



Multi-Function Sharpener – MFS2

User Manual

[Revision 1.0 April 2017]

READ THIS MANUAL CAREFULLY BEFORE USE – FAILURE TO DO SO MAY RESULT IN INJURY, PROPERTY DAMAGE AND MAY VOID WARRANTY. • KEEP THIS MANUAL FOR FUTURE REFERENCE. • Products covered by this manual may vary in appearance, assembly, inclusions, specifications, description and packaging.

Safety

Safety messages are designed to alert you to possible dangers or hazards that could cause death, injury or equipment or property damage if not understood or followed. Safety messages have the following symbols:

| | | | | | |
|---|--|---|---|---|---|
|  | You WILL be KILLED or SERIOUSLY INJURED if you do not follow instructions. |  | You CAN be KILLED or SERIOUSLY INJURED if you do not follow instructions. |  | You CAN be INJURED if you do not follow instructions or equipment damage may occur. |
|---|--|---|---|---|---|

It is important that you read and understand the instruction manual before use and keep the manual in a safe place for future reference. Safety information presented here is generic in nature – some advice may not be applicable to every piece of equipment.

All safety precautions must be observed to reduce the risk of personal injury when operating the equipment.

The term "equipment" refers to your product, be it electrical mains, battery or petrol engine powered.

IMPORTANT – Handle the equipment safely and carefully.

BEFORE USE - If you are not familiar with the safe operation/handling of this equipment, or are in any way unsure of any aspect of suitability or correct use it for your application, you should complete training conducted by a person or organization qualified in safe use and operation of this equipment, including fuel/electrical handling and safety.

WARNINGS

- Read all safety warnings and all instructions. Failure to follow warnings and instructions may result in electric shock, fire and/or serious injury.
- Never run a combustion engine in confined areas.
- Do not operate the equipment in flammable or explosive environments, such as in the presence of flammable liquids, gases or dust. Engine and equipment may create sparks or heat that may ignite vapours, dust etc.
- Keep clear of moving parts.
- This equipment may be a potential source of electric shock if misused.
- Do not operate the equipment if it is damaged, malfunctioning or is in an excessively worn state.
- Do not allow others to use the equipment unless they have read this manual and are adequately trained.
- When using the equipment, basic safety precautions detailed here must always be followed to reduce the risk of fire, electric shock, personal injury and material damage.
- When wiring electrically powered equipment, follow all electrical and safety codes.
- Ensure all power sources conform to equipment voltage requirements and are disconnected before connecting equipment.

General Work Area Safety

Work areas should be clean and well lit. Do not operate the equipment if bystanders, animals etc. are within operating range of the equipment or the general work area.

Personal Safety

Keep packaging away from children - risk of suffocation! Operators must use the equipment correctly. When using the equipment, consider conditions and pay due care to persons and property. Prevent unintentional starting of the equipment - ensure equipment and power source switches are in the OFF position before connecting or moving the equipment. Do not carry equipment with hands/fingers touching any controls. Remove any tools or other items that are not a part of the equipment from it before starting or switching on.

Stay alert and use common sense when operating equipment. Do not overreach. Keep proper footing and balance at all times. Do not use equipment when tired or under the influence of drugs, alcohol or medication. This equipment is not intended for use by persons with reduced physical, sensory or mental capabilities.

You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. Always wear eye protection. Protective equipment such as respirators, non-skid safety shoes, hard hat, hearing protection etc. should be used for appropriate conditions. Other people nearby should also wear appropriate personal protective equipment. Do not wear loose clothing or jewellery, which can be caught in moving parts. Keep hair and clothing away from the equipment.

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.

General Equipment Use and Care

Do not force the equipment. Use the correct equipment for your application. The correct equipment will perform better and be safer within its design parameters. Do not use the equipment if the ON/OFF switch malfunctions – any equipment that cannot be controlled with the ON/OFF switch is dangerous and must be repaired.

- Use the equipment and accessories etc. in accordance with these instructions, taking into account working conditions and the work to be performed. Using the equipment for operations different from those intended could result in hazardous situations.
- Before use, inspect the equipment for misalignment or binding of moving parts, loose components, damage or any other condition that may affect its operation. If damaged, have the equipment repaired by an authorized service centre or technician before use.
- Always keep the equipment and accessories (cutting tools, nozzles, bits etc.) properly maintained. Keep the equipment, controls and handles dry and free from dirt, oil and grease.
- Store the equipment out of reach of children or untrained persons. To avoid burns or fire hazards, let the equipment cool completely before transporting or storing. Never place the equipment in places where there are flammable materials, combustible gases or combustible liquids etc.
- The equipment is not weatherproof, and should not be stored in direct sunlight, at high ambient temperatures or locations that are damp or very humid.

General Service Information

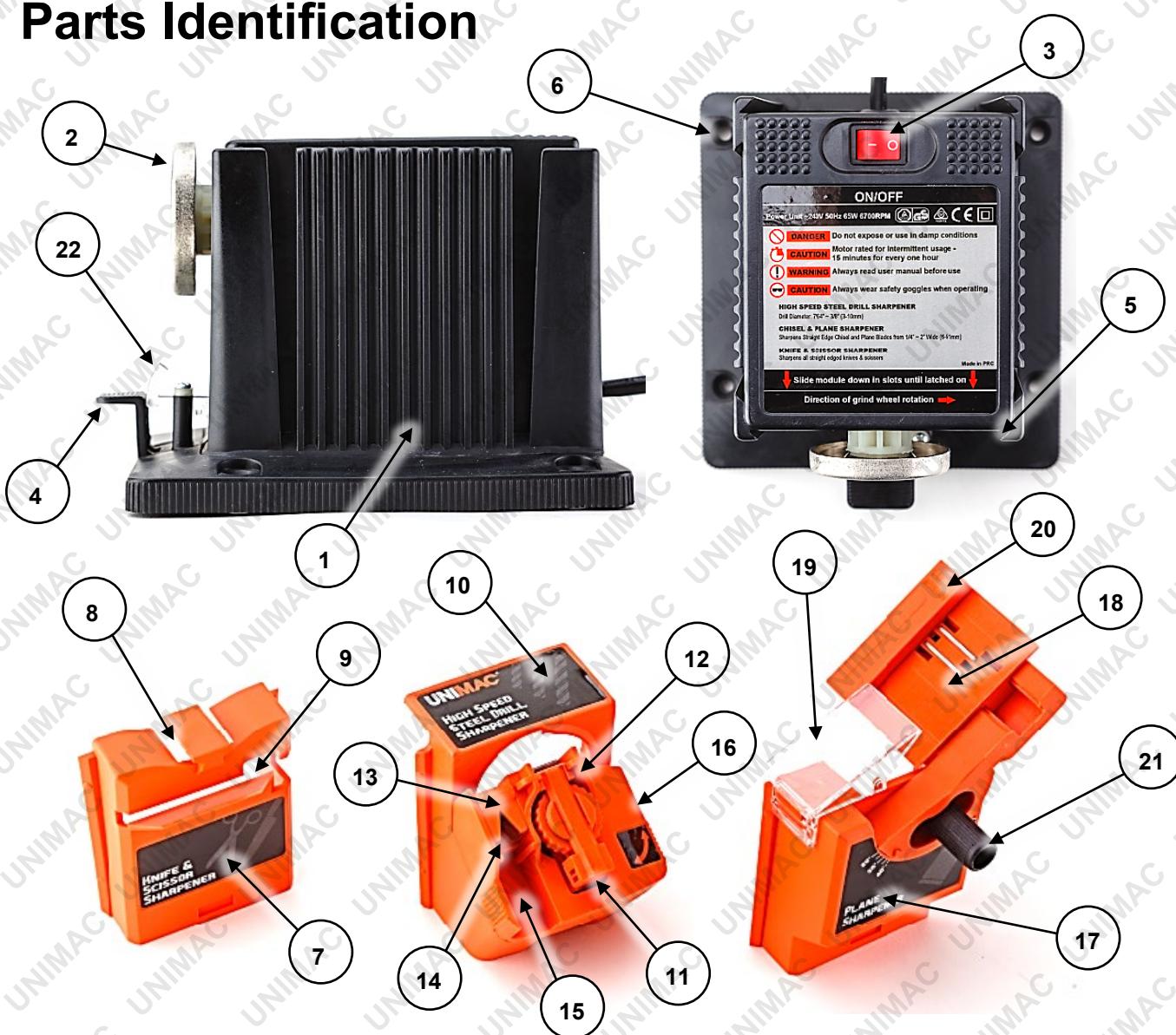
- Have the equipment serviced or repaired at authorized service centres by qualified personnel only.
- Replacement parts must be original equipment manufacturer (OEM) to help ensure that equipment safety is maintained.
- Do not attempt any maintenance or repair work not described in this instruction manual.
- After use, the equipment and components may still be hot – allow the equipment to cool and disconnect spark plugs and/or electrical power sources and/or batteries from it before making adjustments, changing accessories or performing repair or maintenance.
- Do not make adjustments while the equipment is running.
- Perform all service related activities under suitable conditions, such as a workshop etc.
- Replace any worn, damaged or missing warning labels immediately.
- Do not clean equipment with solvents, flammable liquids or harsh abrasives.

