1318 QUAKER CIRCLE   P.O. BOX 589 SALEM, OHIO   44460

PHONE: 330-332-1800
FAX: 330-332-2144

www.ctmlabelingsystems.com

Designers and Manufacturers of Pressure Sensitive Labeling Equipment and Custom Product Handling

3600CE PRINTER APPLICATOR MAINTENANCE & SERVICE MANUAL
(3600CE-2b5.X)

MANUFACTURER'S
DECLARATION OF CONFORMITY

Number: MS2790

Declaration: This product is in conformity with Directive 98/37/EC of 22 June 1998 on the approximation of the laws of the Member states relating to machinery

Manufacturer: CTM Integration
1318 Quaker Circle
P.O Box 589
Salem, Ohio 44460 USA

Product Identification:

Machine Name: 3600A Series Label Printer Applicator

Machine Identification:

Electrical Diagram: 238/705047-401, 1 sheet, dated October 22, 2008

Standards Used:

EN 294 (1992)	Safety of Machinery – Safety distances to prevent danger zones from being reached by upper limbs
EN1010-1 (2004)	Safety of Machinery – Safety requirements for the design and construction of printing and paper converting machines – Part 1: Common requirements
EN 349 (1993)	Safety of Machinery – Minimum gaps to avoid crushing of parts of the human body
EN 418 (1992)	Safety of Machinery – Emergency stop equipment: Functional aspects, principles of design
EN 954-1 (1997)	Safety of Machinery – Safety related parts of control systems, Part 1: General principles for design
EN 60204-1 (2006)	Safety of Machinery – Electrical Equipment of Machines, Part 1: General requirements

Technical Construction File: MS2790

Signature of Manufacturer:
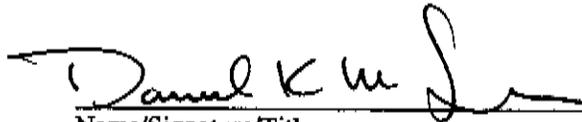
Name/Signature/Title

Place: CTM Integration
1318 Quaker Circle

January 29, 2009

P.O. Box 589
Salem, Ohio 44460, USA

TABLE OF CONTENTS
(3600CE)

TABLE OF FIGURES

INTRODUCTION

The 3600CE printer applicator is a high-speed labeler used to thermally print and apply pressure sensitive labels to moving products. A thermal transfer printer is integrated into an applicator to form a self-contained unit that will print variable data onto a label. The printer/applicator can be mounted in almost any position adjacent to product flow to apply labels to top, sides or bottom of products as they pass by.

Labels are supplied on rolls that consist of a liner on which the labels are held with adhesive. The labels may be preprinted with the variable information added by the printer or blank labels with the printer printing the entire label.

The applicator can work in two different modes:

Normal Tamp Blow
Inverted Tamp Blow

In the Normal Tamp Blow mode, the label is printed, dispensed out onto the label pad and held there by vacuum. When the product detect sensor is made, the label and label pad are moved toward the product using a pneumatic slide. When the slide is extended, an air blast will blow the label off the pad and onto the product.

In the Inverted Tamp Blow mode, the label is printed, dispensed onto the label pad and the slide extends. The applicator will wait in this position until the product sensor is made. The label is then blown off the pad onto the product.

For safe and trouble free operation, the instructions in this manual must be followed carefully during the set-up, operation, media changes, cleaning and maintenance.   Also the specified environmental conditions must be maintained.

Electrical Supply: 230 Volts, 1KW, 50-60 Hertz, Single phase

Air Supply: Clean and dry compressed air must be provided at pressures Between 6.2 and 6.9 bar (90 to 100 P.S.I.) with a minimum flow rate of 113.3 L/min (4 S.C.F.M.)
- **Note: An increase in venturi vacuum pressure may lead to higher L/min requirements.**

Environment: Operating temperature range is 10 to 35°C (50 to 95°F). Operating humidity range is 20 to 85% RH, non-condensing.

Note: The model 3600CE is not intended to be operated in an environment where flammable or explosive gases are present. The model 3600CE-PA MUST not be used in direct contact with food products.

READ THE INSTRUCTIONS CAREFULLY AND COMPLETELY. This manual includes all of the information that you'll need to set up the applicator under normal operating conditions. The instructions include important safety precautions, which must not be ignored.

READ THE INSTRUCTIONS IN ORDER. The instructions are written as numbered steps that will take you safely and efficiently through the setup process. Any steps performed out of sequence may result in a hazard and the applicator may not operate properly.

WORK CAREFULLY. Although setting up the applicator is not difficult, it does take time. Do not rush through the process. Careful work will produce good results.

IF SOMETHING DOES NOT WORK PROPERLY TRY SETTING UP AGAIN. Although applicator malfunction is possible, most problems happen because the applicator was not setup correctly. If the applicator doesn't operate correctly, back-up and start over.

FOLLOW ALL SAFETY INSTRUCTIONS. The 3600CE-PA has been provided with a number of safety features. Observe all safety warning and under no circumstances attempt to remove or defeat safeguards or operate the machine in a manner contrary to the instructions.

MACHINE TERMS

Adhesive Strings: Label adhesive that attaches to the label and liner while the label is dispensing onto the label pad. They can cause the label position on the label pad to become inconsistent.

Air Assist Tube: A small diameter tube with small hole(s) in it mounted under the peel edge. The purpose is to direct a stream of air to help the label onto the label pad.

Air Assist: The stream of air from the Air Assist Tube.

Air Blast: A blast of compressed air that moves the label from the label pad to the product. The duration of the blast is controlled by the Air Blast time accessible through the applicator display.

Air Filter: A device on the inlet of the air supply that removes debris from the air supply.

Critical Alarm: An alarm that will stop the applicator from applying labels. Critical alarms include end of web, out of labels (from printer) and no ribbon (from printer).

Cycle Time: The amount of time it takes for the applicator to print and apply a label to a product, starting from the product detect signal.

Dancer Arm: The function of the dancer arm is to release the brake on the unwind when labels are being printed and to stop the unwind mandrel when printing stops.

Detector Lockout: Time span after the applicator starts the labeling sequence that will cause the applicator to ignore any additional product signals. This is useful if a product triggers the product detect sensor more than once.

Extended Air Assist: The air assist is always on while the label is being printed (dispensed). Extended air assist allows the air assist to stay on longer to aid in putting the label on the pad.

Extended Peel Edge: An applicator nose assembly that adds a peel edge that moves with label flow. This will enable the back feed option to be turned off to the printer so higher labeling rates can be obtained.

Inverted Tamp Blow (ITB): A mode of operation in which the tamp pad is in the extended position waiting for the product detect signal to start the labeling sequence.

Label Feed: The moving of the label stock through the machine.

Label Liner: The backing material that supports the labels before dispensing.

Label Manifold: The aluminum block mounted under the tamp slide. The label pad is mounted to it. Vacuum and the air blast are channeled through it to the pad.

Label Pad: Mounted under the manifold and is usually made from white delrin. This part supports the label before application.

Label Placement: The time from when the product sensor is made to when the labeling sequence starts.

Label Sensor: The sensor that detects the leading or trailing edge of the label.

Label Size: The width and length (or feed) of a label. Length equals the distance from the leading edge of the label to its trailing edge. Width is the distance across the label.

Leading Edge: Refers to the signal sent from a sensor when the first edge of a product or label is detected.

LED: Light Emitting Diode

Normal Tamp Blow: A mode of operation where a label is dispensed onto the label pad and the applicator waits for the product detect sensor to turn on before starting the labeling sequence.

Parity: A data bit that provides a means of checking for errors in the data stream.

Peel Edge: A machined part just before the label pad used to transfer the label onto the pad. The liner is pulled around this part.

Rewind: This is the rotating mandrel that takes up the liner waste after the labels have been removed from it.

Static Stack: When labels are applied to a stationary target on top of each other to check repeatability of the applicator.

Tamp/Swing Extend Time: The time allowed for the tamp slide to fully extend.

Tamp/Swing Retract Time: The time allowed for the tamp slide to return from it's extended position to it's retracted position.

Trailing Edge: Refers to the signal sent from a sensor when the last edge of a product or a label is detected.

Unwind: The rotating mandrel where the roll of labels is placed to be printed and applied.

Valve Bank: The typical valve bank for a tamp has three valves in it. Each valve has a built in regulator and gauge. The assembly is made to be bolted on either side of the applicator.

Warning Alarm: This alarm serves as a warning that the applicator is low on labels or ribbon.

Web Path: The path the label liner follows leading from the unwind, through the printer and ends at the rewind.

3600CE TOUCH SCREEN DISPLAY

The following description provides general information about the display and will explain how to change values, the meaning of different screens, and describe the different options and how to set them up.

TYPES OF KEYS

The above keys are "go to" keys that will move the operator to another screen.

This red key is for disabling the tamp cylinder.

The lower right corner of the display will have "Tamp Disabled in red letters after pressing the red key.

This green key is for enabling the tamp cylinder.

The lower right corner of the display will have "Tamp Enabled in yellow letters after pressing the green key.

This block of keys usually turns something on or off. If the option is on, the lamp to the left of the keys will be green; otherwise it will be red.

The Jog key is used to jog a label onto the pad when the tamp is disabled or to jog a labeling sequence while the tamp is enabled.

The Alarm Reset key is used to clear alarms once the condition(s) that may have caused the alarm are corrected. When the alarm screen is cleared the main menu will appear on the display as long as the condition that caused the alarm has been corrected.

ALARMS

There are two types of alarms generated in the 3600CE applicator:
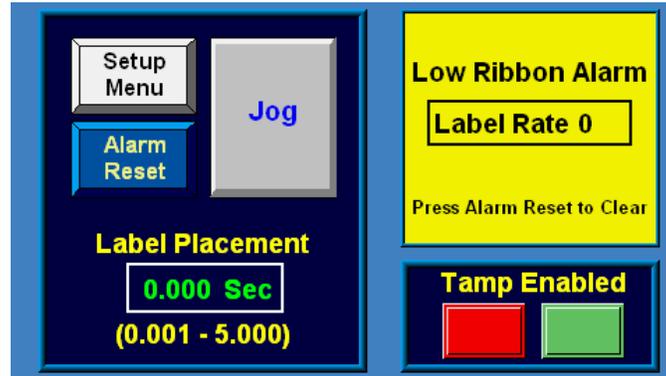
Warning Alarm Screen

Warning alarms will appear in the upper right hand corner of the main menu in the status box. Since these alarms are not serious, the applicator will not be stopped. During a warning alarm, the amber light on the light stack (if so equipped) will be on.

Critical Alarm Screen

Critical alarms will stop the applicator (take it offline) and turn a red light on in the light stack (if so equipped). The alarm screen will cover the current screen, explaining the alarm type that occurred. An Alarm Reset key appears at the bottom of the page to clear the alarm.

ALARMS CONTINUED

Warning Alarms
The following are warning alarms monitored by the applicator:

Low Label – This alarm occurs when the Low Label sensor detects that the unwind roll is nearly out of labels. The Low Label alarm feature requires an optional sensor and mounting assembly.

Low Ribbon – This alarm occurs when the print engine detects that the ribbon roll is nearly out ribbon.

Critical Alarms
The following are the critical alarms monitored by the applicator:

End Of Web – This alarm occurs when the end of web sensor detects a break in the web.
The End of Web alarm feature requires an optional sensor and mounting assembly.

No Media – This alarm occurs when there is no ribbon or label stock detected in the print engine.

Note: Refer to Section 7 Alarms for more information on the optional light stacks and Alarm conditions

STARTUP SCREEN
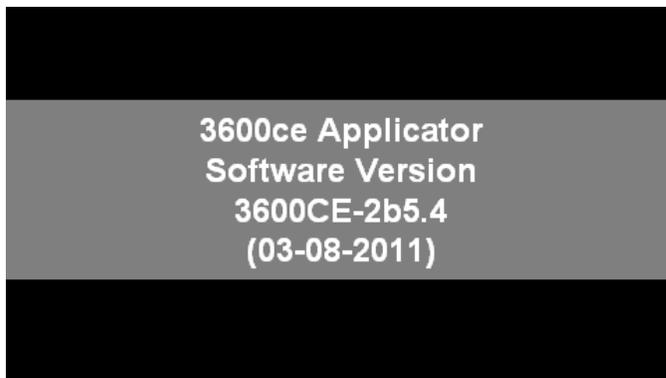
On power-up, the display will scroll the software version screen for 10 or 45 seconds. Zebra equipped printer applicators take 45 seconds to start up. Sato equipped printer applicators take 10 seconds to start up. This startup time allows for the print engines to go through their diagnostics.

Startup Screen

MAIN MENU

After the start up screen has timed out the Main Menu screen will come up. The main menu is divided into three sections. The upper right corner of the display is a status window. The purpose of this box is to inform the operator of the status of the applicator. The display screen shown below appears immediately after going offline. If the applicator is online with no alarms, the status window will have a green background with the label rate displayed. The Label Rate is the rate in which labels have been applied per minute. After 60 seconds passes by with no apply signal 0 labels/min is displayed. If a warning alarm occurs, the background changes color and a message appears indicating the nature of the alarm. Specific warning alarms were discussed previously.
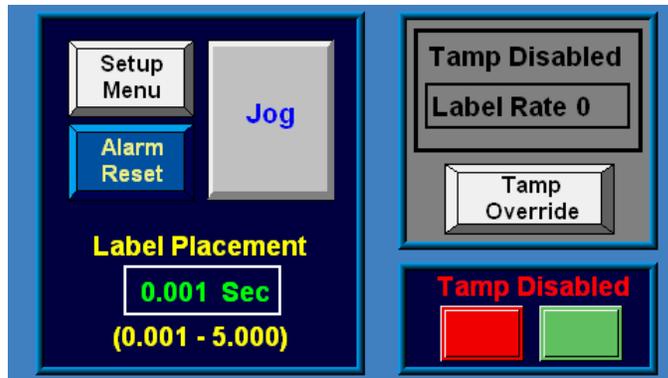
The left side of the screen will remain the same. There will always be jog, alarm reset keys and access to label placement time adjustments. Label Placement is the time from when the product detect sensor turns on until the labeling sequence starts. This is the tool used to place the label in the right position on the product.

The lower right corner has keys to allow the operator to enable and disable the tamp. When the tamp is disabled it will not move and inputs from the product detect sensor are ignored. Press the setup Menu key to gain access to the setup menu.

TAMP EXTEND OVERRIDE FEATURE
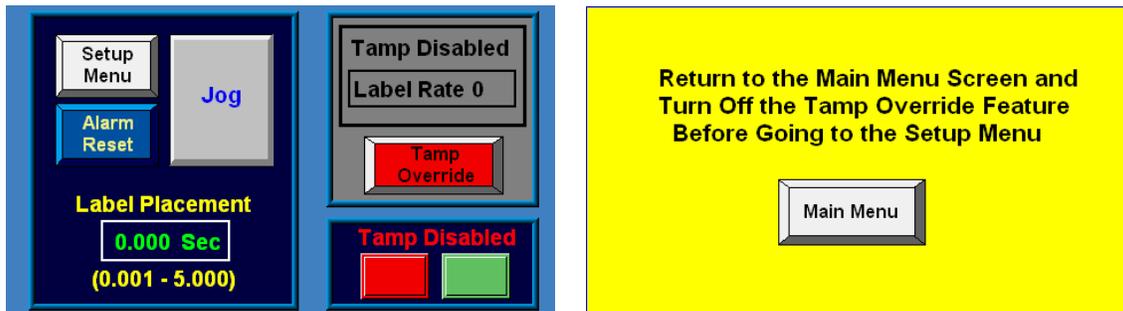
Main Menu Screen and Reminder Screen with Tamp Extend Override Activated

The Tamp Extend Override feature is used during applicator setup. We are mentioning it here because if it's activated as shown at left, the operator cannot enter the setup menu. If the operator would attempt to enter the setup menu then a reminder screen will appear telling the operator to first turn off the tamp extend override feature.

SETUP MENU

Pressing the Setup Menu key in the Main Menu screen will bring up the Setup Menu screen. Here the operator can adjust the apply sequence time based settings to achieve the desired label application results. Pressing the numbers within the boxed in area will pop up a keypad. The minimum and maximum settings are listed beside each timer setting. If the operator enters a number that is out of these ranges the display will not change. It will show the previous value before the adjustment attempt was made. To make fine adjustments to the applicator sequence, these timer settings can be adjusted as the applicator is running. Each time-based feature is listed and described below in detail. Also in this screen are Tamp Enable and Disable keys, a Main Menu key to return to the Main Menu and Configuration Menu key to go to a password screen in order to gain access to the configuration menu.

Setup Menu Screen

Air Blast Time - Time the air blast valve will stay on.

Extended Air Assist - The air assist is on as long as the applicator is printing a label. Extended air assist is the time after the printing stops until the assist turns off. This can be useful in placing a label on the label pad.

Detector Lockout - Used when receiving more than one product detect signal from a product. The detector lockout timer starts with the product detect and will ignore other signals until the timer has timed out.

Tamp Extend Time - Time allowed for the tamp slide to extend before continuing with the labeling sequence.

Tamp Retract Time - Time allowed for the tamp slide to return to receive a label from the extended position.

Note: If the applicator is equipped with a Tamp Home Sensor, the Tamp Retract time will be overridden during the apply sequence if the tamp cylinder returns before the retract timer times out. The applicator will function this way when the Tamp Home Sensor Option is turned off. If the Tamp Home Sensor Option is turned on, the Tamp Retract timer will be completely ignored during the apply sequence. See the Applicator Setup Section 5, page 5-13 for more information on the Tamp Home Sensor Option.

PASSWORD

Once the operator has disabled the tamp and presses the configuration menu key again this screen will pop up notifying the operator that the area is password protected. Here the operator can chose to go back to the main menu or continue with password entry by touching within the box to the left to invoke the keypad.

Password Screen
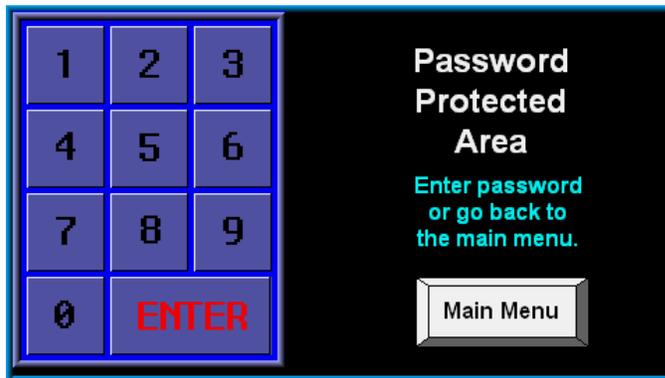
When the operator presses the keypad area a numeric keypad will appear. The standard 3600CE password is "1800".

Password Screen with keypad activated
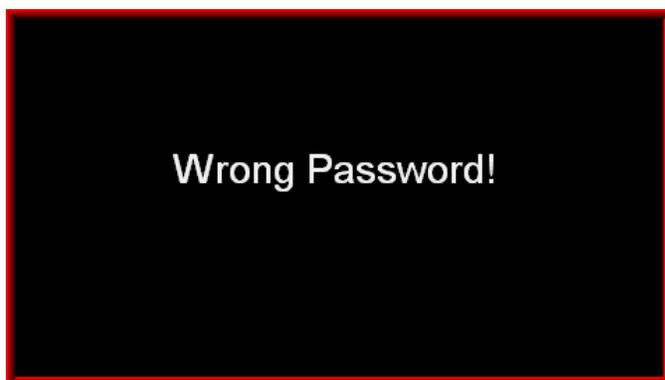
If the password was not entered correctly, a screen will come up stating wrong password. This screen will disappear after three seconds and the password screen will come back up.

Wrong Password Screen

CONFIGURATION

When the password has been entered correctly and "enter" is pressed on the keypad the Configuration screen will popup. Here the operator can go to the Option Menu, Printer Setup, I/O Diagnostics, read and/or reset the Product Counter, or return to the Main or Setup menus. The **Product Counter** is a count of Product Detect sensor initiated labeling sequences.

To gain access to the configuration menu after going to the set-up menu the operator has to first disable the tamp. If the tamp is not disabled and the operator presses the configuration menu key, the reminder screen (bottom right) will popup informing the operator to do so.
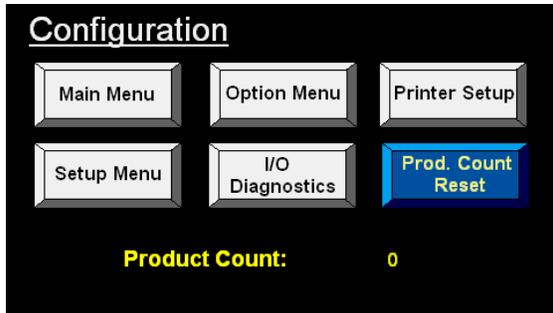
Configuration Screen   **Disable Tamp Reminder Screen**
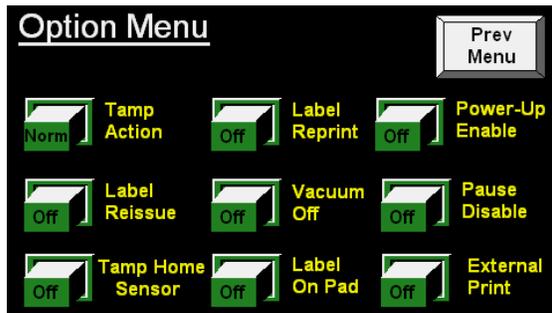
Option Menu Screen

In the Option Menu the operator can choose the options that are to be required for a particular labeling application. Some of the options are not compatible with each other and selecting a certain option will toggle an incompatible option off. See the Applicator Setup Section 5 for more information. Pressing the Previous Menu key will take the operator back to the Configuration Menu.
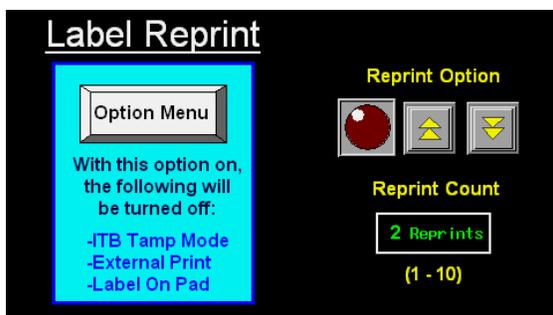
Label Reprint Screen

When the operator presses the Label Reprint key this screen will appear detailing the options that will be turned off. The operator can turn this option on or off by pressing the corresponding arrow key. Pressing the Option Menu will take the operator back to the Option Menu screen.

CONFIGURATION CONTINUED
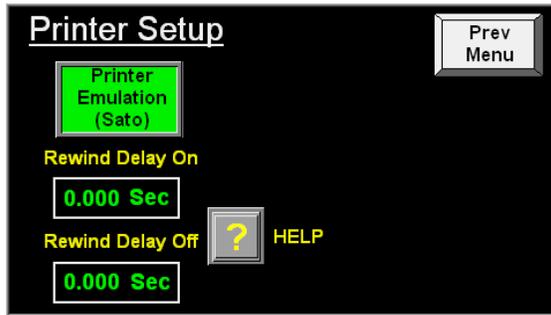
Printer Setup Screen

When the operator presses the Printer Setup key, this screen will appear. Here the operator can select the Printer Type. It is important to have the right printer type selected in order for the print engine to have enough time to run through its diagnostics on startup. The Rewind Delay On and Off timers can be adjusted here after consulting the factory. When the Help button is pressed information on the Rewind Delay On and Off timers is provided.
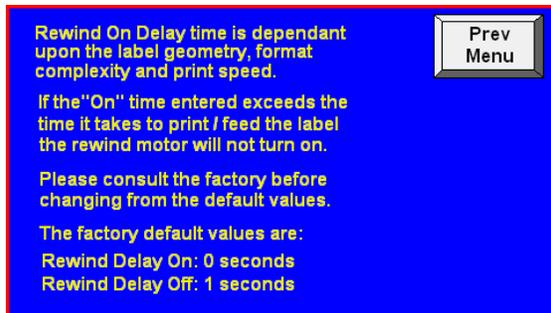
Rewind On/Off Delay Help Screen

This screen is displayed when the "HELP" key is pressed in the Printer Setup screen.

I/O DIAGNOSTICS

I/O Diagnostics –This section allows the operator to monitor inputs and to manually turn outputs on and off. This serves as a diagnostic tool for a technician.
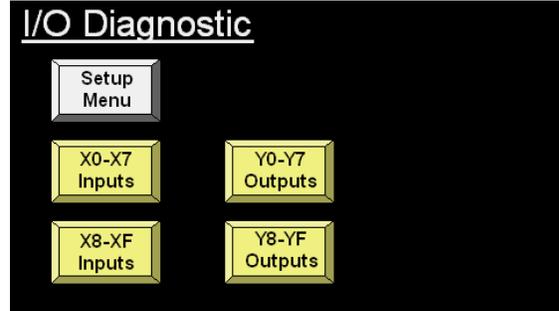
I/O Diagnostics Screen
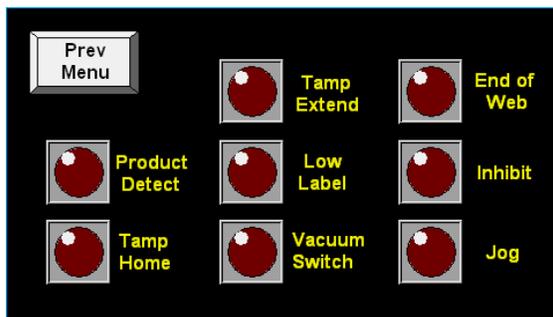
X0-X7 Inputs Screen
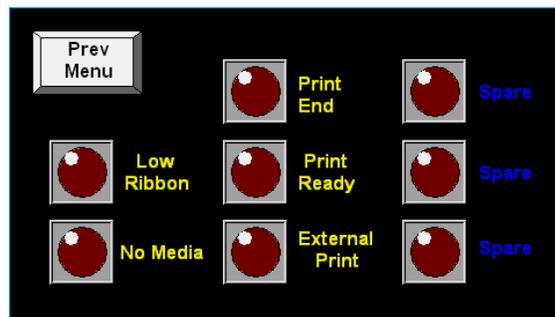
X8-XF Inputs Screen

In either Input screen in the I/O Diagnostics screen a technician can monitor inputs as they occur by watching the corresponding lamp to turn green.

Note: The Input Signals from the print engine are inverted. To visually represent the condition on the diagnostics screen we also invert the four print engine inputs. For example, when the printer is online the (Printer Ready) input lamp will appear green, as it should. When a technician checks this input with a voltmeter the signal will be high. Meaning that the input is on. The technician must keep in mind that inputs other than these four inverted inputs will measure low with a voltmeter when in the "on" state. Low Ribbon [X8], Print End [XA], and Print Ready [XB] are the three inverted print engine inputs.
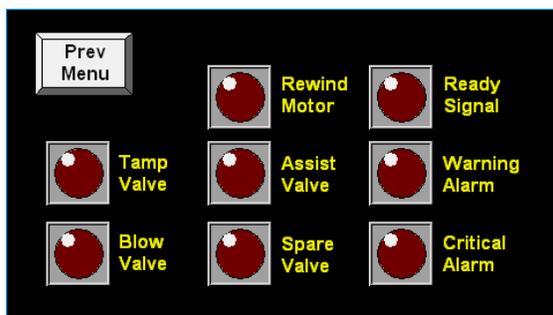
Y0-Y7 Outputs Screen
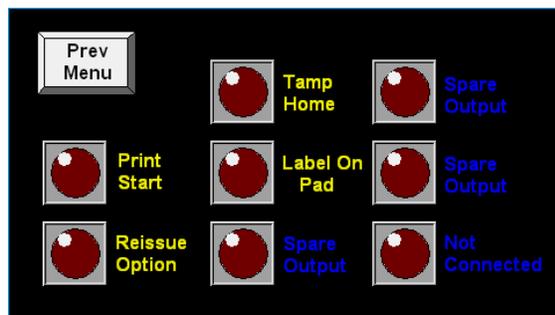
Y8-YF Outputs Screen

In either Output screen in the I/O Diagnostics screen a technician can turn on outputs by pressing the lamp beside the output. When the output is on the lamp will be green.

FACTORY DEFAULT

The ability to reset to factory defaults is useful when the applicator will not dispense labels due to a configuration problem. Resetting to factory defaults will bring all of the settings to something that works and adjustments can be made from there. The factory default screen can be accessed from the power-up software screen.

Startup Screen with Hidden Default Access key shown

On power up, the screen shown above will appear for about five seconds. Pressing the upper right hand corner of the display causes the factory default screen to appear.
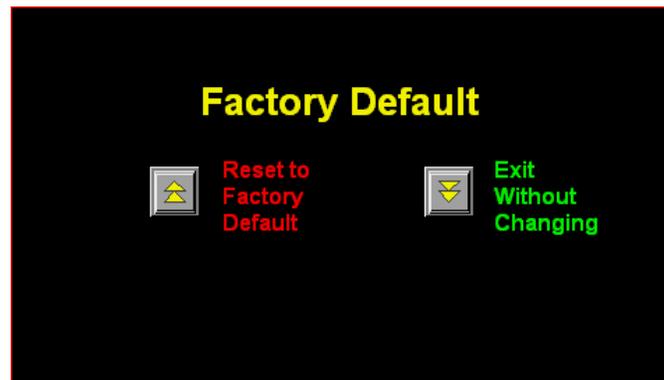
Factory Default Screen

Pressing "Exit Without Changing will take the operator back to the startup screen. Pressing "Reset to Factory Default will bring up the screen below until the reset values are loaded into the registers. When this is complete the startup screen will reappear.

