

**KI** **KALAMAZOO**  
INDUSTRIES, INC.  
KALAMAZOO, MI.



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## K12-14W ABRASIVE WET SAW INSTRUCTION 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.**

### K10SW 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.

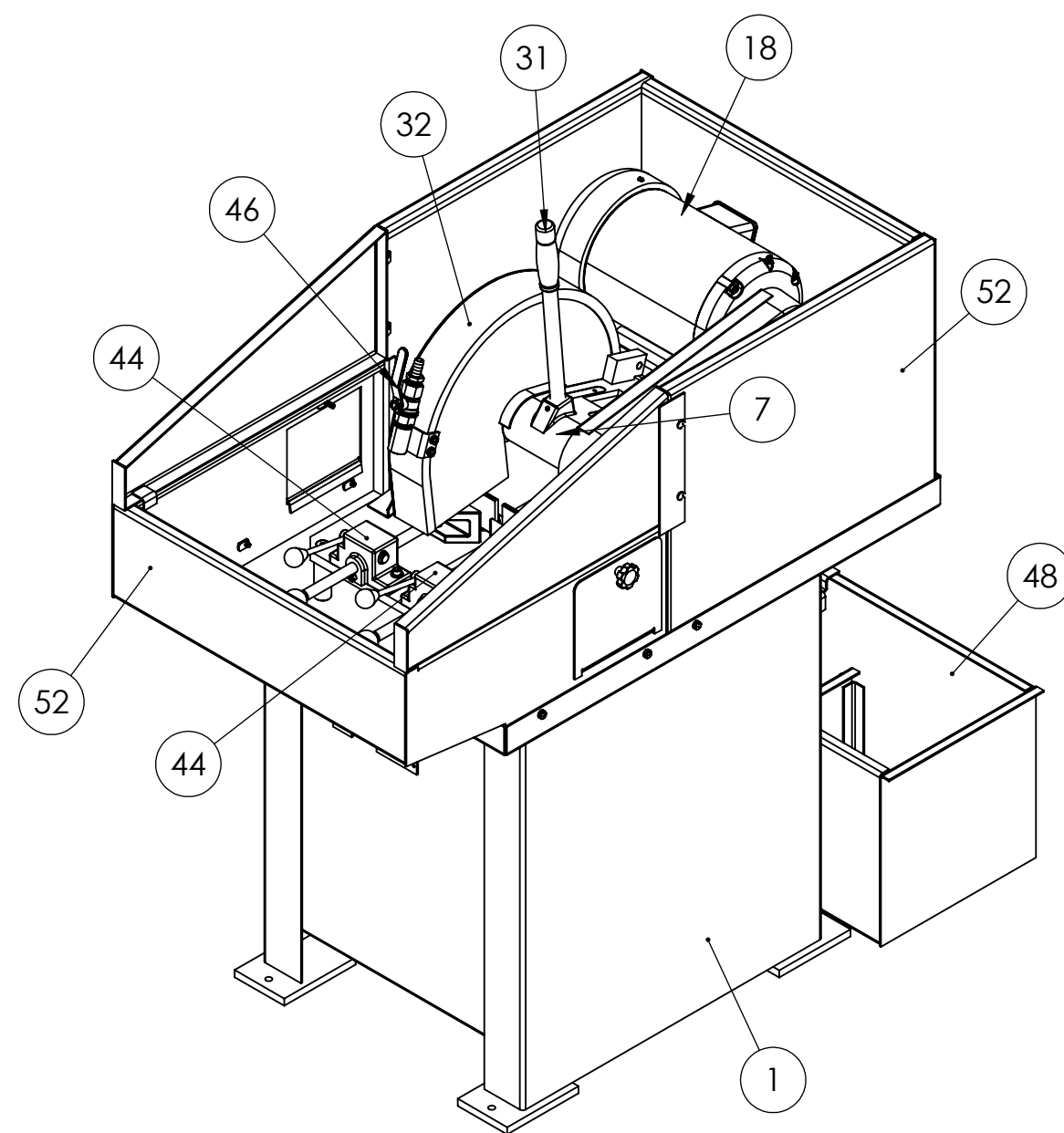
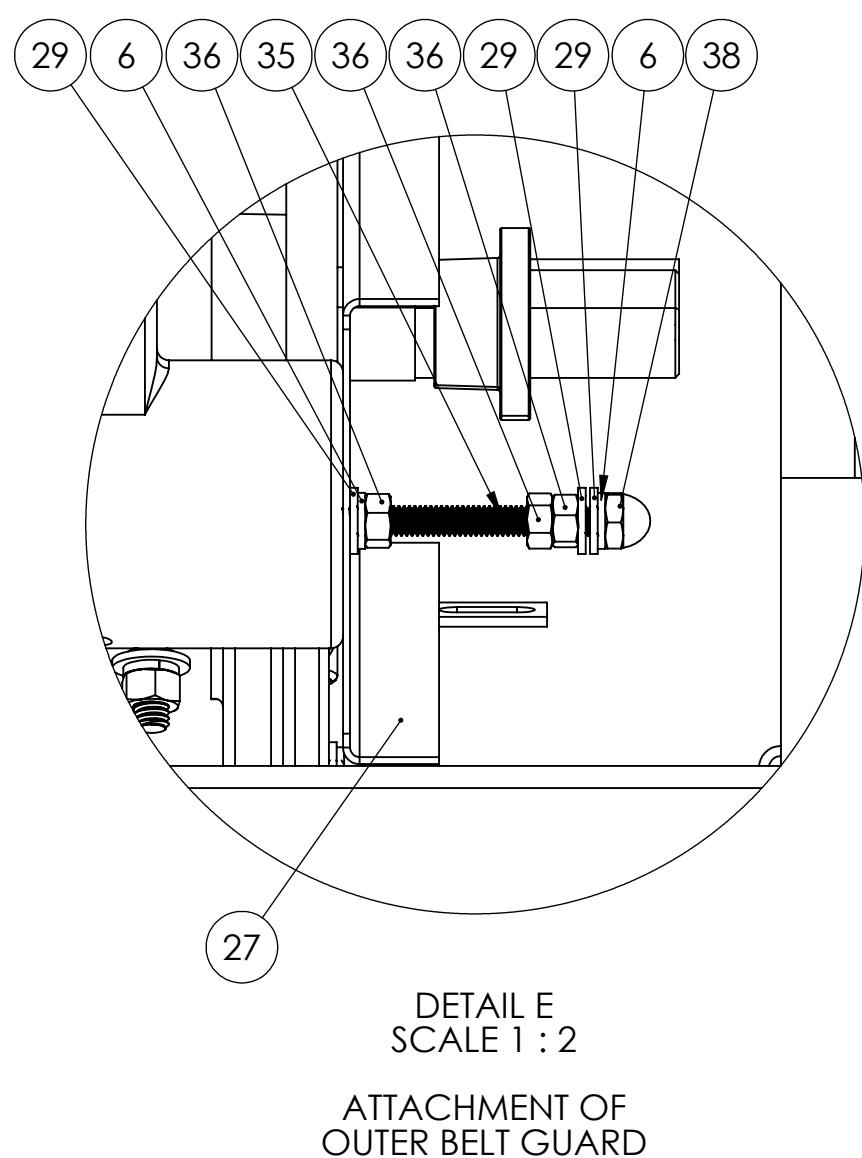
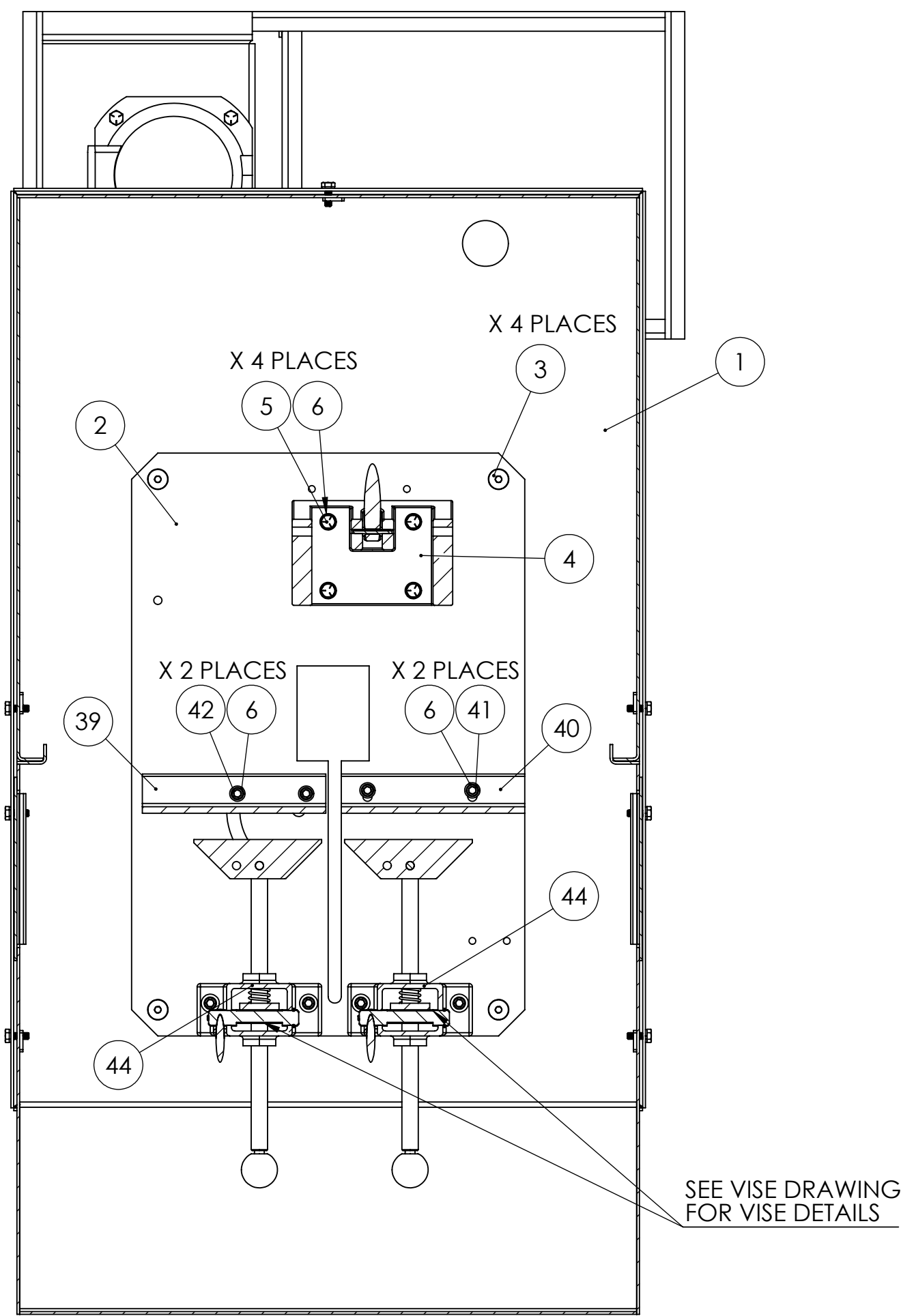
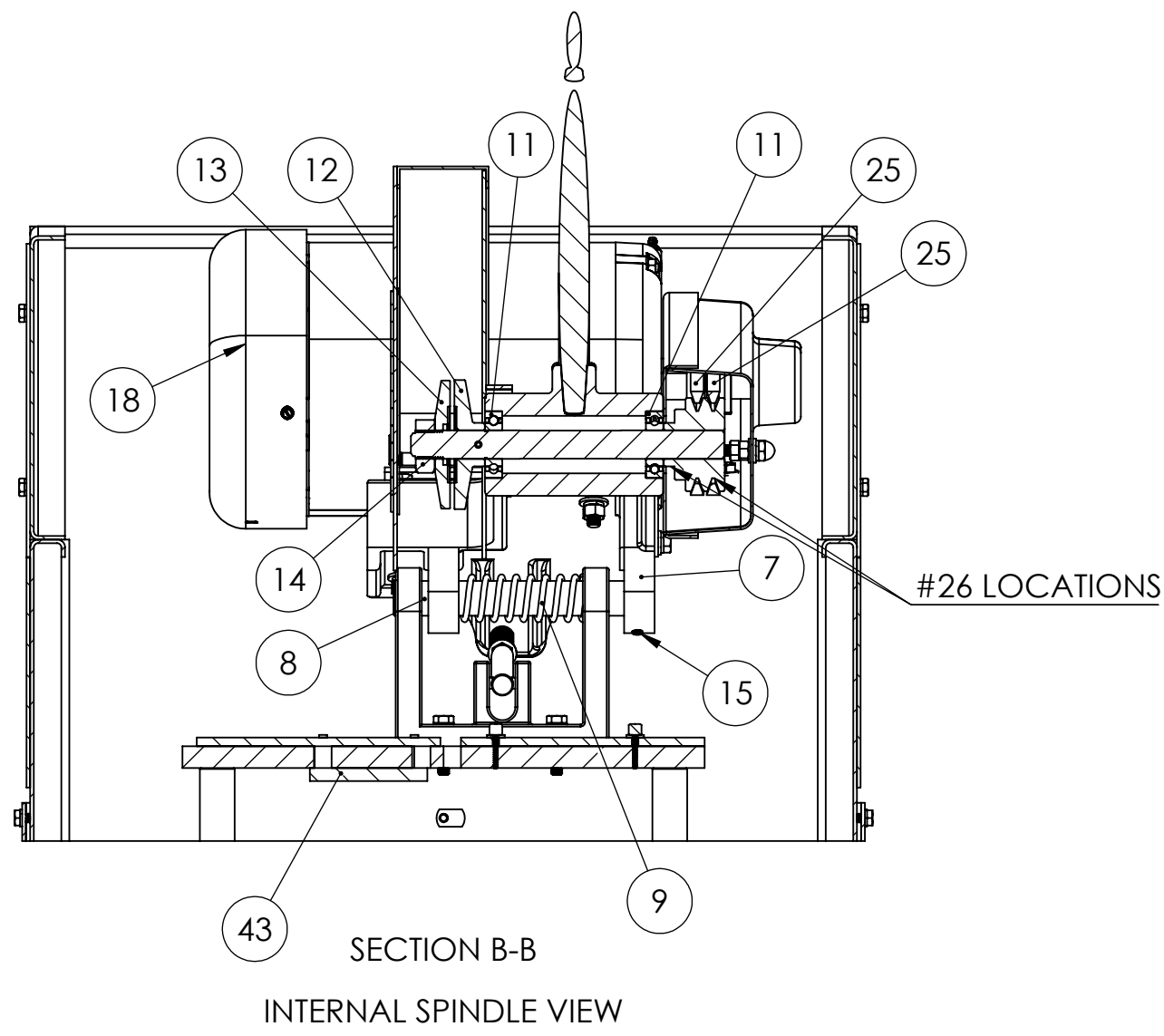
#### DON'T

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

1. Be certain correct wiring is matched to motor.
2. Punch **NEMA ELECTRICAL ENCLOSER FOR INCOMING WIRING. MAKE SURE TO USE A SEAL TITE FITTING TO INSURE A TIGHT SEAL AROUND THE WIRING.** Input wiring to L1, L2 and L3. **CAUTION: IF NOT FAMILIAR WITH ELECTRICS CONSULT AN ELECTRICIAN!**  
The machine is wired at the factory for the voltage specified on the order. Any electrical failures due to incorrect wiring or voltage changes from factory settings are not warranted
3. Always keep flanges clean and tight against the abrasive wheel.
4. Be certain work piece is securely clamped in the vise. Any movement in the work piece during cutting will result in broken abrasive cutoff blades.
5. Check part location: part centerline should be ahead of wheel centerline. Do not climb cut. Use shims or spacers to move part out towards the operator to avoid climb cutting.
6. Keep the back stop assembly (**#10**) adjusted correctly so as not to over cut into the saw table. Down stop is adjusted by using a wrench.
7. Keep the blade guard in the down position at all times. Guarding is designed for abrasive blades only. **DO NOT USE STEEL TOOTHED BLADES!!!**  
**GUARDING IS NOT DESIGNED FOR STEEL TOOTHED BLADES PER OSHA AND ANSI STANDARDS.**
8. Saw spindle speed is set at 2,200 SFPM select cutoff wheel that's designed to run at 2,200 SFPM . Contact the wheel manufacturer or dealer for the correct wheel. **NOTE: DON'T USE IMPACT GUN TO TIGHTEN SPINDLE NUT.**
9. Always follow safety procedures. Wear safety glasses, never wear gloves or loose fitting clothing that can get caught in the moving parts and tie back loose hair. Always keep hands out of sawing area when cutting. See attached safety sheet.
10. V-belts will stretch with use over time. Keep v-belts tight with 1/2" of "squeeze". Use a v-belt tensioner to tighten v-belt belt. Keep both faces of spindle and motor pulley aligned in the same plane with a straight edge. Check motor and spindle pulleys set prior to operating the machine.
11. The coolant that needs to be used with this saw has to have an anti rusting agent in it to prevent the machine from rusting (**contact your coolant dealer for coolant specifications**).

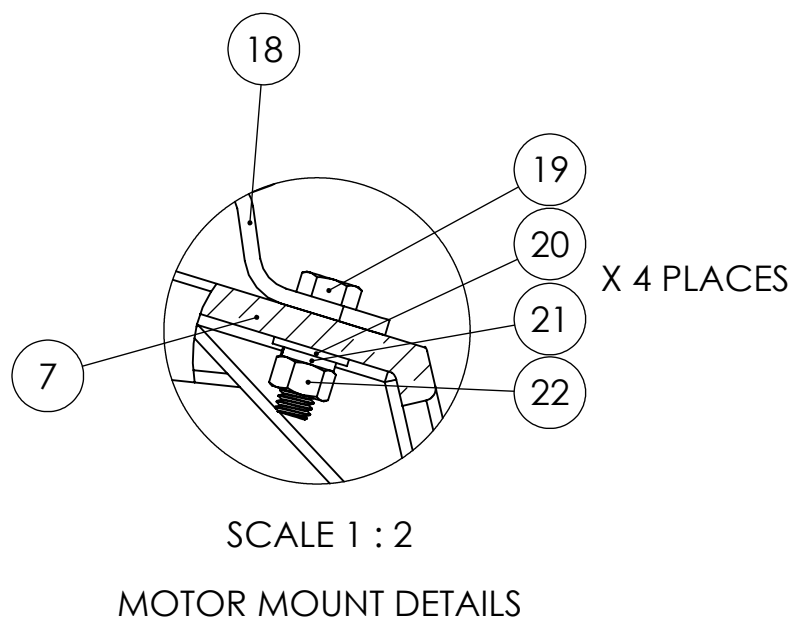
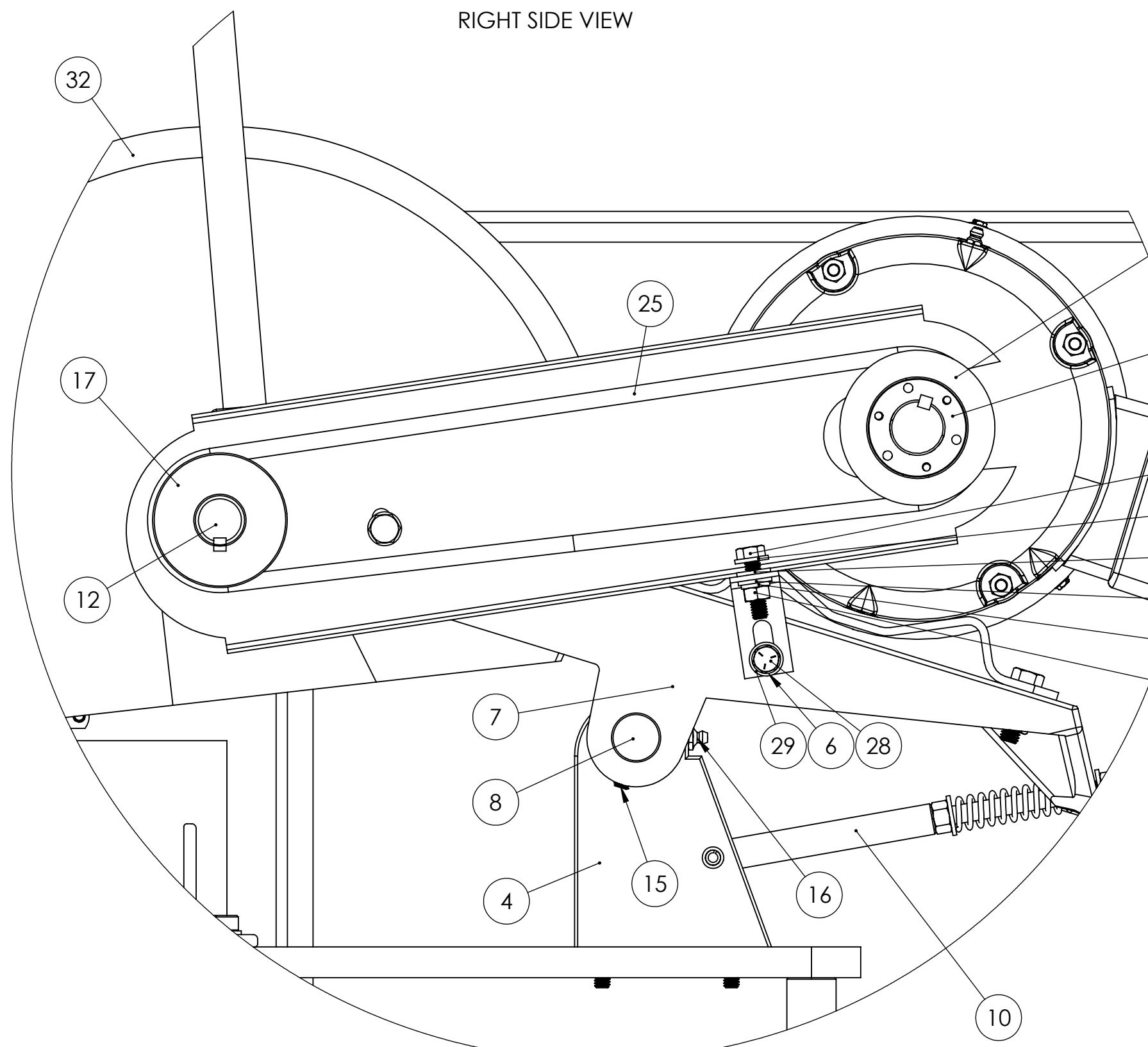
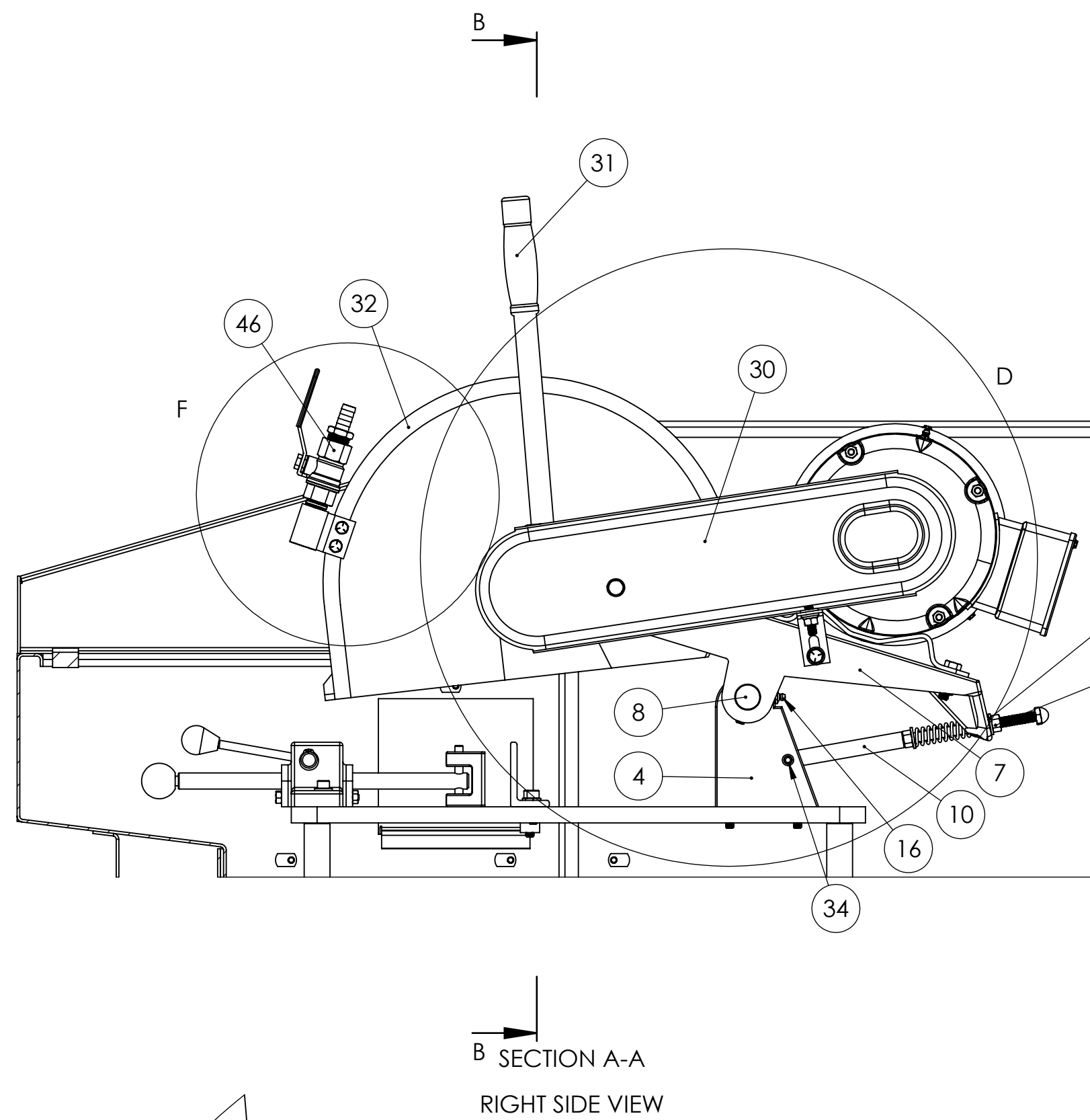
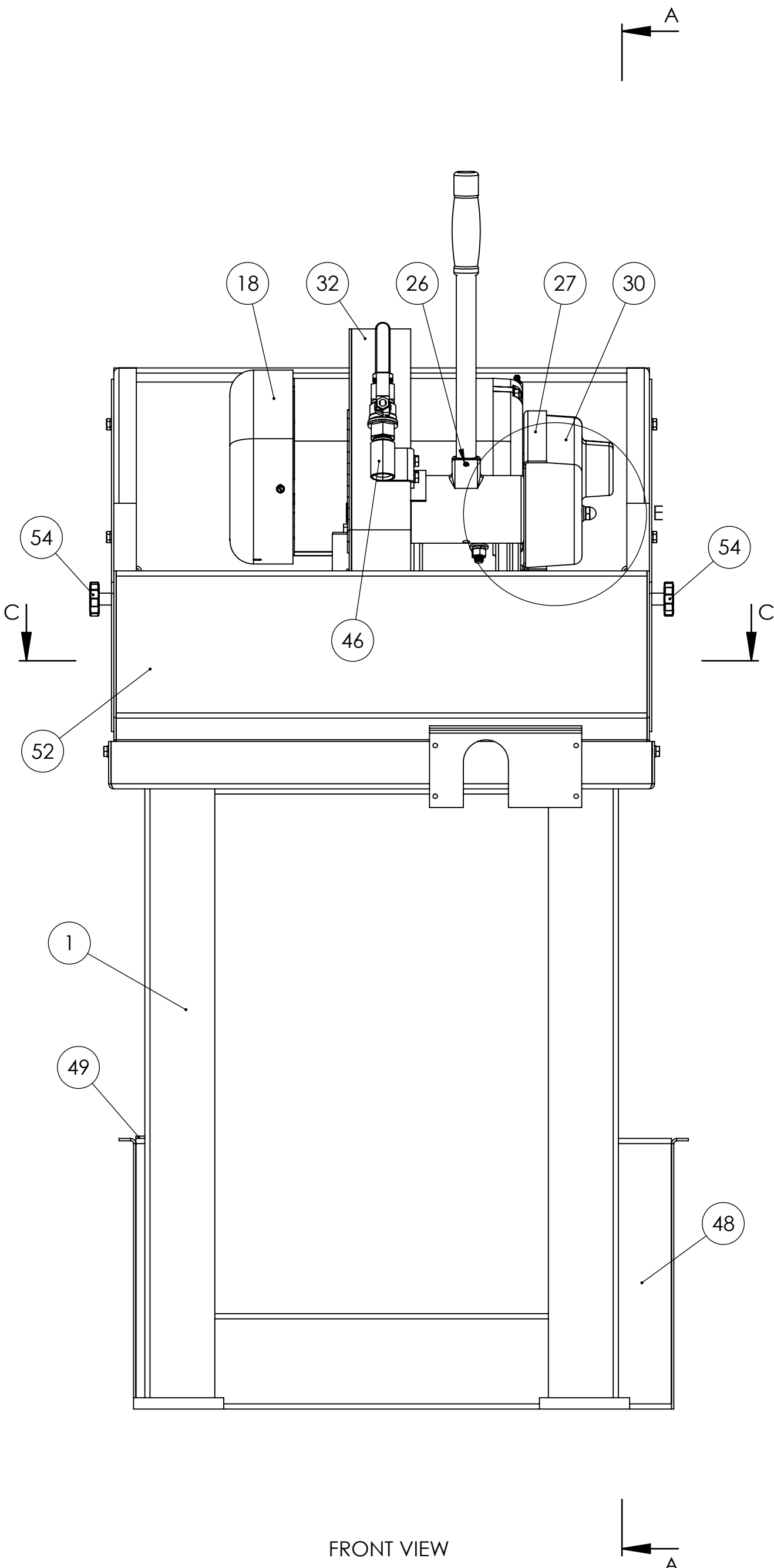
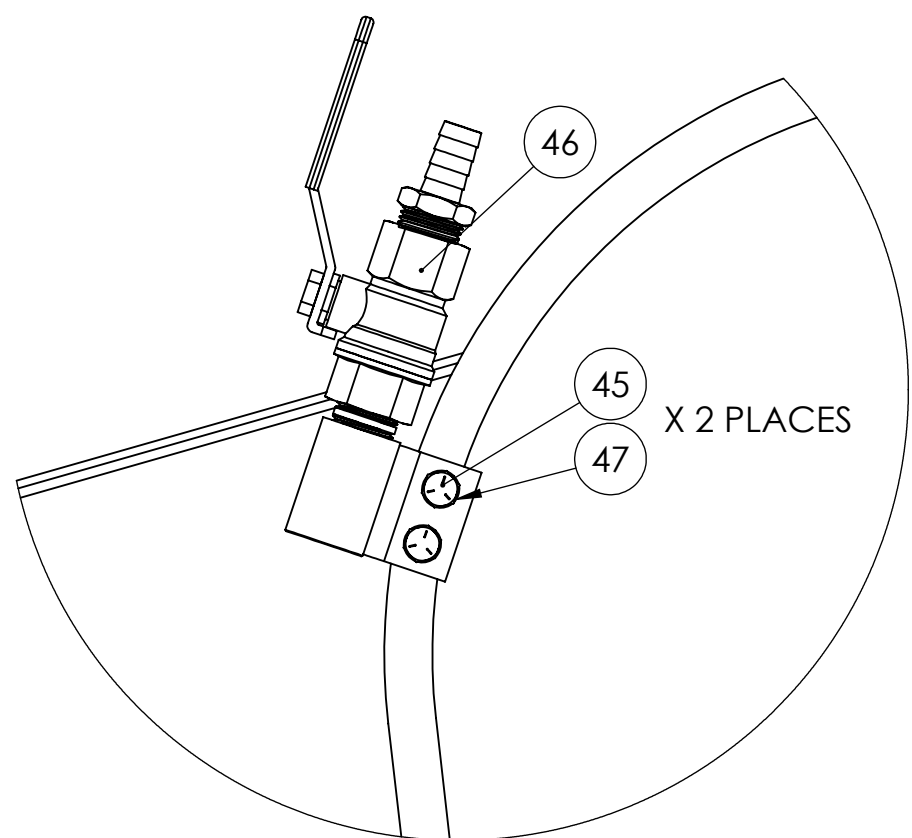
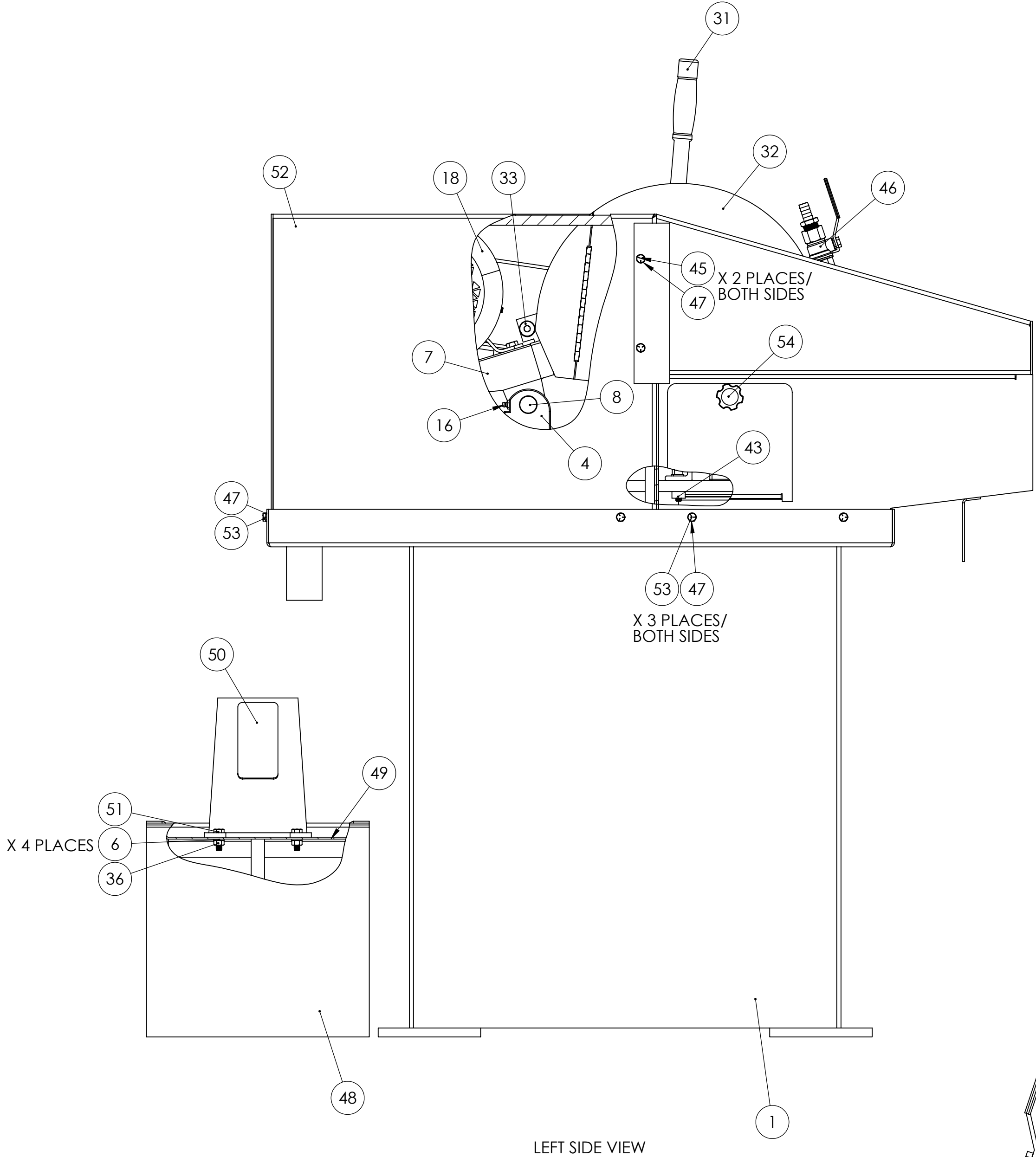




ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	716-020W	STAND ASSEMBLY FOR K12-14W	1
2	050-033	BASE, TABLE FOR K12-14W	1
3	FSCA037024	3/8-16 X 1-1/2 FSHCS	4
4	041-003	K12-K14 TRUNNION	1
5	HHC5031024	5/16-18 X 1-1/2 HHC GR5 Z	4
6	SLWZ031	5/16 SPLIT L/W Z	16
7	002-002	K12- 14 SAW ARM	1
8	562-003	K12-14 TRUNNION PIN	1
9	697-024	SPRING, TENSION FOR BG260, S460, S6M SANDERS, K12-14B SAW, K3390, K3490, K3690 BELT GRINDERS	1
10	645-004	K12B- 14B BACK STOP ASSEMBLY	1
11	044-001	K12 BEARING	2
12	701-002	SPINDLE W TIGHT FLANGE FOR K12B, K14B, K12-14W, KM14, K12-14MS	1
13	292-004	K12-14 LOOSE FLANGE	1
14	537-026	L.H. SPINDLE NUT 1"-14 FOR K14, KM14	1
15	SSKA031006	5/16-18 X 3/8 SOC SET KNURL PT.	1
16	ZERK012000	1/8-27 X 11/16 STRT LUBE FITTING	2
17	560-001	K12- 14 SPINDLE PULLEY	1
18	486-024	5 HP MOTOR FOR K12-14MS-3, KM12-14W-3, KM14SC-3, 5 HP MOTOR FOR K12-14MS-3, KM12-14W-3, KM14SC-3	1
19	HHC5037020	3/8-16 X 1-1/4 HHC GR5 Z	4
20	UFWZ037	3/8 USS F/W Z	5
21	SLWZ037	3/8 SPLIT L/W Z	4
22	FHN5037	3/8-16 FHN GR5 Z	5
23	560-002	MOTOR PULLEY SHEAVE FOR K12-14B, K12-14W, K12-14MS AND KM14	1
24	049-022	MOTOR PULLEY BUSHING FOR K12B, K14B AND KM14	1
25	051-006	V-BELT (TWO REQUIRED) FOR K12, K14, KM14 SAWS (SAME AS 051-009)	2
26	SSKA025004	1/4-20 X 1/4 SOC SET KNURL PT.	3
27	342-086	K12-14 INNER BELT GUARD ASSEMBLY FOR PLASTIC GUARD	1
28	HHC5031012	5/16-18 X 3/4 HHC GR5 Z	1
29	UFWZ031	5/16 USS F/W Z	11
30	342-004	K12-14 OUTER BELT GUARD/PLASTIC	1
31	381-002	HANDLE W GRIP FOR K12-14 SAWS	1
32	342-025	WHEEL GUARD FOR K12-14B SAWS	1
33	SSBA062044	5/8 X 2-3/4 SOC SHOULDER BOLT	1
34	ROLA031024	5/16 X 1-1/2 ROLL PIN	1
35	RND-0.31-18THRX3.75	3-3/4 INCHES OF 5/16-18 THREADED ROD	1
36	FHN5031	5/16-18 FHN GR5 ZINC	8
37	HHC5031020	5/16-18 X 1-1/4 HHC GR 5 Z	1
38	CPNZ031	5/16-18 CAP NUT NICKEL	1
39	293-020L	LEFT FENCE FOR K12-14W	1
40	293-020R	RIGHT FENCE FOR K12-14W	1
41	SHCA031016	5/16-18 X 1 SHCS	2
42	SHCA031024	5/16-18 X 1-1/2 SHCS	6
43	537-014	K10-14 FENCE NUT	1
44	912-016	VISE ASSY K12-14W, KM10, KM14 LESS JAW AND PIN	2
45	HHC5025008	1/4-20 X 1/2 HHC GR5 Z	6
46	389-013	COOLANT HOSE MOUNTING BRACKET ASSEMBLY W FLEXIBLE HOSE & FITTINGS FOR K12-14MS, K12-14W, AND OTHER MACHINES	1
47	SLWZ025	1/4 SPLIT L/W Z	13
48	716-011	COOLANT TANK ASSEMBLY FOR S460W, S6MW, S6MW, K12-14MS, K12-14W	1
49	041-114	1/4 TO 1/2 H.P. COOLANT PUMP MOUNTING BRACKET FOR WET SANDERS	1
50	577-002	1/4HP COOLANT PUMP AND MOTOR	1
51	HHC5031016	5/16-18 X 1 HHC GR5 Z	4
52	342-151	SPLASH GUARD FOR K12-14W	1
53	HHC5025012	1/4-20 X 3/4 HHC GR5 Z	7
54	441-015	907B-2500-1.00S 1/4 THUMBSCREW 1-1/2 DIA	2

SINGLE PHASE MOTOR AND PUMP

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
18	486-036	5HP 3PH 230V 1725 RPM	1
50	577-001	1/4HP 1PH	1



UNLESS OTHERWISE SPECIFIED:		DRAWN		NAME		DATE	
DIMENSIONS ARE IN INCHES		CHECKED					
TOLERANCES:		ENG APPR					
FRACTIONAL		REV					
ANGULAR		MFG APPR					
THREE PLACE DECIMAL		G.A.					
THREE PLACE DECIMAL		COMMENTS:					
INTERPRET GEOMETRIC TOLERANCES PER ASME Y14.5							
NEXT ASSY		USED ON		FRSH			
APPLICATION		DO NOT SCALE DRAWING					

PROPRIETARY/CONFIDENTIAL

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TITLE: K12-14 ABRASIVE WET SAW

SIZE: DWG. NO. E K12-14W

SCALE: 1:5 WEIGHT: SHEET 1 OF 1