BOMAG

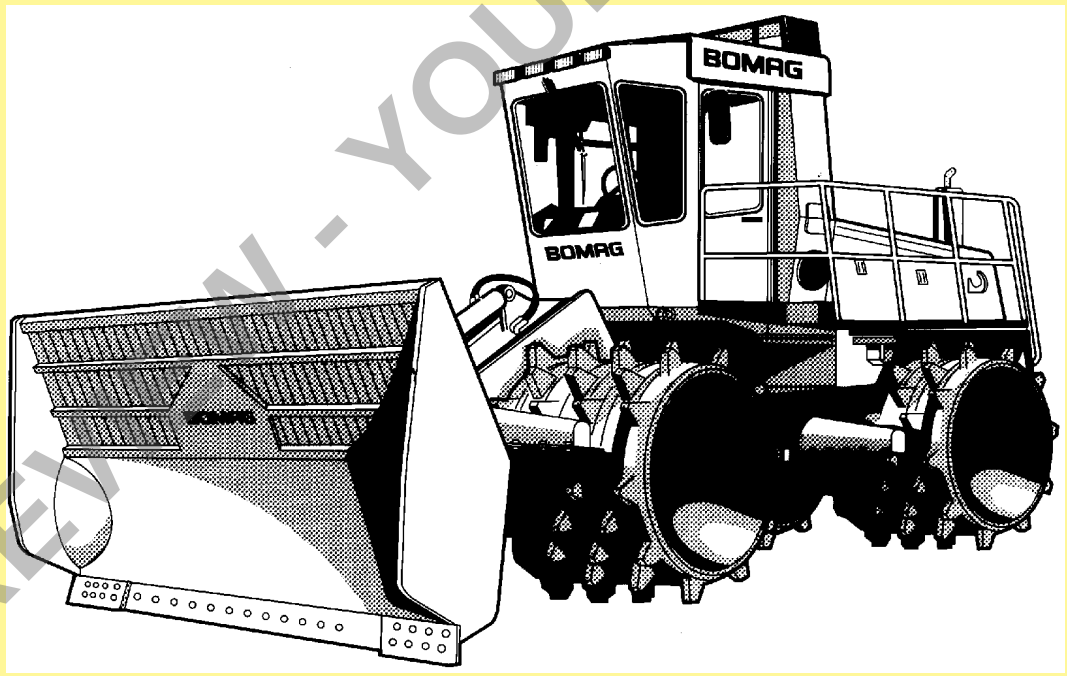
FAYAT GROUP

Service - Manual

BC 672 RB-2 / BC 772 RB-2 / BC 772 RS-2

BC 672 EB-2 / BC 772 EB-2

S/N 101 570 59 .... S/N 101 570 58 .... S/N 101 570 57 ....
S/N 101 570 93 .... S/N 101 570 92 .....



Sanitary landfill compactor

Fast moving soil compactor

Catalogue number.
008 911 53

10/2010

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

1.1 Introduction

This manual addresses the professionally qualified personnel or the after sales service of BOMAG, and should be of help and assistance in correct and efficient repair and maintenance work.

This manual describes the disassembly, dismantling, assembly, installation and repair of components and assemblies. The repair of components and assemblies is only described as this makes sense under due consideration of working means and spare parts supply.

Documentation

For the BOMAG machines described in this manual the following documentation is additionally available:

1 **Operating and maintenance instructions**
2 **Spare parts catalogue**
3 **Wiring diagram***
4 **Hydraulic diagram***
5 **Service Information**

Use only genuine BOMAG spare parts.

Spare parts needed for repairs can be taken from the spare parts catalogue for the machine.

These repair instructions are not subject of an updating service; for this reason we would like to draw your attention to our additional "Technical Service Bulletins".

In case of a new release all necessary changes will be included.

In the course of technical development we reserve the right for technical modifications without prior notification.

Information and illustrations in this manual must not be reproduced and distributed, nor must they be used for the purpose of competition. All rights according to the copyright law remain expressly reserved.

⚠ Danger

These safety regulations must be read and applied by every person involved in the repair /maintenance of this machine. The applicable accident prevention instructions and the safety regulations in the operating and maintenance instructions must be additionally observed.

BOMAG GmbH

Printed in Germany

Copyright by BOMAG

* The applicable documents valid at the date of printing are part of this manual.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

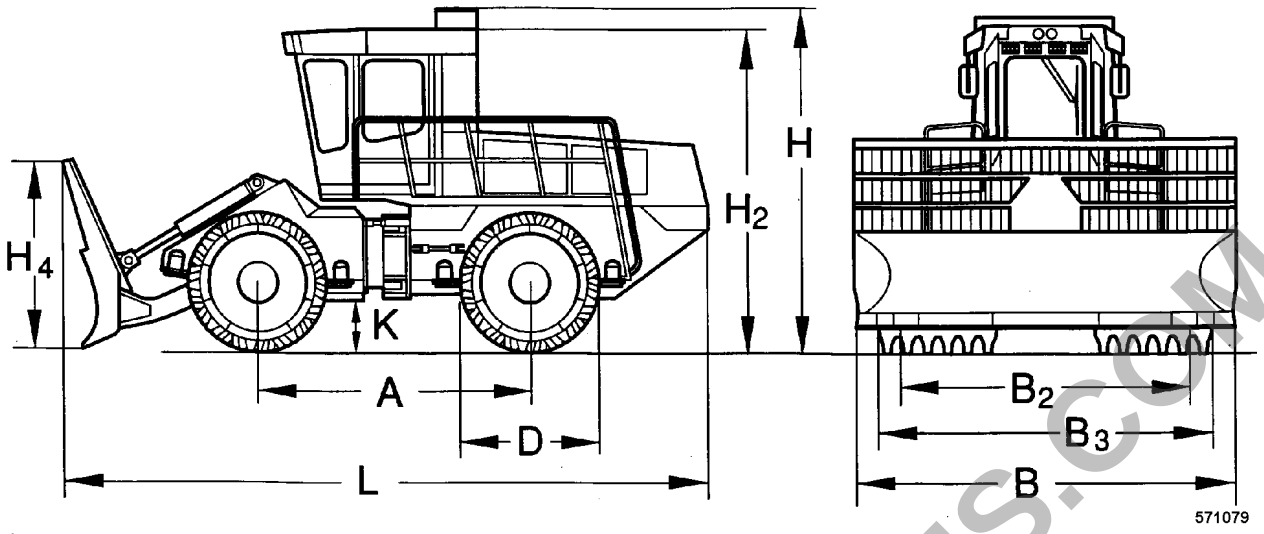


Fig. 13

Dimensions in mm	A	B	B_2	B_3	D	H	H_2	H_4	K	L
BC 672 RB-2	3500	3800	3550	3775	1660	4120	3820	1950	600	8120
BC 772 RB-2	3500	3800	3550	3775	1660	4120	3820	1950	600	8120

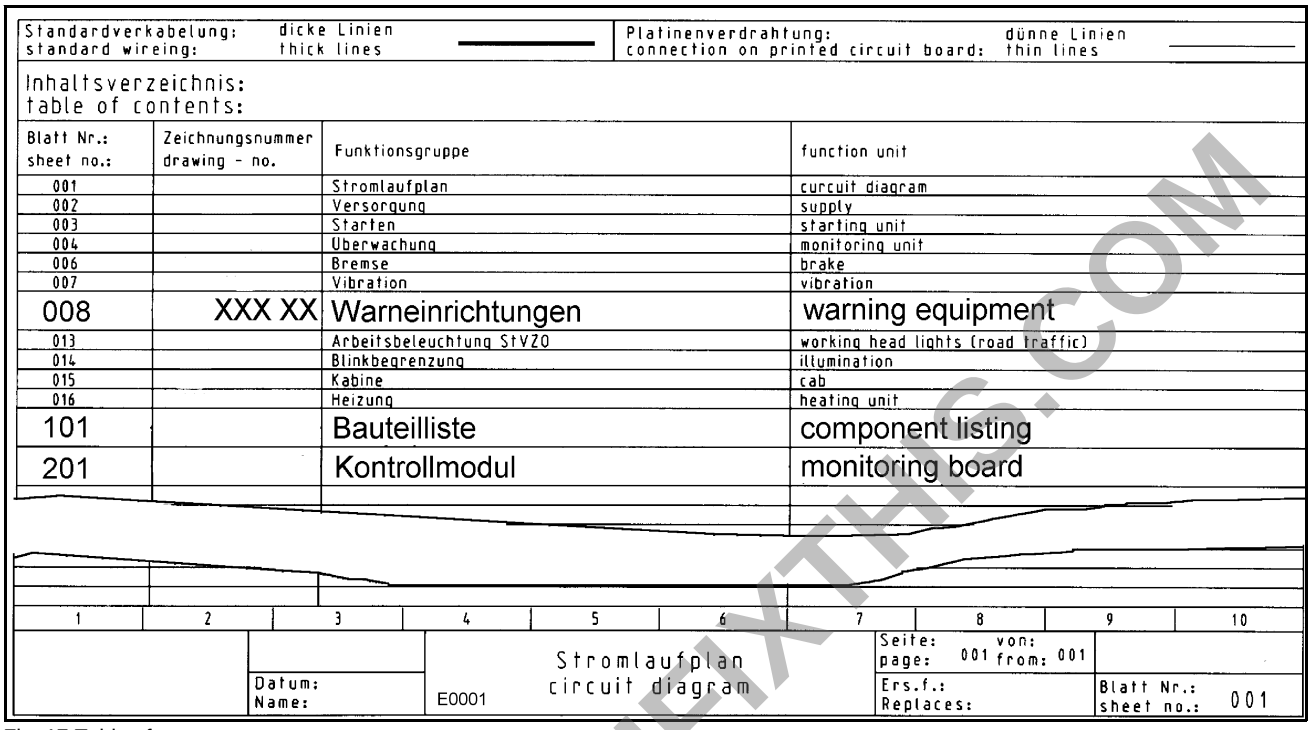
1		**BC 672 RB-2**	**BC 772 RB-2**
Weights			
Operating weight (CECE)	kg	32100	36500
Front axle load (CECE)	kg	15300	17400
Rear axle load (CECE)	kg	16800	19100
Travel characteristics			
Travel speed range I (forward/reverse)	km/h	0 - 4,5	0 - 4,5
Travel speed range II (forward/reverse)	km/h	0 - 12	0 - 12
Max. gradability (depending on soil)	%	100	100
Engine			
Engine manufacturer		Deutz	Deutz
Type		TCD 2015 V06	TCD 2015 V06
Cooling		Water	Water
Number of cylinders		6	6
Rated power ISO 9249	kW	330	330
Rated power acc. to SAE J 1349	hp	442	442
Rated speed	rpm	2100	2100
Electrical equipment	V	24	24
Drive system		hydrostatic	hydrostatic
Driven compactor wheels		4	4
Compactor wheels			
Width, front	mm	1350	1350
Width, rear	mm	1125	1125
Number of teeth, front		60	60
Number of teeth, rear		50	50
Brake			
Service brake		hydrostatic	hydrostatic

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Table of contents (Fig. 17)

The table of contents lists all function groups.



