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## MK-6000 SERIES OWNER'S MANUAL & OPERATING INSTRUCTIONS

MODELS	PART #	MODELS	PART #
MK-6020KB	165149-20	MK-6020KGB	165149-20G
MK-6026KB	165149-26	MK-6026KGB	165149-26G
MK-6030KB	165149-30	MK-6030KGB	165149-30G
MK-6036KB	165149-36	MK-6036KGB	165149-36G
		MK-6042KGB	165149-42G



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



## INTRODUCTION

Congratulations on your purchase of a MK-6000 Concrete 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-6000 Concrete Saw 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-6000 Concrete Saw safely and correctly. Please take the time to familiarize yourself with the MK-6000 Concrete Saw by reading and reviewing this manual.

Read and follow all safety, operating and maintenance instructions.

If you should have questions concerning your MK-6000 Concrete 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 warnings and guidelines do not by themselves eliminate danger. They are not substitutes for proper accident prevention procedures and good judgement.

#### SAFETY MESSAGES

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

DANGER You WILL be KILLED or SERIOUSLY INJURED if you DO NOT follow directions.

WARNING You CAN be KILLED or SERIOUSLY INJURED if you DO NOT follow directions.

You **CAN** be **INJURED** if you **DO NOT** follow directions. It may also be used to alert against unsafe practices.

#### DAMAGE PREVENTION AND INFORMATION MESSAGES

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

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

#### GENERAL SAFETY PRECAUTIONS AND HAZARD SYMBOLS

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



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



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



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





### PERSONAL PROTECTIVE EQUIPMENT

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



### **ACCIDENTAL STARTS!**

Before starting the engine/motor, be sure the **ON/OFF** switch is in the **OFF** position to prevent accidental starting. Place the **ON/OFF** switch in the **OFF** position before performing any service operation. **ALWAYS** place the power **ON/OFF** switch in the **OFF** position when the machine is not in use.



#### **ROTATING PARTS**

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



### HOT PARTS!

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

#### **OVER SPEED**

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



### ELECTRICAL SHOCK

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



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



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



#### **KEEP CHILDREN AWAY**

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

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



#### MAKE THE WORKSHOP KID PROOF

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



#### DO NOT FORCE THE TOOL

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



## USE PROPER APPAREL

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



### SECURE WORK

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



### DO NOT OVERREACH

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



#### **DISCONNECT TOOLS**

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



### MAINTAIN TOOLS WITH CARE

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



#### **REMOVE ADJUSTING KEYS AND WRENCHES**

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



### KEEP WORK AREA CLEAN

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



#### DO NOT USE IN DANGEROUS PLACES

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



#### **USE RECOMMENDED ACCESSORIES**

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



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



#### **NEVER STAND ON THE TOOL**

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



#### TRANSPORT

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



### CHECK FOR DAMAGED PARTS

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



#### DIRECTION OF ROTATION

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



#### **NEVER LEAVE A TOOL UNATTENDED**

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



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



**NEVER** use this machine with any cutter designed for woodworking.



**NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.



**NEVER** operate this equipment under the influence of drugs or alcohol.



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



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



**ALWAYS** store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children



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



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

#### SILICA DUST WARNING

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

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

Observe OSHA regulations for respirator use (29 C.F.R.§1910.134). Visit *http://www.osha.gov* for more information.

#### CALIFORNIA PROPOSITION 65 MESSAGE

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead, from lead-based paints
- · Crystalline silica, from bricks and cement and other masonry products
- · Arsenic and chromium, from chemically treated lumber

For further information, consult the following sources: http://www.osha.gov/dsg/topics/silicacrystalline/index.html http://www.cdc.gov/niosh/docs/96-112/ http://oehha.ca.gov/prop65/law/P65law72003.html http://www.dir.ca.gov/Title8/sub4.html http://www.P65warnings.ca.gov

Your risk from these exposures varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles. Where use of a dust extraction device is possible, it should be used. To achieve a high level of dust collection, use an industrial HEPA vacuum cleaner. Observe OSHA 29 CFR part 1926.57 and 1926.103.

## GAS ENGINE SAFETY

Gasoline models are shipped from the factory dry, meaning without fuel or oil. Both must be added before equipment can be used. Check the engine Manufacturer Owner's Manual for instructions on fueling, break-in, servicing and proper engine care and use.

## GAS SAFETY PRECAUTIONS



### EXPLOSIVE FUEL!

Gasoline is extremely flammable, its vapors can explode if ignited; store only in approved containers, in well-ventilated, unoccupied buildings and away from sparks or flames. **DO NOT** fill the fuel tank while the engine is running or hot. Spilled fuel could ignite if it contacts hot parts or sparks from ignition. **DO NOT** overfill tank. **DO NOT** start the engine near spilled fuel. Never use gasoline as a cleaning agent.



