# PROXXON



# PROXXON-MICROMOT Motorized Carver MOS

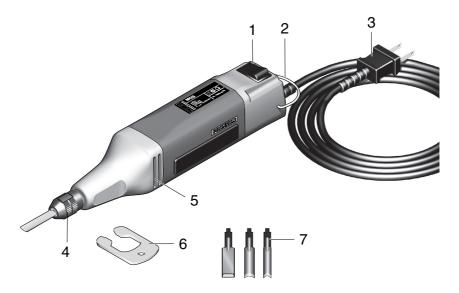


Fig. 1

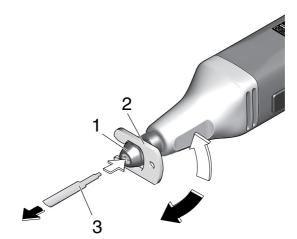
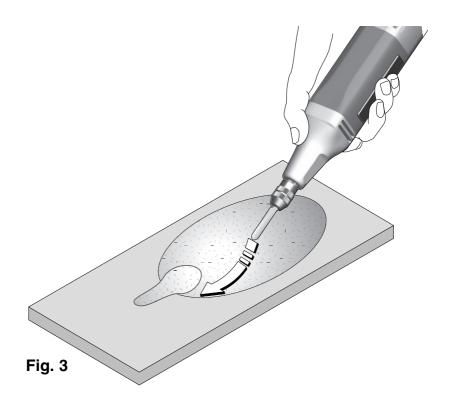
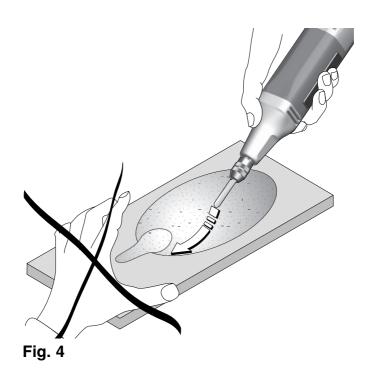


Fig. 2





#### Operating Instructions PROXXON-MICROMOT Motorized Carver MOS

Dear customer.

Congratulations on your purchase of a PROXXON MICROMOT Motorized Carver MOS. Here you have the ideal unit to cut all types of wood, to carry out renovation and general work with furniture and antiques, to carve wood, sculptures or plaster, to cut linoleum, and many more applications as well.

Before putting the machine into operation, read the following safety rules and operating instructions.

For your safety: Never connect the plug to the power source receptacle until the assembly and adjustment steps are completed, and you have read and understood the safety and operating instructions.

To avoid injury from unexpected starting or electrical shock, do not plug the power cord into a power source receptacle during unpacking and assembly. This cord must remain unplugged whenever you are working on the MOS.

#### These instructions include:

- 1. Safety regulations
- 2. Operating information
- 3. Lists of spare parts with exploded diagrams

#### The scope of supply includes:

1 pc. MOS motorized carver for 115 V

1 pc. Chuck key

1 pc Blade inserts (3 shapes, bimetallic): U, V

and flat blade

#### The MOS offers you:

- 1. Maximum operating comfort and convenience thanks to an ergonomically shaped case.
- Low weight for optimum handling and to minimize tiredness when working.
- A gearbox casing made of diecast aluminium for precise locations of the ball bearings and more stability under extreme loading.
- 4. Quiet, powerful and maintenance-free motor.
- 5. Electrical safety to protection class 2.

Please read these safety instructions and operating instructions thoroughly before using the unit for the first time.

#### So you will be able to:

- 1. get to know your motorized carver better
- 2. avoid problems due to incorrect handling
- 3. increase the life of your motorized carver
- 4. minimize the risk of injuries, and
- 5. use your MOS motorized carver more effectively.

