

Huskvarna, 2018-03-12

## **Safety and Operating Instructions**

Dear customer,

thank you for choosing a Husqvarna quality product. We hope that you will genuinely enjoy it. Please note that the enclosed manual contains Atlas Copco references.

The Husqvarna Group is vouching for the quality of this product.

If you have any questions, please do not hesitate to contact our local sales or service point.

Husqvarna AB 561 82 Huskvarna, Sweden



# Safety and operating instructions Poker vibrator



# Contents

Introduction	5
About the Safety and Operating Instructions	5
Safety instructions	6
Safety signal words	6
Work area	6
Electrical safety	6
Personal safety	7
Operating, precautions	8
Maintenance, precautions	9
Storage	9
Overview	10
Design and function	10
Main parts	10
Labels	
Data plate	
Safety label	
Operation	10
Preparations before vibrating	
Vibrating	
When taking a break	
Maintenance	
Every 10 hours of operation (daily)	
Every 75 hours of operation (or bi-weekly)	
Every 100 hours of operation (or monthly)	
Wiring diagram	
AT vibrator tube	
Storage	14
Disposal	14
Troubleshooting	15
Technical data	16
Machine data	16
Noise and vibration declaration statement	16
Noise data	16
Vibrating poker	17
Flexible shaft	17
Dimensions	17
EC Declaration of Conformity	18
EC Declaration of Conformity	18

## Introduction

Thank you for choosing a product from Atlas Copco. Since 1873, we have been committed to finding new and better ways of fulfilling our customers' needs. Through the years, we have developed innovative and ergonomic product designs that have helped customers improve and rationalize their daily work.

Atlas Copco has a strong global sales and service network, consisting of customer centers and distributors worldwide. Our experts are highly trained professionals with extensive product knowledge and application experience. In all corners of the world, we can offer product support and expertise to ensure that our customers can work at maximum efficiency at all times.

For more information please visit: www.atlascopco.com

Construction Tools PC AB Box 703 391 27 Kalmar Sweden

# **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.

The different designation of the texts means as follows:

- Action step in a safety instruction
- Action step
- Established operation process
- 2.
- A Explanation of the elements of a drawing
- ВС
- Listing
- •
- •

# 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.

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 signal words Danger, Warning, Caution, and Notice are used as follows in these Safety and operating instructions:

**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.

Work 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 power tool 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 Falling parts

If a key or wrench is left attached to a rotating part of the machine it may fly off and cause personal injuries. Remove adjusting keys or switches before starting the machine.

# **▲** 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.

#### A 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 should include dust and fumes created by the use of the machine and the potential for disturbing existing dust.
- b 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 should 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 movement

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.
- When the percussion mechanism is activated, the only body contact with the machine you must have are your hands on the handle or handles. Avoid any other contact, for example supporting any part of the body against the machine or leaning onto the machine trying to increase the feed force.
- ► 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 power tool 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

#### ▲ 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 approved by Atlas Copco.
- 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 power tool.

## **Design and function**

AME1600 is a drive unit used for the AT mechanical poker vibrator that is connected to a superflex flexible shaft. Together they form the complete application for concrete vibration. No other use is permitted.

AME1600 is splash proof and double insulated according to the EC standards and consequently does not need earthing. It can be connected to any ordinary single phase power socket.

AME1600 consists of a universal motor located in a plastic body made of glass fibre reinforced polyamide. The handles prevent any shock damage to the casing and allow different position handling.

To choose the correct accessories, see the spare parts list.

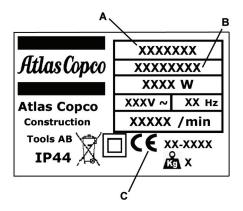
## Main parts



- A. Electric cable
- B. Belt loop
- C. Handle
- D. Power switch
- E. Piston
- F. Square tube
- G. Protective cap

## Labels

## **Data plate**



- A. Machine type
- B. Product identification number
- C. The CE symbol means that the machine is EC-approved. See the EC Declaration of Conformity which is delivered with the machine for more information.

## Safety label



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

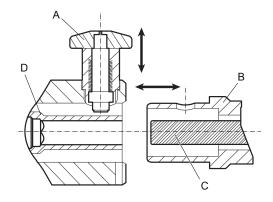
# **Operation**

# **Preparations before vibrating**

*NOTICE* Before starting the drive unit check that the supply values corresponds with the data plate.

#### Connect the shaft on the drive unit

1. Lift the locking piston (A) on the drive unit (D).

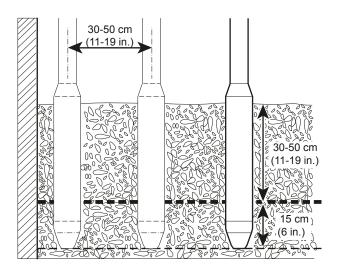


- Insert the flexible shaft (B) into the hole in the drive unit.
- 3. Make sure that the square fitting of the flexible shaft (C) fits the square tube on the drive unit (D).
- 4. Secure the vibrator tube to the flexible shaft by screwing it with left-hand
- 5. Plug the drive unit (D) into the power socket and start the machine.

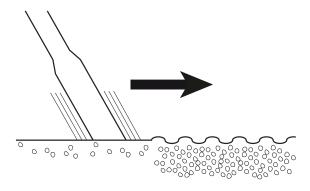
# **Vibrating**

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

- 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, remove it from supply and clean it.
- 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.

# **Every 10 hours of operation** (daily)

## Maintenance routines:

- Check and clean the motor's cooling flanges.
  Sand and stones could clog the air inlet and reduce the cooling of the drive unit.
- Clean the machine. After every working shift concrete splashes must be removed from the surfaces while it is still fresh.
- Check that the controls are not damaged and do not jam. Replace if necessary.

*NOTICE* Never use high-pressure water to clean the drive unit.

# Every 75 hours of operation (or bi-weekly)

#### Maintenance routines:

- Disconnect the flexible shaft from the drive unit by lifting the locking mechanism. Unscrew the shaft from the poker which is a left-handed thread.
- Pull out and lubricate the inner shaft with KLUBER GBU Y131 grease or equivalent.
   About 15 grams of grease is required per meter of the shaft.

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.

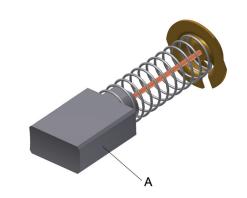
# **Every 100 hours of operation** (or monthly)

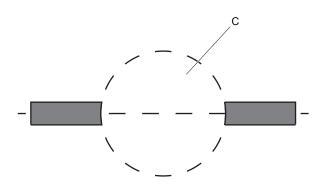
#### Maintenance routines:

- Inspect the carbon brushes on a monthly basis or every 100 hours. At normal duty the carbon brushes would last for approximately 150 hours but premature wear can occur depending on the working conditions or intensive use.
- Inspect the commutator and the carbon brushes.
- Inspect the filter.

## Changing the brushes

 The machine is equipped with two carbon brushes that are placed on each side. The carbon brushes (A) are machined to ensure a good contact between the commutator (C) and the carbon brush.



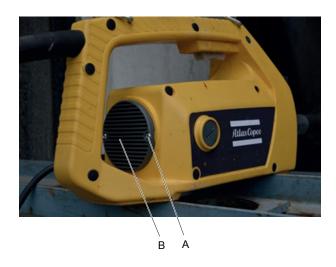


1. Remove the protective cap (C) to reach the carbon brushes (B). Use a large flat bladed screwdriver to remove the cap.



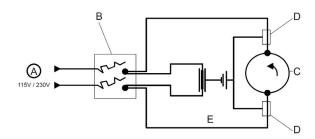
## Replacing the filter

- 1. Remove the screws (A)
- 2. Pull out the rear cover (B)



- 3. Replace the filter
- 4. Refit the rear cover (A)

## Wiring diagram



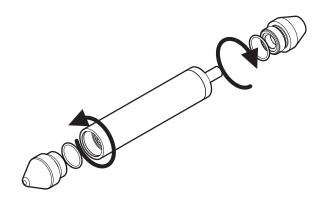
- A. Main
- B. Switch
- C. Rotor
- D. Brush
- E. Stator

**NOTICE** The rotation is anti-clockwise (coupling side view)

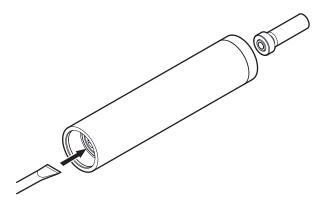
## AT vibrator tube

Due to workload, ambient temperature and vibrations caused by the vibrator poker's contact with the concrete and/or rebar. This will cause wear on the bearings and sealing and these will eventually fail. When components have failed they must be replaced with original parts. Replacement bearing kits are available, see Spare part list.

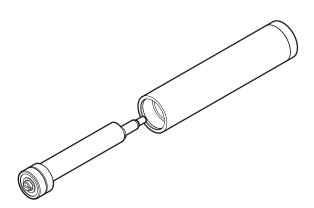
1. Dismantle the end cap (right hand thread) and the tube connector (left hand thread).



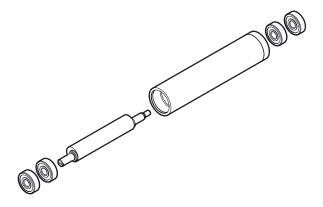
Loosen the square screw cap on the drive side by locking the eccentric. Use a screwdriver to lock the eccentric, place the screwdriver into the groove at the end with the end cap.



3. Locate the bearings and seals to be replaced. Pull out the eccentric together with the two bearings the vibrator tube. Pull out from the end with the end cap.



4. Press the two bearings out of the tube.



5. Assemble in the opposite order.

# **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**

Problem	Cause	Solution
The power tool does not start.	The plug is not connected.	Connect the electrical plug into a power socket.
	Start switch is in off position.	Turn the switch on.
	The carbon brushes are worn out.	Change the carbon brushes.
	No power in the power socket.	Replace or repair the power socket.
	Defective power switch	Replace the power switch.
The power tool switch trips out.	The internal vibrator is overloaded (when operating in concrete or rebar).	Raise the the vibrator poker from the concrete and immerse it again.
	Air inlet or outlet is clogged and the power	Remove anything that may obstruct the air tool is not cooled.
	The electric motor fan is broken and the power tool is not cooled.	Replace the fan at an authorised workshop.
	Nuts and bolts fixating the outer casing has Tighten the nuts and bolts. come loose.	
	Too much friction in the flexible shaft.	Grease the flexible shaft in the hose.
	Too much grease on the flexible shaft.	Respect the quantity of 15 grams per meter of flexible shaft.
	Too much torque inside the the vibrating poker (the bearings get worn out).	Replace the bearings in the vibrating poker.
The flexible shaft is overheating.	Too much friction in the flexible shaft.	Grease the flexible shaft in the hose.
The power tool vibrates too much.	The bearings of the power tool are worn out.	Replace the bearings in the power tool at an authorised workshop.
	Too much friction in the flexible shaft.	Grease the flexible shaft in the hose.
The power tool is very noisy	The carbon brushes are worn out.	Change the carbon brushes.
	The bearings are defective.	Replace the bearings.
	The rotor is touching the stator.	Replace the rotor at an authorised workshop.
	The outer cladding is broken or has loose	Inspect the cladding and tighten the bolts. bolts
The vibrating poker does not vibrate but the power tool starts.	The bearings in the in the vibrating poker are broken.	Replace the bearings in the in the vibrating poker.
	The flexible shaft is broken.	Replace the flexible shaft.

## Technical data

## Machine data

	AME1600 UK / US-CAN	AME1600 EU
	Electrical	drive unit
Voltage, (V)	110	230
Phases	1	1
Frequency, (Hz)	50/60	50/60
Power, kW (hp)	1.6 (2.25)	1.6 (2.25)
Amperage, (A)	14	7
Protection	IP44	IP44
Insulation Class*	1	II
Speed, r.p.m.	12,000	12,000
Cable length, m (ft)	5 (16)	5 (16)
Weight, kg (lb)	6.1 (13.45)	6.1 (13.45)
Weighted effective acceleration uncertainty (K) m/s <sup>2**</sup> (ft/s <sup>2**</sup> )	"4.16 (0,71)"	"4.16 (0,71)"

<sup>\*\*</sup> Weighted effective acceleration measured in water with Superflex 10 and AT29 (m/  $s^2$ ), according to EN ISO 5349 and EN ISO 20643.  $k = 1.5 \text{ m/s}^2$ 

## 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

Noise - Decleared values	
	Sound pressure - EN ISO 11203
Туре	Lpa
AME1600	77

<sup>\*</sup> Class I with ground connection, Class II double insultaion

# Vibrating poker

	AT29	AT39	AT49	AT59
Tube diameter, mm (in.)	29 (1.125)	39 (1.5)	49 (2)	59 (2.375)
Tube length, mm (in.)	332 (13)	315 (12.375)	311 (12.25)	306 (12)
Tube weight, kg (lb)	1.30 (2.875)	2.10 (4.625)	2.70 (6)	3.90 (8.625)
Amplitude peak, mm (in.)	0.80 (0.03)	1.00 (0.04)	1.20 (0.05)	1.20 (0.05)
Speed, r.p.m.	12,000	12,000	12,000	12,000
Weighted effective acceleration uncertainty (K)	12.09	8.86	9.74	10.29

<sup>\*\*</sup> Weighted effective acceleration measured in water with Superflex 40 at 2 m from the end of the poker, according to EN ISO 5349 and EN ISO 20643.

## Flexible shaft

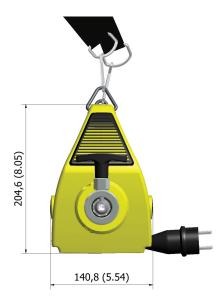
Flexible shaft	10	15	20	30	40
Length, m (ft.)	1 (3.25)	1.50 (5)	2.00 (6.5)	3.00 (10)	4.00 (13)
Weight, kg (lb)	2.40 (5)	3.00 (6.625)	3.80 (8.375)	5.60 (12.375)	7.30 (16)

*NOTICE* The information is only a general description, it is not guaranteed and it contains no warranties of any kind.

# **Dimensions**

mm (in)





# **EC Declaration of Conformity**

## **EC Declaration of Conformity**

We, Construction Tools PC AB, hereby declare that the machines listed below conform to the provisions of EC Directive 2006/42/EC (Machinery Directive), 2006/95/EC (Low voltage), 2004/108/EC (EMC) and the harmonised standards mentioned below.

Drive unit	Input power (kW)	Speed (min-1)	Weight (kg)
AME1600	1.6	12,000	6.1

## Following harmonised standards were applied:

- ♦ EN607451-1
- ♦ EN60745-2-12
- ♦ EN12649

## **Technical Documentation authorised representative:**

Peter Karlsson Construction Tools PC AB Box 703 391 27 Kalmar, Sweden

## **Vice President Design and Development:**

Erik Sigfridsson

## Manufacturer:

Construction Tools PC AB Box 703 391 27 Kalmar, Sweden

## Place and date:

Kalmar, 2015-07-17

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.

