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# MK-3000 SERIES CONCRETE SAW OPERATOR'S MANUAL

MODELS	PART #	MODELS	PART #
MK-3020V	166447-20	MK-3020K	166449-20
MK-3026V	166447-26	MK-3026K	166449-26
MK-3030V	166447-30	MK-3030K	166449-30



MK-3030K  
Part # 166449-30

Revision 304	07.2018
Manual Part No. 166447-OM	

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

## INTRODUCTION

Congratulations on your purchase of a Walk-Behind Concrete Saw. We are certain that you will be pleased with your purchase of your MK-3000 Concrete Saw. MK Diamond takes pride in producing the finest construction power tools and diamond blades in the industry.

Operated correctly, your MK-3000 Series 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 this machine safely and correctly. Please take a few minutes to familiarize yourself with the machine by reading and reviewing this manual.

If you should have questions concerning your MK-3000 Series please feel free to call our friendly customer service department at 800 421-5830

Regards,

MK Diamond

### NOTE THIS INFORMATION FOR FUTURE USE:

<b>MODEL NUMBER:</b>	
<b>SERIAL NUMBER:</b>	
<b>PURCHASE PLACE:</b>	
<b>PURCHASE DATE:</b>	

**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.



**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. **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.



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

**KEEP CHILDREN AWAY**

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

**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**

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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**

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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

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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

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### 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

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**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.

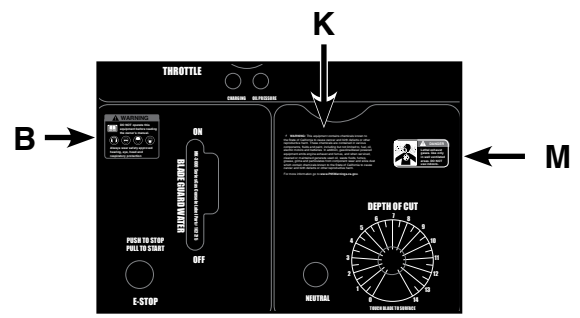
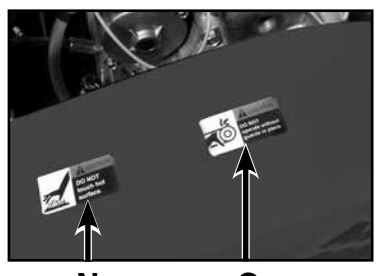
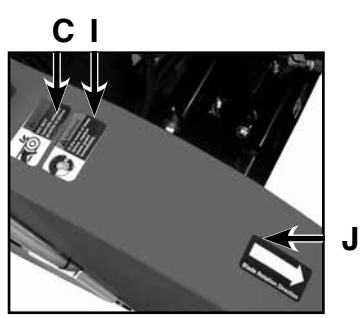
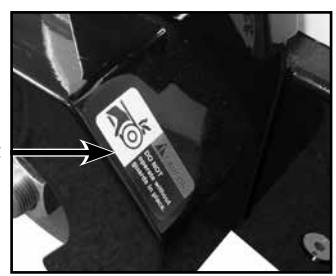
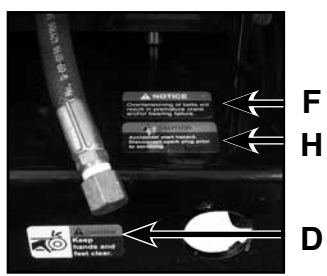
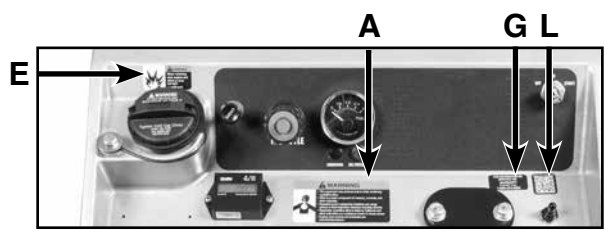
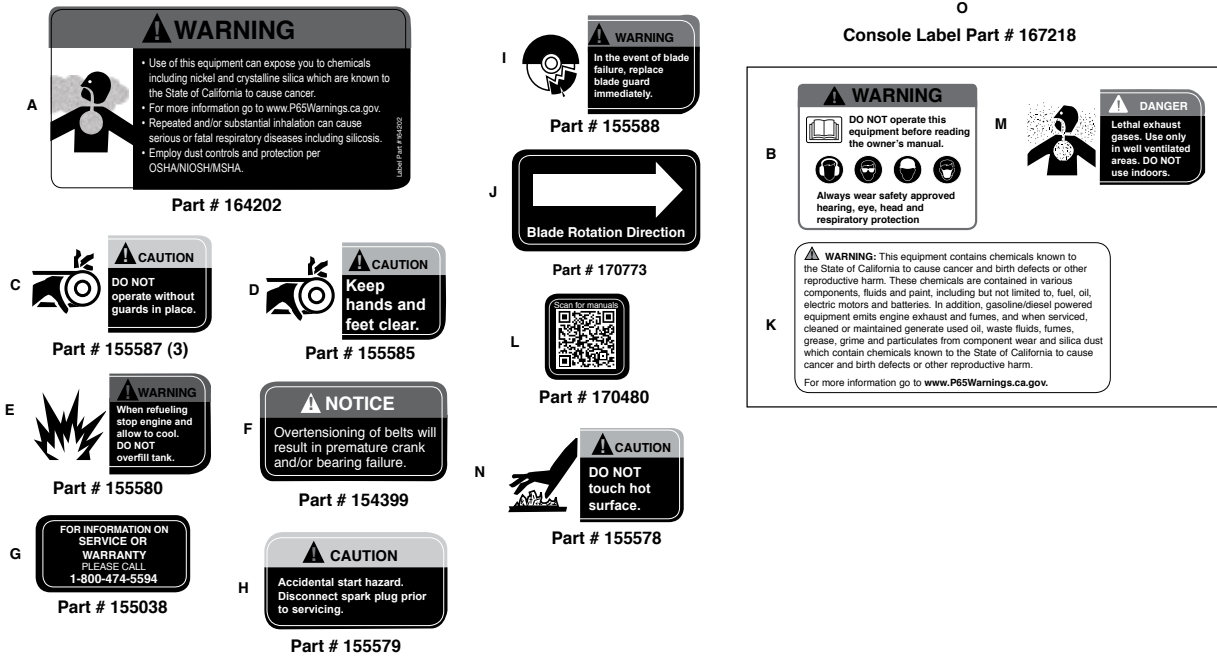


