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**INSTALLERS, SERVICE & LINE MECHANICS:** PLEASE READ THIS MANUAL AND FAMILIARIZE YOURSELF THOROUGHLY BEFORE ATTEMPTING TO INSTALL OR SERVICE THE DALEMARK EQUIPMENT DESCRIBED HEREIN. FOR FURTHER ASSISTANCE, CONSULT OUR FACTORY STAFF.

# **975-FD/420 Carton Coder**

## **INSTRUCTION AND PARTS MANUAL**

**SERIES 975  
FLAT CARTON IMPRINTER  
MODEL 975-FD420**

**SERIAL NO. \_\_\_\_\_**

When ordering, always provide the following information:

- MODEL NUMBER
- SERIAL NUMBER
- PART DESCRIPTION & PART NUMBER  
AS SHOWN IN PARTS LIST

**DALEMARK INDUSTRIES, INC.  
EXCEL PARK 2  
575 PROSPECT ST., SUITE 211-212  
LAKEWOOD, NEW JERSEY 08701  
PHONE: 732-367-3100  
FAX: 732-367-7031  
E-Mail Address: [sales@dalemark.com](mailto:sales@dalemark.com)  
Website: [www.dalemark.com](http://www.dalemark.com)**

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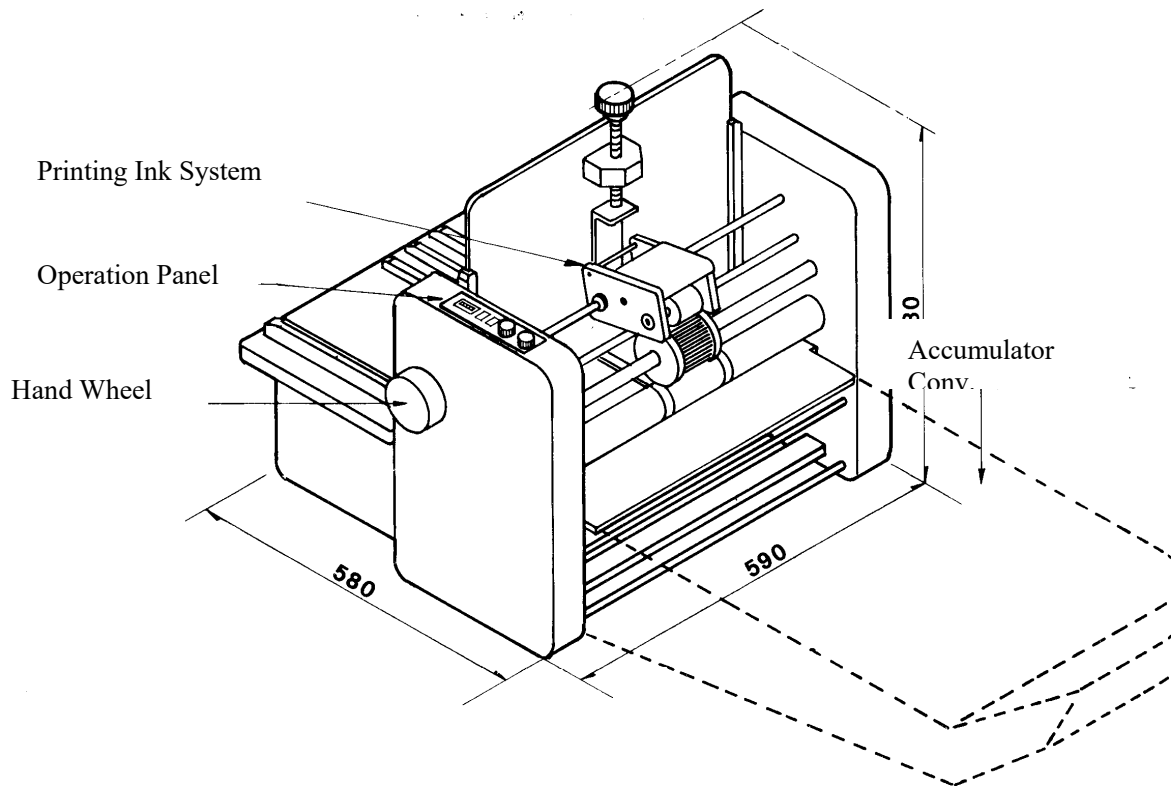
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**In order to ensure personnel safety and avoid machine damage please read this Manual carefully before operation!**

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## 1. Machine Dimensions:



## 2. Machine Functions and Specifications:

### MACHINE FUNCTIONS...

The Model 975-FD 420-2 utilizes a dependable AC Drive Motor with accompanying Speed Control to achieve speed results for any specific carton size or design.

The transversing feed mechanism ensures positive carton feed and copy registration of the Steel Type Characters with easy adjustments to accommodate most straight tuck flat cartons. Optional Paste Ink provides crisp and dark copy when more than debossed copy is required. The same Steel Characters can be used for debossing or coding.

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## SPECIFICATIONS:

Acceptable Products:	Matte or Varnished Straight Tuck (and some Auto Tuck) Cartons
Product Size: (w x l)	1.75" x 3.9" ~ 7" x 13.50"
Thickness of Printed Object: :	1/16" ~ .160"
Speed:	Up to 120 ppm dependent on item
Printing Ink:	Paste Ink
Character Height:	2.5 mm
Maximum Characters per Line:	T Type : (Horizontal) up to 16 characters per line
	R Type : (Radial) up to 16 characters Per line
Registration:	+/-1/16"
Weight:	175 lbs.
Machine Size : (L×W×H)	46" × 26" × 21"
Voltage:	110 VAC @ 50/60 Cyc. Std.
Construction:	Powder Coated Steel Frame & Stainless Contact Surfaces

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## 3. Install/Replace Characters:

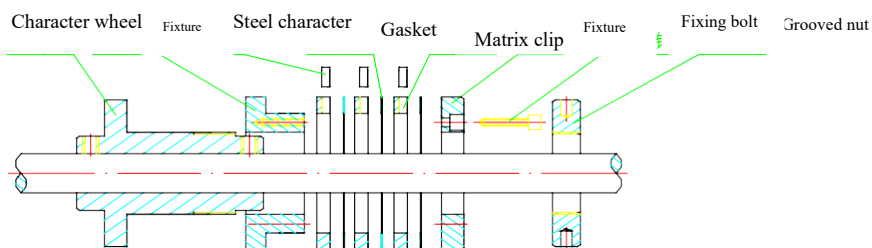
3.1.1 Select Characters. Turn the Hand Wheel to position the Character Wheel so that the Type Slots face upward.

3.1.2 Loosen the Character Wheel Grooved Nut then loosen the collar to allow Character insertion into the Type Wheel.

Note: The bottom of the Steel Character(s) must be fully seated with the Character Wheel base after insertion.

3.1.3 After Character insertion re-fasten the screws evenly to insure Type position.

3.1.4 Re-tighten the Grooved Nut in a clockwise direction.

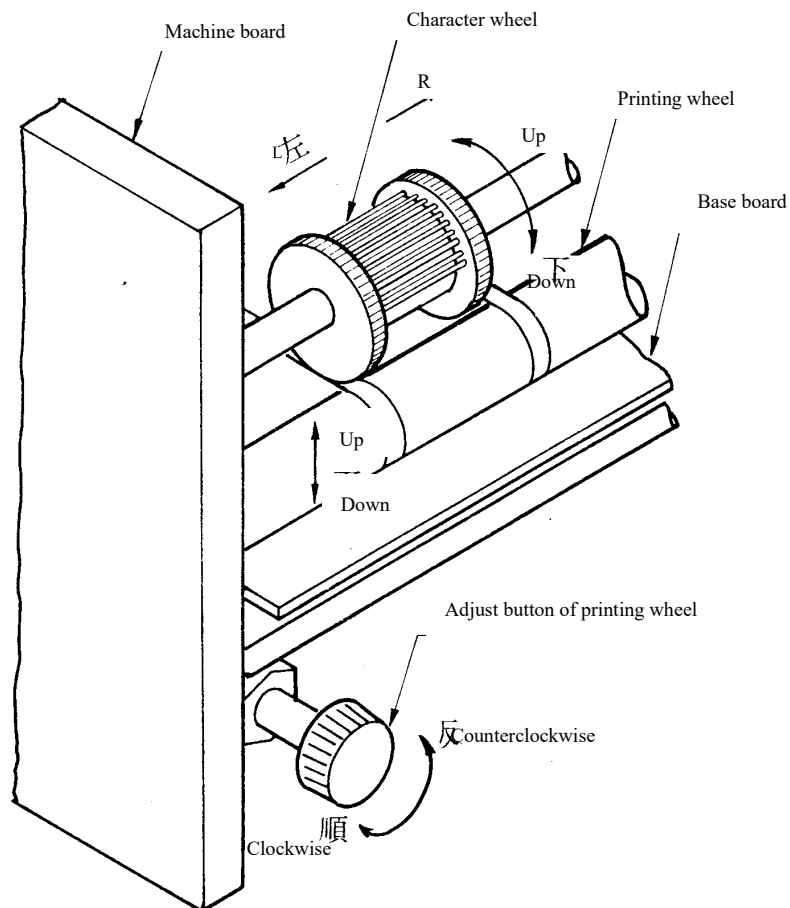


## 4. Adjusting Clearance between the Product and the Character Wheel:

4.1. Turn the Chrome Adjusting Knob of the Character Wheel in a clockwise direction. The Platen Roller will move upwards to shorten the distance between Characters and the White Platen Roller. Turn the Knob counterclockwise to provide less Character depression into the carton.

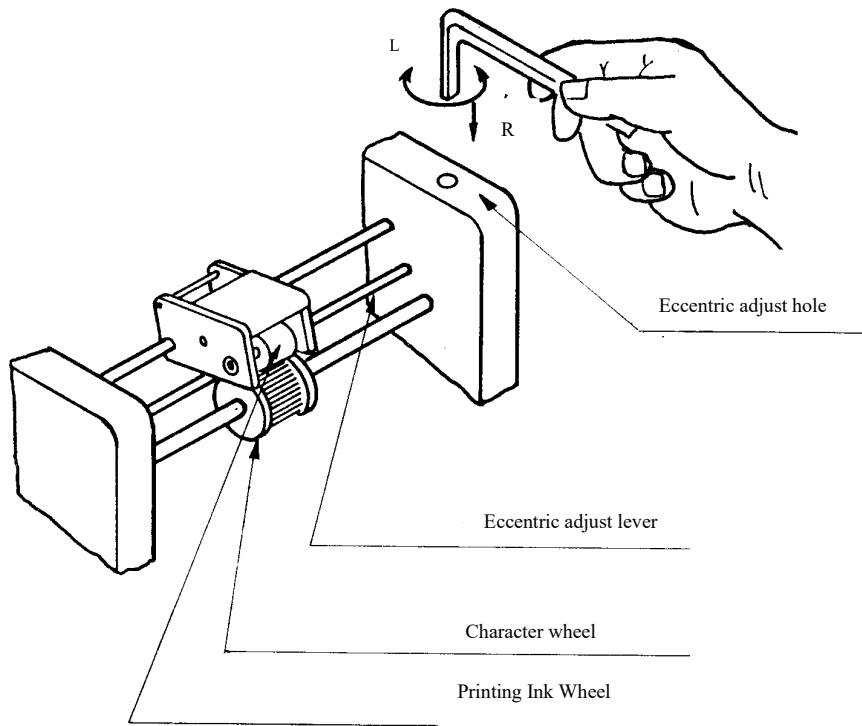
4.2. Depending on the thickness of the carton adjust the distance between the Characters face to the Platen Roller should be around 0.5 mm +/-.

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## 5. Adjust Clearance between Character Wheel and Ink Wheel:

- 5.1 Insert the 4mm Allen Key into the eccentric adjust hole and turn it to left, then the eccentric adjust lever will turn upwards and enlarge the gap, contrariwise it will turn downwards.
- 5.2 Adjust the Ink Wheel and make “kiss” touch contact with the Characters. Too much contact will result in the ink not being properly metered resulting in wet/blurry copy.



## 6. Adjust Copy Position:

- 6.1 Put the printed object (paper box) in the center of feeder set. Position of printed-out characters can be selected by adjusting the position of Character Wheel in all directions.
  - 6.2 The feeding and printing operation is timed so that the feeding of one carton will result in one Character Wheel rotation (1 to 1).
  - 6.3 The leading and trailing position of the print can be selected through adjusting the front and back position of the characters matrix on the Character Wheel. Move the matrix upward the print position will advance on the product, Moving the matrix downward and the print position will retard (Figure 3) .
  - 6.4 Moving the right/left position of Character Wheel can adjust the right/left position of the characters in a broad range (Figure 3) . Move it after loosening the set screw on the Character Wheel while re-adjusting the inking system at the same time.
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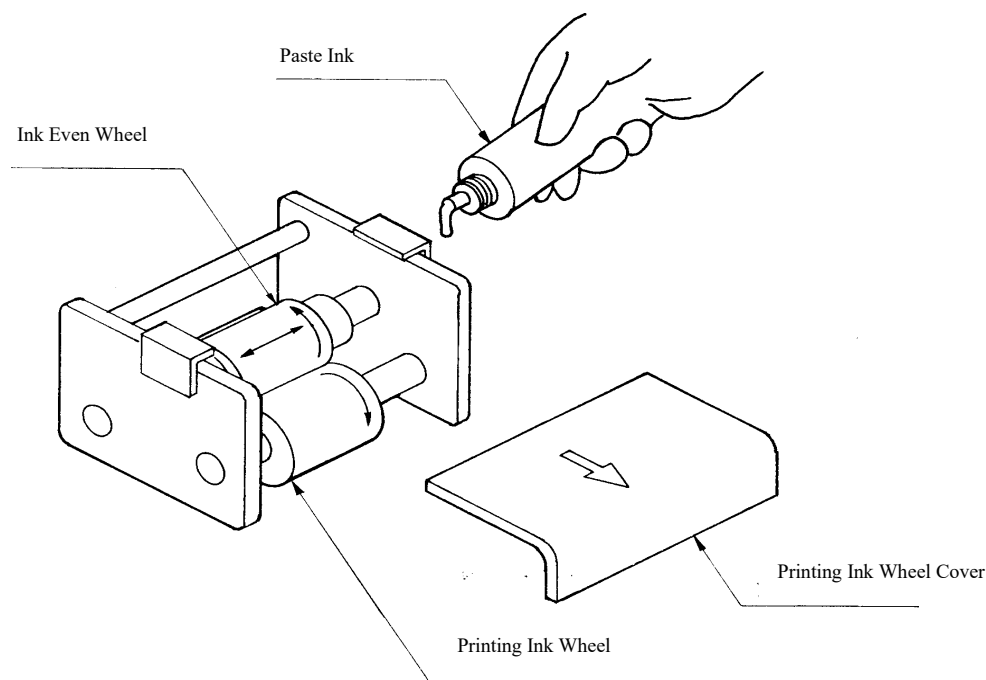
## 7. Refilling the Paste Ink Fountain:

7.1 Pull out the Ink Wheel Assembly Cover

7.2 Apply paste ink sparingly onto the Ink Distribution Roller

7.3 After the Coder starts the ink will spread evenly over the Distribution Roller

**Note: Each time printing is completed the Ink Rollers should be cleaned with a 99.7% Ethyl Alcohol to insure Roller surface consistency and transfer.**



## 8. Adjust Product Feed Separator Height:

8.1 Place the carton under the Product Separator

8.2 Turn the feed height Adjust Knob for in a clockwise direction. The Separator Gate will go down. Bring it down till it touches the carton. Then reverse the turn by approximately one quarter of a turn so that only one carton will pass through per Pusher cycle.

8.3 After manual run testing to insure that only one carton passes through the Separator per cycle then tighten the Locking Thumb Screw on the front of the Plexiglass Cover.

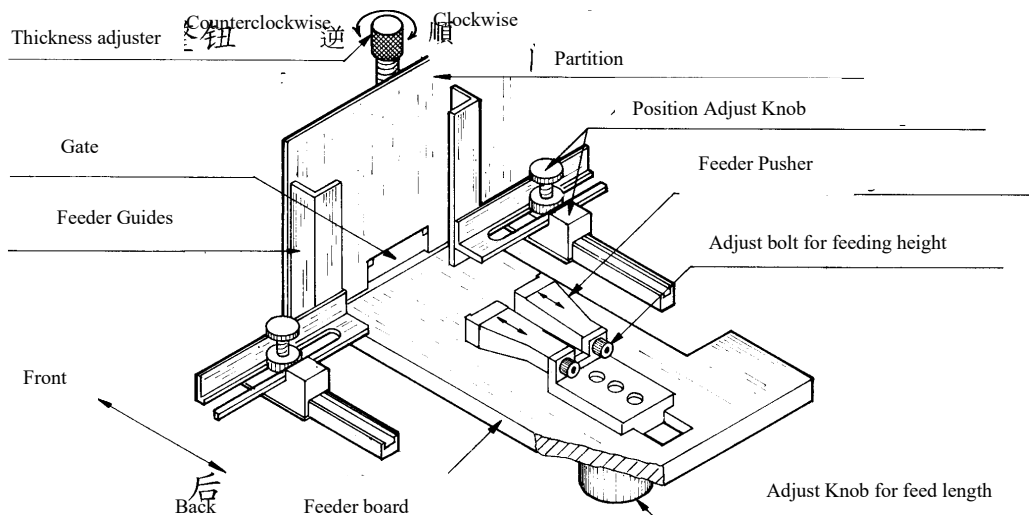
8.4 Loosen and adjust the adjust bolt for feeding height counterclockwise in accordance with the thickness of the box to adjust the height of feeder pusher.

8.5 Fix the paper box and turn the hand wheel at the same time to make the feeder pusher arrive to the final position.

8.6 Loosen adjust feeding length bolt counterclockwise to keep a distance of 5-10mm between the feeder pusher and bottom line of box.

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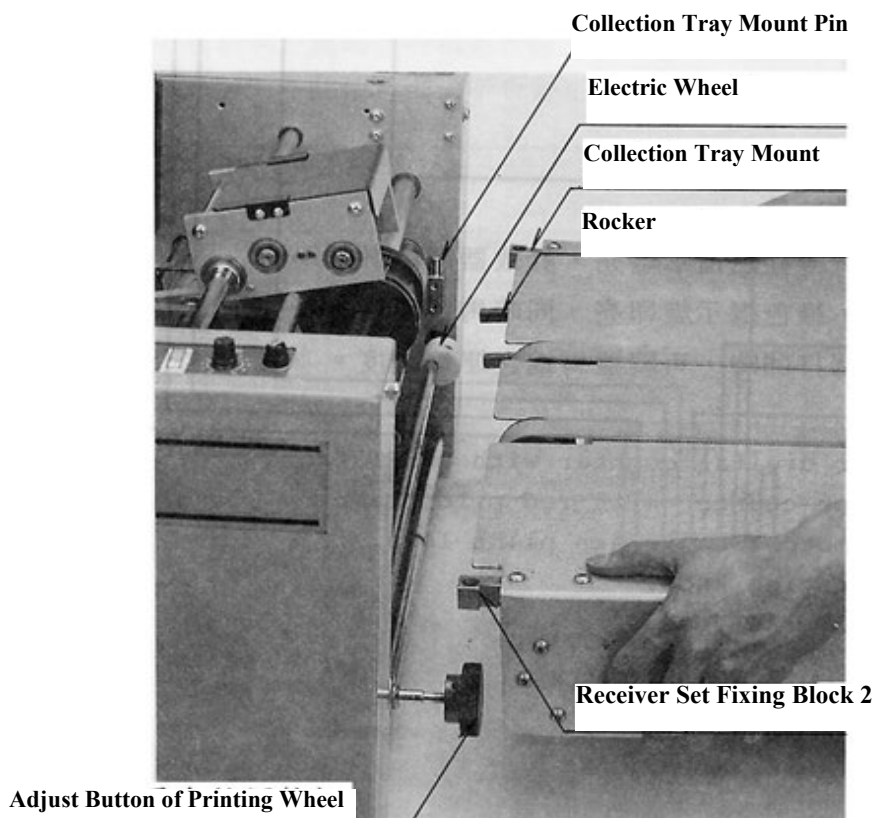




## 9. Adjust Receiver Set:

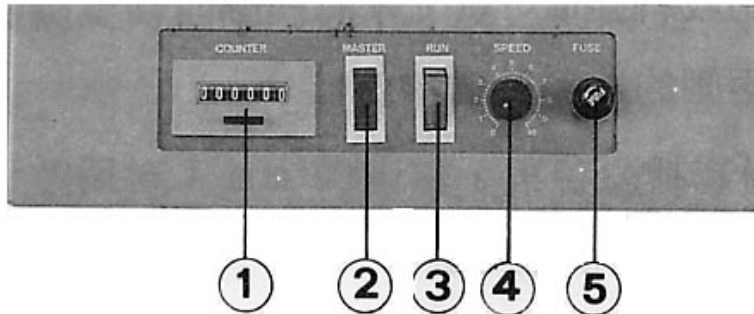
9.1 Hold tightly the two long sides of the feeder set with both hands and fasten the rocker onto the eccentric wheel of the main machine.

9.2 Hitch the Receiver set fixing block 1 on the front end of the receiver onto the receiver set fixing block 2 on the back.



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## 10. Operating Panel:



10.1 Counter indicates Product Count

10.2 Counter Switch - Red Indicator Light is On

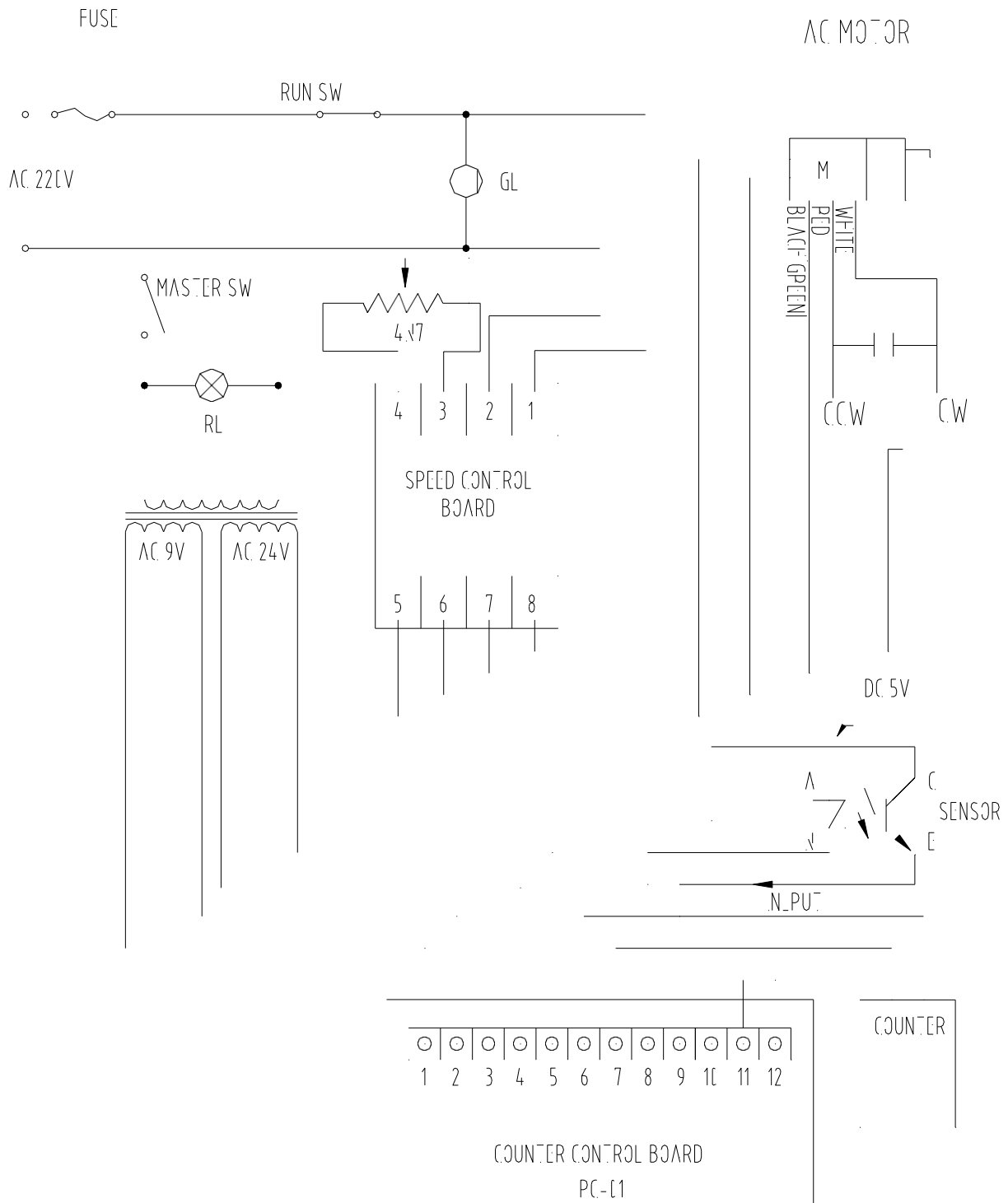
10.3 Motor Switch - Green Indicator Light is On

10.4 Speed Dial – Controls Run Speed adjusted.

10.5 Fuse ——2A

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# 11. Electric Circuit Diagram



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## 12. Quality Inspection and Troubleshooting:

### 12.1 Quality Inspection

Phenomenon	Cause	Countermeasure
No Print	<ol style="list-style-type: none"><li>1. No power</li><li>2. The printing wheel is too low</li><li>3. Type Wheel does not touch the Ink Wheel</li><li>4. Lack of ink</li></ol>	<ol style="list-style-type: none"><li>1. Check the Power source</li><li>2. Adjust the Ink Wheel to appropriate position (upwards)</li><li>3. Adjust Ink Wheel height</li><li>4. Add in ink</li></ol>
Too dark and polluted	<ol style="list-style-type: none"><li>1. Ink is not even</li><li>2. Polluted by Zinc alloy characters</li></ol>	<ol style="list-style-type: none"><li>1. Check ink wheel and ink even wheel</li><li>2. Check the Zinc alloy character and clear the oil contamination off the type of matrix</li></ol>
Unclear print out or partly unclear	<ol style="list-style-type: none"><li>1. Character is not flat</li><li>2. Ink is not even</li><li>3. Ink is not adequate</li><li>4. Too much contact of ink wheel with character</li></ol>	<ol style="list-style-type: none"><li>1. Replace Character(s)</li><li>2. Check ink wheel and ink even wheel</li><li>3. Add in ink</li><li>4. Adjust the ink system to be upward</li></ol>
Others	Mechanical failure or improper operation	<ol style="list-style-type: none"><li>1. Refer to Elimination when failure occurs</li><li>2. Refer to the User's Manual first before operation when improper operation happens.</li></ol>

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## 12.2 Troubleshooting

Trouble	Elimination
Print Head Stops Running	<ol style="list-style-type: none"><li>1. Check Motor Switch</li><li>2. Check 2A Fuse</li><li>3. Check Main Drive Belt</li><li>4. Check Motor. If needed replace</li></ol>
Unit Stops Feeding	<ol style="list-style-type: none"><li>1. Feed Pusher is too low. Raise it</li><li>2. The distance for the Feed Pusher is too far from carton. Re-adjust to ¼” to 3/8” away from the back of the carton</li><li>3. Check Feed Belts</li></ol>
Unit Stops Counting	<ol style="list-style-type: none"><li>1. Check Counter Parameters</li><li>2. Check Electric Eye Operation</li><li>3. Check Counter. If needed replace</li></ol>

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