AREBOS

Concrete Vibrator 1500 W

AR-HE-BR1500

Please follow all security measures in this user´s manual to ensure a secure use.

CE

Thank you for trusting in AREBOS.

List of contents

Please read and save these instructions. Read through this user's manual carefully before using product. Protect yourself and others by observing all safety information, warnings and cautions. Failure to comply with instructions could result in personal injury and/ or damage to product or property. Please retain instructions for future reference.

1. Safety instructions

1.1 Safety symbols

This product must **not** be disposed of with household waste!

By means of a CE marking, it can be recognized that a product complies with the legal provisions of European legal standards and therefore may be traded within the European Community.

Warning! Read the safety instructions carefully. The
Failure to follow the safety precautions could result in serious injury or damage.
Keep the operating instructions in a safe place.

Warning! Wear ear protection!

Warning! Wear non-slip safety shoes!

Warning! Wear protective gloves!

Be careful when using this product.

1.2 General safety instructions

- Before commencing any work shift, the operator must verify the effectiveness of the controls and safety equipment, as well as the proper installation of the safety devices. Concrete vibrators may only be operated with all protective devices. The effectiveness of the controls must not be unauthorized influenced or removed.
  Before putting the devices into operation, it is essential to read the corresponding instructions!
- Concrete vibrators may only be operated as intended, taking into account the operating and maintenance instructions, the generally accepted safety rules and the country-specific regulations. The intended use is exclusively the compacting of concrete. Any other use of the concrete vibrator is considered to be improper and is a matter to be responsible exclusively by the operator.

1.3 Condition for operation

- Proper and safe operation of the device requires the following:
  - Proper transport, storage, installation.
  - Careful operation.
  - Careful care and maintenance.
- The device may only be operated for compacting fresh concrete. The vibrating body must be immersed in the fresh concrete.

1.4 Operational safety

- Observe the safety instructions and warnings on the device and in the operating instructions.
- Commission the device according to the operating instructions.
- Familiarize yourself with the work environment before starting work. These include the following points:
  - Obstacles in the area of work and traffic.
  - Load capacity of the soil.
  - Necessary securing of the construction site, in particular for public transport.
  - Necessary protection of walls and ceilings.
  - Possibilities of assistance in accidents.
- Keep the workplace clean and well lit.
- Do not work with the power tool in an explosive environment, near flammable liquids, gases or dust. Power tools generate sparks that can ignite fumes and dust.
- Keep people and children away from the workplace while working with the power tool. Distraction could make you lose control.
- Do not expose power tools to rain or damp environments. Penetrating water increases the risk of electric shock.
- Never leave a running device without supervision!
- Operate the device only as intended and in perfect technical condition.
- Never put a device requiring maintenance or repair into operation.
- When using an extension cord, it must be undamaged and checked. You must immediately replace extension cables with damages (e.g. cracks in the sheath) or loose connectors and couplings.
- Cable drums and multiple sockets must meet the same requirements as extension cords.
- Protect extension cords, multiple sockets, cable drums and couplers from rain, snow or other wetness.
- Before operation, unwind the cable drum completely. Risk of fire due to unrolled cable drum.
- Do not use the connection cable to pull or lift the device. Do not pull the plug of the connection cable by the cable from the socket.

- Protect the connection cable from heat, oil and sharp edges.
- You must have the connection cable immediately replaced in case of damage or a loose plug.
- Protect protective hose. Do not pull the protective hose over sharp edges. If the vibrating body has caught in the reinforcement, do not pull the protective hose forcibly or jerkily. Loosen the clamped vibrating body by carefully rocking it back and forth.
- Always ensure a secure footing when working with the unit. This is especially when working on scaffolding, ladders, uneven or slippery ground, etc.
- The vibrating body must not come into contact with body parts or be introduced into body parts.
- Do not touch the hot vibrating body during operation or shortly after. The vibrating body can become very hot and can cause burns.
- Also avoid body contact with earthed parts.
- Keep hands, feet, and loose clothing away from moving or rotating equipment. Serious risk of injury from pulling or crushing.
- Never use the protective hose, connecting cables or other components of the device as a climbing aid or as a safety device.
- Only operate the device with safety and danger awareness and with all protective devices. Do not change or bypass safety devices.
- Before starting work, check the effectiveness of controls and safety equipment.

1.5 Protective equipment

- The work clothes should be appropriate, i.e. close but not hindering. Do not wear open long hair, loose clothing or jewelry, including rings, on construction sites. There is a risk of injury, for example by snagging or pulling on device parts that move.
- Wear only flame-resistant work clothing.
- Use personal protective equipment to prevent injury and damage to health:
  - Safety shoes.
  - Work gloves made of solid material.
  - Work suit made of solid material.
  - safety helmet.
  - Ear protection.
- Work with ear protection particularly attentive and prudent, since you sense noises for example cries or beeps only to a limited degree.

1.6 Recommendations for work

- Please follow these recommendations:
  - Only work in good physical condition.
  - Work in a concentrated manner, especially at the end of working hours.
  - Do not work with the device when you are tired.
  - Carry out all work in a calm, cautious and careful manner.
  - Never work under the influence of alcohol, drugs or medications. Your vision, responsiveness, and judgment may be affected.
  - Work so that no third parties are harmed.
  - Make sure that there are no persons or animals in the danger zone.

1.7 Behavior of the machine operator

- Only trained specialist personnel may commission and operate the device.
- To operate concrete vibrators, only suitable persons, at least 18 years old, may be designated. They must have been previously instructed by the operator or his representative in the operation and maintenance.
- In addition, the following conditions apply:

- You are physically and mentally fit.
- You have been instructed in the independent operation of the device.
- You have been instructed in the intended use of the device.
- You are familiar with the necessary safety devices.
- You are entitled to commission devices and systems independently according to the standards of safety technology.
- They are intended by the contractor or operator to work independently with the device.

- During operation, the concrete vibrator must always be monitored for its operational reliability.
- If defects in the safety devices or other defects that impair the safe operation of the device are found, the supervisor must be informed immediately. In the case of defects which endanger the operational safety, the operation must be stopped immediately. In case of non-compliance, any liability must be rejected.
- In the event of maloperation, malpractice or operation by untrained personnel, there are risks to the health of the operator or third parties, as well as to the device or other material assets.
- We cannot accept any liability for damages caused by incorrect handling.

1.8 Safety against electrical voltages

- The electrical cables must be protected from damage. Before each use, the cables and connectors must be checked for damage. The electrical connections must be protected from oil, sharp edges and heat.

1.9 Electrical connection

- These concrete vibrators are connected directly to the AC mains 230V / 50Hz.
  Only use with proper ground fault circuit interrupter!

1.10 Structural changes

- Under no circumstances make structural changes without the written permission of the manufacturer. This endangers your safety and the safety of others!
  In addition, liability and warranty of the manufacturer will be cancelled.
- A structural change exists in particular in the following cases:
  - Opening the device and permanently removing components
  - Installing new components that are not equivalent in design and quality to the original parts.
  - Attaching accessories.
- You can install original spare parts without hesitation.
  Accessories, which are available for your device from the manufacturer, you can safely attach. Observe the mounting instructions in this operating manual.
- Do not drill the housing to install signs. Water can enter the case and damage the device.
- Switch off the device before transporting and unplug the device from the socket. Let the motor cool down.

1.11 Transport

- When transporting on vehicles, the concrete vibrator must be secured against slipping or rolling away with suitable means.

2. Use

- Concrete vibratory compacting is the most common method in concrete processing. The direct contact between the vibrating bottle and the concrete mass enables a fast and effective processing of the concrete even in narrow formwork. The dimensions of the concrete body and the density of the reinforcement determine the diameter of the bottle.
- The device generates high-frequency vibrations in the vibrating body. By immersing the vibrating body in the fresh concrete this is vented and compacted in the effective range of the vibrating body. The fresh concrete simultaneously cools the vibrating body.
  Note: As long as air bubbles rise, the concrete is compacted.

3. Operation

3.1 Before commissioning

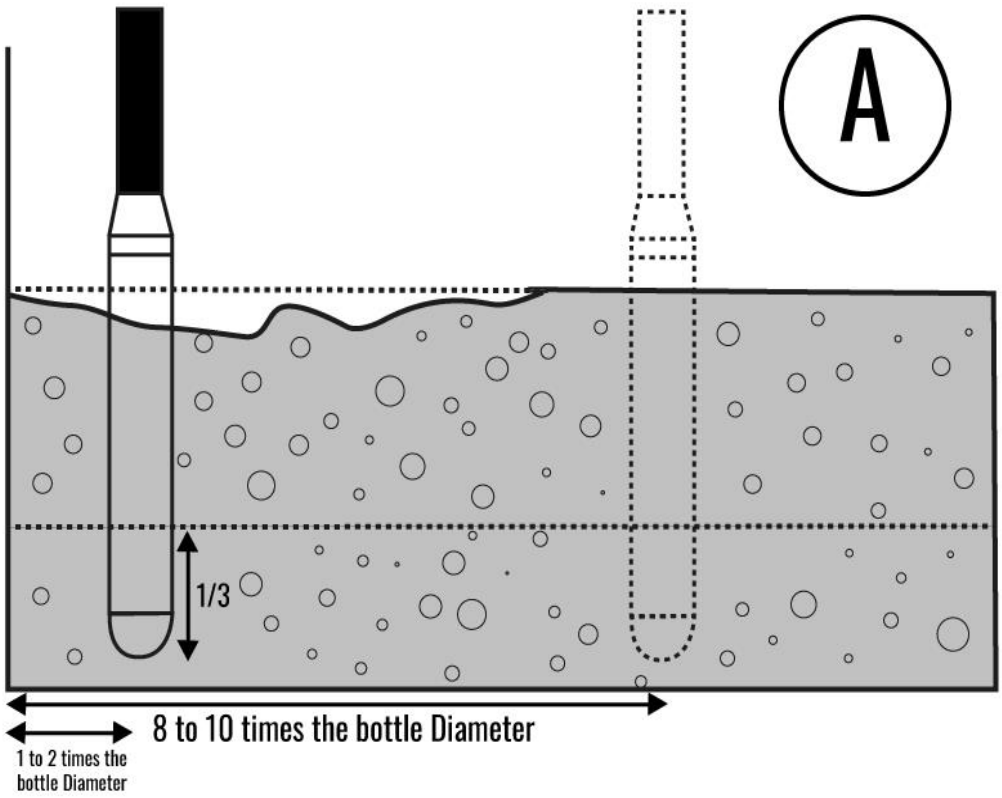
- The device is ready for use after unpacking.
- Check device:
  - Check the device and all components for damage.
  - Damage to the protective hose and the connecting cable.
- Check power supply:
  - Check whether the power grid or the building site distributor have the correct operating voltage (see type plate of the device or chapter technical data).
  - Check whether the power grid or construction site distributor are protected in accordance with the applicable national standards and directives.

3.2 Commission

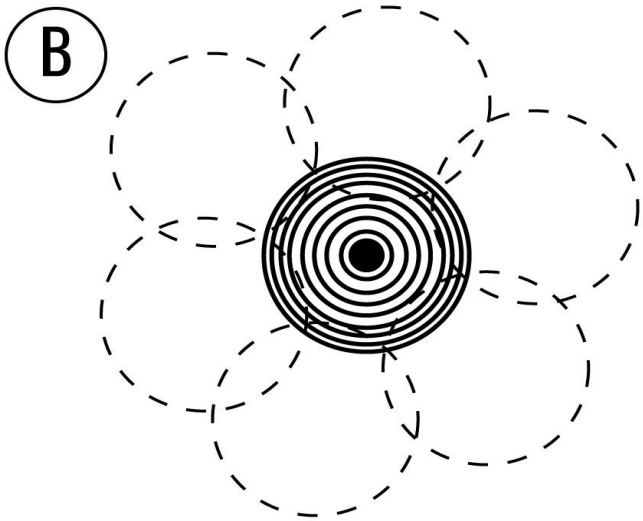
- Definitely connect the individual components correctly.
- Connect the concrete vibrator with the connecting cable to the AC mains (230V / house connection).
- Put the concrete vibrator into operation (set the switch to "ON").

3.3 Compact fresh concrete

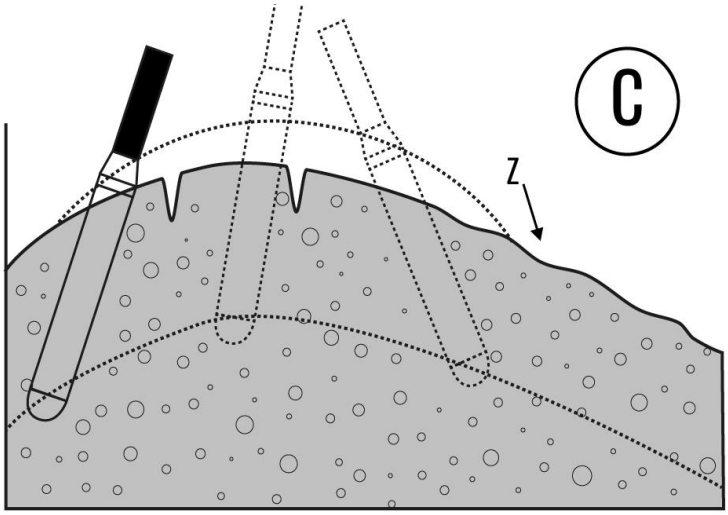
- Hold the device with both hands.
- Quickly immerse the vibrating body in the fresh concrete, stay it for several seconds and slowly pull it out.
- Submerge the vibrating body in all areas of the formwork and compact the fresh concrete.
- For example, if walls are to be built, the concrete is placed in 30 to 40 cm high layers and evenly distributed. The vibrating bottles are immersed predominantly vertically with a distance of 8 to 10 times the bottle diameter, 1-2 times close to the formwork (figure A). The vibrator is exchanged so deep that about 1/3 of the bottle body in the already introduced lower layer is sufficient to ensure a good connection of the different layers. The concrete is thoroughly "shaken" when the surface around the vibrator becomes shiny and no large bubbles break through the surface. This usually takes 10-20 seconds. Slowly pull the vibrator back to give the concrete time to flow back into the hollow space left by the jogger.



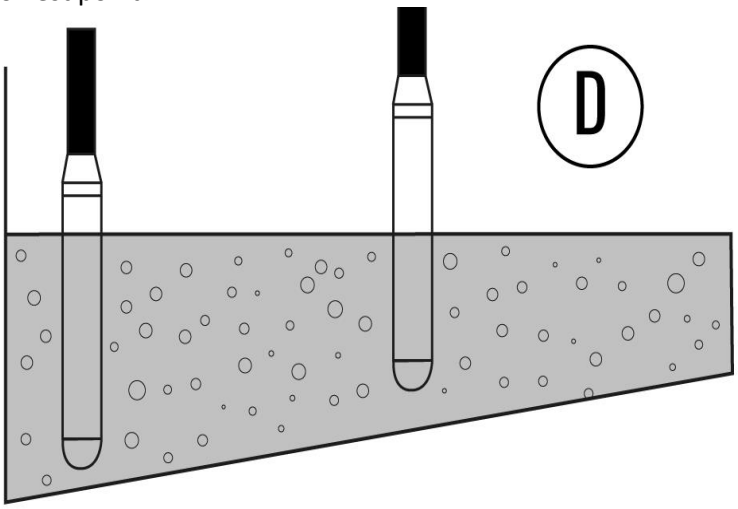
- With correct diving distance a perfect overlap of the compression zones is ensured, there are no uncompressed places.



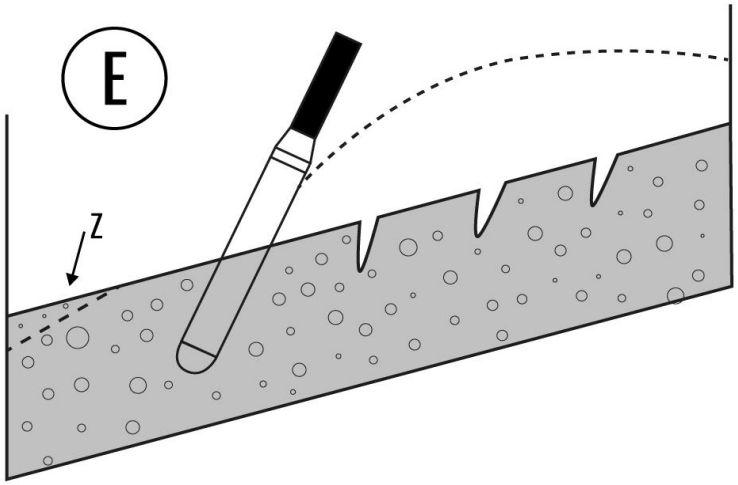
- Figure C shows how it should not be done, because the concrete vibrator does not serve as a "concrete means of transport" (risk of segregation, too much shaking).



- The compacting of horizontal concrete layers on a slated formwork level (figure D) takes place from the lowest point.



- Shaking slopes (figure E) causes segregation and cracks (Z = cement slurry).



- For small layer heights (concrete floors, concrete floors, etc.), the vibrating bottle must be kept at an angle or horizontally to ensure sufficient contact between the concrete and the vibrating bottle.
  The vibrator bottle must not be pulled out of the concrete too fast; you have to give the concrete time to close the dive hole.
  By observing the surface of the concrete, it is checked whether the vibration time is properly aligned. When little or no bubbles form, a sufficient degree of compaction is generally achieved.

Note:

- Compact particularly intensively in the area of shuttering corners because there the reinforcement density is highest.
- Avoid touching the vibrating body with the reinforcement.
  If the vibrating body touches the reinforcement, the following damages may occur:
  - The connection of the concrete to the reinforcement can be lost.
  - The device may be damaged.
- The result of compression depends on the following points:
  - Dwell time of the vibrating body in the concrete.
  - Diameter of the vibrating body.
  - Consistency of the concrete.
  - Reinforcement density.
  For example, if you use a small diameter vibrating body, you will need to compress for a longer time to achieve the same effect as a large diameter.
- Features when the concrete is sufficiently compacted:
  - The concrete does not settle anymore.
  - There are no or hardly any bubbles left.
  - The noise of the vibrating body does not change anymore.

3.4 Switch off the device

- Slowly pull the device out of the fresh concrete, keep the vibrating body in the air.
- Switch off the device with the on / off switch.
- Wait until the device has come to a complete stop.
- Slowly put the device down.
- Do not kink protective hose and connection cable.
- Disconnect the plug from the socket.

4. Technical specifications

Model	**AR-HE-BR1500**
Machine	
Input Power	1500 W
Rated input voltage	230 V
Frequency	50 Hz
Material	Plastic, steel
Rotation speed	2850 rpm
Weight	31 lbs (14 kg)
Shaft	
Ø vibrating head	1.77 in (45 mm)
Ø rubber hose	1.18 in (30 mm)
Ø flexible shaft	0.394 in (10 mm)
Length	6 m
Weight	33 lbs (15 kg)

5. Cleaning and maintenance

5.1 Testing

- Periodic maintenance is required for proper and permanent operation of the unit. Neglected maintenance reduces the safety of the device.
- Be sure to comply with the prescribed maintenance intervals.
- Concrete vibrators are to be tested according to the conditions of use and the operational conditions as required, but at least once a year by an expert on their operationally safe condition.
  The test results must be recorded in writing and kept at least until the next test.

5.2 Maintenance

- Maintenance work may only be carried out on concrete vibrators, if they are disconnected from the mains.
- Before maintenance work, ensure that the internal vibrator cannot be accidentally plugged in.
- Do not use the device if maintenance or repairs are necessary.
- After maintenance work, protective equipment must be properly installed again.

5.3 Cleaning

- The concrete vibrator is to be cleaned of concrete residues at the end of work. Clean the device and all its components with water after each use.
  Check connecting cable for damage.
- The vibrating body must not be submerged in acidic or lye-containing liquids.
- Do not use any fuels or solvents. Risk of explosion!
- Do not use high pressure cleaners. Ingress of water can damage the device. For electrical appliances, there is a serious risk of injury from electric shock.
- **Hose shafts and drive couplings or connections must be lubricated regularly with grease.**

5.4 Storage

- Place or put the unit safely so that it cannot tip over, fall down or slip away.
- After use, store the cooled device in a closed, clean, frost-protected and dry place, which is inaccessible to children.

6. Troubleshooting

Error	Cause	Solution
Device cannot be started.	Operating error	Startup procedure perform as prescribed.
Decreased power output.	Electrical connection	**Switch off immediately!** Check plug and switch. All phases in the plug current-carrying? Check connections.
Device is not running.	Plug connections loose/ defective	Check connections. Check supply line for continuity. Check on / off switch. Vibrator or drive damage, if necessary have it repaired by a qualified specialist.
Shaft does not start.	Operating error	Hit the vibrating bottle head section hard; this activates the pendulum.
Vibrating bottle is humming or running rough.	Bearing damage	Have it repaired by a qualified specialist.

7. Disposal instruction

7.1 Disposal of the packaging

- Please make reference to the guidelines and standards for appropriate disposal of the packaging valid in your region. In part, the package may consist of plastic bags - watch this respect, with special care to ensure that this is not out of the reach of children. There is a risk of suffocation!

7.2 Disposal of waste equipment

- Equipment must be disposed of in accordance with the rules and regulations of the local waste disposal.

7.3 Meaning of the "dustbin"

Protect our environment; electrical appliances do not belong in household waste. Use the provided for the disposal of electrical equipment collection points and enter your electrical and electronic equipment that you no longer use. They help ensure that the potential effects of incorrect disposal on the environment and human health to be avoided. So do your part to recycle, recycling and other forms of recovery of waste electrical and electronic equipment. Information on where the devices are disposed of, please contact your local authorities or local Governments.

Unsere Kundenservicenummer: +49 (0) 931-45232700

EU Declaration of Conformity

We,

Canbolat Vertriebs GmbH, Gneisenaustraße 10-11, 97074 Würzburg, Germany,

Hereby declare that the product named below, seen its design and construction as well as according to our sales, has been complied with the relevant and basic health and safety EU-requirements.

Name of the product: Concrete vibrator 1500 W
Model Nr.: AR-HE-BR1500
Art. Nr.: 4260551587849

If the product has any modification not allowed by us, this declaration loses its validity.

Tested acc. to:
EU Standard:
EN ISO 12100:2010, EN 60745-2-12 :2009, EN 60204-1:2006+A1:2009+AC:2010,
EN 349 :1993+A1 :2008, EN ISO 14120 :2015, EN ISO 13857 :2008, EN 61000-6-1 :2017,
EN 61000-6-3:2007+A1:2011+AC:2012
EN 61000-3-2:2014, EN 61000-3-3:2013
2006/42/EC
2014/35/EU
2014/30/EU

Date/Manufacturer Signature/Location: Würzburg, 12.07.2019

Identification of the signatory:
Korhan Canbolat, head of the company

Authorised representative for the technical documentation:
Korhan Canbolat

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