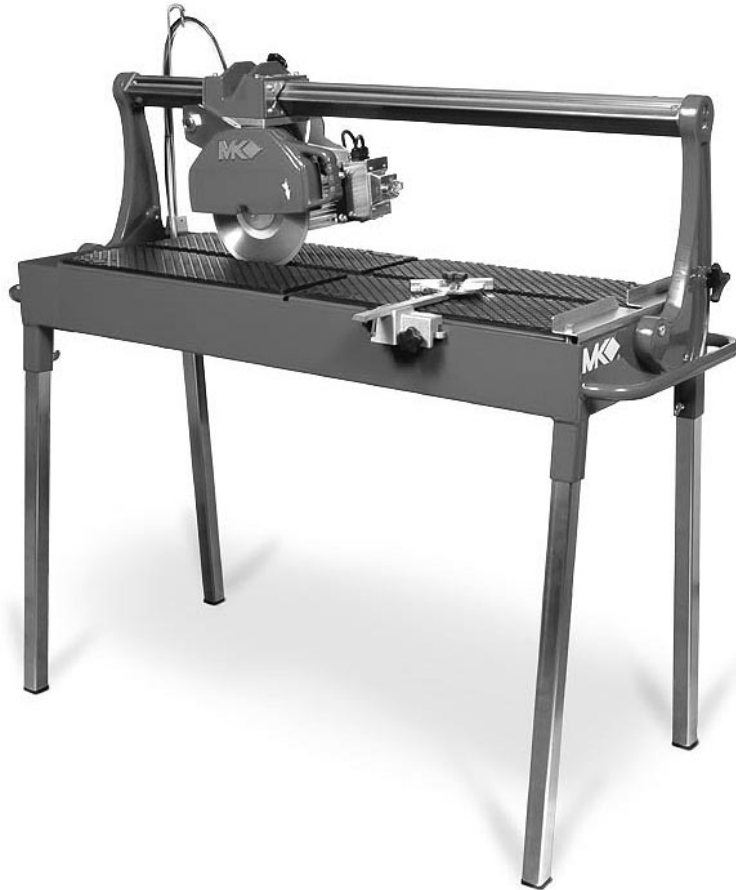




# MK-212 SERIES

## 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 top of the Cutting Head.

**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-212 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-212 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-212 safely and correctly. Please take a few minutes to familiarize yourself with the MK-212 by reading and reviewing this manual.

If you should have questions concerning your MK-212, please feel free to call our friendly customer service department at: 800 421-5830

Regards,

MK Diamond

# TABLE OF CONTENTS

	Page
<b>SAFETY:</b>	
Safety Messages	4
Damage Prevention Message	4
General Safety Precautions and Hazard Symbols	4
California Proposition 65 Message	5
Electrical Requirements and Grounding Instructions	6
Tile Saw Specific Warnings	7
Lockout	7
Safety Label Locations	8
Product Specifications	8
<b>UNPACKING, TRANSPORT, UNIVERSAL STAND, and ASSEMBLY</b>	
Unpacking	9
Contents	9
Transport	10
Assembly	11
<b>SETUP, ADJUSTMENT AND OPERATION</b>	
Setup	16
Adjustment and Operation	19
Cleanup	22
<b>MAINTENANCE AND TROUBLESHOOTING</b>	
Maintenance	24
Troubleshooting	30
<b>EXPLODED VIEW AND PARTS LIST</b>	
Exploded View	35
Parts List	39
<b>THEORY</b>	
Theory of Diamond Saws	43
<b>ACCESSORIES</b>	
Accessories	44
<b>ORDERING and RETURN INSTRUCTIONS</b>	
Ordering Information	45
Return Material Policy	45
Packaging Instructions	45
Authorized Service Centers	45

## 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.

##### 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 7 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.

## SAFETY

### 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.

### Hazard Symbols:

#### 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.

#### 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-](http://www.osha-slc.gov/sltc/silicacrystalline/index.html)

[slc.gov/sltc/silicacrystalline/index.html](http://www.osha-slc.gov/sltc/silicacrystalline/index.html)


[http://www.oehha.org/prop65/out\\_of\\_date/6022kLstA.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** 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 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.

**⚠ 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.

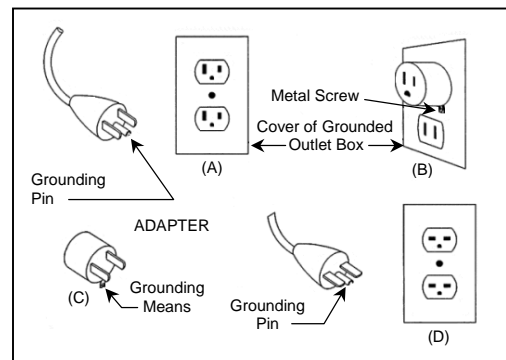



FIGURE 1

**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  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. 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.

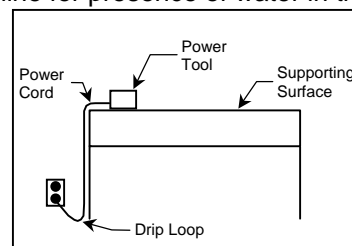


FIGURE 2

## SAFETY

**⚠ WARNING** Use only extensions 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 form 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.

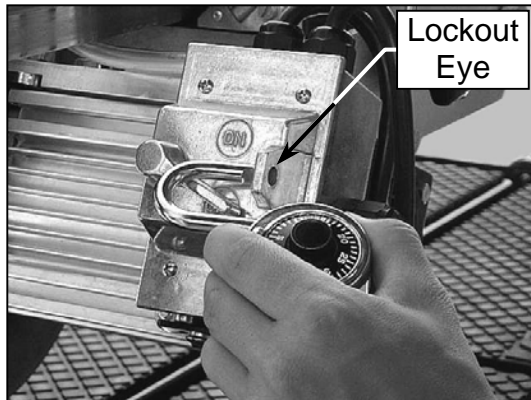
To choose the proper extension cord,

- 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.

Extension Cord Minimum Gage for Length				
Volts	Total Length of Cord in Feet			
120V	25 ft.	50 ft.	100 ft.	150 ft.
	AWG	AWG	AWG	AWG
	18	16	16	14

TABLE 1

### LOCK OUT:



To prevent accidental starting, and to help ensure your workshop is "Kidproof," this saw is provided with a means to lockout the motor ON/OFF switch. The ON/OFF switch is provided with a Lockout Eye that can be used in conjunction with a padlock to prevent starting the MK-212.

### 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
- Do not fill water bath above water fill line

## SAFETY

### SAFETY LABEL LOCATIONS:

Safety labels are located according to the table below and the exploded views at the end of this manual. 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.
1	Cutting Head	Warning, Read Owner's Manual	155806
2	Cutting Head	Caution, GFCI	155678
3	Cutting Head	MK Service Information	155038
4	Cutting Head	MK Serial Number	157500
5	On/Off Switch	Caution, .6 Amps Maximum	154822

### PRODUCT SPECIFICATIONS:

The MK-212 is a versatile Tile and Stone Saw. Operated and used according to this manual, the MK-212 will provide years of dependable service.

#### General Description:

The MK-212 Tile Saw is engineered as a stand mounted wet tile and stone saw. The saw includes a powerful 115v direct drive AC motor. The saw is capable of cutting tile or stone up to thirty-six (36) inches in length and three (3) inches thick in one pass or twenty-four (24) inches diagonally and one and three-fourths (1-3/4) inches thick in one pass.

#### Motor Specifications:

Motor specifications for the MK-212 are listed in Table 2 below.

Voltage	115 v
Motor Amperage	14 a
Frequency	60 Hz
RPM	3400 rpm
Horse Power	2 hp
Weight	226 lbs.

Table 2

#### Blade Capacity:

The MK-212 uses a ten (10) inch (254 mm) diameter wet cutting continuous rim MK Diamond blade.

#### Tile Types:

The MK-212 can cut a variety of tile types including Porcelain, Terracotta, Marble, Quarry and Slate, or almost any other non-ferrous material.

#### NOTE:

The MK-212 is not designed to cut plastic or ferrous (metals) material.

## UNPACKING, TRANSPORT, UNIVERSAL STAND and ASSEMBLY

### UNPACKING:

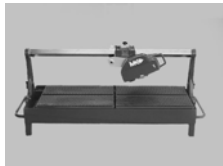
Your MK-212 has been shipped from the factory thoroughly inspected. Only minimal assembly is required.

**⚠CAUTION** Use proper lifting techniques when lifting the MK-212.

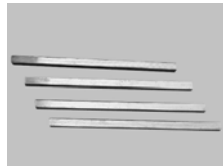
If not done, remove the MK-212, Cutting Head and accessory box from the carton.

### CONTENTS:

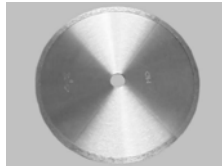
In your container, you will find one (1) MK-212 Saw, four (4) MK-212 support legs, (1) 10-inch wet cutting continuous rim diamond blade, one (1) cutting guide, one (1) blade wrench, one (1) drain plug, one (1) electric water pump, one (1) pump discharge fitting, one (1) cooling transfer tube, one (1) flow regulating clamp, one (1) owners manual, one (1) pump manual and one (1) warranty card.



MK-212 Saw



MK-212  
Support Legs



Diamond Blade



Blade Wrench



90° Cutting Guide  
Alignment Plate



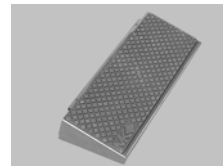
90° Cutting Guide



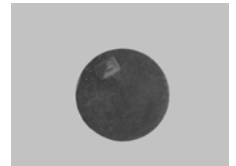
90° Cutting Guide  
Hardware



2-Piece  
Protractor



Side  
Table



Drain  
Plug



Electric  
Water Pump



Pump  
Discharge Fitting



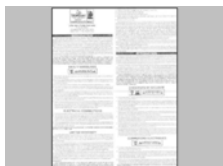
Cooling Transfer  
Tube



Flow Regulating  
Clamp



Owners  
Manual



Pump  
Manual



Warranty  
Card

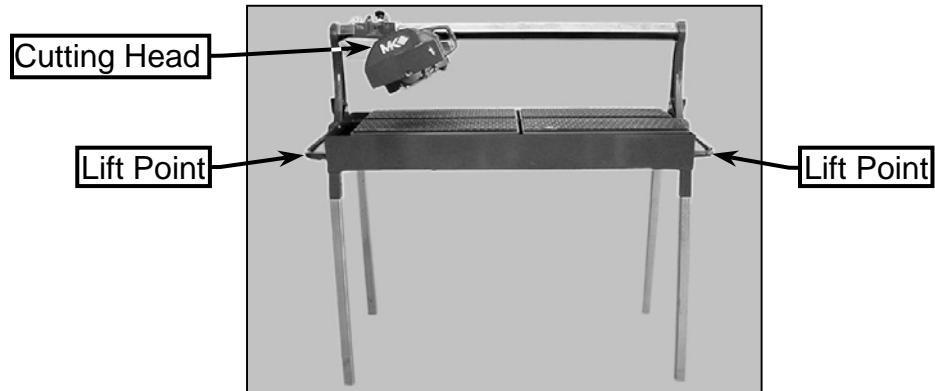
## UNPACKING, TRANSPORT and ASSEMBLY

### TRANSPORT:

1. The MK-212 weighs approximately two hundred and twenty-six (226) pounds and for that reason should not be transported without a minimum of two persons present.
2. Never transport the MK-212 with water in the Water Pan.

To lift the saw, grasp the handles on each end of the Water Pan and lift the entire saw.

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

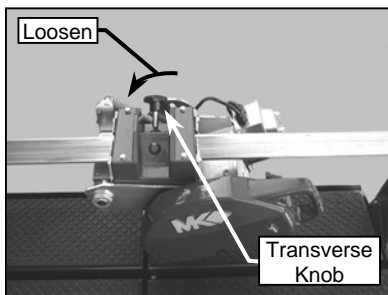


## UNPACKING, TRANSPORT and ASSEMBLY

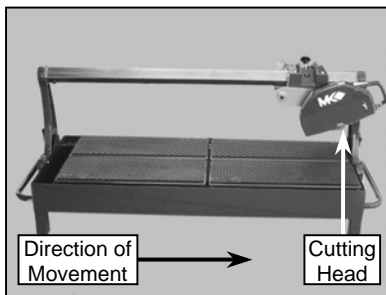
### ASSEMBLY:

Follow the assembly instructions to prepare your MK-212 for operation.

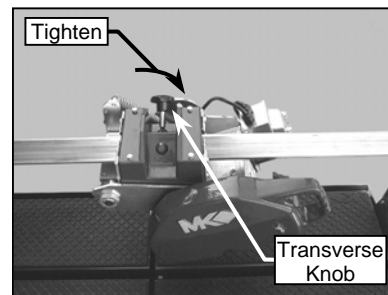
#### 1. Support Leg Installation:



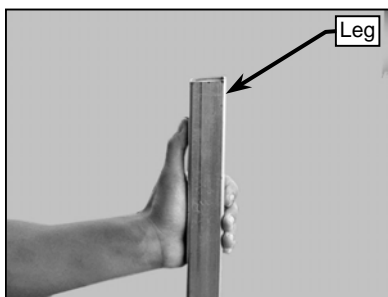
(A)  
Loosen the Cutting Head  
Transverse Knob



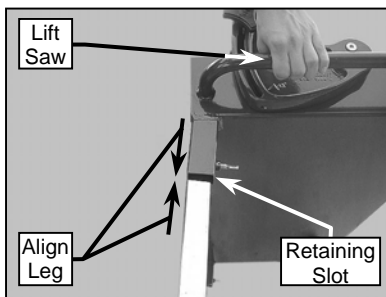
(B)  
Move the Cutting Head to one  
end of the saw



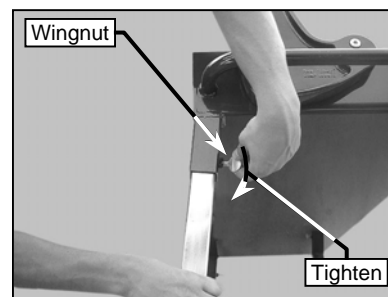
(C)  
Tighten the Cutting Head  
Transverse Knob



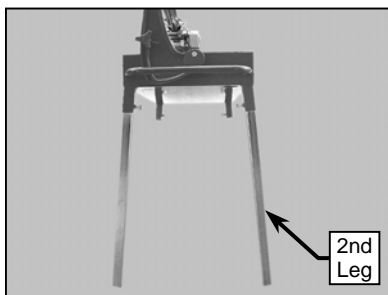
(D)  
Obtain the first Leg



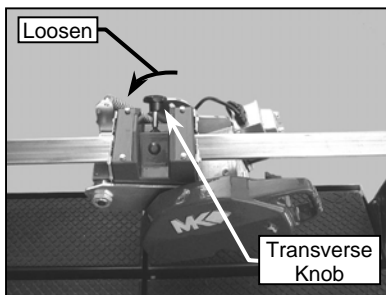
(E)  
Lift the saw; align the Leg with  
the Retaining Slot on the saw  
and the install the leg



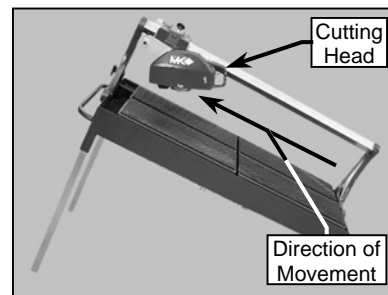
(F)  
Tighten the Leg Retaining  
Wingnut



(G)  
Repeat Steps D through F for  
the second Leg

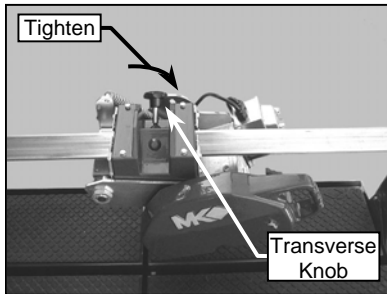


(H)  
Loosen the Cutting Head  
Transverse Knob

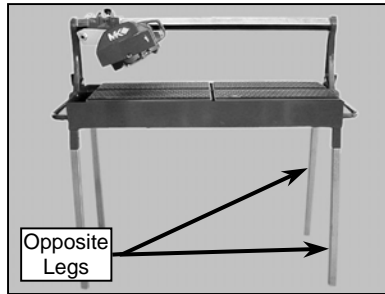


(I)  
Move the Cutting Head to the  
end with the two installed Legs

## UNPACKING, TRANSPORT and ASSEMBLY



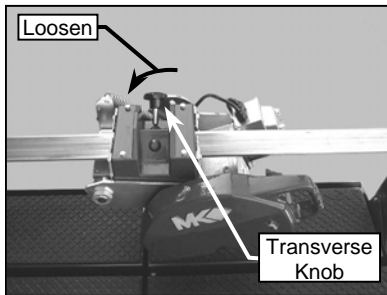
(J)  
Tighten the Cutting Head  
Transverse Knob



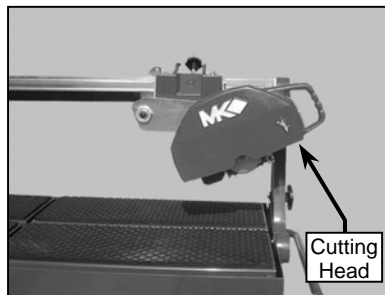
(K)  
Install the remaining to Legs on  
the opposite side of the saw  
using Steps D through G

### 2. Diamond Blade Installation:

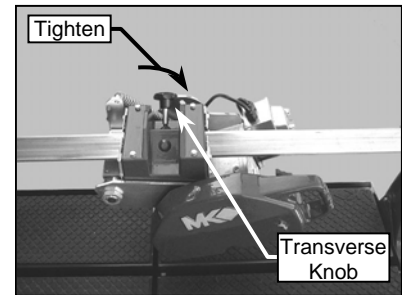
NOTE: When installing the Retaining Screw, do not "cross-thread" and DO NOT over tighten the screw.



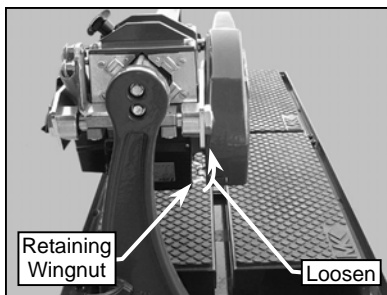
(A)  
Loosen the Cutting Head  
Transverse Knob



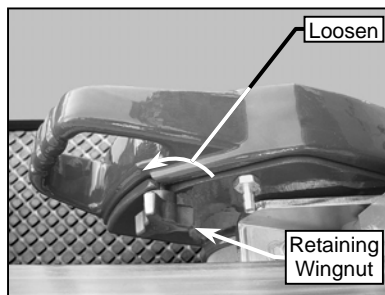
(B)  
Move the Cutting Head to one  
end of the saw



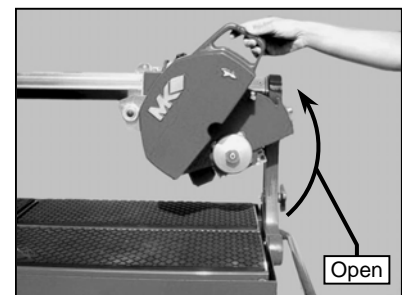
(C)  
Tighten the Cutting Head  
Transverse Knob



(D)  
Loosen the Blade Guard Pivot  
Point Retaining Wingnut

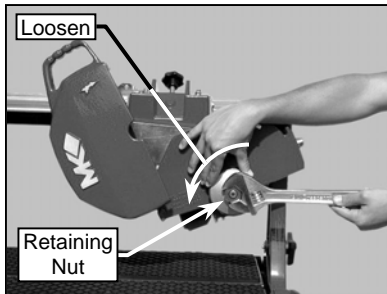


(E)  
Loosen the Blade Guard  
Retaining Thumbscrew and  
open the Blade Guard

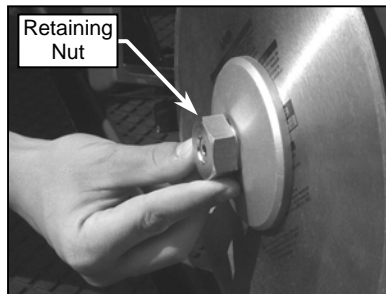


(F)  
Open the Blade Guard

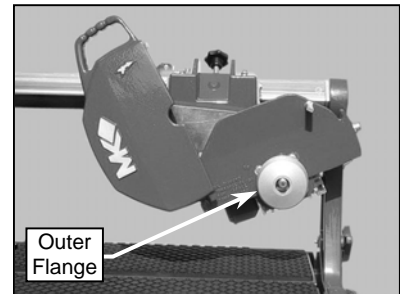
## UNPACKING, TRANSPORT and ASSEMBLY



(G)  
Loosen the Blade Retaining Nut

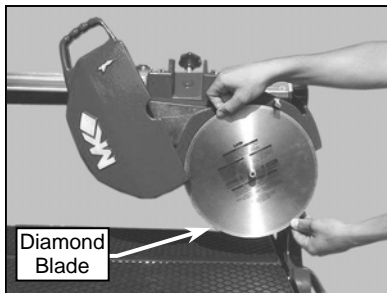


(H)  
Remove the Blade Retaining Nut

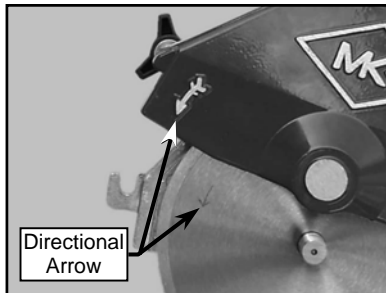


(I)  
Remove the Outer Flange

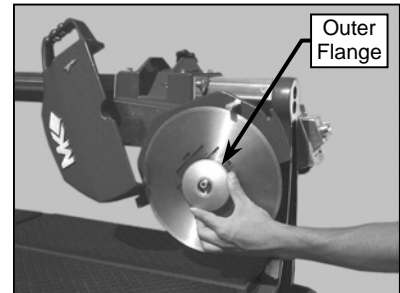
NOTE: The Diamond Blade will have to be installed onto the MK-212 with the Directional Arrow toward the motor side of the Cutting Head for the blade to be seated correctly.



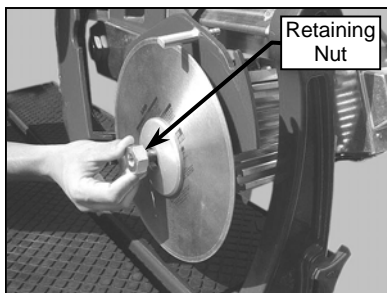
(J)  
Install Diamond Blade onto Blade Shaft



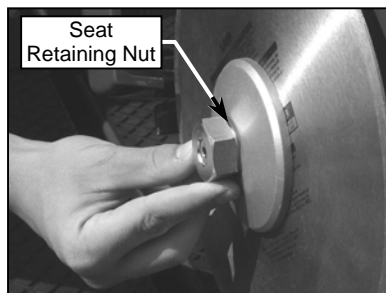
(K)  
Verify the Directional Arrow of the Blade matches the Directional Arrow of the Blade Guard



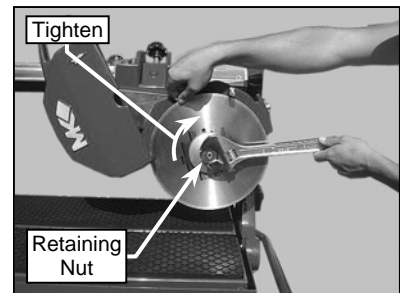
(L)  
Install the Outer Flange



(M)  
Install the Blade Retaining Nut

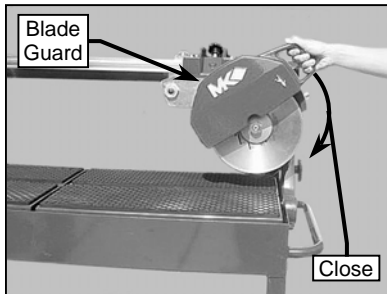


(N)  
Verify the Blade Retaining Nut is seated in the Outer Flange

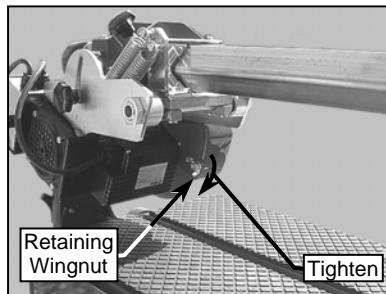


(O)  
Tighten the Blade Retaining Nut

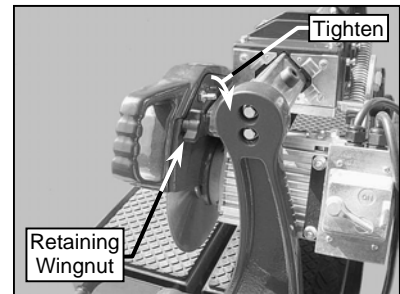
## UNPACKING, TRANSPORT and ASSEMBLY



(P)  
Close the Blade Guard

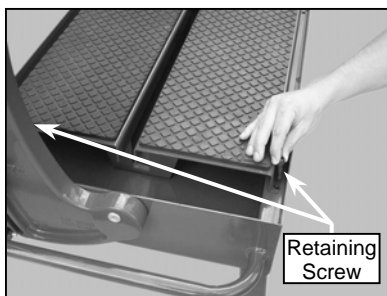


(Q)  
Tighten the Blade Guard  
Retaining Thumbscrew

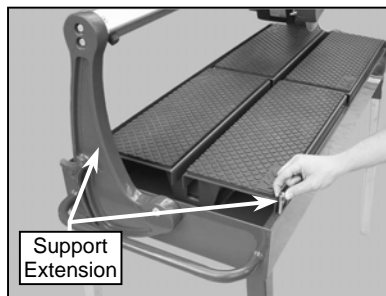


(R)  
Tighten the Blade Guard Pivot  
Point Retaining Wingnut

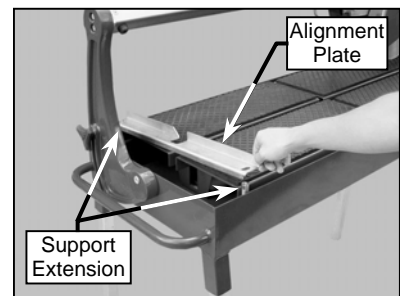
### 3. 90° Cutting Guide Installation:



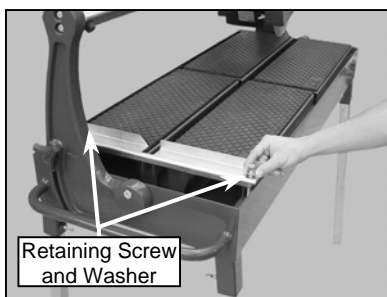
(A)  
Using the supplied Hex-wrench,  
loosen and then remove the two  
back Cutting Surface Retaining  
Screws



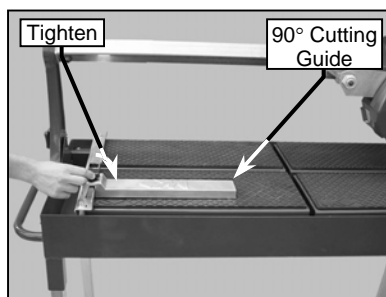
(B)  
Install the two 90° Cutting  
Guide Support Extension in  
place of the Retaining Screws  
and tighten using a wrench



(C)  
Position the 90° Cutting Guide  
Alignment Plate over the  
Support Extensions



(D)  
Install two Alignment Plate  
Retaining Screws and Flat  
Washers through Alignment  
Plate and into Support  
Extensions and then tighten  
using the supplied Hex-wrench

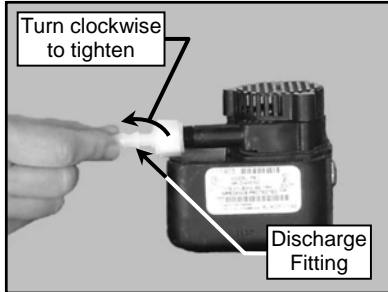


(E)  
Install the 90° Cutting Guide  
onto the Alignment Plate and  
tighten the Retaining Knob to  
hold the 90° Cutting Guide in  
position

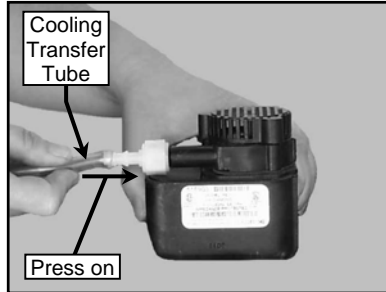
## UNPACKING, TRANSPORT and ASSEMBLY

### 3. Water Pump Preparation:

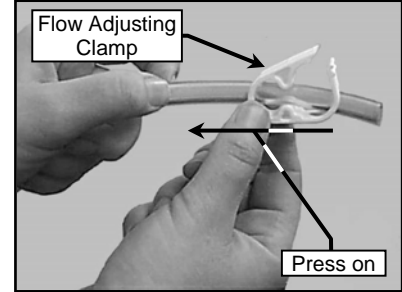
- ⚠ WARNING** 1. To prevent the possibility electrical shock, the MK-212 MUST be de-energized when preparing the Water Pump for operation.
2. To prevent the possibility of electrical shock, use only MK Diamond qualified replacement parts



(A)  
Install Water Pump Discharge Fitting



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



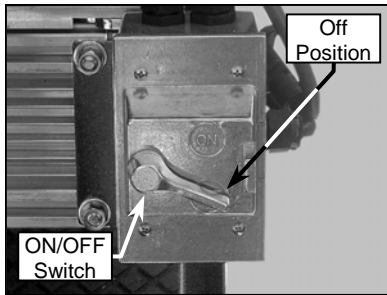
(C)  
Slide Cooling Flow Adjusting Clamp onto the Cooling Transfer Tube

## SETUP, ADJUSTMENT and OPERATION

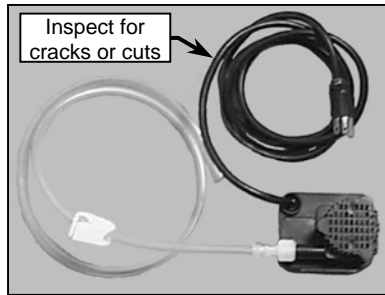
### SETUP:

#### 1. Pre-start Inspection:

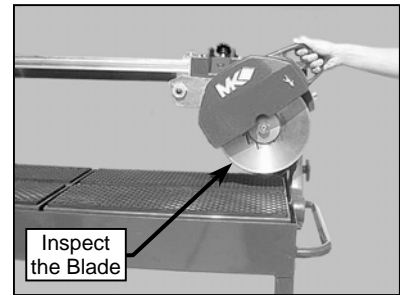
Prior to beginning work, a pre-start inspection of the saw should be performed.



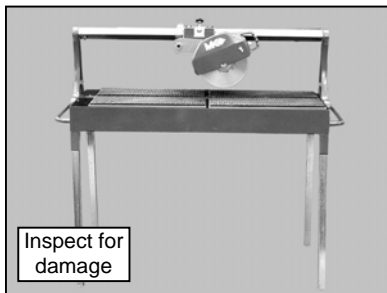
(A)  
Ensure the ON/OFF Switch is in the OFF position



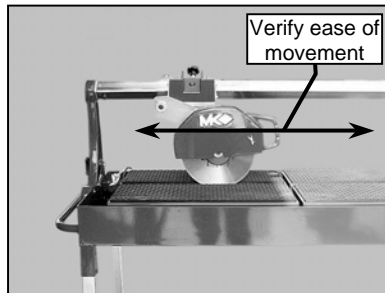
(B)  
Inspect the Pump Assembly for damage – ensure the cord is free of cracks or cuts



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



(D)  
Inspect the MK-212 for damage – ensure the cord is free of cracks or cuts



(E)  
Verify the Movable Cutting Head moves freely

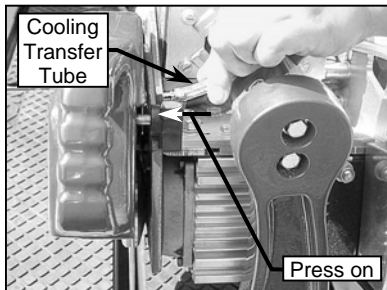
#### 3. Water Pump Setup for Operation:

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

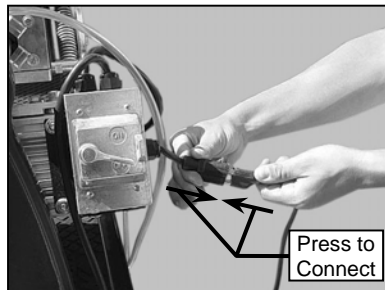
NOTE: If using a dry blade for operation, DO NOT connect the water pump.

##### I. External Water Source:

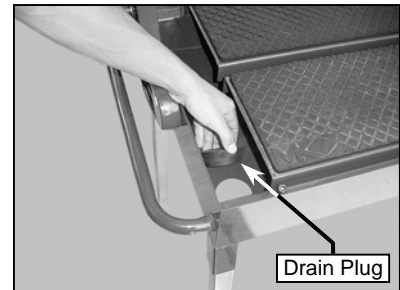
This is the preferred method of cooling.



(A)  
Press the free end of the Cooling Transfer Tube onto the Blade Guard Cooling Port

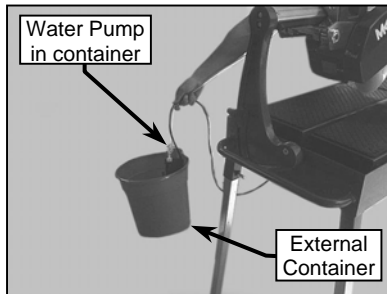


(B)  
Connect the Water Pump to the MK-212

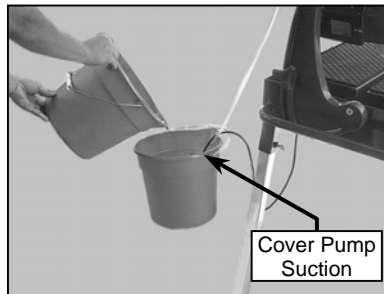


(C)  
Remove the Drain plug

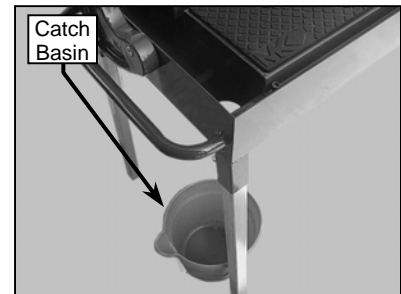
## SETUP, ADJUSTMENT and OPERATION



(D)  
Place the Water Pump in an external container



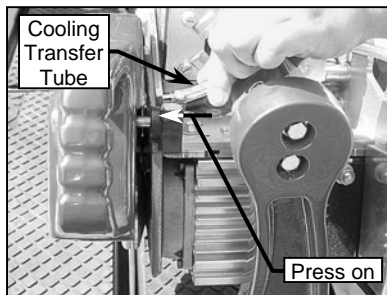
(E)  
Fill the external container until water completely covers the Water Pump suction



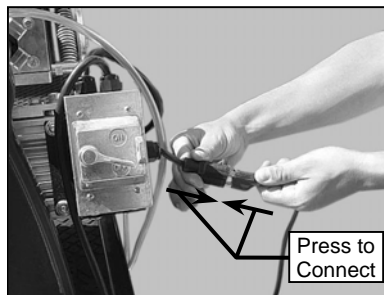
(F)  
Place an external catch basin below the Water Basin drain hole

### II. Re-circulation:

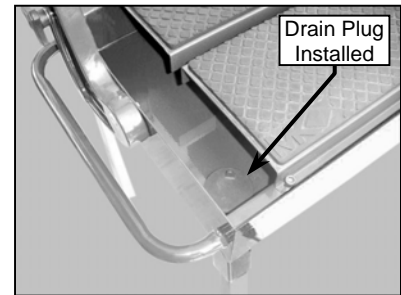
NOTE: When using the re-circulation method, the water should be changed often for longer pump life.



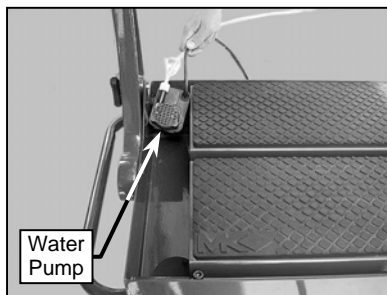
(A)  
Press the free end of the Cooling Transfer Tube onto the Blade Guard Cooling Port



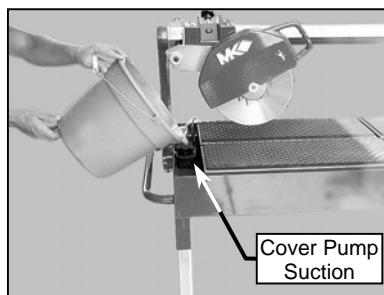
(B)  
Connect the Water Pump to the MK-212



(C)  
Ensure the Drain Plug is installed in the Water Basin



(D)  
Place the Water Pump in the back of the Water Basin



(E)  
Fill the Water Basin until water completely covers the Water Pump suction

## SETUP, ADJUSTMENT and OPERATION

### 2. MK-212 Electrical Cord Setup:

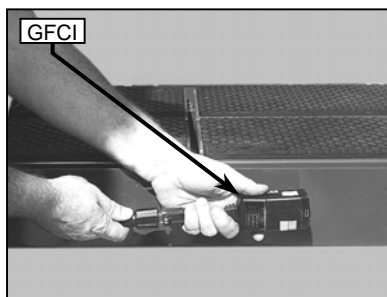
**⚠CAUTION** 1. Before connecting the MK-212 to a power supply, be sure the voltage, cycle and phase meet the requirements of TABLE 3 below.

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

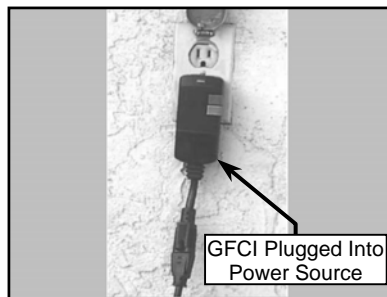
2. If using an extension cord, make sure the length and wire gauge correspond to the requirements listed in TABLE 1 on page 8. An extension cord that is too small in wire gauge (diameter), or too long in length, will cause the motor to overheat and could cause premature failure.
3. Use an approved Ground Fault Circuit Interrupter (GFCI)
4. 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-212 into the GFCI (A GFCI should always be used when operating the MK-170)



(B)

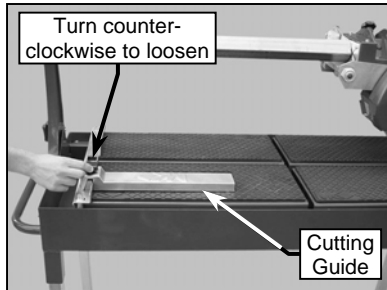
Plug the GFCI into the Power source

## SETUP, ADJUSTMENT and OPERATION

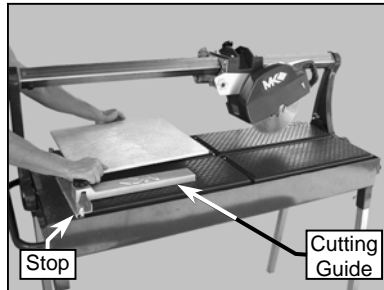
### ADJUSTMENT and OPERATION:

#### 1. Cutting 90° Straight Edges:

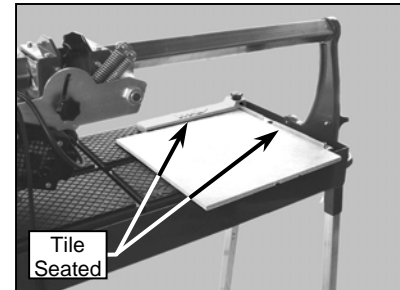
**⚠ CAUTION DO NOT FORCE THE TOOL.** It will do the job better and safer at the rate for which it was designed.



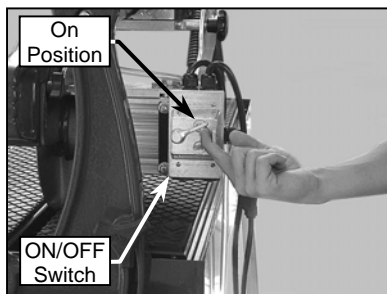
(A)  
Position the Adjustable Cutting Guide to desired cut length



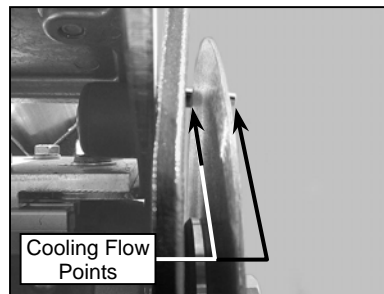
(B)  
Place the tile against the Stop and Cutting Guide



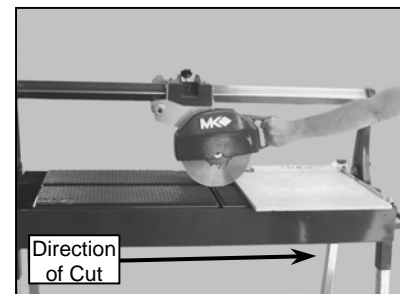
(C)  
Verify the tile is seated against the Stop and Cutting Guide



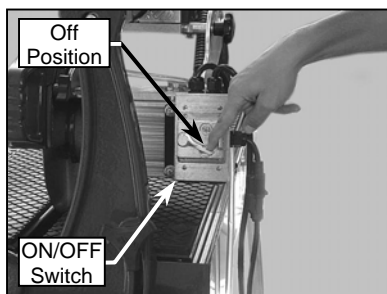
(D)  
Turn the motor ON



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



(F)  
Perform the cut



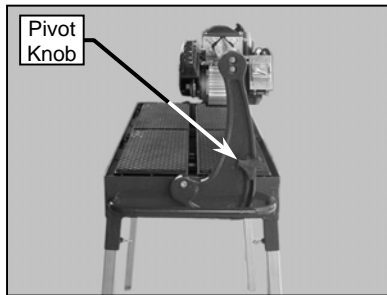
(G)  
Turn the motor OFF when work is complete

## SETUP, ADJUSTMENT and OPERATION

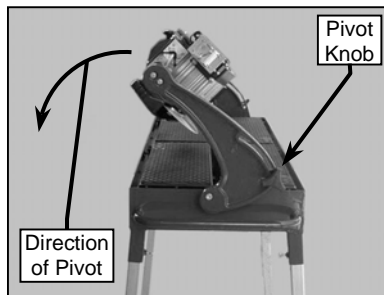
### 2. Angle Cutting:

NOTE: To cut at an angle, the MK-212 has been designed with a pivoting cutting head.

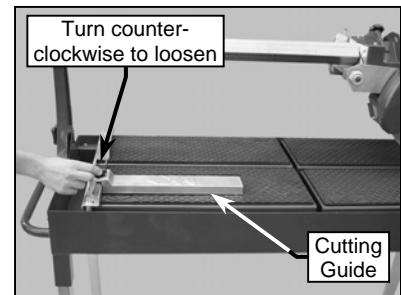
**CAUTION** DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



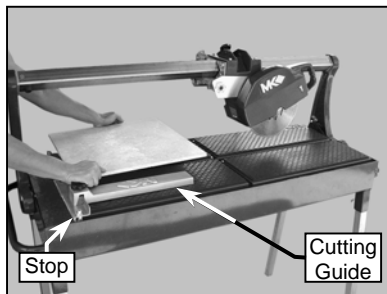
(A)  
Loosen the two Cutting Head Pivot Knobs located on each end of the Cutting Head



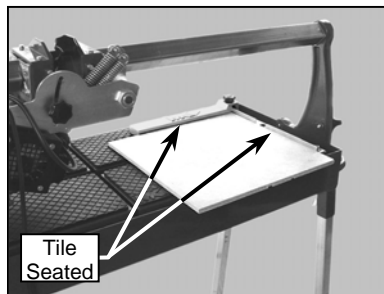
(B)  
Pivot the Cutting Head and retighten the two Pivot Knobs



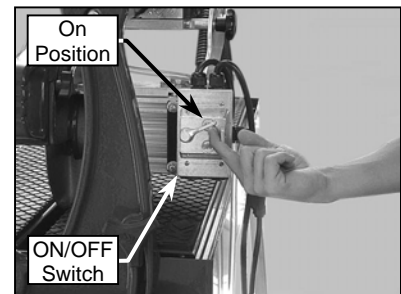
(C)  
Position the Adjustable Cutting Guide to desired cut length



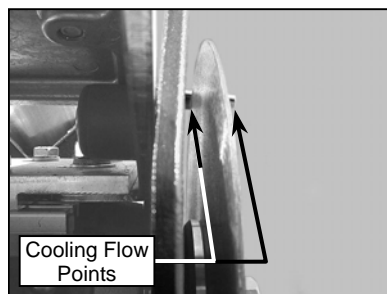
(D)  
Place the tile against the Stop and Cutting Guide



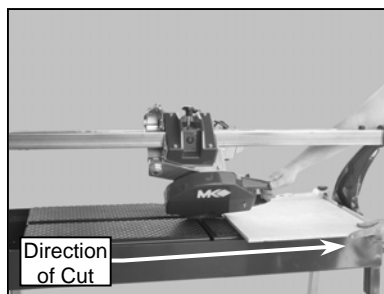
(E)  
Verify the tile is seated against the Stop and Cutting Guide



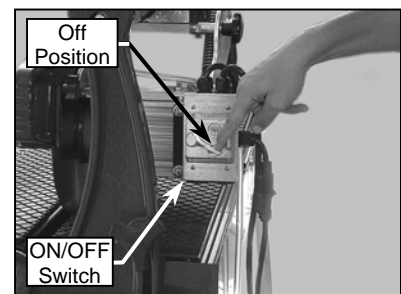
(F)  
Turn the motor ON



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



(H)  
Perform the cut



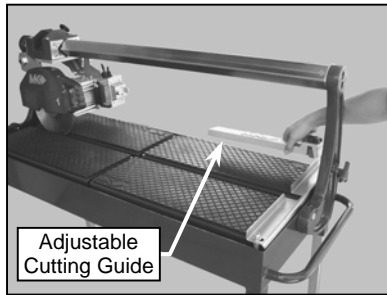
(I)  
Turn the motor OFF when work is complete

## SETUP, ADJUSTMENT and OPERATION

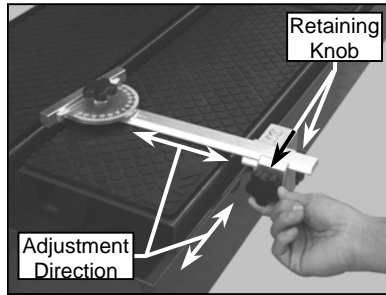
### 4. Off-angle Cutting:

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

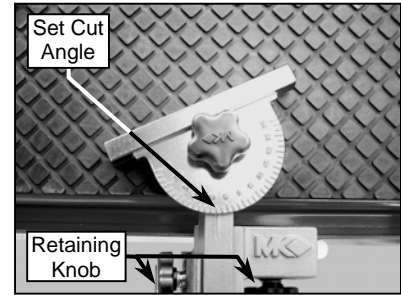
⚠CAUTIONDO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



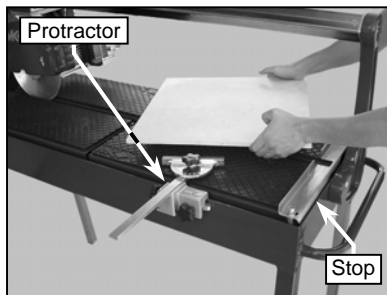
(A)  
Remove the Adjustable Cutting Guide



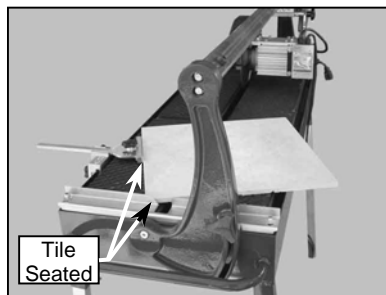
(B)  
Place the Protractor on the side of the cutting table adjust the Protractor to fit the tile being cut and tighten the Retaining Knobs to lock the Protractor



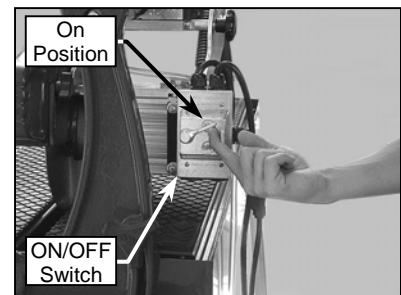
(C)  
Set the desired Cutting Angle and tighten the Retaining Knob



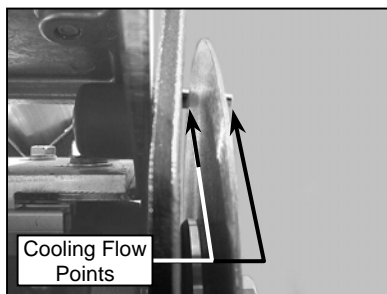
(D)  
Position the tile against the Protractor and the Stop



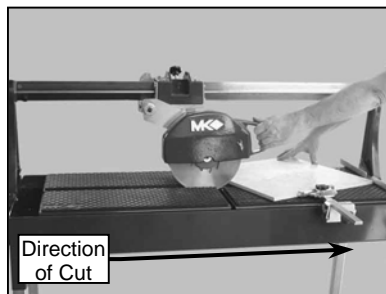
(E)  
Verify the tile is seated against the Stop and Protractor



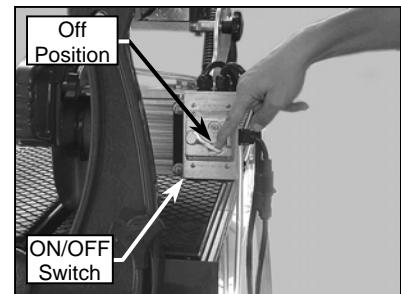
(F)  
Turn the motor ON



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



(H)  
Perform the cut

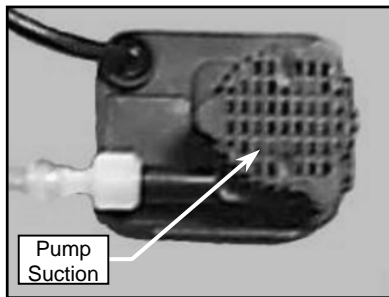


(I)  
Turn the motor OFF when work is complete

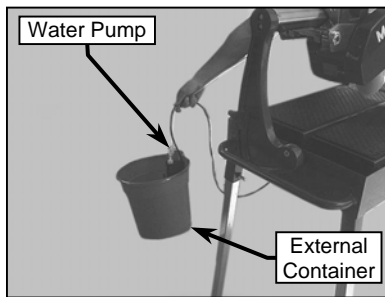
## SETUP, ADJUSTMENT and OPERATION

### 5. Cleanup:

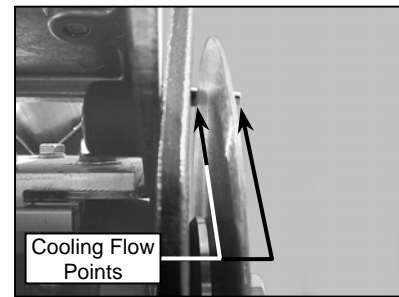
NOTES: 1. If an external water source was used, steps A through C may be skipped.  
2. Dispose of wastewater in accordance with applicable Federal, State and Local laws.



(A)  
Clean the Water Pump suction  
of all debris

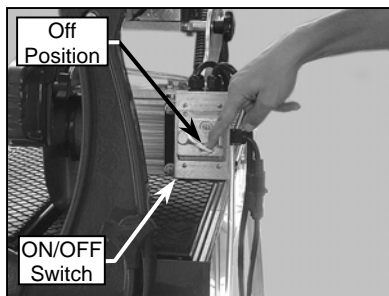


(B)  
Place the Water Pump in an  
external container

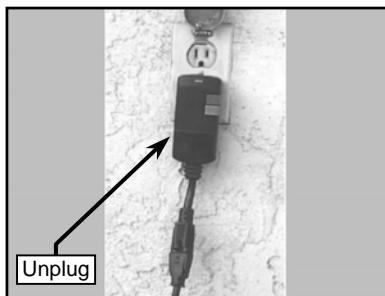


(C)  
Run the saw until clear water is  
seen at the blade cooling ports  
(Approx. 1 minute)

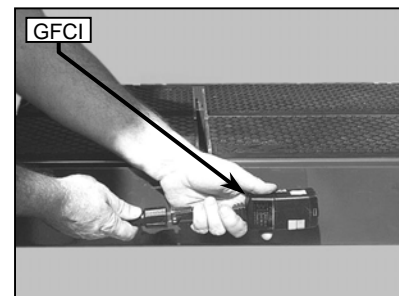
**CAUTION** Ensure the saw is disconnected before completing the remainder of the cleanup process.



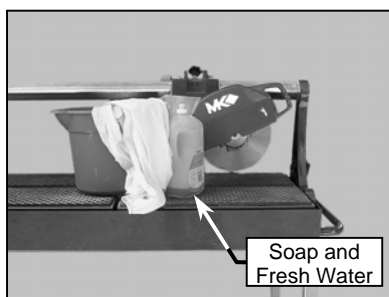
(D)  
Ensure the ON/OFF Switch is  
in the OFF position



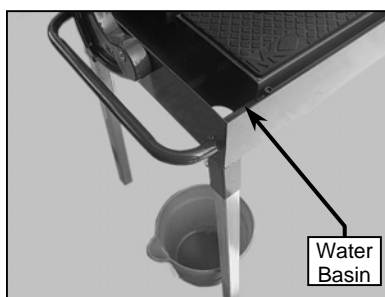
(E)  
Unplug the GFCI from the  
Power source



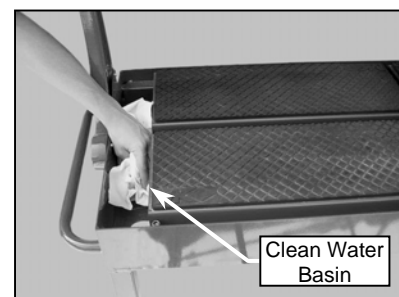
(F)  
Unplug MK-212 from the GFCI



(G)  
Clean the MK-212 with soap  
and clean water



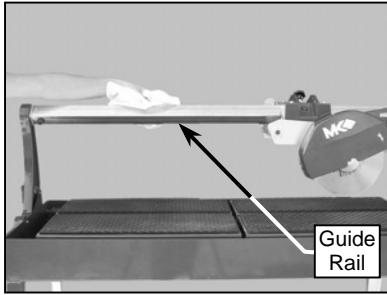
(H)  
Drain the Water Basin and  
dispose of the water in  
accordance with all State, Local  
and Federal laws



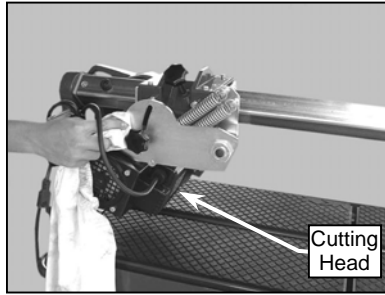
(I)  
Clean the Water Basin

## SETUP, ADJUSTMENT and OPERATION

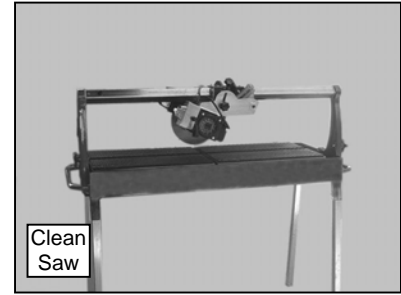
**⚠CAUTION** Ensure water is not forced into the motor casing when cleaning.



(J)  
Clean the Guide Rail



(K)  
Clean the Movable  
Cutting Head



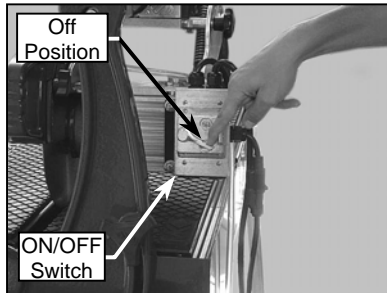
(L)  
Clean the remainder of the  
MK-212

## MAINTENANCE AND TROUBLESHOOTING

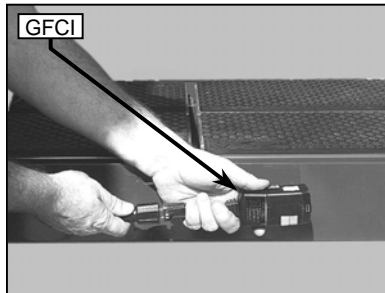
### MAINTENANCE:

#### 1. Maintenance Following Use:

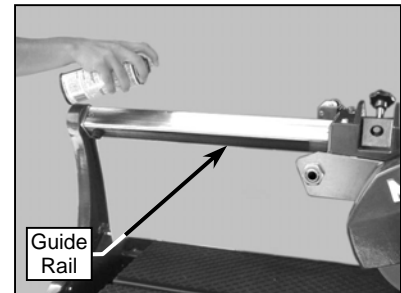
To extend the life of the MK-212, the following procedure should be performed after each use.



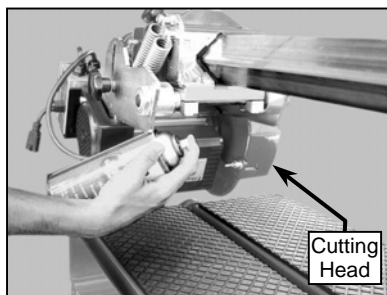
(A)  
Ensure the ON/OFF Switch is  
in the OFF position



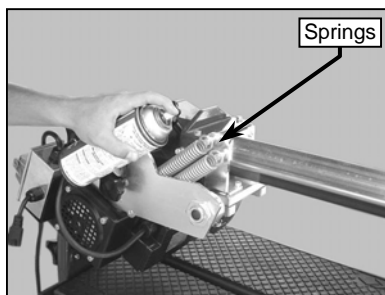
(B)  
Unplug MK-212



(C)  
Lubricate the Guide Rail



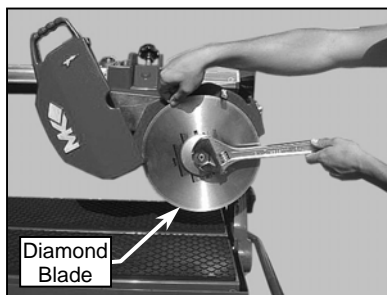
(D)  
Lubricate the Cutting Head



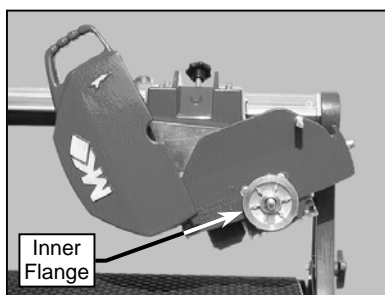
(E)  
Lubricate the Cutting Head  
springs

#### 2. Monthly Maintenance:

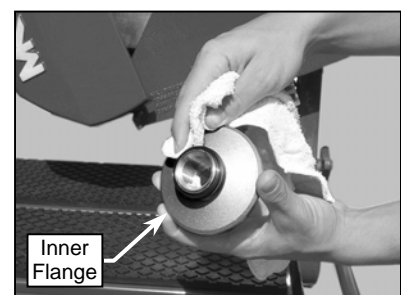
The following maintenance should be performed monthly.



(A)  
Remove the Diamond Blade

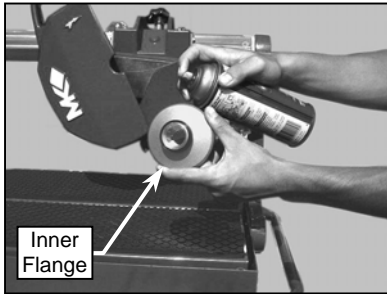


(B)  
Remove the Inner Flange

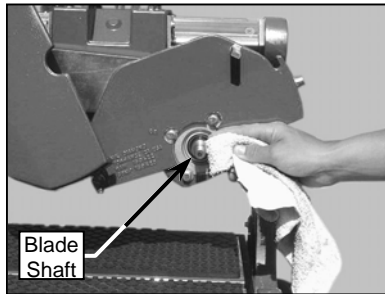


(C)  
Clean the Inner Flange

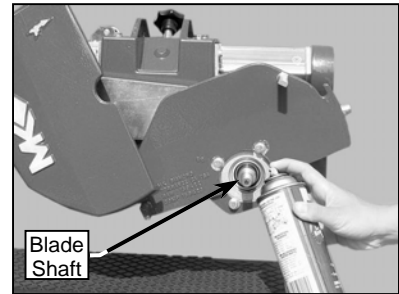
## MAINTENANCE AND TROUBLESHOOTING



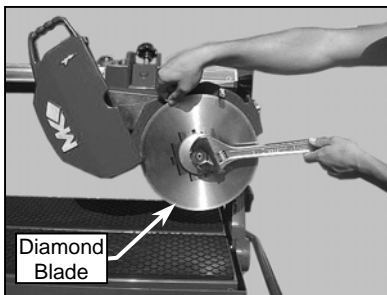
(D)  
Lubricate the Inner Flange  
Gasket



(E)  
Clean the Blade Shaft



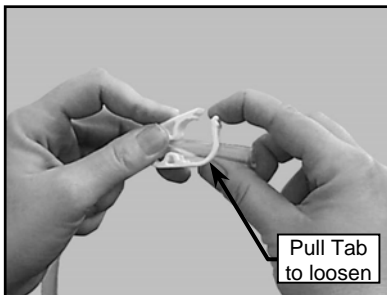
(F)  
Lubricate the Blade Shaft



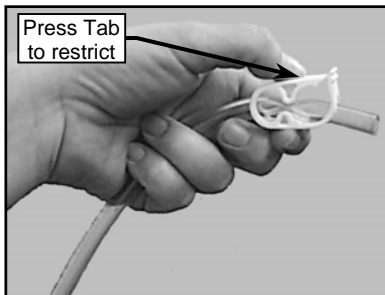
(G)  
Reinstall the Inner Flange and  
Blade

### 3. Flow Adjustment:

NOTE: If flow to the diamond blade requires adjustment, perform the following actions.



(A)  
Increase cooling flow by  
releasing the Flow Adjusting  
Clamp

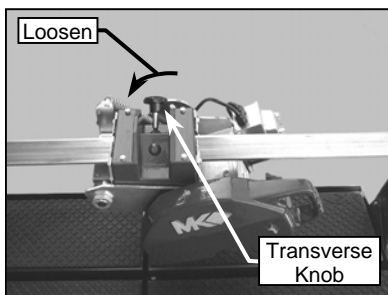


(B)  
Reduce cooling flow by  
Pressing down on the Flow  
Adjusting Clamp

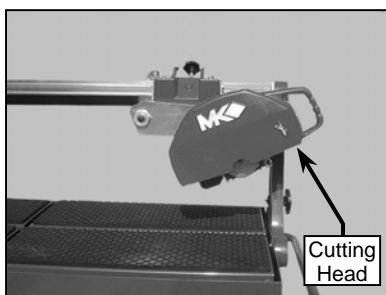
## MAINTENANCE AND TROUBLESHOOTING

### 4. Diamond Blade Change-out:

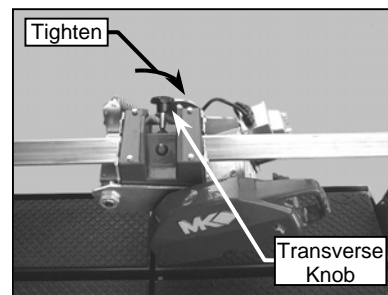
NOTE: When installing the Retaining Nut do not "cross-thread" and DO NOT over tighten the screw.



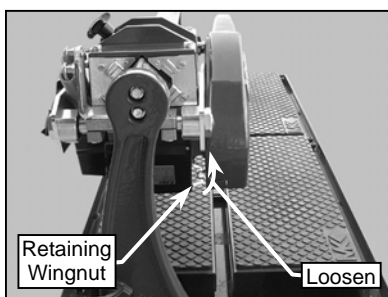
(A)  
Loosen the Cutting Head  
Transverse Knob



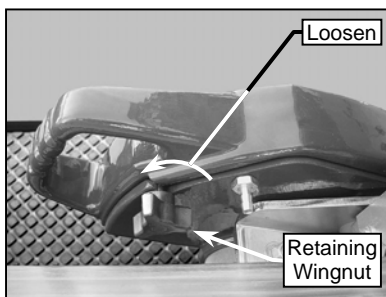
(B)  
Move the Cutting Head to one  
end of the saw



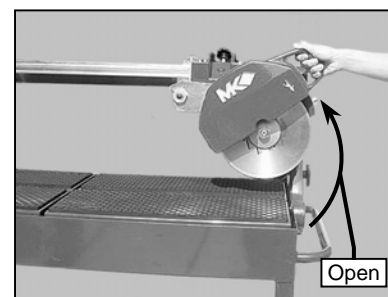
(C)  
Tighten the Cutting Head  
Transverse Knob



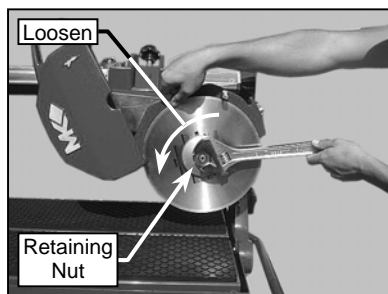
(D)  
Loosen the Blade Guard Pivot  
Point Retaining Wingnut



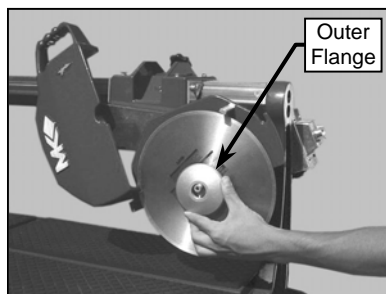
(E)  
Loosen the Blade Guard  
Retaining Thumbscrew and  
open the Blade Guard



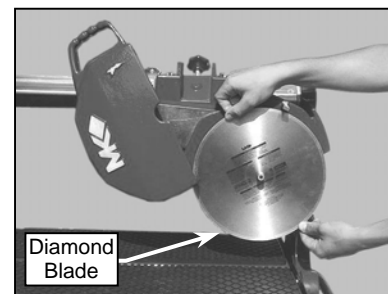
(F)  
Open the Blade Guard



(G)  
Loosen and remove the Blade  
Retaining Nut



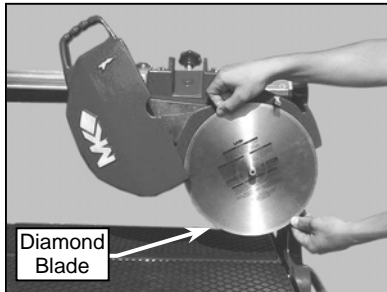
(H)  
Remove the Outer Flange



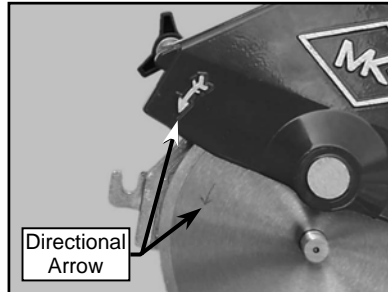
(I)  
Remove the old Diamond Blade

## MAINTENANCE AND TROUBLESHOOTING

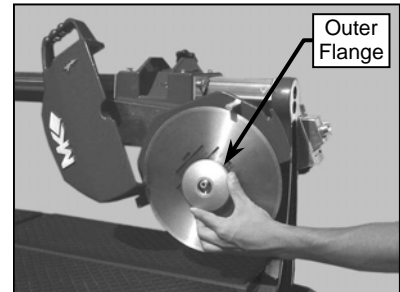
**NOTE:** The Diamond Blade will have to be installed onto the MK-212 with the Directional Arrow toward the motor side of the Cutting Head for the blade to be seated correctly.



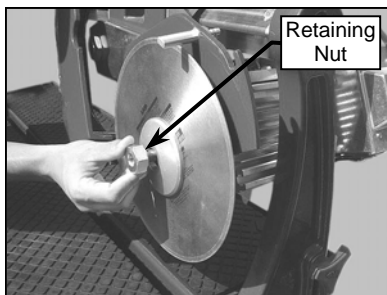
(J)  
Install the new Diamond Blade  
onto the Blade Shaft



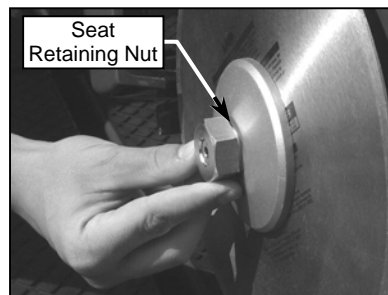
(K)  
Verify the Directional Arrow of  
the Blade matches the  
Directional Arrow of the Blade  
Guard



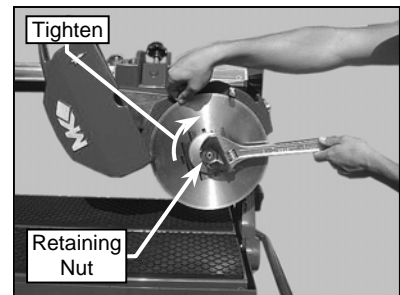
(L)  
Install the Outer Flange



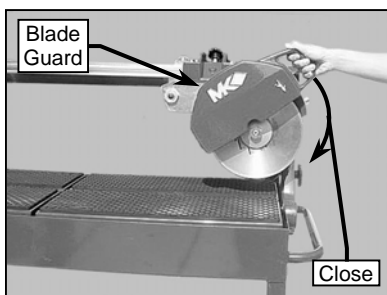
(M)  
Install the Blade Retaining Nut



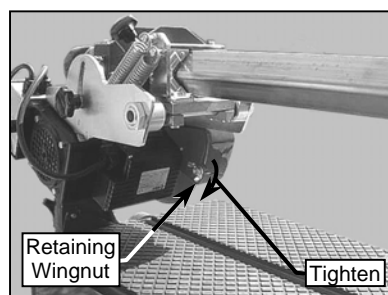
(N)  
Verify the Blade Retaining Nut is  
seated in the Outer Flange



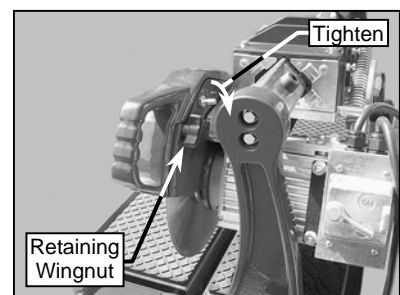
(O)  
Tighten the Blade Retaining  
Nut



(P)  
Close the Blade Guard



(Q)  
Tighten the Blade Guard  
Retaining Thumbscrew

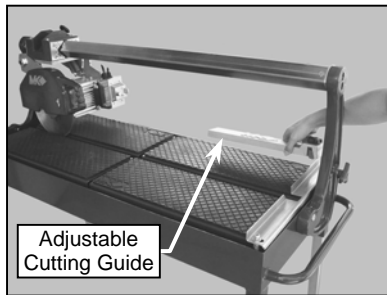


(R)  
Tighten the Blade Guard Pivot  
Point Retaining Wingnut

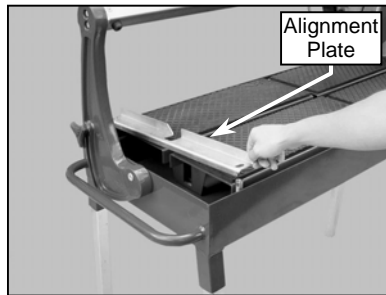
## MAINTENANCE AND TROUBLESHOOTING

### 4. Table Removal:

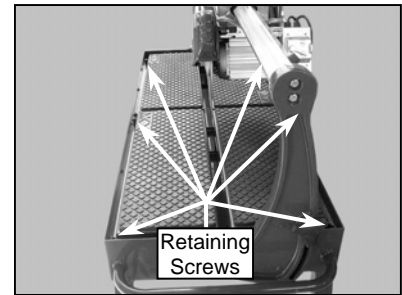
NOTE: The Rubber topped cutting table may be removed to replace the rubberized surface or to clean the Water Basin.



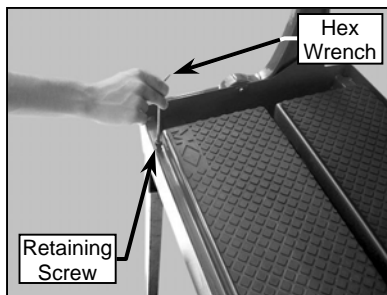
(A)  
Remove the Adjustable Cutting Guide



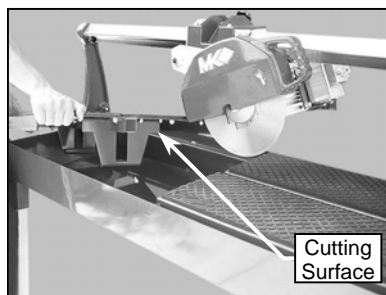
(B)  
Remove the 90° Cutting Guide Alignment Plate



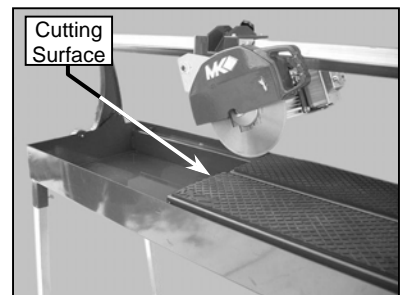
(C)  
Locate the table retaining screws on both sides of the cutting surface



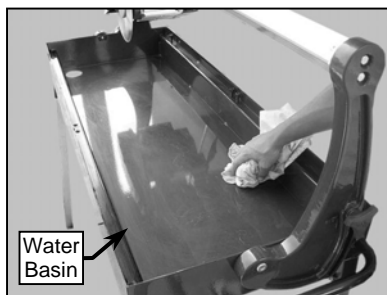
(D)  
Remove all retaining screws using the Hex Wrench provided with the MK-212



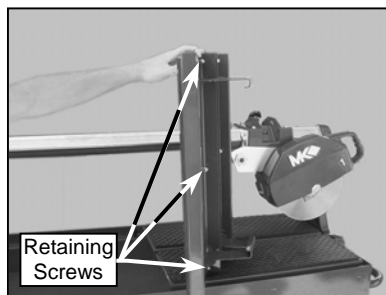
(E)  
Remove one table Cutting Surface piece



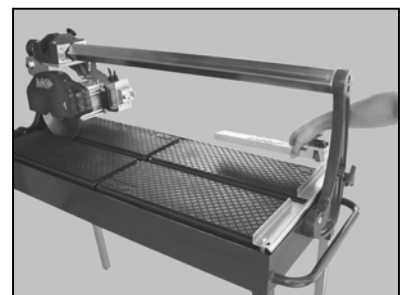
(F)  
Remove the second table piece



(G)  
Clean the Water Basin



(H)  
To replace the Rubber Cutting Surface, remove the surface retaining screws

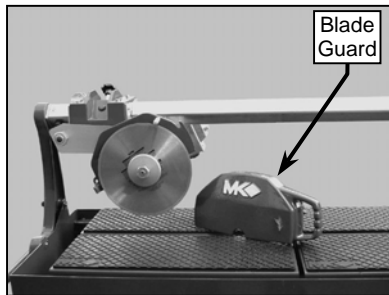


(I)  
Reinstall all components removed in steps A through H

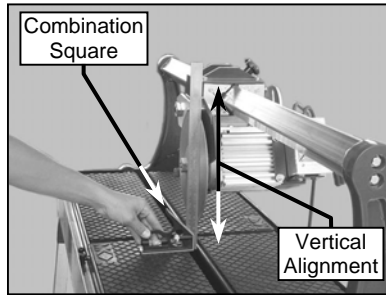
## MAINTENANCE AND TROUBLESHOOTING

### 5. Cutting Head Alignment:

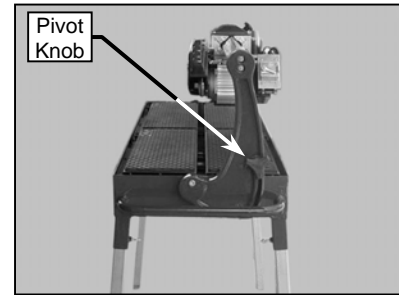
NOTE: The alignment of the Cutting Head should be checked periodically to ensure the accuracy of the cut.



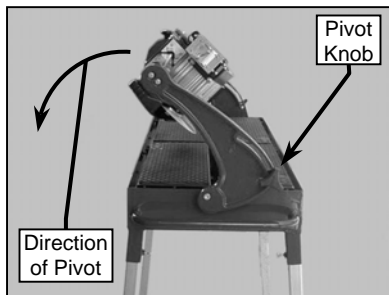
(A)  
Remove the Blade Guard



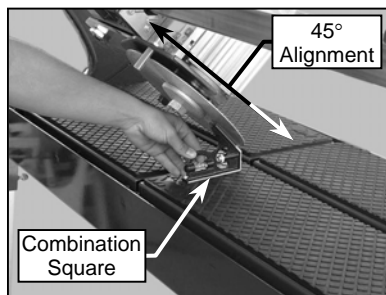
(B)  
Using a combination square,  
check the Blade for vertical  
alignment



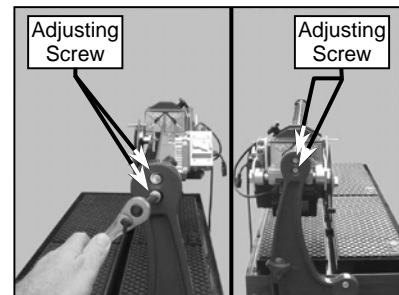
(C)  
Loosen the two Cutting Head  
Pivot Knobs located on each  
end of the Cutting Head



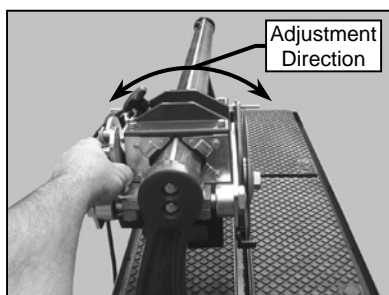
(D)  
Pivot the Cutting Head and  
retighten the two Pivot Knobs



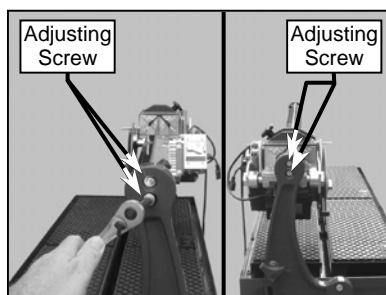
(E)  
Using a combination square,  
check the Blade for 45°  
alignment



(F)  
Loosen the four Guide Rail  
Adjusting Screws using a 1/2-  
inch socket



(G)  
Adjust the Guide Rail until it is  
aligned both vertically and  
horizontally



(H)  
Tighten the four Guide Rail  
Adjusting Screws using a 1/2-  
inch socket

## MAINTENANCE AND TROUBLESHOOTING

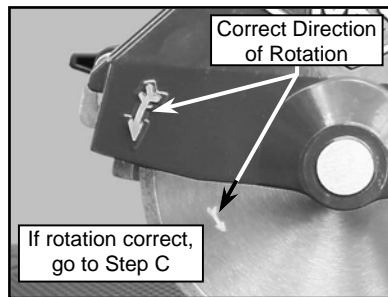
### TROUBLESHOOTING:

#### 1. Blade will not cut properly:



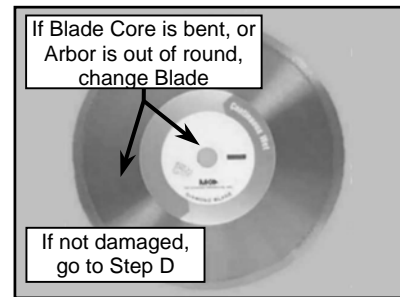
(A)

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)

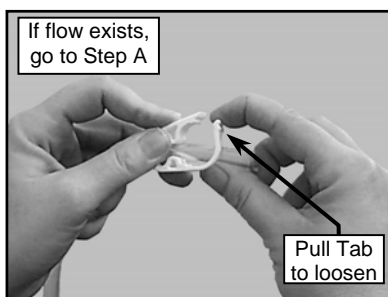
Verify the blade is correct for the material being used

**Return to  
MK Diamond  
for Repair**

(E)

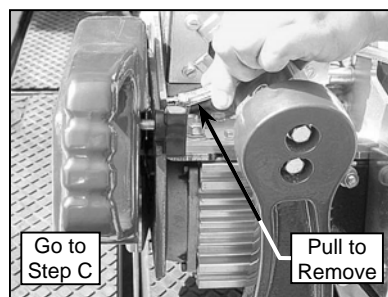
Return to MK Diamond

#### 2. Cooling Flow:



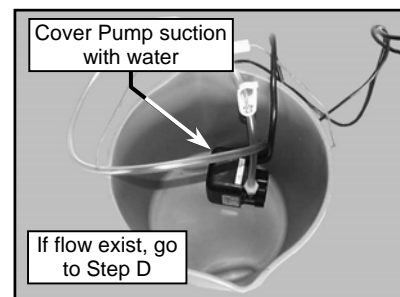
(A)

Verify the cooling flow  
Adjusting Clamp is open



(B)

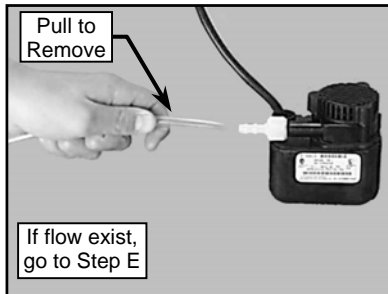
Remove the Cooling Transfer  
Tube from the Blade Guard inlet



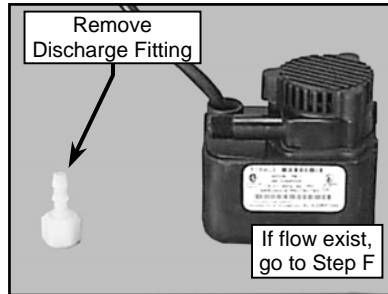
(C)

Place Pump into a bucket of  
water and check flow

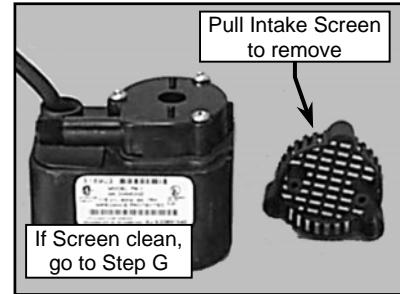
## MAINTENANCE AND TROUBLESHOOTING



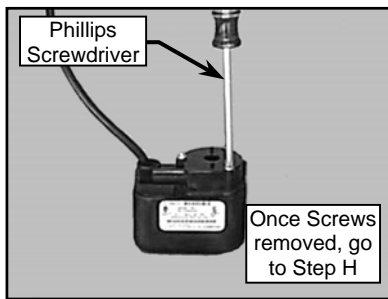
(D)  
Remove the Cooling Transfer Tube and check for flow



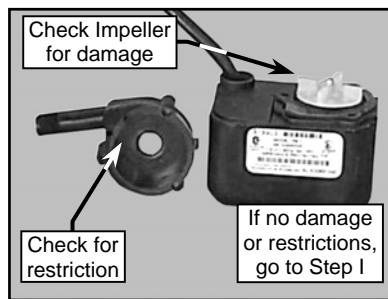
(E)  
Remove the Pump Discharge Fitting and check for flow



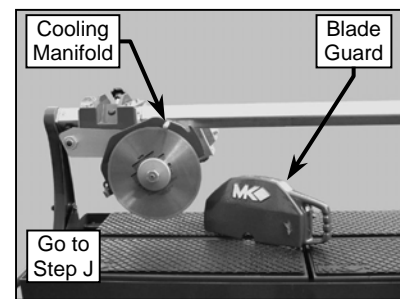
(F)  
Remove the Pump Intake Screen and check for debris – clean the screen if necessary



(G)  
Remove the 3 Pump Casing Retaining Screws

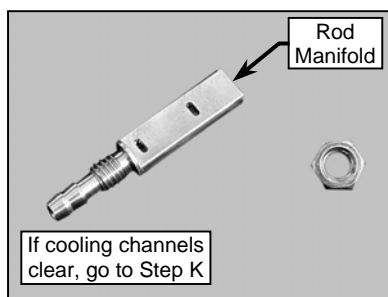


(H)  
Remove the Pump Casing and check for restriction in the casing. Check the Impeller damage



(I)  
Remove the Blade Guard and the Cooling Manifold

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.



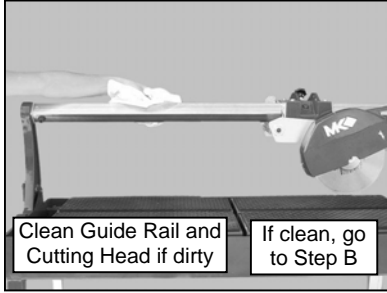
(J)  
Rod (clean out) the Cooling Manifold and then recheck flow

**Return to  
MK Diamond  
for Repair**

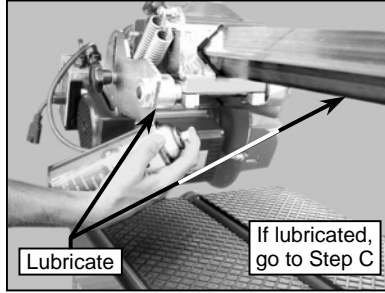
(K)  
Return to MK Diamond

## MAINTENANCE AND TROUBLESHOOTING

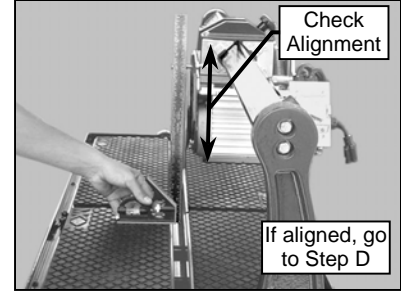
### 3. Cutting Head Does Not Move Correctly:



(A)  
Check that Guide Rail and Cutting Head is clean and clean if dirty



(B)  
Lubricate the Guide Rail and Cutting Head



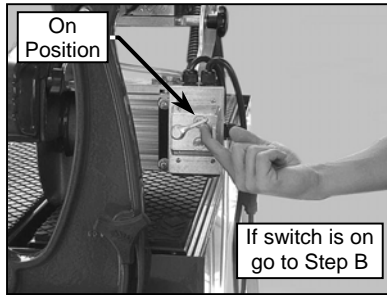
(C)  
Check the Cutting Head alignment

**Return to  
MK Diamond  
for Repair**

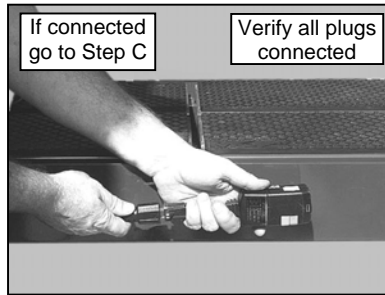
(D)  
Return to MK Diamond

## MAINTENANCE AND TROUBLESHOOTING

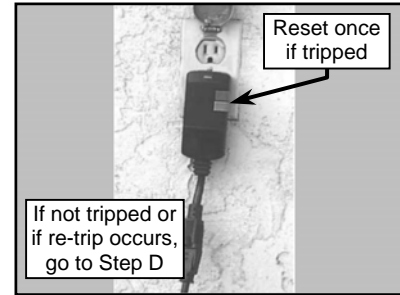
### 4. Blade Stops Turning:



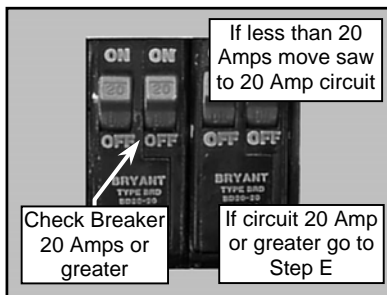
(A)  
Check the ON/OFF Switch is in the ON position



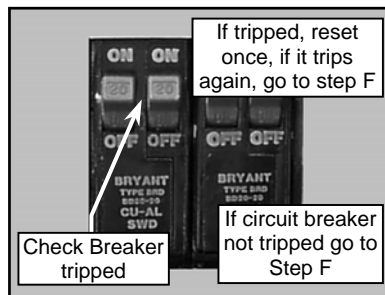
(B)  
Verify all plugs are fully connected



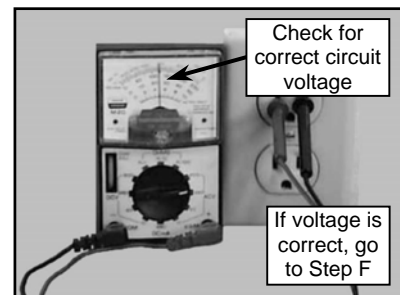
(C)  
Check to see if the Ground Fault Circuit Interrupter (GFCI) tripped



(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

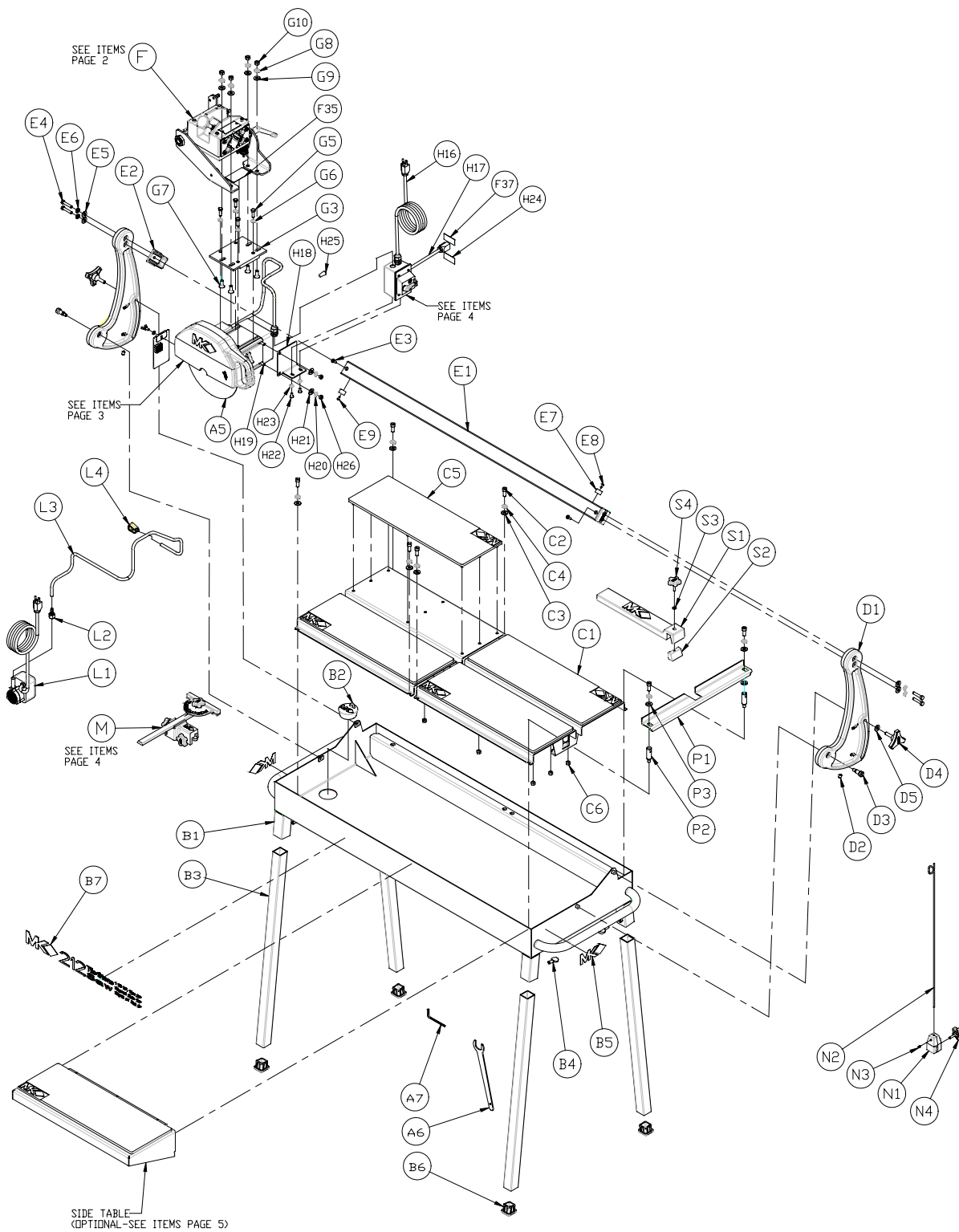
**Return to  
MK Diamond  
for Repair**

(G)  
Return to MK Diamond

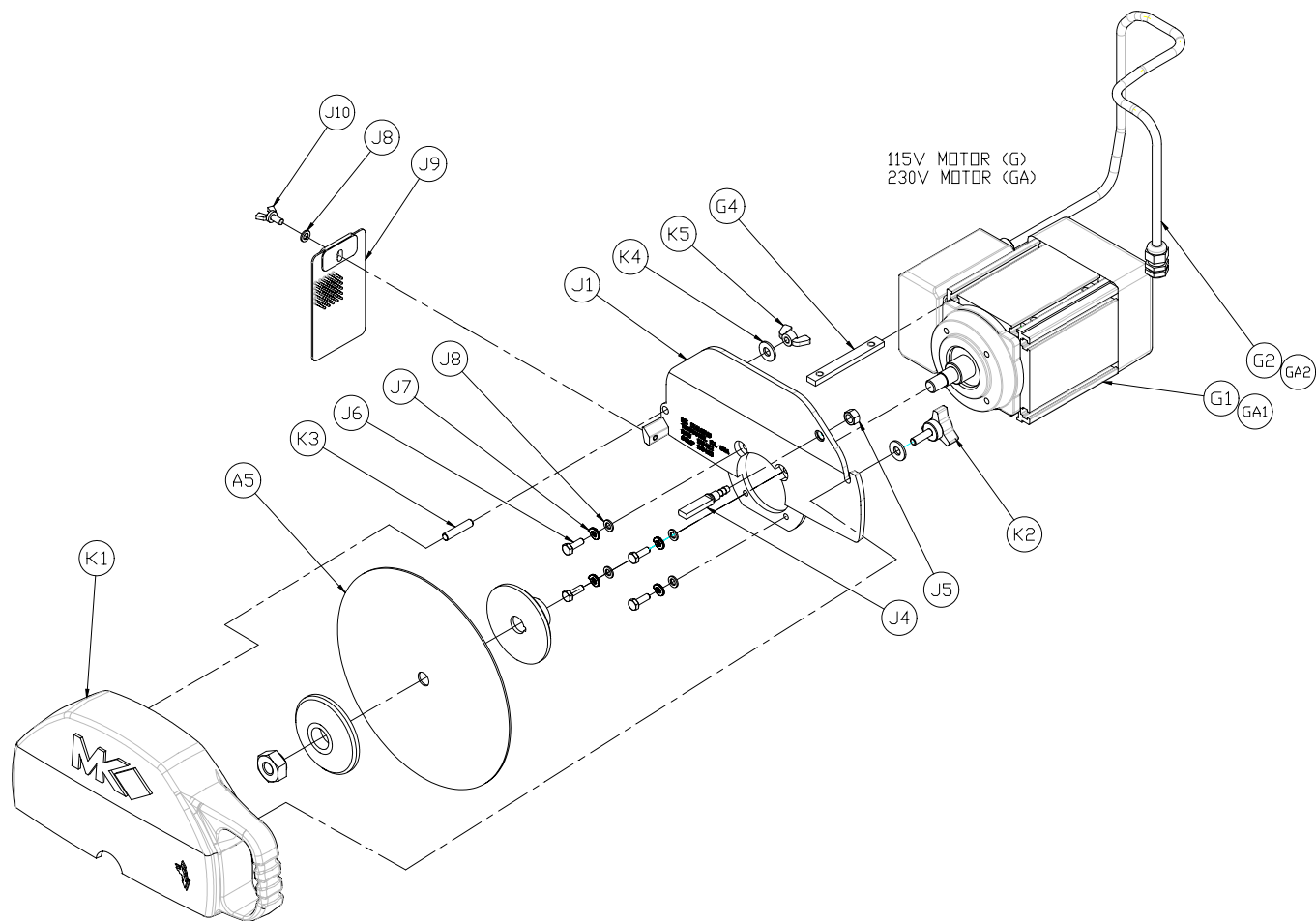


# EXPLODED VIEW AND PARTS LIST

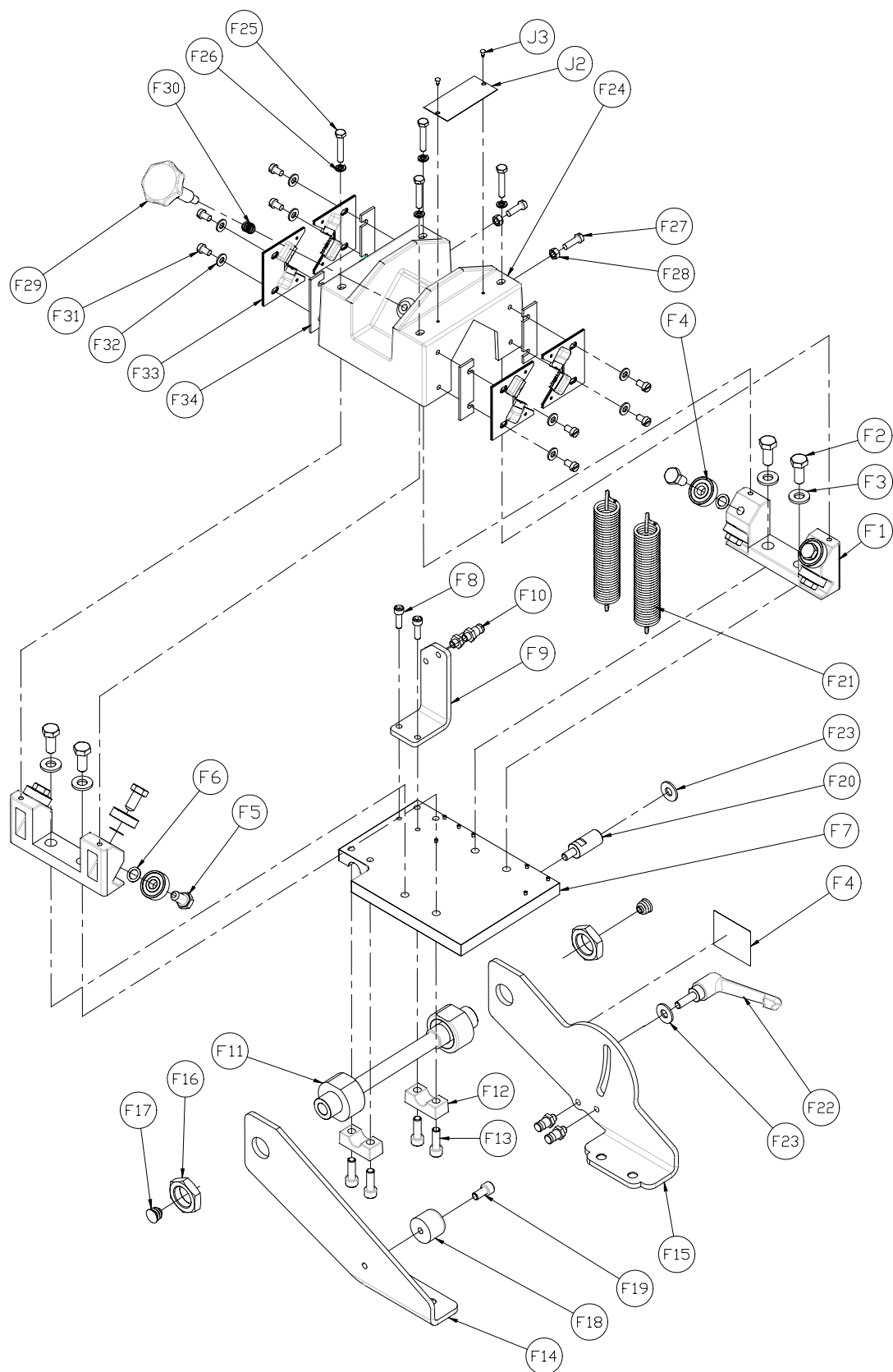
## EXPLODED VIEW:



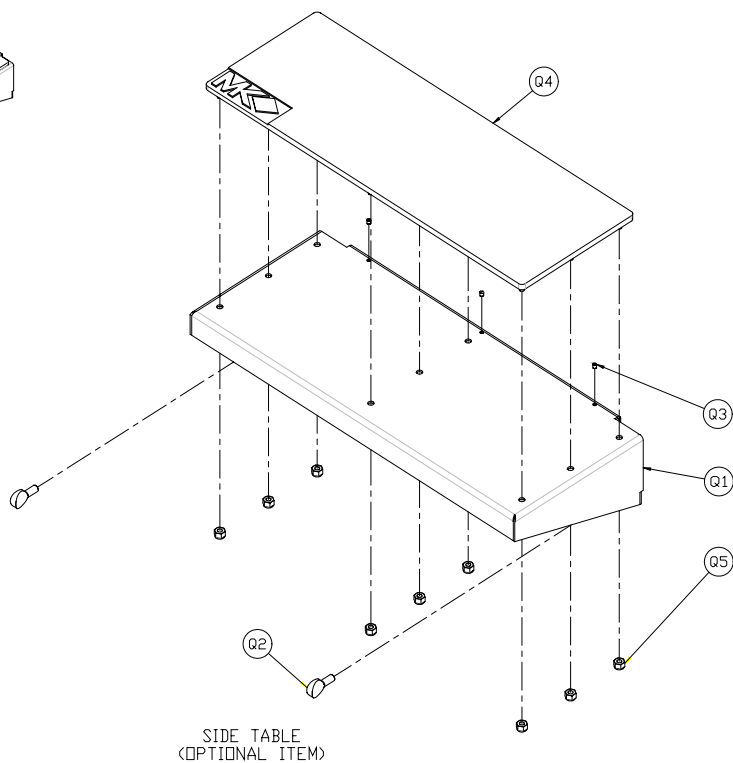
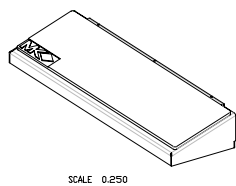
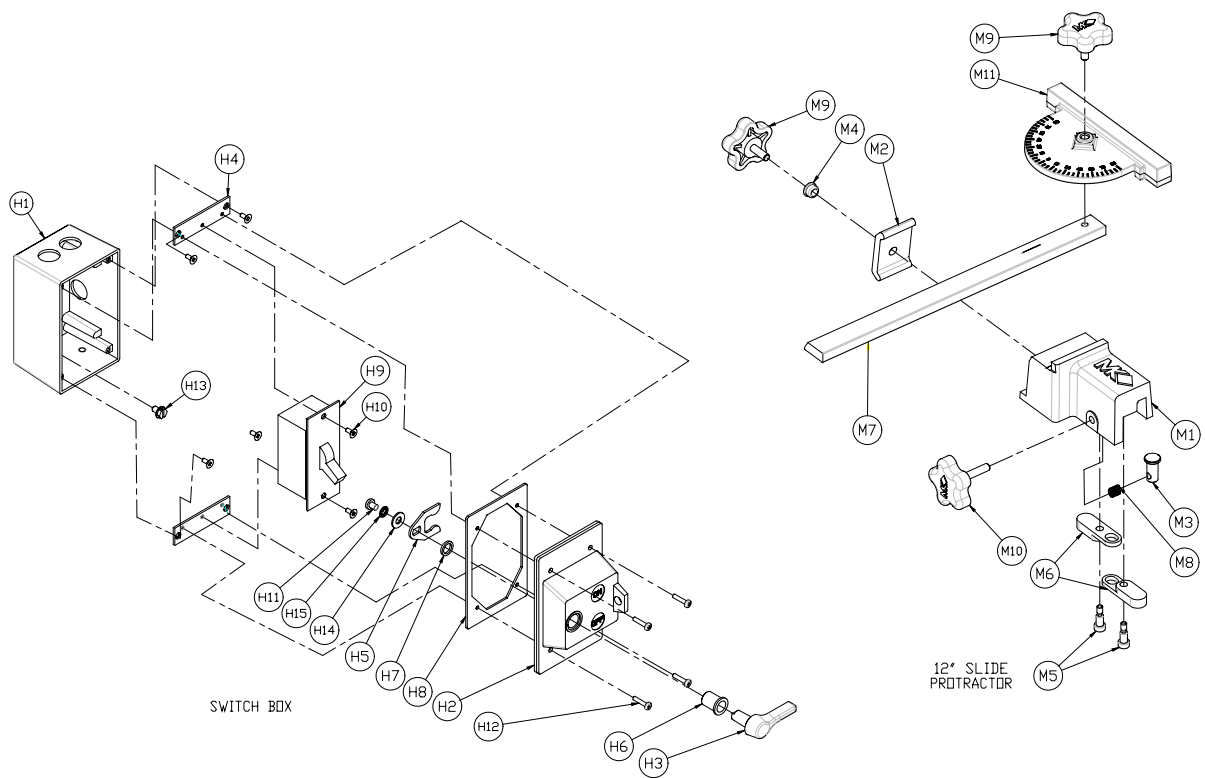
EXPLODED VIEW AND PARTS LIST



# EXPLODED VIEW AND PARTS LIST



# EXPLODED VIEW AND PARTS LIST



## EXPLODED VIEW AND PARTS LIST

### PARTS LIST:

Item	Description	Qty	MK P/N
A	Assembly, MK 212 Accessories	1	-
A1	Carton, MK 212 Shipping (not shown)	1	159860
A2	Pallet, Shipping (not shown)	1	159861
A3	Manual, Owner's (not shown)	1	159862
A5	Blade, MK-415 (10" x .08 x 5/8) 10"	1	155619
A6	Wrench, 30mm open end 30deg.	1	159978
A7	Wrench, 5mm Allen	1	159979
A8	Carton, #13 Shipping (8"x 10") (not shown)	1	153738
B	Assembly, Frame / Pan	-	n/a
B1	Frame / Pan Weldment	1	159419
B2	Plug, 2 1/2" Dia, Drain	1	159858
B3	Leg, Stand	4	155397
B4	Screw, 3/8-16 x 3/4 Thumb	4	155398
B5	Label, 1 3/4 x 5" MK Logo	1	154335
B6	Foot, 1 1/2" x 1 1/2" Rubber	4	159977
B7	Label, MK 212 Title	2	160669
C	Assembly, Table	-	n/a
C1	Table, MK 212	2	159420
C2	Screw, 3/8-16 x 1 Soc. Head Cap	8	156602
C3	Washer, 3/8 SAE Flat	8	150923
C4	Washer, 3/8 Split Lock	8	150925
C5	Mat, MK 212 Table	4	159421
C6	Nut, 1/4-20 Nylock	36	159857
D	Assembly, Pivot Post	-	n/a
D1	Post, Pivot	2	159418
D2	Screw, Self-Lock Set Cup PT 3/8 – 16 x 1/2"	2	159856
D3	Screw, 1/2 X 3/4 Socket Head Shoulder, w/ 3/8-16 X 3/8 Thread	2	156177
D4	Knob, 3/8-16 X 1.5 MK Adjustment	2	156770-02
D5	Washer, 3/8 SAE Flat	2	150923
E	Assembly, Rail	-	n/a
E1	Rail, MK 212	1	159641
E2	Block, Rail	2	159622
E3	Screw, Flat HD 1/4-20 x 3/4	4	154657
E4	Screw, 5/16-18 X 1 3/4 Hex Head Cap	4	150919
E5	Washer, 5/16 SAE Flat	4	151754
E6	Washer, 5/16 Split Lock	4	151747
E7	Stop, Rubber Bumper	2	159855
E8	Screw, 10-24 X 1/2 Pan Head Phillips Cap (Self Tapping)	1	153681
E9	Screw, 10-24 X 3/8 Pan Head Phillips Cap (Self Tapping)	1	151262
F	Assembly, MK 212 Cutting Head	1	159853
F1	Block, Rail Saw Bearing	2	160201
F2	Screw, M10 x 30mm Hex Head Cap	4	160202
F3	Washer, M10 Flat	4	160203
F4	Bearing, Deep Groove Ball (6200-2NSE-C3)	8	160097
F5	Screw, M10 x 20mm Hex Head Cap	8	160204

## EXPLODED VIEW AND PARTS LIST

F6	Shim, 3/8 x 5/8 x .008	8	160205
F7	Base, Bearing Support	1	160223
F8	Screw, M6 x 20mm Socket Head Cap	2	160219
F9	Bracket, Spring Support	1	160220
F10	Pin, Spring Support	4	160221
F11	Assembly, Cutting Head Pivot Axle	1	160224
F12	Clamp, Cutting Head Pivot Axle	2	160226
F13	Screw, M8 x 25mm Socket Head Cap	4	160227
F14	Arm, MK 212 Swing (Right)	1	160242
F15	Arm, MK 212 Swing (Left)	1	160238
F16	Nut, M24 Hex	2	160239
F18	Stop, Cutting Head Rubber Bumper	1	160228
F19	Screw, M8 x 16mm Socket Head Cap	1	160229
F20	Stand-off, Bearing Support Base	1	160218
F21	Spring, MK 212	2	160222
F22	Knob, MK 212 Adjustment	1	160184
F23	Washer, 5/16 SAE Flat	2	151754
F24	Cover, Rail Saw, Bearing	1	160207
F25	Screw, M6 x 30mm Hex Head Cap	4	160212
F26	Washer, M6 Split Lock	4	160213
F27	Screw, M6 x 20mm Pan Head Slotted	2	160208
F28	Nut, M6 Hex	2	160209
F29	Knob, Cutting Head Locking	1	160210
F30	Spring, Cutting Head Locking Knob	1	160211
F31	Screw, M6 x 10mm Pan Head Slotted	8	160214
F32	Washer, M6 Flat	8	160215
F33	Wiper, MK 212	4	160216
F35	Label, Warning, Read Owner's Manual, 1-3/4 X 3-3/8	1	155806
F36	Label, Caution, GFCI, 1 X 2 1/8	1	155678
F37	Label, MK Service Info. 2 1/8 X 1-13/16	1	155038
G	Assembly, 115V Motor	-	n/a
G1	Motor, 115 volt, 14 amp 60HZ 1 ½ hp SOGA	1	159643
G2	Cord, 14/3 SJTW, Motor	1	159907
G3	Mount, SOGA Motor	1	159642
G4	Key, SOGA Motor Mount	2	159859
G5	Screw, 5/16-18 X 1 Hex Head Cap	4	151743
G6	Washer, 5/16 Split Lock	4	151747
G7	Screw, 3/8-16 x 1 Flat Head Soc	4	154019
G8	Washer, 3/8 Split Lock	4	150925
G9	Washer, 3/8 SAE Flat	4	150923
G10	Nut, 3/8-16 Hex	4	101188
GA	Assembly, 230V Motor	-	n/a
GA1	Motor, 230 volt, 14 amp 50HZ 1 ½ hp SOGA	1	159971
GA2	Cord, 3X1.0mm, HAR, PVC, Cable Motor	1	159987
GA3	Mount, SOGA Motor	1	159642
GA4	Key, SOGA Motor Mount	2	159859
GA5	Screw, 5/16-18 X 1 Hex Head Cap	4	151743
GA6	Washer, 5/16 Split Lock	4	151747
GA7	Screw, 3/8-16 x 1 Flat Head Soc	4	154019
GA8	Washer, 3/8 Split Lock	4	150925
GA9	Washer, 3/8 SAE Flat	4	150923
GA10	Nut, 3/8-16 Hex	4	101188

## EXPLODED VIEW AND PARTS LIST

H	Assembly, MK 212 Switch	-	160687
H1	Box, Top / Side Entry, 30A Switch	1	159865
H2	Cover, 30A Switch Box	1	159539
H3	Lever, Actuator, 30A Switch Box	1	159540
H4	Plate, Mounting, 30A Switch	2	159489
H5	Lever, On/Off, 30A Switch Box	1	159490
H6	Bushing, Nylon, 30A Switch Box	1	158799
H7	Seal, Urethane, 30A Switch Box	1	159492
H8	Gasket, 30A Switch Box	1	159491
H9	Switch, 30A/2HP/120V/DPST	1	159488
H10	Screw, 6-32 X 5/16 Flat Head Phillips Machine	6	159493
H11	Screw, 10-24 X 5/16 Pan Head Phillips Machine	1	159494
H12	Screw, 6-32 X 5/8 Pan Head Phillips Machine	4	157393
H13	Screw, 10-24 X 5/16 Slotted Hex Washer Head Grounding	1	159597
H14	Washer, #10 SAE Flat	1	154369
H15	Washer, #10 Lock, Internal Teeth	1	158336
H16	Cord, 14/3 SJTW X 5-15P Power	1	159908
H17	Cord, 18/3 SJTW X 5-15R Pump	1	159909
H18	Bracket, MK 212 Switch	1	159864
H19	Screw, 5/16-18 x 3/4 Hex Head Cap	2	151369
H20	Washer, 5/16 Split Lock	2	151747
H21	Washer, 5/16 Flat SAE	2	151754
H22	Screw, 1/4-20 x 1/2 Pan Head Phillips Cap	2	155452
H23	Washer, 1/4 Split Lock	2	152591
H24	Label, Caution, .6 Amp Max. 1 X 2-1/8	1	154822
H25	Wire Nut, Yellow	1	159968
H26	Nut, 5/16-18 Hex	2	101196
J	Assembly, Inner Blade Guard	-	-
J1	Guard, MK 212 Inner Blade	1	159423
J2	Plate, Serial Number	1	157500
J3	#7 X 5/16 Drive Screw	2	157849
J4	Manifold, MK 212 Water	1	159854
J5	Nut, 3/8-16 Jam	1	159863
J6	Screw, 1/4-20 x 3/4 Hex Head Cap	4	151267
J7	Washer, 1/4 Split Lock	4	152591
J8	Washer, 1/4 SAE Flat	5	151915
J9	Guard, Splash	1	160310
J10	Screw, 1/4 - 20 Wing	1	151888
K	Assembly, Blade Guard	-	-
K1	Guard, MK 212 Blade	1	159416
K2	Knob, Davies	1	151681
K3	Stud, 5/16-18 x 1 1/2	1	153680
K4	Washer, 5/16 Flat SAE	2	151754
K5	Wing nut, 5/16-18 Nylock	1	151746
L	Assembly, Water Pump	-	-
L1	Pump, Water, G-150A	1	151271
L2	Fitting, Plastic, 1/4 FNPT X 1/4 BARB	1	128397
L3	Hose, Vinyl, 1/4 ID	5'	132951
L4	Clamp, Flow, 1/4-1/2	1	154394

## EXPLODED VIEW AND PARTS LIST

LA	Assembly, 230V Water Pump	-	-
LA1	Pump, G300CV 230V 50/60HZ,	1	151714
LA2	Fitting, Plastic, 1/4 FNPT X 1/4 BARB	1	128397
LA3	Hose, Vinyl, 1/4 ID	5'	132951
LA4	Clamp, Flow, 1/4-1/2	1	154394
M	Assembly, MK 212, 12" Slide Protractor	1	159572
M1	Holder, MK 212 Protractor	1	159580
M2	Clamp, MK 212 Sliding Guide	1	159574
M3	Stud, MK 212 Threaded Holder, Clamp	1	159576
M4	Bushing, MK 212 Swivel	1	159577
M5	Screw, 10-24 x 3/8 Shoulder	2	159879
M6	Clamp, MK 212 Holder	2	159581
M7	Guide, MK 212, 12" Sliding	1	159537
M8	Spring, 5/16 x .028 x 3/8 Holding Clamp	1	159533
M9	Knob, 1/4-20 Rubber	2	159428-1
M10	Knob, 1/4-20 Rubber	1	159428-2
M11	Guide, 180° Index	1	159443
N	Assembly, Antenna	1	159980
N1	Holder, Antenna	1	159981
N2	Antenna	1	159983
N3	Screw, 1/4-20 X 5/16 Socket Head Set	1	154226
N4	Knob, 1/4-20 Rubber	1	159428-2
P	Assembly, Back Stop	1	160309
P1	Stop, Back	1	160112
P2	Stand off, Back Stop	2	160117
P3	Washer, 3/8 SAE Flat	2	150923
S	Assembly, Rip Guide	1	160288
S1	Guide, 15 inch Rip	1	160286
S2	Plate, 15 inch Rip Guide Pressure	1	160287
S3	Washer, 1/4 SAE Flat	1	151915
S4	Knob, 1/4-20 Rubber	1	159428-2
Optional Assemblies:			
Q	Assembly, Side Table	1	159870
Q1	Table, Side	1	159984
Q2	Screw, 3/8-16 x 3/4 Thumb	1	155398
Q3	Screw, Set Cup PT 10 – 24 x 1/4"	3	157522
Q4	Mat, MK 212 Table	1	159421
Q5	Nut, 1/4-20 Nylock	9	159857
R	Assembly, Wheel	1	160172
R1	Bracket, MK 212 Wheel	2	159985
R2	Wheel, 8"	2	155986
R3	Washer, SAE Flat	2	153523
R4	Pin, Cotter 1/8 x 1 1/2	2	153861
R5	Shim, .045THK .75ID 1.25OD	1	153699

## 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






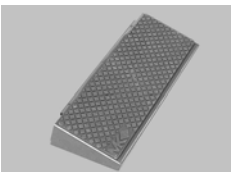

In the case of DRY cutting, the overwhelming popularity and quantity of hand-held saws and the flexible nature of MK Diamond blades to professionally handle most ceramic, masonry, stone and concrete materials, make the DRY cutting blade a very attractive tool. When using a DRY blade, the user must be 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.	Various	MK-275, Marble Profile Wheel	
2.	155619	MK-415, 10" Diamond Blade	
3.	152792	Dressing Stone	
4.	152610	Ground Fault Circuit Interrupter	
5.	See Catalog	Protractor	
6.	159870	Side Table	
7.	153567	Foot Switch	

## **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-212, 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 too you. For technical questions, call – **800 474-5594**.



# MK-212 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 contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead, from lead-based paints
- Crystalline silica, from bricks and cement and other masonry products 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**