| Electrical Safety | Product Use and Care |
|--|--|
| <p>When using electric appliances, basic precautions should always be followed, including the following:</p> <ul style="list-style-type: none"> • To disconnect, switch OFF all controls ("O"), then disconnect from the electrical supply. • Do not unplug by pulling on cord – to unplug, grasp the plug and pull. • Disconnect the equipment from the electrical supply when not in use and before servicing or cleaning. • Do not operate any appliance with a damaged cord or plug, or if it malfunctions, dropped or damaged in any way. • To reduce the risk of electrical shock, do not submerge the equipment or electrical cord in water or other liquid. • The tool is double-insulated, meaning no ground / earth wire is required. Double-insulation provides additional safety against injury resulting from a possible failure of electrical insulation within the device. Normal electrical safety precautions must always be followed when using the tool. • Risk of electric shock. Keep all electrical cables and connection dry and off the ground. • A residual current device ("RCD") rated at 30mA or less must be used. • If using an extension lead, ensure it is an approved extension lead suitable for the power input of the tool. Before use, inspect the extension lead for signs of damage, wear and ageing. Do NOT use the extension lead if it is damaged or defective. If the extension lead is on a reel, fully unwind the lead. Using extension leads not suitable for the electrical requirements of the tool or which is damaged or defective may result in an electric shock and fire hazard. | <ul style="list-style-type: none"> • This product is for domestic use only. • It is recommended that the tool is fastened to a solid, level surface. • Only use attachments recommended or sold by the manufacturer. • Never operate the tool with a cracked, chipped or damaged grinding wheel. Always replace damaged grinding wheels immediately. • Always disconnect the tool from the electrical supply before changing accessories or making any adjustments. • Always use protective equipment including earmuffs, goggles, gloves, hat and clothing when operating the tool. • Do NOT use an object to slow or stop the grinding wheel whilst in motion. • Ensure that the tool speed does not exceed the maximum operating speed of any replacement grinding wheel. • Do not operate the equipment with any guard or safety device removed. Ensure that all guards and safety devices are correctly installed and adjusted. • The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator. |

Table of Contents

| | |
|---|-----------|
| Safety..... | 2 |
| Parts Identification..... | 5 |
| Inserting and Removing Sharpening Modules..... | 6 |
| Sharpening Drills | 7 |
| Sharpening Scissors and Knives..... | 8 |
| Sharpening Chisels | 9 |
| Maintenance | 10 |
| Troubleshooting..... | 10 |
| Specifications..... | 11 |

Parts Identification



| No. | Name | No. | Name | No. | Name |
|-----|-----------------------------------|-----|-------------------------|-----|--------------------------------|
| 1 | Main Body | 9 | Scissor Slot | 17 | Chisel Sharpening Module |
| 2 | Grinding Wheel | 10 | Drill Sharpening Module | 18 | Chisel Bed |
| 3 | ON / OFF Switch | 11 | Drill Bit Holder | 19 | Guard |
| 4 | Retaining Clip | 12 | Drill Guide | 20 | Narrow Chisel Guide |
| 5 | Sharpening Module Guide Slot | 13 | "V" Block | 21 | Angle Adjustment Locking Screw |
| 6 | Mounting Hole | 14 | Drill Stop | 22 | Safety Switch |
| 7 | Scissor / Knife Sharpening Module | 15 | Drill Setter | | |
| 8 | Knife Slot | 16 | Grinding Table | | |