Standardverkabelung: dicke Linien — standard wireing: thick lines

Platinenverdrahtung: dünne Linien — connection on printed circuit board: thin lines

Inhaltsverzeichnis:
table of contents:

Blatt Nr.: sheet no.:	Zeichnungsnummer drawing - no.	Funktionsgruppe	function unit
001		Stromlaufplan	curcuit diagram
002		Versorgung	supply
003		Starten	starting unit
004		Überwachung	monitoring unit
006		Bremse	brake
007		Vibration	vibration
008	XXX XX	Warneinrichtungen	warning equipment
013		Arbeitsbeleuchtung StVZO	working head lights (road traffic)
014		Blinkbegrenzung	illumination
015		Kabine	cab
016		Heizung	heating unit
101		Bauteilliste	component listing
201		Kontrollmodul	monitoring board

1 2 3 4 5 6 7 8 9 10

Datum: Name:

E0001 Stromlaufplan circuit diagram

Seite: page: von: 001 from: 001

Ers.f.: Replaces:

Blatt Nr.: sheet no.: 001

Fig. 17 Table of contents

Example:

Function group "Warning systems“, drawing number XXX XX can be found on page no. 8.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

5.1 Engine control unit

⚠ Caution

Pulling off the plug connectors of the control unit while the control unit is working (i.e. with the power supply to terminal 15switched on) is not permitted. Correct procedure: Switch off the electric power supply (normally with the ignition key), wait until the main relay has switched off (with a delay of up to 15 seconds, listen for clicking sound), then pull off the plugs from the control unit.

Sensors and actuators must not be connected to external power sources for the purpose of testing, but must only be operated on the EMR3. Otherwise components may be permanently damaged.

The engine control unit is the central component of the EMR3-system. It has the function of ensuring optimal performance of the engine with the following goals

- excellent exhaust gas characteristics,
- low fuel consumption,
- smooth running of engine,
- long lifetime of engine,
- efficient servicing

under all operating conditions. For this purpose the engine control unit uses the recorded measuring values and the parameters stored in its data memory to run a number of calculations, which form the basis or all the available functions. The most important functions include:

- exact control of the injection process (among others the number, start and duration of injections),
- idle speed regulation,
- regulation of exhaust gas recirculation,
- optimization of smooth running (by means of injection quantity correction),
- engine monitoring,
- system diagnose.

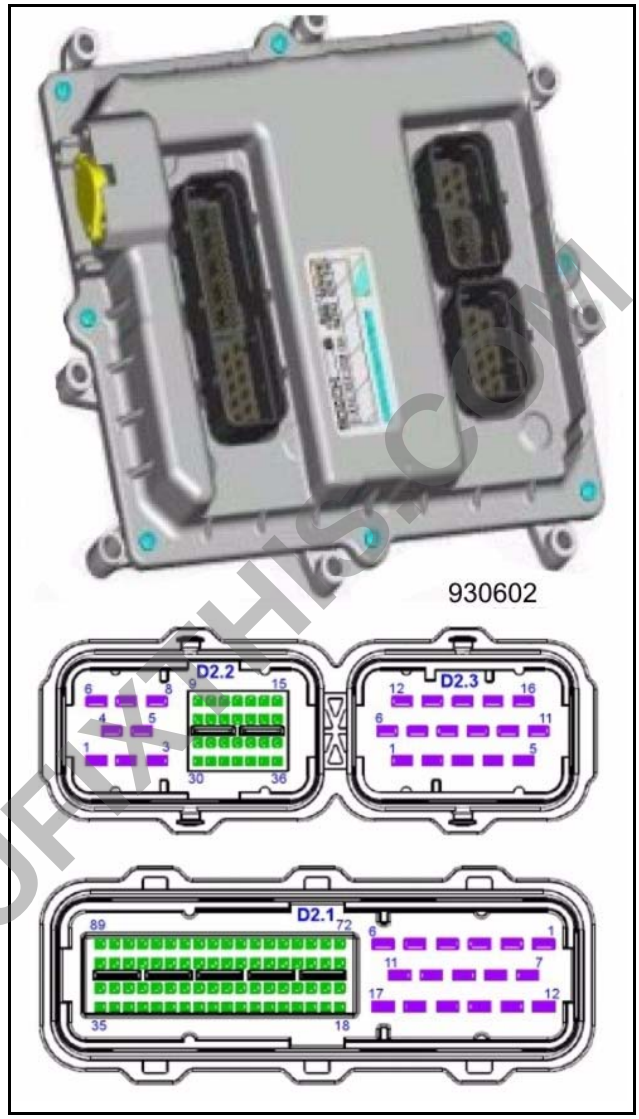


Fig. 14

The EMR3-E (TCD 2015) (Fig. 14) engine control unit is fitted with three sockets on the upper side of the housing:

- socket D2.1 to connect the vehicle wiring loom,
- socket D2.2 to connect the engine wiring loom for sensors and actuators,
- socket D2.3 to connect the engine wiring loom for fuel metering unit and injection valves.

Main relay

When shutting down the engine, the ignition switch isolates the electronic system from terminal 15. Meter readings are saved in the non-volatile memory. After approx. 10 seconds the internal main relay switches off and disconnects the control unit from the power supply. During this time the system must not be disconnected from terminal 30 ($+U_{batt}$).

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Installation location ESX-control

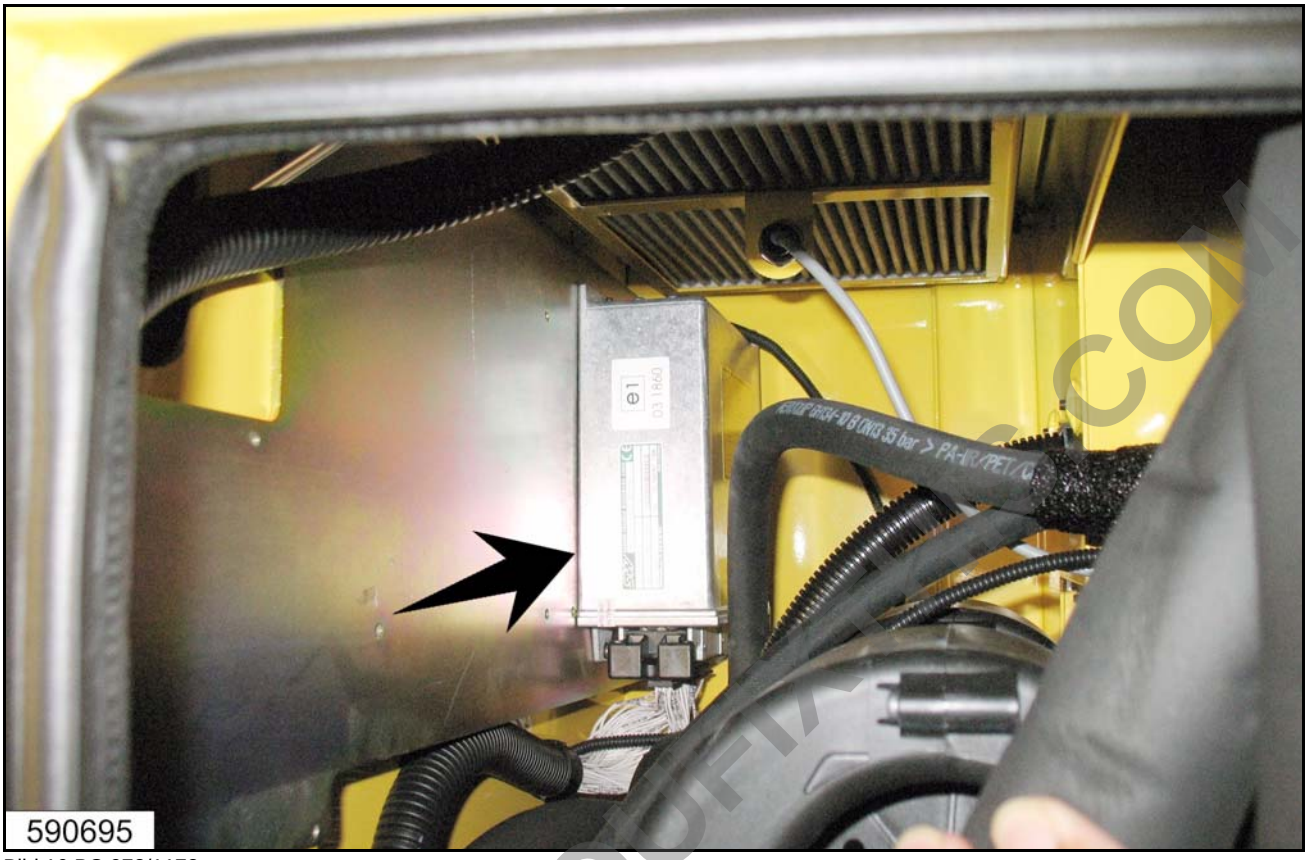


Bild 16 BC 972/1172

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

General notes on trouble shooting in hydraulic systems

The following description of trouble shooting steps contains a small selection of possible faults that may occur during the operation of the machine. The fault lists are by no means complete, but the fault tables were compiled according to the experience gathered by our central customer service, i.e. faults that have occurred in the past have almost all been included.

Procedure:

On machines with electronic control (ESX) you should first of all check the CAN-Bus module, to find out if there is a error code and thus an electric fault present. If a fault code is present, continue trouble shooting by following the description of the ESX-control.

If no fault code is present, the fault may still be caused by an electrical problem or an operating error. The control will only report a fault if the current/voltage values are out of the nominal range. If e.g. a contact in a switch is defective, the control will not always recognize this. For this reason one can have the incoming and outgoing signals for the control displayed by the CAN-Bus module to compare these with the table of nominal values.

Important points for trouble shooting and fault rectification

⚠ Danger

Danger of injury!

Do not touch rotating parts of the engine.

When working on the travel pump and performing tests in the travel circuit block the wheels with suitable wheel chocks.

Hydraulic oil escaping under pressure can penetrate the skin and cause severe injury. You should therefore relieve the pressure in the system before disconnecting any lines. Before repressurizing the system make sure that all line connections and ports are in perfect condition.

When being injured by hydraulic oil consult a physician immediately, as otherwise this may cause severe infections.

⚠ Caution

It is not recommended to open or repair hydraulic units and components without comprehensive knowledge.

Risk of damage to pressure gauges if incorrectly connected.

When performing trouble shooting it is assumed that the machine is correctly equipped and connected, that connections and hoses are free of faults and that setscrews have not been deadjusted without permission.

Progressive tests drawn up in the trouble shooting diagram lead to the detection of faults and their rectification by trained personnel.

- Ensure strict cleanliness, clean ports and fittings before disconnecting.
- Cover all openings and ports or close with plugs.
- Check the hydraulic oil level before and after the work.
- Use only clean oil according to specification.
- Check the hydraulic system for leaks, find and rectify the cause.
- Ensure strict cleanliness, clean ports and fittings before disconnecting.
- Fill new hydraulic units with hydraulic oil before starting operation.
- After changing a component thoroughly flush and bleed the hydraulic system.
- As far as possible conduct all measurements at operating temperature 40 ... 50 °C.
- After changing a component check charge and high pressure, if necessary check the rotational speed.

Hydraulic hoses

⚠ Danger

Danger of injury

Hydraulic hoses must be visually inspected at regular intervals.

Hydraulic hoses must be immediately replaced if:

- the outer layer is damaged down to the inlay (e.g. chafing, cuts, cracks, etc.)
- the outer layer is brittle (formation of cracks in the hose material)
- the hose shows deformations in pressurized and depressurized condition, which do not comply with the genuine shape of the hydraulic hose
- the hose shows deformations in bends, e.g. squeezing, buckling, layer separation, formation of blisters
- the hose is leaking
- the hydraulic hose has separated from the fitting
- the fitting shows corrosion that impairs both function and strength
- the fitting is deformed in a way that both function and strength are affected
- the storage time and utilization period has expired.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

BC 672/772 RB-2

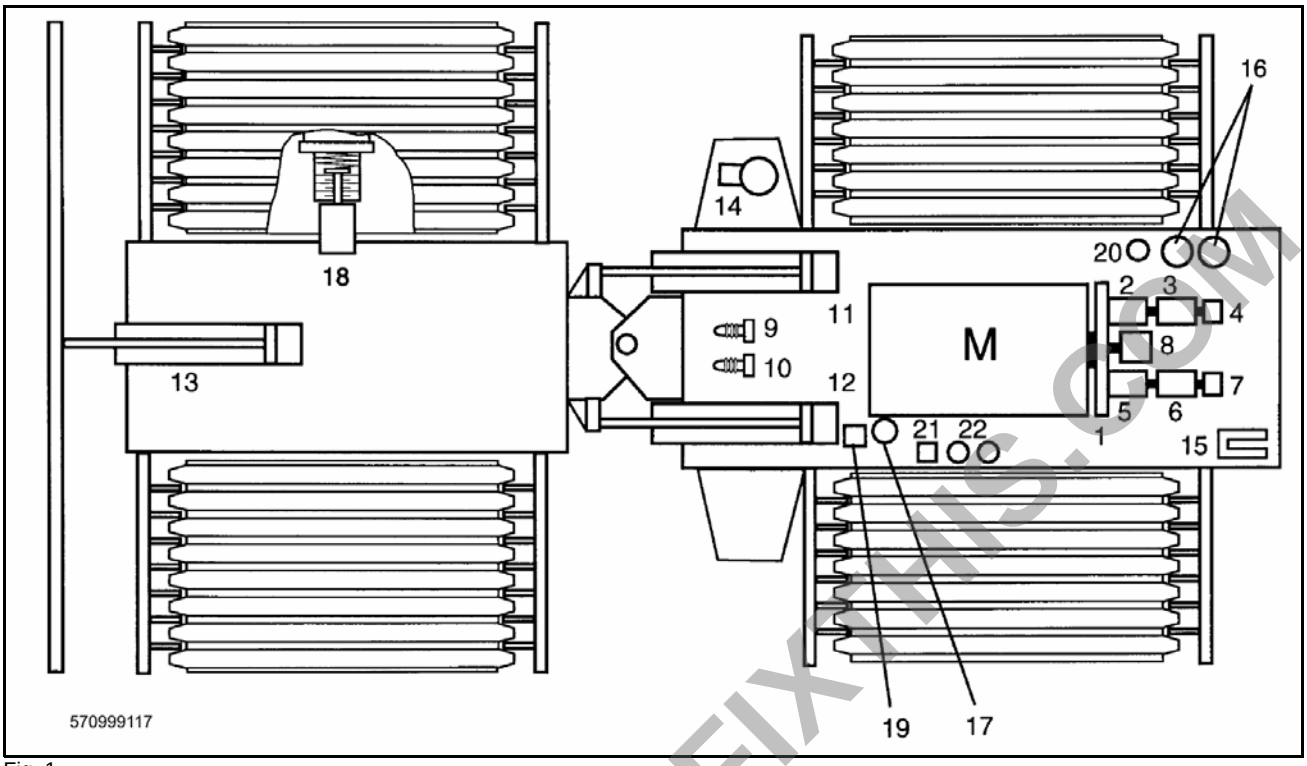


Fig. 1

(M) Diesel engine

1 Transfer box
2 Travel pump front right
3 Travel pump rear right
4 Charge pump right
5 Travel pump front left
6 Travel pump rear left
7 Charge pump left
8 Working pump
9 Control valve block for dozer blade
10 electric steering unit
11 Steering cylinder, right
12 Steering cylinder, left
13 Dozer blade cylinder
14 Central lubrication system
15 Hydraulic return flow filter
16 Hydraulic charge oil filter
17 Engine oil filter
18 Travel motor front right with planetary gear
19 Priority valve (steering priority over dozer blade)
20 Return flow filter from transfer case
21 Fuel pre-filter
22 Fuel pre-filter

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

9.1 Physical basics

In order to understand the working principle of an air conditioning system one must first become familiar with the physical basics of such a system.

The four well known physical conditions of water apply also for the refrigerant in the air conditioning system.

1. gaseous (invisible)

2. vaporous

3. liquid

4. solid

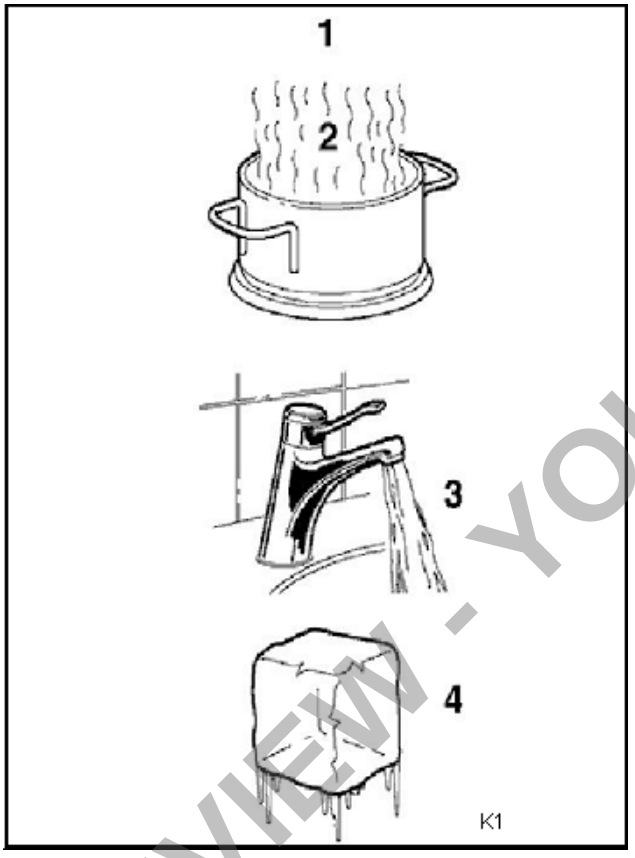


Fig. 1

If the water in a container is heated up (absorption of heat), the rising steam is visible. If the steam is heated up further, due to the absorption of heat, the visible steam will turn into invisible gas. This process is reversible. When withdrawing the heat contained in gaseous water, the gas will turn into steam, then into water and finally into ice.

A - heat absorption

B- Heat dissipation

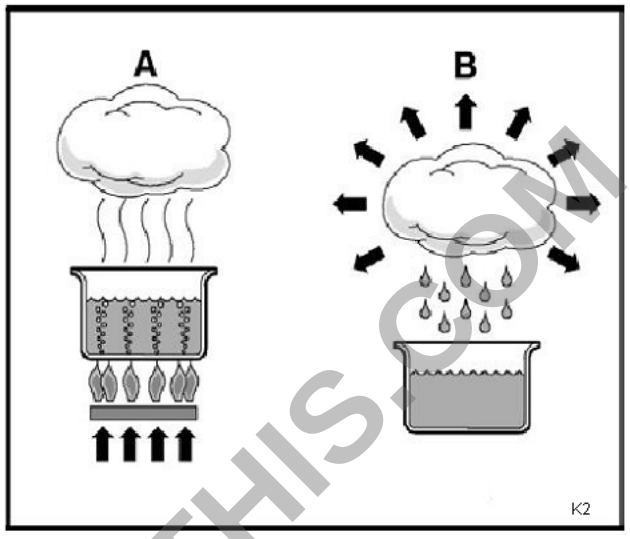


Fig. 2

Heat always flows from the warmer to the colder matter. Any matter consists of a mass of moving molecules. The rapidly moving molecules or a warmer matter dissipate part of their energy to the slower moving molecules with less heat. The movement of the molecules in the warmer matter becomes slower and the molecules in the cooler matter are accelerated. This process continued, until all molecules in the two matters move with identical speed. The matters have then reached an identical temperature and the transfer of heat stops.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

10.2 Technical description

The system is equipped with an electronic control and a monitoring device for the function of the lubricant distributor. The electronic control is integrated in the pump case and controls the lubrication cycle automatically.

When switching the ignition on, the automatic lubrication system is supplied with voltage via fuse (F16) At the same time the system performs a function test for drive motor and control light.

During this function test the motor is activates for 1 seconds (short movement of stirring blade), at the same time a 2 second voltage pulse is sent to the monitoring board.

Control lights for central lubrication system

The control light 11 (Fig. 3) or (m) (Fig. 4) informs about the operating status of the central lubrication system.

Faults are indicated by flashing frequencies of different lengths.

Old design

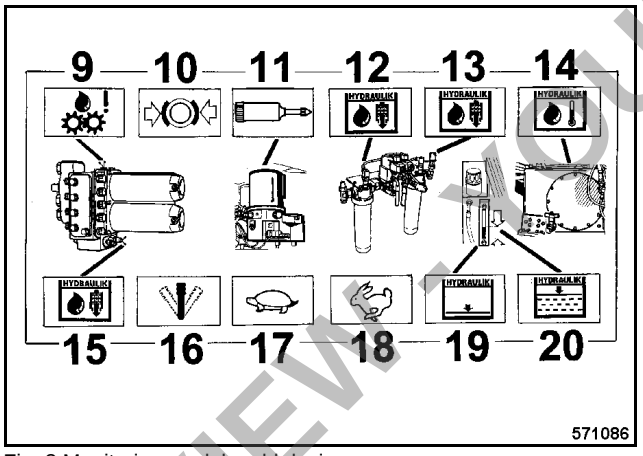


Fig. 3 Monitoring module, old design

11 yellow= lights during the lubrication process and flashes in case of functional disturbances.

New version

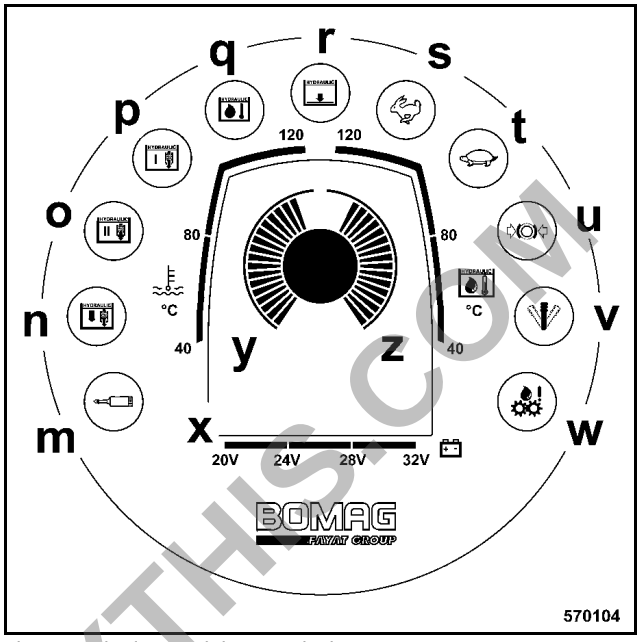


Fig. 4 Monitoring module, new design

m yellow = lights during the lubrication process and flashes in case of functional disturbances.

i Note

The control light indicates the same operating states as the function display (Fig. 5) on the control board.

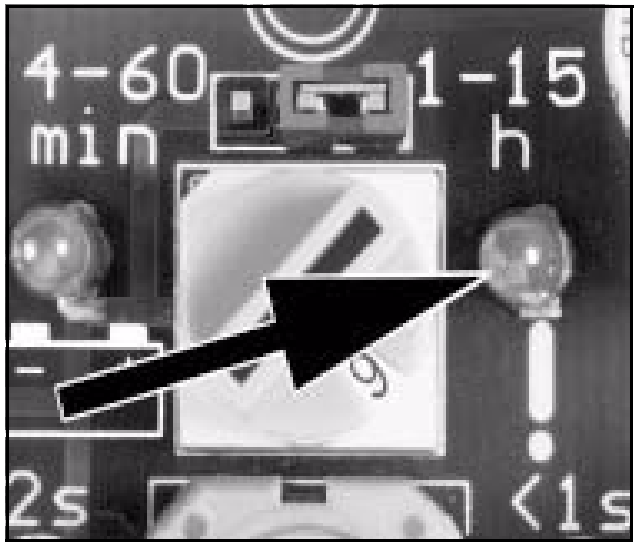


Fig. 5 Function display on control board

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

11.2 Engine description TCD 2015 V 6 cylinder

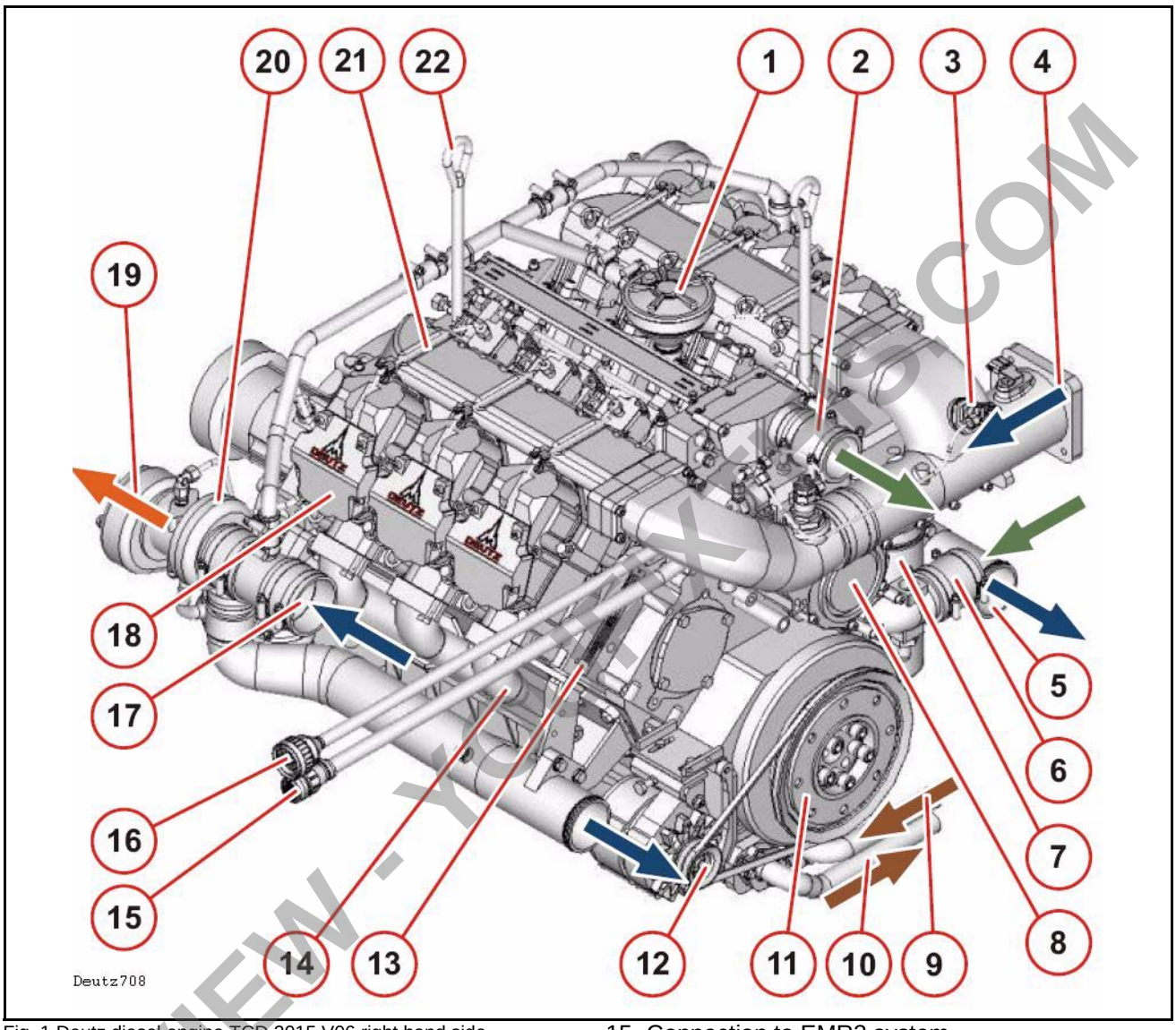


Fig. 1 Deutz diesel engine TCD 2015 V06 right hand side

1 Crankcase ventilation
2 Connection to coolant heat exchanger
3 Pre-heating plug
4 Connection from intercooler
5 Connection to intercooler
6 Connection from coolant heat exchanger
7 Lubrication oil filter cartridge
8 Coolant pump
9 Connection from separate lubrication oil tank
10 Connection to separate lubrication oil tank
11 Vibration damper / V-belt pulley
12 Generator
13 Engine type plate (company plate)
14 Exhaust manifold
15 Connection to EMR3 system
16 Connection to MVS system
17 Connection from air filter
18 Cylinder head cover
19 Connection to exhaust silencer
20 Exhaust turbo charger
21 Charge air suction line
22 Transport device

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Steering and working pump

The tandem pump for the working hydraulics consists of two identical swash-plate operated axial piston pumps with variable displacement. However, the pumps deliver oil only to one direction, i.e. the swash plate moves out of neutral position only to one direction. They are therefore particularly suitable for the use in open hydraulic circuits.

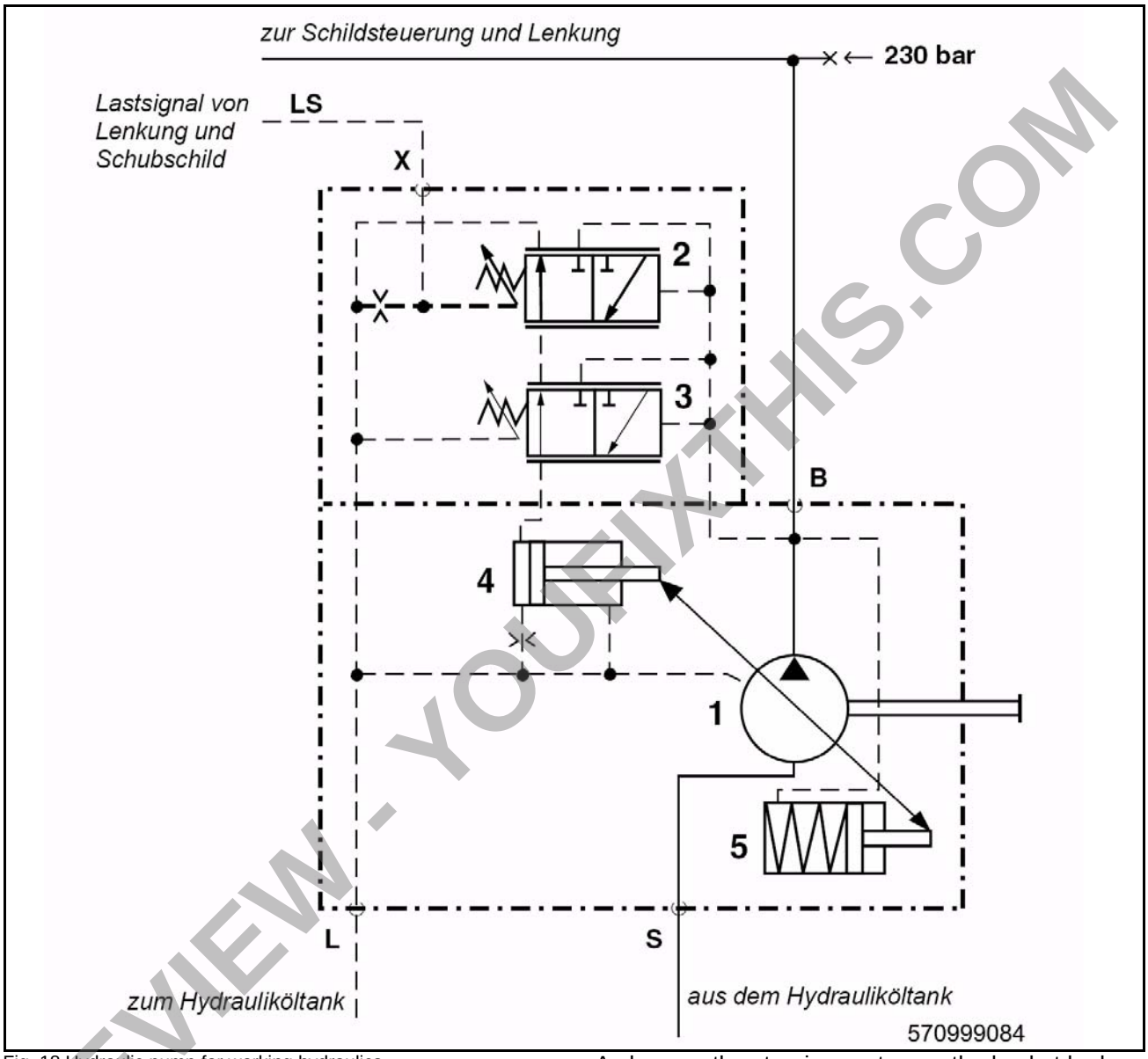


Fig. 18 Hydraulic pump for working hydraulics

1 Working pump

2 Flow control valve

3 Pressure control valve

4 Resetting piston

5 Control piston

(B) to dozer blade control and steering

(L) to hydraulic oil tank

(S) from hydraulic oil tank

(X) LS, load signal from steering and dozer blade

When the engine is not running the swash plate is in max. displacement position, however, when starting the engine the swash plate will move immediately back towards zero, until the stand-by pressure adjusted on valve 2 (Fig. 18) is reached.

As long as the steering system or the bucket hydraulics do not require any oil, the pumps will maintain the so-called ”Stand-by pressure” (30 ±1 bar). Due to the flow control in the working hydraulics the engine has to supply power only when it is actually needed.

Working principle

When looking at the working hydraulics, for better understanding one must always consider two different operating conditions:

- Engine not running
- Engine running

When the engine is not running the swash plate in the steering and working pump is at maximum displacement position. The spring of the smaller control piston in the pump holds the swash plate in this position.

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

Hydraulic system

Travel system as well as steering and dozer blade on these machines are hydraulically operated.

This guarantees an almost loss-free transfer of engine output power to compactor wheels, steering cylinders and dozer blade/bucket control.

The pumps for the corresponding circuits are driven by the engine via a transfer box and convert the mechanical energy provided by the engine into hydraulic energy.

Inside the motors or the cylinders for steering or dozer blade actuation this hydraulic energy is then converted back to mechanical energy.

Since the medium oil is used for this transfer of power, any losses in power are only of minor significance.

All hydraulic circuits are protected against contamination by charge oil filters and a hydraulic oil return flow filter.

Safety elements in pumps and hydraulic control units protect the hydraulic system and the drive engine against overloads and damage resulting from such excessive loads.

To ensure quick heating of the hydraulic oil up to operating temperature the return flow from the hydraulic system flows directly back to the hydraulic oil tank, until the operating temperature is reached. When the oil temperature comes close to operating temperature a thermostat valve will start to open and guide the oil flow through the hydraulic oil cooler back to the tank.

This ensures that the operating temperature is quickly reached, particularly during the cold season, and that the hydraulic system can be operated without any risks.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Measuring and adjustment points

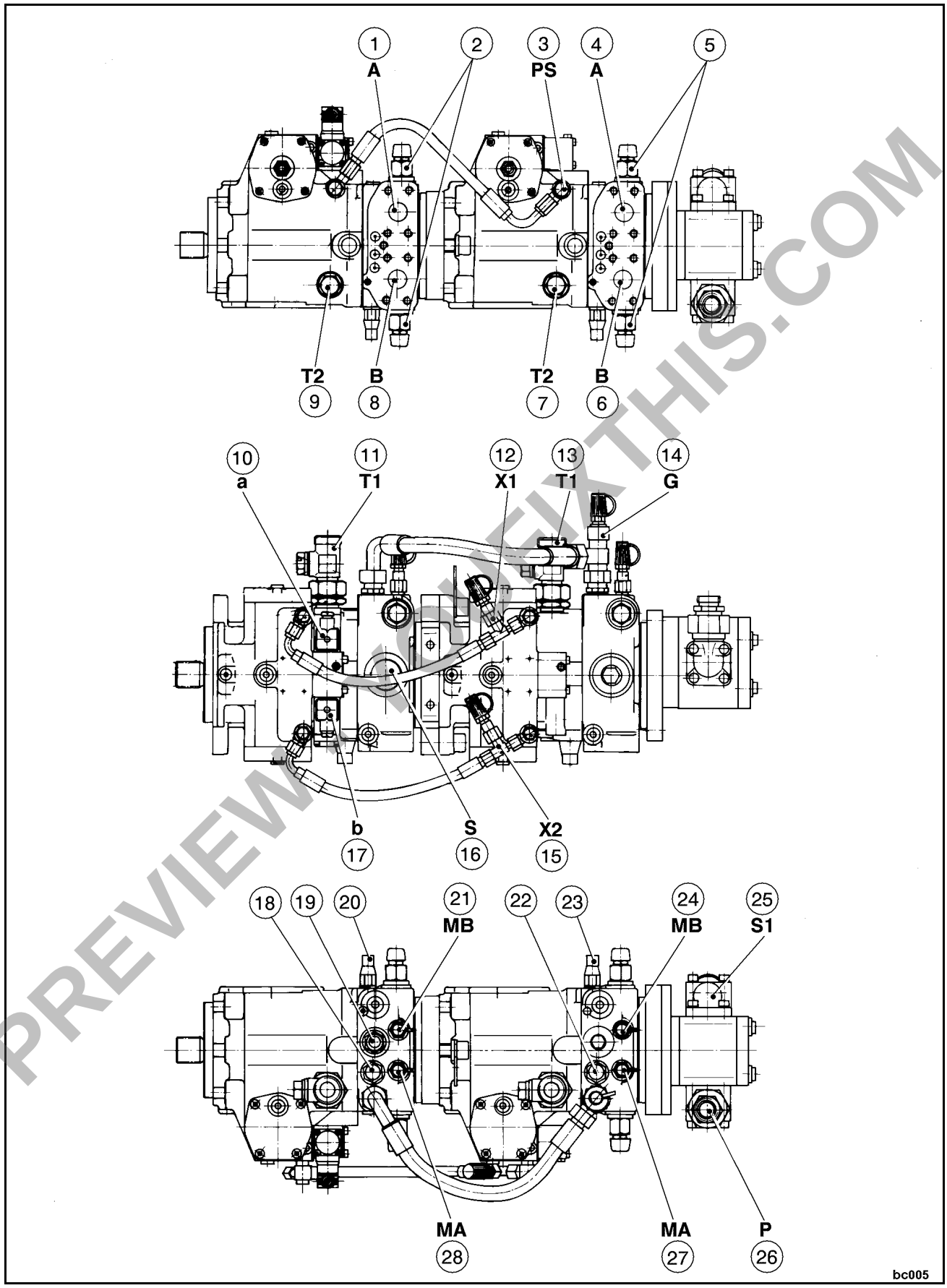


Fig. 2

PREVIEW ONLY FIX THIS.COM

Download full manual at youfixthis.com

16.1 Special tools, tests and adjustments

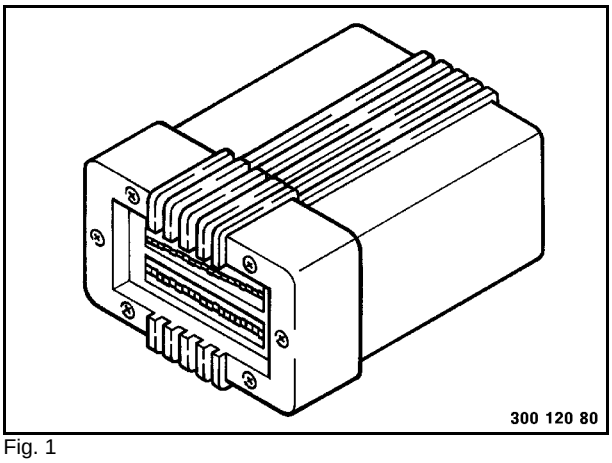


Fig. 1

1. Vibration reed frequency meter

   1000 - 4000 rpm

   17 - 67 Hz

   BOMAG part-no.: 300 120 80


Fig. 2

2. Sirometer (frequency meter)

   800 - 50.000 rpm

   14 - 750 Hz

   BOMAG part-no.: 059 710 02



Fig. 3

3. Anti-freeze tester, quick and accurate measuring, sturdy plastic housing, automatic temperature correction, no after-dripping, instructions for use on unit, reading down to -40 °C. Material: Plastic, Temperature range: down to -40 °C

   BOMAG part-no.: 050 100 75

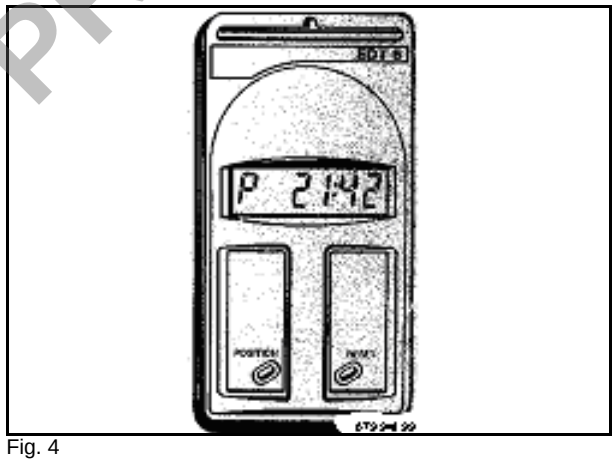


Fig. 4

4. Digital rpm-meter for petrol engines

   BOMAG part-no.: 079 948 99

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

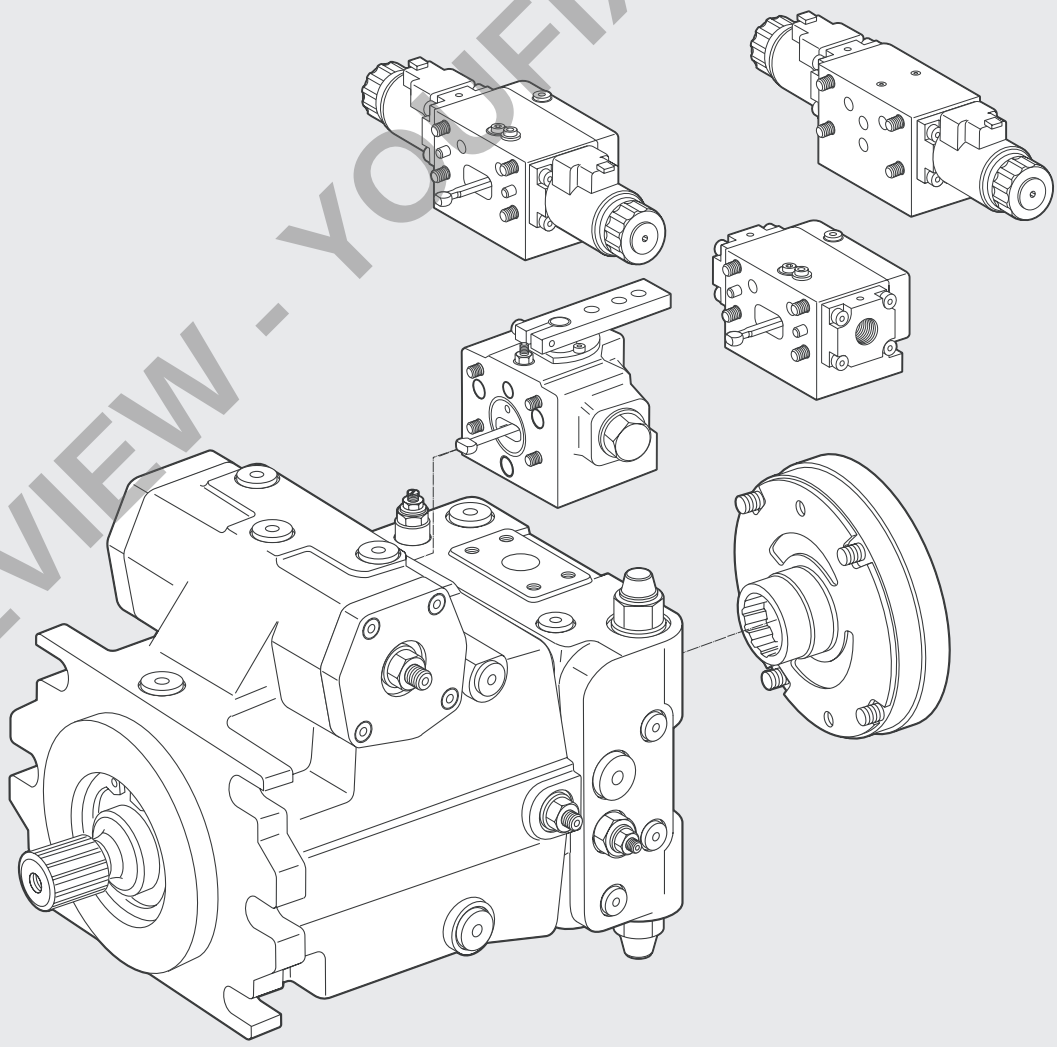
Rexroth
Bosch Group

Verstellpumpe A4VG 71–180
Variable Pump A4VG 71–180
Baureihe/Series 32

RDE 92 003-21-R/01.06

R1

Reparaturanleitung / Repair Manual
Baugruppen / Assembly Groups



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Vermeidung von Gefahren

Für einen sicheren Betrieb und um Schäden bei der Reparatur zu vermeiden, lesen Sie diese Reparaturanleitung sorgfältig und aufmerksam durch!

Für Personen- oder Maschinenschäden, die durch Nichtbeachtung dieser Reparaturanleitung entstehen, verfällt jegliche Gewährleistung von Bosch Rexroth AG.

1 Zu dieser Anleitung

Diese Anleitung unterstützt Sie bei der Reparatur, den Überprüfungen und der Wiederinbetriebnahme von Rexroth A4VG Verstellpumpen, NG 71–180. Diese Anleitung umfasst die folgenden Kapitel:

- „Sicherheit“ auf Seite 7

  Hier erhalten Sie grundsätzliche Hinweise zum sicheren Umgang mit Verstellpumpen und zu deren Betrieb.

  Lesen Sie dieses Kapitel bevor Sie anfangen zu arbeiten.
- „Produktbeschreibung“ auf Seite 11

  Hier erfahren Sie, wie Sie den Typ einer Verstellpumpe feststellen. Ferner finden Sie hier eine Übersicht über die Funktionsweise und Informationen zur bestimmungsgemäßen Verwendung der Verstellpumpe.

  Lesen Sie dieses Kapitel, um Ihr Grundwissen über die Verstellpumpe aufzufrischen.
- „Austausch externer Baugruppen“ auf Seite 15

  Dieses Kapitel erklärt Ihnen, wie Sie Baugruppen einer Verstellpumpe austauschen.
- „Überprüfungen“ auf Seite 33

  Dieses Kapitel erklärt Ihnen, wie Sie die Einstellarbeiten an einer Verstellpumpe vornehmen.

Avoiding Dangers

To ensure safe operations and avoid damages during repairs, read this complete repair manual carefully and attentively.

Bosch Rexroth AG accepts no responsibility for personal injuries or damages to the machine that arise from disregarding this repair manual.

1 About this Manual

This manual supports you in the repair, adjustment and recommissioning of Rexroth A4VG variable pumps, sizes 71–180. The manual is structured as follows:

- “Safety” on page 7

  This chapter provides you with basic hints and tips regarding working with and operating variable pumps.

  Read this chapter before you start working.
- “Product Description” on page 11

  This chapter explains how you identify the variable pump. Addtionally, it provides you an overview of the how the variable pump and information regarding the correct usage.

  Read this chapter to refresh your knowledge of the variable pumps.
- “Exchanging Extermnal Assembly Groups” on page 15

  Rexroth provides various replacement parts for repairs. This section provides you an overview of the available spare parts subassemblies.
- “Checking” on page 33

  Read this chapter to be able to restore the settings on an variable pump after a repair.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

