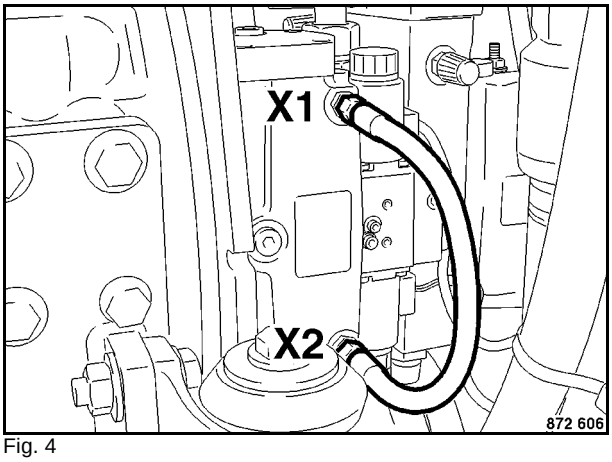


Fig. 4

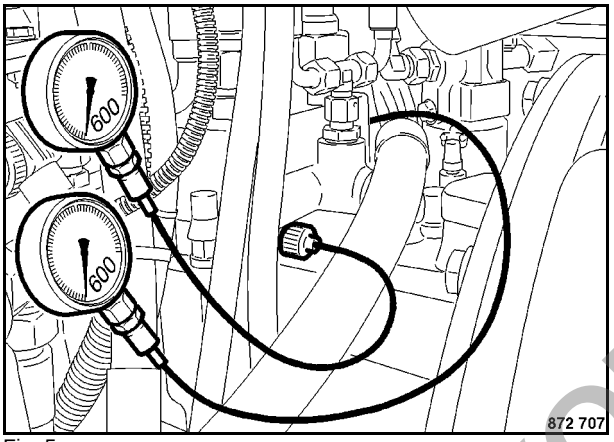


Fig. 5

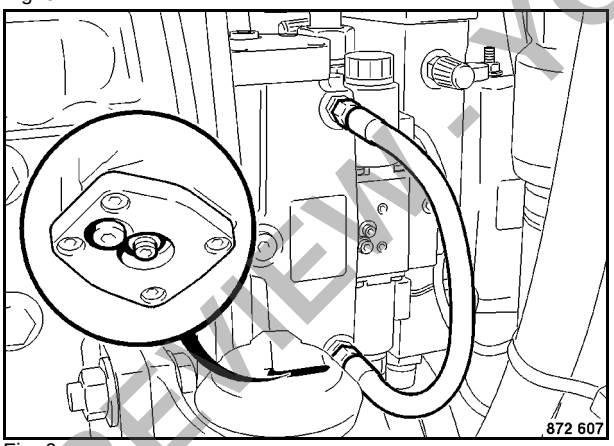


Fig. 6

Mechanical neutral position

1. As a measure to avoid signal residues from the hydraulic neutral position connect both control chambers X1 and X2 with a hose (Fig. 4).
2. Start the engine and run it with maximum speed.
3. Read the pressure gauges (Fig. 5).

i Note

For a more exact adjustment repeat the test with 60 bar pressure gauges

Nominal value

Both pressure gauges must show identical pressure, if necessary correct the mechanical neutral position.

4. Adjust the neutral position (Fig. 6) so that both pressure gauges show identical pressure (charge pressure).

i Note

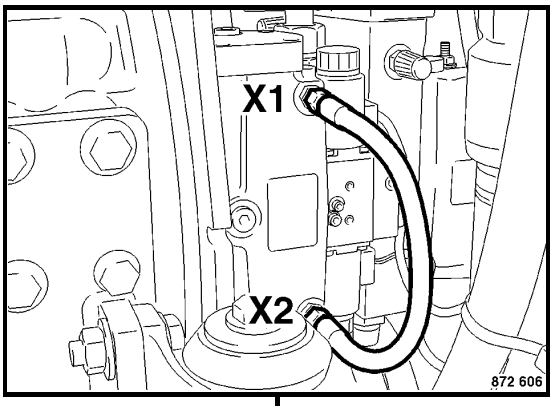
Equalize the dead range of the neutral position.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

4.2 Trouble shooting diagram

The machine drives with the travel lever in „NEUTRAL“



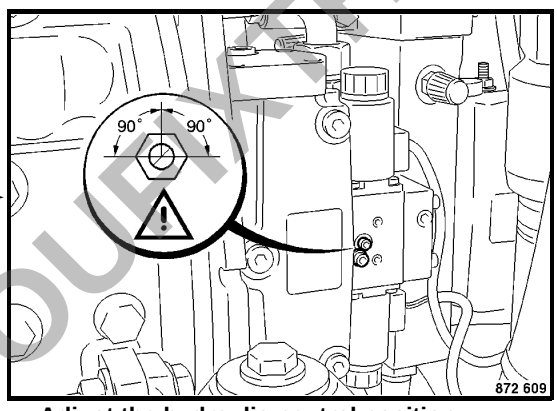
Check the mechanical neutral position

- Enter code number 500 to close the brake
- Connect control chamber ports X1 and X2 with a hose

Neutral position OK?

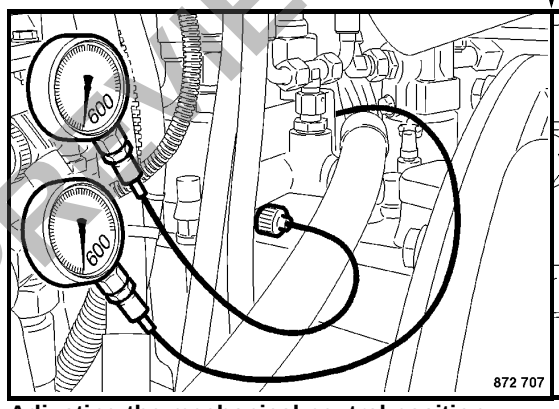
yes

no



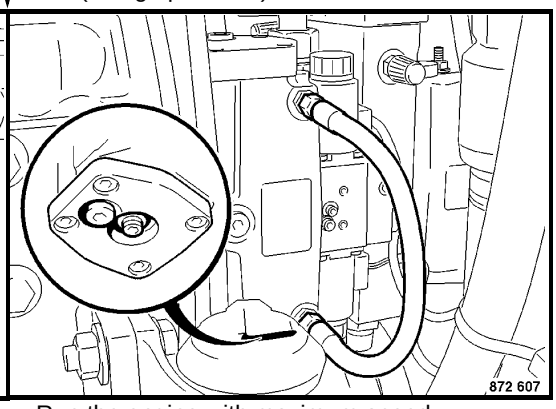
Adjust the hydraulic neutral position

- Remove the hose connecting X1 and X2
- Run the engine with maximum speed.
- Adjust the hydraulic neutral position so that identical pressures are indicated at MA and MB (charge pressure)



