



PH: (269) 382-2050

www.kalamazooind.com

KS390/ KS390V 3" X 90" BELT GRINDER INSTRUCTION MANUAL



MADE IN USA

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



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WARRANTY

All products are guaranteed for a period of one year from receipt of order to the original purchaser, against defects in material workmanship under normal use. Electric motors are warranted by the motor manufacturer for a period of one year and will be repaired by the nearest motor repair station. If non-repairable, they will be replaced by Kalamazoo Industries. Please call for instructions (269) 382-2050.

RETURN POLICY

Authorization must be obtained before returning merchandise. Please call our customer service department for a return authorization number (269) 382-2050. Please include with your return a copy of your invoice or packing slip. All material must be new and unused in the original packaging. Material must be sent back prepaid (unless otherwise indicated) by Kalamazoo Industries. Credit upon inspection at Kalamazoo Industries. All returns will be subject to a 10% restock charge. Used merchandise is non-returnable. No returns will be accepted after one year of invoice date.

BELT GRINDER SAFETY

- READ THE OPERATING INSTRUCTIONS BEFORE RUNNING MACHINE.
- ALWAYS WEAR SAFETY GLASSES OR A FULL FACE SHIELD FOR PROTECTION.
- KEEP HANDS CLEAR OF THE SANDING AREA.
- NEAR WEAR GLOVES OR LOOSE FITTING CLOTHES WHEN OPERATING THIS MACHINE.
- ALWAYS KEEP HAIR TIED BACK OR COVERED.
- LET MACHINE ROTATION COME TO A FULL STOP BEFORE CHANGING BELT.
- KEEP SAFETY GUARDS IN PLACE. DO NOT ALTER GUARD OR MACHINE IN ANYWAY. ANY ALTERATIONS TO GUARDS OR MACHINE COULD CAUSE SERIOUS INJURY.
- ALL BELT SANDERS SHOULD BE OPERATED IN A WELL-VENTILATED AREA. THE DUST CREATED WHEN SOME MATERIALS ARE SANDED CAN BE HARMFUL. DUST MASKS ARE RECOMMEND AS A PRACTICAL MEAN OF MINIMIZING DUST INHALATION. FUMES FROM OTHER OTHER SOURCES CAN ALSO CAUSES FIRES WHEN INTACT WITH SANDING SPARK.
- SPARKS CREATED BY SANDING SHOULD BE DIRECTED DOWNWARD AND AWAY FROM THE FACE AND BODY. DON NOT GRIND NEAR FLAMMABLE MATERIAL.
- ELECTRIC GRINDING MACHINES ARE NOT INTENDED FOR USE IN OR NEAR WATER. THIS INCLUDES AN OPERATOR STANDING ON A WET FLOOR OR WORKING AROUND CONTAINERS OF WATER OR OTHER CONDUCTIVE LIQUIDS.

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**READ AND UNDERSTAND ALL OPERATING INSTRUCTIONS AND SAFETY
PRECAUTIONS 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 PAGE 2 FOR RETURN POLICY AND WARRANTY.

BEFORE STARTING OR CONNECTING ELECTRICALS, VERIFY THE PHASE AND VOLTAGE OF THE UNIT.

BE SURE MACHINE IS BALANCE 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. KEEP ALL SAFETY GUARDS, WORK TABLES, ETC, IN PROPER ADJUSTMENT. WORK TABLE MUST BE KEPT WITHIN 1/8" FROM THE SANDING BELT.

ABRASIVE BELT TENSION

ABRASIVE BELT IS CONTROLLED BY SPRING TENSIONS. THE TENSIONS RELEASE LEVER (#15) CONTROLS THE BELT BELT TENSION. PULL (#15) OUT TO RETRACT HEAD, WHICH WILL RELEASE BELT TENSION. PUSH (#15) IN TO EXTEND HEAD, WHICH WILL APPLY TENSION TO THE SANDING BELT. ADJUST THE BELT TENSION TO THE MINIMUM SUFFICIENT TO ENSURE GOOD CONTACT WITH THE DRIVE AND IDLER WHEELS. THEN THE BELT WILL TRACK PROPERLY UNDER BOTH START UP AND GRINDING CONDITIONS..

