SERVICE - INFORMATION

Repair Instructions CR 5 - CR 6

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Preface

Before starting your repair work, carefully read these repair instructions. Carefully follow all instructions and always carry out the described operations in the indicated order.

The safety precautions prescribed for repair work must be followed in order to avert injury to persons and/or damage to material property.

For safety reasons, any modifications and retrofittings made on the soil compactor without the manufacturer's authorization are prohibited. Damage resulting from modifications or retrofittings is excluded from the manufacturer's liability. Only use genuine WEBER spare parts to ensure a safe and reliable operation.

Important information is highlighted by the pictograms explained in the following. Please strictly observe the information given in the repair instructions.

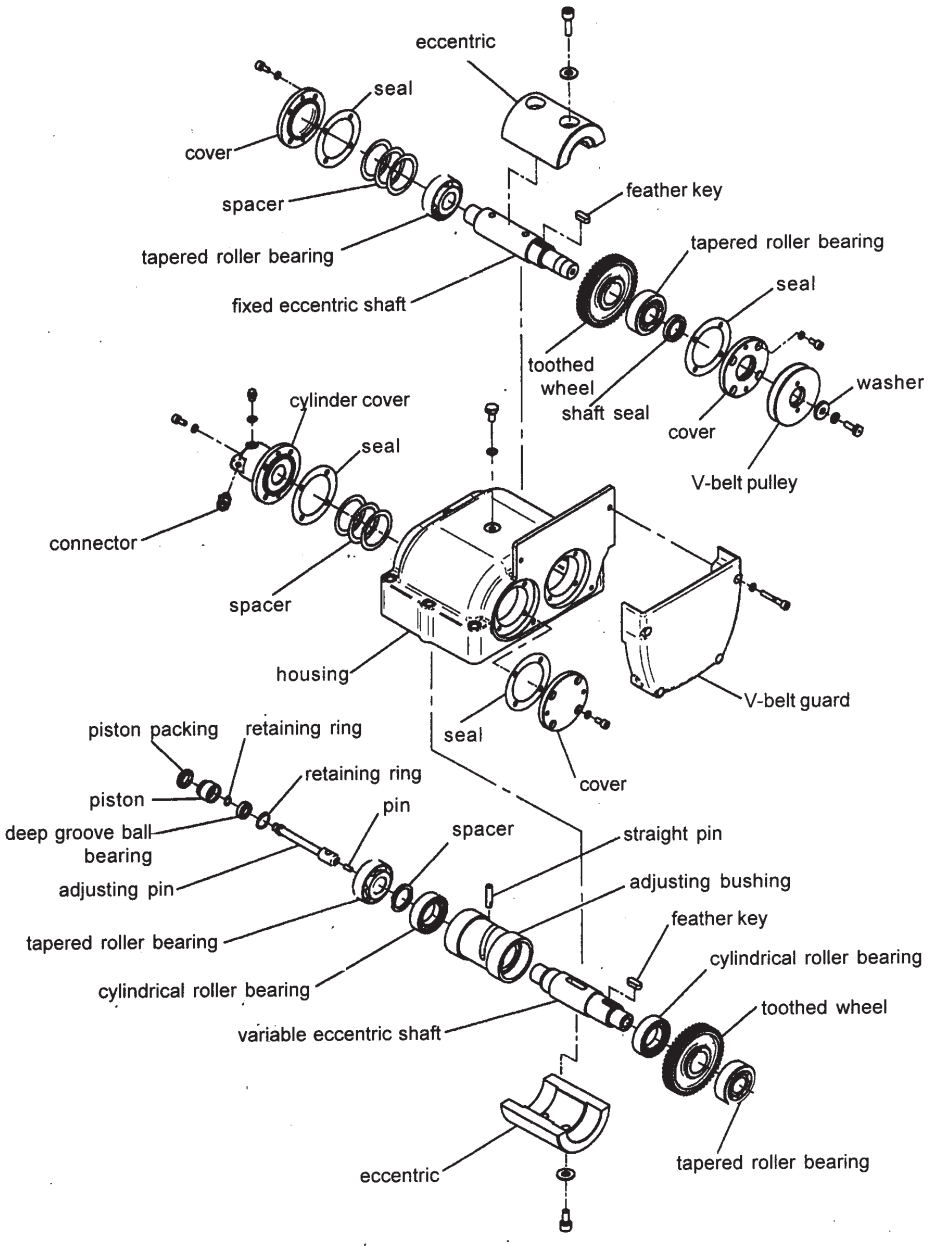
Indicates important information and hints which must be followed by the operator and service personnel.

Indicates working and operating methods requiring in addition the observance of all applicable environment protection and waste disposal regulations.

Indicates working and operating methods which must be precisely followed in order to prevent the soil compactor from being damaged or deteriorated.

Indicates working and operating methods which must be precisely followed in order to avert direct danger to persons.

Vibrator
CR 5



1. Demontage

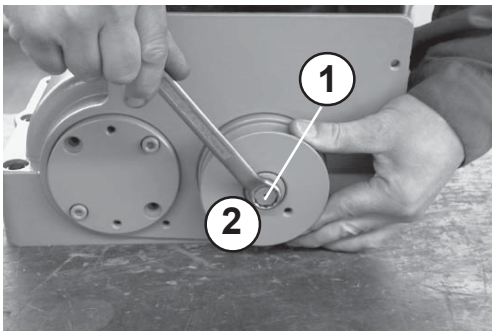


Figure 1

Remove the fastening screw (1/1) of the V-belt pulley (1/2).

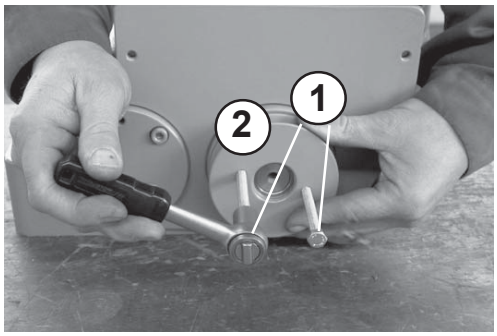


Figure 2

Screw 2 hexagon head cap screws (4/1) into the V-belt pulley (4/2).

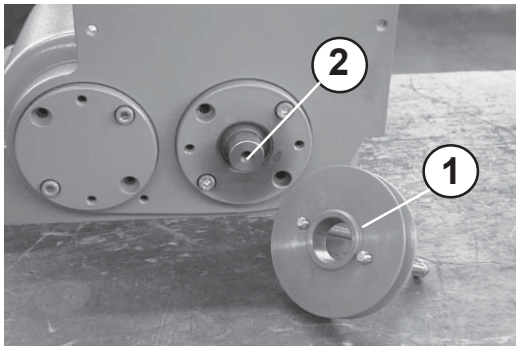


Figure 3

Press the V-belt pulley(3/1) from the eccentric shaft (3/2).

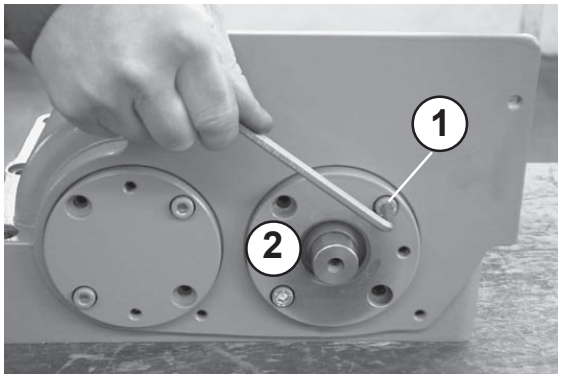


Figure 4

Remove the fastening screw (4/2) of the cover (4/1).

