# Y150 *Thermo-Seal*

# Operator's manual

# Copyrights

# Preface

Dear user,

Welcome to the growing group of Thermopatch users. The product you have purchased has been carefully designed and manufactured to ensure that you, the user, will gain the maximum benefit.

All Thermopatch products are specifically designed to ensure ease of use with particular attention to safety requirements.

Should you discover any fault or damage upon receipt of this product, you should immediately contact your local Thermopatch representative.

# Contents

# 1.    Introduction

The Y150 *Thermo-Seal* is a machine for the temporary marking of garments and other textile items.

In one cycle, labels for temporary marking are printed, cut and sealed onto the garment or textile item.  After washing or chemical cleaning, the lables can be removed from the garment or textile item without leaving any label residue.

Temporary marking of a garment or textile item is achieved without the use of chemical solvents or other harmful materials.  By means of an Ink Ribbon Cartidge, a code (maximum of twelve characters) is printed upon the *Thermo-Seal* label tape (.25" or 6.3mm) in width.

Most garments or textile items can be marked directly.  For garments of very sensitive fabric, there is an alternative method of fixing the temporary label to the garment.  An extra long label tape or "flag" can be printed and attached to the garment through the button hole of the garment.  *Thermo-Seal* temporary marking label tapes are available in 11 different colors.

The Y150 *Thermo-Seal* machine operates electrically and pneumatically.  The code to be printed upon the label tape is entered through the machine keyboard.  Raising the Press Arm engages the pneumatic system to automatically cut and seal the label tape onto the garment or textile item.

Time, temperature and other optional settings can be entered through the machine keyboard.  The time, temperature, as well as other information can be viewed from the Keyboard LCD Panel.

The new heater unit design, as well as electronics, ensures the consumer of lower energy consumption and a safer work enviroment.

## 1.1    What did you receive?

The Y150 *Thermo-Seal* machine has been packed in a cardboard shipment contrainer with laminated foam protection cradles on each end of the machine.  Various components of the Y150 *Thermo-Seal* machine can be found packaged within.  The Y150 *Thermo-Seal* comes complete with the following componenets:

- Y150 Thermo-Seal machine with keyboard

- Ink Ribbon Cartridge                               RC2410-15

- Line Power Cord        (115 volt -#20080-70 or 230 volt #41969)

- Label Tape Cassette Storage Rack          #47068

- Label Tape Cassette, quantity of (6)        #47083

- A roll of white Thermo-Seal label tape      #TS4635-01

- Air Filter Pressure Regulator                 #47094

- Main air line hose                             #DH-6795

- Rubber Sealing Platen                          #DH-3187

- Button head socket hex screws,               #21061-26-N
  quantity of (2)

- Hex L-Key, 4mm                                 #24085-14

If one of these components is missing, please contact your Thermopatch Sales Representative.

## 1.2   Thermopatch Customer Service

Thermopatch Corporations's U.S. and International network of Sales Representatives, as well as its internal Customer Service Department, offer their assistance in the development of effective heat-seal mending, marking, and identification programs.

Thermopatch markets a complete line of heat-seal and marking machines, as well as a complete line of material and supplies.

**Label Print Machines** – manual, automatic and computer controlled.

**Marking Machines** – High speed permanent imprinting of decorative or informative  marks on most woven fabrics.

**Heat-Seal Machines** – Manual, semi-automatic, and completely automatic, with high inter-platen pressure to assure excellent adhesion of label tapes and mending materials.

**Label Tapes** – Specially woven 100% cotton and blends with adhesives to match specific processing requirements.

**Hot Paper Transfers** – In rolls or cut and stacked.  Custom or stock designs in one to four color process.

When ordering machine parts, please include model and serial number of your equipment.

In the United States:

Thermopatch Corporation
P.O. Box 8007
Syracuse, New York 13217-8007
Telephone:    315-446-8110
Fax;            315-445-8046
Toll Free:  800-252-6555 (in the US only)

In Canada:

Thermopatch  (Canada)  Incorporated
25 Groff Place, Unit No. 5
Kitchener, Ontario N2E 2L6
Telephone:    519-748-5027
Fax:            519-748-1543
Toll Free:  800-265-6416 (in Canada only)

In Australia:

Thermopatch (Australia) Pty. Ltd.
477 Warrigal Road, Unit No. 9
Moorabbin, Victoria 3189
Telephone:    011-61-3-9532-5722
Fax:            011-61-3-9532-5652

In the Netherlands:

Thermopatch BV
P.O. Box 50052
1305 AB Almere
Netherlands
Telephone:    011-31-36-549-1111
Fax:            011-31-36-532-0398

| | |
|---|---|
| Germany: | Thermopatch Deutschland<br>Grunteweg 33<br>26127 Oldenburg<br>Deutschland<br>Telephone: +49 441-380210<br>Fax: +49 441-3802121<br>E-mail: sales@thermopatch.de |
| France: | Thermopatch France<br>7 Rue Chappe-Z.I. Des Garennes<br>B.P. 1011<br>Les Mureaux Cedex 78131<br>France<br>Telephone: 011-33-1-3022-0808<br>Fax: 011-33-1-3022-1866 |
| Internet Address: | http://www.thermopatch.com |
| E-mail Address: | sales@thermopatch.com |

## 1.3    The Y150 *Thermo-Seal* Machine

## 1.4　Specifications of the Y150 *Thermo-Seal*

### Specifications – 230 Volts

Power consumption ..................................................................... 575 watts
Power supply ......................................................................230 volts
Temperature ............................................................................ 176 °C
Machine height  ...............................................................................389 mm
Machine width.................................................................................556.5 mm
Machine depth (connections included) ...................................432.5 mm
Net weight ...................................................................................18.5 kg
Platen Pad dimensions...................................................14.3 x 34.7 mm
Heater Unit dimensions ..............................................................35 x 80 mm
Fuses.........................................................................3.15 amps [5 X 20mm]

### Specifications – 115 Volts

Power consumption ..................................................................... 575 watts
Power supply ................................................................................ 115 volts
Temperature.....................................................................................349 °F
Machine height  ............................................................................... 15.3"
Machine width................................................................................. 21.9"
Machine depth (connections included) ........................................... 17.1"
Net weight ...................................................................................... 40.7 LB
Platen Pad dimensions................................................................ 0.56" x 1.37"
Heater Unit dimensions ............................................................ 1.38" x 3.15"
Fuses..........................................................................6.3 amps [5 X 20mm]

## 1.5   Safety

The Y150 *Thermo-Seal* machine is equipped with various safety features to facilitate safe and easy operation of the machine.

**Temperature Monitoring**

The Heating Unit of the Y150 *Thermo-Seal* is equipped with two temperature sensor systems.  One sensor system controls the operation temperature of the heating element.  The second temperature sensor prevents the temperature from exceeding 428° F [220° C].  If the temperature becomes 59° F [15° c] above or below the preset temperature and error code will occure making sealing a label onto a garment or textile item impossible.

**Power On LED Indicator**

At the top left hand corner of the LCD Panel, the operator of this machine will find a green LED.  When the power is turn on, the green LED will be illuminated continuously.  The green LED will not be illuminated when the power is turned off.

**Heat On LED Indicator**

At the top right hand corner of the LCD Panel, the operator of this machine will find a green LED.  When the heater element is warming up to operating temperature, the green LED will remain continuously illuminated.  Once the heater element has obtained operating temperature, the green LED will flash.

**Label Ready LED Indicator**

At the bottom left hand corner of the LCD Panel, the operator of this machine will find a red LED.  When label tape has been feed into the Tape Guide of the machine the red LED will flash indicating that the Printer Head has been engaged and label transportation through the Tape Guide has begun.

**Valve On LED Indicator**

At the bottom right hand corner of the LCD Panel, the operator of this machine will find a red LED.  When the Press Arm has been raised to seal a label tape onto a garment or textile item, the Pneumatic system of the machine will become engaged.  The red Valve On LED will illuminate indicating that the machine Pneumatic system is active.

### 1.5.1   Safety Tips

The Y150 *Thermo-Seal* machine has been designed with optimum safety for the machine operator in mind.  However, we provide you with some instructions by which you should operate this machine.

**Always switch off** the current (pull the plug out of the socket) when undertaking maintenance work or when cleaning the machine.

**Ensure** that there is sufficient space around the machine. Cables and connections must not get jammed. Although the heat radiation of the Heater Unit is low, there should be enough space for cooling down.

**Do not** come in direct contact with the Heating Unit.  Direct contact will cause burns.

## 1.6    Conditions For Warranty

Thermopatch Corporation, Syracuse, New York ("Seller") warrants this product to be free from defects in material and workmanship under normal use and service.  Any part which proves to be defective in material or workmanship within one year of the date of original purchase for use, will be repaired or replaced, at Seller's option, free of service or labor charges, with a new or functionally operative part. Seller's liability under the Warranty shall be limited to repairing or replacing at its own factory or through an authorized service distributor or dealer, material which is determined by Seller to have been defective in manufacture and upon which a claim has been made by the original purchaser or user to Seller (or an authorized distributor or dealer) within the warranty period.  Claims under this Warranty will be honored only upon written approval by an authorized officer of Seller.  Approved return of parts or products will be on a prepaid transportation charges basis only.  Claims under this Warranty will be honored only upon Seller's determination that the claim is covered by this Warranty, and Seller shall incur no obligation under this Warranty prior to such determination.  This Warranty does not apply:  (1) To any machinery or equipment which has been altered or repaired, except by Seller or its authorized representatives, or (2) to any machinery or equipment which has been subject to misuse, negligence, or accident, including, without limitation, use and operation of such machinery or equipment while parts are loose, broken, out of order, or damaged by the elements.  Parts replaced under this Warranty are warranted only through the remainder of the original Warranty.  Any and all claims for warranty service must include such information as Seller designates, and shall include specifically the serial number of each unit (if appropriate).


The foregoing shall constitute the sole and exclusive remedy of any using purchaser and the sole and exclusive liability of Seller in connection with this product. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS AND ALL OTHER OBLIGATIONS OR LIABILITIES OF SELLER, INCLUDING ANY TORT LIABILITY, FOR NEGLIGENT DESIGN OR MANUFACTURE OF THIS PRODUCT, OR OTHERWISE.** It is expressly agreed that Buyer shall not be entitled to recover any incidental or consequential damages, as those terms are defined in the Uniform Commercial Code, and that Buyer shall have no right of rejection or of revocation of acceptance of any part or of revocation of acceptance of any part or all of the goods covered hereby.

# 2. Installation

## 2.1 Transport instructions

Opon receipt, your Y150 *Thermo-Seal* machine is packed in a cardboard shipment container with laminated foam protection cradles for protection of your machine during shipment. If you have to return the machine for servicing at a later time, it is recommended to pack it in a similar way. Please let the machine cool down before packing the machine in the shipment container.

## 2.2 Installing the machine

Take the Y150 *Thermo-Seal* out of the shipment container and put the machine on a worktable near a grounded socket. Ensure that there is sufficient free space around the machine.

## 2.3 Electrical Requirements

The Y150 *Thermo-Seal* should be connected to the electricity grid (230V or 115V alternating current). Use the Line Power Cord provided with the machine.

The Y150 *Thermo-Seal* is an earth grounded machine and has been provided with two, time delay fuses. The fuse amperage is determined by your electrical grid capacity. **All 230v machines use two 250v – 3.15 amp fuses. All 115v machines use two 250v – 6.3 amp fuses.**



The above picture demonstrates the Y150 *Thermo-Seal* set for use with a 230v grid capacity, and the switch is in the **"OFF"** position. The following pictures demonstrate how to set the Y150 *Thermo-Seal* machine for 115v operation.

The above picture demonstrates the Fuse Drawer Door open with Fuse drawer inverted such that 115v can be read. **Caution, 115v machines require 250v – 6.3 amp time delay fuses.**



The above picture demonstrates the Fuse Drawer inserted into the Power Entry Module with the proper sized fuses, the Fuse Drawer Door closed, and line power cord inserted into the Power Entry Module Socket, and the machine is switched to **"ON"** position.

## 2.4    Pneumatic Requirements

The Y150 *Thermo-Seal* machine also requires a **clean dry air supply** to operate the Press Arm Sealing Cylinder and the Dynamic Knife Cylinder.   The line pressure coming into the Y150 *Thermo-Seal* Air Filter Pressure Regulator should be a minimum of 70 P.S.I. or 5 Bars.  **This is not the final pressure setting for the Air Filter Pressure Regulator on the Y150 *Thermo-Seal* machine.**

To confirm that the machine air pressure is correct, check the gauge located on the front of the filter.  The gauge should register 60 P.S.I. (Imperial measurement) or 4 Bars (metric measurement).

The pictures on the following pages demostrate attachment of the machine Air Filter Pressure Regulator, and adjustment of the pressure setting at the Air Filter Pressure Regulator if required.

The above picture illustrates the threaded elbow onto which the Air Fliter Pressure Regulator is connected to.



Connect the Air Filter Pressure Regulator by screwing the component onto the threaded elbow.  Position the gauge in such a manner such that the gauge can be read.



Connect the Air Hose to the Air Filter Pressure Regulator by pushing the receptacle firmly onto the Air Inlet Fitting.  Check the pressure gauge to be sure that the gauge reads 60 P.S.I. or 4 Bars.  If the gauge is not at the proper factory setting (60 P.S.I. or 4 Bars) the Air Filter Pressure Regulator can be adjusted.

The above picture shows the machine Air Filter Pressure Regulator set at 60 P.S.I. or 4 Bars.  To change to the machine operating pressure, follow these simple instructions:

**Make sure** the air line is connected securely, and the air gauge is working.

**Pull up** on the knob on top of the Air Filter Pressure Regulator.  This action will unlock the adjustment knob.

**Slowly turn** the air pressure adjustment knob clockwise to increase the air pressure, or counter clockwise to decrease air pressure, until the gauge on the Air Filter Pressure Regulator shows the desired air pressure.

**Pushing down** on the adjustment knob locks the current setting in place.

**CAUTION !  The maximum machine operating pressure is 100 P.S.I. or 7 Bars.  The Y150 *Thermo-Seal* machine comes pre-set at 60 P.S.I. or 4 Bars.**

## 2.5    Label Tape Storage Rack Installation

The Y150 *Thermo-Seal*  machine comes complete with a Label Tape Storage Rack and six Label Tape Cassettes.  The rack can hold  a maximum capacity of eight Label Tape Cassettes.

Attachment of the Label Tape Storage Rack to the machine chassis requires the use of a 4mm L-Hex Key.  The L-Hex Key has been provided to you for this purpose.

The pictures on the following pages demostrate how to attach the Label Tape Storage Rack to the Y150 *Thermo-Seal* machine chassis.

The left hand side of the Y150 *Thermo-Seal* machine is provided with threaded inserts to attach the Label Tape Storage Rack.
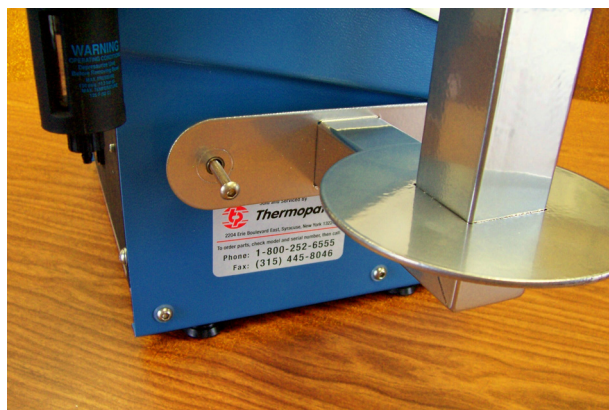


The Label Tape Storage Rack is attached to the Y150 *Thermo-Seal* machine chassis with two M6 x 1.0 x 40mm long Button Head Socket Screws.  Insert the screws through the clearance holes in the Label Tape Storage Rack engaging the threaded inserts in the machine chassis.  Use the 4mm L-Hex Key to tighten the screws.
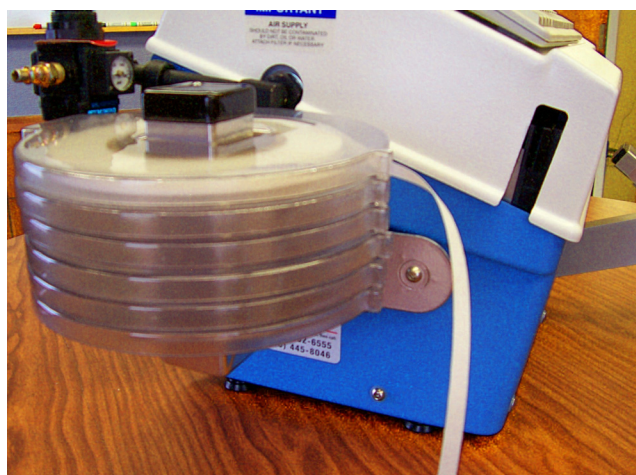


Slide the Label Tape Cassettes – total of six, over the square center post of the Label Tape Storage Rack.  Correct position of the Label Tape Cassettes is with the hinge portion of the cassette towards the back and the slotted opening towards the front.

# 3.   How To Operate The *Thermo-Seal*

## 3.1   Ink Cartridge Installation

The Y150 *Thermo-Seal* machine come complete with an Ink Ribbon Cartridge, Thermopatch supply part #RC2410-15.   The Ink Ribbon Cartridge, is required to print the desired code onto the temporary label tape.
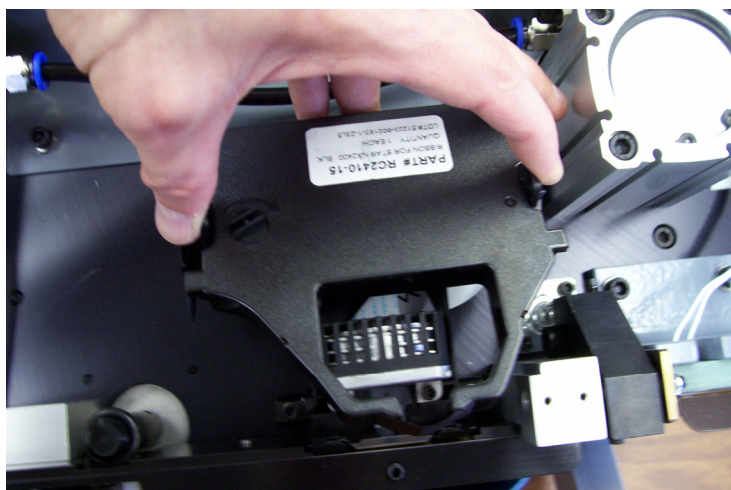
**To Install the Ink Ribbon Cartridge,** open the the hinged Machine Top Cover all the way back until it comes to rest.

**Remove Ink Ribbon Cartridge (RC2410-15)** from the box and the sealed plastic bag.

**The pictures** on the following pages demonstrate how to install the Ink Ribbon Cartridge in the Y150 *Thermo-Seal*.
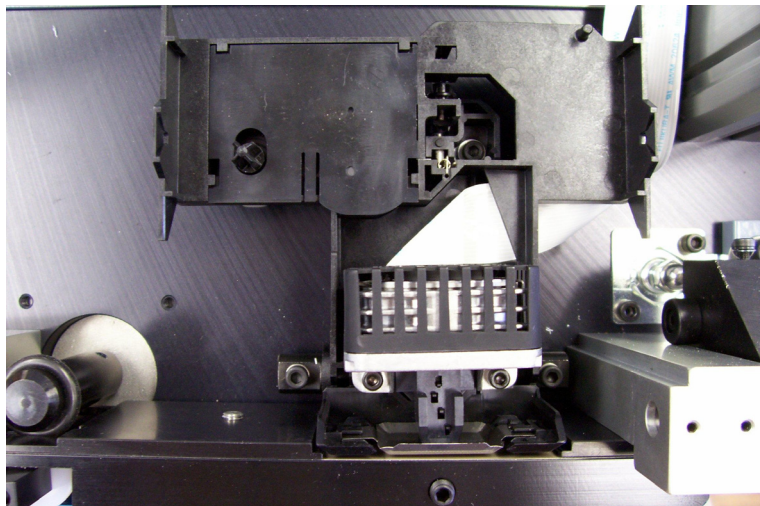


The picture above is a downward view of the Printer Head Carriage and the Printer Head without an Ink Ribbon Cartridge installed.



To insert the Ink Ribbon Cartridge, clasp the tabs on each side of the Cartridge and guide the Ink Ribbon between the Ink Ribbon Mask and the Printer Head.  When properly installed the cartridge will snap in place.
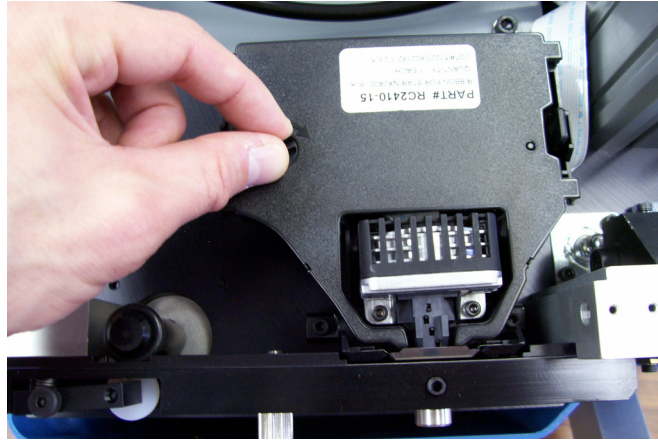
After installing the Ink Ribbon Cartridge, turn the Ink Ribbon Advance Knob in the direction of the arrow (clockwise).  Turning the Ink Ribbon Advance Knob will advance the Ink Ribbon and remove any folds in the ribbon that may have occurred during insertion of the Ink Ribbon Cartridge.

Replacement *Thermo-Seal* Ink Ribbon Cartridges (RC2410-15) is available for purchase through our Customer Service network.

## 3.2   Inserting the Label Marking Tape

The Y150 *Thermo-Seal* comes complete with one roll of white *Thermo-Seal* Label Marking Tape.  Thermopatch, has available to the user of the Y150 *Thermo-Seal* machine, Label Marking Tapes in ten different colors.  *Thermo-Seal Label Marking Tapes* are sold in packages containing six rolls per package.  The *Thermo-Seal* packages are available to the consumer through our Customer Service network. The following lists available colors with supply part numbers:

| | |
|---|---|
| **White** | **TS4635-01** |
| **Tan** | **TS4635-02** |
| **Blue** | **TS4635-03** |
| **Gray** | **TS4635-05** |
| **Lavender** | **TS4635-06** |
| **Yellow** | **TS4635-07** |
| **Green** | **TS4635-08** |
| **Red** | **TS4635-09** |
| **Orange** | **TS4635-11** |
| **Pink** | **TS4635-13** |
| **Gold** | **TS4635-14** |

Begin loading Label Marking Tape into the machine Tape Feed Guide by first switching the Power Entry Module Switch to the **"ON"** position, refer to section **2.3 Electrical Requirements.**  Also, be sure that your air supply hose line is securely attached to the Air Filter Pressure Regulator and set at the correct machine operating pressure, refer to section **2.4 Pneumatic Requirements.**
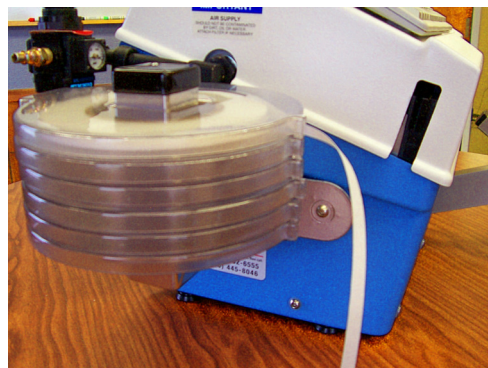
The following narrative and sequence of pictures demonstrates how to load and unload Label Marking Tape into the Tape Feed Guide of the Y150 *Thermo-Seal* machine.



The above picture of the LCD Panel with two illuminated green LED's informs the machine operator, that power is **"ON"** and that the Heating Unit is **"ON"** - coming up to operating temperature.

**Place the desired Label Marking Tape** into a Label Tape Cassette, and place the Cassette onto the Label Tape Cassette Storage Rack. The Y150 *Thermo-Seal* machine has the capability to pull tape from any one of the six Label Tape Cassettes. **The desired Label Marking Tape being used, does not have to be on the top of the stack.**

**Pull out approximately 12" or 30 cm** of Label Marking Tape from the Label Tape Cassette.



The above picture illustrates the Labe Marking Tape pulled out from the Label Tape Cassette and ready to be inserted into the Tape Feed Guide entrance. **Note, when the Label Marking Tape is inserted into the Tape Guide, the adhesive side of the Label Marking Tape must face towards the machine operator or front of the machine.**

**Insert the desired Label Marking Tape** into the Tape Feed Guide entrance slot. The adhesive side of the Label Marking Tape (shiny side) needs to be facing towards the machine operator or front of the Y150 *Thermo-Seal* machine.

**Push the desired Label Marking Tape** Label Marking Tape into the Tape Feed Guide until you feel an obstruction and the Label Marking Tape can go no further.
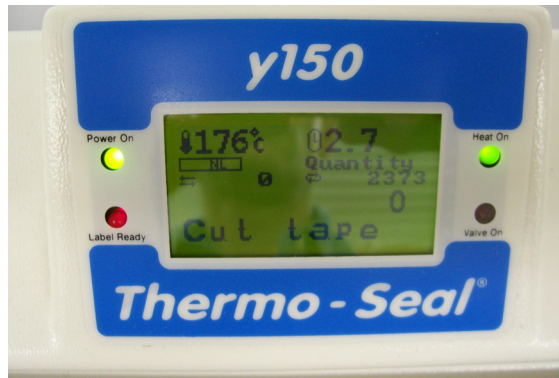


The above picture illustrates insertion of the Label Marking Tape into the Tape Feed Guide entrance. **Note, the adhesive side of the Label Marking Tape must face towards the machine operator or front of the machine.**

**Depress the "LOAD TAPE" F1 key,** and the Label Marking Tape will begin to advance through the Tape Feed Guide assembly. The Label Marking Tape will exit the Tape Feed Guide and become present in front of the Heater Unit.



The above picture illustrates the Label Marking Tape protruding from the Tape Feed Guide and positioned in front of the Heater Unit. **Note, the amount of Label Marking Tape that protrudes from the Tape Feed Guide is relative to how long the "LOAD TAPE" F1 key is depressed.**

The above picture of the LCD Panel illustrates the final sequence to load Label Marking Tape. The words **"Cut Tape"** and the illuminated red LED **"Label Ready"**, informs the machine operator that Label Marking Tape is in the Tape Feed Guide. Once the Label Marking Tape is positioned in front of the Heater Unit, raising the machine Press Arm will complete the "Load Tape" sequence. This action will cut the Label Marking Tape and **"ready"** the Y150 *Thermo-Seal* machine.



The above picture of the LCD Panel illustrates the Y150 *Thermo-Seal* in the **"Ready Mode"**. The machine operator can now enter the desired label code and process your first *Thermo-Seal* label.

**Depress the "UNLOAD TAPE" F2 key,** and the Label Marking Tape will begin to retract out of the Tape Feed Guide assembly. The Label Marking Tape, will retract all the way towards the end of Label Marking Tape, and be free of the Tape Feed Drive mechanism. Gently pulling on the Label Marking Tape will completely remove the Label Marking Tape from the Tape Feed Guide.

The picture above of the LCD Panel illustrates the Y150 *Thermo-Seal* in the **"UNLOAD TAPE"** sequence. Once the Label Marking Tape has been unloaded, another Label Marking Tape can be loaded repeating the **"LOAD TAPE"** sequence steps.

## 3.3 Machine Operation

Before printing and sealing with your Y150 *Thermo-Seal* machine, make sure you have completed all instructions for installation, see section **2 Installation**. In review, the following should be completed:

- Threaded the Air Filter Pressure Regulator onto the machine.
- Mounted the Label Tape Cassette Storage Rack to the left side of the machine.
- Securely attached the Main Air Line Hose to the Air Filter Pressure Regulator.
- Installed the Line Power Cord, and switched the Power Entry Module to **"ON"** position.
- Installed the Ink Ribbon Cartridge.
- Loaded the Label Marking Tape into the Tape Feed Guide.
- The green **"POWER ON"** LED is illuminated on the LCD Panel.
- The green **"HEAT ON"** LED is pulsing or flashing on the LCD Panel.

Before you begin printing and sealing, it is necessary for you to understand the features, messages and icons present on the LCD panel of the Y150 *Thermo-Seal* machine. We will review these features, messages and icons beginning with the machine LCD Panel.

The following narrative and pictures explain the features, messages and icons present on the machine LCD Panel. For clarity of explaination, we will begin in the upper left hand corner of the LCD Panel, moving to the right and downward through the various information fields.

### 3.3.1  Machine Operating Temperature Icon

When you begin working with the Y150 *Thermo-Seal* machine you will see in the upper left hand corner an icon of a thermometer with a number and a letter "C" or letter "F".  This is the **Machine Operating Temperature icon.**  The number imediately to the right of the thermometer icon represents physical temperature in either Celsius or Farenheit scale**.** The letter "C" immediately to the right of the number means Celsius scale, or the letter "F" immediately to the right of the number means Farenheit scale.
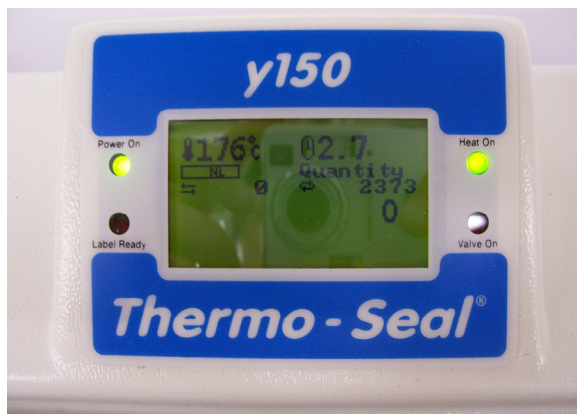


The above picture illustrates that the machine is operating at the factory setting of 176° C or the equivalent of 349° F.

### 3.3.2  Sealing Time Icon

The icon immediately to the right of the temperature icon is a clock face representing **Sealing Time.  The nominal sealing time is 2.7 seconds.**  An optional longer sealing time is available to the machine operator.  The optional longer sealing time is **4.8 seconds** and can be accessed through the *Thermo-Seal* **Function Keys F3 (Normal/Heavy)** of "Keyboard Options" F8 key.  Accessing the Keyboard Options will be discussed in the next section **4.1 *Thermo-Seal* Function keys.**
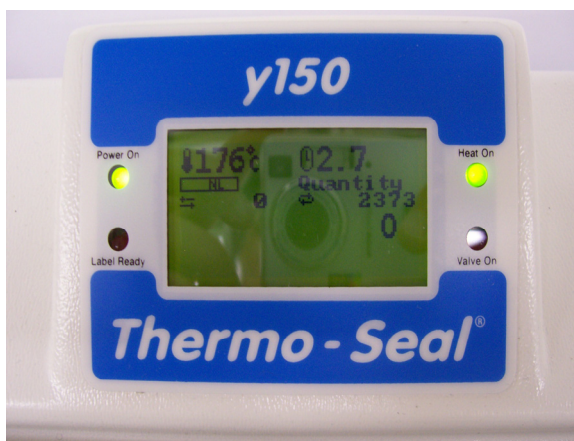


The above picture illustrates that the machine is operating at the factory setting of 2.7 seconds **Normal Seal Time** cycle.  When a **Heavy Seal Time** cycle is selected, 4.8 seconds will appear to the right of the clock face.

### 3.3.3  Label Tape Length Icon

The icon immediately below the temperature icon is the **Label Tape Length icon.**  This icon is represented as a long rectangle with the letters **"NL"** inside the boundaries of the long rectangle.  The letters **"NL"** mean **Normal Length.**  An optional **Extra Length "EL"** Label Marking Tape length is available to the machine operator.  The **Extra Length** Label Marking Tape length can be accessed through the ***Thermo-Seal* Function Keys F4 (Extra Length)** or "Keyboard Options" F8 key.  Accessing the Keyboard Options will be discussed in the next section **4.1 *Thermo-Seal* Function keys.**



The above picture illustrates that the machine is operating with the Label Tape Length set at **"NL" normal length.**  When the **Extra Length** option is selected, **"EL"** will appear inside of a longer rectangle.

### 3.3.4  Daily Production Counter Icon

The icon immediately below the Label Tape Length icon, is the **Daily Production Counter icon**.  The Daily Production Counter will keep track of the total number of labels sealed onto a garment or textile item for the time interval in which the Y150 *Thermo-Seal* machine has been operating.  Once the Y150 *Thermo-Seal* machine has been switched off, the Daily Production Counter will automatically reset itself to zero.

The Daily Production Counter is represented two arrows pointing in opposite directions and a number to the right of the arrows.  A picture illustrating the function of the **Daily Production Counter** can be found on the next page.

The above picture illustrates that the machine has processed a **Daily Count** of 63 labels for this processing session.

### 3.3.5  Total Production Counter Icon

The icon immediately below the Sealing Time icon, is the **Total Production Counter icon.**  The Total Production Counter will keep track of the total number of labels sealed onto a garment or textile item since the machine was installed.  The continuous counter cannot be reset.

The Total Production Counter is easily identified by the word **"Quantity"** and below it a circular arrow with a number immediately to the right of the circular arrow.



The above picture illustrates that the machine has processed a **Total Count** of  2436 labels since the machine has been installed.  The Total Production Counter cannot be reset.

### 3.3.6  Bundle Quantity Icon

The number immediately below the Total Count icon, is the **Bundle Quantity icon.**  The Bundle Quantity icon will keep track of the total number of labels to be sealed per bundle.  The Bundle Quantity counter will count downward from the number placed into the Bundle Quantity queue by the machine operator.
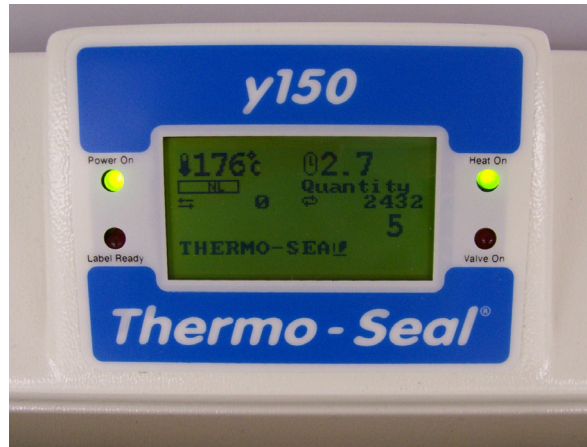


The picture above illustrates the Bundle Quantity set at five items for that bundle.  The Bundle Quantity will count down to zero.

### 3.3.7  Text Character Entry Line

At the very bottom of the LCD Panel is the **Text Character Entry Line**. The Y150 *Thermo-Seal* machine can print cut and seal a text label consisting of five characters up to twelve characters.  The text entered into the **Text Character Entry Line** can be any alphs-numeric code or strictly alphabetical text.



The above picture illustrates text entered into the **Text Character Entry Line.**  The Y150 *Thermo-Seal* machine has been set to **ten** charaters.

### 3.3.8  Arrow Keys, Normal Keys & Escape Key

The **Arrow** keys and **Normal** keys are used for data entry and navigation through the various menus provided on the Y150 *Thermo-Seal* machine.

**Arrow Keys    Up and Down** at the cursor position in a data enty field: allows the user to change a number higher or lower.  When in a menu: allows the user to browse forward or backward in a menu.

**Arrow Keys Left and Right** at the cursor position in a data entry field: allows the user to change a number higher or lower.  When in the Text Charater Entry field: allows the user to move the cursor to the left or to the right.

**Normal Keys:** these keys are used for entering characters, as with a normal computer keyboard.  All letters are printed in capitals to improve legibility of the printed text.

**Escape Key (Esc):** this key is used to escape from a **sub-menu** to return to a **main menu.**  The **Esc Key** is also used to cancel a command of menu entry.

# 4.    Customizing the *Thermo-Seal*

The Y150 *Thermo-Seal* machine software has a number of factory set default settings, such as: **Sealing Temperature,** the **Display Language,** the **Label Marking Tape Length,** and the **Password** to the **Special Settings Mode.**

The Y150 *Thermo-Seal* software can be customized to your personal requirements.  These changes to the factory settings in the machine software can be accessed through the **Special Settings Mode** in the **Keyboard Options "F8"** menu.

The Y150 *Thermo-Seal* factory settings are sufficient for normal daily processing of garments and textile items.  However, short cut ***Thermo-Seal* Function Keys** are provided to allow for **"on the fly"** changes to the standard software settings.  The ***Thermo-Seal* Function Keys** allow for the exceptions that are encountered without having to continually change factory software settings.

## 4.1    *Thermo-Seal* Function Keys

It is important to understand all the controls of the Y150 *Thermo-Seal* machine for efficient **"on the fly"** operation.  The picture below and narrative gives a description of each **Function Command Keys** and it's use.



The picture above is of the **Function Keys** Label found immediately to the right of the Machine Keyboard.

## 4.2   *Thermo-Seal* Function Keys Defined

| Key | Function |
|-----|----------|
| **F1** | **Load,** Label Marking Tape |
| **F2** | **Unload,** Label Marking Tape |
| **F3** | **Normal/Heavy,** Seal Time Cycle, **Normal** Seal Time Cycle is **2.7** seconds.   **Heavy** Seal Time Cycle is **4.8** seconds.   The default Seal Time   Cycle is set at **2.7** seconds. |
| **F4** | **Extra Length,** for use when sealing Label Marking Tape through a Button Hole.  This function can also be used when a Label Marking Tape of **Extra Length** is required. The default Label Marking Tape length is set at **Normal** length **"NL".** |
| **F5** | **Totals,** switches the continuous Total Production Count display **"On"** or **"Off".**  The default setting for display of the Total Production Count is **"On".** |
| **F6** | **Double Strike,** increases the pin strikes from the Printer Head upon the Ink Ribbon.  This function is used to extend the useability range of an old Ink Ribbon Cartridge.  When the Y150 *Thermo-Seal* is set to **Double Strike,  "DS"** will appear under the Label Tape Length icon.  The default factory setting is **Double Strike** set in the **"Off"** position. |
| **F7** | **Reset Day Count,** will reset the **Daily Counter** to zero When the **F7** key is depressed, the LCD Panel will switch to a sub-menu.  The sub-menu requires a **"Yes"** or **"No"** answer.  Entering **"Y"** meaning **"YES"** resets the Daily Counter.  Entering **"N"** meaning **"NO"** will not reset the Daily Counter.   Switching the Y150 *Thermo-Seal* machine off will automatically reset the Daily Counter. |
| **F8** | **Keyboard Options Menu,** allows the machine operator to enter into an optional menu to customize operation settings in their Y150 *Thermo-Seal* machine.   The **Keyboard Options Menu** and it's **sub-menus** will be more fully explained in section **4.3 <u>Keyboard Options Menu</u>.** |
| **F9** | **Repeat Last Label,** use of this key will make a copy of the last label tag that was printed allowing the machine operator to seal an identical tag. |
| **F10** | **Insert On/Off,** allows the machine operator to edit the Text Entry Charater Line without having to re-type the entire line of text.  When the **Insert On/Off** key is used a dark cursor will appear at the last text character in the Text Entry Character Line.  Use the Right and Left arrow keys to navigate within the Text Entry Character Line. To change the text character, simply type the desired text character.   After the desired change has been made in the Text Entry Character Line, depressing the **F10** key again switches   **Insert On/Off** to the **"Off"** position. |

**NUMLOCK**   **Numlock (Check Temp),** use of this key allows the machine operator to check the actual current operating temperature of the Y150 *Thermo-Seal* Heater Unit.  When the key is depressed the LCD Panel will switch to a **Temperature** sub-menu, stating the current actual Heater Unit temperature.

**BACKSPACE**   **End Of Bundle/Series,** use of the **backspace key** on the keyboard ends printing a label tag of the same code for a bundle or a series of label tags.  Once the **backspace key** has been depressed, complete the bundle or series of label tags by sealing the label tag onto the garment or textile item.  A new code can now be entered into Text Character Enty Line.

### 4.2.1  Browsing Menus

You can browse through the **Keyboard Options Menu** with the **Up** or **Down** keyboard keys.  The sub-menu item that is displayed can be activated by depressing the **Enter** key on the keyboard.  The sub-menu item can also be activated by depressing the corresponding sub-menu number preceeding the sub-menu title.  Depressing the **Esc** escape key you will return to the previous menu.



The picture above illustrates the sub-menus available when activating Function Key **F8 Keyboard Options Menu.**  The three sub-menus available are: **Settings, Special Mode,** and **End.**

## 4.3   Keyboard Options Menu (Settings)

The following narrative and pictures will explain all of the operating parameters that can be changed through the **Keyboard Options Menu** and **sub-menus.**  Pictures illustrating the **Keyboard Options sub-menus** can be found on the next page.
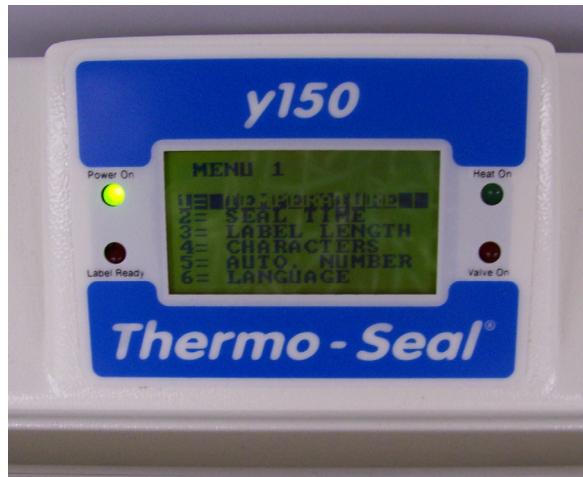
The above picture illustrates the **Keyboard Options sub-menus 1 – 6.**
Those sub-menus are:

1. **Temperature**
2. **Seal Time**
3. **Label Length**
4. **Characters**
5. **Auto Number**
6. **Language**



The above picture Illustrates the remaining **Keyboard Options sub-menus 7 – 9.** Those sub-menus are:

7. **Celc. / Fahr. (Celcius / Farenheit)**

8. **Serial Port**

9. **Operation M. (Operation Mode)**

### 4.3.1  Temperature

The **Temperature** option allows the machine operator to change the machine operating sealing temperature.  The text displayed is dependent upon the setting choosen in  **sub-menu 7 (Celcius or Farenheit).**  The text displayed will be either a **"C"** or a **"F".**

- Select **sub-menu 1** from the Keyboard Options sub-menu.

- Use the **Up** or **Down** arrows keys to increase or decrease the temperature 1° C or 1° F.

- Use the **Right** or **Left** arrow keys to increase or decrease the temperature 10° C or 10° F.

- After setting the desired temperature depressing the **Enter** key will retain the new operating temperature.

- Depress the **Esc** key to return to **Keyboard Options sub-menu.** Depressing the **Esc** key a second time returns the machine operator to the main LCD display.

- The default machine operating temperature for the Y150 *Thermo-Seal* machine is 176° C or 349° F.

<u>**Caution !**</u> Changing the machine operating temperature can seriously affect the adhesive properties of the label tags.  **Do not change the default machine operating temperature unless it is absolutely necessary!**

### 4.3.2  Sealing Time

The **Sealing Time** option allows you to change the default machine Sealing Time.  The Y150 *Thermo-Seal* has two default Sealing Times. The "**Normal**" Sealing Time is set at **2.7** seconds.  The **"Heavy"** Sealing Time is set at **4.8** seconds.

**Normal Seal Time**

- Select **sub-menu 2** from the Keyboard Options sub-menu.

- Depress the **"Enter"** key or type **1** to select **"Normal Seal Time"**

- Use the **Up** or **Down** arrow key to increase or decrease the **"Normal Seal Time"** by increments of **0.1** seconds.

- Use the **Right** or **Left** arrow key to increase or decrease the **"Normal Seal Time"** by increment of **1.0** seconds.

- After setting the desired **"Normal Seal Time"** depressing the **Enter** key will retain the new **"Normal Seal Time".**

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

**Extended Seal Time (Heavy)**

- Select **sub-menu 2** from the Keyboard Options sub-menu.

- Type **2** to select "Extended Seal Time"

- Use the **Up** or **Down** arrow key to increase or decrease the **"Extended Seal Time"** by increments of **0.1** seconds.

- Use the **Right** or **Left** arrow key to increase or decrease the **"Extended Seal Time"** by increment of **1.0** seconds.

- After setting the desired **"Extended Seal Time"** depressing the **Enter** key will retain the new **"Extended Seal Time".**

- Depress the **Esc** key to cycle back through the **sub-menus**, returning to the main LCD display.

**Second Seal Time (Long Label Tag)**

- Select **sub-menu 2** from the Keyboard Options sub-menu.

- Type **3** to select "Sec Seal Time".

- Use the **Up, Down, Right** or **Left** arrow key to switch **On** or **Off** the **"Second Seal Time"**.

- After setting the desired switch setting **On** or **Off,** depressing the **Enter** key will retain the new switch setting**.** The default setting for this option is **Off.**

- Depress the **Esc** key to cycle back through the **sub-menus**, returning to the main LCD display.

## 4.3.3  Label Length

The Y150 *Thermo*-Seal machine software automatically adapts the Label Marking Tape length to match the length of the text string entered. However, the **Label Length** option allows the machine operator to adjust the length of the **"Normal"** length label tag or an **"Extended"** length label tag. Extended length label tags are used for processing label tags through a garment button hole.

**Normal Label**

- Select **sub-menu 3** from the Keyboard Options sub-menu.

- Type **1** to select "Normal Label".

- Use the **Up** or **Down** arrow key to increase or decrease the **"Normal Length"** by increments of **1** unit.

- Use the **Right** or **Left** arrow key to increase or decrease the **"Normal Length"** by increments of **10** units.

- After setting the desired **"Normal Length"** depressing the **Enter** key will retain the new **"Normal Length".**

- Depress the **Esc** key to cycle back through the **sub-menus**, returning to the main LCD display.

**Extended Label**

- Select **sub-menu 3** from the Keyboard Options sub-menu.

- Type **2** to select **"Ext Label"**.

- Use the **Up** or **Down** arrow key to increase or decrease the **"Extended Length"** by increments of **1** unit.

- Use the **Right** or **Left** arrow key to increase or decrease the **"Extended Length"** by increments of **10** units.

- After setting the desired **"Extended Length"** depressing the **Enter** key will retain the new **"Extended Length"**.

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

## 4.3.4  Characters

The **characters** option allows the machine operator to set the maximum number of characters that can be entered into the Text Character Entry Line.  The total number of **characters** set into the Text Character Entry Line will be the same number of **characters** printed onto the Label Marking Tape.

 The Y150 *Thermo-Seal* machine can print cut and seal a text label consisting of five characters up to twelve characters.

- Select **sub-menu 4** from the Keyboard Options sub-menu.

- Below the sub-menu title **"Characters",** a number will appear indicating the fotal number of characters allowed in the Text Character Entry Line.  The **default number of characters is 6.**

- Use the **Up** or **Down** arrow key to increase or decrease the total number of **"Characters"** by increments of **1.**

- After setting the desired number of **"Characters"** depressing the **Enter** key will retain the new total number of **"Characters"** allowed in the Text Character Entry Line.

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

### 4.3.5 Automatic Numbering

The **"Automatic Numbering"** option allows the machine operator to switch **on** or **off** the automatic creation of a **new** label tag code. The **"Automatic Numbering"** feature is important when marking bundles of garments or textile items.

The following example is illustrative of how the **"Automatic Numbering"** system works. For instance, you have entered a code **A04-01,** and the **"Automatic Numbering"** feature is switched **on.** The code for the next bundle of garments or textile items will be **A04-02.** However, if the **"Automatic Numbering"** feature is switched **off**, the machine operator will have to enter new data every time for a new label tag.

- Select **sub-menu 5** from the Keyboard Options sub-menu.

- Below the sub-menu title **"Auto Numbering",** the word **off** will appear indicating that **"Automatic Numbering"** is set at the default switch setting **off.**

- Use the **Up, Down, Right** or **Left** arrow keys to switch the **"Automatic numbering" on** or **off.**

- After selecting the desired switch setting, depressing the **Enter** key will retain the new switch setting for **"Automatic Numbering".**

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

### 4.3.6 Language

The **Language** option allows the machine operator to select the **Language** for the various text fields in the LCD Panel. The **Language** option does not effect the Y150 *Thermo-Seal* Keyboard layout. The default **Language** is **English.** The following is a listing of the optional languages:

- **English**
- **German**
- **Spanish**
- **French**
- **Dutch**

- Select **sub-menu 6** from the Keyboard Options sub-menu.

- Use the **Up** or **Down** arrow keys to navigate to the desired **Language.**

- Depress the **Enter** key to select the **desired Language.**

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

### 4.3.7  Temperature Scale

The **Temperature Scale** allows the machine operator to select the preferred **Temperature Scale** to operate within.  The Y150 *Thermo-Seal* machine allows the machine operator to choose Metric measurement **(Celsius C°)** or Imperial **(Fahrenheit F°).**  The default

- Select **sub-menu 7** from the Keyboard Options sub-menu.

- Below the sub-menu title **Celsius/Fahr** will appear **Celsius** or **Fahrenheit.**

- Use the **Up** or **Down** arrows keys to change the display to the correct **Temperature Scale.**

- Depress the **Enter** key to retain the desired **Temperature Scale.**

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

### 4.3.8  Serial Port

The **Serial Port** option allows the machine operator to switch the **Serial Port On** or **Off.**  The **Serial Port** provided on the back of the Y150 *Thermo-Seal,* provides a communication port for use with a PC computer.

- Select **sub-menu 8** from the Keyboard Options sub-menu.

- Below the sub-menu title **Serial Comm.** will appear **off** or **on.** The default setting is **off.**

- Use the **Up** arrow key to set the **Serial Comm.** switch to **on.**  Use the **Down** arrow key to set the **Serial Comm.** switch to **off.**

- Depress the **Enter** key to retain the desired **Serial Comm.** switch setting.

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

### 4.3.9  Operation Mode

The **Operation Mode** option allows the machine operator six **Operation Modes** to choose from.  Those six **Operation Modes** are as follows:

- **Label Quantity,** with **Automatic Numbering** switched **on.**
- **Label Quantity,** with **Automatic Numbering** switched **off.**

- **Single Label,** with **Automatic Numbering** switched **on.**
- **Single Label,** with **Automatic Numbering** switched **off.**

- **Continuous,** with **Automatic Numbering** switched **on.**
- **Continuous,** with **Automatic Numbering** switched **off.**

**Label Quantity**

- Select **sub-menu 9** from the Keyboard Option sub-menu.

- Type **1** to enter the **Label Quantity sub-menu.** Within the **Label Quantity sub-menu** are three options:

  **1 = Invoice Before**
  **2 = Invoice After**
  **3 = No Invoice**

- Type **1** to select **Invoice Before**. **Invoice Before** allows the machine operator to seal a Label Tag onto the customers **Invoice Before** sealing the garments or textile items. **The Y150 *Thermo-seal* will automatically add the Invoice Label Tag to the quantity of Label Tags required to be printed, cut and sealed.**

  The last Label Tag Code can be repeated by depressing **F9 "Repeat Last Label".**

- Type **2** to select **Invoice After.** **Invoice After** allows the machine operator to seal a Label Tag onto the customers **Invoice After** sealing the garments or textile items. **The Y150 *Thermo-Seal* will automatically add the invoice Label Tag to the quantity of Label Tags required to be printed, cut and sealed.**

  The last Label Tag Code can be repeated by depressing **F9 "Repeat Last Label".**

- Type **3** to select **No Invoice.** **No Invoice** allows the machine operator to seal a Label Tag onto the customers garments or textile items **without** sealing a Label Tag onto the customers invoice.

  The last Label Tag Code can be repeated by depressing **F9 "Repeat Last Label".**

**Single Label**

- Select **sub-menu 9** from the Keyboard Option sub-menu.

- Type **2** to select **Single Label.** The **Single Label option** allows the machine operator to print, cut and seal only **one** label tag. The same label tag code can be printed, cut and sealed by depressing the **Enter** key.

- The Y150 *Thermo-Seal* software will cycle back to Keyboard Options sub-menu.

- Depress the **Esc** key to cycle back to the main LCD display.

  The last Label Tag Code can be repeated by depressing **F9 "Repeat Last Label".**

**Continuous Label**

- Select **sub-menu 9** from the Keyboard Option sub-menu.

- Type **3** to select **Continue.** The **Continuous Label option** allows the machine operator to print, cut and seal a **continuous** queue of Label Tags. The machine operator can exit the **Continuous Label option** by depressing the **Esc** key. Use of the **Esc** key to exit the **Continuous Label option** can be depressed at any time.

- Typing **3** to select **Continue,** will automatically cycle back to the main LCD display.

    The last Label Tag Code can be repeated by depressing **F9** **"Repeat Last Label".**

## 4.4    Special Mode

The following narrative and picture will explain all of the machine operation parameters that can be changed through the **Special Mode Menu** and **sub-menus.**



The picture above illustrates the **sub-menus** available when activating the Functions Key **F8 Keyboard Options Menu.** Type **2** for activation of the **Special Mode Menu.**

When the **Special Mode Menu** is selected, the Y150 *Thermo-Seal* LCD display will show **"Special Mode"** at the top of the LCD display. To continue further within the **Special Mode Menu**, the machine operator is required to enter a password. The LCD display will show **"Type Password"** below **"Special Mode".** The machine operator can now enter the **default Password** or a **special Password** that has been stored in the Y150 *Thermo-Seal* machine software. The default **Password is: Y150TP.**

After the correct **Password** has been entered, the **Special Mode Sub-menus** will be listed.  Those **sub-menus** are as follows:

<div align="center">

**1 = Factory Reset**
**2 = Password**
**3 = Edit Password**
**4 = Temperature Offset**
**5 = Left Margin Adjustment**
**6 = Print Quality**

</div>

## 4.4.1  Factory Reset

The **Factory Reset will erase all customized settings,** returning the Y150 *Thermo-Seal* software back to original **"Factory Settings".**  Customized settings data are not stored in the machine software.  To reset the Y150 *Thermo-Se*al back to the exact customized settings will require re-entry of the settings data.

- Type **1** to select **Factory Reset.**

- The top of the LCD display will read **Special Mode.**  The second line below Special Mode will read **"Factory Reset".** Below **"Factory Reset",** the LCD display will read **"Sure Y/N".**

- Type **"Y"** meaning **"Yes"** to activate **"Factory Reset"** of all software settings back to **factory default settings.  All customized settings are erased.**

- Type **"N"** meaning **"No"** to activation of the **"Factory Reset"** option.  **Current software settings and customized software settings are not changed.**

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

## 4.4.2  Password (On/Off)

The **Password (On/Off) option** allows the machine operator to enter the **Special Mode Menu** without the requirement to enter a **"Password".**  The factory default setting for this option is **"On".**

- Type **2** to select **Password.**

- The top of the LCD display will read **Special Mode.**  The second line below Special Mode will read, **"Password".**  Below **"Password",** the LCD display will read, **"On".**

- Depressing the **Up, Down, Right** or **Left** arrow keys will switch the **"Password"** from **"On"** to **"Off"** or vice versa.

- Depress the **Esc** key to cycle back through the **sub-menus,** returning to the main LCD display.

### 4.4.3  Password Edit

The **Password Edit option** allows the machine operator to enter a **Password** that is specified for use for the individual Y150 *Thermo-Seal* machine.  The factory default **Password** is **Y150TP.**

- Type **3** to select **Password Edit.**

- The top of the LCD display will read **Special Mode.**  The second line below Special Mode will read, **"Password Type".** Below **"Password Type",** the LCD display will read, **"Sure Y/N".**

- Type **"Y"** meaning "**Yes"** to activate **Password Edit.**  Type **"N"** meaning **"No"** to exit **Password Edit.**

- When the letter **"Y"** has been entered meaning **"Yes",** the LCD display screen will read, **"Type Password".**

- Type the current machine **Password** (factory default **Y150TP**) and depress the **Enter** key.

- The top of the LCD display will read, **"Password Change".** Type the **new Password** and depress the **Enter** key.

- The top of the LCD display will read, **"Password Again".**  Enter the **new Password again** and depress the **Enter** key.

- Upon entry of the **new Password** a second time, the LCD display will temporarily read, **"Succeeded"** and exit back to the **Special Mode Sub-menu.**

### 4.4.4  Temperature Offset

The **Temperature Offset option** allows the machine operator to adjust the Heat Control Circuit software in the Y150 *Thermo-Seal* machine. The purpose of the **Temperature Offset** is to eliminate as much as possible, the differential in temperature between the actual surface temperature of the Heater Element and the temperature displayed on the LCD Panel.
**CAUTION!**  The **Temperature Offset option,** should not be used unless Pyrometer readings taken at the Heater Element, are conflicting with the temperature shown on the LCD Panel.

- Type **4** to select **Temperature Offset.**

- The top of the LCD display will read **Special Mode.**  The second line below **Special Mode** will read **"Temp. Offset".** Below **"Temp. Offset"** the LCD display will read **0** degree **Temperature Offset.**  The **factory default is 0 degrees.**

- Depressing the **Up** and **Down** arrow keys will increase or decrease the **Temperature Offset** by **1°.**

- Depressing the **Right** and **Left** arrow keys will increase or decrease the **Temperature Offset** by **10°.**

- Depressing the **Enter** key will retain the **desired Temperature Offset,** and return back to the **Special Mode Sub-menu.**

- Depress the **Esc** key to cycle back through the **sub-menus** to return to the main LCD display.

### 4.4.5 Left Margin Adjustment

The **Left Margin Adjustment option,** allows the machine operator to adjust the margin of tape ahead of the first letter of the Label Tag Code. Increasing the **Left Margin Number** moves the Label Tag Code to the **right.** Decreasing the **Left Margin Number** moves the Label Tag Code to the **left.** The **factory default Left Margin is 10 units.**

- Type **5** to select the **Left Margin Adjustment option.**

- The top of the LCD display will read **Special Mode.** The second line below **Special Mode** will read **"Left Margin".** Below **"Left Margin"** the LCD display will read **"10". The factory default setting is 10 units.**

- Depressing the **Up** or **Down** arrow keys will increase or decrease the **"Left Margin"** by **one unit.**

- Depressing the **Right** or **Left** arrow keys will increase or decrease the **"Left Margin"** by **ten units.**

- Depressing the **Enter** key will retain the **desired Left Margin,** and return back to the **Special Mode Sub-menu.**

- Depress the **Esc** key to cycle back through the **sub-menus** to return to the main LCD display.

### 4.4.6 Print Quality

The **Print Quality option,** allows the machine operator to adjust the appearance of the **Print Quality** on the Label Tag. The **Print Quality** adjustment ranges from **1 to 8 units.** The **default factory setting is 2 units.**

- Type **6** to select **Print Quality.**

- The top of the LCD display will read **Special Mode.** The second line below **Special Mode** will read **"Print Quality".** Below **"Print Quality"** the LCD display will read **"2". The factory default setting is 2 units.**

- Depressing the **Up** or **Down** arrow keys will increase or decrease the **"Print Quality" setting** by **one unit.**

- Depressing the **Right** arrow key will increase the **"Print Quality" setting** to the maximum setting of **8 units.**

- Depressing the **Left** arrow key will decrease the **"Print Quality" setting** to the minimum setting of **1 unit.**

- Depressing the **Enter** key will retain the **desired "Print Quality" setting** and return to the **Special Mode Sub-menu.**

- Depress the **Esc** key to cycle back through the **sub-menus** to return to the main LCD display.

# 5.    Temporary Marking

Temporary, removable marking is used by: laundries, hospitals, hotels, textile suppliers, textile care companies, and various other industries. The Y150 *Thermo-Seal* machine, is designed to be used for temporary marking of garments and textile items.

Almost all garments or textile items can be marked **directly** or **indirectly.** Because of the variety of fabrics, it is very important to **follow some instructions on textile care.** **The default operating temperature of the Y150 *Thermo-Seal* machine is 176° C or 349° F.** Materials that are sensitive to heat cannot be marked directly.

The remark on garment labels **"Only wash / iron at low temperature"** can also indicate that the colors are sensitive to high temperatures, or that the heating of the finish on the fabric can cause the color to change.

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**Attention!** Thermopatch cannot take any responsibility for any damages to garments or textile items that occurs by the use of this machine.

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**If you are not sure about the sensitivity of the fabric, please mark the garment or textile item indirectly.** If there is no possibility for indirect marking, the garment or textile item must be washed in a washing net that has been marked. Be very careful when you want to mark articles that must be cleaned chemically. The message **"Only Dry Cleaning"** normally means, that the garment or textile item is sensitive to heat, pressure and detergents.

## 5.1    Sealing Label Tags and Organization

There are 11 different colors of Label Marking Tape for organizing and sorting purposes. The colored tapes can be used for both the entire operations for a customer and for the different lots.

Some Labeling examples are:

- **MINDERM**     code or shortened name

- **A12042**     department + unique number

- **R514MO**     room + day

- **B44-108**     building + room number

- **AB1234**     lot + sorting station + customer or customer no.

- **MO77082**     day +  customer + wearer

- **A01-02**     week + lot + wearer

### 5.1.1  Normal Label Tag Marking

Label Tags are sealed directly onto the garment or textile item. Placement of the Label Tag should always be done in the correct position for the garment or textile item.  The correct positioning of the Label Tag should be determined for each company.  Correct positioning facilitates organized sorting of the garments or textile items.  **The default factory set Sealing Time is 2.7 seconds "Normal".**

### 5.1.2  Thick, Dirty Or Damp Garments and Textile Items

Label Tags are sealed upon **thick, dirty or damp garments and textile items** in the same manner as described in section 5.1.1 Normal Label Tag Marking.  However, **thick, dirty or damp garments and textile items** require more heat to securely adhere the Label Tag to the garment or textile item.  Therefore, a **Sealing Time of 4.8 seconds "Heavy"** is used to correctly seal the Label Tag to the garment or textile item.

The machine operator can quickly change from **"Normal"** seal time to **"Heavy"** seal time by using the **F3 *Thermo-Seal* function key.**

### 5.1.3  Sensitive Garments Or Textile Items

Label Tags that **cannot** be sealed directly on **sensitive garments or textile items** can be sealed **indirectly** using the **"Extra Length"** option. The **"Extra Length",** option can be activated by using the **F4 *Thermo-Seal* function key.**

The **"Extra Length"** Label Tag has the desired code printed onto the Label Tag.  The Label Tag is positioned in front of the Heater Element and ready to be sealed.  Pass the long Label Tag through the top buttonhole of the garment or opening in a textile item.  The **printed code must be visible and the end of the long Label Tape must be folded between the Sealing Platen and the fixed tape.**

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**Attention!**   To ensure proper sealing of the Label Tag ends, be sure that both ends of the Label Tag are parallel to each other.  To complete the seal, hold the Label Tag at the garment or textile item. **CAUTION!  Be sure to keep your fingers clear of the Sealing Platen.**

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### 5.1.4  The Use Of Flags On Sensitive Garments

There is an alternative **indirect** Label Tag marking method.  The alternative method uses "**flags".**  The Label Tag with desired code is printed, cut and sealed onto the **"flag".**  The **"flag"** is then fastened to a button on the garment, in a manner in which the **"flag"** cannot come loose.

## 5.2   Interrupting The Sealing Cycle

At any point in the process of printing, cutting or sealing the machine operator can interrupt the Sealing Cycle.  Depressing the **Esc** key will exit the process cycle allowing the machine operator to initiate any necessary changes or activation of sub-routes.

# 6.    Trouble Shooting

Before referring to the following information, check for proper set up and operation as outlined in preceding sections of this manual.  Some repair procedures require a person with mechanical and electrical skills.

## 6.1    Problems And Solutions

| Failure | Possible Causes | Solution |
| --- | --- | --- |
| Machine Does Not Function | Not connected to outlet<br>No line power at outlet<br>Fuses blowen in Power Entry Module | Check outlet<br><br>Check fuses in Power Entry Mod. |
| Sealing Pressure Fluctuates | Leak in Air Supply Hose | Repair or replace |
| | Dust or water in air lines, Regulator or Solenoid Valve | Disassemble and clean |
| Machine Does Seal | Insufficient air pressure | Check and adjust Air Filter Press/Reg |
| | Press Arm Limit Switch Defective | Check wiring or replace switch |
| | Solenoid Valve not Engaged | Check wiring & Air leaks at fittings Replace Solenoid |
| No Heat | No power to machine | Check outlet & Check fuses |
| | Heater Element defective Temperature Sensors Defective | Replace<br><br>Replace |
| | Solid State Relay Defective | Replace |
| | Main Controler Board Defective | Replace |
| **Error Detected: Heater Defective** | Defective Heater Element | Replace |
| **Error Detected: PT 1600 Defective** | Defective Temperature Sensors | Replace |
| Temperature too High or too low | Temperture Settings have been changed | Reset Temperature Settings |
| | Temperatue Sensor are Defective | Replace Sensors |

| Failure | Possible Causes | Solution |
|---|---|---|
| Poor Sealing Quality | Temperature setting is Incorrect | See section 3.3.1 & section 4.3.1 |
| | Air pressure setting is Incorrect | See section 2.4 |
| | Sealing Time incorrect | See section 3.3.2 & section 4.3.2 |
| | Heater Shield is loose or Dirty | Correct or clean |
| Poor Sealing Quality | Sealing Platen worn or Dirty | Replace or clean |
| Poor Printing Quality | Ink Ribbon Cartridge dry | Replace |
| | Ink ribbon in cartridge is Not moving | Replace |
| | Print Head defective | Replace |
| | Text spacing incorrect | See section 4.4.6 |
| Printed text has Horizontal type Blanks | Printer Head is defective | Replace |
| | Controller Board is defective | Replace |
| Dynamic Knife does Not cut Label Marking Tape | Dynamic Knife needs to be adjusted | Adjust Knife, see Section 7.4 |
| | Dynamic Knife is dull | Sharpen Knife or Replace |
| | Dynamic Knife Cylinder Is not actuating | Check Air Line Tube connections Or replace Knife Cylinder |
| Label Marking Tape Is jamming in the Tape Guide | Tape Guide is dirty | Clean Int. & Ext. Tape Guide, see Section 7.3 |
| | Splice in Label Marking Tape Or fold in tape | Remove tape & Cut off spliced Tape section |
| Unreadable or no LCD Panel Display | Loose connection at LCD Panel or Controller Board | Reset Ribbon at LCD Panel or Controller Board |
| | Defective Ribbon Cable | Replace |
| | Defective LCD Panel | Replace |
| Incorrect Character Spacing on Label Tape | Obstruction in Tape Guide | Clean Tape Guide |
| | Worn Spindle Drive Ring | Replace, see Section 7.5 |
| | Defective Stepper Motor | Replace |
| Marks on garment or Textile item after Sealing | Ink build up on Rubber Platen | Clean or replace |
| | Ink build up on Heater Shield | Clean or replace |

| Failure | Possible Causes | Solution |
|---|---|---|
| Textile is discoloured During sealing | Textile is temperature Sensitive or textile care Symbols disregarded | Mark with Extra Long Label Tag or with Label Flag |
| | Time setting too long Temperature too high | Decrease Time Correct Temp. |
| Labels become Loose on left side | High mechanical load during washing or Cleaning | Replace Rubber Sealing Platen |
| Labels become Loose on left side | Temperature too low Sealing pressure too low Sealing Time too short | Correct Temp. Correct Pressure Correct Time |

# 7.   Maintenance

In this section you will find advice for general maintenance of the Y150 *Thermo-Seal* machine.

Before beginning any maintenance on your Y150 *Thermo-Seal* machine, finish any process cycles that may be started.  After the process cycles have been completed, maintenance upon the machine may commence.

**Attention!**  Before beginning maintenance unplug the Main Air Supply Line Hose to the Air Filter Pressure Regulator and unplug the Line Power Cord to the electrical supply.

## 7.1   Heater Shield

Clean the Heater Shield several times a day.  To clean the Heater Shield use the cleaning paste provided **"Ez-Off"** (Thermopatch #DH-6873 or SPADH-6873).  **Ez-Off** platen cleaner paste is available for purchase through our Customer Service network.

To clean the Heater Shield, put some paste on a dry cloth and clean the Heater Shield while it is still warm, **but not hot enough to cause burns to your skin.**  When cleaning the Heater Shield, **never use chemicals, solvents or abrasives that can scratch** the Heater Shield.

A Heater Shield that is no longer smooth should be replaced. A Heater Shield that develops a build up of ink or in which the smooth surface has been damaged will affect the print quality of the Label Tag.

Built up layers of ink or dirt on the Heater Shield can cause an insolating effect.  The insolating effect can cause a reduction in surface temperature at the Heater Shield.  **Lower surface temperature is the main cause of Label Tag loses during the laundering process.**

## 7.2   Movable Machine Parts

There are no maintenance requirements for the movable parts in the Y150 *Thermo-Seal* machine.  All bearings are sealed or self-lubricating.
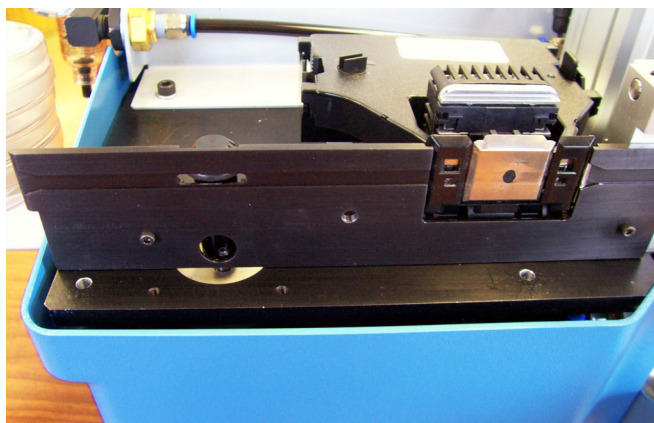
## 7.3   Tape Guide

The Tape Guide in the Y150 *Thermo-Seal* machine is accessible from the front of the machine under the hinged Machine Top Cover.  The following narrative with sequence of pictures will step you through the process of opening and cleaning the Tape guide.
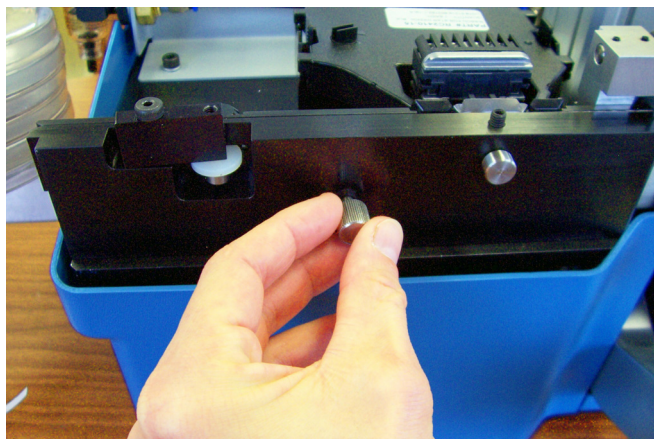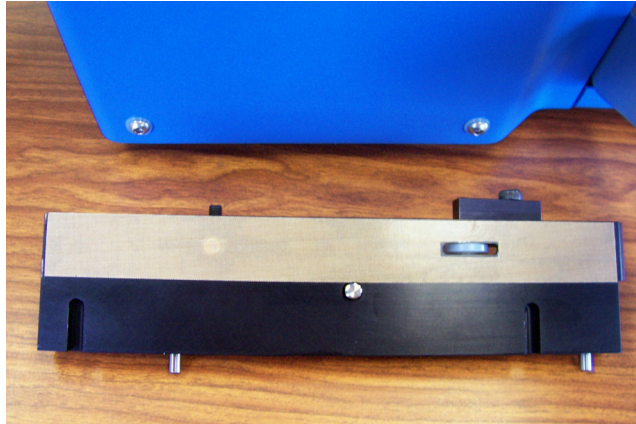
The picture above illustrates the Machine Top Cover open, exposing the **Tape Guide Assembly**. To remove the **External Tape Guide** turn the knurled knob counter clockwise to disengage the **External Tape Guide** from the **Internal Tape Guide.**
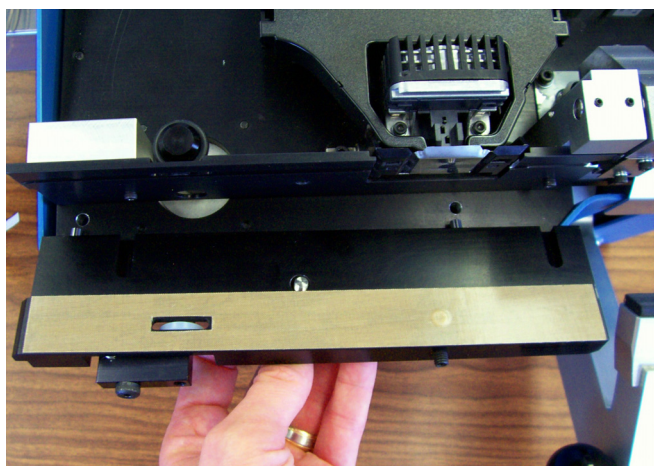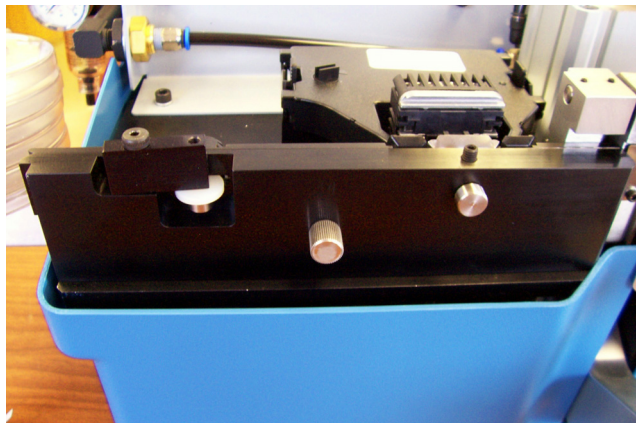


The picture above illustrates the **External Tape Guide** disengaged from the **Internal Tape Guide**.



The picture above illustrates the **Internal Tape Guide** surfaces. Clean the entire front face of the **Internal Tape Guide** surfaces with a clean soft cloth. When cleaning the surfaces of the **Internal Tape Guide**, be careful to not damage the Ink Ribbon Mask of the Printer Head.

The picture above illustrates the **interior** surface of the **External Tape Guide.** Clean the **interior** surface of the **External Tape Guide** with a clean soft cloth. Once this surface has been cleaned, re-assemble the **External Tape Guide** to the **Internal Tape Guide.**
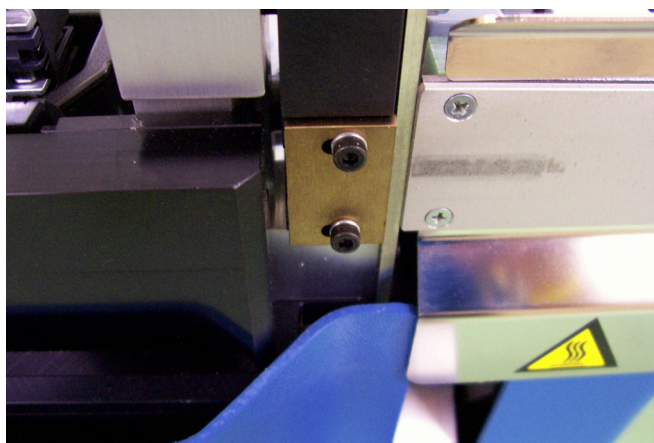


The picture above illustrates the **Tape Guide** re-assembled. At this point, the Machine Top Cover can be closed and the machine will be ready for operation.

## 7.4    Dynamic Knife Adjustment

The Dynamic Knife cuts the Label Tag prior to being sealed onto the garment or textile item. Dependent upon the amount of usage, the Dynamic Knife will become dull, requiring sharpening or replacement.

To remove or replace the Dynamic Knife, the following narrative with sequence of pictures will step you through the process to remove and replace the Dynamic Knife.

Prior to opening the Machine Top Cover to expose the **Dynamic Knife**, switch the power to the machine to the **"Off"** position and unplug the machine from it's electrical source.

The above picture illustrates the Y150 *Thermo-Seal* with the Machine Top Cover open giving access to the **Dynamic Knife.**
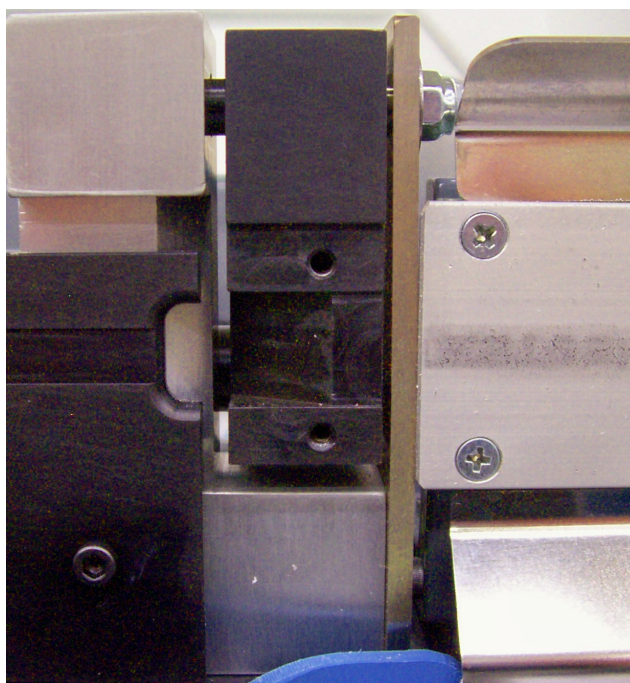


The above picture illustrates the Y150 *Thermo-Seal* with the **External Tape Guide** removed (see section 7.3) exposing the **Internal Tape Guide** and the **Dynamic Knife Arm.** The **Dynamic Knife Blade** has been removed.
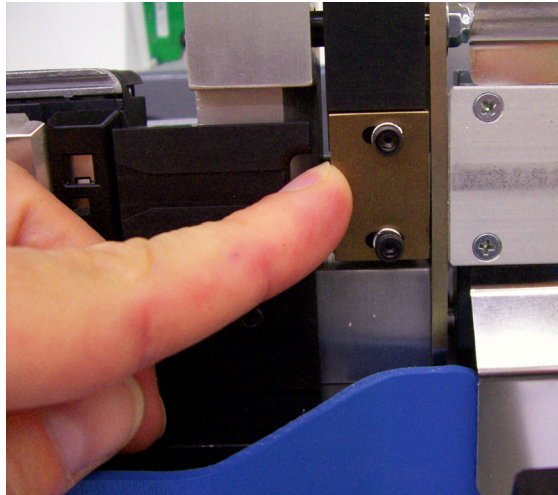
The above picture illustrates the **new Dynamic Knife Blade** mounted to the **Dynamic Knife Arm** using the existing fasteners.  To mate the **Dynamic Knife** with the **Static Knife**, gently push back upon the **Dynamic Knife Blade** while maintaining contact with the **Static Knife.** Tighten the socket hex cap screws.  When mated properly the **Dynamic Knife** will swing freely while maintaining contact with the **Static Knife.**
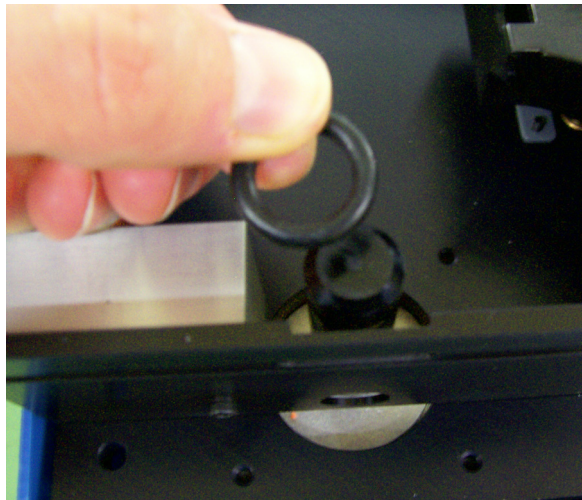
## 7.5   Label Tape Drive "O"-Ring

The **Label Tape Drive "O"-Ring** transports the Label Marking Tape through the Tape Guide.  The **Label Tape Drive "O"-Ring** is a part that will wear over a period of time.  The life cycle of this part is relative to the amount of machine usage.

The following narrative with sequence of pictures will step you through the process of removal and installation of a **new Label Tape Drive "O"- Ring.**

Prior to opening the Machine Top Cover to expose the **Tape Guide** and **Label Tape Drive "O"-Ring**, switch the power to the machine to the **"Off"** position and unplug the machine from it's electrical source. The picture below illustrates the Machine Top Cover of the Y150 *Thermo-Seal* open with the External Tape Guide removed.
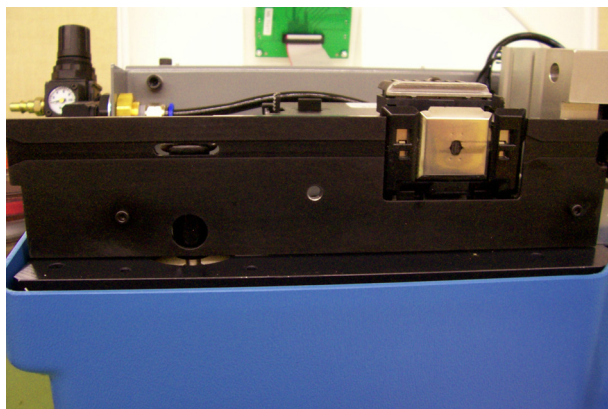
Loosen (but do not remove) the two socket hex cap screws retaining the **Internal Tape Guide.** Tilt the **Internal Tape Guide** forward (towards you). Remove the **Label Tape Drive "O"-Ring** by sliding the **"O"-Ring** up off of the **Label Tape Drive Spindle.** Install the **new "O"-Ring** by sliding the **"O"-Ring** down over the **Label Tape Drive Spindle** until it is seated in the **"O"-Ring groove** on the **Drive Spindle.**

After the **new "O"-Ring** has been installed, slide 0.015" [0.4mm] shim stock at each end, between the **Upper Chassis Platform** and the **Internal Tape Guide.** Tighten the socket hex cap screws, and reinstall the **External Tape Guide.**

## 7.6    Cleaning the Y150 *Thermo-Seal*

Maintaining a clean machine will extend the service life of the Y150 *Thermo-Seal* machine. The following is a recommended cleaning schedule for various parts of the Y150 *Thermo-Seal* machine.

### 7.6.1  Daily Cleaning & Maintenance

To optimise performance of your Y150 *Thermo-Seal* machine, the following parts or areas should be cleaned on a **Daily** basis.

- **Heater Shield:** should be cleaned following the schedule outlined in **section 7.1 Heater Shield.**

- **Rubber Sealing Platen**

- **Tape Guide:** should be cleaned following directions in **Section 7.3 Tape Guide.**

### 7.6.2    Weekly Cleaning & Maintenance

To optimise performance of your Y150 *Thermo-Seal* machine, the following parts or areas should be cleaned on a **Weekly** basis.

- **Machine Top Cover/LCD Panel:** remove dust and lint.

- **Interior Machine Platform:** remove dust and lint.

### 7.6.3  Bi-yearly Cleaning & Maintenance

 To optimise performance of your Y150 *Thermo-Seal* machine, the following parts or areas should be cleaned on a **Bi-yearly** basis.

- **Machine Electronics Compartment:** underside of Interior Machine Platform.   Requires removal of Right and Left Machine Covers.

- **Heater Shield:**  inspect, clean or replace.

- **Rubber Sealing Platen:** inspect, clean or replace.

- **External Tape Guide Teflon Shield:** inspect, clean or replace.

# 8.  Drawings and Parts Listing

On the following pages, the reader will find technical drawings and corresponding parts listing of the Y150 *Thermo-Seal* machine.  The technical drawing illustrating a particular sub-assembly or area of the machine will precede the parts listing.

The reader will find that the technical drawings and corresponding parts listings are arranged by category.  Those categories in order are:

1.  **Electrical**

2.  **Pneumatic**

3.  **Mechanical**