

MEDECUT AUTOPSY SAW

Original Instructions
MC6000 - MSYSPORT



Medezine

www.medezine.co.uk

FOREWORD

The filtration unit is designed for dry particles only and must never be used for extracting liquids.

When not in use or during maintenance always isolate the equipment from the electrical supply by removing the mains plug from the socket.

PREPARATION FOR USE

Unpack and check equipment against the delivery note.

Check the details on the equipment rating label conform to your electrical supply.

IMPORTANT. THIS EQUIPMENT MUST BE EARTHED

The wires in the mains lead of this equipment are coloured in accordance with the following code:

GREEN AND YELLOW EARTH

BLUE NEUTRAL

BROWN LIVE

In the event of the wire colours in the mains lead not corresponding with the terminal markings of your plug, proceed as follows:

The wire which is coloured green and yellow must be connected to the terminal marked with either the letter E, or coloured green and yellow, or the earth symbol.

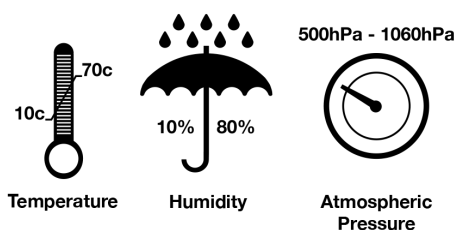
The wire which is coloured blue must be connected to the terminal marked with the letter N, or coloured black.

The wire which is coloured brown must be connected to the terminal marked with the letter L, or coloured red.

If a 240V model is to be fitted with a plug of the 13 amp. fused type to BS1363 then a 13 amp. fuse must be fitted

If a 110v/120v model is to be fitted with a 110v/120v plug to BS4343 the supply must be provided with a 16 amp. protective device.

ENVIRONMENTAL CONDITIONS FOR TRANSPORT AND STORAGE



CONTENTS

- 2 FOREWORD
- 3 CONTENTS
- 4 EQUIPMENT CLASSIFICATION & SAFETY WARNINGS
- 5 SAFETY WARNINGS CONTINUED
- 6 GENERAL DESCRIPTION
- 7 MEDECUT MC6000
- 8 MEDECUT MC6000 & MSYSPORE POWER SUPPLY
- 9 MEDECUT MC6000 & MSYSPORE HAND PIECE
- 10 BLADE AND HOSE REPLACEMENT
- 11 PREVENTATIVE MAINTENANCE AND INSPECTION
- 12 TROUBLESHOOTING
- 13 TROUBLESHOOTING AND CUTTING HINTS
- 14 CONDITIONS OF WARRANTY
- 15 TECHNICAL INFORMATION
- 16 ASSEMBLY OF THE SAW AND CONTACT DETAILS

EQUIPMENT CLASSIFICATION & SAFETY WARNINGS

Type B Equipment  Protection against electrical shock.

Not AP/APG Equipment.

Saw Unit	Watertight Equipment IP67
Power Supply	Splash Proof Equipment IP65
Filtration Unit	Splash Proof Equipment IPX4

Mode of Operation: Continuous with intermittent loading up to 3 mins. Duty cycle 50%

WARNING – continued use for greater than 5 minutes may result in the handle becoming hot.

GENERAL POWER TOOL SAFETY WARNINGS

Save All warnings and instructions for future reference.

WARNING Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

1. Work Area Safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep Bystanders away while operating a power tool. Distractions can cause you to lose control.

2. Electrical Safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

NOTE - The term "residual current device (RCD)" can be replaced by the term "ground fault circuit interrupter (GFCI)" or "earth leakage circuit breaker (ELCB)".

3. Personal Safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.

- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.
- Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

4. Power Tool Use and Care

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5. Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Safety instructions for reciprocating saws

Hold the power tool by insulated gripping surfaces where possible, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

- This equipment must be earthed before use.
- Trained personnel must only use this product.
- Check all equipment before use.
- Use the appropriate safety equipment.
- Do not immerse the Power Supply and Vacuum unit in liquid.
- Use good quality disinfectants as approved by the Hospital Infection Control.
- Do not use corrosive cleaning materials or Hypochlorite as these will damage the units.
- Do not leave the Hand Piece soaking in cleaner for prolonged periods of time as will cause an ingress of fluid.