Adjusting the mechanical neutral position

- Connect 600 bar pressure gauges to MA and MB



- Run the engine with maximum speed.
- Adjust the mechanical 0-position so that identical pressures are indicated at MA and MB (charge pressure)
- For a more exact adjustment repeat the test with 60 bar pressure gauges

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

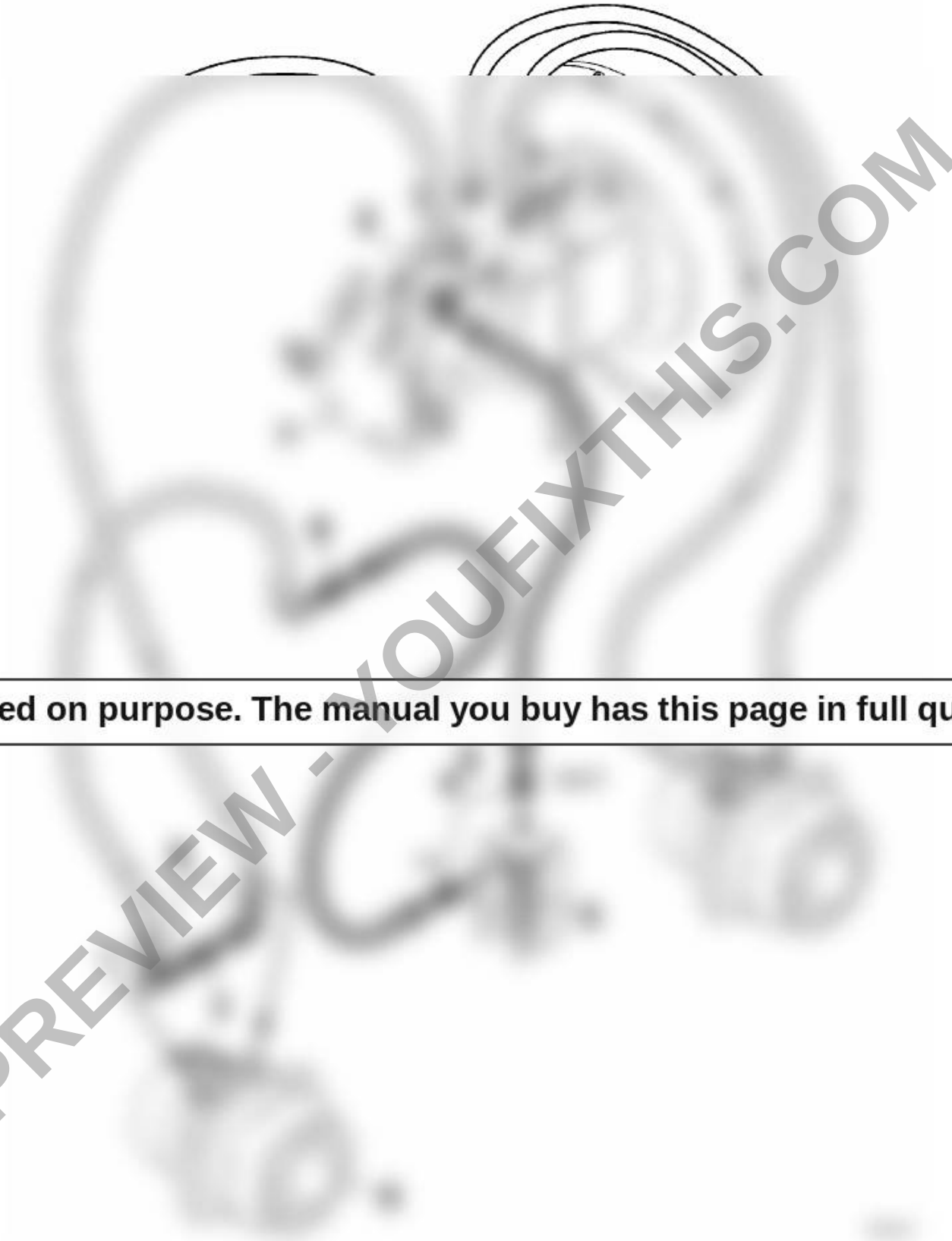
Tightening torques

- Tighten fastening screws and nuts according to the table of tightening torques.
- Tightening torques deviating from the ones in the table are specially mentioned in the repair instructions.

Blurred on purpose. The manual you buy has this page in full quality.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



Blurred on purpose. The manual you buy has this page in full quality.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

General		**5**
	1.1 Foreword	6
	1.2 Safety regulations	7
	1.3 General repair instructions	9
	1.4 Tightening torques	11
	1.5 Connection overview	12
Tests and adjustments		**15**
	2.1 Technical data	16
	2.2 Special tools	19
	2.3 Checking the rotation speeds	21
	2.4 Pressure tests in the travel circuit	23
	2.5 Checking / adjusting the neutral positions of the travel pump	25
	2.6 Check the setting of the high pressure relief valves in the travel circuit	28
	2.7 Pressure measurements in the vibration circuit	30
	2.8 Check the setting of the high pressure relief valves in the vibration circuit	31
	2.9 Checking / adjusting the vibrator shaft speeds	33
	2.10 Checking the leakage rate of the vibration motor	34
	2.11 Pressure test in steering circuit	35
	2.12 Operation of display module for ESX-control	37
	2.13 Driving against the closed brake	38
	2.14 Adjusting the machine type	39
	2.15 Calibration of the angle transducers	41
	2.16 Adjusting the angle transducers	43
	2.17 Automatic detection of step currents for the steering valves	45
	2.18 Adjusting the type of travel range switch	47
	2.19 Resetting the step currents in the travel system	49
	2.20 Automatic detection of step currents in the travel system	50
	2.21 Showing stored faults	53
	2.22 Deleting stored faults	54
Flushing		**55**
	3.1 Special tool:	56
	3.2 Flushing shematic for front drum drive	58
	3.3 Flushing schematic for rear drum drive system	60
	3.4 Flashing the travel circuit	62
	3.5 Flushing schematic for vibration drive	72
	3.6 Flushing the vibration circuit	74
Trouble shooting		**81**
	4.1 General	82
	4.2 Trouble shooting diagram	83
Drum		**103**
	5.1 Special tools	104
	5.2 Repair overview for drum	106
	5.3 Removing and installing the drum	108
	5.4 Removing and installing the vibrator unit on the drum drive side	114
	5.5 Removing and installing the vibrator unit on the vibration drive side	119
	5.6 Repairing the vibrator unit on the drum drive unit	129

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

5.7 Repairing the vibrator unit on the vibration drive unit 134
5.8 Dismantling, assembling the change-over weights 140
Pivot steering **143**
6.1 Removing, repairing and installing the pivot steering 144
6.2 Repairing the oscillation joint 148
Suppliers documentation **153**
7.1 A4VG 155
7.2 A10VG 201
7.3 MS/MSE 02 to 18 255
7.4 Vibration motor A2FM 32 305

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

2.6 Check the setting of the high pressure relief valves in the travel circuit

Special tools

Hydraulic test case

⚠ Caution

Perform measurements at operating temperature of the hydraulic oil (40 °C).

