

TACH-IT[®]

is Entry Level Automation[™]

Setup and Instruction Manual for Tach-It

Model #6500-TL L-Clip Label Applicator



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Cautions:

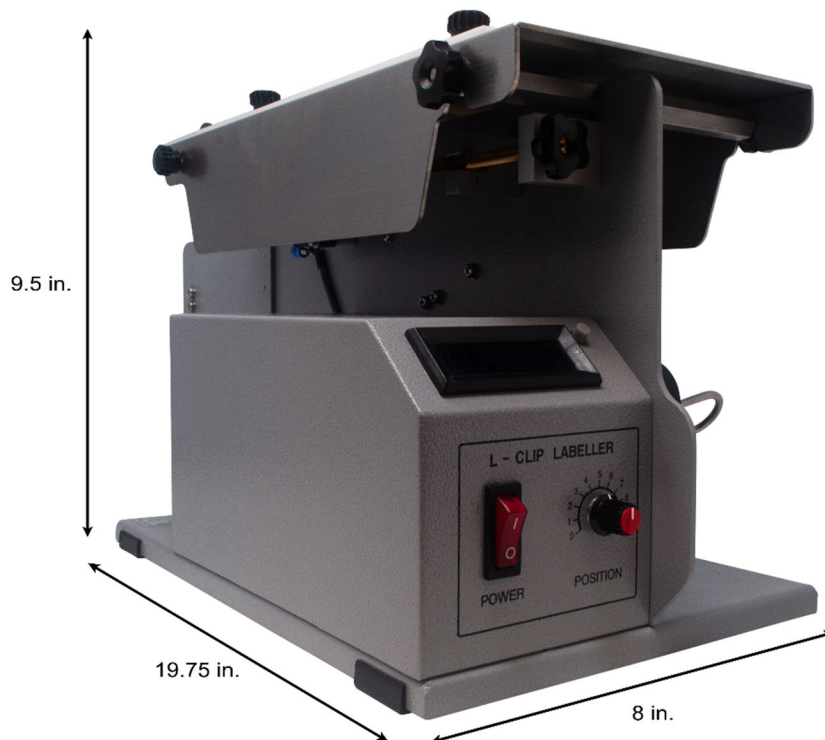
- Before operating this machine make sure to read and understand the complete instruction manual.
- Never have the power cord of this machine plugged into an outlet when any covers or the top of this machine have been removed.
- Install and operate this machine only on a flat, level and dry surface.
- Use only the specified electrical power input with this machine.
- Always turn the power off and unplug this machine prior to clearing any label or label jams from the machine, particularly in the feed path and mechanisms.
- Always keep hand, clothing, jewelry and hair away from all moving parts of this machine.
- Never put hands or any other part of the body or any other item into the working mechanisms of this machine, unless the machine is off and the power has been unplugged.
- Never operate this machine with any of the safety covers removed.
- Never operate this machine after drinking or taking medication or drugs that can cause drowsiness and or reduce any physical or mental function.
- Keep this machine clean and dry at all times.
- Service on this machine should only be performed by factory trained authorized service personnel.
- Never use this machine for other than its intended purpose of feeding and cutting pressure sensitive tapes. Use of this machine for other than its intended purposes can cause harm to the operator, the machine and to the product and will void all actual and implied warranties. Please contact the manufacturer if there are any questions as to whether this machine can be used for a particular application.

Overview of Tach-It Model #6500-TL:

The Tach-It Model #6500-TL is a tabletop L-Clip Label Applicator. Once loaded with the labels to be applied to the product, an operator simply places the box to be sealed onto the top plate moving it forward over the roller. This action applies the label from the side to the bottom of a box.

Utilizing a state-of-the-art non-contact Label Sensor, the Tach-It Model # 6500-TL detects the gap between labels. As the gap is required, the labels must be die-cut. The normal gap is 3mm or 1/8". Because of the sensor being used, unlike other machines, our Model #6500-TL does not black lines printed on the liner.

Easy to setup and use, the Tach-It Model #6500-TL will securely seal chipboard, tuck and many other types of boxes. Labels can be round and clear (this type of label is often called a wafer seal) or other shapes and materials of labels. The Label Sensor can detect all types of transparent and opaque labels.



Specifications:

Machine Size: Length: 19.75 inch (502 mm) x Width: 8 inch (203 mm) x Height: 9.5 inch (242 mm)

Weight: 20 Lbs (9 Kgs)

Label Size: Maximum Width: 1 ½ inch (40 mm) x Maximum Length: 1 ½ inch (40 mm)

Minimum Width: ¾ inch (20 mm) x Minimum Length: ¾ inch (20 mm)

Labels must be die-cut and at least 2 mil thick

Label Roll Diameter: 9 ¾ inch (250 mm)

Power: 110 volt (220 volt available)

Parts Identification:

Figure 1 - Front View:

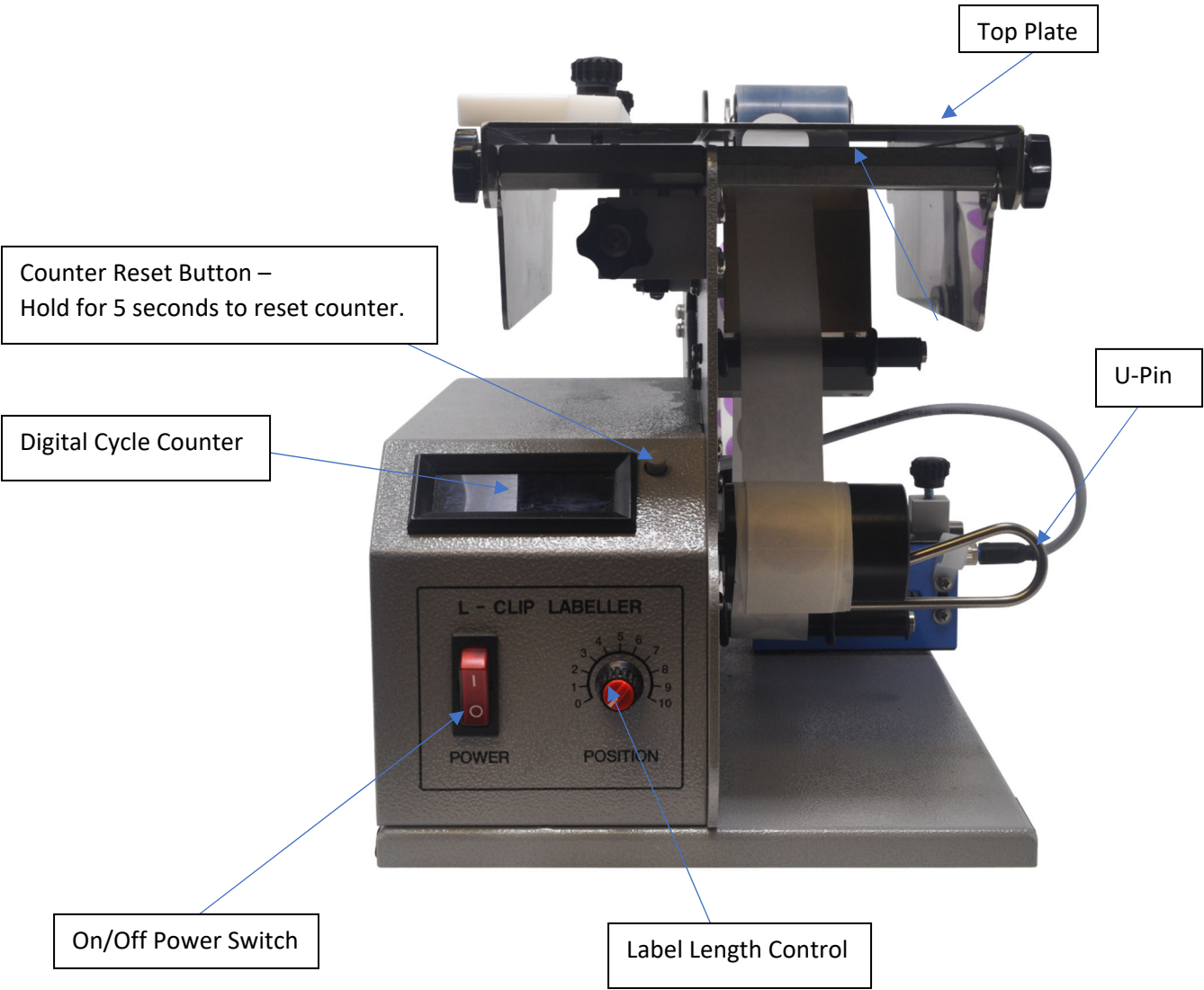


Figure 2 - Right Side View:

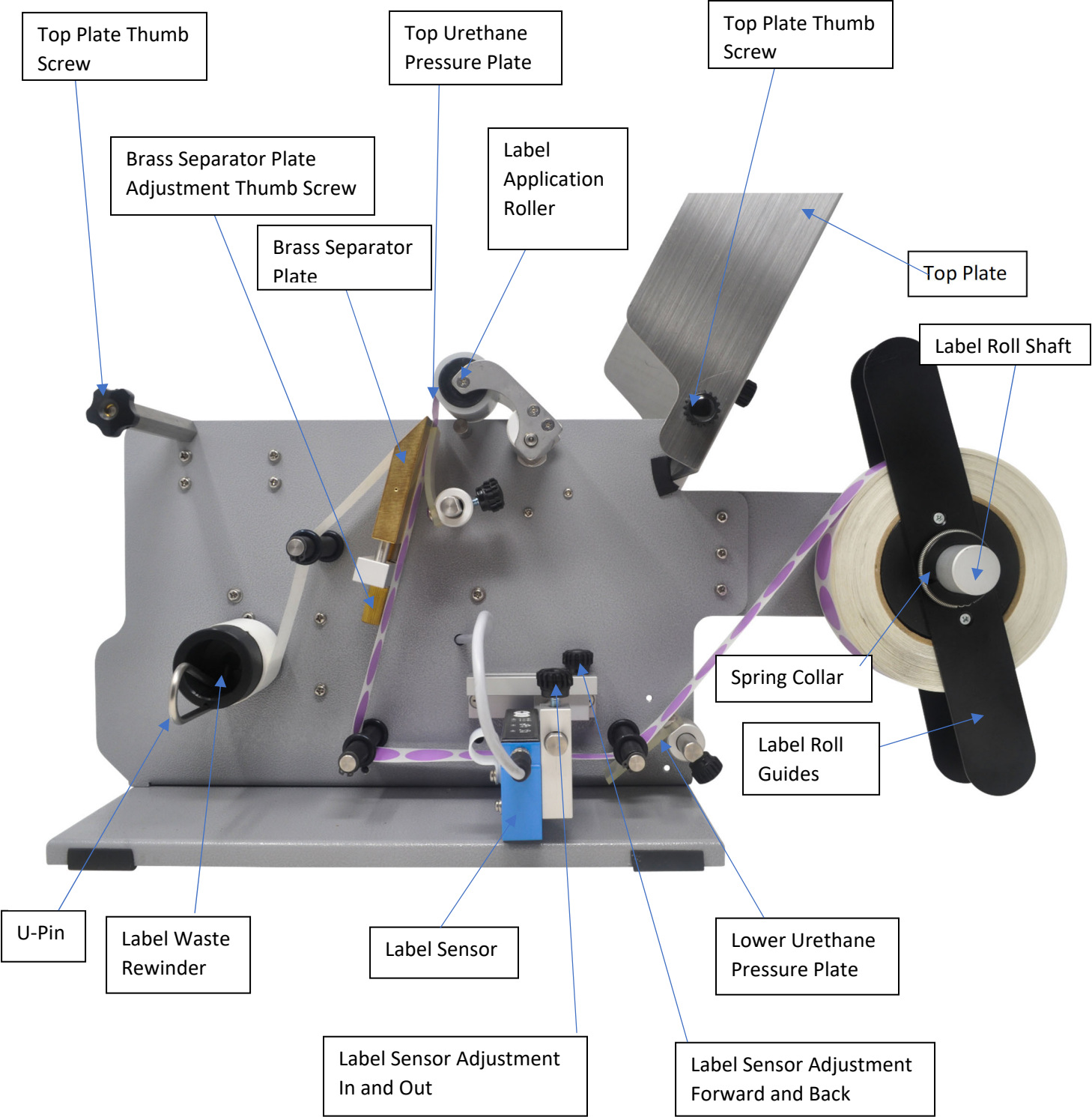


Figure 3 - Back of Machine View:

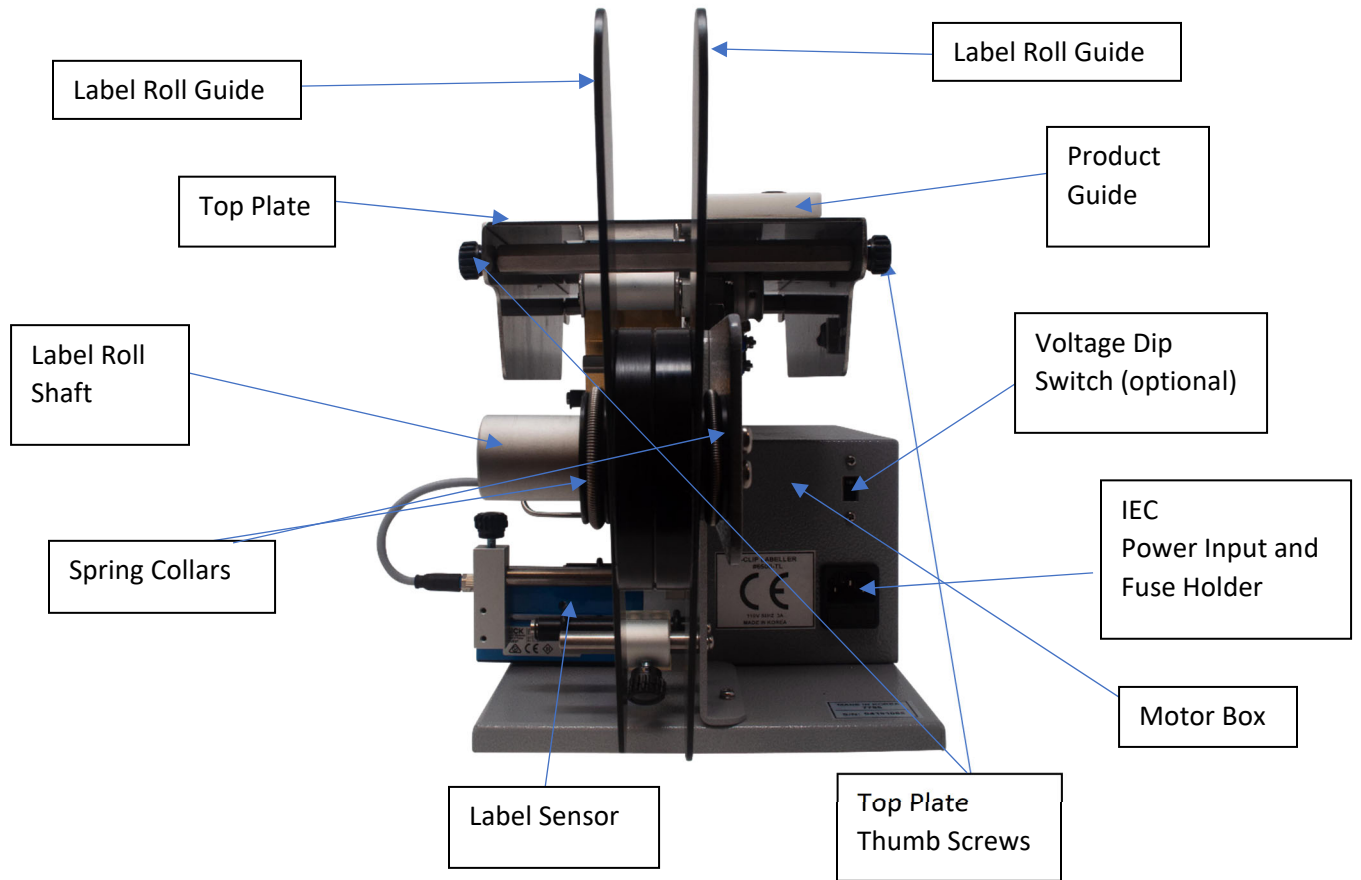
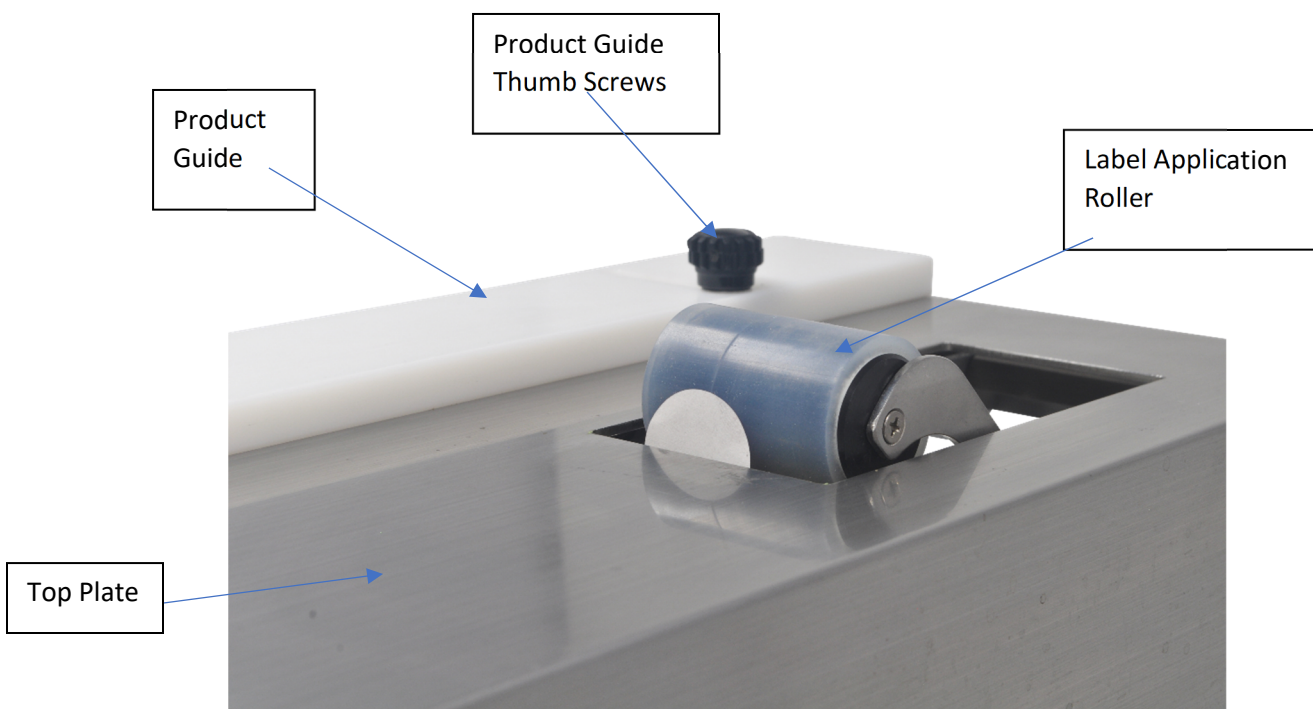


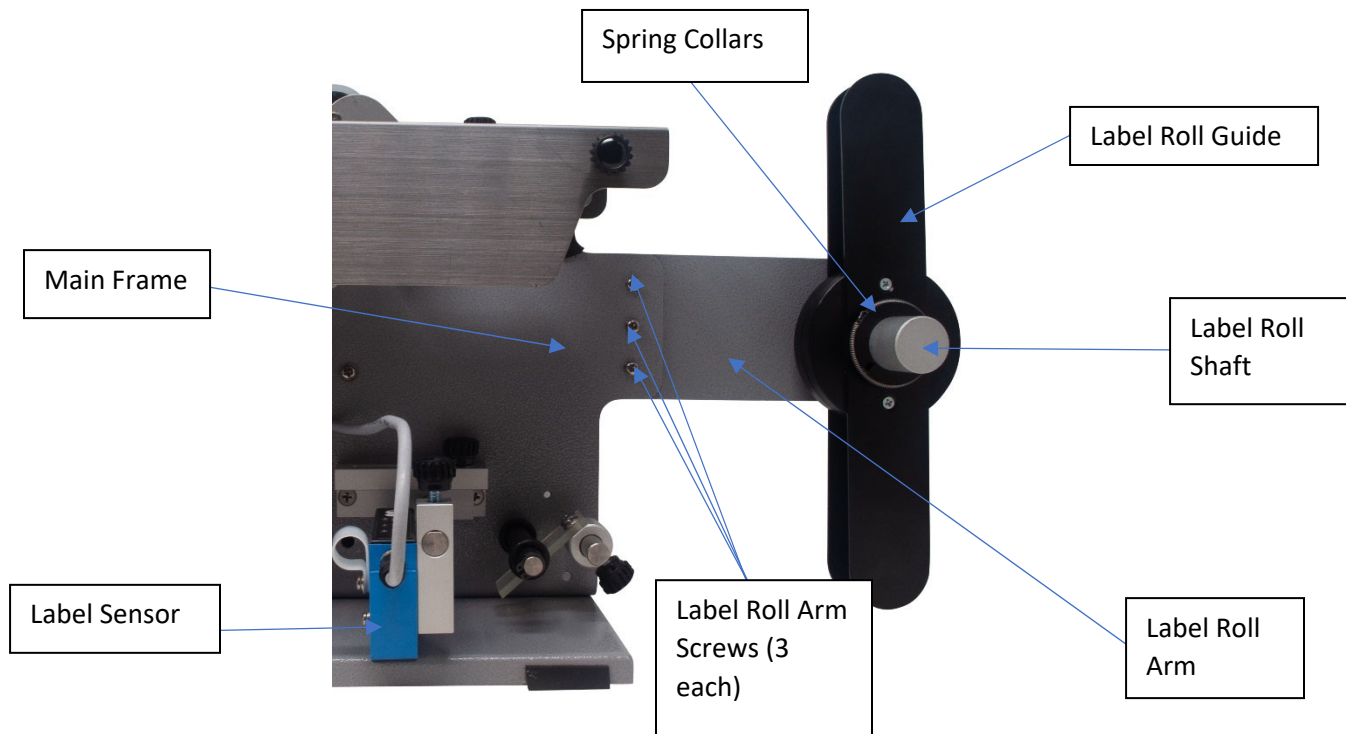
Figure 4 – Top View:



Assembling the 6500-TL:

- 1) Unpack the Model #6500-TL and all accessories and place them onto a flat, level, dry surface that allows full access to all sides of the machine.
- 2) The Label Roll Arm will be packed separately and must be attached to the main frame of the Model #6500-TL. Please see Figure 5 below:

Figure 5 – Label Arm Assembly:



- 3) To attach the Label Roll Arm, unpack it from any protective packaging and there will be 3 screws located on the arm. Remove these 3 screws with a Phillips head screwdriver.
- 4) Holding the arm on the back side of the Main Frame, insert one of the Label Roll Arm Screws previously removed from the Label Roll Arm through one of the holes at the rear of the Main Frame. Tighten until snug.
- 5) Insert the remaining 2 Label Roll Arm Screws into the remaining 2 holes located at the back of the Main Frame and tighten fully. Then tighten the first Label Arm Roll Screw tightly. The Label Roll Arm is now installed.
- 6) Packed separately will also be 2 Roll Guides and 2 Spring Collars. Place 1 Spring Collar onto the Label Roll Shaft and insert 1 of the Label Roll Guides with the 3-inch insert facing away from the Main Frame onto the Label Roll Shaft. The Remaining Label Roll Guide and Spring Collar will be used to secure the roll of labels and will be used during the label feeding process.
- 7) Plug the supplied power cord into the IEC Power Input and Fuse Holder (See Figure 3). Do not plug into outlet.
- 8) The U-Pin to secure the label waste to the Label Waste Rewinder will also be used during the label feeding process and set aside.
- 9) The Model #6500-TL is fully assembled at this time.

Feeding the Labels on the Tach-It Model #6500-TL:

Figure 6 – Label Feeding Diagram Highlighted:

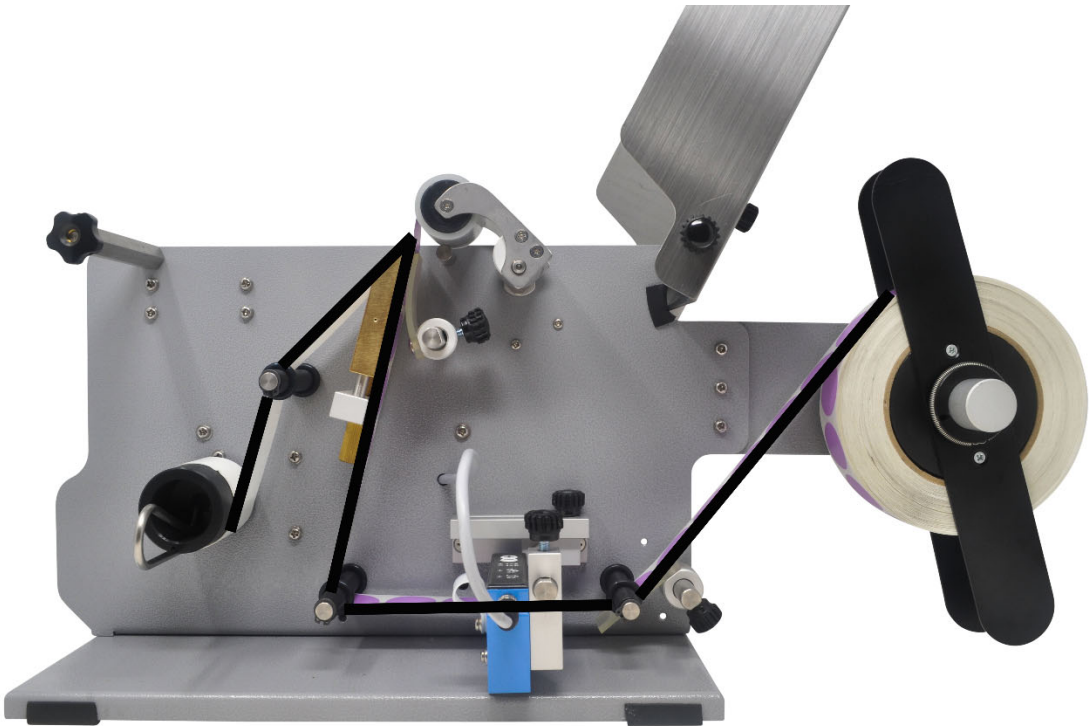
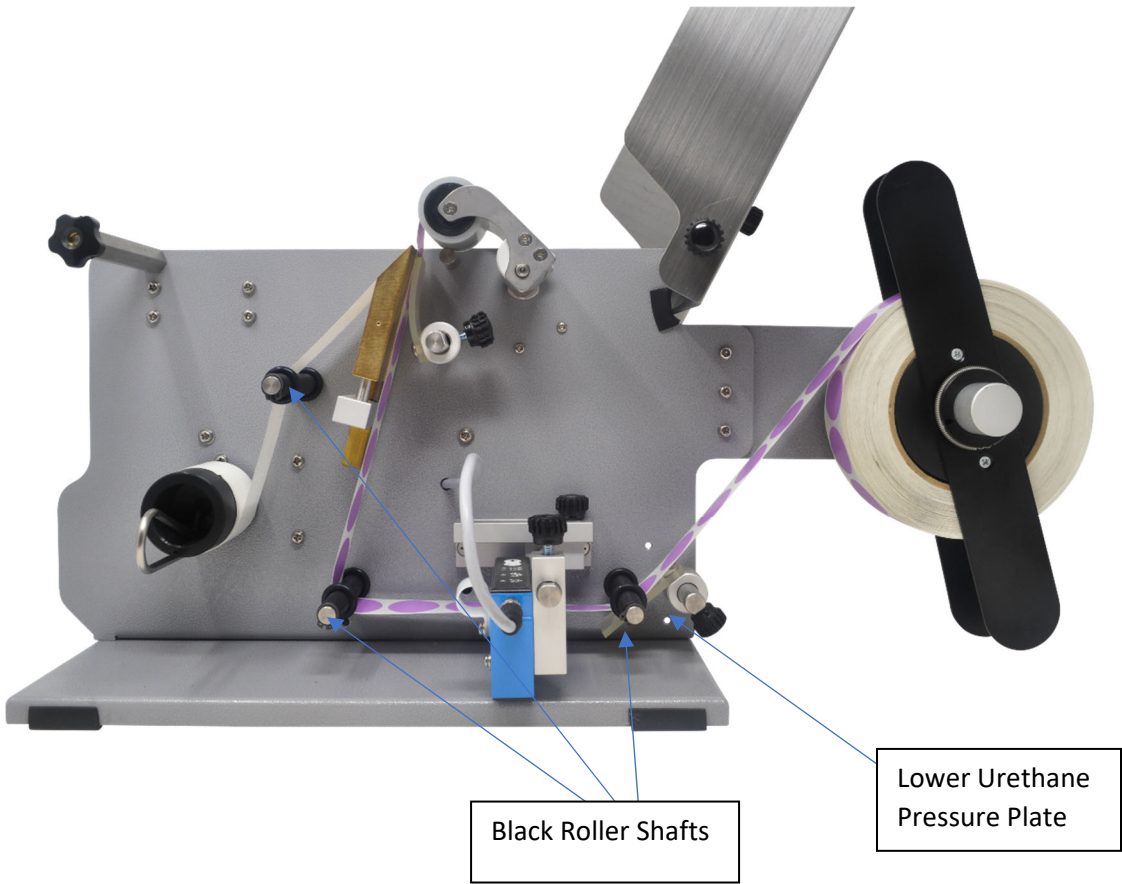


Figure 7 – Label Feeding Diagram Showing Labels:



Feeding the Labels on the Tach-It Model #6500-TL

Continued:

Please see Figure 2, Figure 6 and Figure 7 for diagrams on the feeding of the labels into the Tach-It Model #6500-TL

- 1) The Label Roll Guides have 3-inch core inserts fastened into them. Confirm that the Label Roll Guide placed onto the Label Roll Shaft has the 3-inch core insert facing away from the Main Frame.
- 2) Place the roll of labels onto the Label Roll Shaft and against the Label Roll Guide. Ensure that the 3-inch core insert goes into the core of the label roll. The labels should be feeding from the top of the roll of labels and when the leading edge of the label liner is pulled, the label roll will rotate in a counterclockwise direction.
- 3) Place the 2nd Label Roll Guide onto the Label Roll Shaft so that the 3-inch core insert goes into the core of the label roll and secure with the Spring Collar. Do not press tight with the Spring Collars. This will cause tension on the label roll during operation of the machine. The Spring Collars should be snug against the label roll so that there is no lateral movement of the label roll along the Label Roll Shaft.

If the labels to be used on the Model #6500-TL are on a 1" core, simply reverse the Label Roll Guides so that the 3-inch cores are facing away from the roll of Labels and secure with the Spring Collars.

- 4) Take the leading edge of the label liner and feed it between the Lower Urethane Pressure Plate and the Black Roller Shaft. See Figure 7.
- 5) Continue taking the leading edge of the label liner towards the Label Waste Rewinder and around the second Black Roller Shaft. Make sure that the label is going through the slot in the middle of the Label Sensor, See Figure 9.
- 6) Continue feeding the leading edge of the label liner to the Brass Separator Plate. Keeping the label liner against the bronze Separator Plate continue feeding it upward between the Brass Separator Plate and the Top Urethane Pressure Plate and over the top of the Brass Separator Plate.
- 7) Folding the label liner over the beveled portion of the Brass Separator Plate, take the label liner over the 3rd Black Roller Shaft and to the Label Waste Rewinder. Using the U-Pin that was unpacked during the assembly of the Model #6500-TL, secure the label liner to the Label Waste Rewinder. Move the O-Rings located on the Black Roller Shafts against the label liner.
- 8) The labels are now threaded correctly.
- 9) Both the Lower Urethane Pressure Plate and the Top Urethane Pressure Plate have thumb screws that will allow the assembly to rotate on the shafts. Loosen the thumb screws on both parts and rotate the assembly so that the Urethane Pressure Plate is putting pressure on the labels. This will add some tension to the labels and help maintain consistency in the feeding. Make sure that the Urethane Pressure Plates are in the middle of the label and move the labels through the Urethane Pressure Plate. Ensure that the labels move freely and there is not too much tension. If there is too much tension reduce the pressure on the Urethane Pressure Plates.
- 10) Pull the liner so that any slack in the label liner is removed and until a label is fed about halfway above the Top Plate. See Figure 4. Now it is time to setup the Label Sensor.

Setting up of the Label Sensor and Label Position:

The sensor used on the Model #6500-TL is specifically designed to detect clear labels without any black indicator lines printed on the label liner. If the labels being used have the black line marks or are opaque, it is not a problem due to the state-of-the-art Label Sensor used on this machine.

Figure 8 – Label Sensor Top View:



Yellow Indicator Light –
When Illuminated

Red Indicator Light – Not
Illuminated in this photo

“+” Button – Increases
Sensitivity of Sensor

“-” Button – Decreases
Sensitivity of Sensor

Figure 9 – Label Sensor Side View:



Slot in Sensor that the labels
must be inserted through for
label detection.

Embossed Line – This is the
detection point within the
sensor where the label is
detected.

- 1) See Figure 2 of this manual. On the actual machine locate the Label Sensor and the Label Sensor Adjustment In and Out and The Label Sensor Adjustment Forward and Back assemblies.
- 2) Confirm that the labels are fed through the slot located in the Label Sensor. See Figure 9. See previous section of this manual Feeding the Labels if necessary.
- 3) On the Label Sensor towards the opening of the slot is a line embossed into the body of the Label Sensor. See Figure 9. Loosen the Label Sensor Adjustment In and Out thumbscrew and move the Label Sensor along the shaft so that the embossed line is as close to the center of the label as possible.
- 4) Locate the “+” and “-” buttons on the top of the Label Sensor. See Figure 8. There are LED indicator Lights next to the “+” button on the Label Sensor that will illuminate when there is power to the machine. These LED Indicator Lights will assist and help with setting the sensitivity of the Label Sensor. See Figure 8.
- 5) Plug the Power Cord into a properly grounded and surge protected electrical outlet of the proper voltage. Turn the machine on using the On/Off Power Switch, See Figure 1.
- 6) Hold the label liner and move the labels forward and back so that labels are traveling completely through the slot in the Label Sensor. Ensure that at least 2 or 3 labels are traveling completely through the width of the Label Sensor. See Below and see Figure 8 on the previous page:
 - a. When a gap between the labels is within the slot of the Label Sensor, a Yellow Indicator Light should illuminate. If this is not happening, press the “+” button on the Label Sensor 2 or 3 times. Test again by moving 2 or 3 labels through the Label Sensor and see if the Yellow Indicator Light illuminates. If not repeat the above until the Yellow Indicator Light illuminates when the gap in the label is within the slot of the Label Sensor.
 - b. Sometimes the Label Sensor may be set too sensitive. To check this, move the labels through the gap in the Label Sensor. If the Yellow Indicator Light illuminates at any place on the label that is not the gap between the labels, the Label sensor is too sensitive. Press the “-” button on the Label Sensor 2 or 3 times and move a few labels through the sensor and ensure the Yellow Indicator Light only illuminates at the gap between the labels. If the Yellow Indicator light is still illuminating when the label is within the slot of the sensor, repeat the above by pressing the “-” button 2 or 3 times and test again. Continue this step until the Yellow Indicator Light only illuminates at the gap between the labels. If there is printing on the label, the Label Sensor may detect the ink layer on the label. If possible, find a path within the label with no printing and using the Label Sensor Adjustment In and Out, align the line embossed in the sensor with the path with no ink. Test again and if necessary, adjust per the instructions above.
 - c. The Label Sensor has a unique “Teach-In” Mode to help configure the Label Sensor to the labels being used. Press the “+” and “-” buttons simultaneously for 1 second then let go. A Red Indicator Light next to the “+” button will blink. Move several labels with the substrate through the Label Sensor. After multiple labels have passed through the Label Sensor, press the “-” button to stop the Teach-In Mode. Repeat step 6 above and if necessary fine tune the Label Sensor by using a and b above.
- 7) With the On/Off Switch in the On position, press the Label Application Roller Assembly with an object that will not damage the roller and see if only 1 label is fed through the machine. If multiple labels are fed, repeat step 6-a. If a label is not fully fed, repeat step 6-b.

- 8) To set the Label Sensor Adjustment Forward and Back, confirm that a label is fed halfway up the Brass Separator Plate as shown in Figure 4 of this manual. If a label is not in this position and with the On/Off Switch in the Off position, pull the label liner near the Label Waste Rewinder until the label is fed as shown in Figure 4.
- 9) The Label Sensor Adjustment Forward and Back will determine the feed position of each label as it is fed through the machine. Turn the Power on the machine by using the On/Off Power Switch and press the Label Applicator Roller Assembly and check in what position the next label fed as shown in Figure 4. If the label is not fed high enough, then move the Label Sensor by using the label Sensor Adjustment Forward and Back slightly forward towards the Label Waste Rewinder and test again. If the label is feeding too much, then move the Label Sensor back towards the Label Roll Shaft by using the Label Sensor Adjustment Forward and Back slightly back and try again. Due to the many types of labels, this step will require some trial and error. For fine adjustments to the label feed position, use the Label Length Control as shown in Figure 1 of this manual.
- 10) Once the previous steps have been completed, try applying a label to the product to be sealed using the Model #6500-TL. If the label applies as desired, the Model #6500-TL is ready for use. If the label does not apply as desired but the label is feeding consistently, adjustments can be made by using the Separator Plate Adjustment Thumb Screw, see Figure 2. For smaller labels, the Brass Separator Plate may need to be raised to allow for the label to apply evenly to the package. For larger labels, the Brass Separator Plate may need to be set lower for proper application of the label to the package. To adjust the position of the Brass Separator Plate, use the Separator Plate Adjustment Thumb Screw to raise and lower the Brass Separator Plate. This may require some trial and error for proper adjustment.

Setting up the Product Guides:

- 1) The final step is to setup the Product Guide.
- 2) To setup the Product guide, loosen the 2 Product Guide Thumb Screws and move the Product Guide to the position necessary for the required placement of the labels on the package. See Figure 4.
- 3) There are multiple threaded holes in the Top Plate of the Model #6500-TL and if needed the Product Guide can be fully removed and then placed in a position that will provide the necessary placement of the label on the package and the Product Guide Thumb Screws replaced and tightened.
- 4) The Model #6500-TL can also be flush mounted into a table for larger boxes if desired.

Use of the Tach-It Model #6500-TL:

- 1) Once all of the above has been completed, the Model #6500-TL is ready for use.
- 2) Place the package to be sealed onto the Top Plate of the Model #6500-TL and push the package forward over the Label Application Roller Assembly. Make sure that the package pushes the Label Application Roller Assembly completely below the Top Plate and the forward motion is enough for the full length of the label to be applied.
- 3) Remove the package and the next label will be fed and the machine is ready for the next cycle.

Troubleshooting:

Symptom:	Remedy:
Machine will not Power On when the ON/Off Switch is in the On Position:	Check that the Power Cord is properly inserted into the IEC Power Input. See Figure 3
	Check the Fuse. The Fuse Holder is integrated into the IEC Power Input below the Power Cord
	Make sure that the Power Outlet is live and of the proper voltage.
Labels are not feeding when the Label Application Roller is depressed	Check to make sure that there is no binding of the labels within the feed path.
	make sure that there is not too much tension on the labels as they are being fed. Check the Label Roll Guides, and both of the Urethane Pressure Plates. If necessary loosen these so that the labels will feed freely.
	The Label Applicator Roller depresses a micro-switch located on the back side of the Main Frame. Confirm that the micro-switch is being depressed when the Label Application Roller is depressed below the plate. Also if capable confirm that the signal from the micro-switch is passing.
When the Label Application Roller is depressed below the plate, the labels feed without stopping so multiple labels are fed.	Confirm that the labels are properly fed and that the labels go through the slot within the Label Sensor. See Figure 9 and follow the Feeding the Labels section of this manual
	The Label Sensor will need to be adjusted by pressing the "+" button a few times. Detailed instructions on page 12 of this manual
When the Label Application Roller is depressed below the plate, the labels do not feed all the way up or feed inconsistently.	The Label Sensor will need to be adjusted by pressing the "-" button a few times. Detailed instructions on page 12 of this manual.
	Adjust the position of the Label Sensor by using the Label Sensor Adjustment Forward and Back and see if this changes the position and the position is consistent. See Figure 2. If consistent move forward or back until the desired length of label is fed above the Top Plate and secure the Label Sensor Adjustment by tightening the Tumb Screw.
The label is not being removed from the liner during the feeding process.	Confirm that the label will peel cleanly from the liner by removing a few labels by hand. If the surface of backing label liner is peeling with the label, the die-cut of the label is no good and the machine will have difficulty peeling these labels. Try another label roll or different label

	<p>Add tension to the label using the Top Urethane Pressure Plate. See Figure 2.</p>
The label is not applying as desired.	<p>Confirm that the label is being fed up into the slot at least halfway. See Figure 4. If the label is not feeding enough, use the Label Sensor Adjustment Forward and Back to change how much the label is fed up over the Top Plate. This will take some trial and error.</p>
	<p>If the label is small and not adhering to the box or is not evenly applied to the side and bottom of the box, raise the Brass Separator Plate by using the Separator Plate Adjustment Thumb Screw. See Figure 2.</p>
	<p>IF the label is feeding more onto the side of the box and less on the bottom reduce how much label is fed above the Top Plate by using the Label Sensor Adjustment Forward and Back. This will take some trial and error.</p>

WARRANTY AND GENERAL CONDITIONS

TACH-IT MODEL #6500-TL AND 6510-TL:

THE WARRANTOR, BEN CLEMENTS AND SONS, INC. AND CLEMENTS INDUSTRIES, INC. WARRANTS TO THE ORIGINAL PURCHASER-USER, THE TACH-IT MODEL #6500-TL AND 6510-TL TO BE FREE FROM DEFECTS IN FACTORY MATERIALS FOR THE PERIOD OF 6 MONTHS FROM THE INVOICE DATE OF ORIGINAL PURCHASE OF THE MACHINE. EXCLUDED IN THIS WARRANTY ARE THE MICROSWITCH AND TOP ROLLER AS THESE ARE NORMAL WEAR PARTS. THE WARRANTOR AGREES TO SUPPLY AT **ITS OPTION** SIMILAR PART OR PARTS OF SAID UNIT PROVED TO THE SATISFACTION OF THE WARRANTOR TO BE DEFECTIVE AT THE TIME THE MACHINE WAS SOLD. ANY REPLACEMENTS UNDER THIS 6 MONTH WARRANTY WILL BE WITHOUT COST FOR PARTS TO SAID ORIGINAL PURCHASER-USER, EXCEPT FOR TRANSPORTATION, DUTY, CUSTOMS CLEARING AND LABOR CHARGES. BEFORE WARRANTOR SHALL SUPPLY ANY PART, THE PURCHASER-USER MUST SEND THE ALLEGEDLY DEFECTIVE PART OR PARTS TO WARRANTOR'S DESIGNATED FACTORY FREIGHT PREPAID INCLUDING DUTY AND CUSTOMS CLEARING IF APPLICABLE AND SAID PART MUST BE PROVED DEFECTIVE TO WARRANTOR'S REASONABLE SATISFACTION. **THE WARRANTOR SHALL NOT BE RESPONSIBLE FOR ANY EXPENSES INCURRED FOR SERVICE OR REPAIRS PERFORMED BY ANY PERSON OR PERSONS OTHER THAN THE WARRANTOR, UNLESS SPECIFICALLY AUTHORIZED BY THE WARRANTOR.** SERVICE CALLS OR REPAIRS OTHER THAN THOSE COVERED BY THE CONDITIONS SET FORTH IN THIS WARRANTY WILL BE MADE AT THE EXPENSE OF THE PURCHASER-USER. ANY MODIFICATION OR USE OF THIS UNIT FOR PURPOSES NOT INTENDED VOIDS ANY AND ALL RESPONSIBILITY AND LIABILITY OF THE WARRANTOR. ANY PRESSURE SENSITIVE LABELS USED ON THIS MACHINE THAT DO NOT MEET BEN CLEMENTS AND SONS, INC. / CLEMENTS INDUSTRIES, INC. SPECIFICATIONS WILL MAKE THE WARRANTY NULL AND VOID.

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