

MK-5000 ELECTRIC BLOCK SAWS

OWNER'S MANUAL

MODELS

MK-5005S

MK-5005T

MK-5007T

MK-5010S

MK-5010T



Revision 111	07.2019
Manual Part# 158769	

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-5000 Block Saw. 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-5000 Block Saw 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-5000 Block Saw safely and correctly. Please take the time to familiarize yourself with the MK-5000 Block Saw by reading and reviewing this manual.

Read and follow all safety, operating and maintenance instructions.

If you should have questions concerning your MK-5000 Block Saw, 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:	


WARRANTY: For your (1) one year warranty to be effective, complete the online Product Registration as soon as possible. Visit www.mkdiamond.com/registration/

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Read and follow all safety, operating and maintenance instructions. Failure to read and follow these instructions could result in injury or death to you or others. Failure to read and follow these instructions could also result in damage and/or reduced equipment life. Safety warnings and guidelines do not by themselves eliminate danger. They are not substitutes for proper accident prevention procedures and good judgement.

SAFETY MESSAGES

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.

DAMAGE PREVENTION AND INFORMATION MESSAGES

A Damage Prevention Message is to inform the user of important information and/or instructions that could lead to equipment or other property damage if not followed. Information Messages convey information that pertains to the equipment being used. Each message will be preceded by the word **NOTE**, as in the example below.

NOTE: Equipment and/or property damage may result if these instructions are not followed.

GENERAL SAFETY PRECAUTIONS AND HAZARD SYMBOLS

In order to prevent injury, the following safety precautions and symbols should be followed at all times!



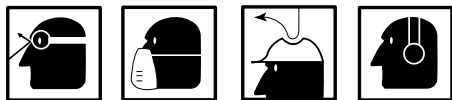
ALWAYS read this Owner's Manual before operating the machine. **DO NOT** operate or service this equipment before reading this entire manual. Read and understand all warnings, instructions and controls on the machine. Know how to stop the equipment quickly in case of emergency. It is the operators responsibility to use this machine under safe working conditions and conform with federal, state and local codes or regulations pertaining to safety, air, pollution, noise etc...



ALWAYS keep the Blade and Belt Guards in place. **DO NOT** operate this machine with any guard or safety device removed. A Guard, or any damaged part should be repaired or replaced immediately.



NEVER operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job. Non-slip foot wear is recommended.

**PERSONAL PROTECTIVE EQUIPMENT**

ALWAYS wear approved respiratory, head, ear and eye protection when operating this machine.

**ACCIDENTAL STARTS!**

Before starting the engine/motor, 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. **ALWAYS** place the power **ON/OFF** switch in the **OFF** position when the machine is not in use.

**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.

**HOT PARTS!**

Engine components can become extremely hot from operation. To prevent severe burns, do not touch these areas while the engine is running, or immediately after it is turned off. Never operate the engine with heat shields removed.

**OVER SPEED**

NEVER tamper with the governor components or settings to increase the maximum speed. Severe personal injury and damage to the engine or equipment can result if operated at speeds above maximum.

**ELECTRICAL SHOCK**

NEVER touch electrical wires or components while the engine is running. Exposed, frayed or worn electrical wiring and plugs can be sources of electrical shock which could cause severe injury or burns. Do not touch the plug with wet hands.



ALWAYS avoid inhalation of and skin contact with silica dust and/or mist. Provide proper dust removal. Use dust-collection system when applicable.



NEVER operate the machine in an explosive atmosphere or near combustible materials. Sparks from the cutting-action of this machine can ignite flammable materials, liquids, gases or dust.



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

**KEEP CHILDREN AWAY**

All visitors and children should be kept a safe distance from work area. Maintain a safe operating distance to other personnel.

**MAKE THE WORKSHOP KID PROOF**

Make the workshops kid proof by using padlocks, master switches or by removing starter keys.

**DO NOT FORCE THE TOOL**

A power tool will do a job better and safer operating at the rate for which it was designed. **DO NOT** force a tool or an attachment to do a job that it was not designed to do.

**USE PROPER APPAREL**

DO NOT wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that may be caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

**SECURE WORK**

Clamps or a vise should be used to hold work whenever practical. Keeping your hands free to operate a power tool is safer.

**DO NOT OVERREACH**

Keep proper footing and balance at all times by not overreaching.

**DISCONNECT TOOLS**

Power tools should always be disconnected before servicing, adjusting or when changing accessories, such as blades, bits, cutters, and the like.

**MAINTAIN TOOLS WITH CARE**

Keep tools clean and maintained for the best and safest performance. Always follow maintenance instructions and examine the machine before use. If any abnormal vibrations or noises occurs, turn off machine immediately and have the problem corrected before further use.

**REMOVE ADJUSTING KEYS AND WRENCHES**

Form a habit of checking to see that keys and adjusting wrenches are removed from the power tool before it is turned on.

**KEEP WORK AREA CLEAN**

Cluttered work areas and benches invite accidents. Keep area around machine clear of obstructions which could cause persons to fall.

**DO NOT USE IN DANGEROUS PLACES**

DO NOT operate equipment in dangerous or hazardous environments. **DO NOT** use power tools in damp or wet locations nor expose them to rain. Always keep the work area well lighted.

**USE RECOMMENDED ACCESSORIES**

Consult the owner's manual for recommended accessories. Using improper accessories may increase the risk of personal or by-stander injury. Unauthorized equipment modifications will void all warranties. Manufacturer does not assume responsibility for any accident due to equipment modifications.



ALWAYS ensure that the machine is on level ground before using.

**NEVER STAND ON THE TOOL**

Serious injury could occur if a power tool is tipped, or if a cutting tool is unintentionally contacted.

**TRANSPORT**

When loading or unloading the machine, use caution. Remove the blade prior to hoisting, loading and transporting the machine.

**CHECK FOR DAMAGED PARTS**

Before using a power tool, check for damaged parts. A guard or any other part that is damaged should be carefully checked to determine if it would operate properly and perform its intended function. Always check moving parts for proper alignment or binding. Check for broken parts and mountings and all other conditions that may affect the operation of the power tool. A guard, or any damaged part, should be properly repaired or replaced. Always check the machine for loose bolts before starting.

**DIRECTION OF ROTATION**

A blade or cutter should always be installed so that rotation is in the direction of the arrow imprinted on the side of the blade or cutter. It should correspond with the rotational direction of the motor. Always feed work into a blade against the direction of rotation.

**NEVER LEAVE A TOOL UNATTENDED**

TURN POWER OFF - Do not leave a tool until it comes to a complete stop. **ALWAYS** turn a power tool **OFF** when leaving the work area, or, when a cut is finished.



NEVER disconnect any "emergency or safety devices". These devices are intended for operator safety. Disconnection of these devices can cause severe injury, bodily harm, or even death! Disconnection of any of these devices will void all warranties. Unauthorized equipment modifications will void all warranties. Manufacturer does not assume responsibility for any accident due to equipment modifications.



NEVER use this machine with any cutter designed for woodworking.



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.



On belt driven equipment, overtensioning of belts will result in premature crank and/or bearing failure.



Whenever necessary, replace nameplate, operation and safety decals when they become difficult to read.



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



DO NOT lend or rent this equipment without including the Owner's Manual and the Engine/Motor Manufacturer's Manual.



Check the chemical properties of the material to be cut/grinded and follow all EPA/OSHA Regulations. (cut/ground)

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.

Use appropriate NIOSH-approved respiratory protection where dust hazard may occur. Paper masks or surgical masks without a NIOSH approval number are not recommended because they do little to protect the worker. For more information about respirator programs, including what respirators have received NIOSH approval as safe and effective, please visit the NIOSH website at:

<http://www.cdc.gov/niosh/topics/respirators>

Observe OSHA regulations for respirator use (29 C.F.R. §1910.134).

Visit <http://www.osha.gov> for more information.

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/docs/96-112/>

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

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

<http://www.P65warnings.ca.gov>

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. Where use of a dust extraction device is possible, it should be used. To achieve a high level of dust collection, use an industrial HEPA vacuum cleaner. Observe OSHA 29 CFR part 1926.57 and 1926.103.

ELECTRICAL REQUIREMENTS AND GROUNDING INSTRUCTIONS

In order to prevent potential electrical shock and injury, the following electrical safety precautions and symbols should be followed at all times!

**WARNING**

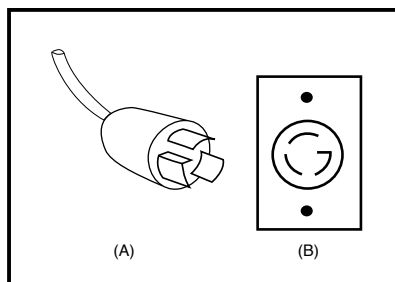
In case of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

- Do not modify the plug provided – if it will not fit the outlet; have the proper outlet installed by a qualified electrician
- Improper connections of the equipment-grounding conductor can result in a risk of electric shock. The equipment-grounding conductor is the insulated conductor that has an outer surface that is green, with or without yellow stripes. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug
- Repair or replace a damaged or worn cord immediately

**WARNING**

This tool is intended for use on a circuit that has an outlet that looks similar to the one shown in Sketch B of Figure below. The tool has a grounding plug that looks similar to the plug illustrated in Sketch A of Figure below. Make sure the tool is connected to an outlet having the same configuration as the plug. No adapter is available or should be used with this tool. If the tool must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after reconnection, the tool should comply with all local codes and ordinances.

If permanently connected, this tool should be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor.



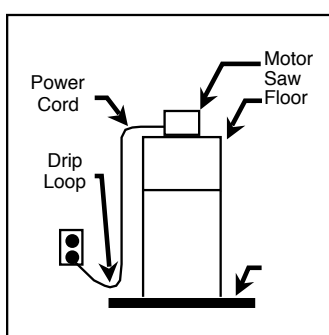
NOTE: Use of a temporary adapter is not permitted in Canada.

