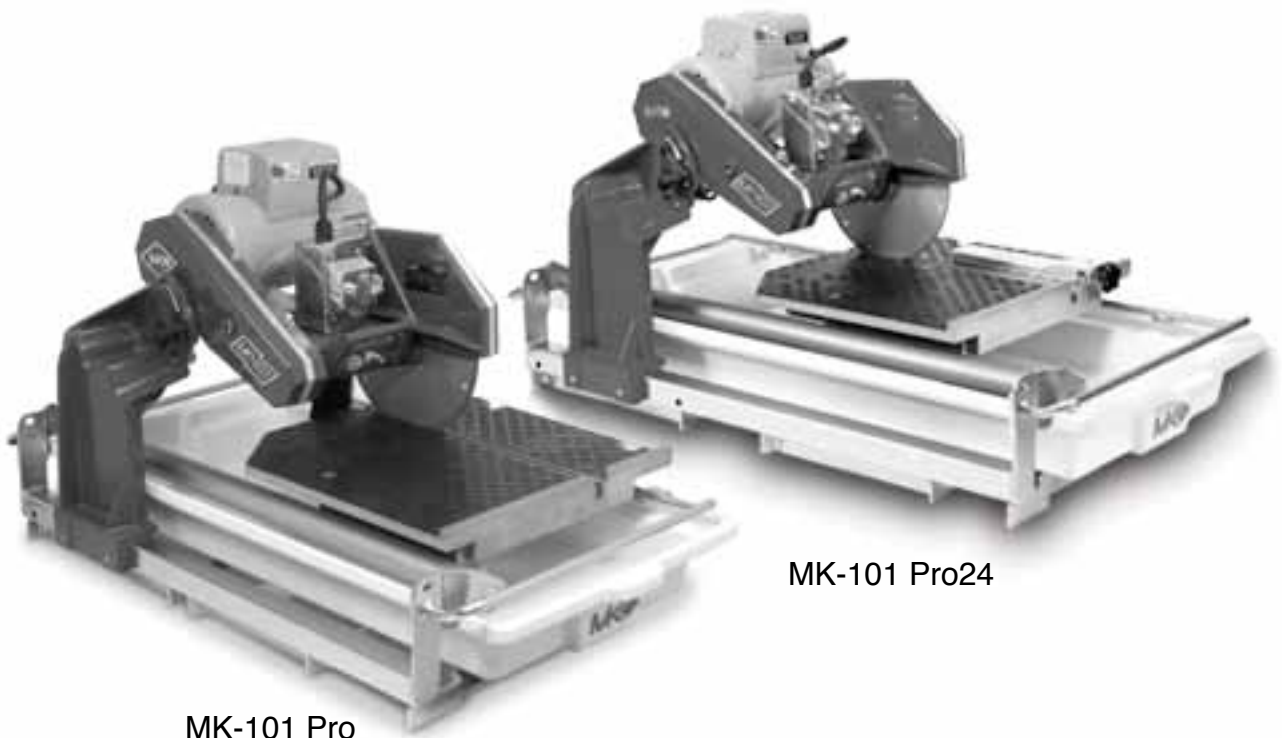


MK-101 Pro and MK-101 Pro 24 Tile Saw OWNERS MANUAL & OPERATING INSTRUCTIONS



MK-101 Pro

MK-101 Pro24

Revision 204	10.2011
Manual Part No. 158808	

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 Pro Series 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 Pro or MK-101 Pro 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 MK-101 Pro Series 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.

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Read and follow all safety, operating and maintenance instructions. Failure to read and follow these instructions could result in injury or death to you or others. Failure to read and follow these instructions could also result in damage and/or reduced equipment life.

SAFETY 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.

HARZARD 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 guards 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.

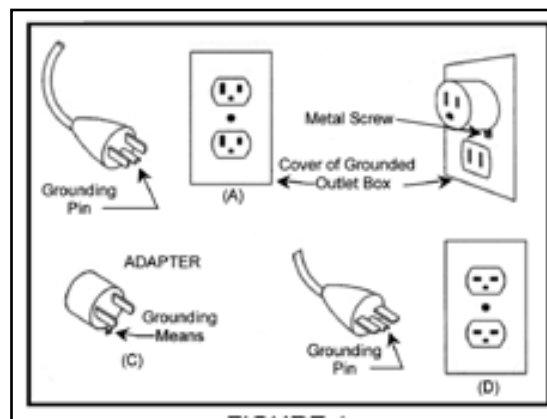
- Do not modify the plug provided – if it will not fit the outlet; have the proper outlet installed by a qualified electrician
- Improper connections of the equipment-grounding conductor can result in a risk of electric shock. The equipment-grounding conductor is the insulated conductor that has an outer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

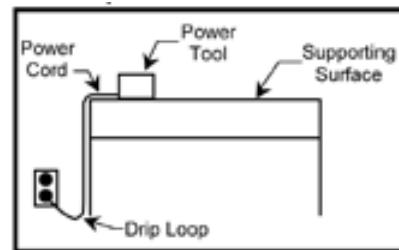
NOTE: Use of a temporary adapter is not permitted in Canada.



**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.

⚠ CAUTION

Receptacle is for water pump only. 125V, .6 amps max.

Label A

⚠ CAUTION

This saw is to be used with a Ground Fault Circuit Interrupter.

Label B

FOR INFORMATION ON
SERVICE OR WARRANTY

PLEASE CALL
1-800-474-5594

Label C



⚠ WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer.

⚠ WARNING



For Your Own Safety Read Instruction Manual Before Operating Saw.
Wear Eye Protection.
Disconnect Saw Before Servicing, when Changing Cutting Wheels and Cleaning.
Use Tool Only with Smooth Edge Cutting Wheels
Free of Openings and Grooves.
Replace Damaged Cutting Wheel Before Operating.
Do Not Fill Water Bath Above Water Fill Line.
See Manual for Pump Replacement.



Label E

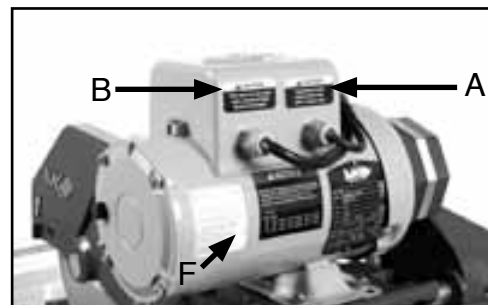
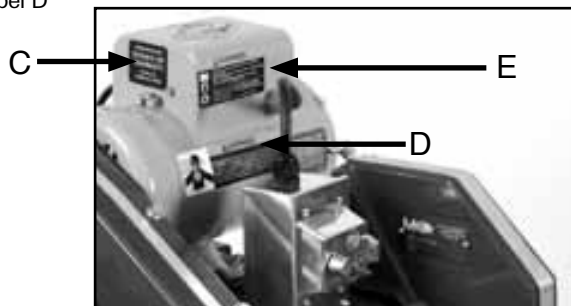
⚠ NOTICE

Most Motor Problems are caused by improper voltage and extension cords. Cord should be one-piece and short as possible. Cord selection should match the following table.

1-2 H.P.			
115v	230v		
25'	100'	Max. Cord Length	No. 12 Wire
50'	150'	Max. Cord Length	No. 10 Wire
75'	250'	Max. Cord Length	No. 8 Wire

Label F

Label D



Tile Master Label Sheet Part#166012

Decal/Label	Location	Description
A	Motor - Back	Caution - Receptacle is for Water Pump Only
B	Motor - Front	Caution - Use with GFCI outlet only
C	Motor - Side	Service/ Warranty
D	Cutting Head - Front	Warning - Silica Warning
E	Motor - Side	Warning - Read Owners Manual
F	Motor - Back	Notice - Voltage/extension cords

TILE SAW SPECIFIC WARNINGS

⚠ 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.

MK-101 PRO SERIES PRODUCT SPECIFICATIONS

The MK-101 Pro Series are versatile Tile Saws. Operated and used according to this manual, the unit will provide years of dependable service.

The MK-101 Pro and the MK-101 Pro 24 are engineered as table top or stand mounted wet tile saws. The saws include a powerful 120v totally enclosed capacitor start motor with a thermal protective overload. The MK-101 Pro 24 includes a powerful 120v or 240v motor.

SPECIFICATIONS

Specifications for the MK-101 Pro.

Voltage	120v	240v
Overall Amperage	14.3a	9a
Frequency	60Hz	50Hz
Blade RPM	3450	3450
Horse Power	1-1/2 hp	1-1/2 hp
Weight	109lbs	109lbs
Blade Capacity	10" (254 mm)	10" (254 mm)
Arbor Size	5/8" (16 mm)	5/8" (16 mm)
Depth of Cut (10" Blade)	3" (76 mm)	3" (76 mm)
Length of Cut	20"	20"
Diagonally Cuts	14" Tile	14" Tile
LxWxH (inches)	36" x 22" x 23"	36" x 22" x 23"
LxWxH (mm)	914 x 559 x 584	914 x 559 x 584
Part #	155747	168502

SPECIFICATIONS

Specifications for the MK-101 Pro 24.

Voltage	120v	240v
Overall Amperage	13a	9a
Frequency	60Hz	50Hz
Blade RPM	3450	3450
Horse Power	1-1/2 hp	1-1/2 hp
Weight	130lbs	130lbs
Blade Capacity	10" (254 mm)	10" (254 mm)
Arbor Size	5/8" (16 mm)	5/8" (16 mm)
Depth of Cut (10" Blade)	3" (76 mm)	3" (76 mm)
Length of Cut	24"	24"
Diagonally Cuts	18" Tile	18" Tile
LxWxH (inches)	41" x 22" x 23"	41" x 22" x 23"
LxWxH (mm)	1,014 x 559 x 584	1,014 x 559 x 584
Part #	153243	156128

UNPACKING, TRANSPORT, UNIVERSAL STAND AND ASSEMBLY

UNPACKING

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

! CAUTION Use proper lifting techniques when lifting the MK-101 PRO SERIES.