Refer to engine manufacturer manual for specific operating procedures and safety warnings. **ALWAYS** check the fuel lines and fuel tanks for leaks and cracks before starting the engine. **DO NOT** run the machine if fuel leaks are present or the fuel lines are loose.



Accidental start hazard. Disconnect spark plug prior to servicing.



#### LETHAL EXHAUST GASES!

Engine exhaust gasses contain poisonous carbon monoxide (an odorless, colorless gas). Avoid inhaling exhaust fumes Breathing it can cause unconsciousness and even kill you. Always operate gasoline engine machines in a well-ventilated area. **DO NOT** operate in areas where exhaust fumes could accumulate without wearing appropriate respiratory protection. Never run the engine in a closed building or confined area.

**NOTE:** Prior to operation of this machine the operator must determine the existence and location of any subsurface features that may be hazardous or could damage the equipment, (i.e. electric cable, natural gas line etc.).

#### FUELING SAFETY

**ALWAYS** use caution when handling fuel. Shut off the engine and allow to cool before refueling.



ALWAYS refill fuel tank in a well-ventilated area.



ALWAYS replace the fuel tank cap after refueling.



ALWAYS close fuel value on engines when machine is not being operated.

Move the machine at least 10 feet (3 meters) from the fueling point before starting the engine, and make sure the gas cap is on the machine and the fuel can is properly tightened.

SAFETY

### TRANSPORT SAW



**WARNING** Never attempt to off load the saw on uneven ground of any degree or slope.

- 1. When transporting the saw from location to location, be sure the transmission drive system is engaged. The FNR handle must be in the neutral position.
- 2. Lower the saw completely to relieve the weight on the front axle assembly.
- 3. For prolonged hauling, the saw should be blocked and chained to prevent undue stress and strain on the drive system.

#### SAW BLADE SAFETY

For complete safety information, refer to ANSI Safety Code B7.1 available through the American National Standards Institute.

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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.



**ALWAYS** keep area around the machine clear of obstructions and clear the work area of unnecessary people. Keep all body parts away from the blade and all other moving parts. Keep hands out of line of saw blade. Never reach around or over saw blade.



Before starting the machine, check that all guards are in position and correctly fitted. **NEVER** allow blade exposure from the guard to be more than 180 degrees. **DO NOT** operate this machine with any guard removed.



Inspect the blade, flanges, and shafts for damage before installing the blade. **NEVER** use damaged or worn blade flanges. Discard cracked, chipped or bent blades. Cracks in the core, hot spots on the core, warping steel core, missing segments and damaged arbor hole are all visible indications that the blade is damaged.





**DO NOT** exceed maximum blade speed, as excessive speed could result in blade breakage. Use **ONLY** blades marked with a maximum operating speed greater than the blade shaft speed. Verify speed and saw drive configuration by checking blade shaft RPM, pulley diameters, and blade flange diameters.



Use the correct blade for the type of work being done. Use only reinforced abrasive blades or steel center diamond blades. **DO NOT** use carbide-tipped blades. Check with the blade manufacturer if you do not know if blade is correct.

#### **MK-6000 SAW**



Make sure the blade and flanges are clean and free of dirt and debris before mounting the blade on the saw. Verify the blade arbor hole matches the machine spindle before mounting the blade. **ALWAYS** mount the blade solidly and firmly. Wrench tighten the arbor nut.



### CAUTION

Make sure that the arrow on the blade points in the same direction as the arrow marked on the blade guard. Before turning the switch "ON", make sure that the blade is correctly installed and operating properly.



In the event of blade failure, replace blade guard immediately.



Do not touch a dry cutting blade immediately after use. These blades require several minutes to cool after each cut. Do not use a blade that has been overheated (core has bluish color).



Never try to stop a moving blade with your hands.



DO NOT cut dry with blades marked "WET".



If the blade makes an unfamiliar noise or vibrate excessively, switch the saw of immediately and disconnect it from the power source. Investigate the cause and remedy the problem before restarting the saw.



**DO NOT** make long continuous cuts with a dry diamond blade. Allow the blade to cool between cuts by freewheeling. Harder materials will cause the blade to heat more quickly.



Let the blade reach full speed before commencing the cut.

#### SAFETY LABEL

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.



