1 Unlocking of engine hood
2 Central lifting device
3 Receiver for radio remote control/infrared evaluator
4 Display module
5 Fuse box
6 Toggle switch for cable remote control/radio remote control/infrared remote control
7 Main battery switch
8 Battery charge control light
9 Engine oil pressure warning light
10 Control unit
11 Dummy socket, spiral cable
12 Locking clamp for service flap
13 Travel lever for left hand drums
14 Toggle switch, vibration automatic / manual
15 Toggle switch, travel ranges
16 Toggle switch, engine speed
17 Travel lever for right hand drums
18 Toggle switch for vibration forward/reverse
19 Emergency stop switch
20 Control light data transfer/power pack radio remote control/infrared remote control
21 Start button
22 Ignition switch
23 Horn button

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4.3 Opening / closing the service hood

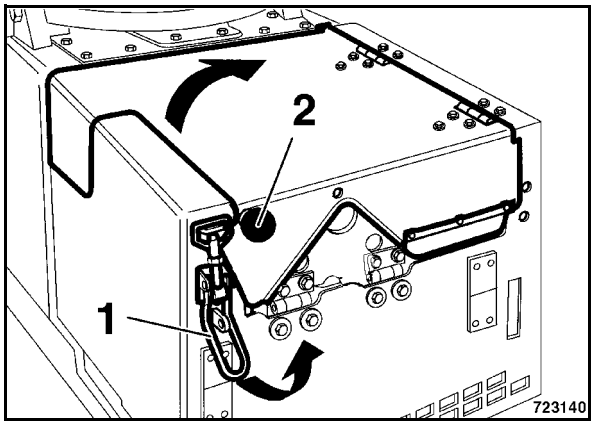


Fig. 24

- Open quick lock 1 (Fig. 24).
- Fold the service hood up to the right.

⚠ Danger

Danger of squashing!

For closing hold the flap only by the knob (2).

4.4 Starting the engine

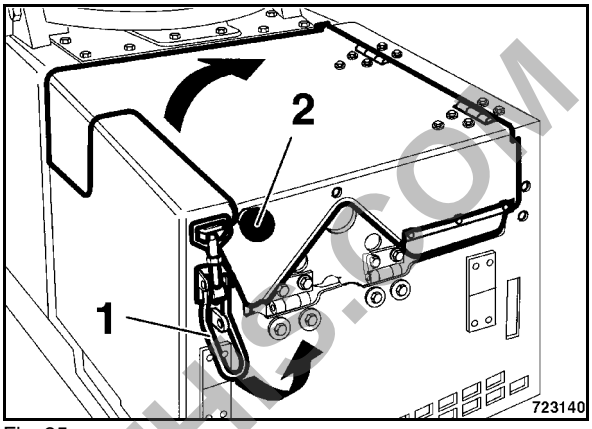


Fig. 25

- Loosen clamp lock 1 (Fig. 25) and open the hood by the knob (2).

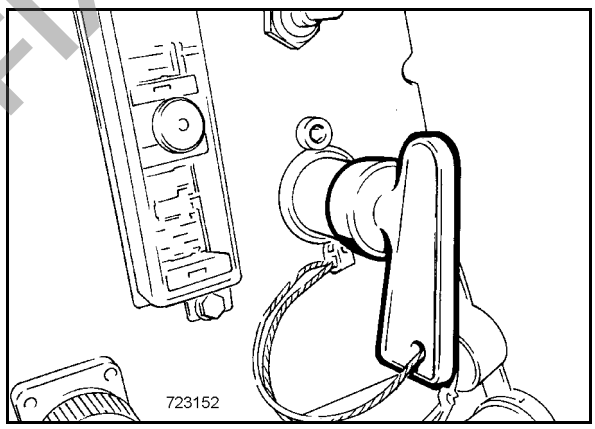


Fig. 26

- Switch on the main battery switch (Fig. 26).

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5.1 General notes on maintenance

Pay careful attention to all applicable safety instructions when servicing the machine.

Thorough maintenance of the machine ensures maximum reliability and prolongs the lifetime of important components. The effort required for these activities is small when compared with the problems which may arise if these instructions are not observed.

- Clean machine and engine thoroughly before starting maintenance work.
- Park the machine on level ground for service work.
- Maintenance work must generally be carried out with the engine shut down.
- Depressurize hydraulic lines before working on them.
- Disconnect the battery and cover it with insulation material before starting to work on electrical components.

The terms left/right are always related to travel direction forward.

- Collect oils and fuel environmentally and do not let them seep into the ground or into the sewage system. Dispose of oils and fuel environmentally.
- Always catch and dispose of biodegradable oils separately.

Frequent causes of failures

- Operating errors
- Incorrect, inadequate maintenance

If you cannot identify the cause of a fault by following the trouble shooting chart or cannot eliminate a fault yourself, you should contact one of our service stations at our branch offices or dealers.

Notes on the fuel system

The lifetime of the diesel engine is decisively dependent on the cleanliness of the fuel.

- Keep the engine free of dirt and water as this could damage the injection elements of the engine.

Notes on the engine performance

Combustion air and fuel injection rates of the diesel engine have been carefully adjusted and determine the engine's performance and temperature level as well as the quality of the exhaust gas.

If your machine has to operate permanently in "thin air" (at high altitudes) and with full power, you should consult BOMAG's after sales service or the service department of the engine manufacturer.

Notes on the hydraulic system

Cleanliness is of utmost importance when servicing the hydraulic system. Make sure, that no dirt or other contaminating substances enter into the system. Small particles can flute valves, cause pumps to seize and block restrictors and pilot bores, thereby causing costly repairs.

- If, during the daily oil level check the oil level is found to have dropped, check all lines, hoses and components for leakages.
- Seal external leakages immediately. If necessary inform the after sales service of BOMAG.
- Wherever possible use the filling and filtering unit (BOMAG - part-no.: 007 610 01) to fill the hydraulic system.

This unit is fitted with a fine filter to clean the hydraulic oil in order to prolong the service life of the filter and the lifetime of important components.

- Clean fittings, filler caps and their immediate surrounding area before removing them, so that no dirt can fall in.
- Do not leave the tank opening unnecessarily open, cover it so that no dirt can fall in.

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6.1 General notes

The following work must only be carried out by qualified and trained personnel or by the BOMAG sales service.

Please observe strictly the safety regulations in chapter 2 of these operating and maintenance instructions.

Malfunctions are frequently caused by incorrect operation of the machine or insufficient maintenance. Whenever a fault occurs you should therefore thoroughly read these instruction on correct operation and maintenance. If you cannot locate the cause of a fault or rectify it yourself by following the trouble shooting chart, you should contact the service departments at our branch offices or dealers.

On the following pages you will find a selection of fault remedies. It goes without saying that not all possible reasons for faults could be listed.

⚠ Danger

Danger of injury!

Do not touch rotating parts of the engine.

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General

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:

- Earth work in trench and sewer construction.
- You should only operate the machine with fully functional safety equipment.
- Have the machine inspected by an expert once every year.
- The place of the operator is behind the machine.

When operating the machine from the opposite side, actuation of travel controls will cause machine movements, which are not in compliance with the movement of the control elements.

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 No. (Fig. 1 and 2)

. . . . . .

Engine type (Fig. 3)

. . . . . .

Engine No. (Fig. 3)

i Note

Fill in the above listed data when receiving the machine.

Upon receipt of the machine our organization will instruct you about correct operation and maintenance.

Please observe strictly all safety regulations and notes on potential dangers!

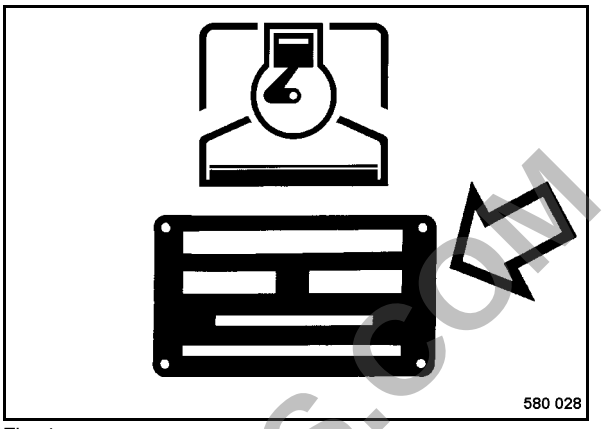


Fig. 1

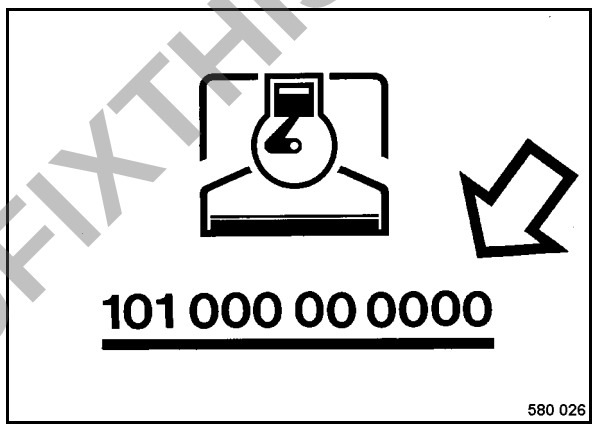


Fig. 2

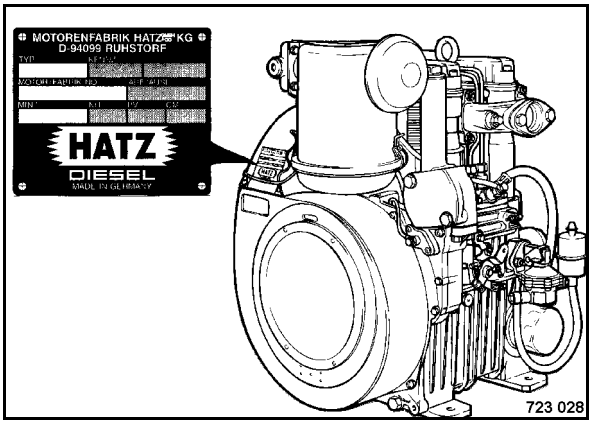


Fig. 3

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3 Indicators and Controls

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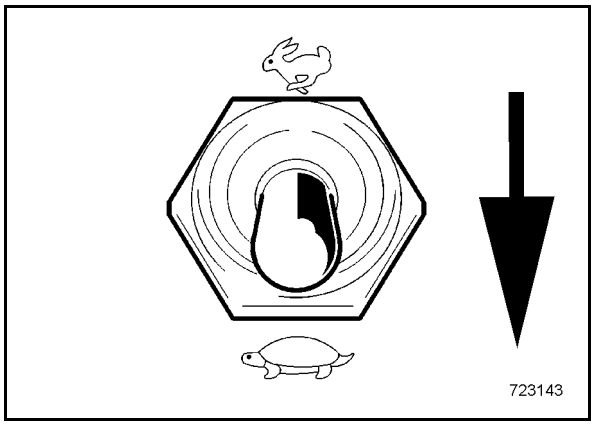


Fig. 44

- Set the toggle switch (Fig. 44) to the desired travel stage.

i Note

If the console of the remote control is folded down or the machine is operated with the attached cable remote control, the machine will only drive in low travel speed range (turtle) for safety reasons.

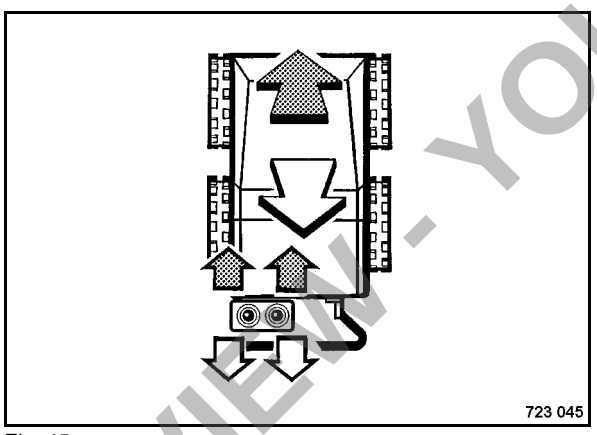


Fig. 45

Actuate both travel levers (Fig. 45) together. The machines drives with a speed which corresponds with the displacement of the travel control levers.

Standstill	=	both travel levers in middle position
Forward travel	=	shift both travel levers forward
Backward travel	=	pull both travel levers back

Stopping the machine

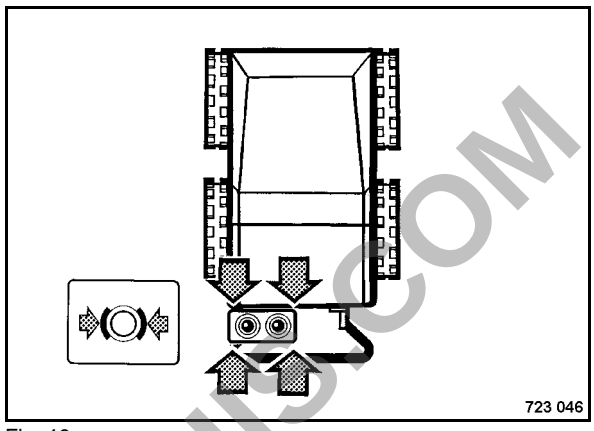


Fig. 46

- Shift both travel lever (Fig. 46) to position "0". The machine will brake.

Steering the machine (forward travel)

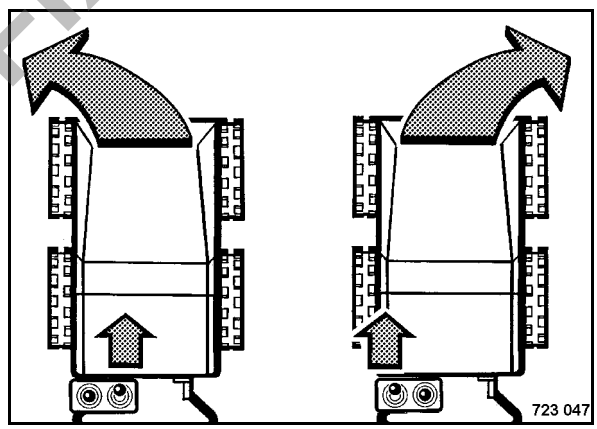


Fig. 47

- Actuate the travel levers (Fig. 47) accordingly.

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Switching on the transmitter (machine)

⚠ Danger

Life hazard

In order to avoid unauthorized operation of the machine do not leave the activated transmitter unattended.

Operate the transmitter only if the machine is in your field of vision.

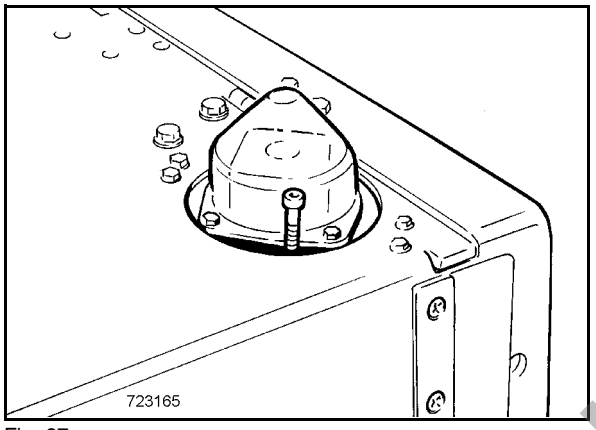


Fig. 97

- Clean the cover of the pre-amplifier (Fig. 97).

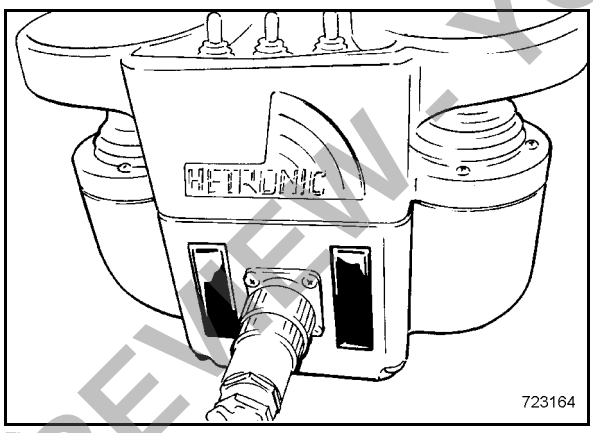


Fig. 98

- Clean the transmission window (Fig. 98) of the transmitter.
- Strap the transmitter to your body, adjust the belts accordingly.

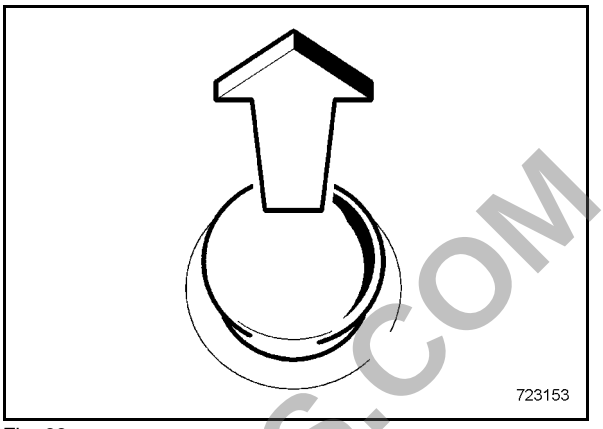


Fig. 99

- If necessary unlock the emergency stop switch (Fig. 99).

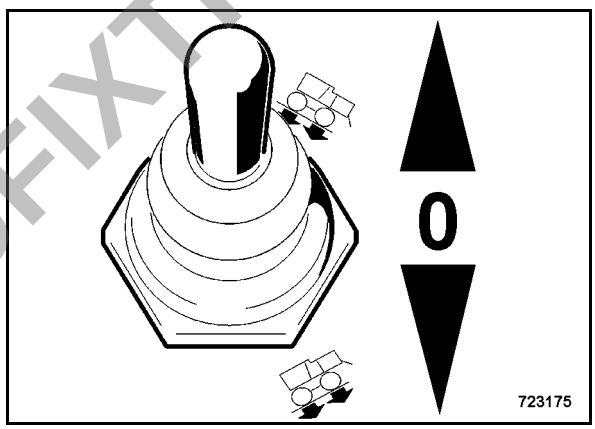


Fig. 100

- Switch the toggle switch for vibration forward/ reverse (Fig. 100) to position "0".
- Direct the transmitter towards the receiver on the machine.

Starting the engine

i Note

All normal work functions can only be operated from a defined neutral position, i.e. the respective control elements must be in rest position when switching the sender on.

i Note

Before starting the engine both travel levers and the vibration control toggle switch must be in rest position (neutral).

The infrared remote control is equipped with a re-start lock.

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In most cases it is also possible to mix in fuel additives to improve the flow properties. Consult the engine manufacturer for details.

Mineral oil based hydraulic oil

The hydraulic system works with hydraulic oil HV 46 (ISO) with a kinematic viscocity of 46 mm^2/s at 40°C. For topping up or changing the hydraulic oil use only quality hydraulic oil type HVLP according to DIN 51524, part 3, or hydraulic oil type HV according to ISO 6743/3. The viscosity index (VI) should be at least 150 (observe the information from the manufacturer).

Biodegradable hydraulic oil

On request, the hydraulic system can also be filled with ester based biodegradable hydraulic oil, Panolin HLP Synth. 46.

This biodegradable hydraulic oil Panolin HLP Synth. 46 meets the demands of a mineral oil based hydraulic oil according to DIN 51524.

The same oil must be used for topping up hydraulic systems filled with Panolin HLP Synth. 46.

When changing from a mineral oil based hydraulic oil to an ester based biodegradable hydraulic oil consult the lubrication oil service department of the oil manufacturer.

Check the filter more frequently after changing to the new oil.

Lubrication grease

For lubrication purposes use an EP-high pressure grease, lithium saponified (penetration 2).

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5.20 Changing the oil for the vibrator bearings

⚠ Caution

Change the oil at operating temperature. Let the machine run for approx. 30 mins. with vibration, to do this.

Environment

Catch any oil running out and dispose of environmentally.

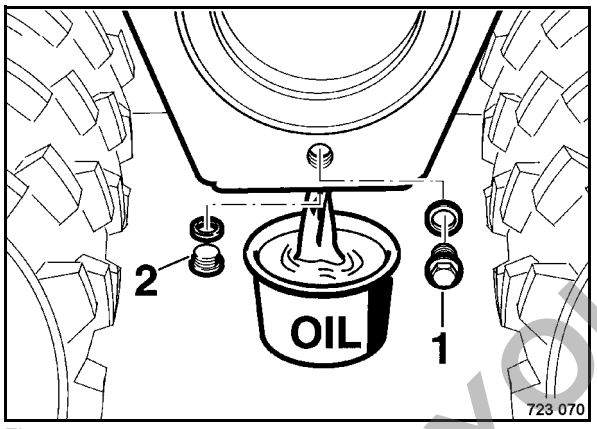


Fig. 160

- Unscrew the drain plug 2 (Fig. 160) and the oil filler and level plug (1), drain the oil off and catch it.
- Once the oil has run out, clean the drain plug and screw it back in tightly.

Fill in oil until it reaches the lower edge of the filler and level bore.

For quality and quantity of oil refer to the table of fuels and lubricants.

- Screw the filler and control plug (1) tightly back in.

⚠ Caution

Overfilling causes overheating of the vibration bearings!

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