

INSTRUCTION MANUAL KM20 - 22



**KALAMAZOO
INDUSTRIES, INC.**

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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.

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.

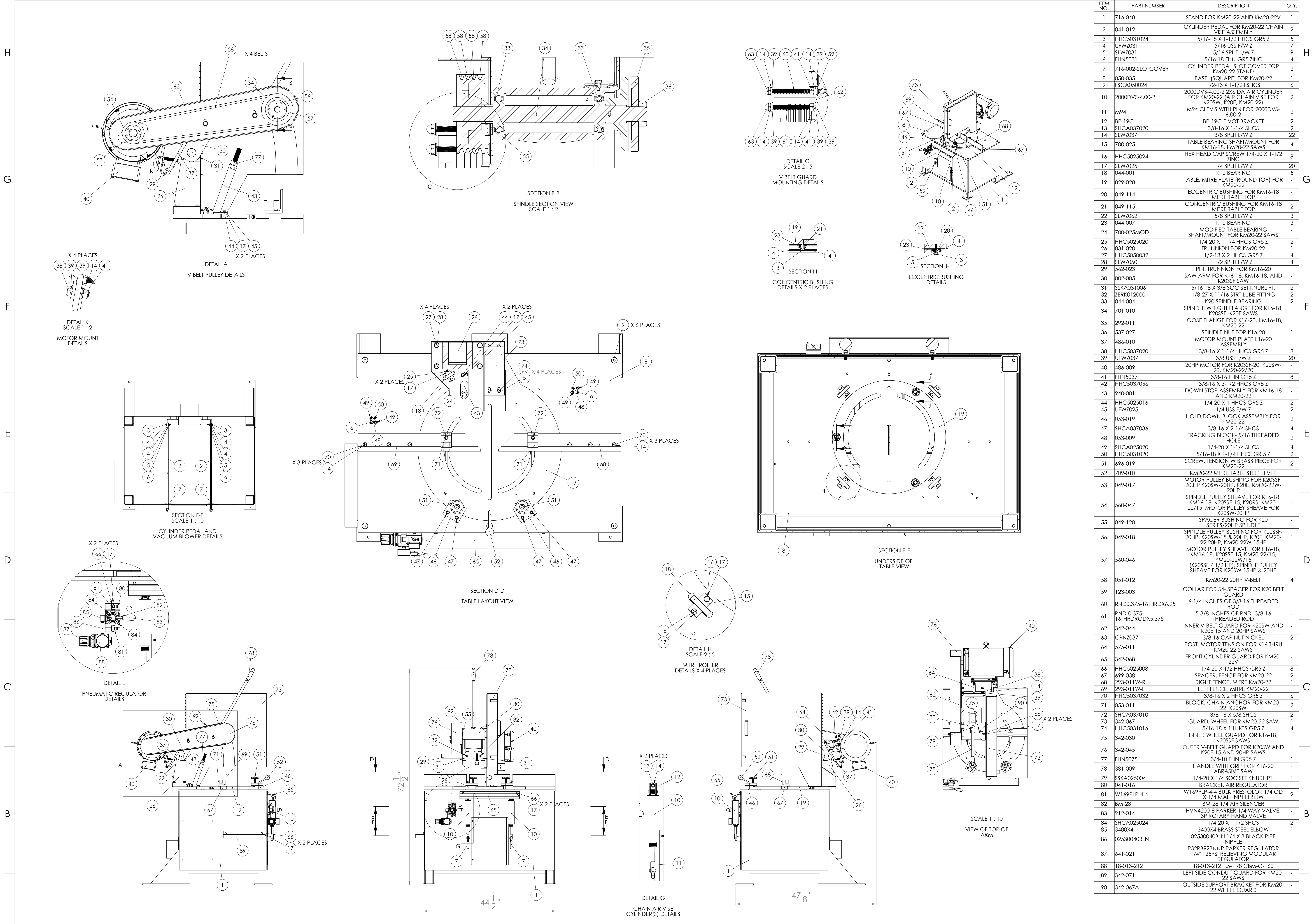
Always check drive belt tightness for positive drive.

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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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	716-048	STAND FOR KM20-22 AND KM20-22V	1
2	041-012	CYLINDER PEDAL FOR KM20-22 CHAIN VISE ASSEMBLY	2
3	HHC5031024	5/16-18 X 1-1/2 HHCS GR5 Z	5
4	UFW2031	5/16 USS F/W Z	7
5	SLWZ031	5/16 SPLIT L/W Z	9
6	FHN5031	5/16-18 FHN GR5 ZINC	4
7	716-002-SLOTCOVER	CYLINDER PEDAL SLOT COVER FOR KM20-22 STAND	2
8	050-035	BASE, [SQUARE] FOR KM20-22	1
9	FSCA050024	1/2-13 X 1-1/2 FSHCS	6
10	2000DVS-4.00-2	2000DVS-4.00-2 2X6 DA AIR CYLINDER FOR KM20-22 AIR CHAIN VISE FOR K20SW, K20E, KM20-22	2
11	M94	M94 CLEVIS WITH PIN FOR 2000DVS-6.00-2	2
12	BP-19C	BP-19C PIVOT BRACKET	2
13	SHCA037020	3/8-16 X 1-1/4 SHCS	2
14	SLWZ037	3/8 SPLIT L/W Z	22
15	700-025	TABLE BEARING SHAFT/MOUNT FOR KM16-18, KM20-22 SAWS	4
16	HHC5025024	HEX HEAD CAP SCREW 1/4-20 X 1-1/2 ZINC	8
17	SLWZ025	1/4 SPLIT L/W Z	20
18	044-001	K12 BEARING	5
19	829-028	TABLE, MITRE PLATE [ROUND TOP] FOR KM20-22	1
20	049-114	ECCENTRIC BUSHING FOR KM16-18 MITRE TABLE TOP	1
21	049-115	CONCENTRIC BUSHING FOR KM16-18 MITRE TABLE TOP	2
22	SLWZ062	5/8 SPLIT L/W Z	3
23	044-007	K10 BEARING	3
24	700-025MOD	MODIFIED TABLE BEARING SHAFT/MOUNT FOR KM20-22 SAWS	1
25	HHC5025020	1/4-20 X 1-1/4 HHCS GR5 Z	2
26	831-020	TRUNNION FOR KM20-22	1
27	HHC5050032	1/2-13 X 2 HHCS GR5 Z	4
28	SLWZ050	1/2 SPLIT L/W Z	4
29	562-023	PIN, TRUNNION FOR KM16-20	1
30	002-005	SAW ARM FOR K16-18, KM16-18, AND K20SSF SAW	1
31	SSKA031006	5/16-18 X 3/8 SOC SET KNURL PT.	2
32	ZERK012000	1/8-27 X 1 1/16 STRT LUBE FITTING	2
33	044-004	K20 SPINDLE BEARING	2
34	701-010	SPINDLE W/TIGHT FLANGE FOR K16-18, KM20-22	1
35	292-011	LOOSE FLANGE FOR K16-20, KM16-18, KM20-22	1
36	537-027	SPINDLE NUT FOR K16-20	1
37	486-010	MOTOR MOUNT PLATE K16-20 ASSEMBLY	1
38	HHC5037020	3/8-16 X 1-1/4 HHCS GR5 Z	8
39	UFW2037	3/8 USS F/W Z	20
40	486-009	20HP MOTOR FOR K20SSF-20, K20SW-20, KM20-22/20	1
41	FHN5037	3/8-16 FHN GR5 Z	8
42	HHC5037056	3/8-16 X 3-1/2 HHCS GR5 Z	1
43	940-001	DOWN STOP ASSEMBLY FOR KM16-18 AND KM20-22	1
44	HHC5025016	1/4-20 X 1 HHCS GR5 Z	2
45	UFW2025	1/4 USS F/W Z	2
46	053-019	HOLD DOWN BLOCK ASSEMBLY FOR KM20-22	2
47	SHCA037036	3/8-16 X 2-1/4 SHCS	4
48	053-009	TRACKING BLOCK- 5/16 THREADED HOLE	2
49	SHCA025020	1/4-20 X 1-1/4 SHCS	4
50	HHC5031020	5/16-18 X 1-1/4 HHCS GR 5 Z	2
51	696-019	SCREW, TENSION W BRASS PIECE FOR KM20-22	2
52	709-010	KM20-22 MITRE TABLE STOP LEVER	1
53	049-017	MOTOR PULLEY BUSHING FOR K20SSF-20,HP K20SW-20HP, K20E, KM20-22W-20HP	1
54	560-047	SPINDLE PULLEY SHEAVE FOR K16-18, KM16-18, K20SSF-15, K20RS, KM20-22/15, MOTOR PULLEY SHEAVE FOR K20SW-20HP	1
55	049-120	SPACER BUSHING FOR K20 SERIES/20HP SPINDLE	1
56	049-018	SPINDLE PULLEY BUSHING FOR K20SSF-20HP, K20SW-15 & 20HP, K20E, KM20-22 20HP, KM20-22W-15HP	1
57	560-046	MOTOR PULLEY SHEAVE FOR K16-18, KM16-18, K20SSF-15, KM20-22/15, (K20SSF 7 1/2 HP), SPINDLE PULLEY SHEAVE FOR K20SW-15HP & 20HP	1
58	051-012	KM20-22 20HP V-BELT	4
59	123-003	COLLAR FOR S4- SPACER FOR K20 BELT GUARD	1
60	RND0.375-16THRDx6.25	6-1/4 INCHES OF 3/8-16 THREADED ROD	1
61	RND-0.375-16THRDxODxS.375	5-3/8 INCHES OF RND- 3/8-16 THREADED ROD	1
62	342-044	INNER V-BELT GUARD FOR K20SW AND K20E 15 AND 20HP SAWS	1
63	CPNZ037	3/8-16 CAP NUT NICKEL	2
64	575-011	POST, MOTOR TENSION FOR K16 THRU KM20-22 SAWS	1
65	342-068	FRONT CYLINDER GUARD FOR KM20-22V	1
66	HHC5025008	1/4-20 X 1/2 HHCS GR5 Z	8
67	699-038	SPACER, FENCE FOR KM20-22	2
68	293-011W-R	RIGHT FENCE, MITRE KM20-22	1
69	293-011W-L	LEFT FENCE, MITRE KM20-22	1
70	HHC5037032	3/8-16 X 2 HHCS GR5 Z	6
71	053-011	BLOCK, CHAIN ANCHOR FOR KM20-22, K20SW	2
72	SHCA037010	3/8-16 X 5/8 SHCS	2
73	342-067	GUARD, WHEEL FOR KM20-22 SAW	1
74	HHC5031016	5/16-18 X 1 HHCS GR5 Z	4
75	342-030	INNER WHEEL GUARD FOR K16-18, K20SSF SAWS	1
76	342-045	OUTER V-BELT GUARD FOR K20SW AND K20E 15 AND 20HP SAWS	1
77	FHN5075	3/4-10 FHN GR5 Z	1
78	381-009	HANDLE WITH GRIP FOR K16-20 ABRASIVE SAW	1
79	SSKA025004	1/4-20 X 1/4 SOC SET KNURL PT.	1
80	041-016	BRACKET, AIR REGULATOR	1
81	W169PLP-4-4	W169PLP-4-4 BULK PRESTOLOK 1/4 OD X 1/4 MALE NPT ELBOW	2
82	BM-28	BM-28 1/4 AIR SILENCER	1
83	912-014	HVN4200-8 PARKER 1/4 WAY VALVE, 3P ROTARY HAND VALVE	1
84	SHCA025024	1/4-20 X 1-1/2 SHCS	2
85	3400X4	3400X4 BRASS STEEL ELBOW	1
86	02530040BLN	02530040BLN 1/4 X 3 BLACK PIPE NIPPLE	1
87	641-021	P32R8928NPN PARKER REGULATOR 1/4" 12PSI RELIEVING MODULAR REGULATOR	1
88	18-013-212	18-013-212 1.5-1/8 CBM-O-140	1
89	342-071	LEFT SIDE CONDUIT GUARD FOR KM20-22 SAWS	1
90	342-067A	OUTSIDE SUPPORT BRACKET FOR KM20-22 WHEEL GUARD	1