GENERAL DESCRIPTION

The Medecut MC6000 Oscillating Saw with Vacuum Filtration has been developed to help minimize the risk of cross infection in sensitive areas, providing it is used in accordance with the manufacturer's instructions.

The complete system comprises three basic units.

THE SAW UNIT

This unit is fed from the power supply. It is hermetically sealed allowing disinfection and appropriate sterilization without dismantling. The enclosed motor cannot become contaminated, consequently there is no hazardous aerosol effect. All external materials used in its construction are non corrosive.

THE FILTRATION UNIT

This unit is fed from the power supply. It gives highly efficient two stage filtration by way of a paper filter and highly efficient cartridge filter (Hepa filter) respectively. It is quite capable of filtering dry and partially damp material but must never be used to extract liquids. This unit is not watertight and not designed for liquid extraction.

THE POWER SUPPLY

This unit is fed from the mains supply and in turn delivers the appropriate electrical currents to the saw unit and the vacuum filtration unit. The complete system is activated by the momentary switch on the saw unit. An intelligent current limiting device (which resets itself automatically) is incorporated in the power supply to prevent overload usage of the saw unit. This unit is watertight.

User preference may require the equipment to be supplied in its basic form which comprises the saw unit and power supply only. A filtration unit may be easily added by the customer at a later stage.

The complete Medecut MC6000 system is capable of handling health endangering dusts, making it suitable for use in hospitals and industrial environments where the collection and disposal of such debris is subject to stringent control.

This equipment is not suitable for use in an environment where an explosion risk is present.

The equipment should only be moved by using the handle provided and never by pulling on the saw unit or mains lead.

SEQUENCE OF OPERATION

Warning: This equipment is designed for use by properly trained personnel only.

Medezine Ltd accepts no liability whatsoever for inappropriate or untrained usage.

1 Plug equipment into appropriate mains supply. Check 'mains on' indicator on power supply is lit.

2 Remove the saw unit from 'park' position and depress and release the on/off button. The complete system will then start.

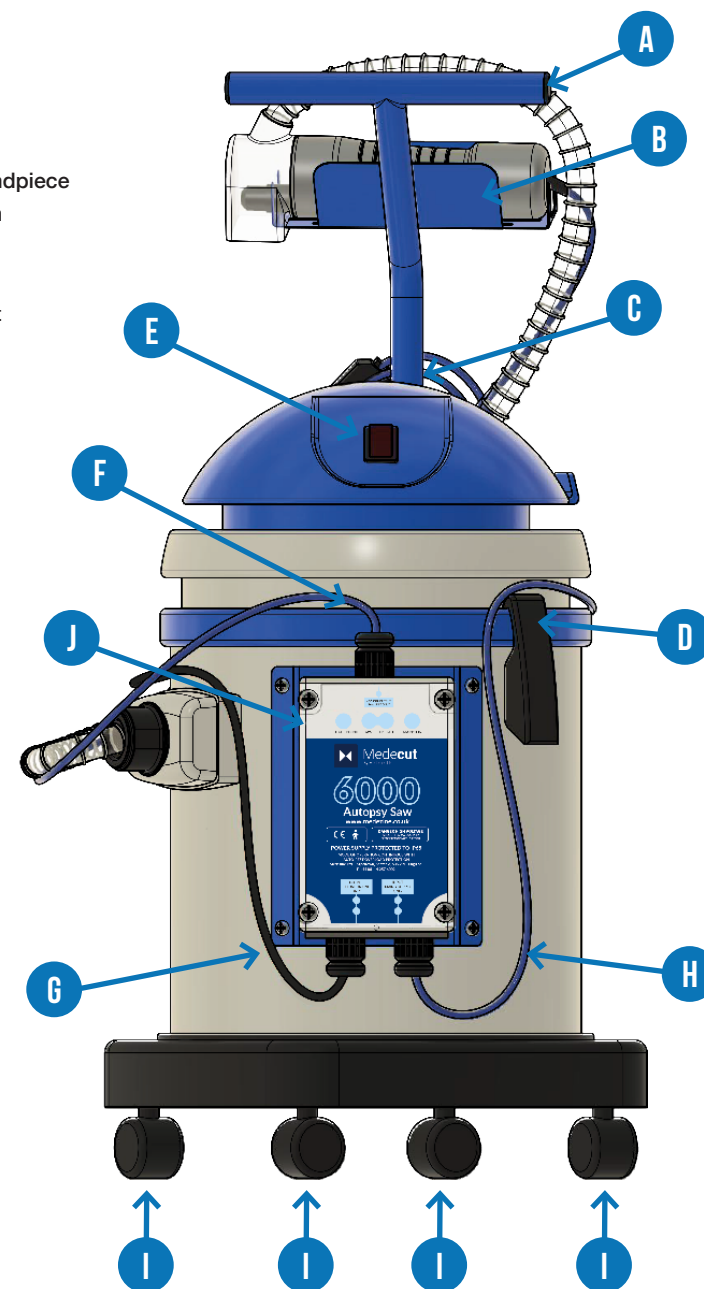
3 Depress and release the on/off button once again and the system will then stop.

4 Return the saw unit to the 'park' position.

5 Always disconnect the equipment from the mains supply when not in use.

MEDECUT MC6000

- A - Handle for moving
- B - Hand piece storage
- C - Cable storage
- D - Cover clamp
- E - On/off switch
- F - Supply lead saw handpiece
- G - Supply lead vacuum
- H - Supply lead mains
- I - Castors with brakes
- J - Status indicator light



MEDECUT MC6000 & MSYSPORT POWER SUPPLY

FUSE REPLACEMENT

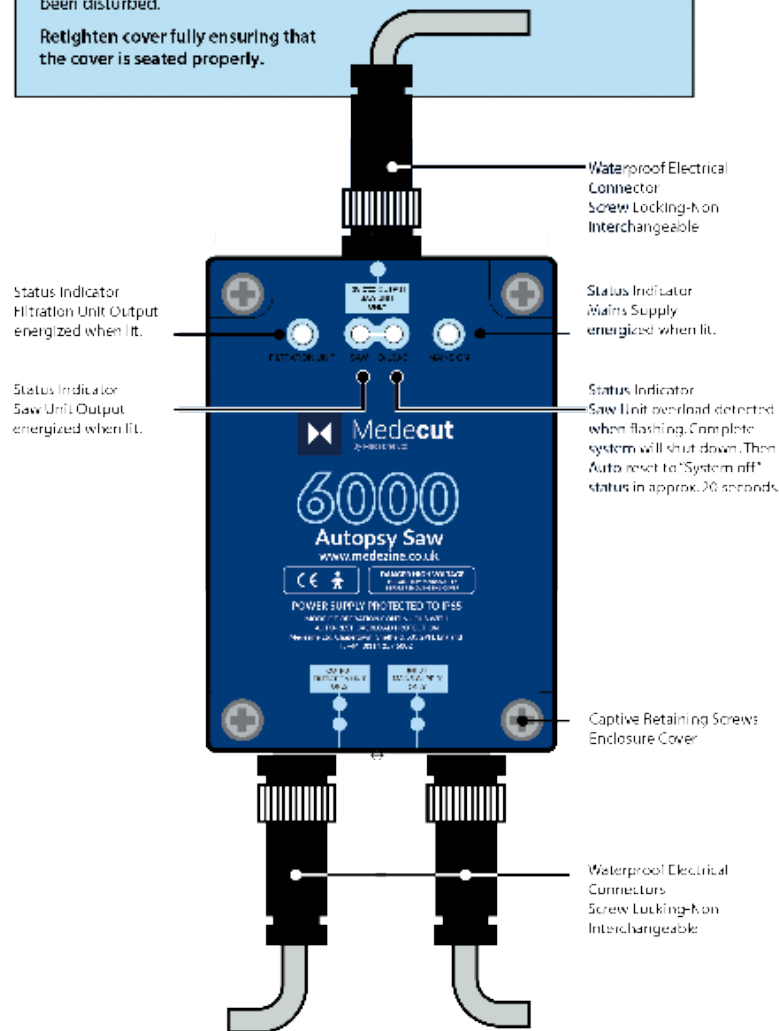
ISOLATE FROM ELECTRICAL SUPPLY BEFORE REMOVING COVER

The two mains supply fuses are located on the underside of the board in the position shown.

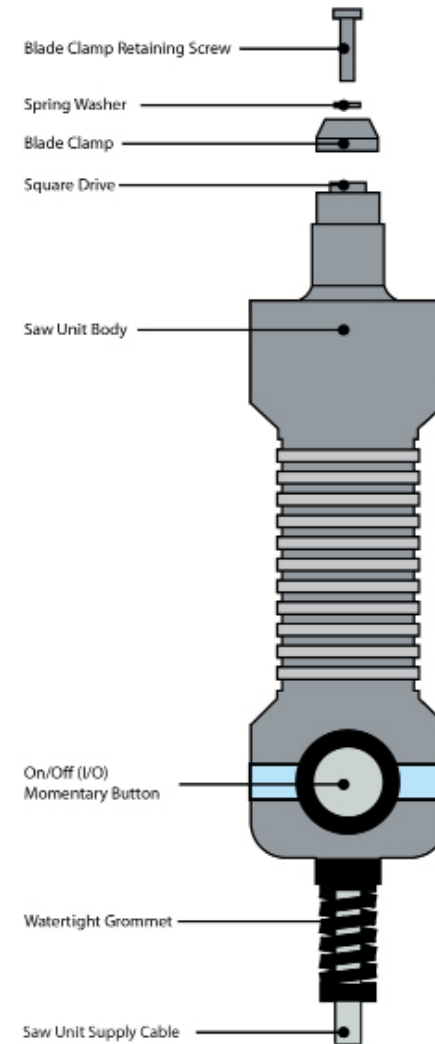
The third fuse is an anti surge fuse. Fuse type and ratings are marked adjacent to the fuse holders.

Undo the four captive retaining screws to remove the cover. Prior to replacement ensure that the rubber seal set into the underside cover has not been disturbed.

Retighten cover fully ensuring that the cover is seated properly.



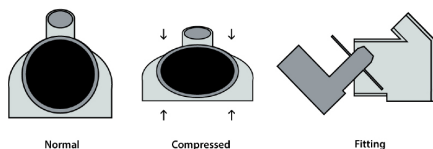
MEDECUT MC6000 & MSYSPORT HANDPIECE



BLADE AND HOSE REPLACEMENT

BLADE REPLACEMENT

1. Pull vacuum hose complete with hose/cowelling connector from the vacuum cowelling.
2. Pull vacuum cowelling from saw unit body.
3. Unscrew blade clamp retaining screw with nutwrench provided and remove retaining screw, spring washer and blade clamp.
4. Replace or index blade as required, ensuring it is seated properly on the square drive shaft. If not, discard, or resulting damage or inefficiency of the saw could result.
5. Refit blade clamp, spring washer and retaining screw. Note ! It is imperative the spring washer is in place or the blade may loosen whilst in use.
6. Firmly retighten clamp retaining screw with nutwrench provided. Note ! use of the nutwrench alone will clamp the blade sufficiently, additional leverage is not necessary as this could result in damage to the internal mechanism.
7. Refit vacuum cowelling. This will pass over a 64mm blade if compressed to an oval shape and fitted as shown.



8. Refit hose/cowelling connector, complete with hose, to cowelling.

HOSE REPLACEMENT

1. Remove hose/cowelling connector from cowelling. Remove connector from vacuum hose by pulling and screwing (clockwise) simultaneously. Remove vacuum hosing from hose/filtration unit connector similarly.
2. Refit vacuum hosing to hose/cowelling connector by pushing and screwing (clockwise) simultaneously until fully engaged. Refit vacuum hosing to hose/filtration unit connector similarly.
3. Refit hose/cowelling connector, complete with hose, to vacuum cowelling.

PREVENTATIVE MAINTENANCE AND INSPECTION

THE EQUIPMENT SHOULD BE DISCONNECTED FROM THE ELECTRICAL SUPPLY WHILE THE FOLLOWING TASKS ARE BEING PERFORMED

THE SAW UNIT

Daily

Clean thoroughly with recommended disinfectant using soft nylon brush, not wire or hard bristle type. Rinse down and dry thoroughly.

Weekly

Lubricate retaining screw, blade clamp and square drive with light engineering or silicone based grease. Graphite based grease is not recommended. Inspect equipment for signs of damage.

Annually

Full service of Saw Unit is strongly recommended.

Note. To retain warranty cover and any further warranty issued against the saw unit, it can only be serviced or repaired by Medezine Ltd. or their appointed agent. Any attempt to do so, by any other party, will invalidate the warranty.

THE FILTRATION UNIT

The filter elements must be renewed periodically, as filtration efficiency is grossly impaired if they become heavily contaminated. Your Safety Officer will advise the correct procedure for disposal of the collected particles and redundant filter elements. Environmental considerations must also be observed when deciding their frequency but the following intervals should be regarded as a minimum requirement.

Daily

Change paper filter.

Weekly

Clean thoroughly with recommended disinfectant using soft damp cloth. Dry thoroughly. Inspect Vacuum Hood, Hose and Hose Connectors for any clogging or signs of damage, clean or replace if necessary.

6 months

Replace micron filter.

THE POWER SUPPLY

Weekly

Clean thoroughly with recommended disinfectant using soft damp cloth. Dry thoroughly and inspect for damage and ill-fitting connections

TROUBLESHOOTING

The information contained in this section covers common problems and suggests solutions. If your system's problem is not covered here, or you still need help, please contact the agent manufacturer.

Note. Disconnect equipment from the mains electrical supply before attempting to implement any solutions of an electrical nature.

The following solutions must only be carried out by a qualified electrician.

SYMPTOM	POSSIBLE CAUSE	SOLUTION
System does not start.	Mains supply indicator not lit. Fuse blown. Bad connection.	Check mains plug fuse. Check power supply fuses. Check all electrical connectors are mated correctly.
Fuses blow repeatedly.	Incorrect supply voltage. Filtration unit has been used to extract liquids.	Check equipment rated voltage is compatible with the electrical supply. Disconnect filtration unit connector from the power supply. If fuses do not blow when saw unit is switched on then the filtration unit is defective.
System shuts down.	Overload indicator is on. Faulty connection.	Wait until yellow overload indicator is on (approx 20 seconds) and retry. Check connections for the saw unit and filtration unit are engaged correctly with the power supply.
System shuts down repeatedly.	Distorted blade. Blunt blade. Incorrect fitted blade.	Discard immediately. Index blade so new portion comes in contact with the workplace. Check blade is fitted in accordance with the manufacturer's instructions.
Filtration unit status indicator lit but not running although saw unit does.	Faulty connection. Defective motor.	Check the power supply connection is properly engaged. Contact manufacturer.
Saw unit status indicator lit but not running although filtration unit does.	Faulty connection. Defective motor.	Check the power supply connection is properly engaged. Contact manufacturer.

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Excessive noise from saw unit.	Distorted blade. Badly fitting or loose blade. Bearing service required.	Renew blade. Check blade is fitted in accordance with the manufacturer's instructions. Contact manufacturer.
Filtration unit does not extract.	Filtration unit not running.	Check the power supply connection is properly engaged and the filtration unit indicator is lit when the saw unit is running.
Filtration unit runs but does not extract efficiently.	Vacuum hose is kinked, blocked or disconnected. Filter elements not assembled correctly. Paper filter is full. Paper filter is split. Micron filter is choked.	Repair or replace hosing. Ensure paper filter is fitted correctly on the hose inlet and pressed firmly up to the side wall. Ensure top cover is seated correctly and toggle clamps are properly engaged. Renew paper filter. Renew paper filter and decontaminate / clean the vacuum cylinder before use. Renew micron filter.

CUTTING HINTS

The Medecut MC6000 oscillating saw has been designed and constructed to provide effortless and highly efficient cutting in its appropriate areas of usage. We suggest a trial cutting period applying the least pressure possible to the workpiece until fully accustomed with the efficiency. Excessive pressure is not required as this will reduce the speed of cut.

If you experience difficulty then consult the Troubleshooting Causes and Solutions.

Suitable safety protection must be worn at all times during cutting.

DISINFECTION AND STERILIZATION

The saw unit only is capable of withstanding temperatures between - 20 degrees C to +70 degrees C. This must be borne in mind when considering a disinfection or sterilization method. Autoclaving of this equipment is not recommended.

Only use cleaning agents that are safe for use on metals. We do not recommend the use of Hypochlorite or corrosive cleaners as possible corrosion could result.

We advise gentle scrubbing with a soft non metallic brush, rinsing with clean water and drying where necessary. Do not direct high pressure water jets at any part of the equipment, this could invalidate the warranty.

All cleaning agents should be mixed, stored and applied according to the manufacturers instructions.

Note. Normal safety precautions should be observed when mixing or applying any cleaning agents, such as the wearing of suitable eye protection, protective clothing and gloves. Always refer to the manufacturer's recommendations.

CONDITIONS OF WARRANTY

Should the equipment covered by this warranty become inoperative because of defective material(s) or workmanship, Medezine Limited undertake at their own discretion to repair or replace it at no charge to the purchaser, subject to the following conditions :-

1. That the equipment has been used with care and shows no sign of abuse, neglect or accidental damage.
2. That the equipment has only been used for the purpose(s) for which it was designed.
3. That the preventive maintenance has been performed in accordance with the manufacturer's instructions.
4. That no attempt to repair or dismantle any part of the equipment has been made, except by a Medezine representative or an appointed agent of Medezine Limited.
5. That any claim for repair or replacement be made within one calendar month of the problem arising.
6. The conditions of this warranty remain in force for a period of twelve months from the date of purchase.
7. This warranty does not affect your statutory rights.

The policy of Medezine Limited is one of continuous product development, and ensuring our customers the best possible service. To achieve this, specifications and details may be subject to change without prior notice.

Equipment owners outside the United Kingdom should consult the distributor/agent from whom they purchased the equipment regarding spare parts and repair facilities.

The distributor/agent will advise on the best course of action to take.

CERTIFICATE OF ELECTRICAL TEST

The following tests have been performed with PAT 2 portable appliance tester and apply to the combination of equipment where goods are serial numbered / dated appropriately and supplied against this warranty.

Earth Bond Test	6V a.c.r.m.s. pass max. 1ohm
Flash Test	1.5 kV a.c.r.m.s. (class 1) pass max. 3mA
Load Test	6V pass max. / green zone / appliance tester
Operation Test	Normal running. pass max. 1kVA

APPLICABLE DIRECTIVES

2014/30/EU	EMC Directive
2006/42/EC	Machinery Directive
2014/35/EU	LVD Directive

TECHNICAL INFORMATION

POWER SUPPLY

Transformer manufactured to IEC	EN60742
Output	Saw 40 VDC
Enclosure	to IEC529, DIN40050
Protected to IP65	
Protection	Electronic Current Limiting
Device Double Pole Fused	
Weight	1.7kg
Input voltage	230v or 110/120v
Cable	4.0m fitted

VACUUM / EXTRACTOR

Model	MFIL6000	
Voltage	230v UK/EU	120v US
Frequency of supply	50-60Hz	
Mode of operation	Continuous	
Protection against water & dust	IPX4	
Protection class	Class 2	
Input current	7A Max	

MEDECUT MC6000 & MSYSPORT - SAW HANDPIECE

Motor	DC permanent Magnet
Speed	No load 13200 cycles per min
Current	No Load 40Vdc 0.75amps

ASSEMBLY OF THE SAW

MC6000 - HANDPIECE ASSEMBLY TO THE POWER SUPPLY & VACUUM UNIT

- 1** Remove the box containing the Saw Handpiece with Hose attached.



- 2** Place the Saw Handpiece on the Vacuum Handle Cradle between the 2 sets of locating lugs



- 3** Plug the Hose Attachment into the Vacuum Inlet hole



- 4** Connect the Handpiece Cable to the top of the Power Supply – labelled Saw Unit Only



CONTACT DETAILS



Medezine

www.medezine.co.uk

UK

Medezine Ltd,
Unit 11, Chambers Way, Thorncliffe Business Park,
Chapelton, Sheffield, S35 2PH, UK

Tel: +44 (0) 114 257 6002

Email: sales@medezine.co.uk

Web: www.medezine.co.uk