**WARNING**

To avoid the possibility of the appliance plug or receptacle getting wet, position the machine to one side of a wall mounted receptacle. This will prevent water from dripping onto the receptacle or plug. A "drip loop," shown in the picture below, should be arranged by the user to properly position the power cord relative to the power source.

The "drip loop" is that part of the cord below the level of the receptacle, or the connector, if an extension cord is used. This method of positioning the cord prevents the travel of water along the power cord and coming in contact with the receptacle.

If the plug or receptacle gets wet, **DO NOT** unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the tool. Then unplug and examine for presence of water in the receptacle.



Drip Loop Information

**WARNING**

Use only extension cords that are intended for outdoor use. These extension cords are identified by a marking "Acceptable for use with outdoor appliances; store indoors while not in use." Use only extension cords having an electrical rating not less than the rating of the product. Do not use damaged extension cords. Examine extension cords before using and replace if damaged. Do not abuse extension cords and do not yank on any cord to disconnect. Keep cords away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord.



To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch the plug with wet hands. Use of undersized extension cords result in low voltage to the motor that can result in motor burnout.

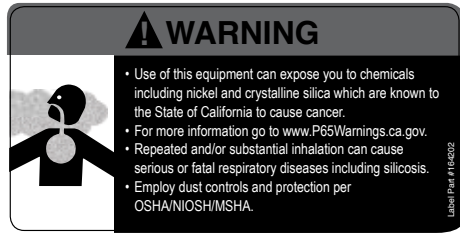
To choose the proper extension cord:

- Locate the length of extension cord needed in the table below.
- Once the proper length is found, move down the column to obtain the correct AWG size required for that length extension cord.

MODELS	MOTOR SPECS			EXTENSION CORD LENGTH			
	Motor	Voltage	Amps	25'	50'	100'	200'
MK-5005S	159472	230V 1 Ph	24	12 ga	12 ga	8 ga	6 ga
MK-5005T	172424	230V 3 Ph	13.4	12 ga	12 ga	12 ga	8 ga
	172424	460V 3 Ph	6.7	14 ga	14 ga	14 ga	14 ga
MK-5007T	172426	230V 3 Ph	19	12 ga	12 ga	12 ga	8 ga
	172426	460V 3 Ph	9.5	14 ga	14 ga	14 ga	14 ga
MK-5010S	165675	230V 1 Ph	38	8 ga	8 ga	6 ga	4 ga
MK-5010T	165676	230V 3 Ph	24	10 ga	10 ga	8 ga	6 ga
	165676	460V 3 Ph	12	14 ga	14 ga	12 ga	12 ga

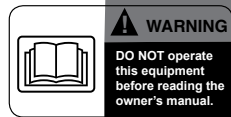
OPERATION & SAFETY DECALS

The MK-5000 Block Saw is equipped with a number of safety decals. These decals are provided for operator safety and maintenance information. Should any of these operation or safety decals become unreadable, replacements can be obtained by calling **(800) 262-1575**.



Part # 164202

A



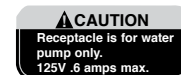
Part # 154398

B



Part # 155678

C



Part # 154822

D



Part # 155038

E



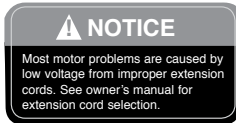
Part # 155587 (2)

F



Part # 155588

G



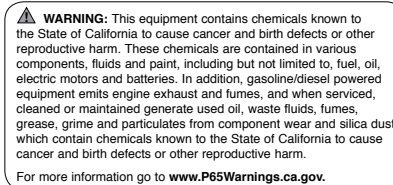
Part # 155672

H



Part # 170480

I

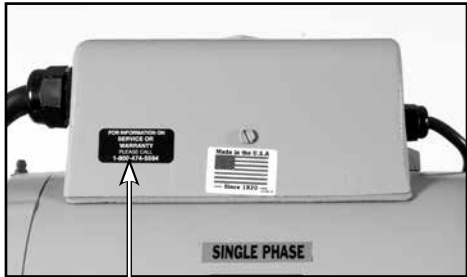
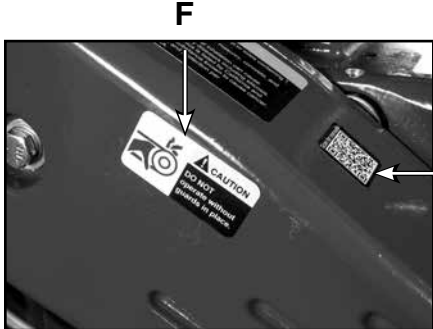
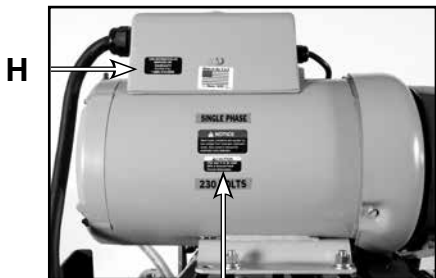
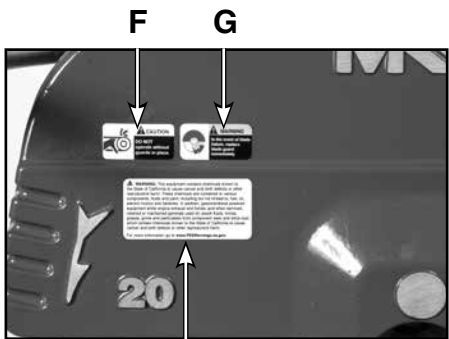
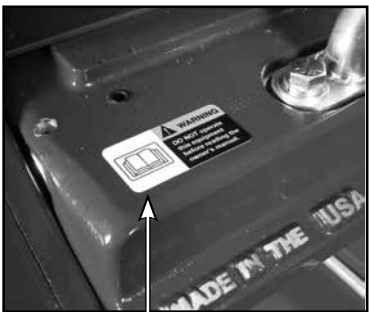


Part # 172641

J

Decal	Location	Description
A	Belt Guard	Warning - Silica
B	Cutting Head	Warning - Read Manual
C	Motor - Back	Caution - Ground Fault Circuit Interrupter
D	Motor - Side	Caution - Receptacle Water Pump
E	Motor - Back	Service/Warranty
F	Blade Guard	Caution - Guards in Place
F	Belt Guard	Caution - Guards in Place
G	Blade Guard	Warning - Replace Blade Guard
H	Motor - Back	Notice - Extension Cord
I	Belt Guard	QR Code for Manuals
J	Blade Guard	Prop 65

SAFETY DECALS LOCATION



SPECIFICATION

The MK-5000 is a versatile masonry saw. Operated and used according to this manual, the MK-5000 will provide years of dependable service.

General Description

The MK-5000, is engineered as a 14", 20" or 24" saw, consisting of a powerful 230V single phase motor. The saw is capable of cutting brick and masonry up to 8" x 8" x 16" in size in a single pass.

Motor and Weight Specifications

Motor and weight specifications for the MK-5000 are listed in the table below.

MK-5005 - 5 Hp Saws				General Specifications	
Model	Voltage	Blade Guard	Part#	Motor	ABB Baldor
MK-5005S	230V 1-Phase	14"	160634-14	Arbor Size	1"
MK-5005S	230V 1-Phase	20"	160634	Motor RPM	1,725
MK-5005T	230V 3-Phase	14"	160636-14	Shaft RPM 14" Blade Guard	2,700
MK-5005T	230V 3-Phase	20"	160636	Shaft RPM 20" Blade Guard	1,925
MK-5005T	460V 3-Phase	14"	160637-14	Shaft RPM 24" Blade Guard	1,540
MK-5005T	460V 3-Phase	20"	160637	Depth of Cut 14" Blade	5"
MK-5007 - 7 Hp Saws				Depth of Cut 20" Blade	8"
MK-5007T	230V 3-Phase	14"	160641-14	Depth of Cut 24" Blade	10"
MK-5007T	230V 3-Phase	20"	160641	Weight - MK-5005	451 lbs. (205kg)
MK-5007T	230V 3-Phase	24"	160641-24	Weight - MK-5007	485 lbs. (220kg)
MK-5007T	460V 3-Phase	14"	160642-14	Weight - MK-5010	485 lbs. (220kg)
MK-5007T	460V 3-Phase	20"	160642	Length of Cut	20"
MK-5007T	460V 3-Phase	24"	160642-24	LxWxH	53" x 26" 63"
MK-5010 - 10 Hp Saws				LxWxH (mm)	1,346 x 660 x 1,600
MK-5010S	230V 1-Phase	24"	169328		
MK-5010T	230V 3-Phase	24"	169330		
MK-5010T	460V 3-Phase	24"	169331		

BLADE CAPACITY

The MK-5000 uses a 14-inch, 20-inch or 24-inch diameter segmented MK Diamond blade with a .125-inch cutting width and a 1" arbor.

MASONRY TYPES

The MK-5000 can cut a variety of masonry types including, cinder block, slump stone block, wall brick, paver brick, concrete block and cylinders, roofing tile, marble, granite, decorative rock or almost any other non-ferrous material.

NOTE: The MK-5000 is not designed to cut plastic or ferrous (metals) material.

PEDDLE ASSISTED CUTTING HEAD

The MK-5000 is designed with a peddle assisted Cutting Head to allow the operator to use both hands when cutting. The Cutting Head can be raised or lowered by the use of an adjusting wheel to set the start of the cut.


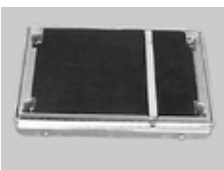
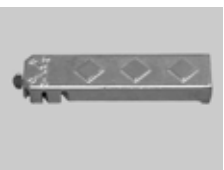







UNPACKING

Your MK-5000 has been shipped from the factory thoroughly inspected. Only minimal assembly is required. If not already done, remove the MK-5000 from the pallet and place it on a flat surface using a forklift.

Remove the accessories from the Water Basin and place along side the MK-5000.