#### Location

- A Console
- B Console
- C Belt Guard/ Blade Guard/ Shaft Cover
- D Frame Front
- E Console
- F Frame Front
- G Console
- H Blade Guard
- I Frame Front
- J Blade Guard
- K Blade Guard
- L Console
- M Console
- N Belt Guard
- O Belt Guard
- P Console
- Q Console

#### Description

Warning - Silica Caution - Read Manual Caution Guards in Place

Caution Hands & Feet Warning - Do Not Overfill Tank Notice - Overtension of the Belts Service/Warranty Warning - Belt Drive & Blade Flanges Accidental Start Replace Blade Guard Blade Direction Prop 65 QR Code for Manuals Danger - Exhaust/Cancer Caution - Do Not Touch Machinery Hazard Warning - Diesel Only

## SAFETY DECAL

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## SAFETY DECAL LOCATIONS







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## CONSOLE CONTROLS

The following is a list of console controls elements:



Kubota

#### CONSOLE CONTROL DESCRIPTIONS

	Name	Function
Α	Ignition Switch	Use to start engine (Glow-OFF-ON-START).
В	Engine Throttle	Controls engine speed.
С	Engine Temp Gauge	Shows temperature of engine.
D	Lifting Points	Used to lift saw.
Е	Engine Tachometer	Shows the engine RPM's.
F	Indicator Lights	Indication of Oil Pressure, Charge and Glow Plug.
G	Fuel Gauge	Shows the level of fuel in the fuel tank.
н	Depth Stop	Sets the depth stop for repetitive cuts at the same depth.
I	Radiator	Filled with engine coolant
J	Depth Indicator	Displays cutting depth.
κ	T-Handle Knob	Use to tighten operator grip handles.
L	Handle Grip	For operator gripping.
Μ	Fuel Tank Fill	Fill the fuel tank at this location.
Ν	Raise/Lower Handle	Controls raising and lowering of blade.
0	Temp Gauge Reset	Must be reset after overheat condition
Р	FNR Handle	Used to set direction of saw (Forward/Neutral/Reverse).
Q	Water Valve Lever	Controls water flow to blade guard.
R	Back Panel Knob	1/4 Turn Fastener to remove back.
S	Water Inlet	Hook-up for standard water hose.
т	E-Stop	Stops down engine in an emergency!
U	Point Lift Cable	Allows operator to lift pointer.
V	Neutral Engagement Handle	Engages Transmission, Turn-To-Lock.

## SPECIFICATIONS

#### SINGLE SPEED

59 HP SERIES	MK-6020KB	MK-6026KB	MK-6030KB	MK-6036KB
Part #	165149-20	165149-26	165149-30	165149-36
Blade Guard Capacity	20" (508mm)	26" (660mm)	<b>30"</b> (762mm)	<b>36"</b> (914mm)
Max. Depth of Cut	7-1/2" (191mm)	10-1/2" (267mm)	12-1/2" (318mm)	15" (381mm)
Blade Flange Diameter	<b>4"</b> (102mm)	<b>5"</b> (127mm)	5" (127mm)	<b>6"</b> (152mm)
Blade Shaft RPM	2,500	1,980	1,640	1,400
Engine Type	Kubota V2403-M-T	Kubota V2403-M-T	Kubota V2403-M-T	Kubota V2403-M-T
Maximum Horsepower**	59Hp (44.0kw)	59Hp (44.0kw)	59Hp (44.0kw)	59Hp (44.0kw)
Displacement	148.5 cu in. (2.434 Liters)			
Bore	3.43" (87mm)	3.43" (87mm)	3.43" (87mm)	3.43" (87mm)
Stroke	4.03" (78.4mm)	4.03" (78.4mm)	4.03" (78.4mm)	4.03" (78.4mm)

14" Blade Guard Model Available upon Request

### **SPECIFICATIONS**

#### THREE SPEED

59 HP SERIES	MK-6020-KBG	MK-6026-KBG	MK-6030-KBG	MK-6036-KBG
Part #	165149-20G	165149-26G	165149-30G	165149-36G
Blade Guard Capacity	<b>20"</b> (508mm)	26" (660mm)	<b>30"</b> (762mm)	<b>36"</b> (914mm)
Max. Depth of Cut	<b>7-1/2"</b> (191mm)	10-1/2" (267mm)	12-1/2" (318mm)	15" (381mm)
Blade Flange Diameter	<b>4"</b> (102mm)	<b>5"</b> (127mm)	5" (127mm)	<b>6"</b> (152mm)
Blade Shaft RPM*	1100/1700/ <b>2500</b>	1100/ <b>1700</b> /2500	1100/ <b>1700</b> /2500	<b>1100</b> /1700/2500
Engine Type	Kubota V2403-M-T	Kubota V2403-M-T	Kubota V2403-M-T	Kubota V2403-M-T
Maximum Horsepower**	59Hp (44.0kw)	59Hp (44.0kw)	59Hp (44.0kw)	59Hp (44.0kw)
Displacement	148.5 cu in. (2.434 Liters)	148.5 cu in. (2.434 Liters)	148.5 cu in. (2.434 Liters)	148.5 cu in. (2.434 Liters
Bore	3.43" (87mm)	3.43" (87mm)	3.43" (87mm)	3.43" (87mm)
Stroke	4.03" (78.4mm)	4.03" (78.4mm)	4.03" (78.4mm)	4.03" (78.4mm)
59 HP SERIES	MK-6042-KBG			
Part #	165149-42G			
Blade Guard Capacity	42" (1067mm)			
Max. Depth of Cut	17-1/2 (495mm)			
Blade Flange Diameter	<b>7"</b> (177mm)			
Blade Shaft RPM*	<b>1100</b> /1700/2500			
Engine Type	Kubota V2403-M-T			
Maximum Horsepower**	59Hp (44.0kw)			
Displacement	148.5 cu in. (2.434 Liters)			
Bore	3.43" (87mm)			
Stroke	4.03" (78.4mm)	-		

