Safety and operating instructions
Poker with built-in Frequency Converter
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Introduction

Allen Engineering Corporation (AEC) designs, engineers, manufactures and markets concrete and related equipment with a number one goal of Total Customer Satisfaction.

AEC is a family-owned, American Manufacturer of high quality equipment that is sold and rented through a network of dealers and rental centers around the world.

For more information, visit the AEC web site at www.alleneng.com

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Paragould, AR 72450

About the Safety and operating instructions

The aim of the instructions is to provide you with knowledge of how to use the machine in an efficient, safe way. The instructions also give you advice and tell you how to perform regular maintenance on the machine.

Before using the machine for the first time you must read these instructions carefully and understand all of them.
Safety instructions

To reduce the risk of serious injury or death to yourself or others, read and understand the Safety and operating instruction before installing, operating, repairing, maintaining, or changing accessories on the machine.

Post this Safety and operating instruction at work locations, provide copies to employees, and make sure that everyone reads the Safety and operating instruction before operating or servicing the machine. For professional use only.

In addition, the operator or the operator's employer must assess the specific risks that may be present as a result of each use of the machine.

Save all warnings and instructions for future reference.

Safety signal words

The safety signal words Danger, Warning and Caution have the following meanings:

**DANGER** Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**WARNING** Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Working area

**DANGER** Explosion hazard

If a warm machine comes into contact with explosives, an explosion could occur. During operating with certain materials, sparks and ignition can occur. Explosions will lead to severe injuries or death.

► Never operate the machine in any explosive environment.
► Never use the machine near flammable materials, fumes or dust.
► Make sure that there are no undetected sources of gas or explosives.

**WARNING** Secure the working area

Cluttered benches and insufficient lighting can cause personal accidents and result in serious injuries.

► Keep the working area clean.
► Maintain adequate lighting in the working area.

Only qualified and trained persons may operate or maintain the machine. They must be physically able to handle the bulk, weight, and power of the machine.

Always use your common sense and good judgement.

Keep bystanders, children, and visitors away while operating the machine. Distractions may cause loss of control.

Electrical safety

**DANGER** Electrical hazard

There is a risk of electrical shocks from electrically powered machines which can lead to serious injuries or death.

► Avoid body contact with earthed (grounded) surfaces.
► Make sure that there are no concealed wires or other sources of electricity in the working area.
► Always check that the mains voltage corresponds with that stated on the data plate on the machine.

**WARNING** Electrical safety

There is a risk of electrical shock if the electrical cable is not treated correctly, if the machine is damaged or modified. This can lead to serious injuries or death.

► The electrical plug on the machine must match the socket.
► Never modify the electrical plug to match the socket.
► Do not use adapter plugs with earthed (grounded) machines.
► Unmodified plugs and matching sockets will reduce the risk of electrical shock.
► Never move the machine by dragging the electrical cable.
► Disconnect the cable only by pulling the plug, never pull the electrical cable.
► Make sure the electrical cable is not pinched in doors, fences or similar.
► Check that the electrical cable and cable plug are intact and in good condition.
► Never connect a damaged electrical cable to the machine.
► Never touch the electrical cable if it becomes damaged during the work. Disconnect the electrical cable plug from the socket.
► Always make sure that the electrical cable is kept away from water, oil and sharp edges.
► Do not expose the power tool to rain or wet conditions.  
If water enters the machine, there is an increased risk of electrical shock.  
► Use a residual current device (RCD) protected supply, if the machine must be operated in a damp location.  
The use of an RCD reduces the risk of electrical shock.

### Personal safety

#### Personal protective equipment
Always use approved protective equipment. Operators and all other persons in the working area must wear protective equipment, including at a minimum:
- Protective helmet  
- Hearing protection  
- Impact resistant eye protection with side protection  
- Respiratory protection when appropriate  
- Protective gloves  
- Proper protective boots  
- Appropriate work overall or similar clothing (not loose-fitting) that covers your arms and legs.

#### Drugs, alcohol or medication

> **WARNING**  Drugs, alcohol or medication

Drugs, alcohol or medication may impair your judgment and powers of concentration. Poor reactions and incorrect assessments can lead to severe accidents or death.  
► Never use the machine when you are tired or under the influence of drugs, alcohol or medication.  
► No person who is under the influence of drugs, alcohol or medication may operate the machine.

> **WARNING**  Involuntary start

Involuntary start of the machine may cause injury.  
► Keep your hands away from the start and stop device until you are ready to start the machine.  
► Learn how the machine is switched off in the event of an emergency.

> **WARNING**  Slipping, tripping and falling hazards

There is a risk of slipping or tripping or falling, for example tripping on the hoses or on other objects. Slipping or tripping or falling can cause injury. To reduce this risk:
► Always make sure that no hose or other object is in your way or in any other person's way.  
► Always make sure you are in a stable position with your feet as far apart as your shoulders width and keeping a balanced body weight.

> **WARNING**  Dust and fume hazard

Dusts and/or fumes generated or dispersed when using the machine may cause serious and permanent respiratory disease, illness, or other bodily injury (for example, silicosis or other irreversible lung disease that can be fatal, cancer, birth defects, and/or skin inflammation).  
Some dusts and fumes created by compaction work contain substances known to the State of California and other authorities to cause respiratory disease, cancer, birth defects, or other reproductive harm. Some examples of such substances are:
- Crystalline silica, cement, and other masonry products.  
- Arsenic and chromium from chemically-treated rubber.  
- Lead from lead-based paints.

Dust and fumes in the air can be invisible to the naked eye, so do not rely on eye sight to determine if there is dust or fumes are the air.  
To reduce the risk of exposure to dust and fumes, do all of the following:
► Perform site-specific risk assessment. The risk assessment must include dust and fumes created by the use of the machine and the potential for disturbing existing dust.  
► Use proper engineering controls to minimize the amount of dust and fumes in the air and to minimize build-up on equipment, surfaces, clothing, and body parts. Examples of controls include: exhaust ventilation and dust collection systems, water sprays, and wet drilling. Control dusts and fumes at the source where possible. Make sure that controls are properly installed, maintained and correctly used.  
► Wear, maintain and correctly use respiratory protection as instructed by your employer and as required by occupational health and safety regulations. The respiratory protection must be effective for the type of substance at issue (and if applicable, approved by relevant governmental authority).
Work in a well ventilated area.
If the machine has an exhaust, direct the exhaust so as to reduce disturbance of dust in a dust filled environment.
Operate and maintain the machine as recommended in the operating and safety instructions.
Wear washable or disposable protective clothes at the worksite, and shower and change into clean clothes before leaving the worksite to reduce exposure of dust and fumes to yourself, other persons, cars, homes, and other areas.
Avoid eating, drinking, and using tobacco products in areas where there is dust or fumes.
Wash your hands and face thoroughly as soon as possible upon leaving the exposure area, and always before eating, drinking, using tobacco products, or making contact with other persons.
Comply with all applicable laws and regulations, including occupational health and safety regulations.
Participate in air monitoring, medical examination programs, and health and safety training programs provided by your employer or trade organizations and in accordance with occupational health and safety regulations and recommendations. Consult with physicians experienced in relevant occupational medicine.
Work with your employer and trade organization to reduce dust and fume exposure at the worksite and to reduce the risks. Effective health and safety programs, policies and procedures for protecting workers and others against harmful exposure to dust and fumes must be established and implemented based on advice from health and safety experts. Consult with experts.

Operating, precautions

⚠️ WARNING Incorrect usage
An incorrect use of the machine, accessories, and insertion tools/cutting blades can result in serious injuries or a hazardous situation.
Use the machine, accessories and tools in accordance with the safety instructions.
Use the machine for what it is designed for, and in the way it is intended.
Use the correct machine for the work that is going to be performed.
Do not force the machine while operating.
Take the working conditions into account.

⚠️ WARNING Broken power switch
The power switch does not control the machine. A broken power switch is dangerous and must be repaired.
Do not use the machine if the power switch is broken and cannot be controlled.
Maintain the power switch.

⚠️ WARNING Projectiles
Failure of the work piece, of accessories, or even of the machine itself may generate high velocity projectiles. During operating, splinters or other particles from the compacted material may become projectiles and cause personal injury by striking the operator or other persons. To reduce these risk:
Use approved personal protective equipment and safety helmet, including impact resistant eye protection with side protection.
Make sure that no unauthorised persons trespass into the working zone.
Keep the workplace free from foreign objects.

⚠️ WARNING Unexpected movements
The machine is exposed to heavy strains during operation. If the machine breaks or gets stuck, there may be sudden and unexpected movement that can cause injuries.
Always inspect the machine prior to use. Never use the machine if you suspect that it is damaged.
Make sure that the handle is clean and free of grease and oil.
Keep your feet away from the machine.
Never sit on the machine.
Never strike or abuse the machine.
Pay attention and look at what you are doing.
WARNING Vibration hazards
Normal and proper use of the machine exposes the operator to vibration. Regular and frequent exposure to vibration may cause, contribute to, or aggravate injury or disorders to the operator's fingers, hands, wrists, arms, shoulders and/or nerves and blood supply or other body parts, including debilitating and/or permanent injuries or disorders that may develop gradually over periods of weeks, months, or years. Such injuries or disorders may include damage to the blood circulatory system, damage to the nervous system, damage to joints, and possibly damage to other body structures.

If numbness, persistent recurring discomfort, burning sensation, stiffness, throbbing, tingling, pain, clumsiness, weakened grip, whitening of the skin, or other symptoms occur at any time, when operating the machine or when not operating the machine, stop operating the machine, tell your employer and seek medical attention. Continued use of the machine after the occurrence of any such symptom may increase the risk of symptoms becoming more severe and/or permanent.

Operate and maintain the machine as recommended in these instructions, to prevent an unnecessary increase in vibration.

The following may help to reduce exposure to vibration for the operator:
► If the machine has vibration absorbing handles, keep them in a central position, avoid pressing the handles into the end stops.
► Make sure that the machine is well-maintained and not worn out.
► Immediately stop working if the machine suddenly starts to vibrate strongly. Before resuming the work, find and remove the cause of the increased vibrations.
► Participate in health surveillance or monitoring, medical exams and training programs offered by your employer and when required by law.
► When working in cold conditions wear warm clothing and keep hands warm and dry.

See the "Noise and vibration declaration statement" for the machine, including the declared vibration values. This information can be found at the end of these Safety and operating instructions.

WARNING Noise hazard
High noise levels can cause permanent and disabling hearing loss and other problems such as tinnitus (ringing, buzzing, whistling, or humming in the ears). To reduce risks and prevent an unnecessary increase in noise levels:
► Risk assessment of these hazards and implementation of appropriate controls is essential.
► Operate and maintain the machine as recommended in these instructions.
► If the machine has a silencer, check that it is in place and in good working condition.
► Always use hearing protection.

WARNING Accessory hazards
Accidental engagement of accessories during maintenance or installation can cause serious injuries, when the power source is connected.
► Never inspect, clean, install, or remove accessories while the power source is connected.

Maintenance, precautions

► Risk assessment of these hazards and implementation of appropriate controls is essential.

WARNING Machine modification
Any machine modification may result in bodily injuries to yourself or others.
► Never modify the machine. Modified machines are not covered by warranty or product liability.
► Always use original parts and accessories.
► Change damaged parts immediately.
► Replace worn components in good time.

WARNING Damaged machine parts
Lack of maintenance will result in damaged or worn parts that can cause accidents.
► Check the moving parts for misalignment or binding.
► Check the machine for broken or, in other ways, damaged parts.
Damaged or worn parts can effect the operation of the machine.

Storage
► Keep the machine in a safe place, out of the reach of children and locked up.
Overview

To reduce the risk of serious injury or death to yourself or others, read the Safety instructions section found on the previous pages of this manual before operating the machine.

Design and function

AHVF is a poker with a built in frequency converter combined with an electrical poker. The AHVF’s electronic components consist of resin moulded components, ensuring optimal protection. The assembly is located in an aluminium casing that also includes a start and stop switch.

Main parts

![Diagram of AHVF with labels]

A. End cap  
B. Vibrator  
C. Hose  
D. LED indicator  
E. On/Off switch  
F. Control unit  
G. Data plate  
H. Rubber sleeve  
I. Electric cable with power connector

Labels

The machine is fitted with labels containing important information about personal safety and machine maintenance. The labels must be in such condition that they are easy to read. New labels can be ordered from the spare parts list.

Data plate

A. Machine type  
B. Product identification number  
C. The ETL symbol means that the machine is ETL-approved.

Wiring label

Safety label

♦ Instruction manual. The operator must read the Safety and operating instructions before operating the machine.  
♦ Use protective gloves.  
♦ Use ear protectors.
Operation

Preparations before vibrating

**NOTICE** Only use the AHFV with a residual current device (RCD) protected supply.

The AHFV is an earthed class 1 device.

The RCD must have a protection for 16 amperes or greater.

The AHFV is fitted with overheating protection. Avoid placing the device in direct sunlight, this could lead to possible stops.

Vibrating

**NOTICE** Never use the poker vibrator to move the concrete sideways.

1. Allow the vibrator to penetrate about 15 cm (6 in.) down into the nearest lower layer to ensure that the various layers merge well with each other.

2. Fill the concrete evenly in the form work in 30 - 50 cm (12 - 19 in.) layers.

3. Insert the poker vibrator vertically at a distance of 8-10 times the tube diameter between insertions.

4. Vibrate systematically.

5. Slowly withdraw the vibrator to allow the concrete to refill the cavity left by the vibrator.

6. The concrete is thoroughly vibrated when the area around the vibrator turns shiny and no air bubbles rise to the surface. This will normally take about 10-20 seconds.

When taking a break

♦ During all breaks you must place the machine in such a way that there is no risk for it to be unintentionally started. Make sure to place the machine on the ground, so that it can not fall.

♦ Switch off the power supply in the event of a longer break or when leaving the workplace.

Maintenance

Regular maintenance is a basic requirement for the continued safe and efficient use of the machine. Follow the maintenance instructions carefully.

♦ Before starting maintenance on the machine, clean it in order to avoid exposure to hazardous substances. See "Dust and fume hazard".

♦ Use only authorised parts. Any damage or malfunction caused by the use of unauthorised parts is not covered by warranty or product liability.

♦ When cleaning mechanical parts with solvent, comply with appropriate health and safety regulations and ensure there is satisfactory ventilation.

♦ For major service of the machine, contact the nearest authorised workshop.

♦ After each service, check that the machine’s vibration level is normal. If not, contact the nearest authorised workshop.

The AHFV is maintenance free, except for cleaning. The converter case must be clean to get the best cooling effect.

**NOTICE** The unit contains components which have dangerously high voltages. Wait 2 minutes before any dismantling is performed.

**NOTICE** Never use high-pressure water to clean the drive unit.
**Tripping of residual current device (RCD):**

1. Inspect cable and plug, replace any damaged or defective parts.
2. If the problem remains, replace the converter.

**Problem with the converter:**

1. Press the switch to stop the converter.
2. Wait 30 seconds.
3. Press the switch to start the converter. If the converter started again, it was overloaded due to a defective mechanical part or the poker got stuck in the steel reinforcement.

**Inefficient vibration:**

1. With the machine unplugged and power removed, short circuit between phases on the poker side:
   Disconnect the wires from the converter to the vibrating head. Measure the resistance between phases on poker side. Compare the values with those stated on the poker with the table, see below. If the values are incorrect, inspect the wiring and the tube stator. Replace the defective part.
2. Short circuit between phases and ground (earth): Measure the resistance between each phase and the ground (earth). If the resistance is 10 Mega ohms or less, inspect the wiring and the stator tube. Replace the defective part.
3. Overload:
   Raise the poker from the concrete, measure the input current to the poker (see the table below for maximum values). The measurements are taken after two minutes. If the measured values do not correspond with the values stated in the table, dismantle the vibrator tube and check the mechanical parts. Replace the defective part. If the mechanical parts are correct, there is an overload in the converter. Check the input current to the poker when the poker is immersed in the concrete. Make sure that the current does not permanently exceed the ampere stated on the data plate.
4. Overheating: temperature of the converter casing is >60°C.
   This could be caused by overload or too high ambient temperature.
   Wait until the temperature of the casing has decreased by 10°C, then press the on/off switch.

<table>
<thead>
<tr>
<th>Input current*, A</th>
<th>Voltage, V</th>
<th>Stator resistance, Ohm</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHFV22</td>
<td>115</td>
<td>1.50</td>
</tr>
</tbody>
</table>

* When the poker is raised out of the concrete.

**Vibrating head**

The vibrating head is maintenance free and lubricated with oil. When replacing the vibrating head it must be lubricated with the right amount of oil. The end cap of the vibrating head is glued and must be tightened and glued in the right way.

**Lubrication**

<table>
<thead>
<tr>
<th>AHFV</th>
<th>Vibrating head</th>
<th>Gluing</th>
<th>Tightening torque, Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>End cap</td>
<td>LOCTITE®638™</td>
<td>520</td>
</tr>
<tr>
<td>E</td>
<td>Screw</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>F</td>
<td>Nipple</td>
<td>LOCTITE®243™</td>
<td>250</td>
</tr>
<tr>
<td>G</td>
<td>Thrust screw</td>
<td>LOCTITE®243™</td>
<td>-</td>
</tr>
<tr>
<td>H</td>
<td>Screw</td>
<td>LOCTITE®243™</td>
<td>-</td>
</tr>
</tbody>
</table>

LOCTITE®243™, LOCTITE®638™ are a registrated trademark of Henkel Corporation. 243, 638 is a trademark of Henkel Corporation.

**NOTICE** Do not grease the inner shafts too extensively. Greasing too much can cause overload of the electric drive unit and trip the circuit breaker. Run the unit for two minutes continuously to distribute...
the grease in the flexible shaft before immersion in the concrete.

**Connecting the vibrating head**

1. Connect the ground (earth) wire on the poker nipple. Use LOCTITE®243™ to glue the screw on the poker.
2. Use connectors and thermo-insulation to connect the wires to the poker stator.
3. Slide the red hose over the wires and place the hose close to the poker gland.
4. Fix the hose on the poker nipple by using a clamp.
5. Slide the wires inside the converter casing, through the gland.
6. Fasten the nut and fit the hose over the converter casing nipple and fix it with a clamp.
7. Use new connectors to connect the wires in the converter.
8. Fit the cover to the converter.

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**Vibrating element**

**AHFV22**

**Disassembly**

1. Unscrew the end cap (A) from the stator tube (B) (left hand thread). The stator is glued inside the tube.

![Diagram of AHFV22 Disassembly](image)

2. Unscrew the nut (C) (right hand thread), and remove the flexible sheathing (D) and the rubber gasket (E).

![Diagram of AHFV22 Disassembly](image)

3. Unscrew the nipple (F) (right hand thread).

![Diagram of AHFV22 Disassembly](image)

4. Use a suitable rod and a mallet to gently press the rotor (G) through the bearing holder (H). After the removal of the bearing holder (H), remove the eccentrics (I) and the eccentrics screws (J). The bearing (K) can be removed after the eccentrics have been removed.

![Diagram of AHFV22 Disassembly](image)

**Assembly**

1. Assemble the vibrating element in the reverse order. Clean all parts before the assembly.
2. Replace the damaged parts and the O-rings systematically.
3. Fill the vibrating element with oil. (See the section Lubrication for information about type and amount of oil.)

**NOTICE** Carefully clean the threads on the end cap and the tube before gluing with LOCTITE®638™. The threads must be perfectly clean and contain no residues of oil or dust.

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Disconnecting the vibrating head

1. Disconnect the AHFV from the power socket.
2. Cut the clamp that holds the wires on the converter side.
3. Remove the cover from the converter.
4. Cut the three connector wires and unscrew the ground (earth) wire.
5. Pull the hose from the converter side and unscrew the nut from the casing.
6. Put the vibrating element in a tube vice and clamp it.
7. Cut the clamp that holds the wires on the poker side, then pull the red hose until the connectors appear.
8. Cut the thermo-insulation and disconnect the terminals.
9. Disconnect the ground (earth) wire from the nipple.

Storage

◊ Clean the machine properly before storage, in order to avoid hazardous substances. See section “Dust and fume hazard”.
◊ Always store the machine in a dry place.
◊ Keep the machine in a safe place, out of the reach of children and locked up.

Disposal

A used machine must be treated and disposed in such way that the greatest possible portion of the material can be recycled and any negative influence on the environment is kept as low as possible, and in accordance with local restrictions. Always send used filters and drained oil remnants to environmentally correct disposal.

The electronic and electrical devices may contain potentially hazardous substances. Do not dispose of them in the nature. Dispose them according to local laws and regulations for the country of use. According to the European directives 2002/95/EC and 2002/96/EC.
# Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The AHFV stops during operation.</td>
<td>The RCD breaker has detected a fault.</td>
<td>Check the cables or converter. Replace the cable or converter.</td>
</tr>
<tr>
<td>The AHFV stops during operation.</td>
<td>The AHFV microprocessor has detected a fault.</td>
<td>Check for short circuit between the phases on the poker side.</td>
</tr>
<tr>
<td></td>
<td>The internal vibrator is overloaded (when operating in concrete or rebar).</td>
<td>Check for short circuit between the phases and (ground) earth on the poker side.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overheating. This can occur when the temperature of the cover casing is too high &gt;60°C (140°F)</td>
</tr>
</tbody>
</table>

### LED status

<table>
<thead>
<tr>
<th>LED status</th>
<th>AHFV status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steady green.</td>
<td>No fault. Connected to the power source.</td>
<td>-</td>
</tr>
<tr>
<td>Flashing green.</td>
<td>Work in progress. Limitation of current.</td>
<td>Check if the vibrating head is blocked or overloaded.</td>
</tr>
<tr>
<td>Flashing red.</td>
<td>Converter box is overheating. Vibrating head is overheating.</td>
<td>Let the converter or vibrating head cool down for a few minutes then try to restart the poker.</td>
</tr>
<tr>
<td>Flashing green and red.</td>
<td>Overvoltage or undervoltage.</td>
<td>Check the voltage of the power source.</td>
</tr>
<tr>
<td>Steady red.</td>
<td>Overload. Short circuit between phases. Insulation fault in the vibrating head. Internal problem in the converter.</td>
<td>Check the converter and vibrator head for damage. If necessary send the poker to a workshop.</td>
</tr>
</tbody>
</table>
Technical data

Machine data AHFV

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage, (V)</td>
<td>115V</td>
</tr>
<tr>
<td>Phases</td>
<td>1</td>
</tr>
<tr>
<td>Frequency, (Hz)</td>
<td>50/60</td>
</tr>
<tr>
<td>Power, (W)</td>
<td>1,170</td>
</tr>
<tr>
<td>Amperage, (A) 230V/115V</td>
<td>6.4/12.8</td>
</tr>
<tr>
<td>Protection</td>
<td>IPX7</td>
</tr>
<tr>
<td>Speed at full load, r.p.m.</td>
<td>12,000</td>
</tr>
<tr>
<td>Cable length, m (ft)</td>
<td>15 (49.2)</td>
</tr>
<tr>
<td>Weighted effective acceleration uncertainty (K) m/s²*</td>
<td>5.87 (1.00)</td>
</tr>
</tbody>
</table>

* Weighted effective acceleration measured in water at 2 meter (6.56 ft.) from the end of the poker according to EN ISO 5349.

Noise and vibration declaration statement

Guaranteed sound power level Lwa according to EN ISO 3744 in accordance with directive 2000/14/EC. Sound pressure level Lpa according to EN ISO 11203. Vibration value determined according to EN ISO 20643, EN ISO 5349-2. See table "Noise and vibration data" for the values etc.

These declared values were obtained by laboratory type testing in accordance with the stated directive or standards and are suitable for comparison with the declared values of other machines tested in accordance with the same directive or standards. These declared values are not suitable for use in risk assessments and values measured in individual work places may be higher. The actual exposure values and risk of harm experienced by an individual user are unique and depend upon the way the user works, in what material the machine is used, as well as upon the exposure time and the physical condition of the user, and the condition of the machine.

We, Construction Tools PC AB, cannot be held liable for the consequences of using the declared values, instead of values reflecting the actual exposure, in an individual risk assessment in a work place situation over which we have no control.

This machine may cause hand-arm vibration syndrome if its use is not adequately managed. An EU guide to managing hand-arm vibration can be found at http://www.humanvibration.com/humanvibration/EU/VIBGUIDE.html. We recommend a programme of health surveillance to detect early symptoms which may relate to vibration exposure, so that management procedures can be modified to help prevent future impairment.

Noise data

<table>
<thead>
<tr>
<th>Noise</th>
<th>Declared values</th>
<th>Sound pressure</th>
<th>EN ISO 3744</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LpA</td>
<td>LwA</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>AHFV22</td>
<td>83</td>
<td>94</td>
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</table>
Noise level measured in air at 1m from the poker according to EN ISO 3744. Uncertainty: ± 3dB

Weights and dimensions AHFV

<table>
<thead>
<tr>
<th></th>
<th>AHFV</th>
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<tbody>
<tr>
<td>Converter weight, kg (lbs)</td>
<td>2.8 (6.17)</td>
</tr>
<tr>
<td>Operating weight, kg (lbs)</td>
<td>15.9 (35.05)</td>
</tr>
<tr>
<td>Dimensions of converter: L x W x H mm (in.)</td>
<td>300 x 103 x 80 (11.8 x 4.05 x 3.14)</td>
</tr>
<tr>
<td>Tube diameter, mm (in.)</td>
<td>56 (2.20)</td>
</tr>
<tr>
<td>Tube length, m (ft)</td>
<td>3.80 (12.46)</td>
</tr>
<tr>
<td>Tube weight, kg (lbs)</td>
<td>5.1 (11.2)</td>
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EC Declaration of Conformity


<table>
<thead>
<tr>
<th>Type</th>
<th>Input power (kW)</th>
<th>Speed at full load (min-1)</th>
<th>Weight (kg)</th>
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<td>1.17</td>
<td>12,000</td>
<td>15.9</td>
</tr>
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</table>

Following harmonised standards were applied:
- EN 60745-1
- EN 60745-2-12:2006
- EN 12649

Technical Documentation authorised representative:
Peter Karlsson
Construction Tools PC AB
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Vice President Design and Development:
Erik Sigfridsson

Manufacturer:
Construction Tools PC AB
Box 703
391 27 Kalmar
Sweden

Place and date:
Kalmar, 2016-01-12
Spare parts list
Poker vibrators

AHFV22
General information

This spare parts list applies to the following:

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
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<tr>
<td>4812052105</td>
<td>AHFV22</td>
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</table>

Use only authorized parts. Any damage or malfunction caused by the use of unauthorized parts is not covered by Warranty or Product Liability. Any unauthorized use or copying of the contents or any part thereof is prohibited. This applies in particular to trademarks, model denominations, part numbers, and drawings.

Instructions for use
This spare parts list contains no safety regulations and is merely intended to assist in the ordering of spare parts. For information about operating, servicing, or repairing, the relevant Safety and operating instructions must be consulted at all costs. Please observe the safety instructions listed in the relevant Safety and operating instructions!
## Contents

<table>
<thead>
<tr>
<th>Spare parts list</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>AHFV22</td>
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<tr>
<td>Vibrating elements list</td>
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</tr>
<tr>
<td>Vibrating element for AHFV22</td>
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<td>Part No.</td>
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Comments for Page: AHFV22

(L)OCAL REMARKS

Refer to Parts Online for the most up to date information. The printed information might be outdated.
Fri Jan 22 07:21:07 MST 2016

2
A | See the separate table.
B | L = 5 m (16.40 ft.) Sold by meter. Exact length must be ordered.
C | L = 0.55 m (22 in.) Sold by meter.

E | Length = 2 x 6 m (2 x 19.68 ft.) Only for AHFV16 115 V cETLus, AHFV19 115 V cETLus, AHFV22 115V cETLus. Sold by meter. Exact length must be ordered.

F | Length = 6.5 m (21.32 ft.) Sold by meter. Exact length must be ordered.

H | Length = 6 m (19.68 ft.) Only for AHFV16 115 V cETLus, AHFV19 115 V cETLus, AHFV22 115V cETLus. Sold by meter. Exact length must be ordered.

I | L = 0.05 m (2 in.) Sold by meter.
J | Glue LOCTITE®495™

L | "Safety gear label"

O | Only for AHFV16 115 V cETLus, AHFV19 115 V cETLus, AHFV22 115V cETLus.
P | High voltage test
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Spare parts list  Vibrating elements list

NO EXPLODED VIEW AVAILABLE FOR THIS BOM
Spare parts list for AHFV22

Refer to Parts Online for the most up to date information. The printed information might be outdated.
Fri Jan 22 07:21:12 MST 2016
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<td>-</td>
<td>Oil, Shell Tellus T46, 0.015 litre, 0.004 gallon</td>
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</tr>
</tbody>
</table>

Comments for Page: Vibrating element for AHFV22

(L)OCAL REMARKS

C | 110 V
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