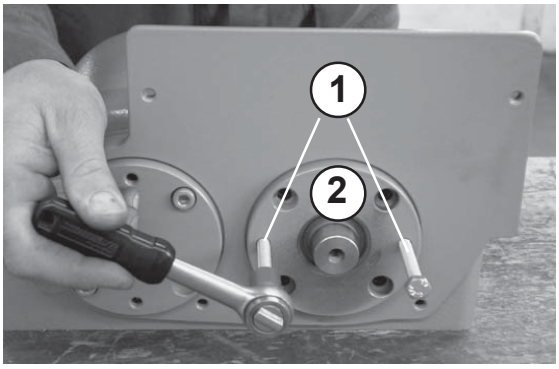


Figure 5

Screw the hexagon head cap screws (5/1) into the cover (5/2) and press the cover from the housing.

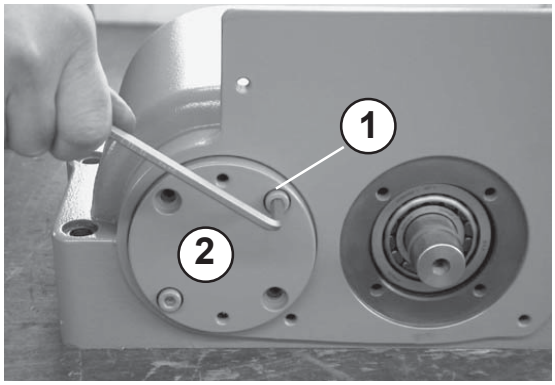


Figure 6

Remove the fastening screw (6/1) of the cover (6/2).

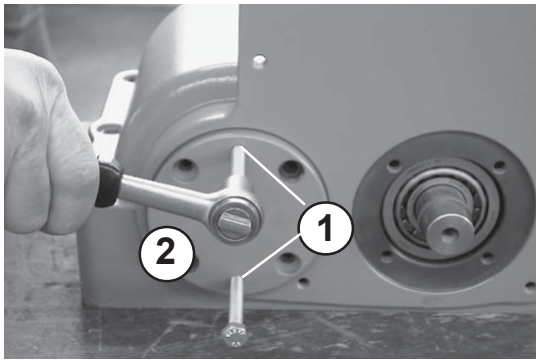


Figure 7

Screw the hexagon head cap screws (7/1) into the cover (7/2) and press the cover from the housing.

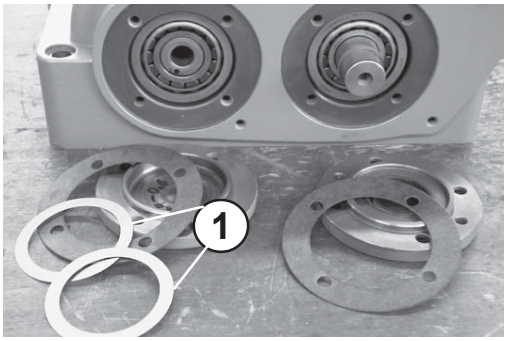


Figure 8

Remove the shims (8/1).

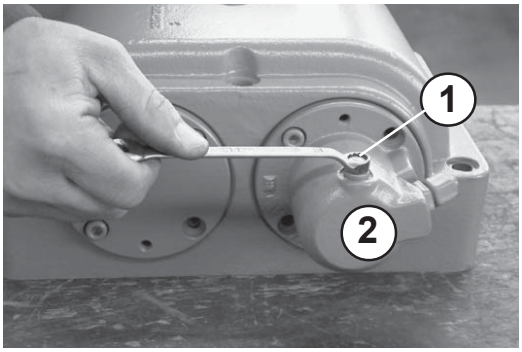


Figure 9

Remove the vent screw (9/1) of the cylinder cover (9/2).

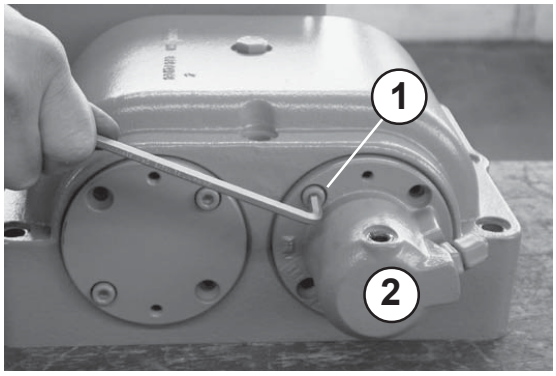


Figure 10

Lossen the fastening screws (10/1) of the cylinder cover (10/2).

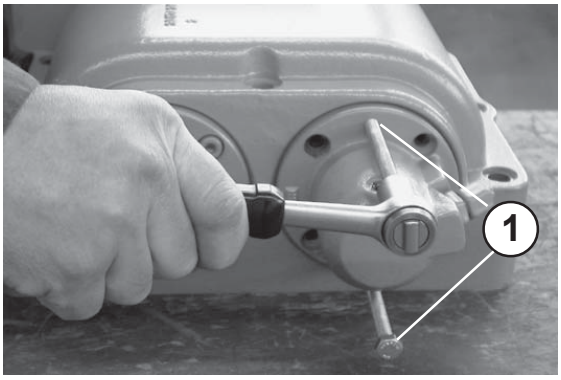


Figure 11

Screw the hexagon head cap screw (11/1) into the fixing flange of the cylinder cover and press the cylinder cover out of the vibrator housing.

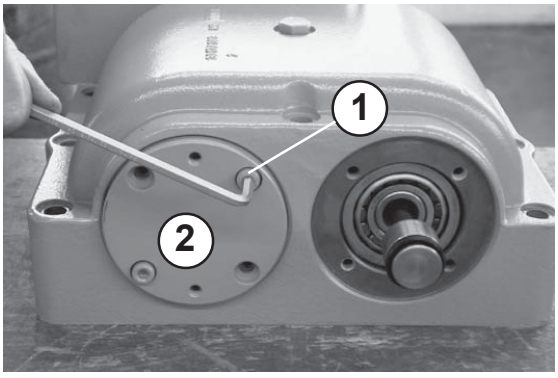


Figure 12

Remove the fastening screw (12/1) of the cover (12/2).

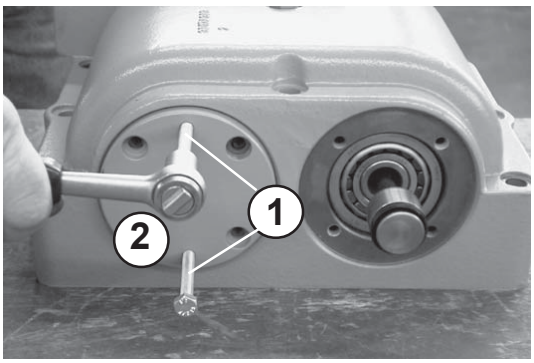


Figure 13

Screw the hexagon head cap screws (13/1) into the cover (13/2) and press the cover from the housing.

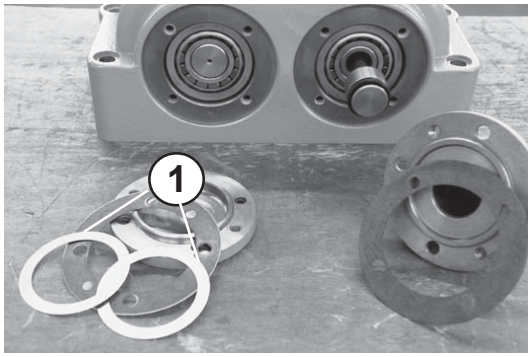


Figure 14

Remove the shims (14/1).