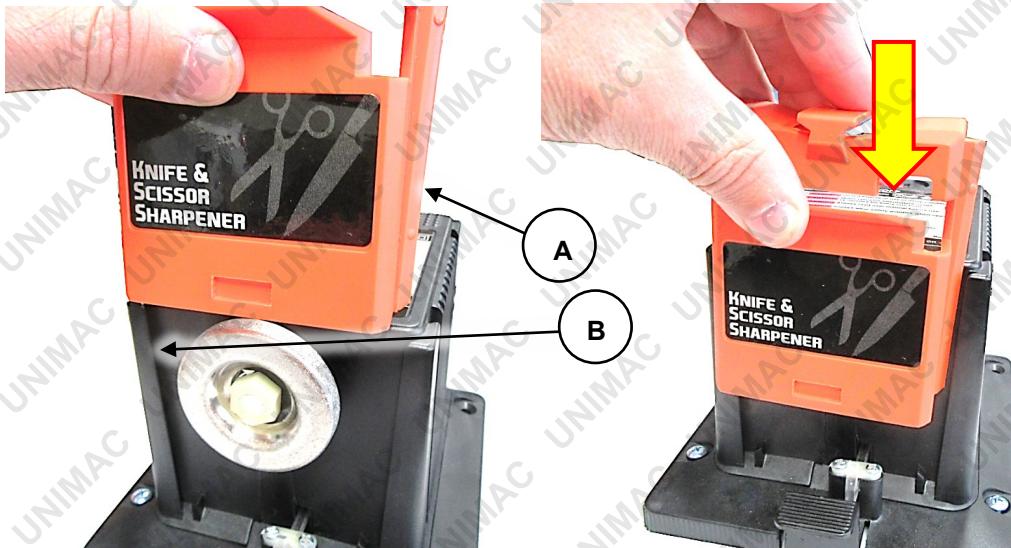
Inserting and Removing Sharpening Modules



The tool MUST be switched OFF and disconnected from the electrical supply when attaching or removing sharpening modules. • It is recommended to fasten the tool to a flat and stable surface, such as a bench. Use the 4 mounting holes for this and 5mm countersunk type fasteners. • The retaining clip and sharpening modules are constructed from plastic – do not use excessive force when inserting and removing sharpening modules.

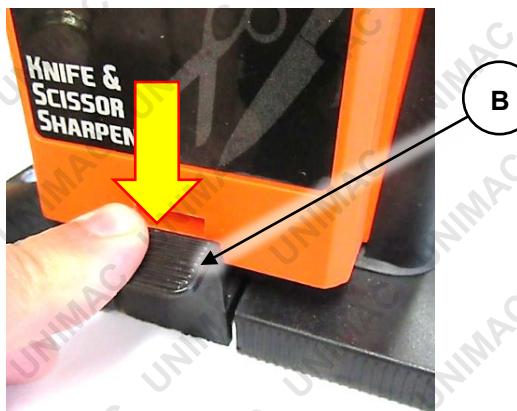
The tool is equipped with three specialised sharpening modules for various sharpening tasks. The sharpeners slide down over the grinding wheel and are held in position by guide slots in the tool body and the retaining clip. The tool can "hold" all sharpeners as it has similar guide slots on each side. To insert a sharpening module:

1. Align the mounting "rails" (A) on the edges of the sharpening module with the guide slots (B) in the tool body on either side of the grinding wheel.
2. Slide the sharpening module down into the tool until it "clicks" into place. When correctly inserted, the retaining clip will prevent the module from being removed [a small amount of vertical movement of the module may be noticed if you pull it upward – this is normal].



To remove a sharpening module:

1. Press down on the retaining clip (C) just enough for it to disengage from the sharpening module and hold it there.
2. Pull the sharpening module from the tool, then release the retaining clip.



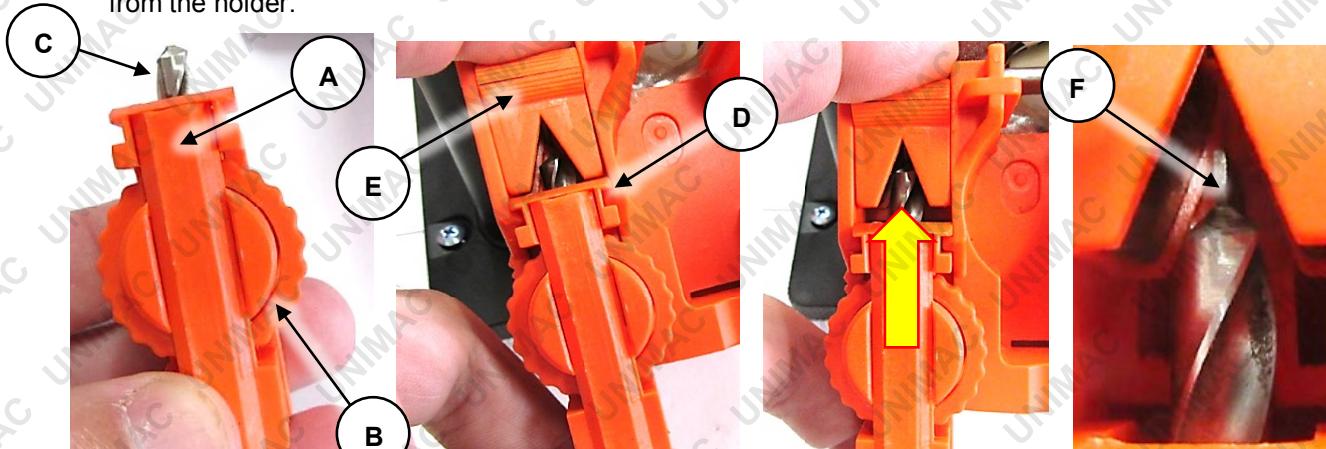
Sharpening Drills



The tool is suitable for sharpening high speed steel (HSS) and hardened steel drill bits to a nominal

118° included angle that is ideal for "normal" drilling into wood, plastic, aluminium, steel etc. It is NOT designed for sharpening carbide-tipped masonry bit, wood bores, counter-boring and counter-sinking tools etc. • The tool is suitable for drill diameters of 3mm (7/64") to 10mm (3/8"). • If the drill is broken, roughly shape the drill to a point using a bench grinder before using the sharpener. • For drill bits that are damaged or severely blunted, it may take several uses of the sharpener to rectify.

1. Insert the drill sharpening module into the tool.
2. Lift the drill bit holder (**A**) from the sharpening module and loosen the clamping screw (**B**) so the drill bit can be inserted.
3. Insert the drill bit (**C**) into the holder and tighten the clamping screw just enough to hold the bit but still allow it to be easily moved.
4. Insert the bit holder into the drill setter (**D**). Ensure that the slots on the sides of the bit holder engage with the "rails" in the drill setter.
5. Hold the "V" block (**E**) against the bit holder, then push forward lightly on the drill bit and slowly rotate it. When the drill bit flutes are on the left and right sides and the bit is as far into the "V" block as it will go, the angle of drill rotation is correct.
6. Release the "V" block, then move the drill forward (do not rotate it) until the end of the drill bit reaches the top of the "ramp" of the metal drill stop (**F**). This sets the correct distance for the drill bit to protrude from the holder.

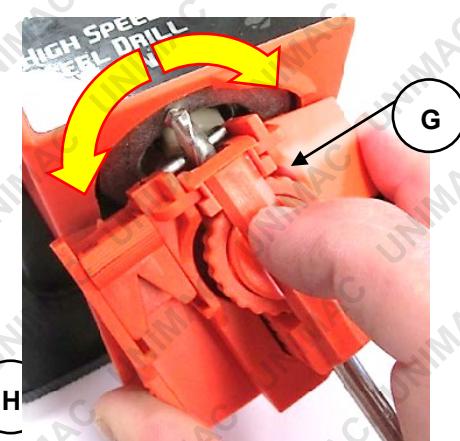


7. Tighten the drill holder clamping screw. Be sure not to allow the drill to move or rotate, then remove the drill holder from the drill setter.
8. Switch the tool ON, then gently insert the bit holder into the drill guide (**G**). Ensure that the slots on the sides of the bit holder engage with the "rails" in the drill guide. The protruding end of the drill should be resting on the metal bar at the end of the drill guide and just touch the grinding wheel.
9. Smoothly move the grinding table (**H**) back and forth until there is no longer any grinding noise or sparks.



10. Carefully lift the bit holder out of the drill guide, then turn it over, insert it into the drill guide and sharpen the other side of the drill bit.

When finished, the point where the drill flutes meet should be centred and the cutting edges should be straight (no chips etc) and equal in length.



Sharpening Scissors and Knives



The tool is suitable for sharpening steel scissors with straight, non-scalloped blades.

1. Insert the scissor sharpening module into the tool.
2. Switch the tool ON.
3. Open the scissor blades (A), with the bevelled cutting edge towards the grinding wheel. Holding the scissor firmly, lower the blade into the scissor blade slot (B) so the pivot end of the blade is nearest the grinding wheel.
4. Evenly and with a light, steady pressure, draw the scissor blade across the grinding wheel (C) for the full length of the blade – pivot to tip. Repeat until the blade has a straight and sharp edge (no chips etc).
5. Repeat the sharpening process for the other scissor blade.



To sharpen knives:

1. Hold the knife firmly, and bring the handle-end of the knife blade (D) to the knife slot (E).
2. Angle the knife blade with the slot then gently lower it until the bevelled edge of the blade contacts the grinding wheel (C).
3. Evenly and with a light but steady pressure, draw the knife blade back across the grinding wheel until it is fully removed. Repeat until the blade has a straight and sharp edge (no chips etc).
4. Repeat the sharpening process for the other side of the knife blade, using the opposite knife slot.

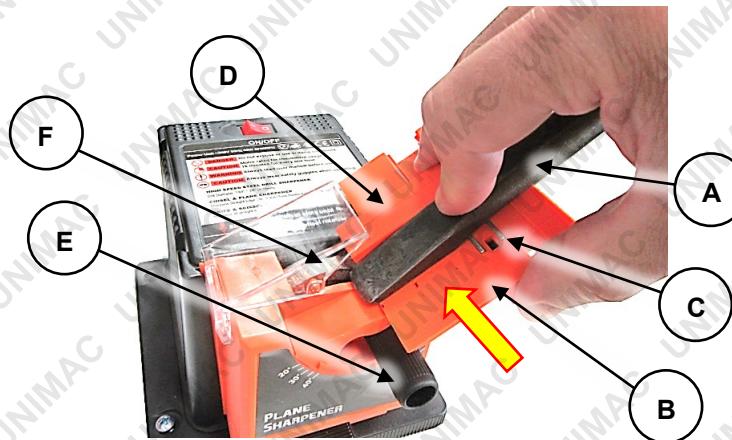


Sharpening Chisels



For chisels that are damaged or severely blunted, it may take several uses of the sharpener to rectify.

1. Insert the chisel sharpening module into the tool.
2. Place the chisel (**A**) on the chisel bed (**B**) so it is hard up against the guide at the end of the bed and held firmly by the magnets (**C**). For narrow chisels, clip the narrow chisel guide (**D**) to the bed. This ensure that the chisel can be held by the magnets.
3. Set the required angle of the chisel bed, by loosening the angle adjustment locking screw (**E**), then tilting the bed to match the existing angle of the chisel bevel (the bed can be set at any angle between 20° and 40°). When set, tighten the locking screw.
4. Position the chisel so it will just contact the grinding wheel (**F**).
5. Switch the tool ON.
6. Evenly and with a light, steady pressure, slide the chisel bed back and forth across the grinding wheel for the full length of the chisel. Repeat as required, moving the chisel in towards the grinding wheel a small amount each time, until the chisel has a straight and sharp edge (no chips etc).
7. Repeat the sharpening process for the other side of the chisel.



Maintenance



Procedures not specifically explained in this manual must be performed by qualified technicians only. • Before performing any inspection, maintenance, or cleaning procedure, place the motor switch in the "OFF" position and disconnect the machine from the electrical supply. • Do NOT allow water or any other liquid to get into the tool housing. • Do NOT use damaged or malfunctioning equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

- After each use, brush away any tool grinding particles and, if possible, use compressed air to blow through the tool housing. Failure to keep the internals of the tool from a build-up of grinding particles may cause overheating and/or other damage.
- Clean the outside surfaces of the tool a soft, slightly damp cloth. Do not use harsh detergents, solvents or abrasives.
- Store all sharpening modules with the tool by inserting them into each side of the tool body.

Troubleshooting

The following information may assist in identifying a problem and rectifying it.

NOTE: Some maintenance activities described may be beyond the scope of some users. For procedures that you are not comfortable with or have the tools or experience for, have the unit serviced by a service centre or qualified technician.

Tool not starting.

| Possible Fault | Action |
|--|---|
| No electrical supply | Check that the tool is connected to a 240VAC electrical supply and the supply is ON. |
| Power switch OFF | Ensure that the tool power switch is in the ON ("I") position. |
| Sharpening module not inserted or not inserted correctly | Ensure that the sharpening module is properly inserted and the retaining clip has "clicked" into place. |

Sparking during use.

| Possible Fault | Action |
|----------------|--|
| Not applicable | Tool grinding and electric motor operation may cause some sparks – this is normal. |

The item being sharpened is turning blue.

| Possible Fault | Action |
|----------------|--|
| Overheating | Reduce the depth of cut. • Apply less pressure. • Cool the item in water in-between sharpening. Note: Avoid overheating the metal as this can cause it to lose hardness. |

Drill point is not centred or cutting edges uneven lengths.

| Possible Fault | Action |
|--------------------------|---|
| <i>Uneven sharpening</i> | Sharpen both sides of the drill bit evenly – sharpen for the same amount of time and using the same pressure. |



| | |
|--|---|
| <i>Drill not set correctly in bit holder</i> | Ensure the drill bit is set in the holder with the flutes on the left and right sides and the centre point at the tip of the drill stop "ramp". |
|--|---|

Sharpened drill is not drilling

| Possible Fault | Action |
|--|---|
| <i>Drill bit not set correctly in bit holder</i> | Ensure the drill bit is set in the holder with the flutes on the left and right sides and the centre point at the tip of the drill stop "ramp". |

Specifications

| | |
|--------------------------------|----------------------------|
| Electrical Requirements | 240VAC / 50Hz |
| Grinding Wheel Diameter | 48mm (approximately 2") |
| Grinding Wheel Speed | Approximately 6700RPM |
| Applicable Drill Sizes | 3mm (7/64") to 10mm (3/8") |



Some experts believe that the incorrect or prolonged use of almost any product may cause serious injury or death. To help reduce your risk of serious injury or death, refer to the information below. For more information, see www.datastreamserver.com/safety

- Consult all documentation, packaging and product labelling before use. Note that some products feature documentation available online. It is recommended to print and retain the documentation.
- Before each use, check the product for loose/broken/damaged/missing parts, wear or leaks (if applicable). Never use a product with loose/broken/damaged/missing parts, wear or leaks.
- Products must be inspected and serviced (if applicable) by a qualified technician every 6 months. This is based on average residential use by persons of average size and strength, and on a property of average metropolitan size. Use beyond these recommendations may require more frequent inspections/servicing.
- Ensure that all users of the product have completed a suitable industry recognised training course before being allowed access to the product.
- The product has been supplied by a general merchandise retailer that may not be familiar with your specific application or description of application. Be sure to attain third-party approval from a qualified specialist for your application before use, regardless of any assurances from the retailer or its representatives.
- This product is not intended for use where fail-safe operation is required. As with any product (for example, automobile, computer, toaster), there is the possibility of technical issues that may require the repair or replacement of parts, or the product itself. If the possibility of such failure and the associated time it may take to rectify could in any way inconvenience the user, business or employee, or financially affect the user, business or employee, then the product is not suitable for your requirements. This product is not intended for use where incorrect operation or a failure of any kind, including but not limited to, a condition requiring product return, replacement, parts replacement or service by a technician may cause financial loss, loss of employee time or an inconvenience requiring compensation.
- If this product has been purchased in error when considering the information presented here, contact the retailer directly for details of their returns policy, if required.



©2017 Unimac. All rights reserved. No part of this document, including descriptive content, concepts, ideas, diagrams or images may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, scanning or recording, or any information storage and retrieval system, without express permission or consent from the publisher.