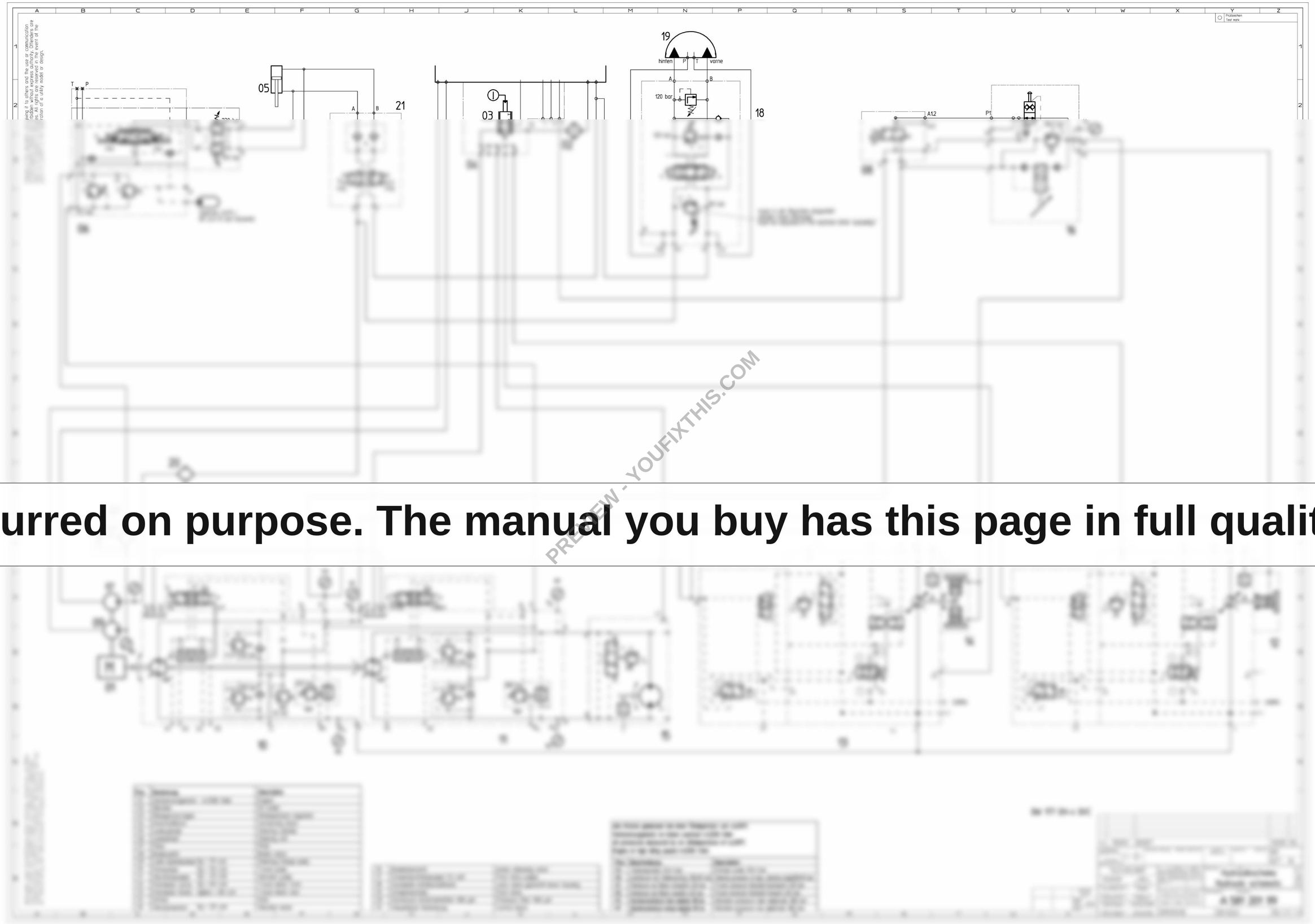


Blurred on purpose. The manual you buy has this page in full quality.

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

10 Error codes of the ESX control

10.1 Overview

Error code	Description of error
4501 - 4540	Position controller (exciter potentiometer, valves)
4601 - 4620	Acceleration transducer
8000 - 8250	Internal software error

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Replaceing the swashing motor

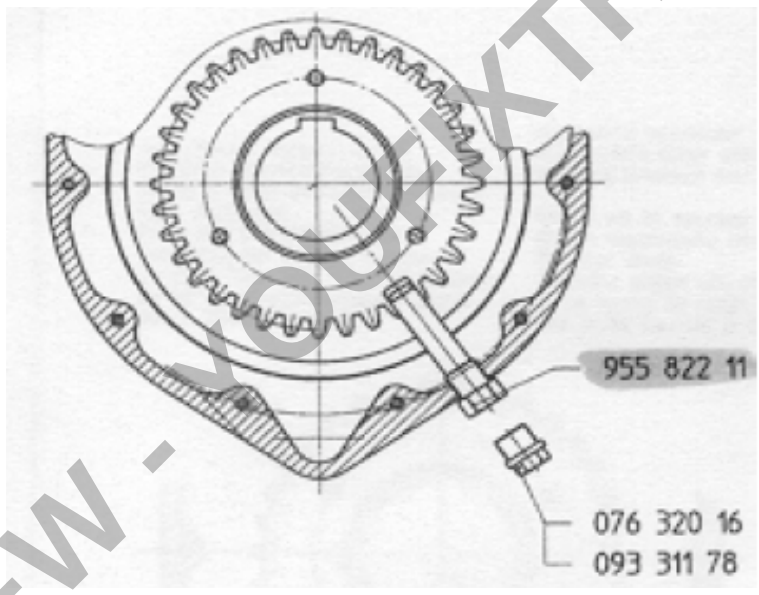
1. If necessary remove the vibration motor

2. Unscrew the bottom plug (Pos.26, P/N 076 320 16) from the gearbox

3. Disconnect the hydraulic hoses and the electric connections from the potentiometer on the swashing motor

4. Connect the hand pump to the front port (in travel direction) of the swashing motor (Pos.5) and pump to the right, until the locking recess in the gear is in line with the bore in the gearbox.

5. Turn the locking screw (P/N 955 822 11) into the gearbox, the exciter is thus blocked in position vertical reverse.



6. Remove the manual pump

7. Remove the swashing motor

8. Connect the manual pump again zo the front port of the new swashing motor and pump to the right to the same position as with the removed swashing motor (position vertical forward)

9. Install the swashing motor, grease the splined shaft (with Optimol White P/N 009 960 01) and connect hydraulically and electrically.

10. Remove the bottom locking screw (P/N 955 822 11) again and turn in the plug (Pos.26, P/N 076 320 16) with seal ring.

11. Tighten all fastening screws with the specified torque.

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

Table of contents

Foreword	**A 1**
Documentation	A 2
General	**B 1**
Peculiarities	B 3
Electric steering	**C 1**
Steering circuit	C 2
Steering pump	C 4
Steering wheel	C 5
Steering valve	C 6
Steering angle sensor	C12
Trouble shooting	C15
Compaction measuring system	**D 1**
BEM	D 1
BTM plus	D 2
BTM prof.	D 3
BVC	D 4
BVC - System	**E 1**
Exciter system	E 4
Gear pump	E 5
Valve block	E 7
Swashing motor	E 9
Acceleration transducer	E 10
MESX-control	E 11
BOP	E 12
Working principle of the system	**F 1**

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Foreword

Reliable construction equipment is of greatest advantage for all parties involved:

- for the customer/user it is a basis for an exact calculation of utilization periods and the completion of projects as scheduled.
- in the rental business it means that the equipment can be reliably used and planned without having to stock a large number of stand-by machines.
- for the manufacturer it means that customers are satisfied, provides him with a good image and gives him a feeling of confidence.

It is BOMAG's philosophy to design and produce the machines with highest possible reliability. This aspect of simple and easy maintenance was one of the key issues when developing and designing the machine:

- the location of components in the machine eases maintenance work,
- the high quality standard of BOMAG is the basis for the considerable extension of the service and maintenance intervals.
- the After Sales Service of BOMAG, including excellent operating and maintenance instruction manuals, high quality training courses and on-site machine demonstrations helps the customer to maintain their machines in good condition over a long period of time.

Permanent training of BOMAG's own service personnel as well as the service personnel of BOMAG Profit Centres and dealers is therefore a general prerequisite for BOMAG's excellent world-wide service.

This program of permanent training is only possible with appropriate and up-to-date training material for trainers as well as persons attending the training courses.

This training manual has not only been written as a support for the professional work of the trainer, but also for the trainees attending these training courses.

The different levels of product training demand, that the training performed by BOMAG, its Profit Centres or its dealers reflects the high quality of the training conducted at the Training Centre at BOMAG in Boppard. For this reason we invested a lot of time in the preparation of these materials .

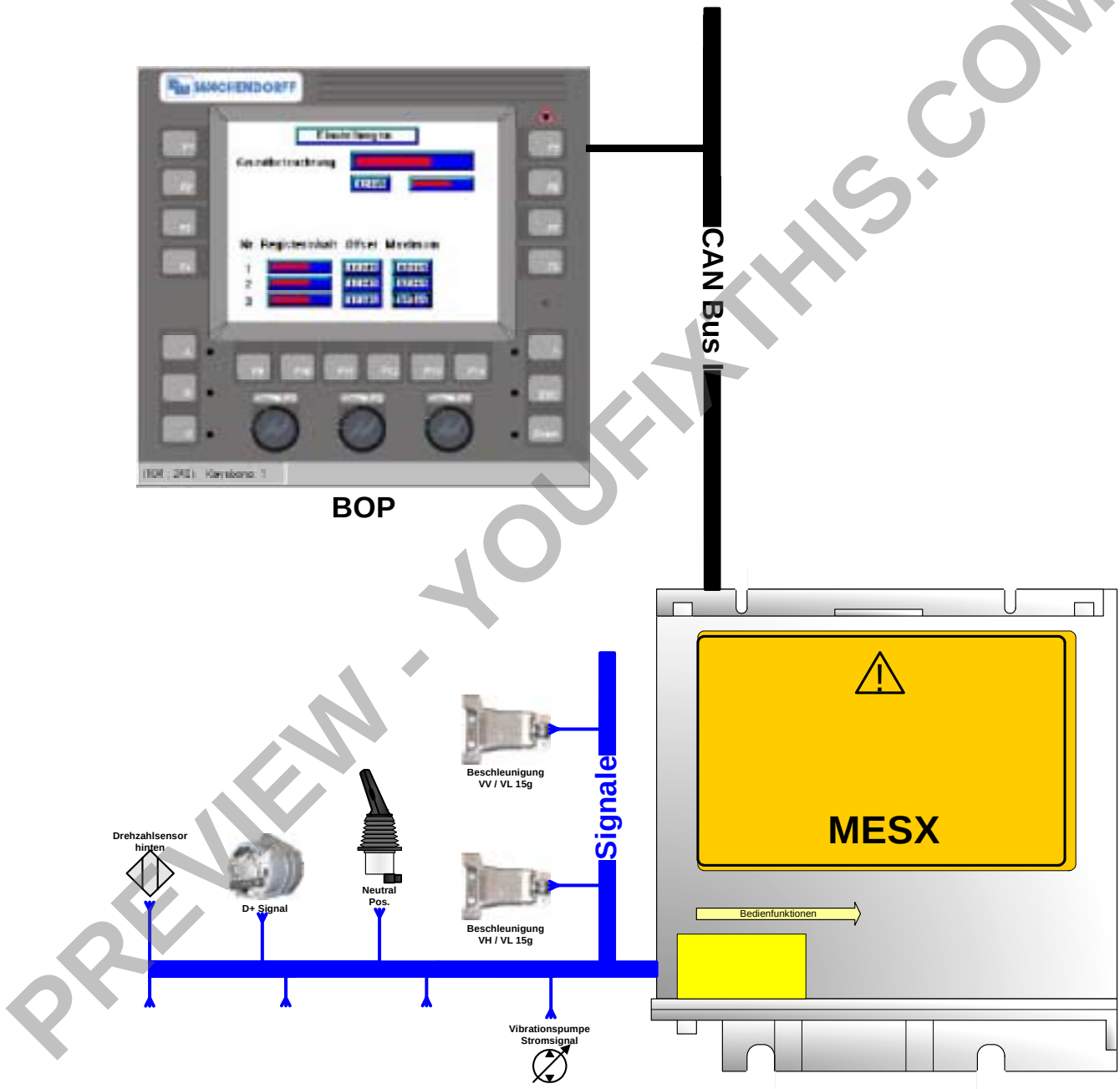
The structure of this training manual enables us to change or up-date individual chapters in case of alterations to the machine.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

BTM plus

(Bomag Terrameter) for circular exciters



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Trouble shooting

In case of a fault in the Vario system the red triangular lamp lights up.

Show the fault code by pressing button **„?“** followed by button **„F5“**

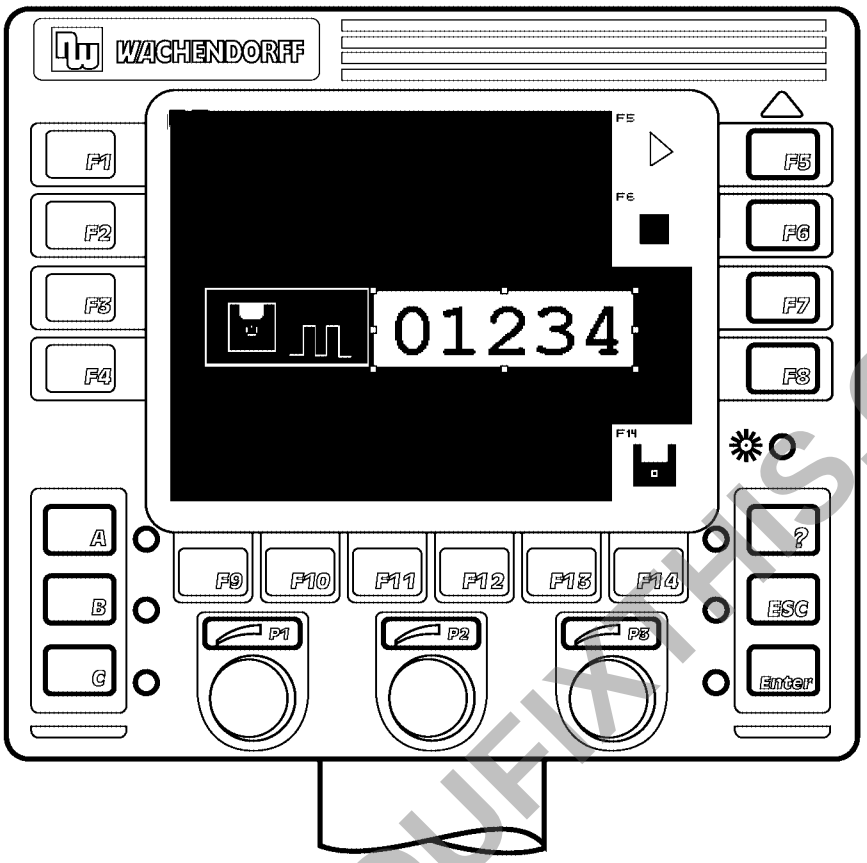




Bei aktuellen Fehler wird ein entsprechender Fehlercode im Feld "Actual Errors" angezeigt.

For detail info on reading out fault codes please refer to the chapter "Electrics, Training MESX".

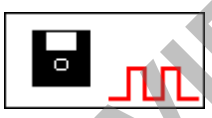
PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com



- Press key "F5" to start the Teach-mode. The following symbol is displayed:



- Travel a distance of 10 m forward and press key "F6" at the end. The following symbol is displayed:



- After completing the measuring pass press key "F14" to save the setting. The following symbol is displayed:



- Press "ESC" to leave the page.

Note: **If the following symbol is displayed after completing the measuring pass, the measured distance pulses are outside the range of +/- 10% of the preset value. The setting cannot be saved! The measurement must be repeated!**



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

Table of contents

1 LIST OF CHANGES 4

2 SELECTED FAULT REACTIONS OF THE ESX CONTROL 5

3 DESCRIPTION OF FAULT DISPLAY IN THE LC DISPLAY 7

3.1 Calling up service mode 7

3.2 Entering input codes 7

3.3 Adjusting the machine type 9

3.4 Changing the steering unit on BVC-4 machines (from version 1.09) 10

3.5 Teaching the travel direction sensor 11

3.6 Automatic detection of surge currents in the travel system 11

3.7 Automatic detection of surge currents on steering valves (BVC) 13

3.8 Teaching the electronic end stops of the steering angle sensor (BVC) 14

3.9 Driving against the closed brake 15

3.10 Showing stored faults 15

3.11 Deleting all stored faults 15

4 HOW TO PROCEED WHEN REPLACING COMPONENTS? 16

4.1 How to proceed when replacing an ESX control? 16

4.2 How to proceed when replacing a travel pump / axle drive motor / drum drive motor? 16

4.3 How to proceed when replacing a steering valve (BVC)? 16

4.4 How to proceed when replacing a steering angle transducer? 16

4.5 How to proceed when replacing an front / rear axle sensor? 16

4.6 Which components can be replaced without a subsequent adjustment procedure? 17

5 DESCRIPTION OF THE SIGNALS ON THE ESX-CONTROL 18

6 DESCRIPTION OF SIGNALS ON THE DATA COLLECTOR 23

7 DESCRIPTION OF SIGNALS ON THE TRAVEL LEVER 25

8 DESCRIPTION OF SIGNALS ON THE LC - DISPLAY 27

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

8 Description of signals on the LC - Display

Notes:
Wherever the value of 12 V is mentioned in the following text it refers to the current battery voltage under due consideration of voltage drops in the lines.

PIN Display	Signal description	Nominal values (voltage / current)
X28:1	Voltage supply (permanent voltage "ignition on")	Electronics working ☞approx.12 V Electronics not working ☞ 0 V
X28:2	Ground connection	0V (measured against ground)
X28:3	Interface **CAN-Bus 1** Wire **+**, is used for communication with the MESX, the ESX, the data collector and the BOP.	Measurement not possible!
X28:4	Interface **CAN-Bus 1** Wire -, is used for communication with the MESX, the ESX, the data collector and the BOP.	Measurement not possible!
X28:5	Voltage supply (permanent voltage "Battery +" for RTC)	Electronics working ☞approx.12 V Electronics not working ☞ 0 V
X28:6	Not used	---
X29:1	Input **frequency adjustment lower** Digital input active high	Adjustment active ☞approx.12 V Adjustment inactive ☞ 0 V
X29:2	Input **frequency adjustment higher** Digital input active high	Adjustment active ☞approx.12 V Adjustment inactive ☞ 0 V
X29:3	Input **engine speed high idle** Digital input active high	High idle active ☞approx.12 V High idle inactive ☞ 0 V
X29:4	Input **engine speed low idle** Digital input active high	Low idle active ☞approx.12 V Low idle inactive ☞ 0 V
X29:5	Not used	---
X29:6	Not used	---
X29:7	Output **voltage supply for additional digital evaluations** This output supplies the engine speed switch and the switch for frequency adjustment. Without this voltage no additional digital switches can be connected to the LCD and evaluated.	Voltage supply active ☞approx.12 V Voltage supply inactive ☞ 0 V
X29:8	Not used	---

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

PREVIEW ONLY

You're viewing 12 of 182 pages

The full manual includes:

- All 182 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Bomag BW 177 DH-4 BVC, BW 213 DH-4 BVC, BW 226 DH-4 BVC, BW 177, BW 213, BW 226 Service Training

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual