5.5 Wiring

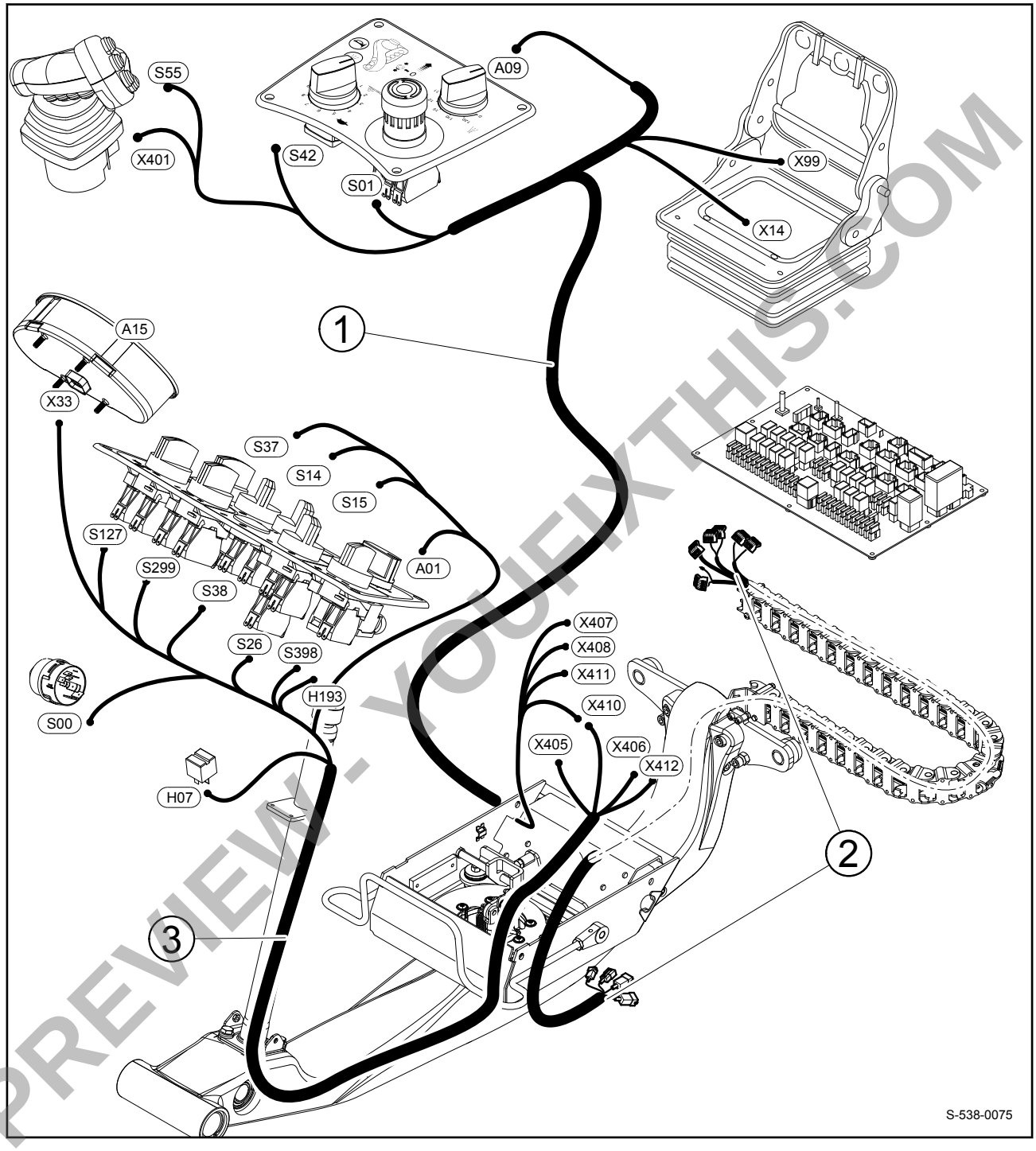


Fig. 72

1 Wiring loom, seat console <> arm rest instruments
2 Wiring loom, seat console <> power board
3 Wiring loom, seat console <> front instruments

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

4.3 Hydraulic system

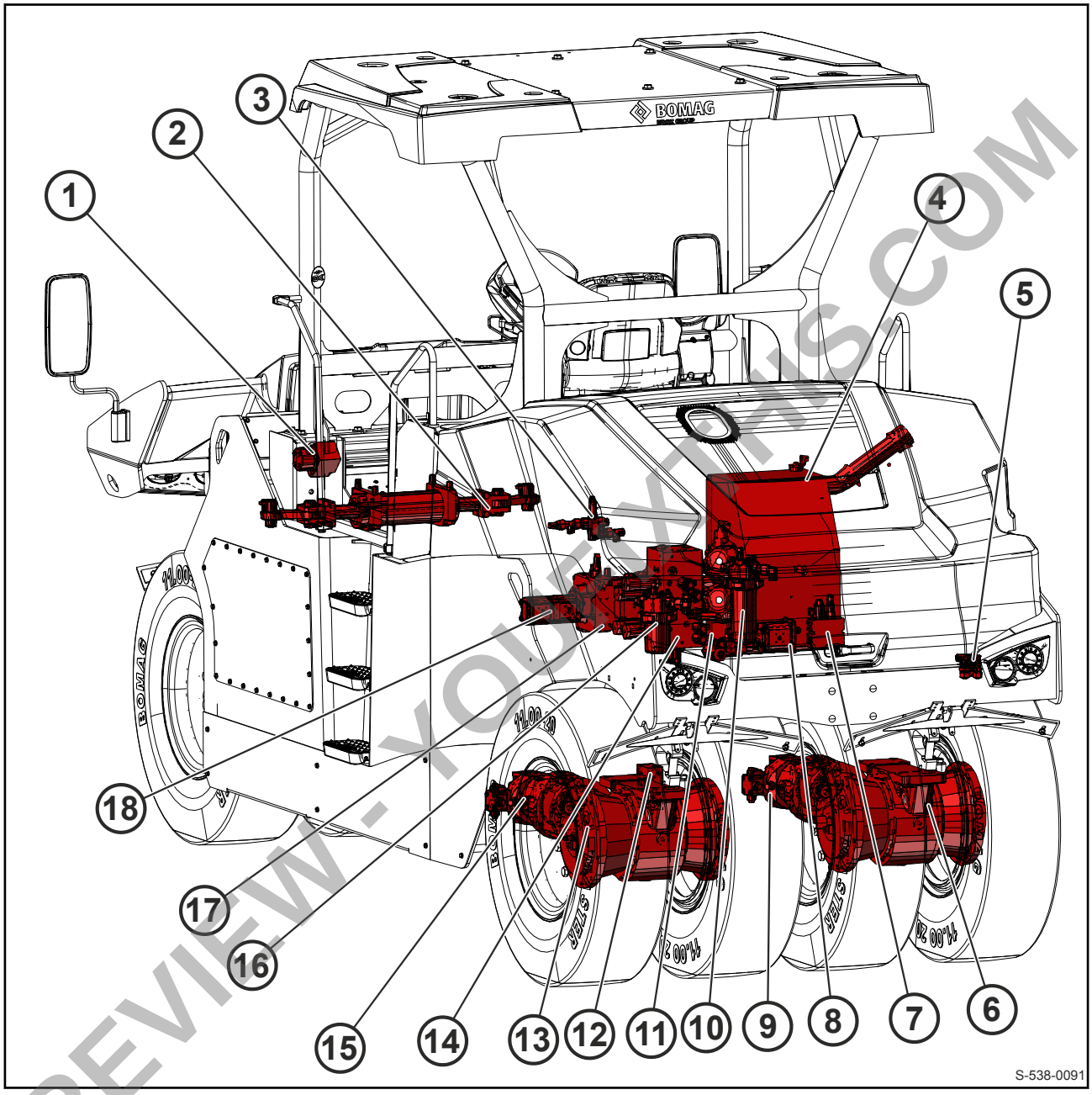


Fig. 62

1 Steering valve
2 Steering cylinder
3 Priority valve with high pressure line filter
4 Hydraulic oil tank with oil thermostat
5 Drain plug
6 Travel gear with brake unit, right
7 Change-over valve of tyre inflation system (Y448)
8 Gear pump of tyre inflation system
9 Right travel motor with travel speed range switch (Y135) and travel speed sensor (B110)
10 Charge oil filter with differential pressure switch (B21)
11 Charge valve of braking system with high pressure line filter

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

6.5.2 BOMAG DTC fault code list

No.	Fault description	Cause	Remedy
1004581	module interval switch - Data valid, but above normal operational range - most severe level	Upper level passed	Adjust conditions
1004582	module interval switch - Data valid, but below normal operational range - most severe level	Lower level passed	Adjust conditions
1004583	module interval switch - Abnormal frequency or pulse width or period	System not adjusted	Adjust system
1004584	module interval switch - Root cause not known	Root cause not know	Solution not known
1004585	module interval switch - Bad intelligent device or component	Bad intelligent device	Check device
1004586	module interval switch - Received network data in error	Received network data in error	Resend data
1004587	module interval switch - Data drifted high	Data drifted high	Adjust conditions
1004588	module interval switch emulsion sprinkler - Data valid, but above normal operational range - most severe level	Upper level passed	Adjust conditions
1004589	module interval switch emulsion sprinkler - Data valid, but below normal operational range - most severe level	Lower level passed	Adjust conditions
1004590	module interval switch emulsion sprinkler - Abnormal frequency or pulse width or period	System not adjusted	Adjust system
1004591	module interval switch emulsion sprinkler - Root cause not known	Root cause not know	Solution not known
1004592	module interval switch emulsion sprinkler - Bad intelligent device or component	Bad intelligent device	Check device
1004593	module interval switch emulsion sprinkler - Received network data in error	Received network data in error	Resend data
1004594	module interval switch emulsion sprinkler - Data drifted high	Data drifted high	Adjust conditions
1004595	module monitoring - Data valid, but above normal operational range - most severe level	Upper level passed	Adjust conditions
1004596	module monitoring - Data valid, but below normal operational range - most severe level	Lower level passed	Adjust conditions
1004597	module monitoring - Abnormal frequency or pulse width or period	System not adjusted	Adjust system
1004598	module monitoring - Root cause not known	Root cause not know	Solution not known
1004599	module monitoring - Bad intelligent device or component	Bad intelligent device	Check device

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

12.2 Disassembling the front axle

DANGER!
Danger to life caused by suspended loads!
– Do not step or stand under suspended loads.



Fig. 442

1. Remove the front axle.
2. Attach the lifting tackle to the front axle ↳ Fig. 442.

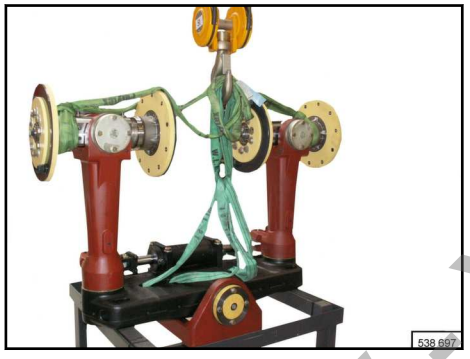


Fig. 443

3. Store the front axle in a safe place ↳ Fig. 443.

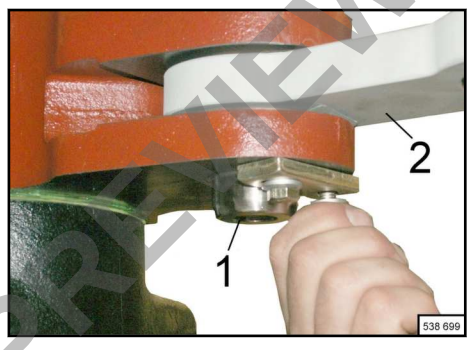


Fig. 444

4. Disassemble the locking plates ↳ Fig. 444.
5. Drive bolt (1) out with a suitable mandrel and pull out the tie rods (2).

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

3.1 Technical data

Dimensions



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

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Tightening torques for screws with metric unified thread

Screw dimension	Tightening torques Nm (Coefficient of friction μ tot. = 0.14)		
	8.8	10.9	12.9

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

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Table of contents

1 General ... **9**
1.1 Introduction ... **10**
1.2 Concerning your safety ... **12**
1.2.1 Basic prerequisites ... 12
1.2.2 Definition of responsible persons ... 15
1.2.3 Basic safety regulations for safe operation ... 16
1.2.4 Handling fuels and lubricants ... 18
1.2.5 Loading / transporting the machine ... 23
1.2.6 Start-up procedure ... 24
1.2.7 Driving the machine; working operation ... 25
1.2.8 Refuelling ... 27
1.2.9 Emergency procedures ... 28
1.2.10 Maintenance work ... 29
1.2.11 Repair ... 31
1.2.12 Signage ... 31
1.2.13 Safety Components ... 40
1.3 Maintenance and repair ... **42**
1.3.1 Notes on repair ... 42
1.3.2 Preliminary remarks and safety notes ... 58
1.3.3 Preparations / concluding work ... 59
1.3.4 Parking the machine in secured condition ... 60
2 Fuels and lubricants ... **63**
2.1 Fuels and lubricants ... **64**
2.1.1 Fuels and lubricants ... 64
2.2 List of fuels and lubricants ... **70**
3 Technical data ... **71**
3.1 Technical data ... **72**
3.1.1 Noise and vibration data ... 74
3.2 Additional technical data ... **75**
3.3 Terms and basis of calculation ... **77**
4 Overview of machine ... **79**
4.1 General ... **80**
4.2 Electric systems ... **86**
4.3 Hydraulic system ... **89**
4.4 Tyre inflation system ... **91**
4.5 Water spraying system ... **92**
4.6 Air conditioning ... **95**
5 Electric systems ... **97**
5.1 Overview of electric system ... **98**
5.2 CAN bus structure ... **101**
5.3 Diagnostic possibilities ... **103**
5.4 Table of fuels and lubricants ... **104**
5.5 Wiring ... **113**
5.6 Level sensor in diesel tank (R03) ... **125**

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Table of contents

5.7 Electric module, A108 ... **126**
5.8 Central electrics ... **127**
5.9 Control console cabin ... **131**
5.10 Fuse assignment ... **133**
5.10.1 Notes on safety ... 133
5.10.2 Central electrics ... 133
5.10.3 Main fuses ... 135
5.10.4 Control console cabin ... 135
5.11 Operator's stand ... **137**
5.11.1 Operating console ... 137
5.11.2 Travel lever console ... 138
5.12 Starting the engine with jump leads ... **139**
5.13 Telemecanique switch ... **140**
5.14 Deutsch plug, series DT and DTM ... **142**
5.15 Inspection and maintenance work ... **146**
5.15.1 Maintenance Table ... 146
5.15.2 Every 500 operating hours ... 146
6 Training of electric system ... **149**
6.1 General information ... **150**
6.1.1 Known faults ... 150
6.1.2 Software versions ... 151
6.2 Notes on commissioning the machine ... **154**
6.2.1 Initial commissioning of the controls ... 154
6.2.2 Checking the set serial number ... 157
6.2.3 Teaching the cross-slope sensor from software version V1.05 ... 158
6.3 Optional equipment ... **160**
6.3.1 Activating/deactivating the AZ14 temperature gauge ... 160
6.3.2 Activating/deactivating the T3 tyre inflation system ... 162
6.3.3 Activating/deactivating the spraying system ... 164
6.3.4 Activating/deactivating the emulsion mixing system ... 166
6.4 Diagnostics system ... **168**
6.4.1 Diagnostics system ... 168
6.4.2 Changing the unit system ... 175
6.5 Fault codes ... **177**
6.5.1 Display fault codes ... 177
6.5.2 BOMAG DTC fault code list ... 181
6.5.3 Deutz DTC fault code list, EMR3 ... 203
6.5.4 Deleting stored fault codes ... 270
6.6 Input codes ... **274**
6.6.1 Activate input mode ... 274
6.6.2 Activate service mode ... 276
6.6.3 Driving against the closed brake ... 278
6.6.4 Input code list ... 280
6.7 Special tools ... **286**
6.8 Measures after replacing or repairing components ... **287**
6.8.1 Replacement of the ESX control ... 287

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

- Always keep battery poles and terminal clams clean to avoid high transition resistances when starting and the related development of heat.
- Make sure the battery is properly fastened in the vehicle.

Generator

- Before removing the generator you must disconnect the ground cable from the minus pole of the battery while the ignition is switched off. Do not disconnect the generator while the engine is running, because this may cause extremely high voltage peaks in the vehicle wiring system ("Load Dump"), which could possibly damage control units, radios or other electronic equipment.
- When removing the battery cable, the B+-nut underneath on the generator side may also be loosened. This nut must in this case be retightened.
- When connecting e.g. the battery cable to the terminal of the generator you must make sure that the polarity is correct (generator B+ to the + pole of the battery). Mixing up the polarities by mistake causes short circuit and damage to the rectifier elements - the generator will be out of function.
- The generator can only be operated with the battery connected. Under special conditions emergency operation without battery is permitted, the lifetime of the generator is in such cases especially limited.
- Plus and minus cables must be disconnected during rapid charging of the battery or electric welding on the vehicle.
- When cleaning the generator with a steam or water jet make sure not to direct the steam or water jet directly on or into the generator openings or ball bearings. After cleaning the generator should be operated for about 1 - 2 minutes to remove any deposits of water from the generator.

Starter

- So-called jump starting (using an additional external battery) without the battery connected is dangerous. When disconnecting the cables from the poles high inductivities (arcs, voltage peaks) may occur and destroy the electrical installation.
- For purposes like e.g. purging the fuel systems, starters may be operated for maximum 1 minute without interruption. Then you should wait for at least 30 minutes (cooling down) until trying again. During the 1 minute starting period this process should not be interrupted.
- Starter motors must not be cleaned with high pressure steam cleaning equipment.
- The contacts on starter terminals 30, 45, 50 must be protected against unintended shorting (jump protection).
- When replacing the starter the ring gear on the engine flywheel must be checked for damage and its number of teeth - if necessary replace the ring gear.
- Always disconnect the battery before starting assembly work in the starter area of the engine or on the starter itself.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Automatic tyre inflation system

Using the optionally available automatic tyre inflation system, the tyre pressure is quickly adjusted to requirements. Tyre pressure can be varied between 2 and 8 bar, and can be kept at a constant automatically.

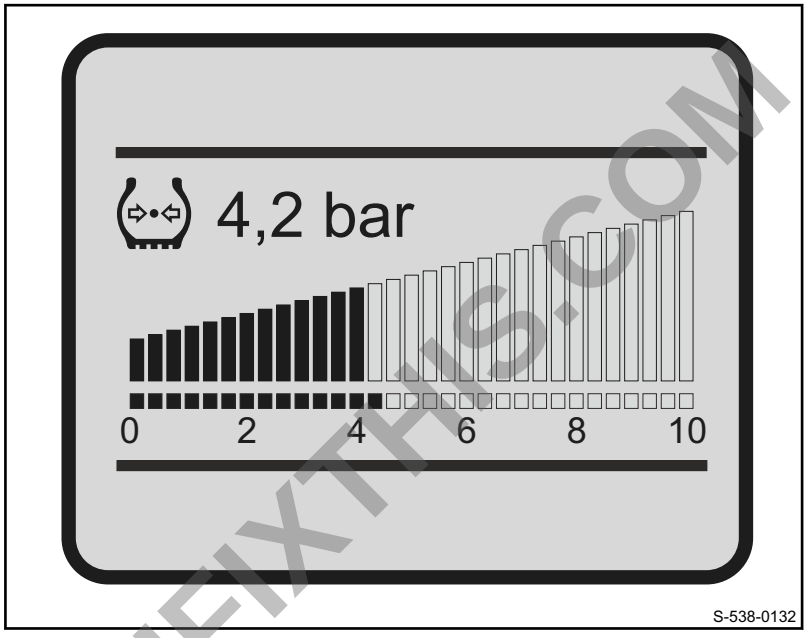


Fig. 55

Wheel position

The pneumatic tyred roller has a steering/oscillating axle at the front and a rigid drive axle at the rear.

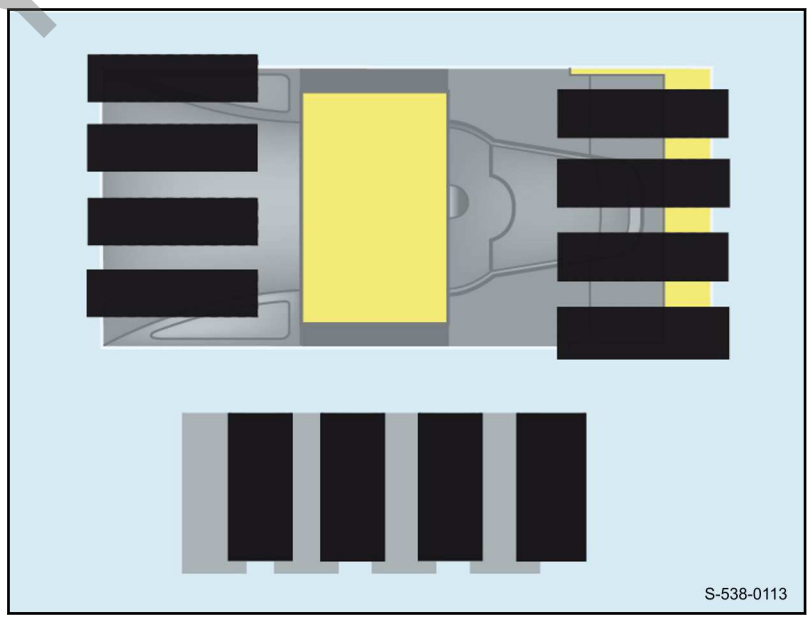


Fig. 56

Compensation of uneven surfaces

The three-way pivoting front axle of the BW 28 RH ensures even weight distribution across all tyres.

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

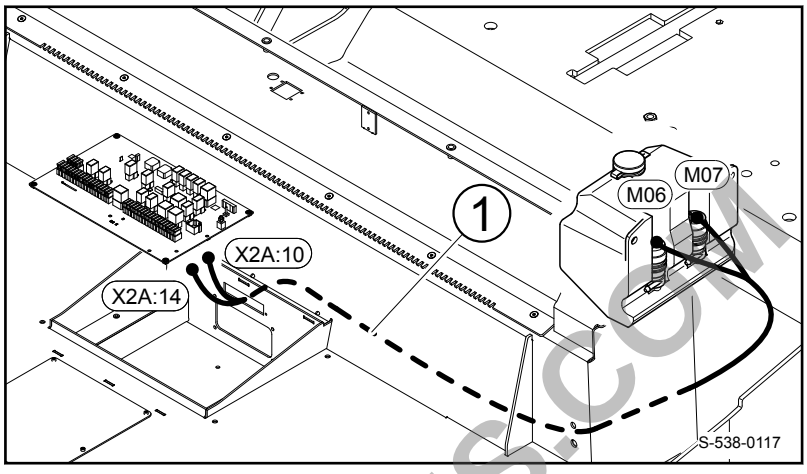


Fig. 80

1 Wiring loom, wiper/washer tank

E21 radio

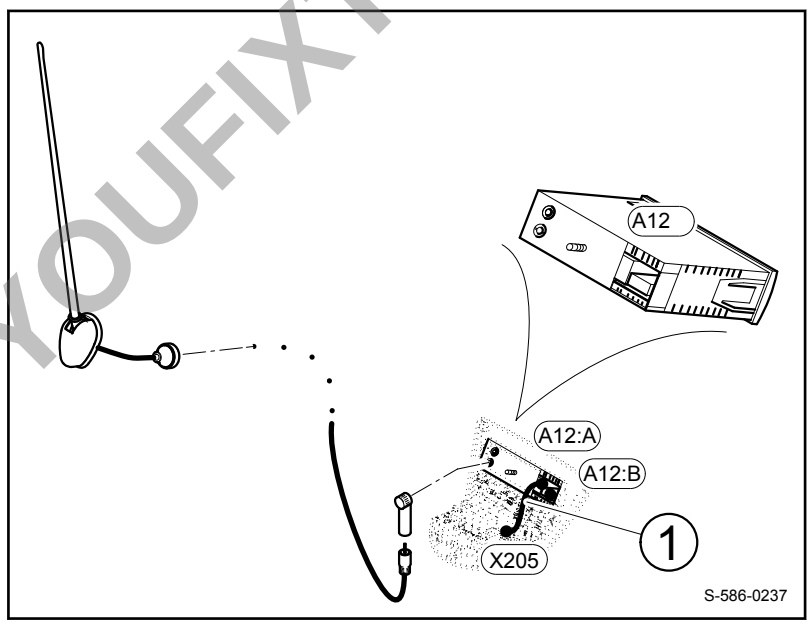


Fig. 81

1 Wiring loom, radio adapter <> control console

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

6.3 Optional equipment

6.3.1 Activating/deactivating the AZ14 temperature gauge

Activating input mode

↳ *Further information on page 274*

Activating service mode

↳ *Further information on page 276*

Activating “temperature gauge” function

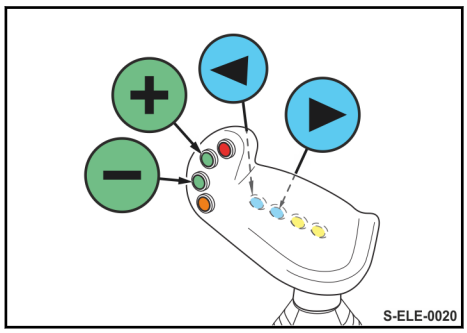


Fig. 138

1.

Button ***[+]*** and ***[-]***	Change the selected value
Button ***[◀] [▶]***	Select adjustable value

Enter code ***[3171]***↳ Fig. 139.

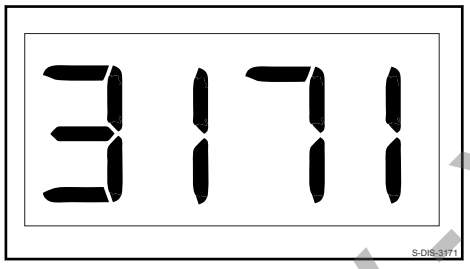


Fig. 139

2. Confirm with button ***[▶]***↳ Fig. 138.

Activate temperature gauge

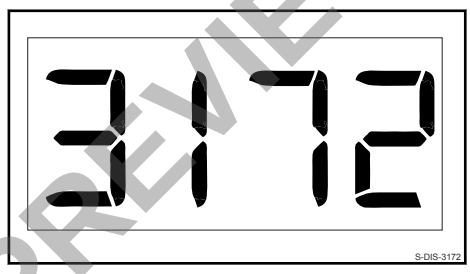


Fig. 140

1. Enter code ***[3172]***↳ Fig. 140.
2. Confirm with button ***[▶]***↳ Fig. 138.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

No.	Fault description	Cause	Remedy
1006127	switch control lever travel - Root cause not known	Root cause not know	Solution not known
1006128	switch control lever travel - Received network data in error	Received network data in error	Resend data
1006129	sensor water trap fuel - Data valid, but above normal operational range - most severe level	Upper level passed	Adjust conditions
1006130	pressure accumulator - Data valid, but above normal operational range - most severe level	Upper level passed	Adjust conditions
1006131	pressure accumulator - Data valid, but below normal operational range - most severe level	Lower level passed	Adjust conditions
1006132	pressure accumulator - Abnormal update rate	System not adjusted	Adjust system
1006133	switch speed range selector - Bad intelligent device or component	Bad intelligent device	Check device
1006134	switch speed range selector - Dual Plausibility error	Dual signal not plausible	Check both tracks
1006135	pump emulsion sprinkler - Current above normal or grounded circuit	Current above normal or shorted to gnd	Check wiring
1006136	ECU work function - Data erratic, intermittent or incorrect	Further instructions	Check SerDia
1006137	Engine EOL Test. Deutz EOL Test not yet done. - Out of calibration	EAT-Components, A66	-
		Deutz EOL Test not yet done.	Perform the Deutz EOL test.
1006138	Engine EOL Test failed 01. Temperature before OxyCat too high - Special instructions	EAT-Components	-
		Temperature before OxyCat too high	Engine running in idle for at least 2 min. Perform the Deutz EOL test again.
1006140	Engine EOL Test failed 03. Engine not running. - Special instructions	EAT-Components	-
		Engine not running.	Start engine. Perform the Deutz EOL test again.
1006141	Engine EOL Test failed 04. Soot load to high, replace DPF. - Special instructions	EAT-Components	-
		Soot load to high, replace DPF.	Replace DPF. Perform the Deutz EOL test again.
1006142	Engine EOL Test failed 05. Check Oxy Cat sensors. Sensors B0124/B0215 swapped. - Special instructions	EAT-Components	-

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Download full manual at youfixthis.com

DTC-List
Diagnosis- and Errorcodes

referrenced ECU-Software
P490_: 220, 310, 501
P491_: 220, 310, 400, 501
P492_: 213
P513_: 214, 300

149 / 105 / IATSCD

Error description CHARGE AIR TEMP.
Charge air temperature sensor: the voltage of sensor measured by ECU is out of the target range or the received value of temperature via CAN is defective

Error codes
DEUTZ-Errorcode: 149
BlinkCode (short-long-short): 1 - 2 - 8
SPN: 105
possible FMI:
3: Voltage to high or short circuit to +Ubatt
4: Voltage to low or short circuit to -Ubatt
2: data stream is defective
12. Errormode not identifiable

Errordetection
Errorlamp shows permanent light. Entry in errormemory.

Possible reason for error
Cable break or short circuit, sensor defective, connection cable demaged, CAN bus wrong cabled, wiring demaged, receiver (sender of the message) work inaccurately, parametering inaccurate

Take actions for error repair
Check cabling, LDF6T-sensor not working, check sensor and if necessary replace it, check connection cable and if necessary repair or replace it, Check CAN Bus cabling (Bus sheduling, polarity, short circuit, power interrupt), test protocol of receiver, c

other error properties
System reaction: Warning, substitute value
Behaviour error lamp: permanent light
Selfhealing: yes
Signal Priority: 4
Measurement @ errortime: default value

150 / 105 / IATSCDSysReac

Error description CHARGE AIR TEMP.
Charge air temperature: die charge air temperature calculated by ECU is above the target range; the ECU activates a system reaction

Error codes
DEUTZ-Errorcode: 150
BlinkCode (short-long-short): 2 - 3 - 3
SPN: 105
possible FMI:
0: data valid, but above normal working area
0: data valid, but above normal working area
12. Errormode not identifiable
12. Errormode not identifiable

Errordetection
Errorlamp shows permanent light
oder
blinking. Entry in errormemory.

Possible reason for error
Above target range with system reaction, air system demaged, sensor defective, connection cable demaged

Take actions for error repair
Check construction of LDF6T , check suction parts, check air system and if necessary repair it, check sensor and if necessary replace it, check connection cable and if necessary repair or replace it

other error properties
System reaction: Advice: IATSCD_stSysReacReq
Behaviour error lamp: permanent light
oder
blinking
Selfhealing: yes
Signal Priority: 4
Measurement @ errortime: actual value

153 / 523350 / InjVlvBnk1A

Error description INJECTOR BANK A
Injector cylinder bank 1: the current drain measured by ECU is above the target range

Error codes
DEUTZ-Errorcode: 153
BlinkCode (short-long-short): 1 - 5 - 1
SPN: 523350
possible FMI:
3: Voltage to high or short circuit to +Ubatt
4: Voltage to low or short circuit to -Ubatt
13: out of calibrated range
12. Errormode not identifiable

Errordetection
Errorlamp shows permanent light. Entry in errormemory.

Possible reason for error
Short circuit (cylinder bank 1), injector defective, connection cable demaged

Take actions for error repair
Check cabling, check injectors and if necessary replace them, check connection cable and if necessary repair or replace it

other error properties
System reaction: Warning, cylinder shut off
Behaviour error lamp: permanent light
Selfhealing: yes
Signal Priority: 4
Measurement @ errortime: actual value

PREVIEW ONLY YOUFIXTHIS.COM

Quit service mode

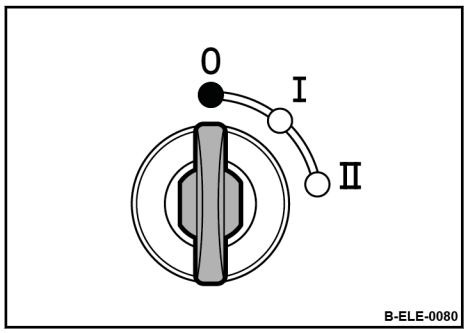


Fig. 206

1. Switch off the ignition or enter code number ***[0000]***.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Shut down the engine.

When shutting down the engine, the starter switch isolates the electronic system from terminal 15. The injectors are closed immediately, the Rail pressure is discharged in an orderly manner and the counter readings are saved in the non-volatile memory. During this time the system must not be disconnected from terminal 30 (+Ubatt). Once the time has expired the main relay switches off and the control unit is no de-energized..

The main relay serves the purpose of releasing the vehicle energy supply for the EMR3 system. The engine control unit EMR3-S requires an external main relay.

When terminal 15 is no longer connected to battery (+) (i.e. after the ignition has been switched off), the main relay is switched off after approx. 10 seconds. The main relay thereby disconnects the control unit from terminal 30 battery (+), whereby it becomes de-energized. On the EMR3-S the switching state of the main relay can be examined directly on Pin72.

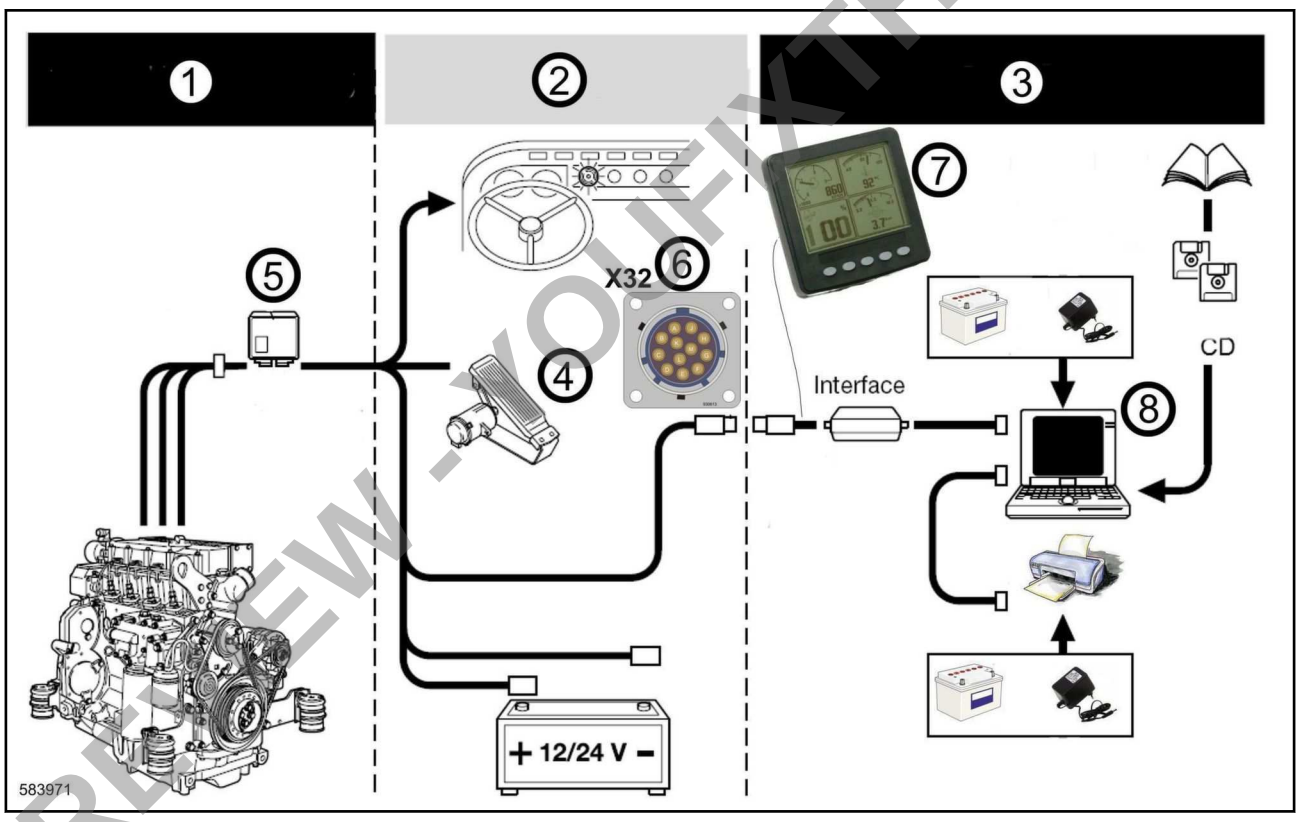


Fig. 233: System overview

1 Engine side
2 Vehicle side
3 Service
4 Sensors and actuators
5 EMR
6 Diagnostics socket, X32 in central electrics
7 CAN-display
8 SerDia2010

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

13. Drain off all water.
14. If using a cleaning agent repeat the flushing process twice with clear water.
15. Reinstall the thermostat.

NOTICE!
Danger of engine damage!
The anti-freeze concentration (additive) must be at least 35 Vol% and maximum 45 Vol%.

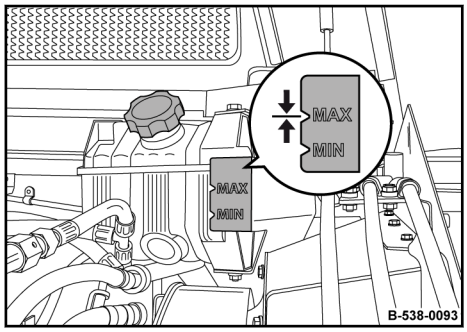


Fig. 299

16. Fill with coolant and close the cap.

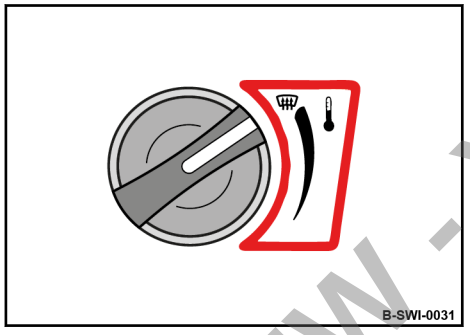


Fig. 300

17. Set maximum cabin temperature.

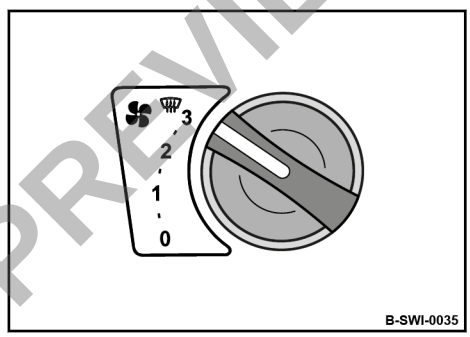


Fig. 301

18. Set maximum fan speed.
19. Start the engine.
20. Run the machine with idle speed until operating temperature has been reached and the thermostat opens.
21. As soon as the thermostat has opened, run the engine for approx. one minute at high speed.
22. Switch off the engine and remove the ignition key.
23. Allow the engine to cool down.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

5 Left travel motor with travel speed range switch (Y134) and travel speed sensor (B109)
6 Manifold block with flow control valve
7 Priority valve
8 Right travel motor with travel speed range switch (Y135) and travel speed sensor (B110)
9 Manifold block with thermostat (oil thermostat)
10 Hydraulic oil tank
11 Radiator

Priority valve

Since the steering pump is also used for cross-flushing and the tyre inflation system, the system is equipped with a priority valve. The priority valve ensures that the steering will always be prioritized in all situations. The priority valve is triggered by the steering valve via the LS line. It limits the oil flow for cross-flushing and the tyre inflation system whenever oil is needed for the steering.

- When operating the steering, the steering valve will generate a load signal “LS”, informing the priority valve that more oil should be directed to the steering.
- If the steering is not used, the oil flow is directed to the brakes for cross-flushing (manifold block with flow control valve) and to the change-over valve of the tyre inflation system (Y448).

Cross-flushing

- If the steering is not used, the oil flows through the manifold block to the brake housings and thus enables cross-flushing of the multi-disc brakes.
- The return flows are united it the manifold block again and directed to the hydraulic oil tank via the return flow filter.

Return flows

All return flows pass through the return flow manifold block with thermostat. This thermostat guides the oil flow directly back to the hydraulic oil tank, until the operating temperature is reached. At an oil temperature of 55 °C the valve starts to switch over and at 70 °C the total amount of oil will flow through the hydraulic oil cooler.

Return line filter

The return filter is equipped with a 12 µ fine filter with bypass valve. This valve opens at a differential pressure (pressure difference between filter inlet and filter outlet) of Δp = 3.5 bar. This differential pressure depends on the filter contamination and the viscosity of the hydraulic oil.

The **differential pressure switch** (B22) switches when a differential pressure of Δp 2.5 bar is reached. The fault information will therefore already be available before the bypass valve opens.

Flushing valves in the drive motors

The flushing valves are used to discharge heat from the hydraulic circuit.

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

Checking the tyre pressure

Protective equipment:
- Working clothes
- Safety shoes
- Protective gloves
- Safety goggles
- Hard hat

Check the tyre pressure only on machines without tyre inflation system.

WARNING!

Danger of being injured by bursting tyres!

– Wear your personal protective equipment (safety shoes, gloves, goggles, hard hat).
– When checking the tyre pressure stand in the extended path of the tyre track.
– Use an air hose with a length of min. 6 meters.
– Never exceed the permitted maximum pressure.

1. Unscrew the valve caps and check the front and rear tyre pressure, correct if necessary.

Ensure equal pressure in all tyres.

Use the tyre pressure appropriate for the application. *Chapter 9.2 „Tyre compaction values“ on page 423*

2. Screw the valve caps back on again.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

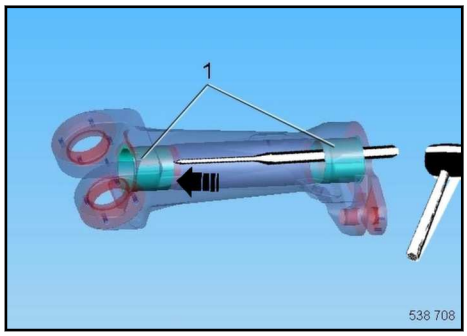


Fig. 455

7. Knock out the bearing bushings (1) ↳ Fig. 455.

Disassembling the body bolster

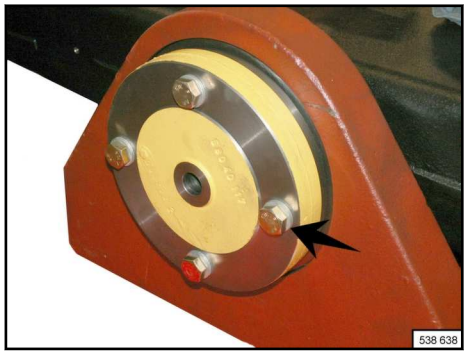


Fig. 456

1. Attach the lifting tackle to the body bolster.
2. Disassemble the rear bearing cover ↳ Fig. 456.
3. Remove the front bearing cover with Belleville springs, shims and backing discs.

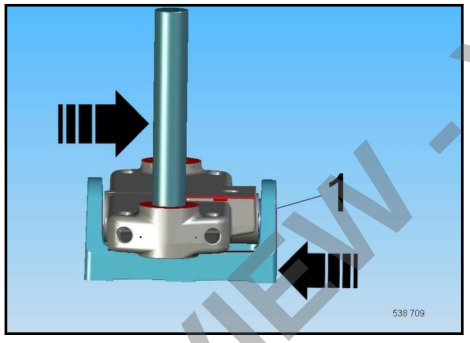


Fig. 457

4. Press the body bolster against the joint receptacle to the stop ↳ Fig. 457.

⇨

The outer race (1) of the rocker bearing is thereby stripped off.

If the outer race is not stripped off completely, it may need to be destroyed.

It may be helpful to weld a flat steel bar to the outer race so that it can be pulled off with a puller.

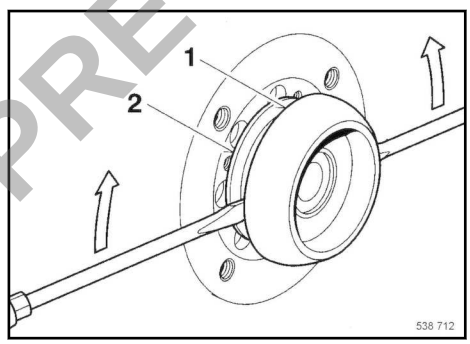


Fig. 458

5. Force inner race (1) ↳ Fig. 458 of the rocker bearing off the bolt.

If the inner race cannot be levered off, it may need to be destroyed.

It may be helpful to weld a flat steel bar to the inner race so that it can be pulled out with a puller.

6. Remove the backing disc (2).

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

As we all know, being able to utilize electric current requires the existence of a closed electric circuit, the electrons leaving the battery must be able to return to the battery. In vehicles numerous existing metal parts can be used for this purpose. The negative pole of the battery is connected with the metal of the frame. The current then flows through an insulated cable to e.g. a lamp should light, and instead of a return line, the socket of the lamp is also, in some way, connected to the frame, through which the current can flow back to the battery. However, should the connection between lamp and frame corrode causing a high electrical resistance at that point, the current will try to find a different way. If no other way can be found, the component will simply not work, even if the meter shows that voltage arrives. Very often the current finds a different way back to the battery, sometimes through other consumers.

Measuring sensors and actuators

Sensor signals are best checked where they are needed, i.e. on the control unit. If the correct signal is received you can be sure that not only the sensor, but also the wiring to the control unit is in good working order.

It is a common procedure to pick up the signals with a break-out-box, the Y-cable of which is fastened between control unit and control unit plug. If no break-out-box is available, the measurement takes place directly on the sensor, or one must try to gain access to the back of the plug.

Trouble shooting procedure:

- First check the corresponding actuator, in case of a faulty signal the output signal must be checked directly on the control unit.
- If the output signal is correct, check the wiring to the actuator.
- In case of an incorrect output signal, check the corresponding input signals after.
- In case of incorrect input signals check the signal on the sensor itself.
- If the sensor signal is correct, check the wiring to the control unit for continuity and against ground (short circuit).
- If the sensor delivers a correct signal, the sensor itself may be the cause of the problem, or the sensor may be affected by other incorrectly working components.
- However, the voltage supply and the ground connection of the control unit as well as the power supply for sensors and actuators must also be checked. Because an incorrect voltage value can distort the input and output signals.
- If the action steps described above do not deliver a result, the periphery is OK and the fault must be in the control unit, but be cautious, most faults are caused by poor contacts in the plug connections.

If the battery is empty

If the battery is empty, the fault is normally quite quickly identified.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Pressure valves (primary)	
Malfunction	**Possible cause**
Fluctuation of pressure / flow volume	■ Intermittent counter pressure ■ Pressure valves set too low ■ Valve seat damaged
Pressure fluid too hot	Setting too high: ■ Increase of gap losses in all components ■ increased leakage ■ Excessive load rhythm caused by machine Setting too low: ■ Power loss ■ Generation of heat ■ Valve cone jams in open position

Pressure accumulator	
Malfunction	**Possible cause**
Abnormal noises	■ Accumulator bladder defective ■ Nitrogen filling enters into hydraulic circuit ■ defective seals ■ Inflow and outflow velocity too high Note: Accumulators in connection with throttle losses can form resonant systems
No or insufficient volumetric flow	■ Nitrogen filling level too low
No or insufficient pressure	■ Nitrogen filling pressure too low or too high ⇨ Stored power is not enough
Fluctuation of pressure / flow volume	■ Resonant system between hydraulic accumulator, pressure and flow valves and pump

Return flow lines	
Malfunction	**Possible cause**
Abnormal noises	■ Line not connected below the pressure fluid level ■ Turbulences towards the suction side ■ missing shut-off ■ mechanical oscillations ■ insufficient fastening
Pressure fluid too hot	■ Cross section too small

PREVIEW - YOUFIXTHIS.COM

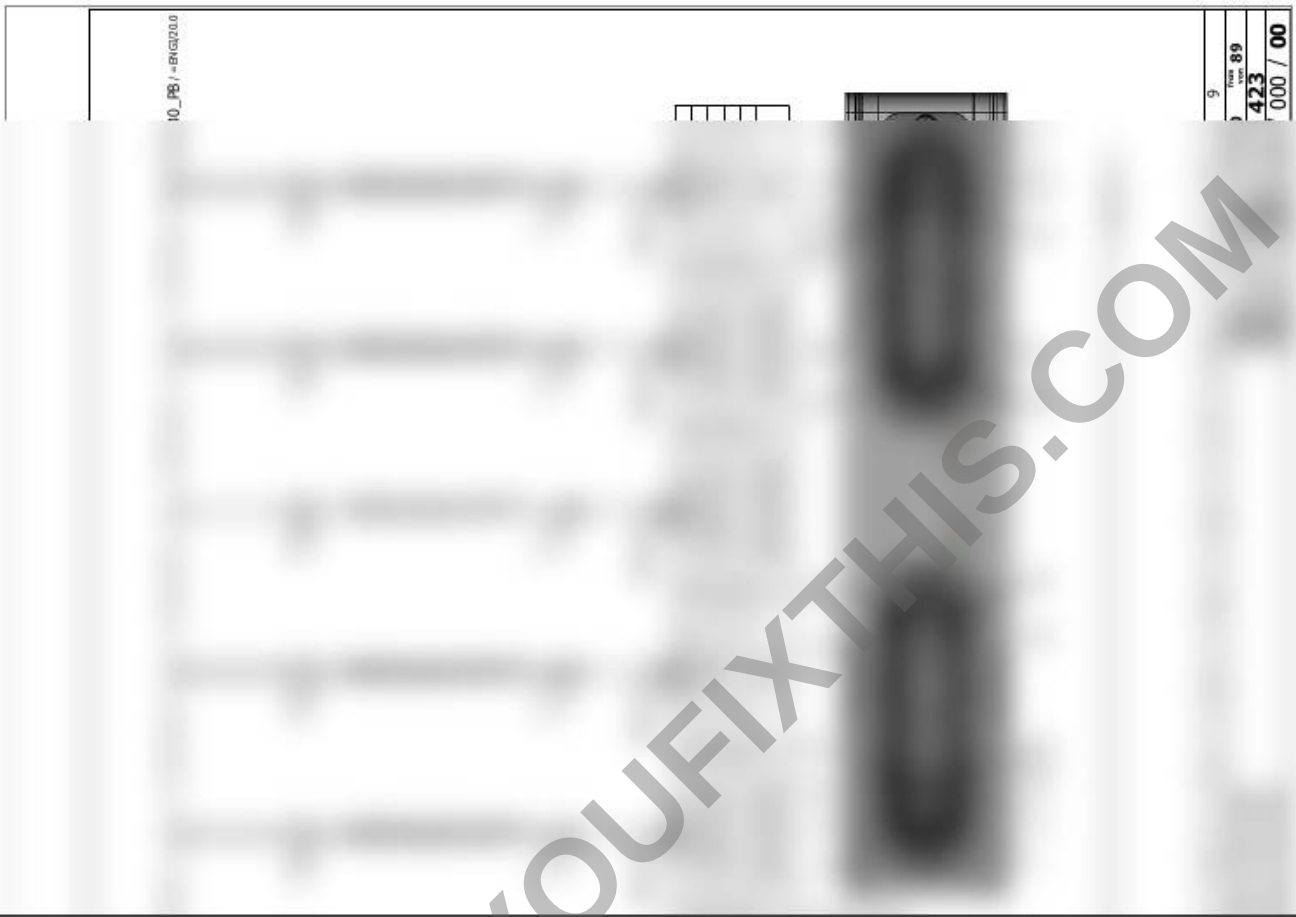
Download full manual at youfixthis.com

F284 . . . 129
F285 . . . 129
F286 . . . 129
F287 . . . 129
F288 . . . 129
F310 . . . 129
F363 . . . 129
G01 . . . 86, 98, 115
G02 . . . 86, 98, 117
H07 . . . 113
H14 . . . 86, 98, 118
H193 . . . 113
K05 . . . 129
K06 . . . 129
K09 . . . 129
K11 . . . 129
K13 . . . 129
K14 . . . 117, 338
K16 . . . 129
K41 . . . 129
K61 . . . 129
K69 . . . 129
K79 . . . 129
K145 . . . 129
K189 . . . 129
K192 . . . 129
K193 . . . 129
K194 . . . 129
K195 . . . 129
K196 . . . 129
K209 . . . 129
KS1 . . . 116
KS2 . . . 116
M01 . . . 86, 94, 98, 114, 117, 124, 440
M03 . . . 86, 94, 98, 124, 440
M04 . . . 86, 98
M05 . . . 86, 98
M06 . . . 86, 98, 121
M07 . . . 86, 98, 121
M25 . . . 86, 98
R03 . . . 86, 98, 114

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Circuit diagrams



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

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW - YOUFIXTHIS.COM

Device tag list
Betriebsmittelliste

Device tag BMK	Page Blatt	Path Pfad	Mounting location Einbauort	Higher-level function Anlage	Function text	Funktionstext	characteristics Techn.-Kenngrößen
F22	32	2	+EBOX		Fuse, working headlights rear	Sicherung Arbeitsscheinwerfer hinten	15A
F23	8	6	+EBOX		Fuse, warning horn	Sicherung Signalhorn	10A
F27	39	4	+CAB		Fuse, windscreen wiper and washer front	Sicherung Wischer und Wascher vorne	15A
F28	39	4	+CAB		Fuse, windscreen wiper and washer rear	Sicherung Wischer und Wascher hinten	15A
F30	9	2	+EBOX		fuse heating operators seat	Sicherung Heizung Fahrersitz	10A
F31	37	6	+EBOX		Fuse, cabin ventilator	Sicherung Kabinenlüfter	25A
F37	31	4	+EBOX		fuse sprinkler pump	Sicherung Berieselung	15A
F39	7	3	+EBOX		fuse cabin main	fuse cabin main	50A
F48	7	1	+REFR		Fuse, glow plug system	Sicherung Glühanlage	80A
F63	9	8	+EBOX		fuse steering	Sicherung Lenkung	10A
F66	32	1	+EBOX		Fuse, headlights front	Sicherung Scheinwerfer vorne	15A
F68	8	5	+EBOX		fuse potential 30	Sicherung Potential 30	10A
F70	33	4	+EBOX		Fuse, indicators	Sicherung Blinker	15A
F91	9	5	+EBOX		Fuse, sensors	Sicherung Sensoren	5A
F93	7	0	+REFR		Fuse, engine controller	Sicherung Motorsteuerung	23A
F95	9	3	+EBOX		- " -	- " -	5A
F103	9	6	+EBOX		fuse potential 15	Sicherung Potential 15	10A
F120	9	4	+EBOX		fuse brake light	Sicherung Bremsleuchte	5A
F143	39	4	+CAB		Fuse, rear screen heating unit	Sicherung Heckscheibenheizung	20A
F148	9	3	+EBOX		fuse controller potential 15	Sicherung Steuerung Potential 15	5A
F150	39	6	+CAB		Fuse, GPS receiver	Sicherung GPS Receiver	5A
F153	9	7	+EBOX		fuse potential 15	Sicherung Potential 15	10A
F157	8	2	+EBOX		fuse solenoid switch starter	Sicherung Magnetschalter Anlasser	30A
F165	9	2	+EBOX		fuse "potetial 15" seat	Sicherung "Potential 15" Sitz	5A
F169	9	9	+EBOX		fuse starting current	fuse starting current	5A
F180	9	7	+EBOX		Fuse, sensors	Sicherung Sensoren	5A
F182	9	6	+EBOX		- " -	- " -	5A
F238	20	3	+EBOX		Fuse, exhaust gas recirculation	Sicherung Abgasrückführung	15A
F243	8	4	+EBOX		Fuse, pot. 30 bomag telematics	Sicherung Pot. 30 Bomag Telematik	5A
F244	9	5	+EBOX		Fuse, sensors	Sicherung Sensoren	5A
F250	20	1	+EBOX		Fuse, SCR control	Sicherung SCR Ansteuerung	30A
F251	20	2	+EBOX		Fuse, NOx sensors	Sicherung NOx Sensoren	10A
F264	39	4	+CAB		Fuse, BCM05	Sicherung BCM05	10A
F266	39	5	+CAB		Fuse, radio / tachograph	Sicherung Radio / Tachograph	10A
F268	8	7	+EBOX		fuse fuel pump	Sicherung Förderpumpe Kraftstoff	30A
F271	39	4	+CAB		Fuse, BCM-Net	Sicherung BCM-Net	10A
F272	39	3	+CAB		Fuse, controller console terminal cabin	Sicherung Controller Bedienkonsole Kabine	5A

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 25 of 710 pages

The full manual includes:

- All 710 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Bomag BW 28 RH Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual