



MK-370 SERIES

**TILE SAW
OWNER'S MANUAL &
OPERATING INSTRUCTIONS**



CAUTION:
Read all safety and
operating instructions
before using this
equipment

Enter the Serial Number of your new saw in the
space below. The Serial Number is located on the
left side of the blade guard.

SERIAL NUMBER:

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.

INTRODUCTION

We at MK Diamond want to congratulate you on selecting the MK-370 Tile Saw. We are certain that you will be pleased with your purchase. MK Diamond takes pride in producing the finest products in the industry.

Operated correctly, your MK-370 should provide you with years of quality service. In order to help you, we have included this manual. This owners manual contains information necessary to operate and maintain your MK-370 safely and correctly. Please take a few minutes to familiarize yourself with the MK-370 by reading and reviewing this manual.

If you should have questions concerning your MK-370, please feel free to call our friendly customer service department at: 800 421-5830

Regards,

MK Diamond

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SAFETY

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 MESSAGES:

Safety messages inform the user about potential hazards that could lead to injury, death and/or equipment damage. Each safety message will be preceded by one of the following (3) three words that identify the severity of the message.

⚠ DANGER

Not following instructions **WILL** lead to **DEATH** or **SERIOUS INJURY**

⚠ WARNING

Not following instructions **COULD** lead to **DEATH** or **SERIOUS INJURY**

⚠ CAUTION

Not following instructions **CAN** lead to injury

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!

Safety Precautions:

KEEP GUARDS IN PLACE.



In order to prevent injury, keep guards in place and in working order at all times.

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.

DO NOT USE IN DANGEROUS ENVIRONMENTS.

Do not use power tools in damp or wet locations nor expose them to rain. Always keep the work area well lighted.

KEEP CHILDREN AWAY.

All visitors and children should be kept a safe distance from work area.

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.

USE THE RIGHT TOOL.

Do not force a tool or an attachment, to do a job that it was not designed to do.

SAFETY

USE THE PROPER EXTENSION CORD.

If using an extension cord make sure it is in good condition first. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage that will result in a loss of power and overheating. TABLE 1, Page 8 shows the correct AWG size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

WEAR 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.

ALWAYS USE SAFETY GLASSES.



Safety glasses should always be worn when working around power tools. In addition, a face, dust mask or respirator should be worn if a cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses and may not prevent eye injury—they are NOT safety glasses.

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.

MAINTAIN TOOLS WITH CARE.

Keep tools clean for the best and safest performance. Always follow maintenance instructions for lubricating, and when changing accessories.

DISCONNECT TOOLS.

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

REDUCE THE RISK OF UNINTENTIONAL STARTING.



Make sure the ON/OFF switch is in the OFF position before plugging in a power tool.

USE RECOMMENDED ACCESSORIES.

Consult the owner's manual for recommended accessories. Using improper accessories may increase the risk of personal or by-stander injury.

NEVER STAND ON THE TOOL.

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

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 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.

DIRECTION OF FEED.

Always feed work into a blade or cutter against the direction of rotation. A blade or cutter should always be installed such that rotation is in the direction of the arrow imprinted on the side of the blade or cutter.

NEVER LEAVE A TOOL RUNNING 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.

SAFETY

Hazard Symbols:

ELECTRICAL SHOCK!



Never touch electrical wires or components while the motor is running. Exposed, frayed or worn electrical motor wiring can be sources of electrical shock that could cause severe injury or burns.

ACCIDENTAL STARTS!



Before plugging the equipment into an electrical outlet, be sure the ON/OFF switch is in the OFF position to prevent accidental starting. Unplug the power tool before performing any service operation.

ROTATING OR MOVING PARTS!



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

⚠WARNING

Sawing and drilling generates dust. Excessive airborne particles may cause irritation to eyes, skin and respiratory tract. To avoid breathing impairment, always employ dust controls and protection suitable to the material being sawed or drilled; See OSHA (29 CFR Part 1910.1200). 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.

CALIFORNIA PROPOSITION 65 MESSAGE:

⚠WARNING

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 and
- Arsenic and chromium, from chemically treated lumber

For further information, consult the following sources:

<http://www.osha-slc.gov/sltc/silicacrystalline/index.html>

http://www.oehha.org/prop65/out_of_date/6022kLstA.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

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



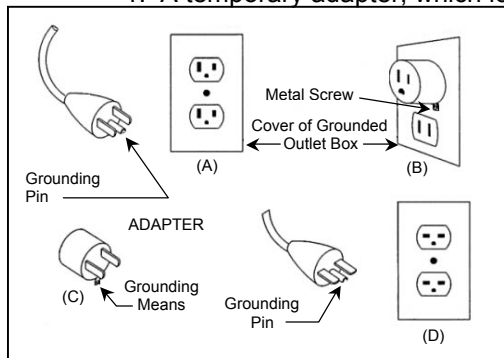
In case of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that 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 like the one shown in Sketch A of Figure 1. The tool has a grounding plug that looks like the plug illustrated in Sketch A of FIGURE 1. A temporary adapter, which looks like the adapter illustrated in sketches B and C, may be used to



connect this plug to a 2-pole receptacle as shown in Sketch B, if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box.

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

FIGURE 1

⚠ WARNING



To reduce the risk of electrocution, keep all connections dry and off the ground.

A Ground Fault Circuit Interrupter (GFCI) should be provided on the circuit(s) or outlet(s) to be used for the Tile Saw. Receptacles are available having built-in GFCI protections and may be used for this measure of safety.

When using an extension cord, the GFCI should be installed closest to the power source, followed by the extension cord and lastly, the saw.

SAFETY

⚠ WARNING



To avoid the possibility of the appliance plug or receptacle getting wet, position the saw to one side of a wall mounted receptacle. This will prevent water from dripping onto the receptacle or plug. A "drip loop," shown in FIGURE 2, should be arranged by the user to properly position the power cord relative to the power source.

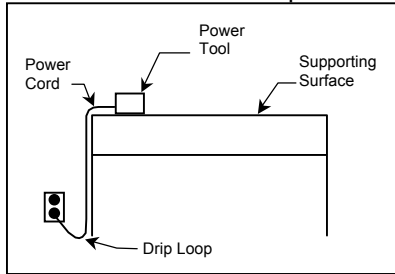


FIGURE 2

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.

⚠ 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 disconnection 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.

⚠ WARNING



Use of undersize extension cords result in low voltage to the motor that can result in motor burnout and premature failure. MK Diamond warns that equipment returned to us showing signs of being run in a low voltage condition, through the use of undersized extension cords will be repaired or replaced totally at the customers expense. There will be no warranty claim.

To choose the proper extension cord,

- Locate the length of extension cord needed in TABLE 1 below.
- Once the proper length is found, move down the column to obtain the correct AWG size required for that length of extension cord.

As an example, a fifty (50) foot extension cord would require an AWG size of 16.

Extension Cord Minimum Gage for Length				
Volts	Total Length of Cord in Feet			
	25 ft.	50 ft.	100 ft	150 ft.
120V	AWG	AWG	AWG	AWG
	14	12	Not Recommended	

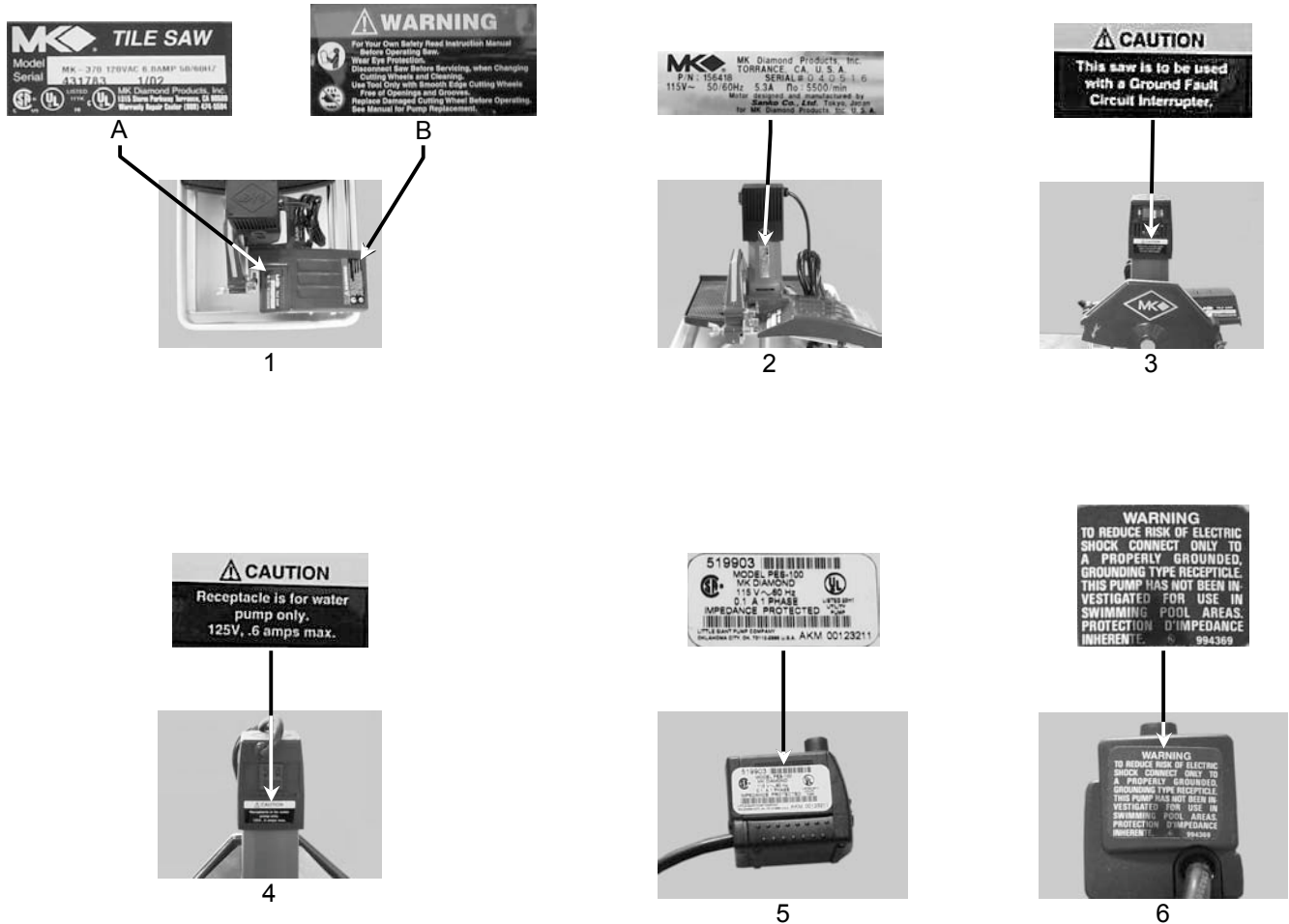
TABLE 1

SAFETY

SAFETY LABEL LOCATIONS:

Safety labels are located according to Figures 1 through 6 below. The labels contain important safety information. Please read the information contained on each safety label. These labels are considered a permanent part of your saw. If a label comes off or becomes hard to read, contact MK Diamond or your dealer for a replacement

Item	Location	Description	Part No.
1A.	Motor Mount	Serial Number	157249-04
1B.	Motor Mount	Warning Read and Follow Operating Instructions	155806
2.	Motor Rear	Motor Specifications	N/A
3	Motor Right Side	Caution Use Ground Fault Interrupt	155678
4	Motor Left Side	Caution Receptacle for Pump Only	154822
5	Pump Left Side	Warning Connect to Grounded Receptacle	N/A
6	Pump Right Side	Pump Specifications	N/A



TILE SAW SPECIFIC WARNINGS:

⚠️WARNING

Wear eye protection.

