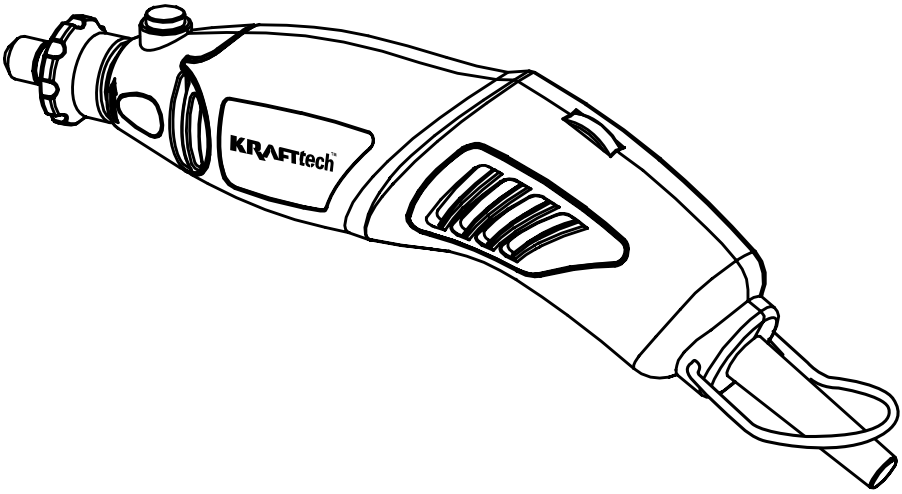
OWNER'S MANUAL

Model Number: MD15HJ

Rotary Tool



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⚠ CAUTION!

To reduce the risk of fire, electric shock and personal injury, read and understand the owner's manual before operating this product. Save this manual.

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WARRANTY

FULL 2 YEAR WARRANTY ON THIS ***KRAFTtech*** ROTARY TOOL.

TOLL FREE NUMER: 1-866-513-6723

INTRODUCTION

Your Rotary Tool has many features that will make your job faster and easier. Safety, performance, and dependability have been given top priority in the design of this tool, making it easy to maintain and operate.

⚠ **WARNING** ***Carefully read through the entire manual before attempting to use this tool. Be sure to pay special attention to the safety rules and all the Warnings and Cautions throughout this manual.***

⚠ **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

GENERAL SAFETY RULES

WORK AREA

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.

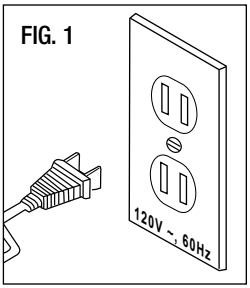
Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

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 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 eliminates the need for a three-wire grounded power cord and grounded power-supply system.

FIG. 1



Avoid 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 grounded.

Don't expose power tools to rain or wet conditions. A wet power tool will increase the risk of electric shock.

Do not abuse the cord. Never use the cord to carry the tool. Never tug on the cord to pull the plug from an outlet. Keep the cord away from heat, oil, sharp edges, and moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outdoors, use an extension cord suitable for outdoor use. These cords are rated for outdoor use and reduce the risk of electric shock.

If an extension cord is necessary, a cord with adequate size conductors should be used to prevent excessive voltage drop, loss of power, or overheating. The table shows the correct size to use, depending on cord length and nameplate amperage rating of tool. If in doubt, use the next heavier gauge. Always use UL and CSA listed extension cords.

Recommended sizes of extension cords

TOOL'S AMPERE RATING	VOLTS	TOTAL LENGTH OF CORD IN FEET CORD SIZE IN A. W. G. (MINIMUM)			
	120 V	25 ft.	50 ft.	100 ft.	150 ft.
0~6		18 ft.	16 ft.	16 ft.	14 ft.
6~8		18 ft.	16 ft.	14 ft.	12 ft.

GENERAL SAFETY RULES

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.

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

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

If devices are provided to connect to dust extraction and collection equipment, ensure they are properly connected. Using these devices can reduce dust-related hazards.

TOOL USE AND CARE

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

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

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

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

Disconnect the plug from power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

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 misaligned or bound moving parts, broken parts, and any other condition that may affect the tool's operation. If it's damaged, have the tool serviced before using it again. 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 type of tool may be dangerous when used for another tool.

Use tools in good condition, adapted to the task to be performed. This do-it-yourself equipment should be used as such and not be considered as heavy-duty equipment.

GENERAL SAFETY RULES

SERVICE

Tool service must only be performed by qualified repair persons. Service or maintenance performed by unqualified persons could result in a risk of injury. For questions on warranty or service, call our toll-free number at 1-866-513-6723.

SPECIFIC SAFETY RULES

Hold the tool by insulated gripping surfaces when performing an operation where the cutting tools may contact hidden wiring. Contact with a "live" wire will make exposed metal parts of the tool "live," and can shock the operator, resulting in serious personal injury.

Do not touch the bit immediately after drilling. The hot bit can cause a severe burn.

Do not overload the motor.

When changing accessories, use the appropriate collets.

When using the drill for an extended period of time, take regular breaks to allow the drill to cool down.

Do not work with a faulty grinding or cutting disc or bent mandrel.

Remove the plug from the outlet before carrying out any adjustment, servicing, or maintenance.

Ensure that the disc dimensions are compatible with the mandrel.

Abrasive discs and grinding stones should be stored with care in accordance with manufacturer's instructions.

Inspect the discs and grinding stones before using. Do not use chipped, cracked, or otherwise defective products.

Ensure that mounted discs and grinding stones are fitted in accordance with the manufacturer's instructions.

Ensure that the abrasive product is correctly mounted and tightened before using. Run the tool in no-load for 30 seconds in a safe position. Stop immediately if there is considerable vibration or if other defects are detected. If this happens, disconnect the tool from the main power supply, and check the machine to determine the cause.

Do not use separate reducing bushings or adapters to adapt large hole abrasive discs and grinding stones.

Check that the work piece is properly supported.

Do not use the cutting disc for side grinding.

Ensure that sparks resulting from using the drill do not create a hazard (e.g., come in contact with operator or bystanders, or ignite flammable substances).

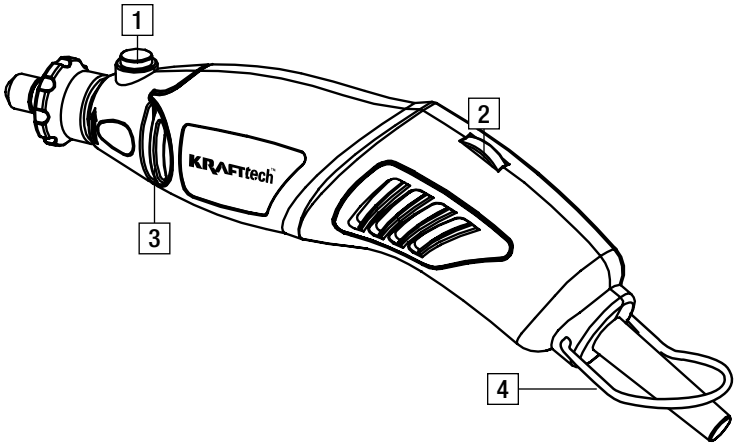
Ensure that ventilation openings are kept clear while working in dusty conditions. If you need to clear the dust, disconnect the tool from the main supply (use non-metallic objects) and avoid damaging internal parts.

TECHNICAL SPECIFICATION

Model	MD15HJ
Rating	120V~, 60Hz
Rated Current	1.0 A
No-Load Speed, n0	8,000 ~ 30,000 RPM
Collet Size	1/8"

OPERATING INSTRUCTIONS

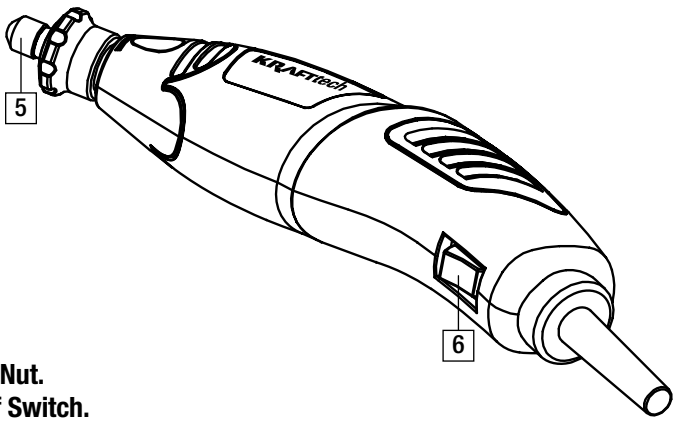
This Rotary Tool is a light duty tool for drilling wood, steel, aluminum and other soft materials.



1. **Locking Button.** Press the locking button, rotate the spindle by hand, and the locking button locks the spindle, preventing it from rotating.
2. **Speed Selector.** To select the right speed for each job, use a practice piece of material. Vary speed to find the best speed for the bits you are using and the job to be done.
3. **Vent.** Releases heat and prevents the motor from overheating.
4. **Hook.** For convenient storage.

Some suggestions regarding speed:

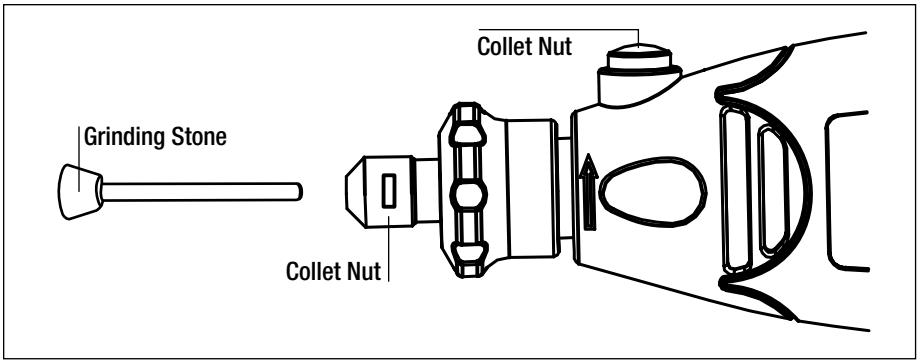
- Plastic and materials that melt at low temperatures should be cut at low speed.
- Soft wood should be cut at high speed.



5. **Collet Nut.**
6. **On/Off Switch.**

Switch On
In the "I" position, the machine is in continuous operation.

Switch Off
In the "O" position, the machine will stop.

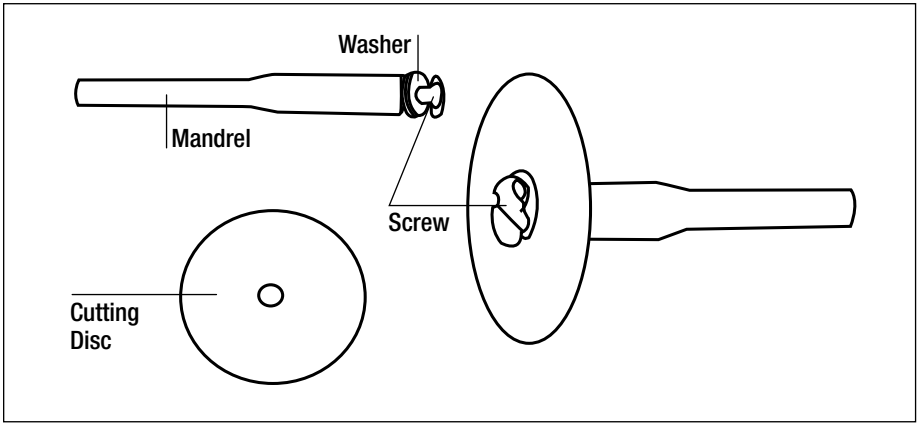


Changing bits (including mandrel and grinding stone) (Fig. 5)

Make sure that the machine is switched off and the plug is removed from the power before you change the bit.

Press the locking button to stop the spindle from rotating. Turn the collet nut counter-clockwise (looking at the front the mini drill) to loosen. When the bit is in place, turn the collet nut clockwise (look at the front of mini drill) to tighten in place by hand.

Make sure that the bit is inserted in the collet properly. Having too much bit exposed could cause it to get damaged or bent.



Install Cutting Disc

The cutting disc can be used to cut different material. Put the cutting disc in the screw between two washers, insert the screw in the hole of the mandrel and turn the screw clockwise to tighten until the cutting disc is fixed in the mandrel. (Fig. 7)

Holding the tool

For jobs such as milling or engraving where precision is required, hold the tool like a pen. For heavier work like cutting or grinding, hold the machine in the palm of your hand.

⚠ **WARNING** ***To reduce the risk of injury, wear safety goggles or glasses with side shields.***

⚠ **WARNING** ***Always wait for the bit to stop completely and unplug the tool before changing bits or making adjustments.***

START ROTARY TOOL

1. Plug the Rotary Tool into an outlet, and turn on the tool by pressing the On/Off switch to "I" position.
2. Practice on scrap materials first to see how the Rotary Tool works. Never lean on or push the tool into your work piece.
3. Allow the Rotary Tool to reach full speed (about 30 seconds of run time) before beginning your project.
4. Lower the rotating bit lightly to the work piece and allow it to touch the point at which you want to cut (or sand or etch, etc.) Concentrate on guiding the tool over the work piece using very little pressure.

OPERATING INSTRUCTIONS

⚠ **WARNING** ***Whenever you hold the tool, be careful NOT to cover the air vents with your hand. That will overheat the motor.***

5. After completing the work, press the on/off switch to "O" position, and allow the bit to come to a complete stop before putting the drill down.
6. When your work has been completed, clean the Rotary Tool to allow for the smooth operation of the Rotary Tool over time.

⚠ **WARNING** ***To reduce the risk of injury, never touch the bit to clean the debris until it has already stopped and cooled down.***

Note: If your drill is not working as expected, don't increase your hand pressure. Consider changing the bit or adjusting the speed.

MAINTENANCE

⚠ **WARNING** ***To avoid accidents, ALWAYS turn off the switch and disconnect the tool from the power source BEFORE cleaning or performing any maintenance.***

⚠ **WARNING** ***It is recommended that all repair or replacements on the tool be performed by a qualified service technician.***

⚠ **WARNING** ***Use only a soft, dry cloth to clean your drill. Never use detergent or alcohol.***

⚠ **WARNING** ***Do not use chemical agents to clean the power tool.***

ACCESSORIES

Cutting Disc . . . . . 5 pcs.
Grinding Stone . . . . . 10 pcs.

⚠ **WARNING** ***Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known (to the State of California) to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are :***

- ***Lead from lead-based paints***
- ***Crystalline silica from bricks and cement and other masonry products***
- ***Arsenic and chromium from chemically treated lumber.***

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

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