

Revision: Revised and power steering pump VT 49 added.

Repair Kits

Designation		Power steering pump VT 27	Power steering VT 49
Seal kit		000 586 55 46	000 586 52 46
Pump insert		000 586 07 46	000 586 54 46
Drive shaft, bushing		000 586 56 46	000 586 53 46
Volume control valve	60 bar gauge pr.	000 586 00 46	—
	82 bar gauge pr.	000 586 42 46	000 586 51 46

End Play of Drive Shaft (for Power Steering Pump VT 27 only)

New pumps	max. 0.7
Used pumps	max. 1

Note

Install correct volume control valve with pertinent pressure relief valve in accordance with vehicle model. The type rating plate of the power steering pump with 60 bar gauge pressure is black, the one with 82 bar gauge pressure is blue.

Checking and Reconditioning

1 Check parting surface of housing cover (15) and ground lateral surfaces of rotor (7) of power steering pump VT 27. If the parting surface of the housing cover is scored, completely renew power steering pump (Fig. 1).

2 Check ground surfaces of volume control valve and bore in pump housing for wear and damage. If the sliding surfaces are showing score marks, **renew complete power steering pump**. Never replace volume control valve only.

3 Check vanes in grooves of rotor (7), they should always slide smoothly in rotor. Check sliding surface of vanes on cam ring (6) for wear. If required, recondition power steering pump by means of repair kit „pump insert“ (Fig. 1).

Note: The slide surface of the cam ring should have no noticeable marks, since the delivery capacity and quiet running of the power steering pump depend on a perfect surface.

4 Check ground surface of pressure plate (3) or on power steering pump VT 49 also the wear plate (14). When the pressure or wear plate is worn, recondition power steering pump by means of repair kit „pump insert“ (Fig. 1 and 2).

5 On power steering pump VT 27, check end play of drive shaft which should be max. 0.7 mm on a new pump and not more than 1 mm on a used pump.

If the end play is higher, press drive shaft out of housing.

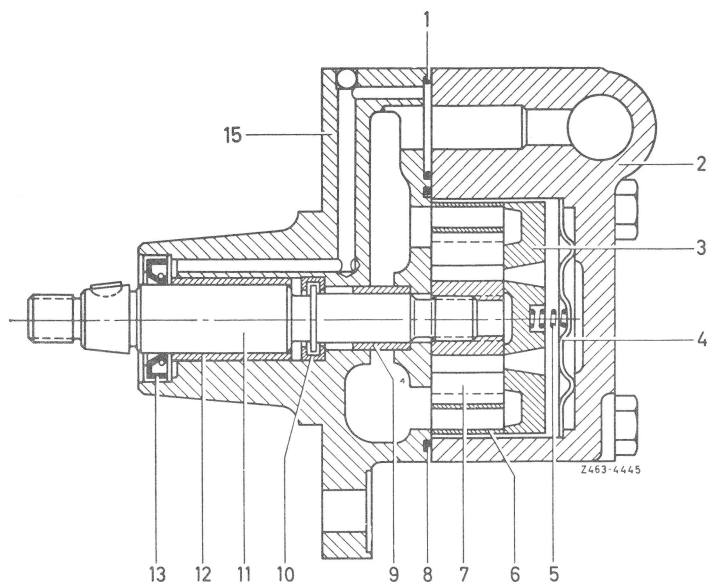


Fig. 1

Power steering pump VT 27

- | | |
|------------------------|--------------------|
| 1 O-ring | 8 O-ring |
| 2 Pump housing | 9 Bearing bushing |
| 3 Pressure plate | 10 Shell half |
| 4 Oil guide plate | 11 Drive shaft |
| 5 Compression spring | 12 Bearing bushing |
| 6 Cam ring | 13 Sealing ring |
| 7 Rotor with pump vane | 15 Housing cover |

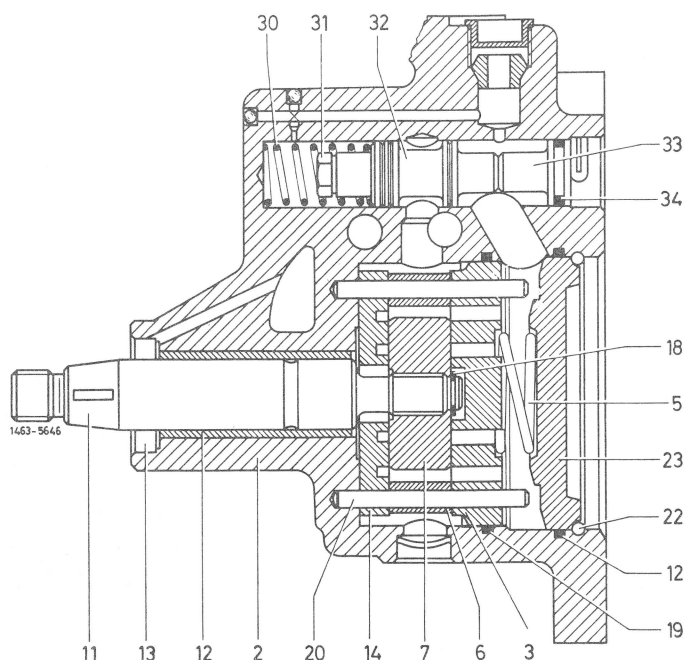


Fig. 2

Power steering pump VT 49

- | | |
|------------------------|-------------------------|
| 2 Pump housing | 19 O-ring |
| 3 Pressure plate | 20 Cyl. pin |
| 5 Compression spring | 21 O-ring |
| 6 Cam ring | 22 Circlip |
| 7 Rotor with vane | 23 Cover |
| 11 Drive shaft | 30 Compression spring |
| 12 Bearing bushing | 31 Valve screw |
| 13 Radial sealing ring | 32 Volume control valve |
| 14 Wear plate | 33 Closing plug |
| 18 Locking ring | 34 O-ring |

6 On power steering pump VT 49, check drive shaft (11) and bearing bushing (12) for wear. Install bushing (12) from repair kit „drive shaft“, if required (Fig. 2 and 3).

7 Check both sealing cones (connection high-pressure expanding hose, return pipe). Renew distorted sealing cones. For this purpose, cut a few 7 or 10 mm threads deep into sealing cone. Then pull sealing cone out of housing by means of a 7 or 10 mm screw (Fig. 4).

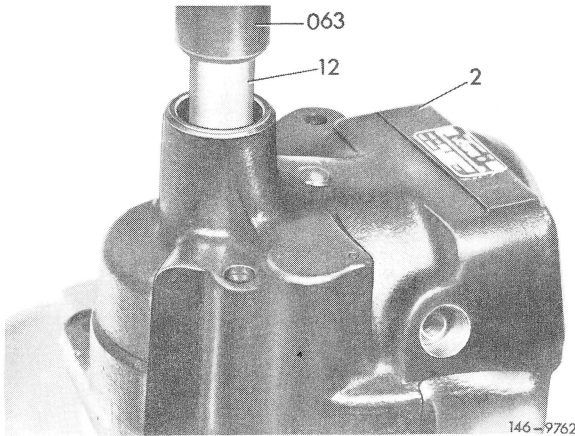


Fig. 3

2 Pump housing
12 Bearing bushing

063 Pressing-in tool

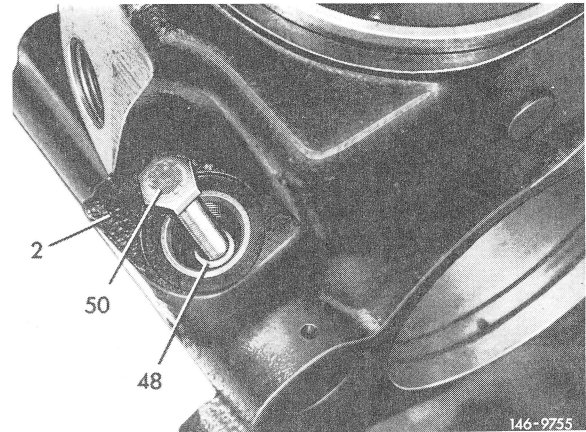


Fig. 4

2 Pump housing
48 Sealing cone

50 Hex. screw

8 Position new sealing cone (48) in housing and push into housing by screwing-in high-pressure expanding hose or return pipe.