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# MK-APC/H OWNERS MANUAL & OPERATING INSTRUCTIONS



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Manual Part No. 168759	

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



# NOTES

### SPECIFICATIONS

US 60100 MK-APC/H Hand Held Air Saw with Geared Belt Drive, 14" Adjustable Guard, Oiler, Water Feed Kit, Wrenches & 1 quart Ice Free Oil **READ AND UNDERSTAND THE OPERATOR'S SAFETY MANUAL THOROUGHLY BEFORE ATTEMPTING TO OPERATE EQUIPMENT**. Death or serious injury could occur if this machine is used improperly.

The safety instructions are proceeded by a graphic alert message of DANGER, WARNING, CAUTION.

**A** DANGER Indicates an imminent hazard which, if not avoided will result in death or serious injury

**WARNING** Indicates an imminent hazard which, if not avoided will result in death or serious injury

**CAUTION** Indicates hazards which, if not avoided could result in death or serious injury and or damage to the equipment

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**READ AND UNDERSTAND THESE THOROUGHLY BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT.** Different models have different parts and controls, death or serious injury could occur if the machine is used improperly. **REFER TO THE (OEM)** Original Equipment Manufacturer operating instructions. **THESE INSTRUCTIONS ARE FOR THE MK-APC/H Hand Held Air Saw ONLY**.

### **IMPORTANT**

- This equipment is an Air powered Hand Held Abrasive Chop Saw. It is designed to cut concrete using a 14" Diamond Blade.
- IT IS THE RESPONSIBILITY OF OWNERS AND OPERATORS TO COMPLY WITH ALL APPLICABLE LOCAL STATE AND FEDERAL REGULATIONS including but not limited to OSHA and ANSI.
- Always use the proper PERSONAL PROTECTIVE EQUIPMENT including Ear Protection, Eye Protection, and any other protection required. Proper attire must be worn when operating this machinery. The operator must wear approved safety equipment appropriate for the job, such as hard hat, when conditions require, safety shoes, hearing protection (operational noise levels of this equipment may exceed 90db), non-fogging vented safety goggles and dust respirator.

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• Plan the cutting prior to starting the cut. Check for hidden hazards that may be hidden from view either within the concrete or on the other side. Take particular care that the cut does not penetrate electrical, gas, steam or other dangerous or flammable conduits.

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- Equipment should only be operated by trained personnel in good physical condition and mental health (not fatigued). The operator and maintenance personnel must be physically able to handle the bulk weight and power of this equipment.
- This is a one person tool. Maintain a safe operating distance from other personnel. It is the operator's responsibility to keep other people (workers, pedestri-
- ans, bystanders, etc) away during operation. Block off the work area in all directions with roping, safety netting, etc. for a safe distance.
- This equipment is intended for commercial use.
- For operator's safety and the safety of others, always keep all guards in place during operation.
- Never let equipment run unattended.
- Keep body parts and loose clothing away from moving parts. Failure to do so could result in dismemberment or death.
- Stop motor/engine when adjusting or servicing this equipment.
- Maintain a safe operating distance from flammable materials.
- Sparks from the cutting-action of this machine can ignite flammable materials or vapors.
- This equipment will create dust from the material being removed. The dust may contain chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm. Check the chemical properties of the material to be removed and take the appropriate precautions 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

### PERSONAL PROTECTION EQUIPMENT

WARNING! When using an abrasive chop saw, approved protective equipment must be used. Personal protective equipment does not eliminate the risk of accidents, however, it can reduce the effects of an injury in the event of an accident. Ask your dealer for help when choosing protective equipment.

- Protective Helmet
- Ear Protection
- Protective Glasses or Full Face Protection
- Breathing Mask
- Heavy-Duty, Firm Grip Gloves
- Snug-Fitting, Heavy-Duty, Comfortable Clothing that allows full freedom of movement
- Leg Protection (to protect against sparks and cutting fragments
- Anti-Slip Boots with Steel Toe-Caps
- First-Aid Kit should always be on hand

### THE POWER CUTTER'S SAFETY EQUIPMENT

This section describes the abrasive chop saw's safety equipment, its function and how checks and maintenance are carried out to ensure that it operates correctly.

NEVER use a defective blade guard or a blade guard that is not fitting correctly.

WARNING! Never use an abrasive chop saw with defective safety equipment. Follow the control, maintenance and service instructions described in this manual.

# GENERAL SAFETY INSTRUCTIONS

#### IMPORTANT INFORMATION!

Do not use the abrasive chop saw until you have read the entire contents of this Operator's Manual. All servicing, in addition to the points listed in the section "control, maintenance and service of the abrasive chop saw's safety equipment", should be carried out be trained service specialists.

#### **Transport and storage**

- Store the abrasive chop saw under lock and key so that it's out of reach of children and unauthorized persons.
- Do not store or transport the abrasive chop saw with the cutting blade fitted.

### **GENERAL WORKING INSTRUCTIONS**

This section takes up the basic safety precautions for working with the abrasive chop saw. Follow these general working instructions, but never use a machine without the possibility of calling for help in the event of an accident.

#### **Basic safety precautions**

**IMPORTANT INFORMATION!** Never work with an abrasive chop saw that is defective or incorrectly adjusted. Do not work with an abrasive chop saw that is incomplete or where assembly has not been carried out in a satisfactory manner. Check that the cutting blade stops rotating when the throttle is released. If you encounter a situation where you are uncertain how to proceed you should ask an expert. Avoid all usage which you consider to be beyond your capability

- Check that no one is in the immediate vicinity when the machine is started or while working with the machine to ensure that people, animals or other things cannot affect your control of the abrasive chop saw.
- Avoid usage in unfavorable weather conditions, for example, thick fog, heavy rain, strong winds or extreme cold, etc. To work in bad weather conditions is tiring and can create dangerous circumstances, e.g. slippery surfaces.
- Never start to work with the abrasive chop saw before the working area is clear and you have a firm foothold. Look out for any obstacles with unexpected movement. Ensure when cutting that no material can become loose and fall, causing operating injury. Take great care when working on sloping ground.
- Make sure clothing and parts of the body do not come into contact with the cutting blade when the engine is started.
- Maintain a safe distance from the cutting blade when the engine is running.
- The blade guard should always be fitted when the engine is running.
- Ensure that the working area is sufficiently illuminated to create a safe working environment.
- Check the cutting area for buried cables and wires.

### CUTTING CONT'D

- 1. Support the work piece in such a way that you can predict what will happen and so it will not pinch.
- 2. Start cutting gently, do not force or squeeze the blade in.
- 3. Use a high speed blade.
- 4. Move the blade slowly backwards and forwards.
- 5. Use a small part of the the blade's cutting edge.
- 6. Only use the blade's cutting edge when cutting.
- 7. Cut with the blade fully vertical—at right angles to the work piece.

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Under all circumstances avoid cutting using the side of the blade; it will almost certainly be damaged, break and can cause immense damage. Only use the cutting section.

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Do not lean the blade to the side, this can cause the blade to jam or break with personal injury as a consequence.

# KICK BACK

#### WARNING

#### Kickback can occur very suddenly and with great force. If the following directives are not followed, it can result in serious or even fatal injury.

If the sector of the blade illustrated below is used for cutting the blade can start to climbing and kickback the abrasive chop saw upwards and backwards towards the user with immense force.

#### How to avoid kickback

- 1. Never cut with the segment illustrated in the diagram
- 2. Keep a good balance and a firm foothold.
  - 3. Use both hands and take a firm grip with the thumb and fingers around the handle.
  - 4. Keep the work piece at a comfortable distance
  - 5. Use the abrasive chop saw at full throttle.
  - 6. Take care when inserting the blade in an existing cut
  - 7. Never cut above shoulder height
  - 8. Be alert to movement of the work piece or anything else that can occur, which could cause the cut to close and pinch the blade.

### WATER COOLING

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Water cooling, which is only used for power cutters and when cutting concrete, cools the cutting blade and increases its service life as well as reduce dust formation (see Section "Abrasive Blades"). Among the disadvantages are difficulties at very low temperatures, the risk of damaging the floor and other sections of the building and risk for slippage.

#### **Sharpening Diamond Blades**

Blades can become dull when the wrong feeding pressure is used or when cutting some materials such as heavily reinforced concrete. To force a dull blade results in overheating and finally the loss of segments (part of the blade) Sharpen against a soft material such as sandstone or brick.

#### **Blade Vibration**

The blade can become out of shape (not round) and vibrate if a too high feeing pressure is used or if the blade is pressed into the work piece. A lower feeding pressure ought to stop the vibration. Otherwise replace the cutting blade

## MAINTENANCE

#### Periodic maintenance

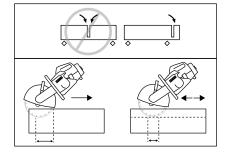
Follow requirement for checking the chain and bar a minimum of daily

- Clean cutting slurry away from the chain and chain guard then spray the bar and chain with a lubricant like WD40 before storing the equipment
- Put a shot of WD40 in the air hose at the same time

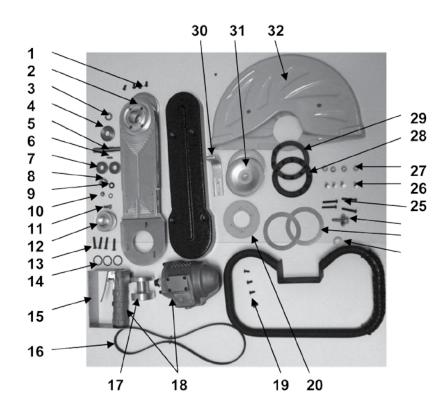
#### Lubrication

The Air motor requires a mist of oil for lubrication and to prevent sticking of the vanes during storage. Check the oiler in the hose is full at all times. Use air oil supplied

- Oiler settings For less humid environments the setting should be 3. For humid environments the settings should be 5 and a shot of WD40 should be put in the hose before long term storage.
- If the motor refuses to start put oil down the hose and turn the motor over by rotating the blade by hand.



### **PARTS LIST & DESCRIPTION**



1. US60119 M6x12 Belt Guard Screw

- 2. US60101 Air Saw Frame
- 3. US60110 Spacer (Blade to Pulley)
- 4. US60111 Spacer (Blade/Dust Cover)
- 5. US60113 Drive Shaft
- 6. US60129 Machine Key
- 7. US60109 15mmx35mm Sealed Bearing
- 8. US60112 Spacer (Bearing)
- 9. US60116 Thick Motor Washer
- 10. US60117 Washer (Thin-Motor Spacer)
- 11. US60125 Cheesehead Slotted Machine Screw
- 12. US60103 Motor Pulley
- 13. US60115 1/4-20x1-1/4 Motor Bolt
- 14. US60138 O-Ring
- 15. US60138 Trigger Guard
- 16. US60108 Drive Belt
- 17. US60140 Handle Extension (short)
- 18. US60102A Air Saw Motor & Trigger
- 19. US60119 M6x12 Belt Guard Screw
- 20. US60114 Guard Flange
- 21. US60105 Air Saw Handle
- 22. US60122 Thin Washer
- 23. HU506139511 Washer (Outer Flange Bolt)
- 24. HU506139601 Outer Flange Bolt
- 25. US60118 M6x35 Guard Mounting Bolt
- 26. US60124 Spacer
- 27. US60123 Spring
- 28. US60121 Right Rubber Washer 29. US60120 Left Rubber Washer
- 30. US59070 Air Saw Guard Bracket
- 31. HU506028701 Outer Blade Flange
- 00 H000400 d dl Diada Ourad
- 32. US60128 14" Blade Guard

### LIMITED EQUIPMENT WARRANTY

#### **MK Diamond Limited Warranty**

New equipment sold by MK Diamond Products is warranted to be free from manufacturing defects in normal service for a period of One (1) Year or as indicated by the product from date of purchase by the original consumer purchaser. Component manufacturers offer separate Warranty periods.

This Warranty shall not apply to any parts that have been subjected to misuse or improper service, that have been damaged in transit or handling, or that have been altered or repaired by unauthorized representatives. This Warranty does not cover defects caused by or resulting from misuse, abuse, neglect or damage caused by accident or the failure to provide reasonable maintenance.

This Warranty is void if the product or any of its individual components is altered or modified by the purchaser or if the product is used in a manner or with a blade not recommended by MK Diamond Products.

Any claim arising under this Warranty must be submitted by the original purchaser within the Warranty period specified above, and shall include proof of purchase. During said Warranty period MK Diamond Products shall, at its option, either replace or repair, at no charge to the original purchaser, any parts or components that are found to be defective by MK Diamond Products. MK Diamond Products shall not be responsible or obligated to pay for freight or other transportation-related costs or expenses in connection with any defective products or components that are either returned to MK Diamond Products'

facility or any authorized repair station and/or replacement products or components that are shipped from MK Diamond Products pursuant to this Warranty.

Parts and labor needed to maintain products, and the replacement of components due to normal wear and tear, are the purchaser's responsibility and are not covered by this Warranty. All products or components replaced under Warranty become the property of the manufacturer. All replacement parts will be considered to be part of the original product and any Warranty on such parts will expire concurrently with this original Warranty.

MK Diamond Products will pay for parts and labor in connection with Warranty repairs conducted by MK Diamond Products or its authorized repair centers. Replacement parts, installed by anyone else will be provided without a charge for such replacement parts, but this Warranty will not apply to labor charges in connection therewith.

IN NO EVENT SHALL ANY LIABILITY UNDER THIS WARRANTY EXCEED THE REPLACEMENT COST OF ANY DEFECTIVE PRODUCT OR COMPONENT THEREOF, AND MK DIAMOND PRODUCTS SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR ANY OTHER DAMAGE OR LOSS NOT EXPRESSLY ASSUMED AS SET FORTH HEREIN. The foregoing constitutes an expressed Warranty on the terms set forth above and is the only Warranty of merchantability and/or fitness for a particular purpose or use being denied. This limited Warranty is expressly in lieu of all other Warranties, whether expressed or implied.

# NOTES



#### MK-APC/H AIR POWERED CHOP SAW OWNERS MANUAL & OPERATING INSTRUCTION DOCUMENT NO. 168759

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