



1318 QUAKER CIRCLE PO BOX 589 SALEM, OHIO 44460  
PHONE: 330-332-1800  
FAX: 330-332-2144

**DESIGNERS AND MANUFACTURERS OF PRESSURE  
SENSITIVE LABELING EQUIPMENT AND CUSTOM  
PRODUCT HANDLING**

# **MAINTENANCE & SERVICE MANUAL**

**REVISION 360-2c.10.4.X**

# TABLE OF CONTENTS

<b>INTRODUCTION .....</b>	<b>1</b>
<b>MACHINE TERMS .....</b>	<b>2</b>
<b>DISPLAY PANEL .....</b>	<b>3</b>
MAIN MENU .....	3-1
ONLINE .....	3-1
APPLICATOR TYPE .....	3-1
LABEL STOP .....	3-2
LABEL SETUP .....	3-2
HOME .....	3-3
JOG .....	3-3
WEB SPEED .....	3-3
ALARM RESET .....	3-3
LABEL FORMATS .....	3-3
APPLICATOR OPTIONS .....	3-4
LABEL PLACEMENT .....	3-5
PRODUCT SETUP .....	3-5
<b>REAR PANEL .....</b>	<b>4</b>
<b>SETUP PROCEDURES .....</b>	<b>5</b>
JOB SETUP .....	5-2
LABEL SENSOR SETUP .....	5-3
LABEL LENGTH SETUP .....	5-5
LABEL STOP SETUP .....	5-6
LABEL FORMATS .....	5-6
WEB SPEED SETUP .....	5-7
SLEW SPEED SETUP .....	5-7
LABEL SETUP RECORDS .....	
<b>LABELER TYPE SETUP .....</b>	<b>6</b>
MERGE APPLICATOR .....	6-1
MERGE PROFILING .....	6-1
MERGE MULTI-PANEL APPLY .....	6-5
AIR BLOW APPLICATOR .....	6-7
TAMP APPLICATOR .....	6-10
DAT APPLICATOR .....	6-13
<b>PRODUCT SETUP .....</b>	<b>7</b>
PRODUCT SENSOR .....	7-1
PRODUCT SETUP .....	7-2
LABEL PLACEMENT .....	7-2
<b>ENCODER .....</b>	<b>8</b>
OPTION .....	8-1
MOUNTING .....	8-1

SETUP .....	8-2
<b>CROSSOVER OPTION .....</b>	<b>9</b>
SETUP .....	9-1
MONITORING .....	9-2
PRECAUTIONS .....	9-2
<b>PRINTER SETUP .....</b>	<b>10</b>
LOOSE LOOP SETUP .....	10-1
IMPRINTER SETUP .....	10-1
<b>LABEL OPTIONS .....</b>	<b>11</b>
MULTIPLE LABEL SETUP .....	11-1
MISSING LABEL .....	11-2
SKIP COUNTER .....	11-3
<b>CONFIGURATION MENU .....</b>	<b>12</b>
RESET TO FACTORY DEFAULTS .....	12-1
SPECIAL OPTIONS .....	12-1
ALARM SUMMARY .....	12-4
<b>WEB PATH DIAGRAMS .....</b>	<b>13</b>
MERGE LH APPLICATOR .....	13-1
MERGE RH APPLICATOR .....	13-2
TAMP LH APPLICATOR .....	13-3
TAMP RH APPLICATOR .....	13-4
AIR BLOW LH APPLICATOR .....	13-5
AIR BLOW RH APPLICATOR .....	13-6
MERGE LH APPLICATOR W/16" UNWIND .....	13-7
MERGE RH APPLICATOR W/16" UNWIND .....	13-8
TAMP LH APPLICATOR W/ 16" UNWIND .....	13-9
TAMP RH APPLICATOR W/ 16" UNWIND .....	13-10
AIR BLOW LH APPLICATOR W/16" UNWIND .....	13-11
AIR BLOW RH APPLICATOR W/ 16" UNWIND .....	13-12
<b>GENERAL MAINTENANCE .....</b>	<b>14</b>
DAILY .....	14-2
WEEKLY .....	14-2
MONTHLY .....	14-2
SEMI-ANNUAL .....	14-3
DANCER ARM ADJUSTMENT .....	14-3
REWIND SLIP CLUTCH .....	14-4
DRIVE BELT ADJUSTMENT .....	14-5
<b>TROUBLESHOOTING .....</b>	<b>15</b>
DIAGNOSTIC CHART .....	15-1
FAULT CODE REGISTER .....	15-5
<b>FLOWCHARTS .....</b>	<b>16</b>
AIR BLOW APPLICATOR .....	16-1

TAMP APPLICATOR .....	16-2	
ITB TAMP APPLICATOR .....	16-3	
MERGE APPLICATOR .....	16-4	
 <b>ACCESSORIES .....</b>		<b>17</b>
ELECTRONIC CROSSOVER .....	17-1	
IMPRINTER .....	17-1	
LOOSE LOOP .....	17-1	
LOW LABEL DETECTION .....	17-1	
TAMP SWITCH .....	17-1	
WEB BREAK DETECTION .....	17-1	
 <b>RECOMMENDED SPARE PARTS .....</b>		<b>18</b>
AIR BLOW APPLICATOR .....	18-2	
MERGE APPLICATOR .....	18-3	
TAMP APPLICATOR .....	18-4	
 <b>DRAWINGS .....</b>		<b>19</b>
W/ COMPLETE PARTS LIST		
 <b>CHANGEOVER INSTRUCTIONS .....</b>		<b>20</b>
APPLICATOR CHANGEOVER .....	20-1	
BLOW BOX NOSE ASSEMBLY REMOVAL / INSTALLATION....	20-2	
MERGE NOSE ASSEMBLY REMOVAL / INSTALLATION .....	20-3	
TAMP NOSE ASSEMBLY REMOVAL / INSTALLATION .....	20-4	
NOSE ASSEMBLY CHANGEOVER .....	20-5	
MERGE PEEL EDGE CHANGEOVER .....	20-5	
BLOW BOX PEEL EDGE / FAN / GRID CHANGEOVER .....	20-6	
TAMP PEEL EDGE / CYLINDER CHANGEOVER .....	20-7	
REWIND REMOVAL / INSTALLATION / CHANGEOVER .....	20-8	
WIRING CHANGEOVER .....	20-8	



(This page is intentionally blank.)

# INTRODUCTION

The CTM Integration 360 Series Modular Labeling System is a high-speed applicator used to apply pressure sensitive labels to moving products on a production line. It is essentially a self-contained module that may be mounted in almost any position to apply labels to the top, bottom, or sides of packages as they pass by on a production line.

The CTM Integration 360 Series Modular Labeling System is unique in that the main module can be adapted to three different types of applicators: Air Blow, Merge, or Tamp by changing the nose assembly. The symmetrical design of the applicator allows labels to be dispensed to the right or left side of the machine. The applicator type and configuration (either left or right -handed) will depend on the type of product to be labeled and the arrangement of the production line.

If your application needs change in the future, a different nose assembly may be purchased but the main module would remain the same. There is no need to purchase a completely new applicator. The CTM Integration 360 Series Modular Labeling System can be easily changed over to a different nose by simply removing the existing nose from the module and replacing it with a different nose.

You can also change the configuration (right-hand or left-hand) by simply moving the applicator nose from one side of the machine to the other. All the parts are interchangeable. Everything you need is already included with each applicator nose to make the change using your existing module.

The labels should be supplied on a liner web with a minimum label gap of 1/8". The applicator will accept and dispense labels from rolls up to 20" O.D. In a typical setup, the applicator detects the leading edge of a package and applies a label with placement accuracy typically within +/- 1/32 inch.

For safe trouble free operation of the applicator, carefully follow the instructions in this manual during setup, operation, label roll changes, cleaning, and maintenance. The applicator is designed to operate under the following environmental conditions:

**ELECTRICAL SUPPLY:** 108 - 132 Volts, 5 Amps, 50 - 60 Hertz, Single-Phase

A three-meter long, three-wire cable with 16 AWG (1.00mm<sup>2</sup>) conductors rated at 10 amperes (in accordance with CENELEC HD-21) is provided for the electrical connection to the IEC 320 receptacle of the applicator. The end of the power cord is terminated with a NEMA5-15 plug.

**AIR SUPPLY:** minimum 90 – 100 PSI at 4\* SCFM per applicator (Tamp and Air Blow applicators) \* **Note: In the tamp applicator, an increase in venturi vacuum pressure may lead to higher SCFM requirements.**

**ENVIRONMENT:** Operating temperature: 40 – 104 degrees F  
Humidity: 20 - 95% RH, non-condensing

**NOTE: THE 360 SERIES MLS IS NOT INTENDED TO BE OPERATED IN AN ENVIRONMENT WHERE FLAMMABLE OR EXPLOSIVE GASSES ARE PRESENT. THE 360 SERIES MLS IS NOT TO BE USED IN DIRECT CONTACT WITH FOOD PRODUCTS.**

**READ THE INSTRUCTIONS CAREFULLY AND COMPLETELY.** This manual includes all of the information needed to setup the applicator under normal operating conditions. The instructions include important safety precautions that 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 IT UP AGAIN.** Although an applicator malfunction is possible, most problems happen because the applicator is not setup correctly. If the applicator doesn't operate correctly, back up and start over.

**FOLLOW ALL SAFETY INSTRUCTIONS.** The CTM 360 Series MLS applicator has been provided with a number of safety features. Observe all safety warnings and under no circumstances attempt to remove or defeat safeguards or operate the machine in a manner contrary to the instructions.

(This page is intentionally blank.)

## **DEFINITION OF MACHINE TERMS**

### **AIR BLAST JETS:**

The flexible air blast jets press-fit into the inside face of the vacuum grid and can be re-arranged to provide an air stream pattern that transfers labels of various sizes and shapes to the product. The air jets are connected via a manifold to the output of the “Air Blast” solenoid valve located in the valve bank. The filter regulator assembly mounted upstream of the valve controls the air pressure to this solenoid valve. The duration of the air blast is controlled by the “Air Blast Time” function. Refer to the setup procedures for instructions.

**NOTE:** Any unused air jet tubes should be inserted into the storage block at the rear of the blow box.

### **AIR ASSIST TUBE:**

The air assist tube is a small stainless steel tube mounted on the underside of the peel edge. It helps to separate the label from the liner as it is being dispensed onto the blow box or tamp label pad for application.

### **APPLICATOR BLOW BOX NOSE:**

The blow box applicator nose is used for dispensing labels via the air blow application. The blow box creates a vacuum to hold the label to the vacuum grid until it is dispensed onto the product. The nose assembly is easily converted from left-hand to right-hand and vice versa using the same parts. Also, the blow box nose assembly can be interchanged with the merge, tamp, or DAT applicator nose assembly.

### **APPLICATOR MERGE NOSE:**

The merge applicator nose is used for dispensing labels via the wipe on/merge application. A label is dispensed from the peel edge and the brush wipes the label onto the product as it is traveling past the applicator. The merge applicator nose is easily converted from left-hand to right-hand and vice versa using the same parts. Also, the merge nose assembly can be interchanged with the air blow, tamp, or DAT applicator nose assembly.

### **APPLICATOR TAMP NOSE:**

The tamp applicator nose is used for dispensing labels via the air blast/tamping application. A label is dispensed from the peel edge onto the label pad. The air cylinder extends the tamp assembly to the product and the label is applied with an air blast. The tamp extend and retract times are configured during applicator setup. The tamp applicator nose is easily converted from left-hand to right-hand and vice versa using the same parts. Also, the tamp nose assembly can be interchanged with the air blow, merge, or DAT applicator nose assembly.

### **APPLICATOR DAT NOSE:**

The DAT (Dual Action Tamp) applicator nose is used for dispensing labels via an air blast to the side of the product with a tamping action and the leading or trailing panel of the same product with a swing action. SWING ONLY and SIDE ONLY operating modes are supported as well. A label is dispensed from the peel edge onto the label pad. Air cylinders extend the tamp or swing arm assembly to the product and the label is applied with an air blast. The tamp/swing extend and retract times are configured during applicator setup.

### **BLOW BOX / VACUUM GRID:**

The blow box/vacuum grid is the cube shaped assembly located next to the peel edge on a blow box applicator. Two axial fans mounted above the grid create the vacuum needed to hold the label in place prior to application.

### **DANCER ARM:**

The dancer arm is attached to the unwind block assembly with a shoulder bolt and a bushing. It appears immediately after the unwind mandrel in the web path. The dancer arm has a roller at one end that rides against the label liner and is interconnected to the mandrel tension disk with a spring. The dancer arm maintains tension on the liner loop as it operates the brake on the unwind mandrel when labels are being dispensed. The spring tension should be large enough to properly tension the web but still allow proper operation of the brake. Do not over tension the dancer arm.

### **DRIVE ROLLER:**

The drive roller is coupled to a stepper motor that provides the motive force for advancing the label liner. The drive roller in conjunction with the spring loaded nip roller pull the label liner around the peel edge to dispense a label onto the product, tamp pad, or blow box grid.

### **LABEL MANIFOLD:**

The label manifold is the mounting block that attaches the label pad to the bottom of the tamp cylinder on the applicator nose. The label manifold is a custom part that is manufactured exactly to the label size being applied. If at any time the label size changes, a new label manifold must be purchased along with the label pad.

### **LABEL PAD:**

The label pad is a white delrin material mounted onto the label manifold at the bottom of the tamp cylinder of the tamp applicator nose. The label pad is a custom part that is manufactured exactly to the label size being applied. If at any time the label size changes, a new label pad must be purchased.

### **LABEL TENSION BRUSH ASSEMBLY:**

This is an adjustable brush to help create tension on the label liner. The brush can be released while threading the label liner.

### **NIP ROLLER:**

The spring-loaded nip roller provides positive pressure to the label liner that passes between the drive and nip roller assemblies. These rollers ensure that the liner does not slip during the label dispense cycle. The tension on the rollers may be released by turning the knob located on the top of the nip roller assembly.

### **PEEL EDGE:**

The peel edge is the beveled plate located at the end of the applicator nose. When the label liner is pulled around the peel edge, the label separates from the liner and is transferred to the vacuum grid, tamp pad, or product depending on the applicator type.

### **PEEL EDGE LABEL TENSION SPRING:**

This tension spring is attached to the bottom of the spring block assembly. It is used to keep the label liner flat on the peel edge surface and assist in controlling the dispensing of the label onto the vacuum grid, tamp pad, or product. The tension is adjustable to accommodate varying label thickness and release properties.

### **REWIND MANDREL / SLIP CLUTCH:**

The rewind mandrel is provided to store the label liner after labels have been removed. It is equipped with a slip clutch and is driven by the stepper motor. The pressure exerted by the slip clutch is adjustable.

### **SINKING OUTPUT CONFIGURATION:**

The 360 Applicator's Alarm, I/O, and Valve outputs are wired in the sinking configuration. The load current for a sinking output flows into the output terminal. The load common connection is the positive power supply terminal (+V). When the output is active, current flows from the positive terminal of the load power supply through the load into the output terminal to ground.  $I_o(\text{max}) = 80 \text{ mA}$

### **SOURCING INPUT CONFIGURATION:**

The 360 Applicator's Low Label, Web/Tamp, and Product Detect inputs are optically-isolated. The sensors connected to these pins must be able to sink the opto-coupler's input current. The sensor common connection is the negative power supply terminal (ground or -V). When the sensor output is active, current flows from the positive terminal of the load power supply through the optical coupler circuit and out of the input pin and through the sensor output (open collector/drain or SPST N.O relay) to ground.  $I_{in}(\text{max}) = 15 \text{ mA}$ .

### **UNWIND ASSEMBLY:**

The roll of labels is placed on the unwind assembly for dispensing onto the product. The unwind block is used to mount the unwind assembly to the main module. The unwind assembly can be removed and remounted on the opposite side of the module for easy conversion from a right-hand to a left-hand applicator or vice versa.

### **UNWIND ROLL MANDREL:**

The unwind roll mandrel is equipped with an adjustable spring tension disk, a brake, and a quick-change outer disc. The unwind roll mandrel and the dancer arm maintain proper web tension and prevent excessive run-out of the label liner as labels are processed through the machine.

### **VALVE BANK:**

The valve bank will consist of single valve for a merge applicator with an imprinter, two valves for a blow box applicator, or three valves for a tamp applicator. The valve bank has built in regulators and gauges and plugs into the valve connector on the rear panel.