CONTENTS

In the containers, you will find one (1) MK-5000, one (1) movable cutting table, one (1) adjustable cutting guide, one (1) electric water pump, one (1) pump discharge fitting, one (1) blade wrench, one (1) drain plug, one (1) owner's manual, one (1) pump manual and one (1) warranty card.

				
MK-5000	Movable Cutting Table	Adjustable Cutting Guide	Electric Water Pump	Pump Discharge Fitting
				
Blade Wrench	Drain Plug	Owner's Manual	Pump Manual	Warranty Card

TRANSPORT

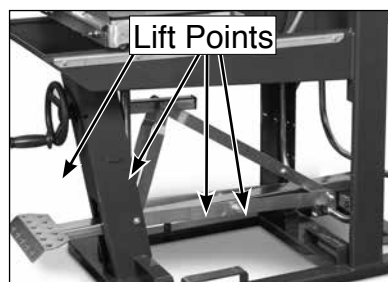
The MK-5000 weighs approximately four hundred forty-five (445) pounds (without the movable Cutting Table).



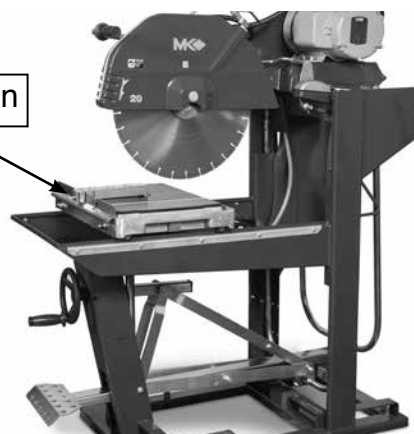
WARNING Do not attempt to move the MK-5000 without a forklift.

NOTE: Place the Cutting Head in the DOWN position, and remove the movable Cutting Table when transporting the MK-5000.

Due to its solid construction, the MK-5000 may only be transported with a forklift. Position the Cutting Head in the DOWN position, remove the movable Cutting Table, and transport the saw using the eight (8) lift points positioned strategically around the base. Use tie downs when transporting the saw.

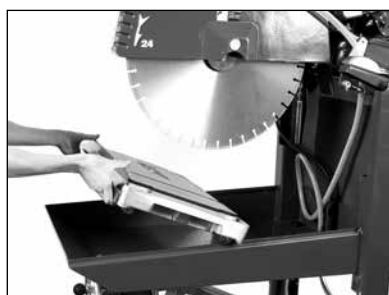


Tie Down

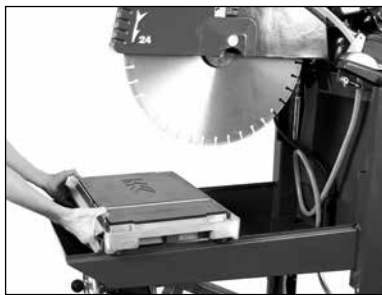


ASSEMBLY

Follow the assembly instructions to prepare your MK-5000 for operation.

Movable Cutting Table Installation

(A)
Position movable Cutting Table.



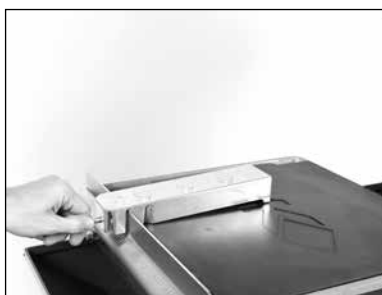
(B)
Seat all four (4) Roller Wheels
on the Guide Rails.



(C)
Verify correct seating of Roller
Wheels.

Adjustable Cutting Guide Installation

(A)
Loosen the Thumbscrew. Align the
adjustable Cutting Guide above the
movable Cutting Table Ruler/Stop.



(B)
Seat the adjustable Cutting
Guide and tighten the Thumbscrew.

Diamond Blade Installation

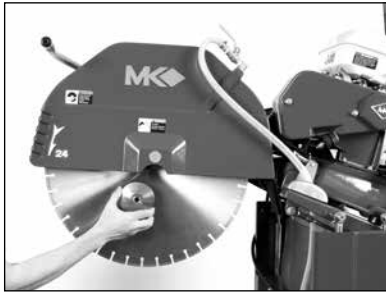
(A)
Remove the Retaining Screw
and Outer Flange with the blade
wrench. Turn counter-clockwise
to loosen.



(B)
Install the Diamond Blade onto
the Blade Shaft.



(C)
Verify the blade is seated on
the Blade Shaft and direction of
rotation is correct.



(D)
Install Retaining Screw and
Outer Flange.



(E)
Rotate Blade Wrench clockwise
to tighten.

CAUTION

Diamond Blades improperly used are dangerous. Comply with American National Standards Institute Safety Code, B7.1 and, Occupational Safety and Health Act covering Speed, Safety Guards, Flanges, Mounting Procedures, General Operating Rules, Handling, Storage and General Machine Conditions.

Water Pump Preparation



(A)
Install Water Pump
Discharge Fitting.



(B)
Press the end of the Cooling
Transfer Tube onto the Water
Pump Discharge Fitting.

SETUP**⚠ CAUTION**

- Before powering or starting, check for damage that could prevent this equipment from proper operation or performing its intended function. Check for binding and alignment of moving parts. Check for damaged, broken, or missing parts.
- Verify the ON/OFF switch is in the OFF position.
- Before connecting the MK-5000 to a power supply, be sure the voltage, cycle and phase of the job site power source meet the requirements of the table below.

VOLTAGE:	230v
CYCLE:	50/60hz
PHASE:	Single phase

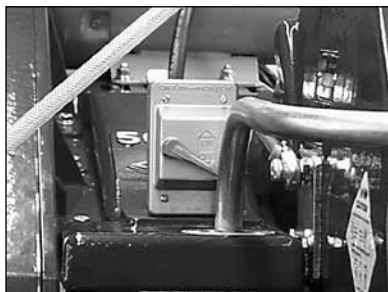
- If using an extension power cord, make sure the length and wire gauge corresponds to the requirements. An extension power cord that is too small in wire gauge (diameter), or too long in length, will cause the motor to overheat and could cause premature failure.
- Do not cover the motor vents as this could lead to motor overheating.

Pre-start Inspection

The pre-start inspection should be performed before beginning any job.

⚠ CAUTION If the Diamond Blade shows signs of fatigue cracking, replace the blade before starting work.

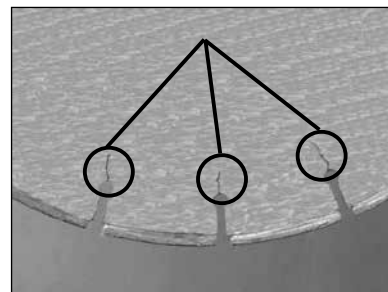
NOTE: In order to avoid breaker tripping, a 30-amp circuit breaker should be used.



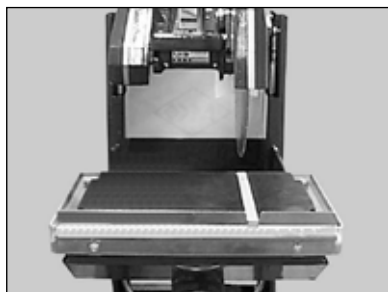
(A)
Ensure the ON/OFF Switch
is in the OFF position.



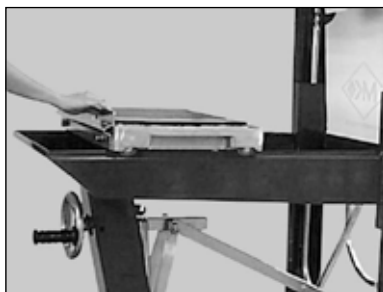
(B)
Check all electrical connections.



(C)
Inspect the blade for damage
and verify it's correct for the
material being cut.



(D)
Inspect Wooden Strip for
excessive grooves.



(E)
Verify movable Cutting Table
moves freely.



(F)
Inspect the MK-5000 for general
damage and/or loose hardware.



(G)

Inspect the Pump Assembly for damage – ensure the cord is free of cracks or cuts.

Connecting the Water Pump



- WARNING**
1. To prevent the possibility of electrical shock, the MK-5000 MUST be de-energized when connecting the Water Pump.
 2. To prevent the possibility of electrical shock, use only MK Diamond qualified replacement parts.

NOTE: To prevent pump damage, the Water Pump must be disconnected if cutting with a Dry Blade.



(A)

Ensure the ON/OFF Switch is in the OFF position.



(B)

Connect the Water Pump power cord to the connection found on the side of the motor.

Water Pump Setup for Operation

The Water Pump can be setup for operation in two ways, External Water Source or Re-circulation.

NOTE: If Dry Cutting, DO NOT connect the Water Pump.

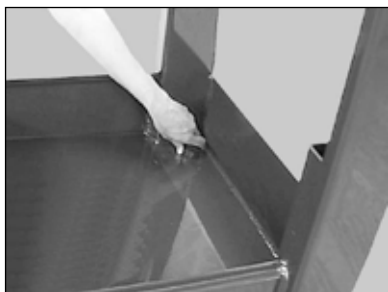


WARNING

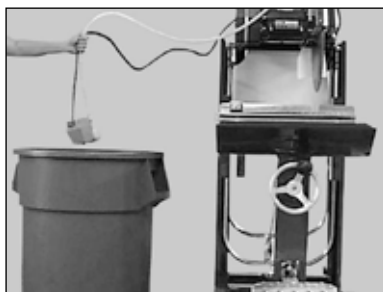
Dry cutting has the potential to expose you to high levels of crystalline silica. Repeated and/or substantial inhalation can cause serious or fatal respiratory diseases including silicosis. For more information go to www.P65Warnings.ca.gov. Employ dust controls and protection per OSHA/NIOSH/MSHA.

External Water Source

NOTE: This is the preferred method of cooling. This method may add as much as twenty (20) percent to the life of the blade.



(A)
Remove the Drain Plug.



(B)
Place the Water Pump in an external container.



(C)
Fill the external container until water completely covers the Water Pump intake.

NOTE: Follow all applicable Federal State and Local laws for the proper disposal of waste water.



