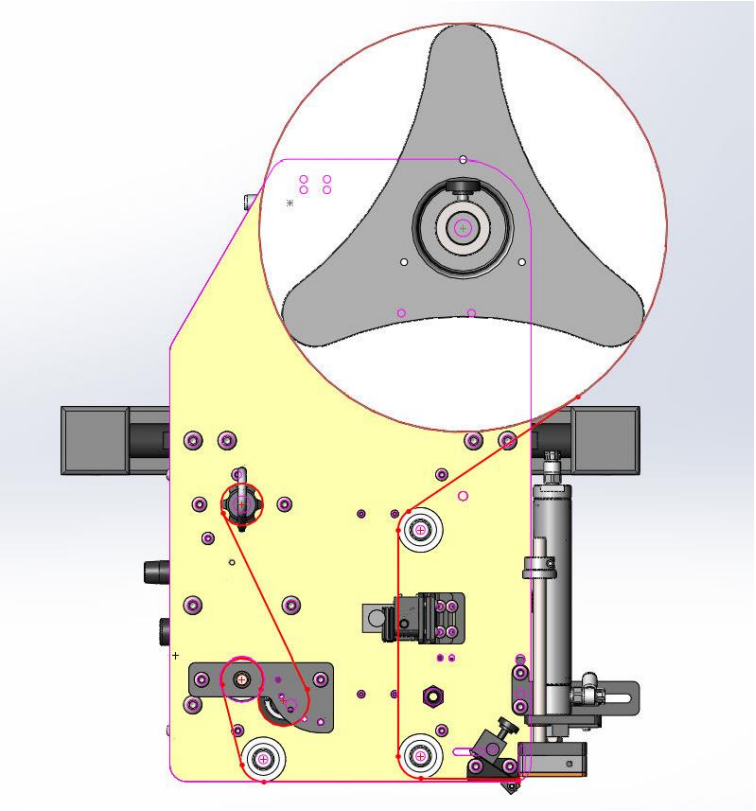
TAKE-A-LABEL, Inc.

Operation Manual
TAL-3100C
Tamp Applicator



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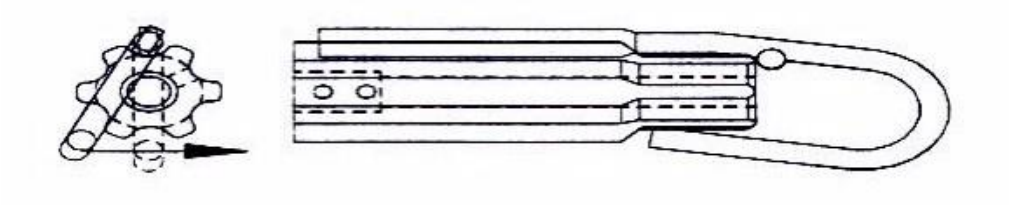
TAL-3100C Tamp Applicator

Machine Startup:

1. Mount the TAL-3100C on an appropriate mounting stand. Be sure to mount the labeler using only the mounting arms.
2. Plug the TAL-3100C directly into a 110 VAC 15-amp Grounded outlet. Extension cords may result in improper labeler operation and are not recommend by Take-A-Label, Inc.
3. Connect the labeler to a sufficient air supply. Note: air requirements are 60 PSI clean dry air. **Note:** The TAL-3100C Typically operates between 30-50 PSI. When air is connected the vacuum generator will continually release air to create the vacuum effect.

Label Threading:

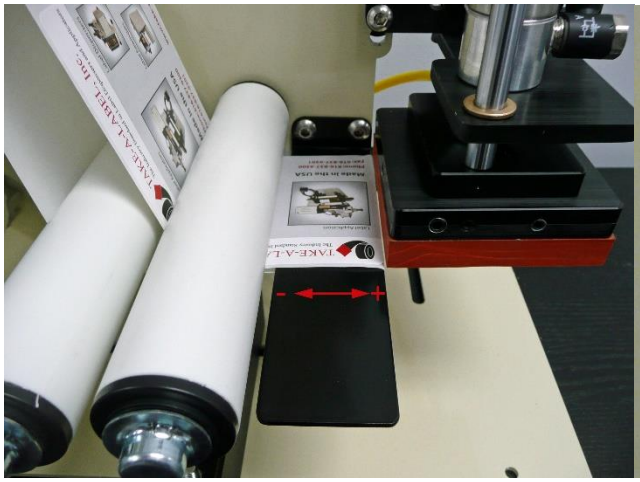
1. Remove outer unwind disc (61) and install new roll of labels and replace disc.
2. Pull label web under the first Idler Roller (25A), and through photo eye (18). Continue pulling the web downward and thread between bottom of roller (25C) and the top of the Peel Plate (1).
3. Pull the web back under the Peel Plate (1), pulling toward the rear of the machine.
4. Keep the liner under the last Idler roller (25B), pulling web up and wrapping over the drive roller (39), and down between the drive roller (39) and pinch roller (22). Then up to the waste wind shaft (52).
    a. Note: The pinch roller (22) is spring loaded. Slight pressure will be needed to separate the pinch roller from the drive roller for threading.
5. Install waste wind clip (3) on waste wind shaft (52) pinching the webbing between the shaft and the clip.



Label Setup:

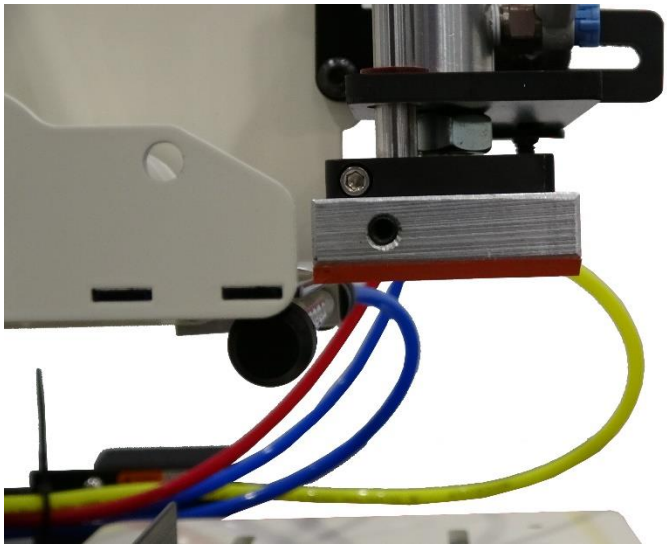
The label advance potentiometer resides on top of the TAL-3100C electrical housing. The purpose is to adjust the stopping position of the label with respect to the peel plate. With the label advance pot turned all the way counterclockwise the photo eye will stop the applicator instantly when it senses a gap. By rotating the potentiometer toward the + the applicator will dispense more of the label, and by rotating the potentiometer toward the – the applicator will dispense less of the label.

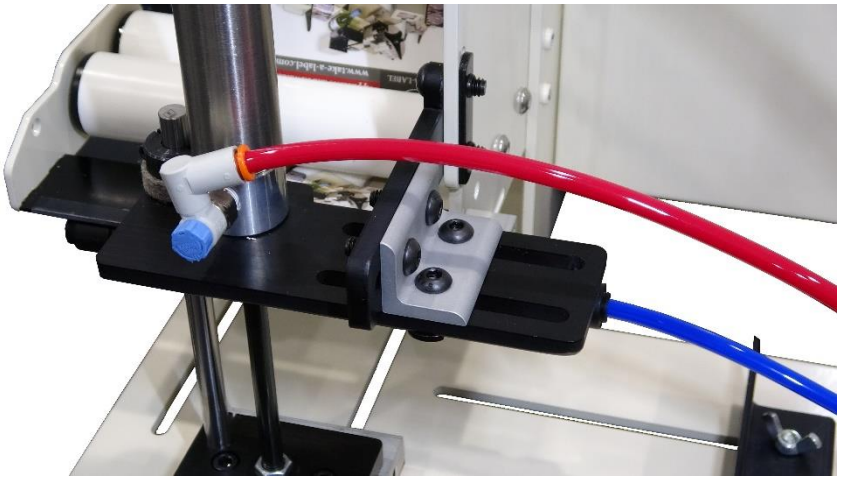
1. To setup the label position, rotate the label advance pot to the – as far as it will rotate.
2. The goal is to have the applicator stop with a label gap right at the peel edge.
3. Activate the applicator and watch the dispensing label. If the label does not advance far enough turn the label advance pot to the +, and repeat until one label is completely dispensed and the next label is stopped at the peel edge.



Tamp Head Placement:

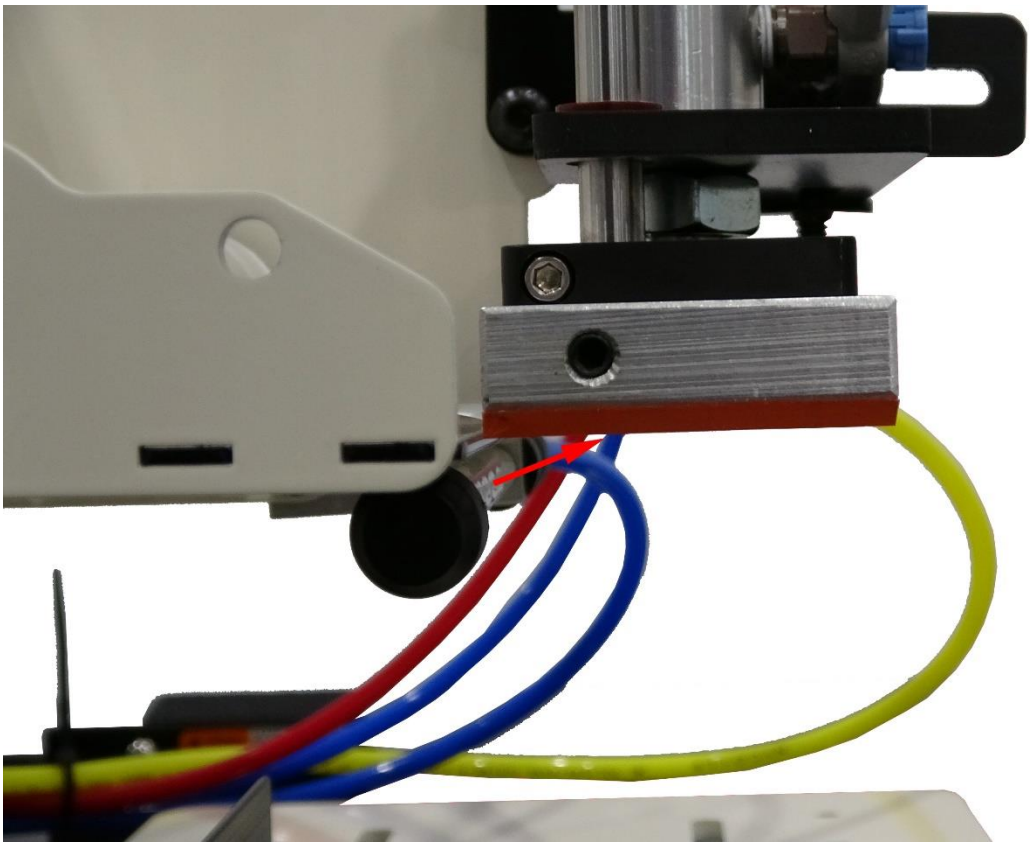
1. The tamp head placement is crucial for consistent label application.
2. The vertical gap between the peel plate and tamp pad should range from 0”-1/32”. If not loosen the nut at the base of the tamp cylinder rod, and unthread to lower the tamp pad or screw in the rod to raise the tamp pad height.
3. The horizontal gap between the peel plate and the tamp pad should range from 0”-1/32”. If not loosen the horizontal mounting bolts and align to the acceptable range.





Air Assist Tube Placement:

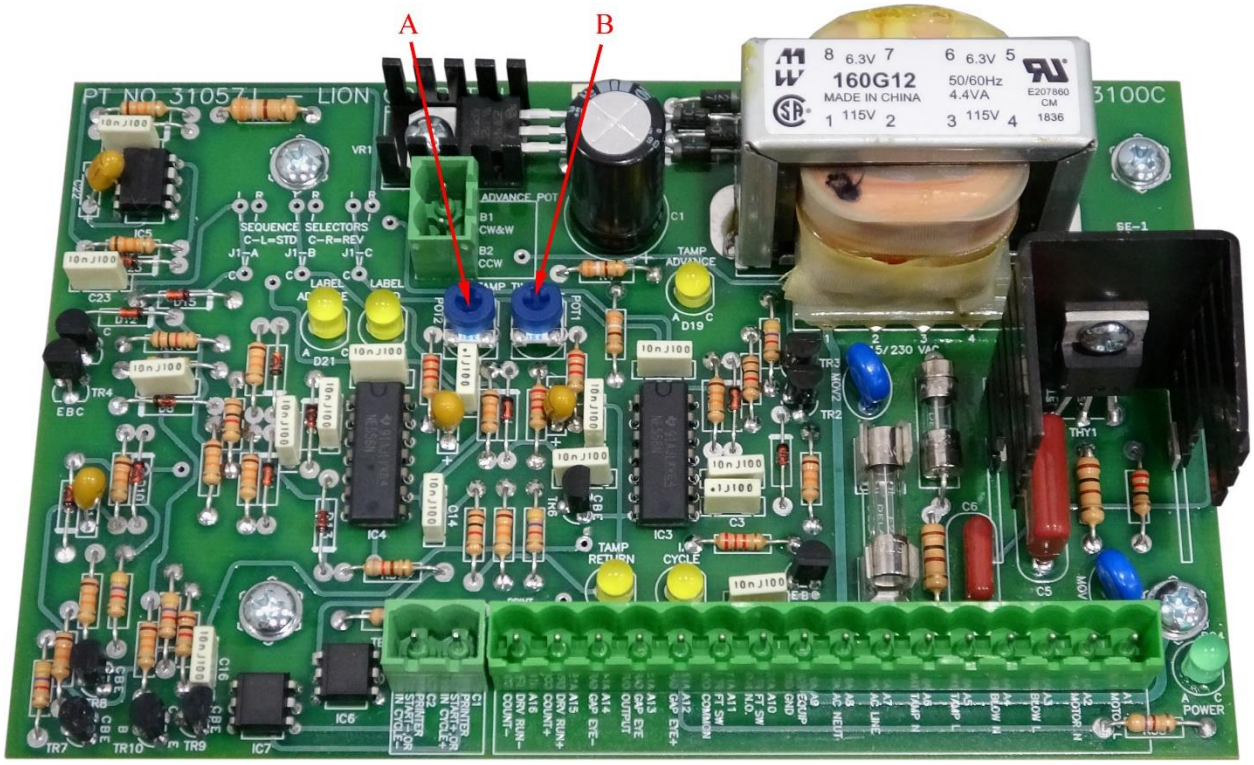
1. The air assist tube is used to assist the label out onto the vacuum pad. As a rule of thumb, the blast pattern from this tube should be directed at a 30° angle onto the vacuum pad. This angle may vary due to several factors, as a result different blast angles may have to be experimented with.



Teaching the photo eye:

1. It is recommended that you teach the photo eye (18) with every new roll of labels used.
2. Remove one label from the webbing and place the webbing only in the photo eye.
3. Press and hold the “Normal” button on photo eye for 3 seconds. When the lights finish flashing the photo eye is taught.

Tamp Head Dwell Time – Label Advance Delay



Adjusting Dwell Time:

- Knob A: increases or decreases the time before the label is advanced on to the tamp pad. This variance will occur after activating the footswitch and beginning the cycle.

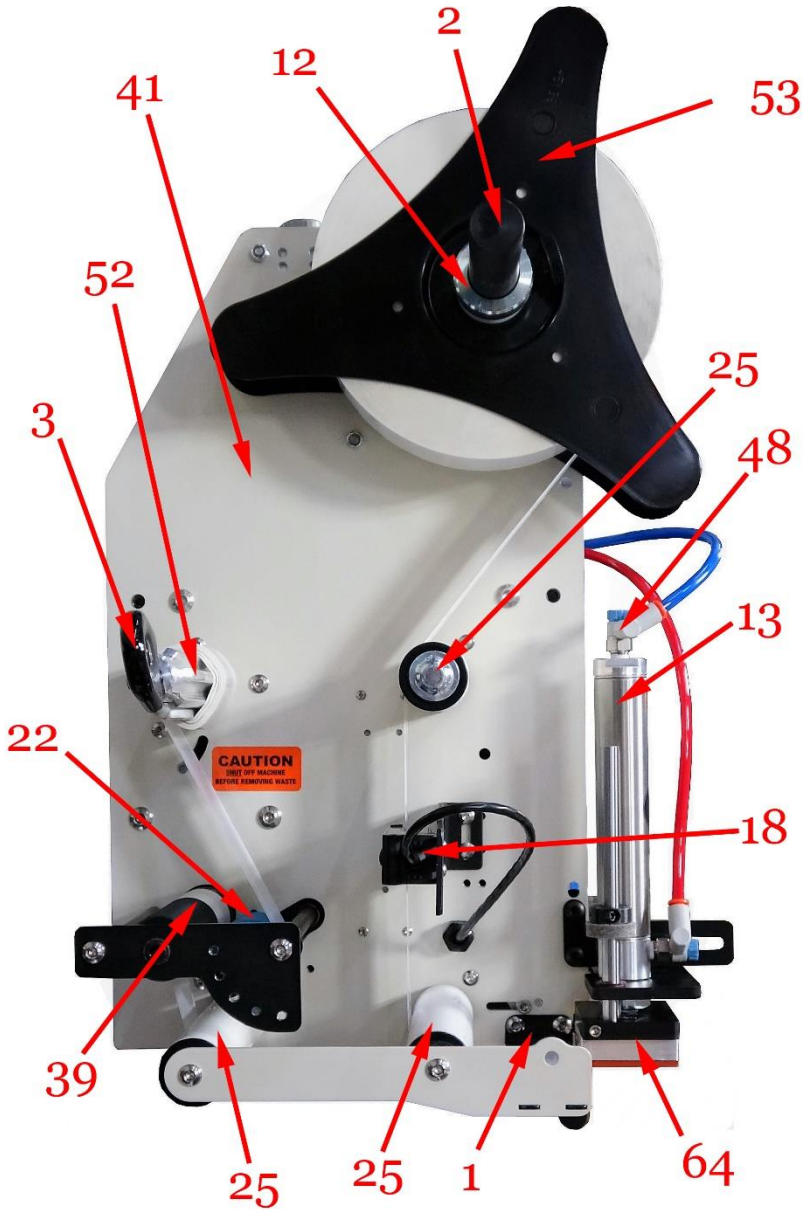
Adjusting Label Advance Delay

- Knob B: increases or decreases the amount of time the tamp pad remains at the bottom of the cylinders stroke. Before returning to the raised position.

Recommended Spare Parts for the TAL-3100C

Qty.	Description	Part #
1	Pinch Roller	31002
1	Waist wind Clip	45131
2	Unwind Disc	45136
1	Motor	30031
1	Photo Cell Label Sensor	30106
2	Drive “V” Belt	31267
1	Circuit Board	31057
1	Unwind Felt Pad	72618
1	Main Fuse	45157
1	Peel Edge Cover	31375
2	Left Hand Torsion Spring	21027
2	Right Hand Torsion Spring	21028

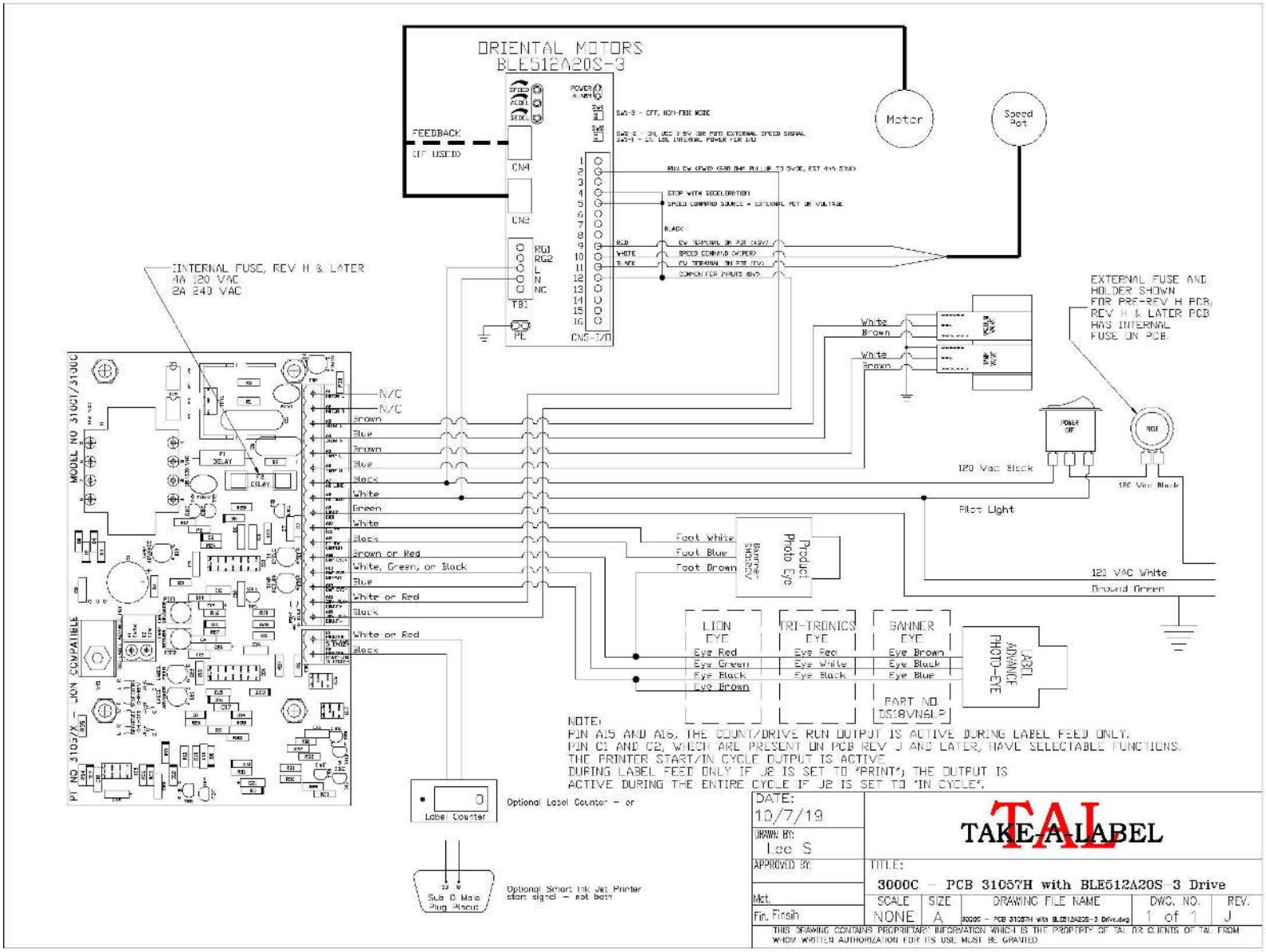
Depending on frequency of use and importance of the machine function, this list may need to be modified to include more of each part to prevent any down time.


2
12
41
53
52
25
3
48
13
22
CAUTION
18
39
25
25
1
64

Parts List

Part #	Description	#
11002	Peel Plate	1
11008	Unwind Shaft	2
45129	Waste Wind Clip	3
21004	Outboard Support Plate	4
21010	Pinch Roller Shaft	5
21012	3” Drive Shaft	6
21027	Torsion Spring LH	7
21028	Torsion Spring RH	8
25112	Unwind Washer	9
25113	Unwind Spring	10
26001	Unwind Collar	11
26002	Unwind Hub	12
30005	Pneumatic Cylinder	13
30024	Anti-Rotation Rod	14
30029	Tamp Pad Base Plate	15
30031	Motor; TAL 3100C/DC	16
30074	CTC 114 Shaft Collar 1/2"	17
30106	Tri-Tronics Label Eye	18
30124	Filter Regulator	19
30151	CTC Shaft Collar	20
30653	½-13 x 3/4” BHCS	21
31002	Pinch Roller	22
31003	Outboard Support Shaft	23
31004	Idler Roller Shaft	24
31006	Idler Roller (A, B, C)	25
31009	Pinch Roller Side Plate	26
31014	Connecting Bracket	27
31015	Plastic Bearing	28
31017	Long Bushing	29
31020	Cylinder Cross Mount Plate	30
31021	Cylinder Mount Plate	31
31029	Rewind Bushing	32
31053	T-Nut/ Bond/8020	33
31140	TAL-3100C/W Housing	34
31141	TAL-3100C/W Cover	35
31057	Control Board	36
31059	Label Advance	37
31060	Rewind Bracket	38
31102	Driver Roller	39

31142	Motor Spacer	40
31143	TAL-3100C/W Frame	41
31267	V Belt	42
31282	V Belt Tensioner	43
31373	V Belt Pully	44
31717	Air Assist Tube	45
31718	Air Assist Bracket	46
31722	Valve Assembly	47
31723	Flow Control Tube	48
31725	Vacuum Generator	49
31047	Extended Scanner Bracket	50
40007	On/Off Switch	51
72613	Waste Wind Shaft	52
45136	Unwind Disk	53
25212	Power Cord	54
72618	White Felt 4x4	55
81830	Shaft Caps	56
81912	Small Cord Grip	57
31144	TAL-3100C Threading Label	58
31146	TAL-3100C Name Label	59
31824	Shoulder Bolt 10-32	60
45136	Unwind Disk	61
25102	3/8” Black Plug	62
30208	Photo Eye Product Sensor	63
30084	Custom Tamp Pad	64



NOTE:
PIN A15 AND A16, THE COUNT/DRIVE RUN OUTPUT IS ACTIVE DURING LABEL FEED ONLY.
PIN C1 AND C2, WHICH ARE PRESENT ON PCB REV J AND LATER, HAVE SELLECTABLE FUNCTIONS.
THE PRINTER START/IN CYCLE OUTPUT IS ACTIVE
DURING LABEL FEED ONLY IF J2 IS SET TO "PRINT"; THE OUTPUT IS
ACTIVE DURING THE ENTIRE CYCLE IF J2 IS SET TO "IN CYCLE".

DATE: 10/7/19	TAL TAKE-A-LABEL
DRAWN BY: Lee S	
APPROVED BY:	TITLE: 3000C – PCB 31057H with BLE512A20S-3 Drive
Mct.	SCALE: NONE; SIZE: A; DRAWING FILE NAME: 3000C – PCB 31057H with BLE512A20S-3 Drive.dwg; DWG. NO.: 1 of 1; REV.: J
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