

www.mkdiamond.com

# MK-2000P Hand held Wet Core Drill

## OWNER'S MANUAL & OPERATING INSTRUCTIONS



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Manual Part# 158490	

**Caution:** Read all safety and operating instructions before using this equipment. This parts list **MUST** accompany the equipment at all times.

## INTRODUCTION

Congratulations on your purchase of a MK-2000P Handheld Drill. We are certain that you will be pleased with your purchase. MK Diamond takes pride in producing the finest construction power tools and diamond blades in the industry.

Operated correctly, your MK-2000P Handheld Drill should provide you with years of service. In order to help you, we have included this manual. This owner's manual contains information necessary to operate and maintain your MK-2000P Handheld Drill safely and correctly. Please take the time to familiarize yourself with the MK-2000P Handheld Drill by reading and reviewing this manual before operating it.

Read and follow all safety, operating and maintenance instructions.

If you should have questions concerning your MK-2000P Handheld Drill, please feel free to call our friendly customer service department at (800) 421-5830.

Regards,

MK Diamond

### NOTE THIS INFORMATION FOR FUTURE USE:

<b>MODEL NUMBER:</b>	
<b>SERIAL NUMBER:</b>	
<b>PURCHASE PLACE:</b>	
<b>PURCHASE DATE:</b>	

**NOTE:** For your (1) one year warranty to be effective, complete the warranty card (including the Serial Number) and mail it in as soon as possible.

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## RULES FOR SAFE OPERATION

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### DANGER

Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following guidelines should always be used when operating the core drill.

## GENERAL SAFETY

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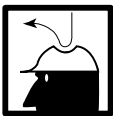
- **DO NOT** operate or service this equipment before reading this entire manual. Read and understand all warnings, instructions and controls on the machine.

- This equipment should not be operated by persons under 18 years of age.



- **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job.

- **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.
- **NEVER** operate this equipment under the influence of drugs or alcohol.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult to read.
- **ALWAYS** check the machine for loose bolts before starting.



- **ALWAYS** wear proper respiratory, head, ear and eye protection equipment when operating this machine.


- Use the right tool. Do not use a tool or attachment to do a job for which it is not recommended. Do not alter the tool. Maintain all tools with care for the safest and best performance.
- **ALWAYS** store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.
- **ALWAYS** insure that the switch is off before plugging unit into electrical power.
- **NEVER** leave the drill running unattended. Turn power off.
- **DO NOT** over reach, maintain control. Keep proper footing and balance at all times. Maintain a firm grip.
- Should any part of this drill become missing or damaged, or any component fail to perform properly, shut off the drill and unplug the power source. Replace the missing, damaged, and/or failed part before resuming operations.

**CAUTION**

Always keep alert. Do not allow familiarity (gained from frequent use) to cause a careless mistake. Always remember that a careless fraction of a second is sufficient to inflict serious injury.

**SAFETY MESSAGE / ALERT SYMBOLS**

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A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol (  ) and one of three words: **DANGER**, **WARNING**, or **CAUTION**.

**DANGER**

You **WILL** be **KILLED** or **SERIOUSLY INJURED** if you do not follow directions.

**WARNING**

You **CAN** be **KILLED** or **SERIOUSLY INJURED** if you do not follow directions.

**CAUTION**

You **CAN** be **INJURED** if you do not follow directions. It may also be used to alert against unsafe practices.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury. Other important messages are preceded by the word **NOTICE**.

**NOTICE**

You can cause **PROPERTY DAMAGE** to your machine if you don't follow directions.

The safety labels should be periodically inspected and cleaned by the user to maintain good legibility at a safe viewing distance. If the label is worn, damaged or illegible, it should be replaced. Contact MK Diamond or your dealer for replacement.

**HAZARD SYMBOLS**

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**ELECTRICAL SHOCK**

**NEVER** touch electrical wires or components while the engine is running. They can be sources of electrical shock which could cause severe injury or burns.

**ACCIDENTAL STARTS**

Before starting the equipment, be sure the ON/OFF switch is in the "OFF" position to prevent accidental starting. Place the ON/OFF switch in the OFF position before performing any service operation.

**ROTATING PARTS**

Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the motor with covers, shrouds, or guards removed.

**SILICA DUST WARNING**

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Grinding/cutting/drilling of masonry, concrete, metal and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When cutting such materials, always follow respiratory precautions.

**CALIFORNIA PROPOSITION 65 MESSAGE**

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Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contain 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

For further information, consult the following sources:

<http://www.osha.gov/dsg/topics/silicacrystalline/index.html>

<http://www.cdc.gov/niosh/docs/96-112/>

<http://oehha.ca.gov/prop65/law/P65law72003.html>

<http://www.dir.ca.gov/Title8/sub4.html>

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.

## **SAFETY LABELS**

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Safety labels contain important safety information. Please read the information contained on each safety label. These labels are considered a permanent part of your drill. If a label comes off or becomes hard to read, contact MK Diamond or your dealer for a replacement.



## **SAFETY INSTRUCTIONS**

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1. Working safely with the MK-2000P is only possible if you read this operating instruction completely and strictly follow the instructions contained within.
2. When drilling through ceilings or walls, make sure you will not cut through electrical wiring, gas lines or water pipes. Use metal detection systems if needed.
3. Check the MK-2000P for damage prior to use. Inspect the cord and plug for cuts, frays and damage. Have damage repaired by authorized repair technicians. Take care that the ON/OFF switch is in the OFF position before inserting the plug into a power receptacle.
4. When using the drill, cooling water is not allowed to get into the motor or any electrical parts.

5. Use only extension cords and plugs approved for outdoor work.
6. Before starting your work, check that the Ground Fault Circuit Interrupter (GFCI) is functioning properly by pressing the test button. The GFCI must never lay in the water.
7. Don't use the machine if a part of the housing is damaged or in case of damages on the switch, cable or plug (check it every day).
8. Stop working if water is dripping out of the overrunning bore hole and take the machine to an authorized service center.
9. Overhead-drilling should be done with using suitable safety measures (water collection).
10. When using the machine with manual control always hold it with both hands and take up a safe position. Pay attention to the reaction torque of the machine.

## PRODUCT SPECIFICATIONS

Ideal for drilling holes in floors, walls, ceilings and for all concrete anchoring systems. Fast and efficient drilling of reinforced concrete, concrete, brick, block and stone.

### General Specifications

Motor	120V 15 Amp (Electronic torque limitation)
Watts	1500
Speed	2 speed
Bit Capacity	1-1/2" (38mm) hand-held 4" (102mm) rig mounted
Connecting Threads	1-14" - 7" UNC 5/8" - 11 UNC
Weight	15 lbs. (6.8 kg)
Includes	<ul style="list-style-type: none"> <li>• Quick Release Water Valve</li> <li>• GFCI</li> <li>• Plastic Carrying Case</li> </ul>
Part #	158365

## OPERATING THE MK-2000P

### Auxiliary Handle

In hand held drilling operations, only use the MK-2000P with the Auxiliary Handle fixed. The Auxiliary Handle must be tightened on the collar, by turning the lever.

### ON/OFF SWITCH

The MK-2000P is equipped with an electronic ON/OFF switch.

Each time the switch is pressed, the speed of the drill becomes higher. This allows very precise drilling. Under normal working conditions, always operate the MK-2000P at maximum speed.



## Gear Shifting

The speed of the drill will need to be adjusted in accordance with the size of the core bit being used. The speed of the drill is adjusted by rotating the Speed-selector in the clockwise direction, while turning the drill shaft by hand until the clutch is engaged.

If the Speed-selector is in the “o” position, drill speed can be adjusted from 0 to 1000 rpm.

If the Speed-selector is in the “oo” position, drill speed can be adjusted from 0 to 2000 rpm.

For core bits with diameters above 2.8 in. / 70 mm, operate the drill using the “o” (0 to 1000) rpm range.

For core bits with diameters below 2.8 in. / 70 mm, operate the drill using the “oo” (0 to 2000) rpm range.



## CAUTION

1. When using the handheld method, operate the drill in the 0 to 2000 rpm range only.
2. Always check the core bit manufacturer's recommendation for use.
3. Gear shifting should only be performed in the clockwise direction when the drill is stopped.

## Starting a Hole

It is easier to start a hole with a centering bit. The switch allows the drill to be operated at slow speed for safely introducing the bit into the material. A normal pilot hole should be from .2 to .4 inches (5 to 10 mm) in depth. Once the pilot hole is created, the centering bit can be removed and replaced for full speed operation.

## OVERLOAD PROTECTION

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To protect the operator and the drill, the MK-2000P is equipped with three overload protective devices - mechanical, electronic and thermal. In case of overload, the MK-2000P is equipped with warning device.

### Mechanical Overload Protection

If the core bit is suddenly blocked in the hole, a clutch will slip, disengaging the bit from the motor.

### Electronic Overload Protection

If excessive penetration speed results in an overload condition, an electronic switch will open disconnecting the motor from the power supply.

Once the drill is removed from the hole and the electronic switch is reset, coring may resume.

### Thermal Overload Protection

If the drill is operated in a continuous overload condition and the Electronic Overload Protective device fails, the Thermal Overload protective device will interrupt power to the motor.

Once actuated, the motor must be allowed to cool to reset the Thermal Overload protective device. Time required for the Thermal Overload protective device to reset will vary depending on the temperature of the motor and ambient temperature.

### Acoustic Overload Warning

In case of overload, a continuous acoustic warning signal will sound.

When the Acoustic Overload Warning is heard, it is recommended that the operating speed and applied pressure be immediately reduced, and /or, the core bit be operated under a no-load condition.

**NOTE:** If the MK-2000P stops due to the activation of one of the overload protective devices, this should not be considered an equipment failure.

### WATER SUPPLY

The MK-2000P is equipped with an intake cooling water flow control valve that can be placed vertically or horizontally. A quick disconnect is supplied with the unit for ease of operation.

Water flow enters through the flow control valve and exits directly through the center of the motor shaft.

Cooling flow may be adjusted using the cooling water flow control valve.



### CAUTION

Do not operate with water pressure greater than 43.5 PSI (3 Bars).

### CARE AND MAINTENANCE

Clean the MK-2000P following use.

Do not allow particles or parts to penetrate inside the tool.

The carbon motor brushes require inspection by a qualified maintenance technician after 300 hours of operation. If the brushes are shorter than .2 inches (5 mm), they must be replaced.

During inspection of the motor brushes, the motor commutator must also be inspected. In case of irregular coloring or scratches, the commutator must be repaired by a qualified service center.

After replacement, the motor brushes must be run at an idle for 20 minutes.

The MK-2000P requires inspection and gearbox cleaning by a qualified service center after 500 hours of operation.



**ORDERING INFORMATION**

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You may order MK Diamond products through your local MK Diamond distributor or, you may order direct from MK Diamond.

When ordering direct from MK Diamond, please have the following information ready before calling:

- The Model Number of the drill
- The Serial Number of the drill
- Where the drill was purchased and when
- The Part Number for the part(s) being ordered
- The Part Description for the part(s) being ordered

**NOTE:** There is a \$25.00 minimum order when ordering direct from MK Diamond. A \$5.00 charge will be added to orders having a net billing value under \$50.00. All purchases must be made using VISA, MasterCard or American Express.

All parts may be ordered by calling toll free to – 800 421-5830 or 310 539-5221 and asking for Customer Service. For technical questions, call – 800 474-5594.

**RETURN MATERIALS POLICY**

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To expedite the service relative to the return of a product purchased through MK Diamond, please observe the following:

**NOTE:** When returning all items, they must have been purchased within the previous twelve (12) months.

- Have the Model Number of the drill
- Have the Serial Number of the drill
- Have the location of where the drill was purchased
- Have the date when the drill was purchased
- Contact Customer Service for approval to return the item(s)
- Obtain a Returned Goods Number (RGA) authorizing the return
- Follow the packaging instructions in the following section
- Ensure your item(s) are prepaid to the destination

For returned items, call toll free to – 800 421-5830 or 310 539-5221 and ask for Customer Service. For technical questions, call – 800 474-5594 or 310 257-2845.

**PACKAGING INSTRUCTIONS**

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- Remove the Core Bit and Support Handle
- Dry the equipment before shipping
- When packing, include the following: Core Drill and Handle
- Package the unit in its original container or one of comparable size (do not ship the unit partially exposed)
- Ensure all parts are secured in the packaging to prevent moving

**AUTHORIZED SERVICE CENTERS**

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For quicker repair time, you may contact MK Diamond Customer Service, toll free, at 800 421-5830 or 310 539-5221 for the Authorized Service Center closest to you or visit our web site at [www.mkdiamond.com](http://www.mkdiamond.com). For technical questions, call – 800 474-5594.

**CONTACT**

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Please contact MK Diamond Products, Inc. Customer Service Department with any questions you might have regarding distributors, parts or service.

Telephone: **(800) 421-5830**

Fax: **(310) 539-5158**

E-mail: **Customer\_Service@MKDiamond.com**

Customer Service Hours: **Monday through Friday, 6AM-4PM PST**

**MK Diamond Products, Inc.**

**1315 Storm Parkway**

**Torrance, CA 90501**

**MK DIAMOND PRODUCTS, INC. LIMITED WARRANTY**

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MK DIAMOND PRODUCTS, INC. will guarantee every machine they build, to be free from defects in material and workmanship for (1) one year from date of purchase. The obligation of MK DIAMOND PRODUCTS, INC. under this warranty is limited to the repair or replacement of any parts which, under normal use, prove to be defective in material or workmanship. The parts involved or the unit in question should be returned to MK DIAMOND PRODUCTS, INC. or to a point designated by us, transportation prepaid.

This warranty does not obligate us to bear the cost of labor or transportation charges in connection with replacement or repair of defective parts. Likewise, it shall NOT apply to any unit which has been subjected to misuse, neglect or accident. This warranty does NOT apply to any machine which has been repaired or altered outside our factory.

This warranty does NOT obligate MK DIAMOND PRODUCTS, INC., with respect to items not of our manufacture, such as engines, motors, hydraulics, etc., which are subject to their own guarantees and warranties.

We shall in no event be liable for consequential damages or contingent liabilities arising out of failure of any equipment or parts to operate properly.

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MK Diamond may have patents, patent applications, trade marks, copyrights of other intellectual property right covering this product in this document.

This manual MUST accompany the equipment at all times. This manual is considered a permanent part of the equipment and should remain with the unit if resold.

The information and specifications included in this publication were in effect at the time of approval for printing.





**MK-2000 Handheld Drill**  
**OWNER'S MANUAL & OPERATING INSTRUCTIONS**



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