

**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.

## **INSTRUCTION AND PARTS MANUAL**

**SERIES 975  
HOT ROLLER CODER/DEBOSSER  
MODEL 975-A/HR-D-MY300**

**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  
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LAKEWOOD, NEW JERSEY 08701  
PHONE: 732-367-3100  
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Website: [www.dalemark.com](http://www.dalemark.com)**

## TABLE OF CONTENTS

	Page
Special Instructions before Operating the Machine.....	2
Operational Procedures .....	3
Preparation for Printing .....	7
Installation of Product Accumulator.....	11
General Problems, Causes and Troubleshooting .....	12
Electrical Diagram.....	16
Parts Identification .....	17

## **SPECIAL INSTRUCTIONS BEFORE OPERATING THE MACHINE**

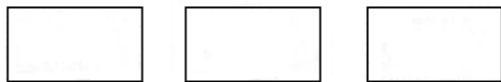
The following instructions must be strictly followed by operators and repair personnel to ensure the normal operation of the machine.

1. Printer should be properly grounded to ensure safety during production.
2. Before operating, each operator or technician must be familiar with this Operational Manual and acquainted with the functions of each control switch and button. The power voltage of the machine is AC 110V 3A unless otherwise noted on the Coder.
3. Media to be printed must separate easily for single feed of each sheet to avoid damage to the machine.
4. The Separation Knob Adjustment should be adjusted for exact separation of each product.
5. The upper and lower limits of the Print Wheel should be adjusted according to the thickness of the media. The lower limit should not be so low so as to avoid damaging the Printing Wheel or breaking the Print Wheel Shaft.
6. The Print Wheel must be installed onto the Shaft avoiding any contact with the Platen Roller. Contact of the Type can be achieved by gradually lowering the Wheel by hand allowing for a space the thickness of the media.
7. Power Off the machine before checking if any abnormality is found.

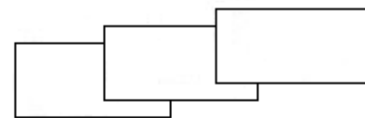
## OPERATIONAL PROCEDURES

1. Press the “ZERO” button (7) on the Control Panel to reset the counter.
2. Set the Control button (6) and Run button (5) at Stop (lamp off) position.
3. Turn the Print Position Adjustment Knobs 2A (macro tuning) and 2B (micro tuning) to “0”.
4. Turn the Heat Switch Knob (4) to “0”.
5. Set the Adjustment knob (3) for thickness and separation of labels at 4.5.
6. Adjust the spacing between solid ink roller and print wheel.
7. Adjust the spacing between print wheel and platen roller.
8. Stack about 5” high of your product into the space between the left and right Guide Plates (26). They should not be clamped too tightly or the feeding of the products may be affected.
9. To start just press down the Control Button (6 - lamp on) to print and count.
10. Press down Run Button (5) (lamp on) to feed products. To determine if the Thickness & Separation Adjustment Knob (3) is at the correct position press the Run Button to retain the labels in the delivery channel. The adjustment is proper as shown in the following Left Picture. If two products are overlapping as shown in the Right Picture the Adjustment Knob (3) must be rotated clockwise until correct separation is achieved.

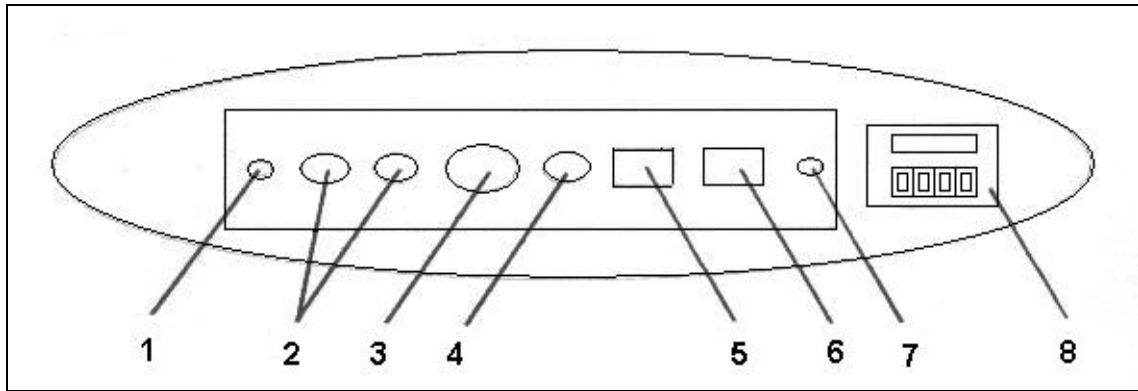
Clearly-separated products



Overlapping products



The above adjustments should be performed each time a large quantity is to be printed. After extensive usage the Reverse Wheel or the Feed Belt may begin to wear causing the interval between the products to be increased. Adjustments or replacements must be made as per the specific condition.



1. Heating Indicator Light
2. Adjustment Knobs for Print Position
3. Thickness & Separation Adjustment Knob
4. Heater - Temperature Control Knob
5. Run Button
6. Master Control Button
7. Zero (Clear button)
8. Counter

### **Description on Control Panel**

#### 1. Counter (8):

- A. Set the preset number on the Counter for the quantity to be printed. The machine will stop automatically when the quantity is reached.
- B. To repeat the printing just press down ZERO Button (7).
- C. Sometimes the digital value displayed in the Counter will be one piece different from the number programmed when it is automatically stopped. To clear the reading, just press the ZERO Button (7).

2. RUN Button (5): Press the Button (lamp off) to cut off the power and stop the printing.

3. Adjustment Knobs (2): When turning clock-wise the printing position will be moved backwards. Turning Counter-clockwise will cause the printing position to advance.

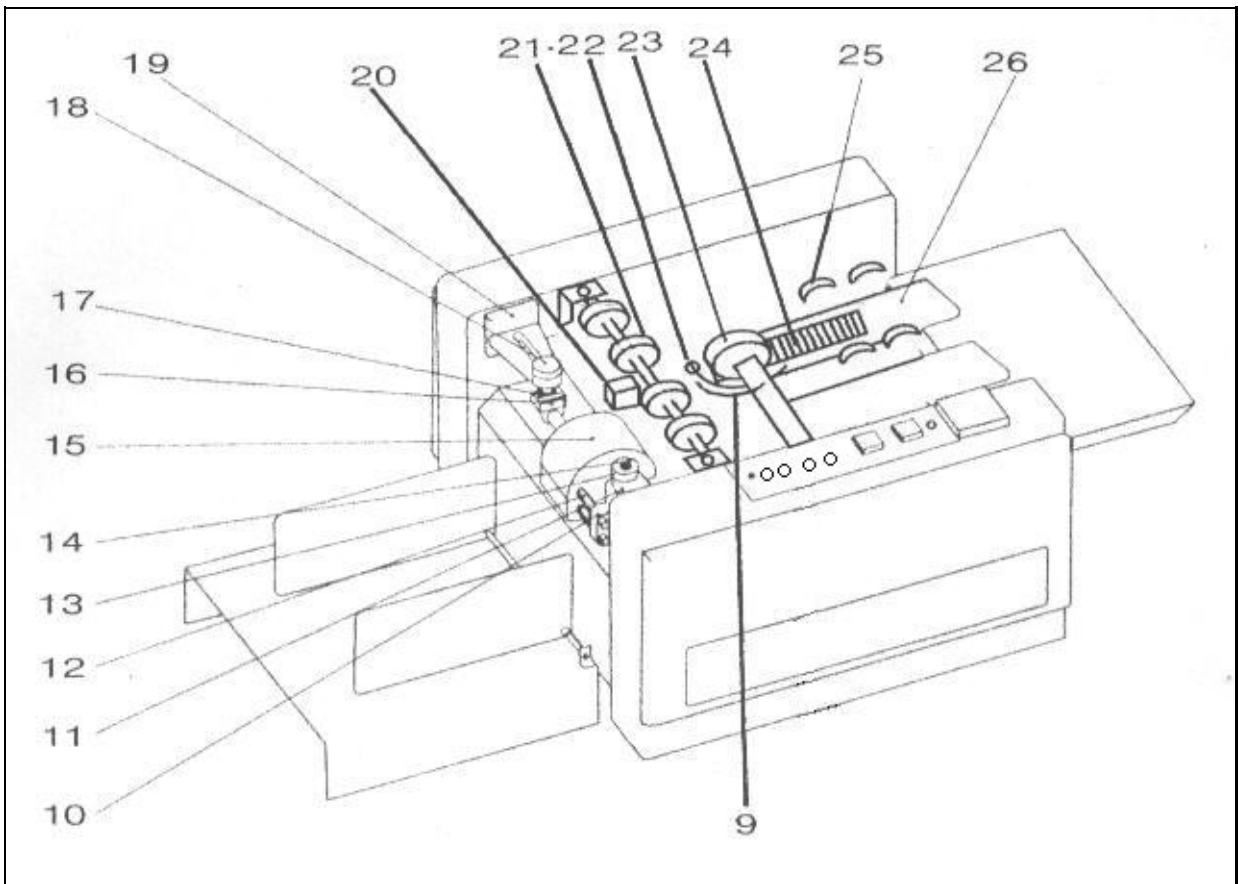


Diagram 1

- 9. Board Pressure Shield
- 10. Locking Screw for Heat Block Guide Rod
- 11. Front Support Block
- 12. Heat Block Guide Rod
- 13. Adjusting Bolt
- 14. Locking Screw
- 15. Heat Block
- 16. Rear Support Block (RSB)
- 17. Upper/lower Locking Nut in RSB
- 18. Control Hand Wheel in RSB
- 19. Rear Bracket
- 20. Sensor
- 21. Auxiliary Feed Wheel
- 22. Control Screw of Board Pressure Shield
- 23. Silicone Feeding Wheel
- 24. Feeding Belt
- 25. Feeding Roller
- 26. Left/Right Guide Plates

## **Product Feed Pressure Adjustments**

1. Product Reverse Wheel (shown in Diagram 1-21): Separates the products and feeds them in sequence.
2. Board Pressure Shield (Diagram 1-9): Helps feed the products smoothly.
3. Control Screw of Board Pressure Shield (shown as Diagram 1-22): During separation & delivery of product the Control Screw helps regulated pressure for various product parameters (size of product, materials and weight, etc.) for smooth and consistent printing.

These minor adjustments must be conducted when the feed belt is worn and slippery and the feed is not smooth.

## PREPARATION FOR PRINTING

### 1. How to adjust the spacing between the Print Wheel and the Platen Roller:

- A. Loosen the Upper/Lower Locking Knob (Diagram 1-14) between the Rear Support Block (Diagram 1-13) and Rear Bracket (Diagram 1-16) to release the Rear Control Wheel.
- B. Turn the Print Wheel (Diagram 2-1) toward the Platen Roller (Diagram 2-3). Then withdraw the control bolt (Diagram 2-6) on the front support block (Diagram 2-7) which releases the Print Wheel (Diagram 2-2) from the Platen Roller. Then insert media to be printed into the space between Print Wheel and Platen Roller. Lower the Control Bolt gradually and rotate the platen roller for a slight contact between the Type and the Roller.
- C. Then lock the Hexagon Screw as shown in Diagram 2-5.
- D. Loosen the Hand Wheel and Nut on the Rear Bracket as shown in Diagram 1-13 to release the Rear Support Block. Then position Print Wheel Shaft in the hole as shown in Diagram 2-4 and rotate the Print Wheel until there is no resistance. Lock the Upper/Lower Nuts as shown in Diagram 1-14.

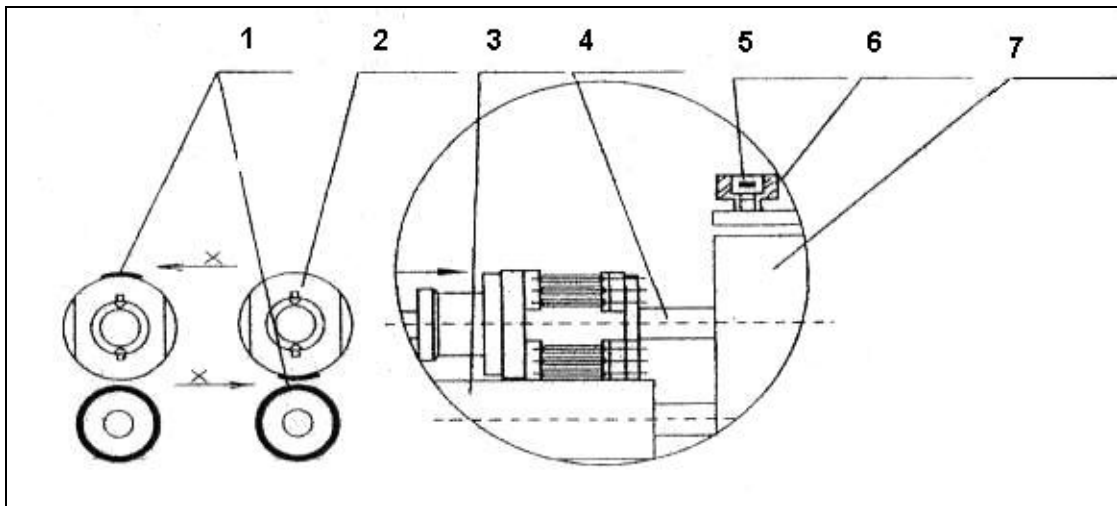


Diagram 2

1. Type
2. Print Wheel
3. Platen Roller
4. Print Wheel Shaft
5. Lock Screw
6. Control Screw
7. Front Support Block

**Note:** In many cases, it is not necessary to engage the Rear Bracket for Print Wheel Shaft support when you are printing without any type debossing. The Rear Support only needs to be connected when you intend on debossing your copy into the product with or without ink.



## 2. How to install/replace Hot Ink Roller:

A. Rotate the Side Plate from the Heating Block Assembly.

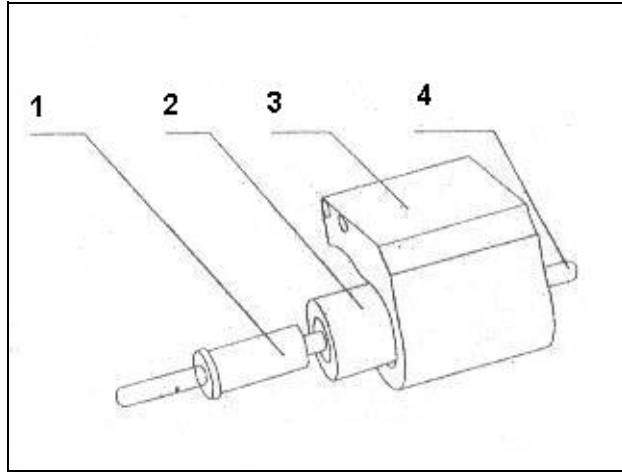


Diagram 3

1. Fixing Sleeve
2. Ink Roller
3. Heating Block
4. Ink Roller Shaft

B. Detach the Fixing Sleeve from the Ink Roller. Remove the old Ink Roller and replace with a new one. Replace the Fixing Sleeve and rotate the Side Plate back into position to cover the Ink Roller.

C. Turn the Heater Knob to 10 and preheat for 5 - 8 minutes. Then reduce the heat to 7 - 8.

### 3. How to control the spacing between the Print Wheel and Ink Roller:

- A. Loosen the Fixing Screw in the Eccentric Bronze Bushing in the Ink Roller Shaft as shown in the diagram.
- B. Rotate the Bronze Bushing (4) by hand to make a slight contact between the Type characters and Ink Roller Surface. Then lock the Fixing Screw of the Bronze Bushing.

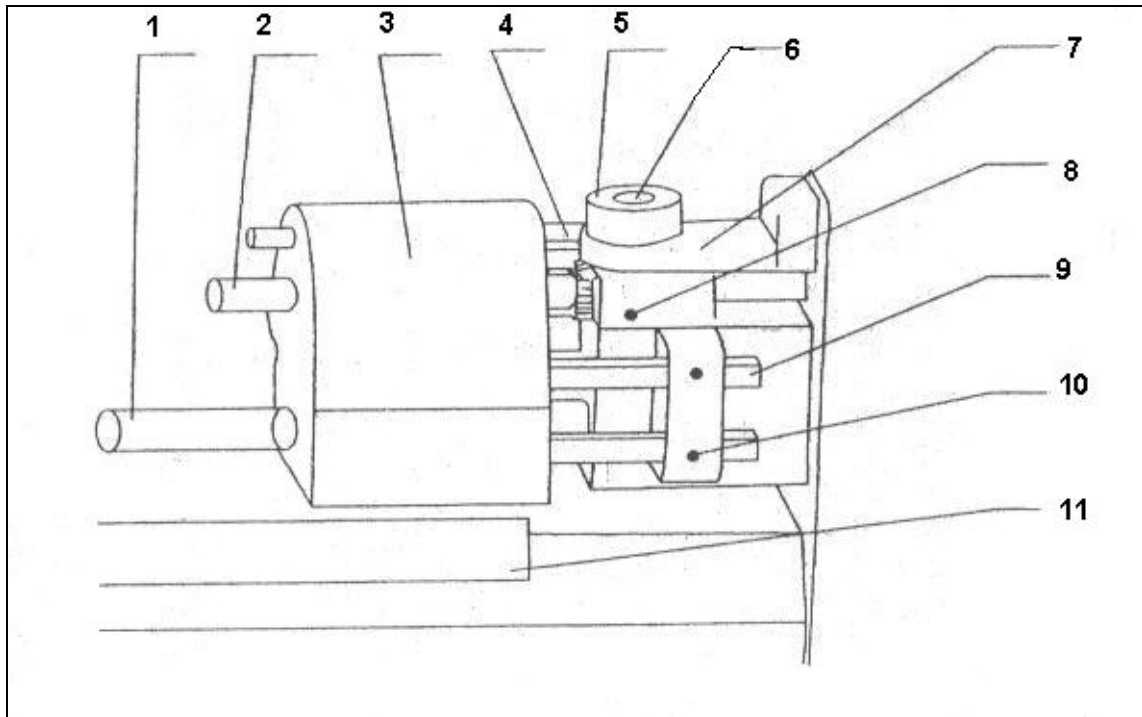


Diagram 4

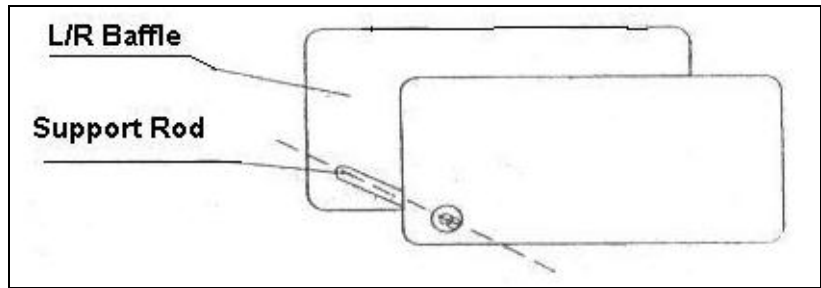
1. Print Wheel Shaft
2. Ink Roller Shaft
3. Heating Block
4. Eccentric Bronze Bushing
5. Control Bolt
6. Fixing Screw
7. Front Bracket
8. Eccentric Bronze Bushing Locking Screw
9. Control Guide Rod of Heating Block
10. Guide Rod Locking Screw
11. Platen Roller

#### **4. How to adjust the Print Wheel Position/Ink Roller Heating Block:**

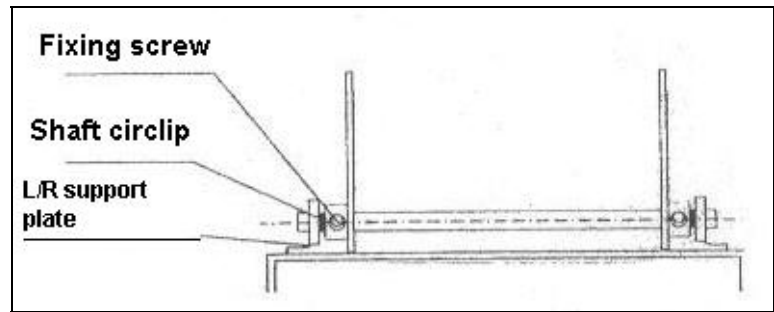
- A. Rotate the Side Cover of the Heating Block.
- B. Remove the Platen Roller and Ink Roller.
- C. Loosen the two Fixing Screws of the Control Guide Rod as shown in Diagram 4-10 and then move the Heating Block to the set position.
- D. Lock the Guide Rod Screw and re-install the Platen Roller and Ink Roller. Reposition the Heating Block Side Cover.

## Installation to Product Collection Tray

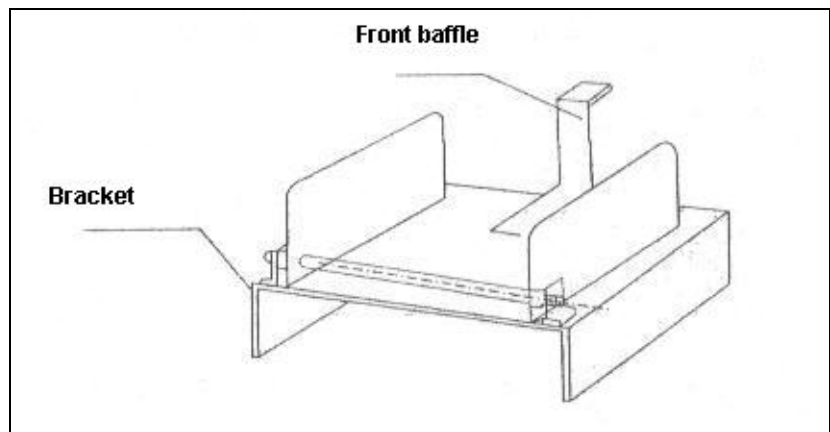
1. Position the bracket for the holes of the Left & Right Baffles.



2. Then insert the L & R Baffles along with the Support Rods into the Left & Right Plates on the Brackets where the Shaft Circlips lock onto the grooves in the rod.



3. Adjust the L & R Baffles per product size and tighten the screws.



4. Position the Front Baffle as needed.

## General Problems, Causes and Troubleshooting

Problem	Cause	Troubleshooting
I. No heat	<ol style="list-style-type: none"> <li>1. One or two Electro-Thermal Tubes in Heater Block are damaged</li> <li>2. Temperature Controller in Heat Block damaged</li> <li>3. Control Board is damaged;</li> <li>4. The fuse on the Control Board has failed</li> <li>5. Heat Potentiometer has failed</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace Tube(s)</li> <li>2. Replace Controller Board</li> <li>3. Replace Control Board</li> <li>4. Replace Fuse</li> <li>5. Replace the Potentiometer</li> </ol>
II. Print Wheel not turning	<ol style="list-style-type: none"> <li>1. The position of Photocell moved</li> <li>2. The Spring of Photocell has changed</li> <li>3. The Counter is counting but product is skipping</li> <li>4. The Counter is not counting if product is skipping</li> <li>5. The Print Wheel has loosened</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust Photocell</li> <li>2. Adjust Spring</li> <li>3. Check or replace the clutch and electromagnet</li> <li>4. Check or replace main PC Board and Photocell</li> <li>5. Tighten the Print Wheel Set Screw</li> </ol>
III. Drive Motor not functioning	<ol style="list-style-type: none"> <li>1. The Red Run Button is not lit</li> <li>2. Power plug is loose</li> <li>3. Fuse blown</li> <li>4. Counter has reached it's preset value</li> <li>5. The Start Capacitor failed</li> <li>6. Motor failure</li> </ol>	<ol style="list-style-type: none"> <li>1. Press the Red Run Button to illuminate and run</li> <li>2. Keep good contact between plug and socket.</li> <li>3. Replace the fuse</li> <li>4. Press the Clear Counter Button and reset the Counter. (Note: if not using this function preset total to 9999)</li> <li>5. Replace the Capacitor</li> <li>6. Repair or replace the Motor</li> </ol>

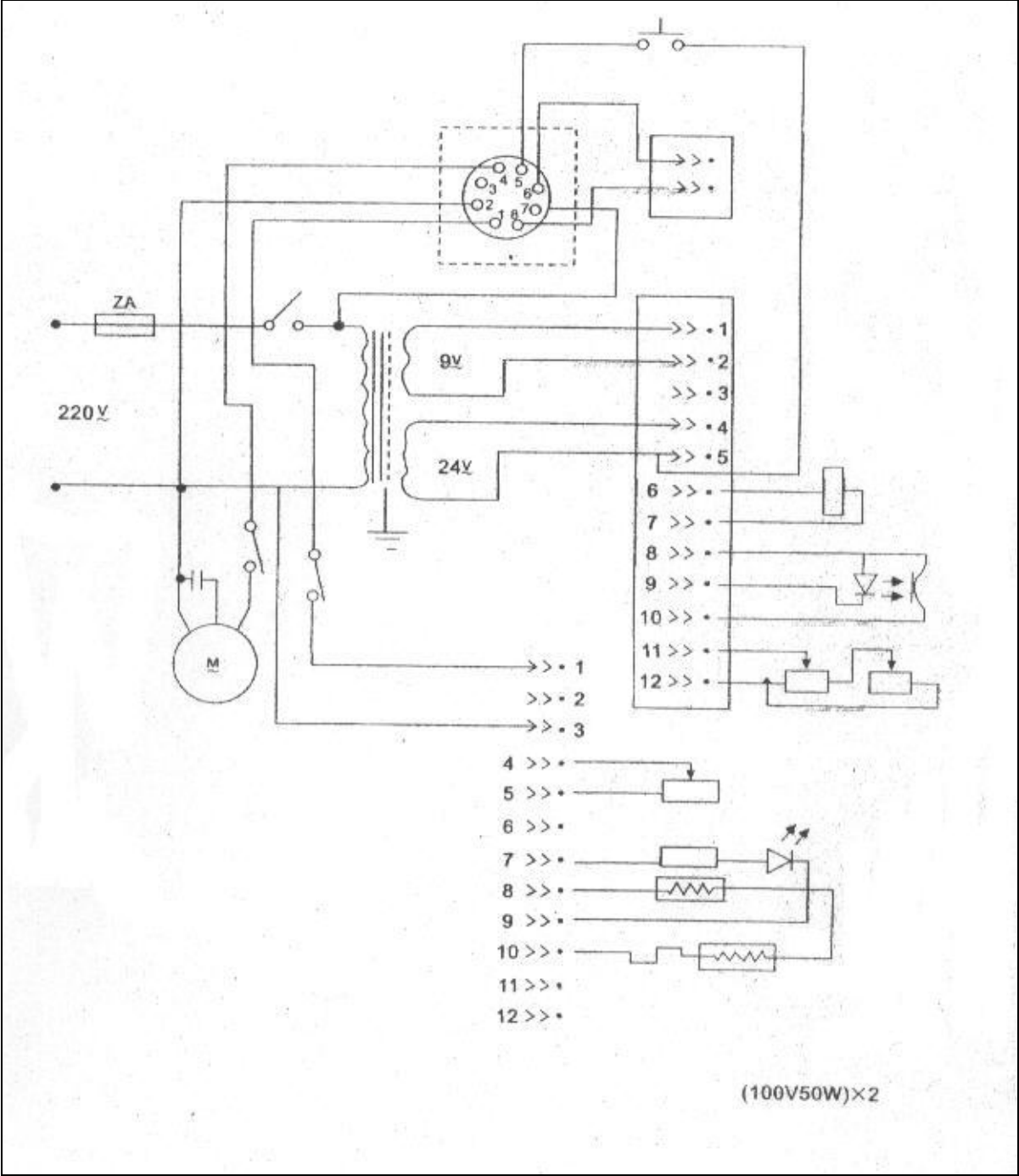
<p>IV. Product feed not smooth</p>	<ol style="list-style-type: none"> <li>1. Silicone Feed Wheel is too low</li> <li>2. Silicone Feed Wheel is worn</li> <li>3. Feed Belt is broken or badly worn</li> <li>4. The Spring of the Board Pressure Shield is too tight</li> <li>5. The separation of the L &amp; R Guide Plates is too tight</li> <li>6. Product does not easily separate</li> </ol>	<ol style="list-style-type: none"> <li>1. Rotate the Machine's Hand Wheel counter-clockwise</li> <li>2. Replace the Silicone Feed Wheel</li> <li>3. Replace the Feed Belt</li> <li>4. Loosen the Spring Fixing Screw and adjust Shield</li> <li>5. Loosen the screws of the Guide Plates and adjust them to be slightly larger than product width and tighten the screws.</li> <li>6. Fan or separate product before placing in the Guide Plates</li> </ol>
<p>V. Multiple feed</p>	<ol style="list-style-type: none"> <li>1. Silicone Feed Wheel is set to high</li> <li>2. The Silicone Feed Wheel is worn</li> <li>3. The Spring of the Board Pressure Shield is too loose</li> <li>4. Product thickness may be too thin</li> </ol>	<ol style="list-style-type: none"> <li>1. Rotate the Machine's Hand Wheel counter-clockwise</li> <li>2. Replace the Feed Wheel</li> <li>3. Loosen the Spring Fixing Screw and adjust Shield</li> <li>4. Product thickness cannot be smaller than .003" (0.08mm)</li> </ol>
<p>VI. Blockage occurred during paper feeding.  <b>NOTE:</b>  <b>Immediately Shut-Off the machine.</b>  If it occurred at the Silicone Feed Wheel rotate the Hand Wheel counter-clockwise and increase the distance of Silicone Feed Wheel and Feed Belt and carefully pull the blocked paper out. Never forcefully pull the paper (bag) or the Reverse Wheel or others may be damaged.</p>	<ol style="list-style-type: none"> <li>1. Silicone Feed Wheel is so high that the distance between the Feed Wheel and Feed Belt is too great</li> <li>2. Product does not easily separate</li> <li>3. The thickness of the material is too thin</li> <li>4. Surface of the product is curved or uneven</li> <li>5. The opening of the product is feeding first</li> <li>6. Separation between the Silicone Feed Wheel and Feed Belt is too great</li> <li>7. The size of the product is too small</li> </ol>	<ol style="list-style-type: none"> <li>1. Rotate the Machine's Hand Wheel clockwise until a single product can be smoothly fed but additional products are rejected</li> <li>2. Fan or separate product before placing in the guide plates</li> <li>3. Product thickness cannot be smaller than .003" (0.08mm).</li> <li>4. Make sure the products are flat before feeding</li> <li>5. Feed the closed end of the product first</li> <li>6. Adjust so the distance is larger than the thickness of one product and smaller than the thickness of two products</li> <li>7. It is not suitable for the machine</li> </ol>

VII. Printing position moves	<ol style="list-style-type: none"> <li>1. The Print Wheel is not inserted correctly</li> <li>2. Type not secured on the Print Wheel</li> <li>3. The Lock Screw of the Print Wheel has loosened</li> <li>4. The Clutch has failed</li> <li>5. The distance between the Guide Plates is too wide</li> </ol>	<ol style="list-style-type: none"> <li>1. Insert the Print Wheel tightly and lock it with Fixing Sleeve</li> <li>2. Secure the Type on both ends with the Rubber Stoppers.</li> <li>3. Tighten the Locking Screw</li> <li>4. Replace</li> <li>5. The distance should be slightly larger than the width of the product</li> </ol>
VIII: No print	<ol style="list-style-type: none"> <li>1. Preheat not enough</li> <li>2. Electro-Thermal Tube and/or Temperature Control damaged</li> <li>3. Ink Roller and Platen Roller not adjusted correctly</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase Time</li> <li>2. Replace the damaged elements</li> <li>3. Adjust the position of the Rollers (See page 8)</li> </ol>
IX. Print is not clear	<ol style="list-style-type: none"> <li>1. Ink Roller failed</li> <li>2. Preheat not enough and/or the temperature of Ink Roller is too low</li> <li>3. Temperature Controller failed</li> <li>4. The position of Ink Roller is too high and the type surface does not fully contact the Roller</li> <li>5. Platen Roller not adjusted correctly</li> <li>6. Motor Brushes not making contact</li> <li>7. Print Wheel inserted improperly</li> <li>8. Print Wheel Shaft and/or bearing worn</li> <li>9. Uneven or worn Type</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace the Ink Roller</li> <li>2. Increase the time of preheat</li> <li>3. Replace the Controller</li> <li>4. Adjust the position of the Ink Roller</li> <li>5. Adjust the position of the Platen Roller to provide adequate pressure</li> <li>6. Replace</li> <li>7. Re-insert Print Wheel and set it with Fixing Sleeve</li> <li>8. Check and replace</li> <li>9. Re-seat or replace Type</li> </ol>
X. Too black and dirty	<ol style="list-style-type: none"> <li>1. Controller temperature set to high</li> <li>2. The position of the Ink Roller is too low</li> <li>3. The position of the Platen Roller is too high</li> <li>4. The Ink Roller overheated</li> <li>5. The Type surface is filled with ink</li> </ol>	<ol style="list-style-type: none"> <li>1. Lower Temperature</li> <li>2. Adjust</li> <li>3. Adjust</li> <li>4. Race the machine when preheating</li> <li>5. Clean the type</li> </ol>

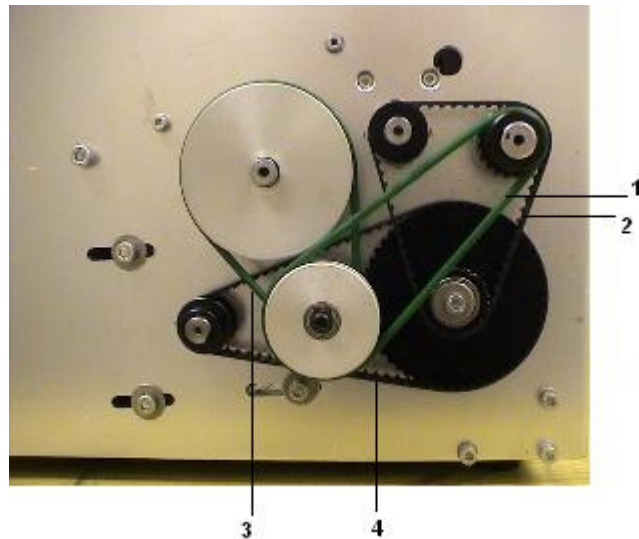
<p>XI. Product damaged during printing</p>	<p>1. Platen Roller to high 2. Type is uneven 3. Print Wheel temperature to high</p>	<p>1. Adjust position 2. Adjust or replace type 3. Lower temperature or replace Controller</p>
<p>XII. Can not print at the edge of materials with very short length</p>	<p>1. Type not installed correctly on the Print Wheel 2. Type installed on the wrong side of Print Wheel 3. Print Position potentiometer not working</p>	<p>1. Reposition the Type  2. Reposition the Type  3. Replace Potentiometer</p>



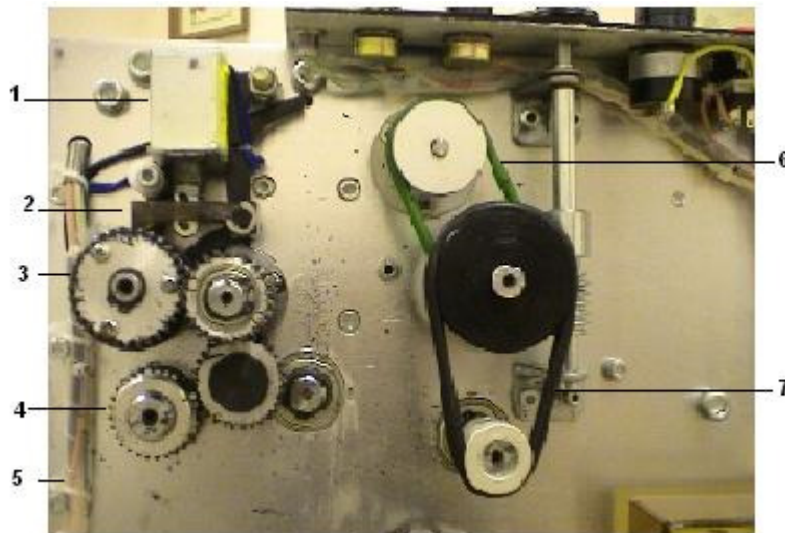
# ELECTRICAL DIAGRAM



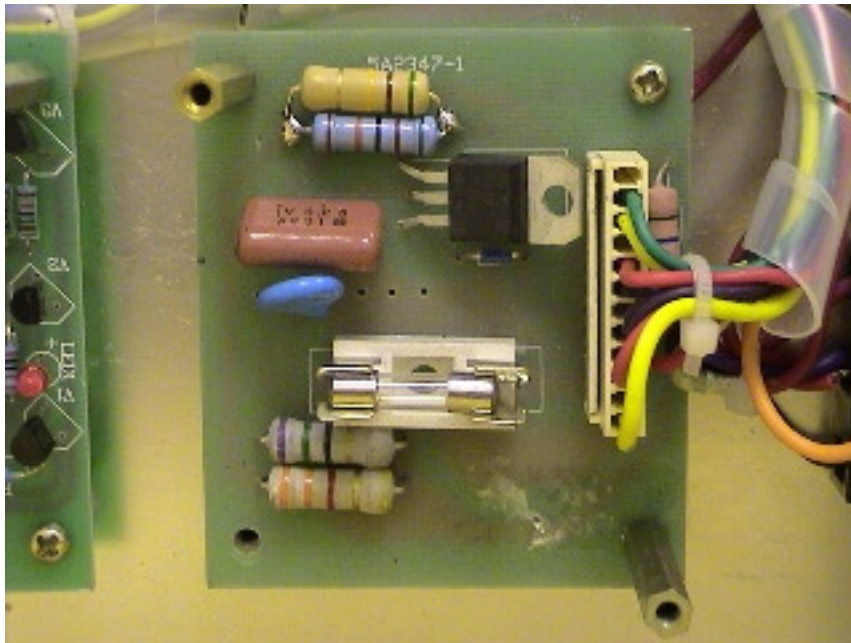
## Parts Identification



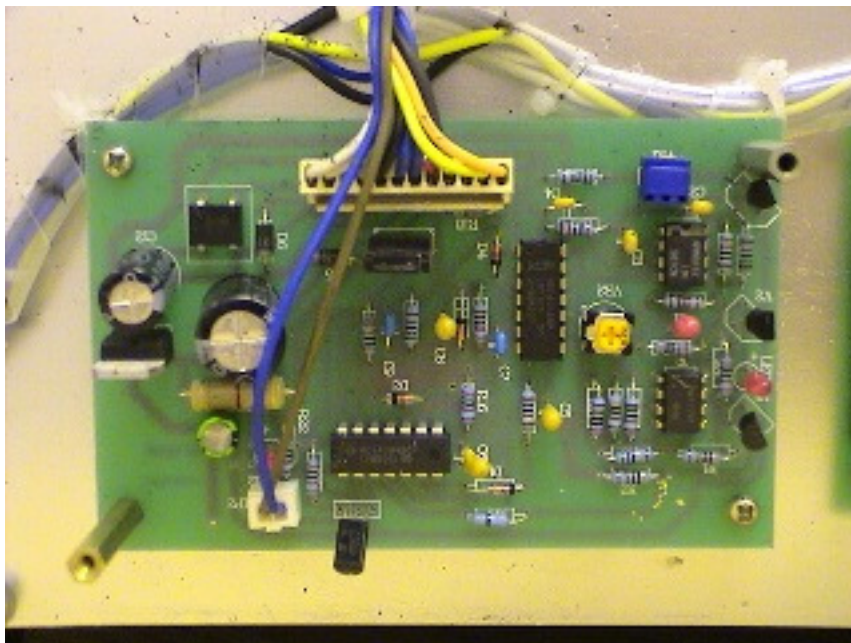
1. O-Ring Black 3 5/16" diameter x 5mm
2. Timing Belt 114XL037
3. O-Ring Black 2 15/16" diameter x 5mm
4. Timing Belt 156XL037



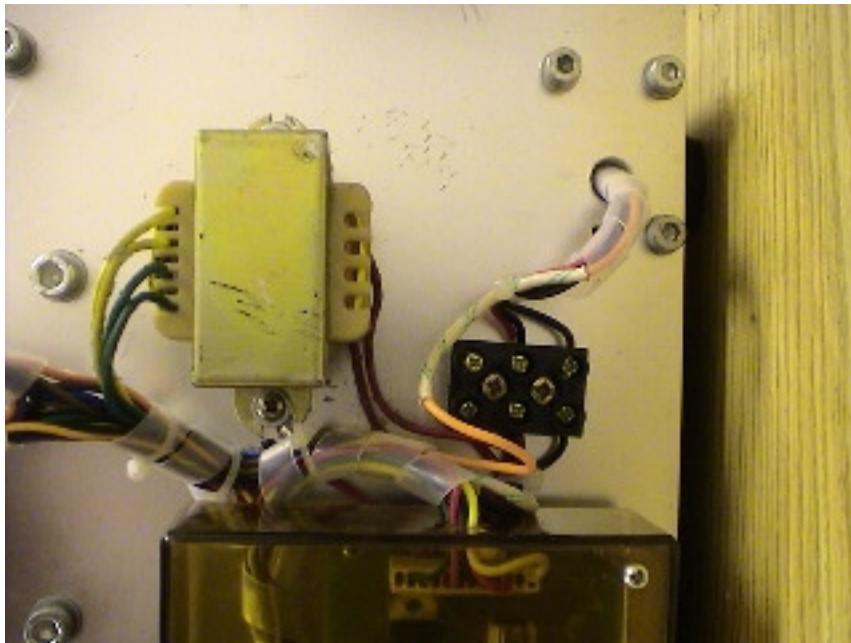
1. Electromagnet Assembly
2. Clutch Assembly
3. Clutch Transfer Gear
4. Print Wheel Shaft Gear
5. Photo Coupler Assembly (Photocell)
6. O-Ring Black 1 11/16" diameter x 5 mm
7. O-Ring Black 1 15/16" diameter x 5mm



HEATING WIRING BOARD



RUN CONTROL WIRING BOARD (MAIN WIRING BOARD)



12V, 24V TRANSFORMER