CONTENTS

In your container, you will find one (1) MK-101 frame and water basin, one (1) MK-101 Cutting Head, one (1) 10-inch wet cutting continuous rim diamond blade, one (1) adjustable cutting guide, one (1) electric water pump, one (1) protractor, one (1) dual flat 45° angle guide, one (1) 45° miter, one (1) blade wrench, one (1) splash guard, one (1) cooling transfer tube, one (1) flow adjusting clamp, one (1) drain plug, one (1) dressing stone, one (1) side table, one (1) owners manual, one (1) pump manual and one (1) warranty card.



MK-101 Frame
and Water Basin



MK-101
Cutting Head



Diamond Blade



Adjustable
Cutting Guide



Electric Water
Pump



Protractor



Dual Flat 45°
Angle Guide



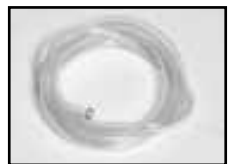
45° Miter



Blade Wrench



Splash Guard



Cooling Transfer
Tube



Flow Adjusting
Clamp



Drain Plug



Dressing Stone



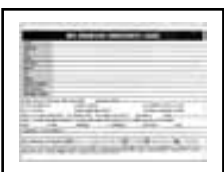
Side Table



Owners Manual



Pump Manual

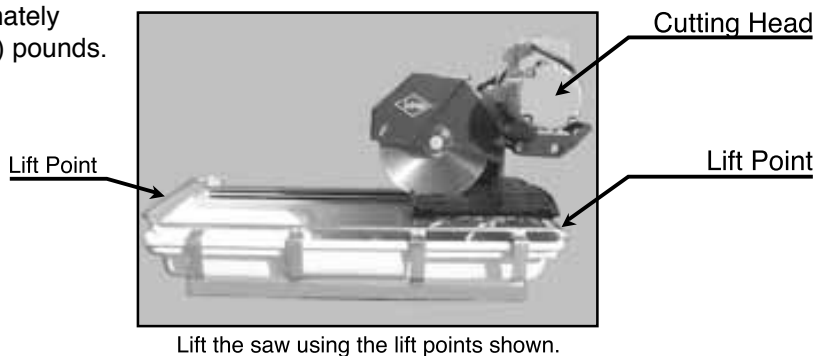


Warranty Card

TRANSPORT

- ! CAUTION**
1. The MK-101 weighs approximately one hundred and twenty (120) pounds.
 2. Never transport the MK-101 with water in the Water Basin.

The MK-101 is designed with a rigid frame and removable Cutting Head. Two people are required to transport the MK-101 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).



Lift the saw using the lift points shown.

UNPACKING, TRANSPORT, UNIVERSAL STAND AND ASSEMBLY

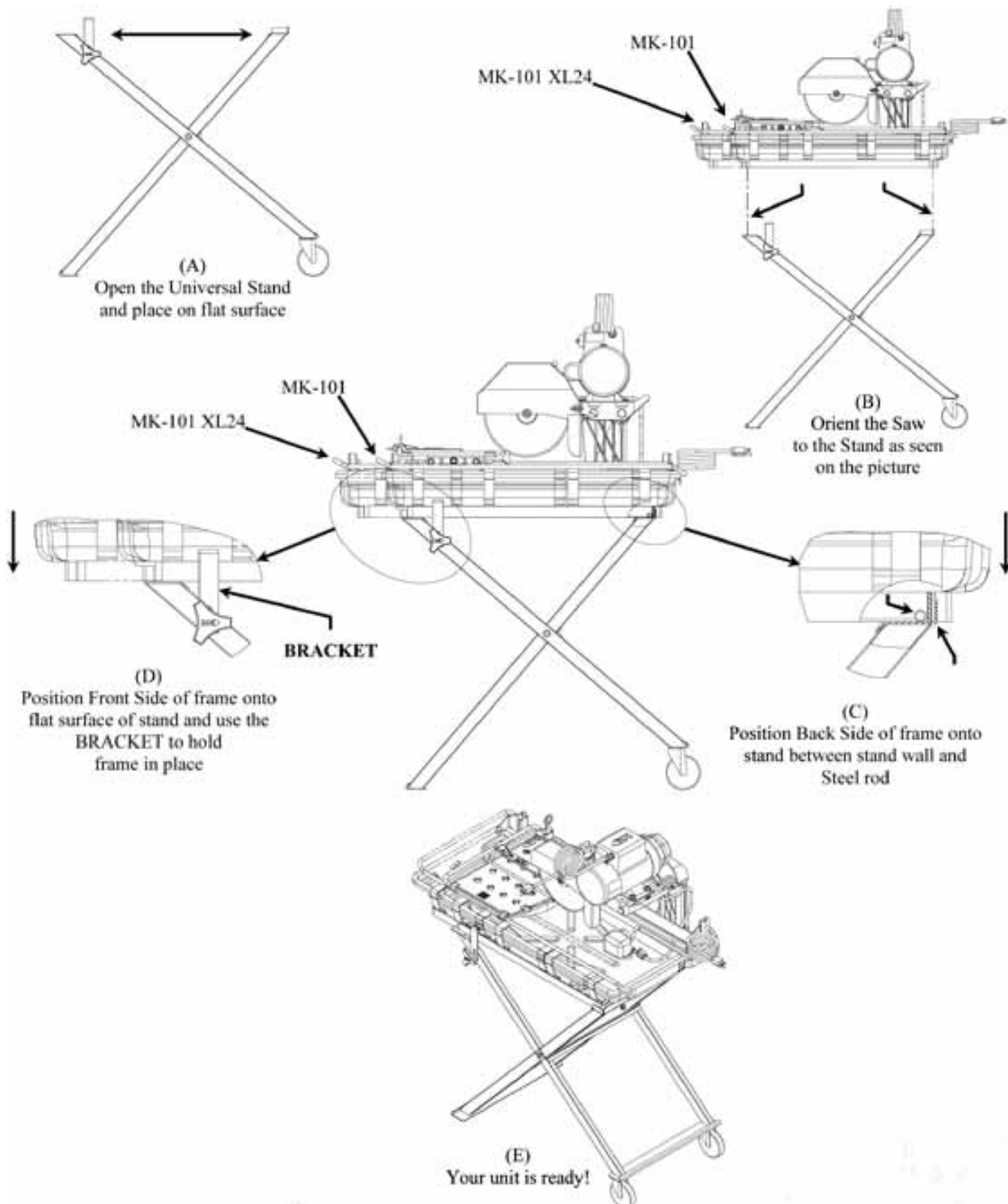
UNIVERSAL STAND



CAUTION

The MK-101 PRO SERIES weighs approximately one hundred and twenty (120) pounds; follow the guidelines for transport in the TRANSPORT section, when placing it on the stand.

Note: If using the MK Diamond, Universal Stand, follow the following steps.



UNPACKING, TRANSPORT, UNIVERSAL STAND AND ASSEMBLY

ASSEMBLY

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

Cutting Head Installation:

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



(A)

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



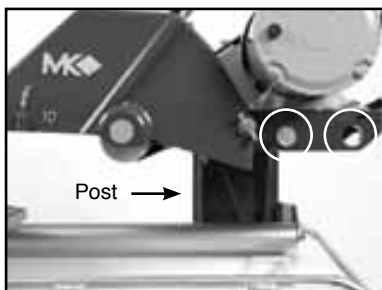
(B)

Ensure Cutting Head Stop is in upward position.



(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.

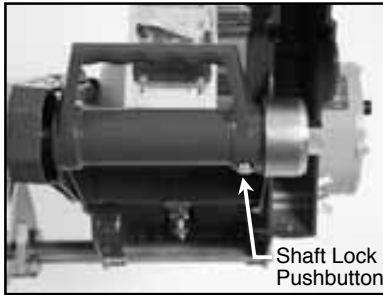
UNPACKING, TRANSPORT, UNIVERSAL STAND AND ASSEMBLY

Diamond Blade Installation:

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



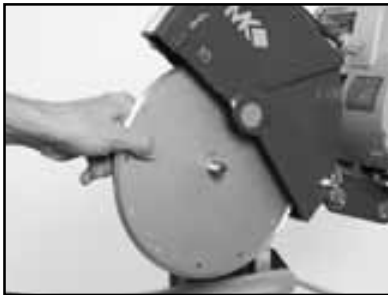
(A)
Position Movable Cutting Table to the front of the saw and raise the Blade Guard by loosening the wingnut.



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



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



(D)
Install Diamond Blade onto Blade Shaft.



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



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

UNPACKING, TRANSPORT, UNIVERSAL STAND AND 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.

SETUP, ADJUSTMENT AND OPERATION

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.

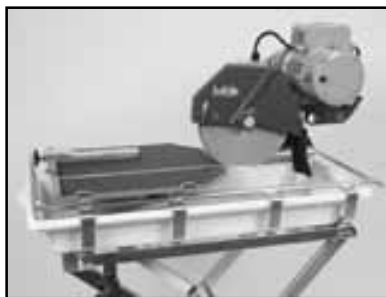


(C)
Inspect the Diamond Blade for
damage – verify the blade is
correct for the material being cut.



Inspect for damage

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



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

Connecting the Water Pump:



WARNING

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

NOTE: To prevent pump damage, the Water Pump must be disconnected 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.

SETUP, ADJUSTMENT AND OPERATION

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.

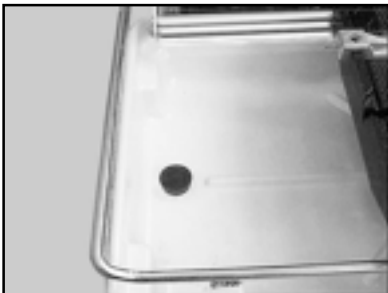


(B)

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, ADJUSTMENT AND OPERATION

MK-101 PRO SERIES Setup for Operation:



CAUTION

1. Before powering or starting, check for damage that could prevent this equipment from proper operation or performing its 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 to a power supply, be sure the voltage, cycle and phase of the job site power source meet these requirements;

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.

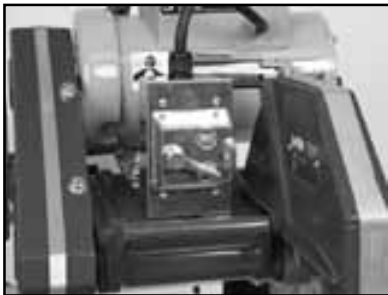
NOTE: In order to avoid breaker tripping, a 20-amp circuit breaker should be used.