MANNESMANN
REXROTH

Brueninghaus Hydromatik

R

Reparaturanleitung
Repair Instructions

A10VSO*

Baureihe 31 / Series 31
Nenngrößen 18...140
Sizes 18...140



* auch für
A10 VO (s. S.2)/
if its A10 VO see
page 2

RDE 92 711-02-R 01.95

PREVIEW - YOUFIXTHIS.COM

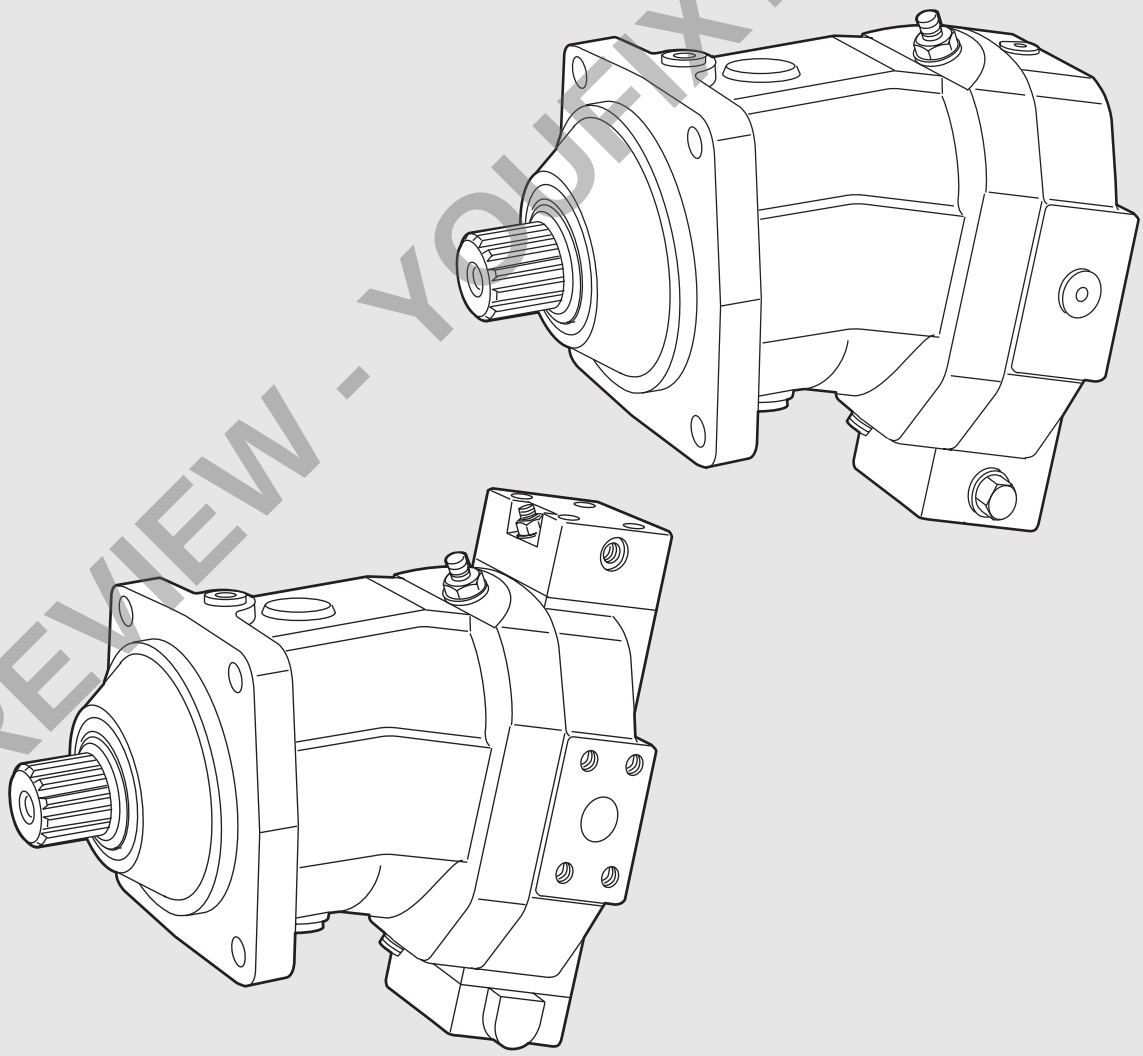
Download full manual at youfixthis.com

Rexroth
Bosch Group

Verstellmotor A6VM 28...200
Variable Displ. Motor A6VM 28...200

RDE 91 604-01-R/03.03
ersetzt/replaces 08.01

Reparaturanleitung / Repair Instructions



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Electric Drives and Controls | Hydraulics | Linear Motion and Assembly Technologies | Pneumatics | Service

Rexroth
Bosch Group

Demontage- Montageanleitung
Disassembly- Assembly Instructions
Planetengetriebe / Planetary Gearbox
HYDROTRAC

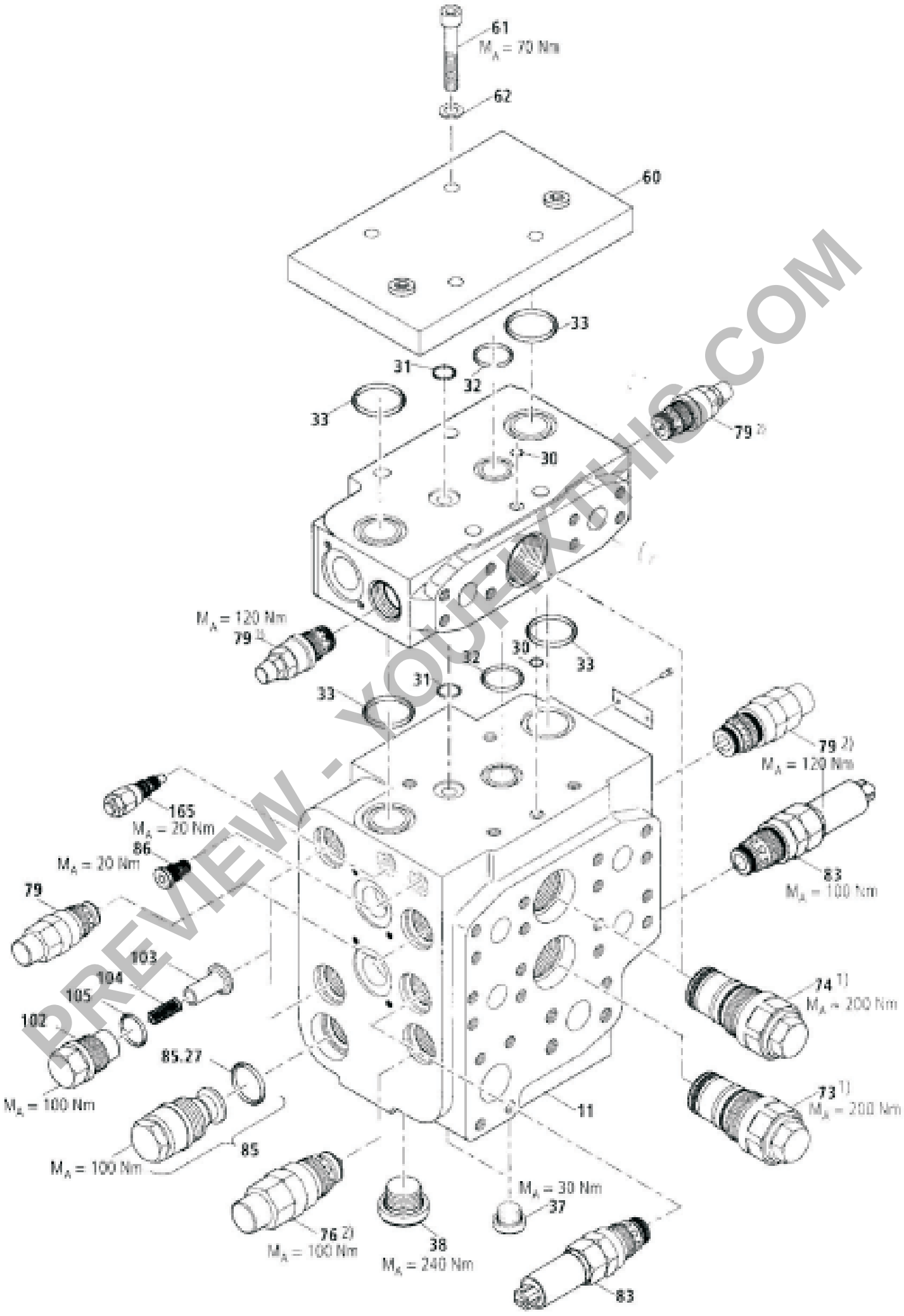
RDE 77977-01-R/01.08
05.02.2008

GFT 110 R3 9279



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Pos.	Benennung	Designation
01	Arbeitspumpe Lenkung/Schild	Operat.pump steering/dozer blade
02	Arbeitsventil	Power valve
03	Hydraulikölkühler	Hydraulic oil cooler
04	Lenkzylinder	Steering cylinder
05	Rückschlagventil	Check valve
06	Schubschildzylinder	Dozer blade cylinder
07	Rücklauffiltereinheit	Return filter unit
08	Fahrpumpe vorne rechts	Travel pump front rh.
09	Fahrpumpe hinten rechts	Travel pump rear rh.
10	Speisepumpe Fahrantrieb rechts	Charge pump travel sys. rh.
11	Fahrpumpe vorne links	Travel pump front lh.
12	Fahrpumpe hinten links	Travel pump rear lh.
13	Speisepumpe Fahrantrieb links	Charge pump travel sys. lh.
14	Fahrmotor und Getriebe vo. re.	Travel motor + transmiss. front rh.
15	Fahrmotor und Getriebe hi. re.	Travel motor + transmiss. rear rh.
16	Fahrmotor und Getriebe vo. li.	Travel motor + transmiss. front lh.
17	Fahrmotor und Getriebe hi. li.	Travel motor + transmiss. rear lh.
18	Wegeventil	Way valve
19	Handpumpe Bremslösevorrichtung	Handlever pump brake loosing dev
20	3-Wegehahn Bremslösevorrichtung	Cock valve brake loosing divice
21	4-Wegeventil Schild Notbetätigung	Cock Valve dozer blade
22	Speisefilter rechts	Charge circuit filter rh.
23	Speisefilter links	Charge circuit filter lh.