Use splash hood for every operation for which it can be used.

Disconnect saw before servicing, when changing cutting blades, and cleaning.

Use tool only with smooth edge cutting blades free of openings and grooves.

Replace damaged cutting blade before operating.

SAFETY

PRODUCT SPECIFICATIONS:

The MK-370 is a versatile Tile Saw. Operated and used according to this manual, the MK-370 will provide years of dependable service.

General Description:

The MK-370 Tile Saw is engineered as a tabletop or stand mounted wet tile saw. The saw includes a powerful 115v direct drive AC motor. The saw is capable of cutting tile up to twelve (12) inches in length and one and three quarter (1-3/4) inches thick in one pass.

Motor Specifications:

Motor specifications for the MK-370 are listed in Table 2 below.

Voltage	115 v
Motor Amperage	5.3 a
Frequency	50/60 Hz
RPM	5500 rpm
Horse Power	1/2 hp
Weight	30 lbs.

Table 2

Blade Capacity:

The MK-370 uses a seven (7) inch (178 mm) diameter, wet cutting continuous rim, MK Diamond blade with a five-eighths (5/8) inch (15.875 mm) arbor.

Tile Types:

The MK-370 can cut a variety of tile types including Porcelain, Terracotta, Marble, Quarry and Slate, or almost any other non-ferrous material.

NOTE:

The MK-370 is not designed to cut plastic or ferrous (metals) material.

UNPACKING, TRANSPORT, UNIVERSAL STAND and ASSEMBLY

UNPACKING:

Your MK-370 has been shipped from the factory thoroughly inspected. Only minimal assembly is required.

⚠CAUTION Use proper lifting techniques when lifting the MK-370.

If not done, remove the MK-370, Cutting Head and accessory box from the carton.

CONTENTS:

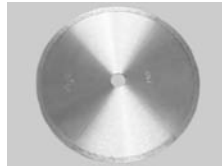
In your container, you will find one (1) MK-370 cutting surface and water pan, one (1) MK-370 cutting head, one (1) 7-inch wet cutting continuous rim diamond blade, one (1) splash guard, one (1) splash guard washer, one (1) splash guard wing nut, one (1) electric water pump, one (1) pump discharge fitting, one (1) blade wrench one (1) shaft wrench, one (1) owners manual, one (1) pump manual and one (1) warranty card.



MK-370 Cutting Surface



MK-370 Cutting Head



Diamond Blade



Splash Guard



Splash Guard Washer



Splash Guard Wing nut



Electric Water Pump



Pump Discharge Fitting



Blade Nut Wrench



Shaft Wrench



Owners Manual



Pump Manual



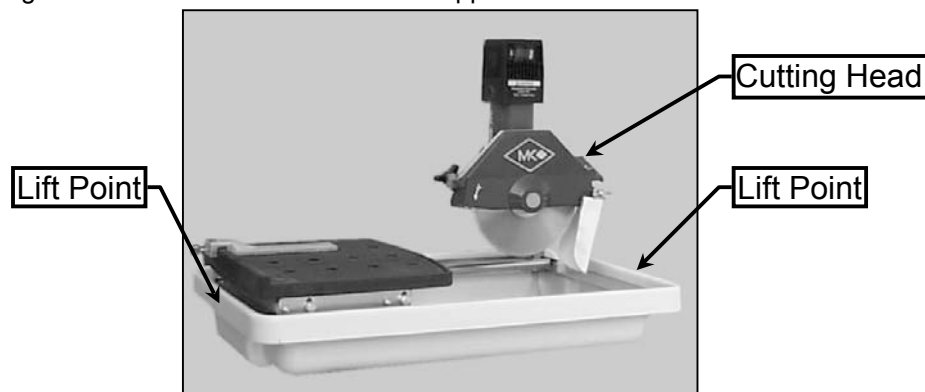
Warranty Card

TRANSPORT:

1. The MK-370 weighs approximately fifteen (30) pounds for ease of transport.
2. Never transport the MK-370 with water in the Water Pan.

To lift the saw, grasp the Water Pan by the front and back, and then lift the entire saw.

NOTE: The Cutting Head end will be heavier than the opposite end.



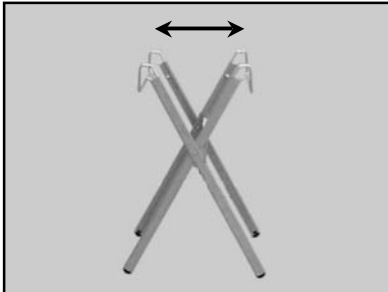
UNPACKING, TRANSPORT, UNIVERSAL STAND and ASSEMBLY

ASSEMBLY:

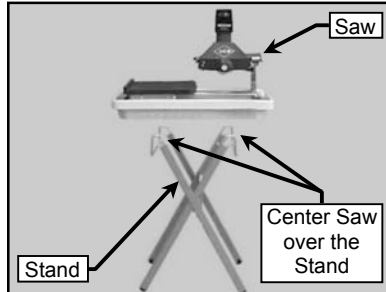
Follow the assembly instructions to prepare your MK-370 for operation.

1. Stand Setup:

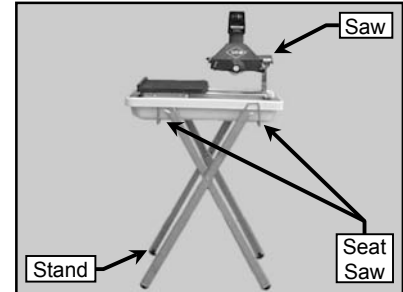
CAUTION The MK-370 weighs approximately thirty (30) pounds; follow the guidelines for transport in the TRANSPORT section, when placing it on the stand.



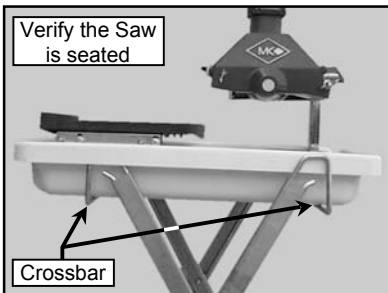
(A)
Open the Universal Stand and place on flat surface



(B)
Orient the Saw to the Stand

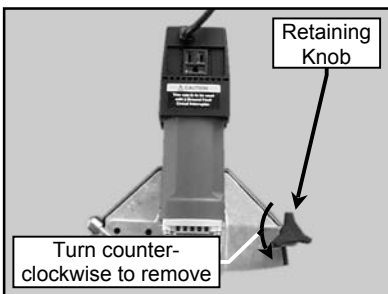


(C)
Seat the saw onto the Stand

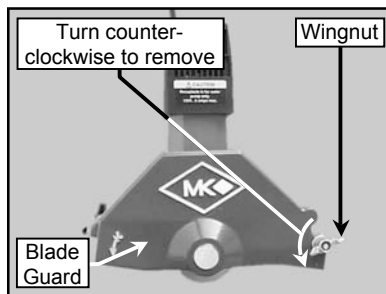


(D)
Verify the Saw is seated on the Crossbars of the Stand

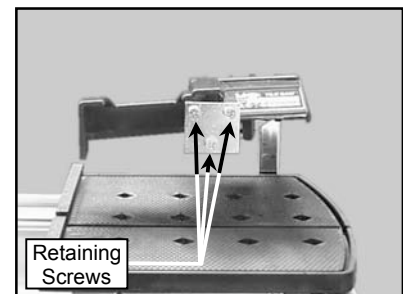
2. Cutting Head Installation:



(A)
Loosen the Blade Guard Retaining Knob

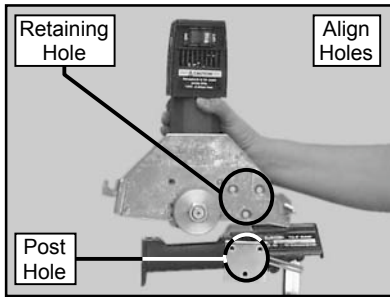


(B)
Remove the Blade Guard Wingnut and then remove the Blade Guard

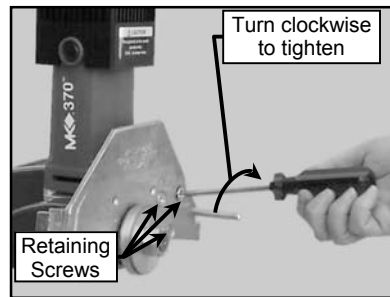


(C)
Locate and remove the three Cutting Head Retaining Screws using a Phillips Screwdriver

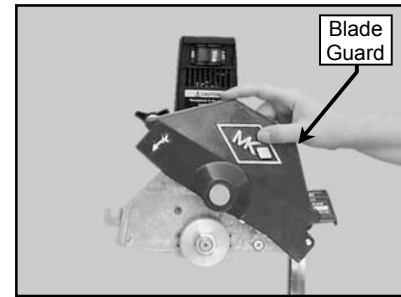
UNPACKING, TRANSPORT, UNIVERSAL STAND and ASSEMBLY



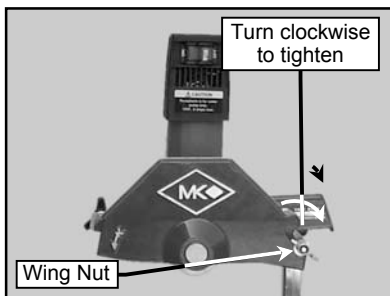
(D)
Align the Cutting Head Retaining Holes to the holes on the Post



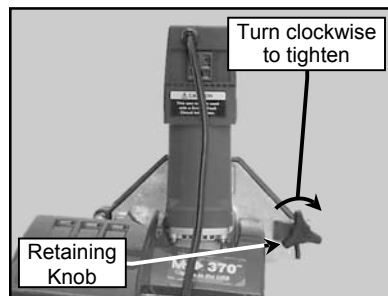
(E)
Install the three Cutting Head Retaining Screws using a Phillips Screwdriver



(F)
Install the Blade Guard



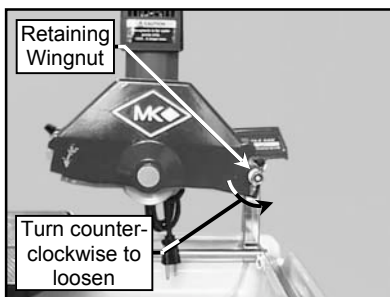
(G)
Install the Blade Guard Wing nut



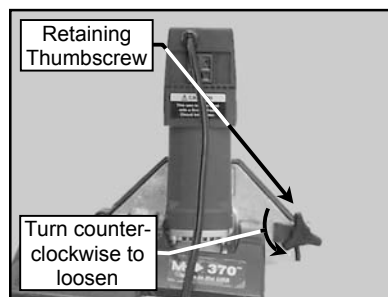
(H)
Tighten the Blade Guard Retaining Knob

3. Diamond Blade Installation:

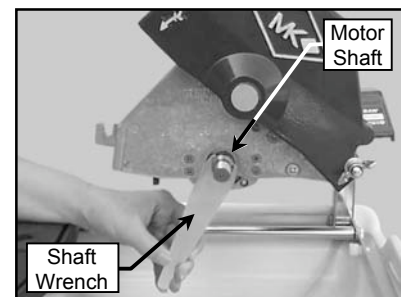
NOTE: When installing the Retaining Screw, do not "cross-thread" and DO NOT over tighten the screw.