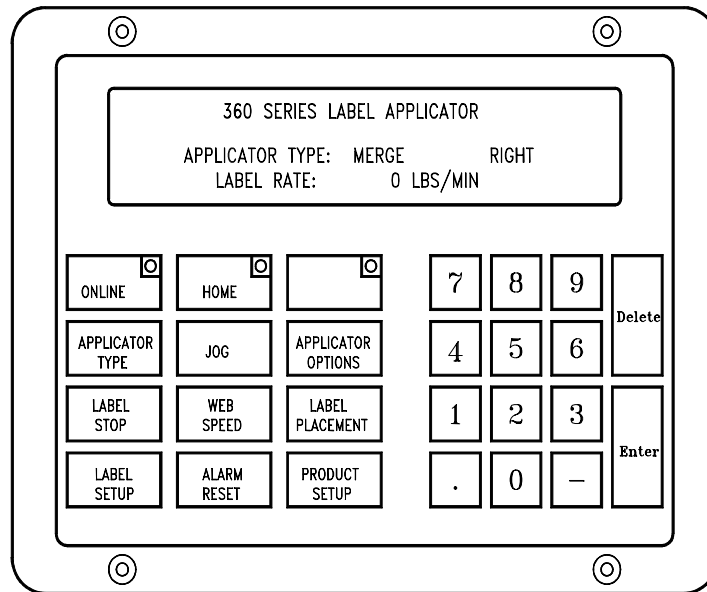
### **WEB PATH:**

The web path is the path the label liner follows from the unwind assembly through the various rollers to the applicator nose.



(This page is intentionally blank.)

## DISPLAY PANEL



### MAIN MENU:

The main menu or home page screen displays the applicator type, whether it is in a left or right-handed configuration, and the label rate.

### ONLINE:

The ONLINE function indicates whether or not the applicator is active. When the online LED is on, the applicator can be jogged or cycled from the product detect signal. When the LED is off, the applicator is disabled and power is removed from the drive roll motor.

### APPLICATOR TYPE:

The applicator type function allows the operator to choose the type of label applicator (air blow, merge or tamp) and whether it will be in a left-hand or right-hand configuration. The tamp applicator has an additional menu that allows you to select between normal, inverted, or dual action tamp (DAT) application modes. The standard tamp applicator nose assembly does not support the DAT applicator type.

**NOTE: 1) Password protected. The default password is 1800. Going back to the home screen will disable the last password entry.**

**2) You must be OFFLINE to change applicator type.**

## **LABEL STOP:**

The label stop key lets you enter the label stop distance value. The label stop value is the distance from the label edge to the label sensor. If the entered value is incorrect, an out-of-range message is displayed and the label stop menu is re-displayed so that a different value may be entered. Allowed values are between 0.03" and (label length – 0.06"). The label stop value may be changed while the applicator is running.

**Note:** After software version 360-2b.25 anything less than .06" comes with a warning that label stop may vary with speed.

## **LABEL SETUP:**

The label setup menu will change depending on the type of applicator selected. The following is a list of possible setups:

**AUTO SETUP:** The auto setup function will automatically set the label sensitivity, label length, and label stop for most labels. Also, the short feed distance will be calculated if the Multi-Panel Apply option is enabled prior to running auto setup. On labels with low contrast between light and dark areas, the label sensitivity may not setup correctly. Therefore, the label length and label stop will not be correct. In these instances, the operator will have to manually setup the label parameters.

**MANUAL SETUP:** The manual setup function provides additional flexibility in those cases where the label contrast is low or the particular label properties show that a choice between leading or trailing edge detection would improve application performance. The terms leading and trailing edge detection refer to which edge of the label that the label sensor responds to during a dispense cycle.

**LABEL LENGTH:** The label length is defined as the width of the label plus the width of the gap between labels. Stated another way, it is the distance from the leading edge of one label to the leading edge of the next label. Since each application cycle moves the label length distance, it is important to enter the exact label length value. Allowed values are between 0.375-20".

**AIR BLAST:** The air blast time is the interval of time that the air blast valve is turned on. Allowed values are .010 to 1 second for merge and air blow applicators and .010 to (tamp retract - 0.01) sec for tamp applicators.

**EXTENDED AIR ASSIST:** The extended air assist time is the interval of time after the label feed until the air assist is turned off. It is used in blow box and tamp applicators to help hold the label in place on the vacuum pad prior to being blown onto the product. Allow values are .001 - 1 second.

**TAMP/SWING EXTEND:** The tamp/swing extend time is the interval of time allotted for the slide/arm to extend. After the timer has timed out the air blast will occur and the slide/arm will return home. To keep labeling speeds up, this value should be as low as possible. Allowed values are between .001 - 5 sec.

**TAMP/SWING RETRACT:** The tamp/swing retract time is the interval of time allotted for the slide/arm to return home before feeding another label. If this value is too small, a label will feed into the pad or manifold. Allowed values are between .001 - 5 seconds. **Note:** In a tamp applicator, the tamp slide action may be disabled or enabled by pressing zero (0).

**LABEL PROFILE:** The label profile option is used to merge a label onto a curved surface. The dispense speed of the applicator is changed between two speeds depending on the position of the product surface relative to the peel edge.

**MULTI-PANEL APPLY:** The Multi-Panel Apply option is used to merge a label onto two or three panels of a product. An example might include the leading, top, and bottom panels of a CD case. The applicator is initially setup so that the label is flagged out in front of the product but is still supported on the liner. When the product reaches the peel edge, the flagged out portion of the label is applied to the bottom edge of the product. The applicator then moves the “Short Feed Distance” at web speed to dispense enough label material for the remaining panels of the product. The applicator then waits for the “Product Clearance” time or distance to allow the product to pass by the peel edge before moving the next label to the flagged out position at slow speed.

## **HOME:**

The home key will take you back to the home screen from any other screen except ones requiring numerical entry. Here it will indicate what type of applicator has been selected (air blow, merge, or tamp) and whether it is in the right-hand or left-hand configuration.

## **JOG:**

If the applicator is online, the jog key will allow you to dispense one label at a time as long as the product detect input is not active. When using the display jog key, motion begins immediately and the applicator will not wait for the label placement value or perform any of the special applicator options such as profiling or multi-label. The jog key is particularly useful when adjustments are made to label length or label stop values in the **label setup** procedure. If the jog key is pressed for three seconds, the applicator will continuously apply labels. The jog function on the power switch simulates a product detect signal and will perform exactly the same applicator steps that a valid product detect signal would initiate.

## **WEB SPEED:**

The web speed key allows you to enter the web speed value. If the entered value is incorrect, an out-of-range message is displayed and the web speed menu is re-displayed so that a different value may be entered. Allowed values are between 100 and 1500 "/min or 100 and 2100 "/min depending on whether it is a normal or high-speed applicator. The web speed value may be changed while the applicator is running.

## **ALARM RESET:**

When a fault occurs (i.e. low label, alarm loop, no labels found, web break, or offline critical) an alarm message will appear on the display indicating the problem. If the applicator is equipped with a light stack, the light will be on solid for warning alarms and flash for critical alarms. Both conditions will remain on until the problem is corrected and “ALARM RESET” is pressed.

## **LABEL FORMATS:**

The label formats key allows the operator to view, save, load, or delete up to 10 label setups. If a certain size label is used over and over, the label parameters may be saved and reloaded for use at a later date. The label formats menu is password protected to prevent inadvertent loss of data. The tamp switch and Multi-Panel Apply options are turned off when a label format is loaded. **The default password is 1800.**

**APPLICATOR OPTIONS:**

The applicator option menu will let you view and choose which options you'll be using in a particular application. **For example:** If you have a loose loop configuration, simply select the loose loop option and press the HOME key to take you back to the main menu.

<b>Option choices:</b> Loose Loop	Low Label	Multiple Label
Imprinter	Web Break	Missing Label
Crossover	Tamp Switch	Skip Counter

**OPTION INCOMPATIBILITY**

In some instances, applicator options are incompatible with one another because they are functionally different. In other cases they share hardware or software resources. When the operator attempts to enable an option, the applicator will disable some options automatically or will prompt the user to disable another option before proceeding. The following table illustrates what options are incompatible with others:

Active Option or Mode	Disabled Option(s) or Mode(s)
Crossover	Multi-Panel Apply Loose Loop Skip Counter
Imprinter	Loose Loop * Powered Rewind DAT applicator * Critical to DO10
Label Profiling	Multi-Label
Multi-Panel Apply	Crossover Multi-Label Label Profiling Skip Counter
Loose Loop	Crossover Imprinter * Powered Rewind DAT applicator * Critical to DO10
Missing Label	Multi-Label
Multi-Label	Label Profiling Multi-Panel Apply Missing Label

(cont'd next page)

\* These options are found in the special option menu accessible at power-up.

Active Option or Mode	Disabled Option(s) or Mode(s)
* Powered Rewind	Imprinter Loose Loop DAT applicator * Critical to DO10
Skip Counter	Crossover
Tamp Switch	Web Break
Web Break	Tamp Switch
DAT applicator	Loose Loop Imprinter Crossover Multi-Label * Pwr'd Rewind/Print/Critical to DO10
* Critical to DO10 /DO10&11	Loose Loop Imprinter * Powered Rewind DAT applicator

**NOTE: 1) The different options are covered in detail in the setup section.**

- 2) If you press the applicator options key, the first screen shows all of the available options and which ones are currently active. Selecting a particular option for the first time requires a password. The default password is 1800. Subsequent selections do not require a password as long as you remain within an option menu. Going back to the home screen will disable the last password entry.**

### **LABEL PLACEMENT:**

The label placement key lets you enter a label placement value. Label placement is the time or distance from the product detect sensor to where the label is dispensed onto the product. If the value entered is out-of-range, a message will let you know so that you can re-enter a different value. The allowed values, in seconds if time based or in inches if encoder based, are shown on the last line of the label placement display screen. When the applicator type is set to DAT, a second label placement menu will come up automatically after the first. The first DAT label placement value corresponds to the first swing/tamp action while the second placement value corresponds to the second tamp/swing action selected (leading/trailing). When the swing or tamp only modes are active, the applicator will bring up the appropriate label placement menu. The label placement value(s) may be changed while the applicator is running.

### **PRODUCT SETUP:**

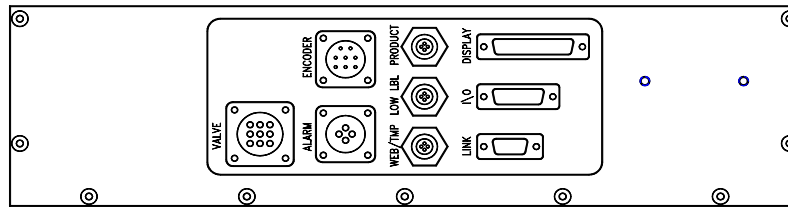
The product setup key provides access to the detector lockout and encoder setup submenus. Also, the current status of the product detect sensor, web speed (if equipped with an encoder), and label counter values are displayed. The user may reset the label counter by selecting that option from the display. If DAT is selected for the applicator type, encoder compensation is not used and is not accessible from the

encoder submenu. **Note: This area is password protected. The default password is 1800. Going back to the home screen will disable the last password entry.**

**DETECTOR LOCKOUT:** The detector lockout function is used when more than one product detect signal is generated per product. The timer starts at the beginning of a labeling sequence and the applicator will ignore product detect signals until this timer has timed out. Therefore, if you set this timer to a value equal to the time it takes the product to pass by the labeler, it will only see the first product detect signal. Allowed values are between .001 - 20 seconds.

**ENCODER SETUP:** Please refer to the **ENCODER SETUP** section of this manual.

## REAR PANEL



## CONNECTORS

**VALVE:** When using a Tamp, Blow Box, or a Merge applicator with an imprinter, a valve bank is mounted to the side of the machine. This plug is used to power the valves.

**ENCODER:** The encoder is connected to this plug. The encoder is enabled through the product setup menu.

**ALARM:** This connector is for an alarm light. Alarm output conditions include:

No Labels Found  
Web Break  
Tight Loop at Printer  
Offline Critical  
Low Label

**PRODUCT:** This is where the product detect sensor is connected.

**LOW LABEL:** When the low label option is used, the sensor is connected here.

**WEB/TMP:** This is a dual-purpose connector. Either a web break sensor or a tamp return switch can be connected here (but not both). Enable either option via the applicator options menu.

**DISPLAY:** This port is for connecting the display to the applicator.

**I/O:** This port is for loose loop, alarm signals to a PLC, and imprinter control. Only one option is available at a time; all are enabled via the applicator options menu.

**LINK:** The link port is used to interconnect two labeling heads in “ZERO DOWNTIME” applications. See CROSSOVER in the SETUP section for more information.



(This page is intentionally blank.)

# **360 SERIES**

# **SETUP**

# **PROCEDURES**

**!!CAUTION!!** **DISCONNECT THE AIR AND POWER FROM THE MACHINE BEFORE YOU THREAD LABELS OR YOU MAY BE CAUGHT BETWEEN THE DRIVE AND NIP ROLLERS IF THE MACHINE CYCLES UNEXPECTEDLY!**

## **JOB SETUP**

**NOTE:** When reading through this section of the manual, refer to the web path diagram section.

### **THREADING LABELS**

1. With the power off remove the outer unwind disk.
2. Make sure the inside of the inner disk is at least 1 1/4" away from the faceplate of the applicator.
3. Slide a roll of labels over the unwind hubs and push against the inner disk. Make sure the labels are face up as they unwind. Replace the outer disk and lock in place.
4. Remove approx. 3 ft of labels from the liner on the leading part of the roll of labels.
5. Thread labels through the machine referring to the web path diagram section that applies to your configuration.
  - a. When going between the nip and drive rollers, turn the knob on top of the nip assembly to spread the two rollers.
  - b. If the applicator is a blow box or tamp, make sure the web goes between the peel edge and the air assist tube.
6. Remove rewind pin, lay the label liner over the pin slot and replace pin.
7. Align guide collars with the unwind assembly.
8. Lower the nip roller so that it comes into contact with the drive roller.
9. Make sure the label tension brush is against the roller. This keeps the web tight between this point and the peel edge.
10. Re-locate the spring block assembly so that it is in the center of the label and is applying slight pressure to the top of the labels. This aids in the dispensing of labels off of the peel edge.

## **LABEL SENSOR SETUP**

The label sensor is a “U”-shaped optical sensor that is connected to the sensor electronics with fiber optic cable. To insure proper operation of the label sensor, there should be no sharp bends in the fiber optic cable from the sensor to the applicator housing. The two sensor forks contain a light emitter and a receiver. For best accuracy, both surfaces should be kept free of contaminants and the light emitter should be in the lower fork. The web must be positioned inside the forks of the sensor so that the sensor can see the label surface. The contrast inside the label should be fairly uniform to avoid false edge detects. If the liner appears within the label, move the sensor in or out to avoid this area on the label. The label sensor has two detection modes available for instances where the entire leading or trailing edge of the label is similar in contrast to the label gap. The terms leading and trailing edge refer to the first and second label edges that the sensor encounters as the label moves past the sensor. Select the edge option that gives the most reliable performance for your particular label. The applicator comes from the factory set for leading edge detection.

## **AUTO SETUP**

In auto setup, the applicator will automatically set the label sensitivity, label length, and label stop values. Also, it will calculate the “short feed distance” if the Multi-Panel Apply option is enabled prior to running auto setup. The following steps summarize the auto setup sequence:

1. With the applicator offline, select “1” from the LABEL SETUP menu.
2. The display will show the two edge detection modes discussed in the paragraph above. Select “1” for label LEADING EDGE or “2” for label TRAILING EDGE detection. If your selection is different than the current sensor configuration, the applicator will display a message that it is re-configuring the sensor. This process takes approximately 8 seconds to complete. If you want to bypass this section, press “ENTER”.
3. The applicator will instruct you to move the web so that the label gap is under the sensor. Manually turn the drive roller to advance the web to the label gap position and press “LABEL SETUP”. The applicator will dispense 10” of label while dynamically setting the label sensitivity. If you want to bypass this section, press “ENTER”.
4. If the MULTI-PANEL APPLY option is off, go to step 6. The applicator will instruct you to move the label leading edge to the peel edge and press “LABEL SETUP”.
5. Enter the number of labels between the label sensor and the peel edge. Make sure to include the label directly under the label sensor in this number. Press “ENTER”, three labels are dispensed while the applicator is calculating the peel edge to label sensor distance and the “Short Feed Distance” values.
6. The applicator will instruct you to move the web to the desired label stop position and press “LABEL SETUP”. Three labels are dispensed while the applicator is calculating the label length and label stop values. If you want to bypass this section, press “ENTER”.

**Note:** If the controller calculates a label stop value that is less than 0.03” or greater than (label length – 0.06”), the controller will select the value closest to these limits and a warning message is displayed indicating that the label stop may need adjusting. The operator may override the controller’s value using the “LABEL STOP” menu.