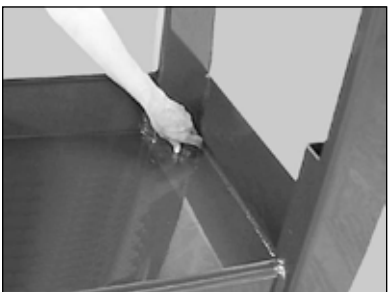
(D)
Locate the Water Basin Drain Connection (located in the back of the Water Basin).



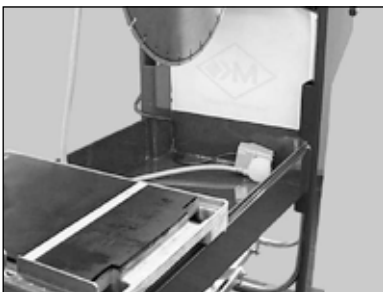
(E)
Install an external drain line onto the Drain Connection.

Re-circulation

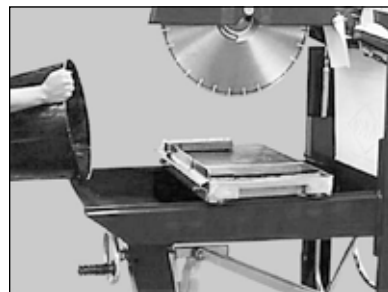
NOTE: When using the re-circulation method, the water should be changed often for longer pump life.



(A)
Ensure the Drain Plug is installed in the Water Basin.



(B)
Place the Water Pump in the back of the Water Basin.



(C)
Fill the Water Basin until water completely covers the Water Tank intake.

Power Connection



(A)
Ensure the ON/OFF Switch
is in the OFF position.



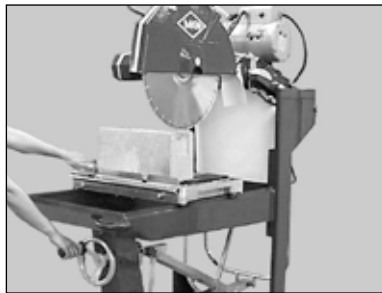
(B)
Connect the MK-5000 to the
proper power source.

Cutting Setup

- NOTES:**
1. While the MK-5000 can cut the materials listed earlier in this document, it is specifically designed to cut concrete masonry. Cutting another material with the MK-5000 will reduce the life of the Diamond Blade.
 2. Due to the material being cut, the Diamond Blade should not require dressing. If dressing is required, use a soft stone such as sandstone.



(A)
Set edge of Cutting Guide to
desired cut length on Ruler/
Stop.



(B)
Set material against adjustable
Cutting Guide and Ruler/Stop.

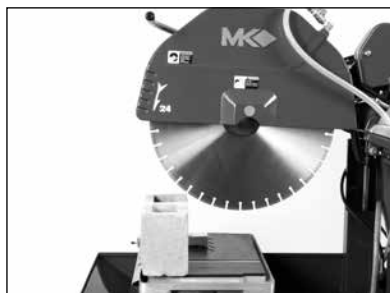


CAUTION DO NOT FORCE the blade to cut, it will do the job better and safer at the rate for which it was designed.

Step Cutting

A Step Cut is performed when a series of small cuts of increasing depth are used to complete a single cut.

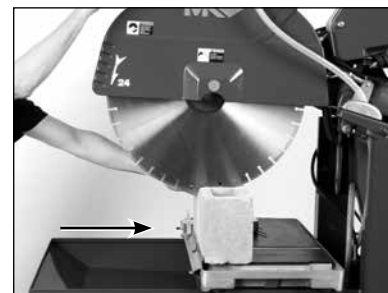
- NOTE:**
1. Step Cutting is the preferred cutting method for all cuts.
 2. When cutting hard material Step Cutting should always be used.
 3. Step Cutting will extend the life of the Diamond Blade.



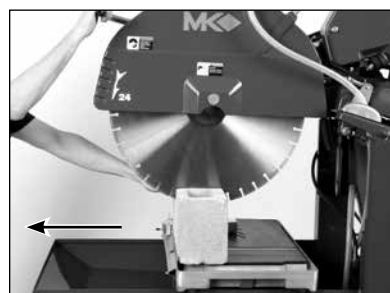
(A)
Adjust the height of the Cutting Head as necessary, start motor.



(B)
Open the Cooling Flow Control Valve and adjust flow. Verify proper cooling flow on both sides of the blade.



(C)
Step Cut "Push" Stroke. Lower Cutting Head 1/4" - 1/2" during Push Stroke.



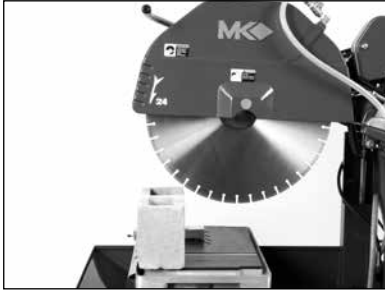
(D)
Step Cut "Pull" Stroke. Lower Cutting Head an additional 1/4" to 1/2" and pull Cutting Table forward.



(E)
Repeat Steps C and D until cut is complete. Turn the saw off when work is complete.

Chop Cutting

A Chop Cut is performed by cutting completely through an object in one pass.



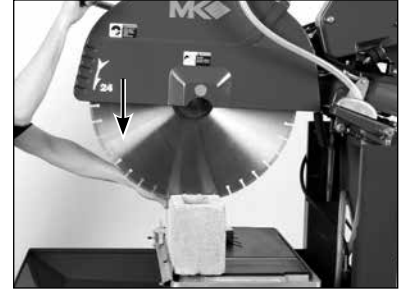
(A)

Adjust the height of the Cutting Head as necessary, start motor.



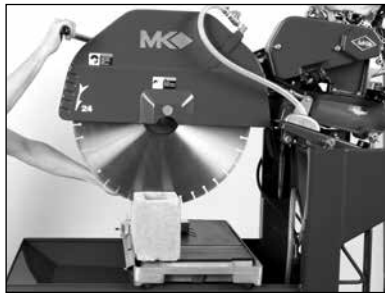
(B)

Open the Cooling Flow Control Valve and adjust flow. Verify proper cooling flow on both sides of the blade.



(C)

Hold the Cutting Table stationary. Lower Cutting Head smoothly to cut.

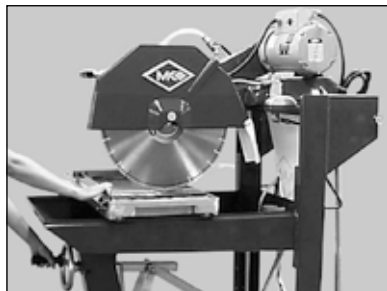


(D)

Continue lowering Cutting Head until cut is complete. Turn the saw off when work is complete.

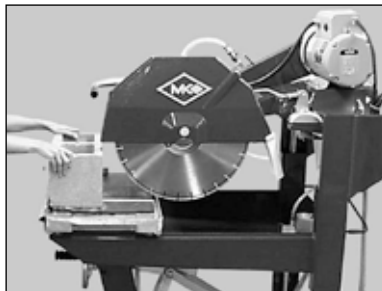
Cutting with the Cutting Head Positioned Down

This method is preferred when cutting small objects.



(A)

Lower the Cutting Head until the blade is just off the surface of the movable Cutting Table.



(B)

Set masonry piece in position.



(C)

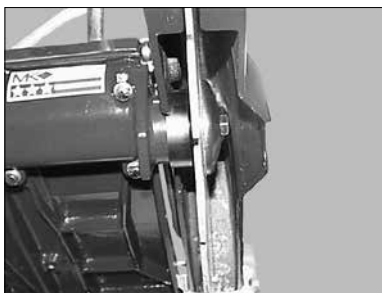
Turn the motor ON.



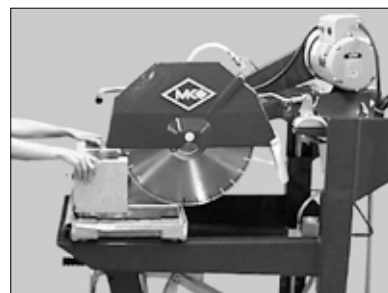
CAUTION DO NOT FORCE TOOL, it will do the job better and safer at the rate for which it was designed.



(D)
Open the Cooling Flow Control Valve and adjust flow.



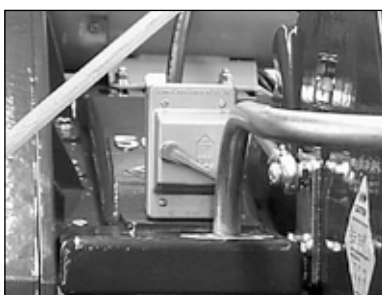
(E)
Verify proper cooling flow on both sides of the blade.



(F)
Slowly push piece toward blade to begin the cut.



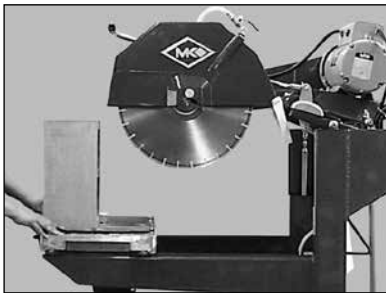
(G)
Continue pushing piece into blade until cut is complete.



(H)
Turn the saw off when work is complete.

Cutting with the Piece Position Vertically

This method may be used when "notching" the masonry piece.



(A)
Position masonry piece.
Adjust the height of the Cutting
Head as necessary.



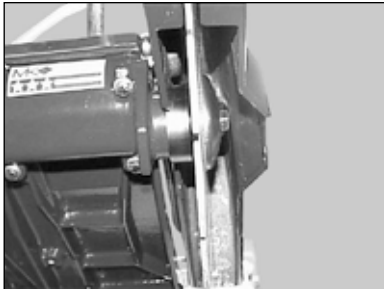
(B)
Turn the motor ON.