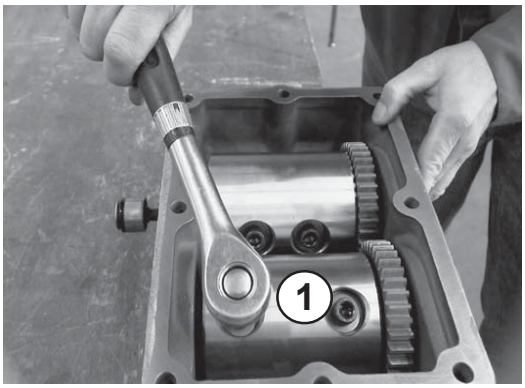


Figure 15

Dismantle the eccentric (15/1) of the fixed eccentric shaft.

STOP Risk of injury because eccentric may overturn.

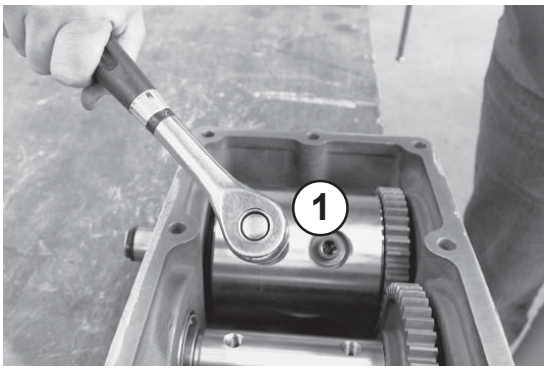


Figure 16

Remove the eccentric (16/1) of the variable eccentric shaft.

STOP Risk of injury because eccentric may overturn.

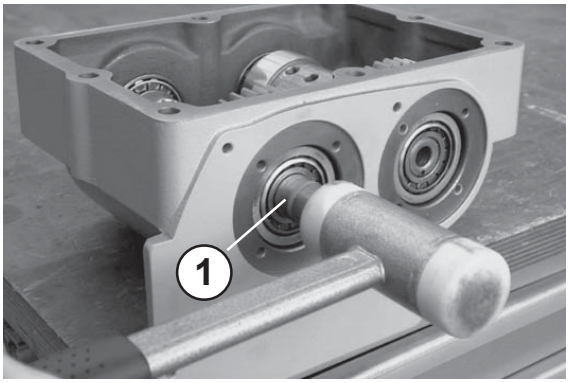


Figure 17

Put the assembly sleeve (17/1) on the eccentric shaft and beat the shaft into the housing.

STOP Risk of injury because vibrator housing may slide or overturn.

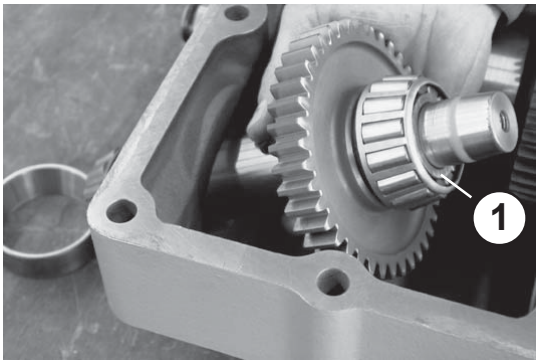


Figure 18

Take the eccentric (18/1) out of the housing.

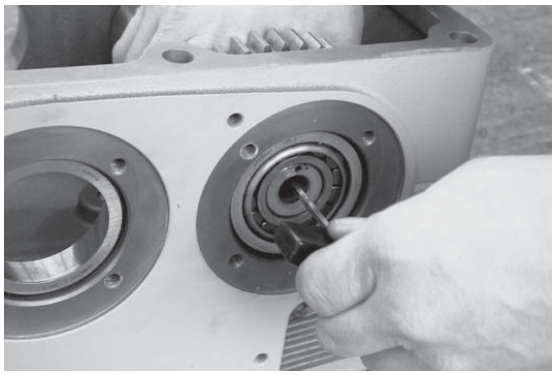


Figure 19

Loosen the fastening pin of the control pin.

Figure 20

The fastening pin is glued in place. Before removing the pin, shortly heat it up by means of a burner in order to loosen the glueing.

Risk of scalds because of hot metal parts.

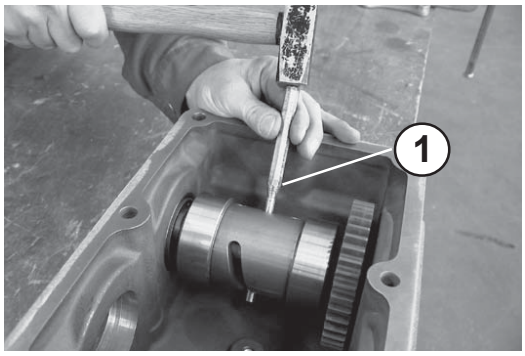


Figure 21

Remove the control pin by means of a piercer (21/1).

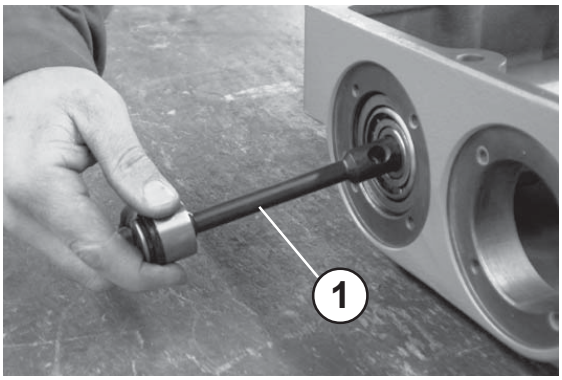


Figure 22

Pull the adjusting pin (22/1) out of the variable shaft.

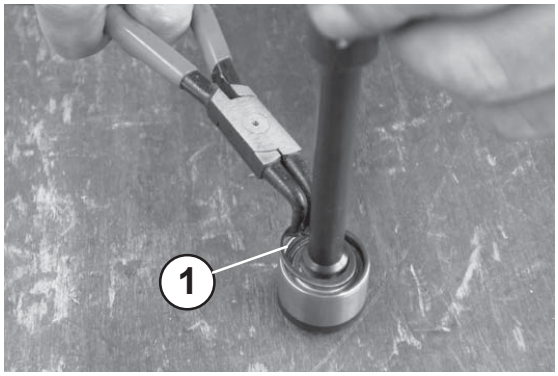


Figure 23

Loosen the retaining ring (23/1) .

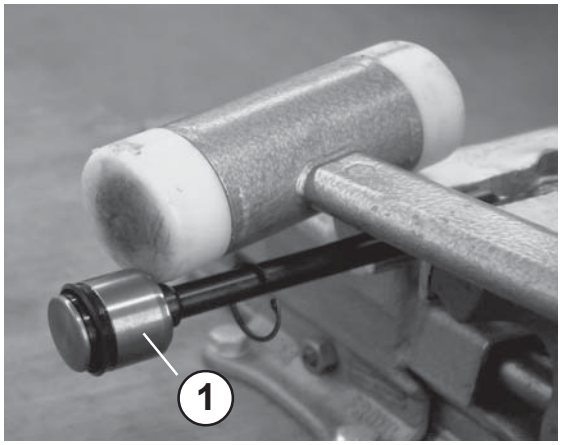


Figure 24

Remove the piston (24/1).

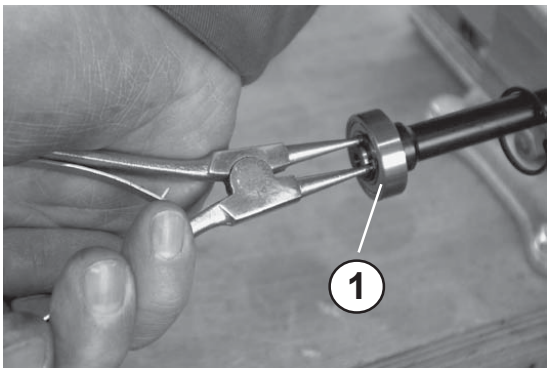


Figure 25

Remove the retaining ring (25/1) .

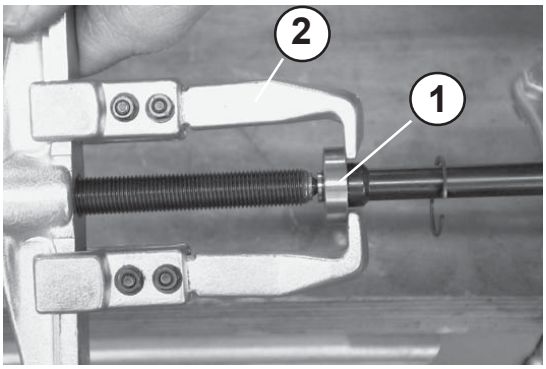


Figure 26

Pull off the bearing (26/1) by means of an extractor (26/2).

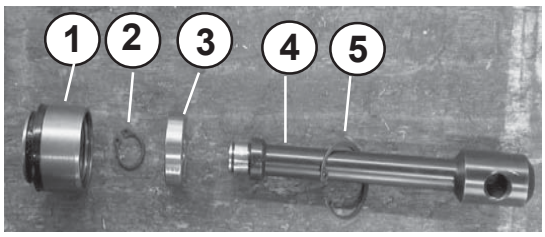


Figure 27

1 Piston

2 Circlip

3 Bearing

4 Control pin

5 Circlip

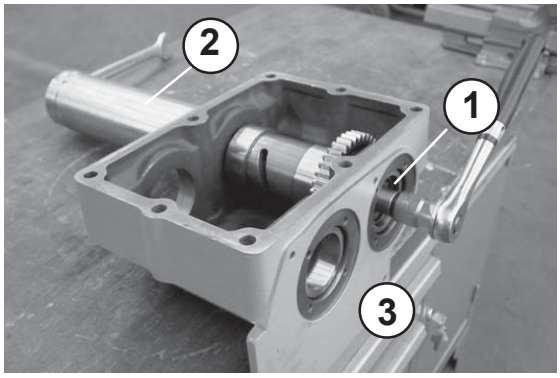


Figure 28

Take the control shaft (28/1) out of the housing (28/3) by means of the special tool (28/2).

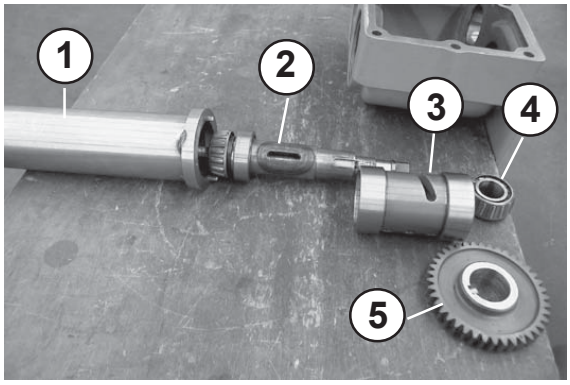


Figure 29

1 Special tool
2 Control shaft
3 Adjusting bushing
4 Bearing
5 Toothed wheel

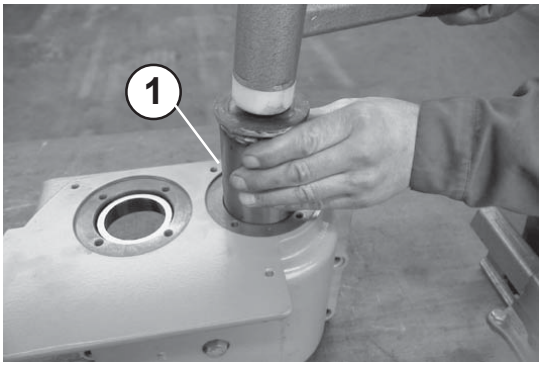


Figure 30

Put the assembly sleeve (30/1) on the bearing outer ring and beat the bearing ring into the housing.

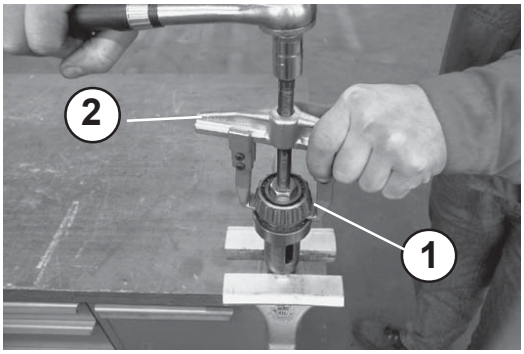


Figure 31

Pull out the bearing (31/1) by means of an appropriate bearing extractor (31/2).

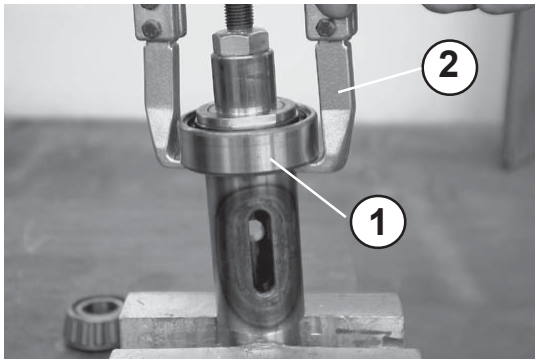


Figure 32

Pull out the bearing (32/1) by means of an appropriate earing extractor (32/2).

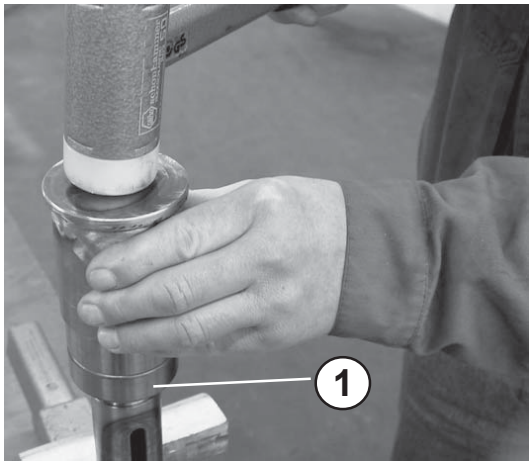


Figure 33

2. Montage

Put the assembly sleeve on the tapered roller bearing (33/1) and mount the bearing onto the variable eccentric shaft.

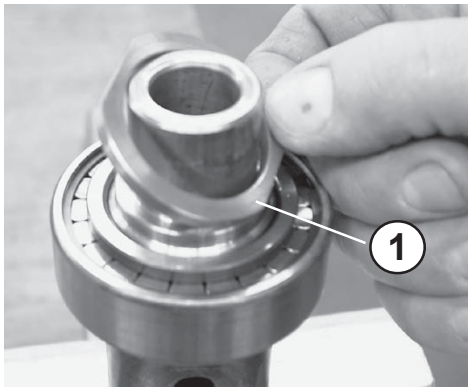


Figure 34

Fit the spacer ring (34/1).

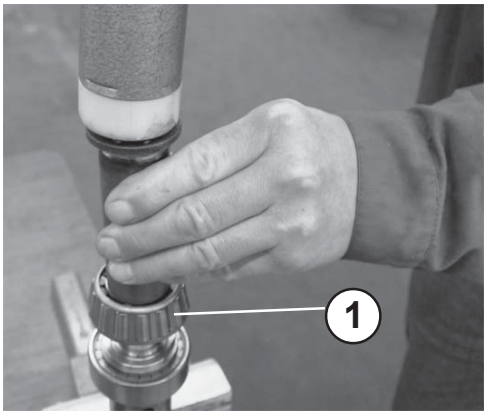


Figure 35

Fit the tapered roller bearing (35/1).

