



A Barry-Wehmiller Company

OPERATION AND SERVICE MANUAL

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**PFIZER GLOBAL MANUFACTURING
MODEL 4000PW
SERIAL NUMBER 2100
PROJECT # RC005825**



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Section 1 Introduction

1.1 Purpose of Manual

The purpose of this manual is to provide the machine operators and maintenance personnel with the necessary information to set up, operate, and maintain the ACCRAPLY pressure-sensitive Labeler.

Section 2 describes the Labeling System , and System Operation.

Section 3 lists general Safety Precautions and highlights specific Cautions and Warnings that must be observed during operation of the machine.

Section 4 presents the machine Installation Instructions, including Handling and Shipping Information, Service Requirements, and Assembly Procedures.

Section 5 provides the Setup and Changeover procedures. It is broken down into separate sub-sections covering first the Applicator Head, and then the mode(s) of label application (i.e. wraparound). If the machine has a Printer installed, this component has its own sub-section.

Note

In the interest of simplicity, some of the how-to of the adjustments that are required to be made while covering this material, are either assumed to be evident or are detailed in Section 7, where the machine's components are covered in more detail.

Section 6 presents the Operator Controls, including the Applicator Head Control Panel, the Main Control Panel, and Air Pressure Regulators (if used).

Section 7 details the operation and adjustment features of each of the machine's primary assemblies, including those that are factory preset and will not need adjusting unless the assembly is repaired and/or replaced, etc. Much of the information presented in this section will not be needed by the machine operator for everyday operation of the machine.



Section 8 is devoted to Troubleshooting guidelines, and Section 9 to recommended Maintenance Procedures.

Section 10 provides information on ordering spare parts from our Parts Department and also requesting service from our Service Department.

Note

In some cases the purchased components on the Labeler have additional data sheets and/or a user manual accompanying this Operation and Service Manual. Refer to those sources for information not covered in this Manual.

Note

Product names mentioned herein are for identification purposes only and may be Trademarks and or Registered Trademarks of their respective companies.



Section 2 Machine Description

2.1 Model SP10 Labeling System

ACCRAPLY's Servo SP10 Applicator delivers the high torque and speed needed to apply today's demanding applications. This applicator is perfect for extremely accurate, continuous-duty, primary labeling at speeds up to 3000" per minute. The applicator is made from the highest quality anodized aluminum and stainless steel components. Setup and operation of the Servo SP10 Applicator has been made extremely easy. The simplified drop from the top web path and bottom edge referencing provide consistent tracking and easy threading. This applicator also includes missing label compensation. The controls sense if a label is missing on the label web and stop the applicator in the correct index position for consistent label dispensing.

This applicator was developed to apply a wide variety of label materials with special features for the latest film constructions. The unique ACCRAPLY servo indexing drive provides time to motion compensation with velocity lock speed match control and velocity offset speed ratio control. Velocity lock control links the applicator dispense to the travel of the conveyor. Velocity offset adds a ratio to the velocity locked dispense, which allows the label dispense to be electronically "geared" faster or slower than the conveyor. Velocity offset is extremely valuable for difficult label applications. These features enable adjustable speed operation of the labeling system and outstanding label control.

The interactive touch screen control system displays all applicator setup and changeover information and stores the setup information for each label for you. Dedicated menu buttons are always accessible for the most common functions to provide easy navigation through higher-level menu functions. Up to 99-label setup recipes can be stored in the touch screen control panel's memory. Label position on a product can be easily changed during operation without the need for any tools. The operator simply needs to step through the applicator setup numbers and change the desired setting.



Section 3 Safety Procedures

3.1 General Guidelines

1. Read and understand your Operations and Service manual. Be sure you know how to operate the Labeler before using it.
2. Never operate the Labeler unless all components are working properly.
3. Don't use the Labeler to label product other than those it was designed to label.
4. Never operate the Labeler at faster speeds than those for which it was designed.
5. Keep a regular maintenance schedule. A well maintained machine operates longer and more efficiently.

3.2 Cautions and Warnings

Caution

is used to indicate that failure to observe can cause damage to equipment.

Warning

is used to indicate that failure to observe can cause damage to equipment and/or injury to personnel.

1. Never operate the Labeler unless it has been electrically grounded.
2. Always lock-out power when working on the drive system, or when placing your hands near a potentially moving surface. Keep hands away from all pinch points during machine operation.
3. Do not remove protective covers and/or guards unless for maintenance or repair. Be sure to replace them when the work is completed.
4. When performing maintenance inside the Applicator Head enclosure, use extreme care to avoid contact with power supply voltages.



5. Keep hands away from all pinch points during machine operation, especially between the knurled and pressure rollers on the Applicator Head.
6. Never attempt to pull product from the conveyor while the conveyor is moving. STOP the conveyor first.



Section 4 Installation Instructions

4.1 Handling and Shipping Information

Warning

Be careful when lifting the Applicator Head that it does not tilt to one side and possibly fall over. One side of the head may be heavier due to installed equipment.

If the machine must be lifted to install the temporary casters, be sure to place the lifting device under the lower frame members.

After positioning the Labeler (wherever its going to be used), remove all banding and wrapping materials (including plastic tie wraps, cloth bands, and padding, etc.) that were installed for shipping.

4.2 Service Requirements

Each labeling machine has electrical and may have air (CMF) requirements. These requirements are listed on a plate (refer to figure 4.2-1) that is mounted on the machine - usually on the electrical box or the machine base. The actual machine electrical and air connections vary with each machine design. In general, the electrical connection will be 117VAC Grounded Wall Plug or installed service ("hard wired") to the main electrical enclosure. If the machine has air requirements, the main air connection will usually be a 1/4" Poly Flow Quick-Disconnect located on the MAIN AIR filter at the infeed end of the labeler. Since machine designs vary the operator can check his/her machine and then the list the actual machine data in the table 4.2-2 that follows the machine plate (refer to figure 4.2-1).



Table 4.2-1

Machine Plate

The diagram shows a rectangular machine plate with the Accraply logo at the top center. Below the logo is the text "CRAFTED WITH QUALITY AND PRIDE". The plate contains several fields for technical specifications, each with a callout box explaining the field:

- MODEL**: Accraplys' assigned model number
- VOLTS**: The labeling machine operating voltage
- AIR CFM**: Derived by adding the CFM air requirement of all devices installed
- AMPS**: The labeling machine operating amperage
- SERIAL NO**: Accraplys' assigned serial number
- HZ**: The labeling machine electrical hertz
- PH**: The labeling machine electrical phase

The plate also includes fields for FLA, PSI, SCHEMATIC NO, SHORT CKT RATE, and MFG DATE, along with the text "PLYMOUTH, MINNESOTA U.S.A." at the bottom.

Operator Log Of Machine Data

Table 4.2-2

SERVICE REQUIREMENTS		
Requirement	Capacity / Characteristics	Location and Type Connection
ELECTRICAL	_____ VAC, _____ Amp	117VAC Grounded Wall Plug
	_____ Phase, _____ Hz	or Install Service to Main Electrical Enclosure
AIR (If used on machine)	_____ CFM at _____ PSI	1/4" Poly Flow Quick-Disconnect located on the MAIN AIR filter at _____ _____ _____

Section 5 Setup and Changeover Procedures

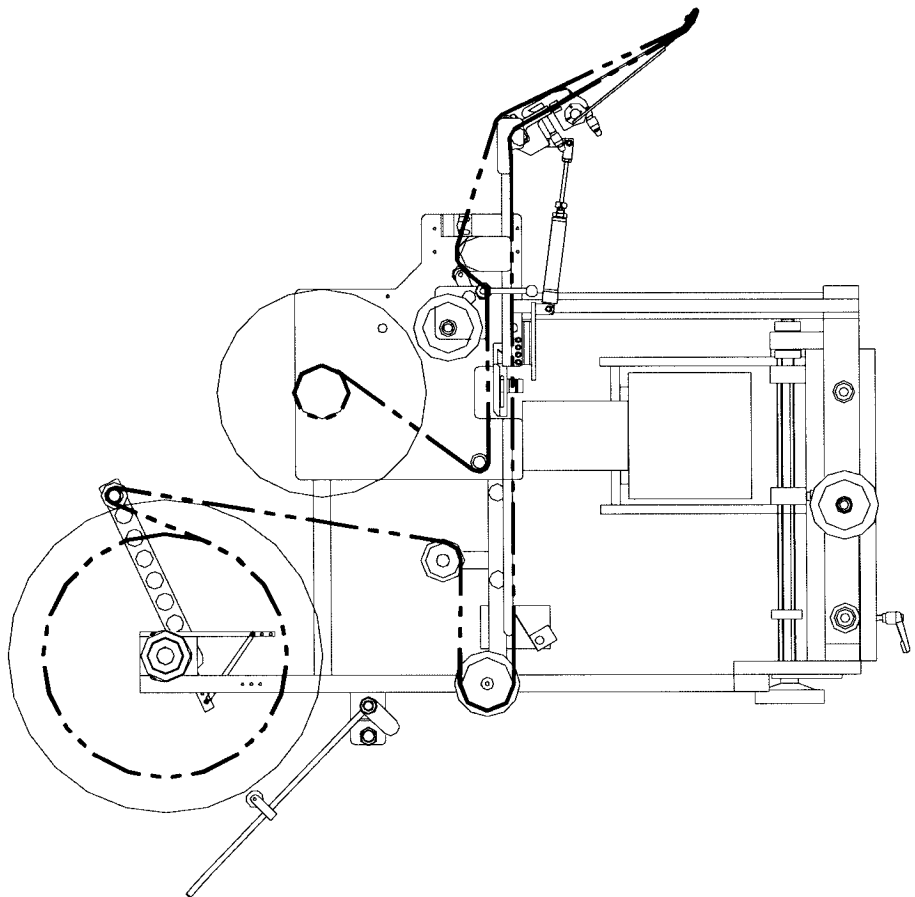
5.1 Applicator Head

5.1.1 Label Threading

Note

The label wipers must not restrict the movement of or scratch the labels, but must be tight enough to provide consistent flat passage of the labels through the applicator head.

Figure 5.1.1-1

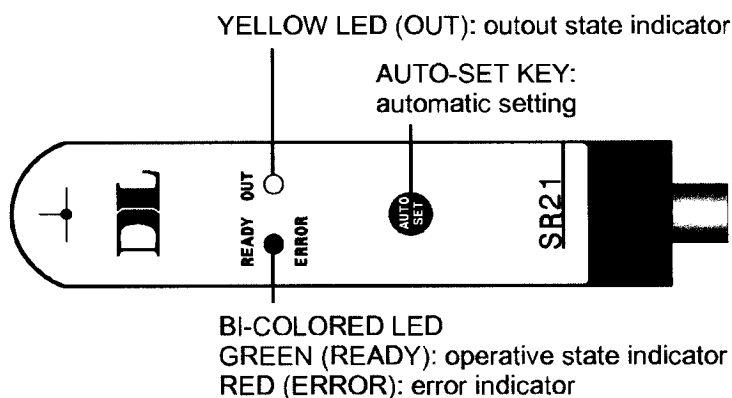


5.1.2 Label Sensor

Function & Operation

The Label Sensor (refer to Figure 5.1.2-1) is a critical component in the labeling process because it is responsible for providing the signal which stops each label dispense.

Figure 5.1.2-1



The labels are threaded through the Label Sensor's probe as they pass from the supply roll to the peeler plate. The sensor emits an infra-red light through the liner (web) and label into the receiver. The photoelectric sensor involves differentiating between two received light levels. The condition with the higher received light level (web only) is referred to as "light", and the condition with the lower received light level (web and label combination) as "dark".

When setup properly, the sensor energizes the load output when a transition from "light" to "dark" is sensed. The sensor's output signal is used by the Applicator Head Control Panel to stop the label dispense.

Setup

1. Turn the Applicator Head on.
2. Position the most transparent portion of the label in the sensor slot using the reference marks on the tip for alignment (refer to Figure 5.1.2-2).
3. Press and hold the AUTO SET key till the green READY LED turns off, this starts the acquisition phase of the label. The label must not be moved till the green READY LED blinks.

4. Next, position only the web (space between the labels) in the sensor slot using the reference marks on the tip for alignment (refer to Figure 5.1.2-3).