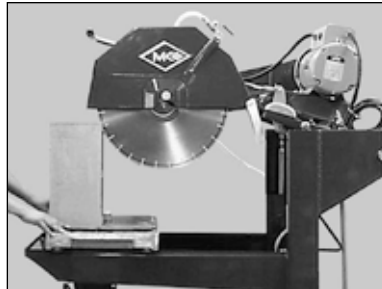
(C)
Open the Coolant Flow Control
Valve and adjust flow.



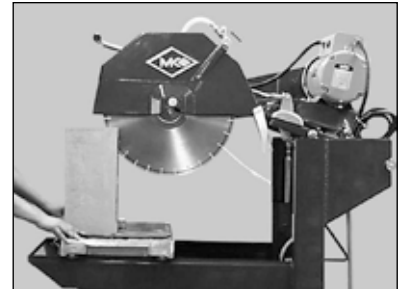
CAUTION DO NOT FORCE TOOL, it will do the job better and safer at the rate for which it was designed.



(D)
Verify proper Cooling Flow on
both sides of the blade.



(E)
Slowly push piece toward
blade to begin the cut.



(F)
Continue pushing piece into
blade until cut is complete.



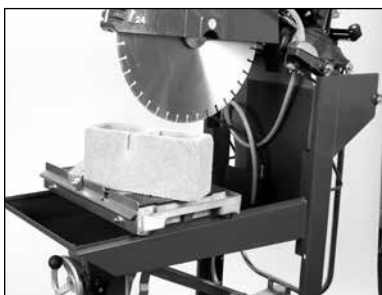
(G)
Turn the saw off when
work is complete.

Angle Cuts

Angle Cuts may be performed using the Step Cut, Chop Cut, Cutting Head Positioned Down methods or with the masonry piece positioned vertically. The following example utilizes the Step Cut method.



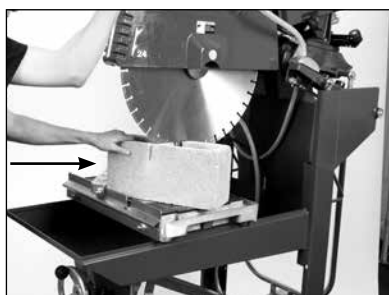
(A)
Reposition adjustable Cutting Guide. Align 45° Slots to Ruler/Stop.



(B)
Position the masonry piece. Adjust the height of the Cutting Head as necessary, start motor.



(C)
Open the Cooling Flow Control Valve and adjust flow. Verify proper cooling flow on both sides of the blade.



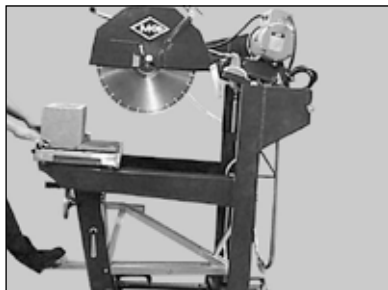
(D)
Lower Cutting Head 1/4" - 1/2" during "Push" Stroke.



(E)
Lower Cutting Head 1/4" - 1/2" during "Pull" Stroke. Repeat Steps D and E until cut is complete. Turn the saw off when work is complete.

Cutting using the Foot Pedal

The Foot Peddle may be used to Step Cut, Chop Cut, cut with the Cutting Head Positioned Down, or with the masonry piece positioned vertically. Using the Foot Peddle frees both of the operator's hands for holding the masonry piece. The following example utilizes the Step Cut method.



(A)
Position masonry piece
(Adjust the height of the Cutting
Head as necessary).



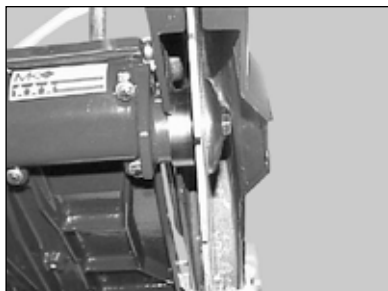
(B)
Turn the motor ON.



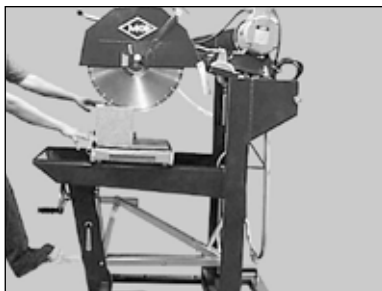
(C)
Open the Cooling Flow Con-
trol Valve and adjust flow.



CAUTION DO NOT FORCE TOOL, it will do the job better and safer at the rate for which it was designed.



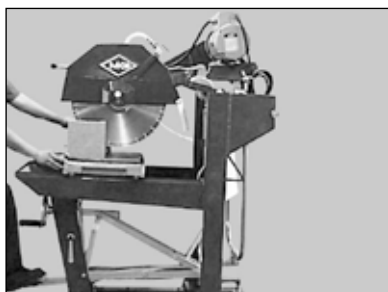
(D)
Verify proper cooling flow on
both sides of the blade.



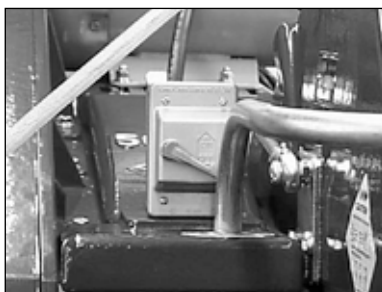
(E)
Lower cutting head with Foot
Pedal 1/4" to 1/2".



(F)
Lower cutting head an ad-
ditional 1/4" to 1/2" with Foot
Pedal for "Pull" Stroke.



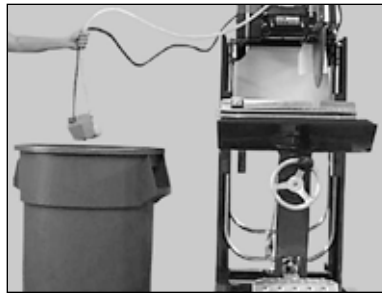
(G)
Repeat Steps E and F
until cut is complete.



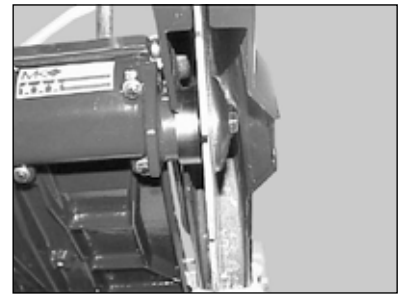
(H)
Turn the saw off when
work is complete.

Cleanup

(A)
Clean the Water Pump
suction of all debris.



(B)
Place the Water Pump in an
external container.



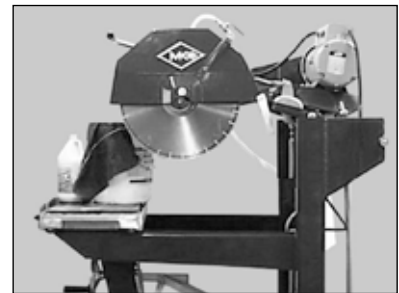
(C)
Run the saw until clear water is
seen at the blade cooling ports
(Approx. one (1) minute).



(D)
Ensure the ON/OFF Switch
is in the OFF position.



(E)
Unplug MK-5000 from the
power source.



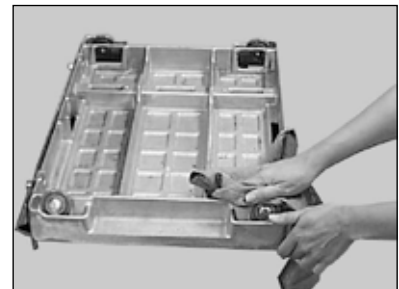
(F)
Clean the saw with soap and
clean water.



(G)
Clean the Water Basin.



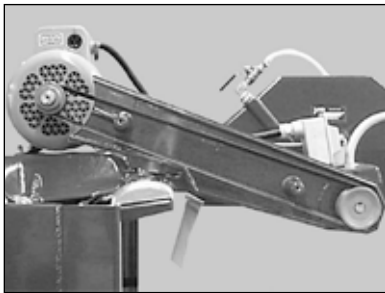
(H)
Clean the movable Cutting
Table Guide Rails.



(I)
Clean the movable
Cutting Table Roller Wheels.

New Maintenance

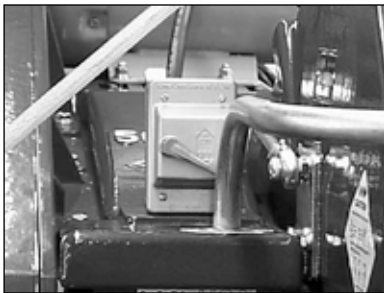
Perform the following after initial purchase and operation of the MK-5000.



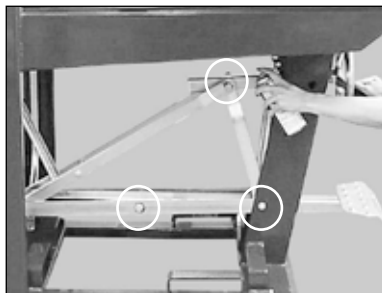
(A)
Check and adjust V-belt tension following first forty-eight (48) hours of operation (See V-belt Inspection page 32).

Maintenance Following Use

The following maintenance should be performed following each use. Use light oil, such as 3-IN-ONE, or other multipurpose spray lubricant.



(A)
Ensure the ON/OFF switch is in the OFF position.



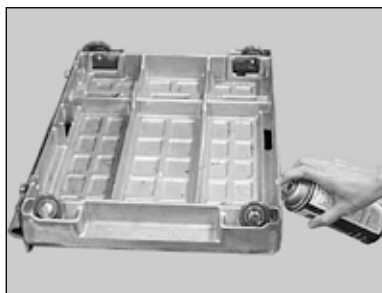
(B)
Lubricate lower pivot points.



(C)
Lubricate upper pivot points.



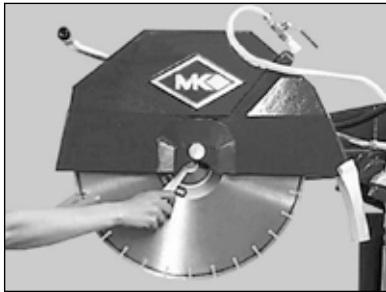
(D)
Clean and lubricate all spring assemblies.



(E)
Lubricate the Roller Wheel Assemblies.

Monthly Maintenance

The following should be performed monthly. Items should be lubricated as directed.



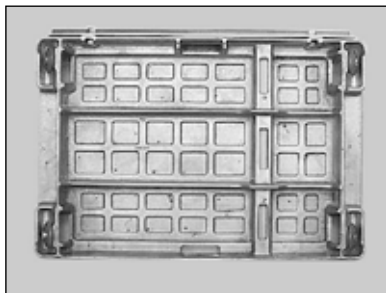
(A)
Remove the Diamond Blade.



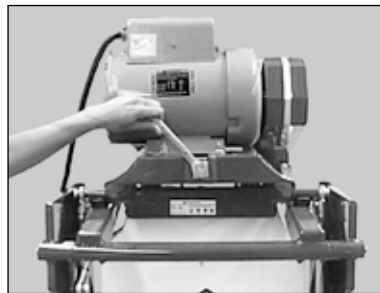
(B)
Clean and lubricate the Outer
Flange and Retaining-bolt.



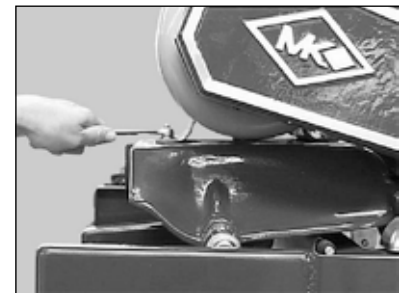
(C)
Clean and lubricate the
Inner Flange.



(D)
Verify the Roller Wheel
Assemblies are tight and
in good condition.



(E)
Verify the Motor Adjustment
Strap is tight.



(F)
Verify all motor mounting
bolts are tight.



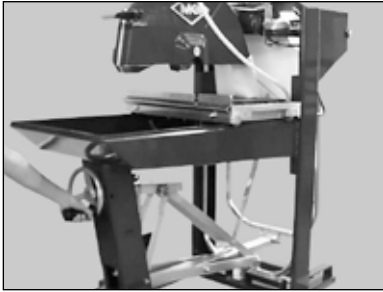
(G)
Apply grease to the nine (9) Zerk
Fittings of the MK-5000
(See Unit Lubrication page 32).

Diamond Blade Change-out

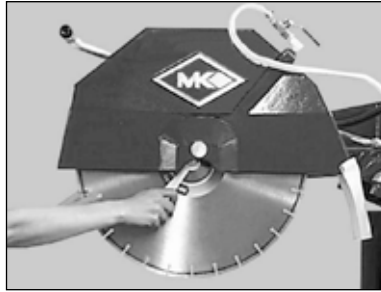


WARNING

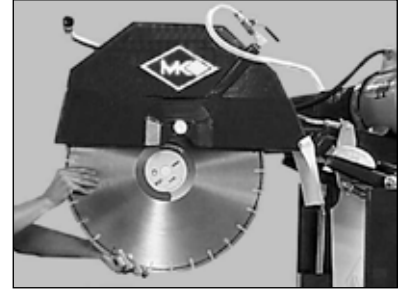
Disconnect the tool before servicing and when changing accessories, such as blades, bits, cutters, and the like.



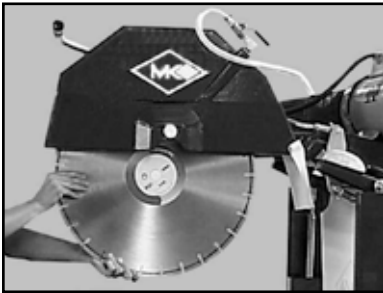
(A)
Raise the Cutting Head.



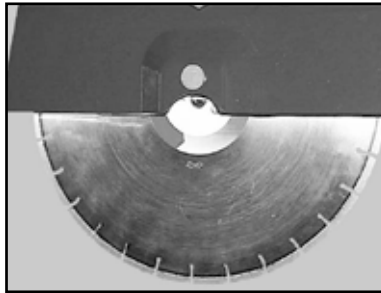
(B)
Identify and remove the Retaining Screw and Outer Flange. Turn counter-clockwise to loosen.



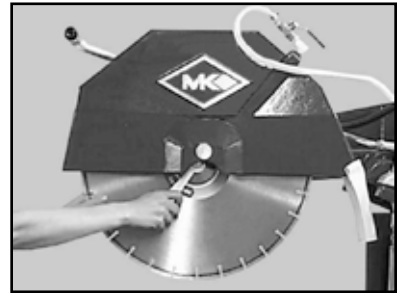
(C)
Remove the Diamond Blade from the Blade Shaft.



(D)
Install the new Diamond Blade onto the Blade Shaft.

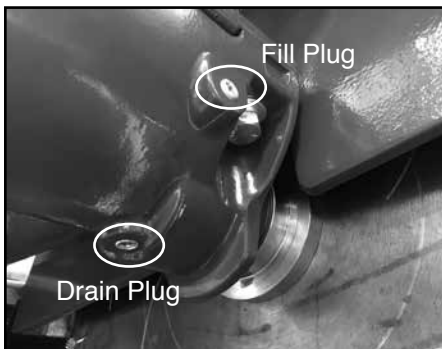


(E)
Verify the blade is seated on the Blade Shaft and direction of rotation is correct.



(F)
Install Retaining Screw and Outer Flange, then tighten. Rotate Blade Wrench clockwise to tighten.

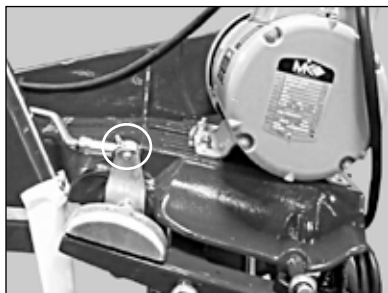
Blade Shaft



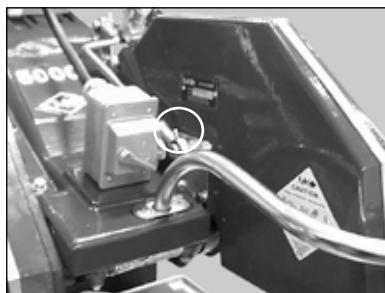
The oil bath for the blade shaft is filled at the factory with 10W-40 Motor Oil to the bottom of the fill plug hole. The oil level should be checked at 100 hours, then at intervals of 500 hours. Changing the oil should occur each 1000 hours or 6 months.

MK-5000 Lubrication Points

Use standard grease when lubricating the MK-5000. Clean the Zerk Fitting when finished lubricating. Apply grease slowly; stop when grease is seen between joints.



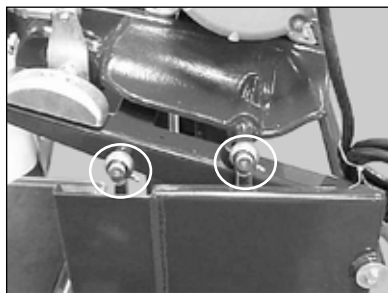
(A)
Rear Blade Guard Stay-level
pivot point, lubrication point.



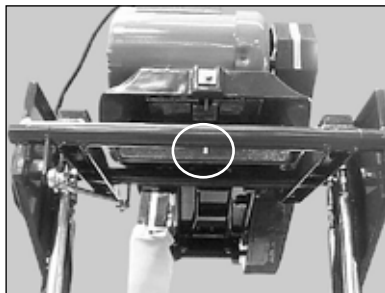
(B)
Front Blade Guard Stay-level
pivot point, lubrication point.



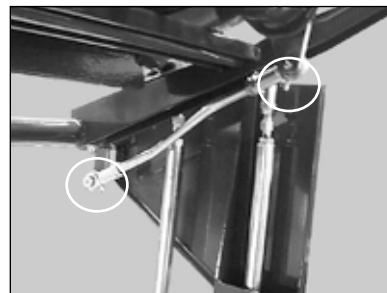
(C)
Front and Rear Connecting
Arms, left side (from front), lubri-
cation points.



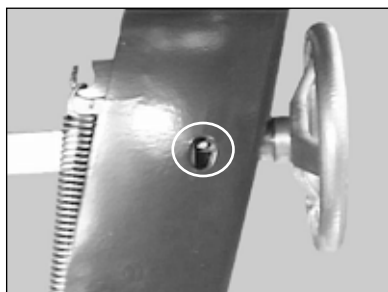
(D)
Front and Rear Connecting
Arms, right side (from front),
lubrication points.



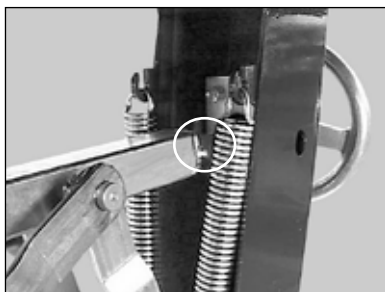
(E)
Elevation Pivot Bracket, Pivot
Shaft Housing, lubrication point.



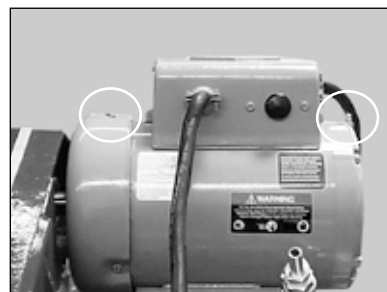
(F)
Cutting Head Rear Connecting
Arm, lubrication point.



(G)
Crank Wheel Assembly Bear-
ing, lubrication point.



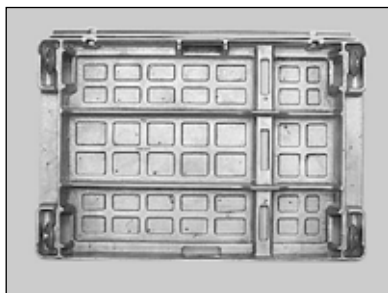
(H)
Depth Control Screw Housing,
lubrication point.



(I)
Motor Bearing lubrication points.

Movable Cutting Table Wheel Change-out

NOTE: All four (4) movable Cutting Table, Roller Wheels should be replaced at the same time (MK Diamond Part No. – 152493).



(A)

Place movable Cutting Table on workbench with Roller Wheels Up.



(B)

Remove Roller Wheels.



(C)

Clean holes to prepare for installation of new Roller Wheels.

NOTE: When installing the Retaining Bolt, do not "cross-thread" and DO NOT over tighten the Nut.



(D)

Obtain Wheel replacement parts (See parts list).



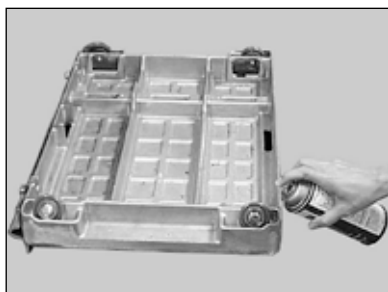
(E)

Install Wheel/Washer Assembly into movable Cutting Table.



(F)

Install Roller Wheel Retaining Nut and tighten. Rotate clockwise to tighten.



(G)

Lubricate Roller Wheels.

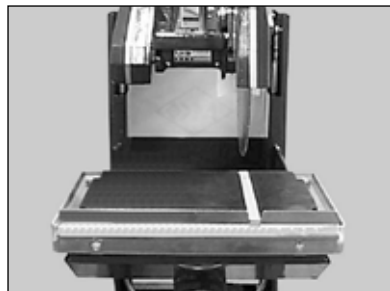


(H)

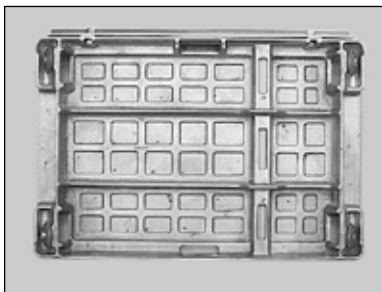
Install movable Cutting Table.

Protective Wooden Strip Replacement

The protective Wooden Strip is to protect the movable Cutting Table from damage during operation. Over time, the Wooden Strip will become grooved from use. A grooved Wooden Strip will not support masonry during cutting causing the blade to "break through" the piece instead of performing a smooth cut (MK Diamond Part No. – 157748).



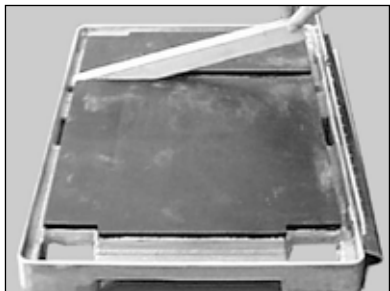
(A)
Inspect the Wooden Strip for excessive wear and grooves.



(B)
Place movable Cutting Table on a work bench with the wheels up.



(C)
Remove the two Protective Wooden Strip retaining screws.



(D)
Replace worn Protective Wooden Strip.



(E)
Place movable Cutting Table on a work bench with the wheels up, and reinstall retaining screws.

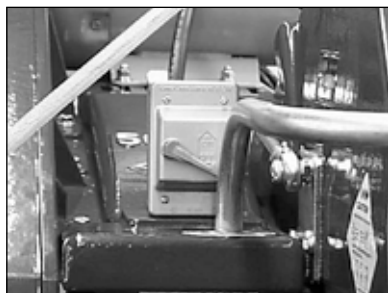


(F)
Install the movable Cutting Table.

V-Belt Inspection, Adjustment and Replacement

The MK-5000 is designed with a power transmission V-belt. In order to ensure the MK-5000 operates at peak efficiency, the V-belt should be inspected monthly, and changed if the V-belt shows damage and/or excessive wear.

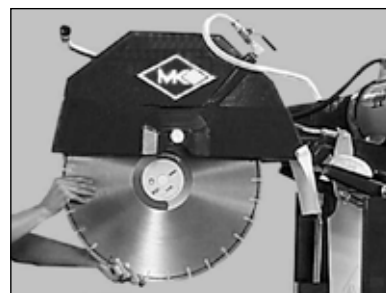
NOTE: When a new belt is installed, it should be inspected and re-tensioned after the first forty-eight (48) hours of operation.



(A)
Ensure the ON/OFF switch is in the OFF position.



(B)
Unplug MK-5000 from the power source.



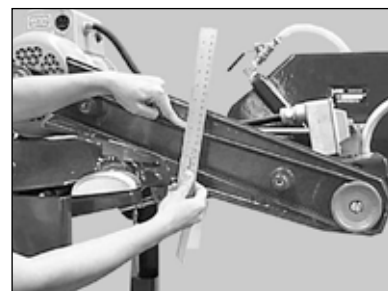
(C)
Remove the Diamond Blade.



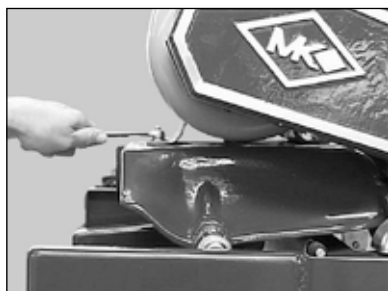
(D)
Remove the Belt Guard.



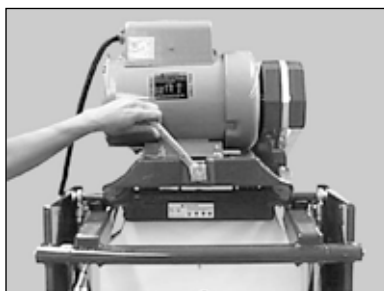
(E)
Inspect the V-belt for cracks, fraying, separation and wear. Go to step G if replacement required.



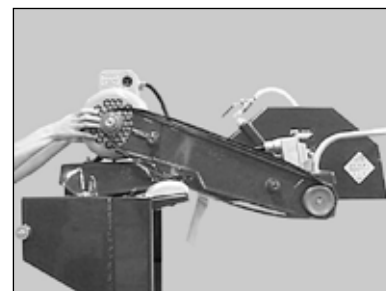
(F)
Check belt for proper tension if tension is correct, go to Step R (proper tension 1/4").



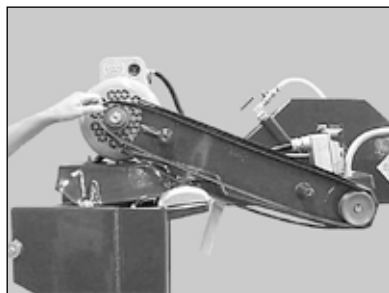
(G)
Loosen motor mounting bolts
If re-tensioning only, go to Step N.



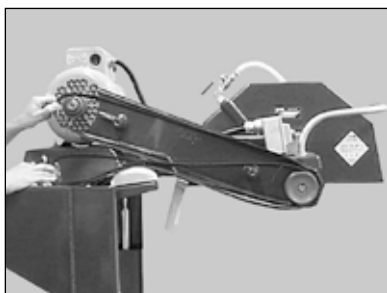
(H)
Loosen the Motor Adjustment Strap.



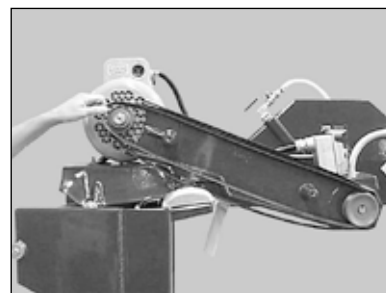
(I)
Push the motor toward the front of the Cutting Head to loosen the V-belt.



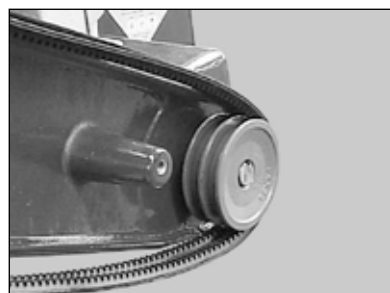
(J)
Remove the outer V-belt.



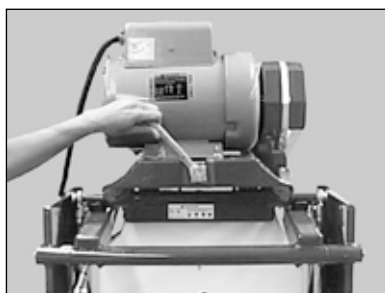
(K)
Remove the inner V-belt.



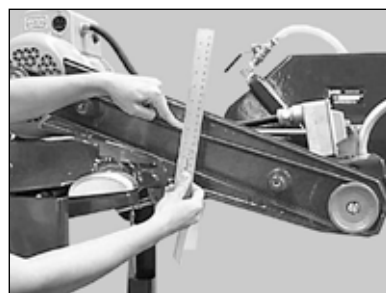
(L)
Install 2 new V-belts
(MK Diamond Part No. 152028).



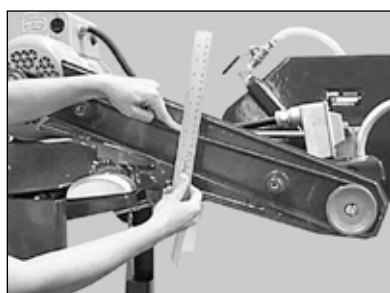
(M)
Verify the V-belts are seated in
the grooves of both pulleys.



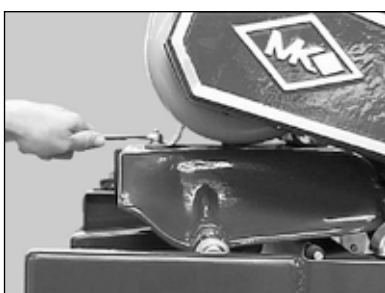
(N)
Tighten the Motor Adjustment
Strap to remove slack.



(O)
Check V-belt tension
(proper tension 1/4").



(P)
Repeat Steps N and O until
proper V-belt tension is achieved
(proper tension 1/4").



(Q)
Tighten the motor
mounting bolts.



(R)
Install the Belt Guard.

MK-5000 Electric Block Saws - Pulley Combinations by MK Part Number

Blade Size	Electric (60 Hz) (1725 RPM Only)			Electric (50 Hz) (1425 RPM Only)			Electric (60 Hz) (3450 RPM Only)
	14 inch	20 inch	24 inch	14 inch	20 inch	24 inch	20/24 inch
Motor Pulley 5, 7.5 & 9 Hp (1-1/8" bore)	160412	160412	160411	160413	160413	160412	160411
7.5 & 10 Hp (1-3/8" bore)	165796	165796	165795	165797	165797	165796	•
Arbor Pulley Standard (3/4" bore)	160364	160362	160362	160364	160362	160362	157536
Heavy Duty (1" bore)	160365	161135	161135	164737	161135	161135	161162
Belt	156551			156551			156551

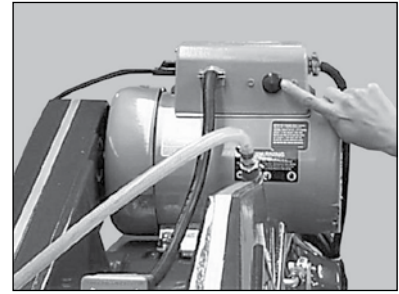
Blade Stops Turning



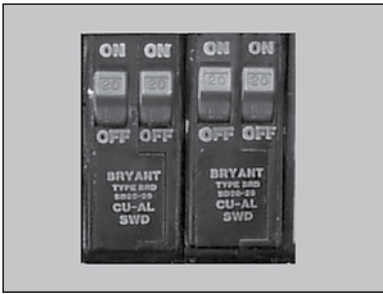
(A)
Verify the motor ON/OFF switch is in the ON position.



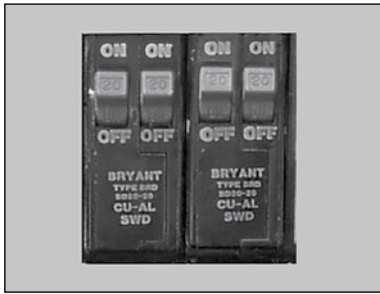
(B)
Verify the MK-5000 is connected to the power source.



(C)
Allow motor to cool and depress the motor Overload Reset Switch.



(D)
Verify the circuit breaker is at least 30 amps - if not, move to 30-amp circuit.

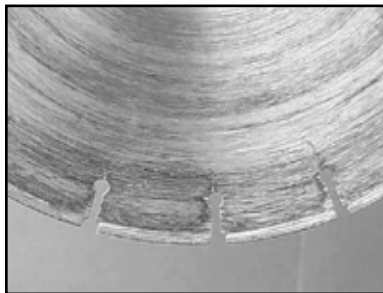


(E)
Verify circuit breaker is not tripped, if tripped, reset once.

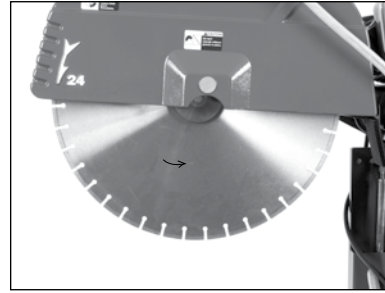


(F)
Check power source voltage is 230V - if not 230V, move to another circuit.

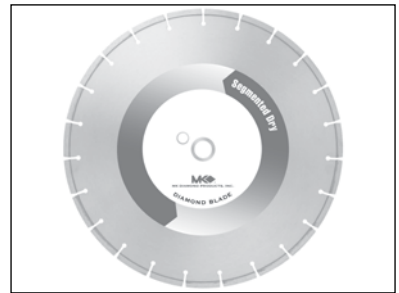
Blade Will Not Cut Properly



(A)
Check for smoothness or "glazing".

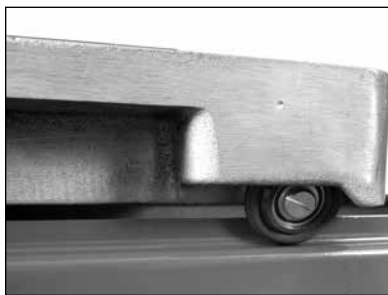


(B)
Check for proper rotation.



(C)
Ensure Blade Core is not bent. Verify blade is correct for material being cut.

Movable Cutting Table Does Not Move Correctly



(A)
Check Guide Rails are clean
and check for Roller Wheel
damage.



(B)
Verify ease and freedom of
movement.

Cooling Flow Stopped



(A)
Check Cooling Flow
Control Valve is open.



(B)
Remove Transfer Tube from
Blade Guard.



(C)
Place Water Pump in clean
water source and check for flow
(if no flow go to Step G).

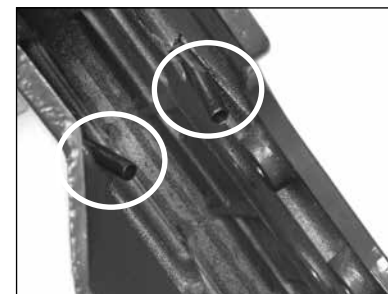
NOTE: "Rodding" Cooling Channels is performed by removing the Flow Control Valve and then inserting a small wire rod through the cooling channel inlet, located on the underside of the Blade Guard. The Cooling Channels should be "rodded" until each of the outlet ports are open and free of foreign debris.



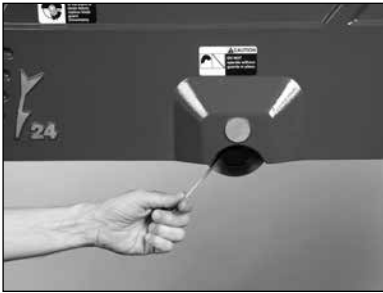
(D)
Verify Cooling Valve operation
by removing the valve from the
Blade Guard.



(E)
Attach the Cooling Valve to the
Transfer Tube to verify flow –
if no flow, replace valve.



(F)
Locate Cooling Channels inside
Blade Guard.



(G)
Rod Cooling Channels and
recheck flow.

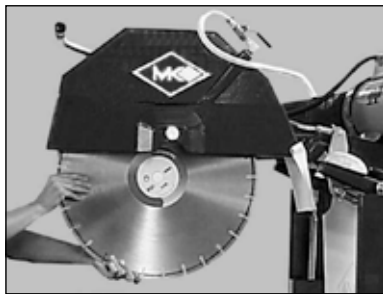


(H)
Verify Water Pump suction is
clean and pump impeller is
turning. Pump Impeller is inside
water inlet.

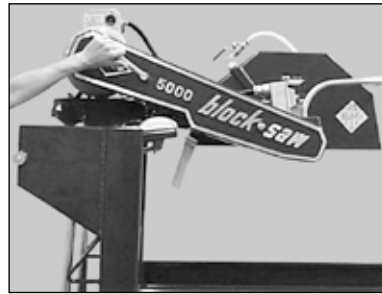


(I)
Verify Water Pump drive end is
in the operating position.

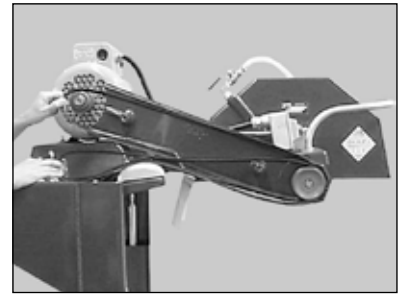
Vibration



(A)
Remove the Diamond Blade
and recheck vibration.



(B)
Remove the Belt Guard.







(C)
Remove the V-belts.



(D)
Clean motor and
recheck vibration.

ACCESSORIES

Item	P/N	Description	
1.	128777	MK-10 , 14" Supreme Grade Wet Cutting Blade for Brick	
	128785	MK-10 , 18" Supreme Grade Wet Cutting Blade for Brick	
	128793	MK-10 , 20" Supreme Grade Wet Cutting Blade for Brick	
2.	128652	MK-30 , 14" Supreme Grade Wet Cutting Blade for Brick & Block	
	128660	MK-30 , 14" Supreme Grade Wet Cutting Blade for Brick & Block	
	128678	MK-30 , 20" Supreme Grade Wet Cutting Blade for Brick & Block	
	156413	MK-30 , 24" Supreme Grade Wet Cutting Blade for Brick & Block	
3.	128744	MK-50 14" Supreme Grade Wet Cutting Blade for Concrete Block	
	128751	MK-50 18" Supreme Grade Wet Cutting Blade for Concrete Block	
	128769	MK-50 20" Supreme Grade Wet Cutting Blade for Concrete Block	
	153165	MK-50 24" Supreme Grade Wet Cutting Blade for Concrete Block	
4.	161283	MK-925DSLX 14" Supreme Grade Silent Core Blade	
	160971	MK-925DSLX 20" Supreme Grade Silent Core Blade	
	168050	MK-925DSLX 24" Supreme Grade Silent Core Blade	

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

NOTE: Standard orders are \$50.00 or more when ordering direct from MK Diamond. A \$6.00 charge will be added to orders having a net billing value under \$50.00. A nominal handling fee of \$5.00 may apply to some orders.

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 saw
- Have the Serial Number of the saw
- Have the location of where the saw was purchased
- Have the date when the saw 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 the RGA number is on the outside of the returned package
- 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.

PACKAGING INSTRUCTIONS

- Remove the Cutting Head and Support Angle Assembly
- Dry the saw before shipping
- When packing, include the following: Saw, Diamond Blade, Blade Guard and Support Angle Assembly and Adjustable Cutting Guide (Other Accessories are not required)
- 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.

WARRANTY: For your (1) one year warranty to be effective, complete the online Product Registration as soon as possible. Visit **www.mkdiamond.com/registration**

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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-5000 BLOCK SAW
OWNER'S MANUAL & OPERATING INSTRUCTIONS



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