PLATEN ALIGNMENT

USING A STRAIGHT EDGE, SET THE STRAIGHT EDGE ON THE PLATEN (#28) SO IT SPANS ACROSS BOTH THE DRIVE AND CONTACT WHEEL PULLEY FACES. DRIVE PULLEY CLEARANCE SHOULD BE 1/8" LOWER THAN PLATEN FACE AT THE OUTER EDGES OF THE DRIVE PULLEY. CONTACT WHEEL CLEARANCE SHOULD BE 1/32" LOWER THAN PLATEN FACE. USE BRACKETS (#29) TO LOWER OR RAISE PLATEN HEIGHT.

DRIVE PULLEY

POOR BELT TRACKING CAN RESULT FROM NORMAL WEAR OVER TIME OF THE DRIVE PULLEY. THE DRIVE PULLEY FACE IS CROWNED SLIGHTLY TO HOLD BELT TRACKING. WHEN THE CROWN IS WORN DOWN AND THE DRIVE PULLEY BECOMES FLAT FACED, TRACKING PROBLEMS WILL RESULT. A QUICK FIX WOULD BE TO WRAP A FEW LAYERS OF MASKING TAPE AROUND THE CENTER HIGHER THAN THE OUTER EDGES IF THIS ALLEVIATES THE PROBLEM, THEN A NEW PULLEY WILL WILL BE NEEDED WITH THE CORRECT CROWN ON IT.

CHANGING BELT

TURN MACHINE POWER OFF. RELEASE BELT TENSION WITH TENSION RELEASE HANDLE (#15), CHANGE THE BELT (MAKE SURE OF THE CORRECT ROTATION). RE-TENSION THE BELT WITH (#15).

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OPERATING INSTRUCTIONS CONTINUED

DUST COLLECTOR

IF YOUR GRINDER HAS A DUST COLLECTOR SYSTEM BE SURE TO THOROUGHLY CLEAN THE BASE AND FILTER AFTER EVERY USE AND OR SWITCHING MATERIALS. **DO NOT MIX MATERIALS. MIXING MATERIALS COULD CAUSE A FIRE.**

TRACKING THE BELT

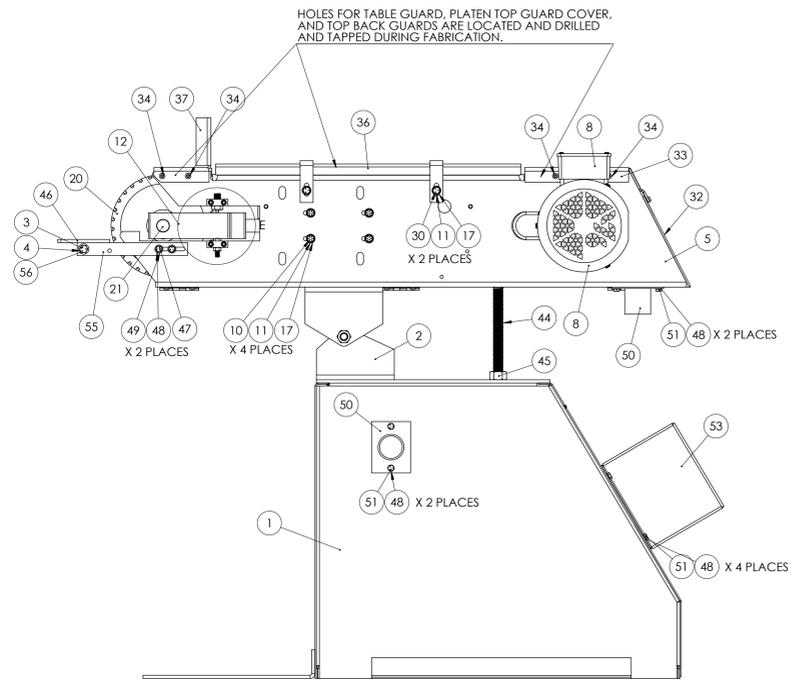
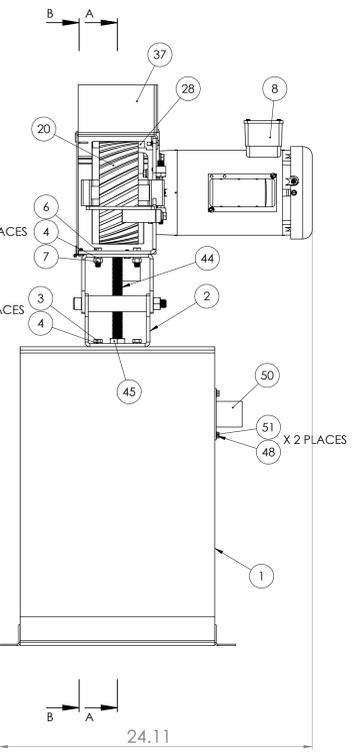
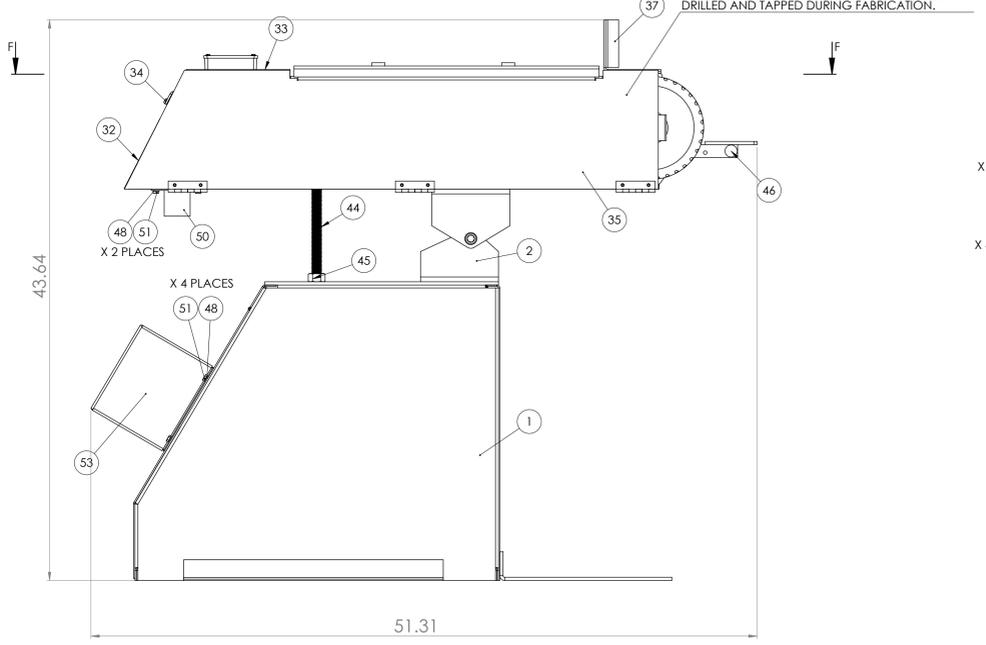
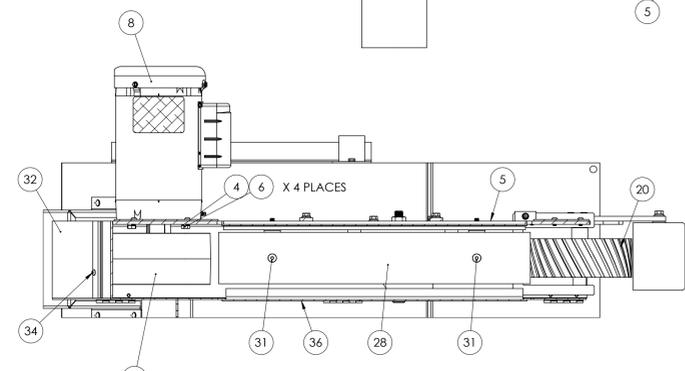
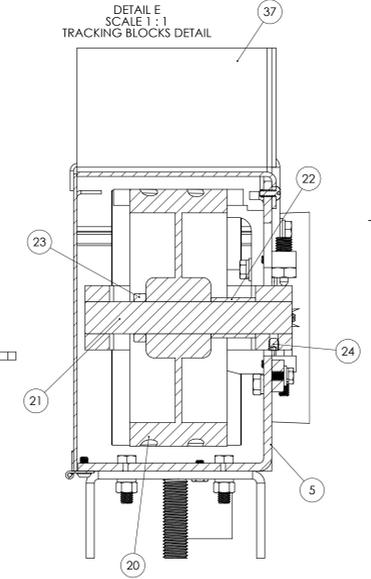
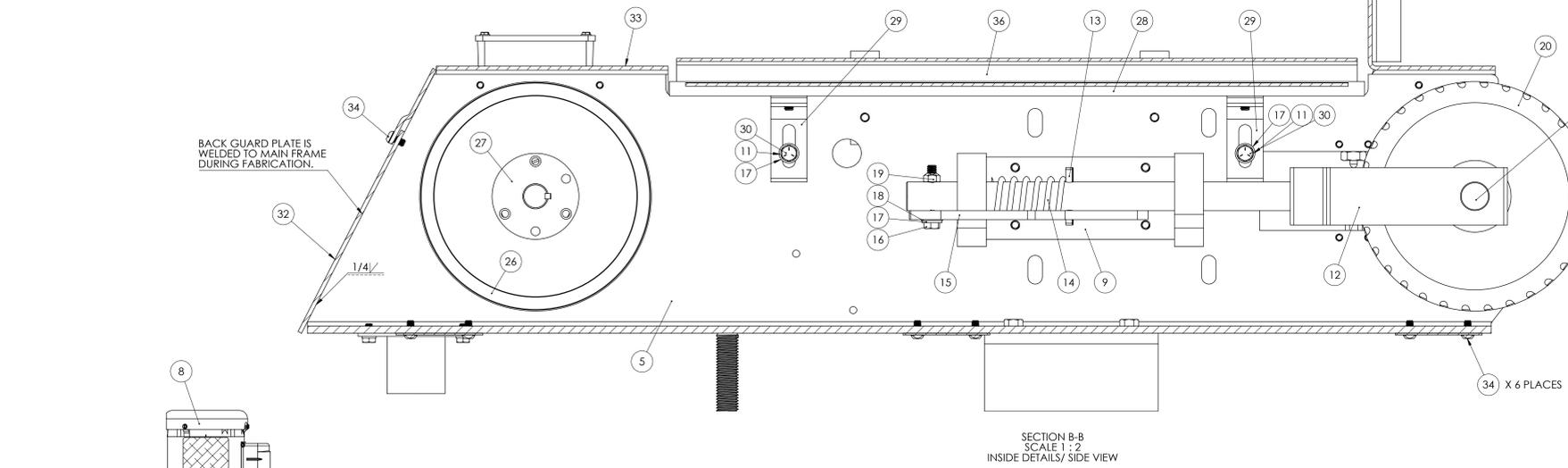
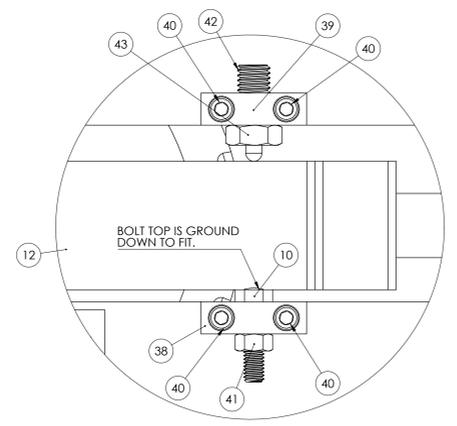
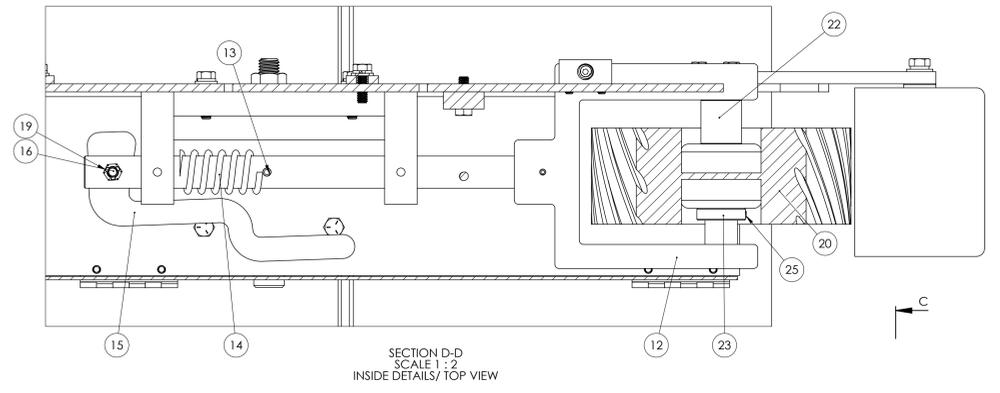
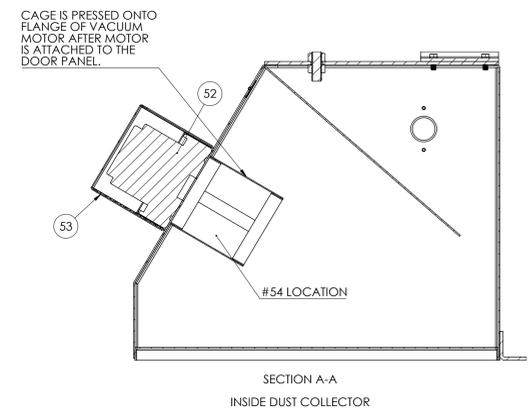
TO TRACK BELT LOOSEN (#41) THEN ADJUST (#10) UP AND OR DOWN. ONCE ABRASIVE BELT IS CENTERED LOCK (#41) TO KEEP BELT TRACKED. **BE SURE THE ABRASIVE BELT FULLY COVERS THE CONTACT WHEEL. DO NOT SLIP OFF THE ABRASIVE BELT AND RUB THE CONTACT WHEEL WITH WORK PIECE. THIS WILL RADIUS THE CONTACT WHEEL FACE EDGES AND RESULT IN POOR BELT TRACKING.**

MACHINE HEAD ANGLE

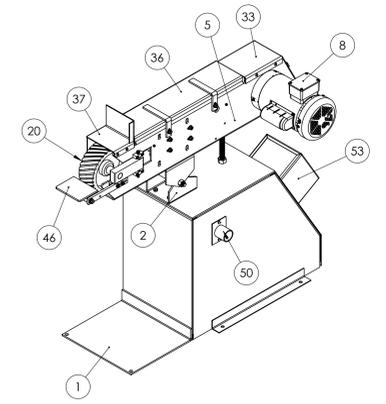
KS390/KS390V CAN BE ADJUSTED FROM HORIZONTAL. LOOSEN CAP SCREW ON TILT BRACKET (#2) ADJUST THE LEVELING STUD BY LOOSENING (#45) AND ADJUST THE LEVELING STUD UP AND OR DOWN (#44) TO SUPPORT THE MACHINE HEAD. RE-TIGHTEN CAP SCREW ON TILT BRACKET (#2).

BELT STORAGE

STORE COATED ABRASIVES IN A DRY AND COOL LOCATION.



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	716-016W	STAND, VACUUM ASSEMBLY FOR K3390 AND K3490	1
2	572-004	TILT BRACKET FOR K3390 AND K3490 SANDERS	1
3	HHC5037016	3/8-16 X 1 HHCS GR5 Z	5
4	SLWZ037	3/8 SPLIT L/W Z	13
5	291-016	MAIN FRAME FOR K3390 AND K3490	1
6	HHC5037020	3/8-16 X 1-1/4 HHCS GR5 Z	8
7	FHN5037	3/8-16 FHN GR5 Z	4
8	486-003	2HP MOTOR FOR K3390-490	1
9	291-018	CAST IRON FRAME FOR S460 DRY SANDERS	1
10	HHC5031020	5/16-18 X 1-1/4 HHCS GR 5 Z	5
11	SLWZ031	5/16 SPLIT L/W Z	8
12	960-012	YOKE AND TENSION SHAFT ASSEMBLY FOR K3390 AND K3490	1
13	ROLA025024	1/4 X 1-1/2 ROLL PIN	1
14	697-024	S6 BELT TENSION SPRING	1
15	455-003	TENSION RELEASE LEVER FOR S6 SANDER HEADS	1
16	HHT5031032	5/16-18x2 HEX HEAD TAP BOLT GR5 ZINC	1
17	UFWZ031	5/16 USS F/W Z	9
18	BWVA031	5/16 BOWED SPRING WASHER 21/64	1
19	STNZ031	5/16-18 STOVER LOCK NUT ZINC-WAX	1
20	936-009	WHEEL CONTACT FOR K3390 AND K3490 SANDERS	1
21	701-032	SPINDLE, IDLER FOR K3390 AND K3490 SANDERS	1
22	699-034	SPACER, IDLER WHEEL FOR K3390 AND K3490	1
23	123-016	S6 IDLER PULLEY LOCK COLLAR	1
24	SSKA031006	5/16-18 X 3/8 SOC SET KNURL PT.	1
25	SSKA025004	1/4-20 X 1/4 SOC SET KNURL PT.	1
26	560-042	DRIVE PULLEY WITH P2X7/8 BUSHING FOR K3390 AND K3490	1
27	049-063	BUSHING FOR K3390 & K3490 DRIVE WHEEL	1
28	563-009	PLATEN FOR K3390 AND K3490 SERIES	1
29	041-029	PLATEN SUPPORT BRACKET FOR K3390 AND K3490 SANDERS	2
30	HHC5031016	5/16-18 X 1 FHCS	4
31	FSCA031016	5/16-18 X 1 FSHCS	2
32	291-016BACKPANEL	K3390 AND K3490 MAIN FRAME REAR GUARD PANEL	1
33	291-016TOPBACK	K3390 AND K3490 MAIN FRAME TOP REAR GUARD	1
34	BSCA025008	1/4-20 X 1/2 BSHCS	11
35	291-016DOOR	K3390 AND K3490 MAIN FRAME DOOR	1
36	829-025A	K3390 AND K3490 PLATEN TOP GUARD COVER	1
37	829-025	TABLE, GUARD FOR K3390 AND K3490 SANDERS	1
38	053-009	TRACKING BLOCK- 5/16 THREADED HOLE	1
39	053-009B	TRACKING BLOCK- 1/2-13 THREADED HOLE	1
40	SHCA025012	1/4-20 X 3/4 SHCS	4
41	FHN5031	5/16-18 FHN GR5 ZINC	1
42	SPPA050020	1/2-13 X 1-1/4 SPRING PLUNGER W BROWN DELRIN NOSE ALLOY	1
43	FJNZ050	1/2-13 F H JAM NUT Z	1
44	709-012	STUD, LEVELING FOR K3390 AND K3490 SANDERS	1
45	FHN5075	3/4-10 FHN GR5 Z	1
46	829-026	TABLE, WORK FOR K3390 AND K3490 SANDERS	1
47	HHC5025012	1/4-20 X 3/4 HHCS GR5 Z	2
48	SLWZ025	1/4 SPLIT L/W Z	10
49	UFWZ025	1/4 USS F/W Z	2
50	168-004	VACUUM PORT FOR K3390 AND K3490 SANDERS	2
51	HHC5025008	1/4-20 X 1/2 HHCS GR5 Z	8
52	486-008	VACUUM MOTOR FOR K3390V AND S612V (OLD STYLE)	1
53	342-037	GUARD, VACUUM MOTOR FOR K3390 SANDERS	1
54	5X878	CLOTH BAG FOR DCV-4 DUST COLLECTOR	1
55	455-014	ARM FOR K3390, K3490 WORK TABLE	1
56	UFWZ037	3/8 USS F/W Z	1



UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN INCHES	DESIGNED BY	
TOLERANCES:	CHECKED BY	
FRACTIONS: 1/16, 1/8, 1/4, 3/8, 1/2	ENG APPR.	
DECIMALS: .1, .2, .5, 1.0	MFG APPR.	
THREE PLACE DECIMAL: .001	D.A.	
INTERFERENCE GEOMETRIC TOLERANCES PER	COMMENTS:	
MATERIAL:		
PROPRIETARY AND CONFIDENTIAL		
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NEET ASSY	USED ON	FINISH
APPLICATION	DO NOT SCALE DRAWING	

KALAMAZOO
KS390 BELT GRINDER W VACUUM IN BASE
 SIZE: DWG. NO: **E KS390V** REV
 SCALE: 1:5 WEIGHT: SHEET 1 OF 1