

SERIES 870SAA20-480v

Stand Alone Automatic Horizontal Winder Stretch Wrapper



OPERATORS MANUAL

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Introduction

Congratulations! Your purchase of a Kalamazoo Series 800SAA Stand Alone Fully-Automatic Horizontal Winder Stretch Wrap System will provide you with years of efficient stretch wrapping service. Your investment will ensure that your products will arrive cleaner, with less damage and pilferage at their destination at a lower cost to you.

Warranty

Kalamazoo Packaging Systems products carry a LIMITED LIFETIME WARRANTY on all K.P.S. manufactured components; all parts not manufactured by Kalamazoo Packaging Systems will be subject to the original manufacturer's warranty.

Kalamazoo Packaging systems, Inc. (KPS) agrees to furnish the purchaser, without charge, F.O.B. the factory, any part found to be defective in either material or workmanship within one (1) year from date of shipment, provided the purchaser gives immediate notice of any defect and description of that defect to KPS. KPS reserves the right to inspect any defective part to verify the defect and to determine probable cause of same.

The liability of KPS under this warranty is limited to furnishing replacements for defective parts, and unless otherwise agreed to in writing, the purchaser shall bear the expense of installation.

Failure of equipment or parts due to abuse, misuse, neglect, incorrect operating techniques or power line drops or surges shall not constitute failure because of defective material or workmanship, and are expressly excluded from this warranty.

The above is the only warranty with no other guarantees which extend beyond the above and the seller disclaims any implications including but not limited to a warranty of merchantability.

Assembly

Your Horizontal Winder has been assembled and tested at our manufacturing plant and released for shipment by a qualified technician. If the unit was shipped via common carrier or by our truck it may not be crated. **Any damage done in transit should be reported to the carrier immediately.** All our shipments are sent F.O.B. Grand Rapids, Michigan, therefore; the customer is responsible to settle any damage claims with the transportation company. Kalamazoo Packaging Systems will do everything possible to assist you in these matters.

Main Power Supply & Air Source

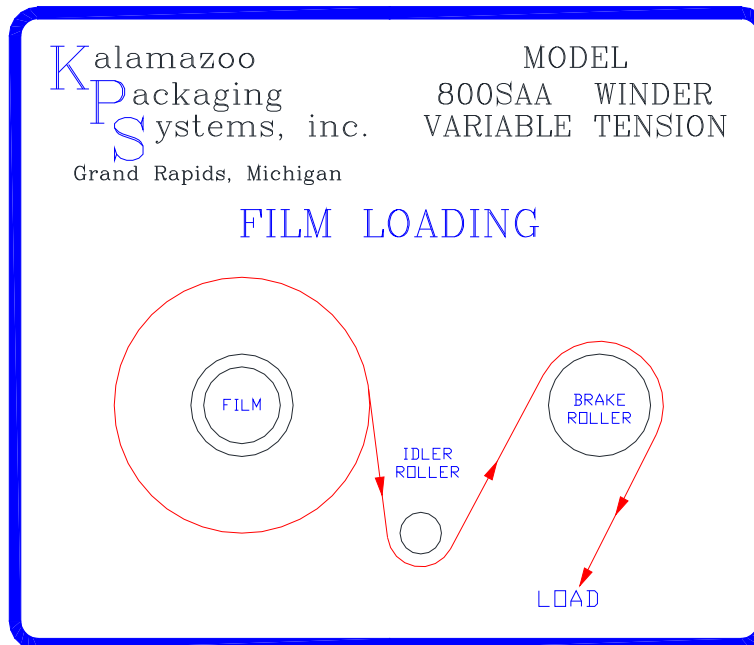
Wire in the main power cord see wiring diagram for voltage.

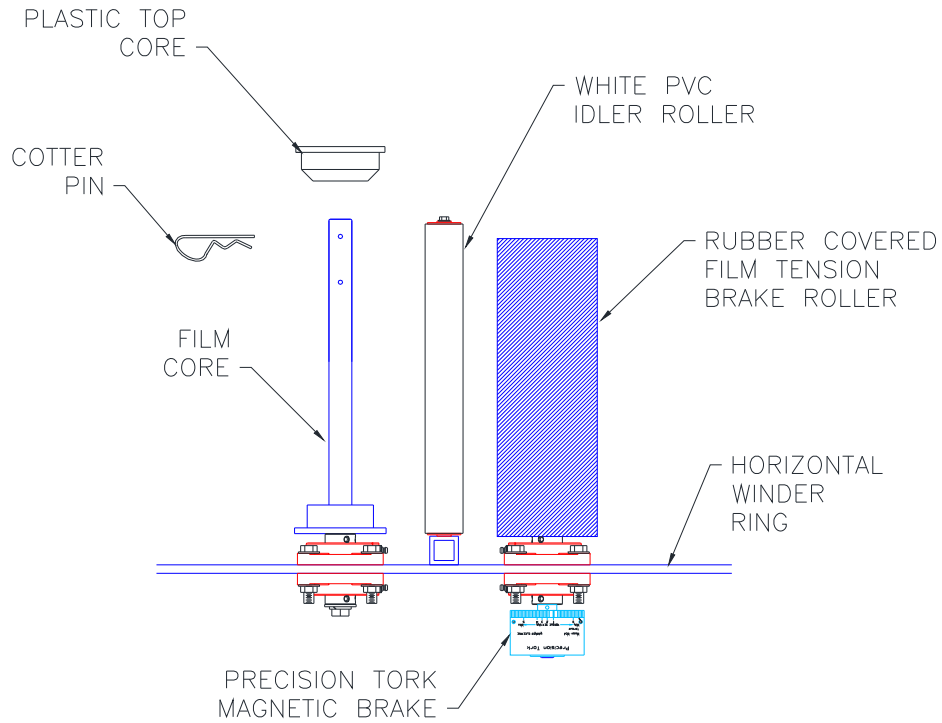
Air Source will needed. 60 P.S.I.

The System is now ready for operation.

Film Loading

Your wrapper is equipped with a Kalamazoo Variable Tension Film Delivery System. Place a roll of 10-12 or 20" stretch film on the film core holder and thread the film as shown on the diagram below. Once the film is loaded and the desire film tension is arrived at the film tension need not be adjusted again until the brand of film or the film thickness is changed.



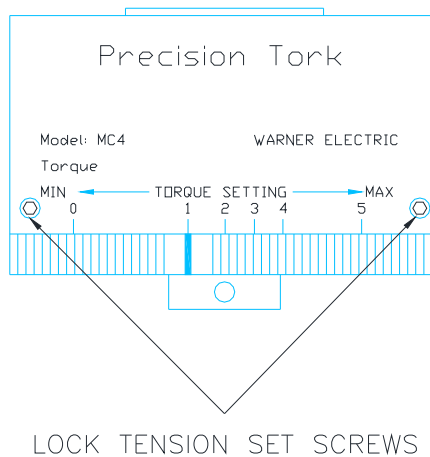


Film Loading and Tension

Place a roll of 10,12 or 20" film onto the film holder so the film unwinds clockwise, than slide the plastic top core into place and install the cotter pin into the hole.

(Note: The film core does not change the film tension.)

Thread the film as shown on the diagram on page 4. Adjust the variable tension Precision Tork magnetic brake to the film tension you desire. Loosen the lock tension set screws on the Precision Tork body with a 5/64" allen wrench. To adjust the film tension, hold the brake roller and turn the Precision Tork body. After the adjustment is may, retighten the lock tension set screws.



Operating Controls & Sensor

- 1 Red Mushroom button (Push off/ Pull to reset): Emergency Stop. Takes away power to motors.
- 2 Green lighted push button: Machine power on. Green lights on. Will go off when the system is
buzzy wrapping.
- 3 Red push button: Machine power off.
- 4 Green push button: Cycle Enable. N/A
- 5 Red Extended push button: To stop wrap cycle or use the remote stop cycle.
- 6 Blue push button: Load Film. Film cylinder will open.
- 7 White push button: System Reset. Film cylinder will close and if the ring is not at the home
position, it will move to the home position.
- 8 2-Position selector switch: Winder auto/manual.
- 9 Start cycle photo-eye: Photo-eye to lets the system know product is present. Located top inside
of the Winder cage.
- 10 Hand held remote control: (1) Stops the wrap cycle and starts the automatic cut off.
- 11 Winder Ring home sensor: Located behind the Winder Ring.
- 12 Film cylinder home sensor: Located on the film cylinder retract end of the cylinder.

Winder- Telemecanique ATV31 AC Drive Programming

bFr Parameter

Code	Assignment	Setting
bFr	Motor Frequency	60

Settings Menu SEt-

Code	Assignment	Setting
ACC	Acceleration time	5.0
dEC	Deceleration time	9.5
HSP	High Speed	60
UFr	IR Compensation	50
SP2	Second Preset Speed	7.5
SFr	Switching Frequency	2kHz

Drive Control Menu drC

Code	Assignment	Setting
tUn	Auto-Tuning	Yes

I/O Menu I-O-

Code	Assignment	Setting
tCC	Conf. Terminal Block	2C

Display Menu Sup-

Code	Assignment	Setting
rFr	Output Frequency Applied	Enter

Operating Instructions

Start Up

- 1 Push the Green lighted button POWER ON: The green beacon light will come on. The system is powered up and ready to load the film.
- 2 Check to make sure you have 60 P.S.I. air to the machine.

Film Loading

- 1 Push the LOAD FILM button. The film holder cylinder will open.
- 2 Open the film loading door and load the film pre the diagram on page #4.
- 3 Pull the film out and lay it across the film holder.
- 4 Close the film door.
- 5 Push the RESET button. The film holder cylinder will close.

Wrap Cycle

- 1 Bring the load to the Winder with a fork truck.
- 2 When the load is position in the Winder the yellow light will come on. Green lights will go off.
- 3 Push the remote button (2). Starts the wrap cycle.
- 4 After a preset time the yellow light will start flashing. The Winder will automatic start wrapping the load.
- 5 Use the fork truck to slowly move the load in.
- 6 After the load is wrapped use the remote button (1) to stops the wrap cycle and start the automatic cut off.
- 7 After the film is cut the yellow light will stop flashing. The yellow light will be on to let you know you can remove the product.
- 8 You may now remover the load from the Winder.
- 9 The yellow light will stay on for a preset time so the same load does not get wrapped again.
- 10 After the yellow light goes off and the green light starts flashing the system is reset and ready for the next load..
- 11 End of wrap cycle.

General Maintenance

Warning!!

MAKE SURE THAT THE POWER SUPPLY IS DISCONNECTED BEFORE ATTEMPTING TO SERVICE ANY COMPONENTS. IF THE POWER DISCONNECT IS OUT OF SIGHT, LOCK IT IN THE OPEN POSITION AND TAG IT TO PREVENT UNEXPECTED APPLICATION OF POWER.

Cleaning

Periodically clean dirt accumulations from machine, especially around moving parts and drive components, preferably by vacuuming.

General

- Check and tighten any loose fasteners.
- Check all electric connections and replace any worn or frayed cords.
- Check all fuses, circuit breakers, and AC controllers.
- Make sure the air supply is on.

Lubrication

Bearings

- The bearings have been greased at the factory and are ready to run. It is recommended that all mounted bearings and support wheels be relubricated with #3 lithium base grease every three months.

Chains

- Clean, lubricate and adjust chains every month. Chain should be lubricated with a penetrating type commercial chain lube.

Gear Reducers

- For new reducers, change the oil 120 hours after the reducer starts operating (based on 8 hours per day of operation). After the first oil change, change oil every 2000 operating hours, or every six months, whichever occurs first.

Temperature	Lubricant
25° - 125° F	AGMA #8
15° - 60° F	AGMA #7

Certain conditions (dust, water, etc.) may require a change of lubricating periods as dictated by experience.

Adjustments

This is a automatic system.
Do not make adjustments without contacting
Kalamazoo Packaging Systems.

Troubleshooting

When any problem develops, review the operating instructions. Diagnose specific problems and review the options below.

Push the E-STOP button in wait 1 min.. Turn the button to reset.

This will denergize the AC drives and reset a fault.

- ✓ Check wall receptacle for power.
- ✓ Check Power cord for cut. (Fork Lift Trucks damage cords.)

DISCONNECT POWER FROM MACHINE

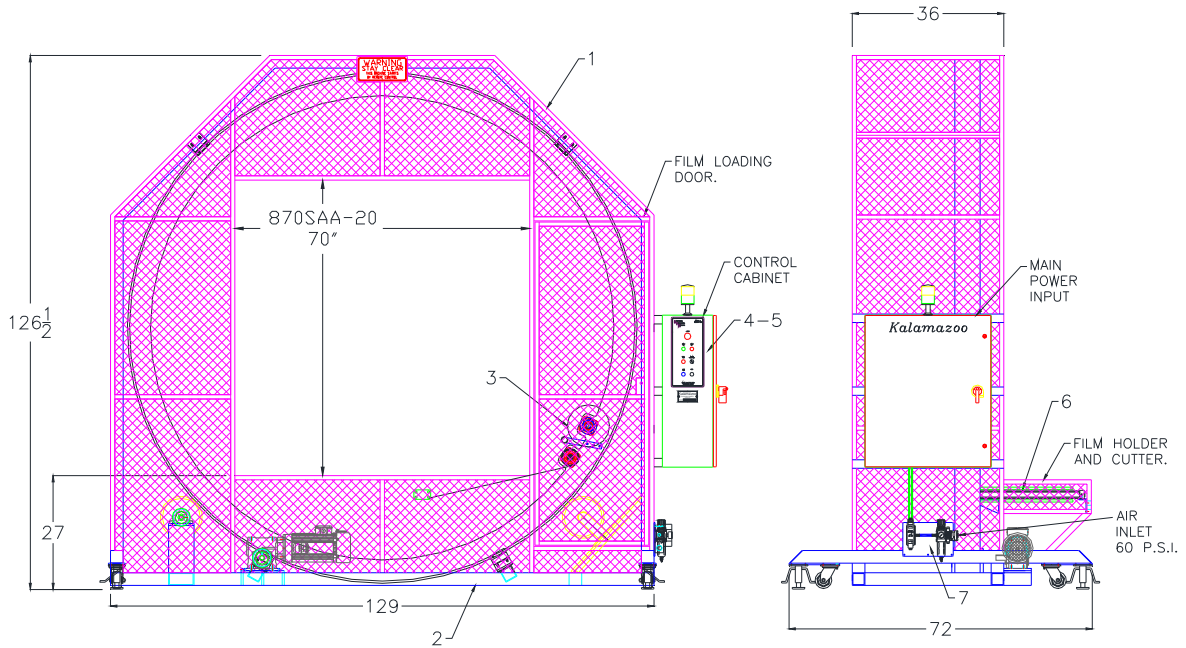
- ✓ Check the film door limit switches for damage, sticking, or internal shorts.
- 🔍 Visually inspect for loose wires and for signs of arcing or burning of any of the components.
- à Check chains and sprockets.
- à Check air supply.
- à Open cabinet and check that all relays are firmly seated in their bases.
- à Check for damage cords.
- à Check the AC drive for errors.
- ☎ It is advisable to call for technical assistance at this point.

Technical and Customer Service is available from Kalamazoo Packaging Systems, Inc., Monday thru Friday 7:30 A.M. to 4:00 P.M. (EST). Stock is maintained on parts to allow us to ship the same day on most orders.

If you have a problem, we want to know about it! Please call and report any difficulties you may encounter.

- Local - (616) 534-2600
- National - (800) 253-4625

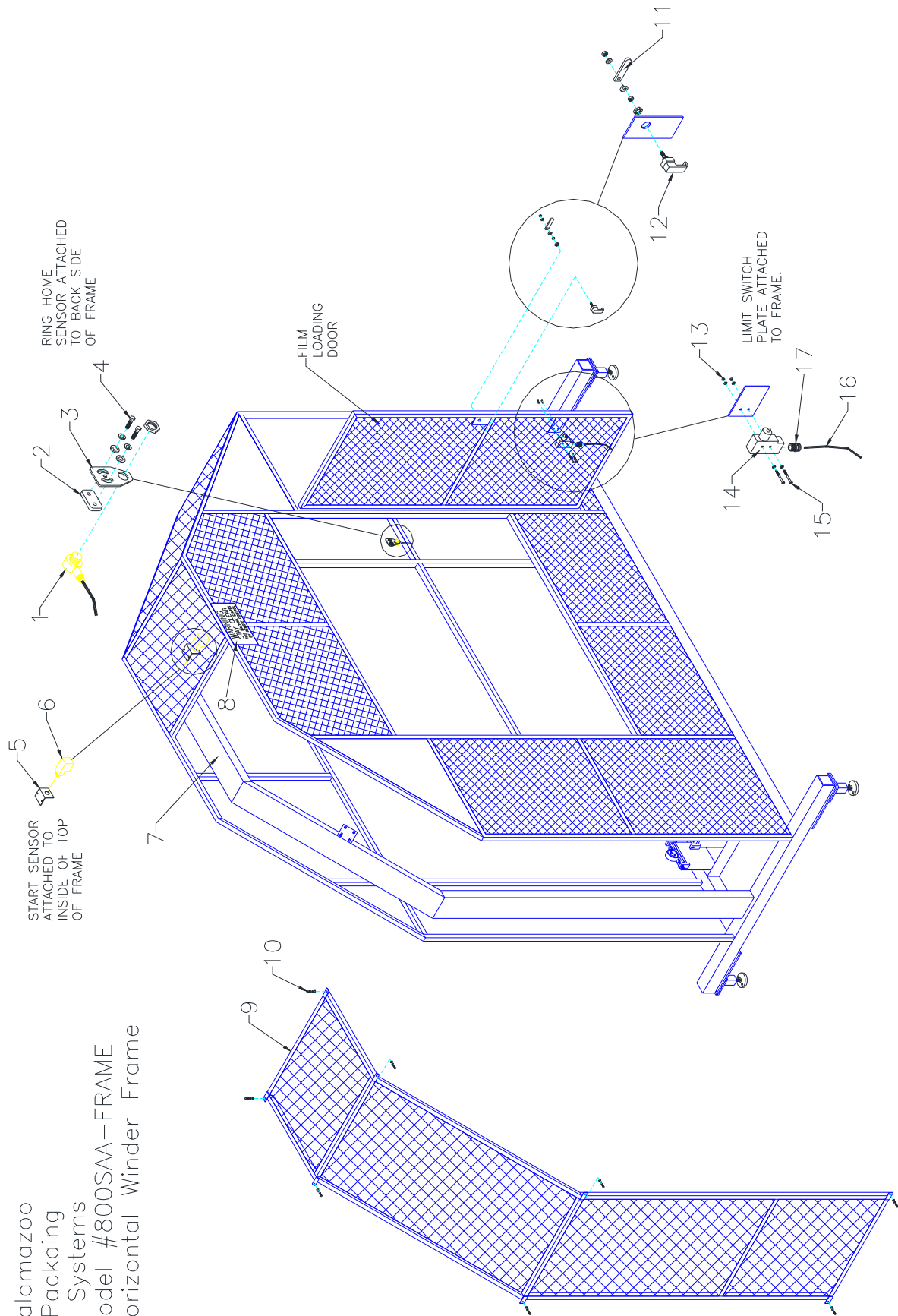
SERIES 870SAA-20 STAND ALONE AUTOMATIC
HORIZONTAL WINDER STRETCH WRAPPER LAYOUT



System Layout: 870SAA20 Stand Alone Automatic

Item	Part #	Description	Page	Qty.
1	870SAA20-F	870 Stand Alone Automatic Frame	10-11	1
2	870SAA20-B	870 Stand Alone Automatic Base	12-14	1
3	870SAA20-4P-R	870 Stand Alone Automatic Ring	15-16	1
4	870SAA20-CC	870 Stand Alone Automatic Control Cabinet	17	1
5	870SAA20-SUB-480v	870 Stand Alone Automatic Sub Panel	18-19	1
6	800-20-AFC	800 Series 20" Film Clamp and Cutter	20	1
7	800SAA20-AIR	800SAA Filter Regulator, Valve, and Mounting Plate. Air system layout.	21	1

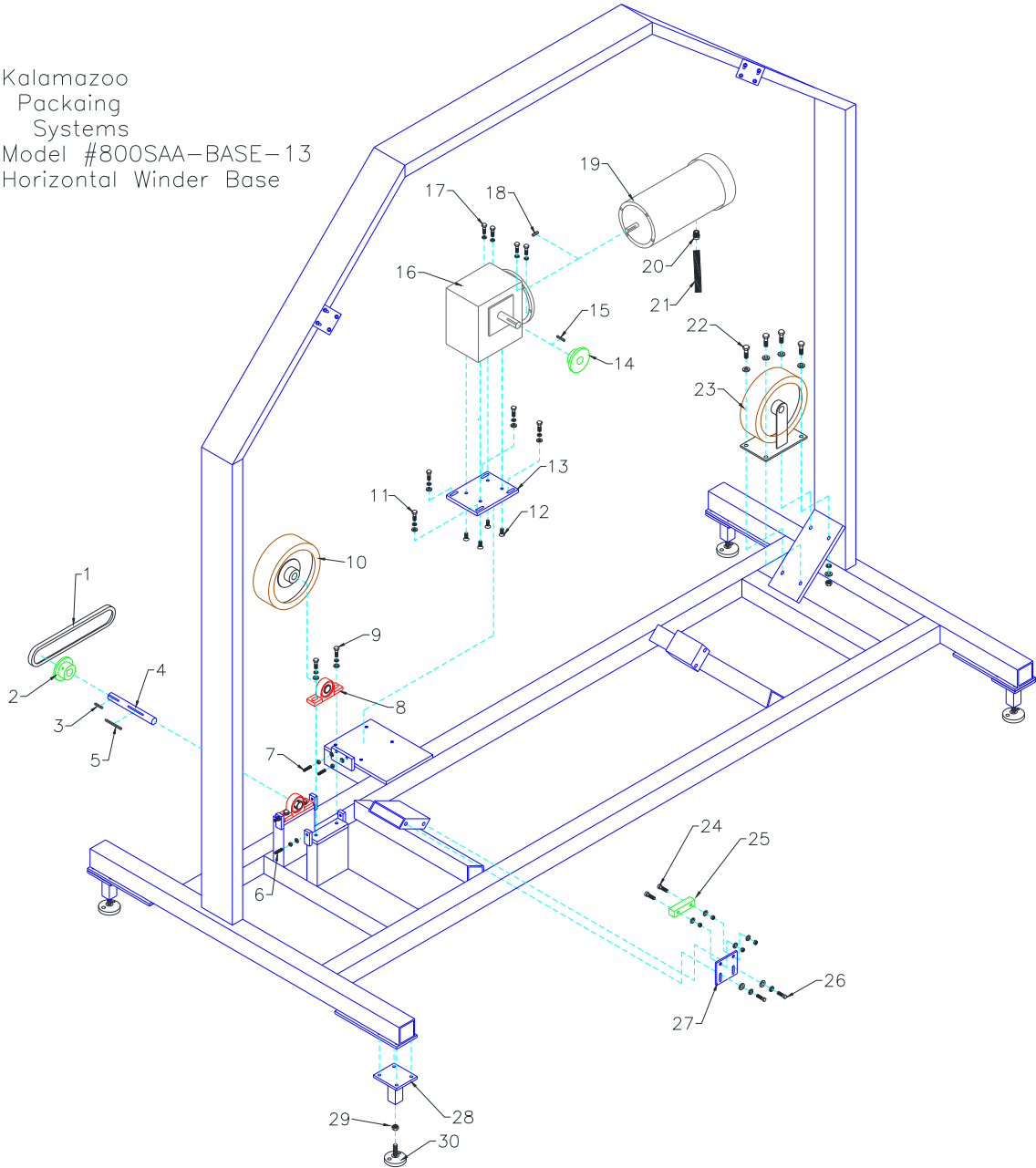
Kalamazoo
 Packing
 Systems
 Model #800SAA-FRAME
 Horizontal Winder Frame



Parts Manual: 870SAA20 Frame

Item	Part #	Description	Qty.
1	2131800	T18 Sensor Polarized	1
1	2132010	Sensor Cable	1
2	SMBAMS18P-S	Sensor Bracket 1/4" Spacer	1
3	2131830	Sensor Bracket	1
4	F515	10/24x 3/4" T.H.P	2
5	2132530	Banner Bracket	1
6	2132510	Banner Q45 Photo-Eye	1
7	870SAA20	870 Stand Alone Automatic Frame	1
8	D-WARNING REMOTE START	Decal Warning Stay Clear This Machine Starts By Remote Control	2
9	870SAA20-RD	870SAA20 Winder Ring Door	1
10	F727, F720, F722	1/4-20x 3/4" H.H.C.S., 1/4" Lock Washer, 1/4" SAE Washer	8
11	800-DHL	Door Handle Latch	1
12	6238000	Lift & Turn Handle	1
13	F201	6/32 nut	2
14	2108520	Film Door Limit Switch (Plunger)	1
15	F210, F204	6/32x 1-3/4" M.S., #6 Washer	2
16	2098420	18/3 STO Cord (Film Door Limit Switch)	1
17	2103571	Cord Grip 1/2-14 NPT	2

Kalamazoo
Packaing
Systems
Model #800SAA-BASE-13
Horizontal Winder Base



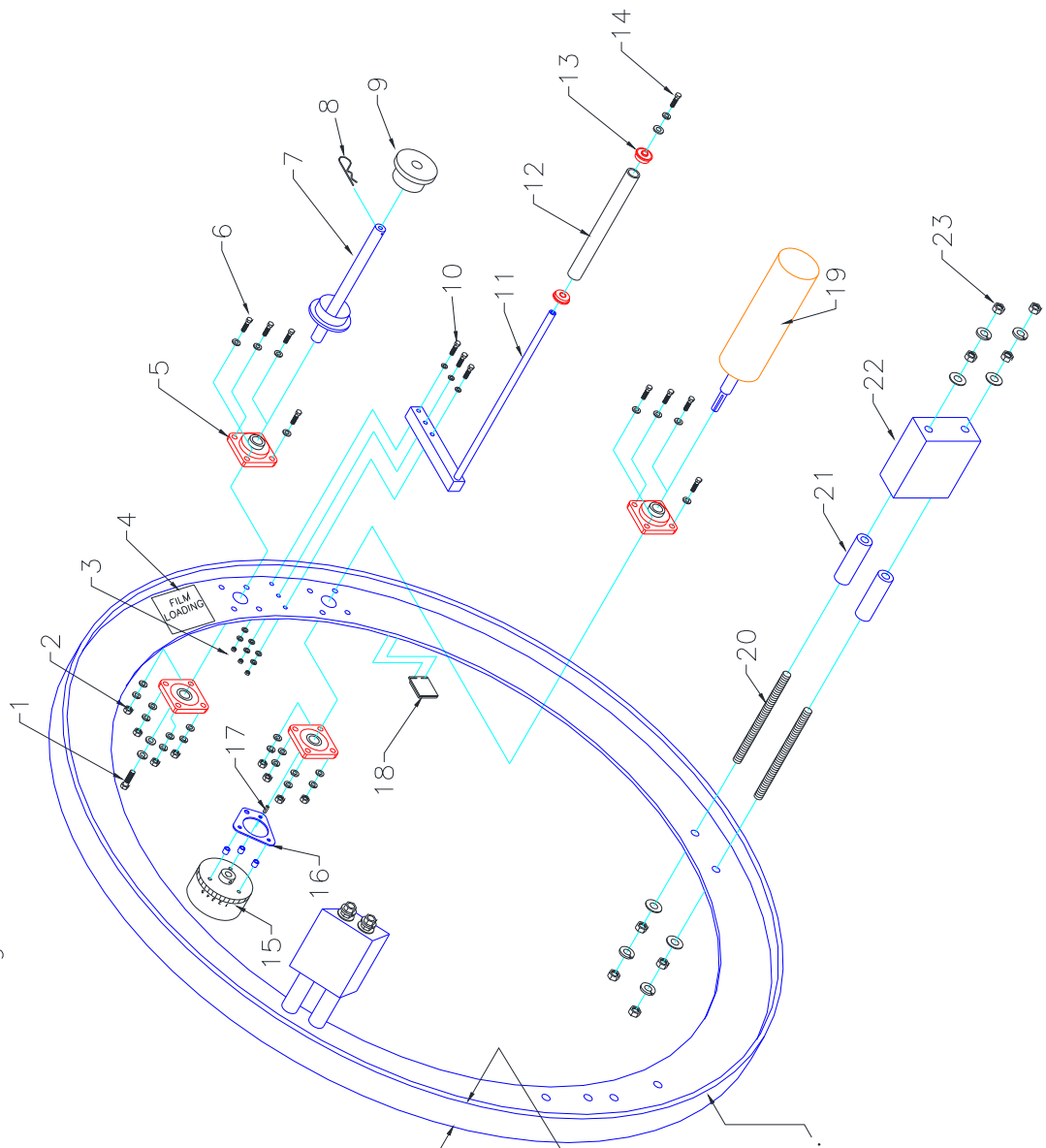
Parts Manual: 870SAA20 Base

Item	Part #/Drawing#	Description	Qty.
1	1085000	#50 Chain x 55.6" w/ Master Link	1
2	1081200	50BTB20 Taper Lock Sprocket (Driven)	1
2	1081320	1610x 1" Taper Lock Bushing	1
3	F20x1	1/4"x 1/4"x 1" Keyway	1
4	800v-DS-4.625	Winder Drive Wheel Drive Shaft	1
5	F20x2.2	1/4"x 1/4"x 2-1/2" Keyway	1
6	F1090	5/16-18x 1-1/2" S.S.	4
6	F1000	5/16-18 Nut	4
6	F1017	5/16 SAE Washer	4
7	F1090	5/16-18x 1-1/2" S.S.	4
7	F1000	5/16-18 Nut	4
7	F1017	5/16 SAE Washer	4
8	1212500	1" Pillow Block	2
9	F1335	3/8-16x 1-1/2" H.H.C.S.	4
9	F1315	3/8 Lock Washer	4
9	F1316	3/8 USS Washer	4
10	1228060	10"x 3" Drive Wheel w/ Hub	1
11	F1335	3/8-16x 1-1/2" H.H.C.S.	4
11	F1315	3/8 Lock Washer	4
11	F1316	3/8 USS Washer	4
12	F1351	3/8-16x 1" F.H.S.C.S.	4
13	870SAA2-MM	Motor Mount Plate	1
14	1081230	50BTB21 Taper Lock Sprocket (Drive)	1
14	1081330	1610x 1-1/8" Taper Lock Bushing	1
15	F20x1	1/4"x 1/4"x 1" Keyway	1
16	1066065	5:1 R/A Reducer 2.3CD 140TC Face	1

Parts Manual: 870SAA20 Base

Item	Part #/Drawing#	Description	Qty.
17	F1333	3/8-16x 1" H.H.C.S.	4
17	F1315	3/8 Lock Washer	4
18	F20x1	1/4"x 1/4"x 1" Keyway	1
19	1055375	3hp 230-480/3/60hz Motor w/Brake 145CT Face	1
20		1/2" Liquid Tight Straight Connector	2
20		1/2" Liquid Tight Conduit	1
21		2ea. 14ga. Brown, 2ea. 14ga. Orange, 1ea. 14ga. Yellow, 1ea. 14ga. Green.	1
22	L99	7/16-14 x 1-1/2" H.H.C.S.	4
22	L95	7/16 Lock Washer	4
22	L96	7/16 USS Washer	4
23	1228005	10"x 3" Idler Wheel w/ Tapered Bearing	1
24	F1553	3/8-24 x 1-1/2" S.H.C.S.	16
24	F1016	5/16 USS Washer	16
24	F1506	3/8-24 Nylock Jam Nut	16
24	F1016	5/16 USS Washer	16
24	F1506	3/8-24 Nylock Jam Nut	16
25	2501000	800 Slide	8
26	F1512	3/8-24x 1" H.H.C.S.	16
26	F1315	3/8" Lock Washer	16
26	F1316	3/8 USS Washer	12
27	800S-HOLDER	800 Slide Holder	8
28	800-RFM	Winder Rubber Foot Mount	4
29	F1900	1/2-13 Nut	4
30	1228490	3" Foot Mounts w/ Two Mounting Holes	4
		Optional Casters and Floor Locks	
	1222600	4" x 2" Swivel Caster (not shown)	4
	1222650	4" Floor Lock (not shown)	4

Kalamazoo
 Packaging
 Systems
 Model # 800SAA—Ring—13
 Stand Alone Automatic Ring



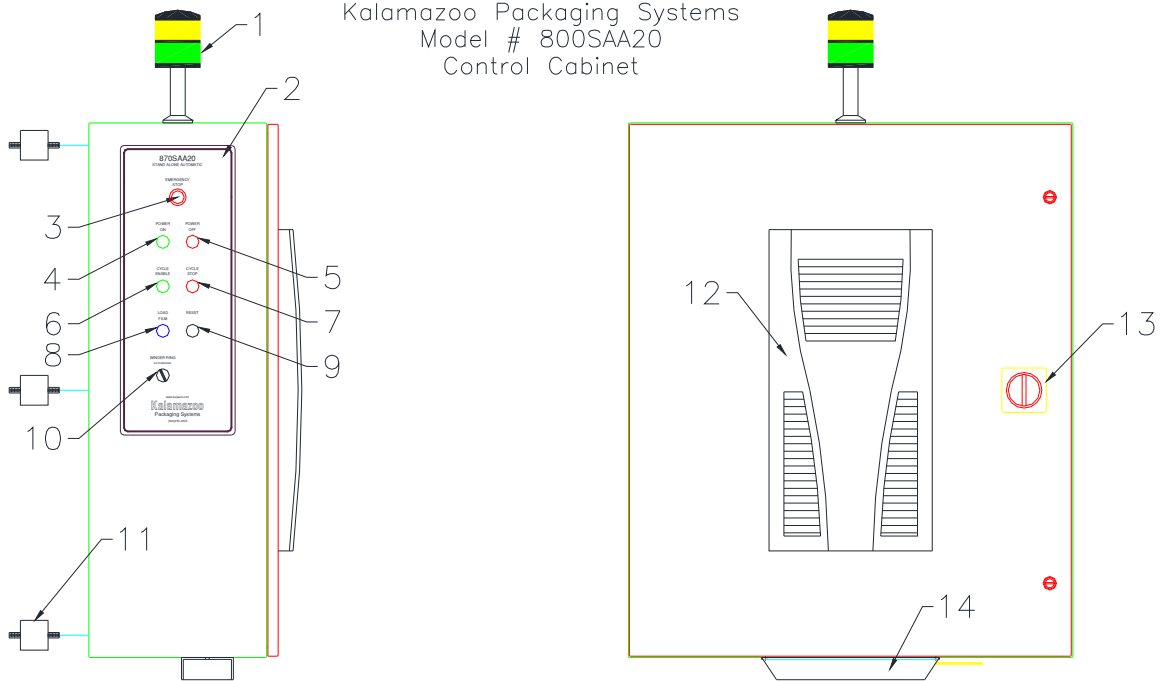
USE TAPING WAX
 ON THE OUTSIDE
 EDGES ONLY.

DO NOT GET WAX
 ON THE FACE OF
 THE WINDER RING.

Parts Manual: 800SAA20 Ring

Item	Part #/Drawing#	Description	Qty.
1	F1933, F1915, F1916	1/2-13 x 1" H.H.C.S. , 1/2" Lock Washer, 1/2" USS Washer	1
2	F1600, F1615, F1617	7/16-14 Nut, 7/16 Lock Washer, 7/16 SAE Washer	8
3	F1002, F1015, F1017	5/16-18 Nylock Nut, 5/16" Lock Washer, 5/16 SEA Washer	3
4	D-800SAA-FL	800SAA Series Film Loading Decal	1
5	1211400	1" 4-Bolt Flange Bearing	4
6	F1634, F1617	7/16-14 x 2-1/4" H.H.C.S., 7/16 SAE Washer	8
7	6230760	20" Film Holder w/ Pined Top Core	1
8	6230790	3/16" Steel Hitch Pin Clip	1
9	6230780	3" Plastic Top Core	1
10	F1039, F1017	5/16-18x 2-1/2" H.H.C.S., 5/16 SAE Washer	3
11	6230770	20" Brake Idler Roller Mount	1
12	5371250	PVC 1-1/4 Tube sch.40 x 21-3/8" (20" FILM)	1
13	1206000	5/8" I.D. x 1-3/8" O.D. Flanged Bearing	2
14	F1033, F1015, F1016	5/16x 1" H.H.C.S., 5/16" Lock Washer, 5/16 USS Washer	1
15	1306500	5/8" Magnetic Brake (MC 5.5)	1
16	800v-MC5.5-BM-R1-01	MC5.5 Brake Mount w/ 3ea. Spacers	1
17	F10x1-3/4	3/16"x 3/16"x 1-3/4" Keyway	1
18	2131806	2x2 Reflector	1
19	6230745	4" Dia. x 20" Brake Roller for MC5.5	1
20	L162x19.5	3/4-10 x 19.5" Threaded Rod (20" FILM)	4
21	800CW-20	Counter Weight Spacer (20" FILM ONLY)	4
22	800CW-20	Counter Weight (20" FILM)	2
	F2800, F2815, F2816	3/4-10 Nut, 3/4" Lock Washer, 3/4" USS Washer	16 8
Not Shown	Grainger # 4KK73	LPS Edge Lube (Taping Wax)	0

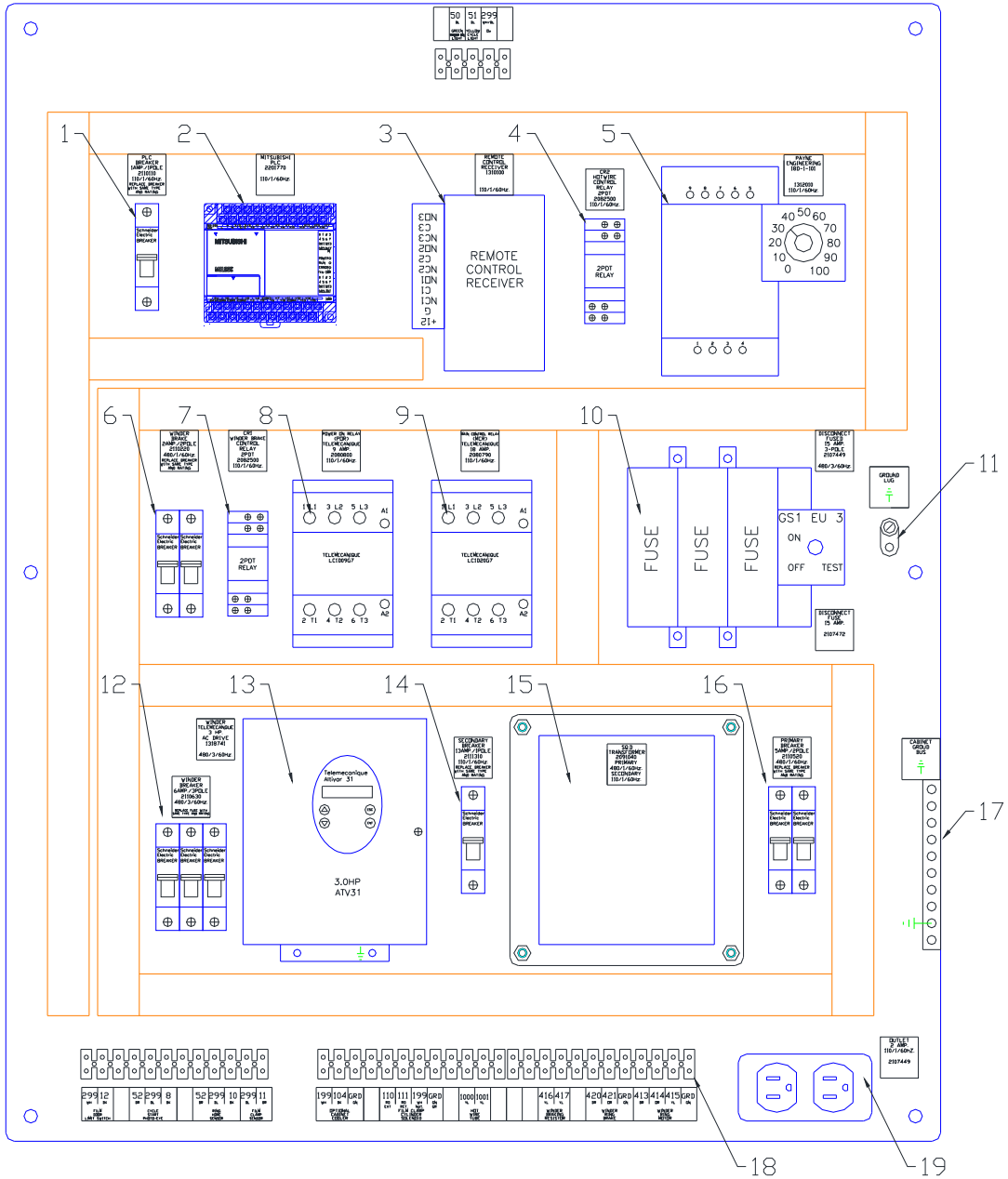
Kalamazoo Packaging Systems
 Model # 800SAA20
 Control Cabinet



Parts Manual: 800SAA20 Control Cabinet

Item	Part #/Drawing#	Description	Qty.
1	2064820	50mm Stack Light Kit (YELLOW, GREEN)	1
2	D-870SAA20	870SAA20 Control Cabinet Decal	1
3	2064000	Red Push/Pull 1NC (E-STOP)	1
4	2064080	Green Lighted Button 1NO (POWER ON)	1
5	2064030	Red Button 1NC (POWER OFF)	1
6		N/A	1
7	2064010	Red Extended Button 1NC (STOP CYCLE)	1
8	2064060	Blue Button 1NO (FILM LOAD)	1
9	2064050	White Button 1NO (RESET)	1
10	2064200	2-Position Selector 1NO (WINDER AUTO/MANUAL)	1
11	1228465	Vibration Mounts	6
12	2910100	Optional: Air Conditioner	0
13	2107451	Disconnect Switch Handle	1
14	1318473	Braking Resistor	1

Kalamazoo Packaging Systems Model # 870SAA20 Control Cabinet 480/3/60Hz.



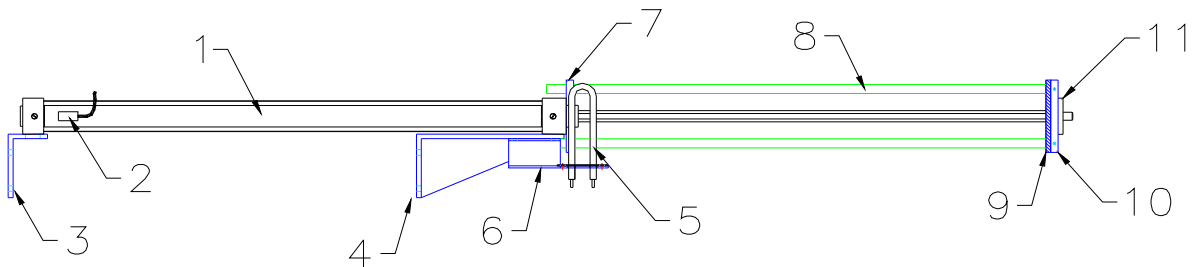
Parts Manual: 870SAA20 Sub-Panel 480/3/60Hz.

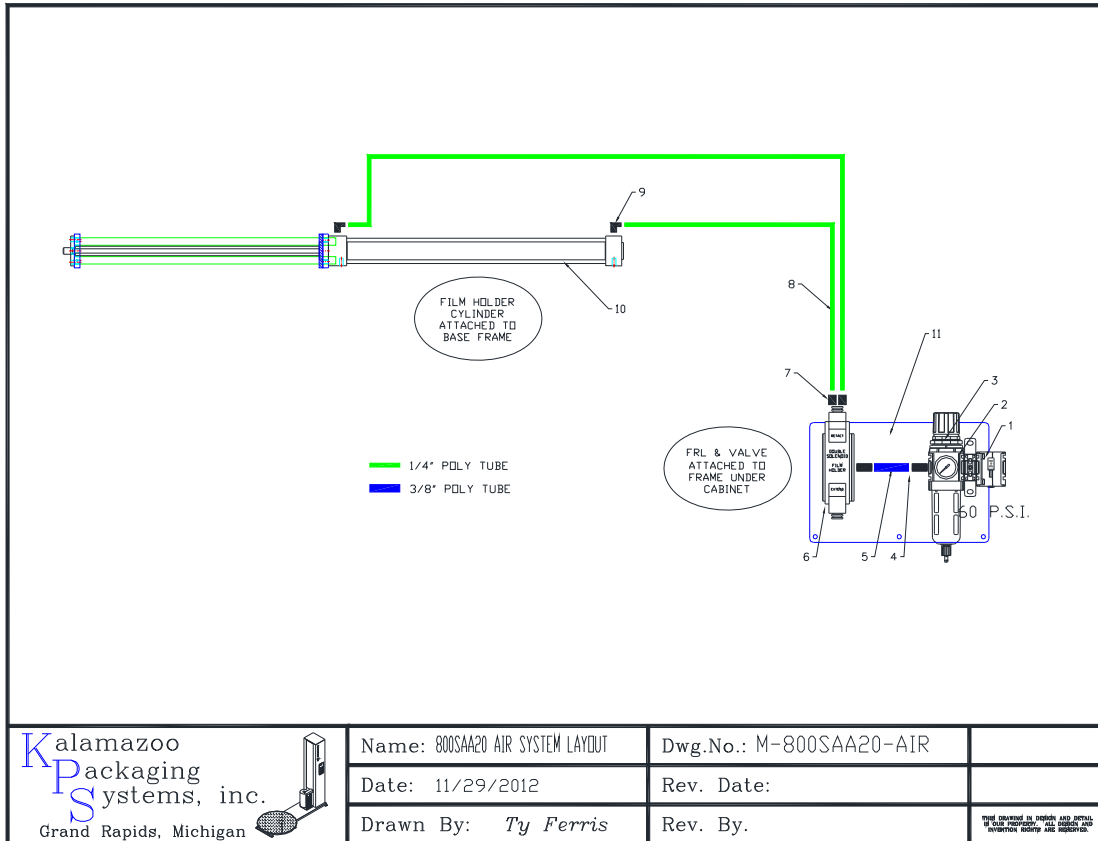
Item	Part #/ Drawing#	Description	Qty.
1	2110110	1 AMP 1-Pole Breaker (PLC)	1
2	2201770	Mitsubishi PLC FX1s-30MR	1
3	1310100	Remote Receiver	1
3	1310110	Hand Held Transmitter (Not shown)	2
4	2082500	2PDT 10 AMP Relay (HOT WIRE)	1
4	2082600	8-Pin Base	1
5	1312010	Payne Controller (HOT WIRE)	1
6	2110220	2 AMP. 2-Pole Breaker (WINDER RING BRAKE)	1
7	2082500	2PDT 10 AMP Relay (WINDER RING BRAKE)	1
7	2082600	8-Pin Base	1
8	2080800	3-Pole 9 AMP Relay (POWER ON RELAY)	1
9	2080790	3-Pole 18 AMP. Relay (Main Control Relay)	1
10	2107449	30 AMP. Fuse Disconnect Switch	1
10	2107452	Fuse Disconnect Shaft	1
10	2107472	15 AMP. Fuse	3
11	2104380	Ground Lug	1
12	2110630	6 AMP. 3-Pole Breaker (WINDER)	1
13	1318741	3hp AC Drive (Telemecanique)	1
14	2111310	13 AMP. 1-Pole Breaker (SECONDARY)	1
15	2091040	1000VA Transformer	1
16	2110520	5 AMP. 2-Pole Breaker (PRIMARY)	1
17	2104360	Cabinet Ground Bus (10 Lugs)	1
18	2097000	12 Terminal Strip	3-1/2
19	2101550	110/1/60Hz. Outlet	1

Parts Manual: 800SAA20 Film Clamp and Cutter

Item	Part #/Drawing#	Description	Qty.
1	2701300	Film Clamp Cylinder 1-1/2" Bore x 24" Stroke	1
2	2701312	Film Clamp Sensor (2-Wire NPN)	1
2	2701320	Film Clamp Sensor Bracket	1
3	850SAA-20-AFC-02	Film Cylinder Back Mount	1
4	850SAA-20-AFC-01	Film Cylinder Front Mount	1
5	1310090	4-1/2" Hot Wire Tube	1
6	800-AFC-09zo	Hot Wire Mounting Bracket	1
7	2500810	4-Rod Film Cylinder Rod Mount	1
8	8000710	5/8" Teflon Shaft x 26.0"	4
9	250084 0	Rubber Film Holder	1
10	2500820	4-Rod Film Cylinder Front Plate	1
11	2500830	4-Rod Cylinder End Cap	1

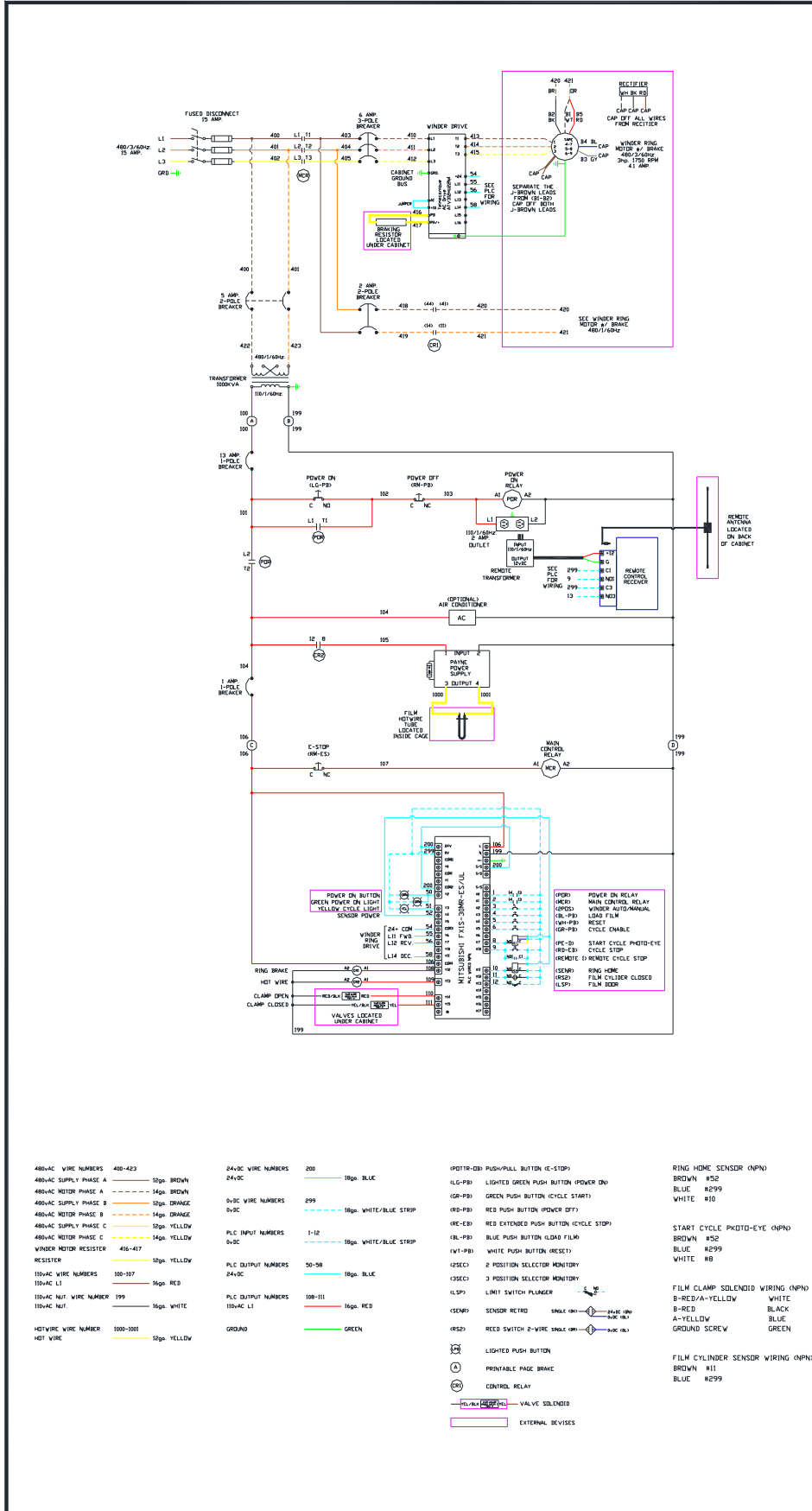
Kalamazoo Packaging Systems
Film Holder and Hotwire
Model# 800SAA-20





Parts Manual: 800SAA20 Air System

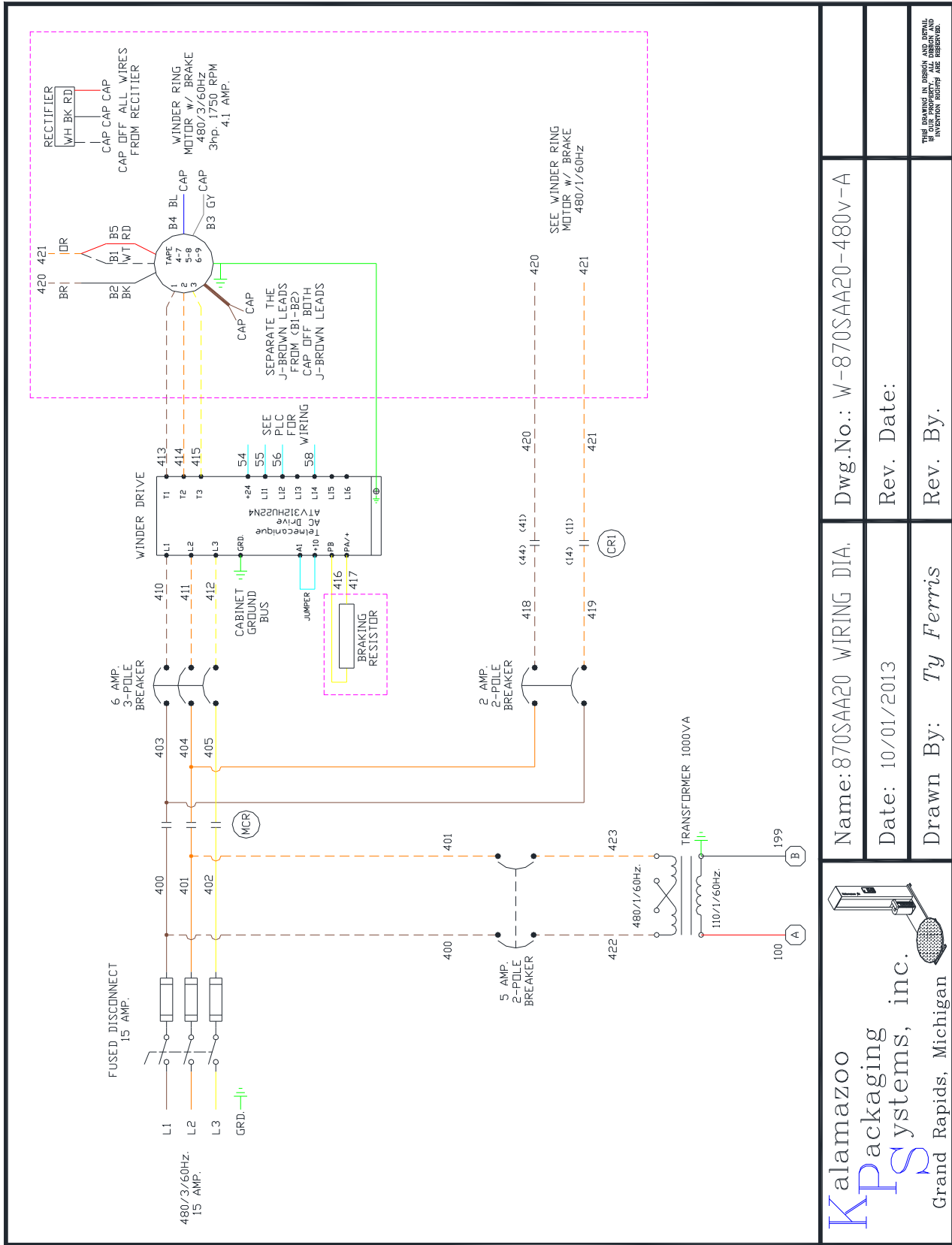
Item	Part #/Drawing#	Description	Qty.
1	2701900	Lock Out/Shut Off Unit	1
2	2701910	Joiner Kit	1
3	2701920	Filter Regulator Unit	1
4	3175 60 18	Male Connector 3/8" Tube—3/8" NPT	2
5	1094 60 01	3/8" Black Poly Tube	1
6		MAC 82 Series Assembly (110vAC)	1
7	3175 56 18	Male Connector 1/4" Tube—3/8" NPT	2
8	1094U06 01	1/4" Black Poly Tube	2
9	3109 56 18	Male Elbow 1/4" Tube—3/8" NPT	2
10	2701300	Film Cylinder 1-1/2" Bore x 24" Stroke	1
10	2701312	Cylinder Reed Switch	1
10	2701320	Reed Switch Bracket	1
11	800SAA20-FRP	800SAA Filter Regulator Mounting Plate	1



Name: 870SAH20 WINDER WIRING DIA. (480/3/60Hz-NPN)
 Dwg.No.: W870SAA20-480V
 Date: 10/01/2013
 Rev. Date:
 Drawn By: Ty Ferris
 Rev. By:

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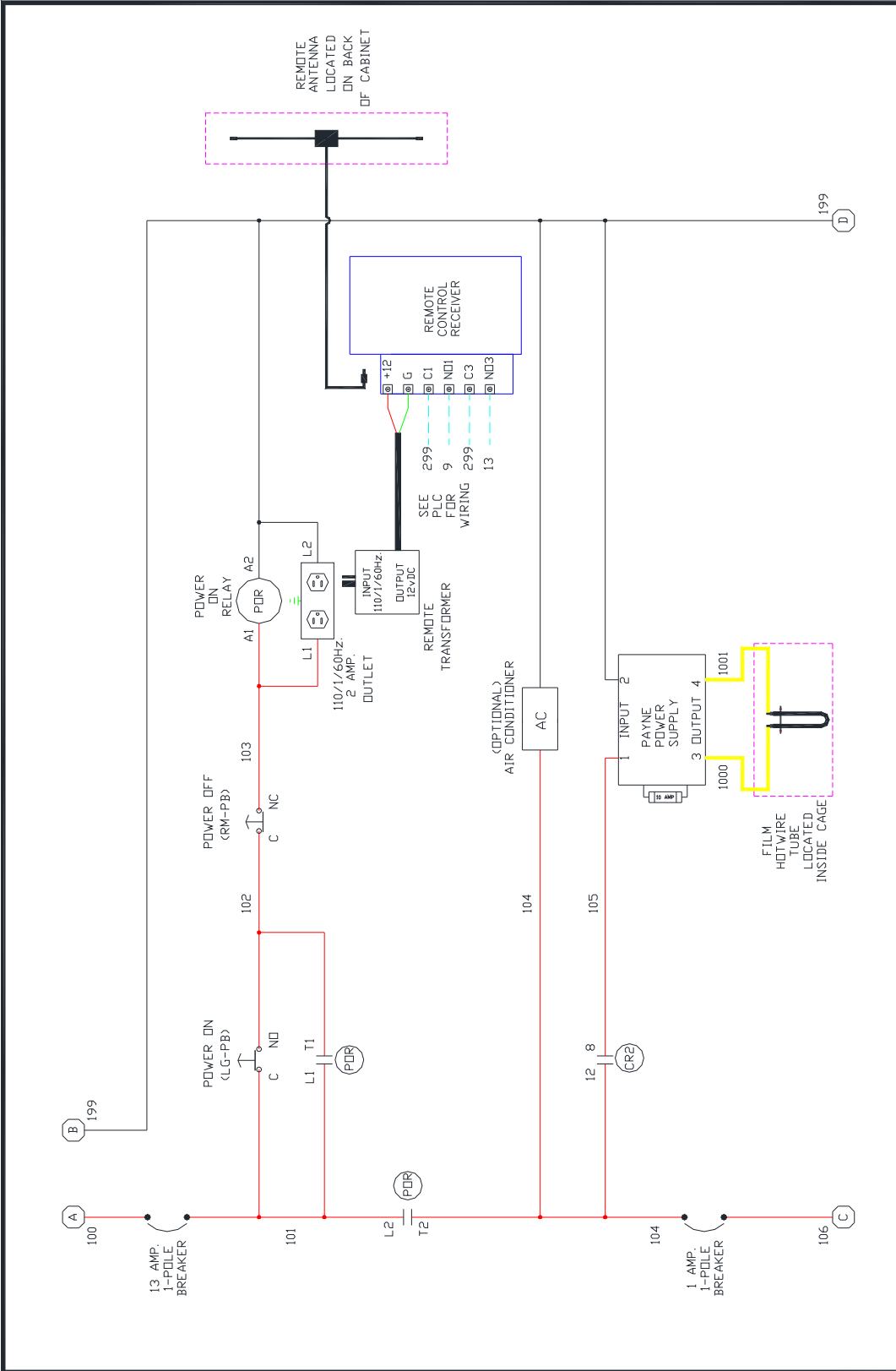
Kalamazoo
 Packaging Systems, Inc.
 Grand Rapids, Michigan



Kalamazoo
PS Packaging Systems, inc.
Grand Rapids, Michigan

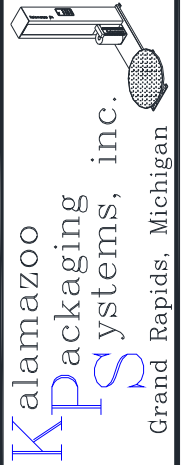
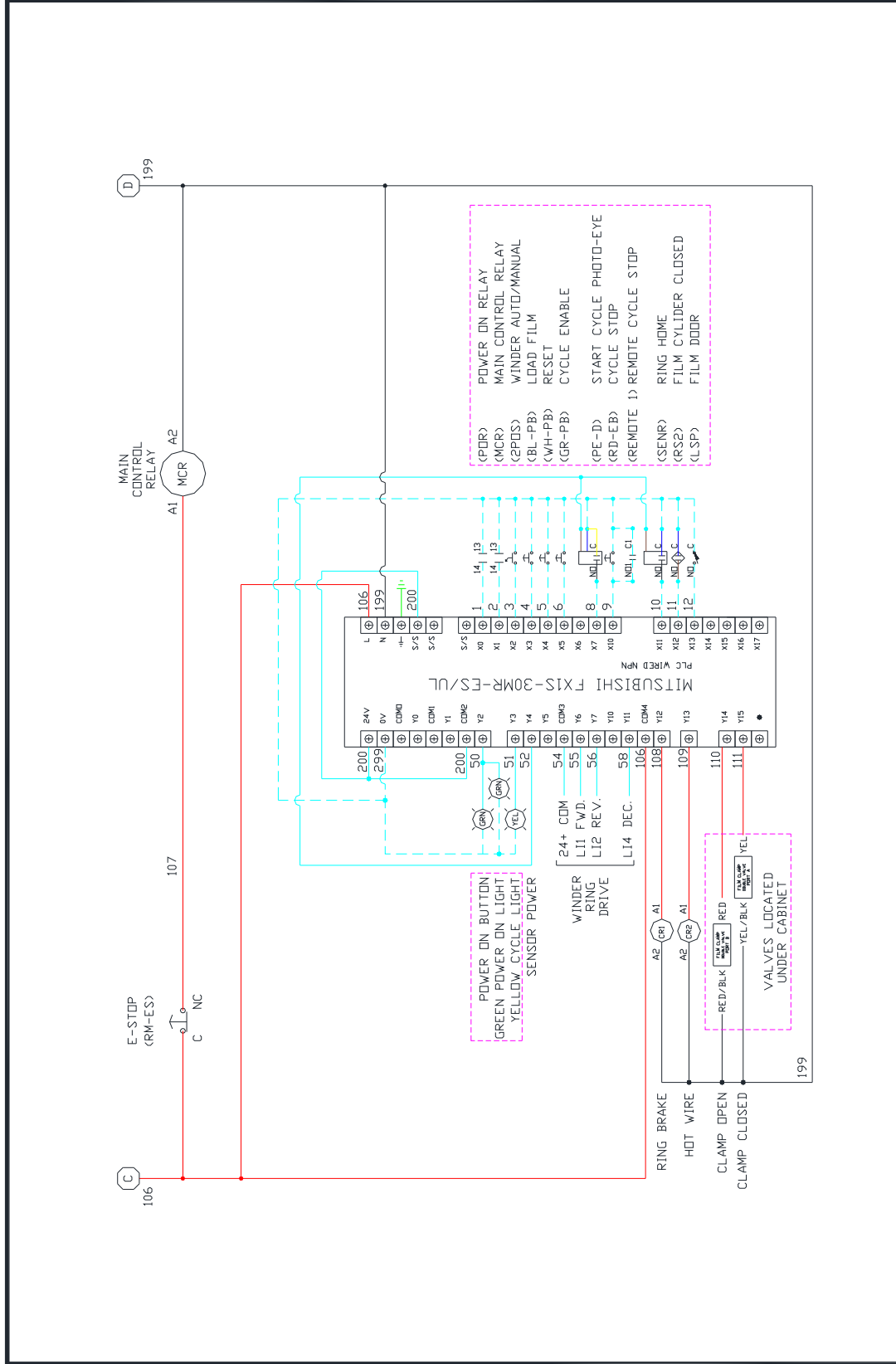
Name: 870SAA20 WIRING DIA.	Dwg.No.: W-870SAA20-480v-A
Date: 10/01/2013	Rev. Date:
Drawn By: Ty Ferris	Rev. By:

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 <p>Kalamazoo Packaging Systems, inc. Grand Rapids, Michigan</p>	<p>Name: 870SAA20 WIRING DIA.</p>	<p>Dwg.No.: W-870SAA20-480v-B</p>
	<p>Date: 10/01/2013</p>	<p>Rev. Date:</p>
	<p>Drawn By: Ty Ferris</p>	<p>Rev. By:</p>

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Name: 870SAA20 WIRING DIA. Dwg.No.: W-870SAA20-480V-C

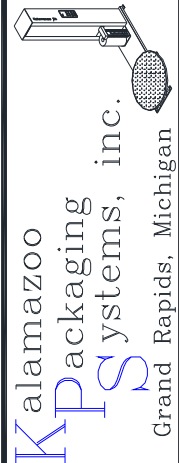
Date: 10/01/2013 Rev. Date:

Drawn By: Ty Ferris Rev. By:

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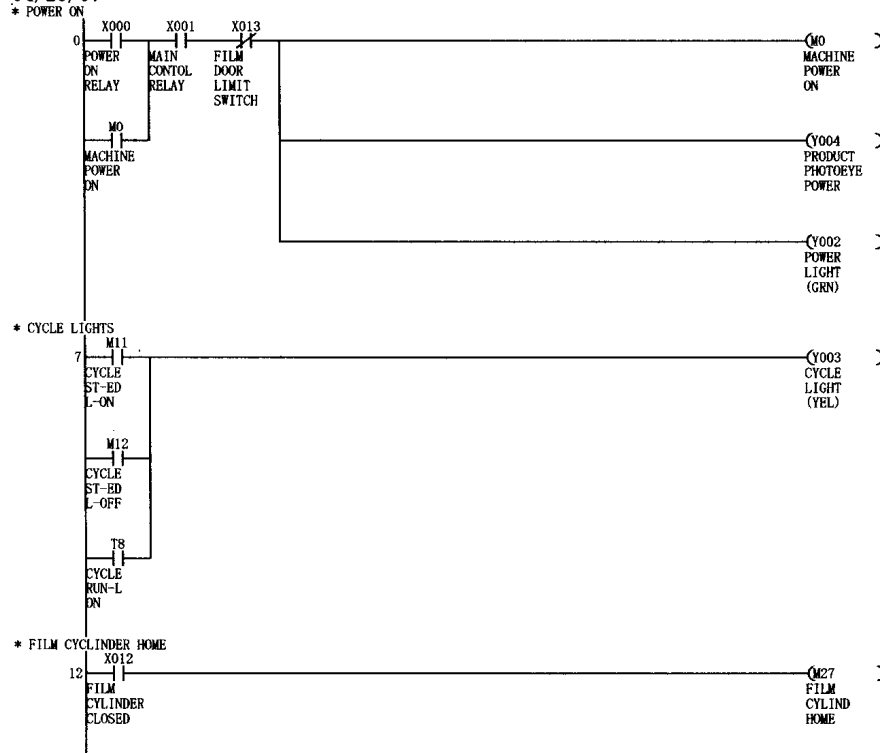
<p>480VAC WIRE NUMBERS 400-423 480VAC SUPPLY PHASE A 12ga. BROWN 480VAC MOTOR PHASE A 14ga. BROWN 480VAC SUPPLY PHASE B 12ga. ORANGE 480VAC MOTOR PHASE B 14ga. ORANGE 480VAC SUPPLY PHASE C 12ga. YELLOW 480VAC MOTOR PHASE C 14ga. YELLOW WINDER MOTOR RESISTOR 416-417 110VAC WIRE NUMBERS 100-107 110VAC LI 16ga. RED 110VAC NUT. WIRE NUMBER 199 110VAC NUT. 16ga. WHITE HOT/WIRE WIRE NUMBER 1000-1001 HOT WIRE 12ga. YELLOW</p>	<p>24VDC WIRE NUMBERS 200 18ga. BLUE 24VDC 0VDC WIRE NUMBERS 299 18ga. WHITE/BLUE STRIP 0VDC PLC INPUT NUMBERS 1-12 18ga. WHITE/BLUE STRIP 0VDC PLC OUTPUT NUMBERS 50-58 18ga. BLUE 24VDC PLC OUTPUT NUMBERS 108-111 16ga. RED 110VAC LI GROUND GREEN</p>	<p>(POTTR-DB) PUSH/PULL BUTTON (E-STOP) (LG-PB) LIGHTED GREEN PUSH BUTTON (POWER ON) (GR-PB) GREEN PUSH BUTTON (CYCLE START) (RD-PB) RED PUSH BUTTON (POWER OFF) (RE-EB) RED EXTENDED PUSH BUTTON (CYCLE STOP) (BL-PB) BLUE PUSH BUTTON (LOAD FILM) (WT-PB) WHITE PUSH BUTTON (RESET) (2SEC) 2 POSITION SELECTOR MONITORY (3SEC) 3 POSITION SELECTOR MONITORY (LSP) LIMIT SWITCH PLUNGER (SEN) SENSOR RETRO SINGLE (BK) 24VDC (BK) (RS2) REED SWITCH 2-WIRE SINGLE (BL) 0VDC (BK) (LP) LIGHTED PUSH BUTTON (A) PRINTABLE PAGE BRAKE (CR) CONTROL RELAY</p>	<p>RING HOME SENSOR (NPN) BROWN #52 BLUE #299 WHITE #10 START CYCLE PK010-EYE (NPN) BROWN #52 BLUE #299 WHITE #8 FILM CLAMP SOLENOID WIRING (NPN) B-RED/A-YELLOW WHITE B-RED BLACK A-YELLOW BLUE GROUND SCREW GREEN FILM CYLINDER SENSOR WIRING (NPN) BROWN #11 BLUE #299</p>
<p>— (VEL/REL) VALVE CYCLE VALVE SOLENOID [] EXTERNAL DEVICES</p>		<p>Name: 870SAA20 WIRING DIA.</p>	<p>Dwg.No.: W-870SAA20-480V-D</p>
<p>Date: 10/01/2013</p>		<p>Rev. Date:</p>	<p>Rev. Date:</p>
<p>Drawn By: Ty Ferris</p>		<p>Rev. By:</p>	<p>Rev. By:</p>

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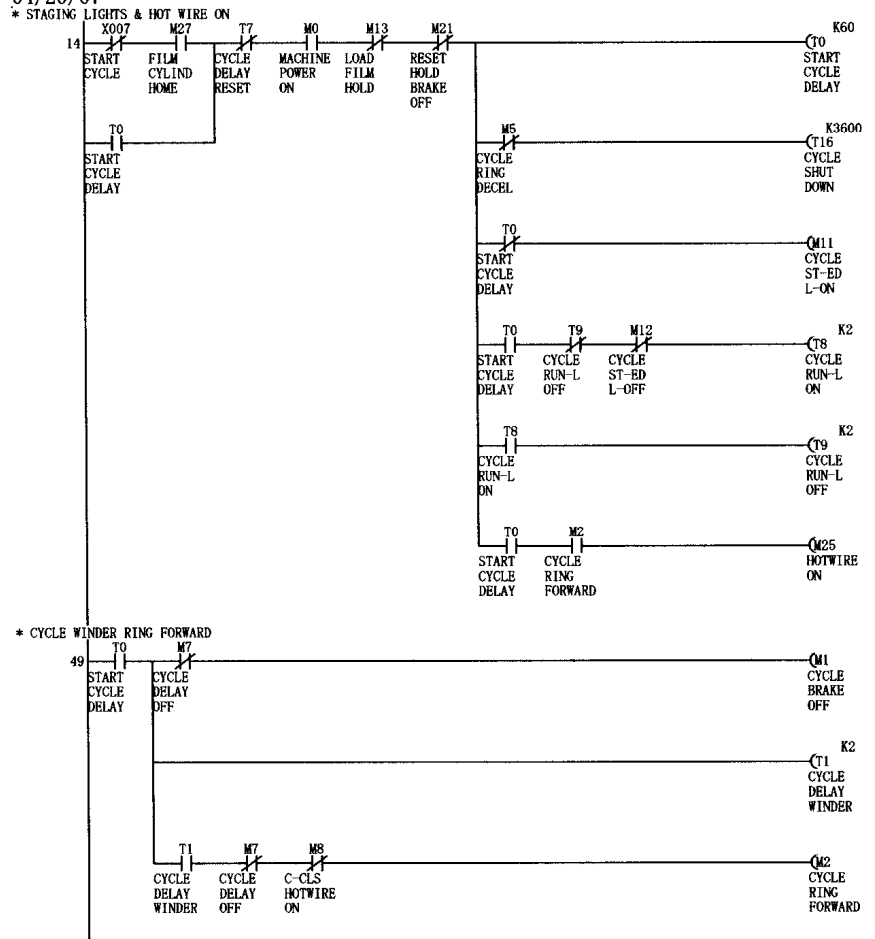


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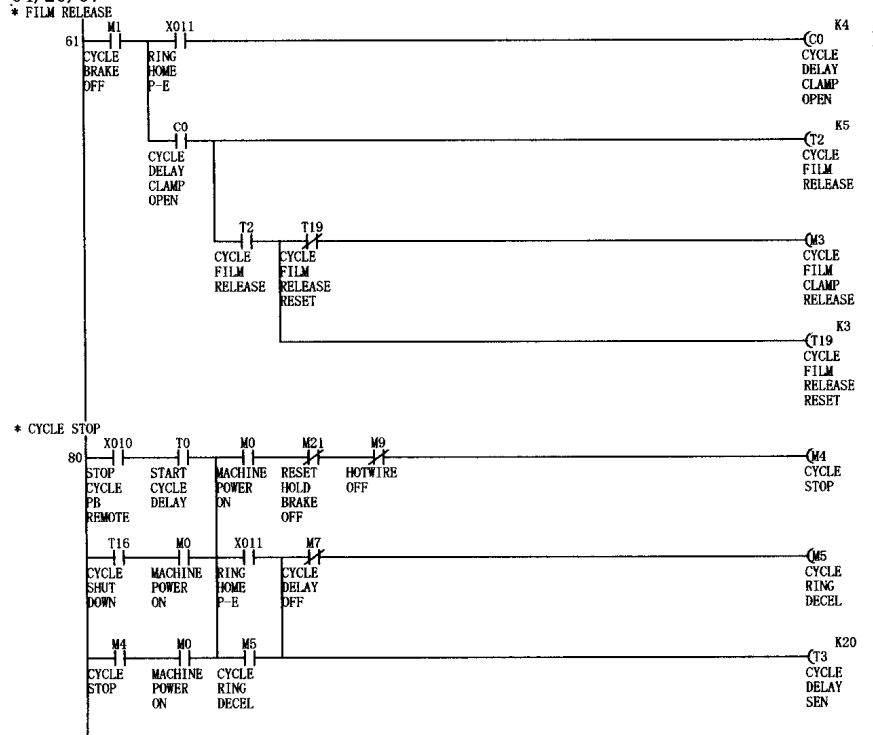
Kalamazoo
 Packaging
 Systems
 Model# 850SAA-20
 Stand Alone Automatic Winder
 04/20/07



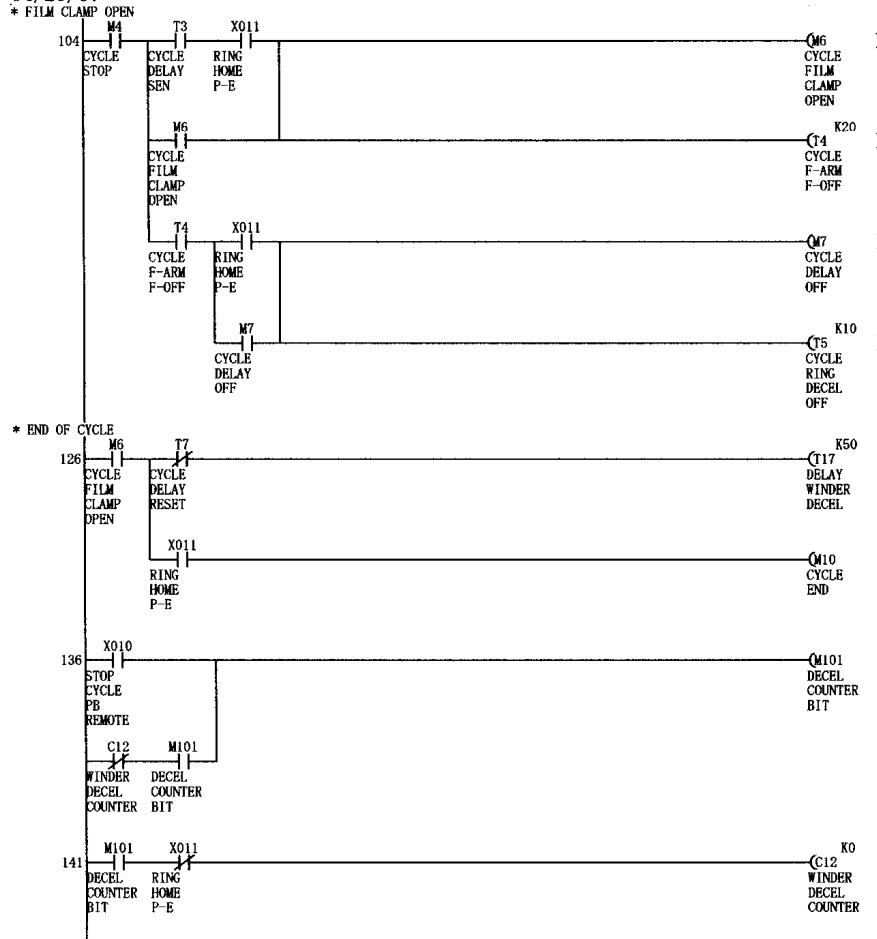
Kalamazoo
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 Systems
 Model# 850SAA-20
 Stand Alone Automatic Winder
 04/20/07



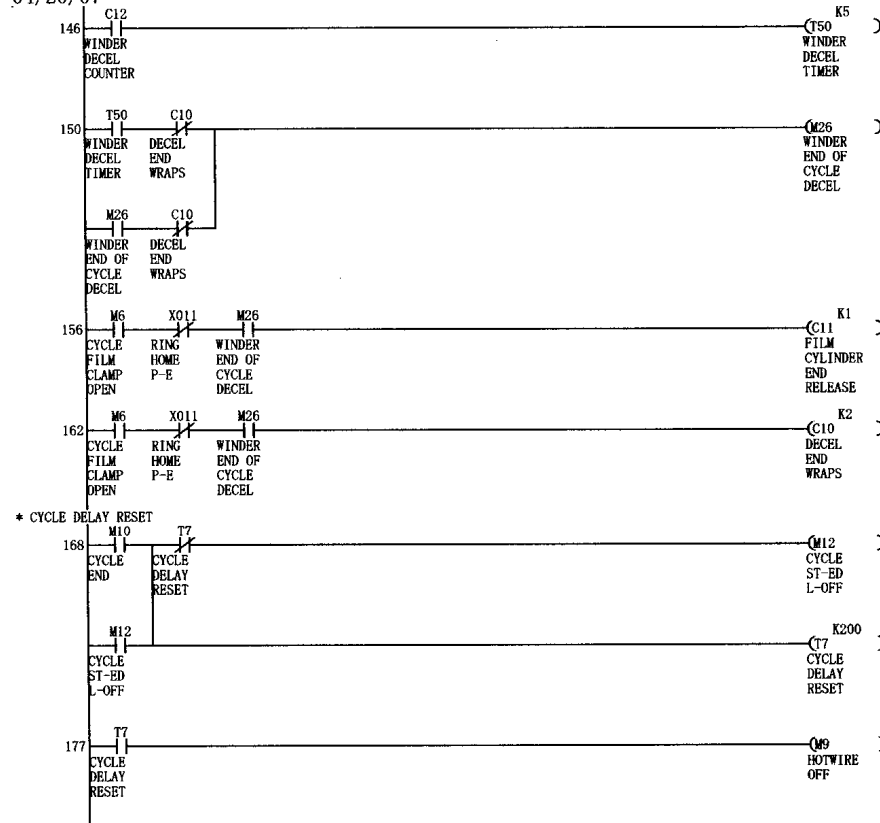
Kalamazoo
Packaging
Systems
Model# 850SAA-20
Stand Alone Automatic Winder
04/20/07



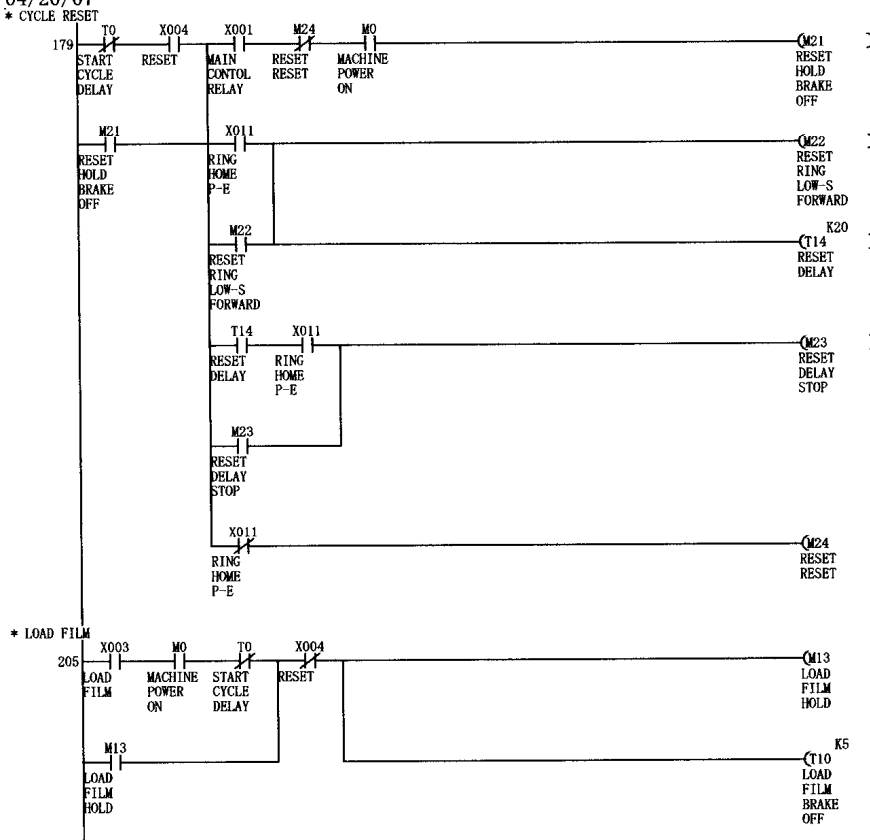
Kalamazoo
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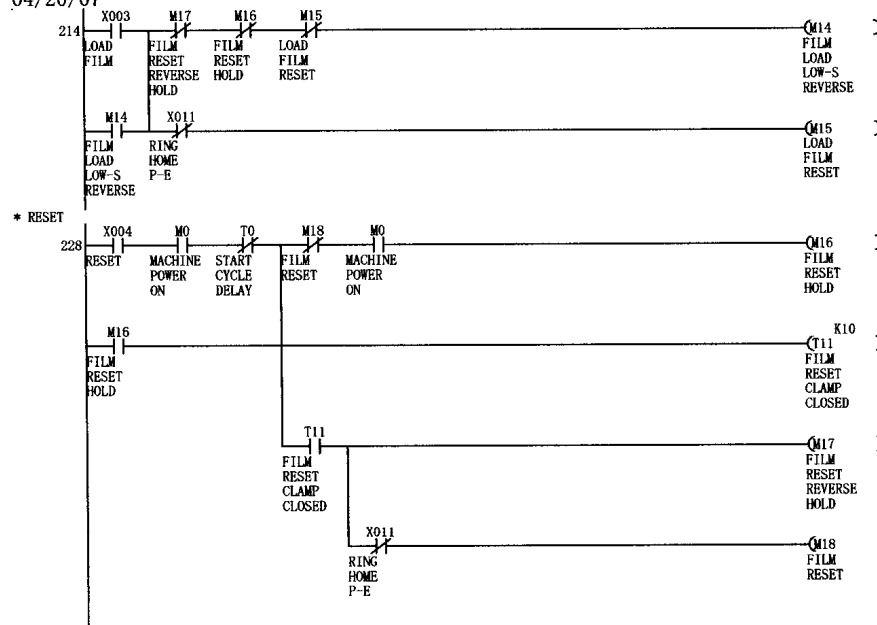
Kalamazoo
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 Stand Alone Automatic Winder
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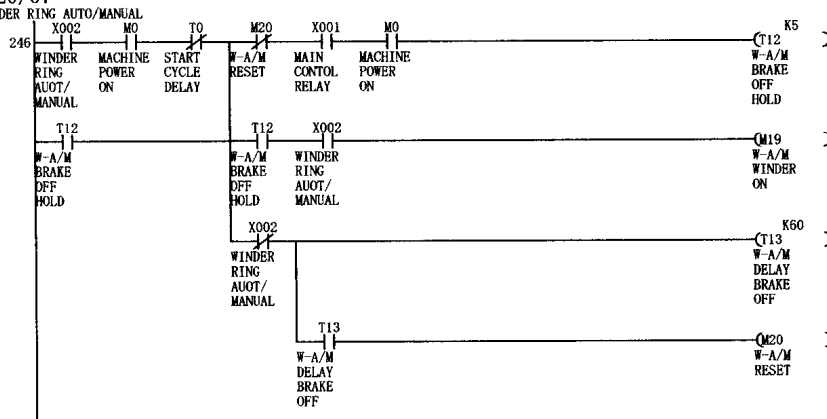
Kalamazoo
 Packaging
 Systems
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 Stand Alone Automatic Winder
 04/20/07
 * CYCLE RESET



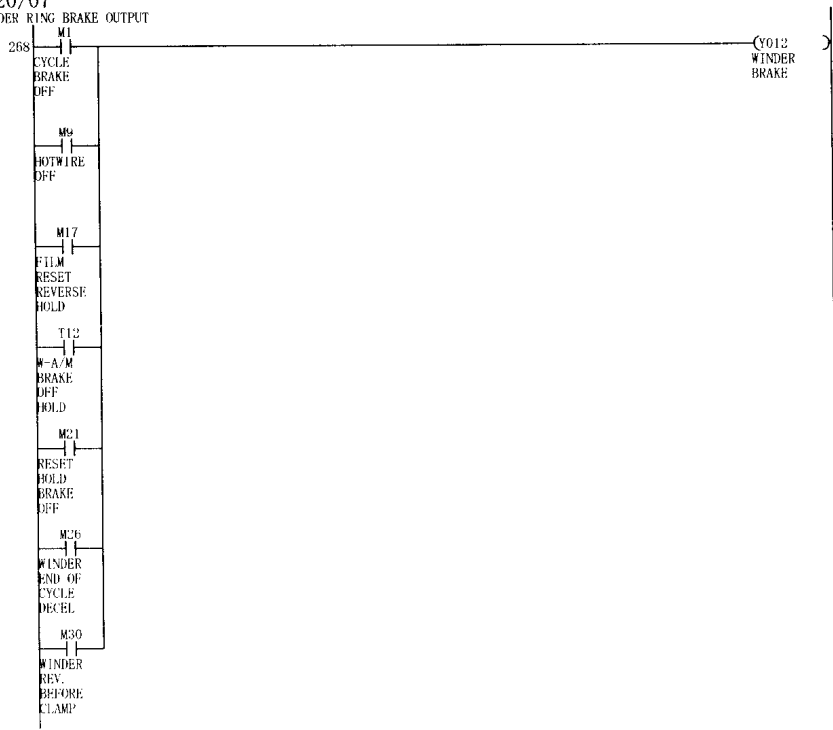
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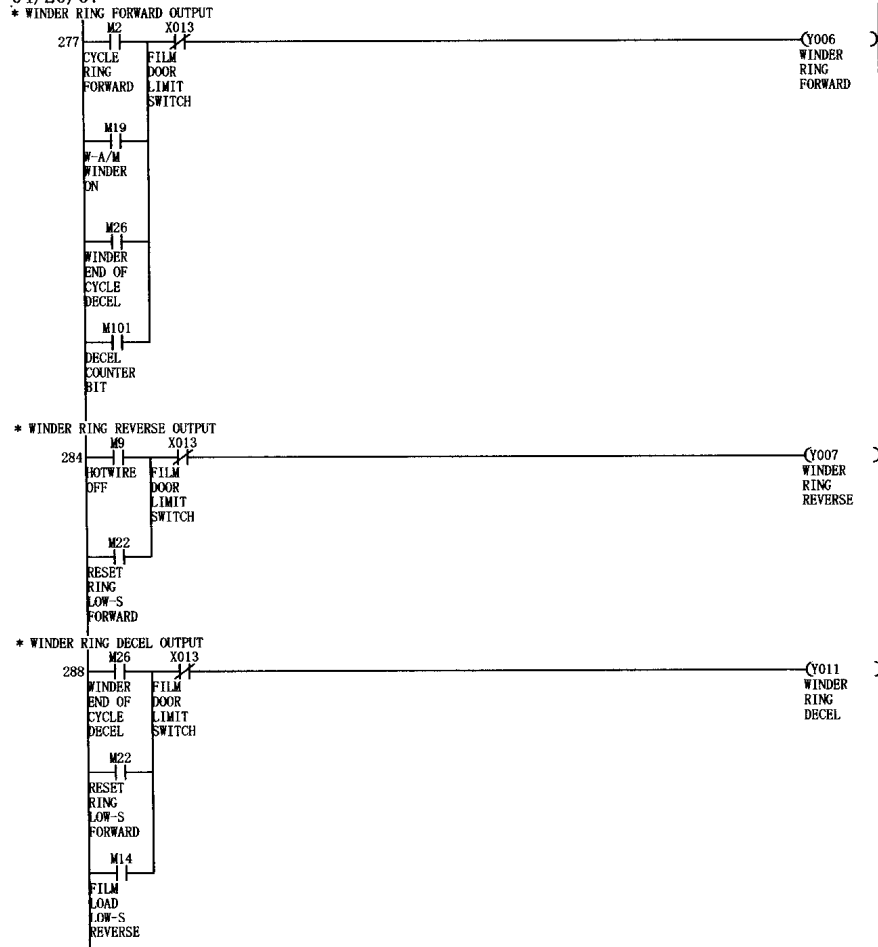
Kalamazoo
 Packaging
 Systems
 Model# 850SAA-20
 Stand Alone Automatic Winder
 04/20/07
 * WINDER RING AUTO/MANUAL



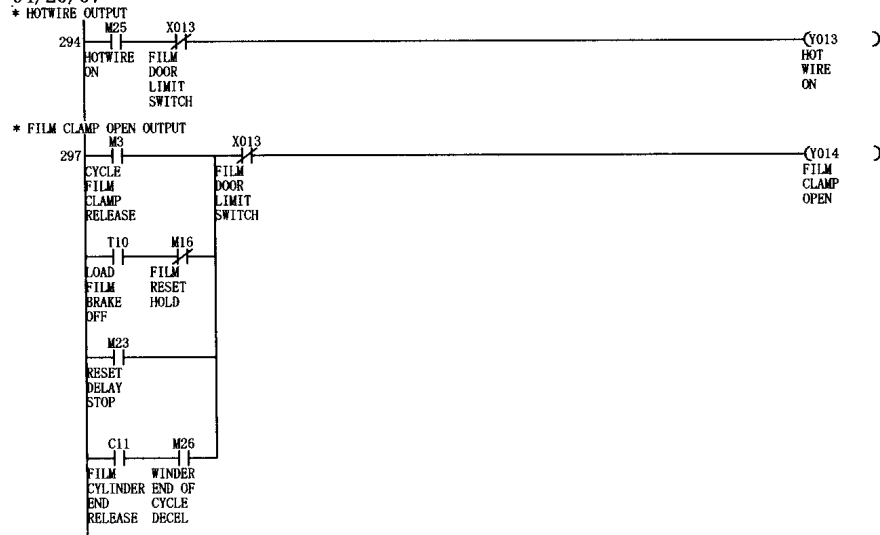
Kalamazoo
 Packaging
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 Model# 850SAA-20
 Stand Alone Automatic Winder
 04/20/07
 * WINDER RING BRAKE OUTPUT



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Stand Alone Automatic Winder
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