(A)
Loosen the Blade Guard Pivot Point Retaining Wingnut

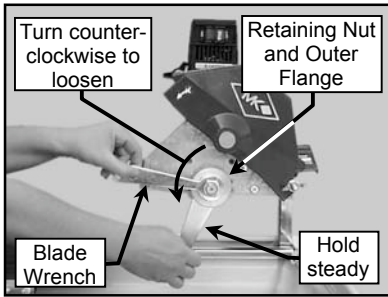


(B)
Loosen the Blade Guard Retaining Thumbscrew and open the Blade Guard

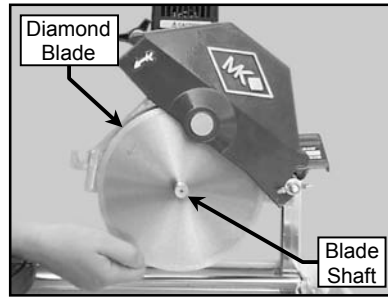


(C)
Place the Shaft Wrench on the Motor Shaft (NOTE: the Outer and Inner Flanges and the Blade Nut are removed in the photo above)

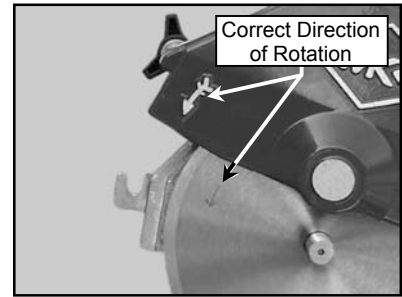
UNPACKING, TRANSPORT, UNIVERSAL STAND and ASSEMBLY



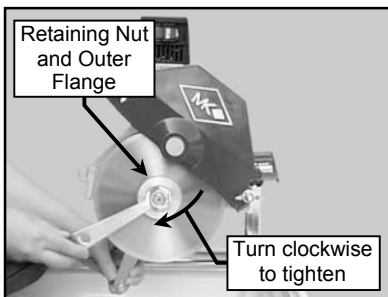
(D)
Place the Blade Wrench on the Blade Retaining Nut and remove the Blade Retaining Nut and Outer Flange



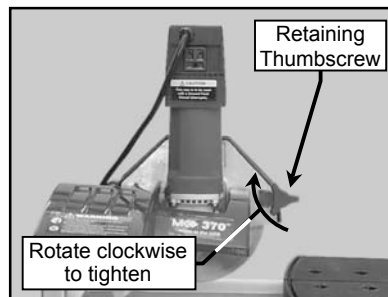
(E)
Install Diamond Blade onto Blade Shaft



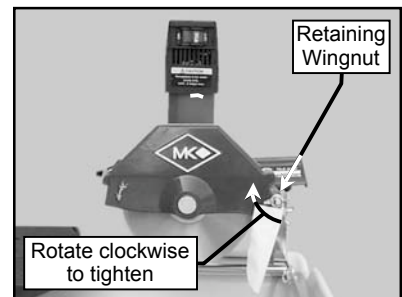
(F)
Verify the Directional Arrow of the Blade faces outward and matches the Directional Arrow of the Blade Guard



(G)
Install the Retaining Nut and Outer Flange; install the Shaft Wrench and Blade Wrench as shown in Steps C and D and Tighten the Retaining Nut

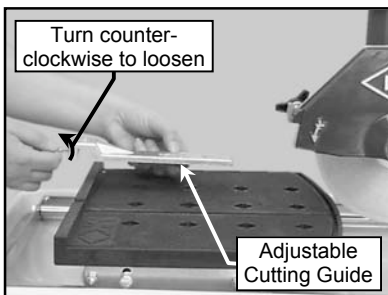


(H)
Close the Blade Guard and tighten the Blade Guard Retaining Thumbscrew

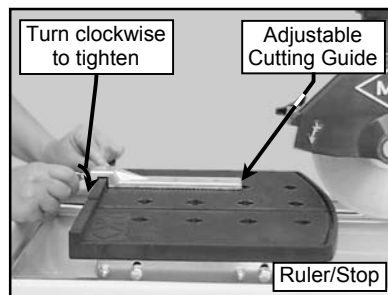


(I)
Tighten the Blade Guard Pivot Point Retaining Wingnut

4. Adjustable Cutting Guide Installation:



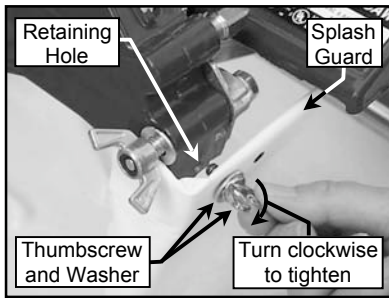
(A)
Loosen Adjustable Cutting Guide retaining thumbscrew and place it over the Movable Cutting Table Ruler/Stop



(B)
Place the Adjustable Cutting Guide onto the Movable Cutting Table Ruler/Stop and tighten the retaining thumbscrew

UNPACKING, TRANSPORT, UNIVERSAL STAND and ASSEMBLY

5. Splash Guard Installation:



(A)

Install the Thumbscrew through the Washer and Splashguard then align to the hole found on back of the Blade Guard and tighten



(B)

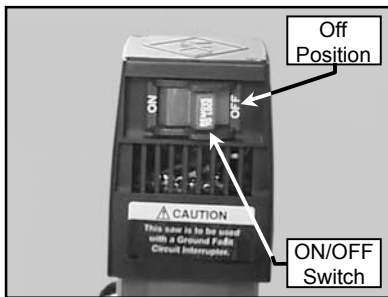
Verify the Splashguard is installed

SETUP, ADJUSTMENT and OPERATION

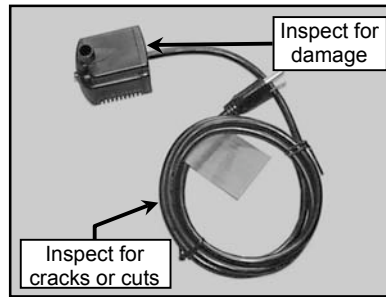
SETUP:

1. Pre-start Inspection:

Prior to beginning work, a pre-start inspection of the saw should be performed.



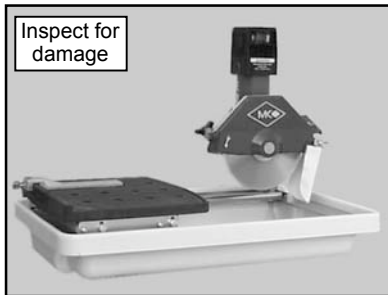
(A)
Ensure the ON/OFF Switch is in the OFF position



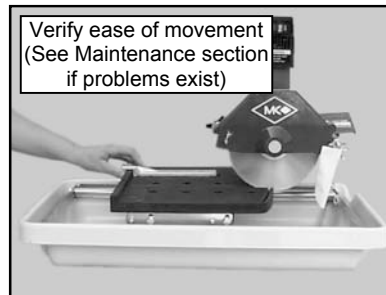
(B)
Inspect the Pump Assembly for damage – ensure the cord is free of cracks or cuts



(C)
Inspect the Diamond Blade for damage – verify the blade is correct for the material being cut



(D)
Inspect the MK-170 for damage – ensure the cord is free of cracks or cuts



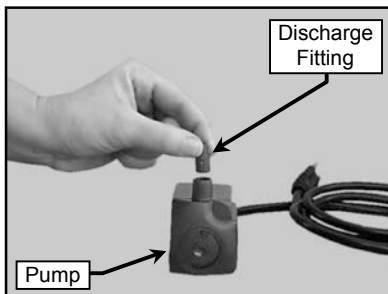
(B)
Verify the Movable Cutting Table moves freely

2. Water Pump Preparation:

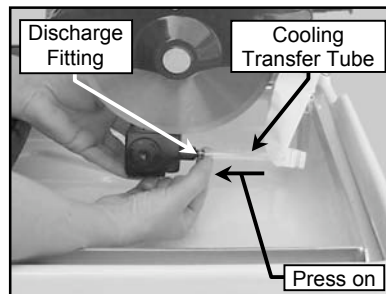
⚠ WARNING 1. To prevent the possibility electrical shock, the MK-370 MUST be de-energized when preparing the Water Pump for operation.



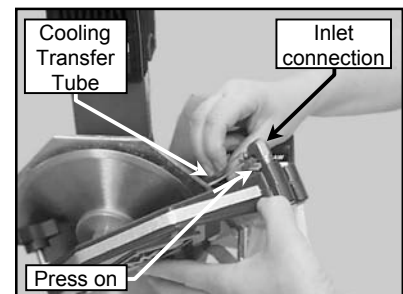
2. To prevent the possibility of electrical shock, use only MK Diamond qualified replacement parts



(A)
Install Water Pump Discharge Fitting

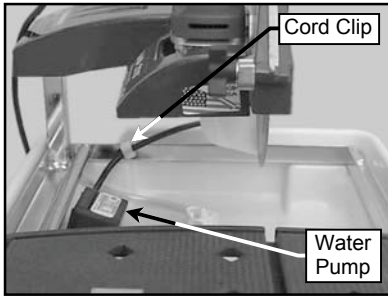


(B)
Press the end of the Cooling Transfer Tube onto the Water Pump Discharge Fitting

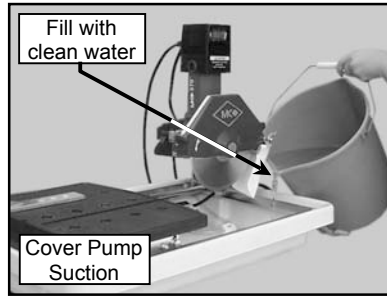


(C)
Connect the Cooling Transfer Tube to the inlet connection of the Blade Guard

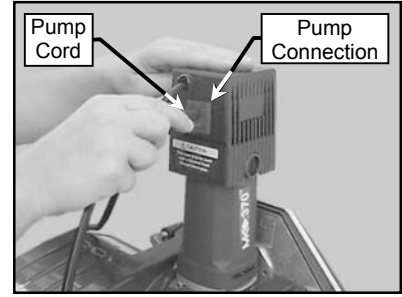
SETUP, ADJUSTMENT and OPERATION



(D)
Place the Water Pump in the Water Pan with the Suction down and insert the Pump Cord to the Clip in the back



(E)
Fill the Water Pan with clean water covering the Pump Suction (this should be done periodically during cutting)



(F)
Connect the Water Pump power cord to the connection found on the back of the motor

3. MK-370 Setup for Operation:

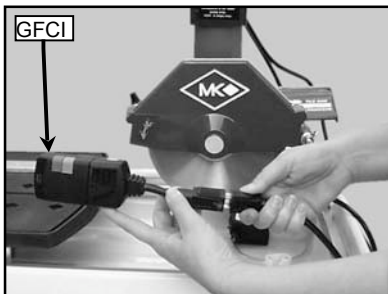
CAUTION 1. Before connecting the MK-370 to a power supply, be sure the voltage, cycle and phase meet the requirements of TABLE 3 below.

VOLTAGE – 115V	CYCLE – 60 Hz	PHASE – 1 Phase
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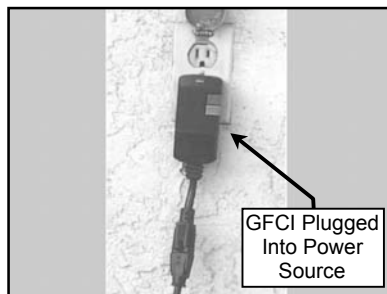
TABLE 3

- If using an extension cord, make sure the length and wire gauge correspond to the requirements listed in TABLE 1 on page 8. An extension 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.
- Use an approved Ground Fault Circuit Interrupter (GFCI)
- Do not cover the motor vents as this could lead to motor overheating.

