

www.mkdiamond.com

# MK-101-24 OWNERS MANUAL & OPERATING INSTRUCTIONS



Revision 101	10.2011
Manual Part No. 169689	

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



## INTRODUCTION

Congratulations on your purchase of a MK-101-24 Tile Saw. We are certain that you will be pleased with your purchase. MK Diamond takes pride in producing the finest construction power tools and diamond blades in the industry.

Operated correctly, your MK-101-24 should provide you with years of service. In order to help you, we have included this manual. This owners manual contains information necessary to operate and maintain your Tile Saw safely and correctly. Please take a few minutes to familiarize yourself with the saw by reading and reviewing this manual.

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

Regards,

MK Diamond

## NOTE THIS INFORMATION FOR FUTURE USE:

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

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

# **TABLE OF CONTENTS**

SAFETY	
Safety Messages	4
General Safety Precautions	4-6
California Proposition 65 Message	6
Hazard Symbols	7
Electrical Requirements	8-9
Safety Label Locations	10
Product Specifications	11
Troduct opcomodicate	• •
UNPACKING, TRANSPORT and ASSEMBLY	
Unpacking	12
Contents	12
Transport	12
Stand	13
Assembly	14-16
Assembly	14-10
SETUP, STARTUP, ADJUSTMENT, OPERATION and SHUTDOWN	
Setup	17-19
Operation	20-23
	20-23 24-25
Cutting Head Adjustment	
Cleanup	26
MAINTENANCE AND TROUBLESHOOTING	
	07.00
Maintenance Translate a triangle	27-32
Troubleshooting	33-38
EVELOPED VIEW AND DADTE LIST	
EXPLODED VIEW AND PARTS LIST	40.40
Exploded View	40-42
Parts List	43-45
ACCESSORIES ORDERING and RETURN INSTRUCTIONS	
Theory of Diamond Blade	47
Accessories	48
	_
Ordering Information	49
Return Material Policy	49
Packaging Instructions	49
Authorized Service Centers	49

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**

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



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



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



CAUTION You CAN be INJURED if you do not follow directions. It may also be used to alert

against unsafe practices.

## **DAMAGE PREVENTION AND INFORMATION MESSAGES:**

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

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

## GENERAL SAFETY PRECAUTIONS AND HAZARD SYMBOLS

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

## **SAFETY PRECAUTIONS**



**ALWAYS** read this Owner's Manual before operating the machine.



**ALWAYS** keep the Blade Guard in place.



#### 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 PLACES

**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 workshop 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 9 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.



## **USE PROPER APPAREL**

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



**ALWAYS** wear approved eye protection.



**ALWAYS** wear approved respiratory protection.



## **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.



**ALWAYS** place the power ON/OFF switch in the **OFF** position when the saw is not in use.



#### **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 part. A guard or any other part that is damaged should be carefully checked to determine if 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 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.

## **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.gov/dsg/topics/silicacrystalline/index.html

http://www.cdc.gov/niosh/consilic.html

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

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

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

## HAZARD SYMBOLS



## **ELECTRICAL SHOCK**

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



## **ROTATING PARTS**

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



#### **OVER SPEED**

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



## DO NOT EXPOSE TO RAIN

**DO NOT** expose to rain or use in damp locations.



# 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).



# WARNING

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

## **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.

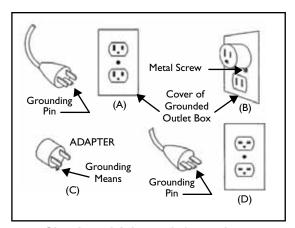
- Do not modify the plug provided if it will not fit the outlet; have the proper outlet installed by a
  qualified electrician
- Improper connections of the equipment-grounding conductor can result in a risk of electric shock.
  The equipment-grounding conductor is the insulated conductor that has an 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. The tool has a grounding plug that looks like the plug illustrated in Sketch A. 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.



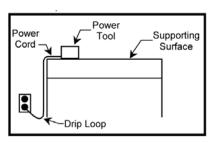
**Circuit and Adapter Information** 



## **WARNING**

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

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



**Drip Loop Information** 

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 disconnecting the product from the extension cord.



## **WARNING**



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 under sized 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 customer's expense. There will be no warranty claim.

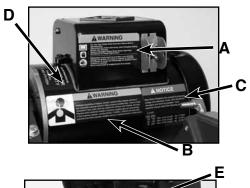
To choose the proper extension cord,

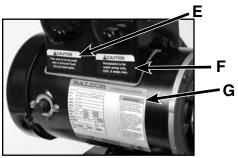
- Locate the length of extension cord needed in the table below.
- Once the proper length is found, move down the column to obtain the correct AWG size required for that length of extension cord.

EXTENSION CORD MINIMUM GAGE FOR LENGTH			
VOLTS	TOTAL LENGTH OF CORD IN FEET		
	25 ft. AWG	50 ft. AWG	75-100 ft. AWG
115v	12	10	8
230v	14	14	12

## **SAFETY LABEL LOCATIONS**

Safety 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.











WARNING



Label B





125V, .6 amps max.

**A**CAUTION

Label F

Tile Master Label Sheet Part#166012

Decal/Label	Location	Description
Α	Motor-Side	Warning - Read and Follow Operating Instructions
В	Motor - Front	Warning - Silica Warning
С	Motor - Side	Notice - Receptacle is for Water Pump Only
D	Motor - Back	Service/ Warranty
Е	Motor - Side	Caution - Use with GFCI only
F	Motor - Side	Caution - Receptacle for water pump
G	Motor - Side	Motor Specifications
Н	Water Pump	Pump Specifications

## **TILE SAW SPECIFIC WARNINGS**



# **A** WARNING

Wear eye protection.

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

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

Replace damaged cutting blade before operating.

# **PRODUCT SPECIFICATIONS**

The MK-101-24 is a versatile Tile Saw. Operated and used according to this manual, the unit will provide years of dependable service.

The MK-101-24 is engineered as a table top or stand mounted wet tile saw. The saw include a powerful 120V totally enclosed capacitor start motor with a thermal protective overload.

Specifications for the MK-101-24		
Voltage	120V	
Overall Amperage	14.5	
Frequency	60Hz	
Blade RPM	3400	
Horse Power	1-1/2 Hp	
Weight	98lbs	
Blade Capacity	10" (254 mm)	
Arbor Size	5/8" (16 mm)	
Depth of Cut (10" Blade)	3" (76 mm)	
Length of Cut	24"	
Diagonally Cuts	18" Tile	
LxWxH (inches)	42" x 21-1/2" x 23"	
LxWxH (mm)	1,014 x 546 x 584	
Part #	169612	

## **UNPACKING**

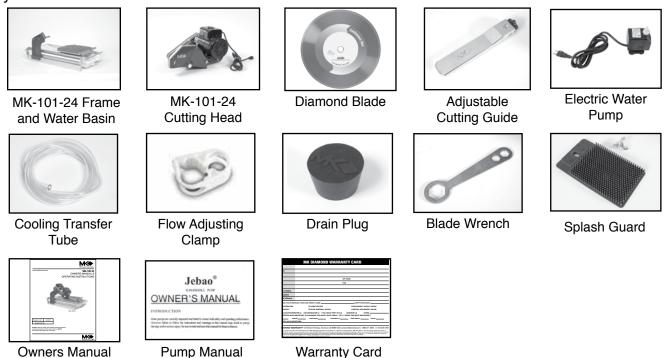
Your MK-101-24 has been shipped from the factory thoroughly inspected. Only minimal assembly is required.



CAUTION

Use proper lifting techniques when lifting the MK-101-24.

In your container, you will find one (1) MK-101-24 frame and water basin, one (1) MK-101-24 Cutting Head, one (1) 10-inch wet cutting continuous rim diamond blade, one (1) adjustable cutting guide, one (1) electric water pump, one (1) blade wrench, one (1) splash guard, one (1) cooling transfer tube, one (1) flow adjusting clamp, one (1) drain plug, one (1) owners manual, one (1) pump manual and one (1) warranty card.



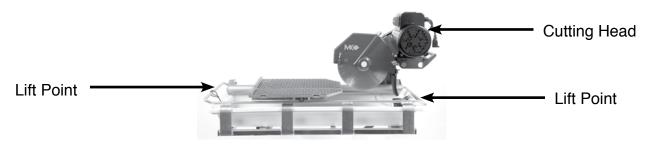
## **TRANSPORT**



CAUTION

- 1. The MK-101-24 weighs approximately ninety-eight (98) pounds.
- 2. Never transport the MK-101-24 with water in the Water Basin.

The MK-101-24 is designed with a rigid frame and removable Cutting Head. Two people are required to transport the MK-101-24 with the Cutting Head installed. Remove the Cutting Head if one person is transporting the saw (see Cutting Head Installation and Removal in the following section).



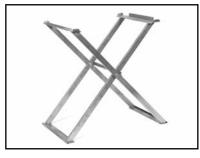
# **STAND (Optional)**



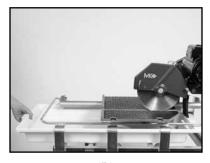
# CAUTION

The MK-101-24 weighs approximately ninety-eight (98) pounds; follow the guidelines for transport in the TRANSPORT section, when placing it on the stand.

If using the MK Diamond Stand, Part # 168244, follow these steps.



(A)
Open the stand and place on flat surface



(B) Remove Water Basin, place saw on stand



(C) Ensure saw frame is positioned properly



(D) Reinstall the Water Basin

MK-101-24 ASSEMBLY

## **Cutting Head Installation**

Follow the assembly instructions to prepare your MK-101-24 for operation.

**NOTE:** If the cutting head is installed, go to the next step.



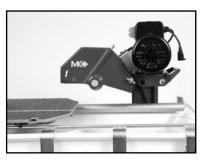
(A)
Ensure Cutting Head Stop is in upward position.



(B)
Align Cutting Head rear Pivot
Hole to the Post Pivot Shaft
and slide onto shaft.



(C)
Install the Cutting Head onto the
Post Pivot Shaft and install the
Adjusting Knob.



For maximum cutting length, the Cutting Head should be in the front pivot hole and the Post should be in the rear post retaining hole.

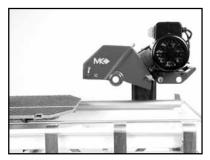
**NOTE:** For small tiles (6" tile or smaller) the Cutting Head should be in the rear pivot hole and the Post should be in the forward post retaining hole. For large tiles and maximum cutting length, the Cutting Head should be in the front pivot hole and the Post should be in the rear post retaining hole.

**NOTE:** Move Cutting Head Stop in upward position when using rear pivot hole and in the down position when using front pivot hole, refer to page 24.

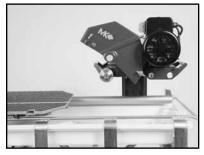
MK-101-24 ASSEMBLY

## **Diamond Blade Installation**

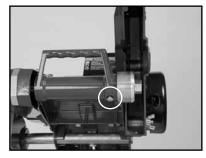
**NOTE:** When installing the Retaining Nut, do not "cross-thread" and DO NOT over tighten.



(A)
Position Movable Cutting Table to the front of the saw.



(B)
Raise the Blade Guard by loosening the wingnut.



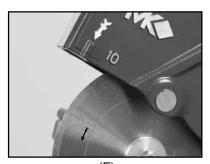
(C)
Locate the Shaft Lock push
button on the underside
of the Cutting Head.



(D)
Depress and hold the Shaft
Lock pushbutton and remove
Retaining Nut and Outer Flange
using the Blade Wrench.



(E) Install Diamond Blade onto Blade Shaft.



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



(G)
Install Retaining Nut and Outer
Flange, depress and hold the
Shaft Lock pushbutton
and tighten Retaining Nut.

MK-101-24 ASSEMBLY

## **Adjustable Cutting Guide Installation**

**NOTE:** The Adjustable Cutting Guide can be used on either side of the Diamond Blade.



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

## **Splash Guard Installation**



(A)
Install the retaining thumbscrew through the washer and Splash Guard then align to the hole found on back of the Blade Guard.



(B)
Install the Splash Guard onto the Blade Guard.

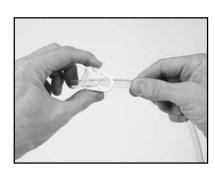
# **Water Pump Preparation**



(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.

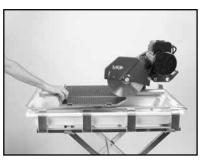
MK-101-24 SETUP

## **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.



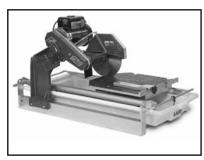
(B)
Verify the Movable Cutting
Table moves freely.



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



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



(E)
Inspect the MK-101-24
for damage – ensure the cord
is free of cracks or cuts.

# **Connecting the Water Pump**



- 1. To prevent the possibility electrical shock, the MK-101-24 MUST be deenergized when connecting the Water Pump.
- 2. To prevent the possibility of electrical shock, use only MK Diamond qualified replacement parts.

NOTE:

To prevent pump damage, the Water Pump must be disconnected during dry cutting operations.



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



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

MK-101-24 SETUP

# **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.

## **External Water Source**

This is the preferred method of cooling.



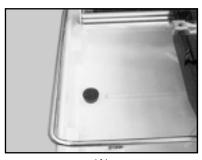
(A)
Remove the Drain Plug. Place
empty container under hole for
water drainage.



(B)
Place the Water Pump in an external container and fill until water completely covers the Water Pump suction.

## Re-circulation

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



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



(B)
Place Water Pump in Water Pan.
Fill the Water Basin until water
completely covers the
Water Pump suction.

## **SETUP FOR OPERATION**



- Before powering or starting, check for damage that could prevent this
  equipment from proper operation or performing it's intended function.
  Check for binding and proper alignment of moving parts. Check for damaged, broken, or missing parts.
- 2. Verify the On/Off switch is in the OFF position.
- 3. Before connecting the MK-101-24 to a power supply, be sure the voltage, cycle and phase of the job site power source meet these requirements.

MK-101-24 SETUP

VOLTAGE:	120V
CYCLE:	60hz
PHASE:	1-phase

4. If using an extension power cord, make sure, the length and wire gauge correspond to the requirements listed in on page 9. An extension power cord that is too small in wire gauge (diameter), or too long in length, will cause the motor to overheat and could cause premature failure.

- 5. Use an approved Ground Fault Circuit Interrupter (GFCI)
- 6. 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.

## PORTABLE GENERATOR

If using a portable generator, ensure the generator meets the following minimum requirements: 5 KW 120/240 volts 41.7/20.8 amps Single Phase

## **ELECTRIC RECEPTACLE**

**NOTE:** A GFCI wall socket is the preferred protective device.



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



(B) Plug MK-100 into the GFCI.



(C)
Plug the GFCI into the power source.

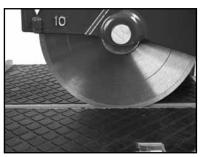
## **Set Cutting Depth**



When loosing the Cutting Head Adjusting Knob, the Cutting Head will pivot down unless held.



(A)
Loosen Cutting Head
Adjusting Knob.



(B)
Set cutting depth approximately
1/4 to 1/2 inch below the
surface of the Movable
Cutting Table.



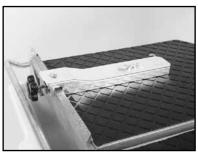
(C)
Tighten the Adjusting Knob.

MK-101-24 **OPERATION** 

# **Cutting Straight Edges**



# A CAUTION



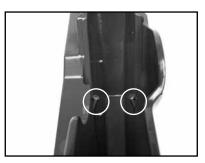
(A) Position the Adjustable Cutting Guide to desired cut length.



(B) Tighten the retaining thumbscrew.



(C)
Place the tile against the
Ruler/Stop and Cutting Guide. Turn the motor ON.



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



(E) Perform the cut. Turn the motor OFF when work is complete.

**OPERATION** MK-101-24

## **Diagonal Cutting (Optional)**

To cut diagonal, the Dual 45° Flat Angle Guide (MK Diamond Part No. 134577-MK) NOTE:

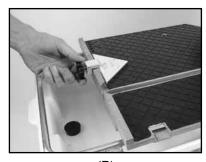
should be used.



**A** CAUTION



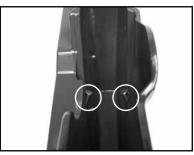
(A) Remove the Adjustable Cutting Guide.



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



(C) Position the tile against the Guide and Ruler/Stop. Turn the motor on.



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



(E) Perform the cut. Turn the motor OFF when work is complete.

MK-101-24 **OPERATION** 

# 45° Miter Cutting (Optional)

NOTE: To cut 45° Miters, the 45° Bullnose Miter Guide (MK Diamond Part No. 153201-MK)

should be used.



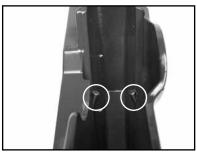
**CAUTION** 



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



(B) Position the tile on the 45° Bullnose Miter Guide and the Ruler/Stop. Turn the motor ON.



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



Perform the cut. Turn the motor OFF when work is complete.

MK-101-24 **OPERATION** 

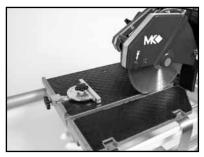
# Off-angle Cutting (Optional)

To cut angles other than 45° angles or Miters, a 90° Protractor (MK Diamond Part No. NOTE:

134569-MK) should be used.



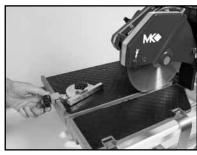
**A** CAUTION



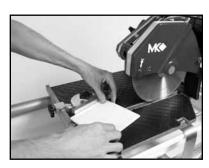
(A) Place the 90° Protractor on the Ruler/Stop.



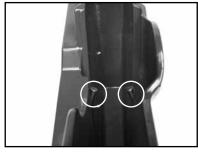
(B) Set the desired angle and tighten the thumbscrew.



(C) Position the 90° Protractor and tighten the retaining thumbscrew.



(D) Position the tile against the  $90^{\circ}$ Protractor and the Ruler/Stop. Turn the motor ON.



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



Perform the cut. Turn the motor OFF when work is complete.

MK-101-24 ADJUSTMENT

## **Adjusting the Cutting Head**

**NOTE:** For larger tiles and maximum cutting length, the cutting head should be in the front pivot hole.



CAUTION

The Cutting Head is heavy! Care must be used when changing the position of the Cutting Head.



(A)
Ensure the ON/OFF Switch
is in the OFF position. Unplug the GFCI from the power
source.



(B) Remove the Blade. Remove Adjusting Knob.



(C)
Remove the Cutting Head from the rear pivot hole.



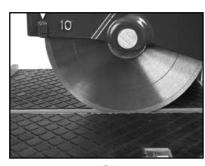
(D)
Install the Cutting Head onto the front pivot hole.



(E) Remove the Cutting Head Stop Bolt. Rotate Cutting Head Stop to down position and re-tighten Cutting Head Stop Bolt.



(F) Install the Adjusting Knob.



(G)
Set cutting depth approximately
1/4 to 1/2 inch below the
surface of the Movable
Cutting Table.

NOTE:

For small tiles (6" tile or smaller) the Cutting Head should be in the rear pivot hole and the Post should be in the forward post retaining hole. For large tiles and maximum cutting length, the Cutting Head should be in the front pivot hole and the Post should be in the rear post retaining hole.

NOTE:

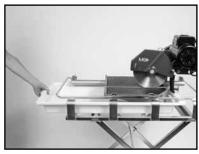
Move Cutting Head Stop in upward position when using rear pivot hole and in the down position when using front pivot hole. MK-101-24 ADJUSTMENT

# **Adjusting the Post for Maximum Cutting Length**



# CAUTION

The Cutting Head and Post are heavy! Use care when changing the position of the Cutting Head.



(A) Remove Water Basin and Blade.



(B) Remove the Cutting Head (See Adjusting the Cutting Head.



(C) Loosen the Post Support and retaining bolts.



# CAUTION

Hold the Post when removing the Post Support Plate.



(D) Remove the Post Support and Retaining Bolts.



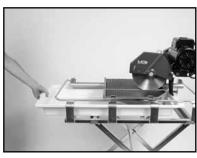
(E)
Relocate the Post to the rear
Post retaining holes.



(F)
Install and tighten the Post
Support and retaining bolts.



(G)
Install the Cutting Head (See Adjusting the Cutting Head.



(H)
Install the Water Basin and
Blade.

MK-101-24 CLEANUP

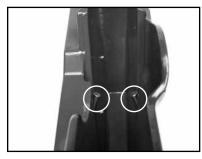
## **CLEANUP**

## **NOTES**

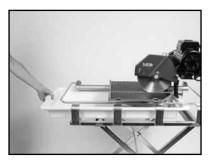
- 1. If an external water source was used, steps A through C may be skipped.
- 2. Dispose of waste water in accordance with applicable Federal, State and Local laws.



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



(B)
Run the MK-101-24 until clear
water is seen at the blade
cooling ports
(Approx. 1 minute).

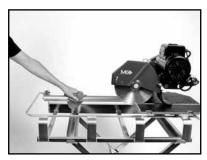


(C) Remove the Water Basin from the MK-101-24.



# CAUTION

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



(D)
Clean the Movable Cutting
Table Guide Bar.



(E) Clean the Movable Cutting Table Roller Wheel Frame Support.



(F) Clean the remainder of the MK-100



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

## **MAINTENANCE**

Perform the following after initial purchase and operation of the MK-101-24.



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

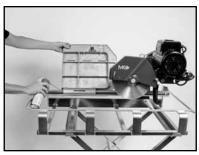
# **Maintenance Following Use**

To extend the life of the MK-101-24, 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.

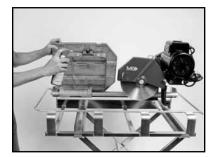


**A** CAUTION

Ensure the saw is off and disconnected before performing any maintenance.



Lubricate the Guide Bar.



(B) Lubricate the Roller Wheel Assembly.

# **Monthly Maintenance**

The following maintenance should be performed Monthly.



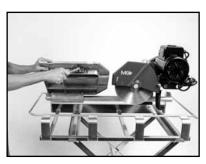
(A) Remove the Diamond Blade.



(B) Lubricate the Outer Flange and Retaining-nut.



(C) Lubricate the Arbor Shaft.



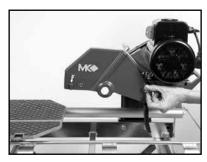
(D)
Verify the Roller Wheel
Assembly is tight and in
good condition.



(E) Verify all motor mounting Bolts are tight.



(F) Verify the Motor Adjustment Strap is tight.



(G) Remove the Blade Guard.



(H) Lubricate the Blade Guard Pivot Shaft.



(I) Remove the Cutting Head (See Adjusting the Cutting Head).



(J) Lubricate the Cutting Head Adjustment Knob.



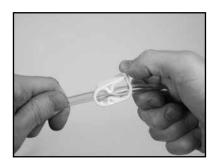
(K)
Lubricate the Cutting Head
Adjustment Knob retaining
holes.



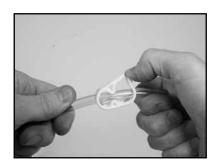
(L) Lubricate the Cutting Head Pivot Shaft.

# 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.

# **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 (MK Diamond Part No 152792) and by following the steps below.



(A)
Setup the MK100 for operation
(See Setup, Adjustment and Operation).



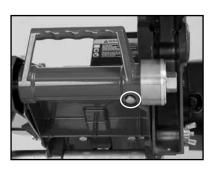
(B) Set the Adjustable Cutting Guide to cut a 1/16-strip.



(C)
Position the Dressing Stick. Cut
2 or 3 strips from the dressing
stick to dress the Blade.

# **Diamond Blade Change-out**

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



(A)
Locate the Shaft Lock push
button on the underside of the
Cutting Head



(B)
Remove Retaining Nut and Outer
Flange, depress and hold the Shaft Lock
hold button and loosen



(C) Remove the Diamond Blade



(D) Install the new Diamond Blade onto Blade Shaft. Install Outer Flange and Retaining Nut



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



(F)
Depress and hold the Shaft Lock button and tighten Retaining Nut

## Micro-V Belt Inspection, Adjustment and Replacement

The MK-101-24 is designed with power transmission Micro-V Belt. In order to ensure the MK-101-24 operates a peak efficiency, the Micro-V Belt should be inspected monthly, and changed if the Micro-V Belt shows damage and/or excessive wear.

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



(A) Remove the Diamond Blade



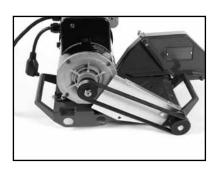
(B)
Remove the Cutting Head (See
Adjusting the Cutting Head)



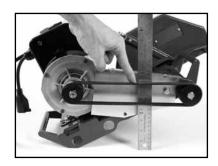
(C) Remove the two top Belt Guard Bolts



(D) Remove Belt Guard bottom bolt



(E)
Inspect the Micro-V Belt for cracks, fraying, separation and wear. Go to step H if replacement is required



(F)
Check belt for proper tension. If tension correct, go to step Q (proper tension should be 1/8-inch deflection)



(G)
Loosen the two front motor
mounting bolts. If re-tensioning
only, go to step N



(H) Loosen the two back motor mounting bolts



(I) Loosen the Motor Adjustment Strap



(J)
Push the motor toward the front
of the Cutting Head to loosen
the Micro-V Belt



(K) Remove the Micro-V Belt



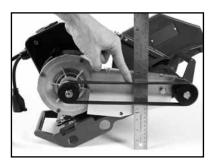
(L) Install the new Micro-V Belt (MK Diamond Part No. 158194)



(M) Verify the Micro-V Belt is seated in the grooves of both pulleys



(N) Tighten the Motor Adjustment Strap to remove slack



(O)
Check Micro-V Belt tension (proper tension 1/8-inch) Repeat steps N and O until proper Micro-V Belt tension is achieved



(P)
Tighten the four motor mounting bolts



(Q) Install the Belt Guard

# Blade will not cut properly



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



(B) Check for proper blade rotation.

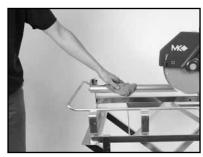


(C) Ensure the Blade Core is not bent.



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

# **Movable Cutting Table Does Not Move Correctly**

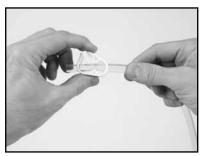


(A) Check the Guide Bar and Frame for cleanliness – clean if dirty.



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

## **Cooling Flow**



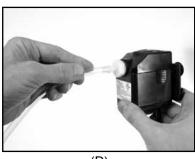
(A)
Verify the cooling flow
Adjusting Clamp is open. If flow
exists, go to Step B.



(B)
Remove the Cooling Transfer
Tube from the Blade Guard
inlet. Go to Step C.



(C)
Place Pump into a bucket of water and check flow. If flow exists, go to Step D.



(D)
Remove the Cooling Transfer
Tube and check for flow. If flow
exists, refer to water pump
manual.



(E) Remove the Blade Guard Intake Fitting. Go to Step F.



(F) Remove the Cooling Channel cover screws. Go to step G.



(G)
Rod the Cooling Channels
and then recheck flow.

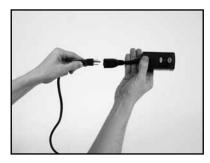
## NOTE:

"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.

# **Blade Stops Turning**



(A)
Allow motor to cool and depress motor Overload Reset
Switch



(B)
Verify all plugs fully installed.
Check Ground Fault Circuit
Interrupter

NOTE: Verify circuit breaker at least 20 amps - if not, move to 20-amp circuit.

Verify circuit breaker not tripped. If tripped, reset once.

Check power source voltage is 120V - if not 120V, move to another circuit.

## **Blade Alignment Procedure**

The Movable Cutting Table of the MK-101-24 may become misaligned with the Cutting Head of the Tile Saw over time. Should misalignment occur, perform the following steps to realign the Tile Saw.

NOTE:

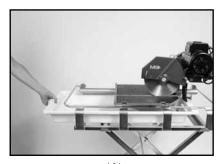
If alignment problems are the result of a warped blade, a bent frame or bent support arm, or, if alignment is off by more than 1/8-inch, contact the MK Diamond Service Center – (800) 474-5594

## **Tools Needed**



(A)
Combination square (square)
12-inch or greater. 1/2-inch
Wrench or MK Triple Hole Box
Wrench and MK Open
End Wrench.

# Preparation



(A) Remove Water Pan.



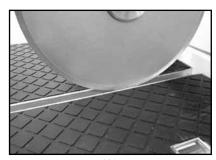
(B) Inspect Diamond Blade for damage.



(C) Loosen front and rear Guide Bar Retaining Bolts.

## **Horizontal Rough Alignment**

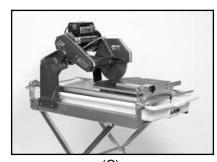
The Horizontal alignment will ensure that straight cuts (or Rip Cuts) are made.



(A)
Position Cutting Head
to normal Cut Depth.



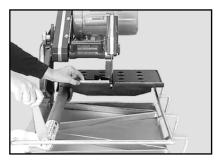
(B)
Move Guide Bar until Blade is centered in Cutting Groove. Tighten rear guide bar retaining bolt.



(C)
Pull Movable Cutting Table to front of Tile Saw.



(D)
Position Square flat on Movable
Cutting Table against Ruler/Stop.
Position front of Square
against Blade.



(E) Move Guide Bar until Square rests evenly across Blade.

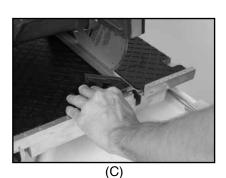
## **Horizontal Alignment Verification**



(A)
Move the Cutting Table back and forth to verify Blade is even across all points of Square.



(B) Tighten Guide Bar Retaining Bolts.



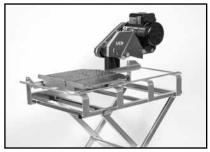
Move the Cutting Table back and forth to re-verify Blade is even across all points of Square.

#### 90° Alignment Verification

90°-alignment verification ensures the blade cuts tile straight up and down and not at an angle. The Diamond blade must be removed and reinstalled when removing the blade guard.

NOTE:

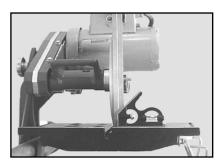
If the blade is misaligned following 90°-alignment verification, return the saw to MK Diamond for repair.



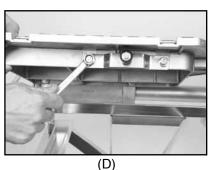
(A) Remove Blade Guard and water pan.



(B)
Position Square on Movable
Cutting Table against
the Diamond Blade.



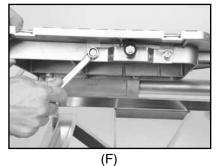
(C)
Verify the Diamond
Blade is Square to the
Movable Cutting Table.



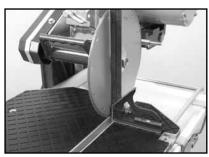
If not Square, loosen Movable
Cutting Table Wheel Assembly
to adjust.



(E)
Move Wheel Assembly
up or down to Square the
Movable Cutting Table.

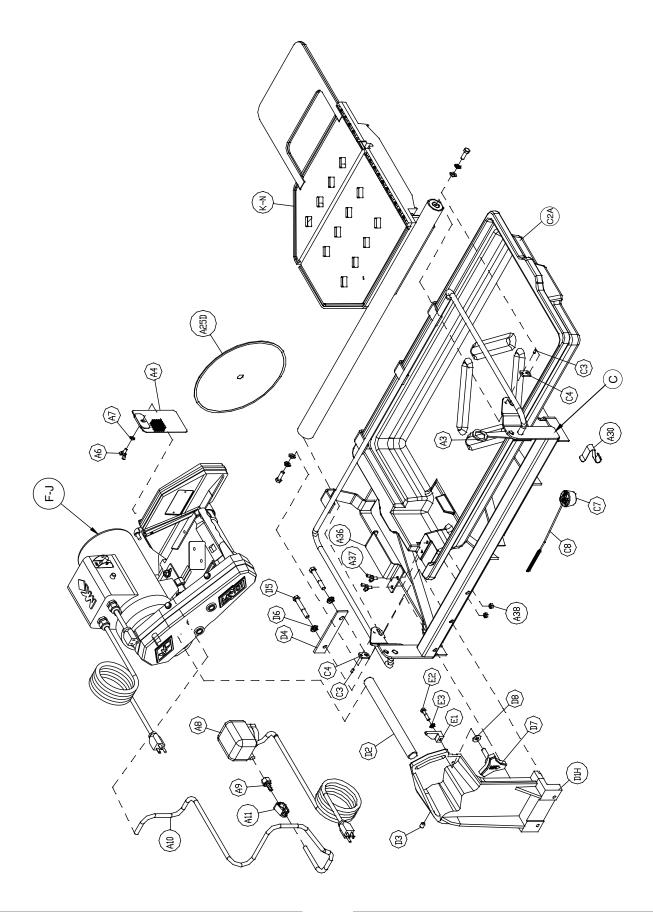


After Squaring, tighten Movable Cutting Table Wheel Assembly.

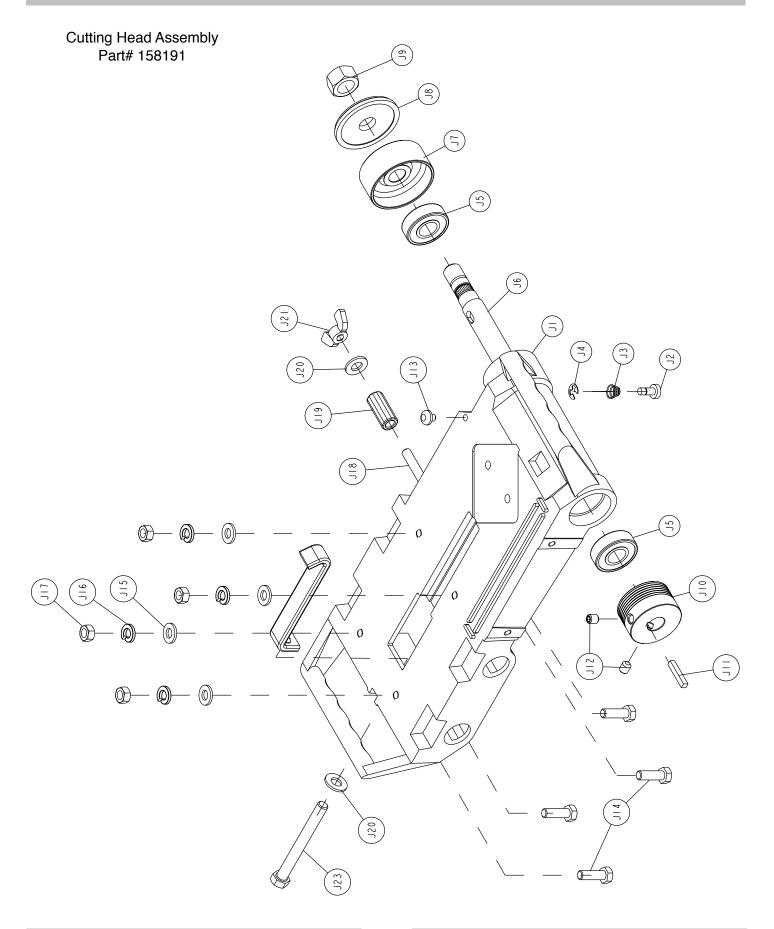


(G)
Re-verify the Diamond Blade
is Square to the Movable
Cutting Table.

MK-101-24 EXPLODED VIEW

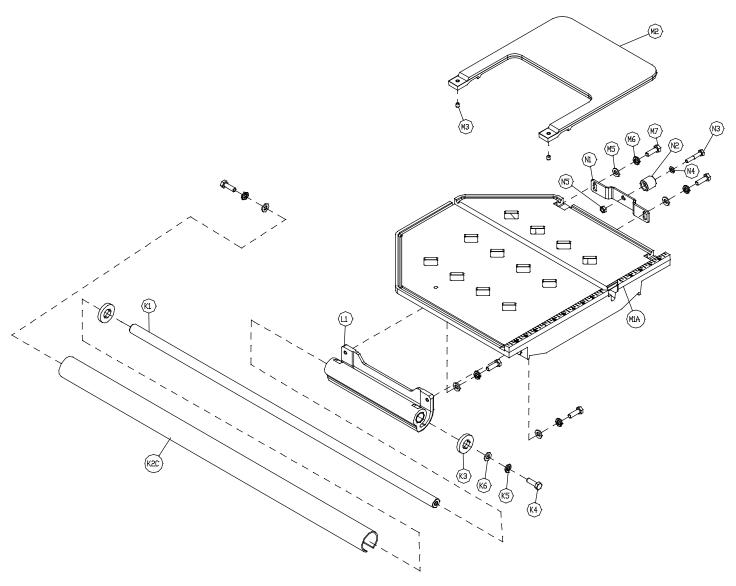


MK-101-24 EXPLODED VIEW



MK-101-24 EXPLODED VIEW

TABLE ASSEMBLY Single Roller Wheel



MK-101-24 PARTS LIST

ITEM NO.	DESCRIPTION	PART #	QTY. REQ.
А	Accessories	-	-
A1	Carton, Accessory Pack, 101	153366	1
A1A	Carton, Accessory Pack, PL-101	154176	1
A2	Foam, Accessory Pack Carton	154022	1
A3	Wrench, 15/16 Closed End	134684	1
A4	Guard, Splash	160310	1
A6 A7	Wingscrew, 1/4-20X1/2 Washer, 1/4 SAE Flat	151888 151915	1 1
A8A	Pump, Water	151913 151271-VP	
A9	Fitting, Plastic, 1/4 FNPT X 1/4 BARB	128397	1 1
A10	Hose, Vinyl, 1/4 ID	132951	6
A11	Clamp, Flow, 1/4-1/2	154394	1
A13	Rip Guide, Large Die Cast	159751	1
A21 A21A	Card, MK Warranty Registration Card, Rental Saw Warranty Registration	155037 155666	1 1
A22	Label, Do Not Return	157063	1
A23	Sell Sheet, Tile Accessory	156915	1
A24 A24B	Stand, Folding, Universal, w/carton (156035) Stand, with Caster	168244 169213	1 1
A25	Blade, MK-100, 10X060X5/8	154380	1
С	Frame	168021-24	-
C2A	Pan, Plastic, Pro-24	153262	1
СЗ	Pin, 3/16 X 3/8 Roll	151783	2
C4	Plate, Adjustment	151758	2
C5	Plug, Rubber Drain	153439	1
C7	Drain Plug	159529	1
C8	Strap, 9" Drain Plug	159530	1
D1H	Post, 101 Pro	158405	1
D2	Shaft, 10.63" Pivot, 101	153254	1
D3	Screw, 3/8-16 X 1/2 Socket Head Set	153710	1
D4	Plate, Support	155671	1
D5	Screw, 3/8-16 X 21/2 Hex Head Cap	156030	2
D6	Washer, 3/8 Split Lock	150925	2
D7	Knob, 3/8-16 X 1.5 MK Adjustment	156770-02	1
D8	Washer, 3/8 SAE Flat	150923	1
E	Stop, Cutting Head	-	-
-	Kit, Stop, 10" Cutting Head	157728-MK	1
E1	Stop, 10" Cutting Head	157728	1
E2	Screw, 1/4-20 X 11/4 Hex Head Cap	157145	1
E3	Washer, 1/4 Split Lock	152591	1
E4	Sheet, Cutting Head Stop Instruction	157728-IS	1
F	Belt Guard	158319-00	-

MK-101-24 PARTS LIST

ITEM NO.	DESCRIPTION	PART #	QTY. REQ.
F2	Bracket, Inner Belt Guard, 100/101	158611	1
F3	Screw, 1/4-20x3/4 Hex Head Cap	152370	3
F4	Screw, 1/4-20 x 1 Hex Head Cap	152676	1
F5	Washer, 1/4 Split Lock	152591	4
F6	Washer, 1/4 SAE Flat	151915	4
F7	Belt, 260J6 Micro-V	158194	1
G	Blade Guard Assembly	162481	-
G2	Tube, Water	155389	2
G3	Screw, 5/16-18 X 1/2 Socket Head Set	152607	3
G4	Elbow, 1/8 MNPT X 1/4 BARB 90° Brass	154652	1
Н	Motor	168022	-
H2	Pulley, 6J17 X 5/8 Bore	158214	1
H3	Key, 3/16 x 3/16 x 1-1/8 Square	150344	1
H4	Screw, 5/16-18 X 3/8 Socket Head Set, Cup Point	157083	2
H5	Label, Warning most motor, 2 3/4 X 2 7/16	155672	1
H6	Label, Caution, GFCI, 1 X 2 1/8	155678	1
H7	Label, Caution, 5Amp Max., 1 X 2-1/8	154822	1
H8	Label, Warning, Read Owner's Manual, 1-3/4 X 3-3/8	155806	1
H9	Label, MK Service Info., 2 1/8 X 1-13/16	155038	1
H10	Label, MK Checklist	157459	1
H10A	Label, HD Checklist	155231	1 1
H10B	Label, EH Checklist	155301	·
J1	Cutting Head	158224	1 1
J2	Pin, Blade Shaft Lock	158200	1
J3	Spring, Blade Guard Lock	158201	1
J4	Ring, Retraining, 1/4	158202	1
J5	Bearing, Ball 17MM X 40MM X 12MM	137711	2
J6 J7	Shaft, Blade	158222 137737	1 1
J8	Flange, Inner Flange, Outer	135830	1
J9	Nut, Hex, 5/8 - 18	135848	1
J10	Pulley, 6j19 x 5/8 Bore	158199	
J11	KEY, 3/16 SQ X 1 - 1/8	150344	1 1
J12	Screw, Socket Head Set, Cup Point, 5/16 -18 x 3/8	157083	2
J13	Bumper, Rubber, 1/2 dia.	152674	1
J14	Screw, Hex Head, 5/16 - 18 x 1	151743	4
J15	Washer, 5/16 Sae Flat	151754	4
J16	Washer, 5/16 Split Lock	151747	4
J17	Nut, Hex 5/16 - 18	101196	4
J17	Screw, Hex Head Tap, 5/16 - 18 X 2-1/2	151748	1
J19	Pivot, Blade Guard	153208	1
J20	Washer, 3/8 Sae Flat	150923	2
J20 J21	Wingnut, Nylok, 5/16 - 18	150923	
J21 J22	Strap, Motor Adjustment	152373	1 1
J23	Screw, Hex Head Tap, 3/8 - 16 X 3-1/2	153147	1
K2A	Cover, Guide Bar, 101 Pro 24	153219	1

MK-101-24 PARTS LIST

ITEM NO.	DESCRIPTION	PART #	QTY. REQ.
K3	Spacer, Guide Bar Cover, 101	152393	2
K4	Screw, 5/16-18 X 1 Hex Head Cap	151743	2
K5	Washer, 5/16 Split Lock	151747	2
K6	Washer, 5/16 SAE Flat	151754	2
L	Linear Bearings	-	-
L1	Linear Bearing, 101	135855	1
L2	Screw, 5/16-18 X1 Hex Head Cap	151743	2
L3	Washer, 5/16 Split Lock	151747	2
L4	Washer, 5/16 SAE Flat	151754	2
M1A	Table	161182	-
M2	Table Extension, 101 Pro	162075	1
M3	Screw, 1/4-20 X 1/2 Socket Head Set	155804	2
M4	Shim, .004 X 5/16 ID X 1/2 OD	152519	4
M5	Washer, 5/16 SAE Flat	151754	2
M6	Washer, 5/16 Split Lock	151747	2
M7	Screw, 5/16-18 X 1 Hex Head Cap	151743	2
M9	Screw, 1/4-20 X 5/16 Socket Head Set	154226	2
N	Roller Wheel	-	-
-	Assembly, Roller Wheel	151756	1
N1	Bracket, Roller Wheel	154021	1
N2	Wheel, Roller	151799	1
N3	Screw, 1/4-20 X 11/2 Hex Head Cap	151914	1
N4	Washer, 1/4 SAE Flat	151915	1
N5	Nut, 1/4-20 Hex	151893	1

MK-101-24 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

MK-101-24 ACCESSORIES

ITEM	NUMBER	DESCRIPTION	
1.	137166	MK-200. 10" X 5/8" ARBOR Premium grade Diamond Blade for smooth, chip-free cutting on tile.	
2.	128074	MK-215, 10" X 5/8" ARBOR Supreme grade diamond blade for hard materials	
3.	153252	MK-315, 10" X 5/8" ARBOR Supreme super hi-rim diamond blade	
4.	134577-MK	DUAL 45° FLAT ANGLE GUIDE	
5.	153201-MK	45° MITER	
6.	134569-MK	90° PROTRACTOR	
7.	152792	DRESSING STONE	
8.	152610	GROUND FAULT CIRCUIT INTERRUPTER	
9.	168244	SAW STAND	X

MK-101-24 ORDERING

#### 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, MasterCard or American Express.

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 Cutting Head and Support Angle Assembly
- Dry the saw before shipping
- When packing, include the following: MK-101, 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 or visit our web site at www.mkdiamond.com. For technical questions, call – 800 474-5594.

# MK-101-24 TILE SAW OWNERS MANUAL & OPERATING INSTRUCTION



MK Diamond Products, Inc. 1315 Storm Parkway Torrance, CA 90501

Toll-Free: (800) 421-5830 Phone: (310) 539-5221 Fax: (310) 539-5158 www.mkdiamond.com