1. Block the wheels with suitable chocks (Fig. 1).

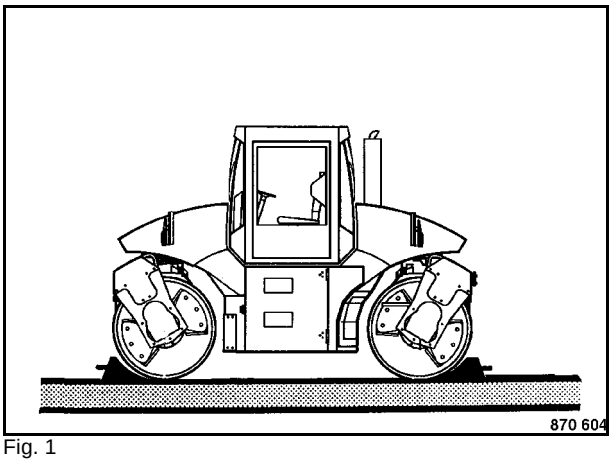


Fig. 1

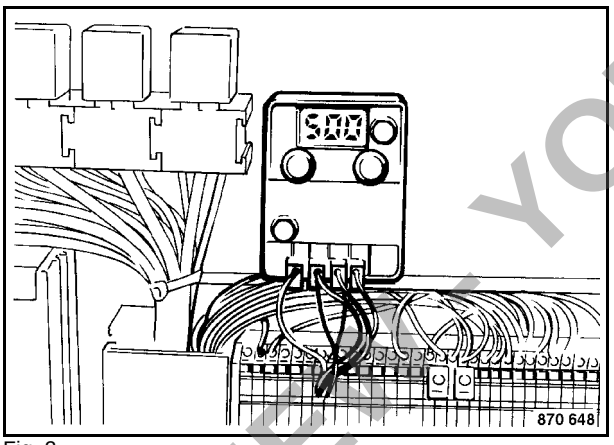


Fig. 2

2. Enter code number 500 on the display module (Fig. 2) to close the brake.

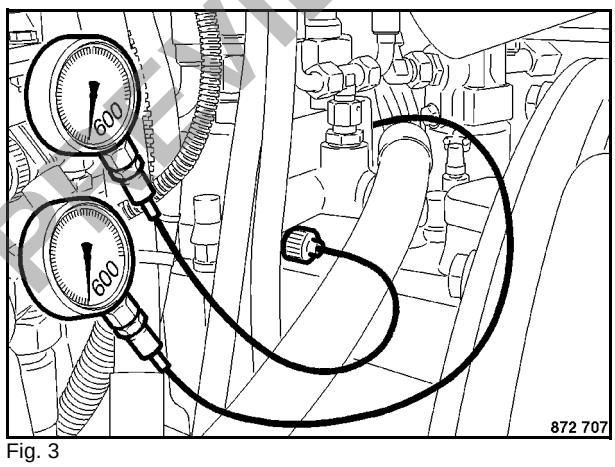


Fig. 3

3. Connect a 600 bar pressure gauge (Fig. 3) each to test ports M_A and M_B.

PREVIEW YOUFIXTHIS.COM

Download full manual at youfixthis.com

2.21 Showing stored faults

i Note

Besides stored faults, current faults are also displayed.

Switching the function on

1. Enter code number „700“ on display module (Fig. 1).

   The function “Show stored faults“ is switched on.

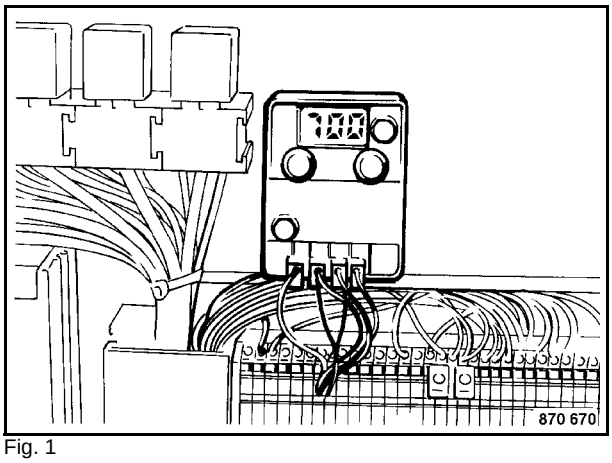


Fig. 1

Switching the function off

1. Enter code number „701“ on display module (Fig. 2).

   The function “Show stored faults“ is switched off.