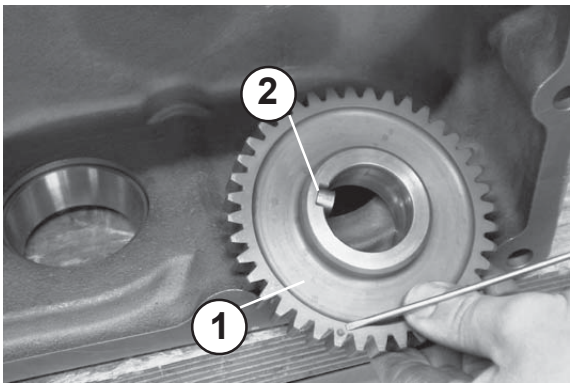


Figure 36

Put the toothed wheel (36/1) into the housing.

⚠ Pay attention to the mark (36/2) and to the feather key (also refer to figure 38).

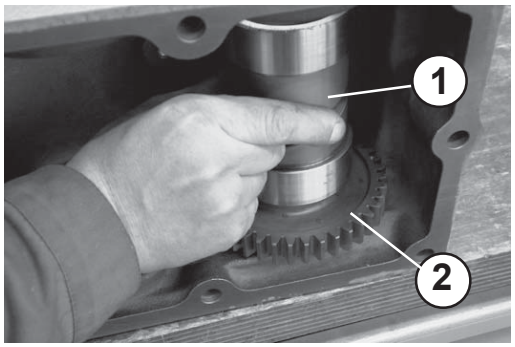


Figure 37

Put the adjusting bushing (37/1) on the toothed wheel (37/2).

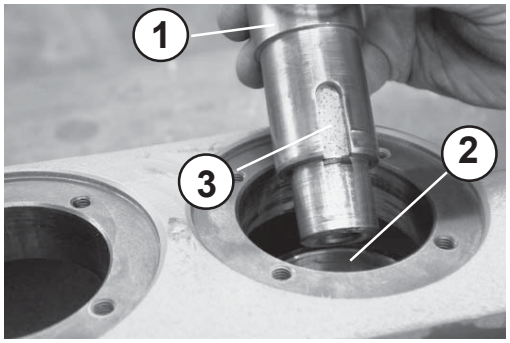


Figure 38

Put the variable eccentric shaft (38/1) into the adjusting bushing (38/2).

⚠ When fitting the variable eccentric shaft (38/1) into the adjusting bushing (38/2), check to ensure that the feather key groove (38/3) engages into the feather key of the toothed wheel (36/1).

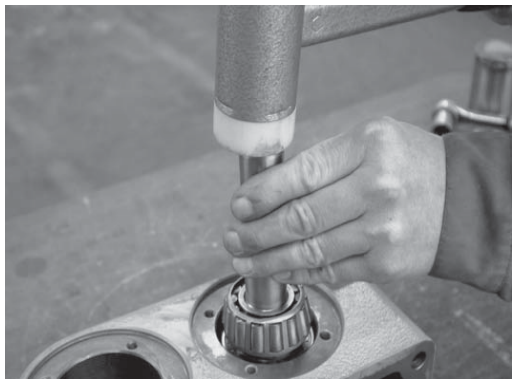


Figure 39

Put the variable eccentric shaft into the housing.

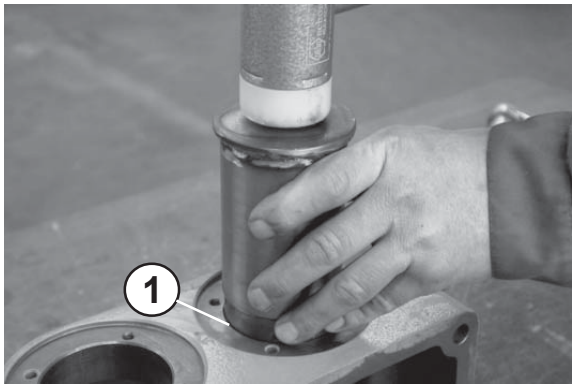


Figure 40

Put the assembly sleeve on the bearing outer ring (40/1) and insert the bearing ring into the housing.

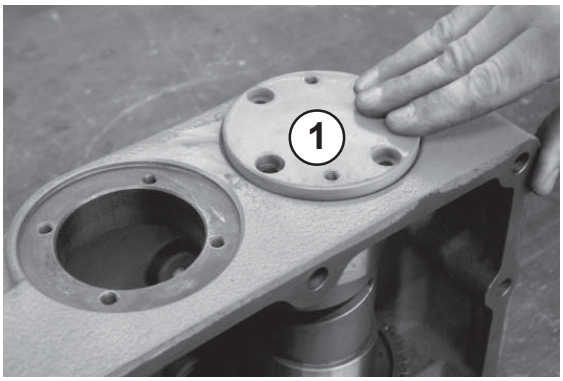


Figure 41

Position the cover (41/1) in place.

⚠ Do not yet fix the cover.

Figure 42

Turn the housing, fit the bearing (42/1) by means of the assembly sleeve (42/2).

Figure 43

Put the assembly sleeve on the bearing outer ring and drive the bearing outer ring into the housing.

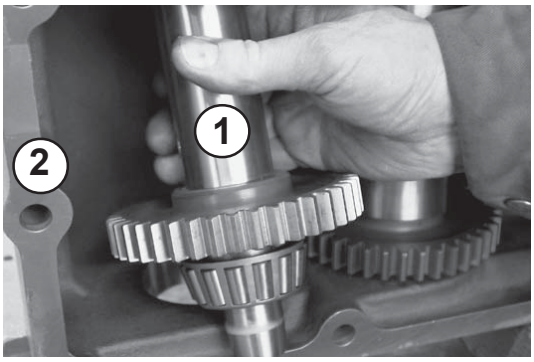


Figure 44

Insert the fixed eccentric shaft (44/1) into the housing (44/2).

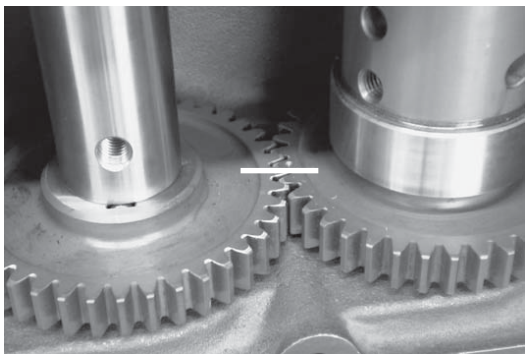


Figure 45

⚠ When fitting the gearwheels, check to ensure that the marks are facing each other.

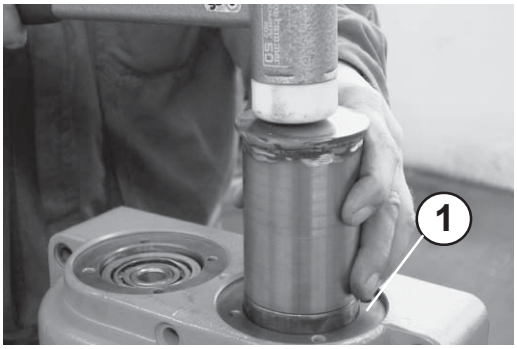


Figure 46

Put the assembly sleeve on the bearing outer ring (46/1) and drive the bearing outer ring into the housing.

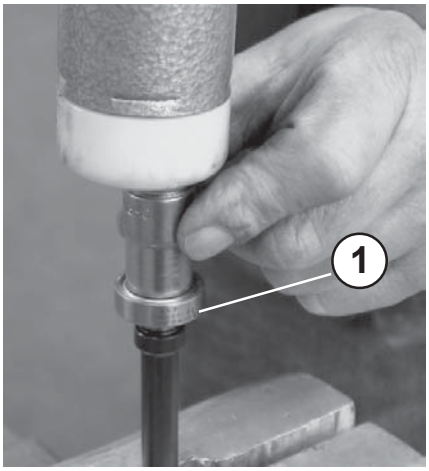


Figure 47

Fit the bearing (47/1) of the adjusting pin.