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

Ground Fault Circuit Interrupter



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



(B)
Plug MK-101 into the GFCI.



(C)
Plug the GFCI into the
power source*.

Set Cutting Depth:



CAUTION

When loosening 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.

*A GFCI wall socket is the preferred protective device.

SETUP, ADJUSTMENT AND OPERATION

ADJUSTMENT and OPERATION

Cutting Straight Edges:



CAUTION

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



(A)

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.

SETUP, ADJUSTMENT AND OPERATION

Diagonal Cutting:

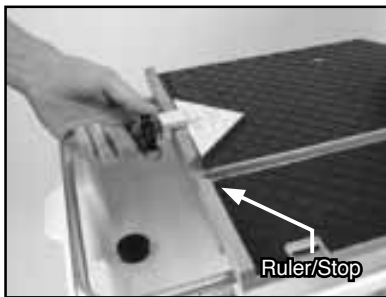
NOTE: To cut diagonal, the Dual 45° Flat Angle Guide (MK Diamond Part No. 134577-MK) should be used.



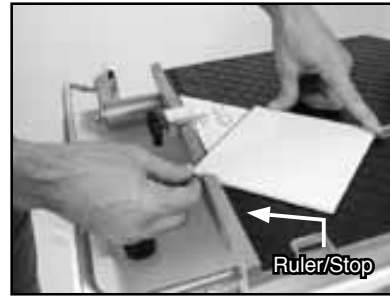
CAUTION DO NOT FORCE THE TOOL. It will do the job better and safer at the rate for which it was designed.



(A)
Remove the Adjustable
Cutting Guide.



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



(C)
Place tile on the Cutting Table.



(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.

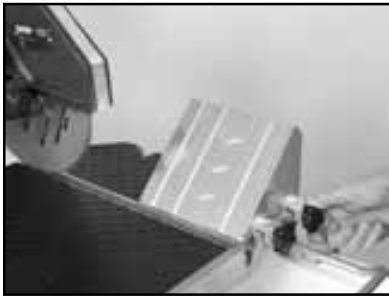
SETUP, ADJUSTMENT AND OPERATION

45° Miter Cutting:

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



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



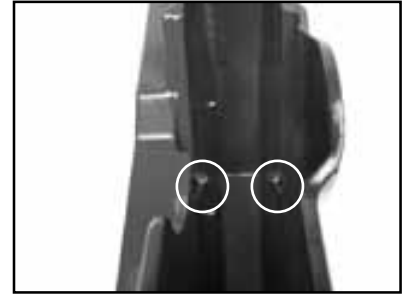
(A)

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).



(D)

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

SETUP, ADJUSTMENT AND OPERATION

Off-angle Cutting:

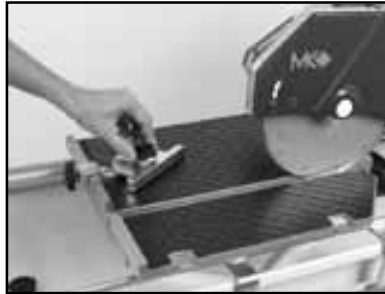
NOTE: To cut angles other than 45° angles or Miters, a 90° Protractor (MK Diamond Part No. 134569-MK) should be used.



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



(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° 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).



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

SETUP, ADJUSTMENT AND OPERATION

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.



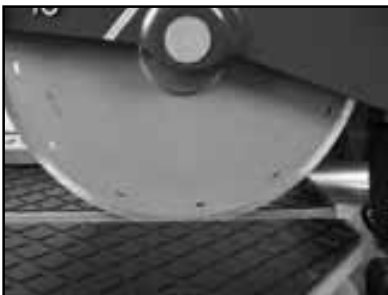
(D)
Install the Cutting Head onto the front pivot hole.



(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.

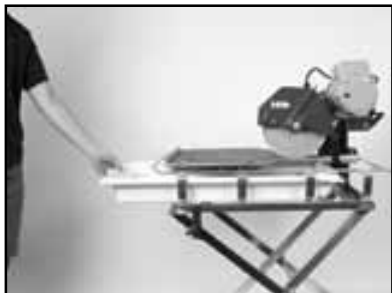
SETUP, ADJUSTMENT AND OPERATION

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



(B)
Remove Water Basin and Blade.



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

! CAUTION Hold the Post when removing the Post Support Plate.



(D)
Loosen the Post Support Plate and retaining bolts.



(E)
Remove the Post Support Plate and retaining bolts.



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



(G)
Install and tighten the Post Support Plate and retaining bolts.



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



(I)
Install the Water Basin and Blade.

SETUP, ADJUSTMENT AND OPERATION

Cleanup:

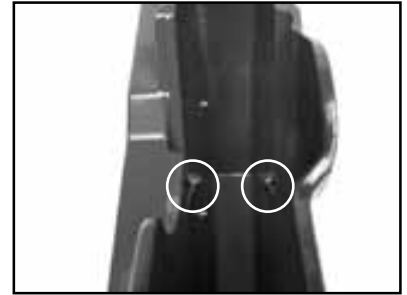
- NOTES: 1. If an external water source was used, steps A through C may be skipped.
2. Dispose of waste water in accordance with applicable Federal, State and Local laws.



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



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



(C)
Run the MK-101 until clear
water is seen at the blade
cooling ports (Approx. 1 min-
ute).



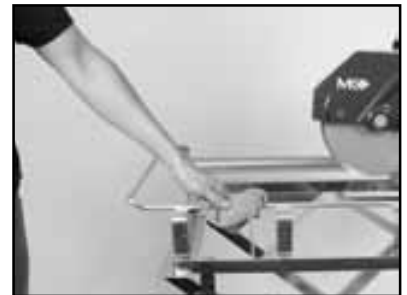
CAUTION Ensure the saw is disconnected before completing the remainder of the cleanup process.



(D)
Remove the Water Basin
from the MK-101.



(E)
Clean the Movable Cutting
Table Guide Bar.



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



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



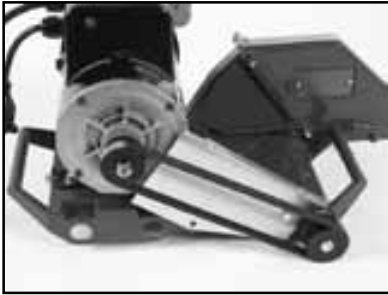
(G)
Clean the remainder of the
MK-101.

MAINTENANCE AND TROUBLESHOOTING

MAINTENANCE

New Maintenance:

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



(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, 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.



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



(A)

Lubricate the Guide Bar.



(B)

Lubricate the Roller Wheel Assembly.

*A GFCI wall socket is the preferred protective device.

MAINTENANCE AND TROUBLESHOOTING

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.



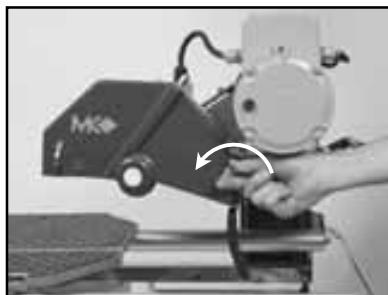
(D)
Verify the Roller Wheel
Assembly is tight and in
good condition.



(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).

MAINTENANCE AND TROUBLESHOOTING



(J)
Lubricate the Cutting Head
Adjustment Knob.



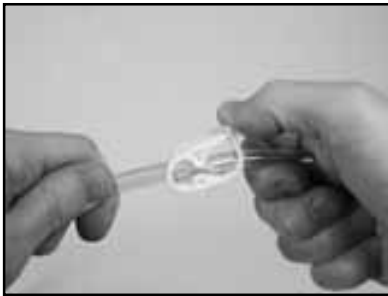
(K)
Lubricate the Cutting Head
Adjustment Knob retaining
holes.



(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 releas-
ing the Flow Adjusting Clamp.



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

MAINTENANCE AND TROUBLESHOOTING

Blade Dressing:

A diamond blade performs best when it is dressed. Over time and use, diamonds on the outer edge of the blade will become smoothed or “glazed” over. This will reduce grinding efficiency and may cause the blade to “wander” or bend giving the illusion of an alignment problem. When this occurs, the blade will need to be dressed. The diamond blade can be dressed using the MK Dressing Stick (part number 152792) and by following the steps below.



(A)
Setup the MK101 for operation
(See Setup, Adjustment
and Operation).



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

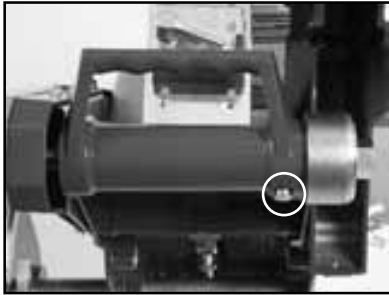


(C)
Position the Dressing Stick. Cut
2 or 3 strips from the dressing
stick to dress the Blade.

MAINTENANCE AND TROUBLESHOOTING

Diamond Blade Change-out:

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



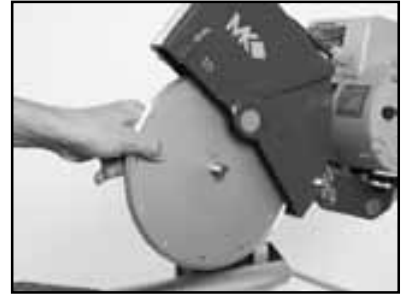
(A)

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 pushbutton and loosen.



(C)

Remove the Diamond Blade.



(D)

Install the Diamond Blade onto Blade Shaft.



(E)

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



(F)

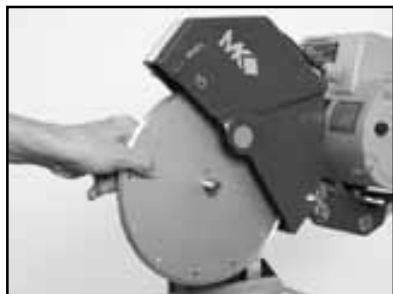
Install Retaining Nut and Outer Flange, depress and hold the Shaft Lock pushbutton and tighten Retaining Nut.

MAINTENANCE AND TROUBLESHOOTING

Belt Inspection, Adjustment and Replacement:

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

NOTE: 1. 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).



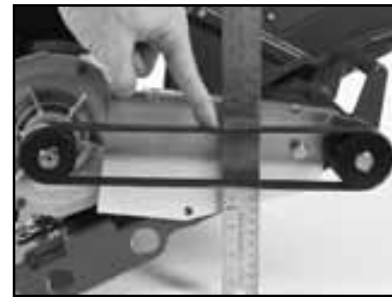
(C)
To remove the Belt Guard, loosen the two top bolts on the belt guard.



(D)
Remove belt guard bottom bolt.



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



(F)
Check the belt for proper tension, if tension is correct, go to step P (proper tension is 1/8-inch).



(G)
Loosen the motor mounting bolts, if re-tensioning only go to step M.



(H)
Loosen the Motor Adjustment Strap.



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

*A GFCI wall socket is the preferred protective device.

MAINTENANCE AND TROUBLESHOOTING



(J)
Remove the belt.



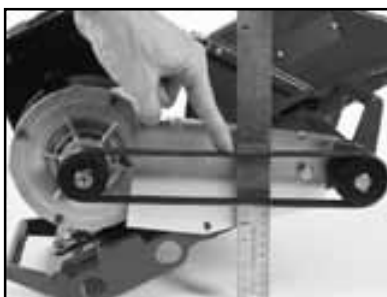
(K)
Install the new belt.



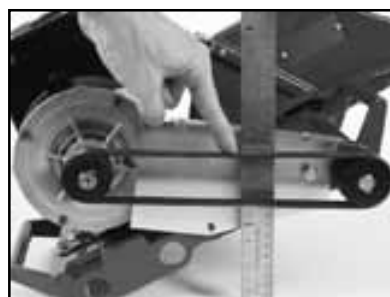
(L)
Verify the V-belt is seated in the grooves of both pulleys.



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



(N)
Check belt tension (proper tension 1/8-inch).



(O)
Repeat steps M and N until proper belt tension is achieved.



(P)
Tighten the motor mounting bolts.



(Q)
Install the Belt Guard. Tighten all three bolts

MAINTENANCE AND TROUBLESHOOTING

TROUBLESHOOTING

Blade will not cut properly:



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



(B)
Check for proper blade rotation.

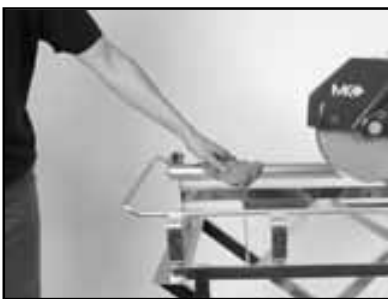


(C)
Ensure the Blade Core
is not bent.



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

2. Movable Cutting Table Does Not Move Correctly:



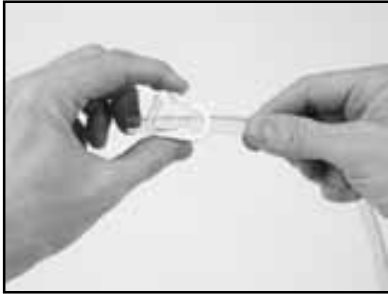
(A)
Check the Guide Bar and
Frame for cleanliness –
clean if dirty.



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

MAINTENANCE AND TROUBLESHOOTING

Cooling Flow:



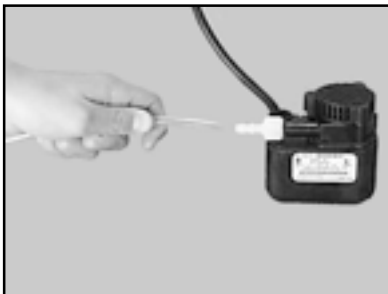
(A)
Verify the cooling flow
Adjusting Clamp is open. If flow
exists, go to Step B.



(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.

MAINTENANCE AND TROUBLESHOOTING

Blade Stops Turning:



(A)

Allow the motor to cool and depress motor Overload Reset Switch. If motor does not start, go to Step B.



(B)

Verify all plugs are fully installed*. If all plugs are connected, go to step C.



(C)

Check to see if the Ground Fault Circuit Interrupter (GFCI) is tripped*. If not tripped, or if a re-trip occurs, go to Step D.



(D)

Verify the circuit breaker is at least 20 amps – if not, move to a 20-amp circuit. If circuit is 20 Amps or greater, go to step E.



(E)

Verify circuit breaker is not tripped, if it is tripped – reset the circuit breaker once, If circuit breaker not tripped, go to Step F.



(F)

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

*A GFCI wall socket is the preferred protective device.

MAINTENANCE AND TROUBLESHOOTING

BLADE ALIGNMENT PROCEDURE

The Movable Cutting Table of the MK-101 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:

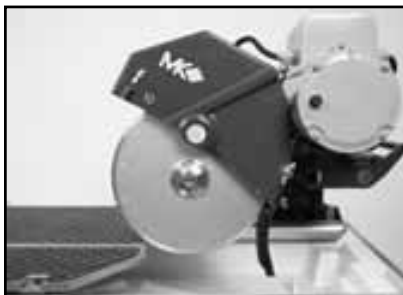


(A)
Combination square (square)
12-inch or greater. 1/2-inch
Wrench or MK Triple Hole Box
Wrench and MK Open
End Wrench.

Preparation:



(A)
Remove Water Pan.



(B)
Inspect Diamond Blade
for damage.



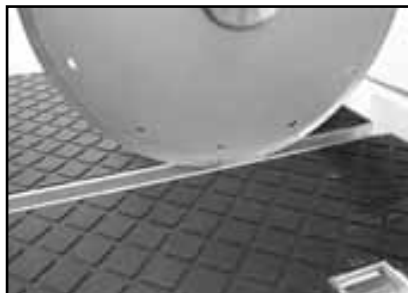
(C)
Loosen front and rear
Guide Bar Retaining Bolts.

MAINTENANCE AND TROUBLESHOOTING

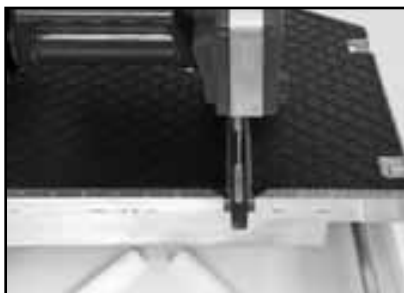
BLADE ALIGNMENT PROCEDURE

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.



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

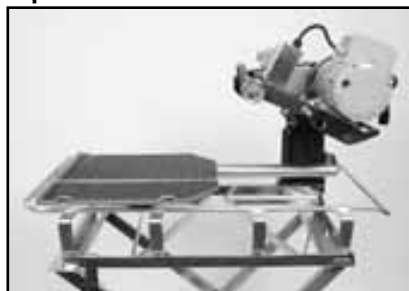
MAINTENANCE AND TROUBLESHOOTING

BLADE ALIGNMENT PROCEDURE

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.

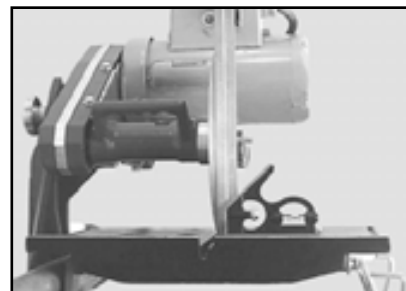
NOTE: If the blade is misaligned following 90°-alignment verification, return the saw to MK Diamond for repair.



(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.



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



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



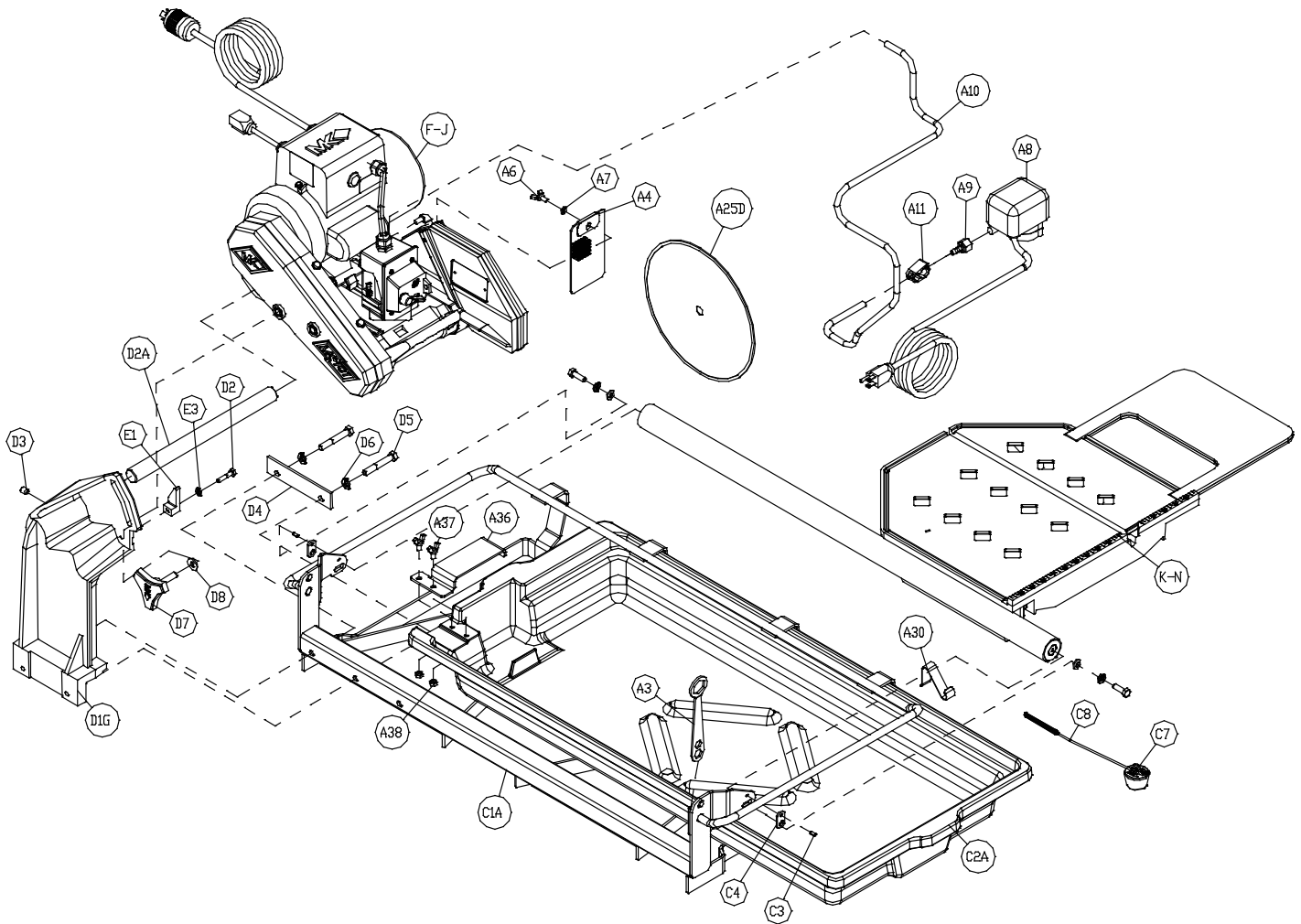
(F)
After Squaring, tighten Movable
Cutting Table Wheel Assembly.



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

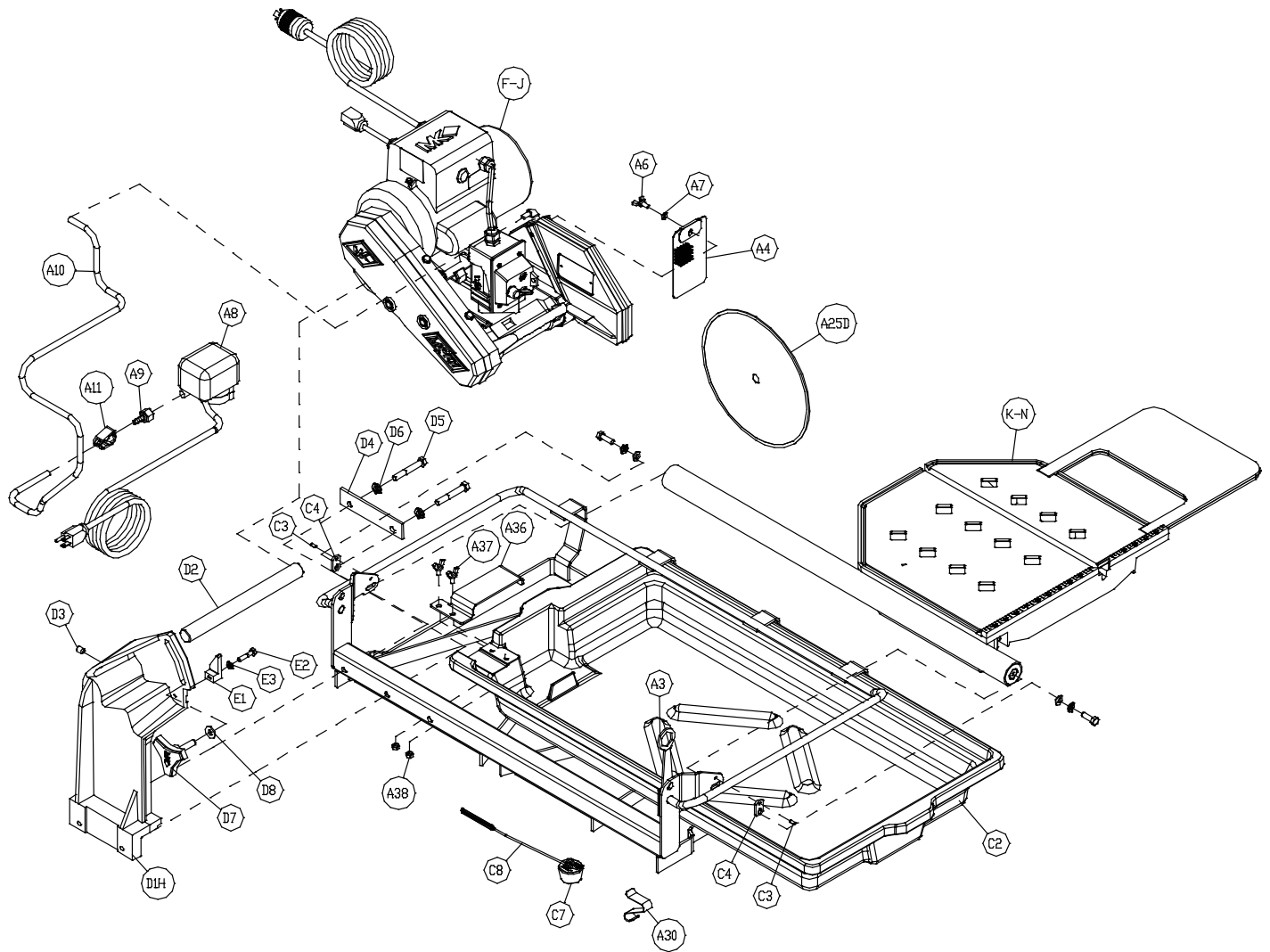
MAINTENANCE VIEW AND PARTS LIST

MK-101 PRO 24 SAW

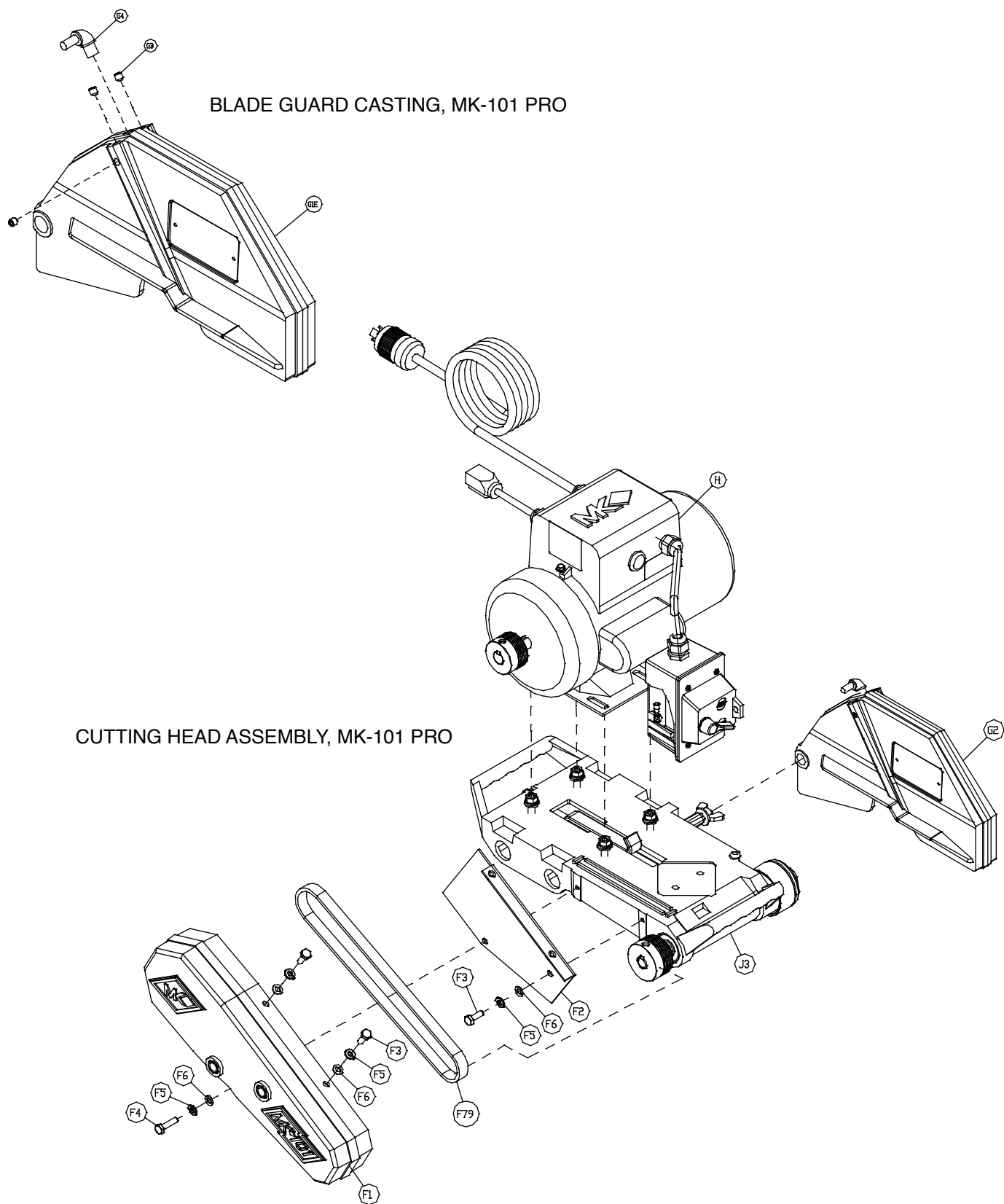


MAINTENANCE VIEW AND PARTS LIST

MK-101 PRO SAW

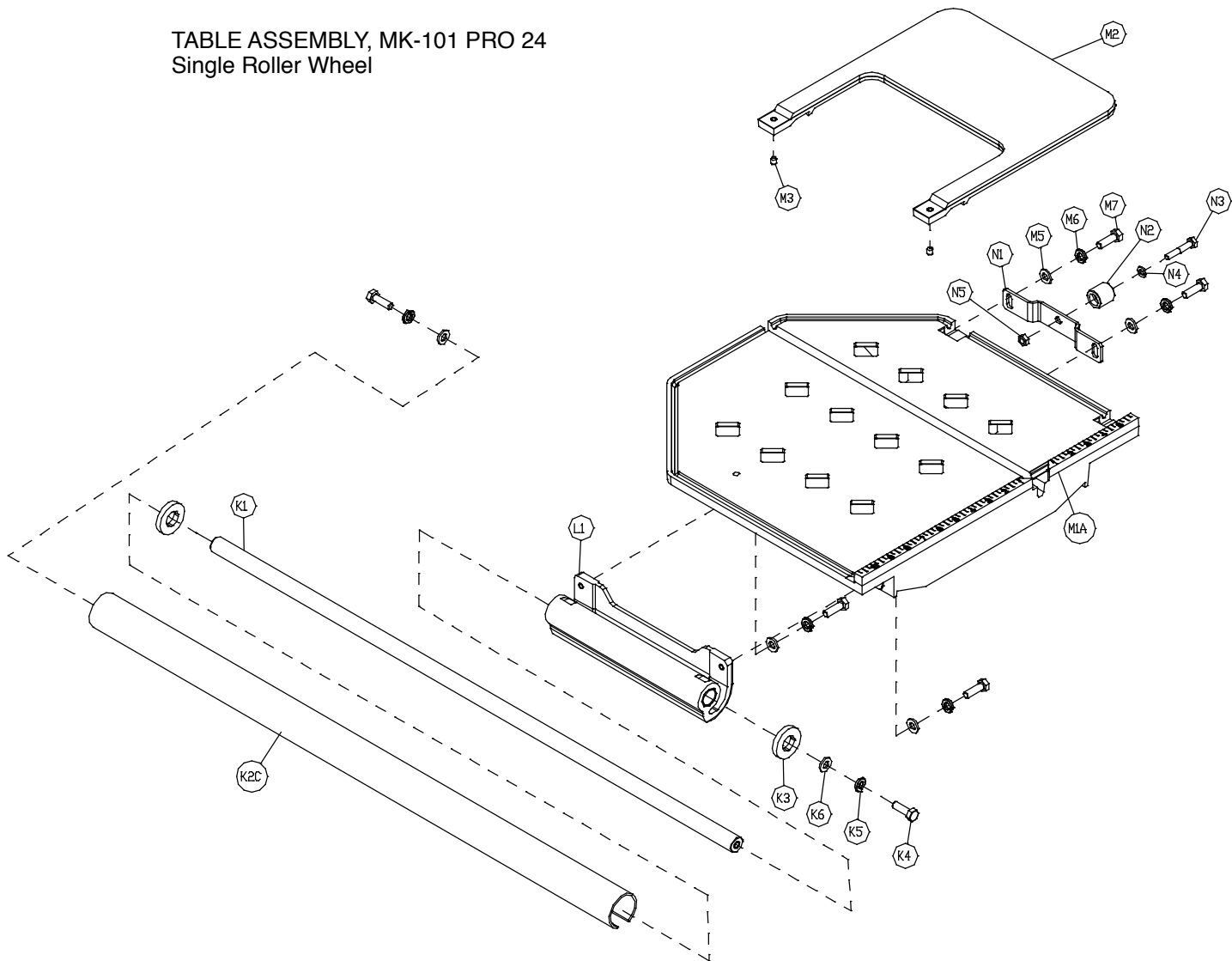


MAINTENANCE VIEW AND PARTS LIST



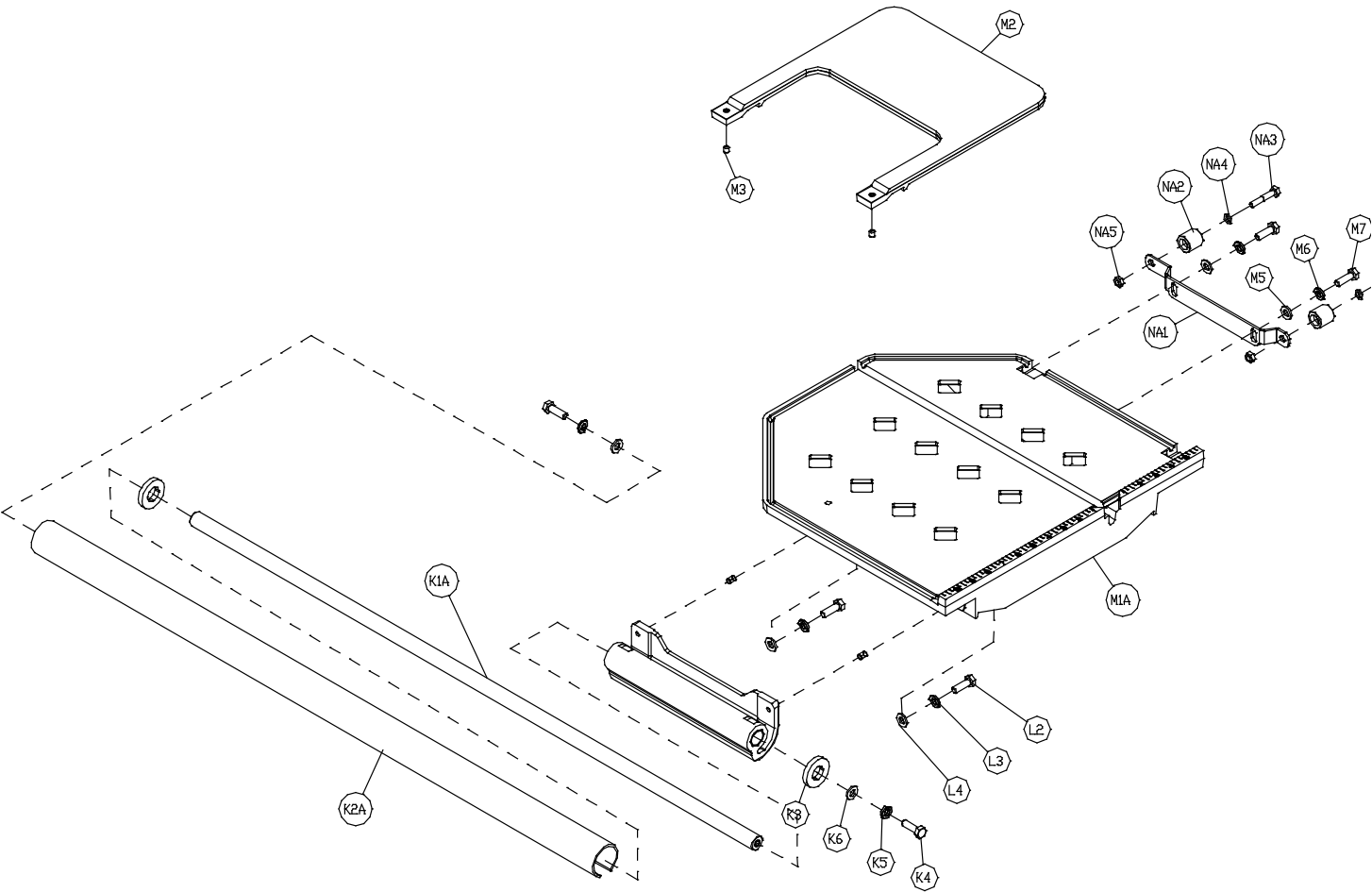
MAINTENANCE VIEW AND PARTS LIST

TABLE ASSEMBLY, MK-101 PRO 24
Single Roller Wheel



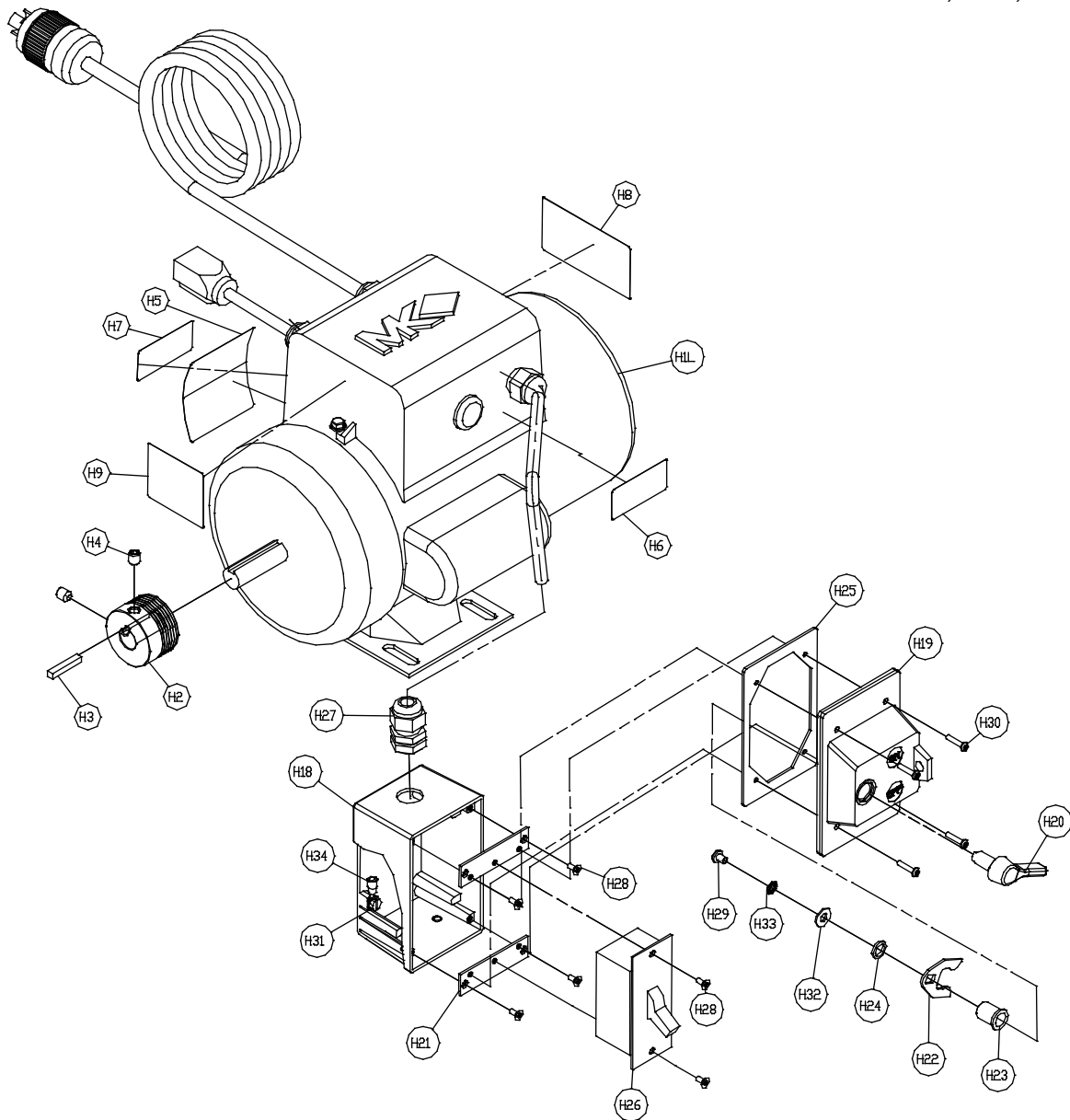
MAINTENANCE VIEW AND PARTS LIST

TABLE ASSEMBLY, MK-101 PRO 24
Double Roller Wheel



MAINTENANCE VIEW AND PARTS LIST

MOTOR ASSEMBLY / 1-1/2HP, 120V, 60 HZ



MAINTENANCE VIEW AND PARTS LIST

PARTS LIST:

Item	Description	Qty	Part#
A	Accessories	-	-
A1	Carton, Accessory Pack, 101	1	153366
A1A	Carton, Accessory Pack, PL-101	1	154176
A2	Foam, Accessory Pack Carton	1	154022
A3	Wrench, 15/16 Closed End	1	134684
A4	Guard, Splash	1	160310
A5	-	-	-
A6	Wingscrew, 1/4-20X1/2	1	151888
A7	Washer, 1/4 SAE Flat	1	151915
A8	Pump, Water, G-150A	1	151271
A8A	Pump, Water, G-300V, 230V	1	151714
A9	Fitting, Plastic, 1/4 FNPT X 1/4 BARB	1	128397
A10	Hose, Vinyl, 1/4 ID	6	132951
A11	Clamp, Flow, 1/4-1/2	1	154394
A13	Rip Guide, Large Die Cast	1	159751
A14	Miter, Large Bullnose	1	153201
A15	Guide, Dual Flat 45	1	134577
A16	Protractor, Tile Saw	1	159429
A17	Dressing Stick, 8X2X1, 60 Grit	1	152792-RW
A18	Extension, 2.25X3/4 Dia. Belt Guard	1	155711
A19	Cord, Twist-Lock GFCI, 120V/15A	1	157421
A20	Owner's Manual, MK-101	1	153754
A20A	Owner's Manual, MK-101 TrackerSaw	1	159701
A20B	Training, Pkg, 101R, HMDepot	1	158739
A20C	Owner's Manual, MK-101 Pro Series	1	158808
A21	Card, MK Warranty Registration	1	155037
A21A	Card, Rental Saw Warranty Registration	1	155666
A22	Label, Do Not Return	1	157063
A23	Sell Sheet, Tile Accessory	1	156915
A24	Stand, Folding, Universal, w/carton (156035)	1	151889
A24A	Stand, Folding, 101Pro	1	153331
A24B	Stand, with Caster	1	160197
A25	Blade, MK-100, 10X060X5/8	1	154380
A25A	Blade, MK-200/GOLD, 10X060X5/8	1	137166
A25B	Blade, MK-215, 10X060X5/8	1	128074
A25C	Blade, DT170, 10X060X5/8	1	DT154380
A25D	Blade, MK-225, 10X050X5/8, 4mm Saws	1	160593
A26	Label, Tile saw Serial#, NoMark	1	157249-01
A26A	Label, Tile saw Serial#, ULMark	1	157249-02
A26B	Label, Tile saw Serial#, CSAMark	1	157249-03
A26C	Label, Tile saw Serial#, UL/CSAMark	1	157249-04
A26D	Label, PL Serial#	1	157458
A26E	Tag, Serial Number, Blank	1	157500
A27	Plug, 10A Australia	1	156267
A28	Cord, L5-15x25' Extension	1	158111
A29	Miter, Small Bullnose	1	134585
A30	Clip, Table Lock, 30deg	1	160331-1
A31	Clip, Table Lock, 50deg	1	160331-3
A32	Drive Screw, Round Head, #7x5/16	2	157849
A33	Holder, Tool Accessory	1	160155
A33A	Holder, Tool Accessory—Orange	1	161155-HD
A34	Lid, Acc Holder Dressing Stick-Clear	1	160156

MAINTENANCE VIEW AND PARTS LIST

A35	Lid, Acc Holder Manual-Clear	1	150512
A36	Clamp, Holding, Pump	1	162073
A37	Screw, Wing, 1/4-20x1/2	2	151888
A38	Nut, Hex, 1/4 x 20	2	151893
C	Frames	-	-
C1	Frame, 101	1	153003
C1A	Frame, Pro-24	1	153209
C2	Pan, Plastic, 101	1	150634
C2A	Pan, Plastic, Pro-24	1	153262
C2B	Pan, Stainless Steel	1	150634S
C3	Pin, 3/16 X 3/8 Roll	2	151783
C4	Plate, Adjustment	2	151758
C5	Plug, Rubber Drain	1	153439
C7	Drain Plug, HD Rental	1	159529
C8	Strap, 9" Drain Plug	1	159530
D	Posts	-	-
D1	Post, 101, MKRed	1	155670
D1A	Post, 101, Blue	1	155670-BL
D1B	Post, 101, BMRed	1	155670-BM
D1C	Post, 101, Orange	1	155670-OR
D1D	Post, DC, 101, MKRed	1	158438
D1E	Post, DC, 101, Blue	1	158438-BL
D1F	Post, DC, 101, BMRed	1	158438-BM
D1G	Post, DC, 101, Orange	1	158438-OR
D1H	Post, 101 Pro	1	158405
D1J	Post, 101 Pro, Blue	1	158405-BL
D1K	Post, 101Pro, Orange	1	158405-BL
D2	Shaft, 10.63" Pivot, 101	1	153254
D2A	Shaft, 12.88" Pivot, 101 PRO	1	155530
D3	Screw, 3/8-16 X 1/2 Socket Head Set	1	153710
D4	Plate, Support	1	155671
D5	Screw, 3/8-16 X 21/2 Hex Head Cap	2	156030
D6	Washer, 3/8 Split Lock	2	150925
D7	Knob, 3/8-16 X 1.5 MK Adjustment	1	156770-02
D8	Washer, 3/8 SAE Flat	1	150923
D9	Plastic Post Cover	1	160157
E	Stop, Cutting Head	-	-
-	Kit, Stop, 10" Cutting Head	1	157728-MK
E1	Stop, 10" Cutting Head	1	157728
E2	Screw, 1/4-20 X 11/4 Hex Head Cap	1	157145
E3	Washer, 1/4 Split Lock	1	152591
E4	Sheet, Cutting Head Stop Instruction	1	157728-IS
F	Belt Guards	-	-
F1	Belt Guard, MK-101	1	158319-01
F1A	Belt Guard, PL-101, Barranca	1	158319-BD
F1B	Belt Guard, PL-101, DalTile	1	158319-BM
F1C	Belt Guard, MK-101, Orange	1	158319-OR
F1D	Belt Guard, PL-101, Blue	1	158319-BL
F1E	Belt Guard, MK-115	1	158319-15
F2	Bracket, Inner Belt Guard, 100/101	1	158611
F3	Screw, 1/4-20x3/4 Hex Head Cap	3	152370

MAINTENANCE VIEW AND PARTS LIST

F4	Screw, 1/4-20 x 1 Hex Head Cap	1	152676
F5	Washer, 1/4 Split Lock	4	152591
F6	Washer, 1/4 SAE Flat	4	151915
F7	Belt, 260J6 Micro-V	1	158194
G	Blade Guard Assemblies	-	-
G1	Blade Guard, 101/115	1	153659
G1A	Blade Guard, BD-101	1	153659-BD
G1B	Blade Guard, DT-101	1	153659-DT
G1C	Blade Guard, MK-101 Rental, Orange	1	155303
G1D	Blade Guard, PL-101 Rental, Blue	1	155303-BL
G1E	Blade Guard, 101/115 Pro	1	155770
G2	Tube, Water	2	155389
G3	Screw, 5/16-18 X 1/2 Socket Head Set	3	152607
G4	Elbow, 1/8 MNPT X 1/4 BARB 90° Brass	1	154652
H	Motors	-	-
H1	Motor, 1-1/2HP\120V\60Hz	1	160127
H1A	Motor, 1-1/2HP\120V\60Hz, with L5-15P	1	151473-TL
H1B	Motor, 1-1/2HP\120V\60Hz, NoLogo	1	155850
H1C	Motor, 1-1/2HP\230V\50Hz	1	155350
H1D	Motor, 2HP\120V\60Hz	1	155704
H1E	Motor, 2HP\230V\50Hz	1	156315
H1F	Motor, 2HP\120or240V\60Hz	1	155849
H1G	Motor, 1-1/2HP\120or240V\50Hz	1	155442
H1H	Motor, 2HP\120V\60Hz, NoLogo	1	155704-PL
H1J	Motor, 1-1/2HP\120V\60Hz, for 30A switchbox	1	159627
H1K	Motor, 1-1/2HP\120V\60Hz, for 30A switchbox, with L5-15P	1	159627-TL
H1L	Motor, 2HP\120V\60Hz, for 30A switchbox	1	160484
H2	Pulley, 6J17 X 5/8 Bore	1	158214
H3	Key, 3/16 x 3/16 x 1-1/8 Square	1	150344
H4	Screw, 5/16-18 X 3/8 Socket Head Set, Cup Point	2	157083
H5	Label, Warning most motor..., 2 3/4 X 2 7/16	1	155672
H6	Label, Caution, GFCI, 1 X 2 1/8	1	155678
H7	Label, Caution, 5Amp Max., 1 X 2-1/8	1	154822
H8	Label, Warning, Read Owner's Manual, 1-3/4 X 3-3/8	1	155806
H9	Label, MK Service Info., 2 1/8 X 1-13/16	1	155038
H10	Label, MK Checklist	1	157459
H10A	Label, HD Checklist	1	155231
H10B	Label, EH Checklist	1	155301
H10C	Label, LW Checklist	1	157460
H11	Screw, 1/4-20 X 1 Hex Head Cap	2	152676
H18	Box, Top Entry, 30A Switch	1	159487
H19	Cover, 30A Switch Box	1	159539
H20	Lever, Actuator, 30A Switch Box	1	159540
H21	Plate, Mounting, 30A Switch	2	159489
H22	Lever, On/Off, 30A Switch Box	1	159490
H23	Bushing, Nylon, 30A Switch Box	1	158799
H24	Seal, Urethane, 30A Switch Box	1	159492
H25	Gasket, 30A Switch Box	1	159491
H26	Switch, 30A/2HP/120V/DPST	1	159488
H27	Connector, LTF11 Cord	1	159582
H28	Screw, 6-32X5/16 Flat Head Phillips Machine	6	159493
H29	Screw, 10-24X1/4 Pan Head Phillips Machine	1	159494
H30	Screw, 6-32X5/8 Pan Head Phillips Machine	4	157393

MAINTENANCE VIEW AND PARTS LIST

H31	Screw, 10-24 X 5/16 Slotted Hex Washer Head Grounding	1	159597
H32	Washer, #10 SAE Flat	1	154369
H33	Washer, #10Lock, Internal Teeth	2	158336
H34	Terminal, 16-14 X #10Ring, Non-insulated	1	154540
H35	Receptacle, Pump	1	159828
H36	Cord, Power	1	159829
H37	Wire, MK-100/101 Jumper	2	160519
H38	Label, Home Depot Tool Rental	1	160602
J	Cutting Head Sub assemblies	-	-
J1	Cutting Head, DC, 100/101, MKRed	1	158224
J1A	Cutting Head, DC, 101, Blue	1	158224-BL
J1B	Cutting Head, DC, 101, BMRed	1	158224-BM
J1C	Cutting Head, DC, 101, Orange	1	158224-OR
J2	Pin, Blade Shaft Lock	1	158200
J3	Spring, Blade Guard Lock	1	158201
J4	E-Ring, 1/4 Retaining	1	158202
J5	Bearing, 17mm X 40mm X 12mm Ball (6203-2NSE)	2	137711
J6	Shaft, Blade 100/101	1	158222
J7	Flange, 2-3/8 Inner	1	137737
J8	Flange, 2-3/8 Outer	1	135830
J9	Nut, 5/8-18 Hex	1	135848
J10	Pulley, 6J19 X 5/8 Bore	1	158199
J11	Key, 3/16 x 3/16 x 11/8 Square	1	150344
J12	Screw, 5/16-18 X 3/8 Socket Head Set, Cup Point	2	157083
J13	Bumper, 1/2 DiaRubber	1	152674
J14	Screw, 5/16-18 X 1 Hex Head Cap	4	151743
J15	Washer, 5/16 SAE Flat	4	151754
J16	Washer, 5/16 Split Lock	4	151747
J17	Nut, 5/16-18 Hex	4	101196
J18	Screw, 5/16-18 x 3 Hex Head Tap	1	162473
J18A	Bolt, 5/16-18 x 2 1/2 Carriage	1	152675
J19	Pivot, Blade Guard	1	153208
J20	Washer, 3/8 SAE Flat	2	150923
J21	Wingnut, 5/16-18 Nylock	1	151746
J22	Strap, Motor Adjustment	1	152673
J23	Screw, 3/8-16 X 3 1/2 Hex Head Full Thread	1	153147
K	Guide Bars	-	-
K1	Bar, 3/4 X 32 Guide, 101	1	134759
K1A	Bar, 3/4 X 37 Guide, 101Pro	1	153492
K2	Cover, Guide Bar, 120 X 35"	1	158403
K2A	Cover, Guide Bar, 101 Pro 24	1	153219
K2B	Cover, Guide Bar, 120° X 37"	1	160143
K2C	Cover, Guide Bar, 101	1	151771
K3	Spacer, Guide Bar Cover, 101	2	152393
K4	Screw, 5/16-18 X 1 Hex Head Cap	2	151743
K5	Washer, 5/16 Split Lock	2	151747
K6	Washer, 5/16 SAE Flat	2	151754
L	Linear Bearings	-	-
L1	Linear Bearing, 101	1	135855
L2	Screw, 5/16-18 X1 Hex Head Cap	2	151743
L3	Washer, 5/16 Split Lock	2	151747

MAINTENANCE VIEW AND PARTS LIST

L4	Washer, 5/16 SAE Flat	2	151754
M	Tables	-	-
M1	Table, 100/101	1	157660
M1A	Table, 1-Slot, 101 Pro 24	1	160174
M2	Table Extension, 101 Pro	1	162075
M3	Screw, 1/4-20 X 1/2 Socket Head Set	2	155804
M4	Shim, .004 X 5/16 ID X 1/2 OD	4	152519
M5	Washer, 5/16 SAE Flat	2	151754
M6	Washer, 5/16 Split Lock	2	151747
M7	Screw, 5/16-18 X 1 Hex Head Cap	2	151743
M8	Table Extension, Front	1	158215
M9	Screw, 1/4-20 X 5/16 Socket Head Set	2	154226
MA	Table, Tracker Wheel	-	-
-	Assembly, Tracker Wheel Table	1	159554
MA1	Table, 101 Tracker Wheel	1	158962
MA2	Wheel, Conveyor Cart	2	133090
MA3	Nut, Hex w/ WSHR 5/16-18	2	153942
MA4	Frame, 101 Tracker Wheel	1	158937
MA5	Stop, MK101 Tracker Wheel Table	1	159652
MA6	Screw, 10/24 x 1/4 Socket Set-Cup PT	2	157522
MA7	Screw, 5/16-18 x 3/4 Hex Head Cap	2	151369
MA8	Washer, 5/16 Split Lock	2	151747
MA9	Washer, 5/16 SAE Flat	2	151754
N	Roller Wheel	-	-
-	Assembly, Roller Wheel	1	151756
N1	Bracket, Roller Wheel	1	154021
N2	Wheel, Roller	1	151799
N3	Screw, 1/4-20 X 1 1/2 Hex Head Cap	1	151914
N4	Washer, 1/4 SAE Flat	1	151915
N5	Nut, 1/4-20 Hex	1	151893
NA	Dual Roller Wheel	-	-
-	Assembly, Dual Roller Wheel	1	159549
NA1	Bracket, Dual Roller Wheel	1	159548
NA2	Wheel, Roller	2	151799
NA3	Screw, 1/4-20 X 1 1/2 Hex Head Cap	2	151914
NA4	Washer, 1/4 SAE Flat	2	151915
NA5	Nut, 1/4-20 Hex	2	151893
NA6	Shim, .004 X 5/16 ID X 1/2 OD	~4	152519

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

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° Bullnose Miter	
6.	134569-MK	90° Protractor	
7.	152792	Dressing Stone	
8.	152610	Ground Fault Circuit Interrupter	
9.	169658	Saw Tent	

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.

When ordering direct from MK Diamond, please have the following information ready before calling:

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

NOTE: There is a \$25.00 minimum order when ordering direct from MK Diamond. A \$5.00 charge will be added to orders having a net billing value under \$50.00. All purchases must be made using VISA, MasterCard or American Express.

All parts may be ordered by calling toll free to – 800 421-5830 or 310 539-5221 and asking for Customer Service. For technical questions, call – 800 474-5594.

RETURN MATERIALS POLICY

To expedite the service relative to the return of a product purchased through MK Diamond, please observe the following:

NOTE: When returning all items, they must have been purchased within the previous twelve (12) months.

- Have the Model Number of the 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: Saw, Diamond Blade, Blade Guard and Support Angle Assembly and Adjustable Cutting Guide (Other Accessories are not required)
- Package the unit in its original container or one of comparable size (do not ship the unit partially exposed)
- Ensure all parts are secured in the packaging to prevent moving

AUTHORIZED SERVICE CENTERS

For quicker repair time, you may contact MK Diamond Customer Service, toll free, at 800 421-5830 or 310 539-5221 for the Authorized Service Center closest too you or visit our web site at www.mkdiamond.com. For technical questions, call – 800 474-5594.

CONTACT AND LIMITED WARRANTY

CONTACT:

Please contact MK Diamond Products, Inc. Customer Service Department with any questions you might have regarding distributors, parts or service.

Telephone: **(800) 421-5830**

Fax: **(310) 539-5158**

E-mail: **Customer_Service@MKDiamond.com**

Customer Service Hours: **Monday through Friday, 6AM-4PM PST**

MK Diamond Products, Inc.

1315 Storm Parkway

Torrance, CA 90501

MK DIAMOND PRODUCTS, INC. LIMITED WARRANTY

MK DIAMOND PRODUCTS, INC. will guarantee every machine they build, to be free from defects in material and workmanship for (1) one year from date of purchase. The obligation of MK DIAMOND PRODUCTS, INC. under this warranty is limited to the repair or replacement of any parts which, under normal use, prove to be defective in material or workmanship. The parts involved or the unit in question should be returned to MK DIAMOND PRODUCTS, INC. or to a point designated by us, transportation prepaid.

This warranty does not obligate us to bear the cost of labor or transportation charges in connection with replacement or repair of defective parts. Likewise, it shall NOT apply to any unit which has been subjected to misuse, neglect or accident. This warranty does NOT apply to any machine which has been repaired or altered outside our factory.

This warranty does NOT obligate MK DIAMOND PRODUCTS, INC., with respect to items not of our manufacture, such as engines, motors, hydraulics, etc., which are subject to their own guarantees and warranties.

We shall in no event be liable for consequential damages or contingent liabilities arising out of failure of any equipment or parts to operate properly.

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MK Diamond may have patents, patent applications, trade marks, copyrights of other intellectual property right covering this product in this document.

This manual **MUST** accompany the equipment at all times. This manual is considered a permanent part of the equipment and should remain with the unit if resold.

The information and specifications included in this publication were in effect at the time of approval for printing.

MK-101 Pro 24 Tile Saw
OWNERS MANUAL & OPERATING INSTRUCTION
DOCUMENT NO. 158808



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