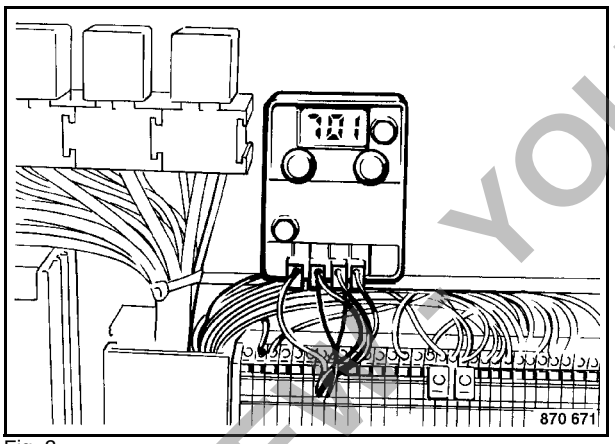


Fig. 2

PREVIEW BY YOUFIXTHIS.COM

Download full manual at youfixthis.com

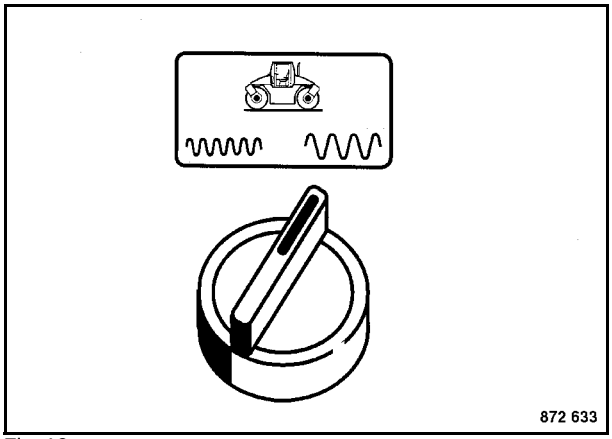


Fig. 10

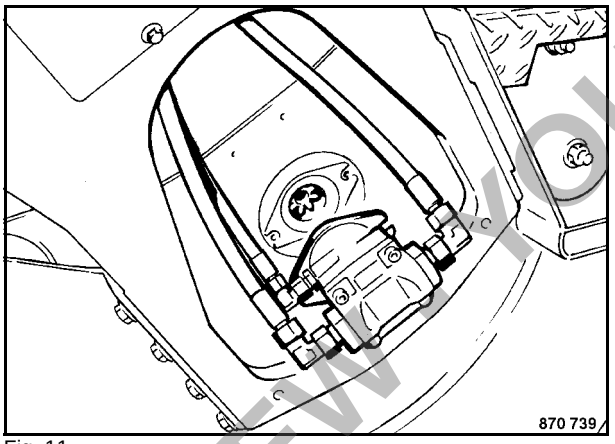


Fig. 11

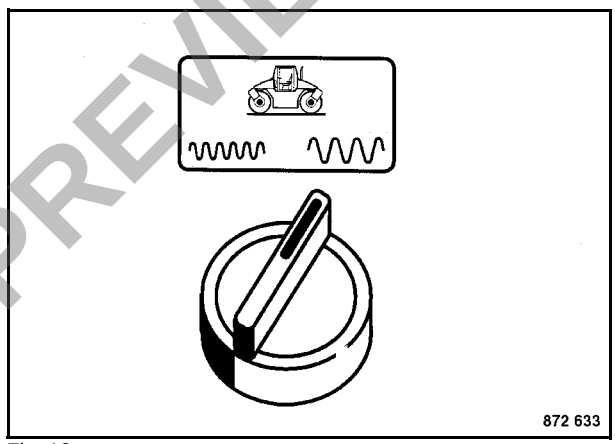


Fig. 12

Flushing the hoses in the vibration circuit

⚠ Caution

Use only low frequency, as otherwise the flushing filter will be subjected to oil flow from the wrong direction.

1. For bleeding switch on low frequency (Fig. 10) for both drums at full engine speed.
2. Run the flushing procedure for approx. 10 minutes. Switch the vibration on and off at intervals of approx. 30 seconds.
3. Shut down the engine.

Environment

Catch hydraulic oil and dispose of environmentally!

4. Reconnect both high pressure hoses to both vibration motors.

Flushing the vibration motors

1. Unscrew the fastening screws for both vibration motors and pull the motors out of their couplings (Fig. 11).

⚠ Caution

Use only low frequency, as otherwise the flushing filter will be subjected to oil flow from the wrong direction.

2. For bleeding switch on low frequency (Fig. 12) for both drums at full engine speed.
3. Run the flushing procedure for approx. 10 minutes. Switch the vibration on and off at intervals of approx. 30 seconds.
4. Shut down the engine.

PREVIEW YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

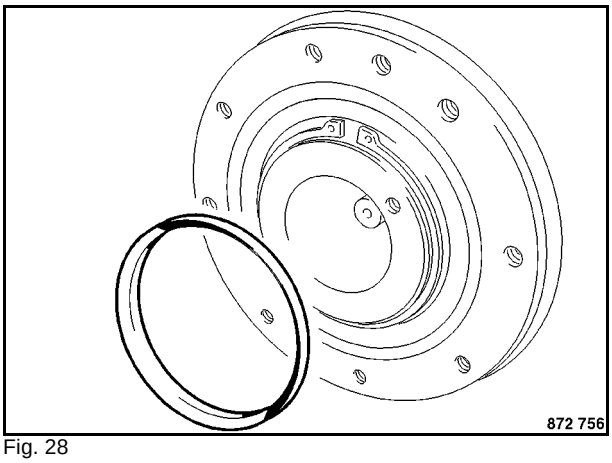


Fig. 28

13. Assemble the V-ring (Fig. 28).

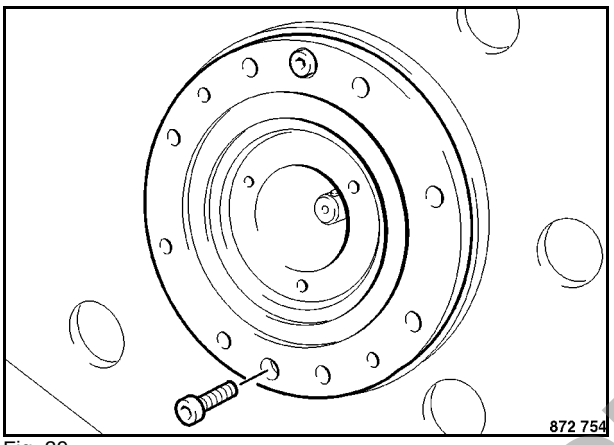


Fig. 29

14. Assemble the intermediate ring, turn in and tighten the fastening screws (Fig. 29).

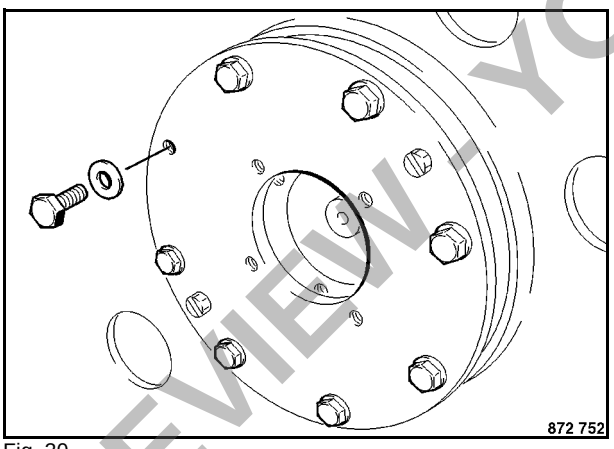


Fig. 30

15. Attach the cover, turn in and tighten the fastening screws (Fig. 30).

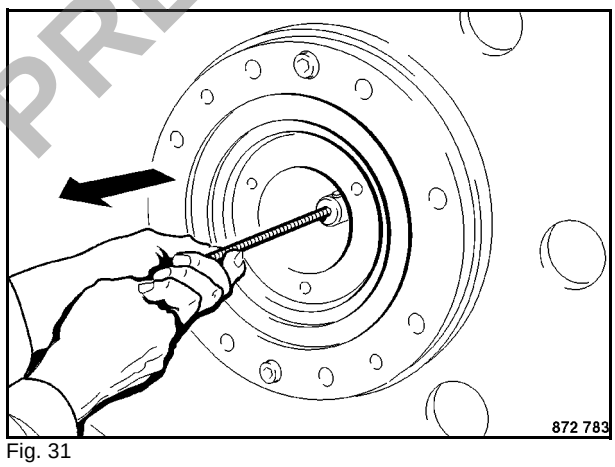


Fig. 31

16. Pull the vibrator shaft towards you (Fig. 31) (must touch the collar of the bearing on the drive side).

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

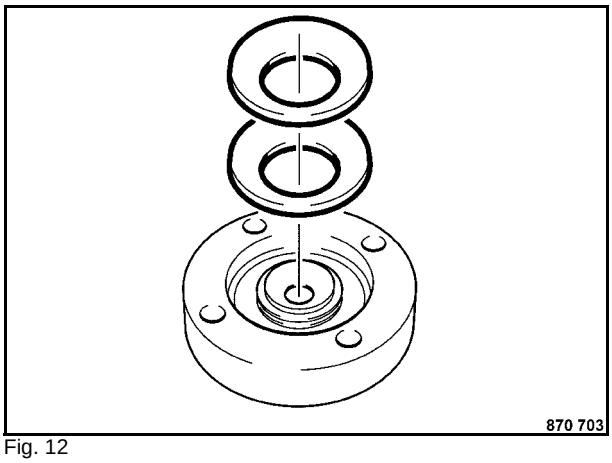


Fig. 12

8. Insert both Belleville springs (Fig. 12).

⚠ Caution
Observe the installation direction!

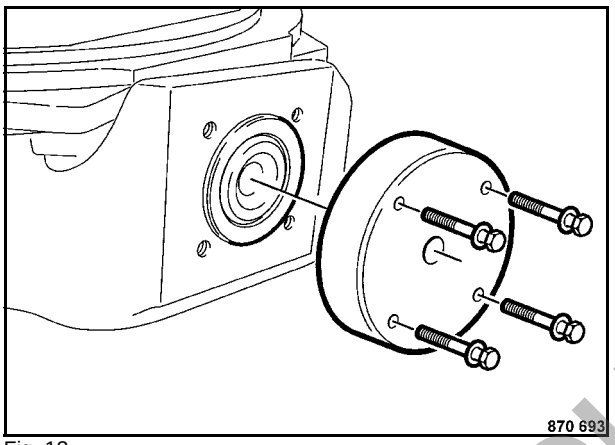


Fig. 13

9. Assemble the cover (Fig. 13) and tighten the fastening screws evenly.
10. Loosen the screws of the cover again.

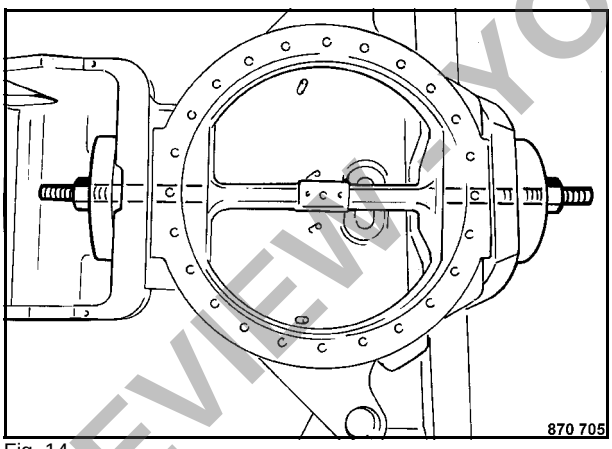


Fig. 14

11. Insert the M16 threaded rod through the central bores in both covers and preload the covers with 90 Nm (Fig. 14).

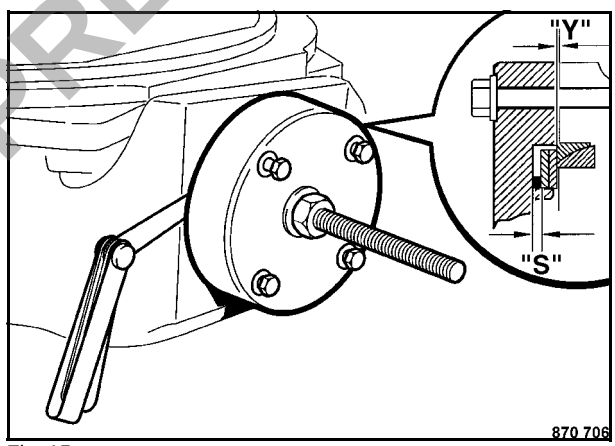


Fig. 15

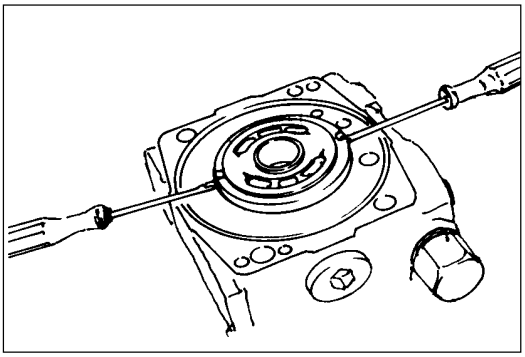
12. Measure the gap (measurement „Y“) between cover and cross member with a feeler gauge (Fig. 15).

    Calculate the shim thickness „S“

    S = 3.7 - Y
13. Reassemble the covers and correct the thickness of the shims as calculated.
14. Assemble the covers with the calculated shims and tighten the fastening screws.
15. Reinstall the drum (see corresponding section).

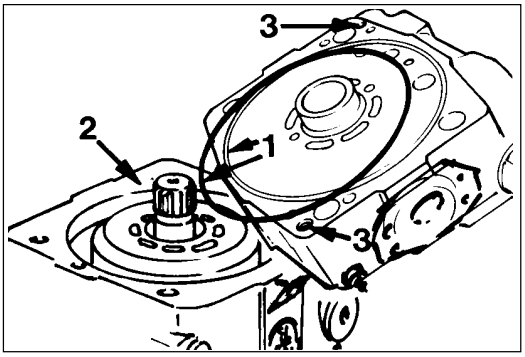
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



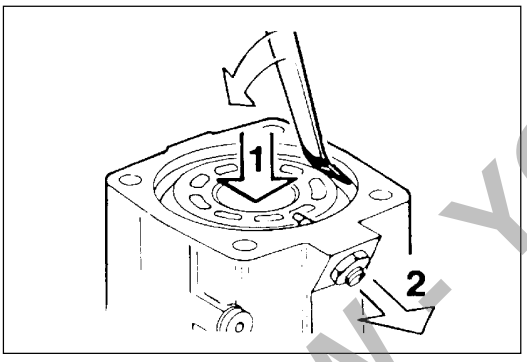
49 Steuerplatte abdrücken.
Lage notieren.

Lift off control plate.
Note position.



