

**Warranty:**

The Label Applicator, including all components unless otherwise specified, carries a limited warranty. For all warranty terms and conditions, contact the manufacturer for a complete copy of the Limited Warranty Statement.
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Section 1: Safety

Safety awareness is critical when working with equipment that contains moving parts and extending electric actuators. Please read all warnings and cautions thoroughly before operating this device.

Following is a list of safety symbols and their meanings, which are found throughout this manual. Pay attention to these symbols where they appear in the manual.

**Wear safety goggles when performing the procedure described!**

**Caution or Warning!** Denotes possible personal injury and/or damage to the equipment.

**Caution or Warning!** Denotes possible personal injury and/or equipment damage due to electrical hazard.

**NOTE:** (Will be followed by a brief comment or explanation.)

ESD protection should be worn when servicing internal printed circuit boards.

After service to the equipment is completed, replace all protective devices such as grounding cables and covers before operating the equipment.

**Caution or Warning!** Denotes possible personal injury due to heat.

**Caution or Warning!** Denotes possible personal injury due to pinching/crushing.

**Caution or Warning!** Denotes possible personal injury due to pinching/crushing.

**WARNING!** Tipping hazard: Tie-down cleats (4600-625) are required to be secured to the ground when using this product on non-flat or uneven surfaces and/or where the center of mass may cause an unsafe condition.
WARNINGS

- WARNING - Moving parts of this machine can present hazards. Components that cannot be guarded because of loss of functionality are marked with a warning symbol.
- Be aware of the actuator extension distance, and avoid accidental triggering of the photosensor.
- When servicing the unit’s electronic assemblies, always remove the power cord from the unit to prevent accidental shock.
- When running for extended periods of time, use caution when accessing the drive module circuitry. The motor drive power transistors, motor case, and motor heatsink can become hot under constant use.
- Wear personal protective equipment, as instructed by your supervisor, when operating or working near this device.
Section 2: Quick Start

Contents:
* Main Applicator
* Product Detector Kit
* Power Cord
* Manual (Digital Copy)
Step 1: System Orientation

Caution: System is top heavy; take care when adjusting roll. Tie-Down Cleats (4600-625) are recommended to secure Stand and Applicator into place while in use.
ORIENTATIONS

Using the Yoke Mount Nut, Yoke Ear Bolts and Yoke Mount Setscrews, adjust the Label Applicator to the desired orientation.

- NOSE UP (RIGHT HAND)
- NOSE DOWN (RIGHT HAND)
- TOP DOWN (LEFT HAND)
- SIDE APPLY (LEFT HAND)
Step 2: System Alignment

WIPE

1. Verify leading edge of peel blade is parallel with product.
2. Verify label direction is parallel with conveyor direction.

TAMP

Pad should extend and lay flat against product.
**Step 3: Position Product Detector**

**MACHINE MOUNTING**

**PRODUCT DETECTOR SETUP**

1. To detect product present (Leading Edge), turn Light On/Dark On Selector to L. To detect product absent (Trailing Edge), turn Light On/Dark On Selector to D.

2. Turn Sensitivity Adjuster full counterclockwise.

3. Put a product on the conveyor at the expected distance from product detector during production.

4. Turn Sensitivity Adjuster clockwise until both Power Indicator and Output Indicator are on and solid when product is in front of sensor for Leading Edge, and absence of product for Trailing Edge.

5. Remove product.

6. Verify that detector does not sense movement beyond the far edge of the product. (If so, repeat steps 2 - 6.)
Step 4: Load Media

1. Push Supply Roll all the way against Unwind Hub.

2. Thread Web around Spindle 1.

3. Lift Brush to slide Web under the Brush and over Spindle 2.

4. Using the Hold-Down Lever to lift the Hold-Down, feed Web under the Hold-Down. (For Wipe Systems, ensure Web runs under Peel Blade Mount.)

5. Ensure that Nip Lever is open (horizontal). Thread Liner around Drive Roller and Nip Roller as shown.

6. Wrap Liner around rewind hub as shown.

7. Insert Rewind Clasp over Liner, and while holding the Liner, turn Rewind until the Liner grips the Rewind.

**NOTE:** Remove the leading three feet of labels to reduce the chance of labels sticking to the rollers.
ROUTE WEB PATH ON BOTTOM SIDE OF PROTECTIVE BRACKET

FOR TAMP APPLICATIONS

WEB PATH

GAP SENSOR

PROTECTIVE BRACKET

BRUSH

HOLD-DOWN LEVER

HOLD-DOWN

PEEL BLADE
8. Press in all Spring Collars to guide the Liner.

9. Replace Brush to apply tight tension on the Liner.

10. Turn Nip Lever to the Closed position (vertical).

**NOTE:** This Label Applicator operates with type 1, 2, 3 and 4 labels. Be conscious of your application when ordering labels.
Step 5: Calibrate Gap Sensor

1. Remove leading label so only liner is below Gap Sensor.

2. Press LABEL from the Home Screen.


4. Review the message, then press the message box to close MSG 36.

5. Press the Calibrate button.
   - Success: The Status LED flashes green, followed by MSG 37.
   - Failure: The Status LED flashes red, followed by MSG 38.
**Label Applicator**

**Step 6: Set Speed**

1. Press **Feed Speed** from the Label Menu.

2. Enter speed value in Feet Per Minute (FPM) then press OK.

**NOTE:** For a Wipe Application, insert the conveyor speed; for a Tamp Application, insert 150 FPM. Adjust as needed. For **Encoder Enabled** Wipe Application, see “WIPE Parameter Setup” on page 52.

**Step 7: Set Dispense Position**

1. Press **Dispense Position** from the Label Menu.

2. Enter a value for the **Dispense Position** in units of 1/100”. This value is the distance the liner has to travel after seeing Gap to align the next label at the edge of the peel blade. (Standard Labels: 50 - 75)

3. Press the **Force Feed** button on the Label Menu to check that the value settings for **Steps 5 to 7** have taken effect. One label will feed at the set speed and the next label will stop at the edge of the peel blade.
**Step 8: Set Rewind Tension**

Change **Rewind Tension** in the Label Menu to desired value. This setting will depend on the feed speed, label length and the liner material type (see LABEL MENU setup in Appendix B: Application Methods).

**Step 9: Set Product Delay**

1. Press **Setup** from the Home Screen, then press **JOB**.

2. Press **Apply Delay**.

3. Set the delay from when the Product Detector triggers to when the Labeler applies a label, in milliseconds. Press OK. (See JOB MENU setup for the appropriate applicator in Appendix B: Application Methods.)
**Step 10: Set Apply Duration (Tamp Applicator only)**

NOTE: See Appendix B for more Actuator adjustments

1. Set **Auto Retract** to 0.
2. Place a stationary product in front of the tamp pad.
3. Place system on-line by pressing the green **Run** button.
4. Manually trigger photo trigger with your hand.
5. Adjust **Apply Duration**.
6. Repeat steps 4 and 5 until label adheres to product, but product is not hit too hard.

**Step 11: Set Actuator Distance Limit (Tamp Applicator only)**

NOTE: This Distance Limit is a safety feature used to reduce damage to the machine and product.

1. Press **ACTUATOR SETUP**.
2. Measure the distance from tamp pad face to product face and add 12,7mm to 25,4mm (1/2" to 1").
3. Set **Distance Limit** to the whole number value.
4. Press **Distance Limit Fine** to make distance adjustments in 1/4" increments.
Step 12: Set the System Online

Press the RUN button from any screen. The system is ready to apply labels when the background turns green.

Press the STOP button from any screen to stop the system from applying a label.

NOTE: Any change made to the settings are permanently saved when Home is pressed. If Home is not pressed, the setting will be temporary.
**Maintenance Schedule Chart**

(See drawings on the following page.)

<table>
<thead>
<tr>
<th>Action</th>
<th>Daily</th>
<th>Monthly</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Drive Roller</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Replace Drive Roller</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Replace Peel Blade</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Clean Label Present and Auto-Retract Sensors (if present)</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Label Low Sensor (if present)</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Clean Product Detector Sensor(s)</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Inspect Drive Module Belt</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Replace Drive Module Belt</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Inspect Rewind Belt</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Replace Rewind Belt</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Replace Unwind Dancer Spring</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Clean Tamp Pad</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect Vacuum Fan</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Replace Vacuum Fan</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Replace Unwind Dancer Arm Spindle</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
**NOTE:** Rewind and Unwind Spindles removed for simplicity.
## Common to All Systems

(Check these first before proceeding to specific system type.)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple labels are fed, without a pause between labels</td>
<td>Label gap sensor is not calibrated</td>
<td>Perform the label gap calibration procedure as seen in “Step 5: Calibrate Gap Sensor” on page 11.</td>
</tr>
<tr>
<td></td>
<td>Label liner is not positioned inside label gap sensor</td>
<td>Set the web guides so that the liner passes through the label gap sensor.</td>
</tr>
<tr>
<td></td>
<td>Label is not within 12.7mm (1/2”) of the liner edge</td>
<td>Change material which has the label’s edge to the liner’s edge less than 12.7mm (1/2”).</td>
</tr>
<tr>
<td>Drive roller is turning backwards, liner is pulled from rewind</td>
<td>Unit is incorrectly webbed</td>
<td>Re-web the label liner, as seen in “Step 4: Load Media” on page 8.</td>
</tr>
<tr>
<td></td>
<td>Unit is not correctly configured for left-hand or right-hand</td>
<td>Confirm that the unit configuration is correct. (See “Appendix B: Application Methods” on page 31.)</td>
</tr>
<tr>
<td>Supply roll is signaling label low too soon</td>
<td>Label Low Sensor position incorrect</td>
<td>Unscrew the label Low Sensor, move it to a position farther away from the unwind supply roll core and screw into position.</td>
</tr>
<tr>
<td></td>
<td>Label Low Sensor malfunction</td>
<td>Refer to “DIAGNOSTICS SCREEN” on page 21 to verify sensor functionality.</td>
</tr>
<tr>
<td>Calibration of Label Gap results in failure</td>
<td>Liner is too thick</td>
<td>This material may not be compatible with the unit’s standard sensor.</td>
</tr>
<tr>
<td></td>
<td>Sensor is dirty</td>
<td>Remove sensor from peel blade and clean it with isopropyl alcohol.</td>
</tr>
<tr>
<td></td>
<td>Sensor connection is faulty</td>
<td>Check Connector J8 on Controller Board (4750-350).</td>
</tr>
<tr>
<td></td>
<td>Sensor is damaged</td>
<td>Replace sensor.</td>
</tr>
<tr>
<td>Problem</td>
<td>Possible Cause</td>
<td>Correction</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Unit will not dispense a label when product detector is triggered</td>
<td>Unit is off-line or has an error condition</td>
<td>If no errors exist, press RUN button to place unit on-line. If errors exist, determine error type from the display and clear error condition. Attempt to go on-line by pressing the RUN button (this will also check for remaining errors).</td>
</tr>
<tr>
<td></td>
<td>Cabling problem</td>
<td>Verify cabling per “Appendix C: Electrical Interface” on page 54.</td>
</tr>
<tr>
<td></td>
<td>Product Detector field of view not set up</td>
<td>Verify set-up per “Step 3: Position Product Detector” on page 7.</td>
</tr>
<tr>
<td>Labels are wrinkled (or crumpled) on the product</td>
<td>Feed speed too high</td>
<td>Reduce Feed Speed per “WIPE Parameter Setup” on page 52.</td>
</tr>
<tr>
<td></td>
<td>Peel blade angle is not correct</td>
<td>Set angle between 20° and 45°. Shorter labels require a steeper angle to the product surface. See “WIPE Mechanical Setup” on page 51.</td>
</tr>
<tr>
<td></td>
<td>Wipe-on brush position is too close to peel edge</td>
<td>For labels longer than 50,8 mm (2”), move the brush away from the peel blade edge and angle to 45°.</td>
</tr>
<tr>
<td></td>
<td>The brush on Spindle 2 has become loose. (Refer to picture in “Step 4: Load Media” on page 8.)</td>
<td>Tighten the brush on Spindle 2 to increase the tension on the Liner per “Step 4: Load Media” on page 8.</td>
</tr>
<tr>
<td>Liner tracking into the inner or outer guide, web travel is not straight, or excessive paper dust created</td>
<td>Web guides not set properly</td>
<td>Adjust guides per “Step 4: Load Media” on page 8.</td>
</tr>
<tr>
<td>Problem</td>
<td>Possible Cause</td>
<td>Correction</td>
</tr>
<tr>
<td>---------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Unit will not actuate when product detector is triggered</td>
<td>Unit is off-line or has an error condition</td>
<td>If no errors exist, press RUN button to place unit on-line. If errors exist, determine error type from the display and clear error condition. Attempt to go on-line by pressing the RUN button (this will also check for remaining errors).</td>
</tr>
<tr>
<td>Label is on the tamp pad, but Actuator does not fire</td>
<td>Product detector not triggered by product</td>
<td>Refer to “DIAGNOSTICS SCREEN” on page 21 to verify that the product detector can repeatedly detect the product. Adjust sensor as necessary.</td>
</tr>
<tr>
<td></td>
<td>Apply trigger occurred before label was on tamp pad</td>
<td>Increase distance of product detector from tamp pad to allow feeding to complete.</td>
</tr>
<tr>
<td></td>
<td>Actuator malfunction.</td>
<td>Refer to “DIAGNOSTICS SCREEN” on page 21 to manually trigger the actuator.</td>
</tr>
<tr>
<td>Tamp pad is contacting product with too much force or for too long a duration</td>
<td>Auto-Retract delay time is too long</td>
<td>Decrease the Auto-Retract delay time to start the Actuator return sooner.</td>
</tr>
<tr>
<td>Multiple labels are fed to the tamp pad</td>
<td>Dispense position incorrect. Next label over-extending during end of feeding. Next label dislodges label on pad.</td>
<td>Decrease dispense position.</td>
</tr>
<tr>
<td></td>
<td>Dispense position incorrect. Label not extending out of Label Applicator far enough to seat on tamp pad.</td>
<td>Increase dispense position.</td>
</tr>
<tr>
<td></td>
<td>Gap sensor not calibrated, or dirty.</td>
<td>Clean gap sensor and recalibrate per “Step 5: Calibrate Gap Sensor” on page 11.</td>
</tr>
<tr>
<td>Labels are feeding into the edge of the tamp pad</td>
<td>Tamp pad position too low</td>
<td>Set tamp pad to a distance just below the peel blade. See Tamp Pad Adjustments in “Appendix B: Application Methods” on page 31.</td>
</tr>
<tr>
<td></td>
<td>Actuator home sensor position too low</td>
<td>Move the home sensor to a position where the Actuator home is detected later.</td>
</tr>
</tbody>
</table>
**Diagnostics**

**DIAGNOSTICS SCREEN**

- **Product Detector 1 triggered**
- **Home Sensor detects Home position**
- **Rewind Test**
- **Actuator Test**
- **Blow Fan Test**
- **Vacuum Fan Test**
- **Warning Tower Test**
- **Auto Retract sensor detects a product**
- **Label Present sensor detects a label on the pad**
- **Product Detector 2 triggered**
- **Labels close to finish**
- **An error occurred in the System**
- **Applicator engine flags that label is finished**
- **Feeding label**
- **Missing label detected**
- **Gap Sensor detects Gap**
- **Label Applicator Operations Manual Rev E 21**
### Information, Warning, Error, and Diagnostic Codes

<table>
<thead>
<tr>
<th>Message Number</th>
<th>Type</th>
<th>Message</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG 6</td>
<td>Error</td>
<td>LABEL OUT</td>
<td>Label Applicator has detected the end of the label supply.</td>
</tr>
<tr>
<td>MSG 9</td>
<td>Information</td>
<td>MISSING LABEL DETECT</td>
<td>Label Applicator has detected a missing label.</td>
</tr>
<tr>
<td>MSG 10</td>
<td>Error</td>
<td>LABEL MODULE</td>
<td>Label Applicator has an error.</td>
</tr>
<tr>
<td>MSG 36</td>
<td>Information</td>
<td>GAP SENSOR CALIBRATION</td>
<td>Instructions on how to calibrate the label gap sensor located on the peel tip.</td>
</tr>
<tr>
<td>MSG 37</td>
<td>Information</td>
<td>CALIBRATION SUCCESS</td>
<td>Label gap sensor was properly calibrated.</td>
</tr>
<tr>
<td>MSG 38</td>
<td>Information</td>
<td>CALIBRATION FAILURE</td>
<td>Label gap sensor was not properly calibrated. This can be due to liner thickness or opacity outside of the system specifications, a faulty connection to the sensor, or the optics require cleaning.</td>
</tr>
</tbody>
</table>

**NOTE:** For additional messages, errors and warnings, refer to MCAIV Manual (6000-012), Section 5: Trouble-Shooting.
### Appendix A: System Specifications

#### General Specifications

<table>
<thead>
<tr>
<th>Category</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (with Yoke)</td>
<td>787mm (31&quot;) L x 686mm (27&quot;) H x 660mm (26&quot;) D</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
</tr>
<tr>
<td>WIPE</td>
<td>36.7 kg (81 lbs) (includes yoke, no stand)</td>
</tr>
<tr>
<td>E-TAMP, E-WASA</td>
<td>44.5 kg (98 lbs) (includes yoke, no stand)</td>
</tr>
<tr>
<td>E-FASA, Chi-Stand</td>
<td>45.8 kg (101 lbs)</td>
</tr>
<tr>
<td></td>
<td>37.6 kg (83 lbs)</td>
</tr>
<tr>
<td>Accuracy</td>
<td></td>
</tr>
<tr>
<td>E-TAMP, E-WASA, E-FASA, WIPE</td>
<td>±1.6mm (±0.06&quot;)</td>
</tr>
<tr>
<td>E-TAMP/BLOW</td>
<td>±2.4mm (±0.09&quot;)</td>
</tr>
<tr>
<td>Certifications</td>
<td></td>
</tr>
<tr>
<td>IEC 61000-6-2 2005/AC:2005 Immunity</td>
<td></td>
</tr>
<tr>
<td>IEC 61000-6-4 2007/A1: 2011 Emission</td>
<td></td>
</tr>
<tr>
<td>FCC Part 15b</td>
<td></td>
</tr>
<tr>
<td>CSA CAN/CSA-C22.2 No. 62368-1:2014</td>
<td></td>
</tr>
<tr>
<td>IEC 62368-1:2014, CE</td>
<td></td>
</tr>
<tr>
<td>Supply Roll Capacity</td>
<td></td>
</tr>
<tr>
<td>355,6mm (14&quot;) OD</td>
<td></td>
</tr>
<tr>
<td>Core</td>
<td>76,2mm (3&quot;) ID</td>
</tr>
<tr>
<td>Label Length</td>
<td></td>
</tr>
<tr>
<td>12,7mm (0.5&quot;) Min. to 558,8mm (22&quot;) Max.</td>
<td></td>
</tr>
<tr>
<td>Label Width</td>
<td></td>
</tr>
<tr>
<td>Narrow Web</td>
<td>25,4mm (1&quot;) Min. to 152,4mm (6&quot;) Max.</td>
</tr>
<tr>
<td>Wide Web</td>
<td>25,4mm (1&quot;) Min. to 228,6mm (9&quot;) Max.</td>
</tr>
<tr>
<td>Product Rate</td>
<td></td>
</tr>
<tr>
<td>WIPE</td>
<td>800 PPM Max.</td>
</tr>
<tr>
<td>E-TAMP</td>
<td>120 PPM Max.</td>
</tr>
<tr>
<td>E-TAMP/BLOW</td>
<td>55 PPM Max.</td>
</tr>
<tr>
<td>E-FASA</td>
<td>Single Apply: 52 PPM Max. Dual Apply: 28 PPM Max.</td>
</tr>
<tr>
<td>E-WASA</td>
<td>Dependent on label length, print speed and product spacing</td>
</tr>
<tr>
<td>E-BLOW BOX</td>
<td>300 PPM Max.</td>
</tr>
<tr>
<td>Line Speed</td>
<td></td>
</tr>
<tr>
<td>WIPE</td>
<td>300 FPM Max.</td>
</tr>
<tr>
<td>E-TAMP, E-TAMP/BLOW</td>
<td>150 FPM Max.</td>
</tr>
<tr>
<td>E-FASA</td>
<td>75 FPM Max.</td>
</tr>
<tr>
<td>E-WASA</td>
<td>125 FPM Max.</td>
</tr>
<tr>
<td>HIGH SPEED TAMP</td>
<td>300+ FPM Max.</td>
</tr>
<tr>
<td>Temperature</td>
<td>5°C - 40°C (41°F - 104°F)</td>
</tr>
<tr>
<td>Humidity</td>
<td>10 to 85% Relative Humidity, Non-Condensing</td>
</tr>
</tbody>
</table>
Electrical Specifications

<table>
<thead>
<tr>
<th>Category</th>
<th>Nominal</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Voltage Supply</td>
<td>100 - 240 VAC, 1.6A 50/60 Hz</td>
<td>90 VAC 47 Hz</td>
<td>264 VAC 63 Hz</td>
</tr>
<tr>
<td>Product Detector</td>
<td>Low: 0 to 3 VDC High: 3 to 5 VDC Supplies 24 VDC</td>
<td>0 VDC</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Product Detector Pulse Width</td>
<td>10 mS</td>
<td>1 mS</td>
<td>Infinite</td>
</tr>
<tr>
<td>Auxiliary Output Warning Tower</td>
<td>0 and 24 VDC 1 Amp sinking</td>
<td>0 VDC 0 mA</td>
<td>24 VDC 3 Amps sinking</td>
</tr>
<tr>
<td>Discrete Inputs (Optional)</td>
<td>Low: 0 to 10 VDC High: 10 to 24 VDC</td>
<td>0 VDC</td>
<td>26 VDC</td>
</tr>
<tr>
<td>Discrete Input Pulse Width</td>
<td>10 mS</td>
<td>1 mS</td>
<td>Infinite</td>
</tr>
<tr>
<td>Discrete Outputs (Optional)</td>
<td>0 - 24 V AC/DC at 150 mA</td>
<td>0 V AC/DC, 13 ohms</td>
<td>30 V AC/DC at 400 mA</td>
</tr>
</tbody>
</table>

Performance Specifications

<table>
<thead>
<tr>
<th>WIPE Application</th>
<th>Label Size</th>
<th>PPM Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIPE</td>
<td>2” x 1”</td>
<td>500 PPM*</td>
</tr>
</tbody>
</table>

* WIPE Maximum PPM greatly relies on label size, line speed and product size.

<table>
<thead>
<tr>
<th>10 or 20 in. E-TAMP Labeler Application</th>
<th>Label Size</th>
<th>Stroke Distance (Baseplate edge to product)</th>
<th>PPM Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side Orientation (Nose-Down)</td>
<td>4” x 2”</td>
<td>101,6mm (4”), HIGH Actuator Profile</td>
<td>85 PPM</td>
</tr>
<tr>
<td>Side Orientation (Nose-Down)</td>
<td>4” x 2”</td>
<td>76,2mm (3”), HIGH Actuator Profile</td>
<td>94 PPM</td>
</tr>
<tr>
<td>Side Orientation (Nose-Down)</td>
<td>4” x 2”</td>
<td>38,1mm (1.5”), HIGH Actuator Profile</td>
<td>102 PPM</td>
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10 in. E-FASA Labeler

<table>
<thead>
<tr>
<th>Application</th>
<th>Label Size</th>
<th>Stroke Distance (Baseplate edge to product)</th>
<th>PPM Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Panels - Front &amp; Side</td>
<td>4” x 2”</td>
<td>114.3mm (4.5”), HIGH Actuator Profile</td>
<td>28 PPM</td>
</tr>
<tr>
<td>Dual Panels - Side &amp; Rear</td>
<td>4” x 2”</td>
<td>114.3mm (4.5”), HIGH Actuator Profile</td>
<td>24 PPM</td>
</tr>
<tr>
<td>Single Panel - Front Only</td>
<td>4” x 2”</td>
<td>114.3mm (4.5”), HIGH Actuator Profile</td>
<td>52 PPM</td>
</tr>
<tr>
<td>Single Panel - Rear Only</td>
<td>4” x 2”</td>
<td>114.3mm (4.5”), HIGH Actuator Profile</td>
<td>46 PPM</td>
</tr>
<tr>
<td>Dual Panels - Front &amp; Side</td>
<td>4” x 6”</td>
<td>114.3mm (4.5”), HIGH Actuator Profile</td>
<td>18 PPM</td>
</tr>
<tr>
<td>Dual Panels - Side &amp; Rear</td>
<td>4” x 6”</td>
<td>114.3mm (4.5”), HIGH Actuator Profile</td>
<td>16 PPM</td>
</tr>
<tr>
<td>Single Panel - Front Only</td>
<td>4” x 6”</td>
<td>114.3mm (4.5”), HIGH Actuator Profile</td>
<td>44 PPM</td>
</tr>
<tr>
<td>Single Panel - Rear Only</td>
<td>4” x 6”</td>
<td>114.3mm (4.5”), HIGH Actuator Profile</td>
<td>40 PPM</td>
</tr>
</tbody>
</table>

20 in. E-FASA Labeler

<table>
<thead>
<tr>
<th>Application</th>
<th>Label Size</th>
<th>Stroke Distance (Baseplate edge to product)</th>
<th>PPM Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Panels - Front &amp; Side</td>
<td>4” x 6”</td>
<td>355.6mm (14”), MED-LOW Actuator Profile</td>
<td>10 PPM</td>
</tr>
<tr>
<td>Dual Panels - Side &amp; Rear</td>
<td>4” x 6”</td>
<td>355.6mm (14”), MED-LOW Actuator Profile</td>
<td>12 PPM</td>
</tr>
<tr>
<td>Single Panel - Front Only</td>
<td>4” x 6”</td>
<td>355.6mm (14”), MED-LOW Actuator Profile</td>
<td>26 PPM</td>
</tr>
<tr>
<td>Single Panel - Rear Only</td>
<td>4” x 6”</td>
<td>355.6mm (14”), MED-LOW Actuator Profile</td>
<td>24 PPM</td>
</tr>
</tbody>
</table>

E-WASA Labeler

<table>
<thead>
<tr>
<th>Application</th>
<th>PPM Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 inch Length WASA</td>
<td>11 PPM</td>
</tr>
<tr>
<td>8 inch Length WASA</td>
<td>10 PPM</td>
</tr>
<tr>
<td>10 inch Length WASA</td>
<td>9 PPM</td>
</tr>
<tr>
<td>12 inch Length WASA</td>
<td>8 PPM</td>
</tr>
</tbody>
</table>
Appendix A: System Specifications

Label Applicator Operations Manual Rev E
E-TAMP & E-TAMP/BLOW

**FRONT**

TAMP = 685,8mm (27”)
TAMP/BLOW = 762mm (30”)

**SIDE**

TAMP = 685,8mm (27”)
TAMP/BLOW = 762mm (30”)

**TOP**

TAMP = 685,8mm (27”)
TAMP/BLOW = 762mm (30”)

**SIDE ORIENTATION**

MIN = 609,6mm (24”)
MAX = 1600,2mm (63”)

**TOP DOWN**

MIN = 609,6mm (24”)
MAX = 1600,2mm (63”)

**NOSE DOWN**

MIN = 279,4mm (11”)
MAX = 1143mm (45”)

**NOSE UP**

MIN = 762mm (30”)
MAX = 1752,6mm (69”)

**TOP DOWN**

MIN = 330,2mm (13”)
MAX = 1270mm (50”)

**SIDE**

MIN = 660,4mm (26”)
MAX = 838,2mm (33”)

**SIDE**

MIN = 330,2mm (13”)
MAX = 1270mm (50”)

**TOP DOWN**

MIN = 330,2mm (13”)
MAX = 1270mm (50”)

**SIDE**

MIN = 787,4mm (31”)
MAX = 1752,6mm (69”)

**TOP DOWN**

MIN = 1193,8mm (47”)
MAX = 1752,6mm (69”)

**TOP**

MIN = 660,4mm (26”)
MAX = 787,4mm (31”)

**TOP DOWN**

MIN = 660,4mm (26”)
MAX = 838,2mm (33”)

**SIDE**

MIN = 279,4mm (11”)
MAX = 1143mm (45”)

**TOP DOWN**

MIN = 279,4mm (11”)
MAX = 1143mm (45”)

**NOSE DOWN**

MIN = 330,2mm (13”)
MAX = 1270mm (50”)

**NOSE UP**

MIN = 330,2mm (13”)
MAX = 1270mm (50”)

**SIDE**

MIN = 330,2mm (13”)
MAX = 1270mm (50”)

**TOP DOWN**

MIN = 330,2mm (13”)
MAX = 1270mm (50”)
Appendix A: System Specifications

E-FASA 10 in.

**FRONT**
- 1244,6mm (49”)
- 685,8mm (27”)

**BOTTOM**
- 1244,6mm (49”)
- 533,4mm (21”)

**SIDE**
- 1244,6mm (49”)
- 533,4mm (21”)
- 685,8mm (27”)

**SIDE ORIENTATION**
- MIN = 609,6mm (24”)
- MAX = 1600,2mm (63”)

**NOSE DOWN**
- 1752,6mm (69”)
- MIN = 279,4mm (11”)
- MAX = 1143mm (45”)

**NOSE UP**
- MIN = 762mm (30”)
- MAX = 1752,6mm (69”)

**MIN = 762mm (30”)**
**MAX = 1752,6mm (69”)**
Appendix A: System Specifications

E-FASA 20 in.

**FRONT**
- 685.8mm (27")
- 1498.6mm (59")

**BOTTOM**
- 533.4mm (21")
- 1498.6mm (59")

**SIDE**
- 533.4mm (21")
- 685.8mm (27")

**NOSE DOWN**
- MIN = 279.4mm (11")
- MAX = 1143mm (45")
- 1752.6mm (69")

**NOSE UP**
- MIN = 762mm (30")
- MAX = 1752.6mm (69")

**SIDE ORIENTATION**
- MIN = 609.6mm (24")
- MAX = 1600.2mm (63")
### Appendix A: System Specifications

#### E-WASA

**FRONT**
- 787,4mm (31") for x6
- 812,8mm (32") for x8
- 863,6mm (34") for x10
- 914,4mm (36") for x12

**BOTTOM**
- 533,4mm (21")
- 787,4mm (31")

**SIDE**
- 914,4mm (36")
- 533,4mm (21")

**SIDE ORIENTATION**
- MIN = 88,9mm (3.5")
- MAX = 1066,8mm (42")
- MIN = 609,6mm (24")
- MAX = 1600,2mm (63")

**TOP-DOWN**
- 533,4mm (21")

Appendix B: Application Methods

E-TAMP Mechanical Setup

ALIGN TO PEEL BLADE

1. Loosen both screws on the dovetail slider (A).
2. Slide actuator assembly toward and away from peel blade until there is approximately 3,2mm (1/8”) gap.
3. Tighten both screws (A).

ALIGN LABEL WITH TAMP PAD

1. Loosen both screws on the tamp actuator L-bracket (B).
2. Slide the actuator assembly toward and away from the baseplate until the label present sensor will be covered by a fed label.
3. Tighten both screws on the tamp actuator L-bracket (B).

ALIGN TAMP PAD HEIGHT

1. Loosen the jam screw on the actuator rod.
2. Adjust the bumper height by turning the bumper so that the face of the peel blade is 1,6mm (1/16”) BEYOND the peel blade.
3. Power on the Label Applicator to verify tamp pad home position.
4. Tighten the jam screw.
E-TAMP Parameter Setup

E-TAMP applications allow the label to be placed on the Top, Side or Bottom of a product. Typically, these are applying only one label to a product, but two can be applied as well.

**LABEL MENU** - Enter LABEL Menu from the Home Screen.

- **Std** for rectangular labels with 3.2mm (1/8") gap or **Odd** for any shape label that passes gap sensor.

- Sets the amount of tension applied to the rewind on a feed cycle. Set lower for speeds less than 100 FPM or labels shorter than 101.6mm (4").

- Sets the distance the liner has to travel after the gap for the next label to align at the edge of peel blade. For standard labels usually set to 50-70 (0.5 to 0.7 inches).

**SYSTEM MENU** - Enter SYSTEM Menu from the Setup Screen.

- Sets the rewind motor direction.

- Set to the length of the actuator.

- Sets the direction of the Actuator motor. This setting matches the A/B configuration of the actuator.

- **E-Tamp** will be chosen for this application.

- **Yes** will offset the label placement from the front. If the product lengths vary, and the label needs to be placed off of the trailing edge of the product, set to **No**.
SMART MENU - Enter SMART Menu from the Setup Screen.

Determines if the system is being used with the optional Label Present sensor.

Determines how many times the label will be fed without an application. The available options are 1, 2, 3 and Infinite. To ensure a 1 Label to 1 Product match, set this to 1.

Provides a warning if the system is online with a prior label on the tamp pad. Helps avoid a potential label to product mismatch.

JOB MENU - Enter JOB Menu from the Setup Screen.

Keep as small as possible by locating the product sensor as close to the peel blade as possible. Exception - if print on demand is used.

Controls the extension stroke time. Set Auto-Retract to zero to properly adjust this time, then re-enable Auto Retract.

Most E-Tamp applications will not need much Home Delay. Large label sizes will benefit with a minimal delay of 20 to 100 mS.

If installed, the Auto-Retract (AR) time depends on the Actuator Speed. Speeds higher than Medium should not use the AR. Low to Medium speeds benefit from AR, and typical values range from 1 mS to 100 mS.
**ACTUATOR SETUP MENU**

Press **ACTUATOR SETUP** from Job Menu.

- **Sets the furthest extension of the tamp for the application with steps of one inch. Use this limit if the product distance to the labeler is consistent.**

- **Sets the furthest extension of the tamp with ¼ inch steps.**

- **Sets the overall speed of the Actuator to five discrete values, and depends on the application speed and through put.**

If enabled, the pad vibrates during label feed to help thicker labels or with stronger adhesive feed on the pad properly.

Sets how long the actuator should hold the same position once it reaches the first of these conditions: Apply Duration expired, Auto Retract sensed, Distance Limit threshold reached.

**Note:** For most tamp applications, this value should be zero. For slow linespeed applications, this value can be used to keep the pad in contact with the product longer, but with weaker (non-crushing) force. Holds the last position, versus continuing forward.

See chart below for recommended setting:

<table>
<thead>
<tr>
<th>Profile</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Label length &gt; 203.2mm (8&quot;)</td>
</tr>
<tr>
<td>Med-Low</td>
<td>Label length &gt; 203.2mm (8&quot;)</td>
</tr>
<tr>
<td>Medium</td>
<td>Label size closely matches pad size (i.e., 4 x 6 label on 4 x 6 pad)</td>
</tr>
<tr>
<td>Med-High</td>
<td>Label area is smaller than pad size by 50% (i.e., 4 x 2 label on 4 x 4 pad)</td>
</tr>
<tr>
<td>High</td>
<td>Label area is smaller than pad area by 70% (may require custom pad to accommodate)</td>
</tr>
</tbody>
</table>
**E-TAMP/BLOW Mechanical Setup**

**ALIGN TO PEEL BLADE**

1. Loosen both screws on the dovetail slider (A).
2. Slide actuator assembly toward and away from peel blade until there is approximately 3,2mm (1/8”) gap.
3. Tighten both screws (A).

**ALIGN LABEL WITH TAMP PAD**

1. Loosen both screws on the tamp actuator L-bracket (B).
2. Slide the actuator assembly toward and away from the baseplate until the label present sensor will be covered by a fed label.
3. Tighten both screws on the tamp actuator L-bracket (B).

**ALIGN TAMP PAD HEIGHT**

1. Loosen the jam screw on the actuator rod.
2. Adjust the bumper height by turning the bumper so that the face of the peel blade is 1,6mm (1/16”) **BEYOND** the peel blade.
3. Power on the Label Applicator to verify tamp pad home position.
4. Tighten the jam screw.
E-TAMP/BLOW Parameter Setup

E-TAMP/BLOW applications allow the label to be placed on the Top or Side of a product. Typically, the label is transferred in a contact-less manner to the product. Alternatively, the tamp pad can make contact with the product and then blow (tamp-touch-blow) to help place a label into a recess or void area.

**LABEL MENU** - Enter LABEL Menu from the Home Screen.

- **Std** for rectangular labels with 3.2mm (1/8") gap or **Odd** for any shape label that passes gap sensor.

Sets the amount of tension applied to the rewind on a feed cycle. Set lower for speeds less than 100 FPM or labels shorter than 101.6mm (4").

Sets the distance the label will travel after gap sensor is triggered. For standard labels usually set to 50-70 (0.5 to 0.7 inches).

Determines the label generation mode. For slow applications, like pallets, make this **P1 Detect**. This will reduce the time the label adhesive is exposed to air and drying. For highest throughput, use **At Home**. Use **P2 Detect** for the highest accuracy (by using two detectors) when feed on demand is required. **Then Apply** feeds a label when actuator is at Home position, then applies immediately.

**SYSTEM MENU** - Enter SYSTEM Menu from the Setup Screen.

Sets the rewind motor direction.

Set to the length of the actuator.

Sets the direction of the Actuator motor. This setting matches the A/B configuration of the actuator.

**E-Tamp** will be chosen for this application.

**Yes** will offset the label placement from the front. If the product lengths vary, and the label needs to be placed off of the trailing edge of the product, set to **No**.
**SMART MENU** - Enter SMART Menu from the Setup Screen.

- Determines if the system is being used with the optional Label Present sensor.
- Determines how many times the label will be fed without an application. The available options are 1, 2, 3 and **Infinite**. To ensure a 1 Label to 1 Product match, set this to 1.

  Provides a warning if the system is online with a prior label on the tamp pad. Helps avoid a potential label to product mismatch.

- Determines how many times the system will attempt to apply the same label. The available options are 1, 2, 3 and **Infinite**. To ensure a 1 Label to 1 Product match, set this to 1.

**JOB MENU** - Enter JOB Menu from the Setup Screen.

- **No** disables the Blow function (E-TAMP). **On Sensor** only activates the Blow function when the product is detected by Auto Retract Sensor. **On Retract** activates the Blow function when the actuator is returning due to Apply Duration expiring.
- Keep as small as possible by locating the product sensor as close to the peel blade as possible. Exception - if print on demand is used.

  Most E-Tamp applications will not need much Home Delay. Large label sizes will benefit with a minimal delay of 20 to 100 mS.

- Controls the extension stroke time. Set Auto-Retract to zero to properly adjust this time, then re-enable Auto Retract.

  If installed, the Auto-Retract (AR) time depends on the Actuator Speed. Typical values range from 1 mS to 100 mS.
ACTUATOR SETUP MENU

Press ACTUATOR SETUP from the Job Menu.

Sets the furthest extension of the tamp for the application with steps of one inch. Set distance just short of the product to blow label to the product.

If enabled, the pad vibrates during label feed to help thicker labels or with stronger adhesive feed on the pad properly.

Vacuum Speed should be Med_High or High.

Sets the furthest extension of the tamp with ¼ inch steps.

Sets how long the actuator should hold the same position once it reaches the first of these conditions: Apply Duration expired, Auto Retract sensed, Distance Limit threshold reached.

Note: Use this delay to keep the tamp pad at a fixed distance while the blow function is operating. A value between 50 and 100 mS makes the blow more effective.

Sets the overall speed of the Actuator to five discrete values.
**High Speed Tamp Mechanical Setup**

**ALIGN TO PEEL BLADE**

1. Loosen the two screws on the dovetail slider (A).

2. Slide assembly toward and away from the drive module until there is approximately 3,2mm (1/8") gap between the drive module peel blade and tamp pad edge.

3. Tighten the two screws (A).

**ALIGN LABEL WITH TAMP PAD**

1. Loosen the two screws on the L-bracket (B).

2. Slide the assembly toward and away from the baseplate until a fed label will cover the label present sensor.

3. Tighten the two screws on the L-bracket (B). Keep the actuator parallel to the baseplate during tightening.

**ALIGN TAMP PAD HEIGHT**

1. Loosen the set screw (D).

2. Adjust the bumper height (C) by turning the bumper so that the face of the peel blade is 1,6mm (1/16") **BEYOND** the peel blade.

3. Tighten the set screw (D).

4. Loosen the screws (E).

5. Slide the roller to set angle. The pad face should be level to the bottom edge of the baseplate.

6. Tighten the screws (E).
**Label Applicator**

**High Speed Tamp Parameter Setup**

High Speed Tamp (HST) applications allow the label to be placed on the Top or Side of a product. Typically, this application method allows for linespeeds higher than a standard tamp module can handle. The actuator extends the pivoting plate down to the product and holds this position to allow the product to receive the label via the roller.

Alternatively, the HST can be used to follow the contour of the product. The same principles apply: the plate should not be setup to make flat contact with the product, but rather stop short, hold position, and let the pivoting-action of the tamp plate glide along the product’s surface.

**LABEL MENU** - Enter LABEL Menu from the Home Screen.

- **Std** for rectangular labels with 3,2mm (1/8") gap or **Odd** for any shape label that passes gap sensor.
- Sets the amount of tension applied to the rewind on a feed cycle. Set lower for speeds less than 100 FPM or labels shorter than 101,6mm (4”).
- Determines the label generation mode. For slow applications, like pallets, make this **P1 Detect**. This will reduce the time the label adhesive is exposed to air and drying. For highest throughput, use **At Home**. Use **P2 Detect** for the highest accuracy (by using two detectors) when feed on demand is required. **Then Apply** feeds a label when actuator is at Home position, then applies immediately.
- Sets the distance the liner has to travel after the gap for the next label to align at the edge of peel blade. For standard labels usually set to 50-70 (0.5 to 0.7 inches).

**SYSTEM MENU** - Enter SYSTEM Menu from the Setup Screen.

- Sets the rewind motor direction.
- Set to the length of the actuator.
- Sets the direction of the actuator motor. This setting matches the A/B configuration of the actuator.
- **HS-Tamp** will be chosen for this application.
- **Yes** will offset the label placement from the front. If the product lengths vary, and the label needs to be placed off of the trailing edge of the product, set to **No**.
SMART MENU - Enter SMART Menu from the Setup Screen.

Determines if the system is being used with the optional Label Present sensor.

Determines how many times the label will be fed without an application. The available options are 1, 2, 3 and Infinite. To ensure a 1 Label to 1 Product match, set this to 1.

JOB MENU - Enter JOB Menu from the Setup Screen.

Keep as small as possible by locating the product sensor as close to the peel blade as possible. Exception - if print on demand is used.

Controls the extension stroke time. Set Auto-Retract to zero to properly adjust this time, then re-enable Auto Retract.

Most E-Tamp applications will not need much Home Delay. Large label sizes will benefit with a minimal delay of 20 to 100 mS.

If installed, the Auto-Retract (AR) time depends on the Actuator Speed. Typical values range from 1 mS to 100 mS.

Provides a warning if the system is online with a prior label on the tamp pad. Helps avoid a potential label to product mismatch.

Determines how many times the system will attempt to apply the same label. The available options are 1, 2, 3 and Infinite. To ensure a 1 Label to 1 Product match, set this to 1.
ACTUATOR SETUP MENU

Press ACTUATOR SETUP from the Job Menu.

If enabled, the pad vibrates during label feed to help thicker labels or with stronger adhesive feed on the pad properly.

Sets the furthest extension of the tamp for the application with steps of one inch. Use this limit if the product distance to the labeler is consistent.

Sets the furthest extension of the tamp with 1/4 inch steps.

Sets the overall speed of the Actuator to five discrete values.

Sets how long the actuator should hold the same position once it reaches the first of these conditions: Apply Duration expired, Auto Retract sensed, Distance Limit threshold reached.

**Note:** For CONTOURING APPLICATIONS use the Distance Limit to set the fixed position to pivot from and increase the Hold Delay to apply all of the label. May need to increase Apply Duration to keep actuator in position for the whole Hold period.

**Note:** For HIGH-SPEED APPLICATIONS minimize stroke length and hold time. Keep the tamp plate engaged to the roller bumper, and extend just long enough to pivot. Lower Actuator Speeds are better for this action.

---

<table>
<thead>
<tr>
<th>Profile</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Label length &gt; 203,2mm (8&quot;)</td>
</tr>
<tr>
<td>Med-Low</td>
<td>Label length &gt; 203,2mm (8&quot;)</td>
</tr>
<tr>
<td>Medium</td>
<td>Label size closely matches pad size (i.e., 4 x 6 label on 4 x 6 pad)</td>
</tr>
<tr>
<td>Med-High</td>
<td>Label area is smaller than pad size by 50% (i.e., 4 x 2 label on 4 x 4 pad)</td>
</tr>
<tr>
<td>High</td>
<td>Custom pads of smaller label sizes</td>
</tr>
</tbody>
</table>
**E-FASA Mechanical Setup**

**PEEL BLADE GAP ADJUSTMENT**

1. Loosen the four screws on the dovetail slider (A).
2. Slide assembly toward and away from the peel blade until there is approximately 3.2 mm (1/8") gap between the peel blade and tamp pad edge.
3. Tighten the four screws (A).

**BASEPLATE ADJUSTMENT**

1. Loosen the four screws on the L-bracket (B).
2. Slide E-FASA assembly toward and away from the baseplate until a fed label will cover the label present sensor.
3. Tighten the four screws on the L-bracket (B).

**HEIGHT POSITION ADJUSTMENT**

1. Loosen the jam nut (C).
2. Set height by rotating bumper rod (D).
3. Adjust the tamp pad height to 1.6 mm (1/16") **BEYOND** the peel blade.
4. Check home position by powering up the system.
5. Tighten the jam nut (C).
PAD ANGLE ADJUSTMENT

1. Loosen the jam nut (E).
2. Tighten or loosen the bumper (F) to rotate the pad, making it parallel with the baseplate.
3. Tighten the jam nut (E).

PIVOT SPRING TENSION ADJUSTMENT

1. Loosen bolt (G).
2. Slide the bracket closer or further from the rod end to loosen or tighten the spring.
3. Tighten bolt (G).
4. Test label application. Pad should not “slap” the product when labeling.

HOME SENSOR ADJUSTMENT

1. Loosen set screw (H).
2. With arm in home position, slide home sensor toward machine and then slowly slide it away from the machine until the light turns on.
3. Tighten set screw (H) to 0,68-0,90 N-m (6-8 LB-IN).
4. Verify that the home sensor light turns off when the pad is moved about 25,4mm (1") away from the home bumper.
E-FASA Parameter Setup

The E-FASA application module allows for either one or two product panel applications. In single label applications, either the front or rear panels can be labeled. In dual label applications, either the front and side or side and rear panels can be labeled.

**LABEL MENU** - Enter LABEL Menu from the Home Screen.

- Std for rectangular labels with 3,2mm (1/8") gap and Odd for any shape label that passes gap sensor.

- Sets the amount of tension applied to the rewind on a feed cycle. Set lower for speeds less than 100 FPM or labels shorter than 101,6mm (4").

- Determines the label generation mode. For slow applications, like pallets, make this P1 Detect. This will reduce the time the label adhesive is exposed to air and drying. For highest throughput, use At Home. Use P2 Detect for the highest accuracy (by using two detectors) when feed on demand is required. Then Apply feeds a label when actuator is at Home position, then applies immediately.

- Sets the distance the liner has to travel after the gap for the next label to align at the edge of peel blade. For standard labels usually set to 50-70 (0.5 to 0.7 inches).

**SYSTEM MENU** - Enter SYSTEM Menu from the Setup Screen.

- Set to the length of the actuator. **Note:** This is an important setting, since it regulates the overall speed of the arm. Faster speeds are allowable for the 5” arm and reduced for the 10” and 20”. Proper function of the system requires the correct match of the Actuator Length and the physical length of the E-FASA arm. The length of the E-FASA is the usable length of the arm, measured between the baseplate edge and the tamp pad center.

- E-FASA will be chosen for this application.

- Yes will offset the label placement from the front. If the product lengths vary, and the label needs to be placed off of the trailing edge of the product, set to No.
SMART MENU - Enter SMART Menu from the Setup Screen.

Determines if the system is being used with the optional Label Present sensor.

Determines how many times the label will be printed/fed without an application. The available options are 1, 2, 3 and Infinite. To ensure a 1 Label to 1 Product match, set this to 1.

JOB MENU - Enter JOB Menu from the Setup Screen.

If the application requires two labels, front and side panels, this delay can be kept minimal. If the application is side and rear panels, the product sensor will have to be relocated, and delay will therefore need to increase.

Should be greater than the time required to print two labels (if using Make Label PD Sensor 1 or 2) or print one label (Make Label = At Home mode) plus the first apply cycle.

Provides a warning if the system is online with a prior label on the tamp pad. Helps avoid a potential label to product mismatch.

Determines how many times the system will attempt to apply the same label. The available options are 1, 2, 3 and Infinite. To ensure a 1 Label to 1 Product match, set this to 1.

Should be incrementally set from low values to higher values to adjust the contact point with the product. For the front or rear panels, the optimum contact point is a little beyond 90 degrees. This allows the pad to pivot, and place the label squarely on the product.

Most E-FASA applications benefit from some minimal delay between 50 to 200 mS, to allow the pad to settle when arriving home.

Not very useful for the front and rear panels, but mainly used for the side application. Values between 1 and 50 mS are typical.

Values between 1 and 50 mS are typical.
ACTUATOR SETUP MENU

Press ACTUATOR SETUP from the Job Menu.

Sets the furthest swing angle for this application.  
**Note:** Use this limit for the front or rear panel swing (typically 90 degrees). Can be used in conjunction with the Hold Delay to swing out and wait for the product’s front panel. If Hold Delay is long enough, will perform a corner wrap on product.

Sets the overall speed of the Actuator to five discrete values.

If enabled, the pad vibrates during label print/feed to help thicker labels or with stronger adhesive feed on the pad properly.

Sets how long the actuator should hold the same position once it reaches the first of these conditions: Apply Duration expired, Auto Retract sensed, Angle Limit threshold reached.

See the chart below for recommended setting:

<table>
<thead>
<tr>
<th>Profile</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Label length &gt; 203.2mm (8”)</td>
</tr>
<tr>
<td>Med-Low</td>
<td>Label length &gt; 203.2mm (8”)</td>
</tr>
<tr>
<td>Medium</td>
<td>Label size closely matches pad size (i.e., 4 x 6 label on 4 x 6 pad)</td>
</tr>
<tr>
<td>Med-High</td>
<td>Label area is smaller than pad size by 50% (i.e., 4 x 2 label on 4 x 4 pad)</td>
</tr>
<tr>
<td>High</td>
<td>Custom pads of smaller label sizes</td>
</tr>
</tbody>
</table>
E-WASA Mechanical Setup

ADJUST “X” POSITION
1. Loosen the two screws on the slider track (A).
2. Slide the WASA module until there is approximately 3,2mm (1/8”) between the peel blade and the edge of the Fan Box.
3. Tighten the screws (A).

ADJUST “Y” POSITION
1. Loosen the two screws (B).
2. Feed a label out to the fan box.
3. Label should dispense within 3,2mm (1/8”) of raised edge, but **NOT** on the raised edge.

ADJUST ROTATION ANGLE “Z” POSITION
1. Loosen two nuts (C) on the cylinder.
2. Turn the cylinder body to thread the rod in or out of the coupling to adjust the “Z” rotational position of the Fan Box.
3. Adjust the rotation so that the label feeds out to the Fan Box without stalling on the surface of the face.
4. Tighten both nuts (C) and feed a few labels to determine if the position is ideal.
ADJUST SPRING RATE

1. Loosen the jam nut with the 13mm open-end wrench.

2. Turn the screw (14mm) clockwise to increase the spring force, and counterclockwise to reduce it. Products that are under 2.3~4.5 kg (5~10 lbs) require less spring force to allow the label to be wrapped without making the product stall on the conveyor. Too light of a spring tension will result in a poorly wrapped label. The full range of spring tension is accomplished within a 50.8mm (2") screw threading distance.

**WARNING:** Do not decrease the spring tension so far that the WASA Fan Box does not consistently return home. If the spring is too weak, friction and product placement will begin to effect the performance of the label wrap.

**NOTE:** The E-WASA is highly dependent on a rear guide rail for optimal performance. Since the E-WASA is spring-loaded to apply pressure to the front and side of the product, the guide rail prevents possible product skew. Operation without the proper material handling will result in poor wrap angle or label wrinkle.

3. When the WASA travel has been checked for the swing range of motion, lock in the spring tension position by tightening the jam nut.

ADJUST RETURN FLOW CONTROL

Loosen the thumb wheel jam nub and turn the flow control clockwise to reduce the speed that the WASA returns to the home position. Increase the flow by turning the control counterclockwise, which will allow the WASA box to return home faster.

**WARNING:** The adjustment on the return speed will determine the maximum throughput rate. If the application can tolerate a slower return rate, it will result in a smoother and gentler return, which will result in longer life.

**NOTE:** The E-WASA is highly dependent on a rear guide rail for optimal performance. Since the E-WASA is spring-loaded to apply pressure to the front and side of the product, the guide rail prevents possible product skew. Operation without the proper material handling will result in poor wrap angle or label wrinkle.
E-WASA Parameter Setup

E-WASA applications allow the label to be placed on two adjacent panels, typically front and side, but front and top is also possible. Since the E-WASA cannot accept the next label until the arm returns home, it is a label print on demand by default.

**LABEL MENU** - Enter LABEL Menu from the Home Screen.

- **Std** for rectangular labels with 3,2mm (1/8") gap and **Odd** for any shape label that passes gap sensor.

Sets the amount of tension applied to the rewind on a print cycle. Set lower for print speeds less than 100 FPM or labels shorter than 101,6mm (4").

Sets the distance the liner has to travel after the gap for the next label to align at the edge of peel blade. For standard labels usually set to 50-70 (0.5 to 0.7 inches).

Std for rectangular labels with 3,2mm (1/8") gap and Odd for any shape label that passes gap sensor.

**SYSTEM MENU** - Enter SYSTEM Menu from the Setup Screen.

Sets the rewind motor direction.

E-WASA, if there is no Home Sensor and E-WASA+, if there is a Home Sensor.

**JOB MENU** - Enter JOB Menu from the Setup Screen.

Determines the amount of time to delay from the product detector trigger to the label printing. Usually kept at a minimum value.
WIPE Mechanical Setup

ANGLE ADJUSTMENT

1. Loosen Rotator Screw (A).
2. Adjust angle.
3. Tighten Rotator Screw (A).

NOTE: Increase the angle to the product (more parallel feeding of label to product’s surface) for surfaces that have an outward bow. Decrease the angle to the product (more perpendicular to the product’s surface) for recessed areas or plastic-based labels that tend to trap air pockets.

NOTE: Using an angle less than 20° or greater than 45° can cause label misplacement or unnecessary wear on applicator.

BRUSH ANGLE AND POSITION ADJUSTMENT

The brush should be positioned at the point where the label will make contact with the product.

1. Loosen the brush clamp handle (B).
2. Position the brush to match the point of contact between the label and the product.
3. For short labels, the brush should be positioned next to or contacting the peel blade (product will push bristles back when in contact).

NOTE: If the brush is positioned too far away from the merge point, the label position consistency can change due to label slippage. In addition, the brush can curl up the front edge and, in certain conditions, can remove the label.
**WIPE Parameter Setup**

Wipe application allows for pre-printed standard and irregular labels to be applied at maximum speed of 300 FPM (Feet Per Minute).

**LABEL MENU** - Enter LABEL Menu from the Home Screen.

- **Std** for rectangular labels with 3.2mm (1/8") gap or **Odd** for any shape label that passes gap sensor.

The distance liner has to travel after gap for the next label to align at the edge of peel blade. For standard labels usually set to 50-70 (0.5 to 0.7 inches).

- **LINE ENCODER DISABLED**
  - Depends on the product speed and PPM. Set for fastest throughput for the application.

- **LINE ENCODER ENABLED**
  - Sets the amount of tension applied to the rewind on a feed cycle. Set lower for speeds less than 100 FPM or labels shorter than 101.6mm (4").
  - The percentage applied to encoder input to increase (>100%) / decrease (<100%) feed speed.

**NOTE:** When using Line Encoder, if product detector is triggered on trailing edge of the product, set PD Distance to zero and set "D" in inches as Position Distance.
**SYSTEM MENU** - Enter SYSTEM Menu from the Setup Screen.

- Sets the rewind motor direction.
- An optional line encoder can be used to follow the speed of the conveyor. Using a line encoder changes some of the settings.
- **Wipe** is used for this application.
- Typically leading edge product triggers will offset the label placement from the front. If the product lengths vary, and the label needs to be placed off of the trailing edge of the product, set this value to No.

**JOB MENU** - Enter JOB Menu from the Setup Screen.

- **LINE ENCODER DISABLED**
  - Determines the amount of time to delay from the product detector trigger to label feeding. The setting depends on feed speed and label placement on the product, but is usually kept at a minimum value.

- **LINE ENCODER ENABLED**
  - Sets the distance from the leading edge of the label to the leading edge of the product.
Appendix C: Electrical Interface

PC SERIAL

ETHERNET

USB

PRODUCT DETECTOR

WARNING TOWER OPTION

PC SERIAL

ETHERNET

USB

PRODUCT DETECTOR

WARNING TOWER OPTION

24V DC

ENCODER OPTION

DIN CABLE (WIPE)

MODULE SERIAL

MODULE CONTROLLER
## Appendix D: Part Numbers

### Replacement Kits

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4750-201</td>
<td>Kit, Nip Roller</td>
<td>(1) Nip Roller Assembly and (3) Springs</td>
</tr>
<tr>
<td>2</td>
<td>4750-222</td>
<td>Kit, Nip Roller Handle</td>
<td>(1) Collar, (1) Nip Lever Cover, (1) Screw and (2) Hangar Studs</td>
</tr>
<tr>
<td>3</td>
<td>4750-223L</td>
<td>Kit, Main Bracket, 6&quot;, Left-Hand</td>
<td>(1) Main Bracket, (1) Bearing Bracket Assembly, (1) Housing Bearing Assembly, (2) Flange Bearings, (3) Springs, (1) Rotator Shaft, (1) Rotator Bracket and (4) Screws</td>
</tr>
<tr>
<td></td>
<td>4750-223R</td>
<td>Kit, Main Bracket, 6&quot;, Right-Hand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4750-228L</td>
<td>Kit, Main Bracket, 9&quot;, Left-Hand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4750-228R</td>
<td>Kit, Main Bracket, 9&quot;, Right-Hand</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4750-224</td>
<td>Kit, Brush Mount, 6&quot;</td>
<td>(1) Nylon Brush, (1) Brush Attachment Shaft, (1) Brush Bracket, (1) Knob and (3) Screws</td>
</tr>
<tr>
<td></td>
<td>4750-225</td>
<td>Kit, Brush Mount, 9&quot;</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4750-226</td>
<td>Kit, Web Tension Shaft, 6&quot;</td>
<td>(1) Peel Blade Shaft, (1) Spring Collar and (1) Screw</td>
</tr>
<tr>
<td></td>
<td>4750-227</td>
<td>Kit, Web Tension Shaft, 9&quot;</td>
<td></td>
</tr>
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</table>
## Replacement Kits (continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4750-229</td>
<td>Kit, Power Supply</td>
<td>(1) Power Supply, (2) Power Supply Brackets and (4) Screws</td>
</tr>
<tr>
<td>2</td>
<td>4750-230</td>
<td>Kit, Drive Pulley Replacement</td>
<td>(1) 20 Groove Timing Pulley, (1) 28 Groove Timing Pulley and (1) Timing Belt</td>
</tr>
<tr>
<td>3</td>
<td>4750-231</td>
<td>Kit, Motor</td>
<td>(1) Motor and (4) Screws</td>
</tr>
<tr>
<td>4</td>
<td>4750-232</td>
<td>Kit, Motor Mount</td>
<td>(1) Motor Mount Bracket, (2) Tie Mounts, (4) Screws and (4) Washers</td>
</tr>
<tr>
<td>6</td>
<td>4750-234</td>
<td>Kit, PC Board Mount Assembly</td>
<td>(1) Controller Board Assembly, (1) Hold-Down Mosfet, (1) Circuit Board Mount Assembly and (8) Screws</td>
</tr>
</tbody>
</table>
### Service Parts

#### LA/4750 Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Kit No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4750-200</td>
<td>Belt</td>
</tr>
<tr>
<td>2</td>
<td>4750-202</td>
<td>4750-210</td>
</tr>
<tr>
<td>3</td>
<td>4750-203</td>
<td>4750-211</td>
</tr>
<tr>
<td>4</td>
<td>4750-204</td>
<td>4750-212</td>
</tr>
<tr>
<td>5</td>
<td>4750-205</td>
<td>PC Board</td>
</tr>
<tr>
<td>6</td>
<td>4750-206</td>
<td>4750-213</td>
</tr>
<tr>
<td>7</td>
<td>4750-207</td>
<td>LA4750 Cable Assembly</td>
</tr>
<tr>
<td>8</td>
<td>4750-208</td>
<td>4750-218</td>
</tr>
<tr>
<td>9</td>
<td>4750-217</td>
<td>Torsion Spring Replacement</td>
</tr>
<tr>
<td>10</td>
<td>6146-611</td>
<td>6146-682</td>
</tr>
<tr>
<td>11</td>
<td>4600-900</td>
<td>Product Detector Assembly, Diffuse</td>
</tr>
<tr>
<td>12</td>
<td>1901-141</td>
<td>AC Power Cable</td>
</tr>
<tr>
<td>13</td>
<td>4600-647</td>
<td>Rewind Clasp</td>
</tr>
<tr>
<td>14</td>
<td>4750-221</td>
<td>Container of Fasteners, 4750</td>
</tr>
<tr>
<td>15</td>
<td>4750-235</td>
<td>Label Gap Sensor</td>
</tr>
<tr>
<td>16</td>
<td>4600-950</td>
<td>Platinum Series Wear Items (not pictured)</td>
</tr>
</tbody>
</table>
### Applicator Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Kit No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6000-205X5</td>
<td>Actuator Extrusion, 5&quot;</td>
</tr>
<tr>
<td></td>
<td>6000-205X10</td>
<td>Actuator Extrusion, 10&quot;</td>
</tr>
<tr>
<td></td>
<td>6000-205X20</td>
<td>Actuator Extrusion, 20&quot;</td>
</tr>
<tr>
<td></td>
<td>6000-205X30</td>
<td>Actuator Extrusion, 30&quot;</td>
</tr>
<tr>
<td>2</td>
<td>6000-698KIT</td>
<td>MCM Board Replacement</td>
</tr>
<tr>
<td>3</td>
<td>6000-950</td>
<td>E-TAMP Wear Items</td>
</tr>
<tr>
<td>4</td>
<td>6000-951</td>
<td>E-FASA Wear Items</td>
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<tr>
<td>5</td>
<td>6000-952</td>
<td>E-WASA Wear Items</td>
</tr>
<tr>
<td>6</td>
<td>4600-906</td>
<td>Home Sensor</td>
</tr>
</tbody>
</table>

**NOTE:** Pictures of items 3, 4 and 5 represent the Applicator, not the components in the Wear Items Kit.

### MCA Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Kit No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6000-202</td>
<td>Display Assembly</td>
</tr>
<tr>
<td>2</td>
<td>6000-203</td>
<td>PC Board Assembly</td>
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</tbody>
</table>
## Optional Equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Kit No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5760-820-IJ</td>
<td>Encoder Assembly with Mounting Bracket &amp; 25' Cable</td>
</tr>
<tr>
<td>2</td>
<td>5765-206</td>
<td>Encoder O-Ring Replacement</td>
</tr>
<tr>
<td>3</td>
<td>4600-901</td>
<td>Product Detector, Break-Beam</td>
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<tr>
<td></td>
<td>4600-902</td>
<td>Product Detector, Laser</td>
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<tr>
<td>4</td>
<td>4750-209</td>
<td>Clear Label Gap Sensor (See Note below)</td>
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<tr>
<td>5</td>
<td>6000-518</td>
<td>Y-Cable, Product Detector</td>
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<tr>
<td>6</td>
<td>6000-260</td>
<td>Remote Hand-Held</td>
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<tr>
<td>7</td>
<td>6000-552</td>
<td>Parking Brake</td>
</tr>
<tr>
<td>8</td>
<td>6000-903</td>
<td>Auto Retract, Label Low or Label Present Sensor</td>
</tr>
<tr>
<td>9</td>
<td>4750-216</td>
<td>Core Adapter, 3” to 6”</td>
</tr>
<tr>
<td>10</td>
<td>4750-215</td>
<td>Bracket &amp; 6” Long Bristle Brush</td>
</tr>
<tr>
<td>11</td>
<td>6000828</td>
<td>LED Warning Light Tower</td>
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<tr>
<td></td>
<td>6000828AUD</td>
<td>Warning Tower, Audible</td>
</tr>
<tr>
<td>12</td>
<td>4600-625</td>
<td>Tie-Down Cleats for Stand (3 pack)</td>
</tr>
</tbody>
</table>

**NOTE:** Refer to Instruction Sheet 4750-209N for setup instructions for the Clear Label Gap Sensor.