## MANUAL SETUP

The manual setup function is provided for those instances where auto setup does not work. The following steps summarize the manual setup sequence:

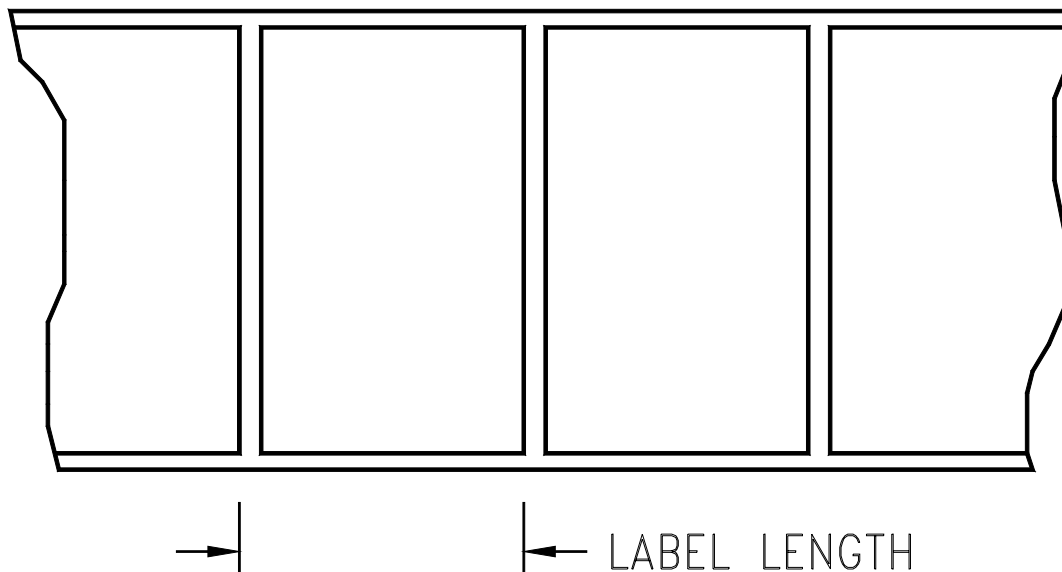
1. With the applicator offline, select “2” from the LABEL SETUP menu.
2. The display will show the two edge detection modes discussed in the paragraph above. Select “1” for label LEADING EDGE or “2” for label TRAILING EDGE detection. Pressing “ENTER” at this point will bypass the following steps and take you back to the “LABEL SETUP” menu.
3. If LEADING EDGE DETECT was selected, the applicator will instruct the operator to place the label and liner under the sensor and press “LABEL SETUP” to continue.  
  
If TRAILING EDGE DETECT was selected, the applicator will instruct the operator to place the liner only under the sensor and press “LABEL SETUP” to continue.  
  
The sensor measures the label sensitivity at this position and uses this value for the “ON” condition.
4. If LEADING EDGE DETECT was selected, the applicator will instruct the operator to place the liner only under the sensor and press “LABEL SETUP” to continue.  
  
If TRAILING EDGE DETECT was selected, the applicator will instruct the operator to place the label and liner under the sensor and press “LABEL SETUP” to continue.  
  
The sensor measures the label sensitivity at this position and uses this value for the “OFF” condition.
5. The display will show whether the sensor is looking at the gap or the label in the current position. If the web is manually adjusted by turning the hand wheel, the display status will change as the web moves past the label sensor. Pressing “ENTER” will take you to the LABEL LENGTH menu.
6. The display will show the current label length setting. If it is incorrect, enter a new label length. If the value shown is correct, pressing “ENTER” will take you back to the LABEL SETUP menu. **For additional help, see the LABEL LENGTH explanation shown below.**
7. If the label length value was changed in step 6, the applicator will dispense a label and advance to the “LABEL STOP” menu. The operator may accept or modify the current label stop value as needed and return to the LABEL SETUP menu by pressing “ENTER”. **For additional help, see the LABEL STOP explanation shown below.**

## LABEL LENGTH SETUP

1. Measure the distance from the leading edge of one label to the leading edge of the next. This will be the “label length” value.
2. From the LABEL SETUP menu press “3” to adjust the “LABEL LENGTH” value.
3. Enter the length and press “ENTER”. If the value is less than 0.375” or more than 20”, the display will show an out-of-range message for 2 seconds then switch back to the label length menu. If the value shown is correct, pressing “ENTER” will take you back to the LABEL SETUP menu.
4. If the label length value was changed in step 3, the applicator will dispense a label and advance to the “LABEL STOP” menu. The operator may accept or modify the current label stop value as needed and return to the LABEL SETUP menu by pressing “ENTER”.
5. Press “HOME” to go to the main menu.

**NOTE: It’s important to set the label length to exactly what it is (don’t guess). If there is a missing label on the liner, the web will feed the label length distance. This is important because of the label sensor’s position relative to the peel edge.**

After 3\* missing labels in a row, a “no labels found” message will appear on the display. If a light stack is connected to the applicator, it will flash at a steady rate. Correct the problem and press “ALARM RESET” to clear the alarm. \* After software version 360-2b.25, the number of missing labels before a “no labels found” alarm is user adjustable in the SPECIAL OPTIONS menu.



## **LABEL STOP**

1. The label stop value is the distance from the label edge to the label sensor. Allowed values are between 0.03" and (label length – 0.06").

**NOTE: After software version 360-2b.25 any value less than .06 comes with a warning that says the label stop can move when the web speed changes.**

2. Press the "LABEL STOP" key. Enter a new value and press "ENTER". If the value is out-of-range, the display will show an out-of-range message for 2 seconds and then switch back to the label stop menu.
3. A valid label stop entry will send you back to the main menu.
4. With the applicator online, press "JOG". If the label stop is not where you want it, go back into the "LABEL STOP" menu and enter a new value.

**NOTE: This adjustment can be made while the machine is running.**

## **LABEL FORMATS**

This option will let the operator view, save, load or delete up to 10 label setups. If a certain size label is used over and over, you can save the label format and reload it at a later date. Parameters that are saved are:

APPLICATOR TYPE	LABEL PLACEMENT #2	TAMP EXTEND	AIR BLAST TIME
LABEL LENGTH	WEB SPEED	TAMP RETRACT	LABEL ADVANCE
LABEL STOP	ENCODER ON/OFF	SWING EXTEND	ACCELERATION
LABEL PLACEMENT #1	RATE COMPENSATION	SWING RETRACT	DECELERATION

Press the "LABEL FORMAT" key. If the Label Format Protect feature is enabled in the Special Options menu, enter the default password "**1800**" to gain access to the following options:

- 1) VIEW LABEL FORMAT
- 2) LOAD LABEL FORMAT
- 3) SAVE LABEL FORMAT
- 4) DELETE LABEL FORMAT

**Warning: The applicator must be offline to enter this menu!**

### View Format

This option will allow the operator to view the individual format parameters. Pick "1" at the label format menu and select the format number you want to see. Pressing "ENTER" will take you back to the Label Format menu.

## **LABEL FORMATS** (cont.)

### Load Format

This option will allow the operator to load the values of a previously stored format in to the system as current values. Pick “2” at the label format menu and select the number of the format you want to load. If you want to exit without loading any format, press “ENTER”. Continue to press “ENTER” to exit to the label setup menu. **Warning: Once you pick a format, it will change the current parameters to what was in the format. There will be no warning!**

### Save Format

This option will allow the operator to save the current parameters to a format with a four-digit name. Pick “3” at the label format menu and enter up to four digits for the format name. When finished, press “ENTER”. If you do not want to save a format, press “ENTER” before you type in a format name. By typing in the same name as an existing format, the variables saved in that format will be over-written. Continue to press “ENTER” to exit to the label setup menu.

### Delete Format

This option will allow the operator to delete a format from the list. Pick “4” at the label format menu and select the number of the format you want to delete. If you want to exit this section without deleting anything, then press “ENTER” before pressing any numbers. Continue to press “ENTER” to exit to the label setup menu. **Warning: Once a format number has been selected, it will be deleted. There is no warning!**

## **WEB SPEED**

Web speed is the velocity of the label web in inches per minute. In a merge application the web speed should be set at the velocity of the product. In tamp or blow box applications the web speed will vary depending on the label size and product rate. Some labels will have to be run at a slower speed so that it will properly feed out onto the label pad/grid.

1. Press the “WEB SPEED” key and enter a value between 100” and 1500” per min. for normal speed applicators or between 100” and 2100” per min. for high-speed applicators. Press “ENTER” to return the main menu. If the value is out-of-range, the display will show an out-of-range message for 2 seconds then switch back to the web speed menu.

**NOTE: This adjustment can be made while the machine is running.**

## **SLEW SPEED**

The slew speed value allows the applicator to speed-up the label dispense cycle in certain time critical applications. The slew speed menu will automatically appear after the web speed menu when the **Missing Label** or **Multi-Panel Apply** options are **ON**. The default value is set at 1200 “/min.

1. Enter a value between 100” and 1500” per min. for normal speed applicators or between 100” and 2100” per min. for high-speed applicators. Press “ENTER” to return the main menu. If the value is out-of-range, the display will show an out-of-range message for 2 seconds then switch back to the slew speed menu. **Note: In order to improve performance, the slew speed setting must be larger than the current web speed or encoder rate value.**



(This page is intentionally blank.)

## MERGE APPLICATOR SETUP

The merge applicator is used to apply labels to products moving on a conveyor. A label is feed onto the surface of the product at the same speed that the product is moving.

1. On the display, under “APPLICATOR TYPE” select “MERGE” applicator. Also, indicate whether it is in a right-hand or left-hand configuration using the “RT/LT HAND” selection.
2. Go through the general label setup procedure.
3. Position the peel edge so it’s between 1/8” and 1/2” away from the product at approximately 20 degrees to the product surface.
4. Adjust the applicator brush so that it will lightly touch the product. It should be angled so that the label is supported as it is fed out. **NOTE: The applicator brush is used to aide in the tacking of the label to the product. It is not made to be a wipe down.**
5. Label stop can be set so that the label is flagged past the peel edge but must miss the passing product.
6. Web speed should be set to match the speed of the product.
7. Go to the product setup section of this manual to finish setup.

## MERGE LABEL PROFILING

Profiling is used to aide in labeling products that have a concave or convex surface. If the surface of the product is convex, the labeler will dispense a label at web speed during the “rise area” distance. When this distance has been traveled, the web speed changes to (web speed) x (web ratio) during the “flat area” distance. After traveling the combined rise plus flat distance, the labeler returns to web speed for the remainder of the move. The reason for this action is that convex products start out farther away from the peel edge than it will be by mid-product. The label is dispensed at normal speed at the beginning of the product. As the product surface moves closer, the label must slow down so that the labels do not wrinkle. As the product surface moves away, the label speeds-up.

On concave products the label is dispensed at web speed initially. As the surface of the product moves away, the label is dispensed faster to force the label into the product. The label dispense speed is slowed as the product surface moves closer to the peel edge.

- NOTE:**
- 1) Label profiling is a function of the merge applicator only.
  - 2) Label profiling is enabled when the “web ratio” is set to something different than “1”.
  - 3) Max. speed for the labeler is 1500 ”/min. for normal speed applicators or 2100 ”/min for high speed applicators. The machine will not exceed this speed even if the web ratio is set to a number higher than “1”.

## **ENTERING LABEL PROFILING VALUES**

1. Press “LABEL SETUP” then select “LABEL PROFILING”.
2. The label profiling menu shows the following three items:

Profile Rise Area  
Profile Flat Area  
Web Ratio
3. Press “(1) PROFILE RISE AREA”. This is the distance the label travels before changing to the mid-product labeling speed. Enter a value between 0.5 and 20. A valid entry will send you back to the label profiling menu.
4. Press “(2) PROFILE FLAT AREA”. This is the distance the label travels while at the mid-product labeling speed. Enter a value between .001 and 20. A valid entry will send you back to the label profiling menu.
5. Press “(3) WEB RATIO”. The web ratio is a multiplier applied to the web speed value to either slow or speed-up the applicator during the profile flat area. This number will vary depending on product shape and is usually determined by trial and error. Enter a value between .5 and 1.5. A valid entry will send you back to the label profiling menu.

**NOTE: Label profiling is disabled when using the multi –label option.**

### **PROFILING SUMMARY**

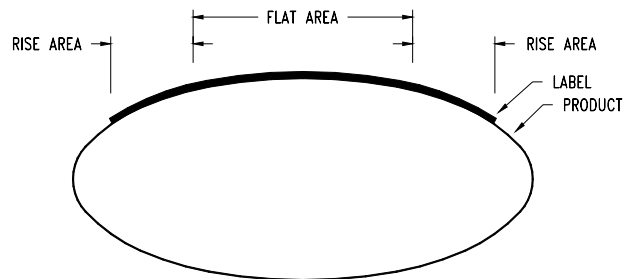
Condition	Product Shape
WEB RATIO < 1.0	Convex
WEB RATIO = 1.0	Flat Surface
WEB RATIO > 1.0	Concave

Web Ratio Setting	Speed during 0” to rise distance	Speed during rise to flat distance	Speed during flat to label length distance
< 1.0	web speed	(web speed) (web ratio)	web speed
= 1.0	web speed	web speed	web speed
> 1.0	web speed	(web speed) (web ratio)	web speed

## **ESTIMATING RISE AREA AND FLAT AREA**

This process will give you a starting point for profile variables. Some experimentation is necessary for best results. The example shown is for a convex or oval product.

1. Apply a label by hand to the product. Measure the rise area by looking at the beginning of the label to where it starts to flatten out. Also measure the length of the flat area. Use the diagram below as an example.



2. Use these numbers when inputting values to the display.
3. When using this type of product, web ratio is set less than "1". This will slow web speed during the flat area.

## **RISE AREA AND FLAT AREA FINAL ADJUSTMENT**

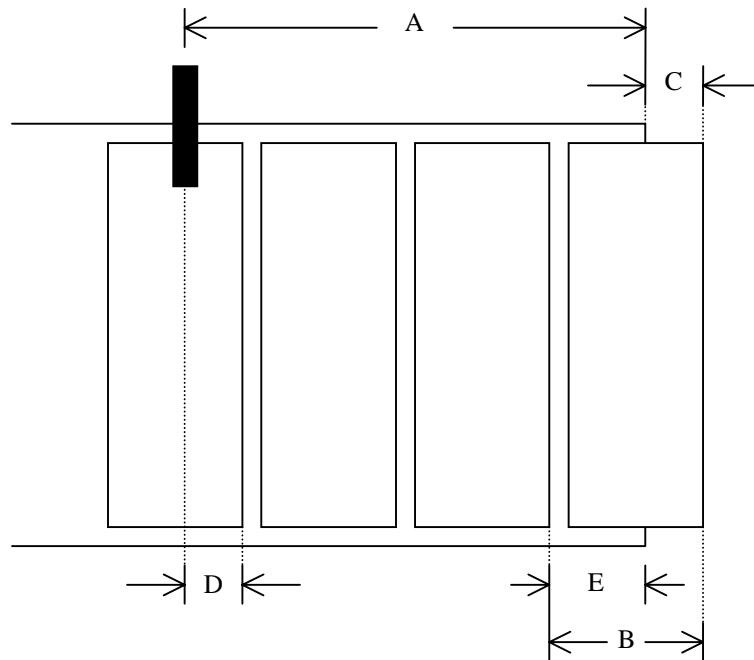
The system will work best with the smallest rise area value and the largest flat area value that properly applies the label. Use the instructions below to find these values.

1. With the applicator online, send several products down the conveyor and observe the labels that are applied.
2. If the leading edges of the labels were all applied at the same position on the products, go on to step #3.  
  
If the leading edges of the labels were placed at various positions on the products, the Rise Area Length is too short.  
  
Slightly increase the Rise Area Length and run some more products. Repeat until the leading edge label placement is consistent.
3. If the leading edges of the label were applied at the required position on the product, go on to step #4.  
  
If the leading edge of the label is applied at the incorrect position, adjust the “LABEL PLACEMENT”, or re-position the product detector. Run some more products. Repeat until the leading edge of the label is applied at the required position on the product.
4. If there are no wrinkles or bubbles in the first half of the applied labels, go on to step #5.  
  
If a wrinkle or bubbles appear from the top to the bottom of the first half of the label, the rise area is too long.  
  
Slightly decrease the rise area and run some more products. Repeat until the wrinkle in the first half of the label is removed.
5. If there is no wrinkle in the center of the label, go on to step #7.  
  
If a wrinkle appears from the top to the bottom at the center of the label, either the Web Ratio is too high, or the Flat Area is too short.  
  
The Web Ratio will be adjusted first. Before adjusting, note the Web Ratio setting. Slightly decrease the Web Ratio and run some more products. Repeat until the wrinkle is removed. Go on to step #7.
6. Increase the Flat Area slightly and run some more products. Repeat until the wrinkle is removed.
7. If the labels are applied wrinkle free from lead edge to trail edge, go on to step #8.  
  
If small horizontal wrinkles appear on the trailing edge on the label, the Flat Area is too long.  
  
Slightly decrease the Flat Area and run some more products. Repeat until wrinkles are eliminated.
8. When the Web Ratio, Rise Area and the Flat Area are established, the setup is complete.

## **MERGE MULTI-PANEL APPLY**

The Multi-Panel Apply option is used to merge a label onto two or three panels of a product. An example might include the leading, top, and bottom panels of a CD case. The applicator is initially setup so that the label is flagged out in front of the product but is still supported on the liner. When a product detect signal is received, the applicator will wait for the label placement time or distance depending on whether the encoder is off or on. At label placement, the applicator will feed the “Short Feed Distance” at web speed or encoder speed. This will place the next label at the peel edge. The applicator will wait for the “Product Clearance” time or distance to allow the product to pass by the peel edge before moving the next label to the flagged out position at slow speed. The figure below illustrates a hypothetical setup with four labels between the peel edge and the label sensor along with the measurement definitions:

- A: label sensor to peel edge distance
- B: label length
- C: label flag distance
- D': label stop distance with C = 0 (not shown)
- D: label stop distance
- E: short feed distance
- N: # of labels between sensor and peel edge



The AUTO SETUP feature will calculate all of the dimensions shown above if the Multi-Panel Apply option is enabled prior to running auto setup. The operator may override these settings by measuring values B through E above and entering them via the display. **Note: The Multi-Panel Apply option will work in a time based system but performance is better if an encoder is purchased.**

**CONFIGURING MULTI-PANEL APPLY WITH AUTO SETUP**

1. Make sure the applicator is powered and offline.
2. Press “LABEL SETUP” and select “5) MULTI-PANEL APPLY”
3. Select “1) MULTI-PANEL APPLY OPTION IS: ON” from the Multi-Panel Apply submenu.
4. Select “3) PRODUCT CLEARANCE TIME / DISTANCE” and enter the time or distance after the label is dispensed to when the product clears the peel edge. The distance in an encoder system should be approximately the length of the product that the label is applied to.
5. Press “ENTER” to return to the label setup menu.
6. Select “AUTO SETUP” and follow the on screen prompts (see: AUTO SETUP in GENERAL SETUP PROCEDURES).
7. Select “WEB SPEED” and enter the product conveyor speed. The “Slew Speed” menu will automatically come up after web speed.
8. Enter a “SLEW SPEED” value and press “ENTER” to return to the home menu. Slew speed is the web speed used to move the label to the flagged position in preparation for the next product.

**CONFIGURING MULTI-PANEL APPLY MANUALLY**

1. Make sure the applicator is powered and offline.
2. Using the hand wheel, position the label in the flagged out position.
3. Press “LABEL STOP” and enter the distance measured for dimension D shown above. **Note: If the label sensor is set for trailing edge detection, add the label gap distance to dimension D.**
4. Press “LABEL SETUP” and select “3) LABEL LENGTH”. Enter the length measured for dimension B shown above.
5. Press “5) MULTI-PANEL APPLY” to gain access to the Multi-Panel Apply submenu.
6. Select “1) MULTI-PANEL APPLY OPTION IS: ON” from the Multi-Panel Apply submenu.
7. Select “2) SHORT FEED DISTANCE” and enter the distance measured for dimension E above.
8. Select “3) PRODUCT CLEARANCE TIME / DISTANCE” and enter the time or distance after the label is dispensed to when the product clears the peel edge. The distance in an encoder system should be approximately the length of the product that the label is applied to.
9. Select “WEB SPEED” and enter the product conveyor speed. The “Slew Speed” menu will automatically come up after web speed.
10. Enter a “SLEW SPEED” value and press “ENTER” to return to the home menu. Slew speed is the web speed used to move the label to the flagged position in preparation for the next product.

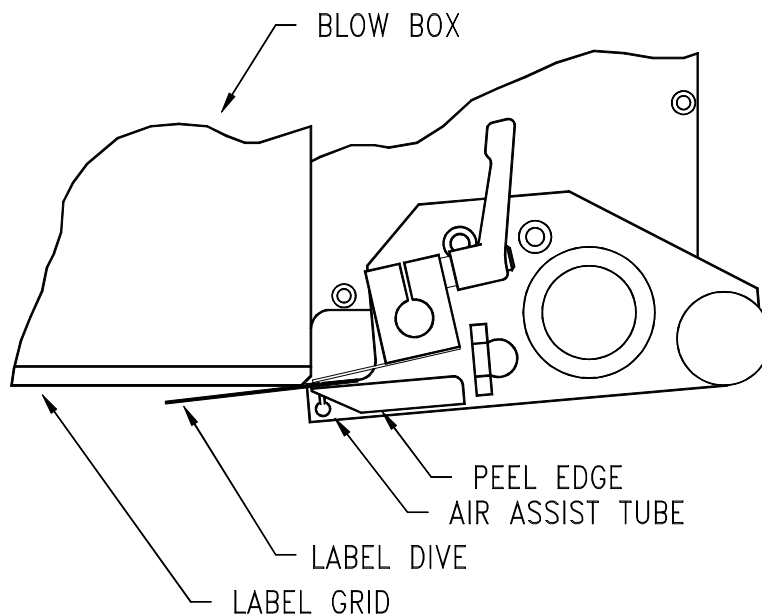
## **AIR BLOW APPLICATOR SETUP**

The air blow applicator is a versatile labeler in the sense that many different label sizes can be used without buying a new pad or manifold. Products can also be labeled at a stand still without contact. The blow box consists of two axial fans mounted in the top of the assembly that produce the vacuum needed to hold the label. Inside the blow box are eighteen flexible tubes that provide the air blast to apply the label. These tubes may be arranged in a variety of ways to apply many shapes and sizes of labels.

1. On the display, under applicator type select “BLOW BOX” applicator. Also, indicate whether it is in a right-hand or left-hand configuration using the “RT/LT HAND” selection.
2. Place the applicator as close to the product as you can without hitting it.
3. Go through “general setup” procedure (i.e. label sensor, setup, web speed, etc.)

## **AIR BLOW LABEL STOP**

1. With the applicator online, jog a couple of labels.
2. Label stop position should be 1/32” from the peel edge tip.
3. If needed, change the label stop value. (Refer to Label Stop setup in the general job setup)





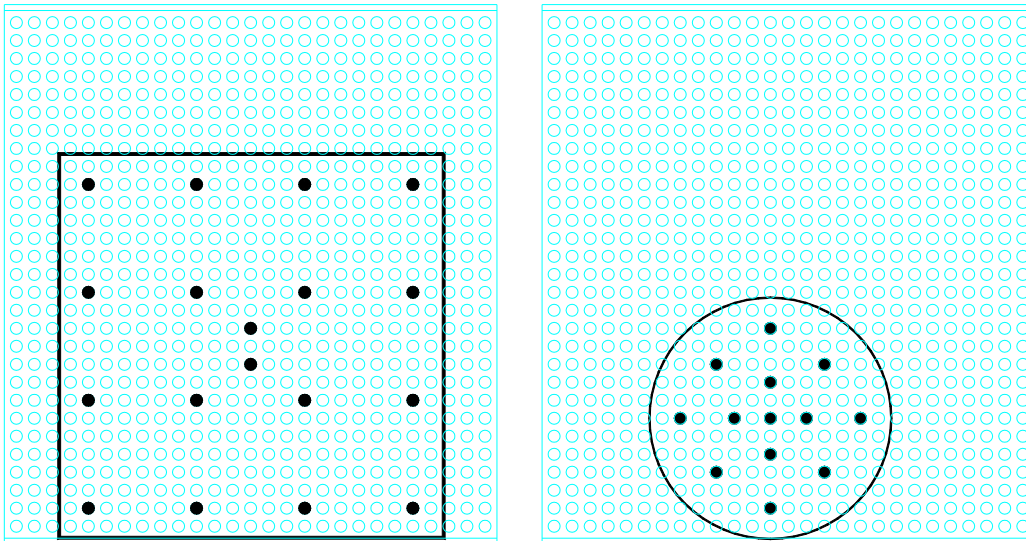
## **AIR BLOW PEEL EDGE ALIGNMENT**

1. Turn power on to the applicator and make sure it's offline.
2. Advance the web using the drive roller and notice how the label feeds onto the grid. A normal paper label should deflect 5-10 degrees to the bottom surface of the label grid. A stiffer label should feed straight onto the grid.
3. To adjust the peel edge, loosen the two 1/4 S.H.C.S. screws on the peel edge faceplate and move the assembly to a position close to the grid. Allow enough room for the label and liner to pass between the peel edge and the grid.
4. Repeat step #2 to check label angle. Re-adjust if needed.

**Note:** The top of the peel edge should be slightly higher than the bottom surface of the label grid. If a label on the grid will slide back onto the peel edge, the peel edge is too low.

## **AIR BLOW GRID SETUP**

1. With the power on and the applicator online, jog a label onto the grid and tape it in place.
2. Turn the power off and remove the blow box cover. Arrange the air jet tubes in a symmetrical pattern with most of the tubes in the center of the label. Insert any unused tubes in the storage block. **WARNING: Make sure the air jet tubes are not in the axial fan.**
3. The blow box is equipped with two fans and a switch. With the switch in LOW position, only one fan will run. With the switch in the HIGH position, both fans will run. Select the appropriate switch position to insure that enough vacuum is generated to hold the label in place.



## **AIR BLOW AIR ASSIST**

The air assist tube blows a stream of air onto the label to force it up against the blow box grid during the label feed. The air assist starts to blow when the web starts to move and stops when the label is on the grid. The extended air assist time allows the air assist to blow after the label feed to help stabilize the label.

1. Adjust the air assist tube so it's blowing into the center of the label. Ensure that the label feeds out against the grid properly.
2. The regulator for the air assist is on the valve bank and should be set between 10 and 15 PSI. This is a typical setting but it may be changed as needed.
3. If a longer air assist is needed to help position the label, press "LABEL SETUP" on the display. Pick "EXTENDED AIR ASSIST" and enter a value between .001-1 second.
4. A valid air assist entry will send you back to the label setup menu.
5. Press "HOME" to return to the main menu.

## **AIR BLOW AIR BLAST**

The air blast transfers the label from the grid to the product and is a function of time and air pressure. The air blast pressure is regulated by the filter/regulator assembly located upstream of the valve.

1. The regulator for the air blast should be set between 40-50 PSI. This is the typical setting but it may be changed as needed.
2. If the air blast time needs changed, press "LABEL SETUP" on the display. Pick "AIR BLAST" and enter a value between .010-1 second.
3. A valid air blast entry will send you back to the label setup menu.
4. Press "HOME" to return to the main menu.

## **TAMP APPLICATOR SETUP**

The tamp applicator consists of a tamp slide, label manifold, and a label pad. The label is fed out onto the label pad and is tamped within 1/8" of the labeling surface. The label is then blown off by an air blast. The tamp applicator has higher placement accuracy and is less dependent on product movement. **NOTE:** Before proceeding, make sure you've selected tamp under "APPLICATOR TYPE" on the display. Choose one of the following types of tamping action:

**NORMAL TAMP:** A label feeds out onto the label pad and the labeler will wait for a product detect signal to tamp and apply the label. After applying the label, the tamp pad returns home to receive another label.

**ITB TAMP:** A label feeds out onto the label pad and tamps. The tamp will wait for a product detect signal before applying the label and returning home to receive another label.

**DAT TAMP:** The dual action tamp has a swing action to apply a label to the leading or trailing panel of the product and a tamp action to apply a label to a side panel of the product. The DAT applicator has two modes of operation: Swing first then Tamp (Leading), or Tamp first then Swing (Trailing). Within these modes, a Swing Only and a Side Only option is available. **Contact your distributor if you require this function and your 360 applicator was purchased without a factory installed DAT assembly.**

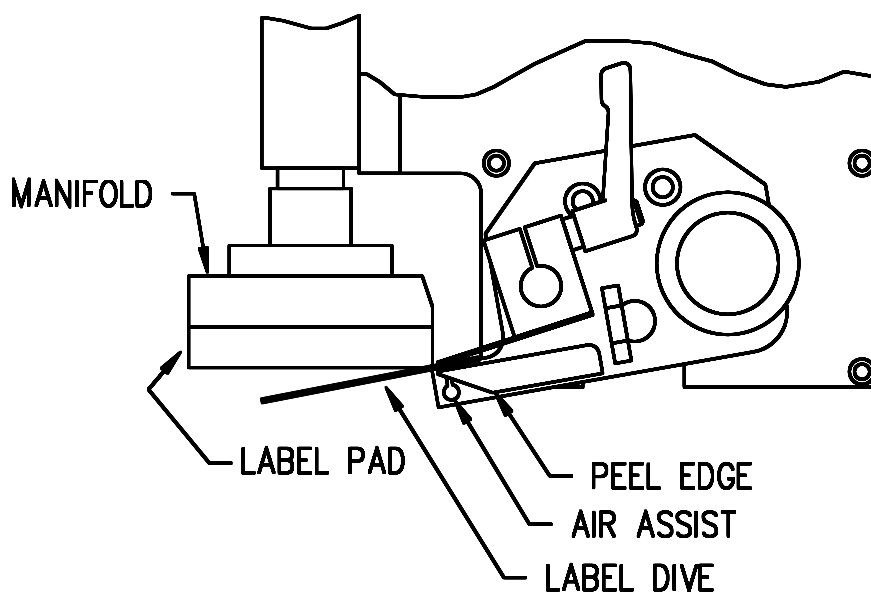
1. With the tamp slide extended make sure the label pad is approx. 1/8" from the product.
2. Go through "general setup" procedure (i.e. label sensor, web speed, etc.)

## **TAMP PEEL EDGE ALIGNMENT**

1. Turn the power on, move the tamp assembly up and make sure the applicator is offline.
2. Advance the web using the drive roller. Stop when half of the label is off the peel edge tip. The label should be at an angle between 5 and 15 degrees from the label pad surface. The stiffer the label, the flatter the angle.
3. To adjust the peel edge, loosen the two 1/4 S.H.C.S. screws on the peel edge faceplate and move the assembly close to the tamp pad. Allow some clearance distance between the peel edge and tamp assembly. Repeat step #2 to check label angle. Re-adjust if needed.
4. If OK go to label stop.

## **TAMP LABEL STOP**

1. With the applicator online, jog a couple of labels.
2. Label stop position should be 1/32" from the peel edge tip.
3. If needed change the label stop value. (Refer to label stop setup in the general job setup)



## TAMP VACUUM

The tamp vacuum is generated by a vacuum venturi located on the applicator. This vacuum is used to hold the label on the label pad until the air blast releases it. Too much or too little vacuum can affect label placement on the pad. The amount of vacuum may be changed by adjusting the air pressure to the vacuum regulator feeding the venturi. A setting of 30-40 PSI is typical but it may be changed as needed.

**WARNING:** It is important to match label size with the label pad size so that no holes are uncovered when the label is on the pad. This may result in losing vacuum.

## TAMP AIR ASSIST

The air assist tube blows a stream of air onto the label to force it up against the tamp pad during the label feed. The air assist starts to blow when the web starts to move and stops when the label is on the pad. The extended air assist time allows the air assist to blow after the label feed to help stabilize the label.

1. Adjust the air assist tube so it's blowing in the center of label. Ensure that the label feeds out against the label pad.
2. The regulator for the air assist is on the valve bank and should be set between 10 and 15 PSI. This is a typical setting but it may be changed as needed.
3. If a longer air assist is needed to help position the label, press "LABEL SETUP" on the display. Pick "EXTENDED AIR ASSIST" and enter a value between .001-1 second.
4. A valid air assist entry will send you back to the label setup menu.
5. Press "HOME" to return to the main menu.

## **TAMP AIR BLAST**

The air blast transfers the label from the label pad to the product and is a function of time and air pressure.

1. The regulator for the air blast is on the valve bank and should typically be set between 40-50 PSI.
2. To change the air blast time, press “LABEL SETUP” on the display. Pick “AIR BLAST” and enter a value between .010 and (tamp retract - 0.01) second.
3. A valid air blast entry will send you back to the label setup menu.
4. Press “HOME” to return to the main menu.

## **TAMP SLIDE**

The tamp slide is used to move the label pad and manifold toward the product. The speed at which it travels is a function of air pressure and airflow. The valve and regulator for the tamp assembly is part of the valve bank mounted to the side of the applicator. Typically, the air pressure should be set between 40 and 50 PSI but it may be changed as necessary. Two adjustment knobs are provided on the air cylinder to adjust the tamp extend and retract times. Turning the knobs clockwise will slow the movement of the cylinder. Turning the knobs counter-clockwise will speed up the cylinder. **Note: The tamp extend and retract times must be setup by the operator since they are dependent on the setting of the adjustment knobs. Both timers are in the “LABEL SETUP” section of the display.**

- EXTEND TIME:**
1. The tamp extend time is the time necessary to fully extend the tamp slide assembly. After the “tamp extend” time, an air blast forces the label off of the label pad onto the product. In order to keep cycle times low, set the extend time so that the air blast occurs when the slide reaches the fully extended position.
  2. To change the extend time press “LABEL SETUP” on the display. Pick “TAMP EXTEND” and enter a value between .001-5 seconds.
  3. A valid tamp extend entry will send you back to the label setup menu.
  4. Press “HOME” to return to the main menu.

- RETRACT TIME:**
1. The tamp retract time is the time necessary to fully retract the tamp slide assembly. At the end of the “tamp retract” time a label will be fed out onto the pad. Too small of a value will cause a label to feed out before the label pad is in the home position. Too high of a value will cause long cycle times.
  2. To change the retract time, press “LABEL SETUP” on the display. Pick “TAMP RETRACT” and enter a value between .001-5 seconds.
  3. A valid tamp retract entry will send you back to the label setup menu.
  4. Press “HOME” to return to the main menu.

**NOTE: If tamp switches are used, it is only necessary to set both tamp extend & retract times to a value higher than the time required. The tamp switches will override any excess time.**

## **DUAL ACTION TAMP**

### **DAT: LEADING SEQUENCE**

With the applicator ONLINE and a label on the pad, the labeler gets a product detect signal. It will wait the label placement distance or time and swing the label pad out in front of the product. At the end of the swing extend time, the air blast valve turns on to apply a label to the leading panel of the product, the swing arm starts to return home, and the swing retract timer is started. When the swing retract timer finishes, a label is fed out on to the pad at web speed and the applicator will wait for the second label placement. The second label placement, whether distance or time is started at the same time as the first label placement. When the second label placement time or distance is reached, the tamp assembly will extend towards the side of the product. The applicator will wait the tamp extend time, blow the label onto the product, start to retract the tamp assembly, and start the tamp retract timer. At the end of the retract time, another label is fed out onto the label pad at web speed. **Note: If DAT: TRAILING is selected, the tamp action occurs first and the swing action applies a label to the back panel of the product.**

### **APPLICATOR TYPE**

If Dual Action Tamp (DAT) is selected, the following submenu appears that allows the user to define the type of motion that occurs during each product application cycle:

- 1) DAT: Leading
- 2) DAT: Trailing
- 3) Swing Only
- 4) Side Only

Selecting “1” will cause the applicator to run the sequence described above. Selecting “2” will cause the applicator to run the sequence described above except the tamp action occurs first followed by the swing action. Selecting “3” will cause the applicator to swing only and selecting “4” will cause the applicator to tamp only.

### **LABEL SETUP**

The label setup menu for the DAT applicator has the following selections:

- |                              |                        |
|------------------------------|------------------------|
| 0) Tamp is Active/Not Active | 4) Air Blast Time      |
| 1) Auto Setup                | 5) Extended Air Assist |
| 2) Manual Setup              | 6) Swing Timers        |
| 3) Label Length              | 7) Tamp Timers         |

If the swing only or side only modes are active, the tamp timer menu or the swing timer menu will not be enabled. Once the swing or tamp timer selection is made, both the extend and retract timer menus for that valve will appear automatically. The swing and tamp extend timers determine how long the tamp or swing valves are on before the air blast will occur. The extend timers should be set long enough to insure that the label pad is fully extended before the air blast occurs. The swing and tamp retract timers determine how long the valve will be off before a label is fed out onto the label pad. The retract timer values should be set long enough to insure that the label pad is home before feeding a label. **(See Tamp Slide: Extend and Retract Time explanation for further details.)**

## **DUAL ACTION TAMP SETUP**

### **GENERAL SETUP PROCEDURES**

- 1) The label stop must be properly set for the applicator to work correctly. Adjust the label stop so the label stops at the peel edge or slightly back from the peel edge.
- 2) Tamp height should be adjusted so that the label feeds out in contact with the label pad. If the pad is too high, the label will not land consistently on the pad. If the label pad is too low, the label will dispense into the back of the pad and jam. Most of this adjustment is done with the peel edge and is discussed in the manual (**See Labeler Setup/Tamp Applicator/Peel Edge Adjustment**). It is important to adjust the rotary actuator so the label pad is level with the applicator. Making it level will involve moving the retract shock for the swing arm. Moving this up and down will move the pad accordingly (**See Dual Action Tamp Shock Absorbers and Flow Controls**).
- 3) Make sure the label is aligned with the pad so there is no over-hang. To adjust this, move the web in or out by adjusting the guide collars and unwind disks.
- 4) 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. Make sure the tamp is not active in the label setup menu under selection 0). 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 the label pad. You may need more vacuum, increased or decreased label dive, or the air assist tube may need to be rotated.

- 5) Air pressure for the tamp slide and rotary actuator should start at 40 P.S.I., the air blast at 40-60 P.S.I., and the vacuum pump at 20-40 P.S.I.
- 6) 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 fewer labels/min. Start at .03 seconds. The same air blast time applies to both the swing and tamp sequences.

### **DUAL ACTION TAMP SHOCK ABSORBERS AND FLOW CONTROLS**

**NOTE: To avoid injury, make sure the applicator is offline for this adjustment!**

Both the linear and rotary actuators have shock absorbers on them that need to be adjusted. The rotary actuator has a stop collar installed on the home shock. This collar should be adjusted so there is about 1/8" of shock travel. Adjust the shock so the swing arm stops in the right position. Press the manual override on the rotary actuator valve and watch the movement of the swing arm. The arm should hit the shock and stop without bouncing. If it bounces too much, slow the actuator down by adjusting the flow controls. The flow controls are integrated into the actuator and are located on the side of the longer cylinders. Turning the screws in with a small screwdriver will slow the speed at which the arm rotates and turning them out will speed it up. The slide shock absorbers are larger and have longer strokes to insure a smooth stop when moving larger loads. The shocks should be adjusted to insure that there is at least an 1/8" or more travel available when the slide stop hits the body of the slide. Do not allow the shocks to bottom-out. To adjust the shocks, loosen the clamping screws on the shock mounts and screw the shock in or out. When in position, re-tighten the clamp so the shock will stay in position. The flow controls for the slide are mounted on the valve bank. Screwing the knobs in will slow the speed of the slide while turning the knobs out will speed it up. **Note: The tamp extend and retract times must be setup by the operator since they are dependent on the setting of the adjustment knobs. See "Extend and Retract Times" section of this insert.**

**Extend and Retract Times**

It's important to make sure these timers are setup correctly. Power-up the applicator and bring it online. Press the jog button on the applicator and watch when the label is blown off on both the swing and tamp cycles. The swing arm or the slide should be fully extended. If not, increase the extend times. If the retract times are too short, a label will be fed out into the manifold and not onto the label pad. Increase the retract times if necessary. It's better to have these times a little on the high side but they will affect the labeling rate. The higher the times, the fewer products per minute you can label.

**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 the DAT applicator. The single tamp action is not discussed but you should be able to interpret their setup from the following instructions.

With the air and power off to the applicator, rotate the swing arm to the extended position. Make sure the slide is fully retracted. Push the product down the conveyor within the guides and stop in front of the label pad. Move the applicator in or out and up or down to position the pad where the label should go. Retract the swing arm and move the product in front of the applicator. Move the slide forward, making sure the swing arm is retracted, and stop when there is about 1/8" between the product and the label pad. You may need to move the slide extend stop by loosening the clamping screw and sliding the stop against the slide body. Some minor changes may be required before you start applying labels but this will get you close.

**Product Detect Sensor Position**

Before going through this section. Make sure the extend and retract times are properly setup. The setup described assumes no encoder is used. For encoder applications some values may change. Power-up the applicator, turn on the air, and bring the applicator ONLINE. Position the product detect sensor about 6 inches upstream of the extended swing arm. Set the #1 label placement to 0.001 and turn the conveyor on. Put a product on the conveyor and watch when the label is blown off the label pad. If the product hit the label pad before it retracted, move the product detector sensor upstream more. If it retracted too soon, move the sensor downstream. Ideally, the label will be blown onto the front of the product and retract without ever touching the product. Now look at the position of the label on the side of the product. If it was applied too late, decrease the #2 label placement. If it was applied too early, increase the label placement. If the #2 label placement is too low compared to the cycle time of the first half of the labeling sequence, a warning will be displayed saying "Product Rate Warning". The Product Rate Warning section outlines several methods to correct this problem.

**Product Rate Warning**

If the applicator is unable to start the label dispense cycle at the proper label placement time or distance, the applicator displays a WARNING: PRODUCT RATE IS TOO FAST FOR THE CURRENT 2<sup>nd</sup> LABEL PLACEMENT VALUE message. To correct this problem try one or more of the following:

- increase applicator web speed setting
- increase 2<sup>nd</sup> label placement value (time or distance )
- decrease tamp and/or swing extend and retract times
- adjust flow controls at the air cylinders to increase speed
- decrease conveyor speed



**Label Static Test**

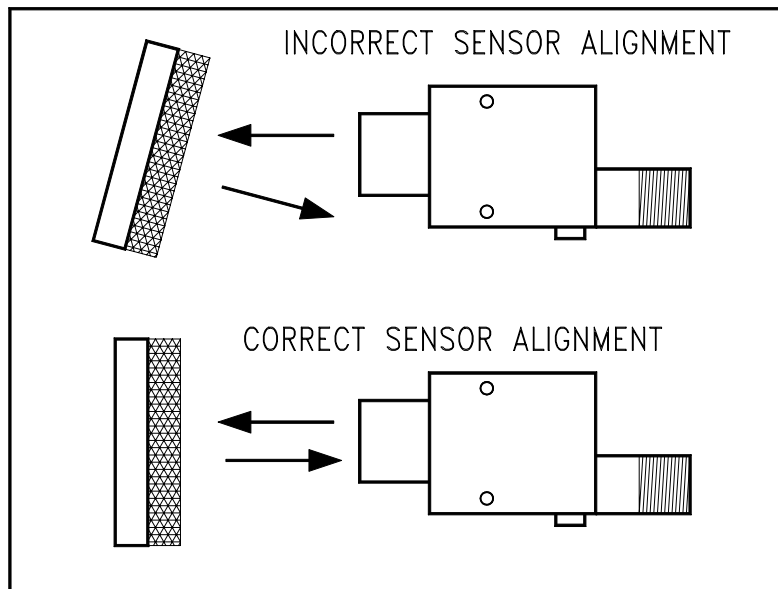
It's important to know if the applicator can consistently place labels in the same place over and over on the product. Without knowing this, you will not know whether label placement problems that occur on the line are due to the machine or to the product being labeled.

To test repeatability, configure the applicator for side only action and position the applicator so the tamp assembly is extended and the label pad is approximately 1/8" away from the product. Jog several labels onto the product. If the label stack is not within the tolerances you have to work with, 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, reset the label sensor. If you still have the problem go to the troubleshooting section of the 360 manual and follow its suggestions. 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. If not, clean and re-try the static test again.
- 4) Make sure the vacuum is set right. If the label flutters when feeding across the pad, the vacuum is too high. If the label falls off or moves after the label has left the liner, the vacuum is too low. 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 consistently onto the pad. Re-try the static test. If the results are still not good enough, go to step 6. Otherwise 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? Exposed holes on the pad will reduce the available vacuum used to hold the label in place and results will be uncertain.

(This page is intentionally blank.)

## PRODUCT SENSOR



The factory product sensor is a reflective type. Other types can be used but the following setup procedure is for a reflective sensor.

1. Make sure the sensor is plugged into the applicator.
2. Turn the power on and leave the applicator offline.
3. Set the sensor to DO (dark operation) by gently turning the output select screw completely counter-clockwise.
4. Make sure the sensor is aligned with the reflector. When the red LED on the back of the sensor is flashing at its fastest rate, the two are in the best alignment.
5. Place a product between the sensor and the reflector. The LED should go out.
  - a). On translucent products, the sensor may fail to detect a product if the sensor gain is set too high. In these cases, reduce the sensor gain by turning the gain pot counter-clockwise to avoid “burning thru” the product.
6. Go to the “PRODUCT SETUP” portion on the display.

## PRODUCT SETUP

1. Make sure the power is on and the applicator is offline.
2. Press “PRODUCT SETUP” on the display.
3. The product setup screen will show the status of the detector lockout function, whether the encoder is on or off and its speed, the label counter value, and whether the product sensor is detecting a product or not. **Note: If you are set for light operate “LO” on the product sensor, the product detect indicator will say “YES” when there is no product in between the sensor and reflector.**
4. There are three submenus associated with this screen:

**DET LOCKOUT ON/OFF:** The product detector lockout function is used if more than one product detect signal is generated per product. When the first product detect signal is received, a timer is started and all other product detect signals are ignored until this time expires. **Warning: this works only when the product sensor is set for dark operate “DO”.**

- a) To add detector lockout, select “DET LOCKOUT” and enter a value between .001-20 seconds.
- b) A valid detector lockout entry will send you back to the product setup menu. **Starting with version 2c.10.4.6, a second detector lockout screen appears when the crossover option is enabled and configured as a secondary applicator. This screen applies to the primary applicator’s product detect sensor and operates identical to the description above.**

**ENCODER SETUP:** SEE THE ENCODER SETUP SECTION OF THIS MANUAL

**LABEL COUNTER:** The label counter is a user resettable counter that keeps track of the number of labels applied by the applicator since it was last reset. With this feature, the number of labels per hour, per shift, etc. may be monitored.

- a) To reset the label counter, select “LABEL COUNTER” from the product setup menu.
- b) Select “YES” to reset the counter or “NO” to go back to the product setup menu.

## LABEL PLACEMENT (also known as Label Delay)

When a product detect signal is received, the product must travel the “label placement” time or distance before the applicator will dispense a label. Label placement gives you the ability to adjust where the label is applied on the product.

**More label placement = label moves back on the product**  
**Less label placement = label moves forward on the product**

1. To change label placement, press “LABEL PLACEMENT” on the display. Enter a value between .001 and 20 seconds and press “ENTER”.
2. A valid label placement value will send you back to the main menu.

## **LABEL PLACEMENT** (cont'd)

- NOTE:**
- 1) The applicator will be slower and less accurate for larger label placement values. Keep this value to a minimum by moving the product sensor closer to the peel edge.**
  - 2) If the encoder option is on, the label placement value is in inches. If the encoder is off, the label placement value is in seconds.**
  - 3) This adjustment can be made while the machine is running.**

(This page is intentionally blank.)

## **ENCODER OPTION**

The encoder option is useful when the product velocity varies during the application cycle. An example of such an application is forms on a forms table. With the encoder installed and enabled, the labeler adjusts the label dispense speed to insure accurate label placement on the product.

The applicator has a differential quadrature incremental encoder interface with times four interpolation built into the controller board. The encoder connector located on the rear panel has +5V and ground to power the sensor and the A and B channel interface. The encoder wiring diagram and pin-out information appear in the Drawings section in this manual and should be consulted for user supplied encoders. Factory encoders generate 2500 pulses per revolution.

**NOTES: Label placement units with the encoder option on is in inches; not seconds.**

**The encoder option will not be accurate with the tamp applicator set to normal tamp.**

**It's important to make sure that the applicator is setup properly so labels are dispensed consistently.**

**If product speeds are too fast causing the compensated label placement to lag behind the current label placement, a warning will be given to raise the label placement value.**

## **ENCODER MOUNTING**

The method of coupling the encoder to the conveying system is an important consideration because errors or stress can be introduced to the system. If the encoder is coupled to a drive shaft, motor, etc., a flexible coupling should be used to compensate for any misalignment between the shaft and the encoder. This compensation is required because the smallest misalignment can result in high radial loads that may induce premature bearing failure. If the encoder is connected to the machine using belts and pulleys, be careful not to over tighten the belts.

An optional mounting kit may be purchased which has a rubber-coated wheel on the encoder shaft. The kit comes with a mounting plate and a spring loaded pivot plate to hold the wheel against the conveyor surface.

**NOTE:** Since the encoder output signal is rotational sensitive, it may be necessary to reverse the A+ & A- wires going to the control board at connector J5.

**WARNING: Change wires with the power disconnected from the machine.**

## ENCODER SETUP

1. Select “ENCODER SETUP” at the product setup menu.

**NOTE: This area is password protected. The default password is 1800. Going back to the home screen will disable the last password entry.**

2. Turn the encoder on by pressing “1”.

**NOTE: If the encoder was already enabled, you would turn off the encoder by pressing “1”.**

3. Select “PULSE LENGTH” and enter the distance the product travels per pulse of the encoder. The pulse length may be calculated using the following formula:

$$\text{Pulse Length} = (\text{Distance Product Moves} / \text{Rev}) / ((\text{Encoder Pulses} / \text{Rev}) \times 4)$$

**EXAMPLE:** An encoder is mounted to a conveyor drive pulley and the circumference of that pulley is 18.75”. Therefore, with one revolution of the encoder, the product on the conveyor will travel 18.75”. The encoder is a factory encoder that generates 2500 pulses per revolution.

$$\text{Pulse length} = 18.75'' / (2500 \times 4)$$

$$\text{Pulse length} = 18.75'' / 10,000$$

$$\text{Pulse length} = 0.001875''/\text{pulse}$$

Enter the pulse length value and press “ENTER”. Allowed values are between .00001 and 1.

A valid pulse length entry will send you back to the encoder menu.

4. Select “Velocity Filter Time” on the display. Enter a filter value between 0.006 and 0.1 and press “ENTER”.

The velocity filter value is proportional to the number of past encoder pulse rates used in computing the average encoder velocity. The average encoder velocity is multiplied by the pulse length setting to obtain the product velocity. The applicator’s ability to track changes in product velocity is proportional to the velocity filter setting. Larger filter values will slow down the applicator response time but will result in more consistent label placement. Small filter settings may lead to inconsistent label placement. A good overall filter value is 0.03.

$$\text{Velocity Filter} = (0.002)(\# \text{ of past encoder rates: } N)$$

$$\text{Avg. Encoder Rate (t)} = (ER(t-1) + ER(t-2) + \dots + ER(t-N)) / N$$

$$\text{Product Velocity} = (\text{Avg. Encoder Rate})(\text{Pulse Length})$$

A valid filter number will take you back to the encoder setup menu.



## ENCODER SETUP (cont.)

### 5. Rate Compensation for Air Blow and ITB Tamp Applicators:

When selecting a value for rate compensation, start at 0.025. Apply labels to the product at a slower speed. Then run the product at production speeds or faster. If the labels are applied in the same place, the compensation is correct. If labels move back the faster you go, **INCREASE RATE COMPENSATION**. If the labels move forward, **DECREASE RATE COMPENSATION**. Whenever the rate compensation value is adjusted, re-run the product at slower and faster speeds to make sure that the labels are applied in the same position.

To change values, select “COMPENSATION” from the encoder setup menu and enter a value between .001 and 1. A valid rate compensation entry will send you back to the encoder setup menu.

**NOTE: The web speed of the applicator will not follow the speed of the encoder.**

### 6. Rate Compensation for Merge Applicators:

When selecting a value for rate compensation, start at 0.007. Apply labels to the product at a slower speed. Then run the product at production speeds or faster. If the labels are applied in the same place, the compensation is correct. If labels move back the faster you go, **INCREASE RATE COMPENSATION**. If the labels move forward, **DECREASE RATE COMPENSATION**. Whenever the rate compensation value is adjusted, re-run the product at slower and faster speeds to make sure that the labels are applied in the same position.

To change values, pick “COMPENSATION” from the encoder setup menu and enter a value between .001 and 1. A valid rate compensation entry will send you back to the encoder setup menu.

**NOTE: The web speed of the applicator will follow the speed of the encoder.**

### 7. Press “HOME” to return to the main menu.

**NOTE: With the encoder enabled the following apply:**

- 1) Label Placement values are inches.
- 2) If the conveyor stops after a product detect signal is received, the applicator will wait for the encoder signal (conveyor) to resume before continuing with the label application cycle. Otherwise, the labeler would continue to cycle and the label placement would not be correct in instances when some operation must be performed on the product at a standstill. The operator may abort the cycle by going offline.
- 3) When the applicator type is set to DAT, encoder rate compensation is not used and the “COMPENSATION” menu is not accessible.

(This page is intentionally blank.)

## CROSSOVER OPTION

The crossover option allows for “zero downtime” operation by interconnecting two applicators with **identical setup configurations**. Both applicators are placed on the conveyor system one upstream of the other. The upstream applicator is the “Primary” labeler while the downstream applicator is the “Secondary” labeler. When the “Primary” applicator encounters a critical alarm condition, the “Secondary” labeler is activated and continues to apply labels to the product. Possible critical alarm conditions include: no labels found, web break, and primary offline.

The crossover sequence operates in the following manner. If there are products between the primary and secondary applicator’s product detect sensors, the PRODUCTS BETWEEN PD SENSORS value in the secondary applicator must be configured appropriately. The primary and secondary heads are brought online and the secondary applicator pre-loads the PRODUCTS BETWEEN SNSRS counter with the PRODUCTS BETWEEN PD SENSORS value. The primary head will begin labeling. At the same time, it will send its product detect signal to the secondary labeler. A counter in the secondary labeler will count up for each primary product detect signal while it will count down for each secondary product detect signal. When a critical alarm condition occurs in the primary labeler, it is taken offline and the secondary labeler is activated. At this point the secondary labeler assumes there are the PRODUCTS BETWEEN SNSRS number of labeled products between the two applicators. When the first unlabeled product reaches the secondary applicator, it will start applying labels incrementing the counter for each product passing the primary and decrementing for each product passing the secondary. It will continue in this fashion until the primary applicator’s alarm condition is cleared and “ALARM RESET” is pressed. When the primary applicator is brought back online, the secondary will continue to label the products in between the heads but it will become disabled once the first labeled product from the primary labeler reaches the secondary applicator.

The detector lockout option may be used when multiple product detect signals are being generated by either of the primary or secondary applicators. The operator should verify the sensor setups on both applicators to insure the sensitivity is set correctly. Due to the crossover-counting scheme, multiple detector signals are especially problematic for the secondary applicator since it receives detector signals from both applicators. Starting with version 2c.10.4.6, a second crossover detector lockout function is available on the crossover secondary applicator only. The first detector lockout screen applies to the secondary applicator’s product detect sensor while the second screen applies to the primary (x-over) applicator’s sensor. **The second x-over detector lockout value should be set to the time it takes for the product to pass by the primary sensor (time = width of product in sensor path divided by velocity of product).** Consult the Product Setup section for additional details on the detector lockout option.

## CROSSOVER SETUP

1. From the factory default configuration menu accessible at power-up, select 2) SPECIAL OPTIONS and make sure that 5) CRTL TO: ANLG is selected on the primary applicator. Also, if an offline condition in the primary labeler is to trigger an alarm, select 2) OFFLINE CRTL: ON. From the second page of the Special Options menu, select 4) RESET LABEL SENSOR (see: CROSSOVER PRECAUTIONS).
2. Configure the label sensor, label length, label stop, label placement, and encoder on both applicators with the crossover option off (see General Setup Procedure). Also, make sure that the crossover cable is connected to both applicators.
3. If a web break condition is to trigger a critical alarm, press the “APPLICATOR OPTIONS” key and select 5) WEB BREAK.

4. From the “APPLICATOR OPTIONS” menu, select “3) X-OVER”.
5. Select 1) CROSSOVER: ON to enable the crossover option.
6. Select 2) to toggle between “PRIMARY LABELER” and “SECONDARY LABELER”. The primary labeler serves as the main or upstream applicator. The secondary labeler is the backup or downstream applicator.
7. If the applicator is a “SECONDARY LABELER”, select 4) PRODUCTS BETWEEN PD SENSORS and enter the number of products between the primary and secondary applicator’s product detect sensors. This is used in continuous film applications where material between the applicators cannot be removed.
8. Press “ENTER” to return to the applicator options menu.
9. Press “HOME” to return to the main menu and bring both applicators “ONLINE”.

## **CROSSOVER MONITORING**

If the applicator is a secondary labeler, the crossover sub-menu will have a MONITOR SECONDARY SETUP selection. This menu is provided to aid the operator in setting up the crossover network and is particularly helpful if the secondary applicator is not labeling or is double labeling products. If this is selected, a screen will show the status of the following items:

- PRODUCTS BETWEEN SNSRS: xx
- PRODUCTS BEFORE LABEL: --/xx
- SECONDARY INHIBIT INPUT: ON/OFF

The products between sensors counter indicates how many products are between the primary and secondary applicators while the products before label value indicates how many of these products are already labeled. The secondary inhibit status indicates whether the secondary labeler is enabled or not. If the inhibit input is ON, the secondary applicator is not labeling. If the inhibit input is OFF, the secondary applicator is labeling.

## **CROSSOVER PRECAUTIONS !**

The crossover option insures that all products on a conveyor system are labeled by providing a redundant system that will be activated if the primary applicator encounters a critical alarm. The following precautions should be observed for reliable operation of the crossover network:

- Both the primary and secondary applicators should be of the same type and have identical setups. The label sensors should be reset to factory default values and configured to detect the same edge on the label.
- Make sure the product detect sensors are properly configured so multiple product detect signals are not sent to the applicators. Multiple product detects will cause the crossover counters to be wrong. When setting-up the system, it is a good idea to monitor the “Products Between Sensors” counter. When there are no products between the product detect sensors, this counter should be

zero. If the number of products displayed by this counter does not match with what the operator physically counts between the sensors, multiple product detects are being generated.

- Make sure that both applicators are brought online before the primary applicator labels the first product. Going online synchronizes the two applicators.
- Do not take products off the conveyor system that are between the heads. This will cause the crossover counters to be wrong.
- When the primary applicator enters into a critical alarm condition, allow the secondary applicator to begin labeling before bringing the primary applicator back online. Failure to observe this precaution will result in double labeled or skipped products. Generally this will not be a problem since it will take some time to correct the problem, press alarm reset, and bring the primary applicator back online.
- If either applicator is powered down, the other applicator will not receive product detect signals. Disconnect the crossover cable between the applicators when performing service on one of the applicators or when crossover is not being used.
- If the applicator is taken offline right after labeling a product with OFFLINE CRITICAL: ON, a label will not be dispensed onto the pad or vacuum grid.
- When an END OF WEB or NO LABELS FOUND alarm occurs, the applicator will complete the labeling cycle and advance a label onto the pad or vacuum grid prior to going to the offline state.

(This page is intentionally blank.)

## LOOSE LOOP SETUP

The loose loop option<sup>1</sup> allows labels to be printed and applied from one system by tying a thermal printer into the web path of the applicator. As the labels exit the printer, they go around a dancer arm to maintain web tension. Three proximity switches monitor the dancer arm position<sup>2</sup>. The loose loop dancer arm assembly should be free to travel from the 'loose' loop prox, past the 'tight' loop prox, up to the 'alarm' loop prox position. In the at rest position, the lower 'loose' prox switch is active and the printer is off. When the dancer arm assembly reaches the 'tight' loop prox, the printer begins printing labels. If the upper 'alarm' prox switch is active, the applicator enters an "ALARM LOOP" condition and a "CHECK PRINTER OR APPLICATOR SPEED" message is displayed. The applicator is taken offline<sup>3</sup> and will not apply labels until the dancer arm returns to the lower 'loose' loop position. When properly set-up under normal operating conditions, the arm will not reach the 'alarm' prox position. **If the 'alarm' prox is active, the 360 Applicator is dispensing faster than what the printer can print and dispense. To correct this issue, decrease the product rate or increase the printer speed.**

1. Select "APPLICATOR OPTIONS" key from the display.
2. Select "LS-LOOP" to enable the loose loop option<sup>4</sup>. **This option is password protected. The default password is 1800.**

**NOTE:**

- 1) The loose loop option is not available with a DAT applicator, when a powered rewind is used, or when the print output is used for alarms.
- 2) Due to the number of the different applications, the factory should be consulted on the mechanical layout of the loose loop.
- 3) Starting with software version 2c.10.3, the applicator remains online but is inhibited.
- 4) The loose loop option will turn off the crossover and imprinter options if they are on.
- 5) This is a factory-installed option
- 6) In Zebra printer applications, the printer must be set to rewind mode (print mode: rewind).

## MISC.

- The printer receives a "Print Start" signal through the 360 I/O interface cable.
- The print engine goes "offline" when a printer "Ribbon Out" or "Media Out" condition occurs.

## IMPRINTER SETUP

The imprinter option allows a hot stamp printer to be installed into the web path of the applicator. It is useful in instances where one line printing or date coding is required. The option is enabled and the dwell time or stamp duration is setup in the imprinter submenu.

1. Select "APPLICATOR OPTIONS" key from the display.
2. Select "(2) IMPRINT" to gain access to the imprinter submenu. **This option is password protected. The default password is 1800.**
3. Select "(1) IMPRINTER IS ON" from the imprinter submenu.
4. Select "(2) IMPRINTER DWELL TIME" and enter a time between 0.001 and 1 seconds. A valid entry will return you back to the imprinter submenu.

5. Press “ENTER” to return to the main menu.
6. The print placement on the label may be adjusted by sliding the registration roller forward or backward in the slot on the mounting bracket (see imprinter web path diagram).

**NOTE:** 1) The imprinter option is not available with a DAT applicator, when a powered rewind is used, or when the print output is used for alarms.  
2) This is a factory-installed option.



(This page is intentionally blank.)

## **LABEL OPTIONS**

This section will discuss options that control how the applicator dispenses a label or handles a missing label on the liner web. These options appear in the “APPLICATOR OPTIONS” menu and are password protected. **The default password is 1800.**

**MULTIPLE LABEL:** The multiple label option allows more than one label to be applied to a product from one product detect signal.

**MISSING LABEL:** The missing label option monitors all labels between the peel edge and the label sensor. If a label is missing, the applicator will advance another label to the peel edge to insure that all products are labeled.

**SKIP COUNTER:** The skip counter option allows the applicator to label every  $x^{\text{th}}$  product and skip the rest.

## **MULTIPLE LABEL SETUP**

The applicator has the ability to apply multiple labels per product detect signal. The number of labels per product detect signal and the center-to-center distance between the labels is configured in the multiple label submenu.

1. Press the “APPLICATOR OPTIONS” key and select “7) MULTI-LBL” to enter the multiple label submenu.
2. Select “1) MULTI-LABEL FUNCTION: ON” to enable the option. Pressing “1” repeatedly will toggle the multi-label function on and off.
3. Select “2) NUMBER OF LABELS PER PRODUCT” and enter the number of labels to be applied to each product. A valid entry between 1 and 99 will take you back to the multiple label submenu.
4. Select “3) LABEL CNTR-TO-CNTR DISTANCE” and enter the center-to-center distance between the labels. The minimum center-to-center distance is either equal to label length or the time it takes to travel label length at the current web speed depending on whether the encoder is on or off. A valid entry will take you back to the multiple label submenu.
5. Press “ENTER” to return to the main menu.

**NOTE:** 1) If the encoder is turned on, the units are in inches. Otherwise, they are in seconds.  
2) If the label center-to-center distance is too small, a message will appear on the display warning you that the applicator cannot keep up. The applicator will continue labeling but label placement will not be accurate.  
3) Label Profiling, Multi-Panel Apply, and Missing Label options are disabled when Multiple Label is on.  
4) After software version 360-2c.10.1 the skip counter option and the display jog function will work correctly with the Multiple Label option.

## MISSING LABEL

The applicator has the ability to track missing labels between the peel edge and the label sensor. When a missing label is detected on the label liner, the applicator will feed a new label to the peel edge at slew speed.

1. Press the “APPLICATOR OPTIONS” key and select “8) MISS LBL” to enter the missing label submenu.
2. Select “1) MISSING LABEL: ON” to enable the option. Pressing “1” repeatedly will toggle the missing label function on and off.
3. Select “2) NUMBER OF LABELS TO PEEL EDGE”. Enter the number of labels between the peel edge and the label sensor including any labels partially hanging over the peel edge and any under the label sensor. A valid entry between 1 and 30 will take you back to the missing label submenu.
4. Press “ENTER” to return to the main menu.

- NOTE:**
- 1) When label length is changed, the Missing Label option is turned off. This insures the operator will change the number of labels to the peel edge if necessary.
  - 2) If the applicator goes offline, either manually or because of a critical fault, with missing labels between the peel edge and the label sensor, a warning will come up on the screen. This message will inform the operator that the applicator will not track the missing labels when it is brought back online.
  - 3) The second label feed occurs as soon as the blank section reaches the peel edge.
  - 4) Multiple Label option is disabled when using Missing Label.

## MISSING LABEL: LABEL STOP CORRECTION DISTANCE

A new feature was added to the Missing Label option that allows the applicator to compensate for stretch in film liner material. When a missing label appears on the liner web, the applicator switches from web speed to slew speed to move a label to the peel edge. The speed change stretches the film liner causing erratic label stop positions. The operator may enter a correction value in the missing label option menu under 3) LABEL STOP CORRECTION. The maximum correction distance is +/- 0.2” but may be less depending on the distance from the label sensor to the label edge/gap boundary. The last line of label stop correction menu shows the allowed range in these instances.

1. Adjust the label stop position so that the leading edge of the label is even with the peel edge at the desired WEB SPEED setting.
2. Remove a label from the liner web upstream from the label sensor. With the applicator ONLINE and the web and slew speeds configured as necessary, use the key switch jog function to initiate a missing label dispense.
3. Observe the label stop position for the label immediately after the missing label. Measure the distance from the peel edge to the leading edge of the label. This is the LABEL STOP CORRECTION distance.

4. Press the “APPLICATOR OPTIONS” key and select “8) MISS LBL” to enter the missing label submenu.
5. Select 3) LABEL STOP CORRECTION. If the label is flagged out past the peel edge, enter – the distance measured in step 2 above. If the label is back or upstream from the peel edge, enter + the distance measured in step 2.
6. If necessary, repeat steps 2 through 6 to yield a consistent label stop position for labels prior to and after a missing label dispense (ex: leading edge of label even with peel edge).

## **SKIP COUNTER**

The applicator has the ability to skip products on the conveyor system. The skip counter submenu displays the CURRENT PRODUCT COUNT: the number of products remaining before a label will be applied, SKIP COUNTER: ON/OFF, and the LABEL EVERY “x” PRODUCTS value: the desired product labeling interval.

1. Press the “APPLICATOR OPTIONS” key and select “9) SKIP CNT” to enter the skip counter submenu.
2. Select “1) SKIP COUNTER: ON” to enable the option. Pressing “1” repeatedly will toggle the skip counter function on and off.
3. Select “2) LABEL EVERY “x” PRODUCTS:” and enter a number between 2 and 10,000. A valid entry will take you back to the skip counter menu. **EXAMPLE:** If you want to label every sixth product, enter “6” above.
4. Press “ENTER” to return to the main menu.

**NOTE:** The second line of the skip counter menu will display the current product count. When this value reaches zero, a product will be labeled and the current label count is reloaded with the label every “x” products value.

## CONFIGURATION MENU

Pressing “9” within the first five seconds of power-up will bring up the factory configuration menu. This screen is hidden from normal use and serves as a place for options that are not normally adjusted. The following two entries appear in this screen:

- 1) RESET TO FACTORY DEFAULTS
- 2) SPECIAL OPTIONS

(PRESS “ENTER” FOR MAIN MENU)

### 1) RESET TO FACTORY DEFAULTS

The reset to factory defaults selection 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. Pressing “1” from the configuration menu will bring up a confirmation screen:

- ARE YOU SURE YOU WANT TO  
RESET TO FACTORY DEFAULTS?
- 1) YES
  - 2) NO

Selecting “1” from the confirmation screen will restore all variables to factory settings and reset the label sensor to its factory defaults. Therefore, an auto or manual label setup should be performed before attempting to dispense labels. **All label formats will be lost and the applicator will be configured as a right-hand merge.** If “2” is selected, the applicator will return to the configuration menu without making any changes.

### 2) SPECIAL OPTIONS

The special option menus contain configuration options that are normally adjusted at the factory by experienced personnel. Therefore, care should be exercised when changing any of these options. Selecting “2” from the factory default menu will bring up the first of two special options menus. **NOTE: This section is password protected. The password is 5115.** The items shown in **bold** type are factory default settings. Each of these options will be discussed in the following sections.

#### Special Options Menu (page 1)

- 1) **PRINT/PWR RWND/SWING/CRTCL TO DO10**
- 2) **OFFLINE CRTCL: OFF/ON**
- 3) NO LBL FOUND CNT
- 4) **NORMAL/HIGH SPEED**
- 5) **CRTCL TO: ALRM/ANLG/DO10/DO10&11**
- 6) NEXT PAGE

#### Special Options Menu (page 2)

- 1) ACCEL/DECEL MENU
- 2) I/O DIAGNOSTICS
- 3) DEBOUNCE DELAY
- 4) RESET LABEL SENSOR
- 5) PASSWORD
- 6) PREVIOUS PAGE

### **1) PRINT/PWR REWIND/SWING/CRTCL ALRM TO DO10** (pg. 1)

Selecting “1” from the special options menu configures the source that drives digital output 10 (DO10). The display in 1) will toggle between PRINT TO DO10, PWR REWIND TO DO10, and SWING TO DO10 each time “1” is pressed. Although the software drivers are supplied with the applicator, the hardware for a loose loop printer, an imprinter, or a powered rewind is an option that must be purchased separately.

If 1) PRINT TO DO10 is selected (factory default), printer information is directed to DO10. This would include output to a loose loop printer or an imprinter if either of these options are installed and enabled in the “applicator options” menu.

If 1) PWR REWIND TO DO10 is selected, DO10 is used to drive a powered rewind system. A powered rewind is recommended when web speeds are greater than 1500 “/min.

If 1) SWING TO DO10 is displayed, DO10 is used to drive the swing valves on a DAT applicator. This selection must be made before the DAT applicator can be selected in the “applicator type” menu.

1) CRTCL ALRM TO DO10 is automatically displayed when 5) CRITICAL TO: DO10 or 5) CRITICAL TO: DO10&11 is selected in the special options menu. Pressing “1” will not have any effect or change any options. This insures that if critical alarms are being sent to DO10, the user can’t inadvertently turn off an alarm by pressing “1”.

**Note: When the software cycles through the different modes available in 1), any other option that is incompatible with the current setting is disabled. Example: If LOOSE LOOP is enabled and the operator cycles from PRINT TO DO10 through the other options and back to PRINT TO DO10, LOOSE LOOP will be disabled in the Applicator Options menu. Please consult the option incompatibility table in the ‘Applicator Options’ section of this manual.**

### **2) OFFLINE CRTCL: ON/OFF** (pg. 1)

The OFFLINE CRTCL: ON/OFF entry allows the user to configure whether or not an “offline” condition is a critical alarm. When this option is ON and the applicator is taken “offline”, a critical alarm will occur. The display will toggle between on and off each time “2” is pressed.

### **3) NO LBLS FOUND CNT** (pg. 1)

The NO LBLS FOUND CNT selection allows the user to configure the number of consecutive missing labels that must appear on the liner web before a “NO LABELS FOUND” alarm occurs. In previous software versions, it was fixed at 3. The user may now enter any integer number between 1 and 10.

### **4) NORMAL/HIGH SPEED** (pg. 1)

The NORMAL/HIGH SPEED entry allows the user to select between either a “normal speed” or a “high speed” applicator each time “4” is pressed. If NORMAL SPEED is selected (factory default), the applicator will operate at web speeds up to 1500 “/min (25 “/sec). If HIGH SPEED is selected, the applicator will operate at web speeds up to 2100 “/min (35 “/sec). Choose this setting only if web speeds

greater than 1500 “/min will be encountered in your application. The powered rewind option is recommended when operating at these speeds due to web handling issues.

## **5) CRTCL TO: ALRM/ANLG/DO10/DO10&11** (pg. 1)

The CRTCL TO: ALRM/ANLG/DO10/DO10&11 selection allows the user to direct critical alarms to specific applicator outputs. The program cycles through ALRM, ANLG, DO10, and DO10&11 each time “5” is pressed. The following critical alarms are supported: no labels found, web break, alarm loop at printer, and applicator offline. Warning alarms are always directed to the alarm output (DO11). **Note: Starting with software version 2c.10.3, alarm loop at printer is no longer a critical alarm (changed to an inhibit).**

If CRTCL TO: ALRM is selected (factory default), critical alarms are directed to the alarm output (DO11, C2/6). A light stack is typically connected to this output and would flash at a 1 Hz., 50% duty cycle rate when a critical alarm occurs. The light stack is on steady for a warning alarm. **Note: Previously, a hardware module in the light stack controlled the flash rate. It is now implemented in software. If you plan on upgrading to a 360-2c.10.x software version and have a system manufactured before 5/1/03, check with the factory to see if your light stack is compatible.**

If CRTCL TO: ANLG is selected, critical alarms are directed to the analog output (AO22). This setting is used when two applicators are interconnected in a crossover configuration **and the applicator is set as the primary labeler** (see the applicator options crossover explanation for more details). Also, the CRTCL TO: ANLG selection may be used to provide a system ‘READY’ or conveyor shutdown signal in custom applications. The ANLG ‘READY’ option would require additional wiring and a relay that are not included with a standard applicator. **Note: The analog output does not have all of the protection circuitry that a standard digital I/O circuit would have. This output is not for general-purpose use!**

If CRTCL TO: DO10 is selected, critical alarms are directed to the print output (DO10, C2/4) and the loose loop printer, imprinter, and powered rewind options are not available. Also, the standard light stack will no longer flash when a critical alarm occurs but it will be on solid when a warning alarm such as low label or alarm loop occurs. The critical to DO10 option is provided to insure backward compatibility with older software versions (360-2b.xx). **Note: Some system level wiring changes may be necessary to insure proper operation of critical alarms when CRTCL TO: DO10 is selected. Contact the factory for information about your system if you plan to upgrade to version 2c.10.x and use the CRTCL TO: DO10 option.**

If CRTCL TO: DO10&11 is selected, critical alarms are directed to the print output (DO10, C2/4) and the alarm output (DO11, C2/6). The loose loop printer, imprinter, and powered rewind options are not available. A light stack connected to DO11 will be on solid when a warning alarm occurs and flash at a 1 Hz., 50% duty cycle rate when a critical alarm occurs. The DO10 output may be used to provide a system ‘READY’ or conveyor shutdown signal. The system ‘READY’ signal may require additional components depending on your application. **Note: This option will be available starting with version 2c.10.4.**

**\* The table shown on the following page summarizes the various alarm options and provides additional information concerning: multi-output modes, signal levels, alarm reset, and intended usage.**

## **6) NEXT PAGE** (pg. 1)

If next page is selected, the second page of the configuration menu will appear.

### Alarm Summary

Special Options 5) CRTCL TO:	Output			Intended Use
	Print DO10 "ready & 2 light"	Alarm DO11 "1 & 2 light"	Analog AO "xover & ready"	
<b>ALRM</b> reset	* *	Steady --> warning Flash --> critical ALARM RESET	* *	1 light alarm
<b>ANLG</b> reset	* *	Steady --> warning Flash --> critical ALARM RESET	OV --> not critical 10V --> critical ONLINE	1 light alarm with xover and/or ready w/added relay (custom application)
<b>DO10</b> reset	Steady --> critical ALARM RESET	Steady --> warning ALARM RESET	* *	2 light alarm or system PLC monitor
<b>DO10&amp;11</b> reset	Steady --> critical ONLINE	Steady --> warning Flash --> critical ALARM RESET	* *	1 light alarm with ready

Legend key	*	no change
	steady	OV
	flash (w/light stack)	0 - 24V, 1Hz., 50% dc
	off	open circuit or 24V

The 'READY' signal may require the use of the OFFLINE CRITICAL: ON function for proper operation.

### 1) ACCEL / DECEL (pg. 2)

Selecting ACCEL/DECEL will bring up a series of submenus that change the drive motor acceleration, deceleration, and current limit values. On a blow box applicator, a "pre-dispense" menu appears that allows the applicator to start dispensing a label before the air blast time expires which increases the label rate. The larger the acceleration and deceleration values the faster the applicator will start and stop. This will increase label rates but web handling may become erratic. The maximum acceleration and deceleration rates that can be achieved depend on the available motor torque. The inertia of the label roll and the system components, friction, and dancer arm spring tension are all factors in determining how much torque is required to operate at a given acceleration/deceleration rate and web speed setting.

Higher torque requirements increase the motor current and temperature. Both of these parameters are monitored by the applicator to insure reliable performance. The "NORMAL" motor current limit value is set to 80% of the maximum motor current rating at the factory. The "HIGH" setting increases the current limit to 100% and should be used only if the motor needs more power. Check for mechanical problems



before switching to the high setting. If you are going to alter any of these settings, verify system performance and accuracy with a new roll of labels while operating at the highest anticipated web speed.

**WARNING: The factory default values should work in most cases and should not be changed. Please consult factory before making changes.**

## **2) I/O DIAGNOSTICS** (pg. 2)

The I/O DIAGNOSTICS menu provides a means to check devices connected to the applicator. From here, the operator can manually turn on valve outputs; monitor inputs such as: product detect, web break, and low label; and verify the operation of the analog input and output.

## **3) DEBOUNCE DELAY** (pg. 2)

The DEBOUNCE DELAY value helps eliminate false product detect signals that are electrical in nature. This feature is provided to eliminate the possibility that the applicator will 'start-up' on its own in the presence of high levels of EMI/RFI interference. When the product detect signal becomes active, the applicator waits the "debounce delay" time and checks to see if the product detect signal is still active. If it is, the applicator will start the drive motor and dispense a label. If the product detect signal is not active, the applicator assumes that the original signal was a 'glitch' and will abort the label application cycle. The default debounce setting is 0.001 seconds but the operator may enter any value between 0. and 0.05 sec.

## **4) RESET LABEL SENSOR** (pg. 2)

If RESET LABEL SENSOR is selected, the label sensor will be reset to its factory default values. If "4" is pressed, the display will show a series of stars as the sensor reconfigures its settings. There is no warning or confirmation screen and the previous settings are permanently deleted so make sure this is what you want before proceeding. When the process is complete, the applicator will return to the configuration menu. **Note: The RESET LABEL SENSOR function should be used before enabling the X-OVER option and when the sensor is behaving erratically. Before attempting to dispense labels, the operator should perform either a manual or auto setup procedure to select the edge detection mode and set the label sensitivity.**

## **5) PASSWORD** (pg. 2)

The PASSWORD option allows the user to select whether or not the Label Format menu is password protected, change the main password to any other 4 digit numerical value, or restore the main password to "1800".

- \* 1) LABEL FORMAT PROTECT
- 2) CHANGE MAIN PASSWORD
- 3) RESTORE MAIN PASSWORD

An asterisk beside LABEL FORMAT PROTECT indicates that the Label Format menu is password protected. The CHANGE MAIN PASSWORD selection requires the user to enter the old password, the new password, and a new password confirmation before the existing password is changed. The RESTORE MAIN PASSWORD selection will restore the main password to the default "1800" value. **Note: The modification described above does not apply to the special options menu password.**

**6) PREVIOUS PAGE** (pg. 2)

If previous page is selected, the first page of the configuration menu will appear.

(This page is intentionally blank.)

**360 SERIES**

**GENERAL**

**MAINTENANCE**

**PROCEDURES**

**!!CAUTION!! DISCONNECT THE AIR AND POWER FROM THE MACHINE BEFORE DOING THE FOLLOWING PROCEDURES. FAILURE TO FOLLOW THIS PRECAUTION COULD RESULT IN INJURIES FROM MOVING PARTS OR ELECTRICAL SHOCK.**

## **MAINTENANCE**

**NOTE: Since all three types of applicator are covered in this section, some items discussed will not pertain to your application.**

### **DAILY MAINTENANCE**

1. Examine the peel edge, vacuum grid, label pad and rollers for excessive adhesive build-up. If necessary, clean these surfaces with alcohol or similar solvent.
2. Examine air filter for water or oil collection. Drain if necessary.
3. Examine for loose screws, rollers, etc.

### **WEEKLY MAINTENANCE**

1. Clean rollers, vacuum grid, label pad, and peel edge of adhesive build-up and dust.
2. Examine air lines and connections to make sure there are no leaks.
3. Examine for loose screws, rollers, etc.
4. Examine teflon tape on peel edges. Replace if needed.

### **MONTHLY MAINTENANCE**

1. Examine dancer arm tension and unwind brake O-ring.
2. Examine drive and rewind belts for wear and to make sure they are properly adjusted.
3. Examine rollers for free rotation and play.
4. Examine rewind slip clutch disk for wear.
5. Replace air inlet filter.
6. Examine teflon tape on peel edges. Replace if needed.

## SEMI-ANNUAL MAINTENANCE

1. Replace air filter and clean collection bowl.
2. Clean inside and outside of machine using an industrial vacuum cleaner.

**NOTE: Do not use compressed air to blow dust off of the electrical section of the applicator.**

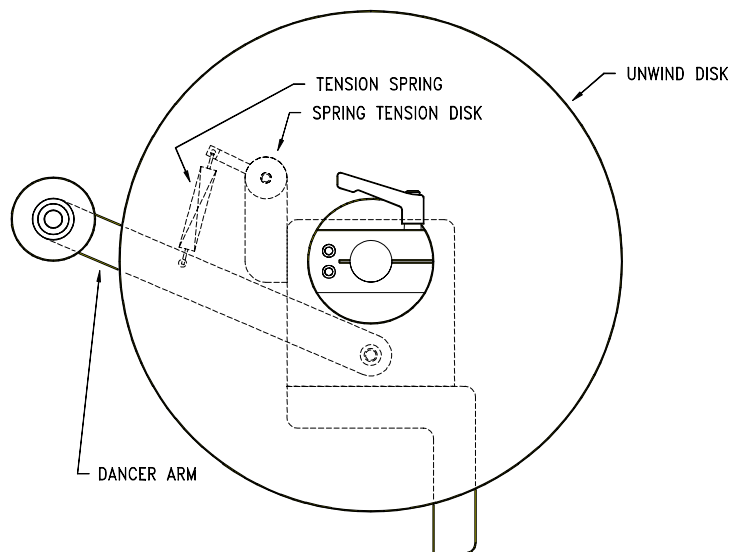
3. Replace slip clutch disk. Clean both friction surfaces.
4. Check roller clutch on the rewind shaft for correct operation.
5. Examine pulleys for wear.
6. Perform the monthly maintenance section.