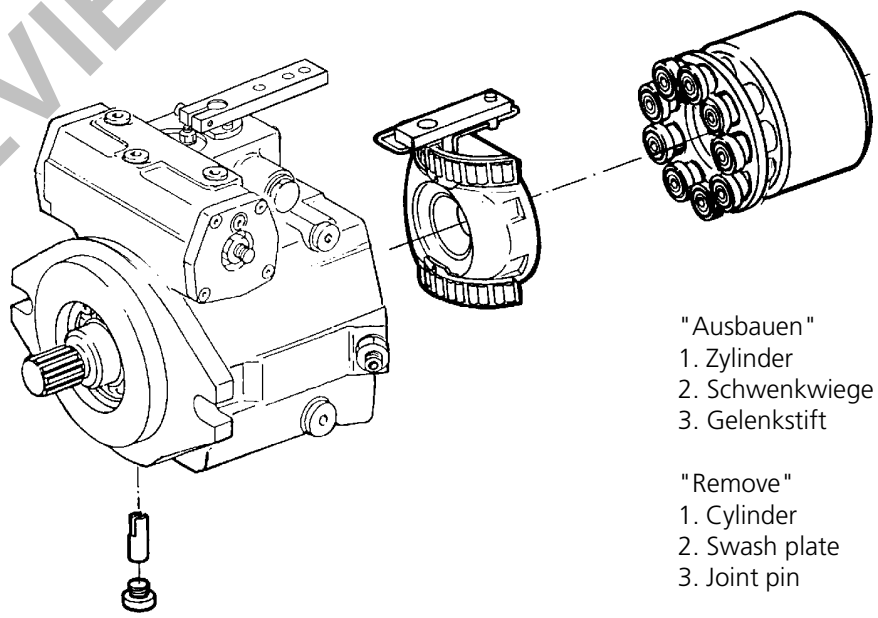
50 Kontrolle!
O-Ring mit Nut (1), Gehäuse (2), Quad-Ring und Quad-Ring Nut (3).

Check!
O-ring and groove (1), housing (2), Quad-ring and groove (3).



51 Zylinder nach unten drücken (1).
Verdrillschraube herausdrehen (2).
Triebwerk ausheben (3).

Press the cylinder to the bottom (1).
Remove fiming indexing screw (2).
Lift out rotary group (3).



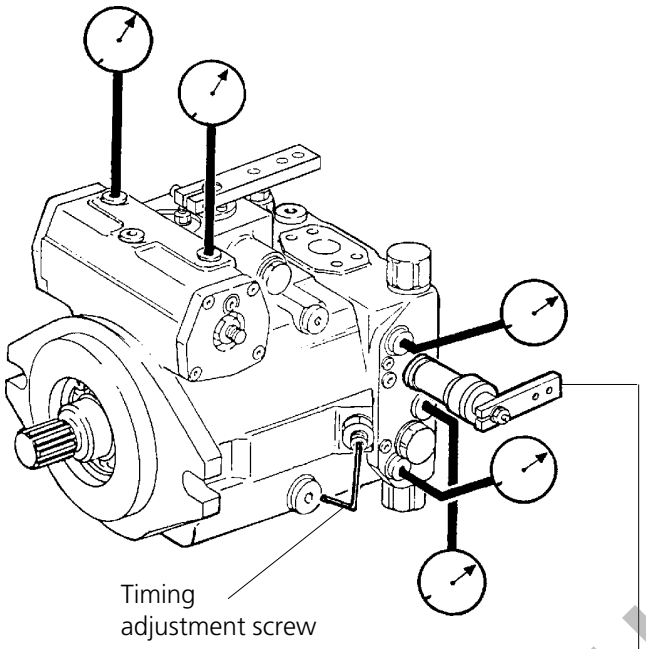
"Ausbauen"
1. Zylinder
2. Schwenkwiege
3. Gelenkstift

"Remove"
1. Cylinder
2. Swash plate
3. Joint pin

52

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



111

Attention!
Observe safety regulations!

Check setting data.
Operating temperature should be kept largely constant during the check procedure.
Start prime mover, idle speed.

Block position
Drive direction switch - **"0"**.
Slowly increase motor speed up to the max. motor speed and thereby observe measuring instruments.

Boost pressure:
Idle speed of prime mover
Psp = approx. 15 - 20 bar
max. motor speed
Psp = ... bar*

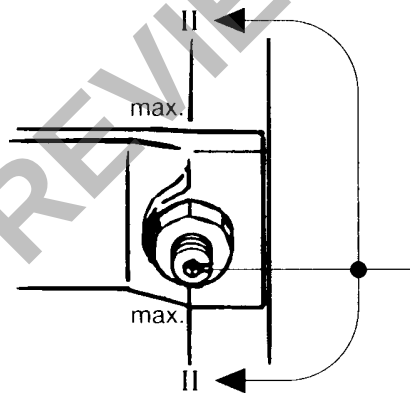
Block position
Drive direction switch - **forward**
(Road gear and fully applied brake)

Check setting data pump A4VIDA
Begin of control:
HD 40 - 50 bar
Motor speed . . . . . rpm* Psp . . . . . bar*
HD . . . . . bar*
Readjusting - control start screw

End of control
HD . . . . . bar
Motor speed . . . . . rpm* Psp . . . . . bar*
Readjusting timing adjustment screw

Note:
Eccentric adjusting - observe direction of rotation

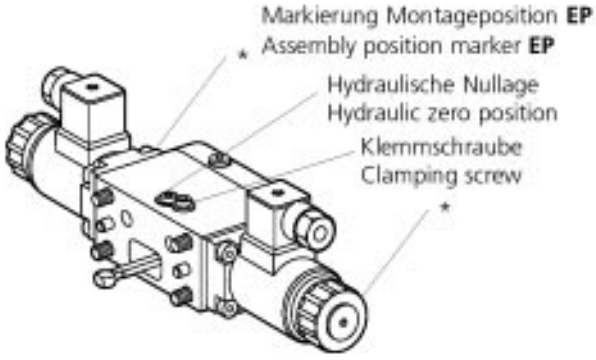
* Setting data according to order!



112

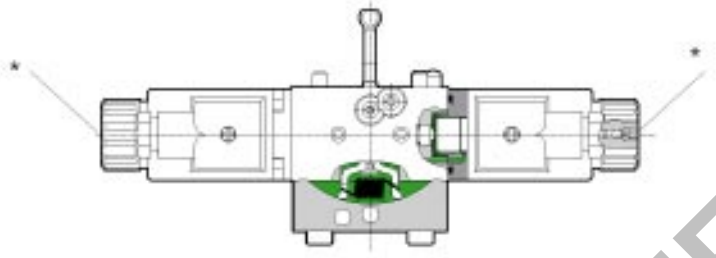
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

