

KI KALAMAZOO
INDUSTRIES, INC.
KALAMAZOO, MI.



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HS14 NON-FERROUS 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.**

HS14 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 4400 SFPM (MOS). YOU CAN FIND THIS INFORMATION DIRECTLY ON THE THE SIDE OF YOUR CUTOFF WHEEL. IT

HIGH SPEED 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.
- 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

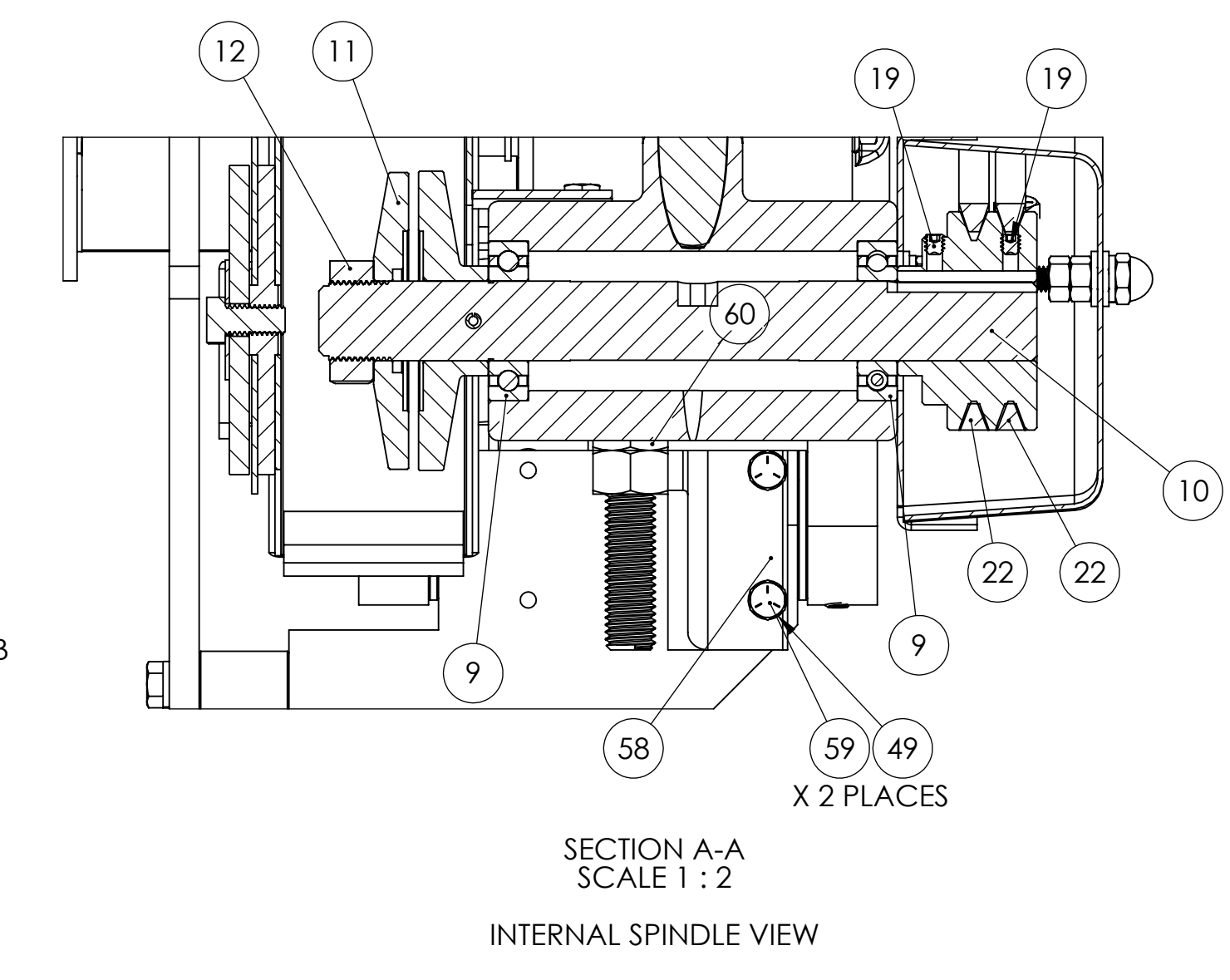
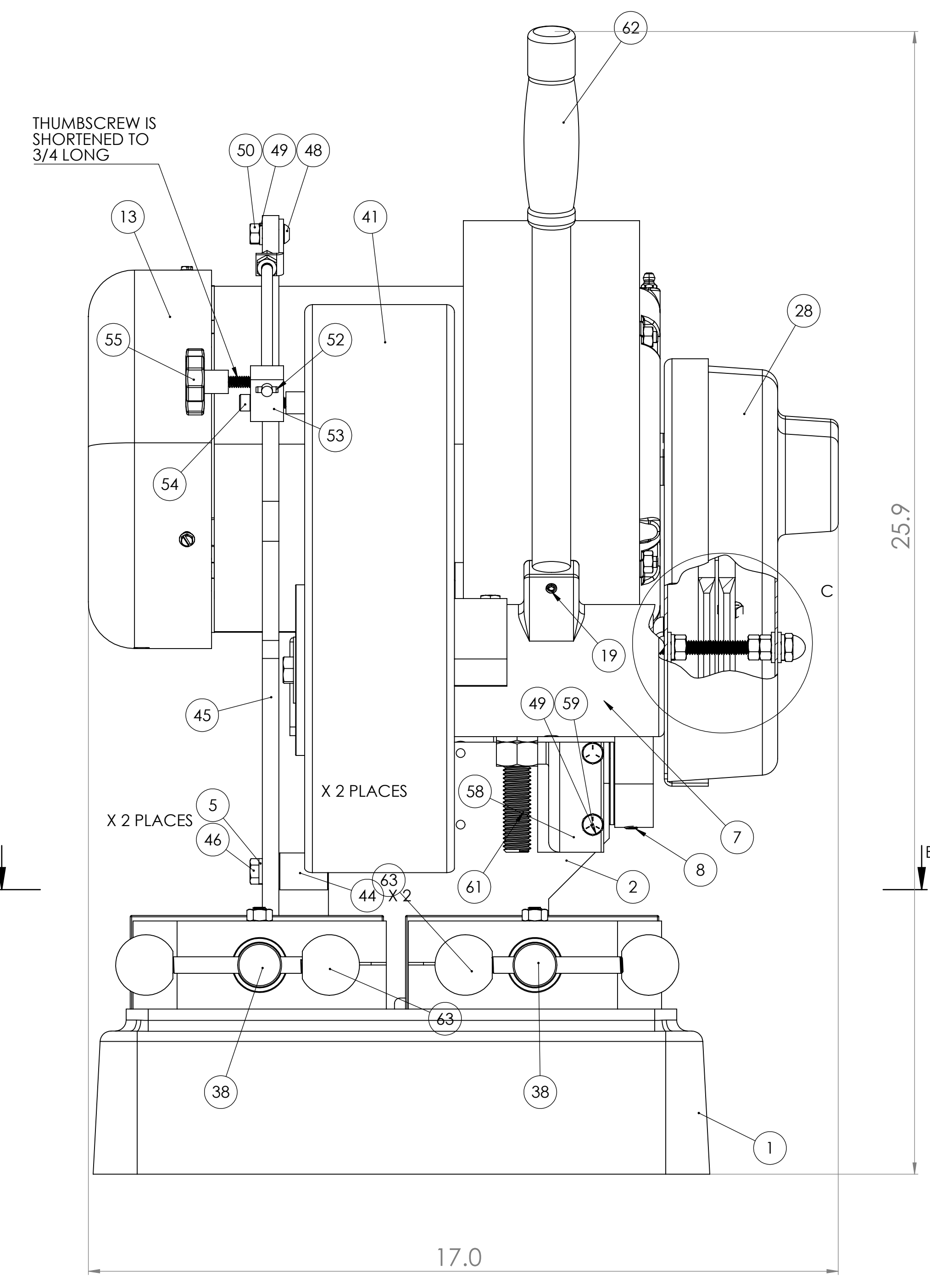
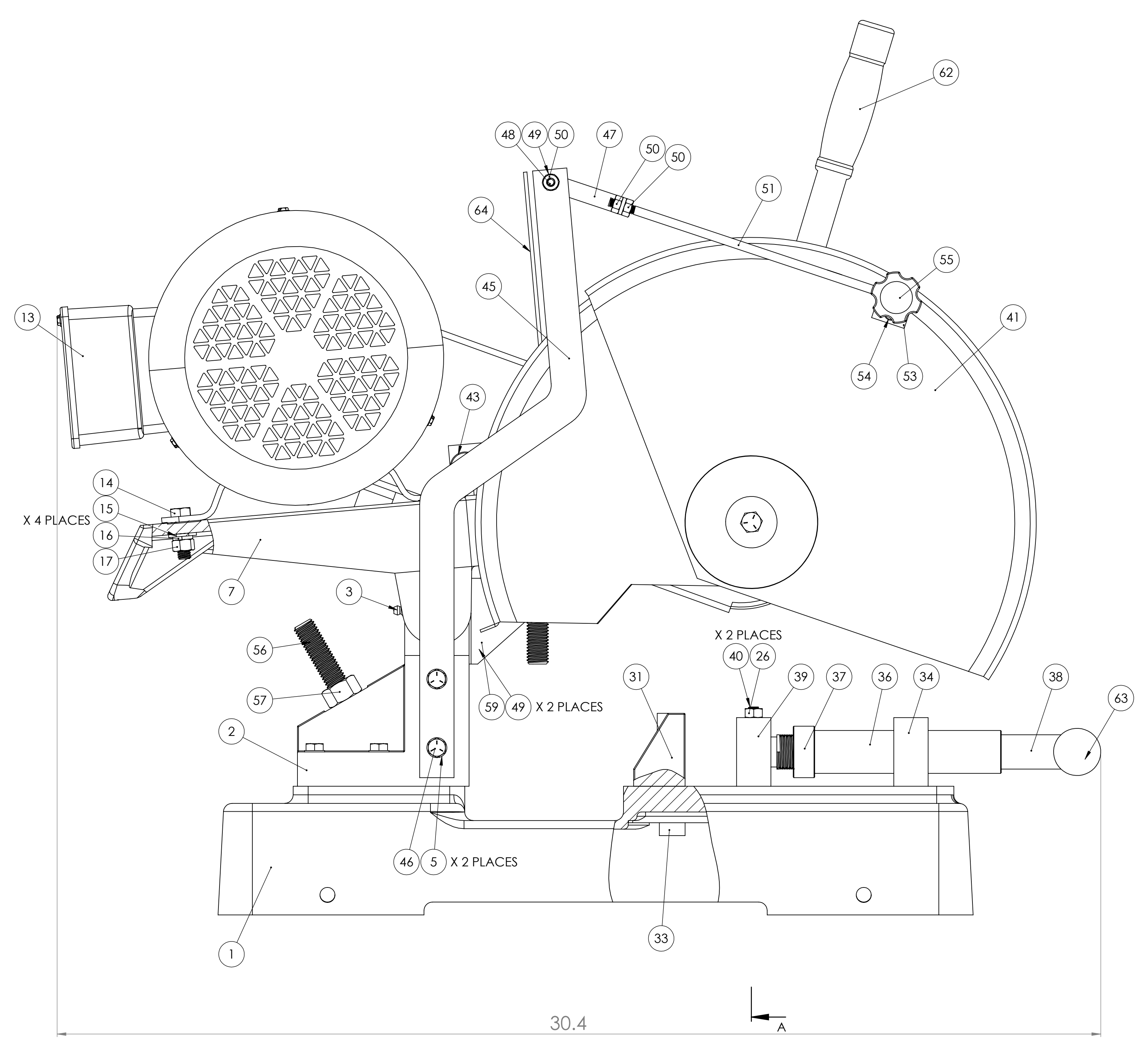
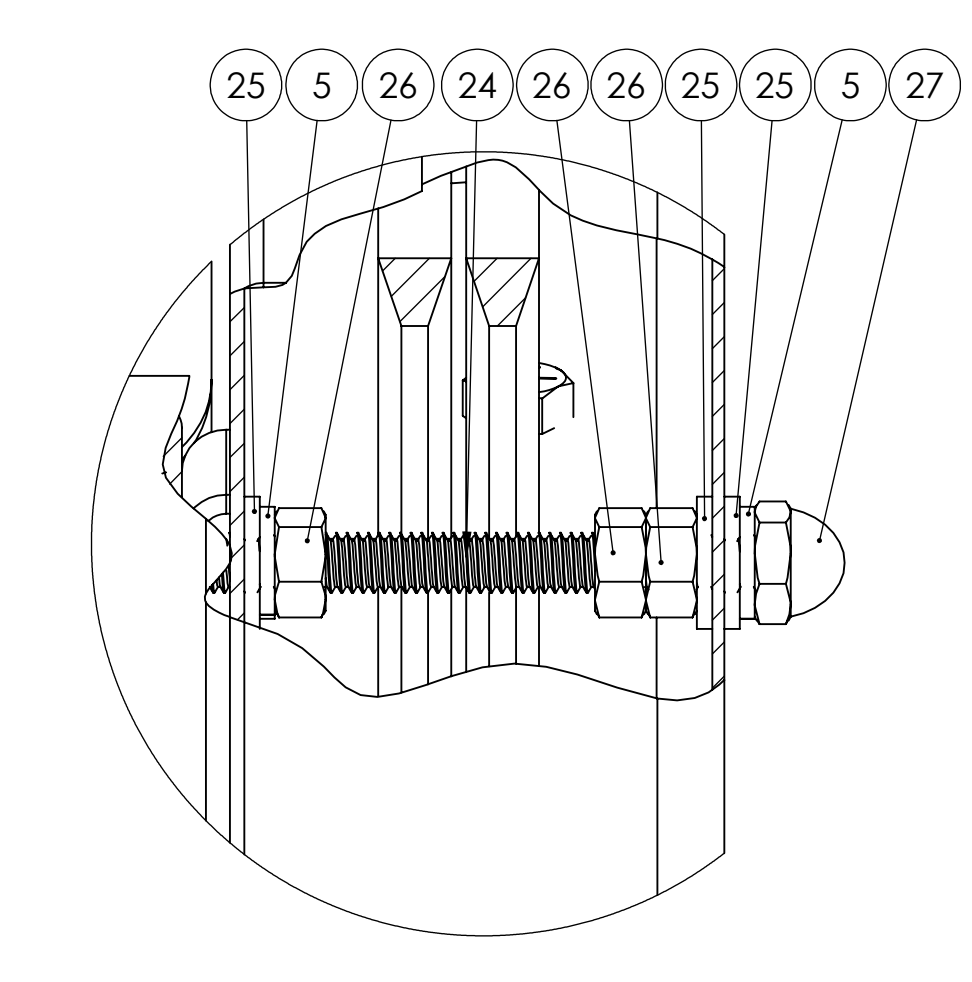
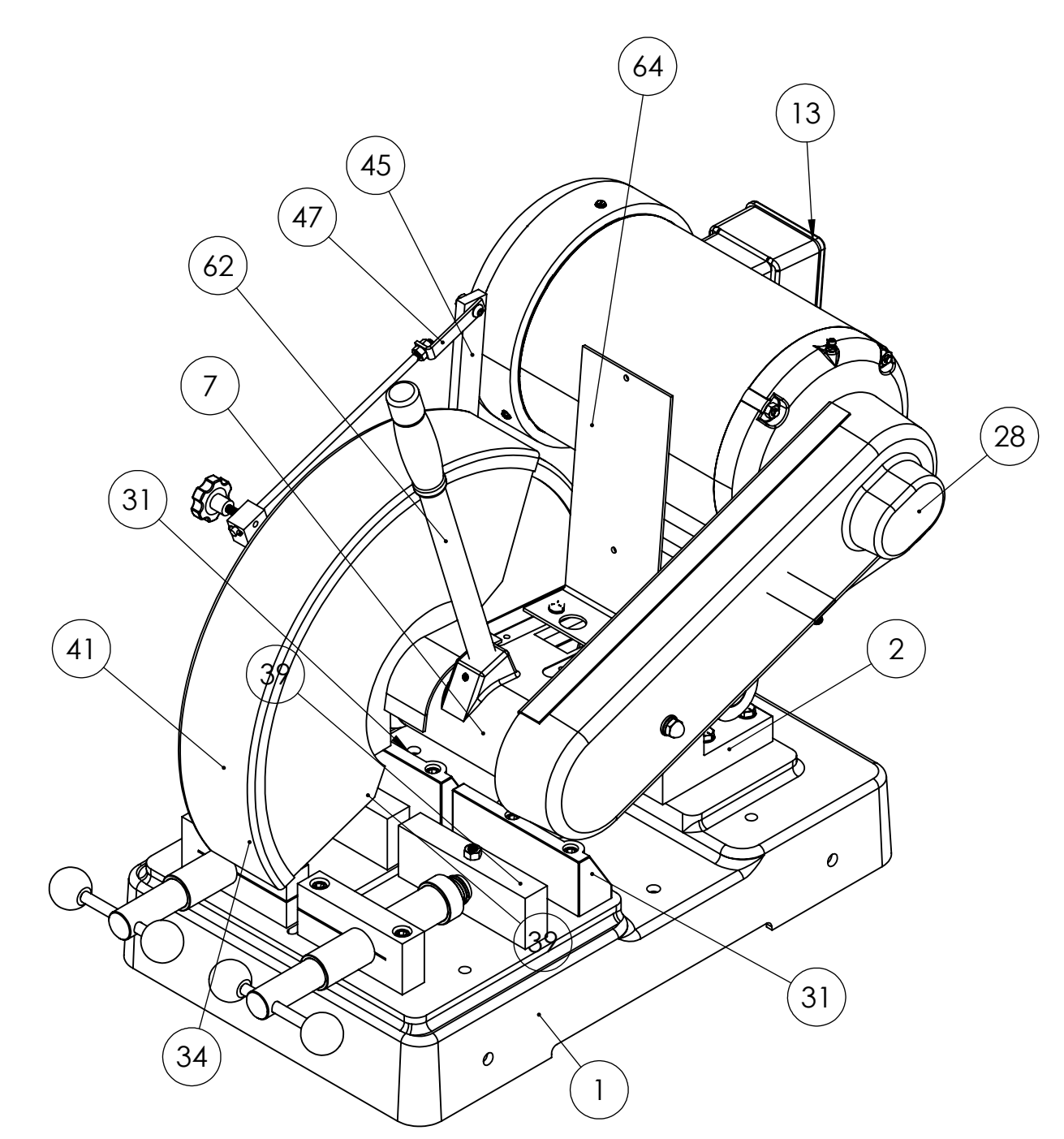
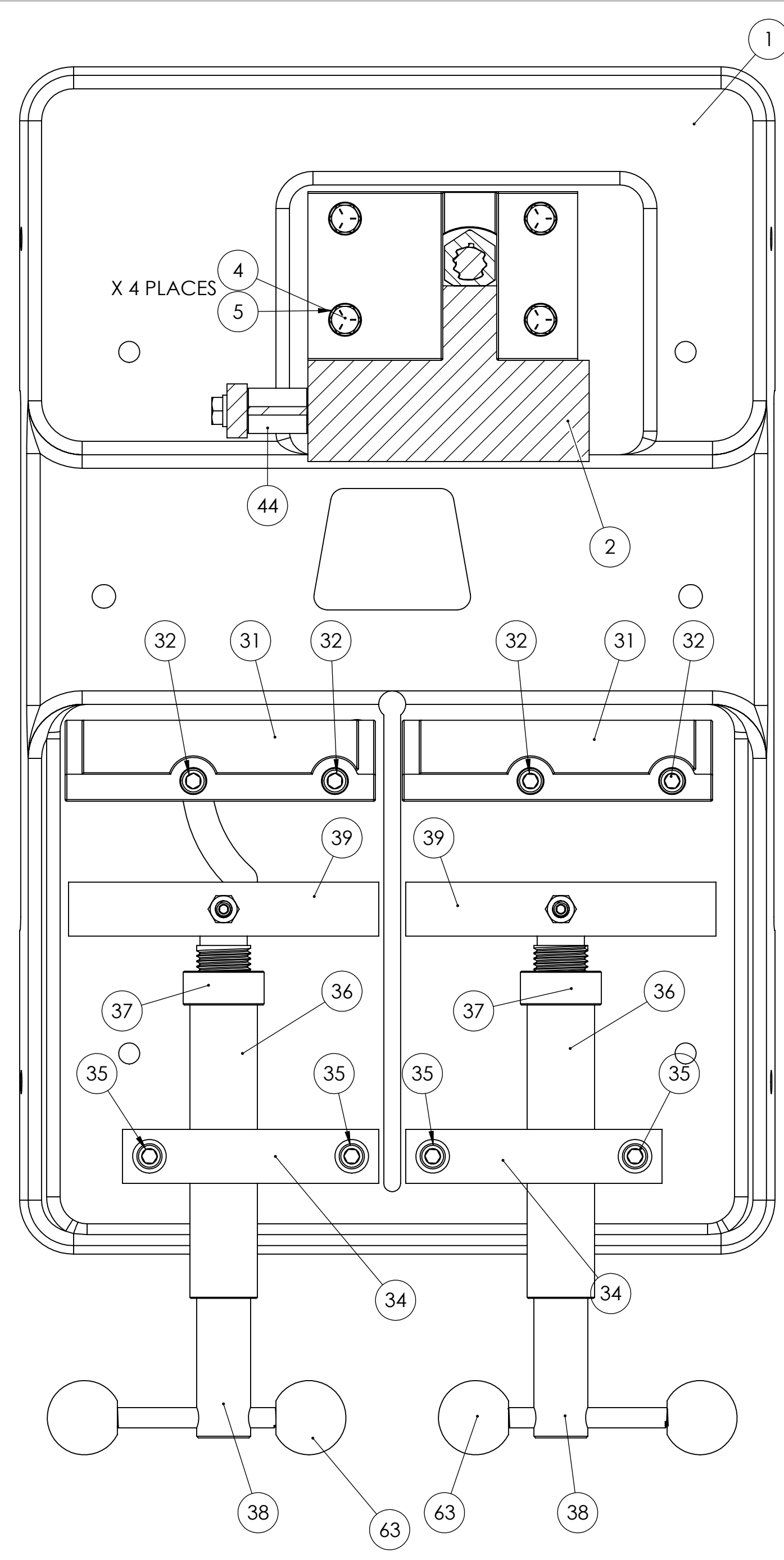
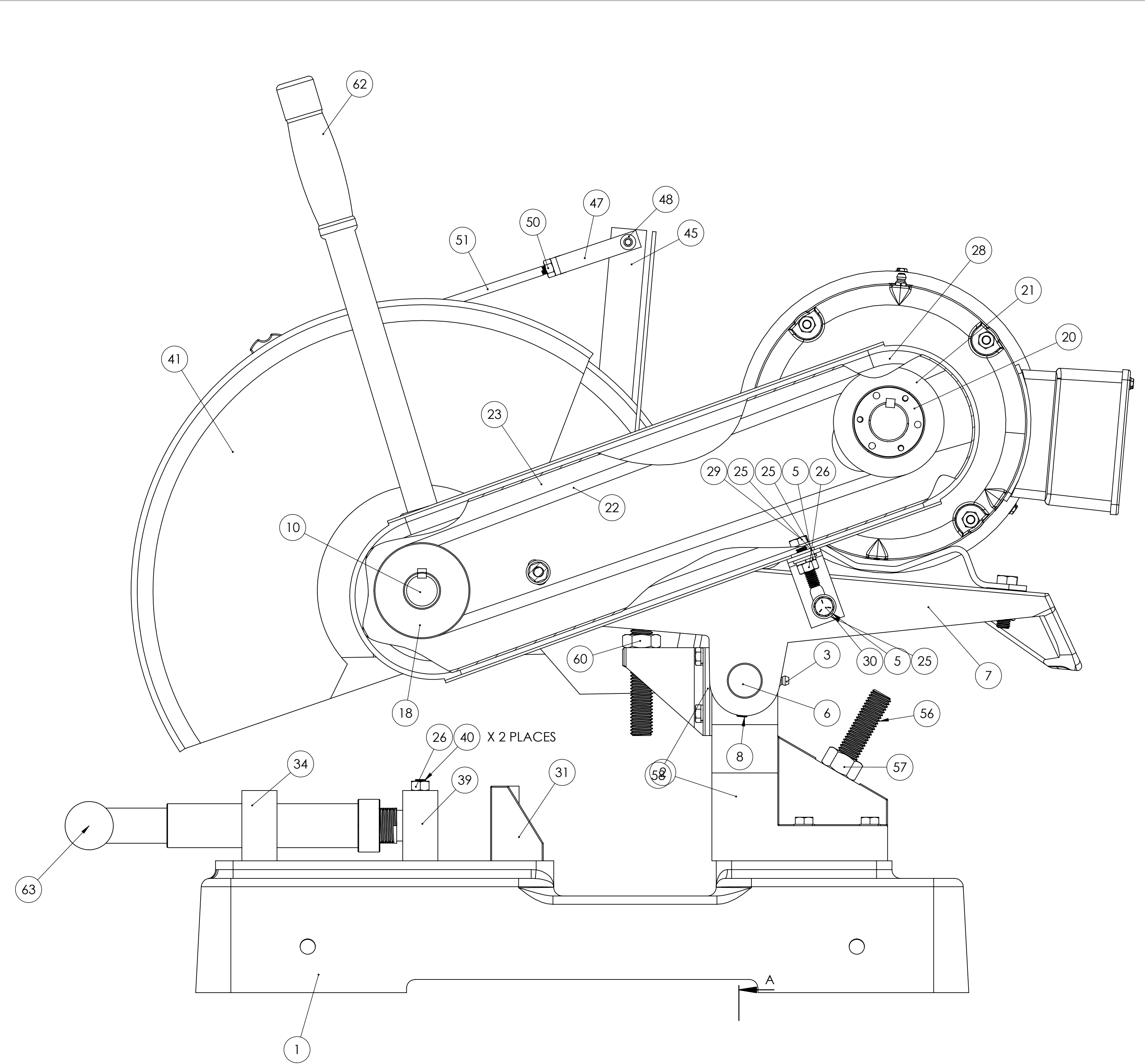
1. **DO** always handle and store wheels in the vertical position.
2. **DO** visually inspect all wheels before mounting for possible damage.
3. **DO** check machine speed against the established maximum safe operating speed marked on the wheel.
4. **DO** check mounting flanges for equal and correct diameter.
5. **DO** use mounting blotters when supplied with wheels.
6. **DO** always use a safety guard covering a least one-half of the high-speed 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

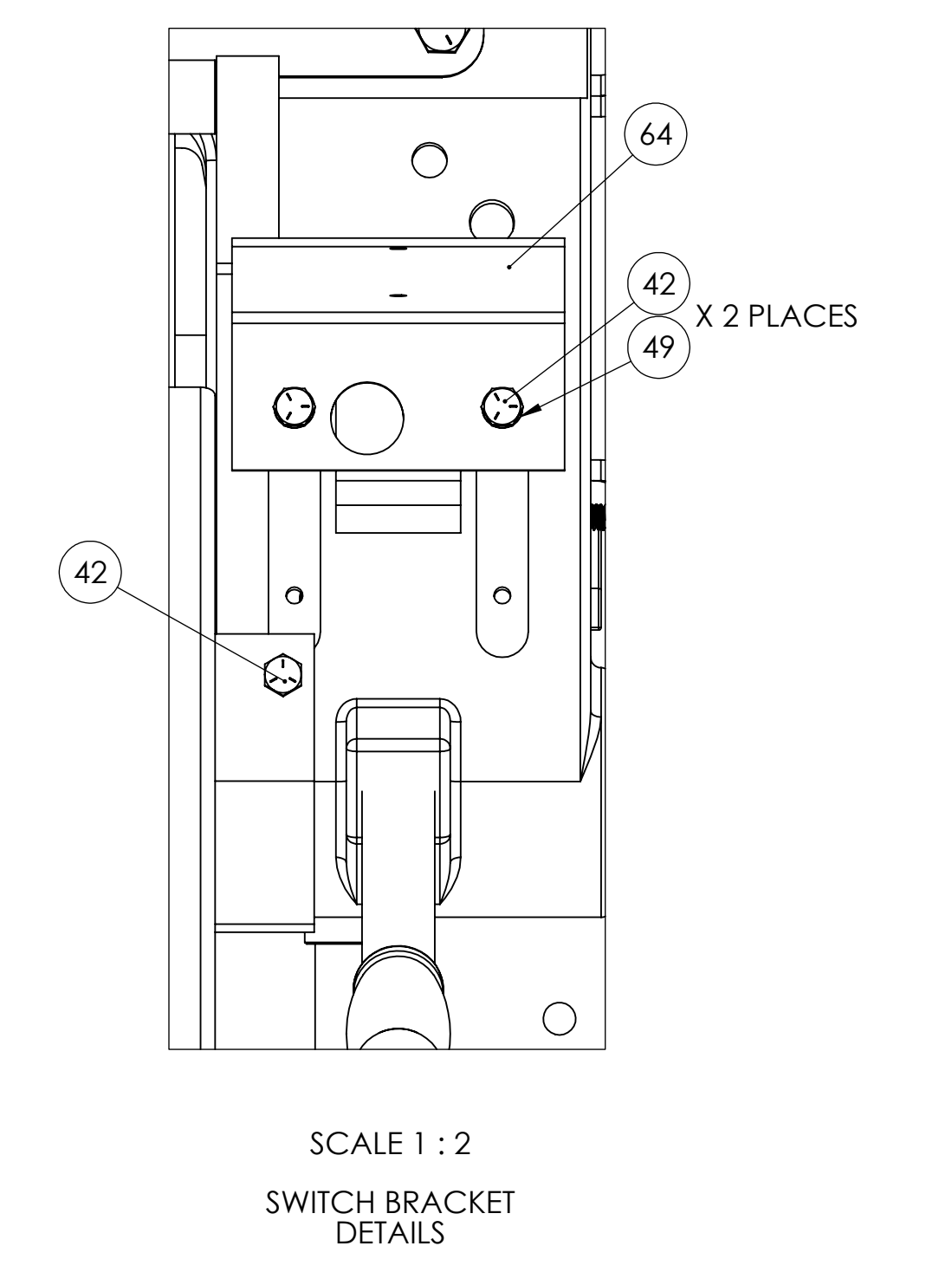
1. **DON'T** use a broken wheel or one that has been dropped or has become damaged.
2. **DON'T** force a wheel onto the machine or alter the size of the mounting hole if wheel won't fir the machine.
3. **DON'T** ever exceed maximum operating speed established for the wheel.
4. **DON'T** use mounting 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. Always keep flanges clean and tight against the abrasive wheel.
3. 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.
4. Down stop screw (**#61**) located on bracket located under the saw arm (**#7**) must be adjusted so the abrasive wheel does not cut into the saw base. Adjust the screw up when installing a new wheel so as not to allow the wheel to cut into the saw base. Keep adjusting the screw down as the wheel wears so you can cut thru the work piece.
5. 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.**
6. Select the correct high speed wheel for the material. Every wheel performs differently. Consult your dealer or wheel manufacturer for the correct high speed cutoff blade selection for your material.
7. Saw spindle speed is set at 4,400 SPFM select cutoff wheel that's designed to run at 4,400 SPFM or greater. Using cutoff wheel's designed to run under 4,400 SPM could cause wheel failure and could cause serious injury to operator. Contact the wheel manufacturer or dealer for the correct wheel.
8. 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.
9. 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 plan with a straight edge. Check motor and spindle pulleys set prior to operating the machine.



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	050-002	K12-14 SAW BASE	1
2	831-022	TRUNNION ASSEMBLY FOR HSM14, HS14, K12-14MS	1
3	ZERKO12000	1/8-27 X 1 1/16 STRT LUBE FITTING	1
4	HHC5031024	5/16-18 X 1-1/2 HHCS GR5 Z	4
5	SLWZ031	5/16 SPLIT L/W Z	10
6	562-034	PIN, TRUNNION FOR HS14 AND K12MS W/PH (SHORT)	1
7	002-002	K12- 14 SAW ARM	1
8	SSKA031006	5/16-18 X 3/8 SOC SET KNURL PT.	1
9	044-001	K12 BEARING	2
10	701-002H5	SPINDLE W TIGHT FLANGE (STEEL) FOR KM14HS, KM14SC, HSM14, HS14	1
11	292-020	LOOSE FLANGE (STEEL) FOR HSM14	1
12	537-026	L.H. SPINDLE NUT 1"-14 FOR K14, KM14	1
13	486-001	5 HP MOTOR FOR K12B, K14B, KM14, KM14HS & 56MS-SHP	1
14	HHC5037020	3/8-16 X 1-1/4 HHCS GR5 Z	4
15	UFWZ037	3/8 USS F/W Z	4
16	SLWZ037	3/8 SPLIT L/W Z	4
17	FHN5037	3/8-16 FHN GR5 Z	4
18	560-001	K12- 14 SPINDLE PULLEY	1
19	SSKA025004	1/4-20 X 1/4 SOC SET KNURL PT.	3
20	049-022	MOTOR PULLEY SHEAVE FOR K12B, K14B AND KM14	1
21	560-002	MOTOR PULLEY SHEAVE FOR K12-14B, K12-14W, K12-14MS AND KM14	1
22	051-006	3V375 V-BELT (2 REQUIRED) FOR K12, K14, KM14 SAWS	2
23	342-086	K12-14 INNER BELT GUARD ASSEMBLY FOR PLASTIC GUARD	1
24	RND-0-31-18THRD3.75	3-3/4 INCHES OF 5/16-18 THREADED ROD	1
25	UFWZ031	5/16 USS F/W Z	6
26	FHN5031	5/16-18 FHN GR5 ZINC	6
27	CPNZ031	5/16-18 CAP NUT NICKEL	1
28	342-004	K12-14 OUTER BELT GUARD/PLASTIC	1
29	HHC5031020	5/16-18 X 1-1/4 HHCS GR 5 Z	1
30	HHC5031012	5/16-18 X 3/4 HHCS GR5 Z	1
31	431-002	K10- 14 REAR VISE JAW	2
32	SHCA031048	5/16-18 X 3 SHCS	4
33	537-014	K10-14 FENCE NUT	1
34	053-032	BLOCK, SCREW VISE FOR HS14	2
35	SHCA031032	5/16-18 X 2 SHCS	20
36	832-020	TUBE, SCREW VISE FOR HS14	2
37	537-020	NUT, SCREW VISE COLLAR FOR HS14	2
38	696-026	HS14 VISE SCREW	2
39	431-020	SCREW VISE JAW FOR HS14	2
40	SSDA031016	5/16-18 X 1 SOC SET FULL DOG	2
41	342-072	WHEEL GUARD ASSEMBLY FOR HSM14 AND HS 14	1
42	HHC5025008	1/4-20 X 1/2 HHCS GR5 Z	3
43	SSBA062044	5/8 X 2-3/4 SOC SHOULDER BOLT	1
44	699-032	SPACER, LEVER FOR HSM14	2
45	455-007	LEVER ASSEMBLY, WHEEL GUARD FOR HSM14	1
46	HHC5031032	5/16-18 X 2 HHCS GR5 Z	2
47	455-007BRACKET	TENSION BRACKET FOR HSM14 WHEEL GUARD LEVER ASSEMBLY	1
48	BSCA025012	1/4-20 X 3/4 BSHCS	1
49	SLWZ025	1/4 SPLIT L/W Z	5
50	FHN5025	1/4-20 FHN GR5 Z	3
51	455-007ROD	GUIDE ROD FOR K10 AND K14 SERIES CLAMSHELL WHEEL GUARD LEVER ASSEMBLY	1
52	ROLA012008	1/8 X 1/2 ROLL PIN	1
53	053-047	BLOCK, WHEEL GUARD FOR K10 AND K14 SERIES CLAMSHHELL GUARD	1
54	SHCA025016	1/4-20 X 1 SHCS	1
55	441-015	907B-2500-1.005 1/4 THUMBSCREW 1-1/2 DIA	1
56	RND-0.625-11THRD0DX3.562	3-9/16 INCHES OF 5/8-11 THREADED ROD	1
57	FHN5062	5/8-11 FHN GR5 Z	1
58	041-118	DOWN STOP BRACKET ASSEMBLY, FOR HS14	1
59	HHC5025012	1/4-20 X 3/4 HHCS GR5 Z	2
60	FJNZ062	5/8-11 F H JAM NUT Z	1
61	RND-0.625-11THRD0DX4.5	4-1/2 INCHES OF 5/8-11 THREADED ROD	1
62	381-002	HANDLE W GRIP FOR K12-14 SAWS	1
63	381-020	HS14 VISE HANDLE	2
64	041-057	SWITCH BRACKET FOR K12-K14	1



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONS ± .005
ANGULAR ± .0315
PROFILES ± .005
THREE PLACE DECIMAL ± .001
INTERFERENCE GEOMETRIC TOLERANCES PER ASME Y14.5

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DATE: _____
DRAWN BY: _____
CHECKED BY: _____
ENG APPR: _____
MFG APPR: _____
D.A.
COMMENTS:

TITLE: **HIGH SPEED NON FERROUS SAW**

SIZE: DWG. NO. **HS14** REV _____
SCALE: 1:5 WEIGHT: _____ SHEET 1 OF 1

APPROVAL: _____
DATE: _____