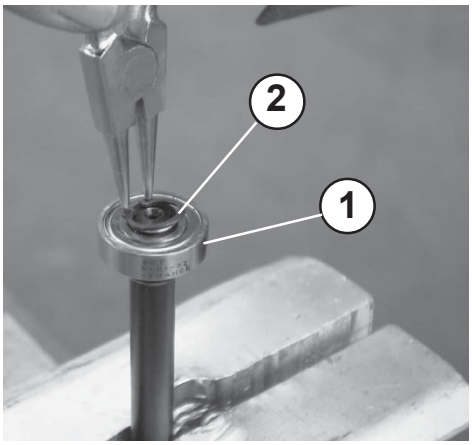


Figure 48

Secure the bearing (48/1) by means of the retaining ring (48/2).

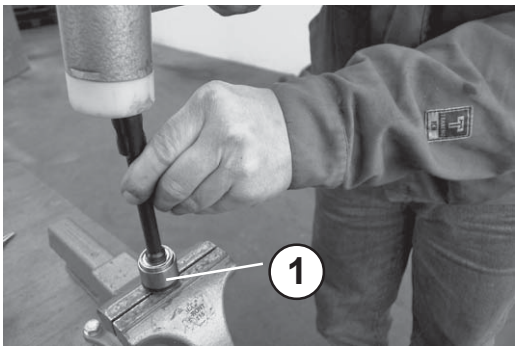


Figure 49

Fit the bearing (49/1) of the adjusting pin.

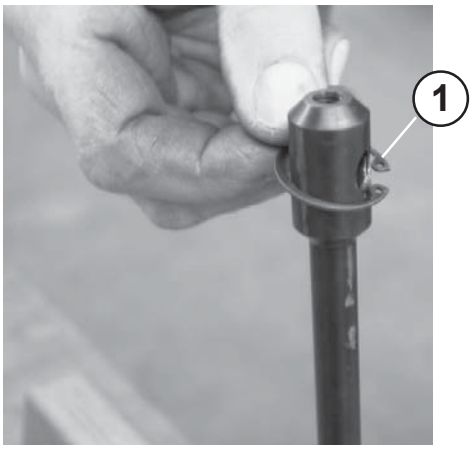


Figure 50

Fit the retaining ring (50/1) of the piston.

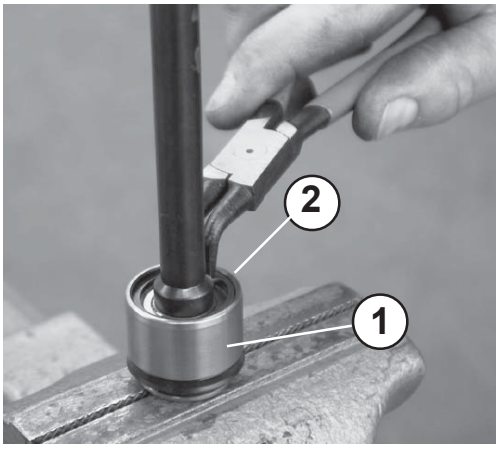


Figure 51

Secure the piston (51/1) by means of the retaining ring (51/2).

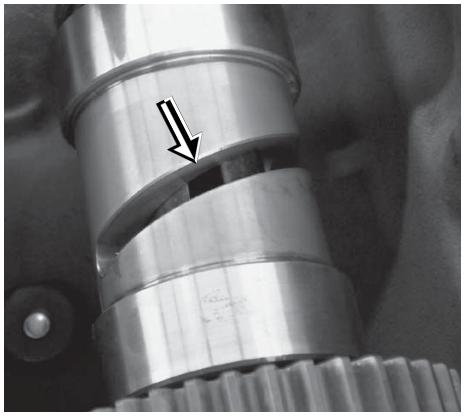


Figure 52

When fitting the variable eccentric shaft and the adjusting gearwheel, pay attention to the longitudinal groove (see arrow, as shown in the figure) and to the spiral flute of the adjusting gearwheel.

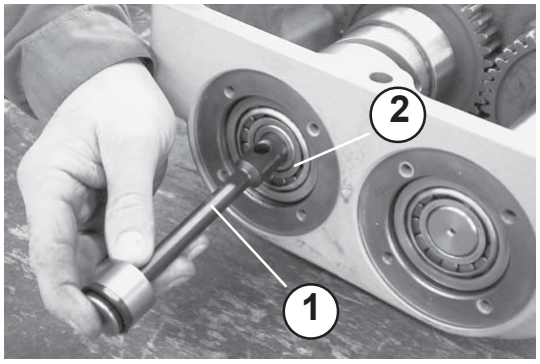


Figure 53

Insert the adjusting pin (53/1) into the variable eccentric shaft (53/2).

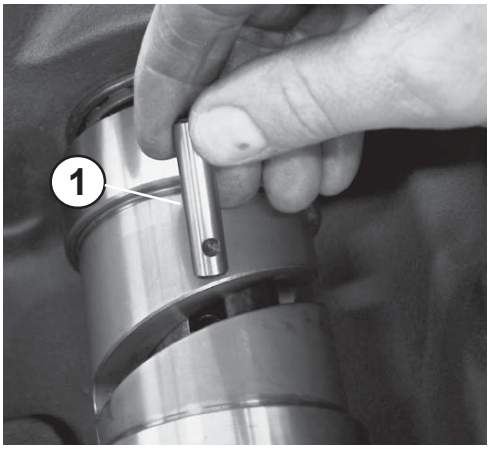


Figure 54

When fitting the control pin (54/1), check to ensure that the cut surface is directed towards the adjusting pin.

The cut surface of the control pin must point towards the fastening pin.

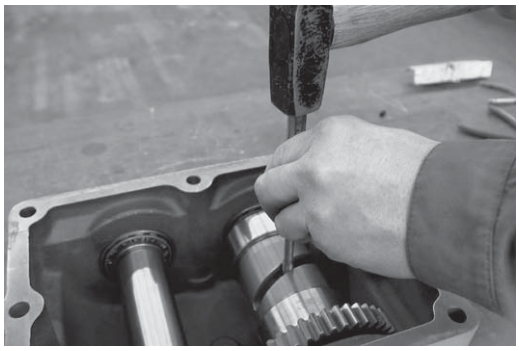


Figure 55

The cut surface of the control pin must point towards the adjusting pin.

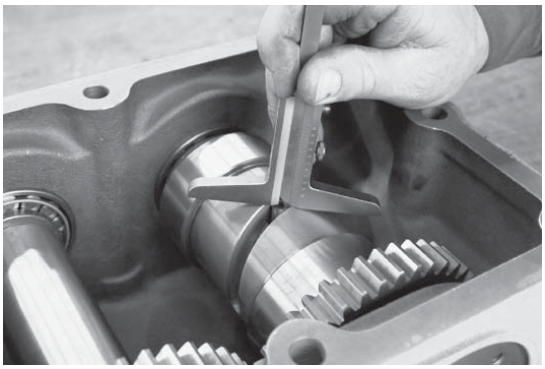


Figure 56

⚠ Ensure that the control pin runs approximately 1,5mm beneath the upper edge of the groove of the adjusting gear wheel.

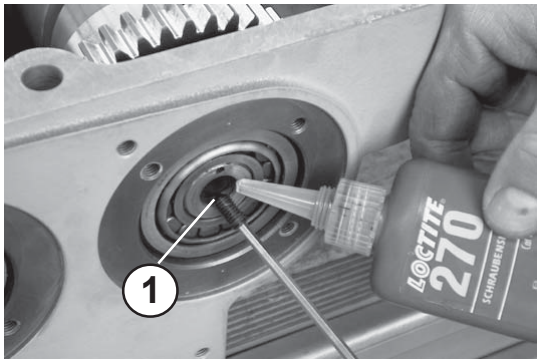


Figure 57

Secure the control pin by means of the pin (57/1).