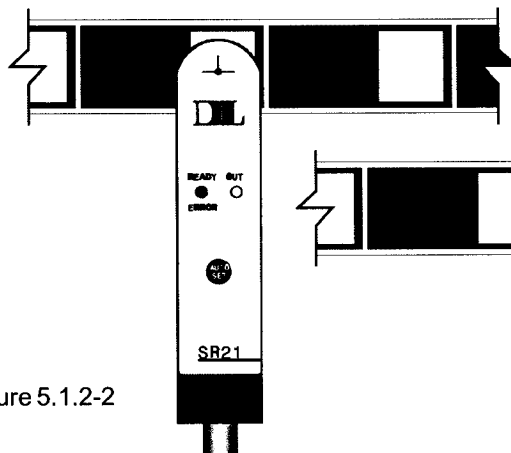


Figure 5.1.2-2

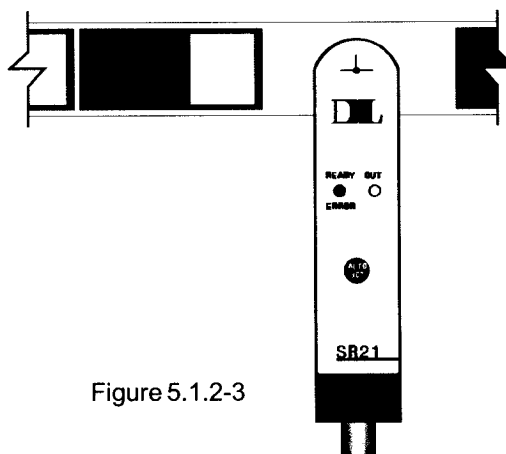


Figure 5.1.2-3

5. Press and hold the AUTO SET key till the green READY LED turns off, this starts the acquisition phase of the liner. The liner must not be moved till the green READY LED turns on continuously, indicating the setting is completed and the sensor is ready.

Error Messages

Alternate blinking of the green READY LED and the red ERROR LED indicates that the contrast between the label and liner is insufficient, or that the setting is incorrect. Repeat the sensor setting operation.

The red ERROR LED blinking indicates the output is in protection mode because of a short circuit. As soon as the cause of the short circuit is removed, the output reactivates and the red ERROR LED turns off.

The red ERROR LED continuously on indicates the sensor is damaged and must be replaced.

5.1.3 Product Sensor

Function & Operation

The Product Sensor is a critical component in the labeling process because it is responsible for sensing the product on the conveyor and subsequently initiating the dispense of the label.

The opposed beam Product Sensor (see Figure 5.1.3-1) consists of a separate emitter and receiver fiber optic positioned directly across from each other just behind the Applicator peeler plates. When aligned properly, an invisible infra-red light beam is emitted across the conveyor to the receiver optic. As the product passes in front of the Sensor (see Figure 5.1.3-2) the light beam is broken momentarily, causing a corresponding output signal to occur. This signal is used by the Applicators to initiate the dispense of the label.

Figure 5.1.3-1

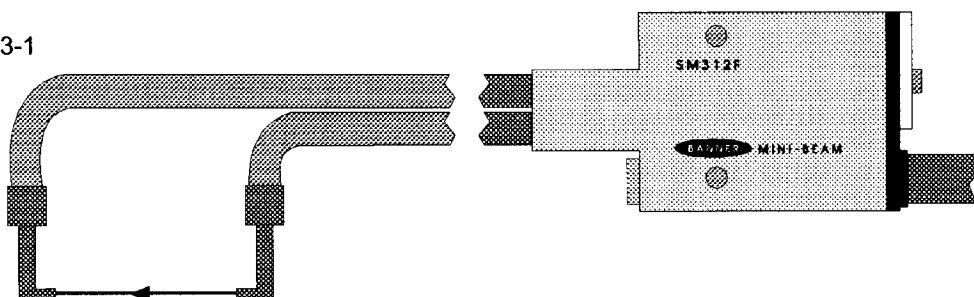
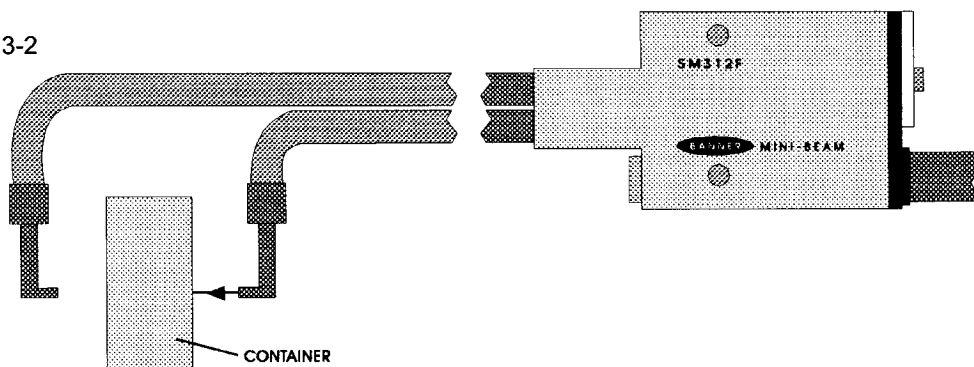


Figure 5.1.3-2



Adjustments
Refer to Figure 5.1.3-3

Sensitivity

The sensitivity of the Sensor to the density or color of a product is adjusted with the sensitivity control potentiometer on the Sensor module. The red indication LED on the back of the Sensor indicates the output is ON.

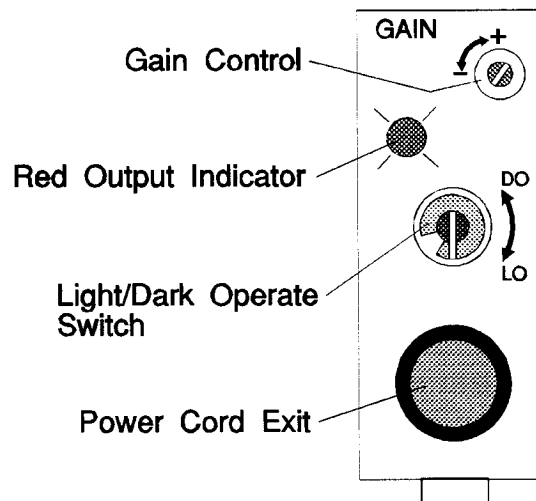
Light/dark operate

The Sensor module also has a light or dark-operate selector potentiometer on the back side for setting the operating mode. Full clockwise is the light-operate mode. To avoid erroneous outputs, be sure the selector potentiometer is always turned either fully clockwise or counter-clockwise.

Setup

1. Mount the Sensor within 1 product pitch of the peeler tip (a product pitch is the distance between the same feature on two products, such as leading edge to leading edge,). Also, mount the Sensor so that it senses off a point on the product which never varies, this will ensure consistency of the timing between when the Sensor initially “sees” the product and when the label is dispensed.
2. Begin with the emitter (either optic) mounted securely in place. Align the receiver to the emitter using line-of-sight.

Figure 5.1.3-3





3. Apply power to the Sensor. The alignment indicator should now be on.
4. Reduce the sensitivity enough to cause the alignment indicator LED to pulse at a slow rate. Now move the receiver up-down-right-left (including angular rotation) to find the center of the area where the indicator pulses at its fastest rate. Secure the receiver in this position.
5. Increase the sensitivity to maximum. Place the product to be detected at the sensing position. If the LED turns off, the setup is complete.

Note

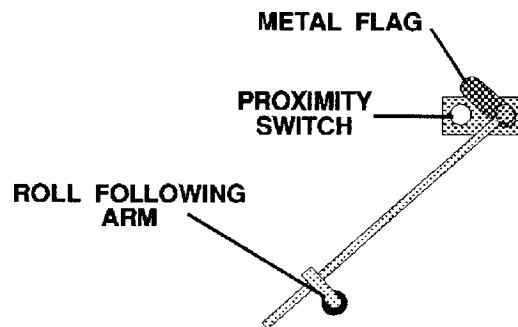
If it does not turn off, the reason is probably because the beam is burning through the product. Reduce the sensitivity until the LED just turns off. Remove the product and be sure the LED comes on "solidly", if not, another type of Sensor must be used.

5.1.4 Low Label Roll Detection

Function & Operation

The low roll detection system is responsible for warning the machine operator when a label supply roll is low on labels.

Figure 5.1.4-1



The low roll sensing device (see Figure 5.1.4-1), is an inductive proximity switch. An inductive alternating field is developed at the front of the sensing surface; when a metal object passes through the field, the oscillator creating the field turns off and the output switches.

The metal low roll flag is attached to the lower end of the roll following-arm; they trip the switch when the roll diameter decreases to the point where the flag passes in front of it.

When the switch is tripped the following events occur:

The text LOW ROLL HEAD #1 will be displayed in the RECENT FAULTS window on the CTC Touch Screen's MAIN SCREEN. The fault alarm is sounded.

To reset the error, push the FAULT RESET button once to turn off the fault alarm. Pushing the FAULT RESET button a second time (after the fault is corrected) will then reset the fault indications.



Adjustments

1. Proximity switch position

The metal flag must pass within 1/4" of the switch's inductive end. This adjustment can be made by loosening the barrel nuts attaching the sensor to its mounting bracket.

2. Flag position

The rotational position of the flag on the following-arm determines when the alarm will sound. This adjustment is made by loosening the set collar and rotating the flag to the desired position.

Setup

1. When the roll reaches the level at which you want it to trigger the alarm, loosen the flag set collar and rotate it until the alarm sounds. Lock the collar in place at this position.

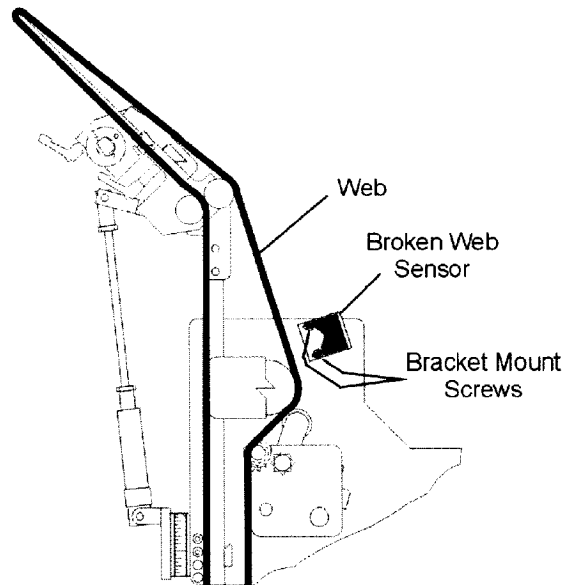
5.1.5 Broken Label Web Detection

Function & Operation

The broken web detection system is responsible for stopping the conveyor and warning the machine operator when the label web (liner) is broken.

The broken web detection sensor (refer to Figure 5.1.5-1) is a normally-closed convergent beam scanner mounted on the Applicator Head between

Figure 5.1.5-1



the peeler tip and the indexing rollers. The scanner emits a beam that reflects (converges) off the web present in front of it. As long as the web is present, the sensor is converged and the output is on. As soon as the web is removed (breaks), the beam no longer converges and the output turns off.

When the web breaks the following events take place:

The conveyor is shut down (unlatched)

The text BROKEN WEB HEAD #1 will be displayed in the RECENT FAULTS window on the CTC Touch Screen's MAIN SCREEN.

The fault alarm is sounded.

To reset the error, push the FAULT RESET button once to turn off the fault alarm. Pushing the FAULT RESET button a second time (after the fault is corrected) will then reset the fault indications.



Adjustments

Position

The scanner can be adjusted in and out from the web by loosening the two bracket mounting screws (refer to figure 5.1.5-1) and sliding it in the slotted mounting holes.

Setup

1. With the Applicator turned on, pull the scanner away from the web until the output lamp turns off.
2. Slowly move the scanner toward the web until the output just turns on. Tighten it in place.

5.2 Side Panel Labeling

Note

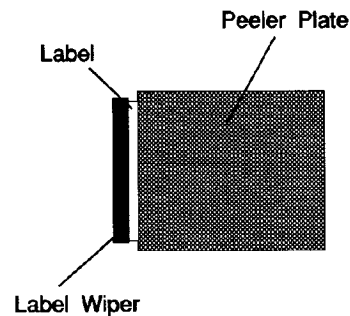
It is assumed at this point that the Applicator Head is threaded and the Label Sensor set up, and that the Product Sensor is set up. Turn the Head off and continue with the following procedures.

Note

It is assumed that the products are metered (spaced) and side-referenced as they pass the Applicator Head.

1. Turn the Applicator Head on. While jogging labels, adjust the LABEL FLAG (IN.) register, until length of the label flag extends about 1/8" beyond the end of the peeler tip (refer to Figure 5.2-1). Adjust the label wiper to extend about 1/8-1/4" beyond the flag.

Figure 5.2-1



The two diagrams on the right illustrate how the Head needs to be skewed in its frame for a flat-sided (top) and a diagonal-sided (bottom) product.

2. Position a product directly in front of the Applicator Head peeler tip.
3. Now adjust the peeler tip to within about 1/16" of the side of the product. Skew the Head in its frame so that the peeler tip is parallel with the side of the product (refer to Figure 5.2-2). Adjust the Head vertically (UP/DOWN) to position the label vertically on the product.
4. Run several products past the applicator (one at a time), using the PRODUCT DELAY (IN.) register to delay the dispense of the labels until they are properly positioned (i.e. centered) on the product.

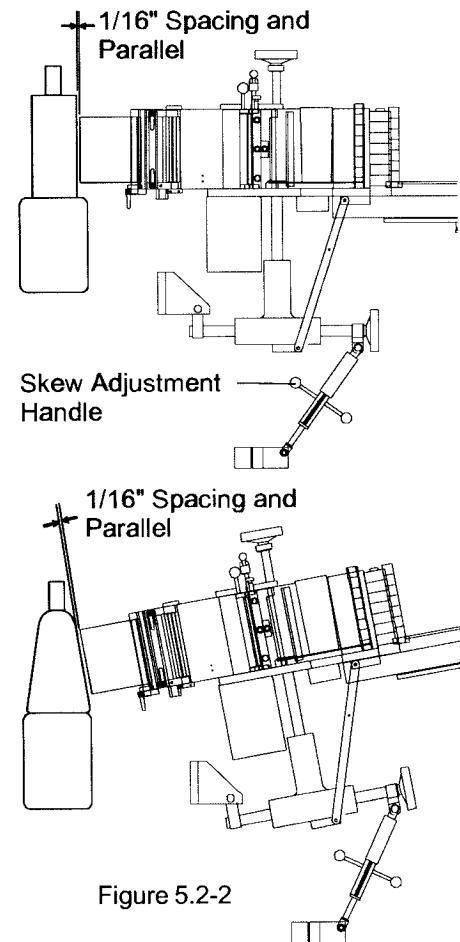


Figure 5.2-2

Section 6 Operator Controls

6.1 Main Control Panel

Figure 6.1-1

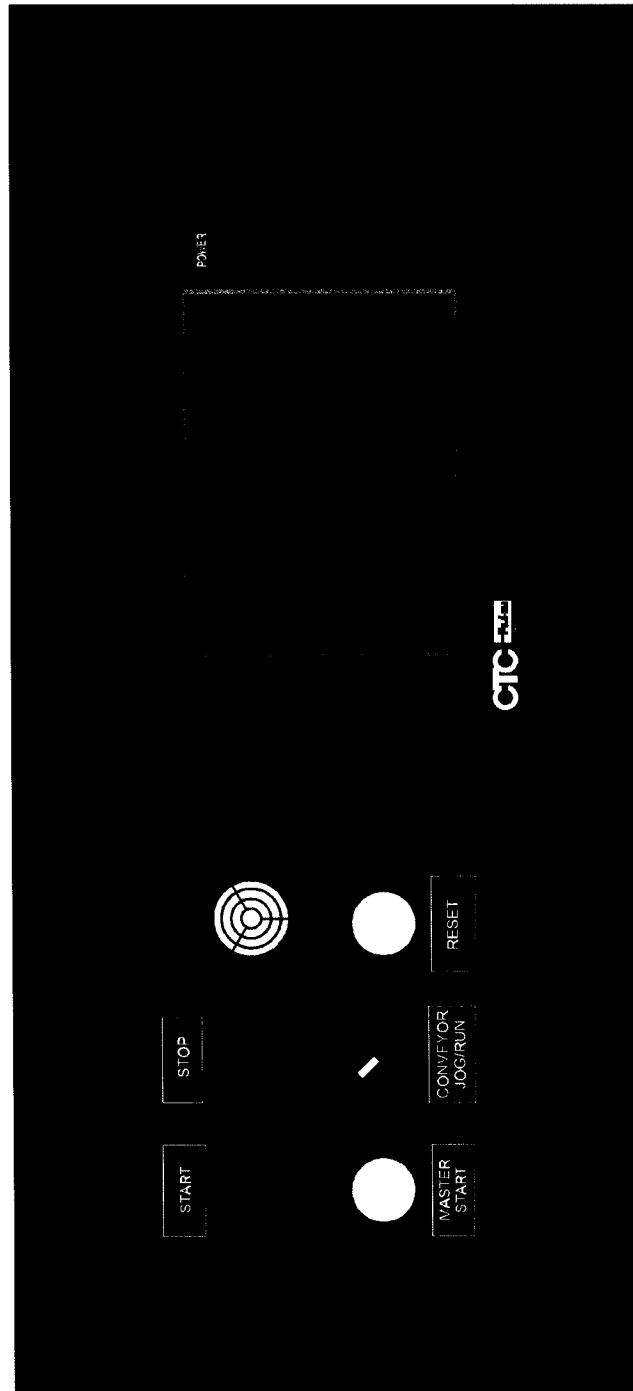


Table 6.1-1

MAIN CONTROL PANEL		
<i>Description</i>	<i>Function</i>	<i>Operation</i>
MAIN POWER	Switches incoming 117VAC to Labeler terminal strip	12 o'clock position = OFF 3 o'clock position = ON
CONVEYOR START	Either starts or jogs the conveyor, depending upon position of JOG/RUN switch	RUN = Push the green button in to operate JOG = Push the green button in and hold to operate
MASTER START	Connects power to the conveyor drive latch circuit	Push the green button in to operate (Switch is lit when latch circuit is active)
CONVEYOR STOP	Stops the conveyor	Push the red button in to operate
CONVEYOR JOG/RUN	Chooses whether the conveyor just jogs or starts when the CONVEYOR START switch is pressed	Clockwise = RUN Counterclockwise = JOG
LASER BYPASS * Not shown on panel drawing	Allows the machine to operate when the laser imprinting system is turned off Turn the function ON or OFF with a key	Clockwise =ON Counterclockwise =OFF
(FAULT) RESET	Resets an active machine fault indication	Push the yellow button in to operate
Fault Alarm (unmarked)	Audibly indicates an active machine fault	Alarm on = Active

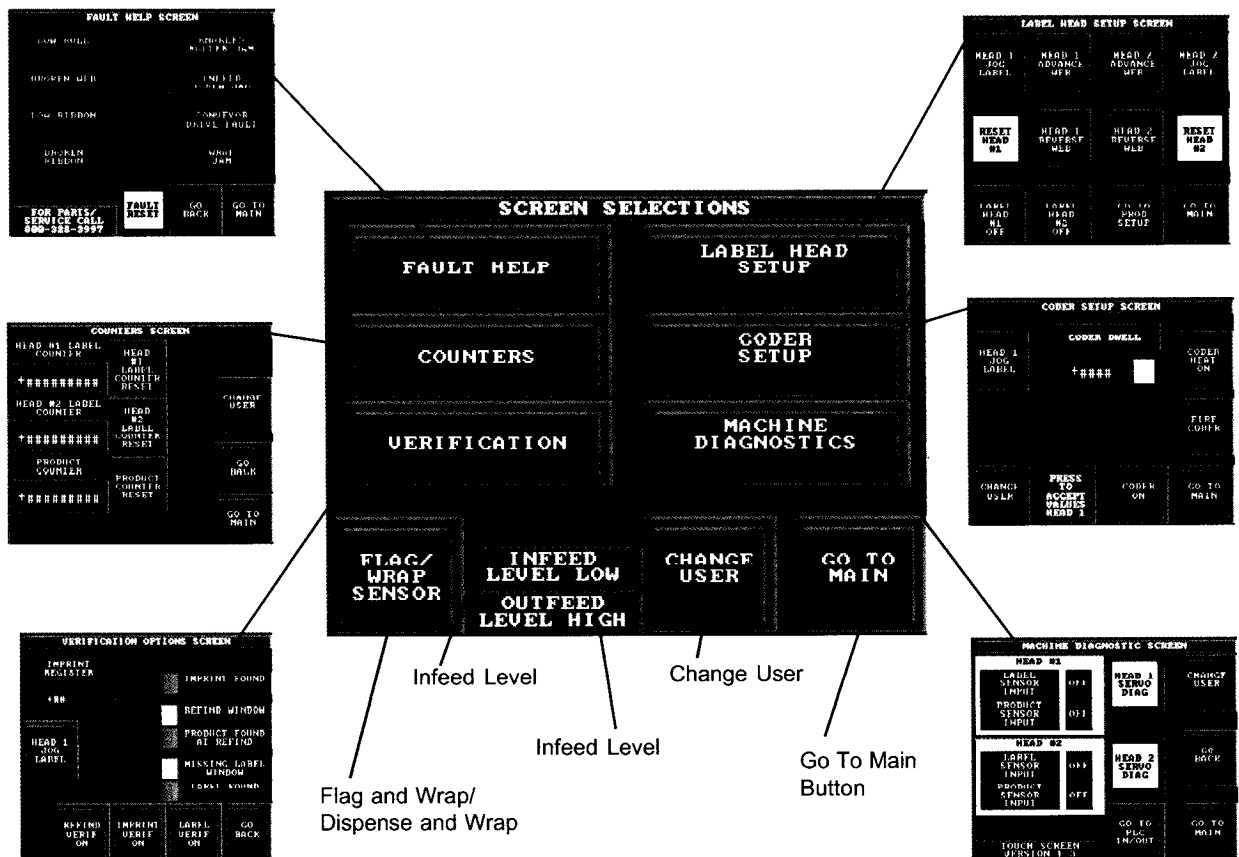
6.3 CTC Touch Screen

The CTC Touch Screen is used by the machine operator to make a majority of the adjustments required to operate, setup and changeover the Labeler for various product and label combinations.

The CTC Touch Screens use touch screen “buttons” and screen displays to activate machine functions, display information and to move from screen to screen. Some buttons appear and disappear as other buttons are pressed.

For example:

1. Pressing any one of the of the six large buttons on the Screen Selections Screen below, opens the CTC to a new screen. Press the button labeled FAULT HELP opens the FAULT HELP SCREEN. This screen also has displays that are used to activate machine functions, display information and to move from screen to screen. Some buttons on these screens also appear and disappear as buttons are pressed.



2. Press the FLAG/WRAP SENSOR button to switch the Labeler between the Flag and Wrap product sensor and the Dispense and Wrap product sensor (DISP/WRAP). The button will then read DISP/WRAP SENSOR Press it again to return to the Flag and Wrap product sensor.
3. INFEED LEVEL LOW - When this button appears on the screen it indicates that there is no product at the infeed stop/gate.
4. OUTFEED LEVEL HIGH - When this button appears on the screen it indicates that the product is jammed at the outfeed.
5. CHANGE USER - Pressing this pushbutton will activate the Touch Screen's internal keyboard window which allows you to enter one of two preset codes. Depending upon the code entered the Touch Screen will switch between the two built in user levels, Operator and Supervisor. The Supervisor user level allows access to all functions within the Touch Screen, where the Operator user level limits the user to only basic Labeler functions.
6. GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

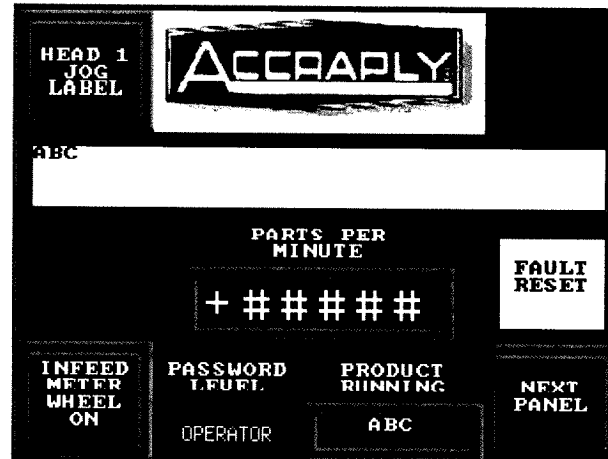
Main Screen



Note

This section of the manual contains the basic control screens and the “optional screens”. Many times, a customer will add optional equipment to a machine at a later date and need additional control screen information. Thus, extra screens and options are included and described in this section. Additionally, an extra momentary pushbutton and definition may appear on a screen description page, they are included for the same reason.

MAIN Screen



HEAD 1 JOG LABEL - A momentary pushbutton when activated, is used to dispense one label at a time from Applicator Head #1 at a fixed speed (as set in the HEAD #1 JOG SPEED parameter). This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.

OPERATOR - This position on the screen indicates the password level of the current user; such as OPERATOR, SUPERVISOR etc.

INFEED RELEASE - A pushbutton when held in, is used to open the infeed screw stop gate.

INFEED METER WHEEL ON (INFEED METER WHEEL OFF) - A pushbutton that when ON allows the infeed metering wheel(s) to operate when the conveyor is running.

PARTS PER MINUTE - Displays the total number products to be detected by the product sensing system per minute.

PASSWORD LEVEL - Indicates the current User Level.

PRODUCT RUNNING - Indicates the current product set selected.

RECENT FAULTS - This window is used to display all active and inactive Labeler faults. Included in each fault line from left to right is the time the fault was activated, the name of the fault, and the status of the fault. This normally hidden window will appear when any of the



Labeler's faults is activated. Only when all faults appear as INACTIVE can the window be removed by pressing the FAULT RESET pushbutton.

The number of faults displayed depends on the options purchased by the customer. Some of the faults that can be displayed are as follows:

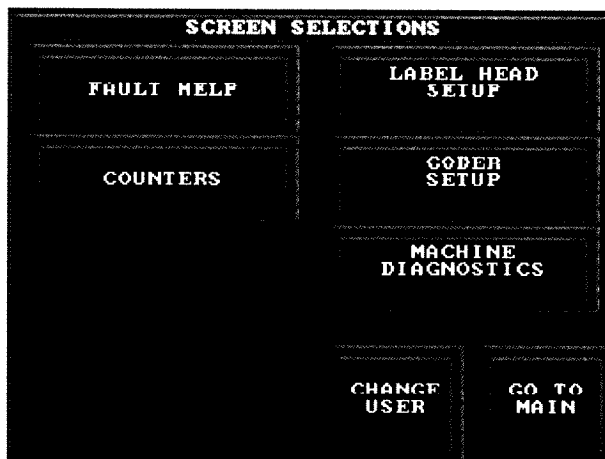
KN. ROLLER JAM HEAD#1
BROKEN WEB HEAD#1
LOW ROLL HEAD#1
LOW RIBBON FAULT
BROKEN RIBBON
INFEEED JAMMED FAULT
CONVEYOR DRIVE FAULT

Note

For more information on each fault please refer to the FAULT HELP SCREEN within the CTC Touch Screen.

FAULT RESET - A pushbutton when activated, is used to silence the fault alarm and remove the RECENT FAULTS window from view, once all faults are INACTIVE. This normally hidden pushbutton will appear when any of the Labeler's faults is activated.

NEXT PANEL - This pushbutton will switch the Touch Screen to the SCREEN SELECTIONS screen. This screen is used to access the other screens within the Touch Screen.

SCREEN SELECTIONS Screen

The SCREEN SELECTIONS screen provides the operator access to the other screens within the Touch Screen.

FAULT HELP - This pushbutton will switch the Touch Screen to the FAULT HELP SCREEN. This screen provides the operator access to more information (both text and pictures) on each of the Labeler's faults.

COUNTERS - This pushbutton will switch the Touch Screen to the COUNTERS SCREEN. This screen is used to monitor and reset the Labeler counters.

LABEL HEAD SETUP - This pushbutton will switch the Touch Screen to the LABEL HEAD SETUP SCREEN. This screen is used to control the Applicator Head(s) and access the setup parameters for each product.

CODER SETUP - This pushbutton will switch the Touch Screen to the CODER SETUP SCREEN. This screen is used to monitor and control the installed hot stamp coder.

MACHINE DIAGNOSTICS - This pushbutton will switch the Touch Screen to the MACHINE DIAGNOSTICS SCREEN. This screen is used to monitor the various inputs and outputs of the Labeler.

FLAG/WRAP SENSOR (DISP/WRAP SENSOR) - This pushbutton will switch the Labeler between the Flag and Wrap product sensor (FLAG/WRAP) and the Dispense and Wrap product sensor (DISP/WRAP)

CHANGE USER - Pressing this pushbutton will activate the Touch Screen's internal keyboard window which allows you to enter one of two preset codes. Depending upon the code entered the Touch Screen will switch between the two built in user levels, Operator and Supervisor. The Supervisor user level allows access to all functions within the Touch Screen, where the Operator user level limits the user to only basic Labeler functions.

Note

A crossed out hand displayed over a pushbutton will indicate that function is not accessible at the current user level.

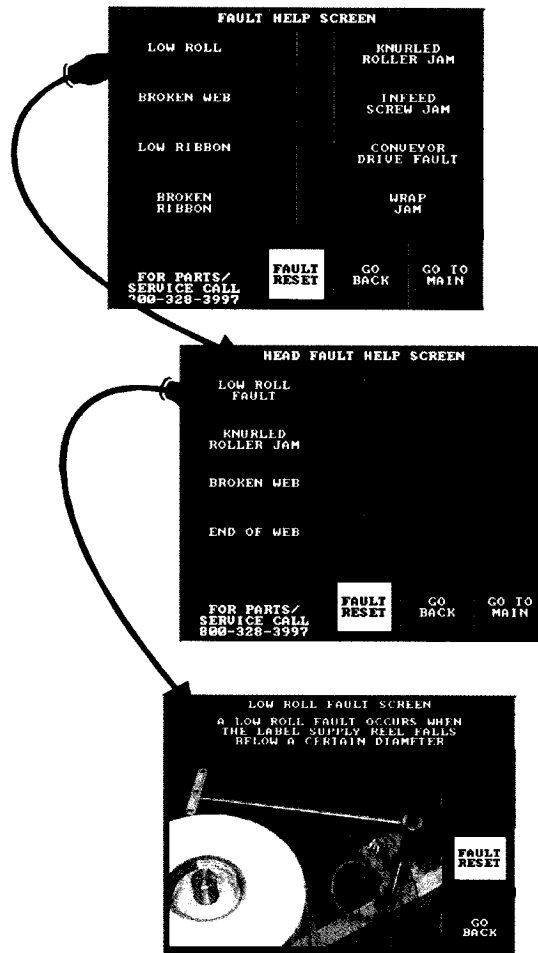
Note

For more information on the user levels or to obtain the passwords please contact our Service Department Manager at 1-800-328-3997 or 763-557-1313. Refer to Section 10 for more information on contacting the ACCRAPLY.

GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

FAULT HELP SCREEN

Example of
access to other
fault screens



Note

The **FAULT HELP SCREEN** provides the operator access to more information (both text and pictures) on each of the Labeler's faults.

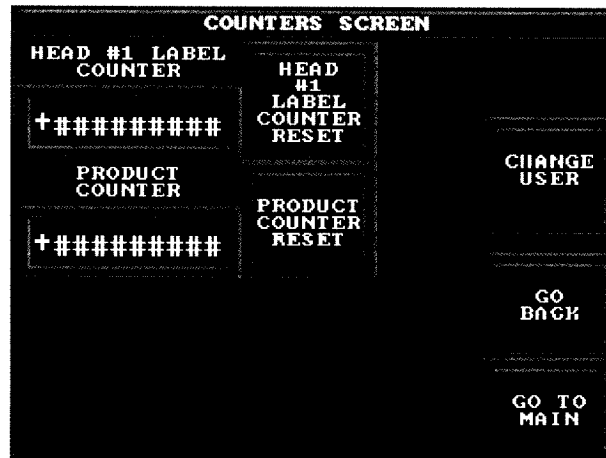
A flashing exclamation point next to a fault indicates that the fault is currently active.

FAULT RESET - A pushbutton when activated, is used to silence the fault alarm and remove the **RECENT FAULTS** window from view, once all faults are **INACTIVE**. This normally hidden pushbutton will appear when any of the Labeler's faults is activated.

GO BACK - This pushbutton will switch the Touch Screen back to the **SCREEN SELECTIONS** screen.

GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

COUNTERS SCREEN



HEAD #1 LABEL COUNTER - Displays the total number of labels to be detected by Applicator Head #1's label sensor since last reset. This counter will increment by one for each leading edge of a label detected. To reset the counter to zero, simply touch the pushbutton directly next to the counter.

PRODUCT COUNTER - Displays the total number products to be detected by the product sensing system since last reset. This counter will increment by one for each product detected by the currently active product sensor. To reset the counter to zero, simply touch the pushbutton directly next to the counter.

CHANGE USER - Pressing this pushbutton will activate the Touch Screen's internal keyboard window which allows you to enter one of two preset codes. Depending upon the code entered the Touch Screen will switch between the two built in user levels, Operator and Supervisor. The Supervisor user level allows access to all functions within the Touch Screen, where the Operator user level limits the user to only basic Labeler functions.

Note

A crossed out hand displayed over a pushbutton will indicate that function is not accessible at the current user level.

Note

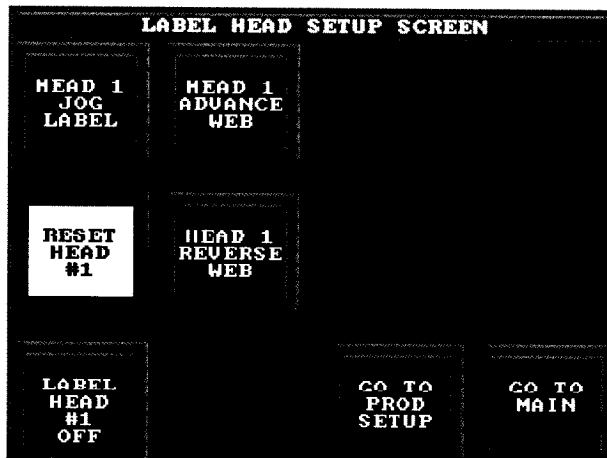
For more information on the user levels or to obtain the passwords please contact our Service Department Manager at 1-800-328-3997 or 763-557-1313. Refer to Section 10 for more information on contacting the ACCRAPLY.

GO BACK - This pushbutton will switch the Touch Screen back to the SCREEN SELECTIONS screen.

GO TO MAIN - This pushbutton will switch the Touch Screen back to

LABEL HEAD SETUP SCREEN

HEAD 1 JOG LABEL - A momentary pushbutton when activated, is used to dispense one label at a time from Applicator Head #1 at a fixed speed



(as set in the HEAD #1 JOG SPEED parameter). This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.

HEAD 1 ADVANCE WEB - A momentary pushbutton when held in, is used to continuously advance the label web at a fixed speed (as set in the HEAD #1 ADVANCE RATE parameter). This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.

HEAD 1 REVERSE WEB - A momentary pushbutton when held in, is used to continuously reverse or backup the label web at a fixed speed (as set in the HEAD #1 ADVANCE RATE parameter). This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.

RESET HEAD #1 - A momentary pushbutton when activated, will reset Applicator Head #1's Giddings & Lewis Servo controller should an internal fault occur. This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.

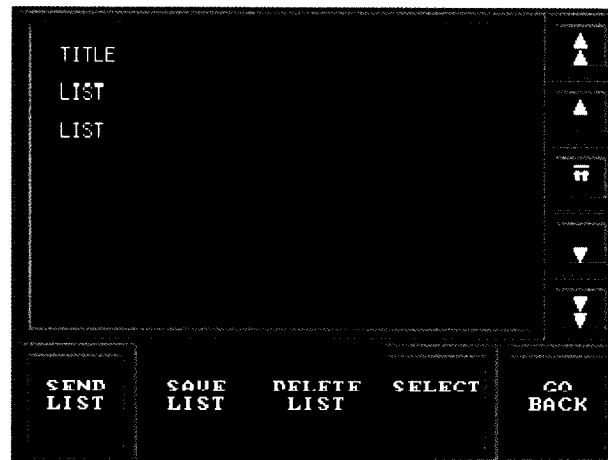
LABEL HEAD #1 OFF (ON) - A pushbutton that when ON activates Applicator Head #1.

GO TO PROD SETUP – This pushbutton will switch the Touch Screen to the PRODUCT SETUP SCREEN

GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

PRODUCT SETUP SCREEN

This screen is used to manage the preset product parameters within the Labeler for a particular product/label combination. The parameters are as



follows:

- **HEAD #1 JOG SPEED** - This parameter is used to set (in Inches Per Minute) the speed of the web whenever a HEAD 1 JOG LABEL pushbutton is pushed. The value entered must be between 1 and 3000 Inches Per Minute.
- **HEAD #1 ADVANCE RATE** - This parameter is used to set (in Inches Per Minute) the speed of the web when either the HEAD 1 ADVANCE WEB or HEAD 1 REVERSE WEB pushbuttons are held in. The value entered must be between 1 and 3000 Inches Per Minute.
- **HEAD #1 ACCEL** - The acceleration distance is the amount of distance the web will travel in inches from a complete stop before reaching full velocity at the beginning of a Applicator Head #1 label dispense. The value entered must be between 0.001 and 1 Inches.
- **HEAD #1 DECEL** - The deceleration distance is the amount of distance the web will travel in Inches from full velocity to end of motion or a complete stop at the end of a Applicator Head #1 label dispense. The value entered must be between 0.001 and 1 Inches.

- **HEAD #1 LABEL PITCH** - Label length is the length in inches of one label pitch. A label pitch is the distance between the leading edge of one label to the next. This parameter is used by the missing label compensation system on Applicator Head #1 and provides a signal to stop the label dispense when a label is missing on the liner. Normally the label sensor provides the signal to stop the dispense, but, in the absence of a label, an extra label would be dispensed when the missing label space passed under the Sensor. The compensator insures that only one label is dispensed should the amount of label dispensed equal this value. The value entered must be between 0.001 and 100 Inches.
- **HEAD #1 LABEL FLAG** - This parameter is used to change the length of label flag - the length of label extending over the end of the peeler tip on Applicator Head #1 before the label is dispensed. After the PLC receives a signal from the label sensor that a label gap has been detected during a label dispense, it must first travel the amount programmed into this register before it stops the label dispense. The value entered must be between 0 and 20 Inches.
- **HEAD #1 FOLLOWING RATIO** - This parameter is used to determine the dispense speed of Applicator Head #1 when labeling. The Applicator Head is designed to follow the speed of the conveyor, multiplied by the number entered in this register (i.e. if the conveyor speed = 2000 Inches Per Minute and the register is set to 0.99, the dispense speed will be 1980 Inches Per Minute). The value entered must be between 0.5 and 5.
- **HEAD #1 PRODUCT DELAY** - This parameter is a programmable delay counter. After the controller receives a signal from the product sensing system that a product is in the labeling position, it initiates a label dispense. The product delay adds a countdown (equal to the distance entered into the register) between that signal and the start of the label dispense from Applicator Head #1. This delay adjusts the position of the label on the product. As the number increases, the label dispense will be delayed longer, which moves the label farther back on the product. The value entered must be between 0 and 20 Inches.
- **HEAD #1 PRODUCT DELAY** - See page 34.

The following describes each procedure as it would be performed on the PRODUCT SETUP SCREEN, and assumes the user is familiar with the Labeler and the product/labels to be run.

Note

It is assumed, that the user is starting each procedure from the PRODUCT SETUP SCREEN and the screen is at the "LISTS FOR GROUP: PRODUCT screen.

Edit a Product Setup Parameter

1. Using the right side navigation buttons, move up or down the list until the Product Setup you wish to edit is highlighted.
2. Press the SELECT pushbutton. The display will switch to list the parameters for that Product Setup.
3. Using the right side navigation buttons, move down the list until the parameter you wish to edit is highlighted.
4. Press the SELECT pushbutton. An on-screen keypad will be displayed showing the maximum (MAX) and minimum (MIN) values allowed for that parameter.
5. Using the keypad, enter the new value and press the ENTER pushbutton.
6. The new value will now be displayed for that parameter.

Switch the Labeler to a different Product Setup

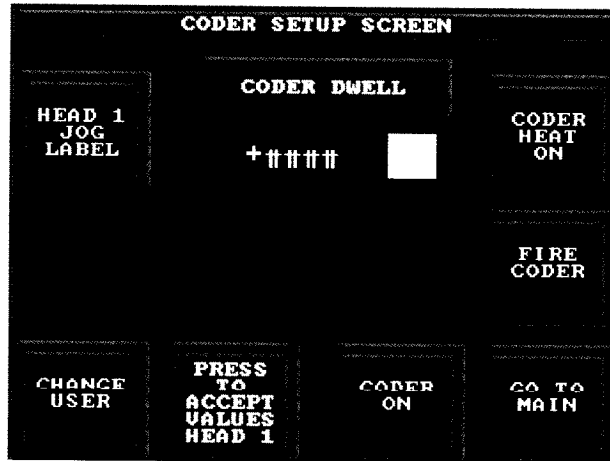
1. Using the right side navigation buttons, move up or down the list until the Product Setup you wish to switch to is highlighted.
2. Press the SEND pushbutton.
3. Press the GO BACK pushbutton. The Touch Screen will switch to the LABEL HEAD SETUP SCREEN.
4. Press the GO TO MAIN pushbutton. The Touch Screen will switch to the Main Screen.
5. Verify the Product Setup selected is displayed in the PRODUCT RUNNING display

Add a Product Setup

1. Using the right side navigation buttons, move up or down the list until either the DEFAULT Product Setup or another Product setup that closely matches the one you wish to add is highlighted.
2. Press the SELECT pushbutton. The display will switch to list the parameters for that Product Setup.
3. Press the SAVE LIST pushbutton. The display will switch to the SAVE LIST screen with the Product Setup name highlighted.
4. Press the SELECT pushbutton. An on-screen keyboard will be displayed allowing you to change the name of the selected Product

CODER SETUP SCREEN

HEAD 1 JOG LABEL - A momentary pushbutton when activated, is used to dispense one label at a time from the Applicator Head #1 at a fixed



speed (as set in the HEAD #1 JOG SPEED parameter). This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.

CODER DWELL - The CODER TIME (the amount of time the type is in contact with the label) determines the quality and consistency of the print and is adjusted with this register. The desired pulse time can be entered through the numerical keypad. The on-screen is accessed by pressing the pushbutton to the right of the register. The value entered must be between 10 and 250 Milliseconds

CODER HEAT ON (OFF) - A pushbutton that when ON activates coder's type chase heating circuit.

FIRE CODER - A momentary pushbutton when activated, is used to manually actuate the coder.

CODER ON (OFF) - Actuation of the coder is turned ON and OFF with this pushbutton. Disabling the coder turns off the coder's trigger signal from the Applicator Head.

CHANGE USER - Pressing this pushbutton will activate the Touch Screen's internal keyboard window which allows you to enter one of two

preset codes. Depending upon the code entered the Touch Screen will switch between the two built in user levels, Operator and Supervisor. The Supervisor user level allows access to all functions within the Touch Screen, where the Operator user level limits the user to only basic Labeler functions.

Note

A crossed out hand displayed over a pushbutton will indicate that function is not accessible at the current user level.

Note

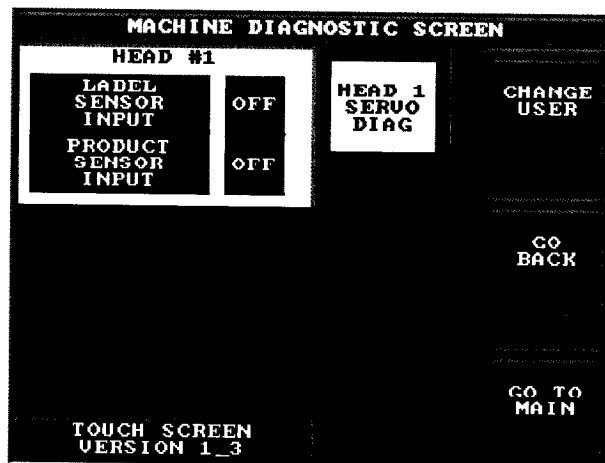
For more information on the user levels or to obtain the passwords please contact our Service Department Manager at 1-800-328-3997 or 763-557-1313. Refer to Section 10 for more information on contacting the ACCRAPLY.

PRESS TO ACCEPT VALUES HEAD 1 - A momentary pushbutton when activated, initiates the use of the values within the Applicator Head #1's Giddings & Lewis Servo controller. This pushbutton will only appear when the conveyor is off.

GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

MACHINE DIAGNOSTICS SCREEN

HEAD #1 LABEL SENSOR INPUT - Indicates the current state of the PLC's Applicator Head #1 Label Sensor Input. The state will be indicated by either a red OFF or a green ON indicator.



HEAD #1 PRODUCT SENSOR INPUT - Indicates the current state of the PLC's Product Sensor Input. The state will be indicated by either a red OFF or a green ON indicator.

HEAD 1 SERVO DIAG – This pushbutton will switch the Touch Screen to the HEAD #1 SERVO DIAGNOSTICS screen. This screen is only accessible from the Supervisor Level and should only need to be viewed when directed by an ACCRAPLY Employee.

Note

For more information on the Servo Diagnostic screens please contact our Service Department Manager at 1-800-328-3997 or 763-557-1313. You can also refer to Section 10 for more information on contacting the ACCRAPLY.

CHANGE USER - Pressing this pushbutton will activate the Touch Screen's internal keyboard window which allows you to enter one of two preset codes. Depending upon the code entered the Touch Screen will switch between the two built in user levels, Operator and Supervisor. The Supervisor user level allows access to all functions within the Touch Screen, where the Operator user level limits the user to only basic Labeler

functions.

Note

A crossed out hand displayed over a pushbutton will indicate that function is not accessible at the current user level.

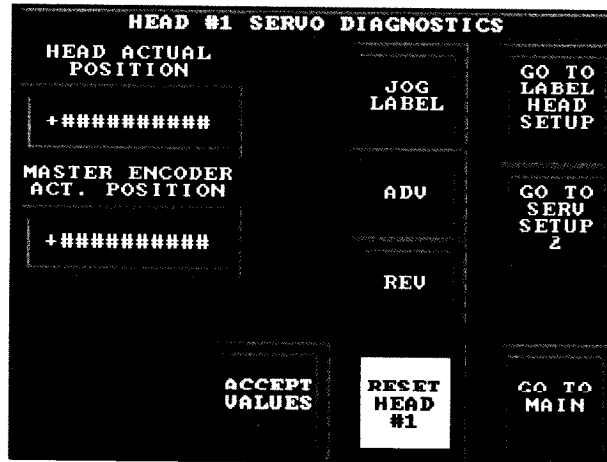
Note

For more information on the user levels or to obtain the passwords please contact our Service Department Manager at 1-800-328-3997 or 763-557-1313. Refer to Section 10 for more information on contacting the ACCRAPLY.

GO BACK - This pushbutton will switch the Touch Screen back to the MACHINE DIAGNOSTICS SCREEN.

GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

HEAD/ MACHINE (error) DIAGNOSTICS SCREEN - Setup #1



HEAD ACTUAL POSITION - The numbers listed in the box with this label identify the position and movement of the head/web and changes to that position as it is advanced or reversed with the ADV and REV buttons.

MASTER ENCODER ACT. POSITION - The numbers listed in the box with this label identify the position and movement of the master encoder. Forward or reverse encoder and thus conveyor movement is indicated as the nubers move up or down.

JOG LABEL - A momentary pushbutton when activated, is used to dispense one label at a time from Applicator Head #1 at a fixed speed (as set in the JOG SPEED parameter). This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.

ADVANCE WEB - A momentary pushbutton when held in, is used to continuously advance the label web at a fixed speed (as set in the HEAD ADVANCE RATE parameter). This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.

REVERSE WEB - A momentary pushbutton when held in, is used to continuously reverse or backup the label web at a fixed speed (as set in the HEAD #1 ADVANCE RATE parameter). This pushbutton will only appear when Applicator Head #1 is enabled and the conveyor is off.



ACCEPT VALUES - Press this button to accept the values listed on the screen after changes have been made with the screen buttons.

RESET HEAD #1 - Press this button to set the head to its default settings.

GO TO LABEL HEAD SETUP – This pushbutton will switch the Touch Screen to the LABEL HEAD SETUP SCREEN.

GO TO SERV SETUP 2 - This pushbutton will switch the Touch Screen back to the HEAD/ MACHINE (error) DIAGNOSTICS SCREEN - Setup #2.

GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

HEAD/ MACHINE (error) DIAGNOSTICS SCREEN - Setup #2

HEAD #1 SERVO DIAGNOSTICS				
HEAD E-STOP ERROR CODE	MASTER E-STOP ERROR CODE		GO TO LABEL HEAD SETUP	
+#####	+#####			
HEAD C-STOP ERROR CODE	MASTER C-STOP ERROR CODE		GO TO SERVO SETUP 1	
+#####	+#####			
HEAD P-STOP ERROR CODE	MASTER P-STOP ERROR CODE			
+#####	+#####			
GO TO E-STOP HELP	GO TO C-STOP HELP	GO TO P-STOP HELP	RESET HEAD #1	GO TO MAIN

HEAD E-STOP ERROR CODE - Emergency Stop errors are listed in the labeled box. Press the **GO TO E-STOP HELP** button to switch to the help screen that identifies the code.

MASTER E-STOP ERROR CODE - Master Emergency Stop errors are listed in the labeled box. Press the **GO TO E-STOP HELP** button to switch to the help screen that identifies the code.

HEAD C-STOP ERROR CODE - Controlled Stop errors are listed in the labeled box. Press the **GO TO C-STOP HELP** button to switch to the help screen that identifies the code.

MASTER C-STOP ERROR CODE - Master Controlled Stop errors are listed in the labeled box. Press the **GO TO C-STOP HELP** button to switch to the help screen that identifies the code.

HEAD P-STOP ERROR CODE - Programming errors are listed in the labeled box. Press the **GO TO P-STOP HELP** button to switch to the help screen that identifies the code.

MASTER P-STOP ERROR CODE - Master Programming errors are listed in the labeled box. Press the **GO TO P-STOP HELP** button to switch to the help screen that identifies the code.



GO TO **E-STOP HELP** - Press this button to switch the Touch Screen to the **E-STOP HELP SCREEN**.

GO TO **C-STOP HELP** - Press this button to switch the Touch Screen to the **C-STOP HELP SCREEN**.

GO TO **P-STOP HELP** - Press this button to switch the Touch Screen to the **P-STOP HELP SCREEN**.

RESET HEAD #1 - Press this button to set the head to its default settings.

GO TO LABEL HEAD SETUP - This pushbutton will switch the Touch Screen to the LABEL HEAD SETUP SCREEN.

GO TO SERV SETUP 1 - This pushbutton will switch the Touch Screen back to the HEAD/ MACHINE (error) DIAGNOSTICS SCREEN - Setup #1.

GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

E-STOP, C-STOP, P-STOP HELP SCREENS

These screens defines the error codes that may appear on the **HEAD/ MACHINE (error) DIAGNOSTICS SCREEN - Setup #2** screen. Pressing the GO TO E-STOP HELP, GO TO C-STOP HELP or GO TO P-STOP HELP buttons on the **HEAD/ MACHINE (error) DIAGNOSTICS SCREEN - Setup #2** screen, accesses the E-STOP, C-STOP , P-STOP, HELP Screens.

E-ERROR (EMERGENCY STOP) ERRORS	
32800 - SERCOS Error	
32784 - SERCOS Drive E-STOP	
32776 - User Set E-STOP E-STOP called by Prog.	GO TO HEAD1 SERV SETUP 2
32772 - Overflow Error Slave Delta Overflow See Manual	
32770 - Excess Error Lost Servo Position	
32769 - Loss Of Feedback No Encoder Detected	
When Multiple Errors Occur OR the Bits Together	GO TO MAIN

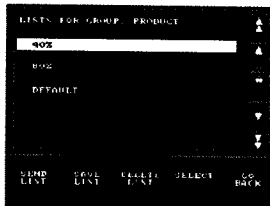
C-ERROR (CONTROLLED STOP) ERRORS	
32896 - Part Reference Error	
32832 - Part Reference Dimension Error	
32800 - Distance or Position Move Dimension Error	GO TO HEAD1 SERV SETUP 2
32784 - Feedrate Error	
32776 - Machine Reference Dimension Error	
32772 - User Defined C-STOP	
32770 - Negative Software Limit Exceeded	
32769 - Positive Software Limit Exceeded	
OR Bits For Multiple Errors	GO TO MAIN

P-ERROR (PROGRAMMING) ERRORS	
32896 - FAST Axis moved too Far In Wrong Direction	
32832 - Profile Number Not Found	
32800 - Master Axis Not Avail.	GO TO HEAD1 SERV SETUP 2
32769 - Master Start Position For Lock On	
OR Bits For Multiple Errors	GO TO MAIN

GO TO SERV SETUP 2 - This pushbutton will switch the Touch Screen back to the HEAD/ MACHINE (error) DIAGNOSTICS SCREEN - Setup #2.

GO TO MAIN - This pushbutton will switch the Touch Screen back to the Main Screen.

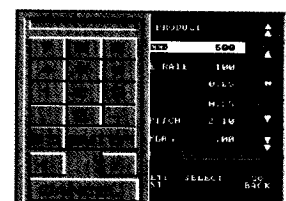
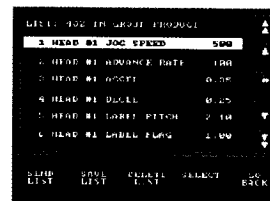
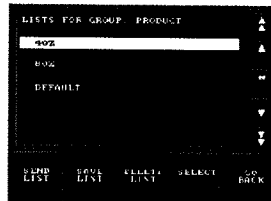
The following describes each procedure as it would be performed on the PRODUCT SETUP SCREEN, and assumes the user is familiar with the Labeler and the product/labels to be run.



It is assumed, that the user is starting each procedure from the PRODUCT SETUP SCREEN and the screen is at the "LISTS FOR GROUP: PRODUCT" screen.

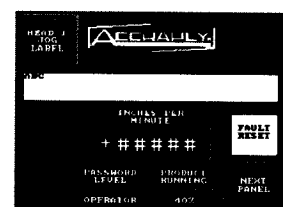
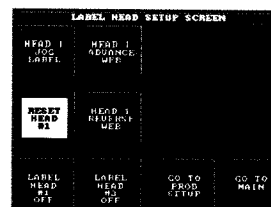
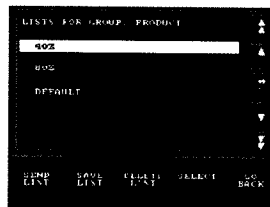
Edit a Product Setup Parameter

1. Using the right side navigation buttons, move up or down the list until the Product Setup you wish to edit is highlighted.
2. Press the SELECT pushbutton. The display will switch to list the parameters for that Product Setup.
3. Using the right side navigation buttons, move down the list until the parameter you wish to edit is highlighted.
4. Press the SELECT pushbutton. An on-screen keypad will be displayed showing the maximum (MAX) and minimum (MIN) values allowed for that parameter.
5. Using the keypad, enter the new value and press the ENTER pushbutton.
6. The new value will now be displayed for that parameter.



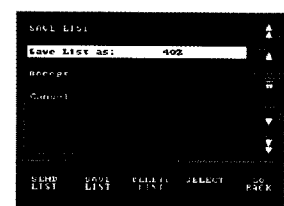
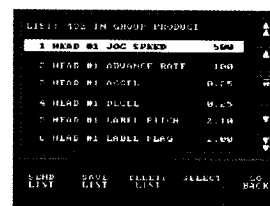
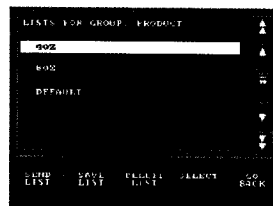
Switch the Labeler to a different Product Setup

1. Using the right side navigation buttons, move up or down the list until the Product Setup you wish to switch to is highlighted.
2. Press the SEND pushbutton.
3. Press the GO BACK pushbutton. The Touch Screen will switch to the LABEL HEAD SETUP SCREEN.
4. Press the GO TO MAIN pushbutton. The Touch Screen will switch to the Main Screen.
5. Verify the Product Setup selected is displayed in the PRODUCT RUNNING display

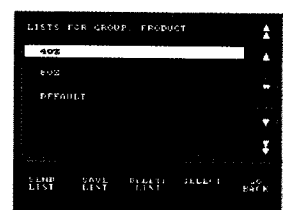
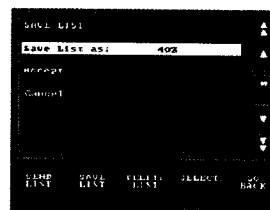
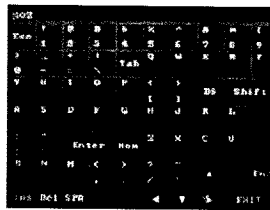


Add a Product Setup

1. Using the right side navigation buttons, move up or down the list until either the DEFAULT Product Setup or another Product setup that closely matches the one you wish to add is highlighted.
2. Press the SELECT pushbutton. The display will switch to list the parameters for that Product Setup.
3. Press the SAVE LIST pushbutton. The display will switch to the SAVE LIST screen with the Product Setup name highlighted.



4. Press the SELECT pushbutton. An on-screen keyboard will be displayed allowing you to change the name of the selected Product Setup.
5. Press the EXIT pushbutton when done.
6. Using the right side navigation buttons, move down until the word Accept is highlighted.
7. Press the SELECT pushbutton.
8. The new Product Setup will be displayed along with the other Product Setups

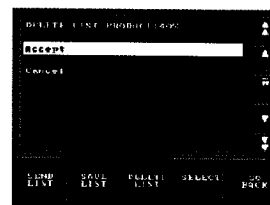
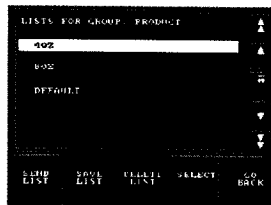


Delete a Product Setup

Note

You must in the Supervisor User Level to perform this procedure.

1. Using the right side navigation buttons, move up or down the list until either the DEFAULT Product Setup or another Product setup that closely matches the one you wish to delete is highlighted.
2. Press the DELETE LIST pushbutton. The display will switch to the DELETE LIST screen with the word Accept highlighted.
3. Press the SELECT pushbutton.
4. The Product Setup should now be removed from the Product list.



Section 7 Machine Components

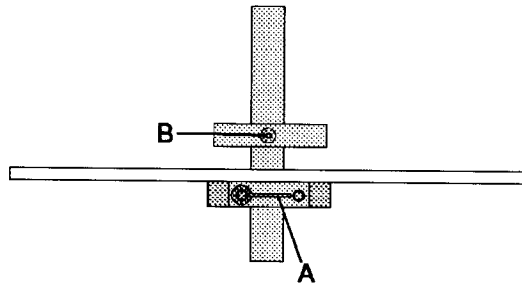
7.1 Applicator Head

7.1.1 Adjustments

Supply Reel/Core Spacer

The position of the supply reel(s) cover(s) can be adjusted by releasing the locking lever (Figure 7.1.1-1,A) on the reel hub and then sliding the reel on the support shaft.

Figure 7.1.1-1

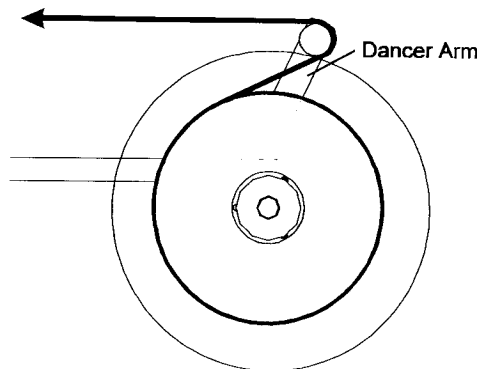


The position of the core spacer can be adjusted by loosening the set-screw attaching it to the support shaft and then sliding it on the shaft. The core spacer has 1-3 button-head screws (Figure 7.1.1-1,B) in its outside diameter to keep the roll from free-rotating on the reel.

Dancer Arms

The spring-loaded dancer arms (Figure 7.1.1-2) provide smooth label unwind during label indexing. As the web is indexed it pulls against the spring rather than the roll, ensuring a gradual acceleration of the roll.

Figure 7.1.1-2



One of the most common causes of label registration errors is failing to thread the web around the dancer arm.

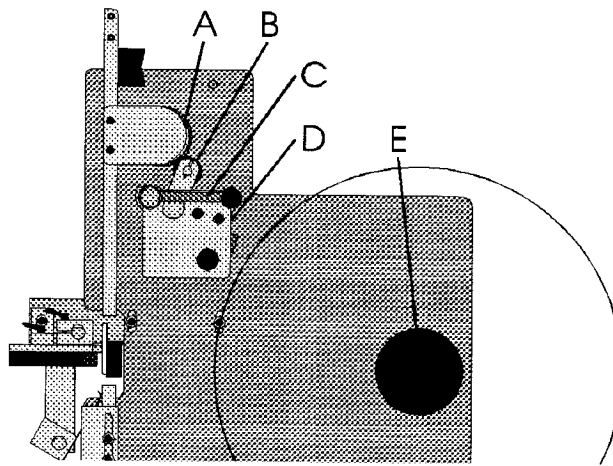
The dancer arm spring has three sets of mounting holes at both ends for adjusting the spring's tension. This adjustment is factory preset and should not need adjusting until the spring becomes stretched.

Pressure Roller and Knurled Roller Assembly

The label web is threaded between the knurled (Figure 7.1.1-3,A) and pressure (B) rollers as it passes behind the peeler plate. The spring-loaded pressure roller clamps the web tight against the knurled roller. As the Applicator's stepmotor indexes the knurled roller, the liner is pulled around the peeler tip, peeling the labels from the liner.

The spring-loaded clamping lever (Figure 7.1.1-3,C) is used to release the pressure between the rollers for threading the web.

Figure 7.1.1-3



Pressure Roller Tensioner

The pressure roller tensioner is used to adjust the amount of tension exerted by the pressure roller against the knurled roller. Turning the two set-screws clockwise (Figure 7.1.1-3,D) increases the tension. The tension of the pressure roller must be maintained to keep the web from slipping and to insure consistent label registration.

Rewind Roller and Tensioner

The rewind core (Figure 7.1.1-3,E) is used to wrap up the used web material after the labels are peeled and it passes through the knurled and pressure rollers.

The removable rewind core provides a way to dispose of the web material. Simply pull the rewind core and web material wound around it, up off the head to dispose of the waste web. Repositioning of the rewind core is done by sliding the core back over the tensioner and aligning the cut-outs in the core with the bolt heads in the tensioner.

The tension of the rewind can be increased by turning clockwise the nut (not shown) on the rewind core's drive shaft clockwise. Increasing the tension of the rewind will result less slipping between the drive shaft and rewind core.

Note

Increasing the rewind tension too much can result in the web breakage

Skew Adjustment

Skew adjustment is done by turning the turnbuckle (Figure 7.1.1-4,A) located under the Applicator Head frame and is used to skew (tilt) the Head in its mounting frame. This adjustment feature allows the operator to match the angle of the peeler tip to the angle of the side of the product.

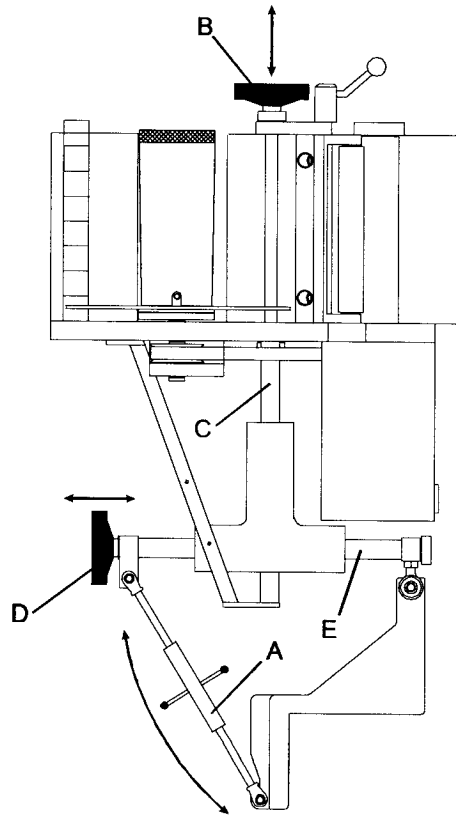
Vertical Adjustment

The vertical adjustment handle (Figure 7.1.1-4,B) is located on top of the Head. The handle is used to vertically adjust the placement of the labels on the products. A setup scale is installed on one shaft of the frame (Figure 7.1.1-4,C) to assist the operator in resetting the Head during product changeovers.

Horizontal Adjustment

The Horizontal adjustment handle (Figure 7.1.1-4,D) is located in front of the Head. The handle is used to horizontally adjust the head. A setup scale is installed on one shaft of the frame (Figure 7.1.1-4,E) to assist the operator in resetting the Head during product changeovers.

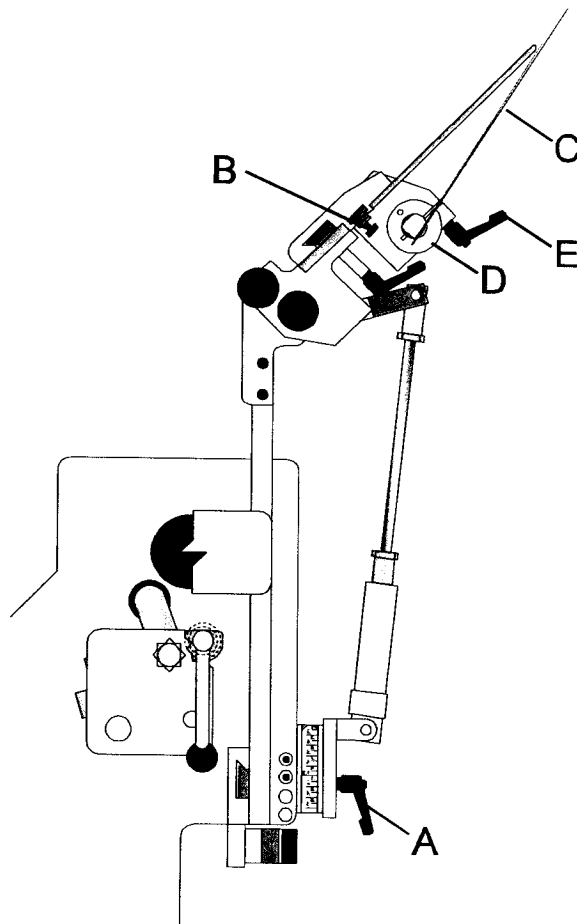
Figure 7.1.1-4



Peeler Plate

1. The peeler plate's angle to the conveyor can be adjusted by loosening the locking handle (Figure 7.1.1-5,A) on the air cylinder mounting bracket and then sliding the peeler in and out.
2. The upper edge guide is adjusted by loosening the black knob (Figure 7.1.1-5,B) on top of the guide and then sliding the guide up or down.
3. The tension wiper (Figure 7.1.1-5,C) on the peeler plate is used to hold the label web flat as the liner is pulled around the peeler tip, ensuring that the labels are peeled from the liner and to control the direction of the label as it is peeled. The tension of the wiper is adjusted by loosening the set collar (D) and pivoting the wiper as needed. The wiper can be removed from the peeler assembly by loosening the black lock locking handle (E) and then pulling the wiper out of its bracket.

Figure 7.1.1-5

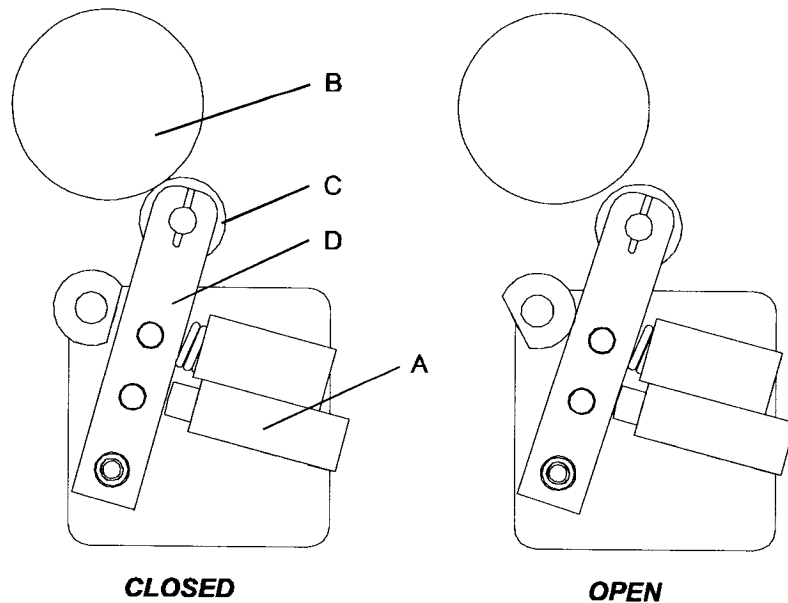


7.1.2 Jam Detection Switch

The Applicator Head jam detection switch (Figure 7.1.2-1,A) is designed to shut off the Head drive motor any time the knurled (B) and pressure (C) rollers are separated. The rollers will be separated either when the clamping lever is rotated to allow threading the labels, or should the liner and/or labels become wound around either roller to the point that the pressure roller is pushed away from the knurled roller.

A spring loaded locking pin is used to automatically lock the pressure roller in the open position. To reclose the pressure roller, the pin's knob must be pulled up, allowing the spring loaded pressure roller to be forced back against the knurled roller.

Figure 7.1.2-1



When the rollers are separated, the pressure roller mounting block (Figure 7.1.2-1,D) pushes back and impresses the button on the limit switch, tripping the normally-closed switch (unlatching the Head motor).

When the rollers are separated the following events take place:

The text KNURLED ROLLER JAM will be displayed in the RECENT FAULTS window on the CTC Touch Screen's MAIN SCREEN.

The fault siren activates

The conveyor is shut down (unlatched)

The alarm warns the machine operator to attend to the Labeler; the message indicates which error caused the alarm to turn on.

Press the yellow FAULT RESET button on the control panel to silence the alarm while the error is corrected. After the error is corrected, press FAULT RESET button again to clear the fault. You must manually restart the conveyor after a KNURLED ROLLER JAM fault.

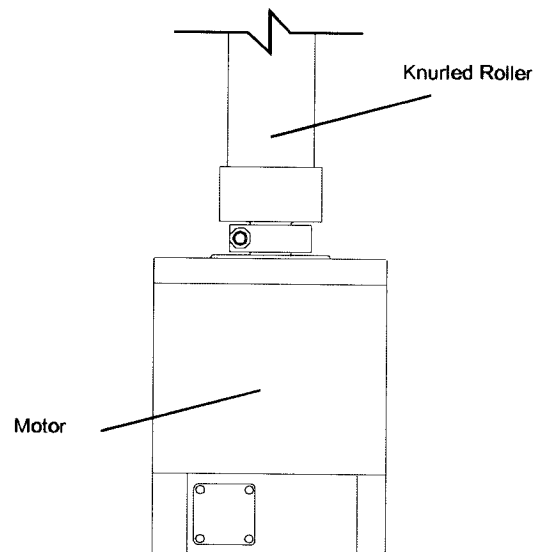
7.1.3 Mechanical Drive System

Motor

The Applicator Head is driven by a servo motor (refer to Figure 7.1.3-1); the output shaft of the motor is coupled to the knurled roller shaft which, in turn, drives the label web.

The speed of the servo motor is controlled by the Applicator Controller which uses the encoder on the conveyor drivetrain to match the label applicator's dispense speed to the product's speed.

Figure 7.1.3-1

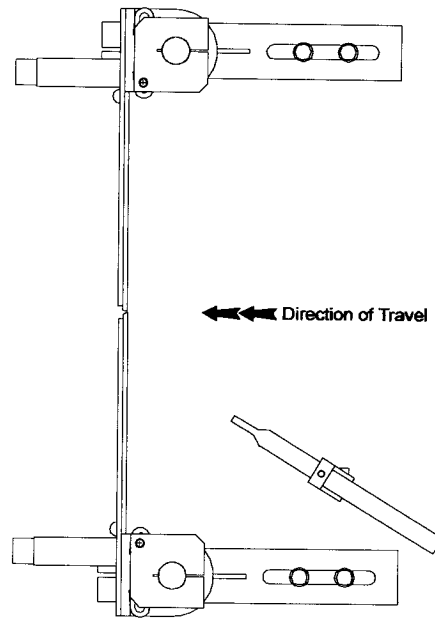


7.2 Three Panel Assembly

Function & Operation

The function of the Three Panel Application Assembly (refer to Figure 7.2-1) is to apply the labels to the front and side of the products.

Figure 7.2-1



The three panel doors are positioned perpendicularly across the conveyor, directly in front of the Applicator Head; the label is dispensed out onto the doors before the product arrives. The product is driven into and through the doors, wiping the label around the product.

An assist blower tube (Figure 7.2-1) is positioned directly behind the peeler plate to help stabilize the labels by blowing a light stream of air onto them as they are dispensed.

Adjustments

1. The perpendicular horizontal position of the panel door is adjusted by loosening the bolt (Figure 7.2-1) clamping each door's mounting shaft and then pivoting the door as needed. This adjustment allows the door to be pivoted so it can be positioned perpendicular to the conveyor.
2. The inline horizontal position of the panel door is adjusted by loosening the two bolts (Figure 7.2-1) on the door's mounting block and then sliding the entire door in the slotted mounting hole.

Section 8 Troubleshooting

Table 8-1

TROUBLESHOOTING GUIDE	
TROUBLE	PROBABLE CAUSE
No system power	<ul style="list-style-type: none"> -Machine not plugged in -MAIN OFF/ON switch turned OFF -A fuse is blown -Open wiring
Conveyor doesn't start when the green CONVEYOR START switch is depressed	<ul style="list-style-type: none"> -The CONVEYOR SPEED setting is set to zero -An EMERGENCY STOP switch is depressed (if used) -A detection error is active (i.e. broken web) -The torque-limiter is tripped -The green CONVEYOR START switch is defective -The green MASTER START switch is defective -The drive chain is disconnected -The motor controller is defective -The motor is defective -A fuse is blown -Open wiring
The Applicator Head(s) doesn't turn on	<ul style="list-style-type: none"> -It(they) is turned OFF on the Main Control Panel -The jam detection switch is open -The stepper indexer is not turning on (see the AMERICAN PRECISION manual) -The stepper indexer is not turning on (see the APPLIED MOTION PRODUCTS manual) -The servo is not turning on (see the GIDDINGS & LEWIS manual) -A fuse is blown -Open wiring
The infeed screw(s) does not start when the conveyor is on	<ul style="list-style-type: none"> -A drive chain is disconnected -A drive belt is broken or loose -The tol-o-matic gearbox is defective
The wrap belt does not start when the conveyor is on	<ul style="list-style-type: none"> -A drive chain is disconnected -The wrap belt's hex shaft is disengaged from the conveyor's power take off -The miter gear is broken
The metering wheel(s) does not start	<ul style="list-style-type: none"> -It(they) is turned OFF on the Main Control Panel -The INFEED SPEED setting is set to zero -The motor controller(s) is defective -The motor(s) is defective -A fuse is blown -Open wiring
The Coder doesn't heat up	<ul style="list-style-type: none"> -The PRINTER OFF/ON switch is OFF -The heater element is defective -The thermocouple element is defective -A fuse is blown -Open wiring
The Coder doesn't actuate after a label is dispensed	<ul style="list-style-type: none"> -The CODER ON switch on the 35S Series Controller is in the off position -Air pressure to the solenoid is low -The Coder dwell time is set too low -The solenoid is defective -A fuse is blown -Open wiring

Note

You may not have purchased all of the options listed in Table 8-1.

Table 8-2

TROUBLESHOOTING GUIDE	
TROUBLE	PROBABLE CAUSE
The overhead belt does not start when the conveyor is on	<ul style="list-style-type: none"> -The drive belt from the conveyor drive shaft to the tol-o-matic gearbox is broken or loose -The tol-o-matic gearbox is defective -The miter gear is broken
Labels dispense continuously when the Applicator Head is jogged	<ul style="list-style-type: none"> -The FLAG and/or PRODUCT registers are set to 0000 (must be at least 0001) -The Label Sensor sensitivity is set too low -The Label Sensor is defective -See the AMERICAN PRECISION manual -See the APPLIED MOTION PRODUCTS manual -See the GIGGINGS & LEWIS manual -Open wiring
More than 1 label is dispensed when the Applicator Head is jogged (but not continuously)	<ul style="list-style-type: none"> -The FLAG register is set too high
The label partially dispenses when the Applicator Head is jogged	<ul style="list-style-type: none"> -The Label Sensor sensitivity is set too high -There is excessive drag on the web causing slipping between the knurled and pressure rollers -The Label Sensor is defective -Open wiring
No DC sensors are operating	<ul style="list-style-type: none"> -The DC power supply is defective -A fuse is blown -Open wiring
No labels are being dispensed (although the Applicator Head is on)	<ul style="list-style-type: none"> -The Product Sensor is improperly set up -The Product Sensor is defective -A fuse is blown -Open wiring
The label mis-registers at the peeler tip	<ul style="list-style-type: none"> -The Label Sensor is not set up properly -The web is not flat as it passes under the Label Sensor -The Label Sensor is dirty or misaligned -The Label Sensor mounting is loose -There is excessive drag on the web causing slipping between the knurled and pressure rollers -The length of the label and/or the space between the labels is varying -The Label Sensor is defective -Open wiring
The label mis-registers on the product, but not at the peeler tip	<ul style="list-style-type: none"> -The Product Sensor mount is loose -The Product Sensor is not set up properly -The Product Sensor is triggering on a part of the product that is varying -The Product Sensor is defective -The peeler tip-to-product configuration is improper (see Section 5) -The product is varying in width, length, diameter, etc.
The Coder print mis-registers on the label	<ul style="list-style-type: none"> -The type is loose in the chase -The Coder is loose on its frame -The Coder frame is loose on the Head -The tension wiper(s) are not keeping the web flat as it passes through the Coder
The Coder print is too light or broken	<ul style="list-style-type: none"> -The temperature is set too low -The dwell time is set too short -The air pressure is set too low -The back-up pad is set too far back

Note

You may not have purchased all of the options listed in Table 8-2.

Section 9 Maintenance Procedures

Table 9-1

35 Series Maintenance Procedures			
Item	Inspection	Frequency	Action
Peeler tip	Check for cleanliness	Daily	Clean with alcohol solvent
Knurled/pressure rollers	Check for cleanliness	Daily	Clean with alcohol solvent
Label Sensors	Check for cleanliness	Daily	Clean with dry cloth
Label Routing Rollers	Check for cleanliness	Daily	Clean shaft
Drive chain(s)	Lubricate	Monthly	Chain lube spray
Air supply filter	Check for cleanliness	Monthly	Clean
Timing Belts and Drive Chains	Check for proper tension	Every 3 months	Tighten
Adjustment rods	Lubricate	Every 3 months	All-purpose grease
Main drive gearbox	Check for proper level	Every 3 months	*Fill
*Fill the Main drive gearbox with LUBRIPLATE APG-90 or equivalent			
Main drive gearbox	Change the oil	After 2500 hours of use or 6 months	Remove and replace oil
Tol-o-matic gearboxes	Inject grease into gear housing	Every 1.5 months	**Grease
Tol-o-matic gearboxes	Disassemble & purge. Hand lubricate all bearings & gears with 3oz. of grease.	Every 6 months	**Grease
**The Tol-o-matic gearboxes should be greased with a hi-temp grease, such as Anderol 786 or equivalent. To order Anderol 786, call 1-800-631-5275			
Overhead stabilizer bevel gears	Lubricate	Every 6 months	All-purpose grease
Drive shaft support blocks (flange and pillow)	Grease	Every 6 months	All-purpose grease
Idle Roller Bearings	Grease	Every 6 months	All-purpose grease
Allen Coder	Refer to the manufacturers cut sheets included with this documentation		
Norwood Coder	Refer to the Maintenance Schedule on page 9.1 of the Norwood Installation and Service Manual		

Note

Your machine may not have some of the options listed in Table 9-1.



Section 10 Spare Parts and Customer Service

10.1 Ordering Parts

For replacement parts contact our Parts Department at the following address or numbers:

**ACCRAPLY INC.
Parts Department
3580 Holly Lane North
Plymouth, MN. 55447-1269**

Telephone: 763-557-1313 1-800-328-3997 (U.S.A. only)

Fax: 763-519-9656

URL: www.accraply.com E-mail: parts@accraply.com

Most parts on the machine will have a Part Number stamped or scribed on it.

When the Part Number is known, it can be easily cross referenced with the **Assembly Drawing** and **Assembly Parts List**. Complete a copy of the master **Parts Order Form** (located at the end of this section) when placing orders and Phone, Mail or Fax this information to the above address or numbers.

Parts will not be shipped without a Customer Purchase Order Number.

Confirming purchase orders are appreciated.

All shipments are made to the address stated on the purchase order unless otherwise instructed.

10.2 Recommended Spare Parts

High-wear items are located on the **Spare Parts List** included with each Operation and Service manual.

Use the **Spare Parts List** to complete a copy of the master **Parts Order Form** (located at the end of this section) and Phone, Mail or Fax this information to Accraply Inc. Parts Department.

10.3 Non-Spare Parts

Non-spare parts consist of either a purchased or fabricated part not listed on the **Spare Parts List**.

For Non-spare parts you must:

- 1 Locate the Part Number stamped on the part.
- 2 Cross reference this number to the **Assembly Parts List** for verification.
- 3 Complete a copy of the master **Parts Order Form** (located at the end of this section).
- 4 Phone, Mail or Fax this information to the Accraply Inc. Parts Department.

10.4 Non-Engraved Parts

This method of locating the Part Number and accompanying information should be used when the Part Number is not scribed on the part.

- 1 Locate the part on the appropriate **Assembly Drawing**.
- 2 Cross reference this number to the **Assembly Parts List**.
- 3 Complete a copy of the master **Parts Order Form** (located at the end of this section).
- 4 Phone, Mail or Fax this information to the Accraply Inc. Parts Department.
- 5 If the part doesn't appear on an **Assembly Drawing** describe it in full and include the following information if possible:

* Length, Width, Bore, Diameter, Voltage

Use this information to complete a copy of the master **Parts Order Form** (located at the end of this section) and Phone, Mail or Fax this information to Accraply Inc. Parts Department.

10.5 Assembly Parts List

The Assembly Parts List (Figure 10.5-1) provides a list of all the parts issued to the machine. The following is a sample of the **Assembly Parts List** which is located at the end of this section. It points out the important information you will need to fill out the Parts Order Form.

Figure 10.5-1

PART LISTING FOR JBC COMPANY - **00 3:3234**

PRINTED: 13/12/2011 19:15 PAGE: 4

QTY	PART#	NAME
SUB-ASSEMBLY 000400 WRAP, 6" 355 [CONTINUED]		
3	140113 M	SCALE, 6 X .33 LB
1	140112 M	SCALE, 6 X .33 LB
2	150110 P	WRENCH
2	150112 M	WRENCH, THERMAL METRIC
2	150113 M	SPACER, BLOCK
2	150114 M	SPACER, GUIDE RAIL
2	150115 M	FIN, BACK-UP
1	150116 P	SPACER, GUIDE RAIL MOUNT
2	150117 M	PLATE, COVER
2	150118 M	BAR, VERTICAL
1	150119 M	PLATE, VERTICAL
1	150120 M	WRENCH
2	150121 M	WRENCH
1	150122 M	WRENCH
1	150123 M	WRENCH
1	150124 M	WRENCH
1	150125 M	WRENCH
1	150126 M	WRENCH
1	150127 M	WRENCH
1	150128 M	WRENCH
1	150129 M	WRENCH
1	150130 M	WRENCH
1	150131 M	WRENCH
1	150132 M	WRENCH
1	150133 M	WRENCH
SUB-ASSEMBLY 000110 SENSOR, [CONTINUED]		
2	110110 P	CONNECTOR
4	110111 P	CLAMP, CONNECTOR 11 PIN
2	110112 P	CONNECTOR, 11 PIN M
2	110113 P	SENSOR, CLAMP LABEL
2	110114 M	BAR, LOCKING
2	110115 M	WRENCH, SENSOR
2	110116 P	WRENCH, STRAIN .315
SUB-ASSEMBLY 000110 DRIVE, OVERHEAD [DRAWING: 0]		
1	110117 P	WRENCH, FILLON BLOCK .15
1	110118 P	FITTING, ZINC .15 STR
1	110119 P	FITTING, ZINC .15 STR
1	110120 P	GEARBOX, 1:1 LB
1	110121 P	WRENCH, BALL .15
1	110122 P	WRENCH, V
1	110123 M	BACK, GEAR

Annotations:

- MACHINE SERIAL NUMBER:** 00 3:3234
- 6 DIGIT PART NUMBER:** 150113
- PART DESCRIPTION:** PLATE, BACK-UP 6"



10.6 Service Requests

Our trained Service Technicians are available to provide installation and/or training and will assure you of the fastest and most efficient start-up possible. Training your personnel in the proper operational, setup, and maintenance procedures for your Accraply Inc. Labeler can assure excellent long term performance and reliability.

In addition to providing installation and training, our Service Department can assist you in retooling, upgrading, rebuilding, and adding labor saving accessories available for your Labeler.

Accraply Inc. Service Technicians are also available to provide phone support Monday through Friday, 8 a.m. to 5 p.m., Central Time, (excluding weekends and holidays).

To request service for an Accraply Inc. Labeler, contact our Service Department at the following address or numbers:

ACCRAPLY INC.
Service Department
3580 Holly Lane North
Plymouth, MN. 55447-1269

Telephone: 763-557-1313 1-800-328-3997 (U.S.A. only)

Fax: 763-519-9656

URL: www.accraply.com E-mail: service@accraply.com

Note

Service will be provided as per the current Service Rate Policy.