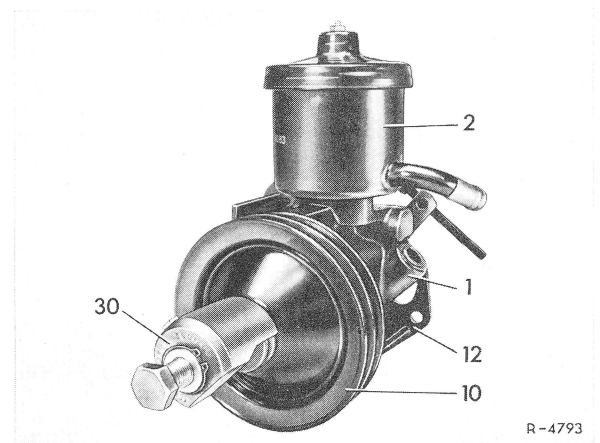


Fig. 3

- | | |
|--------------------------|--------------------|
| 1 High-pressure oil pump | 12 Carrier |
| 2 Supply tank | 30 Pulling fixture |
| 10 Pulley | 108 589 02 33 00 |

46.1 Removal and Installation of High-Pressure Oil Pump

5 Unscrew hex nut from drive shaft while counter-holding pulley at flats (SW 36).

6 Pull pulley (10) from drive shaft with pulling fixture (30) (Fig. 3).

7 Unscrew hex bolts and remove high-pressure oil pump from carrier (12) (Fig. 3).

Installation

8 Insert high-pressure oil pump into carrier (12) and attach with hex bolts. The threads of the rear bolt are measured in inches (Fig. 3).

9 Attach pulley to drive shaft, making sure that the taper of the drive shaft and the flange on the pulley are free of grease. Tighten hex nut to 6 kpm.

10 Tighten hex bolts (20) holding plate (13) to cylinder head (Fig. 4).

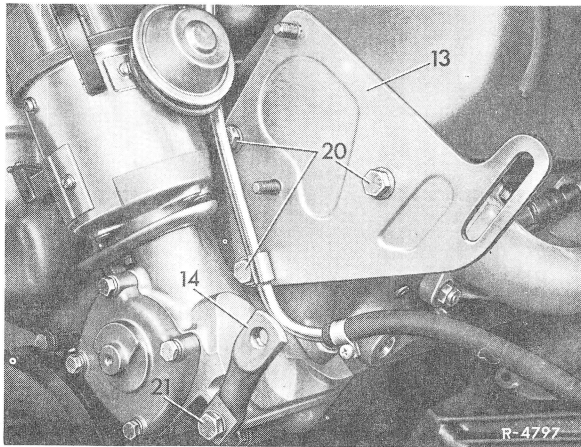


Fig. 4

- | | |
|-------------------------|-------------------------------------|
| 13 Fastening plate | 21 Hex bolt with washer and hex nut |
| 14 Support | |
| 20 Hex bolt with washer | |

11 Attach high-pressure oil pump including carrier (12) to fastening plate (13) and support. But do not yet tighten hex bolts or nuts (Fig. 5).

12 Place both V-belts on pulley (10), **tension** V-belts and tighten hex bolts or nuts (Fig. 5).

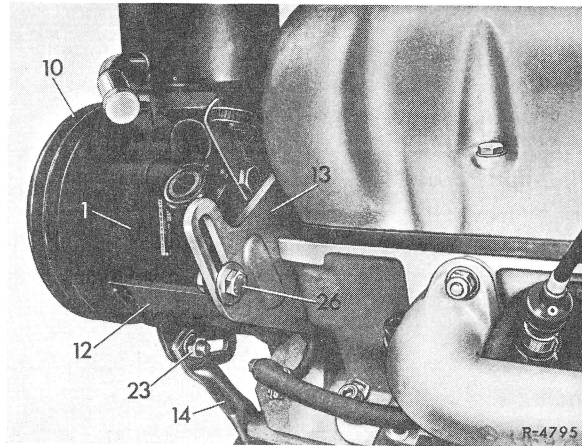


Fig. 5

- | | |
|---------------------------------------|--|
| 1 High-pressure oil pump | 23 Hex bolt with snap ring and hex nut |
| 10 Double belt pulley | 26 Hex bolt with washer, snap ring and hex nut |
| 12 Carrier for high pressure oil pump | |
| 13 Fastening plate | |
| 14 Support | |

13 Connect return hose (11 a) to supply tank (Fig. 6).

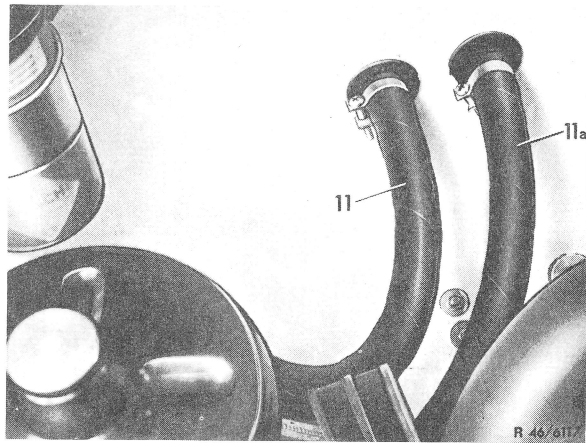


Fig. 6

- | |
|-----------------------------------|
| 11 Return hose to oil cooler pipe |
| 11 a Return hose to supply tank |

14 Connect high-pressure expanding hose. Tightening torque of pipe nut 5.5–6.0 kpm (reference value).

15 Fill supply tank with ATF. Run engine while adding ATF.

16 Check system for leaks.