⚠ Apply Loctite No. 270 to secure the pin.

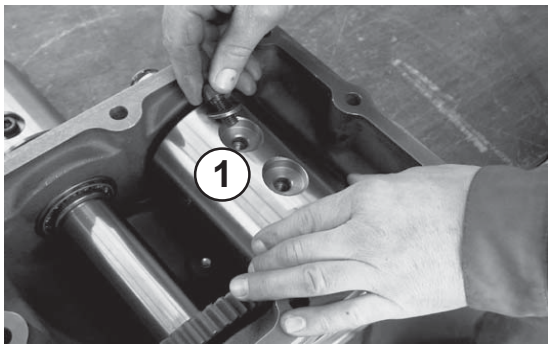


Figure 58

Fit the eccentric (58/1).

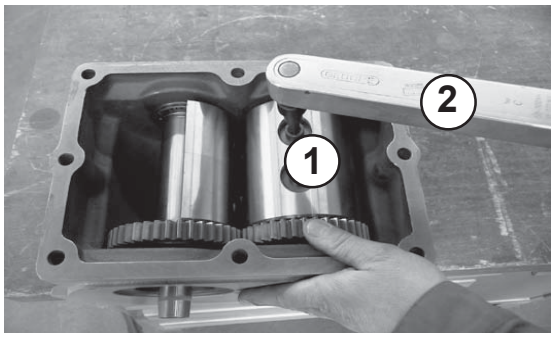


Figure 59

Fit the eccentric (59/1) by means of a dynamometric key (59/2).

⚠ Apply a force of 120 Nm to fasten the eccentric.

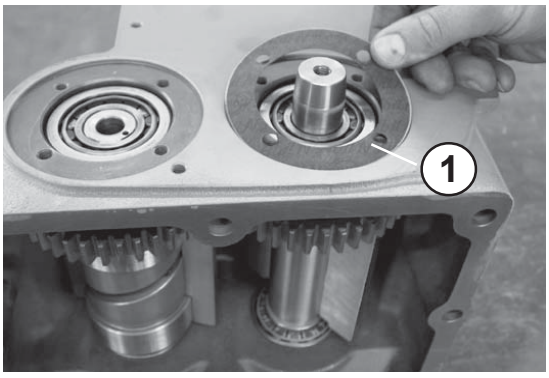


Figure 60

Position the seal (60/1) in place.

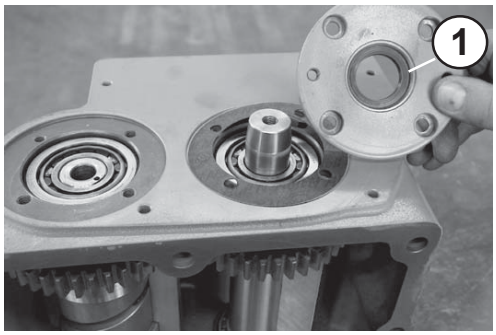


Figure 61

Mount the seal ring (61/1) and the seal onto the bearing housing cover.

⚠ Replace the shaft seal ring each time the unit is repaired.

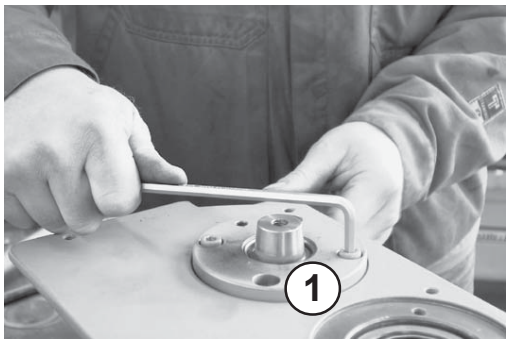


Figure 62

Fasten the cover (62/1).

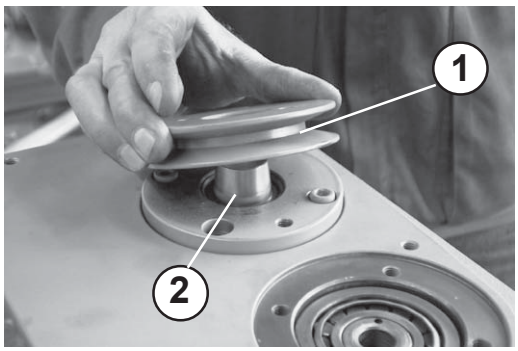


Figure 63

Put the V-belt pulley (63/1) onto the fixed eccentric shaft (63/2).

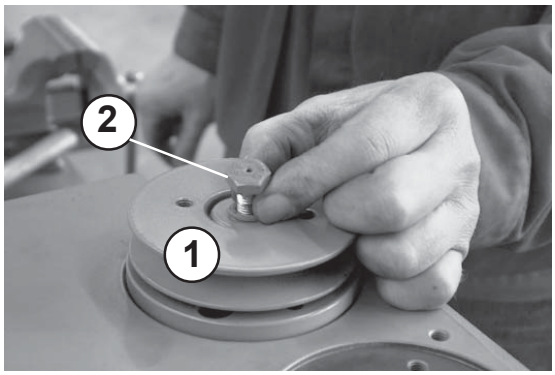


Figure 64

Fasten the V-belt pulley (64/1) by means of the screw (64/2).

The fastening screw (64/2) must feature a bore hole for venting the vibrator.

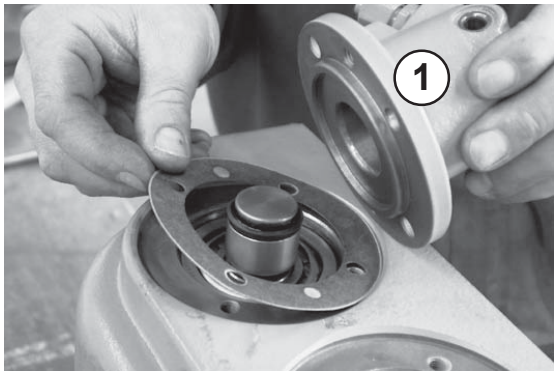


Figure 65

Fit the cylinder cover (65/1) .

Figure 66

Beat the axial play to "0".

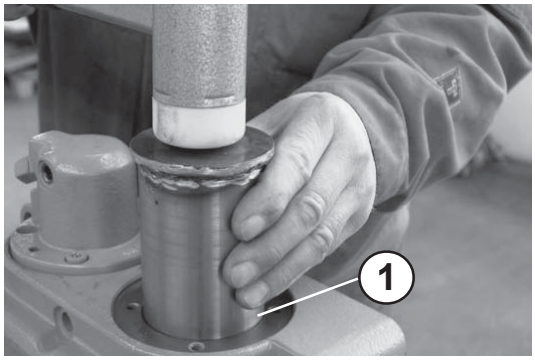


Figure 67

Put the assembly sleeve on the bearing outer ring (67/1) and drive the bearing outer ring into the housing.

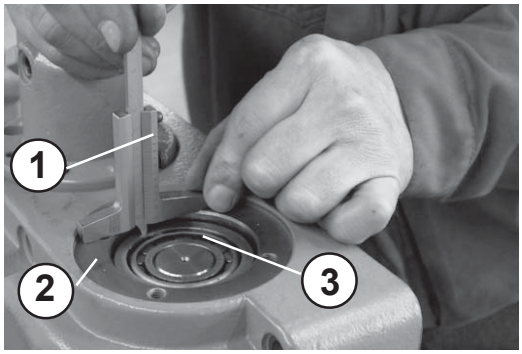


Figure 68

Use a depth slide gauge (68/1) to measure the depth between the housing (68/2) and the bearing outer ring (68/3).

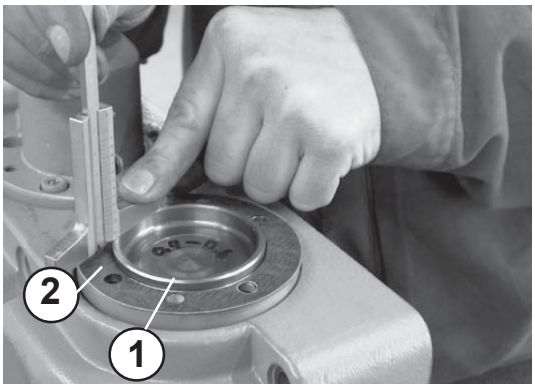


Figure 69

Measure the distance between the cover's collar (69/1) and the seal (69/2).

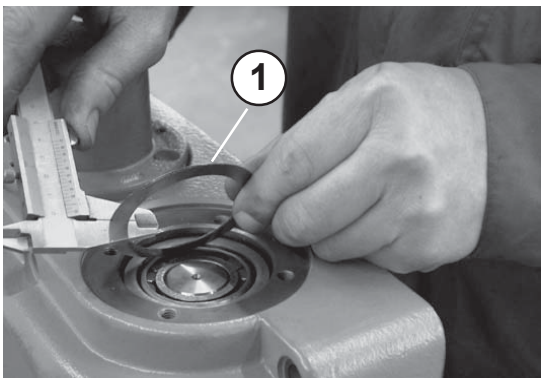


Figure 70

Adjust the axial play by means of shims (70/1).

⚠ Axial play 0.6 mm

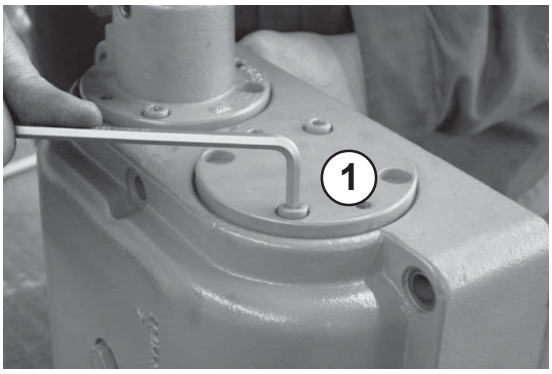


Figure 71

Fasten the cover (71/1).

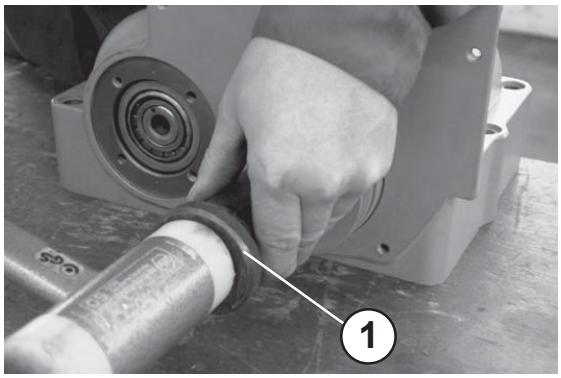


Figure 72

Put the assembly sleeve on the eccentric shaft (72/1) and drive the eccentric shaft back into the bearing seat.

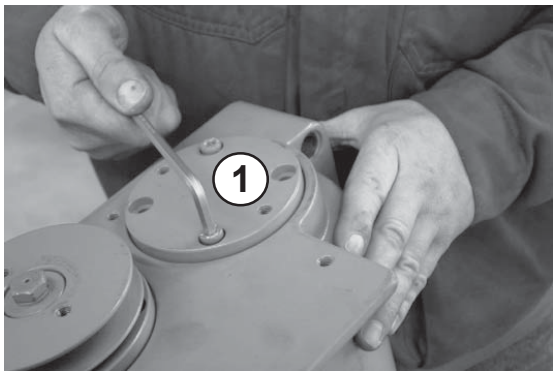


Figure 73

Fasten the cover (73/1).

⚠ Adjust the axial play of the variable eccentric as described above.

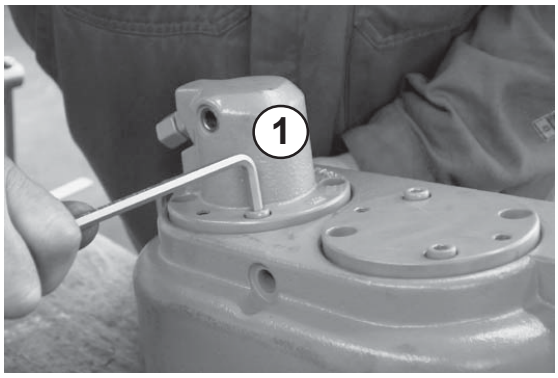


Figure 74

Remove the cylinder cover (74/75/1).

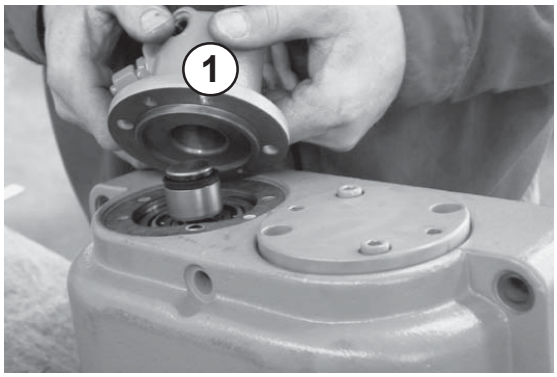


Figure 75

Figure 76

Put the assembly sleeve on the eccentric shaft and drive the shaft back into the seat.

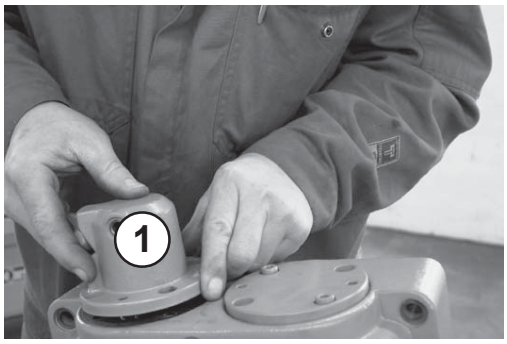


Figure 77

Fit the cylinder cover (77/78/1).

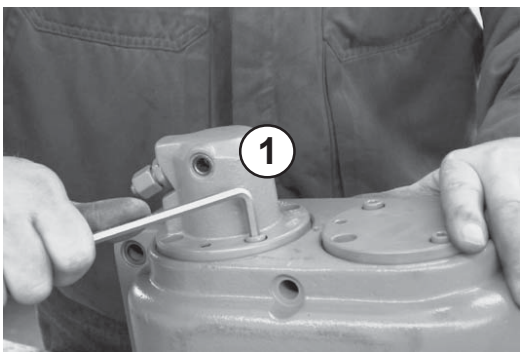


Figure 78

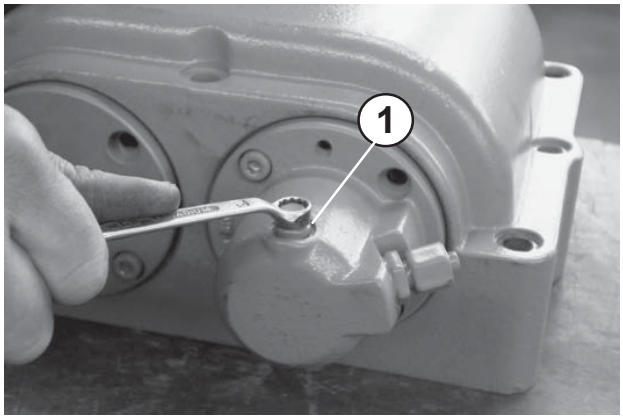


Figure 79

Fit the vent screw (79/1) .