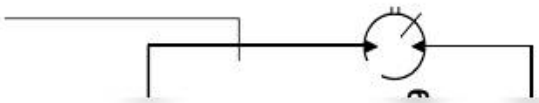


Blurred on purpose. The manual you buy has this page in full quality.

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

Fig. 8:

2. Remove the engine solenoid

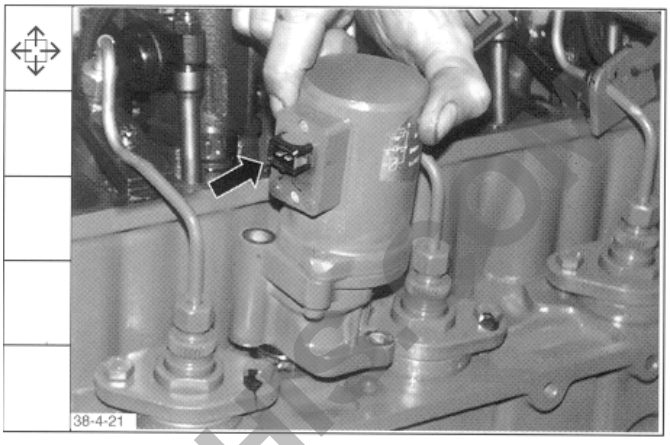


Fig. 9:

3. Insert the pressing device, WILBÄR No. 100 830 carefully into the groove in the governor rod and tighten.

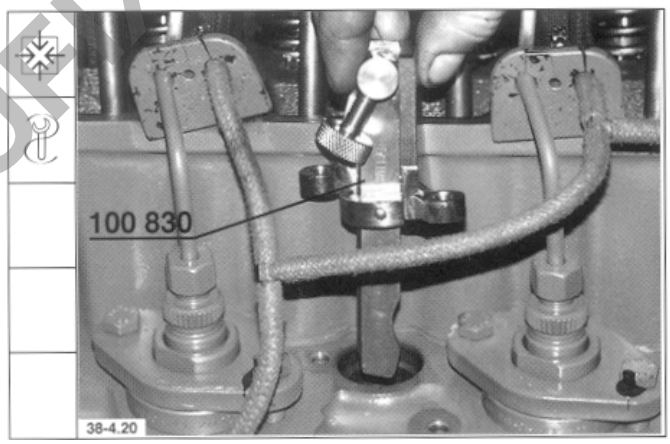


Fig. 10:

4. Turn the knurled fastening screw to press the governor rod to stop position.

Note:

Tighten the knurled fastening screw by hand.

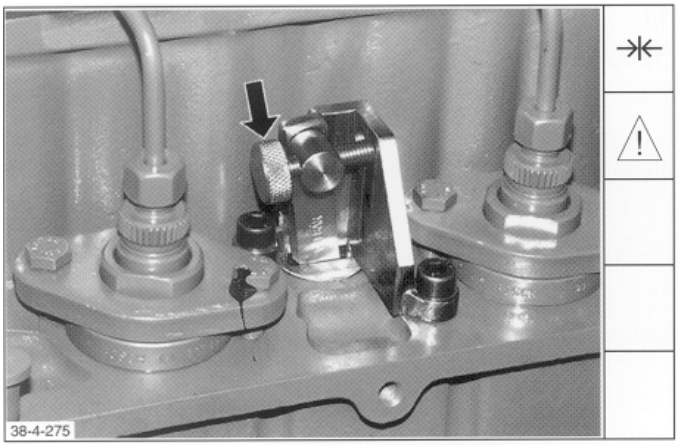


Fig. 11:

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Trouble shooting

The following trouble shooting chart contains a small selection of possible faults, which may occur during operation of the machine. The fault list is by no means complete, however, the fault table is based on the experience of the central service department, i.e. the list covers almost all faults that have occurred in the past.

Procedure:

The following trouble shooting table contains both electrical as well as mechanical and hydraulic faults.

The numerical values specified in the table indicate the probability of the fault cause and thereby the recommended trouble shooting sequence, based on our latest field experience.

TROUBLE SHOOTING TRAVEL SYSTEM BW 211 / 212 / 213 D-40	**SYMPTOMS**	**Machine does not drive (forw. and reverse)**	**Machine drives to one direction only**	**Machine travels with travel lever in 'Neutral'**	**Max. travel speed not reached**	**Hydraulic oil overheating**				
POSSIBLE CAUSES										
Brake valve (electric/mechanical/hydraulic)		1								
Brake in axle-drive motor (mechanical/hydraulic)	2			2	3					
Travel speed range switch position /defective/wiring					1					
Charge pump / charge pressure relief valve(s) dirty/defective		2			3					
Pump control (servo control)		2	1	2	3					
Pressure override/ travel pump high pressure limitation dirty/out of adjustment/defective		3	2		3	3				
Adjustment of travel cable				1	2					
Travel pump mechanical neutral				3	3					
Travel pump(s) defective		3		3	2					
Axle drive motor control valve (electric / mechanical / hydraulic)					1	2				
Flushing valve axle drive motor seized			3							
Travel motor(s) defective		3			3					
Hydraulic oil cooler soiled (internally/externally)						1				
Thermostat (hydraulics) soiled/jammed/defective						2				
Clutch- Dieselmotor-Pumpe		2								
Dieselmotor					1					

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

5.5 Maintenance chart

No.	Maintenance work	Remark	Running-in instructions after 250 operating hours	every 10 operating hours, daily	every 250 operating hours	every 500 operating hours	every 1000 operating hours	every 2000 operating hours	every 3000 operating hours	as required
5.6	Check the engine oil level	Dipstick mark		X						
5.7	Check the water separator			X						
5.8	Check the fuel level			X						
5.9	Check the hydraulic oil level	Inspection glass		X						
5.10	Check the coolant level	Inspection glass		X						
5.11	Check the dust separator			X						
5.12	Check the tire pressure				X					
5.13	Clean the cooling fins on engine and hydraulic oil cooler				X					
5.14	Check the oil level in the drive axle				X					
5.15	Check the oil level in the wheel hubs				X					
5.16	Check the oil level in the vibration bearings				X					
5.17	Change engine oil and oil filter cartridge*	min. 1x per year	X			X				
5.18	Drain the sludge from the fuel tank					X				
5.19	Service the battery	Pole grease				X				
5.20	Check, replace the refrigerant compressor V-belt					X				
5.21	Service the air conditioning					X				
5.22	Check, adjust the valve clearance	Intake = 0,3 mm Exhaust = 0,5 mm					X			
5.23	Check, replace the ribbed V-belt						X			
5.24	Change the fuel filter cartridge					X				

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Name	Bl.	Pf.	Benennung	title	TYP
	005	4			MAX. 1,67A
A02	008	17	Blinkrelais	indicator relay	
A05	003	17	Elektronik Geschwindigkeitsanzeige	Electronic system, speedometer	MODUL
A12	009	5	Radio	Radio	
A13	003	3	Steuergeraet Heizung	Control unit, heating	
A15	004	16	Ueberwachungsmodul	monitoring module	
A16	009	7	Elektronik Tachograph	Electronic system, tachograph	
A51	009	6	Platine Frequenzanzeige	Circuit board,frequenzy meter	
A68	005	10	Modul Sitzkontakt	Modul seat contact	MAX. 0,12A
A72	010	11	Steuergeraet Klimaanlage, Heizung	Control unit,air conditioning,heating	
A83	006	6	Elektronik Messtechnik	electronic measurement−equipment	
A87	007	15	USB−CAN Schnittstelle BCM	USB−CAN Interface BCM	
B03	004	15	Unterdruckschalter Luftfilter	Vacuum switch, air cleaner	
B06	004	17	Druckschalter Motoroel	Pressure switch, engine oil	
B11	003	9	Signalhorn	Warning horn	MAX.5A
B11	003	11	Signalhorn	Warning horn	MAX.5A
B13	004	2	Naeherungsinitiator Fahrhebel links	Proximity switch, travel lever, lh.	
B14	004	6	Naeherungsinitiator Fahrhebel rechts	Proximity switch, travel lever, rh.	
B21	004	14	Differenzdruckschalter Hydr.−Oelfilter	Pressure diff. switch, hydr. oil filter	
B30	004	16	Temperaturschalter Motoroel	Temperature switch, engine oil	
B51	009	5	Lautsprecher Radio	Speaker radio	
B51	009	6	Lautsprecher Radio	Speaker radio	
B55	004	17	Kuehlmittelstand Ausgleichsbehaelter	Coolant charge expansion tank	
B60	003	14	Aufnehmer Achsgeschwindigkeit	Sensor, axle speed	
B61	006	12	Aufnehmer Verstellzylinder	Sensor, ajustable zylinder	
B62	006	8	Beschleunigungsaufnehmer	Acceleration sensor	
B62	006	10	Beschleunigungsaufnehmer	Acceleration sensor	
B103	010	7	Temperaturschalter Klimaanlage	Temperature switch, air conditioning	
B104	010	7	Druckschalter Klimaanlage	Pressure switch, air conditioning	
B113	003	3	EMR Temperaturgeber Kuehlmittel	EMR Temperature switch, collant	
B124	004	19	Geber Wasserstandsabscheider Diesel	Sender, water separator fuel	
B131	010	10	Temperaturschalter Heizung	Temperature switch, heating	
E08	008	17	Blinkleuchte vorne links	Indicator, front, lh.	MAX. 1,75A
E09	008	18	Blinkleuchte hinten links	Indicator, rear, lh.	MAX. 1,75A
E10	008	19	Blinkleuchte vorne rechts	Indicator, front, rh.	MAX. 1,75A
E11	008	19	Blinkleuchte hinten rechts	Indicator, rear, rh.	MAX. 1,75A
E12	008	7	Parkleuchte links	Parking light, lh.	MAX. 0,42A
E13	008	6	Schlussleuchte links	Tail light, lh.	MAX. 0,42A
E14	008	7	Parkleuchte rechts	Parking light, rh.	MAX. 0,42A
E15	008	8	Schlussleuchte rechts	Tail light, rh.	MAX. 0,42A
E16	008	2	Scheinwerfer links	Head light, lh.	MAX. 4,6A
E17	008	2	Scheinwerfer rechts	Head light, rh.	MAX. 4,6A
E23	008	11	Arbeitsscheinwerfer vorne links	Working head light, front, lh.	MAX. 4,6A
E23	009	18	Arbeitsscheinwerfer vorne links	Working head light, front, lh.	4,6A
E25	008	12	Arbeitsscheinwerfer vorne rechts	Working head light, front, rh.	MAX. 4,6A
E25	009	19	Arbeitsscheinwerfer vorne rechts	Working head light, front, rh.	4,6A
E27	008	10	Arbeitsscheinwerfer hinten links	Working head light, rear, lh.	MAX. 4,6A
E27	009	17	Arbeitsscheinwerfer hinten links	Working head light, rear, lh.	4,6A
E28	008	11	Arbeitsscheinwerfer hinten rechts	Working head light, rear, rh.	MAX. 4,6A
E28	009	17	Arbeitsscheinwerfer hinten rechts	Working head light, rear, rh.	4,6A
E29	009	4	Innenleuchte Kabine	Inside light, cabin	1,75A
E30	010	13	Heizgeraet	Heating unit	
E32	009	19	Kennleuchte	Warning light	5A
E70	009	15	Nachtleuchte	Night lamp	0,83A
E71	009	3	Kontrolleuchte Schalter Heckscheibenheizung	indicator light switch rear screen	1,75A
E72	009	16	Beleuchtung Bedienschalter	illum. Switches	
F00	002	4	Hauptsicherung Batterie	Fuse, main, battery	125A
F03	005	18	Sicherung Vibration	Fuse, vibration	MAX. 1,23A
F07	008	15	Sicherung Warnblinker	Fuse, hazard light	15A
F08	008	18	Sicherung Blinker u. Arbeitsscheinw.	Fuse, indicators a. work. head light	15A
F09	008	6	Sicherung Park~ u. Schlussl. links	Fuse, parking and tail light, lh.	10A
F10	008	8	Sicherung Park− u. Schlussl. rechts	Fuse, parking and tail light, rh.	10A
F11	008	2	Sicherung Scheinwerfer links	Fuse, head light, lh.	15A
F13	002	10	Sicherung Startschalter	Fuse, starter switch	30A
F14	002	18	Sicherung Hubmagnet Motor	Fuse, shut off solenoid, engine	15A
F15	010	18	Sicherung Heizgeraet	Fuse, heating unit	BOX2
F18	008	5	Vorsicherung Arbeitsscheinw. vorne	Primary fuse, work. head light, fr.	30A
F19	008	12	Sicherung Arbeitsscheinw. vorne li.	Fuse, working head light, front, lh.	30A
F22	008	10	Sicherung Arbeitsscheinwerfer hinten	Fuse, working head lights, rear	30A
F23	003	9	Sicherung Signalhorn	Fuse, warning horn	10A
F24	004	10	Sicherung Ueberwachungsmodul	Fuse, monitoring module	10A
F25	004	2	Sicherung Magnetv. Fahren u. Bremse	Fuse, sol. valve, travel and brake	10A
F31	010	3	Sicherung Kabinenluefter	Fuse, cabin ventilator	
F39	002	19	Hauptsicherung Kabine	Main fuse, cab	15A
F40	010	13	Sicherung Kabinenheizung	Fuse, heating unit cab	BOX2
F41	009	19	Sicherung Rundumkennleuchte	Fuse, rotary beacon	
F42	009	4	Sicherung Kabineninnenleuchte	Fuse, inside light cab	
F43	009	10	Sicherung Wischermotor hinten	Fuse, wipermotor rear	
F44	009	13	Sicherung Wischermotor vorn	Fuse, wipermotor front	
F48	002	3	Sicherung Gluehanlage	Fuse, glow plug system	125A
F84	006	5	Sicherung Steuerung (Klemme 54)	Fuse, controller (Pin 54)	10A
FM4	006	11	Platinensicherung	Multifuse	
F105	002	16	Sicherung Motordrehzahl	Fuse, motor speed	20A
F130	009	15	Sicherung Nachtleuchte	Fuse, night lamp	
F143	009	2	Sicherung Heckscheibenheizung	fuse rear screen heating unit	
F144	009	20	Sicherung Kabinensteckdose	Fuse cabin−socket	
F146	006	4	Sicherung Steuerung MESX (Potential 30)	Fuse Controller (Pot. 30)	
F148	006	2	Sicherung Steuerung MESX (Potential 15)	Fuse Controller (Pot. 15)	
G01	002	4	Batterie	Battery	103A
G02	002	5	Generator	Generator	
G03	002	3	Batterie	Battery	103A
H06	008	15	Meldeleuchte Warnblinker	Indicator light, hazard light	
H07	004	10	Warnsummer Betriebsstoerung	Warning buzzer, breakdown	MAX. 0,12A

Gepr.: 16.11.2005
Name:Seis

Gez.: 16.11.2005
Name:Vogt

Bauteilliste
component listing

Seite: 1 von: 6
page: 1 from: 6

Ers.f.:
Replaces:

582 702 09

Blatt Nr.: 101
sheet no.:

PREVIEW - YOUR TEXT THIS.COM

Download full manual at vmfixits.com

Table of contents

Foreword	**A 1**
Documentation	A 2
General	A 3
Novelties	
Technical data and adjustment values	**B 1**
Maintenance	C1
Maintenance chart	C2
DEUTZ diesel engine	**D 1**
Operating side	D 2
Exhaust side	D 3
Lubrication oil circuit	D 4
Fuel circuit	D 5
Checking and adjusting the valve clearance	D 6
Assembly of plug-type injection pump	D 8
Test and adjustment points	D16
Travel system	**E 1**
Travel pump	E 3
Control	E 6
Charge pressure relief valve	E 11
High pressure relief valve	E 12
Pressure override	E 14
Axle drive motor	E 16
Drum drive motor	E 20
Test and adjustment points, travel system	E 25
Trouble shooting in travel system	E 29

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

5. Set the cylinder of the injection pump to be replaced to ignition top dead centre (valves overlapping). Then turn the crankshaft approx. 120° against the sense of rotation.

Note:

View on flywheel

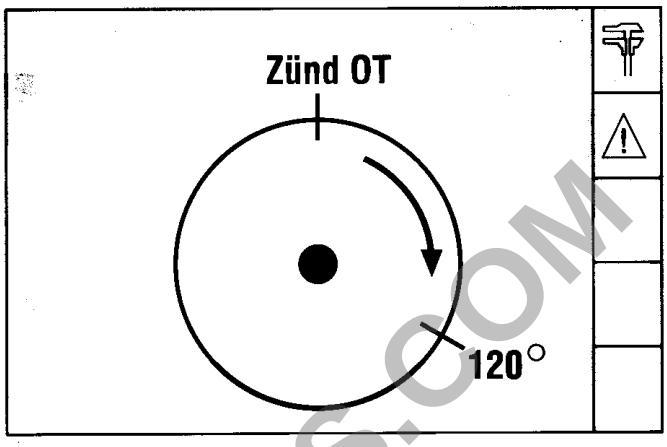


Fig. 12:

6. Remove injection line and injection pump.

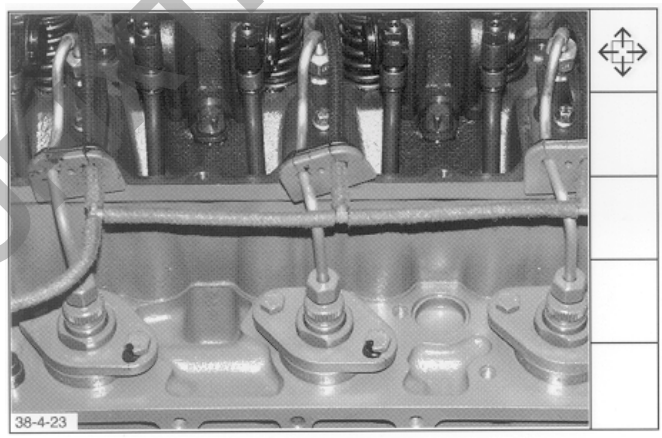


Fig. 13:

7. Take the compensation shim carefully out with the rod magnet.

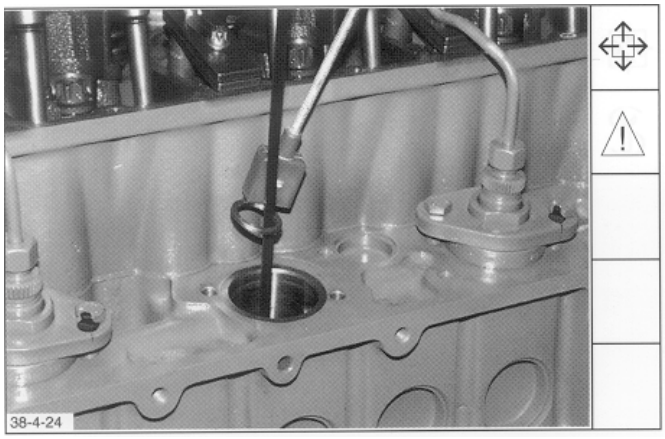


Fig. 14:

Determine the thickness of the new compensation shim:

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

1 Control solenoid, high frequency (vibration pump)
2 Control solenoid, low frequency (vibration pump)
3 Multi-function valve 400 bar (charging and pressure limitation), travel system
4 Charge pressure to solenoid valve for brakes and speed range selector, charging vibration
5 Multi-function valve 400 bar (charging and pressure limitation), travel system
6
7 Port L, leak oil to vibration pump
8 Travel lever
9 Pressure test port, pilot pressure
10 High pressure port B, high pressure reverse
11 Charge pressure relief valve, 26 bar
12 Adjustment screw, low frequency
13 Port L2, leak oil to tank
14 Pressure test port MB, high frequency
15 Pressure test port MA, low frequency
16 High pressure port A, low frequency
17 High pressure port B, high frequency
18 End plate with integrated charge pump (only in vibration pump)

19 Port L2
20 Adjustment screw, high frequency
21 Port D, charge pressure to filter
22 Multi-function valve 345 bar (charging and pressure limitation), vibration high frequency
23 Port S, suction line between hydraulic oil tank and charge pump
24 Multi-function valve 345 bar (charging and pressure limitation), vibration low frequency
25 Charge pressure relief valve, vibration pump (blocked)
26 Port E, charge oil from travel pump
27 Port L1, leak oil port to travel pump
28 Pressure test port MB, high pressure reverse
29 Charge oil from filter
30 Pressure test port MA, high pressure forward
31 High pressure port A, high pressure forward
32 Adjustment screw for mechanical neutral position, vibration

Thermostat housing: 33, 34, 35, 36 Leak oil port
37 cooler inlet

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

During the suction stroke the oil is drawn into the piston chamber, i.e. the charge pressure forces it into the piston chamber. On the opposite side the piston presses the oil out into the high pressure side of he closed circuit.

Control

The electro-hydraulic displacement control (remote control) converts the electric input signal to a load controlling output signal. Since the pump is not equipped with a proportional control, but a 12 Volt solenoid valve, the pump is always actuated to one of the two end stop positions.

Charge pumps

These machines are equipped with two charge pumps.

One of the pumps is an external gear pump, which is directly driven by the auxiliary output of the engine and serves also as steering pump.

The second pump is an internal gear pump and is located in the end cover of the vibration pump.

The oil flow generated by the charge pumps is joined together with the return flow from the steering valve before the hydraulic oil filter and flows through the filter to the charge ports on travel pump and vibration pump.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 11 of 150 pages

The full manual includes:

- All 150 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Bomag BW 211 D-40, BW 212 D-40, BW 213 D-40 Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual