

Operating Instructions BAIER Diamond Wet Core Drilling Machine BDB 802

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„FOR YOUR SAFETY“
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General safety instructions

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For your safety

Read the local safety regulations, safety instructions and operating instructions.



Safety instructions and operating instructions should always be available with the machine.

Make sure that the voltage of current supply corresponds with the voltage specified on the type plate of the machine.

Only plug in if the machine is switched off.

Damages on the double insulation are dangerous.

Do not cover cooling vents and keep it clean (dry cleaning with compressed air).

Use motor and electrical appliances only if they are dry.

Do not stick with screwdriver or other pieces into the cooling vents.

Additional labels or other not original BAIER parts must not be screwed or riveted on the motor handle , gear box or protecting housing.

Check correct fixing of all visible screws, nuts, and protection parts before starting the machine.

Do not leave the machine in extremely hot or cold areas. This could cause mechanical and electrical damages.

After dropping or influence of humidity the machine has to be checked by an authorized service station before further operations are done.

Protect the working area (also on exit sides of bore holes) in the way that there is no danger for other persons.

Take care of visible and covered electrical, -water, -gaslines. Damages could be dangerous for life.

Keep cable, machine cable and extension cable out of the working area.

Safeguard cable against damages and protect against other people, avoid trumble traps.

Make sure that sufficient air ventilation is available in closed rooms.

Always use the well fixed additional handle.

For reducing vibrations in the hand use skid proof and well upholstered gloves.

Connect machines that are used in the open via a residual current circuit breaker with a triggering current of 30 mA maximum.

As a result of external electromagnetic interference (e.g., mains voltage variations, electromagnetic discharges), the machine can shut off automatically. In this case, switch off and then on again.



Safeguard yourselves and other persons next to the working place from shifting pieces by wearing helmet, safety goggles and/or ear protection.

Avoid unnecessary noise emitting.

Safeguard yourselves and other persons next to the working place by using ear protection.

The dust that is produced while working is detrimental to health. Use dust extraction and wear a dust mask. Use the dust absorption devices offered by BAIER.

Use only undamaged, clean and sharp Original-BAIER tools.

Change tools carefully only by using the provided and perfect tools.

Observe the correct rotation direction of the tool.

Check correct seat and fixing of the tool.

Consider the torque when starting the motor and during operation (i.e. sudden stuck or break).

For starting and during working with the machine always hold it on both handles.

If any break of tool occur stop the motor immediately, pull the plug off power supply and change the tool.

Do not direct the tool to your own or any other human body when the machine is switched on, do not hold or touch rotating parts.

Tools, toolholder and other parts next to the working place could be very hot during and after working.

Do not handle tools and machine next to inflammable material.

Do not lay down the machine before it has completely stopped.

Principally do not set the machine on the tool or cable.

Avoid that after laying the machine down you or any other person could be hurt.

Persons below an age of 16 years are not allowed to handle the machine.



Before setting into operation check any time cable and plug.
Damages must be repaired only by us or authorized service workshops.

Further safety instructions are mentioned in the rose coloured safety brochure.

BDB 802

Declaration of conformity



We declare, under our sole responsibility, that this product complies with the following standards or standardisation documents:

EN 50144, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3,
EN 61029-2-6 (BDB 8142) according to the provisions of the directives
73/23/EEC 93/68/EEC.

Noise emission:

	BDB 802
Lpa (sound pressure) dB(A)	91
Lpa (sound pressure) dB(A)	100



Take appropriate measures for the protection of hearing if the sound pressure of 85 dB(A) is exceeded.

Vibration:

	BDB 802
m/s ²	2,6

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General Information

BAIER electric power tools are manufactured according to the regulations for protection against hazards to life and health. They are corresponding to the available regulations if used properly. Before being delivered to our customers our electric power tools have been checked and tested. Therefore you have received a reliable and long lasting tool.

We guarantee the perfect quality of our products and we take on the costs for repair by replacing the defective parts or delivery of a new machine in case of a constructional fault, material defect or manufacturing fault within the guarantee period.

The guarantee period is 12 months for professional use.

The requirements for guarantee claims in case of a constructional fault, material defect or manufacturing fault are:

1 Purchasing record and observing the operation manual

For enforcing requirements of guarantee it needs to present us a machine-posted original invoice mentioning the complete address of the buyer, invoice date as well as type and serial number of the machine.

It has to be confirmed that the operation manual as well as the safety instruction have been observed.

Damages caused by incorrect use are not subject to guarantee

2 Correct use of the machines

The products made by Maschinenfabrik OTTO BAIER GmbH are designed and produced for designated applications.

The request for guarantee can not be accepted in case of nonobservance of the usage according to the operation manual or misuse or use of unsuitable accessories.

The guarantee is excluded if the machine is used for permanent operation or piecework as well as for the rental business.

3 Observing the intervals for maintenance

Requests for guarantee are only accepted on the condition that the regular services have been executed by us or an authorised service station.

Service has to be made after the carbon brushes are worn but in any case once in a year.

The machines are to be cleaned according to the instructions of the operation manual.

Requests for guarantee expire if the machine was demounted by a third party.

Servicing and cleaning of the machine is not subject to guarantee claims.

4 Use of original spare parts

The machine must be operated with original spare parts and accessories which are available from authorised dealers. There is a risk of damages and danger of accidents in case of not using original parts. Type and quantity of grease are to be filled in as per the valid grease list.

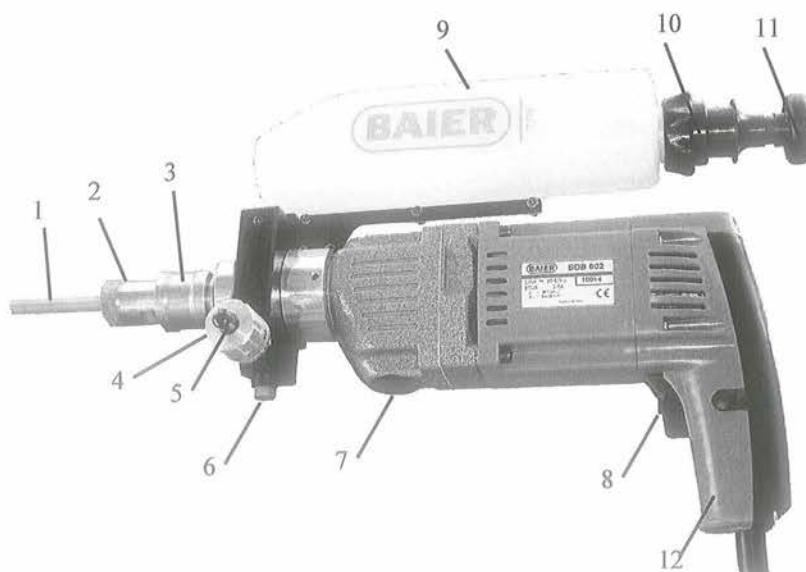
Dismantled machines and machines repaired with not original parts are excluded from guarantee claims.

Working parts

Some parts of the machine are subject to normal wear and tear while working with the machine and therefore excluded from guarantee claims. Those parts are among other parts carbon brushes, bearings, switches, cables, seals, washers.

Diamond Wet Core Drilling Machine BDB 802

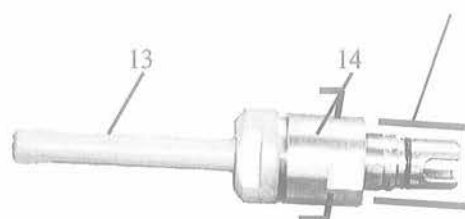
- 1 Diamond wet core drill bit
- 2 Quick change adapter
- 3 Push sleeve
- 4 Quantity regulating valve
- 5 Switch valve
- 6 Cap for external water supply
- 7 Gear change
- 8 Switch incl. setting for electronic control
- 9 Water tank
- 10 Lock nut
- 11 Pump
- 12 Handle



Picture 1

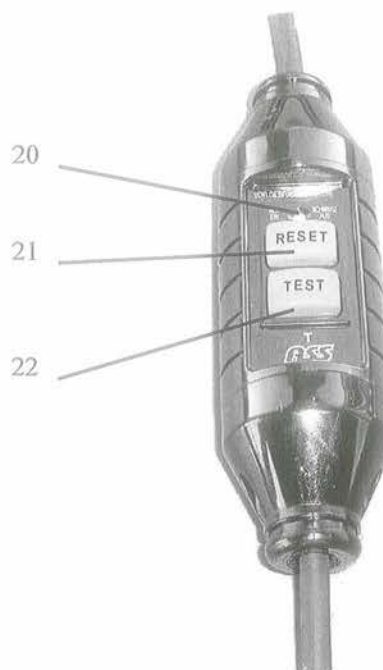
Always keep clean

- 13 Diamond wet core drill bit
- 14 Quick change adapter



Picture 2

- 20 Control display
- 21 EIN/RESET push button
- 22 AUS/TEST push button



Picture 3

BAIER Wet Core Drilling Machine

Technical data:		BDB 802
Power input	Watt	800
Rotation speed		
1st gear	rpm	3600 min ⁻¹
2nd gear	rpm	6400 min ⁻¹
Drilling diameter		
1st gear	mm	20 – 30
2nd gear	mm	6 - 18
Tool holder system		quick change adapter with G1/2" thread
Stainless steel water supply head		yes

Diamond wet core drilling machine BDB 802 is suitable for free hand drilling up to 30 mm diameter with BAIER centring device. The inside of the bore holes is smooth. For setting plugs please observe the valid regulations.

Start up **Attention** Read safety instructions first and observe.

Always disconnect plug from current supply:
before change of tools or doing any work on
the machine
before filling the water tank

Wet drilling is allowed only with a perfect working "personal residual current device PRCD" (see paragraph 3).

Protect drive motor from water.
Do not work overhead

1 Quick change adapter for diamond wet core drill bits (picture 2)

Connecting thread for core bit G1/2".

Before first application screw the core bit (13) (fork wrench size 22 or size 24) into the quick change adapter (14) (fork wrench size 27).

Keep the quick change adapter clean.

2 Change of core drill

For changing the core drill pull the sleeve (2) (picture 1) on the drive shaft back, take the quick change adapter out and replace it by the required core bit including the mounted quick change adapter.

For mounting the quick change adapter pull the sleeve (2) (picture 1) back and insert the adapter in the correct position. Check if correctly locked.

Before inserting the quick change adapter into the drive shaft make sure that it is well cleaned (picture 2).

3 Personal residual current device (PRCD) (picture 3)

Caution: Personal residual current device (PRCD) is principally to be checked each time before setting into operation as follows:

- connect to power supply and press the RESET push button (21) - the orange control display (20) signals "power-on".
- **For testing the residual current switch-off function:**

- press the TEST push button and the orange control display will disappear.
- after pressing the-RESET push button again you may start the connected machine.
- In case of the residual current switch-off function does not work or the PRCD switches off repeatedly while starting the electric power tool the complete combination has to be checked by a qualified electrician.

Before being checked it is not allowed to operate the machine. – Danger of life.

4 Water supply

The water supply while drilling comes from the water tank (9) (picture 1). The water quantity is adjusted with a valve (4): Position 1 = low water quantity, Position 2 = high water quantity.

The pulsating water supply is caused by manual pushing the switch valve (5).

The water tank can be filled by unscrewing the lock nut (10).

The necessary compression for the water supply is built up with the water pump (11).

. Drilling

5.1 Check

- **if the personal residual current device (PRCD) is working correctly (see paragraph 3)**
- **if the motor is protected against water jets**
- **if all safety rules are observed**

5.2 Operation

Fill up the water tank carefully. Water must not run over the motor. Use a funnel if necessary.

Use only clean tap water.

For compression make approx. 10 pump strokes.

Adjust the required water flow on the quantity regulating valve (4) (picture 1).

Position 1 = low water quantity, Position 2 = high water quantity

Select the suitable rotation speed (see on top) with the gear change switch (7).

Use a suitable centring device for correct setting of the drill bit. The diameter must correspond with the diameter of the drill bit.

Check correct setting of the centring device.

Guide the drill bit through the relevant bore hole of the centring device while the motor stands still. Check again if centring device is firmly fixed. Hold the machine with one hand on the handle (12). Hold the machine with the other hand on the collar next to the switch valve.

Keep proper footing and balance. Do not stand on a ladder or other movable installations.

Start the machine with the switch (8) immediately to the maximum speed.

Set the drill bit and start drilling with low and constant pressure. Make a short pulse with the switch valve for water supply. Go on drilling with slight pressure and pulsing water supply. Release time by time and pull a little back in order to rinse the bore hole.

When passing the rest of tiles towards the masonry behind use permanent water supply to keep the drill bits free from droll mud.

6 Cleaning

After finishing the drilling works clean properly and blow out with compressed air. Grease the screws and threads slightly.

Water supply head: empty and blow out with compressed air. Grease thread slightly.

Handle: dry, clean and remove grease.

7 Directions for use to achieve the optimal drilling results

- use centring device for precise setting of the bore holes
- do not press the switch valve permanently. Pulsating use of the switch valve avoids blocking of the core or core rests
- if the core bit is inside blocked, the boring of the core bit must be cleaned with a suitable tool (i.e. ejector or wire).
- remove rests from the core bits immediately after drilling before it dries out.
- for filling the tank use only clean water (tap water).
- use only diamond core bits approved by Baier.

Other brands could have inaccuracy in true running. This would cause problems when setting the core bits. Precise borings are not possible.