Defaults Loading Screen

MISCELLANEOUS

The display is equipped with a backlight saver function that automatically turns the backlight off after 60 minutes of inactivity. Pressing any part of the display screen will turn the display backlight back on. Also the applicator will initiate a backlight wake-up in response to any critical alarm condition in systems without a light stack assembly.

REAR PANEL

VALVE   ALARM   EOW   PROD   I/O   PARALLEL

AUX   L-LBL   DISPLAY   SERIAL
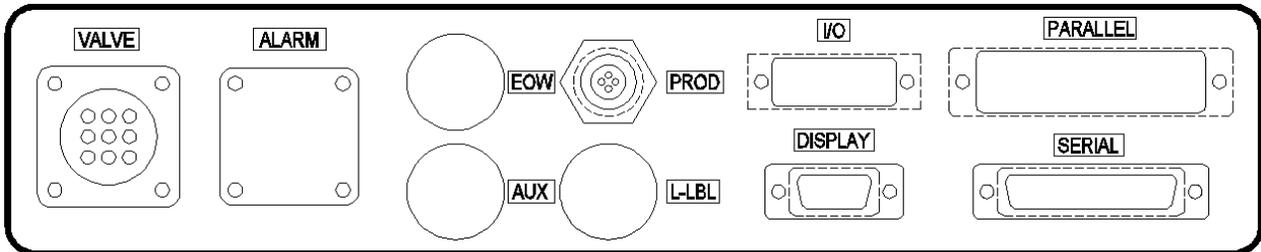
CONNECTOR DESCRIPTIONS

VALVE: This connector is for the valve bank. Valve banks come with a short cable and a plug.

ALARM: This connector is optional. This connector can support up to a three light alarm stack. The green light is for system ready, the amber light for warning, and a red light for critical alarms.

PRODUCT: This connector is for the Product Detect sensor.

END OF WEB: This connector is optional. When purchased it can be used for an End of Web sensor.

LOW LABEL: This connector is optional. When purchased it can be used for a Low label sensor connection.

AUX: This connector is optional. When purchased it can be used for custom applications.

PARALLEL: This connector is wired to the parallel port of the printer for data transfer. Whether or not this connector is installed in the Rear Panel is dependant upon the print engine's communication type.

ETHERNET: This would be placed in the parallel port area. This connector is wired to the Ethernet port of the printer for data transfer. Whether or not this connector is installed in the Rear Panel is dependant upon the print engine's communication type.

SERIAL: This connector is wired to the serial port of the printer for data transfer. Whether or not this connector is installed in the Rear Panel is dependant upon the print engine's communication type.

I/O: This connector is optional. When purchased separately, it can be used by integrators to monitor applicator alarms and functions. See the next page for a list of functions.

I/O PORT FUNCTIONS

The following is a list of the pre-wired functions of the I/O port. If other functions are needed (i.e. tamp home switch), they can easily be added. All outputs are NPN (sinking) with 80-ma load. Inputs are also for sinking devices.

- **Pin #1** (DC Power): 0 VDC

- **Pin #2** (DC Power): 24 VDC at 200ma

- **Pin #3** (System Ready): If there is no critical alarms, the tamp is enabled, inhibit input off, and the printer is online, the ready output is on.

- **Pin #4** (Warning Alarm): This output will turn on when the applicator receives a low label or low ribbon signal. The signal will stay low until the alarm is reset.

- **Pin #5** (Critical Alarm): This output will turn on when the applicator receives a no labels or no ribbon signal from the printer or if the end of web sensor is made. The signal will stay low until the alarm is reset.

- **Pin #7** (Tamp Home): The output turns on when ever the tamp home switch is made or the tamp retract timer times out.
  - **Note:** Tamp home switch is an option and is purchased separately

- **Pin #8** (Label on Pad): After a label has finished printing, the controller will look at the output of a vacuum switch to see if the label is on the pad. If so, the output turns on.
  - **Note:** Vacuum switch is an option and is purchased separately

- **Pin #9** (Air Blow Valve): This output is on when the air blow valve is on.

- **Pin #10** (Air Assist Valve): This output is on when the air assist valve is on.

- **Pin #11** (Product Detect): Taking this input low will start the labeling sequence of the applicator.

- **Pin #12** (Inhibit): This input will stop the applicator from applying labels.

- **Pin #13** (External Print): When the external print option is turned on, the printer will not print a label until this input goes low. This input is for custom applications.

APPLICATOR SETUP

When an applicator is shipped, it may be necessary for some assembly. The following section will show different assemblies to aid in putting the applicator back together so it can be set up.

UNWIND INSTALLATION

The unwind assembly mounts to the applicator by fastening the two unwind mounting plates to the unwind and to the applicator face in alternate positions to suit various orientation and clearance requirements (refer to drawing # ASS-238-0123, MP-238-0236). The two plates are held together using four flat head screws; one end fastens to the unwind bearing block with three flat head screws, and the other end fastens to the applicator face with four screws. The mounting plates can be configured so the unwind can be positioned in different locations to aid in certain applications.
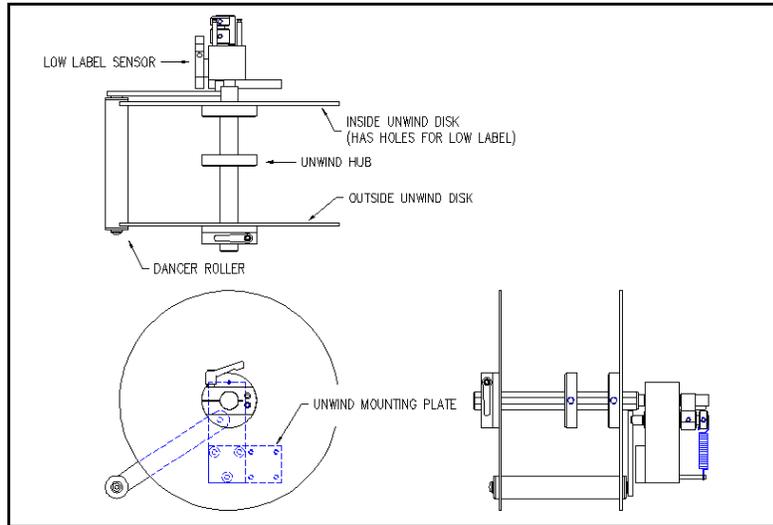
Figure 1 (Unwind Assembly)

The unwind disks include a Lexan disk and hub screwed together. The inboard assembly will have two holes in the disk for the low label sensor. The outboard assembly will have a solid disk and hub assembly that includes a ratchet handle for locking it in place. Place the inboard assembly so that the inside face of the disk is approximately 7/8" from the applicator face. This should match the web path of the printer. When fastening the disk assembly to the unwind shaft, make sure the set screw is engaging against the flat of the shaft. Position the loose hub just short of the label width. This hub is for supporting the outboard end of the roll of labels. The outboard disk assembly will slide onto the shaft against the roll of labels and will lock in place by tightening down the ratchet handle.

AIR FILTER INSTALLATION

When the applicator is shipped, the air filter is off. The filter is sent with two 2" nipples and an elbow. The attitude of the machine will determine how the filter should be plumbed. Note: In all cases it is important to have the filter bowl pointing down.
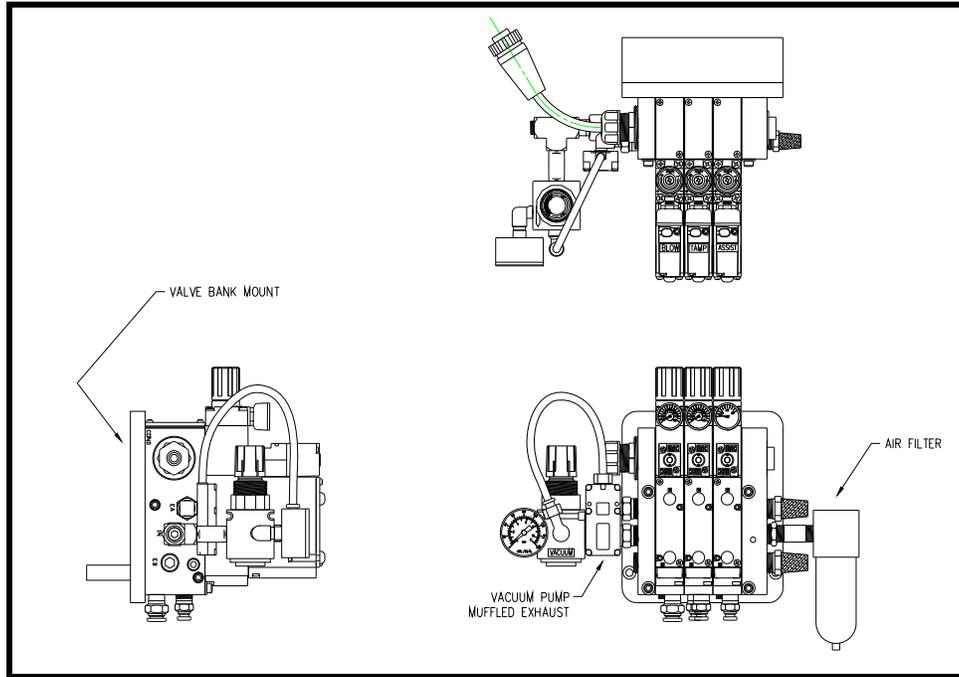
Figure 2 (Valve Bank Assembly)

VALVE BANK INSTALLATION

Figure 2 shows the valve bank assembly. If the valve bank was removed and needs to be re-mounted, decide on which side of the applicator the valves should be mounted. Normally, the valves are mounted on the opposite side from the applicator nose. In a nose up application, it may be best to position the valves on the same side as the applicator nose. Mount the valve bank by putting two ¼ SHCS. through the two clearance holes on the side of the labeler housing. The bolts then screw into the valve bank mounting plate. Run the air lines into the manifold below the valve bank or directly into the applicator nose if the valves are mounted on the side as the applicator nose.

STANDARD TAMP INSTALLATION

Although it is unlikely that this will be removed for shipping, it will, however, have to be adjusted. The assembly is held onto the faceplate by two ¼ SHCS. marked as in/out adjustment in figure 3. These same two bolts will allow the label pad to be moved closer to the printer peel edge. To raise or lower the label pad, loosen two ¼ SHCS. in the slide body (marked as up/down adjustment in figure 3). The label pad and manifold can be moved side to side using the four #10 shcs. in the manifold. The position will change slightly between the Sato and Zebra printers.

Run the air line from the "A" port of the tamp valve to the top cylinder port, and the "B" port of the valve to the bottom cylinder port. The label manifold is plumbed to the "A" port of the air blast valve. The "A" port of the air assist valve is connected to the assist tube inside the machine.

> **Note**: If the valve bank is mounted opposite the applicator nose, it
> will be plumbed into the manifold on the side of the machine.
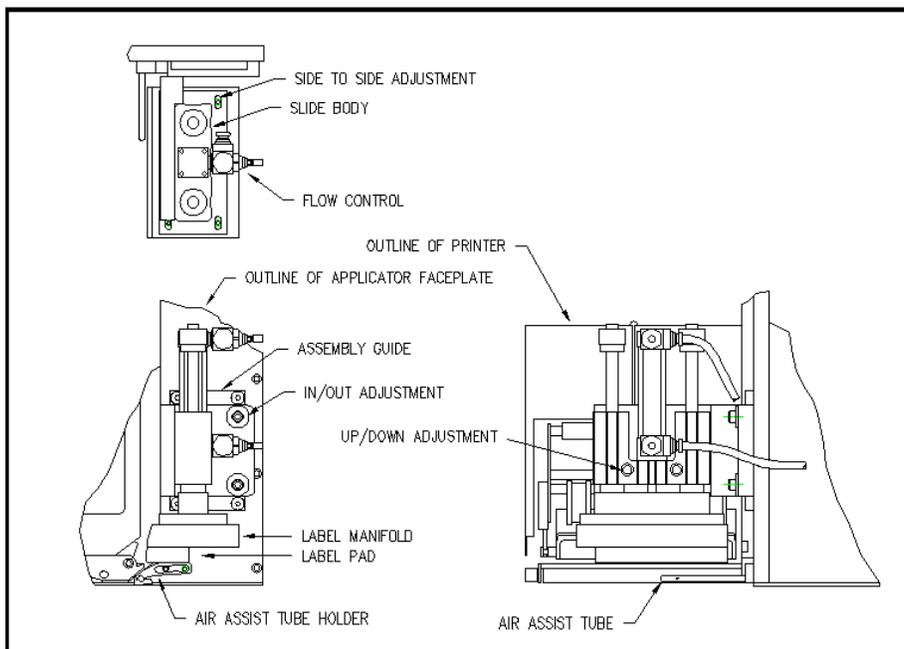
Figure 3 (Standard Tamp Assembly)

EXTENDED PEEL EDGE INSTALLATION

This nose assembly is used when it is desired to disable the backfeed option on the applicator to gain more labels per minute. With the backfeed off, the leading edge of labels will stop in different places with different length labels. To overcome this, the print engine is set to stop the label with the label leading edge under the print line of the printhead, and the tamp assembly is adjusted to where the label stops at the extended peel edge for proper dispensing.

> **Note**: With this type of arrangement, there will always be one or more labels between the printhead and the extended peel edge.

The extended peel edge assembly is mounted on the label feed side of the applicator using four ¼ SHCS. and two 3/16 dowel pins. There are also two ¼ shcs. used to mount the two guide rods to the side of the machine. To move the label pad closer to the peel edge, loosen the two 1/4 SHCS. marked as tamp in/out adjustment in Figure 4. When the label pad is in position, re-tighten the screws. To raise or lower the label pad to the peel edge, loosen the two ¼ SHCS. in the slide body (marked as up/down in Figure 4). The label pad can be moved side-to-side using the four #10 SHCS. in the manifold. To move the whole assembly in or out so the peel edge lines up with the leading edge of the label, loosen the clamping screws on the guide rods and turn the assembly adjustment knob. Tighten all screws when finished.

The plumbing will be the same as the standard tamp assembly except for the air assist. Instead of it plumbing into the air assist tube, it will plumb into a straight tube at the same place. This tube will transfer air through the faceplate and across the printer between the web path going to the pad and the return path of the liner. This tube is held with same holder that was used to hold the assist tube on the standard tamp except it's mounted on the inside of the machine. From the end of the pass through tube to the air assist tube, a ¼' air line is attached.
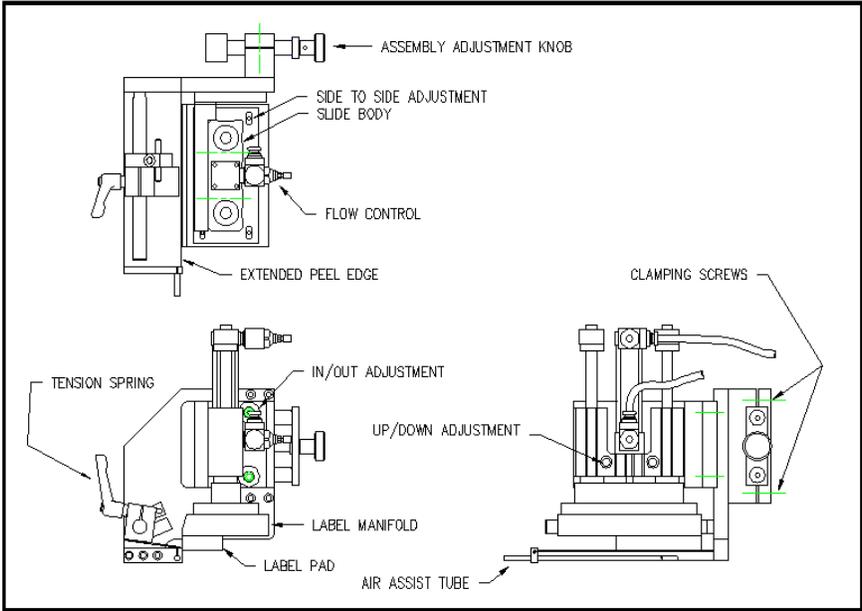
Figure 4 (Extended Peel Edge Assembly)

SWING TAMP INSTALLATION

This assembly is used to apply labels on the leading or trailing edge of products. The assembly is held on to the sideframe by four ¼ SHCS. marked as side to side adjustment in Figure 5. These same four bolts will allow the assembly to move across web path to line the label to the pad. To raise or lower the label pad, turn the retract position adjustment screw on the rotary actuator. Moving the label pad closer to the peel edge is done by loosening the in/out adjustment screws in Figure 5. These also hold the actuator to the mounting bracket.

When plumbing the actuator, air that enters on a side on the top rack must also enter the lower rack on the opposite end. The "A" port on the tamp valve needs to connect to the top rack port farthest away from the applicator body and the lower rack port closest to the body. The "B" port will provide air to the other two actuator ports. The air blast and air assist valves plumb the same as the standard tamp.
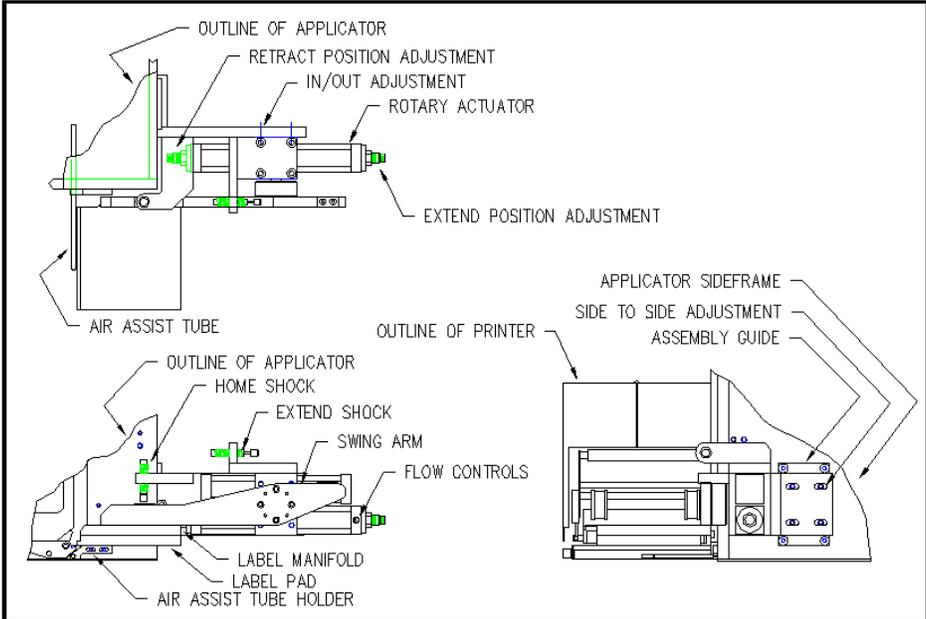
Figure 5   (Swing Tamp Assembly)

RIBBON LOADING

1- At the main menu, press the "Home/Tamp" key (refer to the applicator display section). This will extend the tamp slide so the pad and manifold will not be in the way of opening the print-head. If using the extended peel edge, disabling the tamp is acceptable.
2- Open the printer cover.
3- Refer to the printer manual for ribbon loading instructions.

LABEL LOADING

1- At the main menu, press the "Home/Tamp" key (refer to the applicator display section). This will extend the tamp slide so the pad and manifold will not be in the way of opening the print-head. If using the extended peel edge, disabling tamp is acceptable. Loosen the ratchet handle that locks the outer unwind disk in place and remove disk.
2- Load a roll of labels onto the hubs on the unwind shaft. Make sure the labels are against the inner disk and are right side up.
3- Remove the first three feet of labels from the liner.
4- Thread the label stock around the dancer and guide rollers into the printer. Refer to Figure 6 for the web path from the unwind to the printer. Refer to the printer manual as to how to thread the printer. Make sure the liner passes between the peel edge and the air assist tube.

WEB PATH DIAGRAM
(RIGHT-HAND CONFIGURATION)
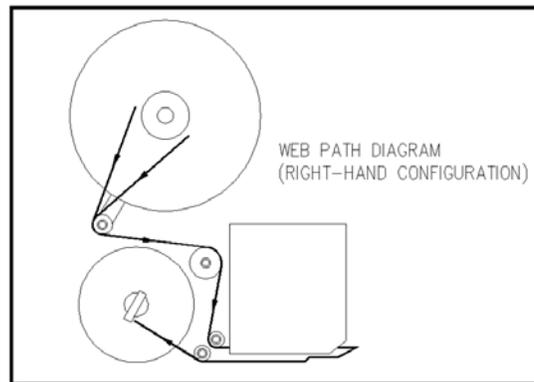
Figure 6 (Web Path)

5- Remove the rewind pin and wrap the liner over the rewind mandrel. Replace the rewind pin and rotate the rewind mandrel to take the slack out between the rewind and printer.
6- Make sure the labels track straight from the unwind into the printer. Adjust the inner unwind hub if necessary.
7- Bring the guide collars within 1/64" of the liner.
8- Make sure the print head and any other latches are closed within the printer. Close the printer cover.

APPLICATOR NOSE SETUP

1- Disable tamp (refer to page 3-1 Touch Screen Display Section). This way adjustments can be made without the fear of the tamp actuating and injuring someone. Also send Print Job formats to the printer.
2- The label stop must be properly set for the applicator to work successfully. This is done through the printer and will be referred to as "Offset", "Top of Form", "Pitch Offset", or other terms dependant on the printer model.
   a) With printing information in the buffer and the tamp disabled, press "jog" to dispense a label.
   b) If the label stop is correct, the label should feed off the liner. If the next label out is flagged past the peel edge, the label stop must be decreased. If the label doesn't dispense completely off, then increase label stop. Refer to printer manual as to how to change label stop
3- Tamp height needs to be set so a label feeds out in contact with the label pad. If the pad is too high, the label will not land consistently on the pad and the trailing edge of the label could come into contact with the peel bar of the printer when the tamp slide extends. If the label pad is too low, the label will dispense into the back of the pad and jam.
4- The inboard edge of the label pad must match the inboard side of the label. Refer to the side to side adjustments to move the pad.
5- Position the air assist tube so the hole or holes are centered on the label and pointing approximately ¼"in from the label pad. The air pressure should be set at 20-30 P.S.I. Press "Jog" to dispense a label. If the label doesn't feed out against the label pad and the vacuum doesn't capture it, try increasing the air pressure. Continue until the vacuum captures the label.

> **Warning:** There are other factors that can keep the label from staying on label pad. You may need more vacuum, increased or decreased label dive, or the air assist tube may need to be rotated.

6- Air pressure for the tamp slide should start at 40 P.S.I., for the air blast at 30-40 P.S.I., and for the vacuum pump at 20-40 P.S.I.
7- Air blast time is set through the display and should be set long enough to apply a label firmly to the product. Setting the time too high will result in less labels/min. Start at .03 seconds.

TAMP SETUP

Go to the display and enable the tamp. Press the "Jog" button and observe the tamp action. The tamp slide should move smoothly. If the action is fast and slams into it's stops, adjust the flow controls so the action slows. To slow down the extend, turn the bottom flow control (standard tamp) clockwise. The retract flow control is on top. By turning counter-clockwise, the slide will move faster.

> **Note**: The flow controls on the swing tamp are integrated into the rotary
> actuator (reference Figure 5 on page 5-5).

Tamp extend and retract times are changed through the applicator display. Refer to the display panel section as to where these menus are. Tamp extend time needs to be set so the slide fully extends before the air blast turns on. If the blow off occurs too soon, the label application will not be accurate. If the time is too long, it adds to cycle time and will slow label rate. Tamp return time is the time allowed for the slide to return home before printing another label. If this time is too short, the label will dispense into the back of the label pad. If too long it will add to the cycle time of the machine.

> **Note**: If tamp switches are added, the tamp extend and retract times should be left high and the switches will over-ride time values.

CHANGING TAMP MODES

The applicator can work in two different modes:

Norm-Normal Tamp Blow
ITB-Inverted Tamp Blow

See the Configuration Menu section page 3-7 for information on selecting tamp mode.

LABEL STATIC TEST

It's important to know if the applicator can repeat putting labels in the same place over and over. Without knowing this, when label placement problems occur on the line, you won't know whether the machine is not repeating or the problem lies with the product.

To test repeatability, position the applicator so when the tamp is extended the label pad is approximately 1/8" away from the product. Jog several labels onto the product. If the label stack is within the tolerances you have to work with go on to the "Product Setup" section. If not go through the following suggestions to help find the problem.

1- Make sure the labels are consistently stopping in the same place on the label pad. If this is OK go to step 7; if not, go to step 2.

2- Check label stop. One label should be completely dispensed off the liner while the next label should be 1/32" away from the peel edge. If this varies more than 1/32" with each cycle, refer to the printer manual to correct. When this is corrected, go back and try the static test again. If this was OK, go to step 3.

3- Make sure the label pad surface is clean. If clean, go to step 4 and if not, clean and try static test again.

4- Make sure the vacuum is set right. If the label flutters when feeding across the pad then the vacuum is too high. If the label falls off or moves after the label has left the liner, then it's not high enough. If the label feed looks smooth go to the next step.

5- Work with the air pressure and the position of the air assist tube until the label feeds more consistent onto the pad. Re-try the static test. If the results are still not good enough, go to step 6 but if they-re OK, go to 7.

6- Make sure you are working with good label stock. Try another roll of labels and see if you get the same results.

7- Check the distance from the label pad to the product. If the distance is too large, the labels may float too much. Try lowering the machine so the label pad just clears the product (within 1/8").

8- Is the label pad made for the label you're using? Look to see if the labels are laying down flat and stacking well. If the hole pattern does not match the label, results will be uncertain.

CONFIGURATION

See the Touch Screen Display Section 3 of the manual for instructions on how to enter the configuration menu. The following paragraphs explain each configuration option.

Option Menu

Tamp Action
The applicator can work in two different modes:
> **Norm-Normal Tamp Blow**
> **ITB-Inverted Tamp Blow**

In the Normal Tamp Blow mode, the label is printed, dispensed out onto the label pad and held there by vacuum. When the product detect sensor is made, the label and label pad is moved toward the product using a pneumatic slide. When the slide is extended, an air blast will blow the label off the pad and onto the product. In the Inverted Tamp Blow mode, the label is printed, dispensed onto the label pad and the slide extends. The applicator will wait in this position until the product sensor is made. The label is then blown off the pad onto the product. The ITB mode should be more accurate.
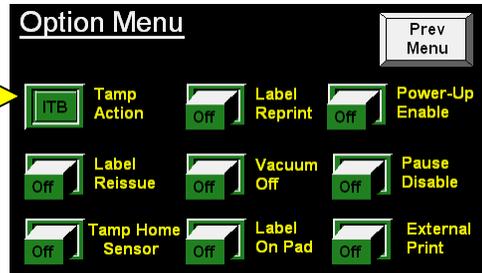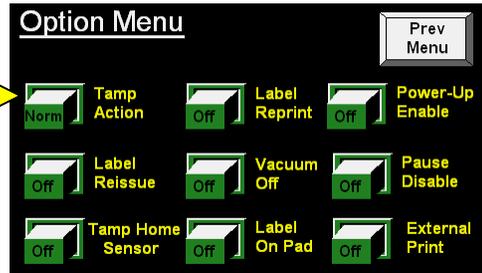
To change from one mode to the other, press the key and it will appear to push into the screen and the text will change indicating the selected mode.

External Print Option
This is an option that will inhibit the printing of a label until the external print input is turned on.
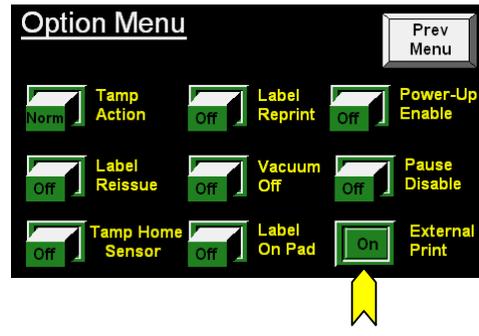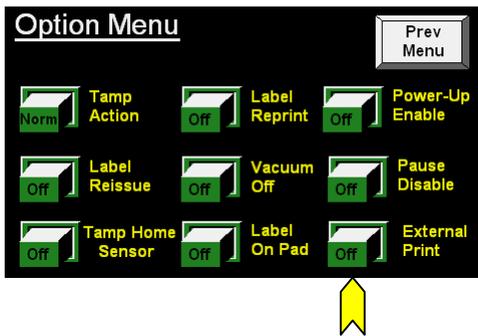
To turn this and other options on, press the key and it will appear to push into the screen and the text will change indicating the options state.

Note: You cannot have both the External Print Option and the Label Reprint Option on at the same time. If you turn one on, the other will automatically be turned off.

Label on Pad Option
With this option on, the controller will look for an input from a vacuum switch after the air assist shuts off. If the vacuum switch is on then that means there is a label on the pad and the label on pad output turns on. The output will stay on until the air blast valve turns on. If the label falls off the pad anytime between when it first turned on and the air blast valve, the output will turn off. An integrator will be able to monitor the air assist valve; air blast valve and the label on pad output and determine if a label has been removed from the pad.

Label Reprint Option
With this option is turned on and a vacuum switch installed, the applicator will dispense another label when the label is removed from the label pad. This option is useful when an extra label is needed but you do not want to actuate the applicator to replace the label you took from the label pad. You simply pull the label off the pad and another label is printed and dispensed. The "Number of Reprints" screen will appear after the Label Reprint screen only if Label Reprint was turned on. Here the number of reprints can be preset up to 99 labels.
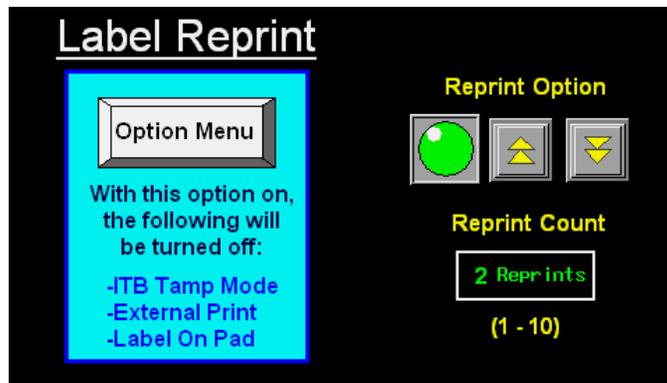
Label Reprint Screen

Note: You cannot have both the Label Reprint Option and the Label on Pad Option on at the same time. If you turn one on, the other will automatically be turned off. Label Reprint is not available while the applicator is set to ITB (Inverted Tamp) See the External Print notation above.

Note: Although the Label On Pad and Label reprint options are not incompatible. These options do however both require a vacuum switch assembly in order to function. This assembly is an option and is to be purchased separately. Refer to CTM drawings ASS-238CE-0462s1 and ASS-238ce-0462s2 for more information. On the following page are instructions on how to set up the vacuum switch included in the before mentioned assembly.

Panasonic Vacuum Switch - CTM # PE-SW1074 - Set-up Guidelines

Where Used

3600 – Label on Pad and Label Reprint Options

Sensor set up "out of the box"

Blu= 0 vdc
Brn= 24 vdc
Blk= Sensor Output

1) Once powered up – Press and hold the Menu Key for 2 seconds
2) Select: Easy / Out1; press Mode Key
3) Select: OFF / Out2; press Mode Key
4) Select: NC / NoNc; press Mode Key
5) Select: 2.5(ms) / SPED; press Mode Key
6) Select: G-ON / CLOR; press Mode Key
7) Select: inHg / UNIT; press Mode Key = enter run mode

*This "output" is <u>ON</u> when the vacuum switch senses vacuum.
*Label On Pad" option - The "program" will monitor this output from
the time the air assist turns off until the air blast output turns "on" .

Set-up of threshold value:

With the back cover removed, labels sent down to printer and a label on the pad, take the printer
"offline" or on "pause". Make note of the "value" on the pressure switch's main "L.E.D. display.
For example, we will say the value is –2.0. Next, remove the label from the label pad. Make
note of the pressure switch's main display "L.E.D." value – example: -0.5. Add these two values
together: -2.0 + -.5 = -2.5, then divide by 2 = -1.2. This value (-1.2) is your "threshold value.
Enter this value in the sub display by the "up and down" arrow keys.

<u>Note</u>: If the vacuum pressure is increased or decreased, you may have to adjust the "threshold"
value per above example

Option Menu Continued

Vacuum-Off Option
This option is used to turn the vacuum to the label pad on and off to save air and to keep particles from entering the pad when there is no label available. When the option is on, the vacuum will turn on when the air assist is on and turns off at the beginning of the air blast.

Note: The applicators are pre-wired and logic is provided for this option but there is still some hardware items needed to make this option work (i.e. valve bank). Please consult your distributor for the necessary items when installing this option in the field.

Tamp Enabled/Disabled on Power-up Option
This option lets the operator chose whether the tamp is enabled or disabled on power-up.

Tamp Home Sensor Option
The Tamp Home Sensor Option is used to determine the Tamp Home output by the Tamp Home Sensor mounted on the tamp slide cylinder. This will save cycling time and take the guesswork out of the Tamp Retract timer setting if the applicator is so equipped with the optional Tamp Home sensor assembly. If the Tamp Home option is turned on the label will not feed/print out onto the pad until the Tamp Home Sensor is made. This setting is useful in determining that the slide is actually in the home position after the apply sequence. This option will only function if the printer applicator is equipped with an optional Tamp Home Sensor assembly. Refer to drawing ASS-238-0433-X.

Note: An explanation of the Tamp Retract Timer is given in the Touch Screen Display Section 3 pg. 3-5.

Label Reissue Option
Label Reissue is a separate option than Label Reprint. When the Label Reissue option is turned on it allows the applicator to reprint the last label format sent to the printer until another label format is received. To use this option with a Zebra printer the operator must enable the Reprint option in the Zebra menu. When using the Zebra printer, the Label Reissue option will continue to Reissue the original format sent to the printer until this format is manually cancelled with label software and a new format is sent down. To use this option with an M8400 series Sato printer the operator must turn DSW 3-8 on. If using the S8400 series Sato print engines the operator has to enable External Reprint in the Advanced Mode settings of the print engine. When using the Sato printer, the Label Reissue option will print the last format sent until a new format is received.

PRINTER SETUP

Printer Emulation
The 3600-PA will support both Sato and Zebra printers. There are some slight differences between the printers on how they handle the recovery from a fault condition. The Zebra printer will dispense a group labels after a critical fault whether it gets a print start signal or not. This may cause the labels to dispense into the manifold if the product detect is turned on at the wrong time or if you're running in ITB mode. The Sato will wait for a print start before it dispenses it's labels after a critical fault. Using a Sato printer and setting the "Printer Type" to Sato will allow the online button on the printer to pause the applicator from applying labels. The Zebra option will cause a label to feed after going off pause. To change from one mode to the other, press the Printer Emulation key until the correct Print Engine is displayed in the box.
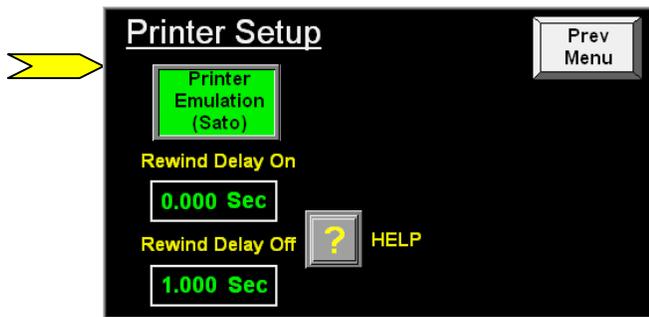
| **Sato Printer Selected** | **Zebra Printer Selected** |
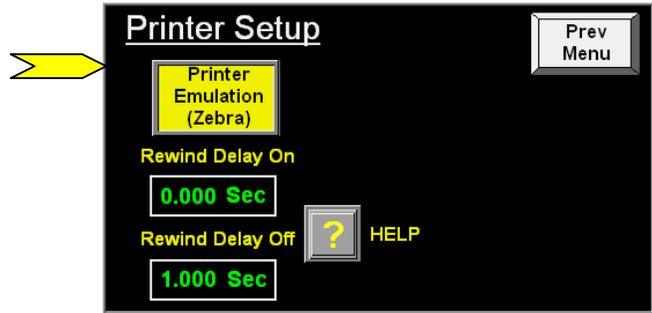
Rewind Delay On and Delay Off Timers
Timers were added to change how soon the rewind motor will turn on after the printer starts to print and how long it will run after the printing is finished. In some cases where label stop varies, this can help control it. These values should only be changed after consulting with the factory. The rewind delay on timer controls when the rewind motor will turn on compared to when the print engine starts to print a label. Putting a delay will cause the motor to wait that amount of time before turning on. On narrow labels where label stop can be a problem, this will keep the rewind motor from putting tension on the web until the backfeed is finished or until you're sure the labels are moving forward through the printer. The delay off time will determine how long the rewind motor stays on after the printer is finished printing. This timer can be decreased to keep the pull on the web to the minimum. Pressing the "HELP" key will display the screen shown below.
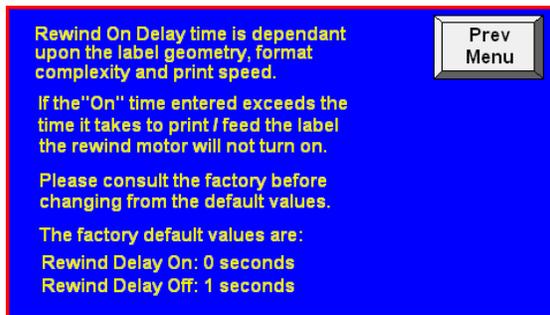
Note: Factory default values are:
            Delay On: 0 seconds
            Delay Off: 1 second

Rewind On/Off Delay Help Screen

PRODUCT SETUP

The applicator should be setup and have successfully passed the static test before going on in this section. If you have skipped the applicator setup section and have trouble with the application here, it will leave you with more areas to troubleshoot to fix the problem.

Applicator Attitudes
The applicator can be positioned in a number of positions. Below applicators are shown indifferent attitudes with the proper name under it.
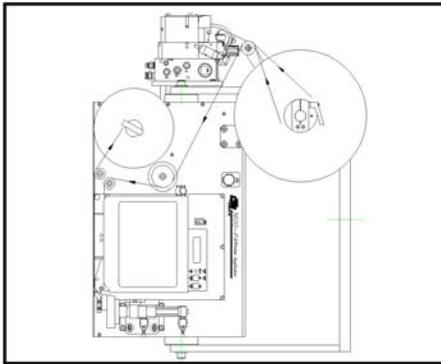
Figure 7 (nose down)
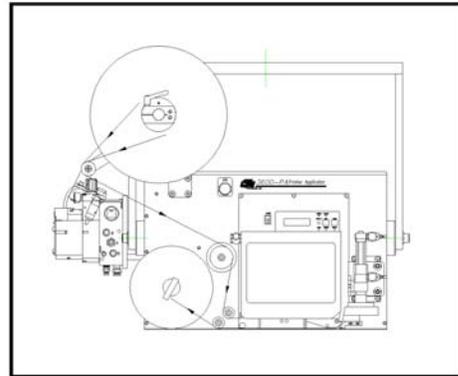
Figure 8 (upright and above)
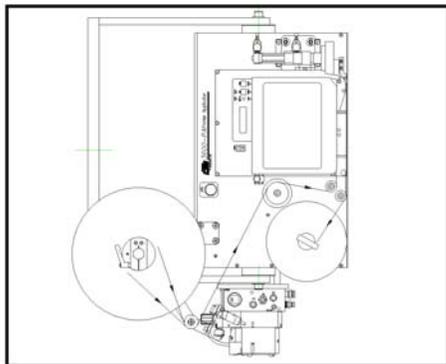
Figure 9 (nose up)
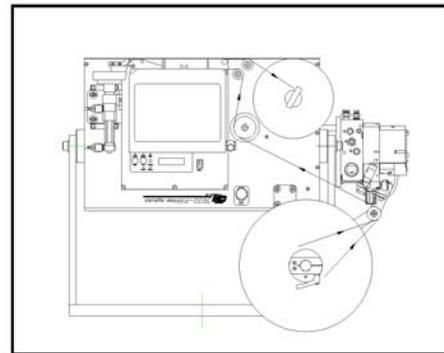
Figure 10 (bottom up)
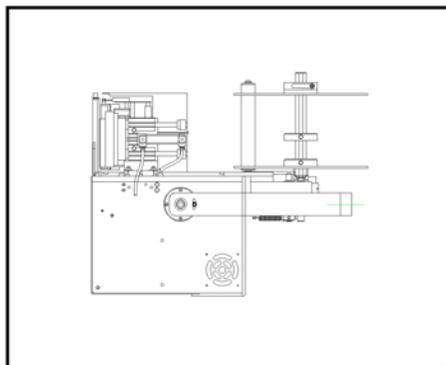
Figure 11 (reels up

Positioning the Applicator
The product must be presented to the applicator in a consistent manner. Label accuracy cannot be maintained if the surface being labeled changes speed or distance relative to the label pad.

   Note: The following directions are for conventional tamps and do not include swing tamps.

Extend the tamp slide by pressing "Home/Tamp" key on the display. Move a product in front of the applicator on the same path as it will run down the line. Move the applicator so the label pad is within 1/8" from the product. Also make sure nothing is in the way of the moving parts.

Move the product and applicator so the label pad is over the application point. Now position the product detect sensor slightly upstream of the leading edge of the product. Now go to the product sensor setup that matches your sensor and follow directions.

Standard Product Sensor Setup (Banner SM312LV --- 4"- 15' range)

1-   Plug the sensor into the back of the machine.
2-   Turn the power on and disable the tamp.
3-   Remove the back cover of the sensor and set the light/dark switch to DO by turning the switch counter-clockwise.
4-   Make sure the sensor is pointing at the reflector (tape). When the LED indicator is flashing at the fastest rate, the two are at the best alignment.
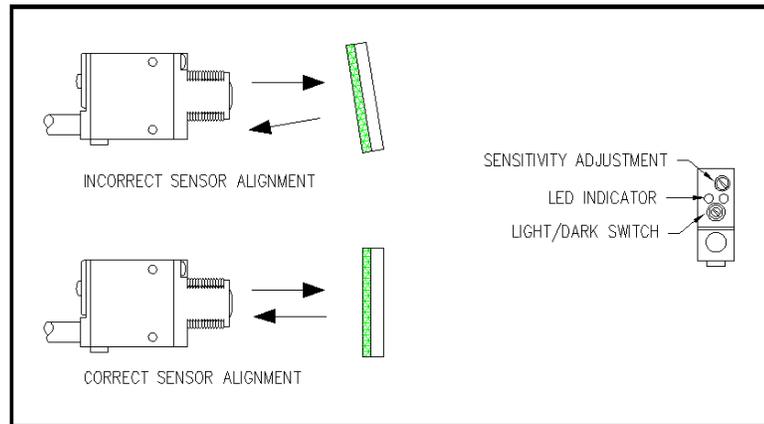
Figure 12 (standard product detect)

5-   Place a product between the sensor and the reflector. The LED indicator should go out.
       a)   On translucent products, the sensitivity may have to be turned back,
             so not to burn through.

6-   Replace back cover of sensor.

Optional Product Sensor Setup   (Banner S18SN6FF50)
This sensor is a 18mm barrel type with a 50mm far limit cut-off. This means it will see objects that are less than 2" away and ignore the rest. There is nothing to adjust on the sensor except the physical position.

Sensor wiring determines whether the product detect will be setup for leading or trailing edge. The #2 terminal in the product detect plug at the end of the sensor cable is for the output of the sensor. The black wire is for leading edge and the white wire for trailing edge.
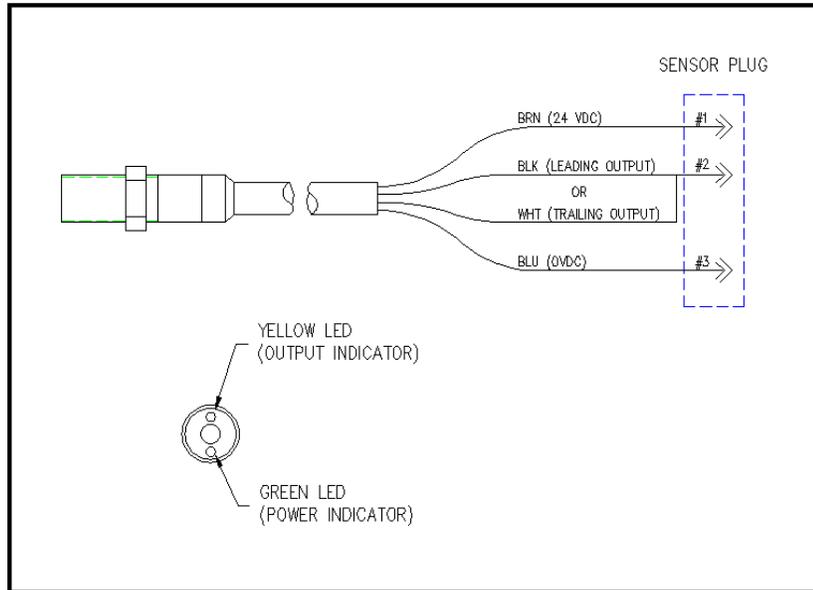
Figure 13 (optional product detect)

Label Placement
Moving the label to the correct position to flow is best accomplished by moving the product detect. For fine adjustments or to adjust while the line is running, the operator can change the label placement value in the display. The higher the value the farther back the label will be placed. The lower the value, the label will move forward. See the "Applicator Display" for more details.

Note: The higher the label placement values, the slower the label rate.

APPLICATOR ALARMS

ALARM SCREEN TYPES

The 3600-PA is equipped with two alarms: Warning and Critical. Both alarms are wired to the alarm and I/O ports. The alarm port will support two alarm lights and the display will show the type of alarm.
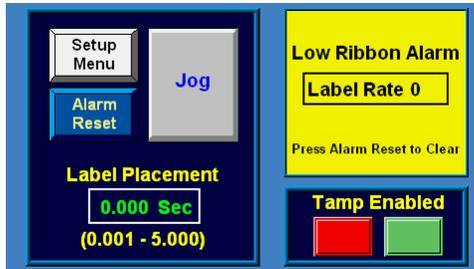
The warning alarm will activate on the following conditions: Low Label and Low Ribbon. The low label signal comes from a photoelectric sensor mounted on the side of the unwind bearing block. This sensor can be adjusted to turn on at different roll diameters. The low ribbon signal comes from the printer (Consult the printer manual). On a warning alarm the applicator will continue to apply labels.

Main Menu screen with Low Ribbon Warning

The critical alarm includes: Out of Labels, Out of Ribbon, and End of Web. Label and ribbon alarms come from the printer and you should consult the printer manual as to how the signals are set. The End of Web signal comes from a sensor mounted to look for the label supply to end before entering the printer. When a critical alarm occurs, the applicator will stop applying labels.

End of Web Critical Alarm screen

To reset the alarms, either alarm display provides an Alarm Reset key. Before clearing the alarm, make sure the problem has been corrected. If out of labels, place a new label roll on the unwind; if out of ribbon, thread a new roll of ribbon into the print engine. If the problem is not corrected before pressing "Alarm Reset", the alarm will come back on again.

Warning: False alarms may occur if the printer is off while the applicator is on!

ALARM LIGHT

The optional alarm light stack is usually a three stack light with red, amber and green lights. The red light is for critical alarms and the amber for warning alarms. The green light indicates a system ready. The alarm signal is a steady on output. The display will show the type of alarm.
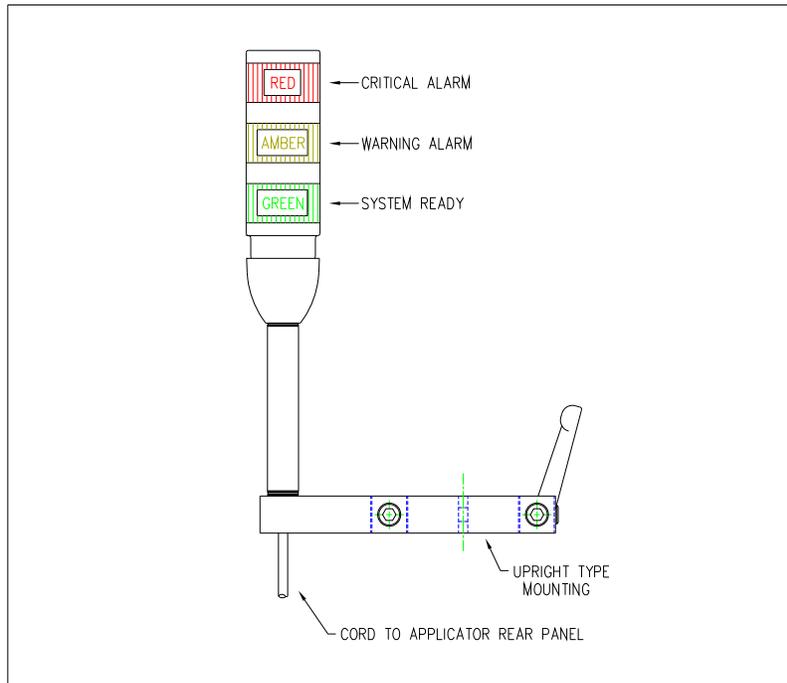
Figure 14 (Alarm Light)

SYSTEM READY OUTPUT

If the applicator is not in a critical alarm state, the tamp is enabled, printer online and the inhibit input is not on, then the system ready output is on. This output is wired to the I/O port and the alarm connector. A green light can be added to the light stack to display this condition.

ALARMS & I/O PORT

The alarm signals from the applicator can be monitored through the I/O port. This is helpful if the applicator is being integrated into a packaging line and the system plc needs these signals as inputs. Check the Rear Panel Section 4 for an explanation of the I/O pins.

ADJUSTING the LOW LABEL SENSOR MOUNT

1- Plug the sensor into the back of the machine.
2- Turn the power on and disable the tamp.
3- Remove the back cover of the sensor and set the light/dark switch to "DO" by turning the switch counter-clockwise.
4- Look at the red dot shining from the sensor to the unwind disk. The red dot shows what the diameter of the roll will be when the alarm turns on. To turn the alarm on sooner, move the sensor up so that it is farther away from the core. To turn the alarm on later, move the sensor down closer to the core.
>   **Note:** The sensing range on the sensor is only 7/8". Try to stay close to this distance away from the inside disk to the end of the sensor.
5- Replace back cover of sensor.
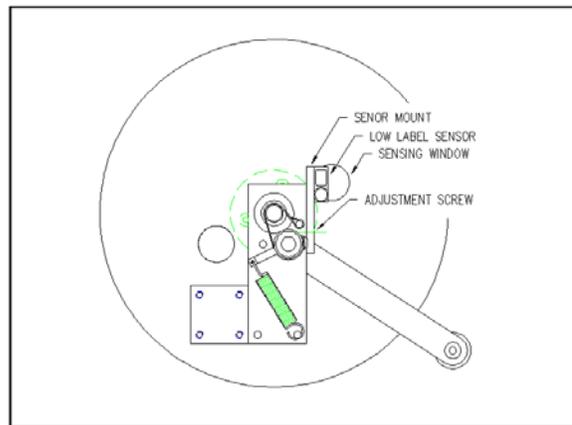
Figure 15 (unwind/low label)
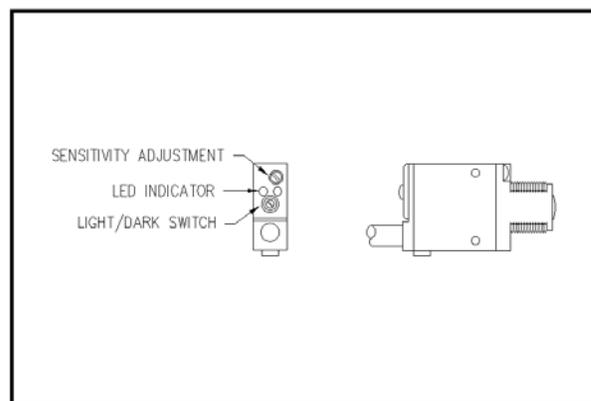
Figure 16 (low label sensor adjustment)

MAINTENANCE

CAUTION: **DISCONNECT AIR AND POWER TO THE APPLICATOR BEFORE PERFORMING THE FOLLOWING PROCEDURES. INJURY FROM MOVING PARTS AND/OR ELECTRICAL SHOCK MAY OCCUR.**

General Maintenance

Daily Maintenance

1- Clean the print head and platen roller each time you change ribbon. Refer to the printer manual for the correct procedure and additional daily checks.

2- Examine the air filter for water or oil collection. Drain if necessary.

3- Examine the tamp pad and the rollers used to guide the web for adhesive build up. Clean if needed with alcohol or similar solvent.

4- Look for loose screws, rollers, etc.

Weekly Maintenance

1- Clean peeler bar, rollers, and tamp pad.

2- Examine machine for air leaks.

3- Wipe down the outside of the applicator and product detect lens.

4- On extended peel edge noses, check the uhmw tape on the peel edge for wear or nicks. Replace if needed.

Semi-Annual

1- Replace filters.

2- Check vacuum pump for an accumulation of debris. Replace if necessary.

3- Examine pulleys, belts and rewind clutch for wear.

Dancer Arm Adjustment

CAUTION: DISCONNECT AIR AND POWER TO THE APPLICATOR
BEFORE PERFORMING THE FOLLOWING PROCEDURES.
INJURY FROM MOVING PARTS AND/OR ELECTRICAL SHOCK
MAY OCCUR.

The figure below shows the layout of the unwind brake band. It's important that the brake stops the unwind from turning but if it's too tight the printer will have a hard time pulling the web off when the label roll nears the end.

 Note: Even if the unwind brake is adjusted properly, it will be of little value if the core of the label roll slips on the unwind hubs. Making sure the unwind disks are tight against the roll of labels will help.

1- Hold the dancer arm in the position it should be when the brake is on. Loosen the collar that the brake band is anchored to, rotate it so the band is tight and tighten back down. Make sure the brake band is wound in the right direction.
2- Loosen the collar with the spring anchor and tighten so the dancer arm is held up with enough tension to stop the unwind from turning. It should not be so tight as to create too much pull off force when the printer is running. This may cause the printer motor to stall or cause print registration problems.
3- Check the performance of the unwind with a full roll of labels and a small diameter roll. Make adjustments as necessary.
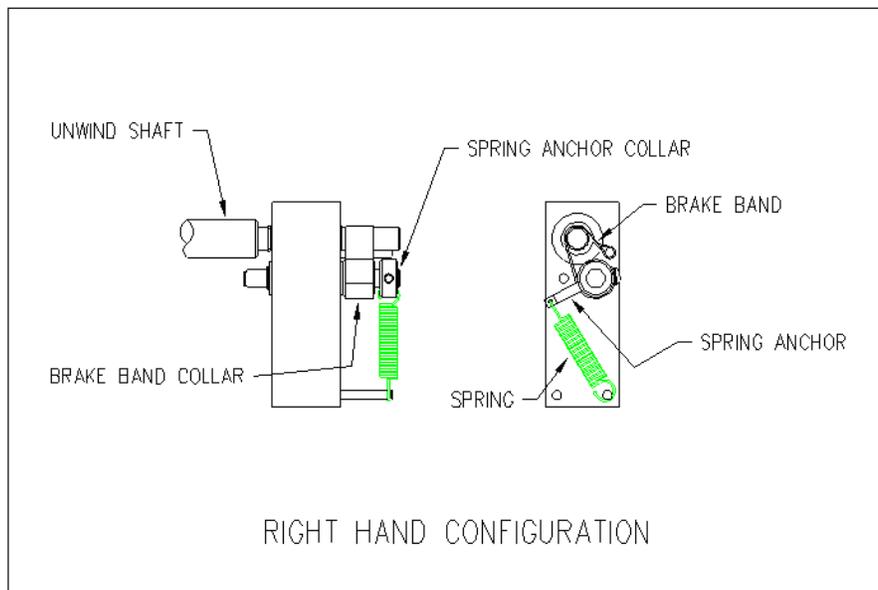
Figure 17 (adjusting brake band)

Rewind Clutch Adjustment

CAUTION: **DISCONNECT AIR AND POWER TO THE APPLICATOR
BEFORE PERFORMING THE FOLLOWING PROCEDURES.
INJURY FROM MOVING PARTS AND/OR ELECTRICAL SHOCK MAY
OCCUR.**

The rewind is used to take-up the liner leaving the printer (after the labels have been dispensed). It's important to set the rewind tension so the liner is taken up even at the end of a roll when the rewind is full. Also, the tension should not be too high so the labels are being pulled through the print head. This will cause poor print quality and label stop will not be consistent.
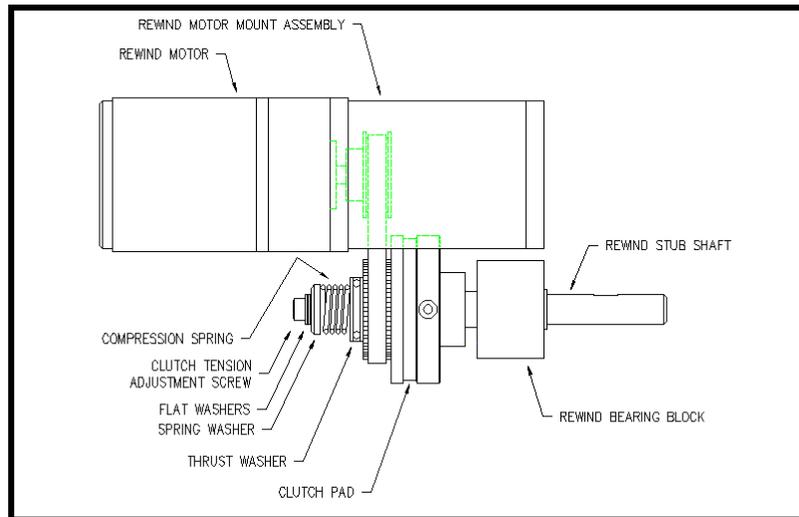
Figure 18 (rewind/clutch assembly)

1- Remove power and air to the machine.

2- Remove the lower stainless cover.

3- CAREFULLY remove the tension adjustment screw and all washers (NOTE: the spring is under compression load). Keep track of how many flat washers are on the outboard and inboard sides of the "spring washer".

4- If the rewind tension was too tight, move one or two of the flat washers from the outboard side of the "spring washer" to the inboard side (nested inside the compression spring). This will relieve the pressure on the clutch pad.
If the tension was too loose, move one or two flat washers from inside the compression spring to the outboard side of the "spring washer". This will increase pressure on the clutch pad.

5- Carefully re-apply the power and air to the machine and test. Re-adjust if necessary.

6- Remove power and air and replace the cover on the machine if everything tests OK.

Changing Clutch Pads

1- Remove power and air to the machine.

2- Remove the stainless cover on the back of the machine.

3- Carefully remove the tension adjustment screw, flat washers, spring washer, spring and thrush washer. NOTE: Keep track of how many flat washers are on the outboard and inboard sides of the "spring washer" to maintain the same pressure on the clutch pad when re-assembled.

4- Work the belt off the pulley/pressure plate and slip off the pressure plate.

5- Replace the clutch pad.

6- Re-assemble and adjust the tension for the new clutch pad.

Belt Tension

1- Remove power and air to the machine.

2- Remove the stainless cover on the back of the applicator.

3- Proper Tension: 1/4"- 3/8 " Belt Deflection.

4- Loosen the two ¼" socket head cap screws that bolt through the side of the rewind motor mount assembly to the faceplate of the applicator.

5- Push the rewind motor assembly up and re-tighten the two ¼" socket head cap screws.

6- Replace stainless cover.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Nothing works.	Power cord is loose, defective or not plugged in.	Inspect the cord to find the problem.
	A.C. line fuse blown.	Find the cause of the electrical short and correct.
Power switch on, printer is on, no display.	PLC is off.	Check power supply.
	Cables are not plugged in on PLC or display.	Make sure cables are plugged in.
Power switch on, display is lit and working; printer not on.	Printer turned off.	Turn the printer on.
	Power cord going to the printer is disconnected.	Inside the applicator, plug the printer power cord in.
Label liner breaking.	Labels are not threaded correctly.	Re-thread labels.
	Unwind/rewind disks or guide collar not aligned with printer.	Adjust disks and collars so the labels flow through the printer.
	Adhesive build-up.	Clean as necessary.
	Label jammed in printer.	Clear jam.
	Bad roll of labels.	Replace label roll.
Labels are not consistently stopping on label pad.	Vacuum pump not working.	Clean or replace pump.
	Too little or too much vacuum.	Adjust vacuum pressure.
	Air assist too high or too low.	Adjust air pressure.
	Tamp pad not positioned correctly to the peel edge.	Check with the applicator setup section on how to position the label pad.
	Air assist tube not positioned correctly.	Adjust the position of the air assist tube.
	Adhesive build-up on the pad.	Clean label pad.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Labels are consistent on the label pad, but not on product.	Product is not consistently presented to the applicator.	Make sure product speed is consistent. Make sure the product is the same distance from the label pad every time.
	Air blast is too high or too low.	Adjust the air pressure.
	Product detect sensitivity or position.	Move and adjust the product detect sensor so it is repeatable.
	Labels are blown off before tamp is fully extended.	Enter a higher value for the tamp extend time.
	Label pad does not match the label.	Install the right label pad.
Valves do not turn on.	Air pressure is too low.	Turn air pressure above 20 psi and try again. The air assist valve is different and can operate at a lower pressure.
	Valve bank plug is not connected to the applicator.	Connect the valve bank plug.
	Valve spool is stuck.	Consult factory for the procedure to remove spool.
	Bad solenoid.	Replace solenoid.
	Dwell times to short.	Increase dwell times through the applicator display.
Tamp valve turns on but the slide does not extend.	Air pressure is too low.	Increase air pressure.
	Flow controls are closed too much.	Open flow controls.
	Slide guide rods are bent.	Replace slide.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Machine will not cycle.	No label formats in print buffer.	Send label format. Check printer manual for parameters.
	No product detect signal.	Verify that that the product detect sensor works. Replace if necessary.
	Printer I/O cable not plugged in.	Reconnect cable.
	Printer fault.	Correct the printer problem.
	The tamp is disabled	Enable tamp (see Appl. Setup)
Label application rate is too fast for the applicator to keep up.	Printer is taking too long to process data or to print label.	Check software and compiling time; increase print speed.
	Excessive dwell times for air blast, tamp extend/retract, or air assist.	Go through the setup procedure for proper setting.
	The label print and apply cycle may be too long for the product rate.	Slow product rate.
Applicator cycles at random.	Loose or vibrating product detect sensor.	Check and correct.
	Product detector alignment is marginal.	Refer to product setup on how to set sensor.
	Loose wiring connections.	Check cables and wiring harnesses inside applicator.
	R.F. interference.	Isolate and correct.
No label feed.	Printer is not configured correctly.	Refer to printer manual.
	No label data in print buffer.	Send label data to printer.
	No external print signal sent.	Investigate and correct.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Compressed print on labels.	Applicator unwind brake is too tight creating too much pull through the printer.	Loosen unwind tension.
	Worn or damaged platen roller.	Replace the printer platen roller.
Printing registration is early.	Applicator unwind is not properly tensioned.	Adjust unwind tension.
Elongated print on labels.	Rewind has too much tension on it.	Re-adjust slip clutch.
Printing registration is late.	Rewind tension is too tight, not allowing a complete back feed.	Re-adjust slip clutch.
Poor print quality		Refer to printer manual.
Labels print continuously without being applied.	Printer configuration is wrong.	Check printer settings.
	Print end signal was not received from printer.	Call factory for help.
	Lost 24 vdc power supply.	
Alarm messages will not clear.	Printer turned off.	Turn printer on.
	The problem was not fixed before telling the applicator to reset.	Correct the problem at the source of the alarm signal.

PRINTER SETTINGS

Sato Printers: M-8485SE/M-8490SE/M-8459SE/M-8460SE

> **Note**: Pin 9 has to be defined in the service mode. It should be set to "Mode 2".
> Resetting the printer to factory default values will change this to "Mode 1" and
> the applicator will malfunction.

These printers use dipswitches to setup the operating parameters. The dipswitch settings are read on power up. Therefore any changes in the switch settings will not take effect until the printer is shut off and powered back on.

There are two dipswitches (DSW2 and DSW3) located inside the cover. These switches are used to set:
-Thermal transfer or direct thermal
-Label sensor enable/disable
-Head check mode
-Hex dump mode
-Single job or multi-job receive buffer
-Operation mode

A third dipswitch is located on the RS232 serial adapter card (back of the printer). This is used to setup the serial communications.

If the switches are down, they are off. Factory settings are that all switches are off.

Parallel port is always on regardless of switch settings.

Note: The older "S" version of this printer (M-8485<u>S</u>) also has three dipswitches. All three switches are mounted inside the cover. DSW1 has some differences with the "SE" model. Checking with the appropriate manual will clarify the differences.

RS232 Transmit/Receive Switches

Data Bit Selection: This switch sets the printer to receive either 7 or 8 bit data for each byte transmitted.

DSW1-1	SETTING
Off	8 data bits
On	7 data bits

Parity Selection: These switches select the type of parity used for error detection.

DSW1-2	DSW1-3	SETTING
Off	Off	Disabled
Off	On	Even
On	Off	Odd
On	On	None

Stop Bit Selection: Selects the number of stop bits to end each byte transmission.

DSW1-4	SETTING
Off	1 Stop Bit
On	2 Stop Bit

Baud Rate Selection: Selects the data rate (bps) for the RS232 port.

DSW1-5	DSW1-6	SETTING
Off	Off	9600
Off	On	19200
On	Off	38400
On	On	57600

Protocol Selection: Selects the flow control and status reporting protocols. See Interface Specification section in the printer manual for more details.

DSW1-7	DSW1-8	SETTING
Off	Off	Rdy/Bsy
Off	On	Xon/Xoff
On	Off	Bi-Com
On	On	Bi-com 4

Printer Set-Up Switches

Print Mode Selection: Selects between direct thermal printing on thermally sensitive paper and thermal transfer printing using a ribbon. This switch is not used on the M-8459.

DSW2-1	SETTING
Off	Therm Xfr
On	Direct Thrm

Note: It is recommended that this be set to "Off".

Sensor Type Selection: Selects between the use of a label gap or a reflective Eye-Mark detector.

DSW2-2	SETTING
Off	Gap
On	Eye-Mark

Note: It is recommended that this be set to "Off".

Head Check Selection: When selected, the printer will check for head elements that are electrically malfunctioning.

DSW2-3	SETTING
Off	Disabled
On	Enabled

Hex Dump Selection: Selects hex dump mode (refer to printer manual).

DSW2-4	SETTING
Off	Disabled
On	Enabled

Receive Buffer Selection: Selects the operating mode of the receive buffer.

DSW2-5	SETTING
Off	Single Job
On	Multi Job

Protocol Code Selection: Selects the command codes used for protocol control.

DSW2-7	SETTING
Off	Standard
On	Non-Std

M8400 Emulation Mode: For emulating special M8400S series software commands. Should be used only if problems are encountered when using existing M8400S software.

DSW2-8	SETTING
Off	Disable
On	Enable

Backfeed Selection: Backfeed is used to correctly position the label for application and then retract the next label to the proper print position. This operation can be performed immediately after a label is printed and used, or immediately prior to printing of the next label.

DSW3-1	SETTING
Off	Before
On	After

Note: It is recommended that this dipswitch be left off for applicator.

Label Sensor Selection: Enables or disables the label sensor. If the sensor is enabled, it will detect the edge of the label and position it automatically. If it is disabled, the positioning must be under software control using line feed commands.

DSW3-3	SETTING
Off	Sensor Used
On	Not Used

Note: It is necessary to leave this switch off for the applicator to work.

Backfeed Selection: When backfeed is enabled, the printer will position the last printed label for dispensing and retract it before printing the next label. The amount of backfeed offset is adjustable. See printer manual for details.

DSW3-4	SETTING
Off	Enable
On	Disable

Note: When using the extended peel edge assembly, the backfeed option should be disabled. In most other applications, it should be left on. Backfeed will slow label rate.

External Signal Interface Switches

External Print Signal Selection: Allows an external device to initiate a label print for synchronization with the applicator.

DSW3-5	SETTING
Off	Enable
On	Disable

Note: It is necessary to leave this switch off for the applicator to work.

External Signal Type Selection: Both the polarity and signal type (level or pulse) of the external print signal synchronizing signal can be selected.

DSW3-6	DSW3-7	SETTING
Off	Off	Type 4
Off	On	Type 3
On	Off	Type 2
On	On	Type1

Note: Use Type 4 for use with the applicator.

Repeat via External Signal: Allows the applicator to reprint the current label in the print buffer.

DSW3-8	SETTING
Off	Enable
On	Disable

Note: This has become a standard option called "Reissue" with Software Revision 2b5.0.

Sato Printers: S-8400 Series

Advanced Mode   Before
Printer Type → Dispenser → Back Feed Motion → None
                                                     After
            Transfer
Print Method→ Direct

External Signal → Enable
External Signal → Type 4

Service Mode
Ext. 9 Pin Select – Mode 2

ZEBRA PAX PRINTER SETTINGS

Below is a list of the printer parameters that affect the printer/applicator interface. They will be marked as required or recommended. The ones marked as required must be set as shown. The recommended parameters are for convenience of setup but will not stop the applicator portion from working.

There are other parameters that may need to be set that are not discussed in the chart below. Refer to the printer manual for the total list.

PARAMETER	SETTING
Print Mode	Applicator (required)
Media Type	Non-continuous (required)
Sensor Type	Web (required)
Applicator Port	Mode 2 (required)
Start Print Signal	Pulse Mode (required)
Resync Mode	Feed Mode (required)

3600CE PRINTER APPLICATOR SPARE PARTS LIST
When ordering parts, present Serial Number of 3600

Part Number	Recommended Qty	Description
WEAR ITEMS		
PE-FI1050	1	REPLACEMENT FILTER, REFER TO DWG. ASS-238CE-0123R or L
PM-BELT1015	1	REWIND BELT, REFER TO DWG. ASS-238-0120C WITHIN ASS-238-0123R or L
MP-238-0274	1	3" CLUTCH PAD, REFER TO DWG. ASS-238-0120C
PM-BB1030	1	UNWIND BRAKE BAND, REFER TO DWG. SAS-238-0122R/L
PM-FASP30434	1	DANCER ARM UNWIND SPRING, REFER TO DWG. SAS-238-0122R/L
RECOMMENDED SPARE PARTS LIST		
ASS-200-0427	1	SM312LV PRODUCT DETECT W/CONNECTOR
PE-RT1000	1	1"W X 6"L REFLECTIVE TAPE FOR PRODUCT DETECT SENSOR ASSEMBLY
PE-TE6000	1	WIRING TOOL required for insertion/extraction @ terminal strip
ASS-238CE-0126	1	3600CE 24VDC POWER SUPPLY ASSEMBLY
ASS-238CE-0428	1	REWIND GEAR MOTOR
PE-FU2090	2	6.3 AMP FUSE, REFER TO DWG. ASS-238CE-0412
PE-IN1116	1	COLOR TOUCHSCREEN INTERFACE DISPLAY for 3600CE APPLICATOR (PROGRAM SPECIFIC) SEE DWG. ASS-238CE-0125
MP-PLC1015	1	PANASONIC FP0 PLC (MUST SPECIFY PROGRAM)
PE-RE1015	1	MOTOR RELAY REFER TO DWG. ASS-238CE-0127R or L
PM-BE1232	1	REWIND CLUTCH THRUST BEARING, REFER TO DWG. ASS-238-0120C
PM-FASP30540	1	REWIND CLUTCH SPRING, MED DUTY, REFER TO DWG. ASS-238-0120C
ASS-238-0129M	1	TAMP 3 STATION MAC VALVE BANK ASSY
PM-VA2395M	1	DC SOLENOID FOR MAC VALVE
PM-VA2396M	1	0-30 PSI REG W/0-60 GUAGE FOR MAC VALVE
PM-VA2397M	1	0-120 PSI REG W/0-160 GUAGE FOR MAC VALVE
MP-211-0217-X	1	AIR ASSIST TUBE **JOB SPECIFIC** (SEE DWGS)
SLIDE ASSEMBLIES		
ASS-214-0108-1	1	1" SLIDE ASSEMBLY
ASS-214-0108-2	1	2" SLIDE ASSEMBLY
ASS-214-0108-3	1	3" SLIDE ASSEMBLY
ASS-214-0108-4	1	4" SLIDE ASSEMBLY
ASS-214-0108-6	1	6" SLIDE ASSEMBLY

Part Number	Recommended Qty	Description
RECOMMENDED SPARE PARTS FOR EXTENDED PEEL BAR		
PM-T1010	1	PEEL EDGE TAPE (6" WIDE x 4" LONG)
MP-211-XXXX-X	1	AIR ASSIST TUBE **JOB SPECIFIC** SEE DWGS
PM-BEBF0985	1	PEEL EDGE ADJUSTMENT BUSHING
ASS-238-0143	1	ADJUSTMENT KNOB ASSEMBLY
RECOMMENDED SPARE PARTS FOR ROTARY SWING TAMP		
PM-AC1250	1	ROTARY ACTUATOR
PM-SA0990	1	SHOCK ABSORBER (HOME)
PM-SA1000	1	SHOCK ABSORBER (EXTEND)

APPROX. 27.25"

APPROX. 11.88"

④

③

SECTION A-A
LOW LABEL SENSOR
(ORDER AS AN OPTION)

OUTLINE OF PRINT ENGINE

①

APPROX. 31.25"

12.00"
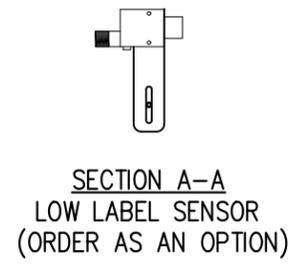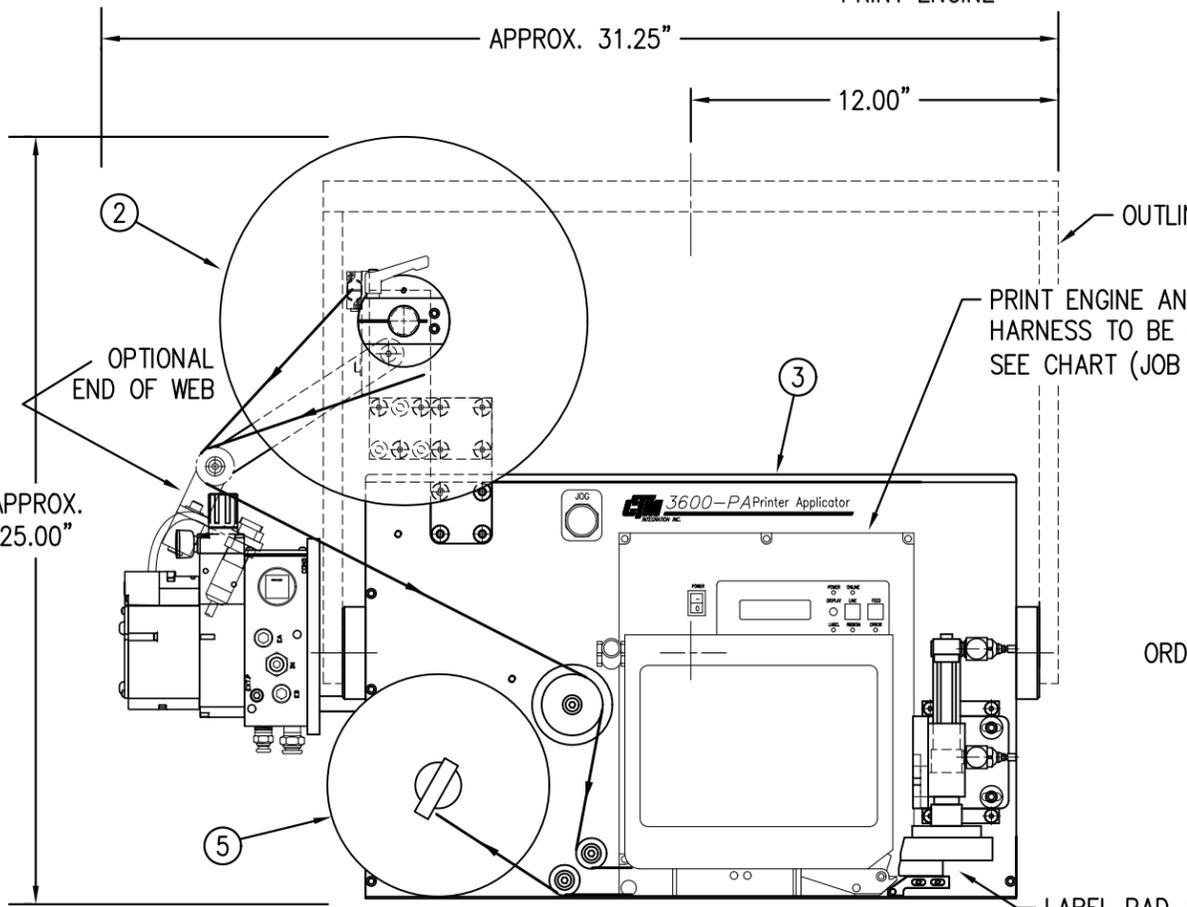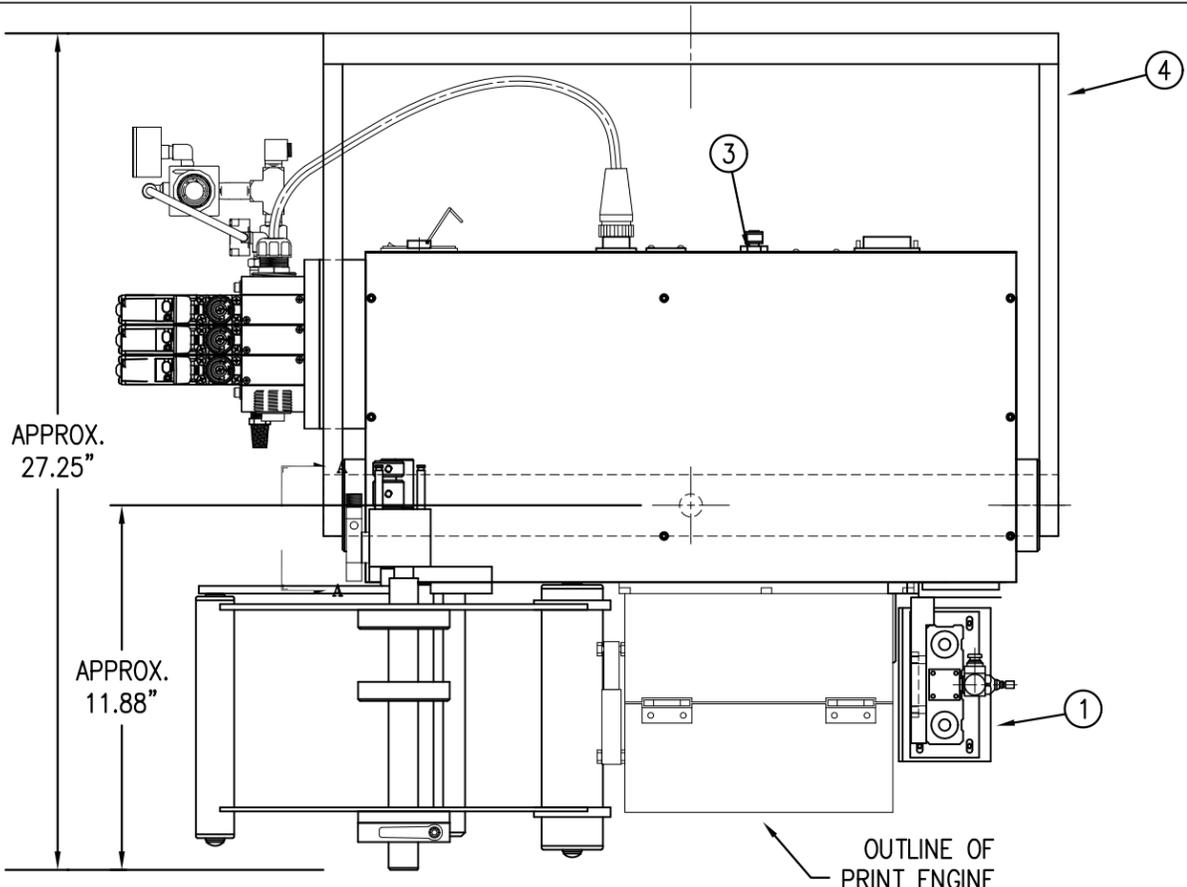
BILL OF MATERIAL

CTM-238CE-0124R/L-12X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MOD-238CE-0124R/L	STANDARD TAMP GUIDE ASSEMBLY
②	1	MOD-238-0122R/L	12" UNWIND MODULE
③	1	ASS-238CE-0123R/L	HOUSING ASSEMBLY/CORE UNIT
④	1	WAS-238-0130	U-ARM MOUNT
⑤	1	ASS-238-0144-12	STANDARD REWIND DISK ASSEMBLY
	1	ASS-200-2137	FILM REWIND DISK ASSEMBLY
	1	ORDER SEPARATELY	TAMP SLIDE ASSEMBLY (STROKE LG IS JOB SPECIFIC) ASS-214-0103R/L-X
	1	ORDER SEPARATELY	PAD & MANIFOLD (LABEL SIZE IS JOB SPECIFIC) MANIFOLD BLANK MP-214-X201R/L-X
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR

CTM-238CE-0124R/L-12X

STD. REWIND	-0124R-12S
FILM REWIND	-0124R-12F

APPLICATOR TO PRINT ENGINE INTERFACE HARNESSES:
(ORDER W/ PRINT ENGINE)

PAX	PE-238-0418
SATO SE	PE-238-0420
SATO S	PE-238-0417

OBSOLETE →

ASSEMBLY NOTE:
VALVE BANK TO APPLICATOR CABLE
NEEDS TO BE SHORTENED AT ASSY.

BUSHING & LOCK COLLAR
ONLY USED FOR REELS UP
ORIENTATION

OPTIONAL LOW LABEL

②

OUTLINE OF U-ARM

PRINT ENGINE AND CORRESPONDING WIRING
HARNESS TO BE ORDERED SEPARATELY
SEE CHART (JOB SPECIFIC)

②

OPTIONAL
END OF WEB

APPROX. 25.00"

③

3600-PA Printer Applicator
CTM INTEGRATION INC.

JOG

SLIDE STROKE LENGTH IS JOB SPECIFIC
ORDER SLIDE & MTG. NUT ASS'Y SEPARATELY
(REFER TO CTM #ASS-214-0103-XX)

①

⑤

LABEL PAD AND MANIFOLD
ORDER SEPARATELY
(JOB SPECIFIC)

APPROX. 23.50"

④

APPROX. 8.00"

③

ASS-238CE-0123L

25 26 DISPLAY ASSEMBLY & CABLE

3600-PA Printer Applicator
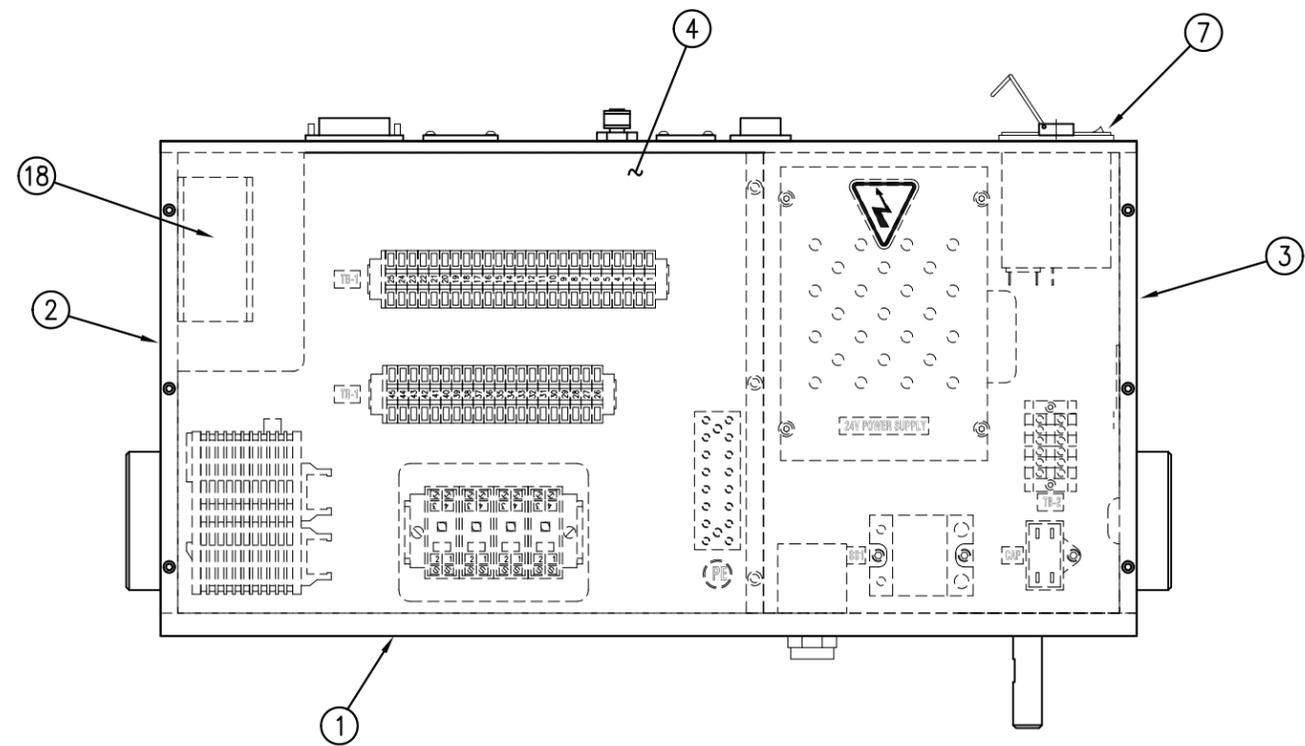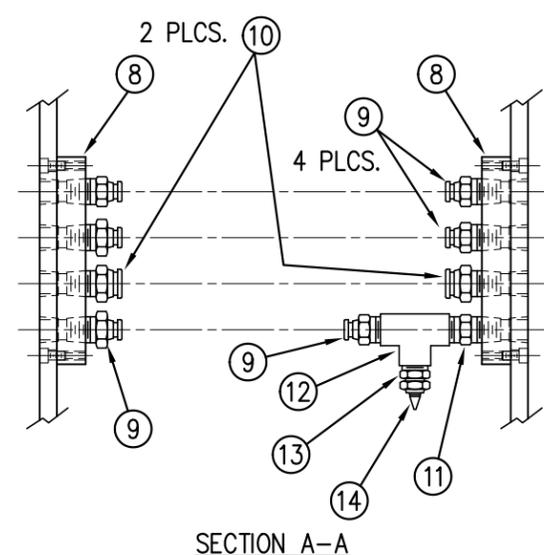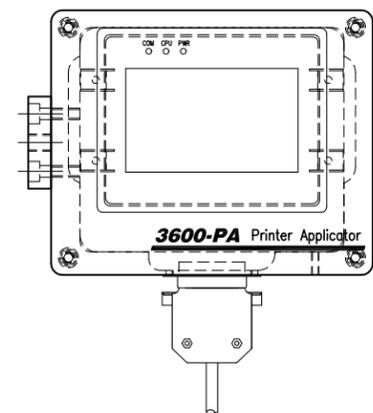
BILL OF MATERIAL

ASS-238CE-0123L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	1	MP-238CE-0226L	HOUSING FACEPLATE – LH
2	1	MP-238CE-0224L	NOSE SIDE HOUSING SIDEFRAME – LH
3	1	MP-238CE-0225L	UNWIND SIDE HOUSING SIDEFRAME – LH
4	1	ASS-238CE-0127L	ELECTRIC SHELF ASSEMBLY SERIAL / PARALLEL / ETHERNET
5	2	MP-200-0273	U-ARM / APPLICATOR PIVOT MOUNT
6	1	ASS-238CE-SW2010	JOG PUSH BUTTON SWITCH ASSEMBLY
7	1	ASS-238CE-0412	AC POWER HARNESS & FILTER ASSEMBLY INCLUDES 2 FUSES (PE-FU2090)
8	2	MP-200-0250	AIR MANIFOLD (4-HOLES)
9	6	PM-PF1010	FITTING, 1/4 NPT to 1/4 TUBE
10	2	PM-PF1020	FITTING, 1/4 NPT to 3/8 TUBE
11	1	PM-PF1153	1/4 NPT BRASS NIPPLE w/ 9/16 HEX.
12	1	PM-PF1200	TEE FITTING, 1/4 NPT (FEMALE)
13	1	PM-PF1105	FITTING, 1/4 NPT to 1/8 NPT RED. BUSHING
14	1	PM-FT1105	HOSE BARB, 1/8 NPT MALE x 1/4 TUBE
15	1	ASS-238-0120C	REWIND CLUTCH ASSEMBLY
16	1	ASS-238CE-0133L	REWIND MOTOR & PULLEY ASSEMBLY
17	1	ASS-238CE-0428	REWIND MOTOR WIRING HARNESS
18	1	PE-FAN1046	AXIAL FAN
19	1	PE-FAN1130	FAN FILTER KIT INCLUDES REPLACEMENT FILTER (PE-FI1050)
20	1	ASS-238-0135	2" DIA. DANCER ROLLER
21	2	MP-238-0247	GUIDE COLLAR
22	2	ASS-238-0134	1" DIA. ROLLER
23	1	MP-238-0221	TOP COVER
24	1	PM-238CE-0228L	S.S. HOUSING COVER – LH
25	1	ASS-238CE-0125	3600CE MAPLE DISPLAY HOUSING ASSEMBLY
26	1	ASS-238CE-0405	3600CE APPLICATOR TO DISPLAY CABLE
	3	PM-PT1070	1/4" DIA. TUBE x 51" Lg. (CUT TO SUIT)
	1	PM-PT1080	3/8" DIA. TUBE x 17.75" Lg. (CUT TO SUIT)

2 PLCS. 10

4 PLCS.

SECTION A-A

UNWIND MTG. PLATE
STANDARD LOCATION
(NOT INCLUDED IN ASSY.)

UNWIND MTG. PLATE
(OPTIONAL LOCATION)

F:\Engineering\Standard Parts\Applicator\
3600-CE\ASS-238CE-0123L

TITLE: STANDARD APPLICATOR HOUSING (SERIAL/PARALLEL/ETHERNET)

DRAWN BY: DKM
Date: 10/29/08
Scale: 1=4
REV. BY: XXX

GROUP: HOUSING
APPLICATOR WIDTH(S): 7.5"
APPLICATOR SERIES: 3600-CE
REV. DESCRIPTION
REV: O REV. DATE: –

BILL OF MATERIAL
ASS-238CE-0123R

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	1	MP-238CE-0226R	HOUSING FACEPLATE – RH
2	1	MP-238CE-0224R	NOSE SIDE HOUSING SIDEFRAME – RH
3	1	MP-238CE-0225R	UNWIND SIDE HOUSING SIDEFRAME – RH
4	1	ASS-238CE-0127R	ELECTRIC SHELF ASSEMBLY SERIAL / PARALLEL / ETHERNET
5	2	MP-200-0273	U-ARM / APPLICATOR PIVOT MOUNT
6	1	ASS-238CE-SW2010	JOG PUSH BUTTON SWITCH ASSEMBLY
7	1	ASS-238CE-0412	AC POWER HARNESS & FILTER ASSEMBLY INCLUDES 2 FUSES (PE-FU2090)
8	2	MP-200-0250	AIR MANIFOLD (4-HOLES)
9	6	PM-PF1010	FITTING, 1/4 NPT to 1/4 TUBE
10	1	PM-PF1020	FITTING, 1/4 NPT to 3/8 TUBE
11	1	PM-PF1153	1/4 NPT BRASS NIPPLE w/ 9/16 HEX.
12	1	PM-PF1200	TEE FITTING, 1/4 NPT (FEMALE)
13	1	PM-PF1105	FITTING, 1/4 NPT to 1/8 NPT RED. BUSHING
14	1	PM-FT1105	HOSE BARB, 1/8 NPT MALE x 1/4 TUBE
15	1	ASS-238-0120C	REWIND CLUTCH ASSEMBLY
16	1	ASS-238CE-0133R	REWIND MOTOR & PULLEY ASSEMBLY
17	1	ASS-238CE-0428	REWIND MOTOR WIRING HARNESS
18	1	PE-FAN1046	AXIAL FAN
19	1	PE-FAN1130	FAN FILTER KIT INCLUDES REPLACEMENT FILTER (PE-FI1050)
20	1	ASS-238-0135	2" DIA. DANCER ROLLER
21	2	MP-238-0247	GUIDE COLLAR
22	2	ASS-238-0134	1" DIA. ROLLER
23	1	MP-238-0221	TOP COVER
24	1	PM-238CE-0228R	S.S. HOUSING COVER – RH
25	1	ASS-238CE-0125	3600CE MAPLE DISPLAY HOUSING ASSEMBLY
26	1	ASS-238CE-0405	3600CE APPLICATOR TO DISPLAY CABLE
	3	PM-PT1070	1/4" DIA. TUBE x 51" Lg. (CUT TO SUIT)
	1	PM-PT1080	3/8" DIA. TUBE x 17.75" Lg. (CUT TO SUIT)

25 26 DISPLAY ASSEMBLY & CABLE

3600-PA Printer Applicator

10 2 PLCS.

4 PLCS.

SECTION A-A

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

ASS-238CE-0123R

UNWIND MTG. PLATE
STANDARD LOCATION
(NOT INCLUDED IN ASSY.)

UNWIND MTG. PLATE
(OPTIONAL LOCATION)

ASS-238CE-0133R

REFER TO DWG. ASS-238-0120C
FOR REWIND CLUTCH ASSEMBLY

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	1	PM-238-0273	MOTOR PULLEY
2	1	ASS-238CE-0428	REWIND MOTOR
3	1	MP-238-0201	MOUNT PLATE
4	1	MP-238-0272	REWIND MOTOR MOUNT PLATE
5	2	MP-238-0204	MOTOR SIDEFRAME
6	1	PM-BELT1015	REWIND BELT

BILL OF MATERIAL
ASS-238CE-0133R

APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:		TITLE:		Dept. Code
3600-CE	7.5"	HOUSING		220 VAC REWIND MOTOR ASSEMBLY		70

REV.	REV. DESCRIPTION		REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\
0	–		–	XXX	1=2	10-28-08	DKM	3600-CE\ASS-238CE-0133R

ASS-238CE-0133L

BILL OF MATERIAL
ASS-238CE-0133L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	1	PM-238-0273	MOTOR PULLEY
2	1	ASS-238CE-0428	REWIND MOTOR
3	1	MP-238-0201	MOUNT PLATE
4	1	MP-238-0272	REWIND MOTOR MOUNT PLATE
5	2	MP-238-0204	MOTOR SIDEFRAME
6	1	PM-BELT1015	REWIND BELT

REFER TO DWG. ASS-238-0120C
FOR REWIND CLUTCH ASSEMBLY

APPLICATOR SERIES: 3600-CE	APPLICATOR WIDTH(S): 7.5"	GROUP: HOUSING		TITLE: 220 VAC REWIND MOTOR ASSEMBLY			Dept. Code 70
REV. 0	REV. DESCRIPTION –		REV. DATE –	REV. BY: XXX	Scale: 1=2	Date: 10-28-08	DRAWN BY: DKM

F:\Engineering\Standard Parts\Applicator\
3600-CE\ASS-238CE-0133L

BILL OF MATERIAL
ASS-238CE-0127R

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-238CE-0220	UPPER ELECTRIC SHELF
②	1	MP-238CE-0221	LOWER ELECTRIC SHELF
③	1	MP-238CE-0222	ELECTRIC SHELF RISER
④	1	ASS-238CE-0126	24 VDC POWER SUPPLY
⑤	1	PE-PLC1046	FPOR PANASONIC PLC w/ POWER SUPPLY HARNESS
⑥	1	PE-CL1016	PLC MOUNTING BASE
⑦	1	ASS-238CE-0419R	RH VALVE RELAY ASSEMBLY
⑧	1	PE-RE1015	5-24 VDC RELAY FOR REWIND MOTOR
⑨	1	ASS-238CE-TE4133	TERMINAL BLOCK ASSEMBLY (#1-#25)
⑩	1	ASS-238CE-TE4152	TERMINAL BLOCK ASSEMBLY (#26-#45)
⑪	1	CP-200-0279	DIN RAIL (FOR 25 TERMINALS)
⑫	1	CP-200CE-0213	DIN RAIL (FOR 20 TERMINALS)
⑬	4	PE-TE4020	END STOP
⑭	2	PE-RE1053	IDEC RELAY STOP CLIP
⑮	1	MP-200CE-0215	GROUNDING BAR
⑯	1	ASS-238CE-0423	3600CE TB2 TERMINAL STRIP ASSEMBLY
⑰	1	MP-238CE-0223R	CONNECTOR PLATE
⑱	1	ASS-238CE-0411	3600CE I/O HARNESS
⑲	1	ASS-238CE-0410	3600CE APPLICATOR ALARM CONNECTOR HARNESS
⑳	1	ASS-238CE-0425	DISPLAY CONNECTOR HARNESS
㉑	6	PE-SO1028	JACK SCREW, JAM NUT & LOCK WASHER
㉒	1	MP-CON1019	PRODUCT DETECT PORT
㉓	1	MP-CON1025	EOW PORT
㉔	1	ASS-238CE-0412	AC RECEPTACLE ASSEMBLY
㉕	1	ASS-200-0148	POWER CORD CLIP
	1	ASS-CO1025	PRINT ENGINE POWER CORD
㉗	1	ASS-238CE-0409	VALVE PORT
㉘	1	PM-WL1057	WARNING LABEL
㉙	1	MP-238CE-0227	NAME PLATE LABEL
㉚	1	PE-238-0405	SERIAL PRINTER PORT
㉛	1	MP-238-0276	PARALLEL PORT BLANK
㉜	1	MP-CON1020	LOW LABEL PORT
㉝	1	PE-EN9056	5/8 HOLE PLUG

* SEE TABLE BELOW FOR HARNESS PE# AS PURCHASED & THE MODIFICATIONS REQUIRED FOR MP#.

CTM NUMBER	CTM PART NUMBER (AS PURCHASED)	MODIFICATION OF PURCHASED PART
MP-CON1019	PE-CON1019	CUT BLACK WIRE
MP-CON1020	PE-CON1020	CUT BLACK & WHITE WIRES
MP-CON1025A	PE-CON1025	SHRINK WRAP WIRES

ASS-238CE-0127R

#8-32 X ¼" BHCS FOR DIN RAIL

#8-32 X ⅜" SHCS (2) PLACES

CAPACITOR LOCATION

#8-32 X ⅜" BHCS

#6-32 X ½" SHCS (2) PLACES

#10-32 X ½" SHCS (4) PLACES

#8-32 X ⅜" BHCS FOR DIN RAILS

#8-32 X ⅜" SHCS IN PLC BRACKET

#10-32 X ¾" SHCS (6) PLACES

#4-40 X ⅜" BHCS (UP TO 16) PLACES

#4-40 X ½" SHCS (2) PLACES

PARALLEL   I/O   PROD   EOW   ALARM   VALVE
SERIAL   DISPLAY   L-LBL   AUX

CTM LABELING SYSTEMS

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\3600-CE\ASS-238CE-0127R
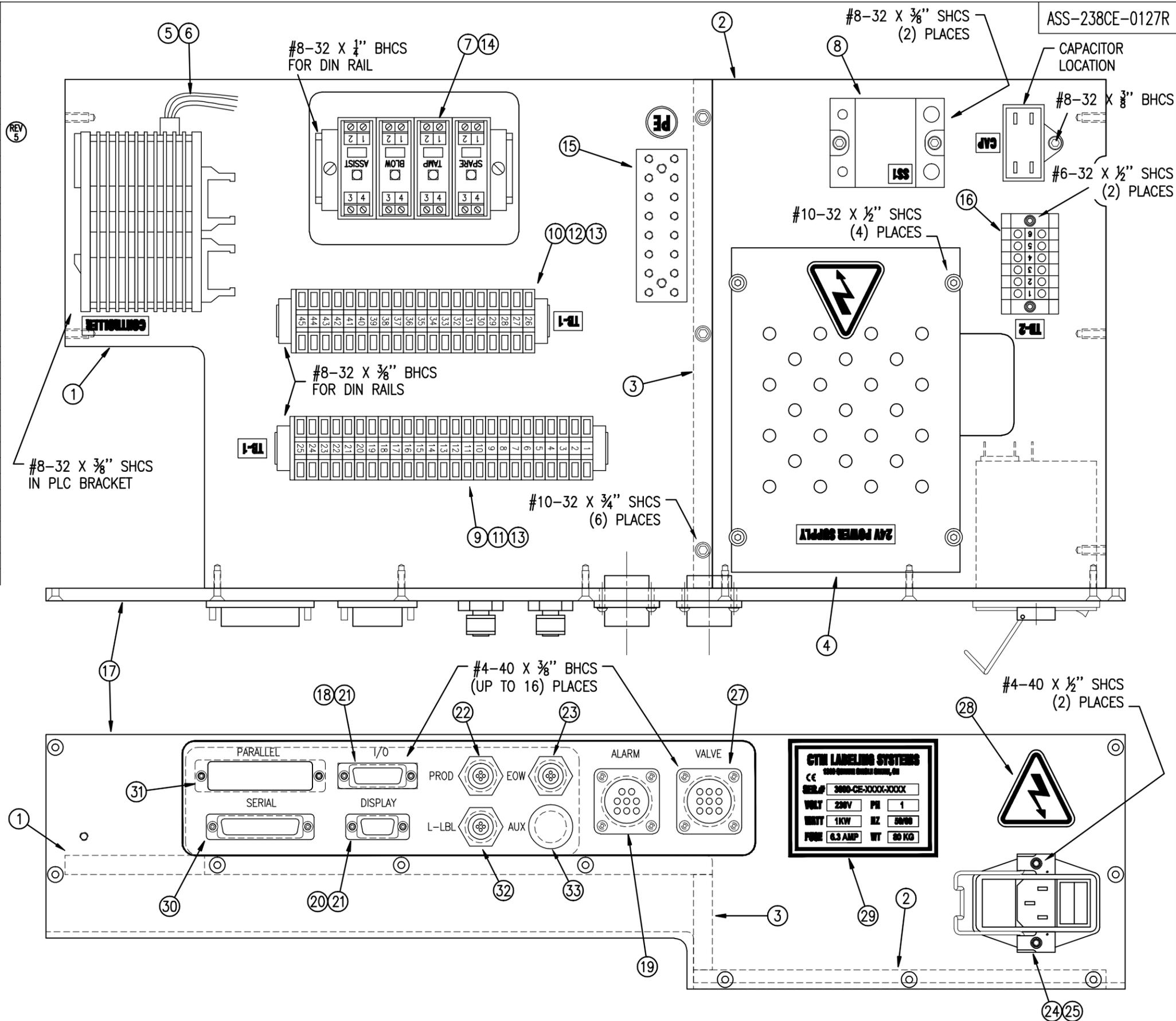
TITLE: ELECTRICAL SHELF ASSEMBLY w/ CONNECTOR PLATE

DRAWN BY: DKM   Date: 10/28/08   Scale: 1=2

REV. BY: JWS   REV. DATE: 09/09/2015

GROUP: HOUSING ELECTRICAL

APPLICATOR SERIES: 3600-CE   APPLICATOR WIDTH(S): 7.5"

REV: 6   REV. DESCRIPTION: REMOVED POWER CORD AND ADDED PRINTER POWER CORD

BILL OF MATERIAL
ASS-238CE-0127L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	1	MP-238CE-0220	UPPER ELECTRIC SHELF
2	1	MP-238CE-0221	LOWER ELECTRIC SHELF
3	1	MP-238CE-0222	ELECTRIC SHELF RISER
4	1	ASS-238CE-0126	24 VDC POWER SUPPLY
5	1	PE-PLC1046	FPOR PANASONIC PLC w/ POWER SUPPLY HARNESS
6	1	PE-CL1016	PLC MOUNTING BASE
7	1	ASS-238CE-0419L	LH VALVE RELAY ASSEMBLY
8	1	PE-RE1015	5-24 VDC RELAY FOR REWIND MOTOR
9	1	ASS-238CE-TE4133	TERMINAL BLOCK ASSEMBLY (#1-#25)
10	1	ASS-238CE-TE4152	TERMINAL BLOCK ASSEMBLY (#26-#45)
11	1	CP-200-0279	DIN RAIL (FOR 25 TERMINALS)
12	1	CP-200CE-0213	DIN RAIL (FOR 20 TERMINALS)
13	4	PE-TE4020	END STOP
14	2	PE-RE1053	IDEC RELAY STOP CLIP
15	1	MP-200CE-0215	GROUNDING BAR
16	1	ASS-238CE-0423	3600CE TB2 TERMINAL STRIP ASSEMBLY
17	1	MP-238CE-0223L	CONNECTOR PLATE
18	1	ASS-238CE-0411	3600CE I/O HARNESS
19	1	ASS-238CE-0410	3600CE APPLICATOR ALARM CONNECTOR HARNESS
20	1	ASS-238CE-0425	DISPLAY CONNECTOR HARNESS
21	6	PE-SO1028	JACK SCREW, JAM NUT & LOCK WASHER
22	1	MP-CON1019	PRODUCT DETECT PORT
23	1	MP-CON1025	EOW PORT
24	1	ASS-238CE-0412	AC RECEPTACLE ASSEMBLY
25	1	ASS-200-0148	POWER CORD CLIP
	1	ASS-CO1025	PRINT ENGINE POWER CORD
27	1	ASS-238CE-0409	VALVE PORT
28	1	PM-WL1057	WARNING LABEL
29	1	MP-238CE-0227	NAME PLATE LABEL
30	1	PE-238-0405	SERIAL PRINTER PORT
31	1	MP-238-0276	PARALLEL PORT BLANK
32	1	MP-CON1020	LOW LABEL PORT
33	1	PE-EN9056	5/8 HOLE PLUG

* SEE TABLE BELOW FOR HARNESS PE# AS PURCHASED
& THE MODIFICATIONS REQUIRED FOR MP#.

CTM NUMBER	CTM PART NUMBER (AS PURCHASED)	MODIFICATION OF PURCHASED PART
MP-CON1019	PE-CON1019	CUT BLACK WIRE
MP-CON1020	PE-CON1020	CUT BLACK & WHITE WIRES
MP-CON1025A	PE-CON1025	SHRINK WRAP WIRES

CAPACITOR LOCATION

#8-32 X ⅜" BHCS (REV 5)

#4-40 X ½" SHCS (2) PLACES

#8-32 X ⅜" SHCS (2) PLACES

#8-32 X ¼" BHCS FOR DIN RAIL

#10-32 X ½" SHCS (4) PLACES

#8-32 X ⅜" BHCS FOR DIN RAILS

#8-32 X ⅜" SHCS IN PLC BRACKET

#10-32 X ¾" SHCS (6) PLACES

CAP

SSI

PE

CONTROLLER

TB-2

TB-1

24V POWER SUPPLY

SPARE TAMP TAMP BLOW ASSIST

#4-40 X ⅜" BHCS (UP TO 16) PLACES

#4-40 X ½" SHCS (2) PLACES

VALVE ALARM EOW PROD I/O PARALLEL

AUX L-LBL DISPLAY SERIAL

CTM LABELING SYSTEMS
CE
SER.# 3600-CE-XXXX-XXXX
VOLT 230V   PH 1
WATT 1KW   HZ 50/60
FUSE 6.3 AMP WT 80 KG

APPLICATOR SERIES: 3600-CE
APPLICATOR WIDTH(S): 7.5"
GROUP: HOUSING ELECTRICAL
TITLE: LH ELECTRICAL SHELF ASSEMBLY w/ CONNECTOR PLATE
REV. DESCRIPTION: REMOVED POWER CORD AND ADDED PRINTER POWER CORD
REV: 6
REV. DATE: 09/09/2015
REV. BY: JWS
DATE: 10/28/08
DRAWN BY: DKM
SCALE: 1=2
Dept. Code: 70
F:\Engineering\Standard Parts\Applicator\3600-CE\ASS-238CE-0127L

BILL OF MATERIAL
ASS-238CE-0126

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200CE-0206	MOUNT PLATE FOR POWER SUPPLY
②	2	MP-200CE-0207	POWER SUPPLY SIDE GUARD
③	1	PM-200CE-0208	POWER SUPPLY TOP GUARD
④	1	PE-PS1024	LINEAR and SWITCHING POWER SUPPLY, (TDK LAMBDA SCS4024)
⑤	1	MP-200CE-0214-C	POWER SUPPLY LABEL
⑥	1	PM-WL1057	WARNING LABEL
⑦	2	PM-RU3030	EDGE TRIM x 3.5" LG.
⑧	1	ASS-238CE-0430	INTERNAL WIRE HARNESS: DC SUPPLY

WORK THIS DRAWING WITH ASS-200CE-0411.

#10-32 X ½ SHCS
(4) PLACES

6-32X0.38 SHCS
W/ #6 FLAT WASHER
(4 PLCS.)

OUTLINE OF POWER
SUPPLY ASSEMBLY

24V POWER SUPPLY

#6-32 X ⅜ SHCS
(4) PLACES

#6-32 X ½ FHCS
(4) PLACES
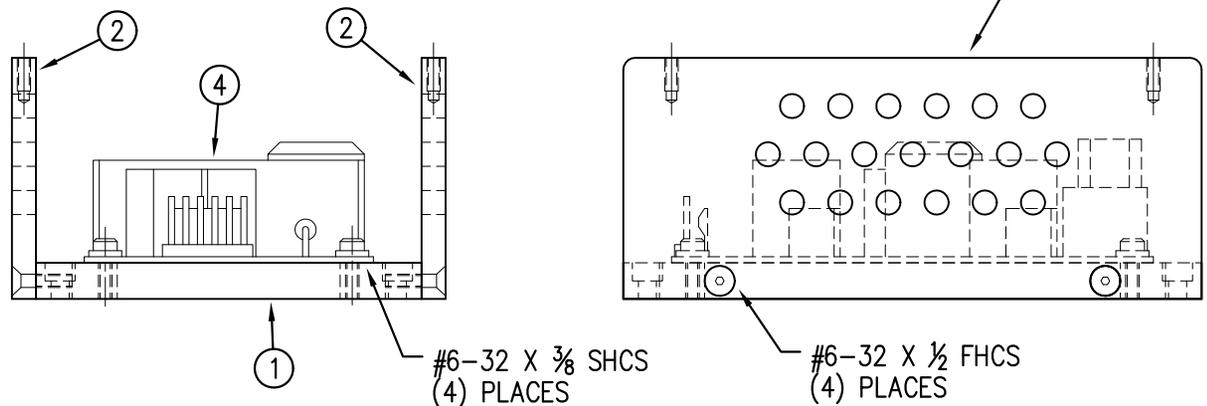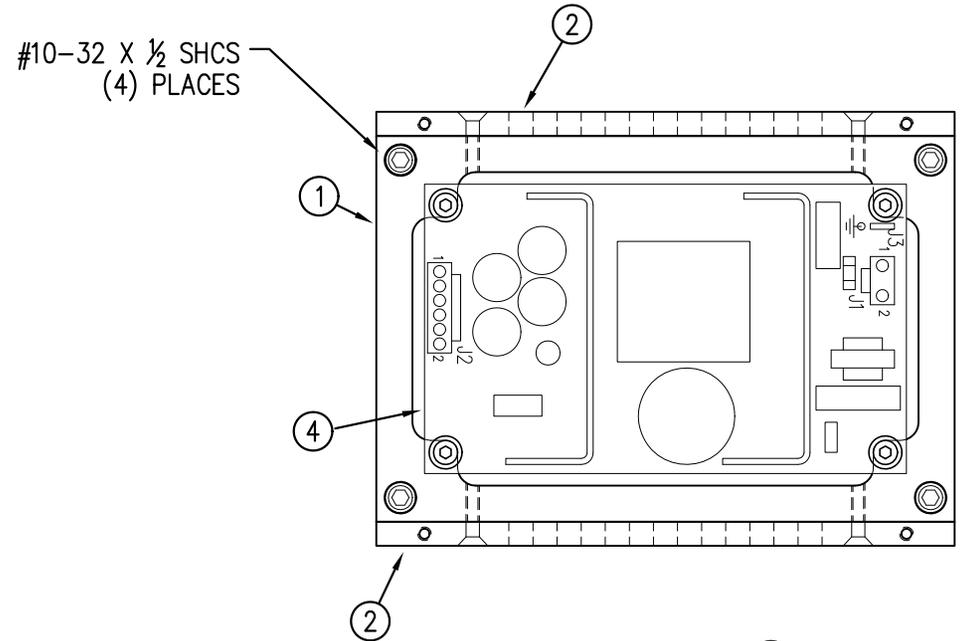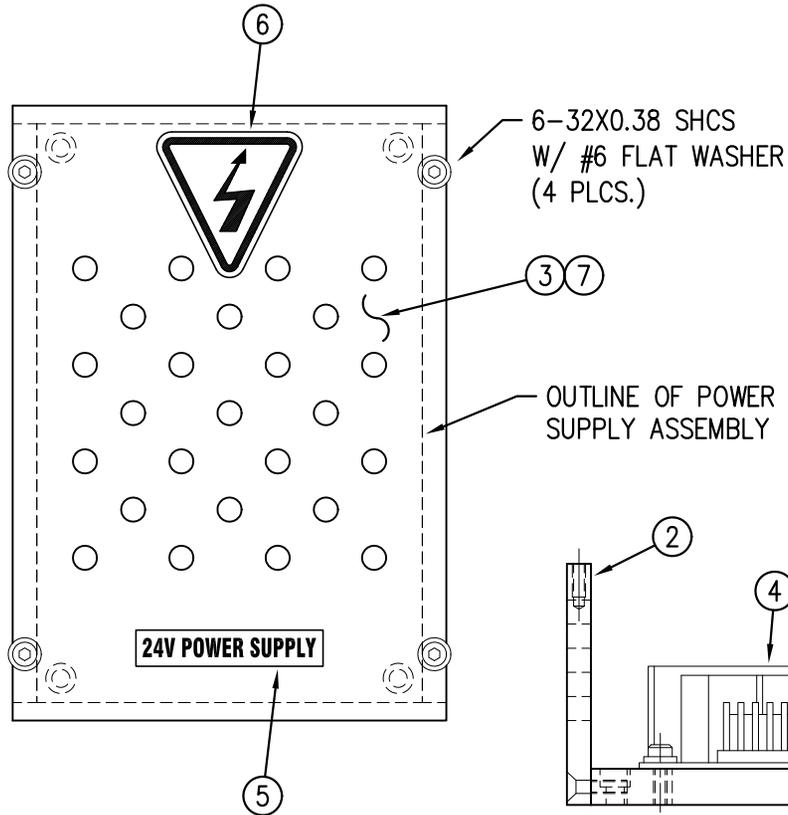
FOR ASSEMBLY DWG. REFER TO:
ASS-238CE-0127R/L

APPLICATOR SERIES: 3600-CE	APPLICATOR WIDTH(S): 7.5"	GROUP: HOUSING: ELECTRICAL	TITLE: 3600CE 24 VDC POWER SUPPLY ASSEMBLY	Dept. Code 70
REV. 0	REV. DESCRIPTION —	REV. DATE —	REV. BY: XXX	Scale: 1=2	Date: 03/15/2011	DRAWN BY: DKM	F:\Engineering\Standard Parts\Applicator\ 3600-CE\ASS-238CE-0126

ASS-238CE-0125

COM CPU PWR

3600-PA Printer Applicator

① ③ SILKSCREEN ②

¼"-20 X ⅞" LG.
SS SHCS (4) PLACES

④
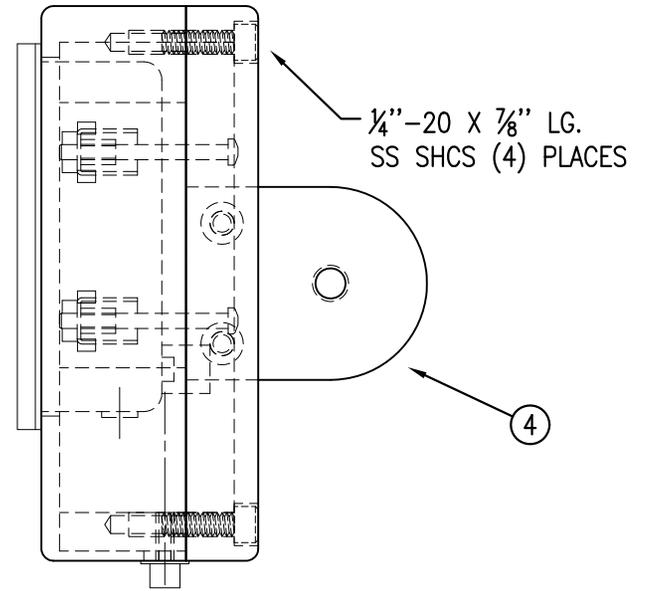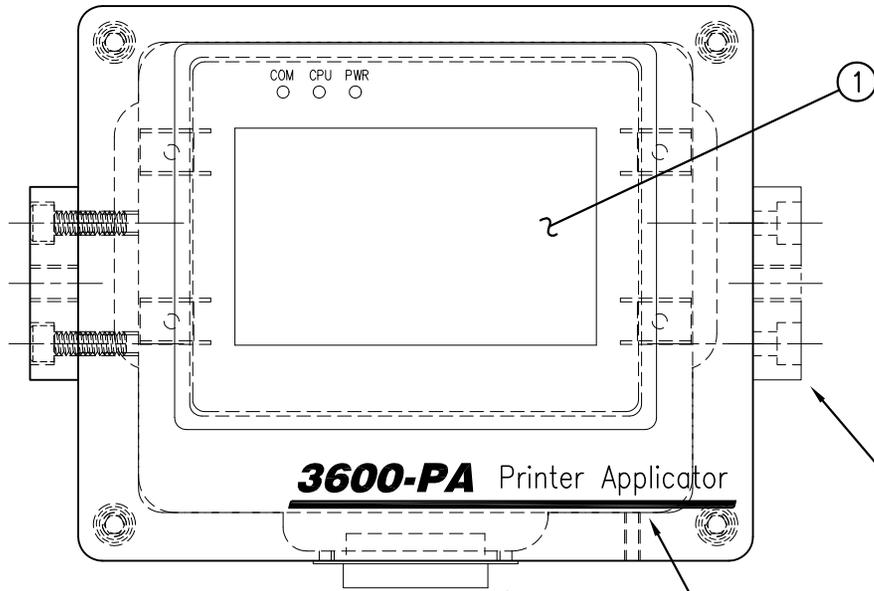
DISPLAY ASSEMBLY CAN ALSO BE
MOUNTED FROM THIS SIDE BY REMOVING
(4) ¼"-20 X ¾" SHCS & THEN
ROTATING DISPLAY BACK SHELL 180° (ITEM 3)
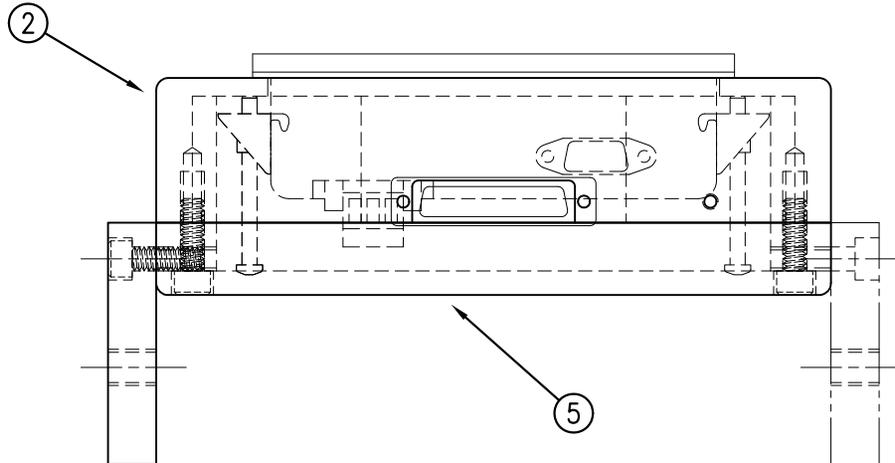
MOUNTING BRACKET NOT INCLUDED IN ASSEMBLY:

STANDARD UPRIGHT MOUNT ~ #ASS-200-0138
OPTIONAL U-ARM MOUNT ~ #ASS-200-0146

⑤

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	PE-IN1116	MAPLE COLOR TOUCHSCREEN INTERFACE DISPLAY for 3600CE APPLICATOR
②	1	MP-238CE-0230	HMI5043N DISPLAY FACE SHELL
③	1	ASS-238CE-0426	HMI5043N DISPLAY INTERNAL HARNESS
④	1	MP-238CE-0229	HMI5043N DISPLAY MOUNTING EAR
⑤	1	MP-238CE-0231	HMI5043N DISPLAY BACK SHELL

BILL OF MATERIAL
ASS-238CE-0125

APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:	TITLE:	Dept. Code
3600-CE	7.5"	HOUSING	3600CE MAPLE DISPLAY HOUSING ASSEMBLY	70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\
0	–	–	XXX	1=2	03/15/2011	ERIC SANOR	3600-CE\ASS-238CE-0125

BILL OF MATERIAL
MOD-238CE-0124R/L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	2	MP-238-0241	TAMP GUIDE
2	1	MP-238-0242	AIR ASSIST TUBE HOLDER
3	1	MP-211-0217-7	AIR ASSIST TUBE
4	1	PM-AH1000	AIR ASSIST TUBING x 15" Lg.
5	1	ASS-218-0136M	3-STATION VALVE BANK
6	1	MP-214-0206	VALVE MOUNTING PLATE
7	1	MP-238-0238	VALVE FASTENING PLATE
8	1	MP-238-0239	VALVE NUT PLATE
9	1	PM-PT1070	1/4" O.D. SMC TUBING x 60" Lg. (CUT TO SUIT)
10	1	PM-PT1080	3/8" O.D. SMC TUBING x 33" Lg. (CUT TO SUIT)
11	2	PM-PF1020	FITTING, 1/4 NPT to 3/8 TUBE
12	3	PM-PF1010	FITTING, 1/4 NPT to 1/4 TUBE
13	2	PM-PF1035	FTG, 1/4 NPT to 1/4 TUBE, 90° SWIVEL
14	1	PM-PF1145	1/4 PIPE NIPPLE
15	1	PM-PF1175	1/4 NPT FEMALE 90° ELBOW
16	1	PM-PF1162	1/4 NPT PLUG
	4	PM-FASH40125	FHCS, #10-32 x 1/2" Lg.

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-
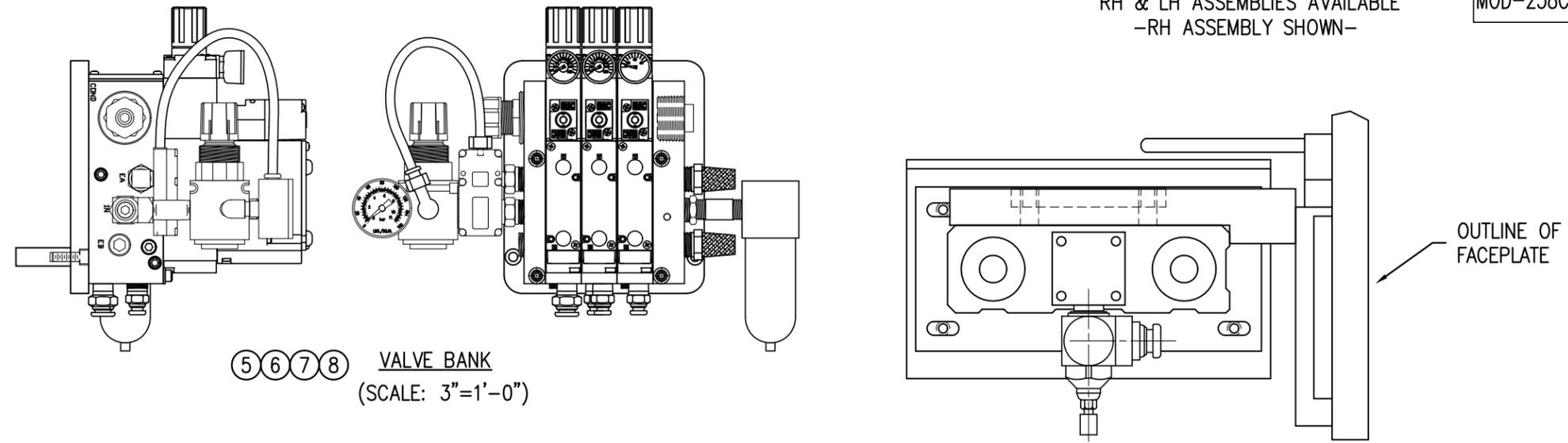
5 6 7 8 VALVE BANK
(SCALE: 3"=1'-0")

OUTLINE OF
FACEPLATE

MOD ALSO INCLUDES
ITEMS 9 THRU 16
WHICH ARE NOT SHOWN

TAMP SLIDE STROKE LENGTH IS JOB SPECIFIC
ORDER SLIDE & MTG. NUT ASS'Y SEPARATELY
(REFER TO CTM #ASS-214-0103-XX)
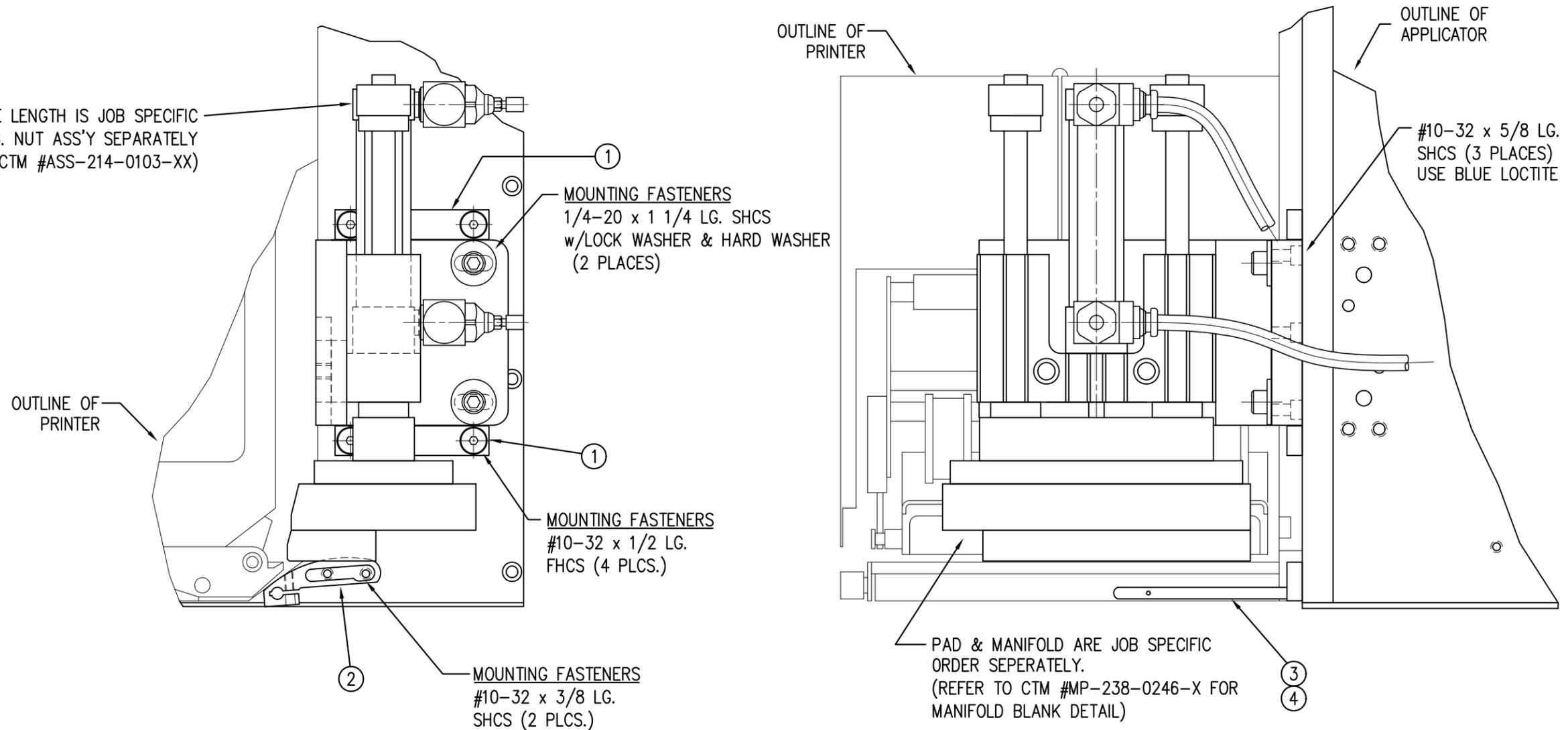
MOUNTING FASTENERS
1/4-20 x 1 1/4 LG. SHCS
w/LOCK WASHER & HARD WASHER
(2 PLACES)

OUTLINE OF
PRINTER

MOUNTING FASTENERS
#10-32 x 1/2 LG.
FHCS (4 PLCS.)

MOUNTING FASTENERS
#10-32 x 3/8 LG.
SHCS (2 PLCS.)

OUTLINE OF
PRINTER

OUTLINE OF
APPLICATOR

#10-32 x 5/8 LG.
SHCS (3 PLACES)
USE BLUE LOCTITE

PAD & MANIFOLD ARE JOB SPECIFIC
ORDER SEPERATELY.
(REFER TO CTM #MP-238-0246-X FOR
MANIFOLD BLANK DETAIL)

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\3600-CE\MOD-238CE-0124RL

DRAWN BY: DKM
Date: 10/30/08
Scale: 1=2
REV. BY: XXX

TITLE: STANDARD TAMP ASSEMBLY

GROUP: HOUSING

APPLICATOR SERIES: 3600-CE
APPLICATOR WIDTH(S): 7.5"

REV. DATE: --
REV. DESCRIPTION
REV. 0 --

RH & LH MOUNTING AVAILABLE
(BOTH HANDS USE SAME PARTS)
—RH MOUNTING SHOWN—

ITEM ⑥
STANDARD NUT
FOR 3600-PA

NOTE:
USE HEAVY DUTY SLIDE
FOR 8",10" & 12" STROKES
SEE SHEET 2

ASS-214-0103R/L-XX	
1" STROKE	-0103R/L-1N
2" STROKE	-0103R/L-2N
3" STROKE	-0103R/L-3N
4" STROKE	-0103R/L-4N
6" STROKE	-0103R/L-6N
EXT PE: 1" STROKE	-0103R/L-1E
EXT PE: 2" STROKE	-0103R/L-2E
EXT PE: 3" STROKE	-0103R/L-3E
EXT PE: 4" STROKE	-0103R/L-4E
EXT PE: 6" STROKE	-0103R/L-6E

TUBING NOT
INCLUDED IN
ASSEMBLY

⑦⑧ MOUNTING FASTENERS
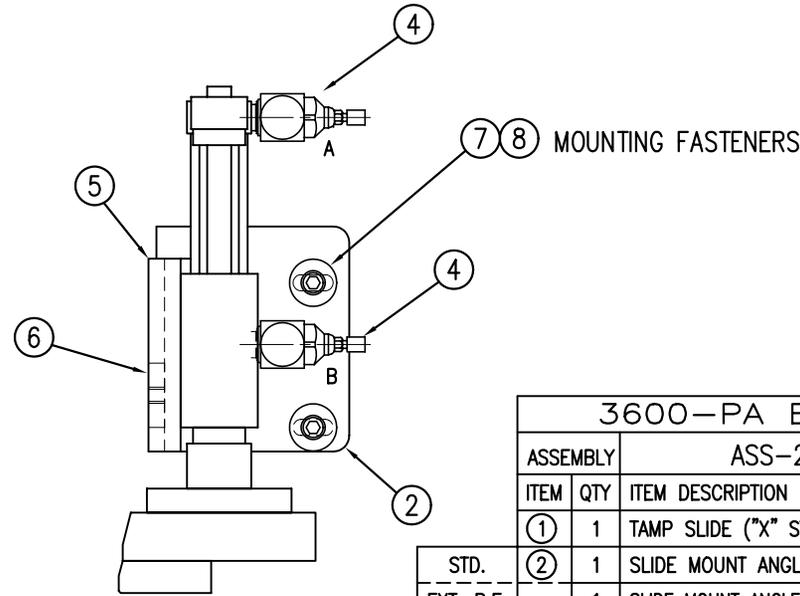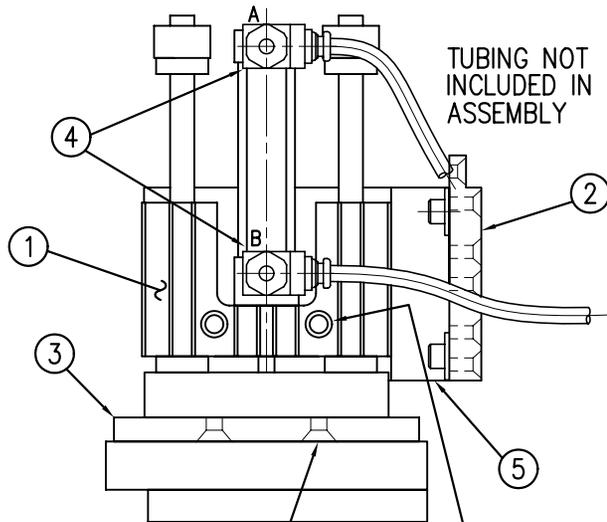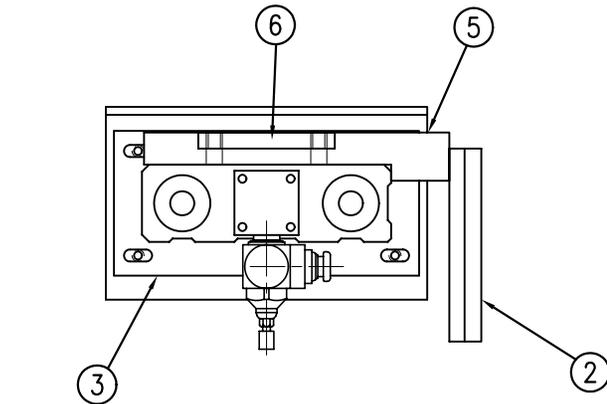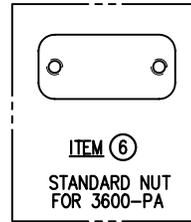
(2) 1/4-20 x 1-3/8 Lg. SHCS, SS
w/ HIGH COLLAR LOCK WASHER
(INCLUDED WITH STANDARD SLIDE)

(4) 1/4-20 x 3/4 LG. FSHCS

ORDER SEPARATELY
PAD & MANIFOLD (JOB SPECIFIC)
FOR MANIFOLD BLANKS SEE
MP-238-0246-X

3600-PA BILL OF MATERIAL					SOLD
ASSEMBLY		ASS-214-0103R/L-XX			S
	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	①	1	TAMP SLIDE ("X" STROKE LENGTH)	ASS-214-0108-X	S
STD.	②	1	SLIDE MOUNT ANGLE PLATE	MP-238-0244R/L	.
EXT. P.E.		1	SLIDE MOUNT ANGLE PLATE FOR EXT. P.E.	MP-238-0255R/L	.
	③	1	SLIDE TO MANIFOLD TRANSITION PLATE	MP-238-0245	.
	④	2	FLOW CONTROL	PM-PF2060	S
STD.	⑤	1	SLIDE MOUNT PLATE	MP-238-0243	.
EXT. P.E.		1	SLIDE MOUNT PLATE FOR EXT. P.E.	MP-238-0254	.
	⑥	1	SLIDE NUT FOR STANDARD CYLINDER	MP-238-0240	.
STD.	⑦	2	SHCS, 1/4-20 x 1-1/4 Lg. SS	PM-FASH40330	
	⑧	2	1/4 HEAVY FLAT WASHER	PM-FAW30297	
	⑨	2	1/4 LOCK WASHER	PM-FAW30690	
EXT. P.E.	⑦	2	SHCS, 1/4-20 x 1 Lg. SS	PM-FASH40320	
	⑧	2	1/4 FLAT WASHER	PM-FAW30275	
	⑨	2	1/4 LOCK WASHER	PM-FAW30690	

TITLE: 3600-PA SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 1 of 2)	PART: STANDARD SLIDE ASSEMBLY FOR 3600-PA APPLICATOR	Dept. Code 70
REV. 7	REV. DESCRIPTION ADDED MTG. FASTENERS FOR EXT. PEEL EDGE	REV. DATE 07/25/06	REV. BY TDR	Scale: 1=3	Date: 02/21/98	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 214\ASS-214-0103RL-XXs1

RH & LH MOUNTING AVAILABLE
(BOTH HANDS USE SAME PARTS)
-RH MOUNTING SHOWN-

ASS-214-0103R/L-XX

8" STROKE	-0103R/L-8N
REV 4 10" STROKE	-0103R/L-10N
12" STROKE	-0103R/L-12N
EXT PE: 8" STROKE	-0103R/L-8E
REV 4 EXT PE: 10" STROKE	-0103R/L-10E
EXT PE: 12" STROKE	-0103R/L-12E

ITEM ⑥
HEAVY DUTY NUT
FOR 3600-PA
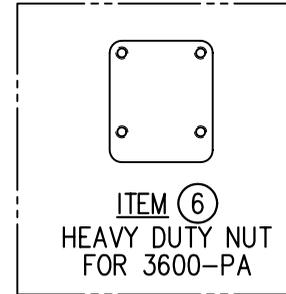
NOTE:
USE STANDARD DUTY SLIDE
FOR 1", 2", 3", 4"& 6" STROKES
(SEE SHEET 1)

TUBING NOT
INCLUDED IN
ASSEMBLY

⑦⑧ MOUNTING FASTENERS

ORDER SEPARATELY
PAD & MANIFOLD (JOB SPECIFIC)
FOR MANIFOLD BLANKS SEE
MP-238-0246-X

(4) 1/4-20 x 3/4 Lg.FSHCS

(4) 1/4-20 X 1-3/8 Lg. SHCS
w/ HIGH COLLAR LOCK WASHER
(INCLUDED w/HEAVY DUTY SLIDE)

3600-PA BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-0103R/L-XX		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TAMP SLIDE ("X" STROKE LENGTH)	ASS-214-0108-X	S
STD. ②	1	SLIDE MOUNT ANGLE PLATE	MP-238-0244R/L	.
EXT. P.E.	1	SLIDE MOUNT ANGLE PLATE FOR EXT. P.E.	MP-238-0255R/L	.
③	1	SLIDE TO MANIFOLD TRANSITION PLATE	MP-238-0245	.
④	2	FLOW CONTROL	PM-PF2060	S
STD. ⑤	1	SLIDE MOUNT PLATE	MP-238-0243	.
EXT. P.E.	1	SLIDE MOUNT PLATE FOR EXT. P.E.	MP-238-0254	.
⑥	1	SLIDE NUT FOR HEAVY DUTY CYLINDER	MP-238-0240E	.
STD. ⑦	2	SHCS, 1/4-20 x 1-1/4 Lg. SS	PM-FASH40330	
⑧	2	1/4 HEAVY FLAT WASHER	PM-FAW30297	
⑨	2	1/4 LOCK WASHER	PM-FAW30690	
EXT. P.E. ⑦	2	SHCS, 1/4-20 x 1 Lg. SS	PM-FASH40320	
⑧	2	1/4 FLAT WASHER	PM-FAW30275	
⑨	2	1/4 LOCK WASHER	PM-FAW30690	

TITLE: 3600-PA SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 2 of 2)	PART: HEAVY DUTY SLIDE ASSEMBLY FOR 3600-PA APPLICATOR	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
3	MOVED ITEM #5 TO TOP HOLES ON ITEM #2	04/09/07	TDR	1=4	02/21/98	BOB S.	214\ASS-214-0103RL-XXs2

RH & LH MOUNTING AVAILABLE
—RH MOUNTING SHOWN—

ASS-214-0103R/L-XXQ
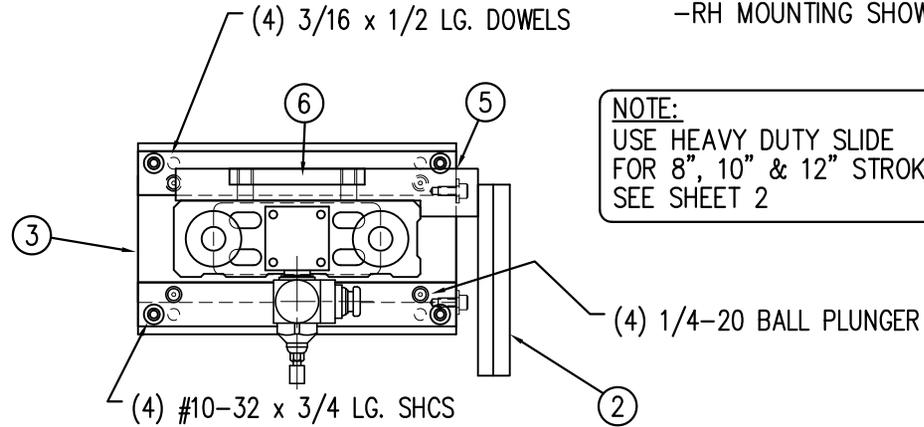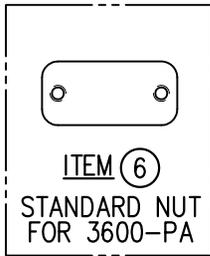
1" STROKE	-0103R/L-1NQ
2" STROKE	-0103R/L-2NQ
3" STROKE	-0103R/L-3NQ
4" STROKE	-0103R/L-4NQ
6" STROKE	-0103R/L-6NQ
EXT PE: 1" STROKE	-0103R/L-1EQ
EXT PE: 2" STROKE	-0103R/L-2EQ
EXT PE: 3" STROKE	-0103R/L-3EQ
EXT PE: 4" STROKE	-0103R/L-4EQ
EXT PE: 6" STROKE	-0103R/L-6EQ
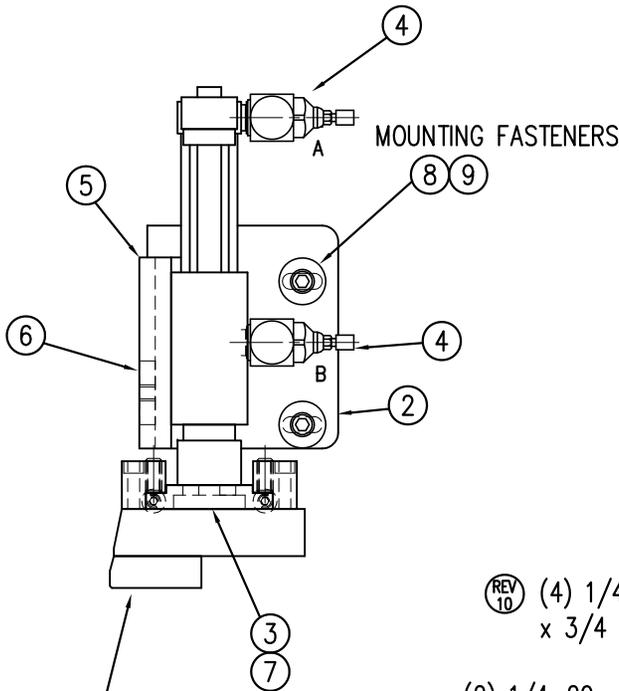
NOTE:
USE HEAVY DUTY SLIDE
FOR 8", 10" & 12" STROKES
SEE SHEET 2

(4) 3/16 x 1/2 LG. DOWELS

(4) 1/4-20 BALL PLUNGER

(4) #10-32 x 3/4 LG. SHCS

ITEM (6)
STANDARD NUT
FOR 3600-PA

MOUNTING FASTENERS

TUBING NOT
INCLUDED IN
ASSEMBLY
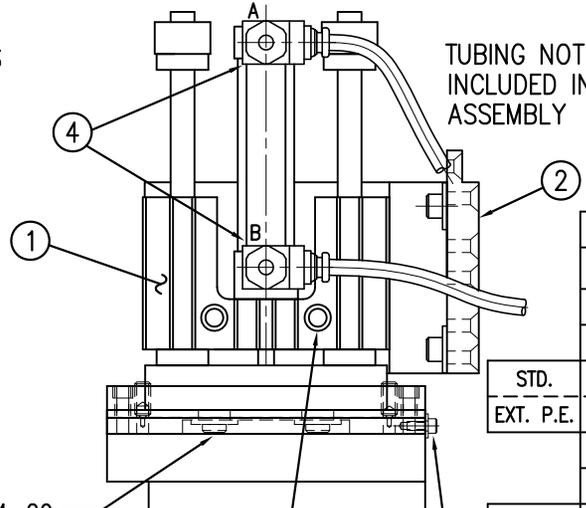
(REV 10) (4) 1/4-20
x 3/4 LG. LSHCS

(2) 1/4-20 x 1-3/8 Lg. SHCS, SS
w/ HIGH COLLAR LOCK WASHER
(INCLUDED WITH STANDARD CYLINDER)

(REV 8) (REV 11) (2) 6-32 x 3/8 LG.
SHCS w/FLAT WASHER

ORDER SEPARATELY
PAD & MANIFOLD (JOB SPECIFIC)
& CLAMPS & BALL PLUNGERS
(ASS-214-0119)

3600-PA BILL OF MATERIAL					SOLD
ASSEMBLY		ASS-214-0103R/L-XNQ, -XEQ			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
(1)	1	TAMP SLIDE ("X" STROKE LENGTH)	ASS-214-0108-X		S
STD. (2)	1	SLIDE MOUNT ANGLE PLATE	MP-238-0244R/L		.
EXT. P.E.	1	SLIDE MOUNT ANGLE PLATE FOR EXT. P.E.	MP-238-0255R/L		.
(3)	1	SLIDE TO MANIFOLD TRANSITION PLATE	MP-238-0270		.
(4)	2	FLOW CONTROL	PM-PF2060		S
STD. (5)	1	SLIDE MOUNT PLATE	MP-238-0243		.
EXT. P.E.	1	SLIDE MOUNT PLATE FOR EXT. P.E.	MP-238-0254		.
(6)	1	SLIDE NUT FOR STANDARD CYLINDER	MP-238-0240		.
(7)	1	QUICK CHANGE NUT PLATE	PM-238-0271		.
STD. (8)	2	SHCS, 1/4-20 x 1-1/4 Lg. SS	PM-FASH40330		
(9)	2	1/4 HEAVY FLAT WASHER	PM-FAW30297		
(10)	2	1/4 LOCK WASHER	PM-FAW30690		
EXT. P.E. (8)	2	SHCS, 1/4-20 x 1 Lg. SS	PM-FASH40320		
(9)	2	1/4 FLAT WASHER	PM-FAW30275		
(10)	2	1/4 LOCK WASHER	PM-FAW30690		

TITLE: 3600-PA SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 1 of 2)
PART: STANDARD SLIDE ASS'Y FOR 3600-PA APPLICATOR w/QUICK CHANGE PAD
Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
11	SHOWED #6-32 SHCS (QC STOPS) IN CORRECT LOCATION	03/23/10	TDR	1=3	02/21/98	BOB S.	214\ASS-214-0103RL-XXQs1

RH & LH MOUNTING AVAILABLE
—RH MOUNTING SHOWN—

(4) 3/16 x 1/2 LG. DOWEL PINS

(6) (5)

(4) 1/4-20 BALL PLUNGER

(2)

(4) #10-32 x 3/4 LG. SHCS

ASS-214-0103R/L-XXQ	
8" STROKE	-0103R/L-8NQ
10" STROKE	-0103R/L-10NQ
12" STROKE	-0103R/L-12NQ
EXT PE: 8" STROKE	-0103R/L-8EQ
EXT PE: 10" STROKE	-0103R/L-10EQ
EXT PE: 12" STROKE	-0103R/L-12EQ
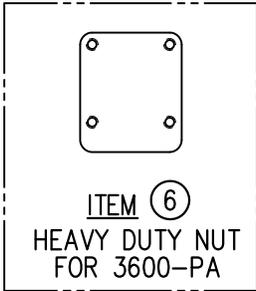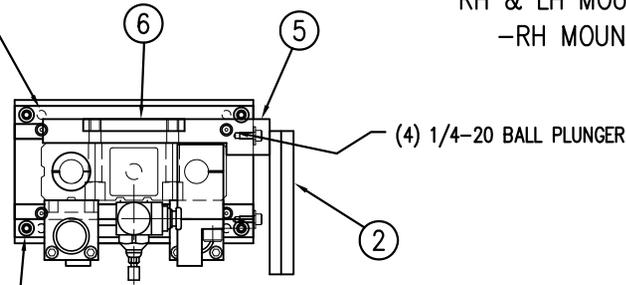
NOTE:
USE STANDARD SLIDE
FOR 1", 2", 3", 4" & 6" STROKES
(SEE SHEET 1)

ITEM (6)
HEAVY DUTY NUT
FOR 3600-PA

(4)

(4)

TUBING NOT
INCLUDED IN
ASSEMBLY

(8)(9) MTG. FASTENERS

(5)

(2)

(6)

(4)

(1)

(2)
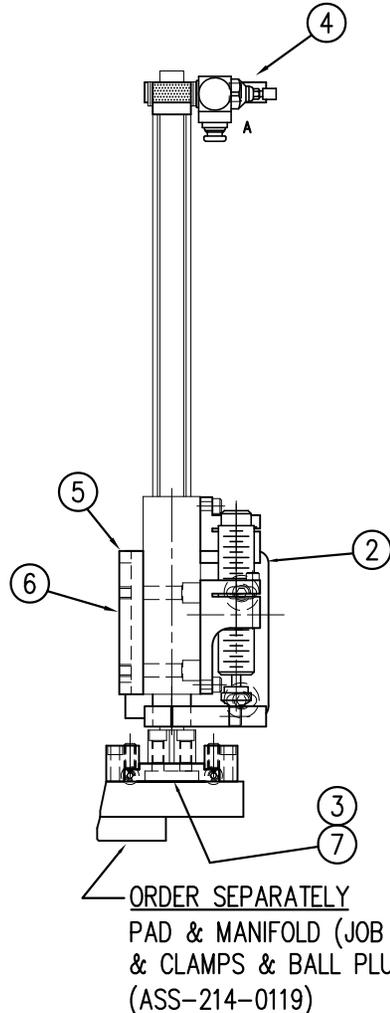
(2) 1/4-20 x 1-3/8 Lg. SHCS
W/ HIGH COLLAR LOCK WASHER
(INCLUDED WITH STD CYLINDER)

(3)
(7)

ORDER SEPARATELY
PAD & MANIFOLD (JOB SPECIFIC)
& CLAMPS & BALL PLUNGERS
(ASS-214-0119)

(REV 5) (4) 1/4-20
x 3/4 LG. LSHCS

(REV 2)(REV 6) (2) #6-32 x 3/8 LG.
SHCS w/FLAT WASHER

(5)

3600-PA BILL OF MATERIAL					SOLD
ASSEMBLY		ASS-214-0103R/L-XNQ, XEQ			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
(1)	1	TAMP SLIDE ("X" STROKE LENGTH)	ASS-214-0108-X		S
STD.	(2)	1	SLIDE MOUNT ANGLE PLATE	MP-238-0244R/L	.
EXT. P.E.		1	SLIDE MOUNT ANGLE PLATE FOR EXT. P.E.	MP-238-0255R/L	.
(3)	1	SLIDE TO MANIFOLD TRANSITION PLATE	MP-238-0270		.
(4)	2	FLOW CONTROL	PM-PF2060		S
STD.	(5)	1	SLIDE MOUNT PLATE	MP-238-0243	.
EXT. P.E.		1	SLIDE MOUNT PLATE FOR EXT. P.E.	MP-238-0254	.
(6)	1	SLIDE NUT FOR HEAVY DUTY CYLINDER	MP-238-0240E		.
(7)	1	QUICK CHANGE NUT PLATE	PM-238-0271		.
STD.	(8)	2	SHCS, 1/4-20 x 1-1/4 Lg. SS	PM-FASH40330	
	(9)	2	1/4 HEAVY FLAT WASHER	PM-FAW30297	
	(10)	2	1/4 LOCK WASHER	PM-FAW30690	
EXT. P.E.	(8)	2	SHCS, 1/4-20 x 1 Lg. SS	PM-FASH40320	
	(9)	2	1/4 FLAT WASHER	PM-FAW30275	
	(10)	2	1/4 LOCK WASHER	PM-FAW30690	

THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 3600-PA SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 2 of 2)	PART: HEAVY DUTY SLIDE ASS'Y FOR 3600-PA APPLICATOR w/QUICK CHANGE PAD	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
6	SHOWED #6-32 SHCS (QC STOPS) IN CORRECT LOCATION	03/23/10	TDR	1=4	02/21/98	BOB S.	214\ASS-214-0103RL-XXQs2

ASS-214-0108-X

1" STROKE	-0108-1
2" STROKE	-0108-2
3" STROKE	-0108-3
4" STROKE	-0108-4
6" STROKE	-0108-6
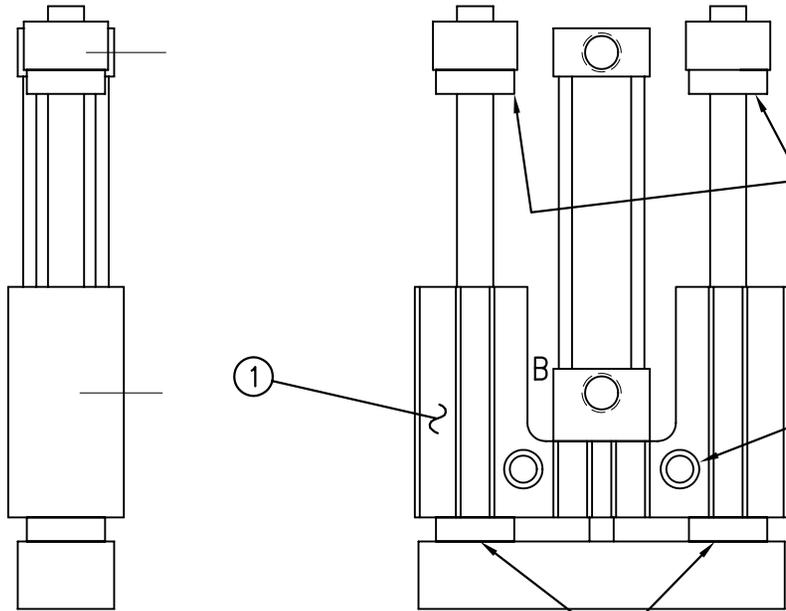
REMOVE HARD RUBBER
DAMPERS & REPLACE
w/ ITEM ② - 2 PLCS.
(TOP ONLY)

①

B

214-TAMP ~ 1/4-20 x 1-1/4 Lg. SHCS
(2 PLACES FOR STANDARD CYLINDER)

238-TAMP ~ 1/4-20 x 1-3/8 Lg. SHCS
(2 PLACES FOR STANDARD CYLINDER)

NOT INCLUDED IN ASSEMBLY

ADD ITEM ③ TO THE TOP
OF THE BOTTOM DAMPERS.

BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-214-0108-1,-2,-3,-4,-6			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TAMP SLIDE ("X" STROKE LENGTH)	PM-AC2000-X	S
②	2	3/8" I.D. RUBBER GROMMIT	PE-CO2018	S
③	4	O-RING (BUNA-N)	PM-OR1021	S

NOTE: FOR HEAVY DUTY SLIDE
REFER TO SHEET 2

THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360/3600-PA SERIES APPLICATOR: TAMP ASSEMBLY (Sht. 1 of 2)	PART: STANDARD TAMP SLIDE (FOR 360 & 3600-PA STD & EXT. TAMP)	Dept. Code 70

| REV. 2 | REV. DESCRIPTION ADDED SHT. 2 FOR HEAVY DUTY SLIDE W/SHOCKS | REV. DATE 02/07/05 | REV. BY: TDR | Scale: 1=2 | Date: 02/21/98 | DRAWN BY: BOB S. | F:\Engineering\Standard Parts\Applicator\360 214\ASS-214-0108-Xs1 |

BILL OF MATERIAL

				SOLD
ASSEMBLY		ASS−214−0108−8, −10, −12		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TAMP SLIDE ("X" STROKE LENGTH)	PM−AC2010−X	S
②	1	SHOCK ABSORBER MTG BRACKET−HOME	MP−238−0314	.
③	1	SHOCK ABSORBER MTG BRKT−EXTENDED	MP−238−0315	.
④	2	SLIDE SHOCK ABSORBER	PM−SA0950	S

ASS−214−0108−X	
8" STROKE	−0108−8
10" STROKE	−0108−10
12" STROKE	−0108−12
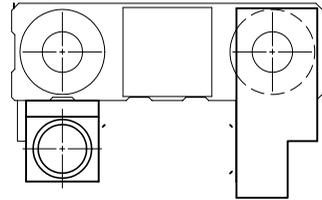
NOTE: SLIDE WITH SHOCK ABSORBERS TO BE USED IN CONJUCTION WITH

   360 SERIES: MOUNTING PLATE (MP−214−0204, rev. 1)

   3600 SERIES: MOUNTING PLATE (MP−238−0244R/L or MP−238−0255, rev. 1)
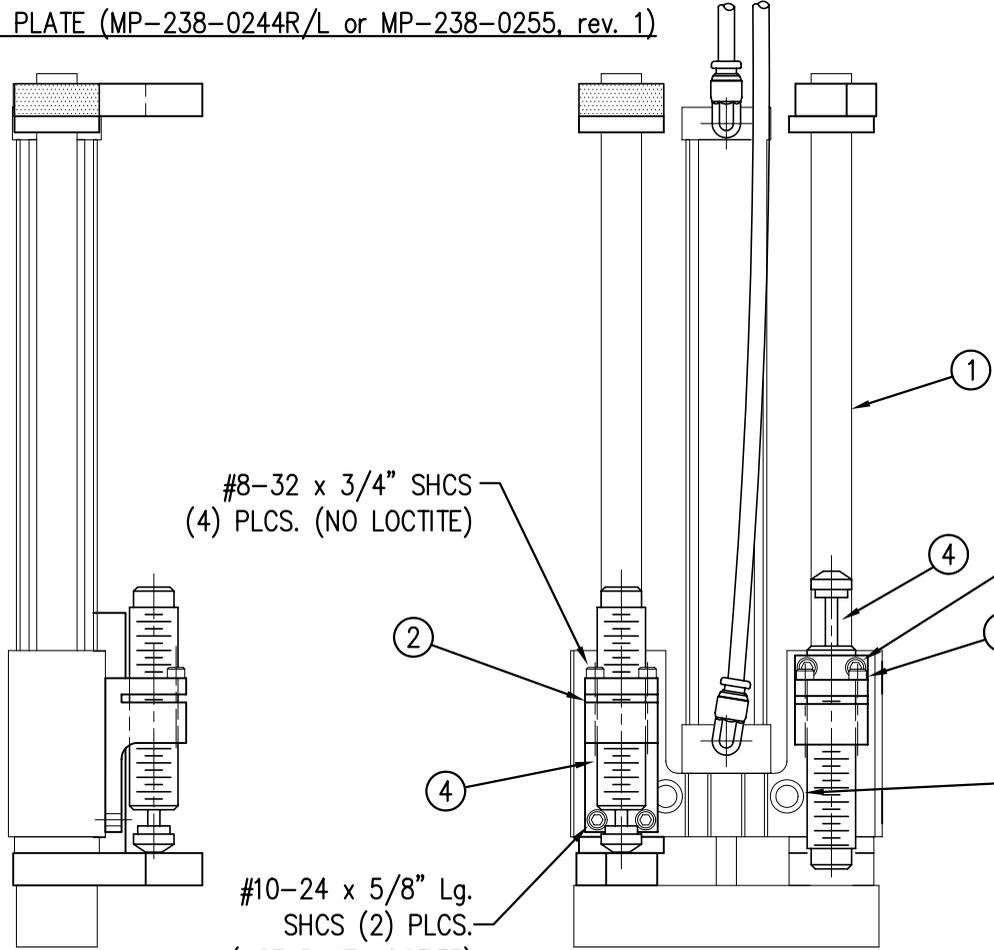
#8−32 x 3/4" SHCS
(4) PLCS. (NO LOCTITE)

#10−24 x 5/8" Lg.
SHCS (2) PLCS.
(USE BLUE LOCTITE)

214−TAMP ~ 1/4−20 x 1−1/4 Lg. SHCS
(4 PLACES FOR HEAVY DUTY CYLINDER)

238−TAMP ~ 1/4−20 x 1−3/8 Lg. SHCS
(4 PLACES FOR HEAVY DUTY CYLINDER)
NOT INCLUDED IN ASSEMBLY

#10−24 x 5/8" Lg.
SHCS (2) PLCS.
(USE BLUE LOCTITE)

NOTE: FOR STANDARD SLIDE
REFER TO SHEET 1

TITLE: 360/3600−PA SERIES APPLICATOR: TAMP ASSEMBLY (Sht. 2 of 2)				PART: HEAVY DUTY TAMP SLIDE (FOR 360 & 3600−PA STD & EXT. TAMP)		Dept. Code 70
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:
2	ADDED FASTENER CALLOUTS	10/28/05	TDR	1=3	02/21/98	BOB S.

F:\Engineering\Standard Parts\Applicator\360
214\ASS−214−0108−Xs2

BILL OF MATERIAL

ASSEMBLY				SOLD
		MOD-238-0122XR/L		S

ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
①	1	UNWIND ASSEMBLY	SAS-238-0122R/L	.	
②	1	12" INSIDE UNWIND DISK ASSEMBLY	ASS-200-0132	S	STANDARD
	1	12" ALUMINUM INSIDE UNWIND DISK ASSY	ASS-200-0132A	S	REELS UP
③	1	12" OUTSIDE UNWIND DISK ASSEMBLY	ASS-200-0133	S	
④	1	CORE SUPPORT	MP-200-0267CS	.	
⑤	1	MOUNTING PLATE	MP-238-0236	.	
⑥	1	5/8" ID STAINLESS STL LOCK COLLAR	PM-C01015	.	REELS UP
⑦	1	1" ID x 5/8" Lg. BRONZE BUSHING	PM-BU1475	.	ONLY
	4	FHCS, 1/4-20 x 3/4" LG.	PM-FAFH50619	.	

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

OPTIONAL END OF WEB
(NOT INCLUDED IN ASS'Y)

1/4-20 x 3/4 LG. FHCS
(4) PLCS.

1/4-20 x 3/4 LG. FHCS
FOR MOUNTING (4) PLCS.

LOW LABEL SENSOR
& MOUNTING PLATE
(NOT INCLUDED IN ASSY)
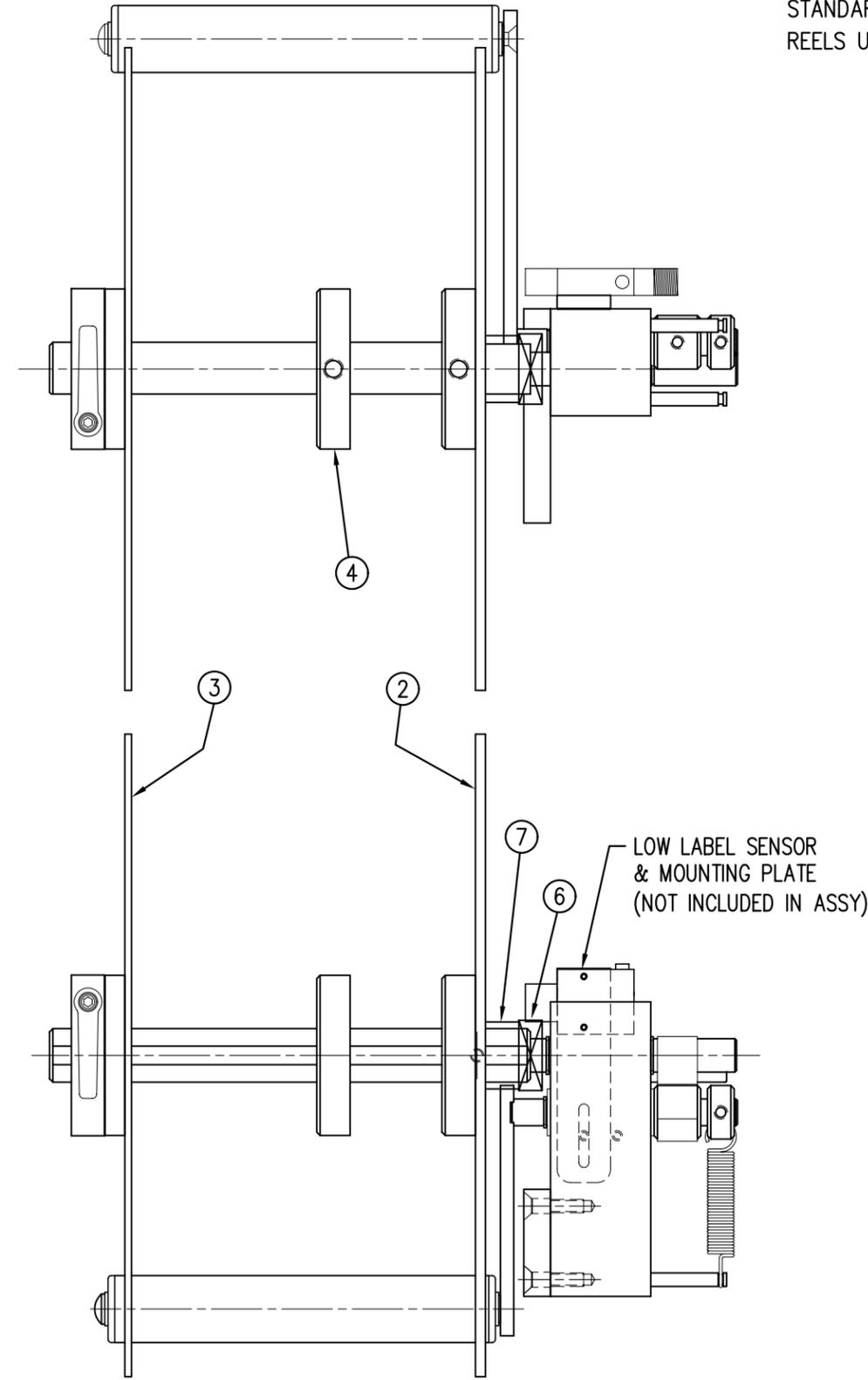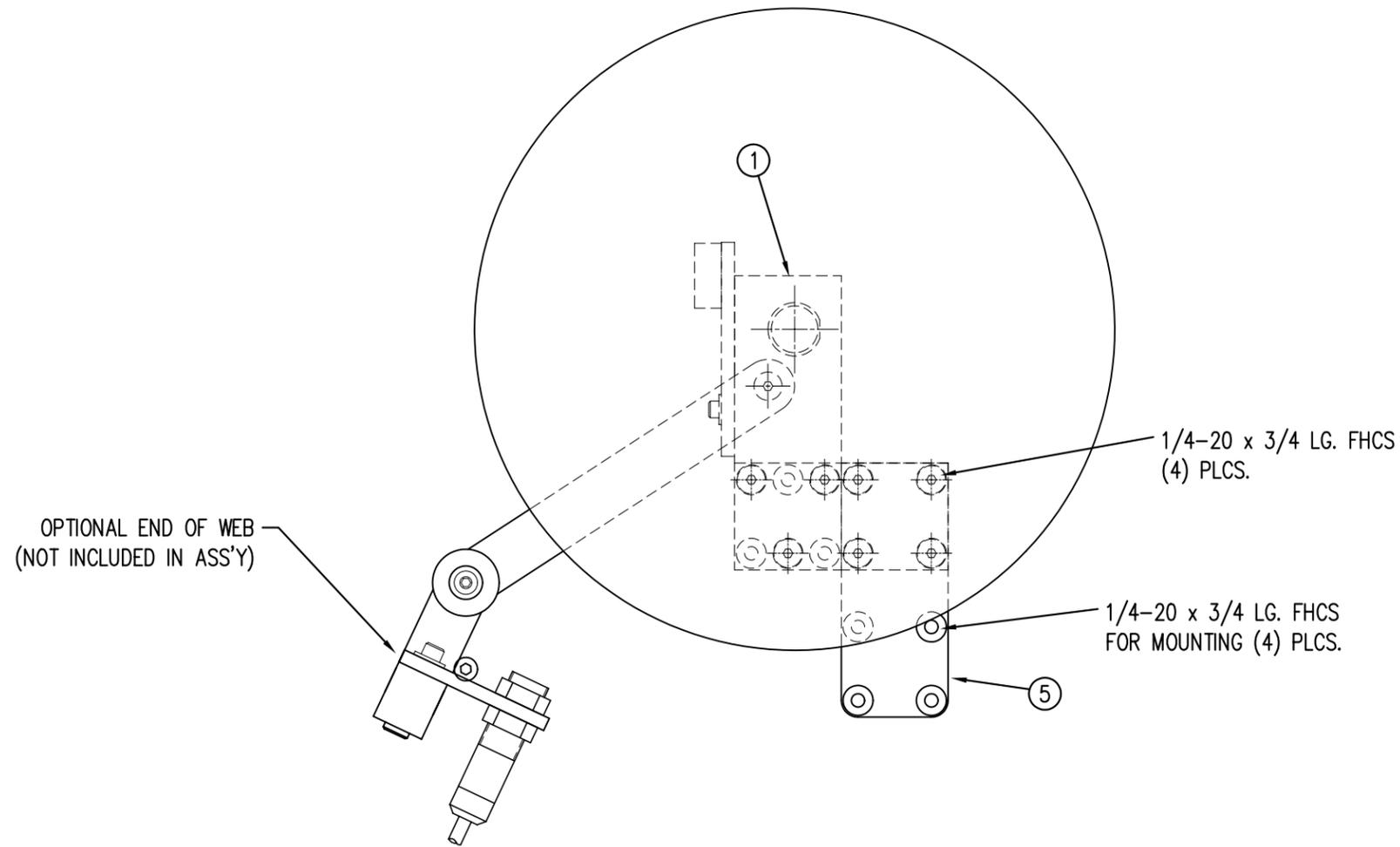
MOD-238-0122XR/L

STANDARD	-0122R/L
REELS UP	-0122AR/L

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\3600
238\MOD-238-0122XRL

PART: UNWIND ASSEMBLY w/ UNWIND DISKS MODULE

DRAWN BY: BOB S.
Date: 04/11/00
Scale: 1=3
REV. BY: TDR
REV. DATE: 03/04/08

TITLE: 3600 SERIES APPLICATOR: UNWIND ASSEMBLY

REV. DESCRIPTION
FIXED BALLOON CALLOUTS

REV: 3

BILL OF MATERIAL			SOLD
ASSEMBLY	ASS-238-0120C		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	REWIND BRG. BLOCK w/SHAFT	ASS-238-0121	S
②	1	SLIP CLUTCH ASSEMBLY	ASS-200-0143	S
③	1	LOCK COLLAR	PM-CO1020	.
④	1	SLIP CLUTCH	MP-238-0202	.
⑤	1	CLUTCH PAD	MP-238-0274	S
⑥	1	THRUST BEARING	PM-BE1232	S
⑦	1	COMPRESSION SPRING (MEDIUM DUTY)	PM-FASP30540	S
⑧	1	CLUTCH SPRING KEEPER	MP-200-0229	.
⑨	10	FLAT WASHER, 1/4 NOM.	NONE	.
⑩	1	SHCS, 1/4-20 x 1" LG.	NONE	.

REV 1   REV 2

7.06 SHAFT LENGTH

2.50
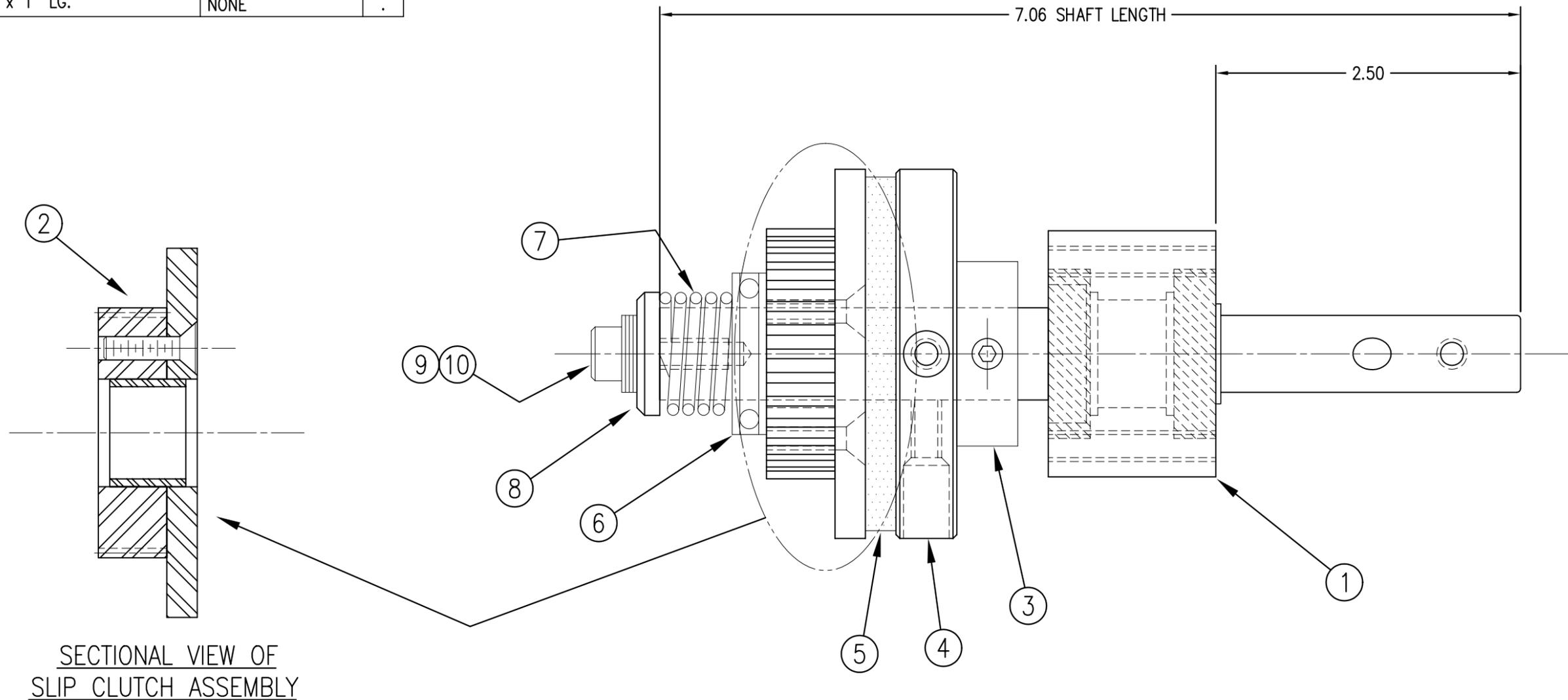
SECTIONAL VIEW OF
SLIP CLUTCH ASSEMBLY

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\3600 (3600-PA)\ASS-238-0120C

DRAWN BY: ROB S.

REV. BY: TDR

Date: 07/04/00

Scale: 1=1

REV. DATE: 12/20/06

PART: REWIND CLUTCH ASSEMBLY

TITLE: 3600-PA SERIES APPLICATOR: REWIND: SHELF ASSEMBLY

REV. DESCRIPTION

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-238-0121		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	REWIND BEARING BLOCK	MP-200-0216	.
②	1	REWIND SHAFT	MP-238-0205	.
③	2	#R10 BALL BEARING	PM-BE1260	.
④	1	SNAP RING	PM-FASR1010	.
	4	FHCS, 1/4"-20 UNC x 3/4" LG.	NONE	.

2.500

1.219

0.563

②

③

③ ④

①

℄ SHAFT

℄ SHAFT

TITLE: 3600-PA SERIES APPLICATOR: REWIND ASSEMBLY				PART: REWIND BEARING BLOCK w/SHAFT		Dept. Code 70
REV. O	REV. DESCRIPTION ADDED SHAFT TO DWG. AND UPDATED TITLEBLOCK	REV. DATE 11/19/03	REV. BY: TDR	Scale: 1=2	Date: 03/29/00	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\3600 238\ASS-238-0121

ASS-238-0144-X

BILL OF MATERIAL			SOLD
ASSEMBLY	ASS-238-0144-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	REWIND SPINDLE	MP-238-0206	.
②	1	REWIND PIN	PF-238-0207	.
③	1	REWIND DISK ASS'Y (FOR 12" UNWIND)	ASS-200-0127	S
	1	REWIND DISK ASS'Y (FOR 16" UNWIND)	ASS-200-3158-16	S

FOR 12" UNWIND | -0144-12

FOR 16" UNWIND | -0144-16
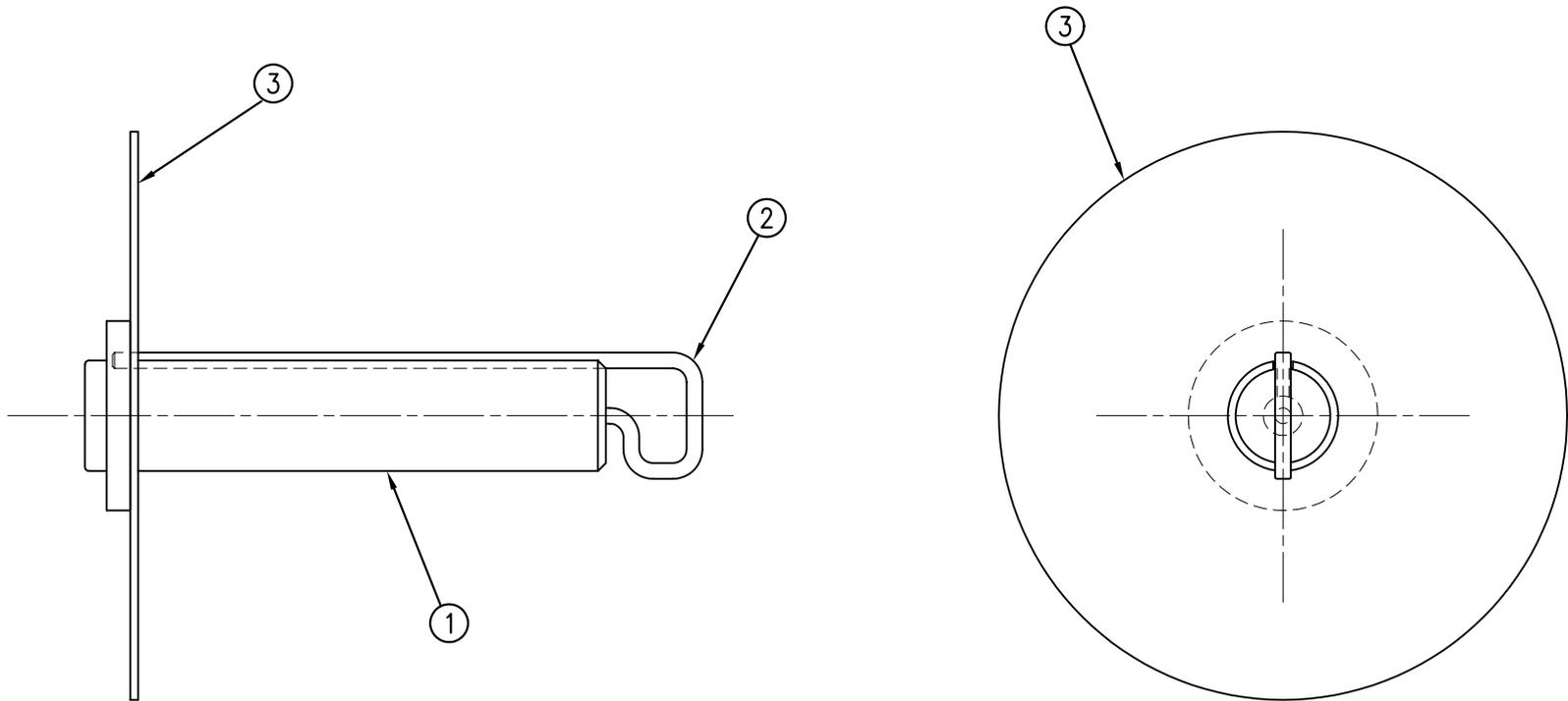
TITLE: 3600-PA SERIES APPLICATOR: REWIND ASSEMBLY	PART: STANDARD REWIND SPINDLE (FOR 12" & 16" UNWIND)	Dept. Code 70

| REV. 0 | REV. DESCRIPTION NEW ASSEMBLY | REV. DATE 01/14/04 | REV. BY: TDR | Scale: 1=1 | Date: 01/14/04 | DRAWN BY: TDR | F:\Engineering\Standard Parts\Applicator\3600\ 238\ASS-238-0144-X |

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-238-0180R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	UNWIND BLOCK	MP-238-0211	.
②	2	FLANGE BUSHING, 1/2" ID x 5/8" OD	PM-BEBF1016	.
③	2	#R10 BEARING	PM-BE1260	.
④	1	UNWIND SPRING PIN	MP-238-0214	.
⑤	1	UNWIND BELT PIN	MP-238-0213	.

RH & LH ASSEMBLIES AVAILABLE
RH ASSEMBLY SHOWN (REV 3)

ASS-238-0180R/L

#R10

TITLE: 3600-PA SERIES APPLICATOR: UNWIND ASSEMBLY				PART: RH / LH UNWIND BLOCK ASSEMBLY		Dept. Code 70
REV. 3	REV. DESCRIPTION CHANGED NOTE to "RH" ASSEMBLY SHOWN	REV. DATE 07/13/10	REV. BY: TDR	Scale: 1=1	Date: 04/11/00	DRAWN BY: DKM

F:\Engineering\Standard Parts\Applicator\3600\238\ASS-238-0180RL

ASS-238CE-0401

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\ 3600-CE\ASS-238CE-0401

TITLE: 3600CE HOUSING SCHEMATIC
DRAWN BY: DKM
Date: 10/22/08
Scale: 1=2
REV. BY: ES
REV. DATE: 04/01/2011
APPLICATOR SERIES: 3600-CE
APPLICATOR WIDTH(S): 7.5"
GROUP: HOUSING
REV. DESCRIPTION: ADDED AUX. PORT DIAGRAM
REV: 3

THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

6 AMP
IEC CONNECTOR AND FILTER
BLK / BLU / GRN/YEL / PE

24 VDC POWER SUPPLY
REV 1

FAN RED / BLK

DISPLAY
GRN/YEL — C1/1
BLU — C1/9
BRN — C1/7
BRN — C1/5
RED — C1/3
ORG — C1/2
ASS-238CE-0405

REWIND MOTOR 238-0428XXX M1 P2
CAP
SS1

CONTROLLER

X0-7
COM — BRN
IN0 — PROD. DET. — W/PUR — 10
IN1 — TAMP HOME — W/BLK — 30
IN2 — TAMP EXTEND — W/RED — 31
IN3 — LOW LABEL — W/BLU — 11
IN4 — VACUUM SWITCH — W/GRY — 32
IN5 — END OF WEB — W/YEL — 12
IN6 — INHIBIT — W/GRN — 13
IN7 — JOG — W/ORG — 33
COM — BRN

X8-F
COM — BRN
IN8 — LOW RIBBON — 238-0402-G — W/GRY — 40
IN9 — NO MEDIA — 238-0402-Y — W/YEL — 41
INA — PRINT END — 238-0402-P — W/PUR — 42
INB — PRINTER READY — 238-0402-B — W/BRN — 43
INC — EXT. PRINT — W/RED — 14
IND — SPARE — W/BLK — 15
INE — SPARE — W/BLU — 16
INF — SPARE — W/GRN — 17
COM — BRN

Y0-7
+24V — BRN
OUT0 — TAMP VALVE — YEL — 34
OUT1 — BLOW VALVE — GRY — 35
OUT2 — ASSIST VALVE — PUR — 36
OUT3 — SPARE VALVE — ORG — 57
OUT4 — REWIND MOTOR — WHT — 38
OUT5 — SYSTEM READY — W/YEL — 18
OUT6 — WARNING ALARM — PINK — 19
OUT7 — CRITICAL ALARM — RED — 20
0VDC — BLU

Y8-F
+24V — BRN
OUT8 — PRINT START — PINK — 44
OUT9 — REISSUE — YEL — 45
OUTA — TAMP HOME — W/BLK — 21
OUTB — LBL ON PAD — WHT — 22
OUTC — SPARE OUTPUT — GRY — 23
OUTD — SPARE OUTPUT — PUR — 24
OUTE — SPARE OUTPUT — RED — 25
OUTF — RESERVED
0VDC — BLU

VALVE BANK
TAMP — YEL — C9/1
BLOW — GRY — C9/3
ASSIST — PUR — C9/2
SPARE — ORG — C9/4
GRN/YEL — C9/8 / C9/6
WHT / BRN

PRODUCT DETECT
C4/2 — WHT
C4/1 — BRN
C4/3 — BLU

LOW LABEL
C5/5 — GRY — 1
C5/1 — BRN
C5/3 — BLU

END OF WEB
C6/1 — BRN
C6/3 — BLU
C6/2 — WHT — 12
JOG — BLU

C7/1 — BRN — 4
C7/2 — WHT — XX APPLICATION SPECIFIC SEE BELOW
C7/3 — BLU — 8
C7/4 — BLK
C7/5 — GRN/YEL — DO NOT CUT

REV 3 AUX. PORT INSTALL ONLY WHEN REQUIRED
TAMP EXTEND(RETURN) XX = 31
TAMP HOME XX = 30

PRINT ENGINE
(C10B) SERIAL PORT (C10) (ASS-238-0405)
(C11B) PARALLEL PORT (C11) (EY244-MF)
(C12B) INTERFACE PORT (C12) (THIS CABLE WILL CHANGE WITH PRINTER)

ALARM
GRN/YEL — C8/7 — GRD
BRN — C8/3 — 24 VDC
W/YEL — C8/4 — READY — 18
PINK — C8/5 — WARNING — 19
RED — C8/6 — CRITICAL — 20

I/O
BLU — C2/1 — 0 VDC
BRN — C2/2 — 24 VDC
W/YEL — C2/3 — SYSTEM READY — 18
PINK — C2/4 — WARNING ALARM — 19
RED — C2/5 — CRITICAL ALARM — 20
W/BLK — C2/7 — TAMP HOME — 21
WHT — C2/8 — LABEL ON PAD — 22
GRY — C2/9 — BLOW VALVE — 35
PUR — C2/10 — ASSIST VALVE — 36
W/PUR — C2/11 — PRODUCT DETECT — 10
W/GRN — C2/12 — INHIBIT — 13
W/RED — C2/13 — EXTERNAL PRINT — 14

XX -TB1 TERMINALS					
TB1-1	24 VDC	TB1-16	SPARE INPUT	TB1-31	TAMP EXTEND INPUT
TB1-2	24 VDC	TB1-17	SPARE INPUT	TB1-32	VACUUM SWITCH
TB1-3	24 VDC	TB1-18	SYSTEM READY	TB1-33	JOG INPUT
TB1-4	24 VDC	TB1-19	WARNING ALARM	TB1-34	TAMP VALVE
TB1-5	0 VDC	TB1-20	CRITICAL ALARM	TB1-35	BLOW VALVE
TB1-6	0 VDC	TB1-21	TAMP HOME OUTPUT	TB1-36	AIR ASSIST VALVE
TB1-7	0 VDC	TB1-22	LABEL ON PAD OUTPUT	TB1-37	SPARE VALVE
TB1-8	0 VDC	TB1-23	SPARE OUTPUT	TB1-38	REWIND MOTOR
TB1-9		TB1-24	SPARE OUTPUT	TB1-39	
TB1-10	PRODUCT DETECT	TB1-25	SPARE OUTPUT	TB1-40	LOW RIBBON
TB1-11	LOW LABEL	TB1-26	24 VDC	TB1-41	NO MEDIA
TB1-12	END OF WEB	TB1-27	24 VDC	TB1-42	PRINT END SIGNAL
TB1-13	INHIBIT	TB1-28	0 VDC	TB1-43	PRINTER READY SIGNAL
TB1-14	EXTERNAL PRINT	TB1-29	0 VDC	TB1-44	PRINT SIGNAL
TB1-15	SPARE INPUT	TB1-30	TAMP HOME INPUT	TB1-45	REISSUE

XX -TB2 TERMINALS (AC POWER)			
TB2-1	AC/LINE POWER	TB2-4	AC/NEUTRAL POWER
TB2-2	AC/LINE POWER	TB2-5	AC/NEUTRAL POWER
TB2-3	AC/LINE POWER	TB2-6	AC/NEUTRAL POWER

WEB PATH DIAGRAM
3600CE SERIES R.H. STANDARD TAMP PRINTER APPLICATOR
WITH 12" UNWIND

12"∅ UNWIND DISK

UNWIND ASSEMBLY

INSIDE WIND

OUTSIDE WIND

UNWIND MOUNTING BRACKET

DANCER ARM

WEB PATH

JOG

U-ARM MOUNT

VALVE BANK

TAMP NOSE ASSEMBLY

REWIND ASSEMBLY

REWIND MANDREL

LABEL MANIFOLD

LABEL PAD

7.25"∅ REWIND DISK

AIR ASSIST TUBE

PRINT ENGINE
(RIBBON WEB PATH
DIAGRAM INSIDE)

POWER

POWER   ONLINE
DISPLAY   LINE
LABEL   RIBBON   ERROR   FEED

WEB PATH DIAGRAM
3600CE SERIES L.H. STANDARD TAMP PRINTER APPLICATOR
WITH 12" UNWIND

UNWIND ASSEMBLY

12.00"∅ UNWIND DISK

INSIDE WIND

OUTSIDE WIND

UNWIND MOUNTING BRACKET

DANCER ARM

WEB PATH

U-ARM MOUNT

JOG

ONLINE POWER
LINE DISPLAY
FEED
ERROR RIBBON LABEL

POWER

TAMP NOSE ASSEMBLY

REWIND ASSEMBLY

VALVE BANK

LABEL MANIFOLD

LABEL PAD

REWIND MANDREL

AIR ASSIST TUBE

7.25"∅ REWIND DISK

PRINT ENGINE
(RIBBON WEB PATH
DIAGRAM INSIDE)

WEB PATH DIAGRAM
3600CE SERIES R.H. EXTENDED TAMP PRINTER APPLICATOR
WITH 12" UNWIND

12"Ø UNWIND DISK

UNWIND ASSEMBLY

INSIDE WIND

OUTSIDE WIND

UNWIND MOUNTING BRACKET

DANCER ARM

VALVE BANK

REWIND ASSEMBLY

REWIND MANDREL

7.25"Ø REWIND DISK

PRINT ENGINE (RIBBON WEB PATH DIAGRAM INSIDE)

AIR PASSAGE TUBE

JOG

POWER   ONLINE
DISPLAY LINE FEED
LABEL RIBBON ERROR
POWER
0

U-ARM MOUNT

EXTENDED TAMP NOSE ASSEMBLY

LABEL MANIFOLD

LABEL PAD

AIR ASSIST TUBE

PEEL EDGE

WEB PATH DIAGRAM
3600CE SERIES L.H. EXTENDED TAMP PRINTER APPLICATOR
WITH 12" UNWIND

12"Ø UNWIND DISK

UNWIND ASSEMBLY

INSIDE WIND

OUTSIDE WIND

UNWIND MOUNTING BRACKET

DANCER ARM

JOG

ONLINE POWER
FEED LINE DISPLAY
ERROR RIBBON LABEL

POWER

U-ARM MOUNT

EXTENDED TAMP
NOSE ASSEMBLY

REWIND ASSEMBLY

VALVE BANK

LABEL MANIFOLD

REWIND MANDREL

LABEL PAD

AIR ASSIST TUBE

AIR PASSAGE TUBE

7.25"Ø REWIND DISK

PEEL EDGE

PRINT ENGINE
(RIBBON WEB PATH
DIAGRAM INSIDE)

WEB PATH DIAGRAM
3600CE SERIES R.H. SWING TAMP PRINTER APPLICATOR
WITH 12" UNWIND

12.00"Ø UNWIND DISK

UNWIND ASSEMBLY

INSIDE WIND

OUTSIDE WIND

DANCER ARM

UNWIND MOUNTING BRACKET

WEB PATH

JOG

U-ARM MOUNT

POWER

POWER ONLINE
DISPLAY LINE FEED
LABEL RIBBON ERROR

SWING TAMP NOSE ASSEMBLY

VALVE BANK

REWIND ASSEMBLY

7.25"Ø REWIND DISK

REWIND MANDREL

PRINT ENGINE
(RIBBON WEB PATH
DIAGRAM INSIDE)

AIR ASSIST TUBE

LABEL PAD

LABEL MANIFOLD

WEB PATH DIAGRAM
3600CE SERIES L.H. SWING TAMP PRINTER APPLICATOR
WITH 12" UNWIND

12.00"Ø UNWIND DISK

UNWIND ASSEMBLY

INSIDE WIND

OUTSIDE WIND

DANCER ARM

UNWIND MOUNTING BRACKET

WEB PATH

JOG

U-ARM MOUNT

SWING TAMP NOSE ASSEMBLY

ONLINE POWER
FEED LINE DISPLAY
POWER
ERROR RIBBON LABEL

VALVE BANK

REWIND ASSEMBLY

7.25"Ø REWIND DISK

LABEL MANIFOLD

LABEL PAD

AIR ASSIST TUBE

REWIND MANDREL

PRINT ENGINE
(RIBBON WEB PATH
DIAGRAM INSIDE)

3600CE DISPLAY FLOW CHART

Factory Default Area

Factory Default

Reset to Factory Default   Exit Without Changing

LOADING FACTORY DEFAULT VALUES!

.... Please Wait........

3600CE Applicator Software Version 3600CE-2b5.4 (03-08-2011)

The main menu screen will appear   after 10 to 45 seconds. This time is dependant upon the printer type.

After the Factory Defaults are loaded the Startup Screen will appear again.

3600CE Applicator Software Version 3600CE-2b5.4 (03-08-2011)

Setup Menu   Jog

Alarm Reset

Label Placement

0.001 Sec

(0.001 - 5.000)

Tamp Disabled
Label Rate 0

Tamp Override

Tamp Disabled

13-1

MAIN MENU

Jog Key

Alarm Reset

Setup Menu

Jog

Alarm Reset

Label Placement

0.000 Sec

(0.001 - 5.000)

Tamp Enabled
Label Rate 0

Status Window

Tamp Enabled

Tamp Enable/ Disable

Setup Menu

Jog

Alarm Reset

Label Placement

0.100 Sec

(0.001 - 5.000)

1	2	3	E
4	5	6	S
7	8	9	C
.	ENTER		0

Label Placement Keypad

Tamp Enable/Disable Keys

Setup Menu

Tamp Enabled

Main Menu

Configuration Menu

Air Blast 0.040 Sec (0.005-1.000)
Extended Air Assist 0.001 Sec (0.001-1.000)
Detector LockOut 0.000 Sec (0.000-20.000)
Tamp Extend 0.500 Sec (0.001-5.000)
Tamp Retract 0.600 Sec (0.001-5.000)

1	2	3	E
4	5	6	S
7	8	9	C
.	ENTER		0

0.040 Sec (0.005-1.000)
0.001 Sec (0.001-1.000)
0.000 Sec (0.000-20.000)
0.400 Sec (0.001-5.000)
0.500 Sec (0.001-5.000)
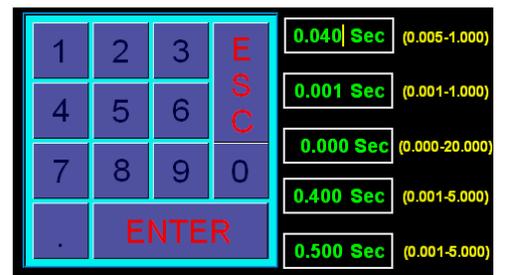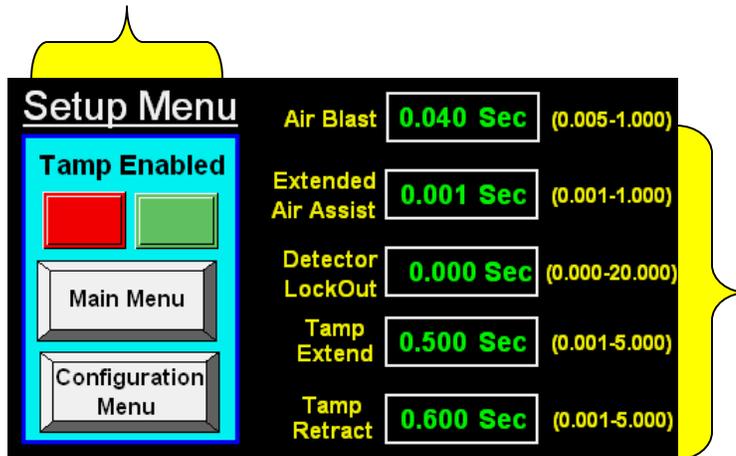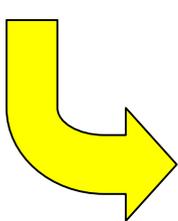
Setup Keypad

Setup Menu Screen
Section 3 pg. 3-5

13-2

Return to the Setup Menu and Disable the Tamp in order gain access to the Configuration Menu
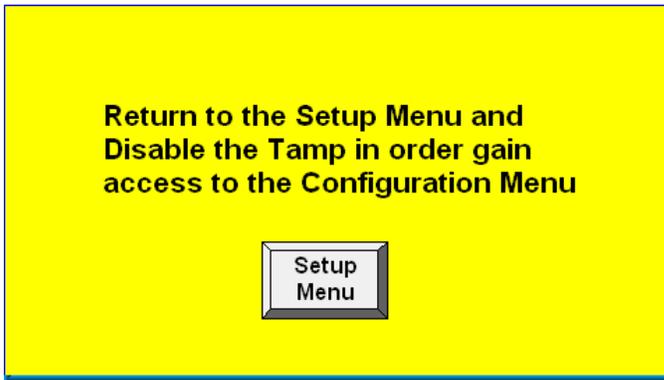
Setup Menu

The Tamp must be disabled in order to access the Configuration Menu. This screen will appear if the Tamp is Enabled. Press the "Setup" key to return to the Setup Menu to Disable the Tamp.

Setup Menu

Tamp Disabled

Main Menu

Configuration Menu

Air Blast 0.040 Sec (0.005-1.000)

Extended Air Assist 0.001 Sec (0.001-1.000)

Detector LockOut 0.000 Sec (0.000-20.000)

Tamp Extend 0.500 Sec (0.001-5.000)

Tamp Retract 0.600 Sec (0.001-5.000)

After Disabling the Tamp and then Pressing the Configuration Key, The Password Area Screen appears. (See next page)
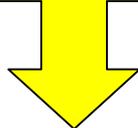
Password Screens
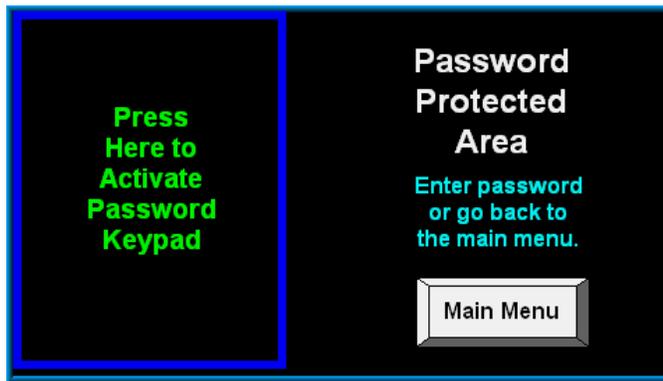
Press the Green Text to activate Keypad
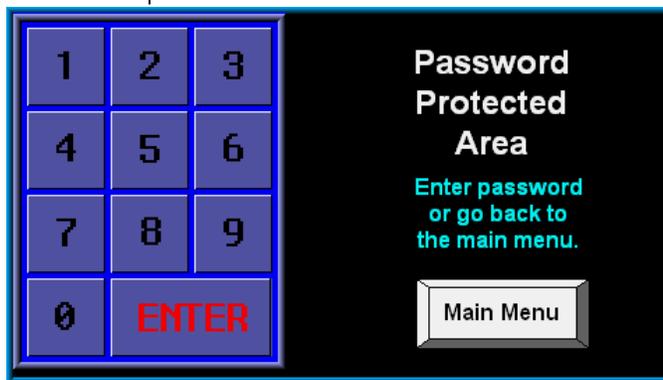
Press "1800" for the Password then press Enter
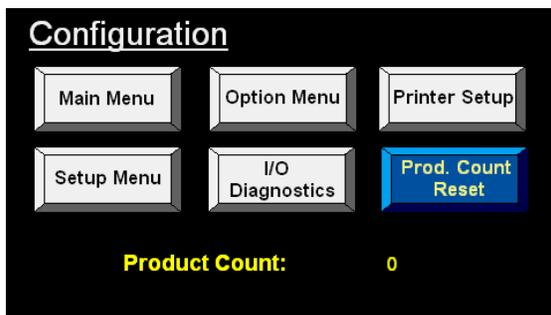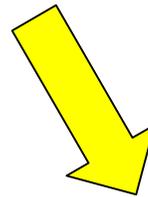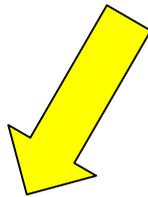
If the Password was entered correctly the Configuration Menu will appear. The next page will detail the keys shown here.

If the Password was not entered correctly the Wrong Password screen will appear briefly then the Main Menu screen will appear.

Configuration Menu
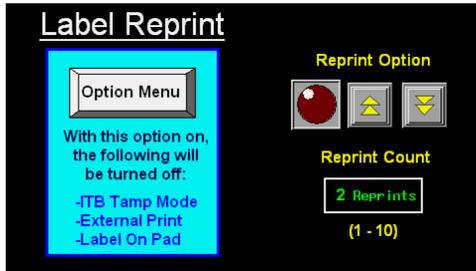
Label Reprint Screen
See pg. 5-11
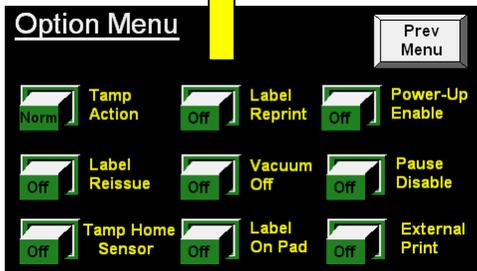
Option Menu Screen
See pgs. 5-10 thru 5-13
for Option Descriptions
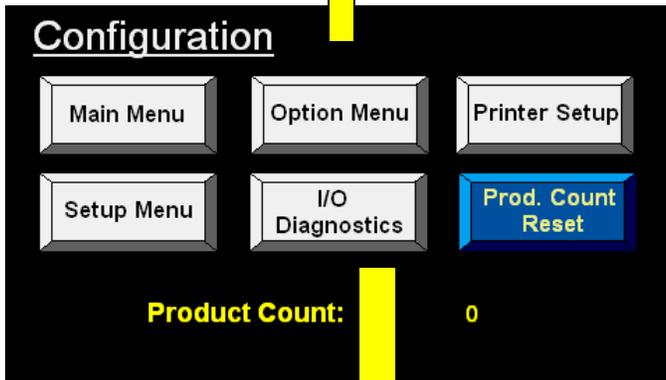
Printer Setup Screen
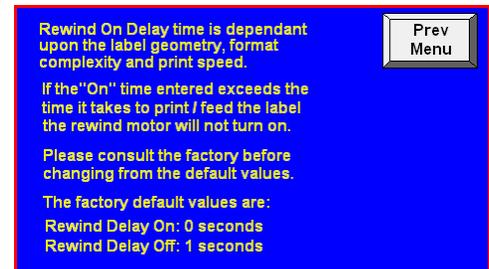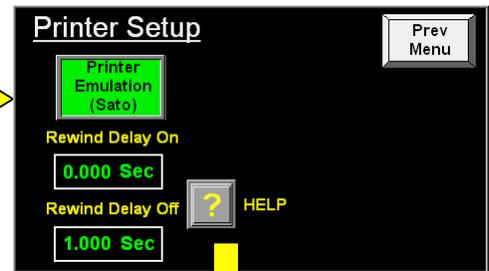
I/O Diagnostics screen path is shown on the next page.

13-5

I/O Diagnostics

**Lamps will turn Green
when the input is "ON"**

Prev Menu	Tamp Extend	End of Web
Product Detect	Low Label	Inhibit
Tamp Home	Vacuum Switch	Jog

Prev Menu	Rewind Motor	Ready Signal
	Tamp Valve	Assist Valve	Warning Alarm
	Blow Valve	Spare Valve	Critical Alarm

I/O Diagnostic

Setup Menu

X0-X7 Inputs   Y0-Y7 Outputs

X8-XF Inputs   Y8-YF Outputs

Prev Menu	Print End	Spare
Low Ribbon	Print Ready	Spare
No Media	External Print	Spare

**When the output is toggled "ON"
the Lamp will turn green .**

Prev Menu	Tamp Home	Spare Output
Print Start	Label On Pad	Spare Output
Reissue Option	Spare Output	Not Connected

13-6