

# **KALAMAZOO**

## **INDUSTRIES INC.**

### **K20SW-15 ABRASIVE SAW**

### **MANUAL**



**MADE IN USA**

# WARNING!

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

## INSPECTION

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.**

**Electrical: CAUTION:** Voltage changes require wiring changes at drive motor. **WARRANTY DOES NOT COVER** unauthorized wiring changes/failures. **Consult an electrician an electrician if your not familiar with electrics.**

### K20SW SETUP

- BEFORE STARTING OR CONNECTING ELECTRICAL VERIFY THE PHASE AND VOLTAGE OF THE UNIT.
- BE SURE MACHINE IS BALANCED CORRECTLY SO IT WILL TIP OVER.
- TO GUARD AGAINST CONCEALED DAMAGE, STAND CLEAR AND OBSERVE UNIT FOR THE FIRST FEW MINUTES OF OPERATION. GUARDS MUST NEVER BE REMOVED.
- BEFORE INSTALLING THE ABRASIVE WHEEL CONFIRM THAT THE CUTOFF WHEEL IS DESIGNED TO RUN AT 4800 SFPM (MOS). YOU CAN FIND THIS INFORMATION DIRECTLY ON THE THE SIDE OF YOUR CUTOFF WHEEL. IT

### ABRASIVE SAW SAFETY

- NEVER REMOVE SAFETY GUARDS FROM MACHINE. DISCONNECT MACHINE FROM 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.
- DO NOT USE TOOTHED BLADE WITH THIS SAW AND DO NOT ATTEMPT TO USE STEEL BLADES ON THIS SAW.
- 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.
- MANUALLY TIGHTEN AND LOOSE SPINDLE NUT.
- DO NOT USE IMPACTED GUN TO LOOSEN OR TIGHTEN SPINDLE NUT.
- ALWAYS KEEP WHEEL GUARD IN THE 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 the vertical position.
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 a 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.
9. **DO** tie back hair.

#### 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.
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 spindle 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 noticeable or work gets hot.
9. **DON'T** wear gloves and or have loose clothing when operating machine.
10. **DON'T** use tooth blade on saw.

# BASIC OPERATION

## IMPORTANT

15HP 3PH 230V and or 460V

**Electrics:** Be sure of incoming AC power and verify machine power is the same as incoming AC power. CAUTION: IF NOT FAMILIAR WITH ELECTRICAL, CONSULT AN ELECTRICIAN!!! FOLLOW ALL SAFETY PROCEDURES. SEE THE ABRASIVE SAFETY SHEET!!!

1. **Start:** Rotate the selector switch to **SAW** to start the saw blade, and rotate the switch to **PUMP** to use the coolant pump without running the saw blade to wash the machine down.
2. **STOP:** Pull out the red button to engage the circuit; PUSH in the red button to STOP.
3. **Coolant:** The ball valve controls coolant flow.
4. **Air chain vise:** Rotate the valve to tighten/loosen the chain vise.
5. **Coolant lines:** Adjust coolant flow lines on either side of the abrasive blade
6. **Chain vise:** SEE BELOW
7. **NEMA electrical enclosure:** SEE BELOW
8. **DOWN STOP:** Adjust the threaded rod with the new blade to stop the blade from cutting into the saw top. Adjust the threaded rod down as the blade wears.

K20SW-15HP in 230V and or 460V uses a magnetic switch. Drill and punch NEMA enclosure to accept seal tite fitting and input power to L1, L2, L3 on the contactor.

**CAUTION: VOLTAGE CHANGES REQUIRE WIRE LEAD CHANGES AT THE MOTOR, TRANSFORMER, AND FUSES. IF YOU ARE NOT FAMILIAR WITH ELECTRICS, CONSULT AN ELECTRICIAN!!! CHANGES FROM FACTORY SETTINGS ARE NOT COVERED UNDER WARRANTY UNLESS AUTHORIZED BY THE FACTORY**

**Cutting:** Be sure you hold the material securely while cutting. NO MOVEMENT of the material should occur when cutting or wheel failure will result. Use constant steady manual pressure when pulling down the saw head. Too lite of pressure will cause the loading of the abrasive wheel to. Be sure no flammable material is nearby to cause a fire. Follow ALL safety procedures like safety glasses, face shields, etc. Use the correct abrasive blade for the material that you're cutting. Not all cutoff blades are the same. Consult your blade dealer for abrasive blade selection.

**Chain vise:** Pull the chain over the material as tight as possible, and insert the closest chain link into the clevis on the back of the fence (**#53**). Use the vise open and close valve to tighten the chain around the material. **Do not allow material to move during cutting!! Wheel breakage will occur. Input shop air 0-100 PSI into the regulator to operate the vise.**

**Coolant:** Use a rust inhibiting grinding type coolant. Consult your dealer for coolant.

**Maintenance:** Keep the drive V-belts tight (1/2" of a squeeze). Don't over-tighten. After initial start-up and use re-check the V-belt tension. All bearings are sealed and no attention is needed. Keep the machine and area clean of abrasive dust.