Before putting the machine into operation, read the enclosed safety rules and operating instructions. Warning! Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

#### Save these instructions.

#### **SAFETY REGULATIONS:**

- 1. Avoid untidiness in the working area.
- Check the unit for damage each time before it is used (connecting cable, protective devices, etc.), and have defective parts replaced by a technician.
- This unit complies with the relevant safety instructions. Repairs (such as replacing the mains cable) should only be done by an electrician.
- 4. Never work without the safety devices provided.
- Do not operate electric tools in the rain, in a damp environment, or in the vicinity of inflammable liquids or gases.
- Only use the tool, if the handle is dry and free of grease.
- Avoid body contact with earthed parts such as pipes, radiators, electric stoves and refrigerators.
- Protect the connecting cable against heat and sharp edges and run it along the ground in such a way that it does not get damaged.
- Do not pull the plug out of the socket by pulling on the cable.
- 10. Do not lift the unit by the cable.
- Keep children and unauthorized persons away from the working area.
- 12. Keep unused tools away from children.
- 13. Do not overload the tool.
- Do not use the tool for work for which it is not intended.
- 15. Change blunt tools in good time.
- 16. Check the tools used each time before starting work by means of a visual check to ensure they are undamaged and suitable for the intended purpose.
- 17. Firmly attach or clamp the work piece.
- 18. Thoroughly clean the unit after work (unplug it from the mains first).
- Pull out the mains plug if the unit is not being used, before maintenance, before changing the tool or making repairs.
- Only insert the mains plug when the unit is switched off.
- 21. Always wear protective glasses (danger of the tool breaking).
- 22. Wear a dust mask, if necessary.
- Only wear suitable work clothing (no loose sleeves, ties, jewelry).
- 24. Wear a hair net, if you have long hair.
- 25. Only use accessories and spare parts that have been recommended by PROXXON
- 26. Use a dust extraction device if necessary (but only use suitable dust extraction devices, in such a case due to the danger of fire from sparks).
- 27. Do not use the tool if you cannot concentrate properly or if you have been drinking.

- 28. Keep your hands away from rotating or fast-moving tools (saw blade, etc.).
- Always keep the operating instructions close at hand.

#### **GENERAL SAFETY RULES**

Warning! Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

#### SAFE THESE INSTRUCTIONS

#### Work Area

Keep your work area clean and well lit. Cluttered benches and 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, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

#### **Electrical Safety**

Double Insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double Insulation  $\Box$  eliminates the need for the three wire grounded power cord and grounded power supply system.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is 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 to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock.

#### Personal Safety

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool

while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Avoid accidental starting. Be sure switch is off before

Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

Use safety equipment. Always wear eye protection. Dust mask, skid defied safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

#### Tool Use and Care

Use clamps or other practical way to secure and support the work piece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.

Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

Use only accessories that are recommended by the manufacturer for your model.

Accessories that may be suitable for one tool, may become hazardous when used on another tool.

#### Service:

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury. When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia etc. may damage plastic parts.

#### SPECIFIC SAFETY RULES

Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

Some material may produce harmful or toxie dust (i. o. lead containing paint, some kinds of wood or metal).

#### Symbols

**Important:** Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

Symbol	Name	Designation/Explanation		
V	Volts	Voltage (potential)		
Α	Amperes	Current		
Hz	Hertz	Frequency (cycles per second)		
W	Watt	Power		
kg	Kilograms	Weight		
min	Minutes	Time		
S	Seconds	Time		
Ø	Diameter	Size of drill bits, grinding wheels, etc.		
n <sub>0</sub>	No load speed	Rotational speed, at no load		
/min	Revolutions or reciprocation per minute	Revolutions, strokes, surface speed, orbits etc. per minute		
1, 2, 3,	Selector settings	Speed, torque or position settings. Higher number means		
		greater speed		
	Infinitely variable selector	Speed is increasing from narrow end		
<b>→</b>	Arrow	Action in the direction of arrow		
~	Alternating current	Type or a characteristic of current		
	Class II construction	Designates Double Insulated Construction tools.		

Only use accessories and spare parts recommended by PROXXON (Observe the max. permitted rotational speed).

#### Please note the following in addition:

PROXXON is not liable for any damage occurring as a result of:

- 1. Handling that is not done in the normal way
- Using the unit for purposes that are not listed in the instructions
- 3. Failure to comply with the safety instructions

Any claim to warranty shall be null and void in the event of

- 1. Errors in the use of the unit
- 2. Inappropriate operation
- 3. Manipulation or opening-up of the unit

Only use PROXXON original spare parts. Only these can guarantee maximum quality and reliability. We reserve the right to make changes and improvements without notice.

#### The MOS motorized carver:

#### Captions: (Fig. 1)

- 1. ON-OFF switch
- 2. Device clamp
- 3. Connecting cable with mains plug
- 4. Coupling ring to attach the blade
- 5. Ventilation slots
- Chuck key
- 7. Set of blade inserts

#### Technical data

Motor:

Class II Equipment For indoor-use only!

The noise level can exceed 85 dB(A) during work. Wear ear protection!

#### WARNING!

#### Please note the following:

Pull out the mains plug before carrying out any work on

In any case ensure that the switch is set to the "OFF" position in order to prevent the unit starting up again accidentally or unexpectedly.

#### **Operation of the Motorized Carver MOS:**

Inserting or replacing the blades (Fig. 2)

#### WARNING:

Always ensure that the mains plug has been pulled out when you insert or change the blade! Please note the following when handling the blades: DANGER OF INJURY: The blades have a sharp cutting edge!

- 1. Loosen the coupling ring (1) with the chuck key (2) and pull the blade (3) out to the front.
- 2. Push the new blade into the slot.
- 3. Tighten up the coupling ring again.

Please ensure that the blade has been securely tightened up. This is essential for safe and proper work. This will benefit both the work piece and the tool and will considerably reduce wear. In addition, the results of the work will be considerably better.

#### Note:

Blunt blades should be replaced in good time. The blades can be re-sharpened with sharpening stone No. 28 578 (is not part of this set).

#### Working with the carver:

#### WARNING!

Do not switch on the unit when it is under load (axial pressure). Do not work without protective glasses.

- 1. Firmly secure the work piece.
- 2. Turn on the unit at the switch 1 (Fig. 1).
- 3. Hold the unit such that the ventilation slots 5 (Fig. 1) are not covered.
- 4. Guide the unit with light hand pressure (Fig. 3) and avoid strong pressure. You can achieve cleaner work results if you let the unit cut through the material by itself without much pressure. Immediately switch off the machine and allow it to

cool down if it has overheated.

#### WARNING!

Always work moving away from the body and never hold your fingers or hand (Fig. 4) in the direction of cutting. You could hurt yourself if you slipped. Work as shown in Fig. 3!

#### Note:

Trace or draw the design motif before starting the work on the work piece and cut it out roughly. You can find technical books and templates at your bookstore.

#### Care and maintenance

Always pull out the mains plug before any work! Always ensure that the ventilation slots are clear. Check the mains cable at regular intervals for damage. Have it replaced by a technician if it is damaged.

No special maintenance is required for your motorized carver apart from occasional cleaning. Clean the unit thoroughly, removing all shavings with a brush or a soft cloth. Ensure all ventilation slots are free from obstruction

If you follow the notes in these operating instructions. the unit will give you long, reliable, safe and valuable service.

#### Important!

To avoid fire or toxic reaction, never use gasoline, naphtha, acetone, lacquer thinner, or similar highly volatile solvents to clean the carver.

Do not allow brake fluids, gasoline, or penetrating oils to come in contact with the plastic parts. They contain chemicals that can damage or destroy plastics.

Turn switch OFF and always remove plug from power source before making any adjustments or repairs.

All electrical or mechanical repairs should be done only by qualified service technicians.

When servicing use only PROXXON replacement parts. Use of any other parts may create a hazard or cause product damage.

Any attempt to repair or replace electrical parts on this carver may create a hazard unless repair is done by a qualified service technician. Repair service is available at your PROXXON service centre (You will find the address at the back of this manual).

#### Accessories:

You can find a PROXXON replacement set of blade inserts under the article number 28 572 in our catalog.

#### Important!

Only use PROXXON original spare parts and accessories. Only these can guarantee maximum quality and reliability. For your own safety, use only accessories and tools sized and recommended for this carver.

Follow the instructions that accompany accessories. Use of improper accessories may cause hazards.

### PROXXON-Micromot Motorized Carver MOS Parts list MOS (article-number 38642)

Please order spare parts in writing from PROXXON Service center (Address on back of instruction manual)

Part no.:	Designation	Part no.:	Designation
28644-01	Cap nut	28644 - 18	Motor screw
28644-02	Circlips	28644 - 19	Protective strip
28644-03	Bushing	28644-20	Motor casing, complete
28644 - 04	Pin	28644-21	Centering ring
28644-05	Plunger	28644-22	Pignon
28644-06	Spring	38644-23	Motor, 11000 U/min
28644-07	Ball, hardened	28644-24	Support ring
28644 - 08	Сар	28644-25	Board
28644-09	Head	28644-26	Cap, short
28644 - 10	Shaft	28644-27	Casing screws
28644 - 11	Bearing 8x19x6	28644-28	Switch
28644 - 12	Spacer	38644-29	Power supply cord
28644 - 13	Bearing 8x19, h=7	28644-30	Bow
28644 - 14	Shaft	28644-31	Spring washer
28644 - 15	Washer	28644-36	Shim
28644 - 16	Brass nut M16x1	28644-93	Label
28644 - 17	Fan	28644-99	Manual incl. Safety instructions

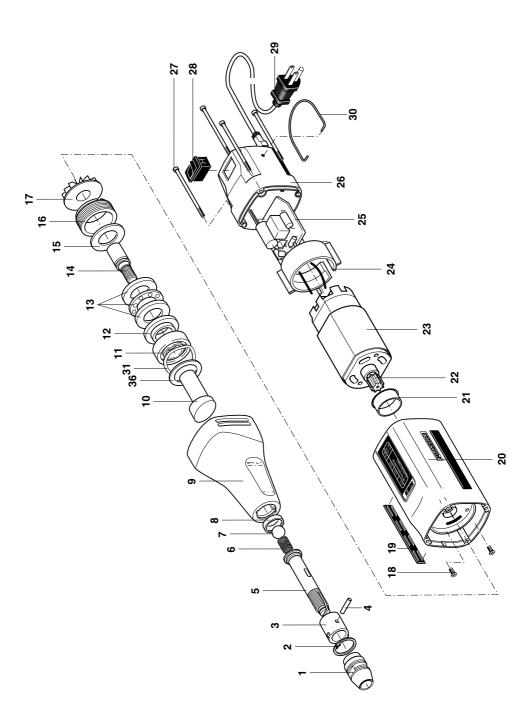
#### LIMITED WARRANTY OF PROXXON POWER TOOLS FOR HOME USE

Prox-Tech, Inc., ("Seller") warrants to the original purchaser only, that all PROXXON consumer power tools will be free from defects in material or workmanship for a period of two years from the date of purchase. Seller's sole obligation and your exclusive remedy under this limited warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Station. In the event of a failure of a product to conform to this written warranty, please refer to the Service and Repair section on the back of this manual and take action accordingly.

This Limited Warranty does not apply to accessory items such as circular saw blades, drill bits, router bits, jigsaw blades, sanding belts, grinding wheels and other related items. Damage to the product resulting from tampering, accident, abuse, negligence, unauthorized repairs or alterations, unapproved attachments or other causes unrelated to problems with material or workmanship are not covered by this warranty.

Any implied warranties shall be limited in duration to two years from date of purchase. Some states in the U.S. and some Canadian provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

In no event shall seller be liable for any incidental or consequential damages (including but not limited to liability for loss of profits) arising from the sale or use of this product. Some states in the U.S. and some Canadian provinces do not allow the exclusion or limitation of incidental or consequential damages; so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights, which vary from state to state in the U.S., province to province in Canada and from country to country. This limited warranty applies only to PROXXON power tools sold within the United States of America, Canada, the commonwealth of Puerto Rico and Mexico. For warranty coverage within other countries contact your local PROXXON Importer.



## PROXXON

#### SERVICE AND REPAIR

Your device does not work properly? Please read the operating instructions again carefully. If the unit is in fact defective, please send it to:

Prox-Tech, Inc.

Attn.: PROXXON Service Center

2555 Tate Blvd. S.E.

PO Box 1909

Hickory, NC 28603-1909

Please make sure, that your tool is carefully packaged and include a copy of your dated proof of purchase. You will help us to react even quicker, if you describe the problem in short and please don't forget to include your name, address and daytime telephone number. We will respond in a prompt and reliable manner.

#### **Spare Parts**

You can also order any necessary spare parts from our Service Center at the above address. Please check the article-number of the tool concerned on the nameplate of the tool and define the part needed by using the explosion drawing in the manual that came with the tool. Every part has a specific number (5 digit-XX). Please provide us with this number when ordering.

For any further information call us toll free at 1-877-PROXXON (1-877-776 9966) or visit us on the web at www.proxxon.com/us.