

MK-130/3 Hand Held Wet Core Drill

OWNER'S MANUAL & OPERATING INSTRUCTIONS



Revision 100	08.2012
Manual Part# 158368-OM	

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-130/3 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-130/3 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-130/3 Handheld Drill safely and correctly. Please take the time to familiarize yourself with the MK-130/3 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-130/3 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:

MODEL NUMBER:	
SERIAL NUMBER:	
PURCHASE PLACE:	
PURCHASE DATE:	

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.

TABLE OF CONTENTS

SAFETY

Safety Messages	4
General Safety	4-5
California Proposition 65 Message	6
Safety Label	7
Pre-Start Safety	7-8
Product Specification	8

OPERATION

Main Instruction	9
Auxiliary Handle	9
GFCI	9
Gear Shifting	9

MAINTENANCE & TROUBLESHOOTING

Water Supply & Electrical Safety	11
Care & Maintenance	11
Noise Emission	11
Troubleshooting	12

ORDERING and RETURN INSTRUCTIONS

Ordering Information	14
Return Material Policy	14
Packaging Instructions	14
Authorized Service Centers	14

CONTACT and LIMITED WARRANTY

Contact	15
Limited Warranty	15

RULES FOR SAFE OPERATION




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.

SAFETY MESSAGE / ALERT SYMBOLS

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.



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.

GENERAL SAFETY



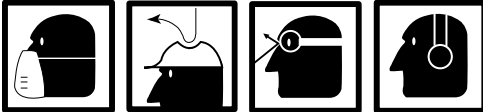
- **DO NOT** operate or service this equipment before reading this entire manual. Read and understand all warnings, instructions and controls on the machine.

- 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 and parts 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.



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

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

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/consilic.html>

<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 those dust masks that are specially designed to filter out microscopic particles.

SAFETY LABELS

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.



PRE-START SAFETY

1. When drilling ceilings or walls make sure you will not cut through electrical mains, gas or water pipes. Use metal detection systems if needed.
2. Before using the machine you need to check the cord and plug. If they are damaged or cut during use do not touch it, but instantly disconnect from the power source. Repairs should only be made by an authorized specialist. Take care that the tool is switched off when plugged into a power receptacle.
3. Unplug and switch the machine off if it is not under supervision, when setting up and stripping down the machine, in case of excessive voltage drop or when fixing or mounting an accessory.
4. Switch the machine off if it stops for whatever reason to avoid accidental starts.

5. 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).
6. When using the drill, cooling water is not allowed to get into the motor or any electrical parts.
7. Stop working if water is dripping out of the overrunning bore hole and take the machine to an authorized service center.
8. Overhead-drilling should be done with using suitable safety measures (water collection).
9. After a breakdown, the machine should only be switched on again if the drill bit can be turned.
10. 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.
11. 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.
12. If drilling through ceilings, secure the place below, because the core may fall downward.

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
Watts	1700
Frequency	40-60Hz
Speed	3 speed
Bit Capacity	3" (76mm) hand-held 6" (152mm) rig mounted
Connecting Threads	1-14" - 7" UNC 5/8" - 11 UNC G1/2"
Weight	16 lbs. (7.2 kg)
Includes	<ul style="list-style-type: none"> • Quick Release Water Valve • GFCI • Plastic Carrying Case
Part #	158368

INSTRUCTIONS

The MK-130/3 is designed for wet drilling in concrete and stone using diamond core bits. For drilling diameters bigger than 1-1/2" using 1st or 2nd speed, use a suitable drill stand.



CAUTION Hand Drilling in 1st gear is strongly not recommended as the high torque created can be extremely dangerous and cause injury.

The operator is responsible for all damages which may arise due to improper use.

AUXILIARY HANDLE

In hand held drilling operations, only use the MK 130/3 with the enclosed auxiliary handle. This handle must be tightened on the collar by turning the handle.

ELECTRIC SAFETY

The MK-130/3 machine has class 1 protection. For operator protection this machine must only be used with a GFCI.

Check that the voltage and frequency available are compatible with the drive motor. A $\pm 5\%$ voltage difference is allowed. For protection purposes the machine is equipped with a integrated GFCI switch for the direct connection to a grounded socket. Check the GFCI before using the machine (please read the separate instructions).

NOTICE: Don't use the GFCI-switch for switching the machine **ON/OFF**.

Use only a 3-wire extension cable with grounding conductor and sufficient cross-section (12 gauge min.). A cross-section which is too small could lead to excessive voltage drop and to overheating the motor and the cable.

GEAR SHIFTING

Choose the proper gear and speed according to the drill bit size used. To switch gears, turn drill spindle by hand until gears mesh/align.

Maximum Drilling Diameter

Gear	Diameter
1st	6"
2nd	2-3/4"
3rd	1-1/2"

ATTENTION: Switch only when the machine is stopped and turned **OFF**.

Load Speed 1st Gear	600 RPM
Load Speed 2nd Gear	1300 RPM
Load Speed 3rd Gear	2800 RPM

ON-OFF SETTING

The machine is equipped with an **ON/OFF** switch with a lock button which allows a soft start-up and accurate spot-drilling.

CAUTION: Don't lock the switch for hand-drilling!

Short-Time Operation - Free-Hand Drilling

Switching-**ON**: press the on/off switch
Switching-**OFF**: release the on/off switch

Permanent Operation - Drilling with Drill Stand

Switching-**ON**: press the on/off switch and, keeping it pressed, engage the lock button
Switching-**OFF**: release the on/off switch and let it go off again

OVERLOAD PROTECTION

In order to protect the operator, the machine and the drill bit, the machine is equipped with mechanical, and electronic overload protection.

Mechanical: If the drill bit suddenly binds in the hole, a clutch will slip, disengaging the drill motor from the bit.

Electronic: In case of electrical overload, the overcurrent switch will shut off the motor. The electrical reset button is on the handle opposite the **ON/OFF** switch. After a cooling off period, the overload can be reset and the motor restarted.

To prevent mechanical or electrical overloads, let the drill do the work and do not use excessive pressure. Overload trips **ARE NOT FAILURES**. The overloads are there to protect the operator, the motor, and the circuit the drill is running on.

NOTE: The stopping of the machine caused by overload is not a failure. After an adequate time it is possible to restart working.

WATER SUPPLY

The machine is equipped with an internal water supply through the work spindle. Using the ball tap you can regulate the water quantity. The water supply is equipped with a connector for garden-hose coupling.

If there is a water leakage on the hole of the gear collar, stop your work immediately. In this case, the shaft seals have to be changed from a authorized skilled workshop.

CAUTION: The water pressure should not be higher than 3 bar.

NOTE: When drilling “overhead,” you have to control the water at the drill hole by using a water suction ring and wet-vacuum cleaner for safety.

CARE AND MAINTANCE

Before starting work, ensure the machine is disconnected from the power source. Repairs have to be carried out only by qualified and experienced personnel.

After every repair, the machine has to be inspected by an electric specialist. Due to its design, the machine requires minimum care and maintenance. The following maintenance needs to be performed regularly.

- The electric tool as well as the ventilation slots always have to be clean.
- During work, please pay attention that no foreign elements get into the interior of the machine.
- In case of failure, a repair has to be carried out by an authorized service center.

TROUBLESHOOTING

NOTE: In case of breakdown, switch the motor **OFF** and disconnect it from the power. Repairs of the electrical parts may only be performed by an authorized service center.

Error	Possible Cause	Error Recovery
machine does not work	main current supply interrupted line cord or plug damaged switch damaged	plug in another electric appliance have the tool repaired by an authorized service center have the tool repaired by an authorized service center
motor runs, drill bit does not rotate	gearbox damaged	have the tool repaired by an authorized service center
drilling speed too slow	water pressure/water flow rate too high drill bit damaged gearbox damaged drill bit glazed over	regulate the water quantity check if drill bit is damaged and replace it if necessary have the tool repaired by an authorized service center sharpen the drill bit with a sharpening stick while using the flushing w/water
motor shuts down	the tool overheats, overload protection of the motor has reacted	discharge the tool and restart it by pressing the switch a couple of times
water drops out of the gearbox housing	shaft sealing rings damaged	have tool repaired by an authorized service center

ORDERING INFORMATION

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

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

- 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

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. For technical questions, call – 800 474-5594.

CONTACT

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

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.

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