

Revision: Revised and power steering pump VT 49 added.

A. Vickers Pump VT 27

Supply Tank

1 Unscrew knurled nut (1) and remove closing cover (2) together with paper seal on power steering pumps with screwed-on supply tank. Remove compression spring (4), damping plate (5) and filter ring (6). Unscrew hex. bolt (13) and hollow screw (8). Remove supply tank (3) and O-rings (9 and 11) from pump housing (10) (Fig. 1).

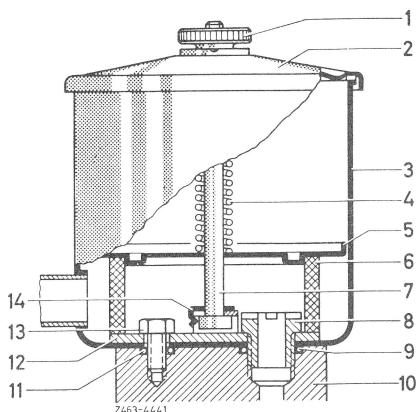


Fig. 1

1 Knurled nut	8 Hollow screw
2 Closing cover	9 O-ring
3 Supply tank	10 Pump housing
4 Compression spring	11 O-ring
5 Damping plate	12 Reinforcing plate
6 Filter ring	13 Hex. bolt
7 Bolt	14 Lock

Rotor and Cam ring

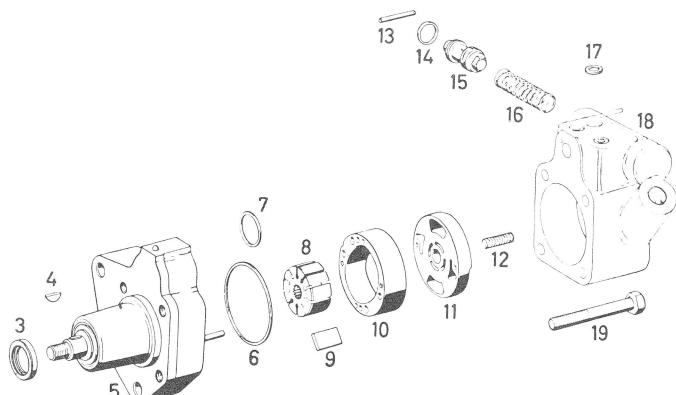


Fig. 2

3 Radial sealing ring	12 Compression spring for pressure plate
4 Woodruff key	13 Locking pin
5 Housing cover	14 O-ring (closing plug)
6 O-ring (pump housing)	15 Volume control valve with pressure relief valve
7 O-ring (oil feed hole)	16 Spring for volume control valve
8 Rotor	17 O-ring (supply tank)
9 Pump vane	18 Pump housing
10 Cam ring	19 Hex. bolt
11 Pressure plate	

2 Unscrew hex. bolts (19), by means of which the housing cover (5) is attached to pump housing (18) and remove pump housing (Fig. 2).

3 Remove compression spring (5) from pressure plate (3). **Mark pressure plate (3), cam ring (6) and housing cover (15) together** (refer to arrows in Fig. 3).

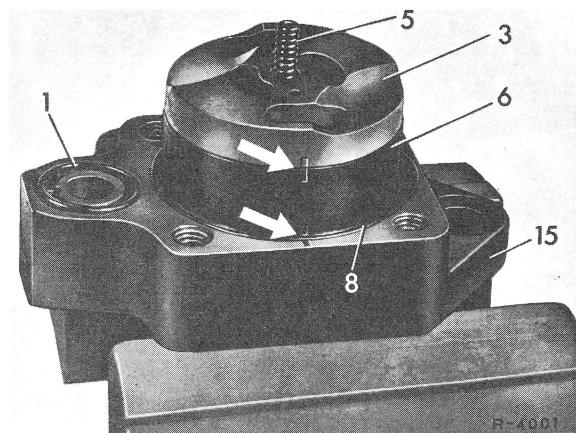


Fig. 3

1 O-ring	6 Cam ring
3 Pressure plate	8 O-ring
5 Compression spring	15 Housing cover

4 Remove pressure plate (3) from fitted pins, then remove cam ring (6) (Fig. 4).

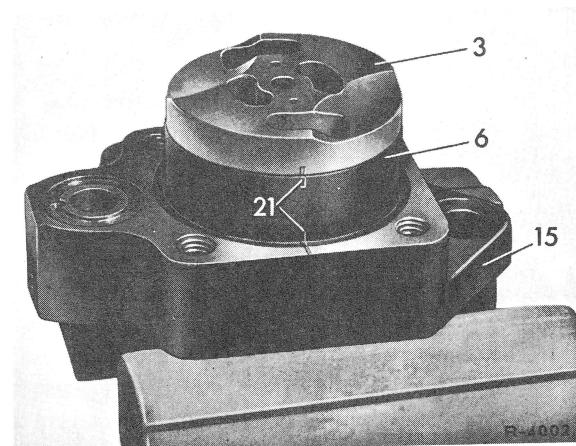


Fig. 4

3 Pressure plate	15 Housing cover
6 Cam ring	21 Marking line

5 Remove rotor (7) together with pump vane (16) from splining of drive shaft (Fig. 5).

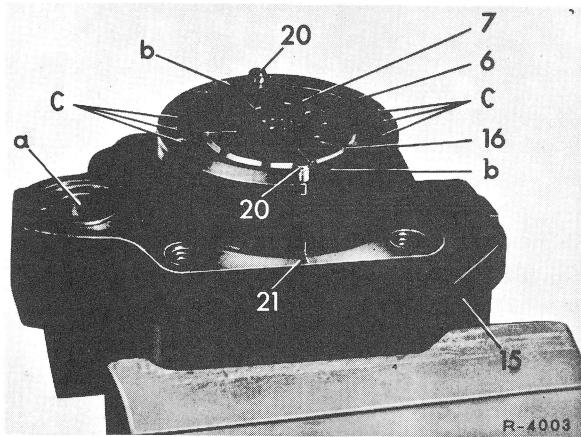


Fig. 5

a Oil inflow from supply tank	15 Housing cover
b Pressure oil outlet from cam ring	16 Pump vane
c Intake holes	20 Fitted pin
6 Cam ring	21 Marking line
7 Rotor	

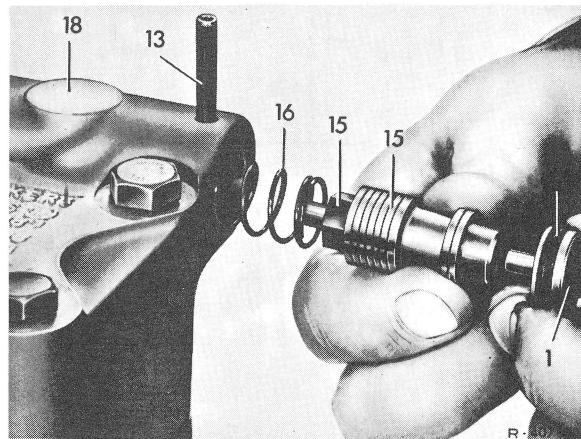


Fig. 6

1 Closing plug	15a Valve screw
13 Locking pin	16 Compression spring
14 O-ring	18 Pump housing
15 Volume control valve	

6 Remove O-ring (1 and 8) from housing cover (15) (Fig. 3).

7 Remove volume control valve (refer to item 9 and 10).

8 Clean all parts well and rinse.

Volume Control Valve

9 Knock locking pin (13) carefully from pump housing (18) (Fig. 6), since this will generally result in pushing the closing plug and the volume control valve of the compression spring out of the housing.

10 Remove closing plug (1), volume control valve (15) and compression spring (16) from pump housing (Fig. 6).

Note: If the closing plug remains seated in housing, loosen by means of light hammer blows against plug. **Make sure that volume control valve is not damaged.**

11 Clamp volume control valve (32) at its unground end into vise and unscrew valve screw (53) of pressure relief valve. Make sure that no spacing washer (52) is lost.

Remove valve cone (51) and compression spring (50) from volume control valve (Fig. 7).

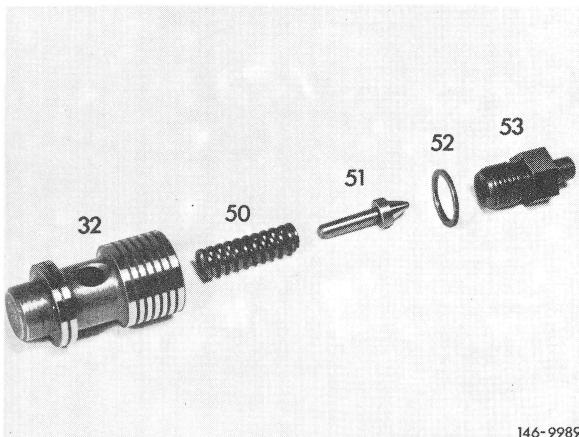


Fig. 7

32 Volume control valve	51 Valve cone
50 Compression spring for pressure relief valve	52 Spacing washers
	53 Valve screw

Drive shaft and Sealing Ring

12 Press drive shaft (11) out of housing cover (15), watching out for the two shell halves (10) (Fig. 8).

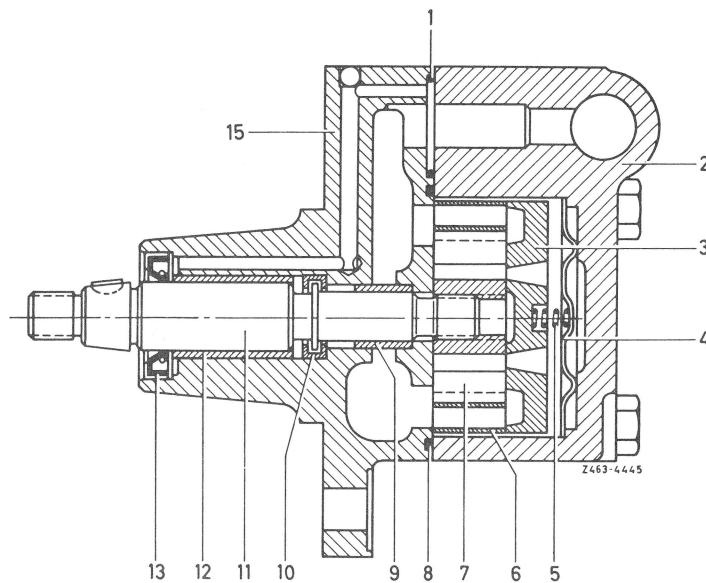


Fig. 8

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

B. Vickers Pump VT 49

1 Unscrew wing nut (47), remove closing cover (45), compression spring (43), the two damping plates (42 and 40) and filter ring (41) (Fig. 1).

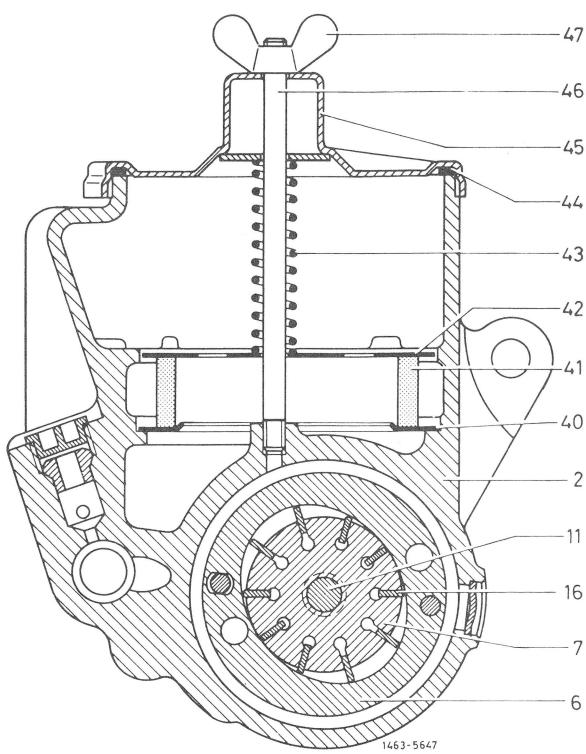


Fig. 1

2 Pump housing	42 Damping plate
6 Cam ring	43 Compression spring
7 Rotor	44 Gasket
11 Drive shaft	45 Closing cover
16 Vane	46 Stud
40 Damping plate	47 Wing nut
41 Filter ring	

Note: On first version of pump, a washer is inserted between compression spring and closing cover, on the second version, this washer is attached to cover.

2 Remove woodruff key from drive shaft.
 3 Push cover (23) downwards and remove circlip (22) out of bore in housing (2) by means of a punch (Fig. 2).

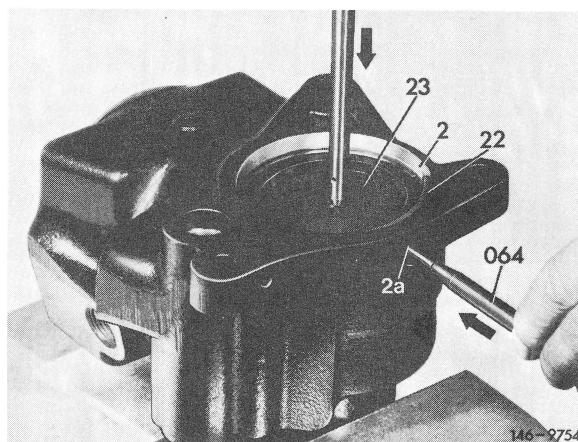


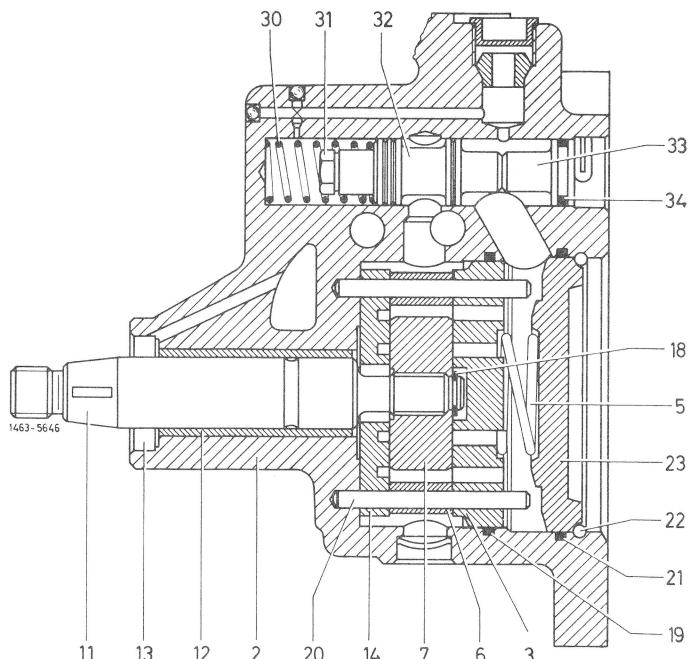
Fig. 2

2 Pump housing	23 Cover
2a Bore in housing	064 Punch
22 Circlip	

4 Take spring (5) and O-ring (21) out of pump housing (2) (Fig. 3).

Fig. 3

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



5 Push drive shaft (11) complete with pressure plate (3), rotor (7), cam ring (6) and wear plate (14) out of housing in rearward direction (Fig. 3 and 4).

6 Remove pressure plate (3), cam ring (6) and vanes (10 each) (Fig. 3).

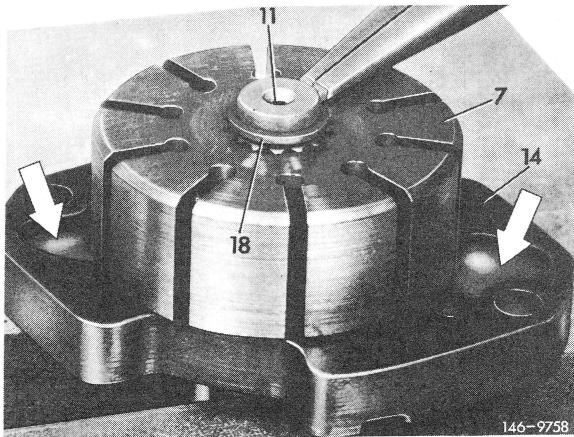


Fig. 4

7 Rotor	14 Wear plate
11 Drive shaft	18 Locking ring

7 Take locking ring (18) out of drive shaft (11), then remove rotor (7) and wear plate (14) (Fig. 4).

8 Remove cyl. pins (20) out of pump housing.

9 Force radial sealing ring (13) out of pump housing (2) (Fig. 3).

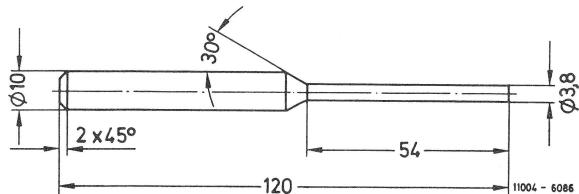
10 Knock locking pin (48) out of pump housing (2) with punch (064) (Fig. 5).



Fig. 5

2 Pump housing	064 Punch
48 Locking pin	

Note: Punch is self-made acc. to dimensions shown in Fig. 6.

Fig. 6
Punch

11 Remove closing plug (34), volume control valve (32) and compression spring (30) from housing (Fig. 7).

Note: If the closing plug remains seated in housing, loosen by applying light hammer blows against plug.

Be sure not to damage volume control valve.

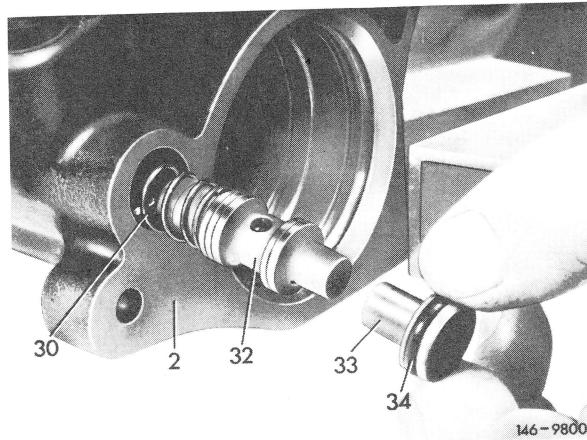


Fig. 7

2 Pump housing
30 Compression spring
32 Volume control valve

33 Closing plug
34 O-ring

12 Clamp volume control valve (32) with its unground end into vise and unscrew valve screw (53) of pressure relief valve. Make sure that no spacing washer (52) is lost. Remove valve cone (51) and compression spring (50) from volume control valve (Fig. 8).

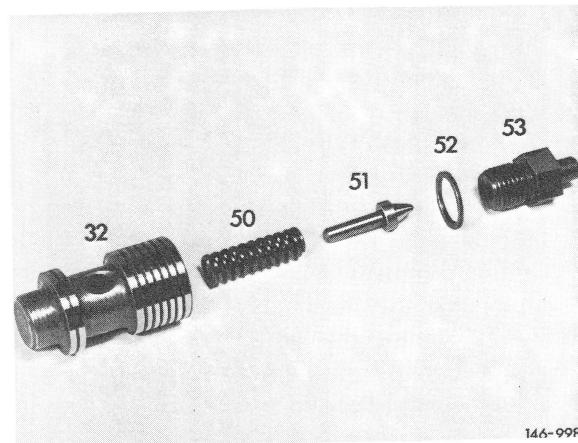


Fig. 8

32 Volume control valve
50 Compression spring
51 Valve cone

52 Spacing washer
53 Valve screw