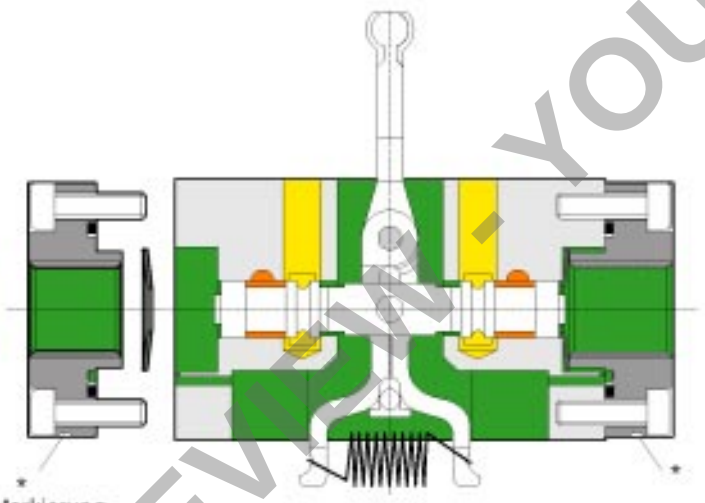


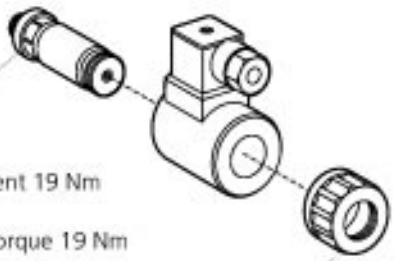
Die neuen Proportionalmagnete müssen bei der Inbetriebnahme entlüftet werden. Wird die Luft nicht aus dem Ankerraum entfernt, kann es zum Schwingen der Ansteuerung kommen.
Zum Entlüften ist am Ende des Magneten, im Messingteil, ein kleiner Gewindestift M4, SW 2 vorhanden. Dieser Gewindestift ist max. 2 Umdrehungen herauszudrehen und nach dem Entlüften mit 1 Nm wieder festzuziehen.
Bei der Ausführung mit Nothand mit Federrückzug muß zum Entlüften die Kunststoffmutter mit Gummibalg entfernt und nach dem Entlüften mit 5+1 Nm wieder angeschraubt werden.

Entlüftungsschraube * max. 2 Umdrehungen herausdrehen.
Bleed screw *. Unscrew by a max. of 2 turns

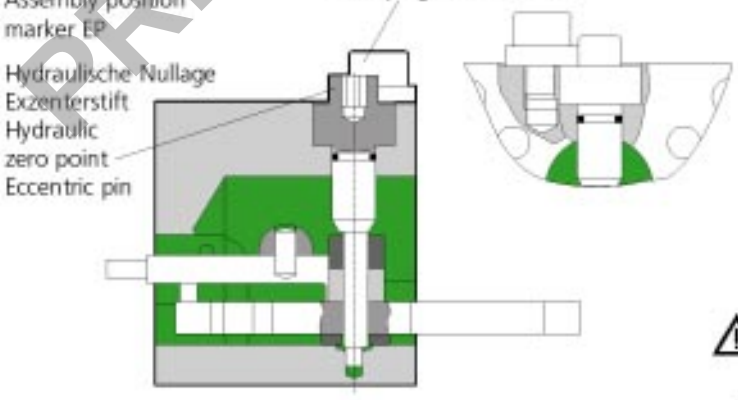


The new proportional solenoids must be bled during commissioning. If the air is not removed from the armature chamber oscillations at the control can occur.
For bleeding purposes there is, on the end of the solenoid, in the brass component a small set screw M4, 2 A/F. This can be unscrewed by a maximum of 2 turns and then after completion of the bleeding tightened to a maximum of 2 Nm.
For the version with hand override and spring return the plastic nut with rubber coating has to be removed for bleeding. After bleeding it has to be replaced and tightened with 5+1 Nm.





Anziehmoment 5+1 Nm
Steckschlüssel SW 26
Tightening torque 5+1 Nm
26 A/F socket spanner

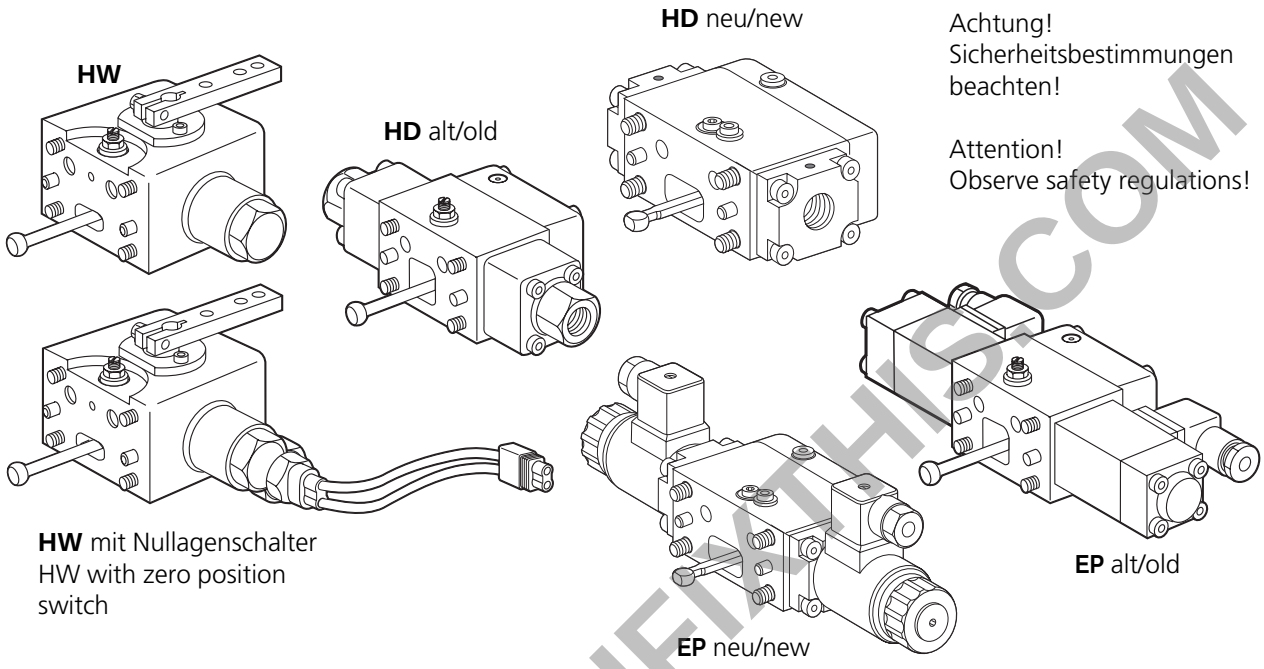


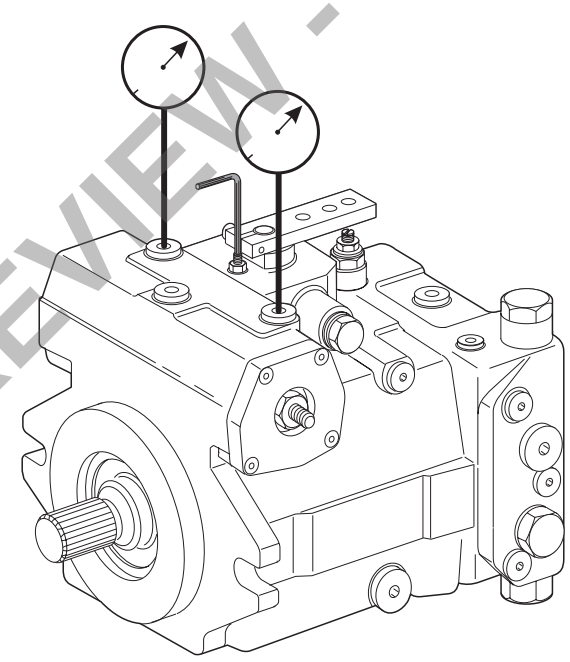
⚠ Beim Lösen der Klemmschraube
Exzenterstift - Hydraulische Nullage festhalten.