NOTE: In order to avoid breaker tripping, a 20-amp circuit breaker should be used.



(A)
Plug MK-370 into the GFCI (A GFCI should always be used when operating the MK-170)



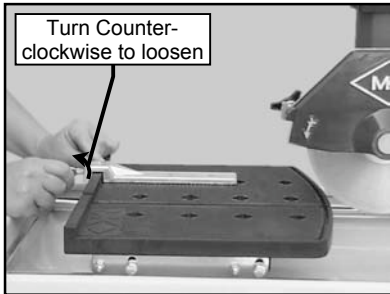
(C)
Plug the GFCI into the Power source

SETUP, ADJUSTMENT and OPERATION

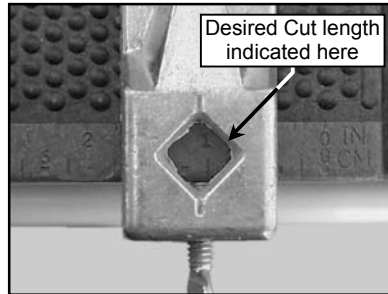
ADJUSTMENT and OPERATION:

1. Cutting Straight Edges:

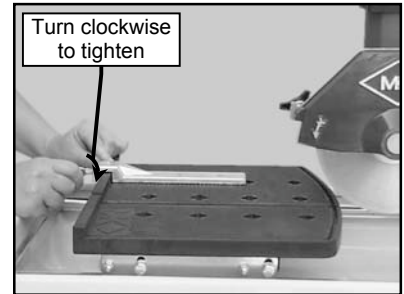
⚠CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



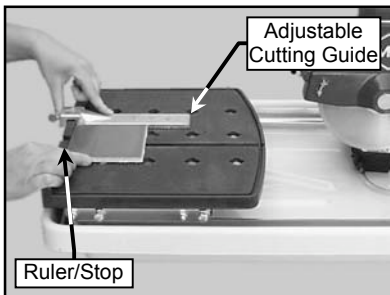
(A)
Loosen the Adjustable Cutting Guide retaining thumbscrew



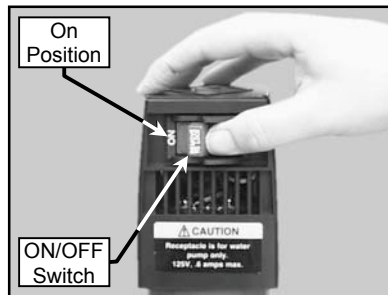
(B)
Position the Adjustable Cutting Guide to desired cut length indicated inside the diamond



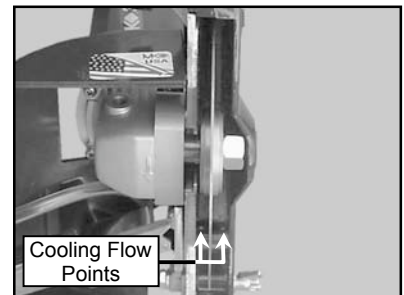
(C)
Tighten the retaining thumbscrew



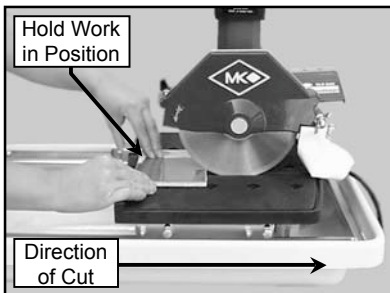
(D)
Place the tile against the Ruler/Stop and Cutting Guide



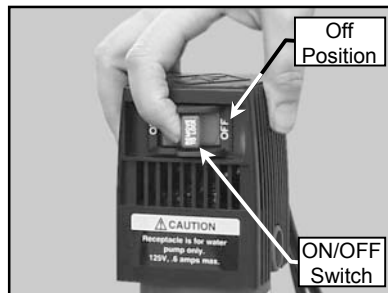
(E)
Turn the motor ON



(F)
Verify proper cooling flow on both sides of the blade (See Maintenance Section to increase/decrease flow)



(G)
Perform the cut



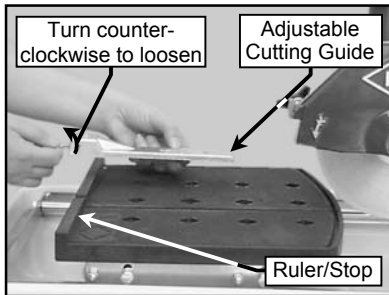
(H)
Turn the motor OFF when work is complete

SETUP, ADJUSTMENT and OPERATION

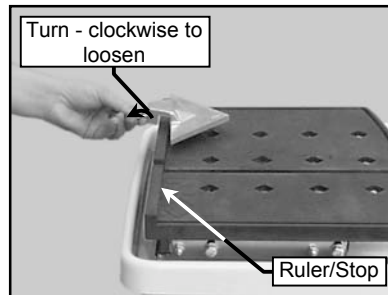
2. Diagonal Cutting:

NOTE: To cut diagonal, the Dual 45° Flat Angle Guide (MK Diamond Part No. 134557-MK) should be used.

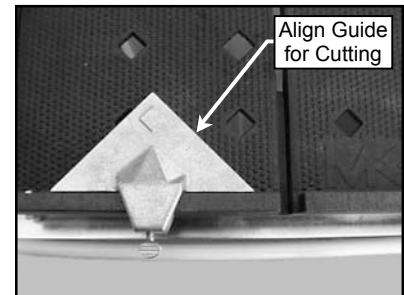
⚠CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



(A)
Remove the Adjustable Cutting Guide

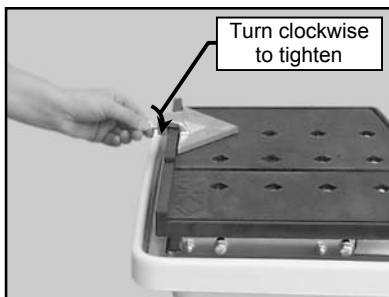


(B)
Place the Dual 45° Flat Angle Guide on the Ruler/Stop

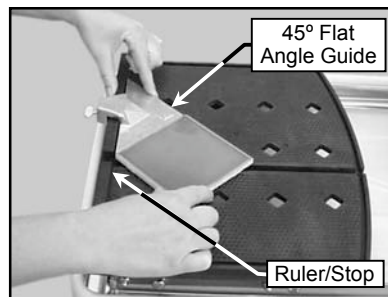


(C)
Align the Dual 45° Flat Angle Guide for the desired Cut Length

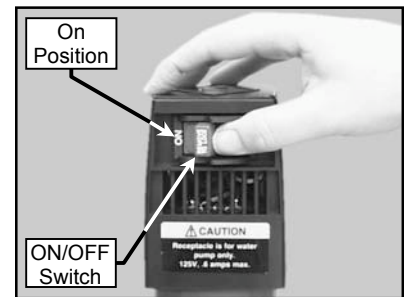
NOTE: If Cutting the tile in two equal halves, align the tile in the V-notch of the Movable Cutting Table Ruler/Stop.



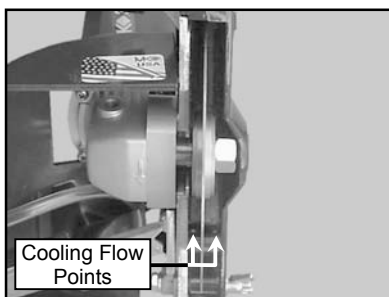
(D)
Position the Dual 45° Flat Angle Guide and tighten the retaining thumbscrew



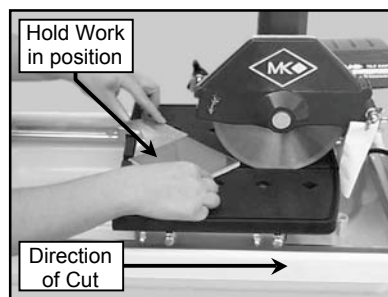
(E)
Position the tile against the Dual 45° Flat Angle Guide and the Ruler/Stop



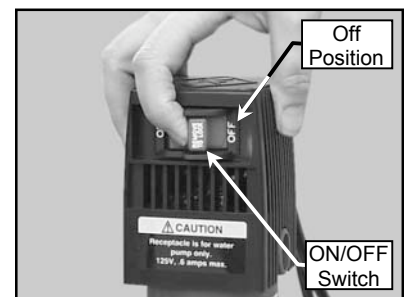
(F)
Turn the motor ON



(G)
Verify proper cooling flow on both sides of the blade (See Maintenance Section to increase/decrease flow)



(H)
Perform the cut



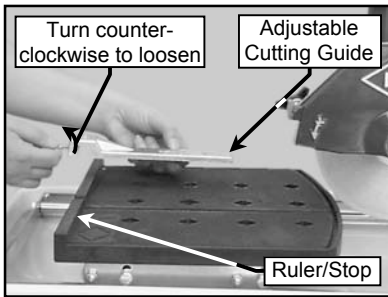
(I)
Turn the motor OFF when work is complete

SETUP, ADJUSTMENT and OPERATION

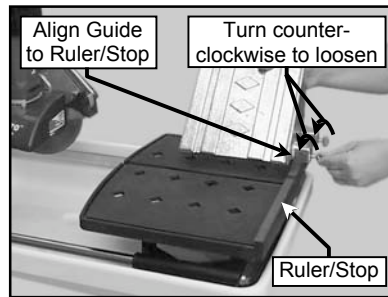
3. 45° Miter Cutting:

NOTE: To cut 45° Miters, the 45° Bullnose Miter Guide (MK Diamond Part No. 134585-MK) should be used.

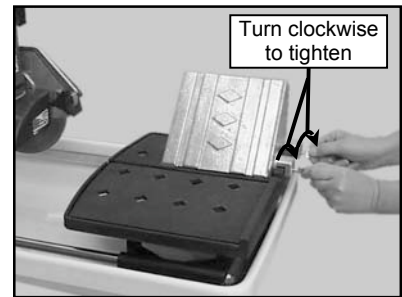
⚠CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



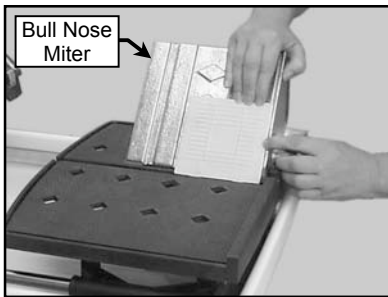
(A)
Remove the Adjustable Cutting Guide



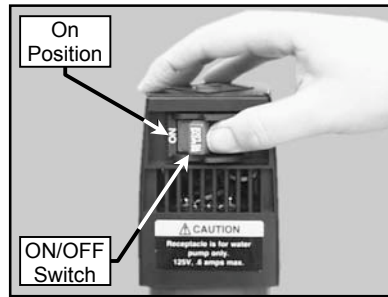
(B)
Place the 45° Bullnose Miter Guide on the Ruler/Stop



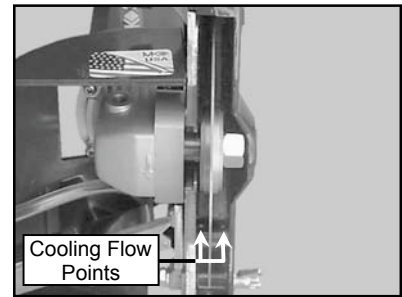
(C)
Position the 45° Bullnose Miter Guide and tighten the retaining thumbscrew



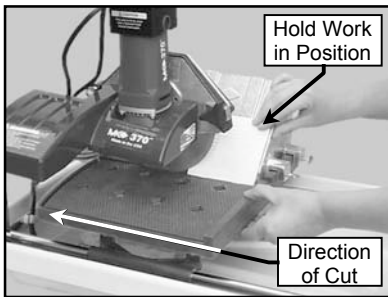
(D)
Position the tile on the 45° Bullnose Miter with the Glazed Side down



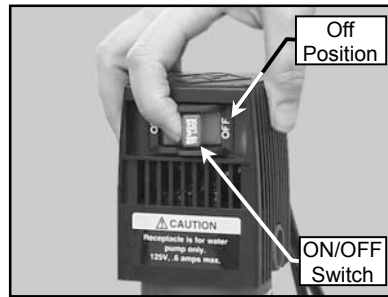
(E)
Turn the motor ON



(F)
Verify proper cooling flow on both sides of the blade (See Maintenance Section to increase/decrease flow)



(G)
Perform the cut



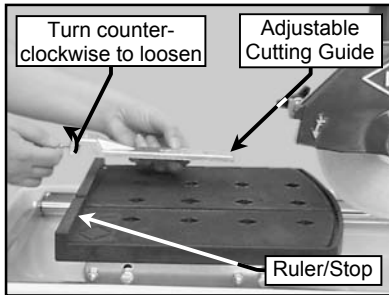
(H)
Turn the motor OFF when work is complete

SETUP, ADJUSTMENT and OPERATION

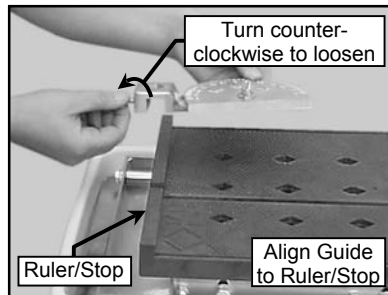
4. Off-angle Cutting:

NOTE: To cut angles other than 45° angles or Miters, a 90° Protractor (MK Diamond Part No. 134569-MK) should be used.

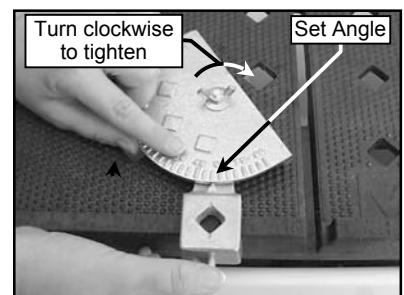
⚠CAUTIONDO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



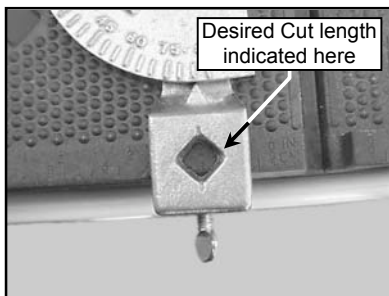
(A) Remove the Adjustable Cutting Guide



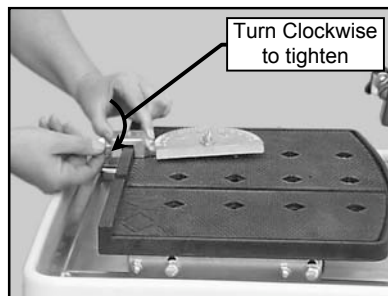
(B) Place the 90° Protractor on the Ruler/Stop



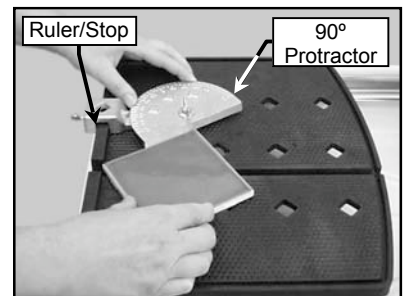
(C) Set the desired Cutting Angle and tighten the thumbscrew



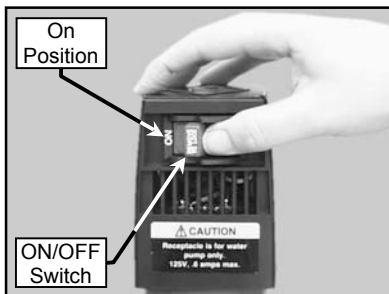
(D) Position the 90° Protractor Position to desired cut length indicated inside the diamond



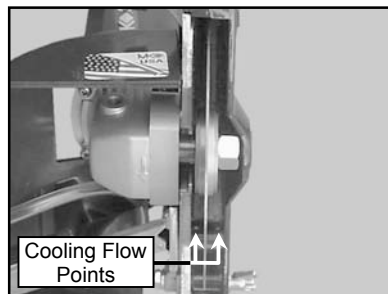
(E) Tighten the 90° Protractor



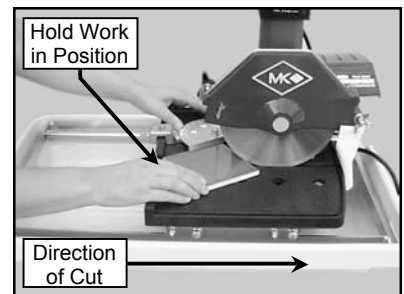
(F) Position the tile against the 90° Protractor and the Ruler/Stop



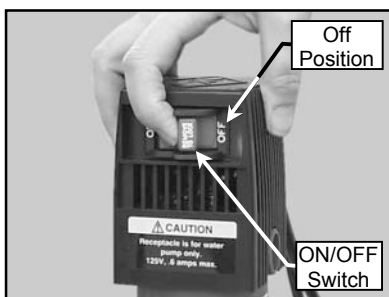
(G) Turn the motor ON



(H) Verify proper cooling flow on both sides of the



(I) Perform the cut

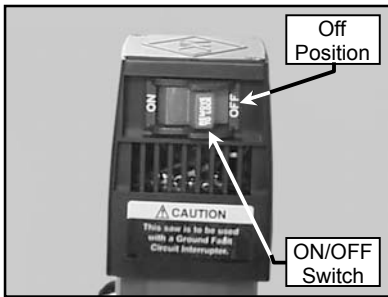


(J) Turn the motor OFF when work is complete

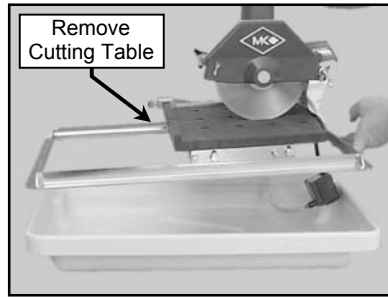
SETUP, ADJUSTMENT and OPERATION

5. Cleanup:

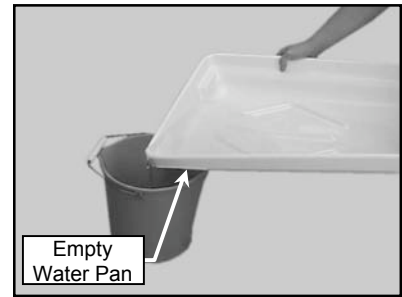
NOTE: Dispose of wastewater in accordance with applicable Federal, State and Local laws.



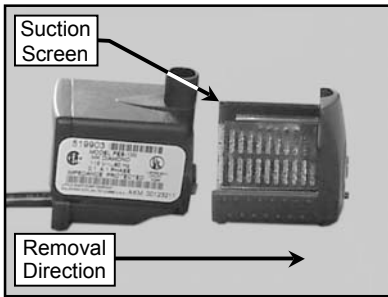
(A) Ensure the ON/OFF Switch is in the OFF position



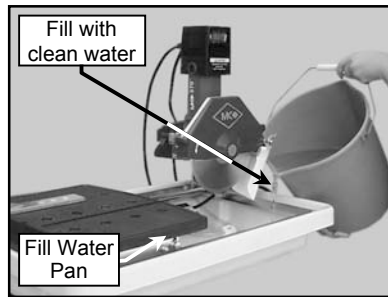
(B) Remove the Cutting Assembly from the Water Pan



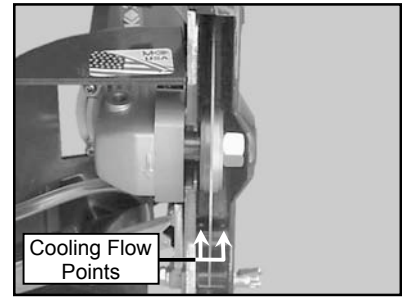
(C) Dispose the contents of the Water Pan



(D) Remove the pump Suction Screen and clean the Water Pump of all debris

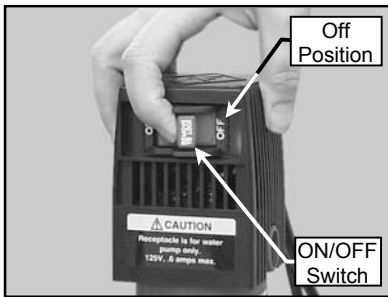


(E) Fill the Water Pan with clean water

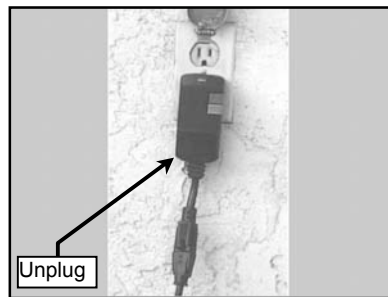


(F) Run the MK-370 until clear water is seen at the blade cooling ports (Approx. 1 minute)

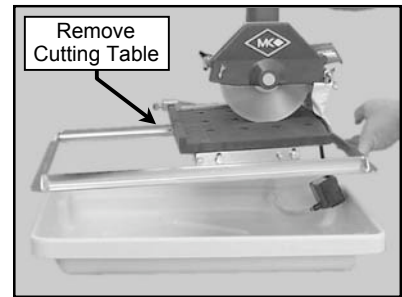
⚠CAUTION Ensure the saw is disconnected before completing the remainder of the cleanup process.



(J) Turn the motor OFF when work is complete



(H) Unplug the GFCI from the Power source



(I) Remove the Cutting Assembly from the Water Pan

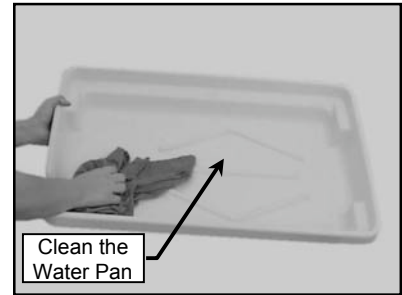
SETUP, ADJUSTMENT and OPERATION



(J)
Dispose the contents of the
Water Pan

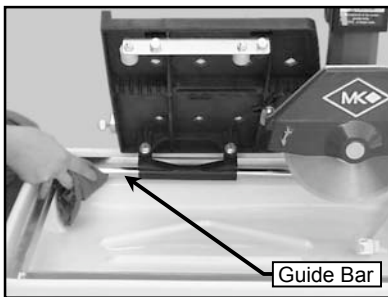


(K)
Clean the MK-370 with soap
and clean water

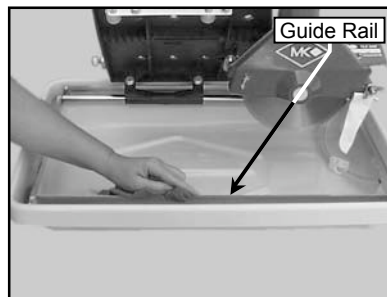


(L)
Clean the Water Pan

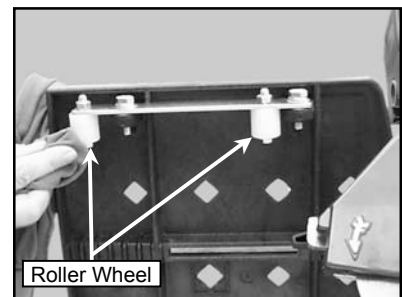
NOTE: To extend the life of the MK-370, lubricate the Motor Shaft with light oils such as, 3 in 1, WD-40, etc.



(M)
Clean the Adjustable Cutting
Guide, Guide Bar

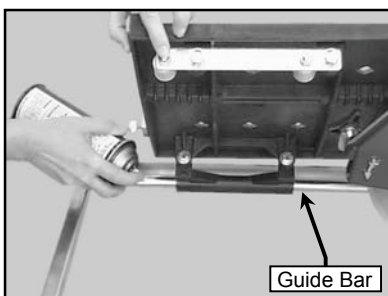


(N)
Clean the Roller Wheel Guide
Rail

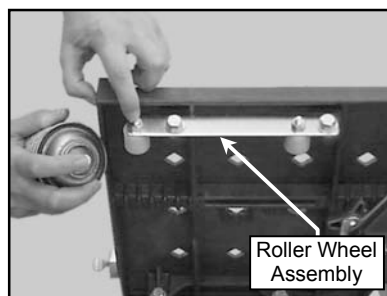


(O)
Clean the Roller Wheels

NOTE: To extend the life of the MK-370, the following procedure should be performed after each use.
Lubricate all points listed below with light oils such as, 3 in 1, WD-40, etc.



(A)
Lubricate the Guide Bar



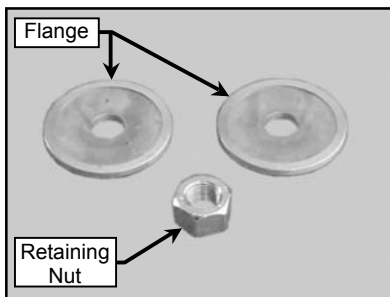
(B)
Lubricate the Roller Wheel
Assembly

MAINTENANCE AND TROUBLESHOOTING

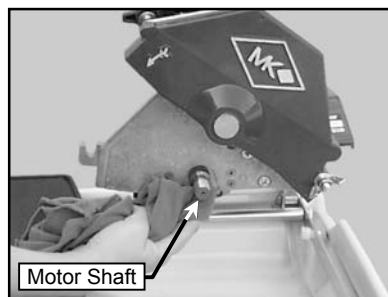
MAINTENANCE:

1. Monthly Maintenance:

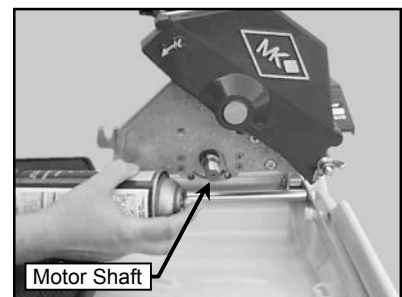
The following maintenance should be performed monthly.



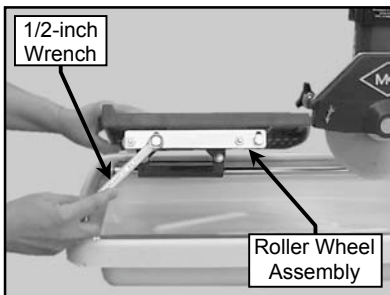
(A)
Remove and clean the Inner and Outer Flanges and the Blade Retaining Nut



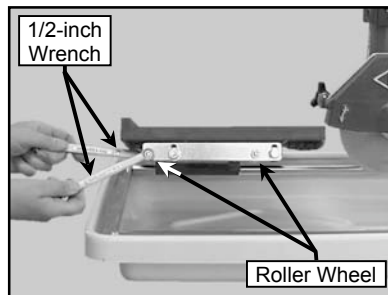
(B)
Clean the Motor Shaft



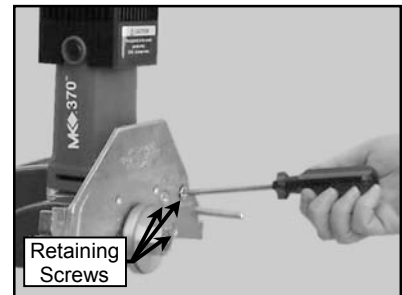
(C)
Lubricate the Motor Shaft



(D)
Verify the Movable Cutting Table Roller Wheel Assembly is tight



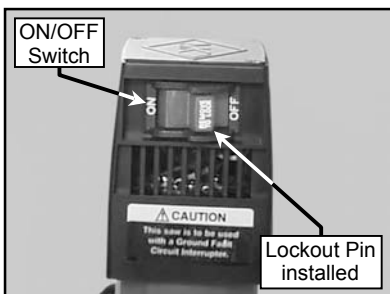
(E)
Verify the Roller Wheels are tight



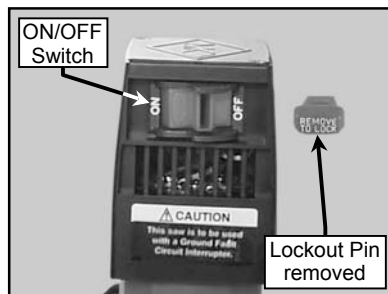
(F)
Verify the Cutting Head Assembly Retaining Screws are tight

2. Lockout:

The MK-370 is equipped with a lockout device that can be used during maintenance and troubleshooting to render the saw inoperable. The lockout can also be used to prevent unauthorized use.



(A)
Locate the Lockout Pin in the center of the ON/OFF Switch toggle (the Lockout Pin has "Remove To Lock" highlighted)

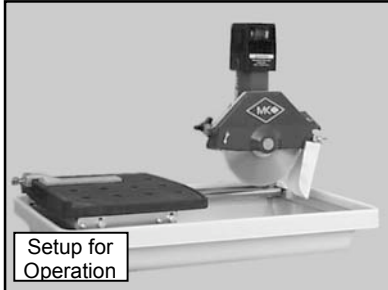


(B)
Lockout the Saw by removing the Lockout Pin

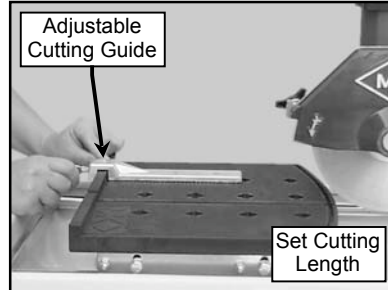
MAINTENANCE AND TROUBLESHOOTING

3. Blade Dressing:

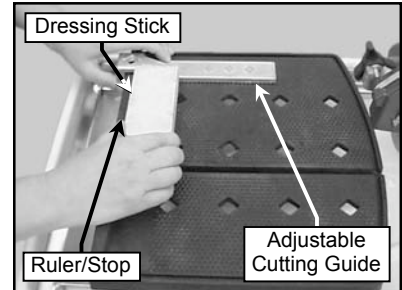
Like most cutting instruments, a diamond blade performs best when it is dressed. Over time and use, diamonds on the outer edge of the blade will become smoothed or “glazed” over. This will reduce grinding efficiency and may cause the blade to “wander” or bend giving the illusion of an alignment problem. When this occurs, the blade will need to be dressed. The diamond blade can be dressed using the MK Dressing Stick (part number 152972) and by following the steps below.



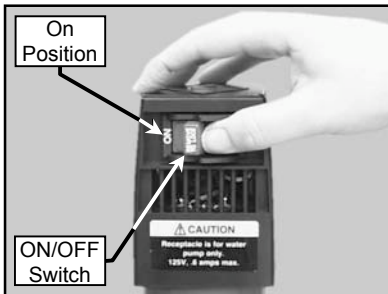
(A)
Setup the MK-370 for operation (See Setup, Adjustment and Operation)



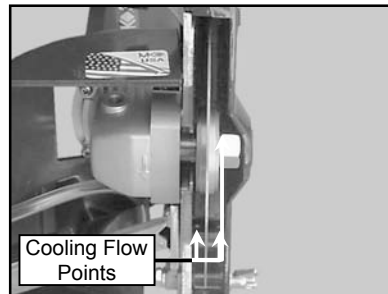
(B)
Set the Adjustable Cutting Guide to cut a 1/16-strip



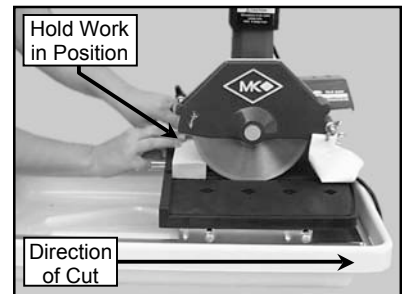
(C)
Position the Dressing Stick against the Adjustable Cutting Guide and the Ruler/Stop



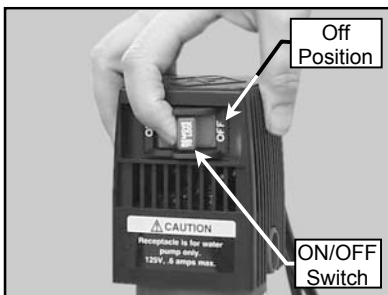
(D)
Turn the motor ON



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



(F)
Push the Dressing Stick into the Blade in a smooth even motion to perform a cut, repeat 7 or 8 times to dress the Blade



(G)
Turn the motor OFF when work is complete

MAINTENANCE AND TROUBLESHOOTING

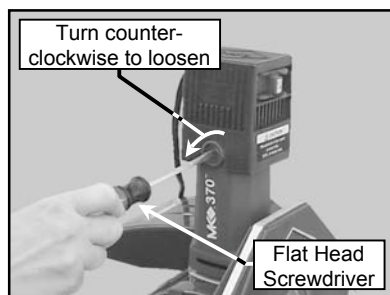
4. Motor Brush Change-out:



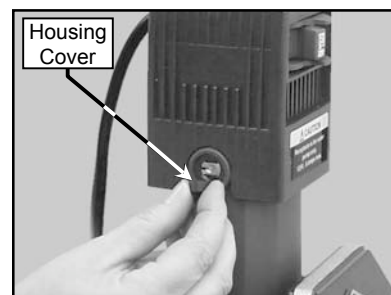
⚠ WARNING Disconnect the tool before servicing and when changing accessories, such as blades, bits, cutters, and the like.



(A)
Disconnect the MK-370

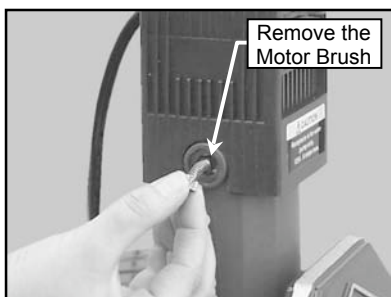


(B)
Locate and loosen one Motor Brush Housing Cover using a Flat Head Screwdriver

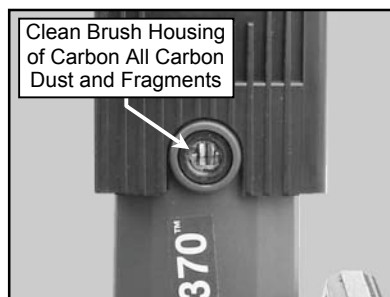


(C)
Remove the Motor Brush Housing Cover

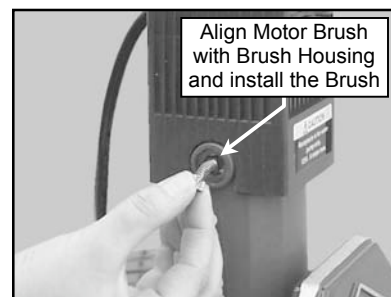
NOTE: When installing motor brushes, care must be taken to ensure the spring end is straight before installing the Motor Housing Cover.



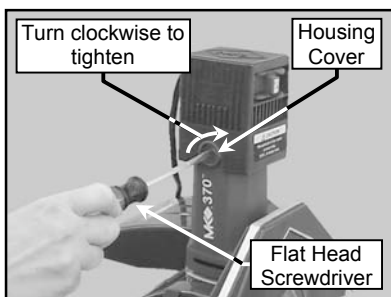
(D)
Remove the old Motor Brush



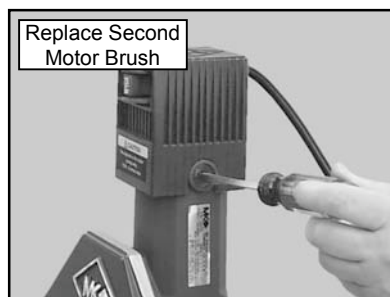
(E)
Clean the Motor Brush Housing using a Q-tip



(F)
Align and install the new Motor Brush



(G)
Install Motor Brush Cap and tighten using a Flat Head Screwdriver

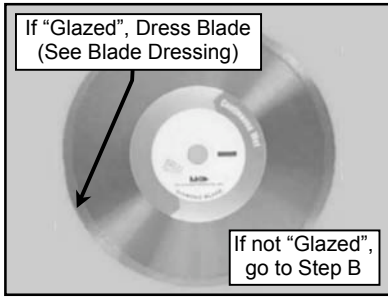


(H)
Install the Second Motor Brush (Repeat Steps B to G)

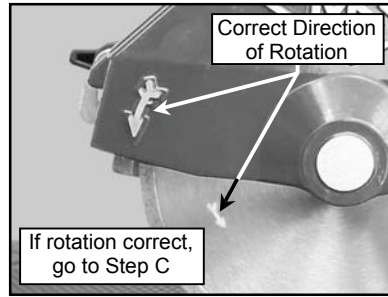
MAINTENANCE AND TROUBLESHOOTING

TROUBLESHOOTING:

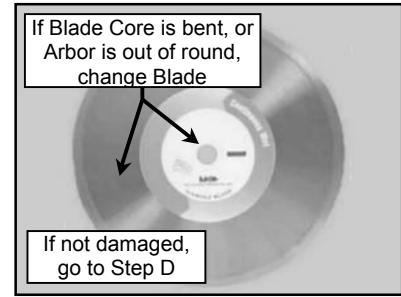
1. Blade will not cut properly:



(A)
Check for Smoothness or
"Glazing" (Dress blade if
needed)



(B)
Check for proper rotation



(C)
Ensure the Blade Core is not
bent and Arbor is not out of
round

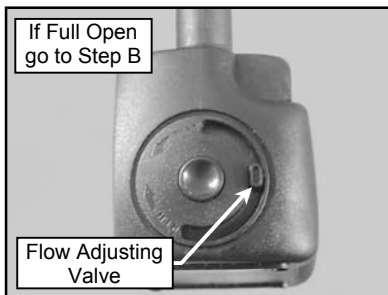


(D)
Verify the blade is correct for
the material being used

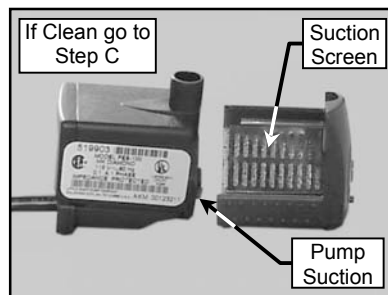
**Return to
MK Diamond
for Repair**

(E)
Return to MK Diamond

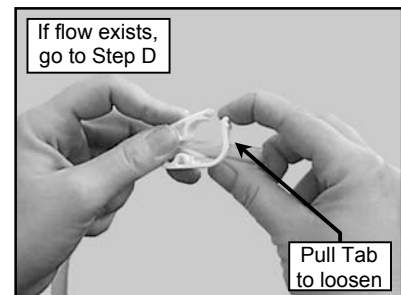
2. Cooling Flow:



(A)
Check that the Cooling Flow
Adjusting Valve is FULL open



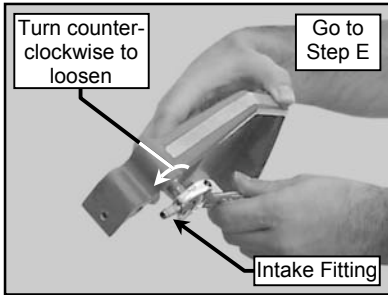
(B)
Remove the Cooling Transfer
Tube from the Blade Guard
inlet



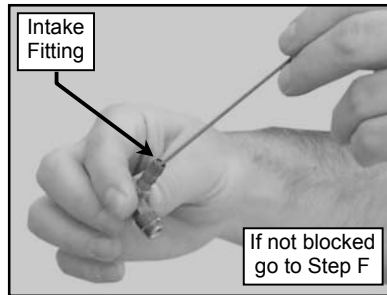
(C)
Check the cooling flow
Adjusting Clamp open

MAINTENANCE AND TROUBLESHOOTING

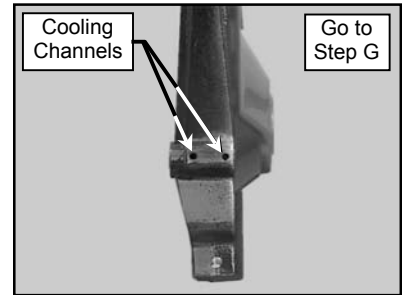
NOTE: "Rodding" cooling channels is performed by inserting a small wire rod through the cooling inlet on top of the Blade Guard and directing the rod out through each of the cooling flow tubes located on the underside of the Blade Guard. The cooling channels should be "rodded" until all ports are free of foreign debris.



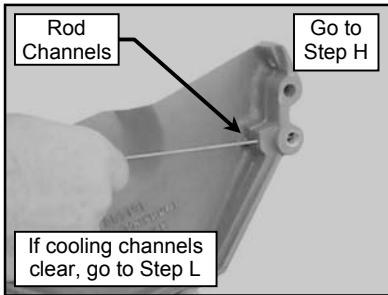
(D)
Remove the Blade Guard Intake Fitting



(E)
Clean the Blade Guard Intake Fitting



(F)
Locate the Blade Guard Cooling Channels

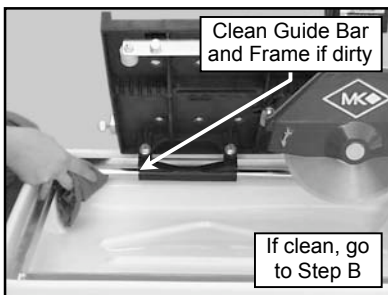


(G)
Rod Cooling Channels and recheck flow

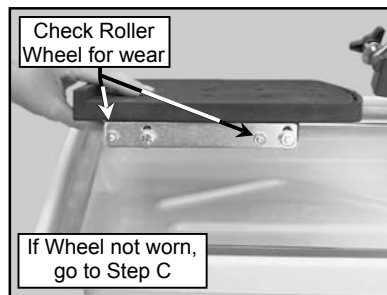
**Return to
MK Diamond
for Repair**

(H)
Return to MK Diamond

3. Movable Cutting Table Does Not Move Correctly:



(A)
Check the Guide Bar and Roller Wheel Guide Frame is clean – clean if dirty



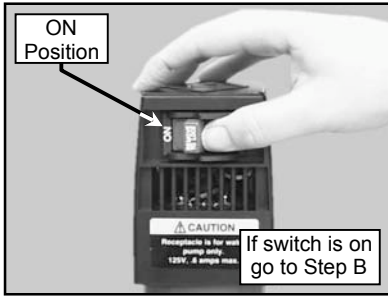
(B)
Check the Movable Cutting Table Roller Wheels for wear replace if necessary

**Return to
MK Diamond
for Repair**

(C)
Return to MK Diamond

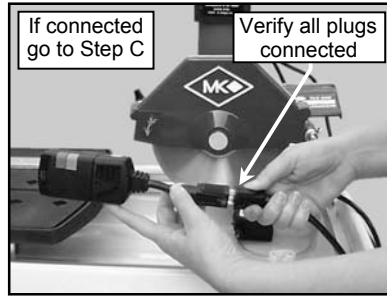
MAINTENANCE AND TROUBLESHOOTING

4. Blade Stops Turning:



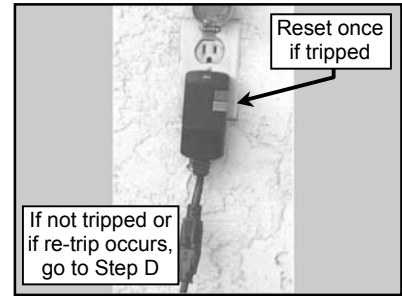
(A)

Check the ON/OFF Switch is in the ON position



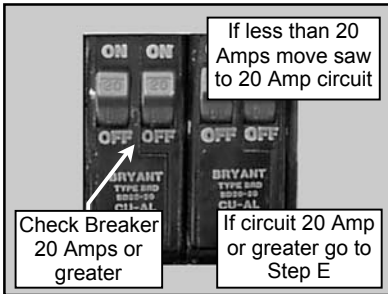
(B)

Verify all plugs are fully connected



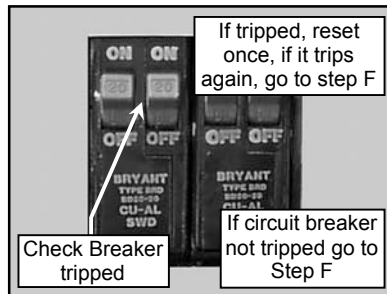
(C)

Check to see if the Ground Fault Circuit Interrupter (GFCI) tripped



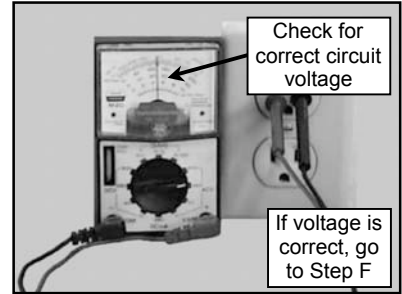
(D)

Verify the circuit breaker is at least 20 amps – if not, move to 20-amp circuit



(E)

Verify circuit breaker not tripped; if it is tripped, reset it once only



(F)

Check power source voltage is 115V – if not 115V, move to another circuit

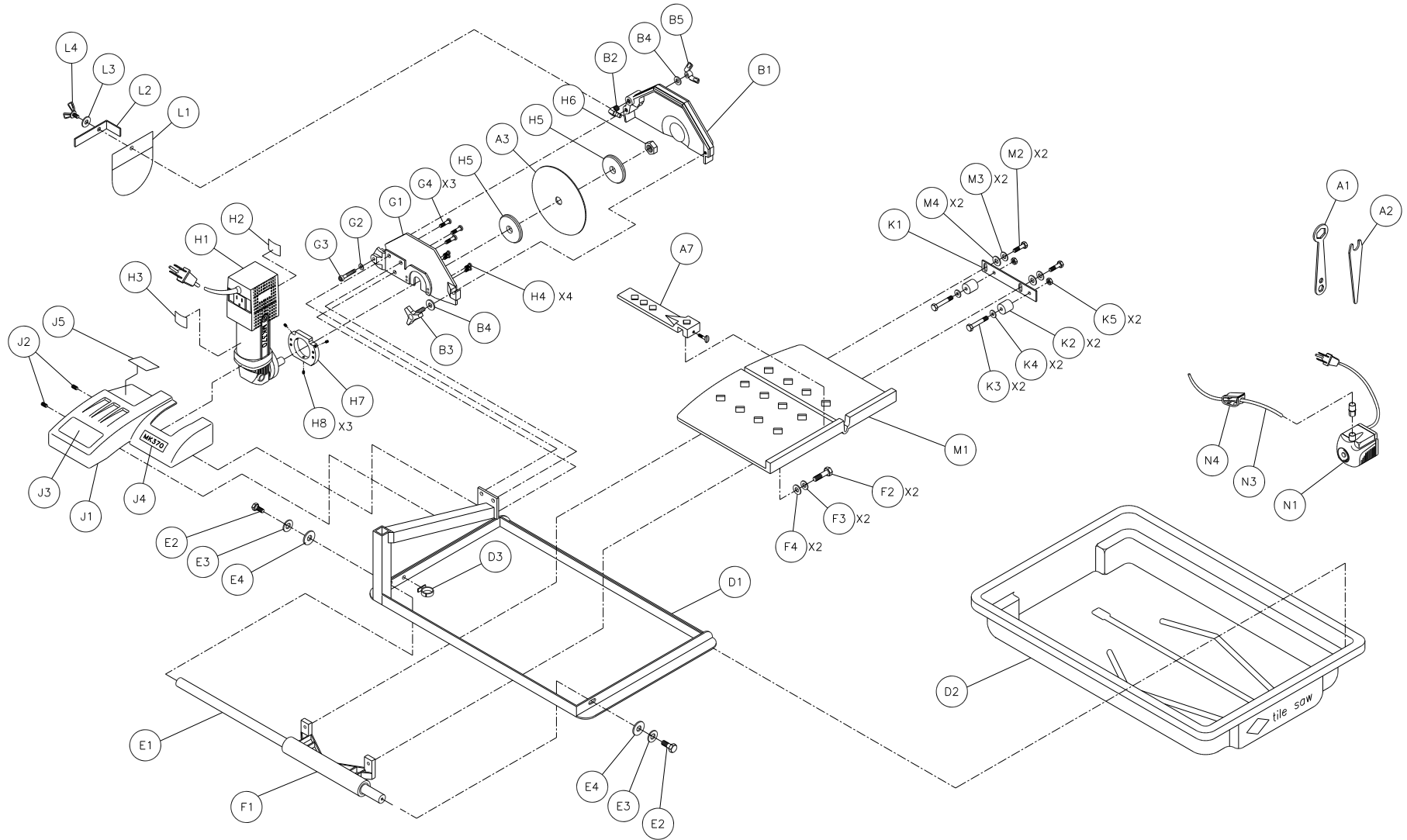
**Return to
MK Diamond
for Repair**

(G)

Return to MK Diamond

EXPLODED VIEW AND PARTS LIST

EXPLODED VIEW:



EXPLODED VIEW AND PARTS LIST

PARTS LIST:

Item	Description	Qty	Part #
A	Accessories	-	n/a
A1	Wrench, Blade Nut, 15/16 Boxed End	1	134684
A2	Wrench, Blade Shaft, 11/16 Open End	1	153450
A3	Blade, 7 Dia X 5/8 arbor	1	153441
A4	Owner's Manual, 370	1	156760
A5	Warranty Card	1	155037
A6	Tag, Saw Hang, 370	1	156750
A7	Assembly, Rip Guide	1	134551-MK
B	Assembly, Blade Guard, 7"	1	154811-MK
B1	Guard, 7" Blade	1	154811
B2	Elbow, 1/8 MNPT X 1/4 BARB 90° Brass	1	154652
B3	Knob, Davies	1	151681
B4	Washer, 5/16 SAE Flat	2	151754
B5	Wingnut, 5/16-18 Nylock	1	151746
D	Frames	-	n/a
D1	Frame	1	155792
D2	Pan, Water	1	155791
D2A	Pan, Water, Deep	1	157210
D3	Cord Clip, 1/4 Push Mount	1	157259
E	Assembly, 5/8 Guide Bar	1	151739-MK
E1	Bar, Guide, 5/8 Dia	1	151739
E1A	Bar, Guide, 5/8 Dia, Extended	1	157486
E2	Screw, 5/16-18 X 1 Hex Head Cap	2	151743
E3	Washer, 5/16 Split Lock	2	151747
E4	Washer, 5/16 SAE Flat	2	151754
F	Linear Bearing	-	n/a
F1	Bearing, Linear, 5/8 Dia (comp) F1A Bearing, Multilube	1 2	157126 151781
F2	Screw, 5/16-18 X 1 Hex Head Cap	2	151743
F3	Washer, 5/16 Split Lock	2	151747
F4	Washer, 5/16 SAE Flat	2	151754
G	Assembly, Motor Mount	1	155811-MK
G1	Motor Mount	1	157403
G2	Washer, 5/16 Split Lock	1	151747
G3	Screw, 5/16-18 X 2 1/2 Hex Head Cap, Full Thread	1	151748
G4	Screw, 1/4-20 X 1/2 Flat Head Phillips Cap	3	155812
H	Motors	-	n/a
H1	Motor, 120v/5.3a, 370	1	156418
H1A	Motor, 100v/6.0a, 370	1	157053
H1B	Motor, 230v/2.7a, 370	1	157054
H2	Label, Caution, GFCI, 1 X 2 1/8	1	155678
H3	Label, Caution, Receptacle, 1 X 2 1/8	1	154822
H4	Screw, 10-32 X 5/8 Flat Head Phillips Cap	4	157554
H5	Flange, Blade	2	135830
H6	Nut, 5/8-18 UNF	1	135848
H7	Adapter, Motor, 370	1	156703
H8	Screw, 10-32 X 1/4 Socket Head Set, Cup Point	3	156715

EXPLODED VIEW AND PARTS LIST

Item	Description	Qty	Part #
H9	Label, 370 Model	1	156692
H10	Plug, CEE 7/7 16a 240v	1	153687
J	Post Cover	-	n/a
J1	Casting, Cover, Post, 370	1	156748
J2	Screw, 10-24 X 3/8 Socket Head Set, Cup Point	2	156715
J3	Label, Warning, Read Owner's Manual	1	155806
J4	Label, 370 Model	1	156692
J5	Label, Serial Number, UL/CSA Mark	1	157249-04
K	Assembly, Roller Wheel, Double	1	156586
K1	Bracket, Roller Wheel	1	156522
K2	Wheel, Roller	2	151799
K3	Screw, 1/4-20 X 1 1/2 Hex Head Cap	2	151914
K4	Washer, 1/4 SAE Flat	2	151915
K5	Nut, 1/4-20 Hex	2	151893
L	Assembly, Splash Curtain	1	155901-MK
L1	Curtain, Splash	1	134841
L2	Bracket, Splash Curtain	1	155901
L3	Washer, 1/4 SAE Flat	1	151915
L4	Wingscrew, 1/4-20 X 1/2	1	151888
M	Table	-	n/a
M1	Table, Composite, 370/470	1	156536
M2	Screw, 5/16-18 X 1 Hex Head Cap	2	151743
M3	Washer, 5/16 Split Lock	2	151747
M4	Washer, 5/16 SAE Flat	2	151754
N	Assembly, PES-100 120v Water Pump	1	155987-MK
N1	Pump, Water, PES-100 120v	1	155987
N1A	Pump, Water, 100v	1	154812
N1B	Pump, Water, 230v	1	156181
N3	Hose, Vinyl, 1/4 ID	2'	132951
N4	Clamp, Flow, 1/4-1/2	1	154394
N5	Owner's Manual, Water Pump	1	155745

THEORY

THEORY OF DIAMOND BLADES:

Diamond blades do not really cut; they grind the material through friction. Diamond crystals, often visible at the leading edge and sides of the rim/segment, remove material by scratching out particles of hard, dense materials, or by knocking out larger particles of loosely bonded abrasive material. This process eventually cracks or fractures the diamond particle, breaking it down into smaller pieces. As a result, a diamond blade for cutting soft, abrasive material must have a hard metal matrix composition to resist this erosion long enough for the exposed diamonds to be properly utilized. Conversely, a blade for cutting a hard, non-abrasive material must have a soft bond to ensure that it will erode and expose the diamonds embedded in the matrix. These simple principles are the foundation of “controlled bond erosion”.



Types of Cutting:

There are two basic types of cutting-Dry or Wet. The choice of which type of blade to use depends on:

- The requirements of the job
- The machine/tool utilizing the diamond blade
- The preference of the operator







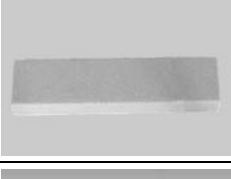


In the case of DRY cutting, the overwhelming popularity and quantity of hand-held saws and the flexible nature of MK Diamond blades to professionally handle most ceramic, masonry, stone and concrete materials, make the DRY cutting blade a very attractive tool. When using a DRY blade, the user must be aware of distinct operating practices to ensure optimum performance. DRY cutting blades require sufficient airflow about the blade to prevent overheating of the steel core. This is best accomplished by shallow, intermittent cuts of the material with periods of “free-spinning” (for several seconds) between each cut, to maximize the cooling process.

For WET cutting applications, MK has the exact blade to compliment both the material to be cut and the wet cutting machine to be used. During cutting operations, liberal amounts of water act as a coolant to support the cutting effectiveness and longevity of the WET blade. Additionally, using water adds to the overall safety of cutting operations by keeping the dust signature down.

Know All You Can About the Material You Wish to Cut

ACCESSORIES

ACCESSORIES:

ITEM	NUMBER	DESCRIPTION	
1.	139295	MK-200, 7 x 5/8 Arbor	
2.	139311	MK-215, 7 x 5/8 Arbor	
3.	153293	MK-315, 7 x 5/8 Arbor	
4.	134569-MK	Dual 45° Flat Angle Guide	
5.	134585-MK	45° Bullnose Miter	
6.	134569-MK	90° Protractor	
7.	152792	Dressing Stone	
8.	152610	Ground Fault Circuit Interrupter	
9.	155953	Stand	

ORDERING and RETURN INFORMATION

ORDERING INFORMATION:

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

NOTE: There is a \$25.00 minimum order when ordering direct from MK Diamond. All purchases must be made using VISA or MasterCard.

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

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 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 Blade guard and Support Angle Assembly
- Dry the saw before shipping
- When packing, include the following: MK-370, 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. For technical questions, call – **800 474-5594**.



MK-370 SERIES

TILE SAW OWNER'S MANUAL & OPERATING INSTRUCTIONS

CALIFORNIA PROPOSITION 65 MESSAGE:

⚠ WARNING

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 and
- Arsenic and chromium, from chemically treated lumber

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

MK DIAMOND PRODUCTS, INC
1315 STORM PARKWAY, TORRANCE, CA 90509-2803
310 539 5158