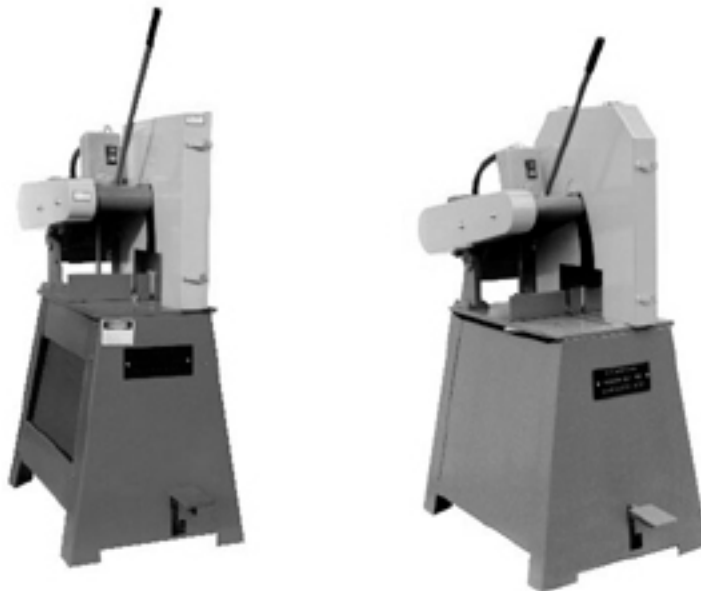


# INSTRUCTION MANUAL

**K16-18 & K20SSF  
Abrasive Saws**



**KALAMAZOO  
INDUSTRIES, INC.**

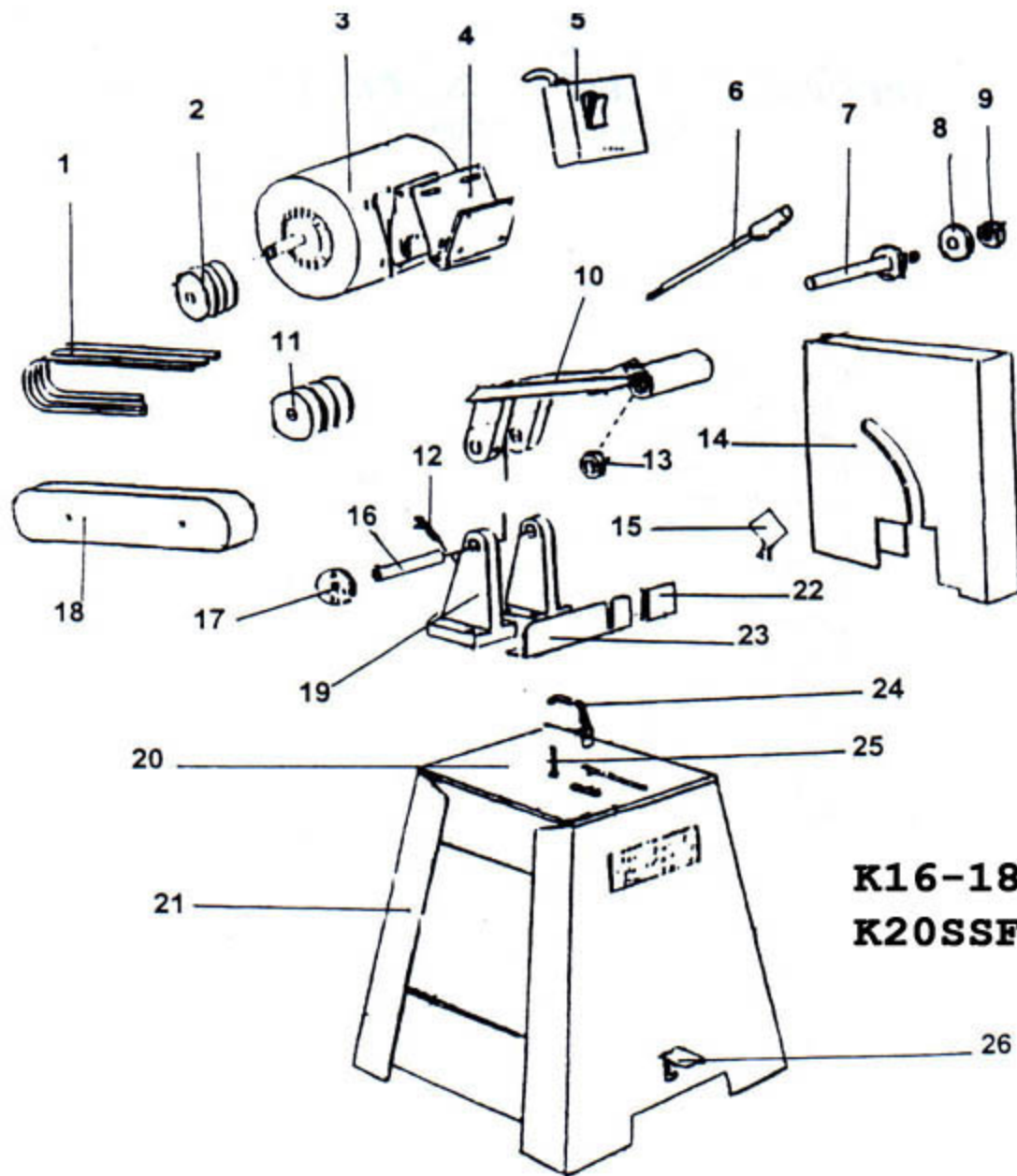
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**K16-18 &  
K20SSF**

| NO. | PART NO | DESCRIPTION                | QTY |
|-----|---------|----------------------------|-----|
| 1   | 051-005 | V-BELT                     | 3   |
| 2   | 560-046 | MOTOR PULLEY               | 1   |
|     | 049-003 | MOTOR BUSHING-NOT SHOWN    | 1   |
| 3   | 486-009 | 20HP SD, MOTOR K20SSF-20   | 1   |
|     | 486-019 | 10HP SD, MOTOR K16-18      | 1   |
| 3   | 486-020 | 15HP SD, MOTOR K20SSF-15   | 1   |
| 4   | 486-010 | MOTOR MOUNT                | 1   |
| 5   | 710-012 | MANUAL SWITCH-K16-18       | 1   |
|     | 710-006 | MAGNETIC SWITCH-K20SSF/220 | 1   |
|     | 710-012 | MANUAL SWITCH-K20SSF/440   | 1   |
| 6   | 381-008 | HANDLE WITH GRIP           | 1   |
| 7   | 701-010 | SPINDLE WITH TIGHT FLANGE  | 1   |
| 8   | 292-011 | LOOSE FLANGE               | 1   |
| 9   | 537-027 | SPINDLE NUT                | 1   |
| 10  | 002-005 | SAW ARM                    | 1   |
| 11  | 560-047 | SPINDLE PULLEY             | 1   |
|     | 049-004 | SPINDLE BUSHING-NOT SHOWN  | 1   |
| 12  |         | UP STOP                    | 1   |
| 13  | 044-004 | BEARING                    | 2   |

|    |         |   |   |
|----|---------|---|---|
| 14 | 342-013 | WHEEL GUARD-K20SSF  | 1 |
|    | 342-014 | WHEEL GUARD-K16-18  | 1 |
| 15 | 342-030 | INNER GUARD   | 1 |
| 16 | 700-002 | TRUNNION PIN  | 1 |
| 17 | 641-002 | TRUNNION CAP  | 2 |
| 18 | 342-021 | BELT GUARD  | 1 |
| 19 | 831-002 | TRUNNION  | 1 |
| 20 | 050-018 | TABLE PLATE-K16-18  | 1 |
|    | 050-019 | TABLE PLATE-K20SSF  | 1 |
| 21 | 716-023 | STAND ASSY-K16-18   | 1 |
|    | 716-027 | STAND ASSY-K20SSF   | 1 |
| 22 | 293-003 | FENCE-RIGHT   | 1 |
| 23 | 293-002 | FENCE-LEFT  | 1 |
| 24 | 697-021 | SPRING, CHAING ASSY   | 1 |
| 25 | 709-003 | DOWN STOP   | 1 |
| 26 | 041-007 | FOOT PEDAL & SPRING   | 1 |
|    | 702-008 | SPINDLE ASSEMBLY<br>INCLUDES SPINDLE, FLANGES<br>BEARINGS AND NUT | 1 |

## **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

ELECTRIC MACHINES ARE NOT INTENDED FOR USE IN OR NEAR WATER. THIS INCLUDES AN OPERATOR STANDING ON A WET FLOOR.

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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## Basic Operation

K16-18, 10 hp, 3 phase, 220/440 volt, manual switch.

K20SSF 15 hp, 3 phase 220/440 volt, K20SSF-50 hz 10 hp, manual & magnetic switches.

All above 1" spindle arbor, RH thread.

Electrics- Be sure of incoming AC power and verify machine power is the same as incoming AC power. CAUTION: IF NOT FAMILIAR WITH ELECTRICALS CONSULT AN ELECTRICIAN.!!! Follow all safety procedures. SEE ABRASIVE SAFETY SHEET!!!

K16-18 uses as standard a manual switch with over loads. Bring incoming AC power to the switch box. Drill/punch switch box to accept a seal tite fitting and connect incoming AC power to L1, L2,L3 on the contactor.

K20SSF-15 hp in 220 volt uses a magnetic switch. Drill/punch NEMA enclosure to accept seal tite fitting, input power to L1,L2.L3 on the contactor. For K20SSF-15/440 using a manual switch, follow same instructions as above.

CAUTION: Voltage changes require wire lead changes at motor and switches. IF NOT FAMILIAR WITH ELECTRICS CONSULT AN ELECTRICIAN.!!! CHANGES FROM FACTORY SETTINGS ARE NOT COVERED UNDER WARRANTY UNLESS AUTHORIZED FROM THE FACTORY.!!

Abrasive wheels- Select the correct abrasive wheel for the material being cut. Consult your dealer for correct wheel selection. Abrasive wheels vary in grit, bond, etc.. Good cuts are not burnt or discolored but bright like the outside of the material. If material being cut is binding, pinching the wheel, burning then the wrong wheel is being used. Many times it may take several test cuts with different wheels to get the best performance. Inform your dealer of the material , size, shape being cut so as to select the right abrasive wheel.

Cutting- Be sure material is held securely while cutting. NO MOVEMENT of material should occur when cutting or wheel failure will result. Use constant steady manual pressure when pulling down the saw head. To light of pressure will cause loading of wheel. Be sure no flammable material is nearby to cause a fire. Follow safety procedures like safety glasses, face shields, etc. SEE ABRASIVE SAFETY SHEET.!!

Chain Vise- Pull chain over material as tight as possible, insert closest chain link into clevis on back of fence (#23). Depress foot pedal (#26) to tighten chain around material. Do not allow material to move during cutting!! Wheel breakage will occur.

Maintenance- Keep drive V belts tight. ( 1/2" of squeeze) Do not over tighten. After initial start up and use re-check V belt tension . All bearings are sealed bearings and need no attention. Keep machine and area clean of abrasive dust.