⚠ When loosening the clamping screw
Hold the eccentric pin - hydraulic zero point

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com





Manometer an X_1 und X_2 anschließen.
Nullage so einstellen, daß bei blockiertem Antrieb beide Manometer auf gleichem Druckwert stehen.
Hinweis:
Excenterjustierung
- nicht über ±90° verdrehen.

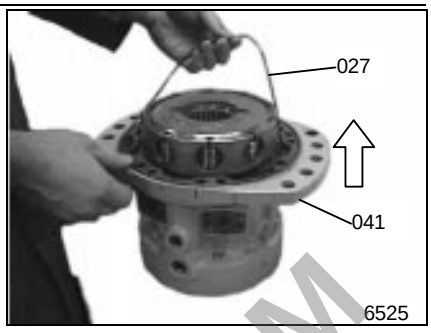
Connect pressure gauges to X_1 and X_2.
Adjust the zero position so that with a block drive both pressure gauges indicate the same pressure value.
Note:
Eccentric adjusting
- Do not turn more than ±90°.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

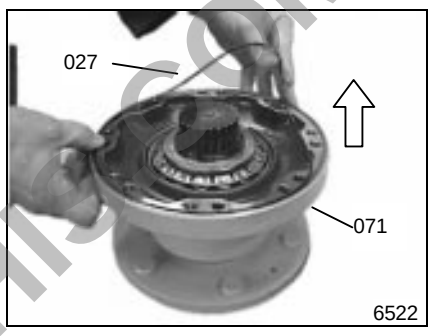
- O-Ring (027) vom Verteilerdeckel (041) entfernen.

- *Discard the O-ring (027) from the valving cover (041).*



- O-Ring (027) vom Lagerteil (071) entfernen.

- *Discard the O-ring (027) from the bearing support (071)*

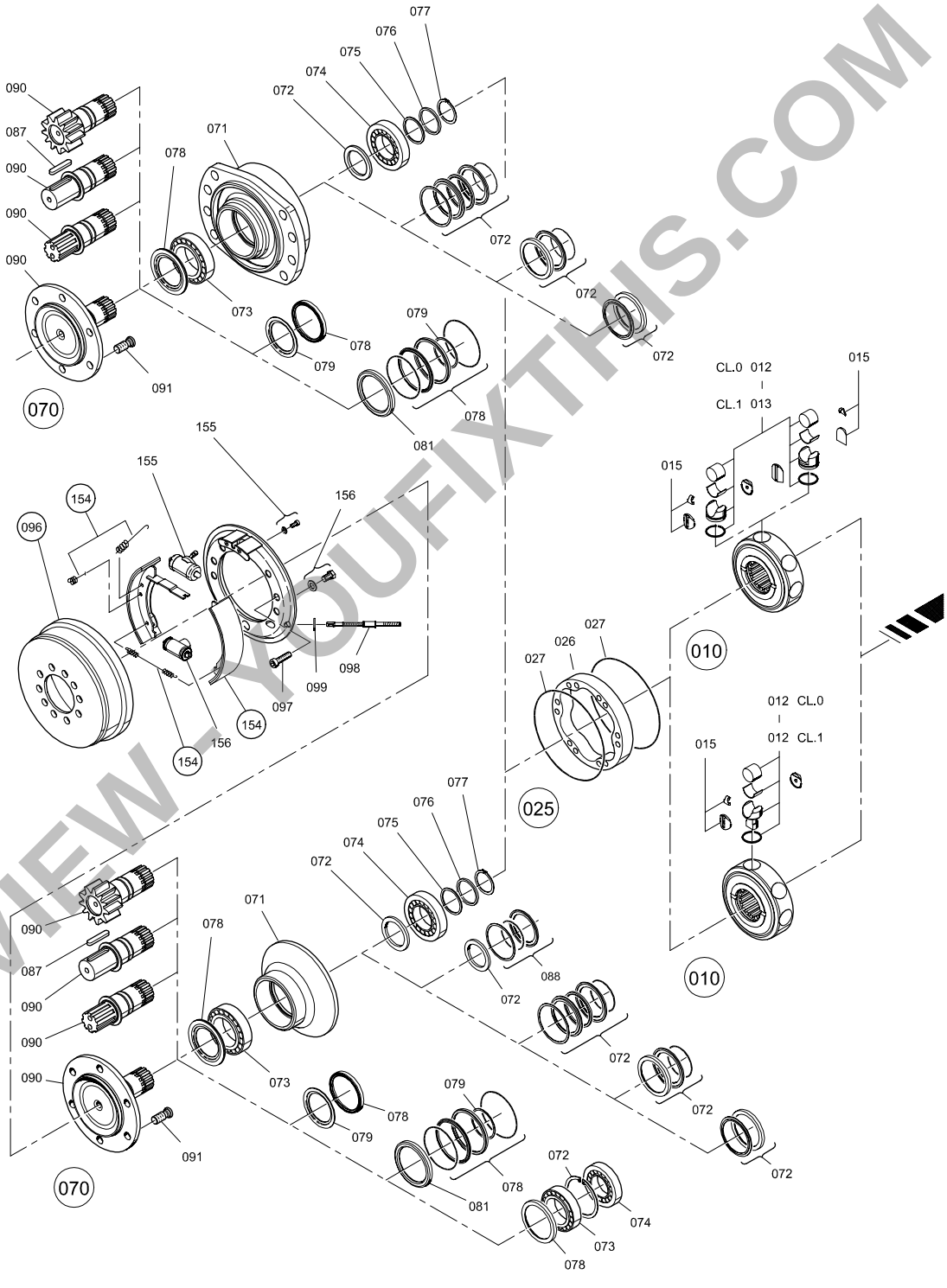


PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Motoren mit konstantem Hubvolumen MS, MSE 02-05-08-11-18.

Single displacement motors MS, MSE 02-05-08-11-18.



0987

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 18 of 326 pages

The full manual includes:

- All 326 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Bomag BW 180 AD Repair Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual