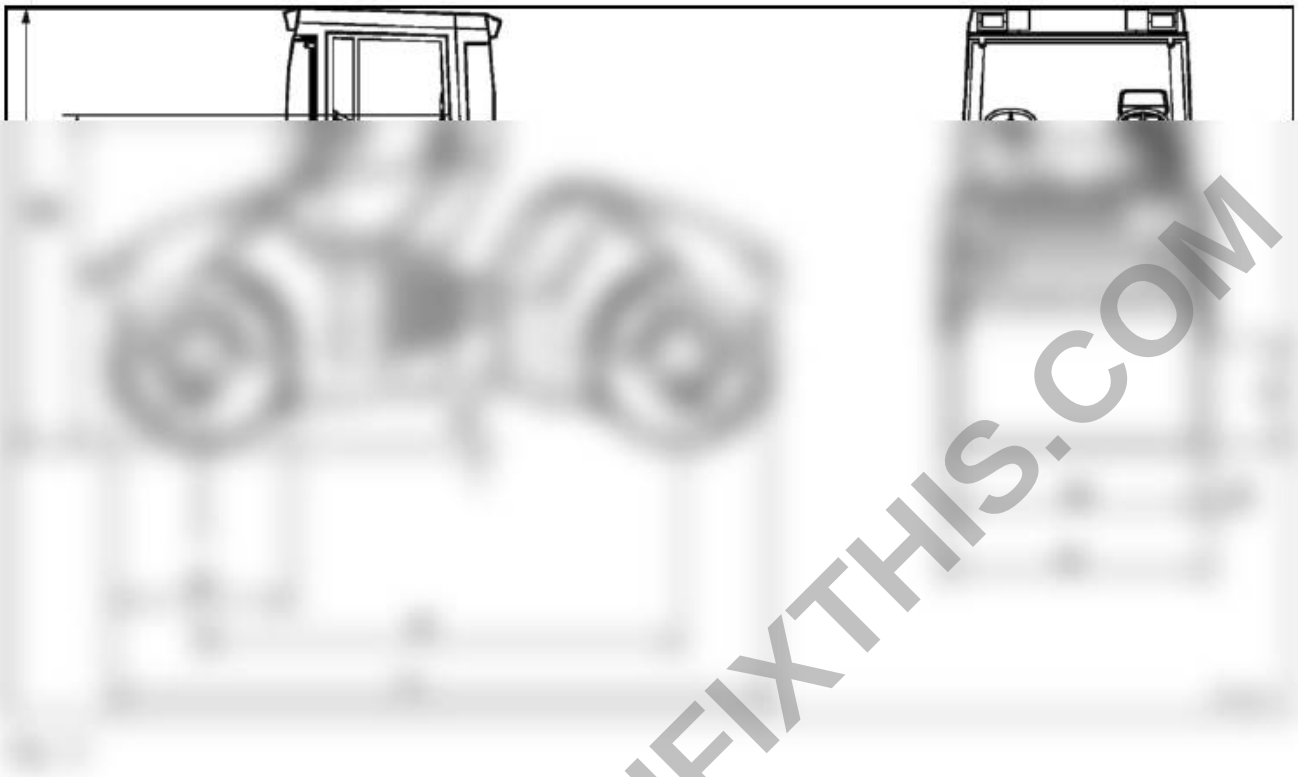
Technical data



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1 Emergency stop push button
2 Instrument cluster
3 Rotary switch for hazard light system[1]
4 Start switch
5 Rotary momentary contact switch for engine speed
6 Rotary switch for travel ranges
7 Rotary switch for sprinkling pumps
8 Rotary switch for vibration, drum pre-selection
9 Rotary switch for vibration, manual or automatic
10 Rotary switch for vibration, amplitude selection
11 Rotary switch direction indicators[1]
12 Rotary switch for light system[1]
13 Rotary switch for rear working lights[1]
14 Lever, sideways sliding of driver's seat
15 Push button for edge cutter[1] up
16 Push button for edge cutter[1] down
17 Travel lever, right
18 Momentary contact push button for manual vibration, right
19 Push button for warning horn
20 Push button for edge cutter sprinkling system[1]
21 Interval switch for pressure sprinkling system
22 Travel lever, left
23 Momentary contact push button for crabwalk, left
24 Momentary contact push button for crabwalk, right
25 Momentary contact push button for manual vibration, left
26 Lever, swivelling of driver's seat
27 12 V-socket

1 - Optional equipment

4.1 General notes

If you are not yet familiar with the control and display elements on this machine you should read this section thoroughly before starting any operation on the machine. Here all functions are described in detail.

The section "Operation" contains only brief descriptions of the individual control steps.

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5.1 General

If you are not yet acquainted with the controls and indicating elements on this machine you should thoroughly read chapter "Indicators and control elements" before starting work.

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

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6.1 General notes on maintenance

Always comply with the appropriate safety regulations when performing maintenance work.

Thorough maintenance of the machine guarantees far longer safe functioning of the machine and prolongs the lifetime of important components. The effort needed for this work is only little compared with the problems that may arise when not observing this rule.

The terms right/left correspond with travel direction forward.

Do not touch hot engine parts.

Always clean machine and engine thoroughly before starting maintenance work.

For maintenance work stand the machine on level ground.

Always remove the main battery switch for all maintenance work.

Perform maintenance work only with the engine shut down.

Relieve hydraulic pressures before working on hydraulic lines.

Before working on electric parts of the machine disconnect the battery and cover it with insulation material.

When working in the area of the articulated joint attach the articulation lock (transport lock).



ENVIRONMENT!

During maintenance work catch all oils and fuels and do not let them seep into the ground or into the sewage system. Dispose of oils and fuels environmentally.

Keep used filters in a separate waste container and dispose of environmentally.

Catch biodegradable oils separately.

Notes on the fuel system

The lifetime of the diesel engine depends to a great extent on the cleanliness of the fuel.

Keep fuel free of contaminants and water, since this will damage the injection elements of the engine.

Drums with inside zinc lining are not suitable to store fuel.

When choosing the storage place for fuel make sure that spilled fuel will not harm the environment.

Do not let the hose stir up the slurry at the bottom of the drum.

The fuel drum must rest for a longer period of time before drawing off fuel.

Fuel residues in the drum are not suitable for the engine.

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7.2 Engine

Fault description	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
Excessive exhaust smoke	Engine oil level too high	Drain the oil to the upper dipstick mark
	Dry air filter dirty	clean, replace if necessary
	Exhaust gas turbo-charger defective	Have examined by a specialist
	Poor compression due to burned or broken compression rings or incorrect valve clearance	Have compression rings and pistons examined by a specialist, adjust the valve clearance
	Incorrect valve clearance	Adjust the valve clearance

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General

This BOMAG machine has been built in compliance with the latest technical standard and complies with the applicable regulations and technical rules. However, dangers for persons and property may arise from this machine, if:

- it is used for purposes other than the ones it is intended for,
- it is operated by untrained personnel,
- it is changed or converted in an unprofessional way,
- the safety instructions are not observed.

Each person involved in the operation, maintenance and repair of the machine must therefore read and comply with these safety regulations. If necessary, this must be confirmed by obtaining the signature of the customer.

Furthermore, the following obviously also applies:

- applicable accident prevention instructions,
- generally accepted safety and road traffic regulations,
- country specific safety regulations. It is the duty of the operator to be acquainted with these instructions and to apply these accordingly. This applies also for local regulations concerning different types of handling work. Should the recommendations in these instructions be different from the regulations valid in your country, you must comply with the safety regulations valid 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 or road sub-bases

Unintended use

Dangers may arise from the machine when it is used for purposes other than the one it is intended for.

Any danger caused by intended use is the sole responsibility of the customer or driver/operator, the manufacturer cannot be made liable.

Examples for unintended use are:

- work with vibration on hard concrete, cured bitumen layers or extremely frozen ground
- cleaning the drums while driving or changing nozzles during travel.
- driving on subsoils with too low load bearing capacity
- driving on slippery subsoils (e.g. ice and snow)
- driving on surfaces of insufficient size (danger of turning over)
- unauthorized use of public roads
- Using the machine for towing

Transporting persons, except the machine driver, is prohibited.

Starting and operation of the machine in explosive environments and in underground mining is prohibited.

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5.6 Stopping the machine, operating the parking brake

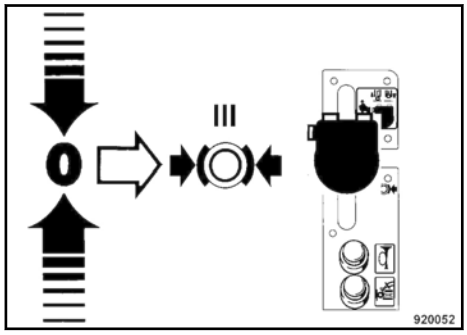


Fig. 65

Return the travel lever ↳ Fig. 65 slowly to "0"-position and engage it towards the outside in notched position "III", parking brake position.

The machine is automatically braked by the hydrostatic drive and the parking brake is applied.

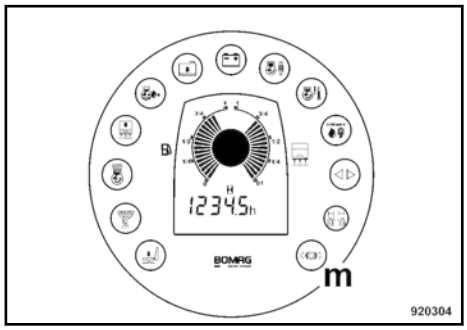


Fig. 66

The parking brake warning light (m) ↳ Fig. 66 in the instrument cluster lights up.

The parking brake also closes automatically when shutting the engine down.

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NOTICE!

A proportion of more than 50% of cooling system protection agent causes a drop in cooling power.

The use of corrosion protection oils as cooling system protection agents is not permitted.

When working at temperature below -41 °C(-42 °F) you should consult our local service representative.

ENVIRONMENT!

Coolant must be disposed of environmentally.

Mineral oil based hydraulic oil

The hydraulic system is operated with hydraulic oil HV 46 (ISO) with a kinematic viscosity of 46 mm^2/s at 40 °C and 8 mm^2/s at 100 °C. For topping up or for oil changes use only high-quality hydraulic oil, type HVLP according to DIN 51524, part 3, or hydraulic oils type HV according to ISO 6743/3. The viscosity index (VI) should be at least 150 (observe information of manufacturer).

Bio-degradable hydraulic oil

The hydraulic system can also be operated with a synthetic ester based biodegradable hydraulic oil.

The biologically quickly degradable hydraulic oil Panolin HLP Synth.46 meets all demands of a mineral oil based hydraulic oil according to DIN 51524.

In hydraulic systems filled with Panolin HLP Synth.46 always use the same oil to top up.

When changing from mineral oil based hydraulic oil to an ester based biologically degradable oil, you should consult the lubrication oil service of the oil manufacturer for details.

NOTICE!

Check the filter more frequently after this change.

Perform regular oil analyses for content of water and mineral oil.

Replace the hydraulic oil filter element every 500 operating hours.

Gear oil

Quality

For the gearboxes use only multi-purpose gear oils of API-GL5-class, SAE 80W- 90.

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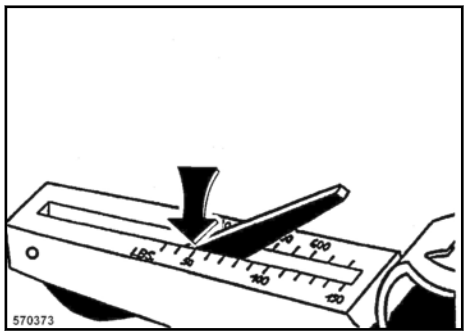


Fig. 153

Read the V-belt tension where the upper edge of the indicating arm intersects with the measuring scale ↳ Fig. 153.

First installation	approx. 450±50 N
Retighten after 15 minutes	approx. 300±50 N

Tightening the generator V-belt

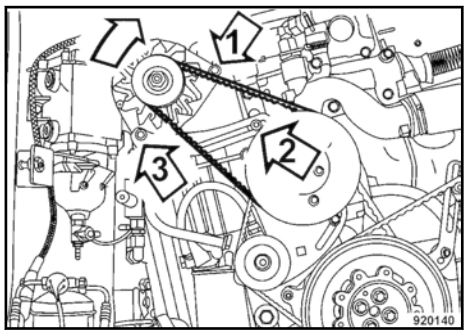


Fig. 154

Slacken the fastening screws 1,2 and 3 ↳ Fig. 154 slightly.

Press the generator towards the outside until the correct tension is achieved. Check with the tester.

Retighten all fastening screws.

Replacing the generator V-belt

Slightly slacken fastening screws 1,2 and 3.

Press the generator towards the engine.

Take the old V-belt off the V-belt pulley.

Fit the new V-belt to the V-belt pulleys.

Tension the V-belt as previously described.

Checking the V-belt for coolant pump and fuel pump

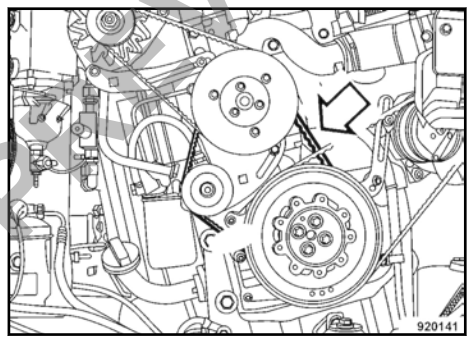


Fig. 155

Inspect the entire circumference of the pump V-belt ↳ Fig. 155 visually for damage and cracks. Replace damaged or cracked V-belts.

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