**ALWAYS** close fuel value on engines when machine is not being operated.

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.

**OPERATION & SAFETY DECALS**

The MK-3000 is equipped with a number of safety decals provided for operator safety and maintenance information. Should any of these decals become unreadable, replacements can be obtained by calling (800) 262-1575.



**SAFETY DECAL LOCATIONS**

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<b>Decal</b>	<b>Location</b>	<b>Description</b>
A	Console	Warning -Silica
B	Console	Caution - Read Manual
C	Shaft Cover/Blade Guard/ Belt Guard	Caution - Guards in Place
D	Frame - Front	Caution Hands & Feet
E	Console	Warning - Do Not Overfill Tank
F	Console	Notice - Overtension of the Belts
G	Console	Service/Warranty
H	Console	Accidental Start
I	Frame - Front	Warning - Replace Blade Guard
J	Blade Guard	Blade Direction
K	Console	Danger - Prop 65
L	Console	QR Code For Manuals
M	Console	Danger - Lethal Exhaust
N	Belt Guard	Caution - Do Not Touch

## CONSOLE CONTROL DESCRIPTIONS

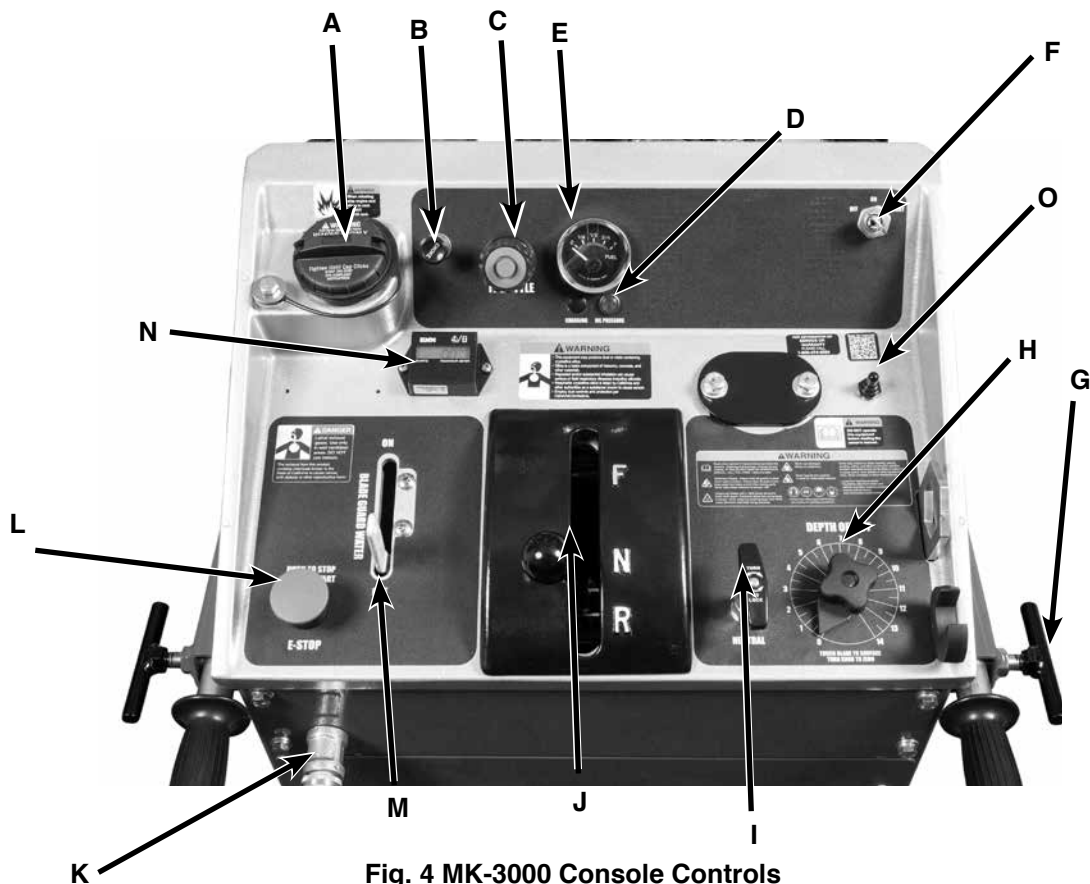


Fig. 4 MK-3000 Console Controls

Object	Name	Function
A	Fuel Tank Fill	Fill the fuel tank at this location.
B	Choke	Use when cold starting.
C	Engine Throttle	Controls engine speed.
D	Oil Pressure Light	Indicates low oil pressure when illuminated.
E	Fuel Gauge	Shows the level of fuel in the fuel tank.
F	Keyed ON-OFF Start	Use to start engine.
G	T-Handle Knob	Use to tighten operator grip handles.
H	Depth Indicator	Displays cutting depth.
I	Engage Handle	Engages Transmission.
J	FNR Handle	Used to Set Direction of Saw (Forward/Neutral/Reverse).
K	Water Inlet	Hook-up for standard water hose.
L	E-Stop	Stops down engine in an emergency!
M	Water Lever	Controls water flow to Blade Guard.
N	Engine Tachometer/Hour Meter	Shows the engine RPM's (running) and Engine Hours (stopped).
O	Blade Raise & Lower Switch	Increase & decrease the blade depth

**SAW FEATURES**

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The MK-3000 Heavy-Duty Concrete Saw has been engineered for operator convenience, improved accessibility for maintenance and better control during operations. The MK-3000 has been designed for both front and rear pivoting and has easily removable rear and side panels to provide easy accessibility for maintenance.

- Totally enclosed and sealed blade shaft with continuous oil bath lubrication system
- Quick release, auto-latching bayonet mount blade guard
- Three position adjustable solid steel handlebars
- Blade guard uses “ride on the blade” water tubes for superior water delivery and blade cooling
- Dual arbor design for left or right side mounting of blade and blade guard
- Rigid frame front pointer with high visibility guide wheel for accurate tracking
- Instrumentation includes engine tach, fuel level and hour meter
- Ergonomic FNR traverse control for ease of operation
- Depth of cut indicator positioned for easy access
- Blade guard has garden hose style connector for quick disconnecting
- Removable rear panel for easy service
- 7 3VX belts from engine to blade shaft
- Electric leadscrew for positive adjustment of cutting depth
- Wide front wheel base increases stability and allows ramp loading/unloading
- Easy access emergency stop control
- Water control level allows operator to adjust rate of water flow to blade guard
- Venier throttle control for fast or fine adjustments
- Meets EPA Interim Tier IV requirements
- Eaton model 6 hydrostatic transmission coupled to a MK trans-axle
- Built-in lifting bail for easy maneuverability
- Travel speed 0-220 FPM forward, 0-100 FPM reverse
- Neutral start switch to prevent starting with transmission in gear
- Transmission can be disengaged from axle to allow saw to be pushed manually
- Made in U.S.A.

**ENGINE SPECIFICATIONS**

Model	MK-3020V	MK-3020K
Engine	Vanguard (Gas)	Kohler (Gas)
Power	V-Twin Big Block OHV 35 hp	Command Pro CH980 38 hp
Blade Capacity	20"	20"
Depth of Cut	7-1/2" (190 mm)	7-1/2" (190 mm)
Weight	650 lbs. (295 kg)	650 lbs. (295 kg)
Part #	166447-20	166449-20
Model	MK-3026V	MK-3026K
Engine	Vanguard (Gas)	Kohler (Gas)
Power	V-Twin Big Block OHV 35 hp	Command Pro CH980 38 hp
Blade Capacity	26"	26"
Depth of Cut	10-1/2" (267 mm)	10-1/2" (267 mm)
Weight	650 lbs. (295 kg)	650 lbs. (295 kg)
Part #	166447-26	166449-26
Model	MK-3030V	MK-3030K
Engine	Vanguard (Gas)	Kohler (Gas)
Power	V-Twin Big Block OHV 35 hp	Command Pro CH980 38 hp
Blade Capacity	30"	30"
Depth of Cut	12-1/2" (318 mm)	12-1/2" (318 mm)
Weight	650 lbs. (295 kg)	650 lbs. (295 kg)
Part #	166447-30	166449-30
General Specifications		
Arbor	1" with 3/8" Drive Pin	
Blade RPM	1,900	
Fuel Capacity	5 gal	
Travel Speed	Travel speed 0-220 FPM forward, 0-100 FPM reverse	
Starting System	Electric	
L x W x H	50" x 29" x 42"	
L x W x H (mm)	1,270 x 737 x 1,067 mm	
Handle Extension	22" (559 mm)	

## STANDARD SAW SPECIFICATIONS

BLADE GUARD			
<b>CAPACITY</b>	20"	26"	30"
	(508 mm)	(610 mm)	(760 mm)
<b>BLADESHAFT RPM</b>	1,900		
<b>MAXIMUM DEPTH OF CUT</b>	7-1/2"	10-1/2"	12-1/2"
<b>ARBOR SIZE</b>	1" (25.4 mm) with 3/8" drive pin, blade can be mounted on either side of shaft		
<b>BLADE SHAFT</b>	1-7/16" (36.5 mm) diameter		
<b>BLADE SHAFT BEARING</b>	Dual Row 1-7/16" Pillow Block Roller Bearings		
<b>BLADE SHAFT DRIVE</b>	7 3VX Belts, optimized for correct blade shaft RPM at peak engine power		
<b>BLADE CONTROL</b>	Electric leadscrew for positive adjustment of cutting depth		
<b>BLADE COOLANT</b>	Blade guard uses "ride on the blade" water tubes for superior water delivery and blade cooling		
<b>AXLES</b>	FRONT REAR	1" (25.4 mm) diameter 1" (25.4 mm) diameter	
<b>WHEELS</b>	FRONT REAR	Front Wheel 6" x 2-1/2" wide rubber with 1" ball bearings with lubrication fittings. Rear Wheel 8" x 2-1/2" wide solid rubber	
<b>TRANSMISSION</b>	Hydrostatic Transmission with freewheel neutral control. Travel speed 0-220 FPM Forwards, 0-100 FPM Reverse. FNR Handle controls forward/neutral/reverse. Neutral safety start switch.		
<b>CHASSIS</b>	Heavy-duty rigid box and rib main frame construction. Removable Service Panels for ease of maintenance.		
<b>CONSOLE</b>	Console with Tachometer/Hour Meter, Fuel Level Gauge, indicator for Oil Pressure and Keyed Start Switch		
<b>POINTER</b>	Adjustable front and rear pointers		
<b>HANDLE BARS</b>	Three positions		

**BLADE SPEED**

**! WARNING**

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

GUARD SIZE	BLADE SHAFT SPEED*	BLADE SPEED (FPM)	
		Size	FPM
20"	1900 RPM	16"	8,000
		18"	9,000
		20"	10,000
26"		20"	10,000
		24"	11,900
		26"	13,000
30"		26"	13,000
		28"	14,000
		30"	14,900

\*Blade Shaft Speed at full throttle engine setting at 3600 rpm.

**! NOTICE**

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

BLADE GUARDS AND BLADE SIZES	
BLADE GUARD	BLADE SIZE THAT CAN BE USED WITH BLADE GUARD
20"	Uses 16" up to 20"
26"	Uses 18" up to 26"
30"	Uses 26" up to 30"



**Fig. 5 Blade Guards**



## PRE-OPERATION CHECKLIST

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### **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 this entire Operation Manual and are familiar with the operation of the machine.

## Machine Cold

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1. Check engine oil. See Engine Owner's Manual for type & quantity.
2. Connect battery cables.
3. Check hydrostatic transmission fluid level.
4. Check the engine air cleaner.

## SCHEDULE MAINTENANCE QUICK REFERENCE

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### 1-2 Hour Operation Checklist

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### **WARNING**

**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. Ensure the parking brake is set.

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

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

## Other time interval service

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See the Maintenance Schedule Table on Page 25.

**NOTICE**

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 (Figure 6).
- B. Hold the Blade Guard by the handle (Figure 7). Release the inner latch.
- C. Pull the Blade Guard up and off the Saw.



Fig. 6 Unscrew Hose Fitting



Fig. 7 Hold Blade Guard

## 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, nut has right hand threads. To remove, turn counter-clockwise (Figure 8).

## 3. Remove outer flange (Figure 9).

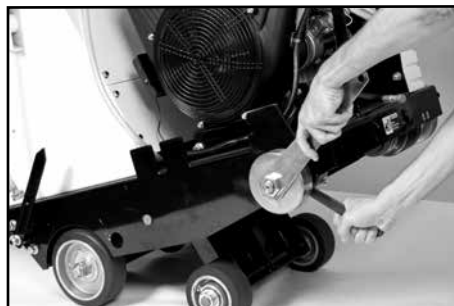


Fig. 8 Remove Arbor Bolt

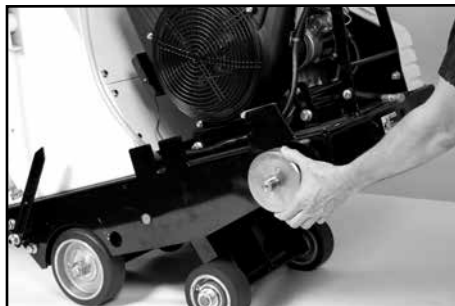


Fig. 9 Remove Outer Flange

## 4. Install new blade (Figure 10).

## 5. Install the outer flange on to the blade flange (Figure 11).

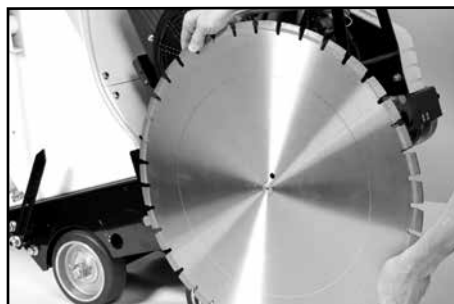


Fig. 10 Install New Blade



Fig. 11 Slide Outer Flange in place

**BLADE MOUNTING INSTRUCTIONS CONTINUED**

6. Tighten the arbor bolt (Figure 12).
7. Install the blade guard in place. Make sure that the guard locks in place and connect the hose (Figure 13).

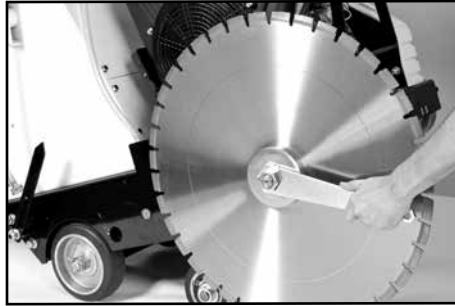


Fig. 12 Tighten Arbor Bolt

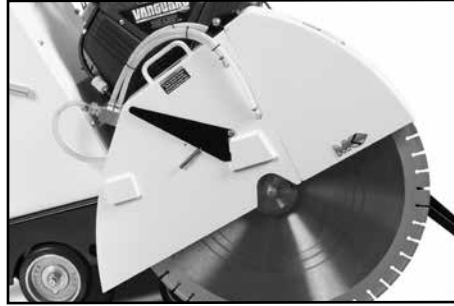


Fig. 13 Install Blade Guard

**WARNING**

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 Table on page 15.

**NOTICE**

To meet ANSI safety standards, larger diameter blade collars are required for large diameter blades. Information is available upon request.

**NOTICE**

We recommend the use of MK Diamond blades with this saw.

**CAUTION**

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.

**STARTING ENGINE****NOTICE**

Read the engine instructions manual before starting.

**WARNING**

Be sure blade is unobstructed and not resting on ground.

**WARNING**

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. Verify that E-Stop is pulled out.
2. Place FNR handle in **NEUTRAL**. Engine will not start unless FNR handle is in neutral.
3. Verify the transmission is in **NEUTRAL**.  
Engagement handle in unlocked and fully down position.
4. Pull throttle handle out half-way.
5. Close choke by pulling choke button to full out position.
6. Start engine by rotating starter switch to the right.

FNR  
HandleEngagement  
Handle

Fig. 14 Pull Engagement Handle

**NOTICE**

**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.

7. After engine starts, push choke button in as required for smooth running.

**NOTICE**

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

8. When engine is warm, pull throttle out to maximum.
9. To stop engine, push throttle to idle, rotate ignition switch to "OFF" position.

**NOTICE**

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****WARNING**

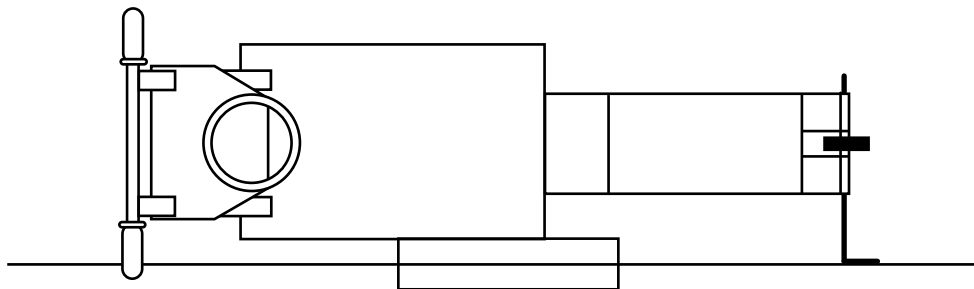
This operation is performed with the engine "OFF"!

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.

**REAR:** With the blade centered over the line and the saw frame parallel to the line, loose the pointer and adjust up or down and ensure that it touches the line.

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. Secure hardware.



**Fig. 15 Pointer Alignment**

## MANEUVERING THE SAW

---



### WARNING

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

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The water used on the blade is to provide coolant during cutting and to flush the concrete cutting from the cut.

## ENGAGING THE DRIVE UNIT

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This saw is driven by a hydrostatic transmission. To engage the transmission, **PULL** the Engagement Handle up and turn to either direction to lock (Figure 14). To disengage the transmission, twist the Engagement Handle and **PUSH** down.



### NOTICE

**DO NOT** engage the unit unless directional FNR Handle (Figure 14) is on **NEUTRAL**.

## SPEED CONTROL-LEVER USE AND ADJUSTMENT

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

## WATER HOOK UP

Prior to starting the engine, you should hook up the water hose to the Water Inlet (Figure 16) and visually inspect it to make sure that water is flowing to the blade. Hook up the hose to the the unit and turn on the water source. Open the water valve. Next, lift the front of the blade guard and visually inspect the make sure water is flowing out of each of the tubes. If either of the holes is blocked, flush impurities from the tube.



### NOTICE

Water flow volume can be metered by opening the water valve partially (Figure 17).

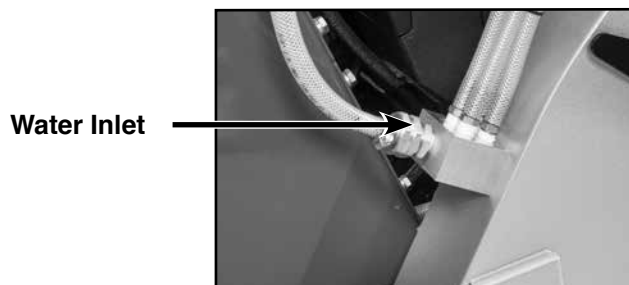


Fig. 16 Inlet attach Hose to Water

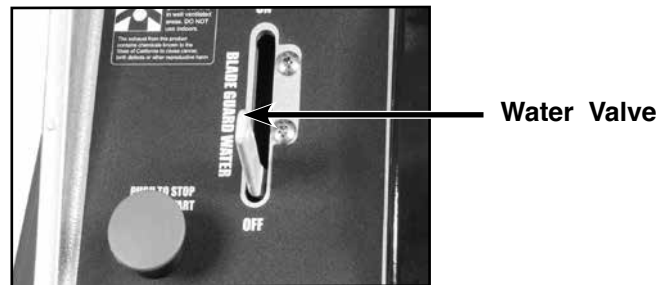


Fig. 17 Partially open Water Valve

## DEPTH INDICATOR

The saw is equipped with a Depth Indicator. The Depth Indicator (Figure 18) 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 knob to 0.

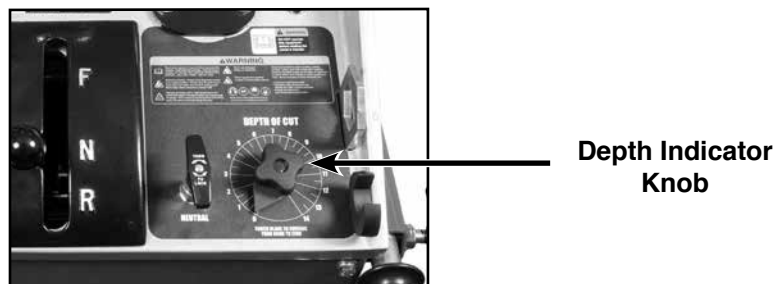


Fig. 18 Depth Indicator Knob

## 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.



### NOTICE

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

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 or 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 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 (Figure 19). Remove plug (Oil Gearbox Plug) and fill transmission gearbox with 80-90 SAE Gear Oil to lower edge of fill hole.

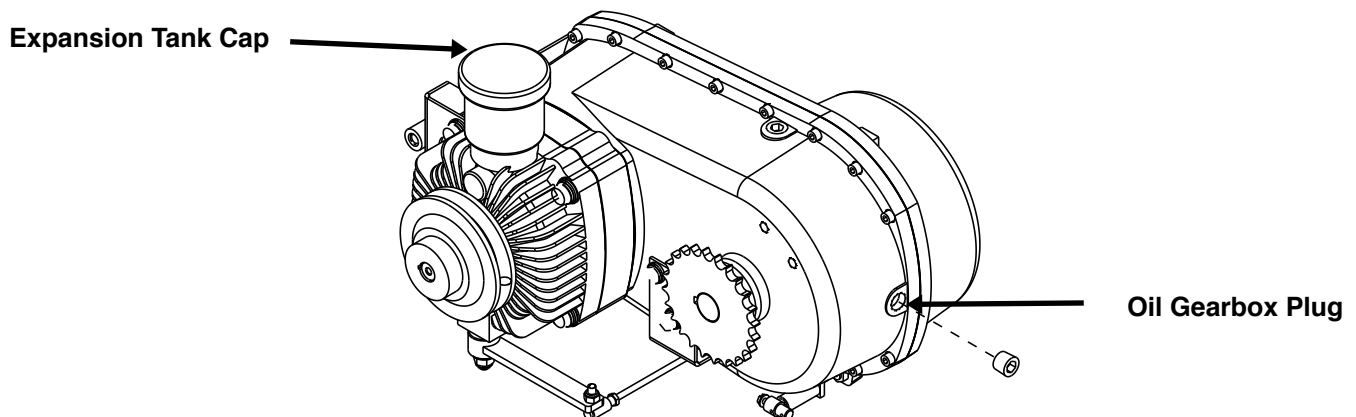


Fig. 19 Expansion Tank Cap



## MAINTENANCE SCHEDULE

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

\* See Engine Manual for specific engine maintenance information and schedule.

**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.

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

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

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



## **ORDERING INFORMATION**

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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**

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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**

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- Remove the Cutting Head and Support Angle Assembly
- Dry the saw before shipping
- When packing, include the following: MK3000 Saw and Blade Guard
- 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**

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

**CONTACT**

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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**

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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-3000 SERIES**  
**OPERATOR'S MANUAL**



**MK Diamond Products, Inc.**

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