	alle Drücke gemessen bei einer Öltemperatur von ca. 50°C Verbrennungsmotor im hohen Leerlauf	all pressuresmeasured by an oiltemperature of ca. 50°C Engine at high idling speed
Pos.	Beschreibung	Description
M1	Fahrdruck vorne links rückwärts 430 +10/-20 bar	Travel pressure in front left backwards 430 +10/-20 bar
M2	Fahrdruck vorne links vorwärts 430 +10/-20 bar	Travel pressure in front left forward 430 +10/-20 bar
M3	Fahrdruck hinten links rückwärts 430 +10/-20 bar	Travel pressure in the back left backwards 430 +10/-20 bar
M4	Fahrdruck hinten links vorwärts 430 +10/-20 bar	Travel pressure in the back left forward 430 +10/-20 bar
M5	Stellkammerdruck links vorwärts 0-max. 14 bar	Placing chamber pressure left forward 0-max. 14 bar
M6	Stellkammerdruck links rückwarts 0-max. 14 bar	Placing chamber pressure left backwards 0-max. 14 bar
M7	Speisedruck links 30 +/-2 bar	Supply pressure left 30 +/-2 bar
M8	LS-Druck Arbeitspumpe 210 +10 bar	LS-pressure work pump 210 +10 bar
M9	Arbeitsdruck 230 +10 bar	Operating pressure 230 +10 bar
M11	Fahrdruck vorne rechts rückwärts 430 +10/-20 bar	Travel pressure in front right backwards 430 +10/-20 bar
M12	Fahrdruck vorne rechts vorwärts 430 +10/-20 bar	Travel pressure in front right forward 430 +10/-20 bar
M13	Fahrdruck hinten rechts rückwärts 430 +10/-20 bar	Travel pressure in the back right backwards 430 +10/-20 bar
M14	Fahrdruck hinten rechts vorwärts 430 +10/-20 bar	Travel pressure in the back right forward 430 +10/-20 bar
M15	Stellkammerdruck rechts vorwärts 0-max. 14 bar	Placing chamber pressure right forward 0-max. 14 bar
M16	Stellkammerdruck rechts rückwarts 0-max. 14 bar	Placing chamber pressure right backwards 0-max. 14 bar
M17	Speisedruck rechts 30 +/-2 bar	Supply pressure right 30 +/-2 bar
M18	Lenkdruck links 0-230 +10 bar	Guidance pressure left 0-230 +10 bar
M19	Lenkdruck rechts 0-230 +10 bar	Guidance pressure right 0-230 +10 bar
M21	Umschaltung 2. Gang 30 bar	Change-over 2. course 30 bar
M22	Druck manuelle Bremslösevorrichtung 30 bar	Pressure manual brake release device 30 bar
M23	Stelldruck Fahrmotor vorne rechts 0-430 bar	Placing chamber pressure drive motor in front right 0-430 bar
M24	Stelldruck Fahrmotor hinten rechts 0-430 bar	Placing chamber pressure drive motor in the back right 0-430 bar
M25	Stelldruck Fahrmotor vorne links 0-430 bar	Placing chamber pressure drive motor in front left 0-430 bar
M26	Stelldruck Fahrmotor hinten links 0-430 bar	Placing chamber pressure drive motor in the back left 0-430 bar
M27	Fahrdruck vorne rechts 0-430 +10 bar	Driving pressure in front right 0-430 +10 bar
M28	Fahrdruck hinten rechts 0-430 +10 bar	Driving pressure in the back right 0-430 +10 bar
M29	Fahrdruck vorne links 0-430 +10 bar	Driving pressure in front left 0-430 +10 bar
M30	Fahrdruck hinten links 0-430 +10 bar	Driving pressure in the back left 0-430 +10 bar
(a) M31	Schild heben 0-230 bar	Blade lift 0-230 bar
(a) M32	Schild senken 0-230 bar	Blade lower 0-230 bar
M41	Rücklauffilter 0-3 bar	Return flow filter 0-3 bar
(a) Ma1	Steuerdruck Schild heben 0-30 bar	Actuating pressure blade lift 0-30 bar
(a) Ma2	Steuerdruck Lenken links 0-30 bar	Actuating pressure steering left 0-30 bar
(a) Mb1	Steuerdruck Schild senken 0-30 bar	Actuating pressure blade lower 0-30 bar
(a) Mb2	Steuerdruck Lenken rechts 0-30 bar	Actuating pressure steering right 0-30 bar
MT1	Tankvorspannventil 0-15 bar	Tank linking up valve 0-15 bar
Mp	Arbeitsdruck 0-230 +10 bar	Operating pressure 0-230 +10 bar

Copying of this document, and giving it to others and the use or communication of the contents thereof, are forbidden without express authority. Offenders are liable to the payment of damages. All rights are reserved in the event of the grant of a patent or the registration of a utility model or design.

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patenterteilung oder Gebrauchsmuster-Eintragung vorbehalten.

PREVIEW - YOU CAN FIX THIS.COM

Download full manual at youfixthis.com

Index	Änderungs-Nr. Revision-No.	Beschreibung Description	Datum/Name Date/Name	Gepr. Chkd.
a	tbc-03-0021	Meßstellen M31 und M32 nachgetragen, Drücke korriegiert	20.02.03/Jä.	Echt.

Darstellungsmethode ISO 128 / Projection-method per ISO 128	Werkstoff, Halbzeug Material, Semifin.Part	Stoff-Nr. Standard-No. / Rohteil-Nr. Blank-No.	Gewicht Weight / Maßstab Scale

	Datum	Name
Bearb.	13.02.2003	Jäckel
Gepr.	14.02.2003	Lohse
Norm		

wenn nicht anders angegeben unless otherwise specified

Werkstückkanten nach DIN 6784 — Edges per DIN 6784

Form-u.Lagetoleranzen nach DIN ISO 1101 — Maßangaben in Millimeter

Geometric tolerances per DIN ISO 1101 — Dimensions are in millimeters

Allgemeintoleranzen nach ISO 2768-mL — Oberflächenangaben nach DIN ISO 1302

General tolerances per ISO 2768-mL — Surface texture per DIN ISO 1302

Paßmaß Tolerance on fit

oberes upper Abmaß / unteres lower Tolerance

Benennung Title: Hydraulikschema / Hydraulic schematic

CAD

Zeichnungs-Nr. Drawing-No.: C 571 908 15 a

Gesamtoberfläche [dm2] entire surface [dm2]

ähnlich Zeichn.-Nr. similar Drawing-No.

Blatt Sheet 2 von of 2 Bl. Sh.

4.33 Machine related electrics 119
4.34 Electronic control units 126
4.35 Checking the voltage supply for the control unit 128
4.36 Diagnostics concept 136

Engine electrics 139

5.1 Engine control unit 140
5.2 Pin assignment 142
5.3 System faults indicated by flashing code 148
5.4 Flashing code 150
5.5 Diagnose with SERDIA 152
5.6 Diagnose with CAN-bus 155
5.7 Diagnostics interface 156
5.8 EMR3 List of fault codes 158
5.9 Sensors 229
5.10 Oil pressure sensor 231
5.11 Fuel temperature sensor 235
5.12 Charge air temperature - charge air pressure sensor 236
5.13 EMR coolant temperature sensor 238
5.14 Rotary speed sensor for crankshaft 242
5.15 Rotary speed sensor for camshaft 243
5.16 Preheating system 244
5.17 Checking the preheating system. Maintenance in case of frost. 247
5.18 Sensor, water in fuel 248
5.19 Air filter vacuum switch 249
5.20 Coolant temperature sensor 250
5.21 Float switch, coolant tank 251
5.22 Charge control light, engine RPM-meter 252
5.23 Generator 253
5.24 Replacing the voltage regulator 263
5.25 Electric starter 265

Electronic control 271

6.1 ESX control 273

Trouble shooting 343

7.1 Notes on trouble shooting 344
7.2 The machine drives with the travel lever in „NEUTRAL“ 345
7.3 The machine does not drive 347
7.4 Machine travels to one direction only or to one travel direction with reduced power 349
7.5 Hydraulic oil overheating 352
7.6 Insufficient travel power, max speed is not reached 353
7.7 No steering function / steering stiff, end stops are not reached 358
7.8 Failure of central lubrication system (grease emerges from relief valve) 359
7.9 Trouble shooting travel system 361
7.10 Trouble shooting working hydraulics 363

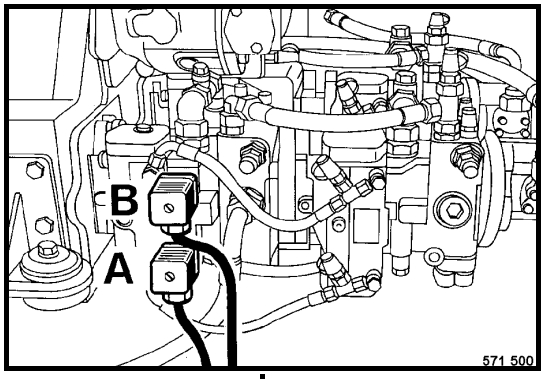
Installed components / connection overview 365

8.1 List of installed components 366
8.2 Measuring and adjustment points on tandem travel pump unit 368
8.3 Connection overview 370

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

The machine drives with the travel lever in „NEUTRAL“



Check the control current to the solenoids

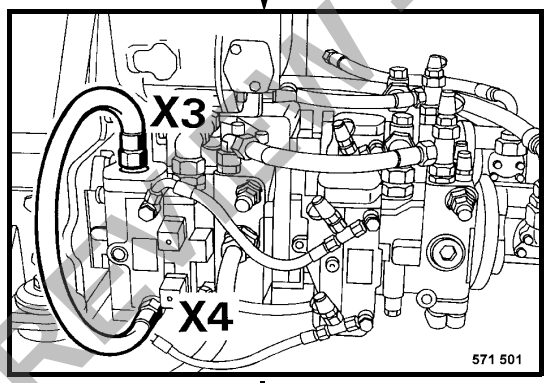
- Pull the plugs off the magnets on the control, one after the other

Machine stops?

yes

Perform trouble shooting in the electrical system

no

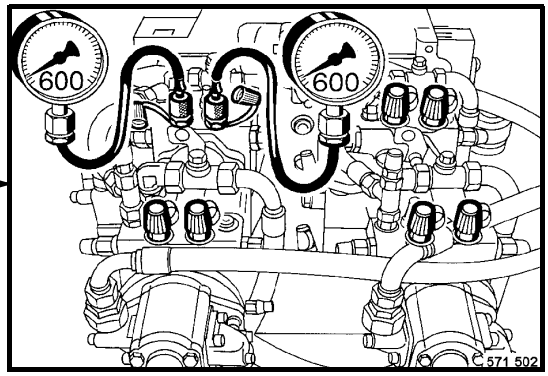


Check the zero position of the pump

- Connect control chamber ports X3 and X4 on one pump with a hose
- Start the engine
- Repeat this test on all other pumps

Machine stops?

no



yes

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Index

M

Maintenance 48, 49
Malfunction table 54

N

Name plate 23
Neutral valve 12

O

Operation 47
Operator's
  Obligations 9
Options
  Neutral valve 12

P

Performance description 11
Piston 11
Port overview 39
Product description 11

Q

Qualifications
  Personnel 6

R

Recommissioning
  After downtime 46
Related documents 4
Repair 49
Retaining plate 11
Ring screw 24
Running-in phase 47

S

Safety instructions 6, 7
Slipper pad 11
Spare parts 49
Storage 24
Storage time 25
Stroke piston 11
Swashplate 11

T

Technical data 56
Tightening torques 41
Tools 50
Transport 24
  With lifting device 25
  With ring screw 24
Transport protection 36
Troubleshooting 53

U

Use
  Improper 6
  Intended 6

W

Warning 7
Warranty 8, 26, 37, 44, 52
Weights 24

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 25 of 1022 pages

The full manual includes:

- All 1022 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Bomag BC 672 RB-2, BC 772 RB-2, BC 772 RS-2, BC 672 EB-2, BC 772 EB-2 Service Manual



Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual