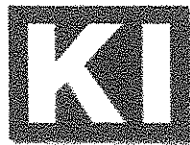
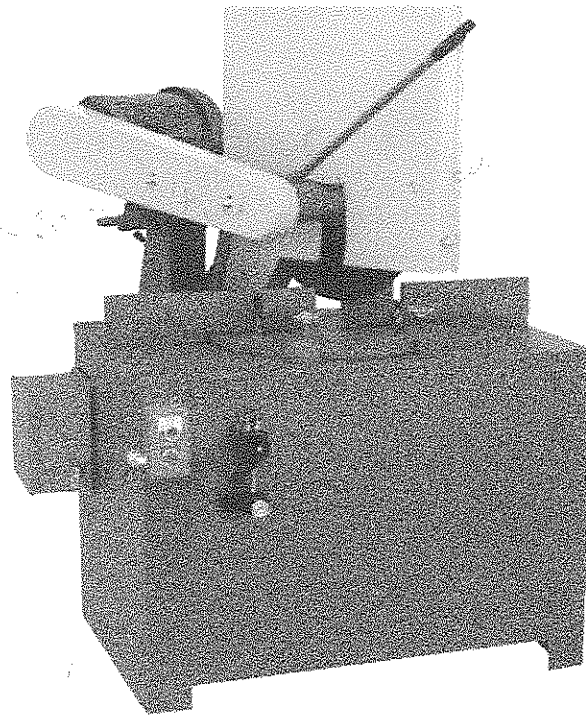


# INSTRUCTION MANUAL KM20 - 22



**KALAMAZOO  
INDUSTRIES, INC.**

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[www.kalamazooindustries.com](http://www.kalamazooindustries.com)

## **WARNING!**

**TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD,  
DO NOT EXPOSE THIS EQUIPMENT TO RAIN, ANY LIQUID OR MOISTURE.**

### **READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE OPERATING UNIT**

#### **OPERATING INSTRUCTIONS**

INSPECT YOUR NEW UNIT CAREFULLY FOR SIGNS OF SHIPPING DAMAGE. IF DAMAGED, PLEASE CONTACT CARRIER AND SUBMIT A CONCEALED DAMAGED REPORT. DO NOT RETURN GOODS TO US WITHOUT OUR RGA NUMBER AND SHIPPING INSTRUCTIONS. SEE BACK PAGE FOR RETURN POLICY AND WARRANTY.

BEFORE STARTING OR CONNECTING ELECTRICALS VERIFY THE PHASE AND VOLTAGE OF THE UNIT.

BE SURE MACHINE IS BALANCED CORRECTLY SO IT WILL NOT TIP OVER.

TO GUARD AGAINST CONCEALED DAMAGE, STAND CLEAR AND OBSERVE UNIT FOR THE FIRST FEW MINUTES OF OPERATION. GUARDS MUST NEVER BE REMOVED.

#### **ABRASIVE SAW SAFETY**

NEVER REMOVE SAFETY GUARDS FROM MACHINE. DISCONNECT POWER SOURCE BEFORE MAKING ANY MACHINE ADJUSTMENTS

DO NOT USE AROUND FLAMMABLE MATERIALS OR LIQUIDS.

MACHINES SHOULD BE OPERATED IN VENTILATED AREAS.

ALWAYS WEAR SAFETY GLASSES OR A FULL FACE SHIELD FOR PROTECTION.

KEEP HANDS CLEAR OF THE CUTTING AREA.

DO NOT WEAR GLOVES OR LOOSE FITTING CLOTHES WHEN OPERATING THIS MACHINE.

ALWAYS KEEP HAIR TIED BACK OR COVERED.

ALWAYS KEEP FLANGES CLEAN AND TIGHT AGAINST CUTTING WHEEL.

ABRASIVE MACHINES ARE FOR ABRASIVE WHEELS NOT STEEL TOOTHED BLADES. DO NOT ATTEMPT TO USE STEEL BLADES UNLESS CORRECTLY GUARDED WITH AN ENCLOSED WHEEL GUARD. KEEP STEEL BLADES FULLY RETRACTED INTO WHEEL GUARD WHEN DONE CUTTING.

ALWAYS KEEP WHEEL GUARD IN DOWN POSITION.

BE SURE WORK PIECE IS CLAMPED SECURELY IN VISE BEFORE CUTTING.

#### **WARNING!!!**

**IMPROPER USE MAY CAUSE BREAKAGE AND SERIOUS INJURY.**

##### **DO**

1. DO always handle and store wheels in a careful manner.
2. DO visually inspect all wheels before mounting for possible damage.
3. DO check machine speed against the established maximum safe operating speed marked on the wheel.
4. DO check mounting flanges for equal and correct diameter.
5. DO use mounting blotters when supplied with wheels.
6. DO always use a safety guard covering at least one-half of the abrasive wheel.
7. DO allow newly mounted wheels to run at operating speed, with guard in place, for at least one minute before cutting.
8. DO always wear safety glasses or some type of eye protection when cutting.

##### **DON'T**

1. DON'T use a cracked wheel or one that has been dropped or has become damaged.
2. DON'T force a wheel onto the machine or alter the size of the mounting hole-if wheel won't fit the machine, get one that will.
3. DON'T ever exceed maximum operating speed established for the wheel.
4. DON'T use mounting flanges on which the bearing surfaces are not clean, flat and free of burrs.
5. DON'T tighten the mounting nut excessively.
6. DON'T start the machine until the wheel guard is in place.
7. DON'T jam work into wheel.
8. DON'T force cutting so that motor slows noticeably or work gets hot.
9. DON'T wear gloves when operating machine.

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### **WARRANTY**

- All products are guaranteed for a period of one year to the original purchaser, against defects in material workmanship under normal use.
- Electric motors are warranted by the motor manufacturer and will be repaired by the nearest motor repair station. If non-repairable, they will be replaced by Kalamazoo Industries. Please call for instructions.

### **RETURN POLICY**

- Authorization must be obtained before returning merchandise. Please call our customer service department for a return authorization number at 269-382-2050.
- Please include with your return a copy of your invoice or packing slip.
- Materials must be sent back prepaid. (Unless otherwise indicated).
- All returns will be subject to a 10% restocking charge.
- No returns will be accepted after one year of invoice date.

### **DO YOU KNOW THAT**

If these goods are damaged in transit, the DELIVERING TRANSPORTATION COMPANY is required by law to make notation of damages on the freight bill.

If in your opinion, there may be concealed damage, they are required to make an inspection after goods are unpacked. Transportation rates are made in proportion to damage.

Therefore, the carrier and NOT the shipper should be charged with any loss or damage. Any claim should be filed with the delivering Transportation Company.

**PLEASE DO NOT RETURN GOODS TO US  
WITHOUT OUR RGA NUMBER AND SHIPPING INSTRUCTIONS.**

## ***MODEL KM20-22 ABRASIVE SAWS***

### **GENERAL INFORMATION**

The KM20-22 abrasive saws are mitre cut machines. 45deg. cuts left or right is achieved by swiveling the saw head to the desired angle. To swivel the saw head pull the index pin on mitre base plate, loosen table lock handle and swivel saw head to angle desired. Re-lock table lock handle to lock saw head in place.

Two vises are provided for either left or right cuts. Be sure work piece is secure and cannot move in vise before cutting. Use enough pull down force to ensure good wheel wear. Too little cutting force will result in the abrasive wheel edge glazing over impeding the cut. Too much cutting pressure will stall the wheel in the cut; burn drive belts and gives inferior cuts. Good cuts are bright (not blue, black or yellow). Discoloration of cut path indicates over or under feeding saw head and/or wrong abrasive wheel selection. Abrasive wheels have different grains, bonds and reinforcements for different materials and structures. Select the proper wheel for the job.

### **TROUBLESHOOTING/MAINTENANCE**

The most common problem in abrasive cutting is wheel selection. Discolored parts indicate too much heat. Usually obtaining the correct wheel will stop the problem. There are abrasive wheels designed for tubing, solids and structures, low power machines and various exotic materials. Contact your abrasive wheel specialist for recommended grits, grains and reinforcements.

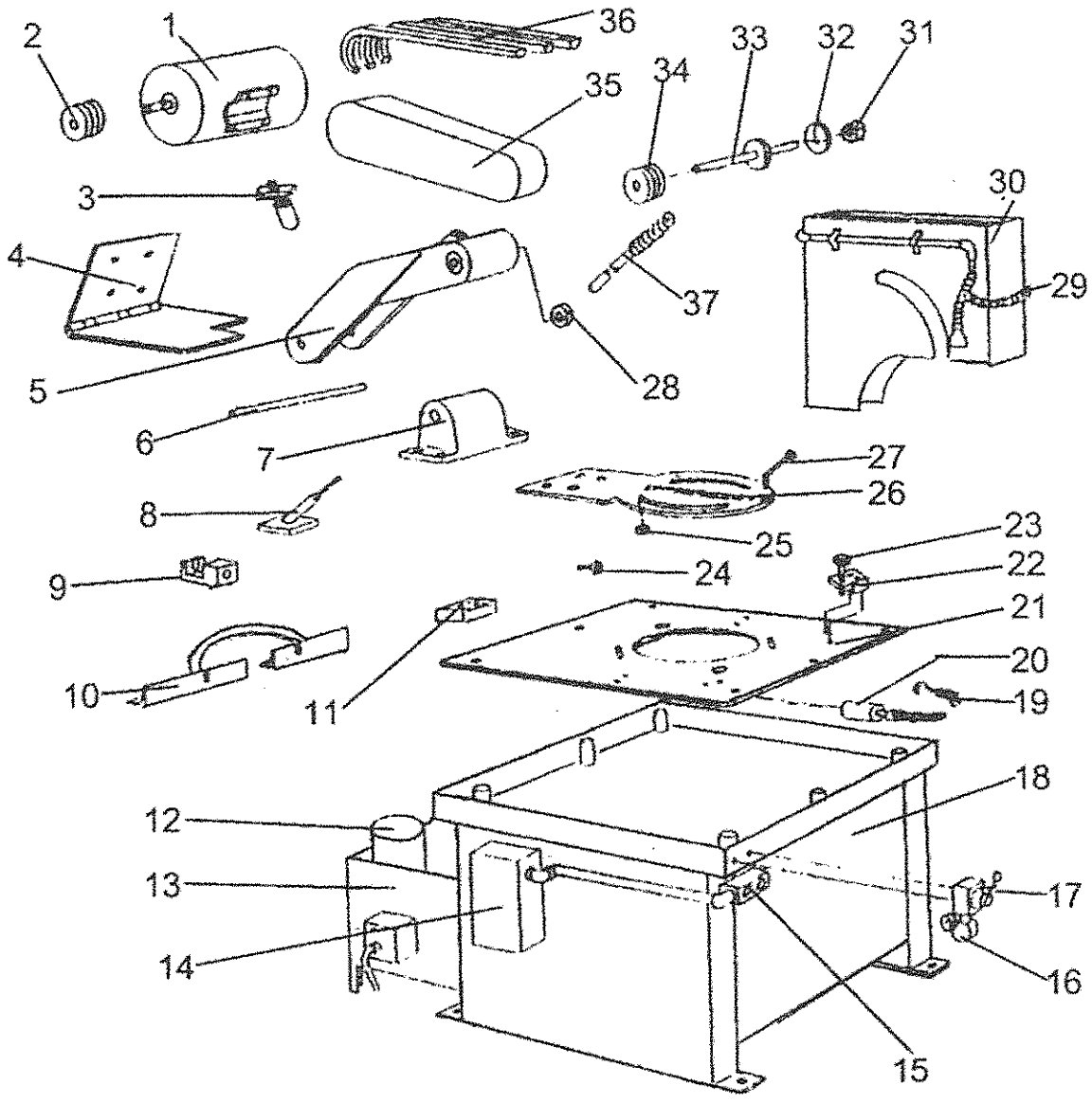
Always check drive belt tightness for positive drive.

Always check incoming power for correct phase and voltage.

Part location can sometimes result in cutting problems. **DO NOT CLIMB CUT**. Be sure work piece is ahead of wheel center. Keep work piece toward operator in vise. If work piece is behind wheel center, use a shim or spacer to bring work piece out toward operator. Work piece need only be very slightly ahead of center in vise.

Keep wheel flanges clean and flat to ensure true running of the wheel.

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KM20-22/KM20-22W/KM20AS-575

No.	Part No.	Description	QTY	No.	Part No.	Description	QTY
1	486-005	30Hp 3Ph 1725RPM	1	18	716-002	Base Assembly KM20-22	1
	486-020	15Hp 3Ph 1725RPM	1		716-002W	Base Assembly KM20-22W	1
2	560-046	15Hp Motor Pulley (Bush Sold Separately)	1	19	1000-39	Chain Assembly	1
	049-003	15Hp Motor Bushing (Not Shown)	1	20	131-008	Air Cylinder-Chain Vise	2
	560-057	20Hp Motor Pulley (Bush Sold Separately)	1	21	050-035	Base Top	1
	049-017	20Hp Motor Bushing (Not Shown)	1	22	053-019	Hold Down Block	2
3	575-011	KM20-22 Motor Post Tension	1	23	696-019	Tension Screw	2
	575-011W	KM20-22W Motor Post	1	24	700-025	Shaft, Bearing Roller Assembly	1
4	486-010	Motor Mount Plate	1	25	044-015	Mitre Bearings	3
5	002-016	Saw Arm	1	26	829-028	Mitre Plate Table	1
6	562-023	Trunnion Pin	1	27	709-010	Stop Lever	1
7	831-020	Trunnion Set	1	28	044-004	Bearings	2
8	840-001W	Work Stop Assembly	1	29	1000-26	Coolant Hose Assembly	1
9	053-011	Block Chain Anchor	2	30	362-067	Wheel Guard	2
10	293-011W	Mitre Fence	1	31	337-027	Spindle Nut	1
11	699-023	Mitre Fence Spacer	1	32	282-011	Loose Flange	1
12	577-005	1/4Hp 3Ph Pump Motor KM20-22W Only	1	33	701-030	Spindle W/ Tight Flange	1
13	716-002W1	Coolant Tank For KM20-22W Only	1	34	560-047	15Hp - Spindle Pulley	1
14		15Hp 3Ph Switch	1		049-004	15Hp - Spindle Bushing (Not Shown)	1
		20Hp 3Ph Switch	1		560-058	20Hp - Spindle Pulley	1
15	710-015	On/Off Control Box	1		049-018	20Hp - Spindle Bushing (Not Shown)	2
16	912-006	Air Gage & Regulator	1	35	342-098	Belt Guard	1
17	912-014	4-Way Valve	1	36	051-012	15Hp V - Belts	3
	002-016AS	Arm Assenbly(Arm & Spindle Assy)	1		051-012	20Hp V - Belts	4
				37	281-002	Handle With Grip	1
					X00-011	Table Bearing Set (Not Shown)	1