1 Omegameter (E-Vib display)*
2 Instrument cluster, left
3 Emergency stop push button
4 Push button for hazard light system*
5 Instrument cluster, right
6 Speedometer*
7 Ignition switch
8 Rotary switch for chip spreader*
9 Rotary momentary contact switch for chipping quantity control*
10 Rotary momentary contact switch for engine speed
11 Rotary switch for speed range selection
12 Riotary switch for tire sprinkling system (only AC-4)
13 Rotary switch for sprinkling pumps
14 Rotary switch for vibration, drum pre-selection
15 Rotary switch for vibration, manual - zero - automatic
16 Rotary switchfor amplitude pre-selection
17 Rotary switch for direction indicators left/right*

* Optional equipment

18 Rotary switch for lighting (StVZO)*
19 Rotary switch for working head lights*
20 Lever, swivelling of driver's seat
21 Momentary contact push button to raise the edge cutter
22 Momentary contact push button to lower the edge cutter
23 Travel lever, right
24 Push buttin for manual vibration
25 Push button for warning horn
26 Rotary momentary contact switch for edge cutter sprinkling system*
27 Interval switch for pressure sprinkler system
28 Travel lever, left
29 Momentary contact push button for crabwalk, left
30 Momentary contact push button for crabwalk, right
31 Push buttin for manual vibration
32 Lever, lateral sliding of driver's seat
33 Rotation stop for travel lever movement
34 2-pole socket

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4.1 General notes

Please read section 3 Indicators and Control Elements thoroughly before operating the machine if you are not yet fully familiar with the indicators and control elements of the machine.

All indicators and control elements are described in detail in this chapter.

4.2 Tests before taking into operation

The following inspections must be carried out before each working day or before a longer working period.

⚠ Danger

Danger of accident!

Please observe strictly the safety regulations in chapter 2 of this instruction manual!

- Park the machine on ground as level as possible.

Check:

- fuel tank and fuel lines for leaks
- screw joints for tight fit
- function of steering
- machine for cleanliness, damage
- Presence of the appropriate operating and maintenance instructions
- proper maintenance of the machine
- right and left hand service doors closed and locked

i Note

For a description of the following tasks refer to the chapter "maintenance every 10 operating hours".

- Engine oil level

i Note

In hydraulic systems filled with Panolin HLP Synth. 46 always use the same oil to top up. With other ester based oils consult the lubrication oil service of the respective oil manufacturer.

- Check the hydraulic oil level, top up if necessary.
- Check the coolant level, top up if necessary.

⚠ Danger

Fire hazard!

Do not refuel in closed rooms.

- Check the fuel level, top up if necessary.

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5.5 Maintenance chart

With all maintenance intervals perform also the work for shorter preceding service intervals.

No.	Designation	Note
Every 10 operating hours		
5.6	Check the engine oil level	Observe the dipstick marks
5.7	Check the fuel level	
5.8	Check the hydraulic oil level	Inspection glass
5.9	Check the coolant level	Inspection glass
5.10	Check/empty the fuel pre-cleaner (water separator)	Inspection glass
5.11	Check the water level	Summer: Water, winter: Anti-freeze agent
Every 250 operating hours		
5.12	Check, clean radiator, fuel cooler, hydraulic oil cooler and intercooler	
5.13	Check the oil level in vibrator shaft tube	
Every 500 operating hours		
5.14	Change the engine oil (at least 1x per year)*	Dipstick mark
5.15	Change the engine oil filter cartridge	
5.16	Check the coolant concentration	
5.17	Service the air conditioning	
5.18	Check the battery condition, grease the poles	
Every 1000 operating hours		
5.19	Clean the fuel pre-cleaner, replace, bleed the filter if necessary	
5.20	Change the fuel precleaner, bleed the fuel system	
5.21	Change the oil in the drum drive gear	
5.22	Check, tension, lubricate the steering chain	
5.23	Check the engine mounts	
5.24	Check the V-belt, tighten, if necessary replace the V-belt	
5.25	Change the oil in the vibrator shaft tube	
Every 1500 operating hours		
5.26	Check, adjust the valve clearance	on cold engine
Every 2000 operating hours		
5.27	Change the hydraulic oil**	at least every 2 years
5.28	Replace the hydraulic oil filter element	at least every 2 years
5.29	Grease the articulated joint	High pressure grease
5.30	Change the coolant	at least every 2 years

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6.2 Engine

Faults	Possible cause	Remedy
The engine does not start	Starter defective or pinion not engaging	Have examined by a specialist
	Fuel tank empty	Fill and bleed the tank
	Temperature below starting limit	Use winter fuel and engine oil acc. to the ambient temperature.
	Fuel filter clogged, in winter due to paraffin separation.	Change the filter. use winter fuel
	Fuel lines leaking	Check all line connections for leakages and tighten the fittings.
	Battery discharged or not connected	Tighten the pole clamps, check the cable connections
	Injection valves or injection pump defective	Have examined by a specialist
The engine starts poorly and works irregularly with poor power	Battery power too low, battery clamps loose or oxidized, causing the starter to turn too slowly	Have the battery checked, clean the terminal clamps, tighten them and cover them with acid free grease
	Especially during winter: the use of too viscous engine oil	Use engine oil suitable for the ambient temperature
	Fuel supply restricted, in winter fuel system clogged due to paraffin separation	Change the fuel filter. Check the line connections for leaks and tighten the fittings. Use winter fuel in the cold season.
	Incorrect valve clearance	Adjust the valve clearance
	Injection valve defective	Have examined by a specialist
	Injection lines leaking	Check the lines for leakages
	Turbo charger defective	Have examined by a specialist
	Dry air filter dirty	clean, replace if necessary
	Excessive play in the throttle cable	Adjust the throttle cable, change it if necessary

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General notes

This BOMAG machine is built in accordance with the latest technical standard and the valid technical rules and regulations. There is, however, a risk of danger for persons and property if:

- the machine is used for purposes other than those it is intended for
- the machine is operated by untrained personnel
- the machine is modified or converted in an unprofessional way
- the applicable safety regulations are not observed.

Each person involved in operation, maintenance and repair of the machine must therefore read and apply these safety regulations. This should be confirmed by obtaining the signatures of the customer, if necessary.

Furthermore the following regulations and instructions are obviously also valid:

- applicable accident prevention instructions
- generally acknowledged safety and road traffic regulations
- country specific safety regulations. It is the duty of the operator to know and observe these regulations. This applies also for local regulations and the regulations for various types of manual work. If the recommendations in this manual differ from the regulations valid in your country, you must strictly observe the regulations in your country.

Intended use

This machine must only be used for:

- Compaction of bituminous material, e.g. road surface layers.
- medium to heavy compaction work in earth construction (road sub-bases)
- You should only operate the machine with fully functional safety equipment.
- Have the machine inspected by an expert once every year.

Unintended use

Dangers may, however, arise from the machine if it is used by untrained personnel in an unprofessional way or if it is used for purposes other than those mentioned in these instructions.

Do not work with vibration on hard concrete, on a cured concrete layer or heavily frozen ground.

Starting and operation of the machine in an explosive environment is prohibited.

Who is allowed to work with the machine?

The machine must only be operated by trained and authorized persons which are at least 18 years of age. The responsibilities for the operation of the machine must be clearly specified and complied with.

Persons under the influence of alcohol, medication or drugs must not operate, service or repair the machine.

Maintenance and repair tasks require specific knowledge and must therefore only be carried out by trained and qualified personnel.

Conversions and alterations to the machine

Unauthorized conversions to the machine are prohibited for safety reasons.

Original parts and accessories have been specially designed for this machine. We wish to make expressly clear that we have not tested or authorized any original parts or special equipment not supplied by us. The installation and/or use of such products can impair the active and/or passive driving safety. The manufacturer expressly excludes any liability for damage resulting from the use of non-original parts or accessories.

Safety notes in the operating and maintenance instructions:

⚠ Danger

Sections marked like this point out possible dangers for persons.

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Please fill in

. . . . . .

Machine type (Fig. 1)

. . . . . .

Serial-number (Fig. 1 and 2)

. . . . . .

Engine type (Fig. 3)

. . . . . .

Engine number (Fig. 3)

i Note

Supplement the above data together with the commissioning protocol.

During commissioning our organisation will instruct you in the operation and maintenance of the machine.

Please observe strictly the safety regulations and all notes on risks and dangers!

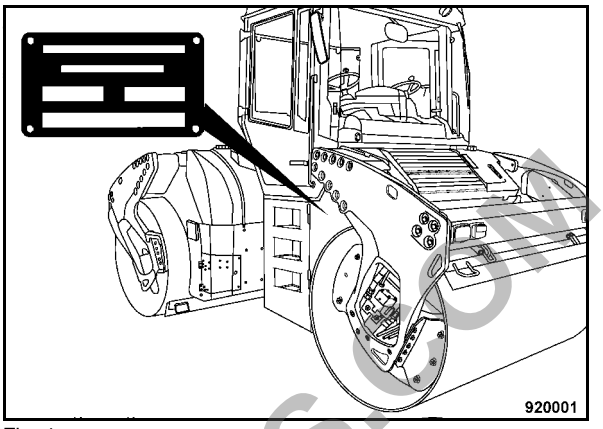


Fig. 1

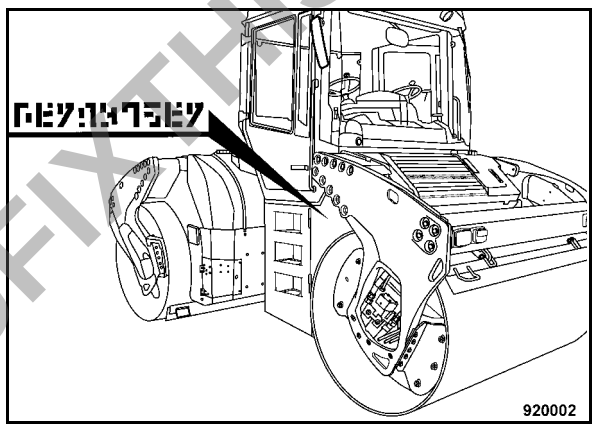


Fig. 2

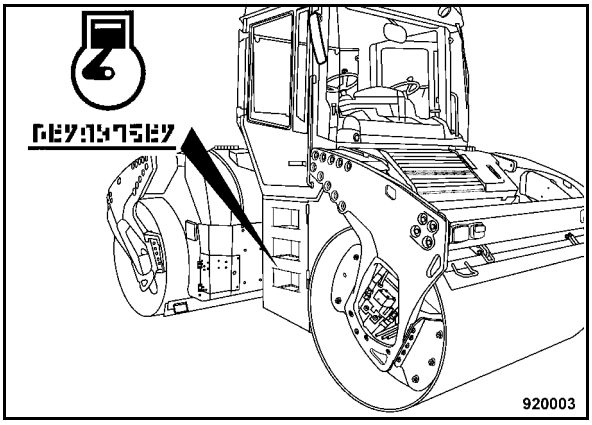


Fig. 3

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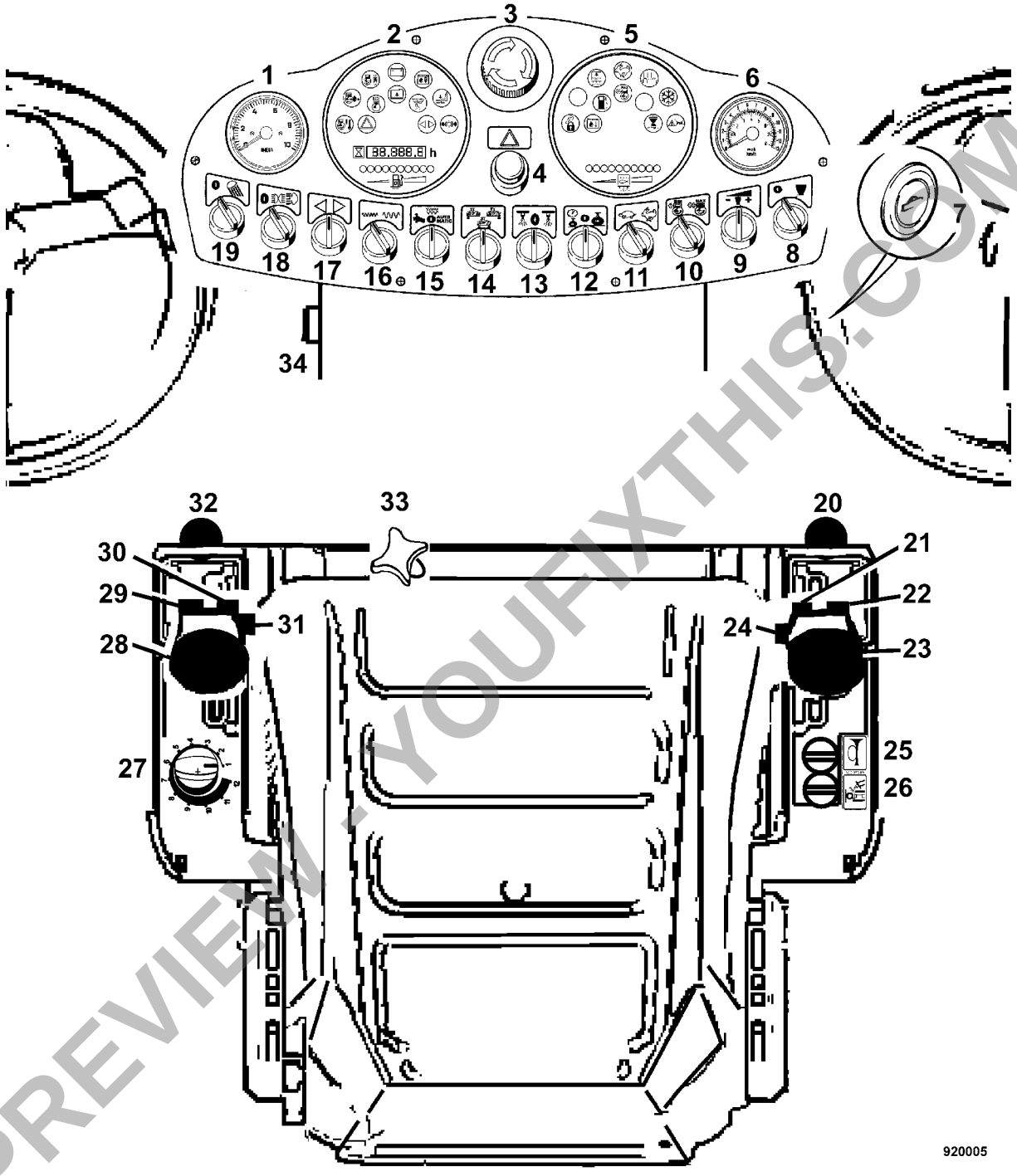


Fig. 6

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Releasing the parking brake in case of a battery failure

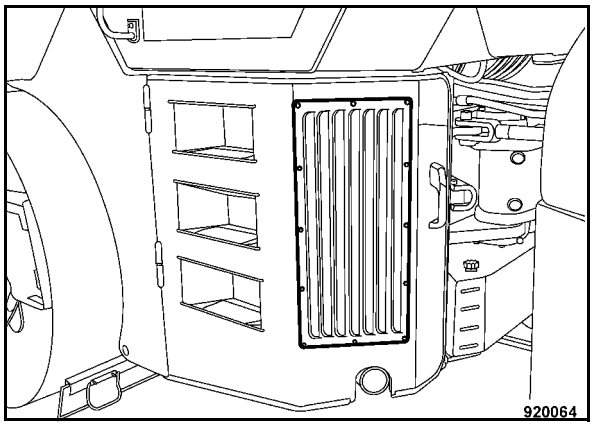


Fig. 104

- Open the left hand maintenance door (Fig. 104).

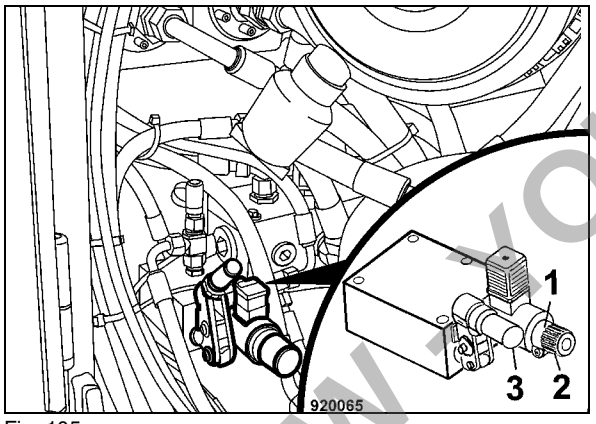


Fig. 105

- Loosen clamp 1 (Fig. 105).
- Press the emergency control button (2) in and turn it clockwise against the end stop.

⚠ Danger

Danger of accident!

If the emergency control button remains pressed in, the automatic parking brake is out of function.

Once the function of the machine has been re-established unlock the emergency control button and assemble the clamp.

i Note

The pump lever extension is stored in the tool box in the cabin.

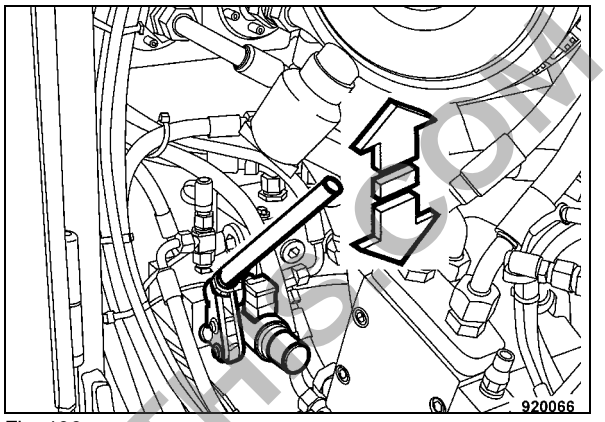


Fig. 106

- Release the brake by operating the hand pump (Fig. 106).

After towing

⚠ Caution

Before detaching the tow bar block the machine with chocks to prevent unintended rolling.

- Unlock the emergency control button and lock it with the clamp.

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5.13 Checking the oil level in vibrator shaft tube

⚠ Caution

Check the oil level in both drums, rear right and front left.

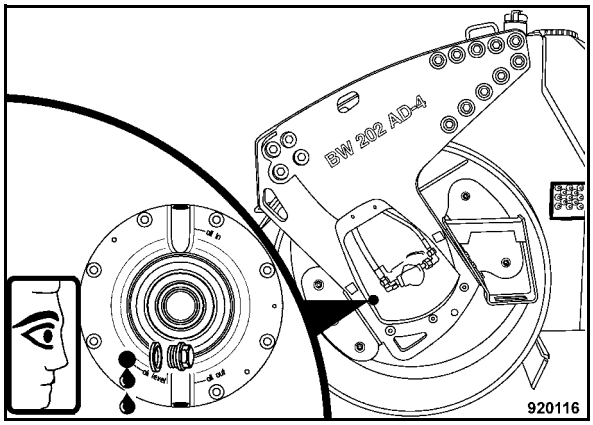


Fig. 129

- Move the machine so that the level inspection plug is exactly behind bore (Fig. 129).
- Clean and unscrew oil level inspection plug (1).
- The oil level must reach the bottom edge of the bore, top up oil if necessary.

For quality of oil refer to the table of fuels, lubricants and filling capacities.

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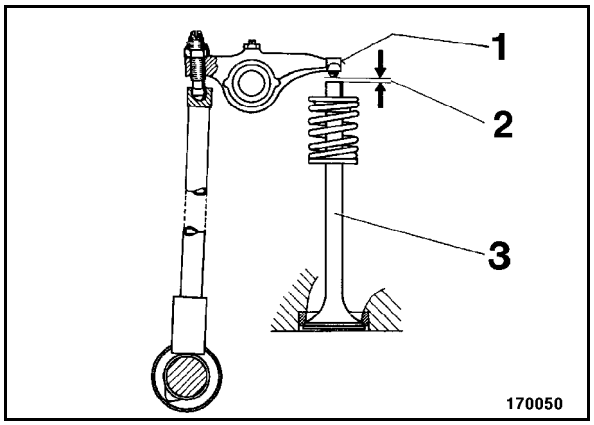


Fig. 174

- Check valve clearance 2 (Fig. 174) between rocker arm (1) and valve (3) with a feeler gauge.

Intake valve = 0,3 mm

Exhaust valve = 0,5 mm

The feeler gauge must fit with little resistance.

- If the gap is too narrow or too wide for the feeler gauge, the valve must be adjusted.

Adjusting the valve clearance

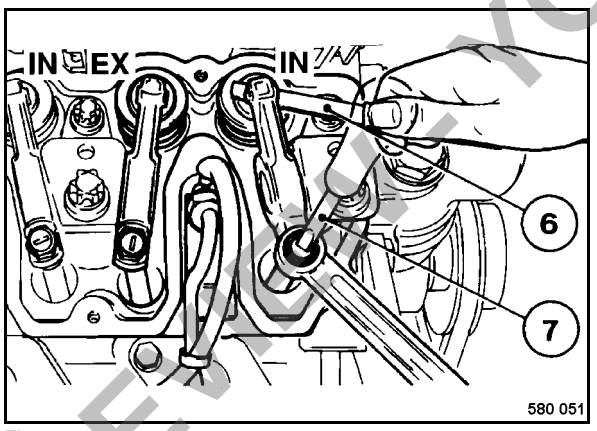


Fig. 175

- Slightly slacken the counter nut. Adjust setscrew 7 (Fig. 175) with a screwdriver, until the feeler gauge (6) can be inserted and pulled out with little resistance after retightening the counter nut.
- Perform tests and adjustments on all other adjustable valves.
- Check the gasket of the valve cover, replace it if necessary.
- Reassemble the cylinder head cover.
- Swivel the ventilation valve back to correct position and fasten it.
- Fasten the air filter again and ensure correct fit of combustion air hoses and clamps.

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