14" Blade Guard Model Available upon Request

\*Bold blade shaft RPM indicates correct speed for model listed above

\*\*Engine power ratings are calculated by the individual engine manufacturer and the rating method may vary among engine manufacturers. MK Diamond Products makes no claim, representation or warranty as to the power rating of the engine on this equipment and disclaims any responsibility or liability of any kind whatsoever with respect to the accuracy or the engine power rating. Users are advised to consult the engine manufacturer's owners manual and website for specific information regarding the engine power rating.

## **MK-6000 SAW**

## **SPECIFICATIONS**

GENERAL SPECIFICATIONS	
Arbor Size	1" (25.4mm) w/ 3/8" Drive Pin
Blade Shaft Diameter	<b>2"</b> (58 mm)
Blade Shaft Bearings	Oil Bath
Blade Shaft Drive	1 Ten Rib Powerband
Blade Guard Attachment	Quick Detach Bayonet
Blade Control	Electro-Hydraulic
Axle - Front	1" (25mm)
Axle - Rear	1" (25mm)
Wheels - Front	<b>6" x 2-1/2" x 1"</b> (152 x 64 x 25mm)
Wheels - Rear	<b>10" x 3" x 1"</b> (254 x 77 x 25mm)
Handle Bars/Adjustment Length	<b>32-1/2"</b> (826mm)
Transmission	Eaton Hydrostatic
Rear End/Differential	Differential
Control	Forward/Reverse Control, Engage/Disengaged Controls and Differential Lock
Speed	0-222 FPM (Forward) 0-100 FPM (Reverse)
Chassis	Heavy Duty jig-welded box frame
Power Source	Kubota V2403-M-T-E3B Diesel Turbo Charged
Cylinders	Four Cylinder Turbo Diesel
Fuel Capacity	10 Gal (34 liter)
Oil Capacity	10 Qt. (9.4 liter)
Air Filter	Three Stage Sy-Klone
Starter	Electric
Travel Speed	0-220 FPM Forward, 0-100 FPM Reverse
Engine Cooling	Liquid Cooled

#### SAW DIMENSIONS





Item	Description	Inches	(mm)
Α	Height	53-1/2"	(1,359)
В	Minimum Saw Length	70"	(1,778)
С	Maximum Overall Length	140-1/2"	(3,568)
D	Handle Extension	25"	(635)
Е	Maximum Pointer Extension	62"	(1,574)
F	Frame Width	31-1/2"	(800)
G	Frame Length	50"	(1,270)
н	Saw Width	39-1/2"	(1,010)
J	Outside to Outside Wheel Width - Front	28"	(711)
К	Outside to Outside Wheel Width - Rear	32"	(812)
L	Blade to Wall	2-1/4"	(57)
М	Wheel Base Length	20-1/2"	(570)
Ν	Maximum Overall Height (Pointer Up)	56"	(1,422)



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#### INSTRUCTIONS FOR CHANGING BLADE SPEED FOR SINGLE SPEED SAWS

## 

Do not exceed blade shaft speed shown for each blade size. Excessive blade speed could result in blade failure and serious personal injury.



Changing Blade Guard size **MUST** be accompanied by changing Pulleys to achieve the correct blade speed.

#### SINGLE SPEED SAWS

Blade Size	Model # Kubota	Includes	Blade Shaft Speed (Engine RPM = 2800)	Blade Speed (FPM)
20"	MK-6020KB Single Speed	20" Blade Guard Assembly 4" Flange Set 3.4" Engine Pulley 4.8" Blade Shaft Pulley 10 Rib Powerband	2,500 RPM	16" = 10,470 18" = 11,780 20" = 13,090
26"	MK-6026KB Single Speed	26" Blade Guard Assembly 5" Flange Set 3.4" Engine Pulley 4.8" Blade Shaft Pulley 10 Rib Powerband	1,980 RPM	20" = 10,370 24" = 12,440 26" = 13,480
30"	MK-6030KB Single Speed	30" Blade Guard Assembly 5" Flange Set 3.4" Engine Pulley 5.8" Blade Shaft Pulley 10 Rib Powerband	1,640 RPM	26" = 11,160 30" = 12,880
36"	MK-6036KB Single Speed	36" Blade Guard Assembly 6" Flange Set 3.4" Engine Pulley 6.8" Blade Shaft Pulley 10 Rib Powerband 36" Frame Corner	1,400 RPM	30" = 11,000 36" = 13,190

## 

As shown on the chart, some blade guards accept more than one size blade.

BLADE GUARDS AND BLADE SIZES			
BLADE SIZE THAT C BLADE GUARD BE USED WITH BLAN GUARD			
<b>20</b> " 16" up to 20"			
<b>26</b> " 20" up to 26"			
<b>30</b> " 26" up to 30"			
<b>36</b> " 30" up to 36"			

#### **INSTRUCTIONS FOR CHANGING BLADE SPEED FOR THREE SPEED SAWS**

## DANGER!

Turn off saw before changing gears. Engage the E-Stop button for additional safety.

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Never shift the Gearbox with the engine running. Only shift the Gearbox with the engine OFF. Gearbox damage could occur.

**NOTE:** The engine speed on this saw does not need to be changed from the factory set speed. The maximum RPM should be 2800, no load.

The 3-speed gearbox provides correct blade speed for different blade sizes. Determine gearbox speed based on the chart below.

Selected Gear	Blade Diameter/ Blade Guard	RPM
High	14" - 20"	2500
Medium	22" - 30"	1700
Low	36" - 42"	1100



**NOTE:** Gears are not sequential. High speed is in middle position.





Move lever up to unlock gears.



Place lever in desired position.



Move lever all the way down to lock in gear selection.

**NOTE:** Blade may need to be rotated slightly so gears align and lever slides to desired position/gear.

#### **MK-6000 SAW**

### **INSPECTION & START-UP**

#### BELT AND POWERBAND INSPECTION AND TENSION ADJUSTMENT

The MK-6000 is designed with a transmission belt and a 10 rib powerband. The transmission belt and powerband should be inspected, adjusted and/or replaced periodically. Inspect the belt and powerband daily for cracks, fraying, separation and wear.

#### **Powerband Tension**



Check powerband tension by applying pressure by pushing down firmly with finger in the middle of the belt; approximately 1/8" deflection is correct.

#### **To Tension Powerband**



Loosen 4 bolts on the two retaining caps so gearbox can rotate.



Loosen locknut on tension bar.



Apply tension to belt by turning tension screw clockwise, increasing tension.

## When correct tension has been obtained, retighten locknut and retaining caps. Replace belt guard. **Transmission Belt Tension**



A. Lock Nut B. Breaker arm hole



Check transmission belt tension by applying pressure by pushing down firmly with finger in the middle of the belt; approximately 3/8" deflection is correct.



To Tension Belt: Loosen locknut on tension arm. Apply tension with ½" drive breaker bar.

Retighten locknut and check deflection is correct. Replace belt guard.

#### **PRE-OPERATION CHECKLIST**



## WARNING

Before leaving our factory, every machine is thoroughly tested. Follow instructions strictly and your machine will give you long service in normal operating conditions.



Before starting up the machine, make sure you read the entire Operation Manual and Engine Manual so you are familiar with the operation of the machine.

#### Machine Cold

- Check engine oil. See Engine Owner's Manual for type and quantity.
- Connect battery cables.
- 3. Check hydrostatic transmission fluid level.
- Test hydraulic operations. Raise and lower.
- 5. Check the engine air cleaner.

#### SCHEDULE MAINTENANCE QUICK REFERENCE

#### 1-2 Hour Operation Checklist



ALWAYS locate machine on a level surface with the engine "OFF" and the ignition switch set in the "OFF" position before performing any maintenance. Let the machine cool down prior to any service.

- 1. Check the engine air cleaner hose clamps. Tighten as required.
- 2. Tension the blade drive V-belts. **DO NOT** overtension.

# WARNING

Before performing any maintenance, ALWAYS locate machine on a level surface with the engine "OFF" and the ignition switch set in the "OFF" position.

#### Service Daily

- 1. Check engine oil level.
- 2. Check blade guard for damage.
- Check hoses and clamps for damage or looseness. Tighten or replace as necessary.
- 4. Check air cleaner for restriction. Replace air filters at regular intervals.

#### **Interval Service**

See the Maintenance Schedule Table on Page 30.

### **MK-6000 SAW**

## 

Before mounting the blade, machine should be turned "OFF". Clean the blade collars and stub shaft. **BLADE MOUNTING INSTRUCTIONS** 

- 1. Remove Blade Guard.
  - A. Unscrew the hose fitting to disconnect hose.
  - B. Hold the Blade Guard by the handle. Release the inner latch.
  - C. Pull the guard up and off the Saw.



Unscrew Hose Fitting



**Release Inner Latch** 

2. Remove arbor bolt. If blade is mounted on right side saw, the bolt has left hand threads. To remove turn clockwise. If the blade is mounted on left side of saw, bolt has right hand threads. To remove, turn counter-clockwise.

- 3. Pull off vi-lock washers and outer flange.
- 4. Install new blade.
- 5. Slide the outer flange in place.
- 6. Slide on the vi-lock washers. Ensure the stepped ridges face each other.
- 7. Tighten the arbor bolt.
- 8. Install the blade guard in place. Make sure that the guard locks in place and connect the hose.

## 

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.



Remove arbor bolt



**Replace Washers** 



Install Blade Guard

#### **BLADE MOUNTING INSTRUCTIONS**

# 

Observe the rotation arrow on blade and **DO NOT** exceed maximum RPM stamped on the blade. To set proper RPM, consult the Blade Guards and Blade Sizes.

## 

To meet ANSI safety standards, larger diameter blade flanges are required for large diameter blades. Information is available upon request or for complete safety information refer to ANSI Safety Code B7.1

## 

We recommend the use of MK Diamond Products diamond blades with these saws.

FLANGE DIAMETER	BLADE DIAMETER
4"	20"
5"	26" up to 30"
6"	36"
7"	42"

#### POSITIONING THE SAW

Position the handles to suit the operator and conditions. The saw may be pivoted like a wheelbarrow by lifting the rear wheels and rotating the saw into position. If moving the saw more than a few feet or up and down ramps, start the engine and drive.

### STARTING ENGINE

## 

Read the engine instructions manual before starting.

# 

Be sure blade is unobstructed and not resting on ground.

## 

Be sure hands and feet are clear of blade.

- 1. Check engine oil. Add oil if low.
- 2. Check fuel level. Add fuel if low.
- 3. Check cooling air intake areas and external surfaces of engine. Make sure surfaces are clean and unobstructed.
- 4. Check that air cleaner components and all shrouds, equipment covers and guards are in place and securely fastened.

#### STARTING INSTRUCTIONS

- 1. Place FNR Handle in **NEUTRAL**.
- 2. Verify Neutral Engagement Handle is down, in NEUTRAL.
- 3. Pull Engine Throttle Handle out half-way.
- 4. Start engine by rotating Ignition Switch to the right.

## 

**DO NOT** crank engine for more than 30 seconds at a time. If engine fails to start, wait about 2 minutes between cranking periods to prevent starter from overheating.

# 

Allow engine to warm up at least 3 minutes before applying load.

- 5. When engine is warm, throttle may be used out to maximum position.
- 6. To stop engine, push throttle to idle, rotate ignition switch to "OFF" position.



If the engine has been running hard and is hot, do not shut engine off abruptly. Cool engine by removing load and allowing engine to run idle for 3 to 5 minutes.

#### SAW GUIDE ALIGNMENT AND ADJUSTMENT

## 

This operation is performed with the engine "OFF"!

The front and rear pointers are set in line at the factory. However, the pointers should be checked for proper alignment with the blade after every use. The following are the procedures for aligning the pointers with the blade, with the engine shut off.

- 1. Using a straight edge, carefully mark a line 12 feet long on a smooth level concrete surface.
- 2. Place the saw parallel to the line. Lower the blade and center it over the line.
- 3. **FRONT:** With the blade centered over the line and the saw frame parallel to the line, lower the front pointer assembly and position the pointer over the line.
- 4. **REAR:** With the blade centered over the line and the saw frame parallel to the line, loosen the pointer and adjust up or down and ensure that it touches the line.
- 5. Finally, roll the saw along the entire length of the line. The saw should lead off no more than 6 inches to the left in 12 feet of forward travel. Adjust the pointer in or out if the lead-off is outside this parameter.
- 6. Secure hardware.



#### MANEUVERING THE SAW



The blade is spinning whenever the saw is running. Raise the blade as high as possible when maneuvering so that the blade will not strike the pavement.

#### DRY CUTTING

Dry cutting blades have been specially designed for use with concrete saws. Ensure that the blade you are using is clearly marked for dry cutting.

When dry cutting, it is important to keep the air filter clean. Check the condition of the filter at least every four (4) hours of operation. Clean the pre-filter (wash in soapy water and re-oil) and change the paper filters as soon as it becomes clogged. Concrete dust is very abrasive and will quickly damage internal engine parts, causing loss of compression and eventual engine failure.

Saw only as deep as the specifications and job conditions require. Remember airflow helps to cool the blade during dry cutting. Cutting too deep with one pass, or exerting excessive forward or side pressure can be dangerous. Step cut in increments of 1 inch (25 mm) or less, for the best results.

If reinforced abrasive blades are used for cured concrete, it is usually better to saw only 1 inch deep per pass. If deeper cuts are required, cut in multiple passes.

Thinner Diamond Blades are especially advantageous when cutting dry.

#### WET CUTTING

The water used on the blade is to provide coolant during cutting and to flush the concrete cutting from the cut. Turn the water control to full "ON" when using wet cutting blades. The required flow rate is 5 to 8 gallons per minute.

#### FNR HANDLE

The FNR Handle moves the saw forward by pushing the lever away from the operator and moves the saw in reverse by pulling the lever toward the operator. The further you push this lever, the faster the saw travels.

## 

Before starting the engine, place this lever in **NEUTRAL**.

#### **RAISE/LOWER HANDLE**

The raise/lower handle controls the depth of the blade. When pulled back, the electric/hydraulic pump will raise the blade out of the cut. When pushed forward the blade will lower. The lowering speed is faster, the farther forward the lever is pressed.

#### ENGAGING THE DRIVE UNIT

This saw is driven by a hydrostatic transmission. To engage the transmission, **PULL** the Neutral Engagement Handle up and turn to either direction to lock.

**DO NOT** engage the unit unless FNR Handle is on **NEUTRAL**.



**Engage transmission** 

To disengage the transmission, twist the Neutral Engagement Handle to unlock, and **PUSH** down.

#### WATER HOOK UP

Prior to starting the engine, you should hook up the water hose to the Water Inlet and visually inspect it to make sure that water is flowing to the blade. Hook up the hose to the unit and turn on the water source. Open the water valve.

## 

Water flow volume can be metered by opening the water valve partially.

Next, lift the front of the blade guard and visually inspect to make sure water is flowing out of each of the tubes. If any of the holes are blocked, flush impurities from the tube.



#### **DEPTH INDICATOR AND DEPTH STOP**

The saw is equipped with a Depth Indicator and a Depth Stop. The Depth Indicator tells you approximately how deep you are in the cut. To set the indicator, you need to first lower the blade until it is just touching the ground and then rotate the Depth Indicator knob to 0.

The Depth Stop is used for several cuts at the same depth. It is set by finding the desired depth and then turning the knob until it is tight. This will prevent cutting below the "locked" level to provide a consistent depth with every cut.



**Depth Indicator and Depth Stop** 

#### **STEP CUTTING**

- 1. Follow general instructions outlined in the section Operating the Saw pages 20.
- 2. When deep sawing (more than 4") or concrete with hard aggregate, sawing to full depth in several cuts should be made in incremental steps of 1-1/2 to 2 inches until the desired depth of cut is reached. In softer aggregates or asphalt, it may be possible to saw full depth in two passes.
- Gradually move the speed control lever forward to increase the cutting speed. If the blade stalls in the cut (which can happen when deep sawing) immediately raise blade from cut. If not done at once, the belts will spin freely and burn. Check belts for proper tension and continue sawing at a slower rate of speed.
- 4. On final pass, lower the blade until it hits the sub-base (sandy color will appear in the water being discharged from the cut). Raise blade approximately 1/2" from bottom. The sand and gravel particles of the sub-base may cause premature wear or damage to the saw blade.
- 5. It is common, on the final pass of the cut, for pavement to wedge blade, particularly on a hot day. When this happens, immediately stop engine. If the blade is wedged, remove the Blade Shaft Bolt and Outside Collar and move the saw away from the blade. To remove a wedged blade from the concrete, use a jack hammer and carefully chip out concrete around the blade. (Pounding or twisting the blade may cause severe damage).
- 6. Go slowly with a new blade until it "opens up" that is, until you can see and feel the diamonds.
- 7. Small corrections can be made by leaning on handles. Deep sawing is very hard on saws and blades. Experienced operators soon get a "feel" for the saw and are constantly on guard to slow down when they hit excessive steel or hard aggregate.

#### ENGINE

The operation and life of the engine depends on proper maintenance. Do not start engine until engine pre-check is complete. The engine pre-check consists of checking the oil, fuel level, air filter and greasing the wheel, axle, drive unit and arbor bearings. Basic engine maintenance is shown in Maintenance Schedule Table on the next page. For more detailed information, please refer to the Engine Operator Maintenance Manual and Warranty provided with the saw.

# 

When breaking-in a new saw, we recommend running the engine for one hour with no load prior to actual use on the job.

#### AIR CLEANER

Due to the dusty conditions created by sawing, it is essential to check the engine air cleaner element daily. Remove the element and shake out the accumulated dust and dirt. Wipe out dirt from the inside cover and from the housing. Check the engine manual for washing instructions. Stocking replacement filters is strongly recommended.

#### ARBOR, AXLE, DRIVE UNIT AND WHEEL BEARINGS

Blades shaft, Axle, Drive Unit, and Wheel Bearings should be greased according to the Maintenance Schedule table on the next page.

## **WARNING**

**DO NOT** inspect when the engine is running.

Use of high quality detergent oil of API (American Petroleum Institute) service class SF or SG. Select the viscosity based on the air temperature at the time of operation. For temperatures below 0°F, 5W-20 or 5W-30 oil is recommended. For temperatures above 0°, 10W-30 oe 10W-40 oil is recommended. Check your engine manual for other recommendations.

#### HYDROSTATIC DRIVE UNIT & TRANSMISSION GEARBOX

The fluid shipped in your hydrostatic transmission is a fluid having a viscosity equivalent to SAE 20W20. Mobil fluid 300 or any other oil equivalent to SAE 20W20 is preferred by Eaton Transmission. The expansion tank (Marker A) is marked for proper fluid level. It should be checked when unit is cold. **DO NOT** allow the unit to run low on oil. If the unit is low, you can add oil by removing the cap (Marker B). Remove plug (Marker C) and fill transmission gearbox with 80-90 SAE Gear Oil to lower edge of fill hole.



**Expansion Tank and Cap** 

#### MAINTENANCE SCHEDULE

MAINTENANCE SCHEDULE	DAILY	25 HOURS	50 HOURS	250 HOURS
Check Engine Oil Level	X			
Check Air Filter	X			
Check Air Intake, Clean if Necessary	X			
Grease Rear Wheel Pillow Blocks		X		
Grease Front Wheel Bearings		X		
Check Drive Transmission Oil, Add if Low		X		
Check Bladeshaft Gearbox, Add if Low		X		
Check Power Unit Fluid, Add if Low		X		
Large Road Saw Air Cleaner Element			Х	
Change Engine Oil		X		
Change Engine Oil Filter			Х	
Check Engine Compression				X
Inspect Fuel Filter, Replace if Dirty				Х
Inspect Spark Plugs and Ignition System				X
Inspect Cooling System and Clean				X
Inspect Starting Motor				X
Gearbox Oil Level			Х	

#### TROUBLESHOOTING

When trouble occurs, be sure to check the simple causes which, at first, may seem too obvious to be considered. Refer to the table below for problems and their possible causes.

	Cause Problem	Loose Transmission Linkage	Oil Level	Cooling Fan	Water in Oil Reservoir	Dirty Cooling Fans	Loose Drive Chain
	Transmission jerky when starting	Х	x				х
TRANSMISSION	Transmission operates in one direction	x					
	Transmission operating hot	X	Х	X		X	
	Oil color is black			X		X	
	Oil color is milky				Х		

	Cause	No Fuel	Improper Fuel	Dirt in Fuel Line	Fuse Burned Out	Incorrect Oil Level	Dirty Air Filter	Faulty Spark Plugs
	Will not start	X		X	Х		X	X
	Hard starting	X	Х	X			Х	X
	Stops suddenly	X		X		X	Χ	
ENGINE	Lacks power		X	X		X	Х	X
	Operates erratically		X	X			Х	X
	Knocks or pings		Х					X
	Skips or misfires			Х			Х	X
	Back fires			Х			Х	X
	Overheats			Х			Х	X
	High Fuel Consumption						Х	X

OTHER	Cause Problem	Improper Blade for the Application	Improper Belt Tension	Damage Caused by External Objects
	Reduced blade life	X	X	
	Excessive belt wear		X	X

#### **MK-6000 SAW**

#### ORDERING INFORMATION

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

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

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

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

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

#### RETURN MATERIALS POLICY

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

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

- Have the Model Number of the saw
- Have the Serial Number of the saw
- Have the location of where the saw was purchased
- Have the date when the saw was purchased
- Contact Customer Service for approval to return the item(s)
- Obtain a Returned Goods Number (RGA) authorizing the return
- · Follow the packaging instructions in the following section
- Ensure the RGA number is on the outside of the returned package
- Ensure your item(s) are prepaid to the destination

For returned items, call toll free to – 800 421-5830 or 310 539-5221 and ask for Customer Service.

#### PACKAGING INSTRUCTIONS

- Remove the Cutting Head and Support Angle Assembly
- Dry the saw before shipping
- When packing, include the following: MK-6000 and Guard Blade (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.mkdia-mond.com. For technical questions, call – 800 474-5594.

#### CONTACT

Please contact MK Diamond Products, Inc. Customer Service Department with any questions you might have regarding distributors, parts or service. Telephone: (800) 421-5830 Fax: (310) 539-5158 E-mail: Customer\_Service@MKDiamond.com Customer Service Hours: Monday through Friday, 6AM-4PM PST

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

#### MK DIAMOND PRODUCTS, INC. LIMITED WARRANTY

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

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

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

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

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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-6000 SAW OWNER'S MANUAL & OPERATING INSTRUCTIONS



**MK Diamond Products, Inc.** 

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

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