

**MODEL 4000M-PM w/ SCALE
MODEL 4000T-PM w/o SCALE
POWERED MANUAL
STRETCH WRAP SYSTEM**



**OPERATORS
MANUAL**

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Introduction

Congratulations! Your purchase of a **Kalamazoo Model 4000M-PM Powered Manual Spiral Stretch Wrapping 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

Effective on all machines built January 1, 2007 and later

Kalamazoo Packaging Systems, Inc. (KPS) agrees to furnish the purchaser, without charge (up to \$1000.00), F.O.B. the factory, any part found to be defective in either material or workmanship within five (5) years 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, power line drops and/or surges shall not constitute failure because of defective material or workmanship, and are expressly excluded from this warranty. This system is supplied with solid state AC drives, PLC, and sensors. A clean power source must be supplied to the system without voltage drops or spikes.

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

Modular Design

All **Kalamazoo** stretch wrap equipment is of modular design to grow and adjust to your specific packaging requirements. Your system has the ability to grow with you in the future. You can change modules to adjust to whatever your packaging requirements may be.

Assembly

Your **4000M-PM** Stretch Wrap System 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, it will be on a pallet. If the unit was delivered by our truck or by your distributor's truck it may not be placed on a pallet. **Any damage done in transit should be reported to the carrier immediately.** All 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.

Once the machine was cleared for shipment at the factory, It was put on a pallet and wrapped completely assembled . No electrical wires were removed or disconnected for shipping.

Remove the unit from the pallet. The machine is now ready for operation and should be plugged into an independent 115 volt, 20 amp. power source.

NOTE: The use of an extension cord may reduce the efficiency and life of the machine and is not recommended.

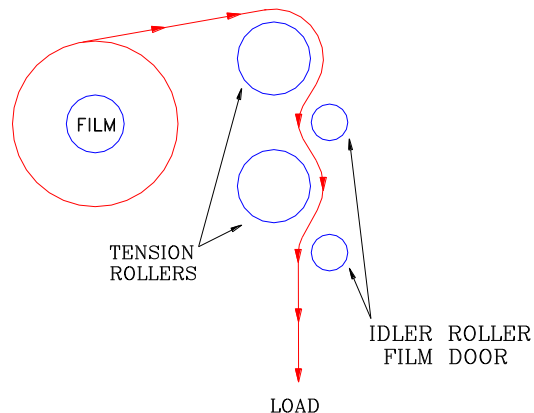
Set-up Procedures

The spiral module and turntable are designed to run smoothly together. Before wrapping the first pallet, check the AUOT/MANUAL functions of the turntable and the FILM RAISE and FILM LOWER functions of the spiral. Then center a load on the turntable and jog to check clearances.

Loading the film Constant Prestretch

If your wrapper is equipped with our **Kalamazoo** Constant Prestretch Film Delivery System, place a roll of 20" stretch film on the film core holder and open the film door. Thread the film clockwise around the back rubber covered tension rollers and close the film door.

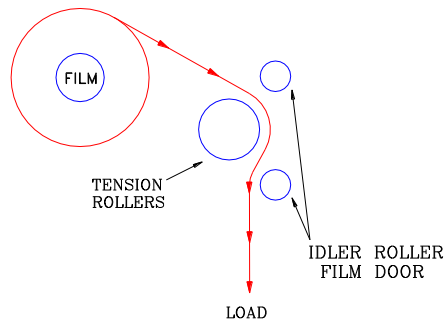
CONSTANT PRESTRETCH



Loading the film for optional Variable Tension

If your wrapper is equipped with a Kalamazoo Variable Tension Film Delivery System, place a roll of 20" stretch film on the film core holder and open the film door. Thread the film clockwise around the black rubber covered tension roller and close the film door. Once the film is loaded and the desired film tension is arrived at, the film tension need not be adjusted again until the brand of film or the film thickness is changed.

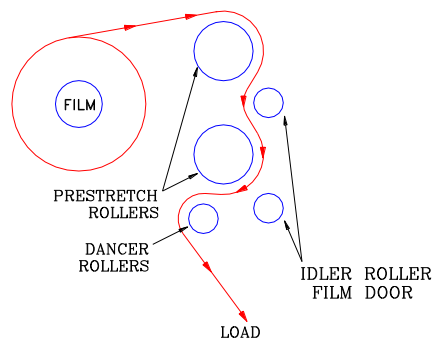
Variable Tension



Loading the film for optional Powered Prestretch

If your wrapper is equipped with a Kalamazoo Powered Prestretch Film Delivery System, place a roll of 20" stretch film on the film core holder and open the film door. Thread the film clockwise around the black rubber covered tension rollers and counter-clockwise around the Dancer Bar Roller. Close the film door. Once the film is loaded and the desired film tension is arrived at, the film tension need not be adjusted again until the brand of film or the film thickness is changed.

Powered Prestretch



Controls

- 1) E-STOP - Turns off the main control relay. The system will not run.
- 2) TABLE OFF/ON – Turns the turntable and optional variable tension brake on.
- 3) FILM CARRIAGE RAISE/OFF/LOWER-Runs the film carriage up and down
- 4) Optional Film Tension Control. Turn the knob clockwise to increase film tension.
- 5) Film Lift Speed Control. Turn the knob clockwise for less over wrap and counter clockwise for more over wrap.
- 6) Turntable Speed Control. Turn the knob clockwise to make the table rotate faster and counter clockwise to slow the table down.

Operating Instructions

- 1) Attach the film to the pallet securely.
- 2) (STAND CLEAR)
- 3) Start the turntable with the OFF/ON selector switch.
- 4) Adjust the Optional Tension Control knob to obtain the correct amount of film stretch.
- 5) When there are enough wraps around the bottom of the load to properly stabilize it, turn the film carriage switch to the RAISE position.
- 6) When the carriage reaches the top limit switch or you have wrapped the load as high as desired, stop the film carriage by moving the switch to the center OFF position.
- 7) The unit will now apply the reinforcing wraps to the top of the load.

THE SEQUENCE MAY BE STOPPED AT THIS POINT IF THE LOAD IS ADQUATELY SECURED. PLACE THE TURNTABLE AND CARRIAGE CONTROLS TO THE OFF POSITION CUT AND SECURE THE FILM. YOU MAY RETURN THE FILM CARRIAGE TO THE HOME POSITION OR WRAP THE NEXT LOAD FROM THE TOP TO THE BOTTOM.

- 8) After step (7) turn the Film Carriage selector switch to the LOWER position and lower the film carriage to the home position.
- 9) The film carriage will stop at the lower limit switch and you should then place the film carriage and turntable controls switches to the OFF position.
- 10) Cut the film and smooth the end against the load. The film's inherent cling will hold it in place.
- 11) End of wrap cycle.

Maintenance

- 1) Check and tighten any loose fasteners.
- 2) Check all electrical connections and replace any worn or frayed cords.
- 3) Clean and lubricate the tower channels where the rollers run with #2 grease every three months, more frequently if the unit is in an especially dirty location.
- 4) Lubricate and adjust the turntable drive chains every three (3) months. Chain should be lubricated with a penetrating type commercial chain lube. (Do not over tight the turntable chain)
- 5) Lubricate pillow blocks with #2 grease every six months.
- 6) Check the main control relay for burning or arcing replace if necessary.
- 7) Check all push buttons and limit switch for shorts or sticking.
- 8) Keep the area clean around the system and all moving parts.
- 9) Remove film built up under the turntable disc.

Troubleshooting

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

Push the E-STOP button in, wait for 1 min.. This will denenergize the AC drives and reset a fault.

Pull the E-STOP button out to reset.

Check wall receptacle for power.

Check all cords for cut. (Fork Lift Trucks damage cords.)

Check under the turntable disc to make sure film is not wrapped around the center shaft and/or sprocket.

DISCONNECT POWER FROM MACHINE

- ✓ Check both top and bottom limit switches for damage, sticking, or internal shorts.
- ✎ Remove panel cover. Visually inspect for loose wires and for signs of arcing or burning of any of the components.
- Check belt tension.
- Check optional variable tension brake controller for AC in and DC out.
- Check brake pads.
- Check for damage cords.
- 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, Monday through 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
E-mail –kzoo@iserv.net

Telemecanique ATV 12 AC Drive Programming

To change a parameter in the AC Drive.

1. Press the Jog Dial to get into the parameter you would like to change.
2. Turn the Jog Dial to change the code.
3. Press the Jog Dial to enter into the code.
4. Turn the Jog Dial to change the value.
5. Press the Jog Dial to enter the value.

4000M-SA Film Lift Drive

rdy — Conf

	ACC	Acceleration	2.5
	dEC	Deceleration	0.1
	HSP	High Speed	60.0
	bFr	Motor Frequency	60
Full			
	drc		
	tUn	Auto Tune	yes
	SFr	Switching Frequency	2kHz.
	Ctt	Motor Control Type	PErF
	StA	Frequency Loop Stability	10
	Fun		
	rrS	Turn On LI2	L2H

4000M-SA Prestretch Drive

rdy — Conf

	ACC	Acceleration	2.5
	dEC	Deceleration	0.1
	HSP	High Speed	60.0
	bFr	Motor Frequency	60
Full			
	drc		
	tUn	Auto Tune	yes
	SFr	Switching Frequency	2kHz.
	Ctt	Motor Control Type	PErF
	StA	Frequency Loop Stability	10

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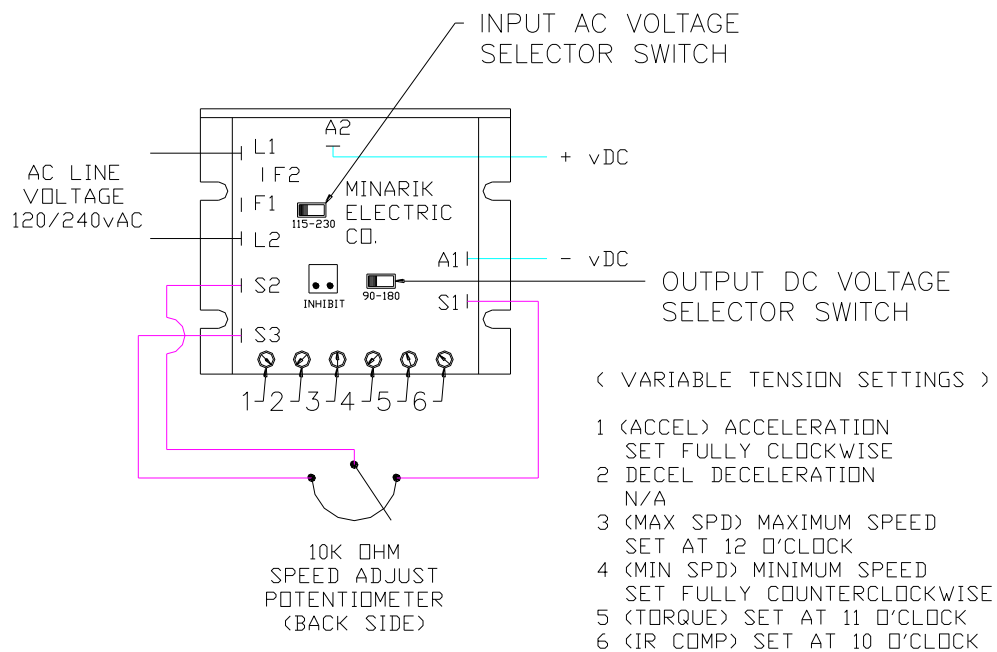
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4000M-SA Turntable Drive

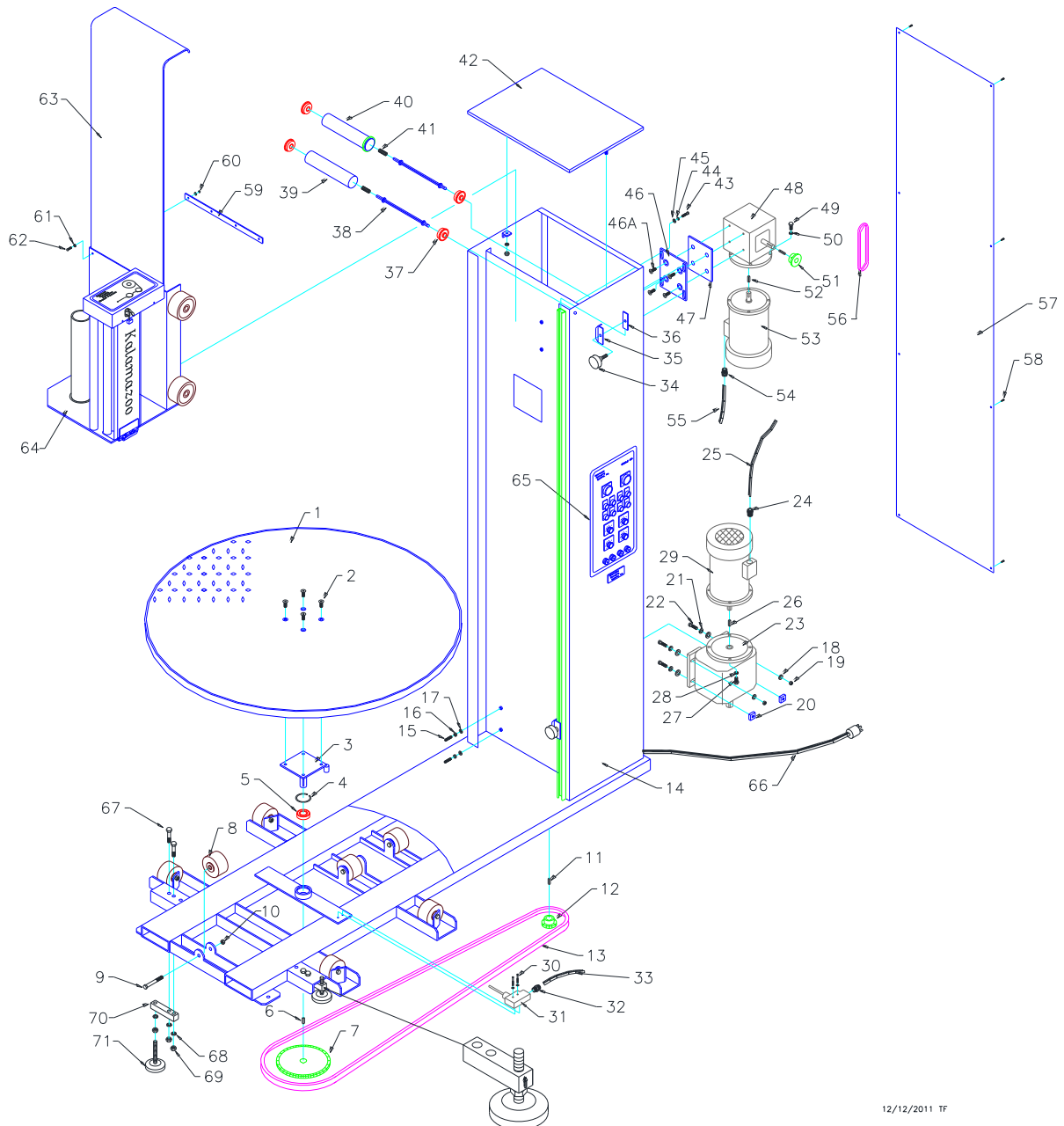
rdy — Conf

ACC	Acceleration	5.0
dEC	Deceleration	6.0
HSP	High Speed	60.0
bFr	Motor Frequency	60
Full		
drc		
tUn	Auto Tune	yes
SFr	Switching Frequency	2kHz.
Ctt	Motor Control Type	PErF
StA	Frequency Loop Stability	10
Fun		
Pss		
PS2	2 Preset Speed	L4H
PS4	4 Preset Speed	L4H
SP4	Preset Speed 4	15.0

VARIABLE TENSION FILM DELIVERY DC CONTROLLER SETTINGS



Kalamazoo Packaging Systems Model #4000M Turntable with Scale and Tower



12/12/2011 TF

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PARTS MANUAL: 4000M-TURNTABLE & TOWER

ITEM	PART#	DESCRIPTION	QTY.
1	3620220	4000M Disc	1
2	F1351	3/8-16x 1" F.H.C.S.	4
3	3670620	4000M Center Shaft	1
4	1209050	2" Snap Ring	1
5	1209000	1" Turntable Center Bearing	1
6	F20x1	1/4"x 1/4"x 1" Keyway	1
7	1081000	50B40x 1" Sprocket	1
8	1221500	3-1/4"x 2"x 1/2" Turntable Wheel	7
9	1221550	1/2"X 3-1/2" Wheel Axle	7
10	F1905	1/2-13 Nylock Nut	7
11	F15	3/16"x 5/16"x 1.5" Keyway	1
12	1080300	50B18x 1" Sprocket	1
12	1080020	50B12x 1" Sprocket (system with extra length over 12")	1
13	1085000	#50 Chain x 141-1/4" Plus Master Link (4000M)	1
13	1085000	#50 Chain x 163-3/4" Plus Master Link (4060M)	1
14	4060480	4000M 48" SCALE TURNTABLE & TOWER WELDMENT	1
14	4060481	4000T 48" w/o SCALE TURNTABLE & TOWER WELDMENT	1
14	4060600	4060M 60" SCALE TURNTABLE w/ TOWER WELDMENT	1
14	4060600	4060T 60" w/o SCALE TURNTABLE w/ TOWER WELDMENT	
14	4060720	4000M 72" SCALE TURNTABLE w/ TOWER WELDMENT	1
14	4060721	4072T 72" w/o SCALE TURNTABLE w/ TOWER WELDMENT	1
14	4060840	4084M 84" SCALE TURNTABLE w/ TOWER WELDMENT	1
14	4060841	4084T 84" w/o SCALE TURNTABLE w/ TOWER WELDMENT	1
15	F1090	5/16-18x 2" Set Screw	2
16	F1000	5/16-18 Nut	2
17	F1017	5/16 SAE Washer	2
18	F1316	3/8 USS Washer	4
19	F1300	3/8-16 Nut	2
20	4000M-STTMM-LP-R1	3/8-16 Locking Plate	2

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PARTS MANUAL: 4000M-TURNABLE & TOWER

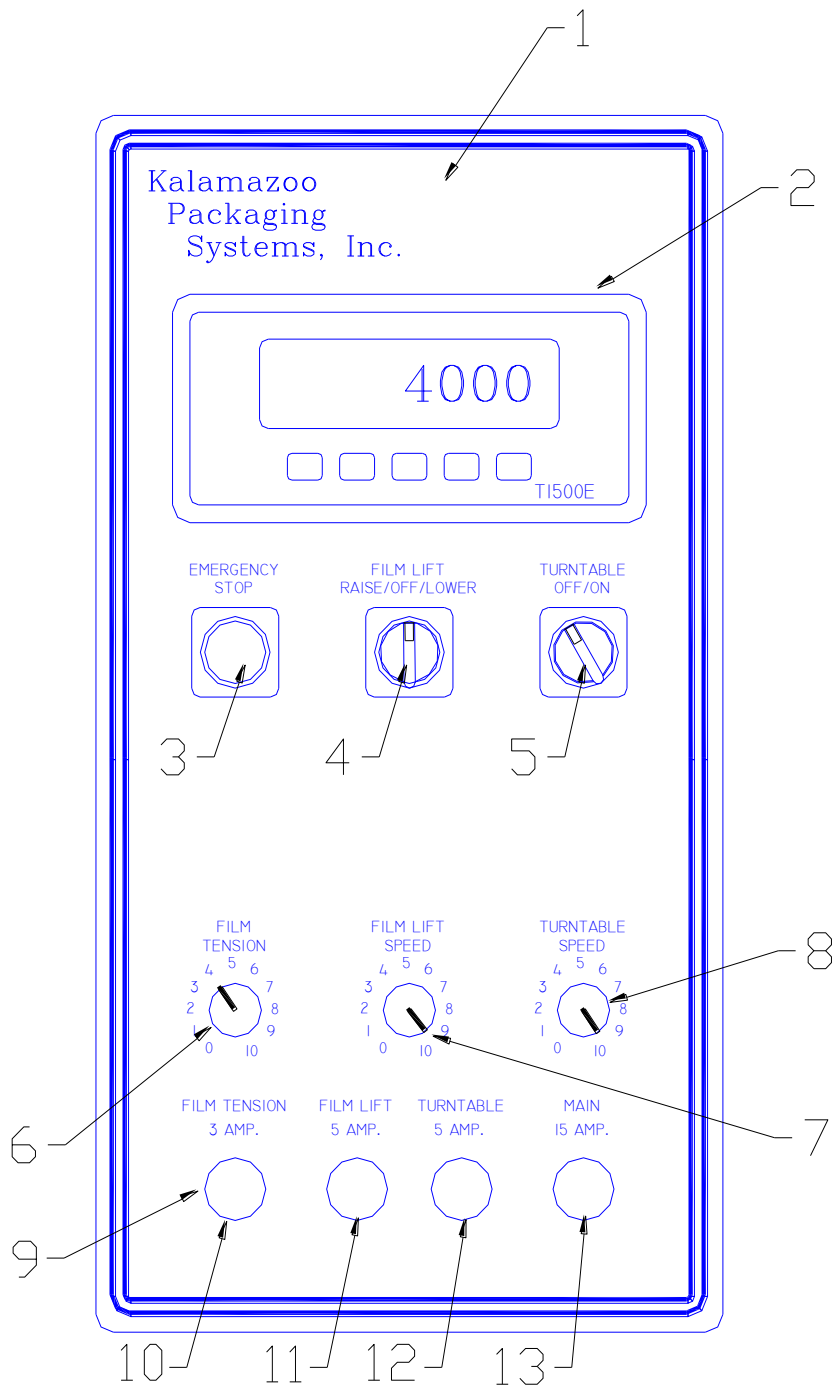
ITEM	PART#	DESCRIPTION	QTY.
21	F1315	3/8 Lock Washer	4
22	F1337	3/8-16x 2" H.H.C.S.	4
23	1059801	58:1 Inline Reducer (Dodge)	1
24	2103400	Cord Grip	1
25	2099010	14/4 STO Cord	3'
26	F10	3/16"x 3/16"X 3/4" Keyway	1
27	F1333	3/8-16x 1" H.H.C.S.	4
28	F1315	3/8 Lock Washer	4
29	1053130	1/2hp. AC Motor	1
30	F210	6/32x 1-3/4" Machine Screw	2
31	2108510	Autostop Limit Switch Spring Arm	1
32	2103400	Cord Grip	2
33	2098500	16/3 SJ Cord	10'
34	8000951	3/8-16 Knob x 3/4"	2
35	4060040	4000M-LSB Outer Limit Switch Bracket	2
36	4060050	4000M-LSB Inter Limit Switch Bracket	2
37	1214050	1.9" Conveyor Roller Bearing	4
38	4060060	4000M-STRHS Roller Hex Shaft	2
39	4060070	4000M-STIR Idler Belt Roller	1
40	4060090	4000M-STDR Drive Belt Roller	1
41	1214471	Roller Spring	2
42	4060010	4000M-STTC-01 Tower Top Cover	1
43	F1033	5/16-18x 1" H.H.C.S.	4
44	F1015	5/16 Lock Washer	4
45	F1016	5/16 USS Washer	4
46	4060030	4000M-STMM1 Film Lift Motor Mount	1
46A	F751	1/4-20x 1" Flat Head	4
47	4060030a	4000M-STMMS1 Film Lift Motor Spacer	1
48	1061000T	60:1 R/A Reducer (Tigear)	1
49	F1333	3/8-16x 1" H.H.C.S.	4

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PARTS MANUAL: 4000M-TURNABLE & TOWER

ITEM	PART#	DESCRIPTION	QTY.
50	F1315	3/8 Lock Washer	4
51	1079760	40B13x 5/8" Sprocket	1
52	F10	3/16"x 3/16"X 3/4" Keyway	1
53	1053130	1/2hp. AC Motor (Reliance)	1
54	2103400	Cord Grip	1
55	2099010	14/4 STO Cord	4-1/2'
56	1084000	# 40 Chain x 20-1/2" w/ Master Link	1
57	4060020	4000M-STD Tower Back Cover	1
58	F740	1/4-20x3/4" Stainless Steel Button Head Cap Screw	8
59	4060110	4000M-H-BP Carriage Belt Plate	1
60	F510	10/24 Keps Nut	4
61	F400	#10 Washer	8
62	F515	10/24x 3/4" Truss Head	4
63	4060100	4000M-BELT #120 Black PVC 18"x 90"	1
63	4060100-120	Extra Height 4000M-BELT-120 #120 Black PVC 18"x 118.5"	1
64	see page 19-30	Film Delivery Head	1
65	See page 15-16	4000M-SA Control Panel	1
66	2097680	14/3 Red Power Cord x 15'	1
		OPTIONAL SCALE	
67	F2117	1/2-20x 2-1/2" H.H.C.S.	8
68	F1915	1/2 Lock Washer	8
69	F2100	1/2-20 Nuts	8
70	2410090	4K Load Cell (Use load cell spacer when needed. Not Shown) (EXC+ Red, EXC- Black, SIG+ Green, SIG- White, SHLD Shield Wire)	4
71	2410130	Load Cell Feet	4

4000M-PM CONTROL PANEL



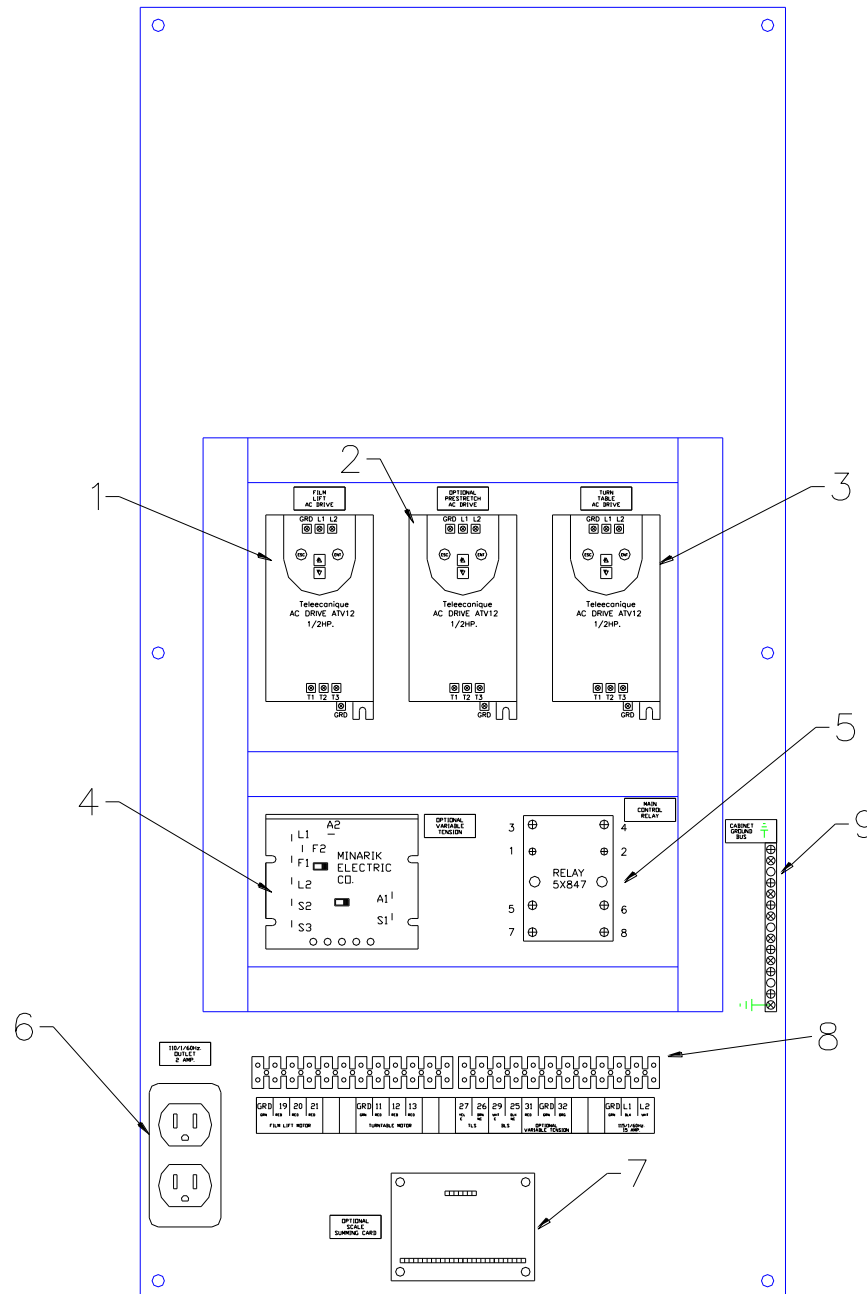
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PARTS MANUAL:

4000M-PM CONTROL PANEL

ITEM	PART#	DESCRIPTION	QTY
1	4000M-PM	4000M-PM Decal	1
2	2410120	Scale Display TI-500E (OPTIONAL SCALE) (EXC+ Red, EXC- Black, SIG+ Green, SIG- White, SHLD Shield Wire)	1
3	2071100	E-STOP Button (PUSH OFF/ TURN TO RESET)	1
4	2071070	3-Position Selector Switch	1
5	2071000	2-Position Selector Switch	1
6	1312050	10K Potentiometer w/ Knob (OPTIONAL FILM TENSION)	1
7	1312050	10K Potentiometer w/ Knob (FILM LIFT SPEED)	1
8	1312050	10K Potentiometer w/ Knob (TURNTABLE SPEED)	1
9	2107700	Panel Mount Fuse Holder	4
10	2107770	3AMP. Fuse (OPTIONAL FILM TENSION)	1
11	2107780	5AMP. Fuse (FILN LIFT)	1
12	2107780	5AMP. Fuse (TURNTABLE)	1
13	2107860	15 AMP. Fuse (MAIN)	1

4000M-PM SUBPANEL



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PARTS MANUAL:

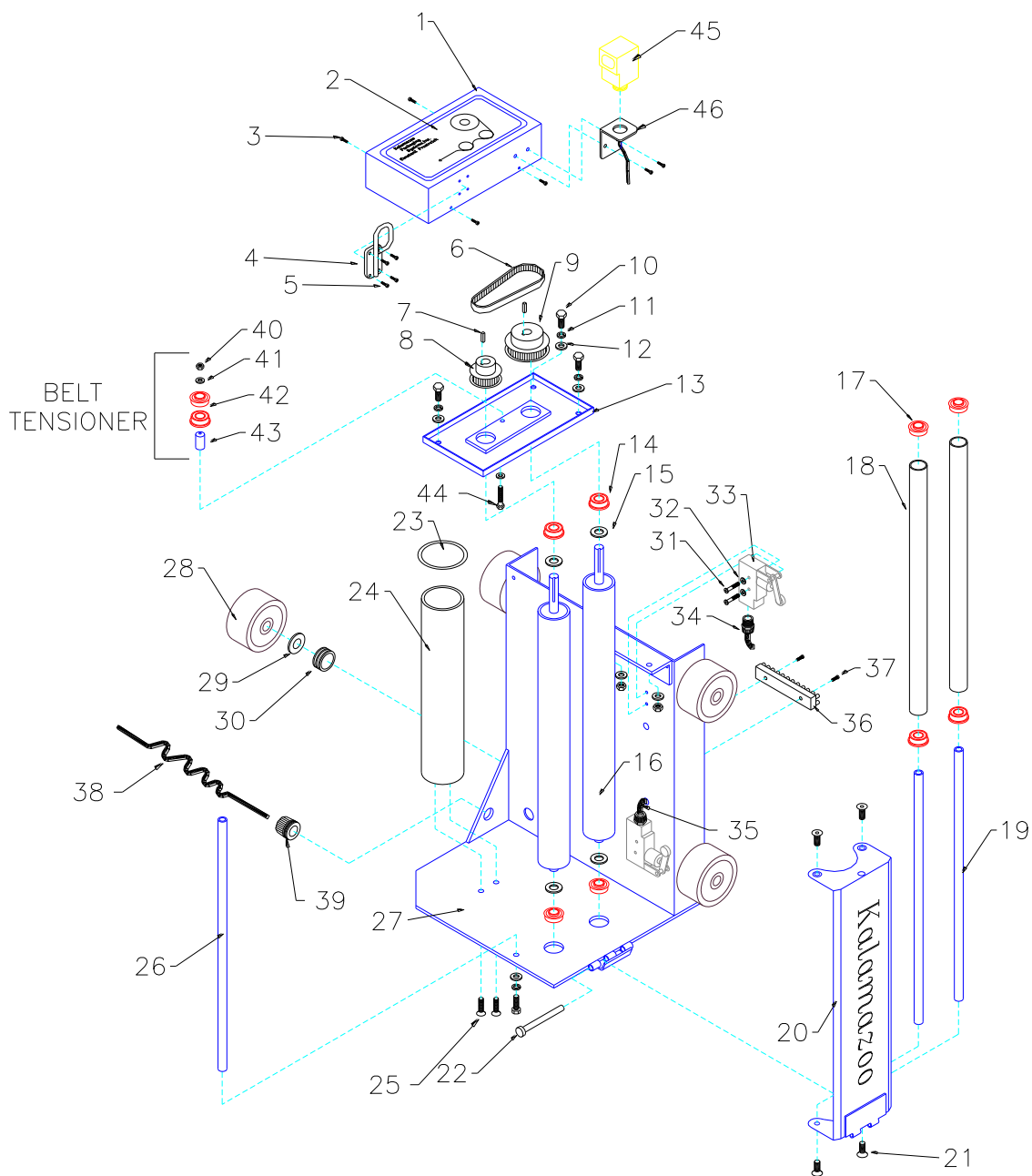
4000M-PM SUB PANEL

ITEM	PART#	DESCRIPTION	QTY
1	1318501	Telemecanique 1/2 hp. AC Drive (FILM LIFT)	1
2	1318501	Telemecanique 1/2 hp. AC Drive (OPTIONAL POWERED PRESTRETCH)	1
3	1318501	Telemecanique 1/2 hp. AC Drive (TURNTABLE)	1
4	1312000	90/180v DC Controller (OPTIONAL FILM TENSION)	1
5	2080500	2PDT 30a. Main Control Relay (MCR)	1
6	2101550	110v Outlet (Scale System Only)	1
7	2410110	Summing Card (OPTIONAL SCALE)	1
8	2097000	12 Terminal Strip	2
9	2104360	Cabinet Ground Bus	1

4000M-CP-H2

CONSTANT PRESRTETCH

FILM DELIVERY



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PARTS MANUAL:H2 CONSTANT PRESTRETCH FILM DELIVERY

ITEM	PART#	DESCRIPTION	QTY
1	4060232	4000M-H2-C Film Cover	1
2	4060240	Constant Prestretch Film Delivery Decal	1
3	L25	10/32 x 3/4" Truss Head	4
4	8134980	D-Handle Film Door Latch	1
5	L7	8/32 x 3/4" Machine Screw w/ Lock Nut	4
6	1073100	Timing Belt (STANDARD) 1/2"x 16.5"	1
7	L2	3/16" x 3/16" x 1-1/4 "Keyway	2
8	1073140	14 Tooth Pulley	1
9	1073200	20 Tooth Pulley	1
10	L80	3/8-16x 1 H.H.C.S. (2 with 3/8-16 Nuts)	4
11	L64	3/8 Lock Washer	4
12	L66	3/8 SAE Washer	4
13	4060252	4000M-H2-TP-R1 Film Top Plate	1
14	120650	5/8 x 1-3/8 Precision Flange Bearing	4
15	L145	5/8 Spring Washer	4
16	6230652	4000M-H2-R 20" Brake Roller	2
16	6230653	4000M-H2-R 30" Brake Roller	2
17	1206000	5/8 x 1-3/8 Flange Bearing	4
18	4060282	4000M-H2-D 20" Film Door Roller	2
18	4060283	4000M-H2-D 30" Film Door Roller	2
19	4060272	4000M-H2-D 20" Film Door Roller Shaft	2
19	4060273	4000M-H2-D 30" Film Door Roller Shaft	2
20	4060262	4000M-H2-D 20" Film Door	1
20	4060263	4000M-H2-D 30" Film Door	1
21	L58b	5/16-18x 1 B.H.C.S.	4
22	338712	Hinge Pin	1
23	1208600	3" Thrust Washer	1

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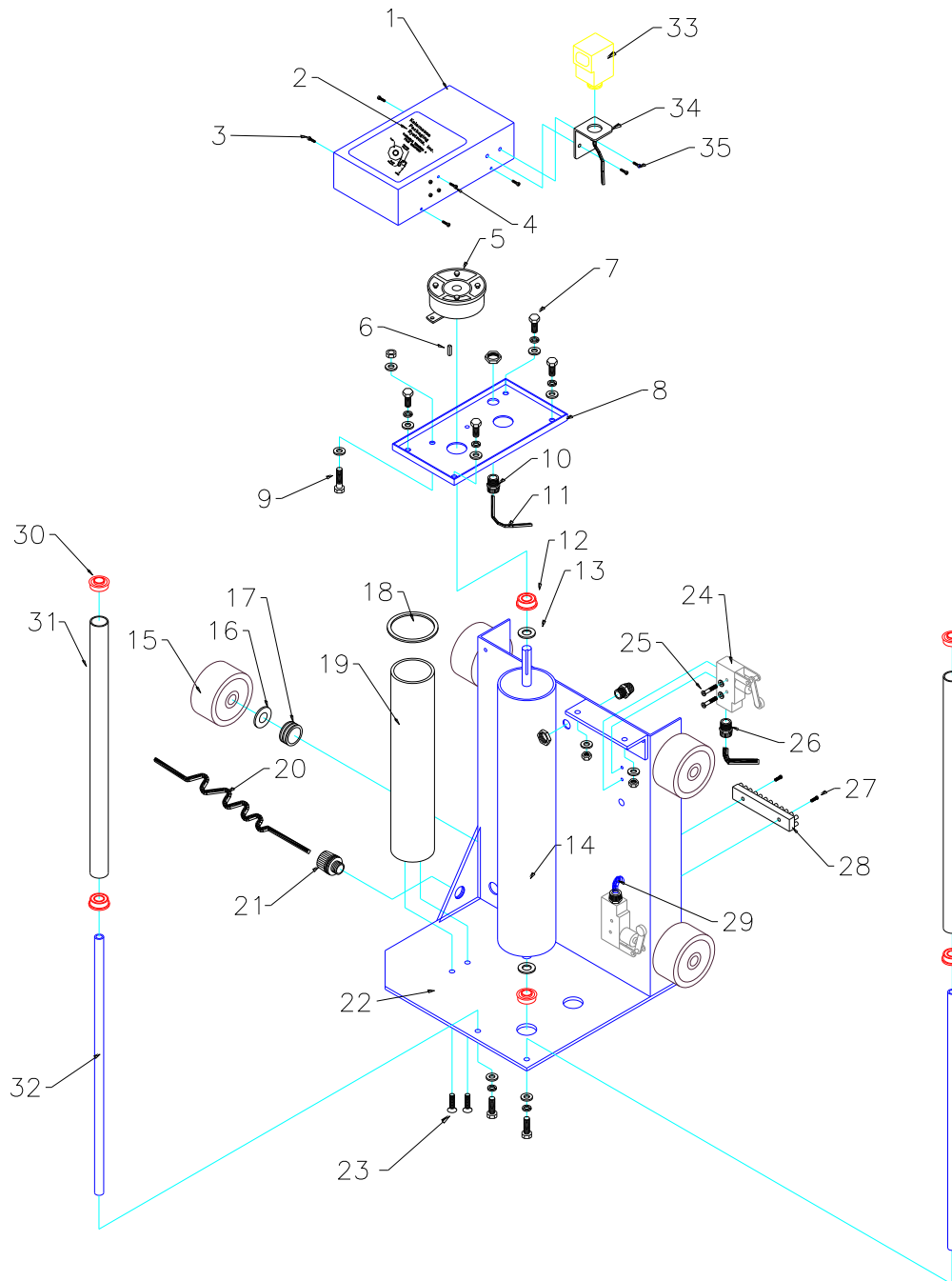
PARTS MANUAL: H2 CONSTANT PRESTRETCH FILM DELIVERY

ITEM	PART#	DESCRIPTION	QTY
24	6230800	2.95" Diameter x 15" Film Core	1
24	6230810	2.95" Diameter x 20" Film Core	1
25	L55	5/16-18x 1-1/2 F.H.C.S.	2
26	4060222	4000M-H2-R 20" Film Head Support Shaft	1
26	4060223	4000M-H2-R 30" Film Head Support Shaft	1
27	4060212	4000M-H2-FHBP-CP 20" Film Base Plate	1
27	4060213	4000M-H2-FHBP-CP 30" Film Base Plate	1
28	1222500	4"x 1-1/2"X 3/4" Carriage Wheels	4
29	L161	Carriage Wheel Springs	4
30	1222500	Carriage Wheel Spacer 0.840'	4
31	L6	6/32x1-3/4" Machine Screw	4
32	L6a	#6 Washer	4
33	2108500	Limit Switch (ROLLER ARM)	2
34	2103400	Cord Grip	2
35	2098500	16/3 SJ Cord	2
36	2097000	12 Terminal Strip	1
37		#6 x 3/4" Sheet Metal Screw	2
38	2100520	16/5 Coiled Cord x 2'	1
39	2103570	1" Cord Grip	1
40	L29	1/4-20 Nylock Nut	1
41	L32	1/4 USS Washer	2
42	1207000	3/4 x 1-3/8 Flange Bearing	2
43	1073110	Belt Tensioner Shaft	1
44	L38x2	1/4-20x 2" H.H.C.S.	1
45	2132560	Q45 Banner Photo-eye (4000M-SA only) Dark Operate Adjust the Gain so eye does not see pass the turntable disc	N/A
45	213257	Banner Photo-eye 4-pin cable 6' long	N/A
45	2132520	Banner Photo-eye Timing Module (4-5 on / 1-2-3-6-7-8 off) Set Timer for 5 second	N/A
46	2132530	Banner Photo-eye Mounting Bracket	N/A

Parts Manual: 4000M-H2-CP Constant Prestretch Film Delivery Optional Tension Pulleys and Belts

ITEM	PART#	DESCRIPTION	QTY
		120% @ 28 Pounds of Pull	
8	1073120	12 Tooth Pulley	1
9	1073280	28 Tooth Pulley	1
	1073110	Belt Tensioning Kit	1
		110% @ 27 Pounds of Pull	
8	1073120	12 Tooth Pulley	1
9	1073240	24 Tooth Pulley	1
	1073110	Belt Tensioning Kit	1
		90% @ 25 Pounds of Pull	
8	1073120	12 Tooth Pulley	1
9	1073220	22 Tooth Pulley	1
	1073110	Belt Tensioning Kit	1
		70% @ 19 Pounds of Pull	
8	1073140	14 Tooth Pulley	1
9	1073240	24 Tooth Pulley	1
	1073110	Belt Tensioning Kit	1
		50% @ 17-3/4 Pounds of Pull	
8	1073160	16 Tooth Pulley	1
9	1073240	24 Tooth Pulley	1
		40% @ 16 Pounds of Pull(STANDARD)	
8	1073140	14 Tooth Pulley	1
9	1073200	20 Tooth Pulley	1
	1073110	Belt Tensioning Kit	1
		20% @ 11 Pounds of Pull	
8	1073160	16 Tooth Pulley	1
9	1073200	20 Tooth Pulley	1
	1073110	Belt Tensioning Kit	1

4000M-H2-VT4 VARIABLE TENSION FILM DELIVERY



Kalamazoo Packaging Systems

Parts Manual: 400M-H2-4VT Variable Tension Film Delivery

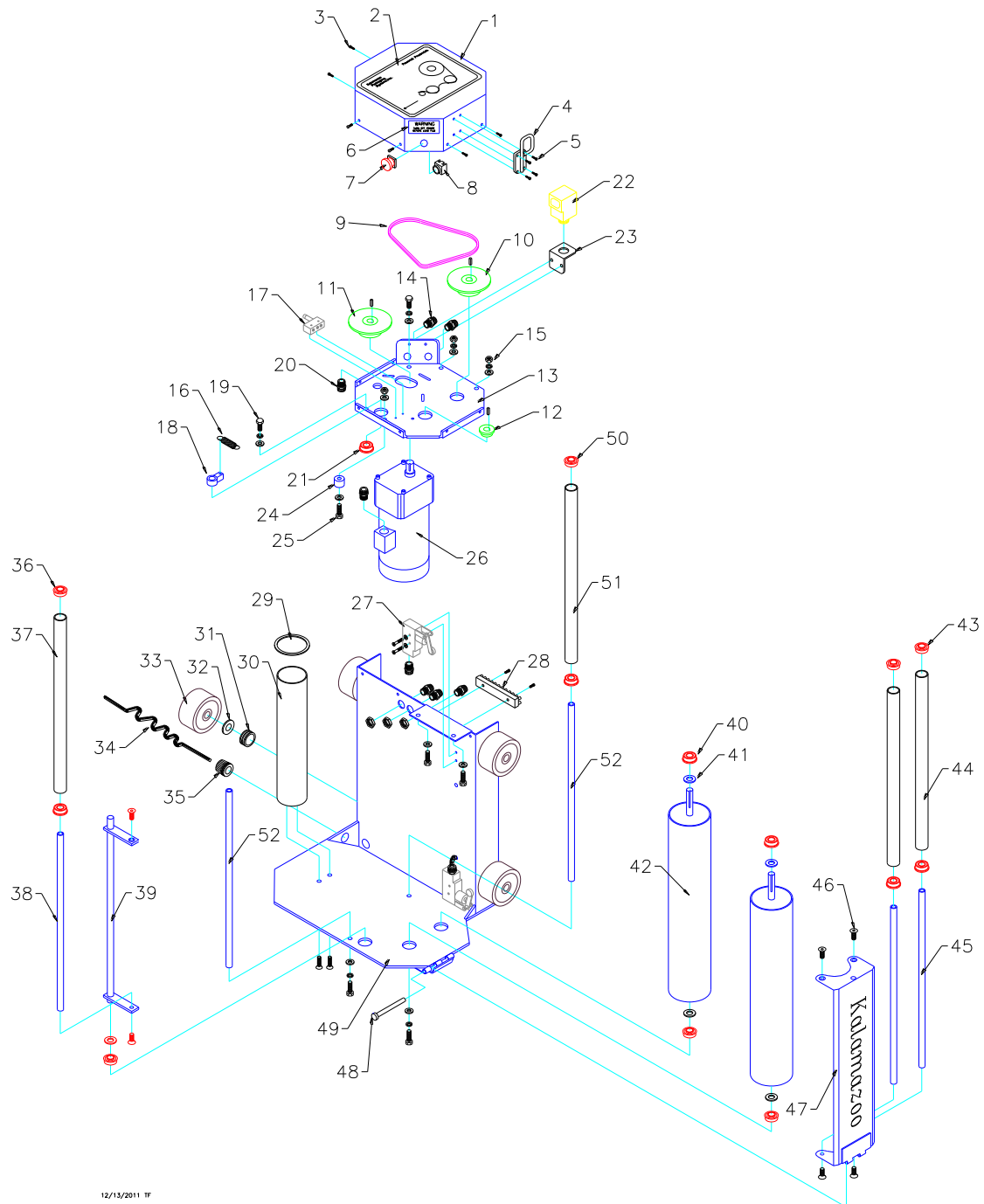
ITEM	PART#	DESCRIPTION	QTY
1	4060232	4000M-H2-C Film Cover	1
2	4060242	Variable Tension Film Delivery Decal	1
3	F440	10/32 x 3/4" Truss Head Screw	6
4	F312	8/32 x 3/4" Machine Screw w/ Lock Nut	4
5	1305000	90v DC Brake 5/8" Bore Warner: Remove Top Spring and Retainer. Dodge: Remove Retainer Snap Ring.	1
6	F15x0.75	3/16" x 3/16" x 3/4 "Keyway	1
7	F1333, F1315, F1300	3/8-16x 1 H.H.C.S., 3/8 Lock Washer, 3/8 SAE Washer and (2 with 3/8-16 Nuts)	6
8	4060252	4000M-H2-TP-R1 Film Top Plate	1
9	F1035, F1017, F100	5/16-18 x 1-1/2" H.H.C.S., 5/16 SAE Washer, and Nut	1
10	2103400	7/8" Cord Grip	2
11	2098500	16/3 SJ Cord (Film Brake)	1
12	1206500	5/8 x 1-3/8 Precision Flange Bearing	2
13	F2518	5/8 Spring Washer	2
14	6230655	4000M-H2-4VT-R 20" Brake Roller 4" Dia.	1
15	1222500	4"x 1-1/2"X 3/4" Carriage Wheels	4
16	F2818	Carriage Wheel Spring	4
17	1222490	Carriage Wheel Spacer 0.840"	4
18	1208600	3" Thrust Washer	1
19	6230800	2.95" Diameter x 15" Film Core	1
19	6230810	2.95" Diameter x 20" Film Core	1
20	2100540	16/8x 2' Coiled Cord	1
21	2103570	1" Cord Grip	1
22	4060214	4000M-H2-FHBP-4VT Film Base Plate	1

Kalamazoo Packaging Systems

Parts Manual: 400M-H2-4VT Variable Tension Film Delivery

ITEM	PART#	DESCRIPTION	QTY
23	F1053	5/16-18x 1-1/2 F.H.C.S.	2
24	210850	Limit Switch (Roller Arm)	2
25	F210	6/32x 1-3/4" Machine Screw	4
26	2103400	7/8" Cord Grip	2
27	F251	#6 x 3/4" Sheet Metal Screw	4
28	2097000	12 Terminal Strip	1
29	2098500	16/3 SJ Cord (Limit Switch)	2
30	1206000	5/8 x 1-3/8 Flange Bearing	4
31	5371250	1-1/4" PVC Idler Roller	2
32	4060222	4000M-H2-R Film Head Support Shaft	2
33	2132560	Q45 Banner Photo-eye (4000M-SA only) Dark Operate Adjust the Gain (upper right corner no markings) so eye does not see pass the turntable disc	N/C
33	2132570	Banner Photo-eye 4-pin cable 6' long	N/A
33	2132520	Banner Photo-eye Timing Module (4-5 on / 1-2-3-6-7-8 off) Set Timer (Delay) for 5 second	N/A
34	2132530	Banner Photo-eye Mounting Bracket	N/A
35	F515, F510	10/24x 3/4" Truss Head, 10/24 Keps Nuts	N/A

4000M-HPS POWERED PRESTRETCH FILM DELIVERY



12/13/2011 1P

Kalamazoo Packaging Systems

Parts Manual: Powered Prestretch Film Delivery

ITEM	PART#	DESCRIPTION	QTY
1	4060290	4000M-HPS-C Top Cover	1
2	4060340	4000M Pre-Stretcher Film Loading Decal	1
3	F440	10/32 x 3/4" Truss Head Phillips	6
4	8134980	D-Handle Film Door Latch	1
5	F312	8/32 x 3/4" Machine Screws w/ Locknuts	4
6	4060350	Warning Decal for Pre-Stretcher	1
7	2064000	E-Stop Button	1
8	2064310	NC Contact Block	1
9	1083500	#35 Chain x 3'	1
10	1077770	35B36 x 5/8" Finish Bore Sprocket	1
11	1077780	35B36 x 3/4" Finish Bore Sprocket	1
12	1075750	35B10 x 5/8" Finish Bore Sprocket (250% Pre-Stretch)	1
12	1076000	35B11 x 5/8" Finish Bore Sprocket (220% Pre-Stretch)	1
12	1076500	35B13 x 5/8" Finish Bore Sprocket (170% Pre-Stretch)	1
12	1077000	35B15 x 5/8" Finish Bore Sprocket (135% Pre-Stretch)	1
12	1077500	35B17 x 5/8" Finish Bore Sprocket (105% Pre-Stretch)	1
13	4060330	Prestretch Top Plate	1
14	2103450	Cord Grip	5
15	F1305, F1315, F1316	3/8"-16 Nylock Nut, 3/8" Lock Washer, and 3/8" USS Washer	2
16	7055250	#99 Spring	1
17	2108550	Micro Switch	1
18	4060360	Dancer Bar Micro Switch Collar DWG# 4000M-HPS-DB	1
19	F1333, F1315, F1316	3/8"-16 x 1" H.H.C.S., 3/8" Lock Washer, and 3/8" USS Washer	4
20	2103400	Cord Grip	2
21	1206500	1 3/8" x 5/8" Precision Flange Bearing	2
22	2132560	Q45 Banner Photo-eye (4000M-SA only) Dark Operate Adjust the Gain (upper right corner no markings) so eye does not see pass the turntable disc	N/A
22	2132570	Banner Photo-eye 4-pin cable 6' long	N/A

Kalamazoo Packaging Systems

Parts Manual: Powered Prestretch Film Delivery

ITEM	PART#	DESCRIPTION	QTY
22	2132520	Banner Photo-eye Timing Module (4-5 on / 1-2-3-6-7-8 off) Set Timer (Delay) for 5 second	N/A
23	2132530	Banner Photo-eye Mounting Bracket	N/A
24		1" O.D. x 3/8" I.D. x 3/4" Rubber hose	1
25	F1335, F1316, F1305	3/8-16x1-1/2" H.H.C.S., 3/8 USS Washer, 3/8-16 Nylock Nut	1
26	1056010	1/4 HP Inline Gear motor	1
27	2108500	Limit Switch (Roller Arm)	2
28	2097000	12 Block Terminal Strip	2
29	1208600	3" Thrust Washer	1
30	6230800	2.95" Diameter x 15" Film Core	1
30	6230810	2.95" Diameter x 20" Film Core	1
31	1222490	Carriage Wheel Spacers 0.840"	4
32	F2818	Carriage Wheel Spring Washers	4
33	1222500	4" x 1 1/2" x 3/4" Carriage Wheels	4
34	2100550	18/15x 2' Coiled Cord	1
35	2103570	1" Cord Grip	1
36	1206000	5/8" x 1 3/8" Flange Bearing	2
37	4060370	4000M-HPS-DB 20" Dancer Bar Roller	1
37	4060373	4000M-HPS-DB 30" Dancer Bar Roller	1
38	4060380	4000M-HPS-DB 20" Dancer Bar Roller Shaft	1
38	4060383	4000M-HPS-DB 30" Dancer Bar Roller Shaft	1
39	4060390	4000M-HPS-DB 20" Dancer Bar	1
39	4060393	4000M-HPS-DB 20" Dancer Bar	1
40	1206500	5/8 x 1-3/8 Precision Flange Bearing	4
41	F2518	5/8" Spring Washer	4
42	6230660	20" Brake Roller x 4" Dia	2
42	6230663	30" Brake Roller x 4" Dia	2
43	1206000	1 3/8" x 5/8" Flange Bearing	4

Kalamazoo Packaging Systems

Parts Manual: Powered Prestretch Film Delivery

ITEM	PART#	DESCRIPTION	QTY
44	4060400	4000M-HPS-FD1 20" Film Door Roller	2
44	4060403	4000M-HPS-FD1 30" Film Door Roller	2
45	4060410	4000M-HPS-FD1 20" Film Door Roller Shaft	2
45	4060413	4000M-HPS-FD1 30" Film Door Roller Shaft	2
46	F1092	5/16"-18 x 3/4" B.H.	4
47	4060320	4000M-HPS-FD 20" Film Door	1
47	4060323	4000M-HPS-FD 30" Film Door	1
48	3387120	Hinge Pin	1
49	4060300	20" Pre-Stretcher Carriage	1
49	4060303	30" Pre-Stretcher Carriage	1
50	1206000	5/8" x 1 3/8" Flange Bearing	2
51	4060420	4000M-HPS-IR 20" Idler Roller	1
51	4060423	4000M-HPS-IR 30" Idler Roller	1
52	4060425	4000M-HPS-IRS 20" Idler Roller Shaft	2
52	4060428	4000M-HPS-IRS 30" Idler Roller Shaft	2

Kalamazoo Packaging Systems: Available Options

ITEM	PAGE	PART#	DESCRIPTION	QTY
NOT SHOWN		3630020	4000M Ramp	
NOT SHOWN		3630050	4000M Scale Ramp	
NOT SHOWN		3630090	4000M Powered Walkie Ramp	
			30" Constant Prestretch Film Delivery	
51	12	1079760	40B13x 5/8" Sprocket	-1
51	12	1079770	40B17x 5/8" Sprocket	1
16	19	6230652	4000M-H2-R 20" Brake Roller	-2
16	19	6230653	4000M-H2-R 30" Brake Roller	2
18	19	4060282	4000M-H2-D 20" Film Door Roller	-2
18	19	4060283	4000M-H2-D 30" Film Door Roller	2
19	19	4060272	4000M-H2-D 20" Film Door Roller Shaft	-2
19	19	4060273	4000M-H2-D 30" Film Door Roller Shaft	2
20	19	4060262	4000M-H2-D 20" Film Door	-1
20	19	4060263	4000M-H2-D 30" Film Door	1
24	20	6230800	2.95" Diameter x 15" Film Core	-1
24	20	6230810	2.95" Diameter x 20" Film Core	1
26	20	4060222	4000M-H2-R 20" Film Head Support Shaft	-1
26	20	4060223	4000M-H2-R 30" Film Head Support Shaft	1
27	20	4060212	4000M-H2-FHBP-CP 20" Film Base Plate	-1
27	20	4060213	4000M-H2-FHBP-CP 30" Film Base Plate	1

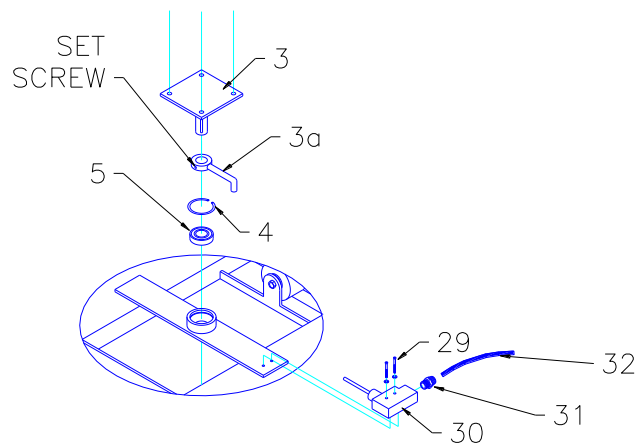
Kalamazoo Packaging Systems: Available Options

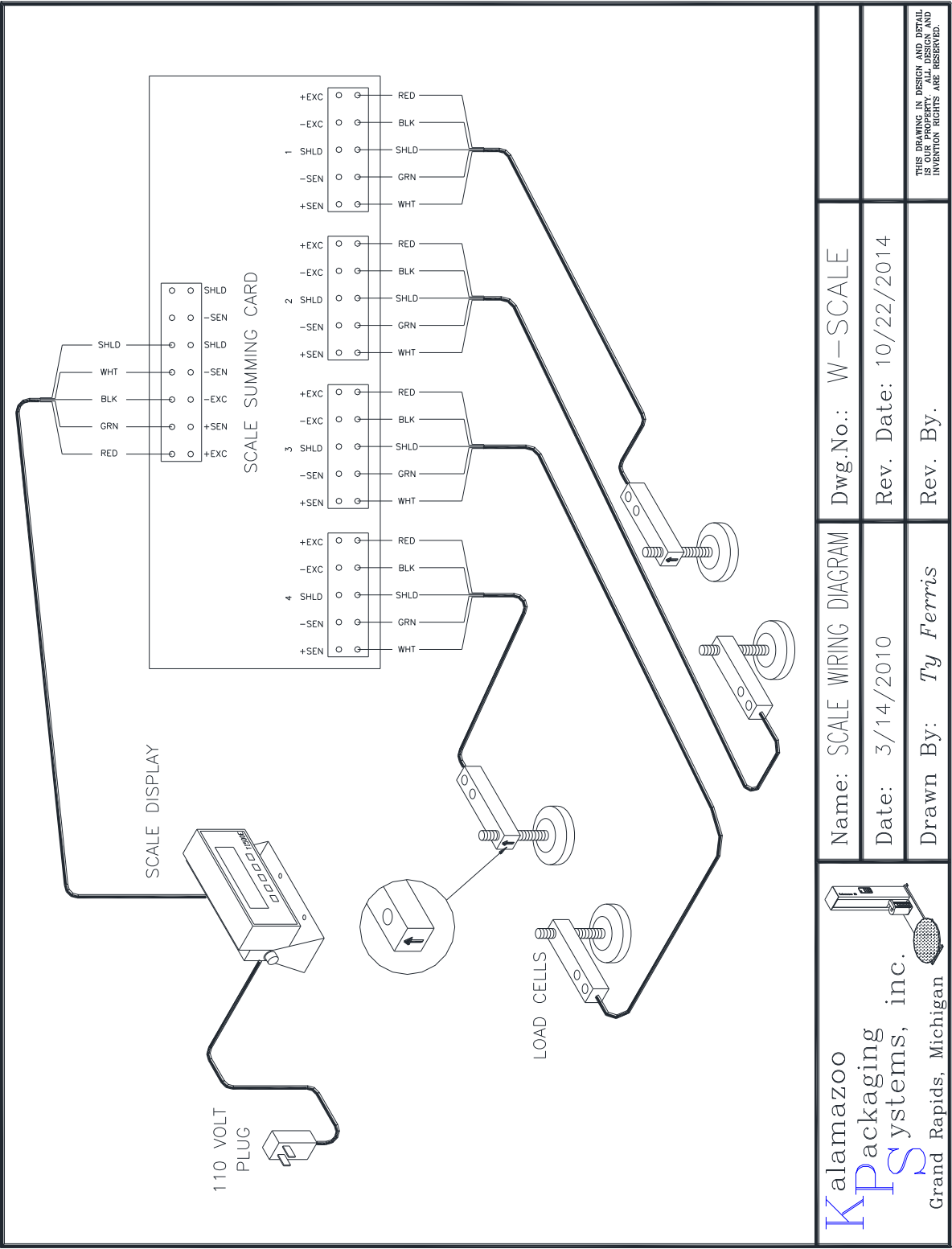
ITEM	PAGE	PART#	DESCRIPTION	QTY
			30" Variable Tension Film Delivery	
51	12	1079760	40B13x 5/8" Sprocket	-1
51	12	1079770	40B17x 5/8" Sprocket	1
14	23	6230655	4000M-H2-4VT-R 20" Brake Roller 4" Dia.	-1
14	23	6230656	4000M-H2-4VT-R 30" Brake Roller 4" Dia.	1
19	23	6230800	2.95" Diameter x 15" Film Core	-1
19	23	6230810	2.95" Diameter x 20" Film Core	1
22	23	4060214	4000M-H2-FHBP-4VT Film Base Plate	-1
22	23	4060215	4000M-H30-FHBP-4VT 30" Film Base Plate	1
31	24	5371250	1-1/4" PVC Idler Roller	-2
31	24	5371250	1-1/4" PVC 30" Idler Roller	2
32	24	4060222	4000M-H2-R Film Head Support Shaft	-2
32	24	4060222	4000M-H2-30-R 30" Film Head Support Shaft	2
			72-84" Turntable w/ Built in scale	
	66	2410090	4K Load Cell (72-84" Turntable add two)	3
	67	2410130	3" Rubber Feet (72-84" Turntable add two)	3

Kalamazoo Packaging Systems: Available Options

ITEM	PART#	DESCRIPTION	QTY
		Extra Length Turntable Chain Guide (Extra length 18" and over)	
NOT SHOWN	4000M-EL-TCGP	Chain Guide Plate	1
NOT SHOWN	4000M-EL-TCG	Chain Guide	1
NOT SHOWN	F1053	5/16-18x 1-1/2" Flat Head	6
NOT SHOWN	F1351	3/8-16x 1" F.H.	4
		Turntable Disc	
1	3620250	4060M 60" Dia. Turntable Disc w/ 1-1/4" Skirt	1
1	3620260	4072M 72" Dia. Turntable Disc w/ 1-1/4" Skirt	1
1	3620270	4084M 84" Dia. Turntable Disc w/ 1-1/4" Skirt	1
		5,000/6,000 lb. SCALE	
66	2410080	5K Load Cell	4
67	2410130	3" Rubber Load Cell Feet	4
		ADJUSTABLE AUTOSTOP	
3a	3670680	Adjustable Autostop Cam	1
3	3670620	4000M Center Shaft w/o Autostop Cam	1

TURNTABLE DISC





Kalamazoo
KPS Packaging Systems, inc.
 Grand Rapids, Michigan

Name: SCALE WIRING DIAGRAM
 Date: 3/14/2010
 Drawn By: Ty Ferris

Dwg.No.: W-SCALE
 Rev. Date: 10/22/2014
 Rev. By:

THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY. ALL DESIGN AND INVENTION RIGHTS ARE RESERVED.

NEW INCELL TI-500E QUICK CALIBRATION (Blue decal)

	500LBS. 1K-CELL	3000LBS. 4K-CELL	4000LBS. 4K-CELL	6000LBS. 6K-CELL
--	--------------------	---------------------	---------------------	---------------------

Push the DIP switch
on the back of the
scale read out to the left.

Turn on the scale.

F1

Push ZERO

0000

5000

6000

6000

6000

Push NET

Push UNIT

F1

Push PRINT

F9

Push ZERO

0

1

1

1

1

Push NET

Push UNIT

F9

Push PRINT

F10

Push ZERO

0

Push PRINT

0

0.0

0

0

0

Push NET

Push UNIT

F10

Push PRINT

F16

Push ZERO

Push ZERO

0

Push NET

Push UNIT

F16

Push PRINT

F17

Put know weight on scale.

Push ZERO

Use the TARE/PRINT button to type in the know weight.

Push NET

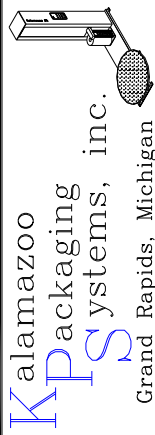
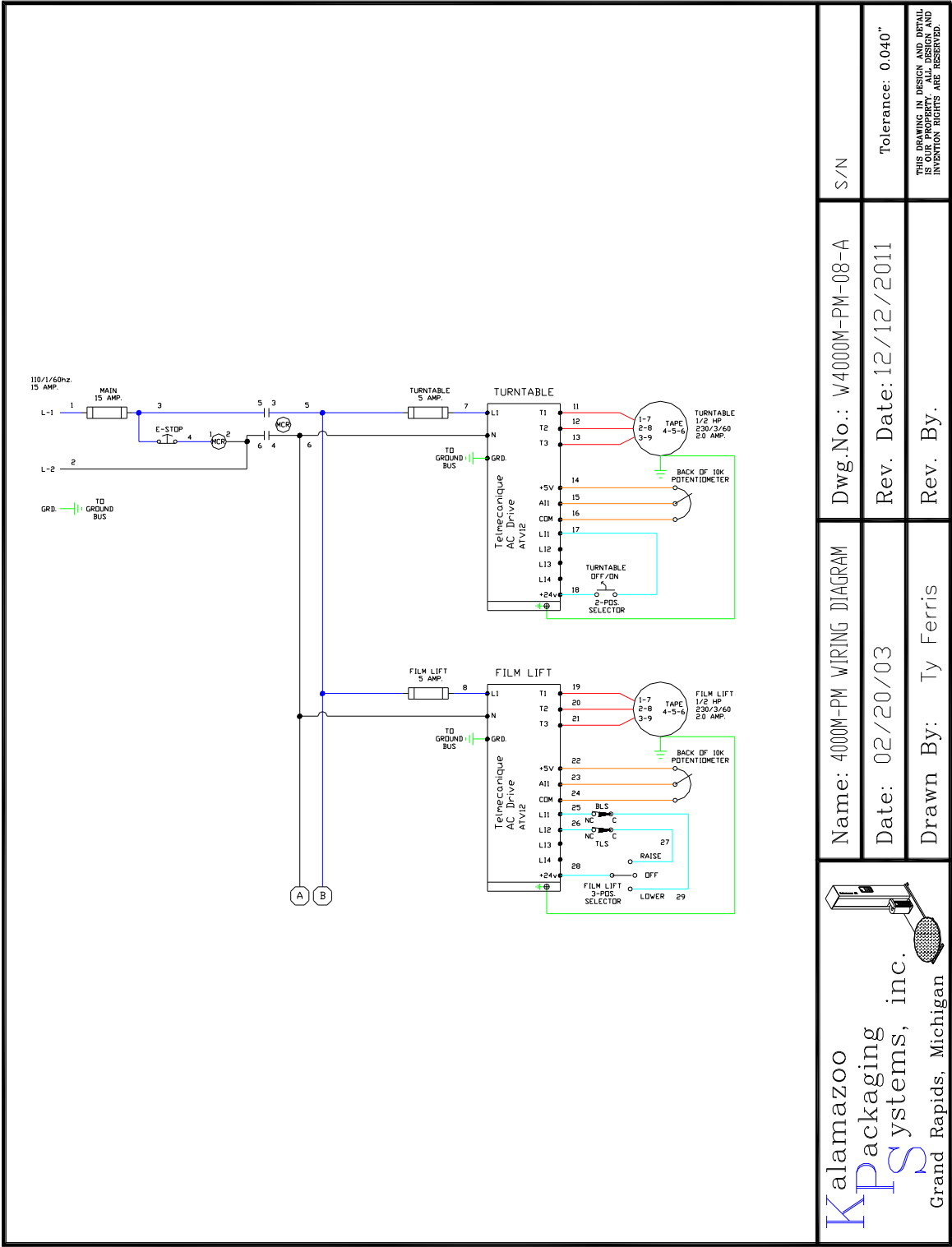
Push UNIT

Remove the know weight.

Push the DIP switch back to the right.

Kalamazoo

Packaging Systems



Kalamazoo
Packaging Systems, inc.
Grand Rapids, Michigan

Name: 4000M-PM WIRING DIAGRAM	Dwg.No.: W4000M-PM-08-A	S/N
Date: 02/20/03	Rev. Date: 12/12/2011	Tolerance: 0.040"
Drawn By: Ty Ferris	Rev. By:	THIS DRAWING IS DESIGN AND DEVELOPMENT PROPERTY OF KALAMAZOO PACKAGING SYSTEMS, INC. AND INVENTION RIGHTS ARE RESERVED.