## DANCER ARM ADJUSTMENT

The dancer arm maintains tension on the label liner and operates the brake on the unwind mandrel when labels are dispensed. The spring holding the dancer arm should be adjusted so that there is enough braking force to keep the unwind mandrel from continuing to roll after a label feed yet still release the applicator when it is cycled.

1. Loosen the screw going to the spring tension disk.
2. Rotate disk to proper spring tension.
3. Re-tighten screw.

**!!CAUTION!! PERFORM THE FOLLOWING PROCEDURES WITH THE MACHINE OFFLINE TO AVOID INJURIES FROM UNWANTED MOVEMENT OF THE APPLICATOR.**



**!!WARNING!! DISCONNECT THE POWER AND AIR TO THE MACHINE BEFORE DOING THE FOLLOWING PROCEDURES. INJURIES COULD OCCUR FROM MOVING PARTS OR ELECTRICAL SHOCK.**

## **REWIND SLIP CLUTCH ADJUSTMENT**

**More or less tension may be needed on the rewind if the liner is being wound too loose or tight. Different conditions will warrant this adjustment:**

1. Change in label width or length.
2. Applicator attitude.
3. Web speed changes.
4. Motor acceleration or deceleration value changes.

**Use the following procedure to adjust the rewind tension or replace the slip clutch disk:**

1. Remove all AC power and air to the machine.
2. Remove lower stainless cover.
3. Use 3/16" Allen wrench to remove the screw at the end of the drive roller shaft.
4. Remove the washers, spring keeper, and spring from the drive roller shaft.
5. If you're replacing the slip clutch disk, remove the thrust bearing and walk the rewind belt off of the slip clutch pulley. Slide the pulley for the rewind off the drive roller shaft. Clean friction surfaces, replace clutch part, and replace assembly.
6. If **more** rewind tension is needed, **remove** one shim washer from the inboard side of the spring keeper and re-install on the outboard side of the keeper. If **less** tension is needed, **remove** one shim washer from the outboard side of the spring keeper and re-install on the inboard side of the spring keeper.
7. Replace and tighten the screw on the end of the drive roller .
8. Replace the lower stainless cover and tighten the mounting screws.
9. Re-connect AC power and air to machine.
10. Test machine and observe the rewind from beginning to end of a roll of labels.
11. Re-adjust if necessary.

**!!WARNING!! DISCONNECT THE POWER AND AIR TO THE MACHINE BEFORE DOING THE FOLLOWING PROCEDURES. INJURIES COULD OCCUR FROM MOVING PARTS OR ELECTRICAL SHOCK.**

## **DRIVE BELT ADJUSTMENT**

1. Remove all AC power and air to the machine.
2. Remove the lower stainless cover. Rotate the 360 so the drive roll assembly is facing the floor. This orientation will aid you when it comes time to set angular alignment.
3. Remove the air lines interconnecting the two sides of the applicator to gain access to the drive belt.
4. Remove both splice plates that are mounted on either side of the motor. Use a 5/32" Allen wrench to remove the 12 screws holding the splice plates. There are enough remaining screws to keep rewind and applicator plates in place. Discard broken/worn belt. Check pulley integrity and alignment – flanged motor pulley hub should extend beyond the motor shaft approx. 1/16". The 3" main drive pulley dimensioning, – 45/64" from the backside of the 360 faceplate to the inside edge of the pulley. Place replacement belt onto flanged motor pulley. Cautiously / slowly walk the belt over the main drive pulley to keep from crimping / nicking belt edge.
5. Loosen the four (4) screws on the side of the motor mounting plate using a 5/32" Allen wrench.
6. Push the motor mount assembly upward and re-tighten mounting screws. Make sure the motor assembly is 90 degrees from the faceplate to insure proper angular alignment – \*see note
7. Disengage nip roller and turn the drive roller. Make sure there is no severe catching as you turn the roller.
8. Check belt tension. With light finger pressure on one side of the belt, adjust the tension so that the belt deflects approximately 1/16" to 1/8".

**NOTE: Do not over tighten the belts. This may result in shortened motor life. If belts are too loose, label stop may become erratic.**

9. Replace the two splice plates.
10. Replace the air lines interconnecting the two sides of the applicator.
11. Replace the stainless cover and tighten the mounting screws.
12. Re-connect the AC power and air.

**\*Note:** One method to verify angular alignment is to use ½" wide X .025" thick banding material/strapping. Cut 2 pcs. approximately 8" long. Place each pc. between the faceplate and the motor mount side frames. Place your hand on the end of the motor and firmly push the motor toward the faceplate – making sure motor mount side frames are running parallel to the faceplate. Verify belt tension is correct – see step #8 above. Snug the 4 screws, remove banding strips and tighten the 4 screws.



(This page is intentionally blank.)

**TROUBLESHOOTING**

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>SOLUTION</b>
<b>WITH THE POWER SWITCH ON, NO COOLING FAN; NO DISPLAY</b>	POWER CORD DEFECTIVE OR UNPLUGGED	INSPECT AND CORRECT
	AC FUSE BLOWN	DETERMINE CAUSE AND REPLACE FUSE
<b>WITH THE POWER SWITCH ON, COOLING FAN ON; NO DISPLAY</b>	DISPLAY CABLE NOT PLUGGED IN TO THE BACK OF THE APPLICATOR	RECONNECT CABLE
	DISPLAY PORT SETTINGS INCORRECT	LOCATE SW1 NEAR THE AIR FILTER MAKE SURE SWITCHES 1 & 6 ARE UP
	LOSS OF 12 VDC	CALL A FACTORY REPRESENTATIVE
	DEFECTIVE CABLE	REPLACE CABLE
	DEFECTIVE DISPLAY BOARD	REPLACE DISPLAY BOARD
<b>LABEL LINER BREAKING</b>	LABELS ARE THREADED INCORRECTLY	SEE THREADING DIAGRAM
	BAD ROLL OF LABELS	REPLACE LABEL ROLL
	SIDE NICKS IN LINER; HEAVY DIE CUT ON LINER	REPLACE LABEL ROLL
	ROLLER COLLARS ARE STRESSING THE LABEL STOCK	CHECK TO MAKE SURE GUIDE COLLARS LINE UP WITH UNWIND
		SHOULD HAVE 1/64" CLEARANCE BETWEEN LABEL STOCK AND COLLAR
	ADHESIVE BUILD-UP ON PEEL EDGE	CLEAN PEEL EDGE SURFACE
	PEEL BAR TENSION SPRING TOO TIGHT	RELEASE SPRING TENSION

**TROUBLESHOOTING**

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>SOLUTION</b>
<b>LABEL DOES NOT ADVANCE AND DISPLAY IS WORKING</b>	NIP ROLLER NOT ENGAGED AGAINST DRIVE ROLLER	INSPECT AND CORRECT
	DRIVE BELT IS BROKEN	REPLACE BELT
	LOST KEY IN DRIVE PULLEY	FOLLOW PROCEDURE FOR SLIP CLUTCH ADJUSTMENT. WHEN YOU GET TO STEP #6 AND HAVE REMOVED THE PULLEY GOING TO THE REWIND, GO AHEAD AND REMOVE THE DRIVE PULLEY. REPLACE KEY AND PUT BACK TOGETHER
<b>LABEL DOES ADVANCE BUT DOES NOT STOP IN THE SAME PLACE EVERY TIME OR DOES NOT STOP IN THE RIGHT PLACE</b>	LABEL SENSOR NEEDS SET UP	REFER TO LABEL SENSOR SETUP IN THE GENERAL SETUP PROCEDURES SECTION
	LABEL SENSOR NOT LOOKING AT A LABEL	MOVE LABEL SENSOR OVER THE LABEL PATH
	LABEL SENSOR OR FIBER CABLE IS DAMAGED	REPLACE LABEL SENSOR
	NIP ROLLER NOT ENGAGED AGAINST DRIVE ROLLER	INSPECT AND CORRECT
	LABEL LENGTH SET WRONG	REFER TO LABEL LENGTH SETUP IN THE GENERAL SETUP PROCEDURES SECTION
	LABEL STOP SET WRONG	REFER TO LABEL STOP SETUP IN THE GENERAL SETUP PROCEDURES SECTION

**TROUBLESHOOTING**

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>SOLUTION</b>
<b>LABEL LINER NOT WINDING UP</b>	REWIND SLIP CLUTCH NEEDS TENSIONING OR REPLACED	SEE SLIP CLUTCH ADJUSTMENT IN THE MAINTENANCE SECTION
	ONE-WAY CLUTCH BEARING NOT WORKING	REPLACE REWIND SHAFT ASSEMBLY
	BROKEN BELT	REPLACE BELT
<b>LABELS ARE NOT HELD ON LABEL GRID OR LABEL PAD</b>	<b><u>AIR BLOW</u></b> VACUUM FAN NOT WORKING	CHECK FOR BLOWN FUSE
		OBSTRUCTION IN FAN
		REPLACE FANS
	<b><u>TAMP</u></b> NOT ENOUGH VACUUM ON PAD	INSPECT FOR CLOGGED OR DEFECTIVE VENTURI
		VENTURI EXHAUST IS BLOCKED
		NEEDS MORE AIR PRESSURE
	<b><u>BOTH AIR BLOW &amp; TAMP</u></b> PEEL EDGE OUT OF ADJUSTMENT	REFER TO PEEL EDGE ALIGNMENT IN THE LABELER SET UP SECTION

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
LABEL PLACEMENT ON GRID OR LABEL PAD NOT CONSISTENT	<u>AIR BLOW</u> IMPROPER VACUUM	YOU MAY HAVE TO MASK OFF THE HOLES NOT USED BY THE LABEL ON THE INSIDE OF THE VACUUM BOX
		YOU CAN ADD MORE VACUUM BY TURNING THE VAC SWITCH TO HIGH
	<u>TAMP</u> IMPROPER VACUUM	ADJUST AIR PRESSURE
	<u>BOTH</u> ADHESIVE STRINGS ON LABEL AND LINER	REPLACE LABEL ROLL
	<u>BOTH</u> PEEL EDGE OUT OF ADJUSTMENT	REFER TO PEEL EDGE ALIGNMENT IN THE LABELER SET UP SECTION
	<u>BOTH</u> INCORRECT EXTENDED AIR ASSIST TIME	EXAMINE AND CORRECT
	<u>BOTH</u> AIR ASSIST TUBE NOT ALIGNED PROPERLY	REFER TO AIR ASSIST SET UP IN THE LABELER SET UP SECTION
LABEL FAILS TO LEAVE THE LABEL GRID OR LABEL PAD	<u>AIR BLOW</u> TOO MUCH VACUUM	SWITCH TO LOW ON VAC SWITCH
		REMOVE MASKING
	<u>BOTH</u> NO AIR BLAST	AIR BLAST TIME TOO SMALL
		IF BAD VALVE; REPLACE
	<u>AIR BLOW</u> INCORRECT AIR JET PATTERN	INSPECT AND CORRECT

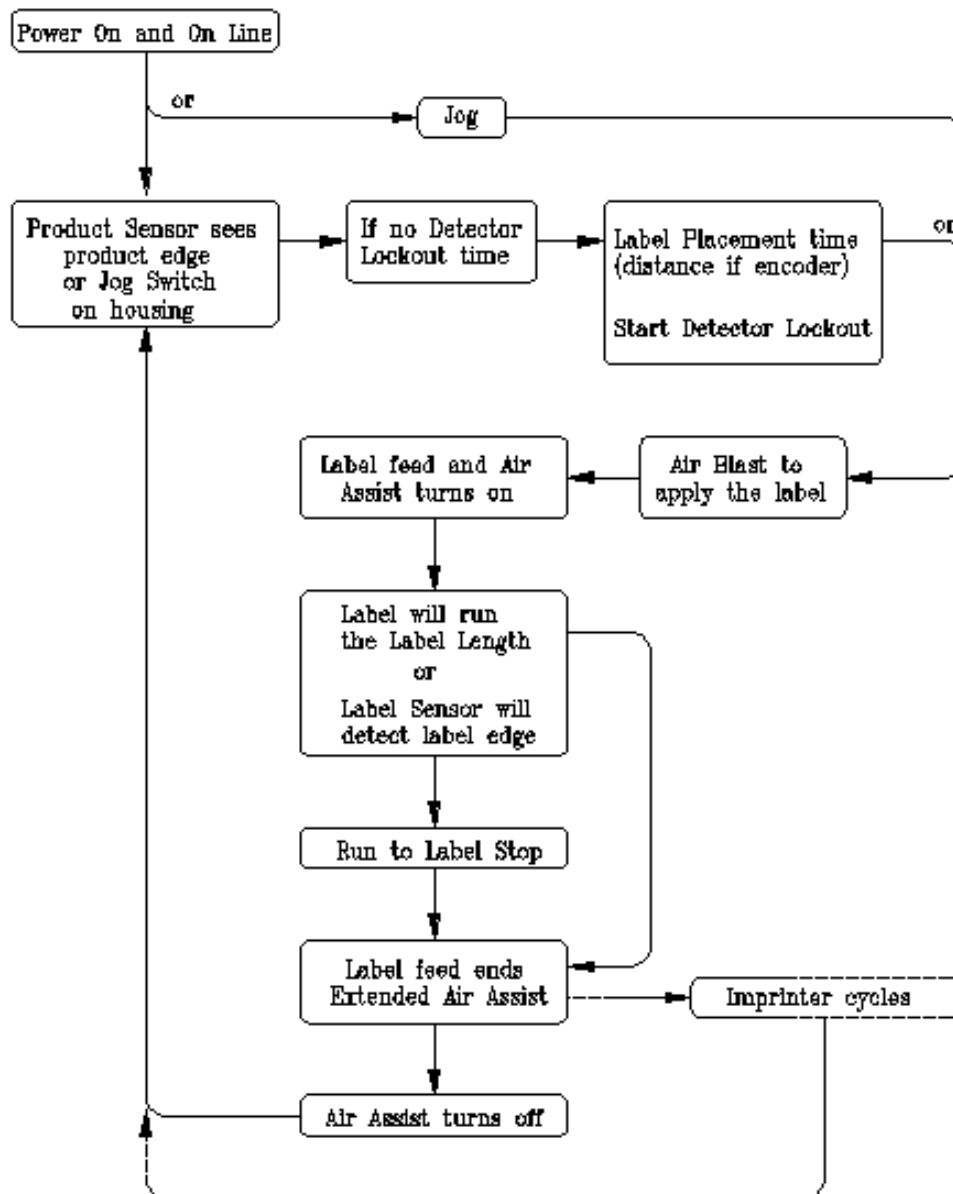
**FAULT CODE REGISTER**

Following a fault condition, the controller runs a section of code to determine the cause of the fault. The display will show a fault type message, its corresponding fault code value, and the fault code register value. If a fault occurs, record these three values and contact the factory for assistance. The display will only show the first error condition encountered but the fault code register value encodes the status of all fault conditions. The controller will also check the SRAM memory for corrupt variables and allow the operator to restore factory default settings if a problem is detected. The controller memory is verified at power-up and during fault conditions. The controller continuously monitors the following conditions:

Fault Code	Fault Type
0	POWER FAILURE
1	RESERVED
2	SOFTWARE FAULT
3	LOST ENABLE
4	DIGITAL OUTPUT FAULT
5	INVALID COMMAND IN STRING
6	TRANSMIT BUFFER OVERFLOW
7	RESOURCE NOT AVAILABLE
8	INVALID VARIABLE POINTER
9	MATHEMATICAL OVERFLOW
10	MATHEMATICAL DATA ERROR
11	VALUE OUT OF RANGE
12	STRING TOO LONG
13	NONEXISTANT LABEL
14	GOSUB STACK UNDERFLOW
15	GOSUB STACK OVERFLOW
16	INVALID MOTION
17	RESERVED
18	RESERVED
19	NETWORK POWER FAILURE
20	DUPLICATE NETWORK ADDRESS
21	EXCESSIVE FOLLOWING ERROR
22	EXCESSIVE COMMAND INCREMENT
23	POSITION REGISTER OVERFLOW
24	RESERVED
25	MOTOR POWER OVERVOLTAGE
26	MOTOR POWER CLAMP DC/UV
27	MOTOR POWER CLAMP OC/DC
28	MOTOR OVER-CURRENT FAULT
29	RESERVED
30	CONTROLLER OVER TEMPERATURE
31	NETWORK COMMUNICATION ERROR

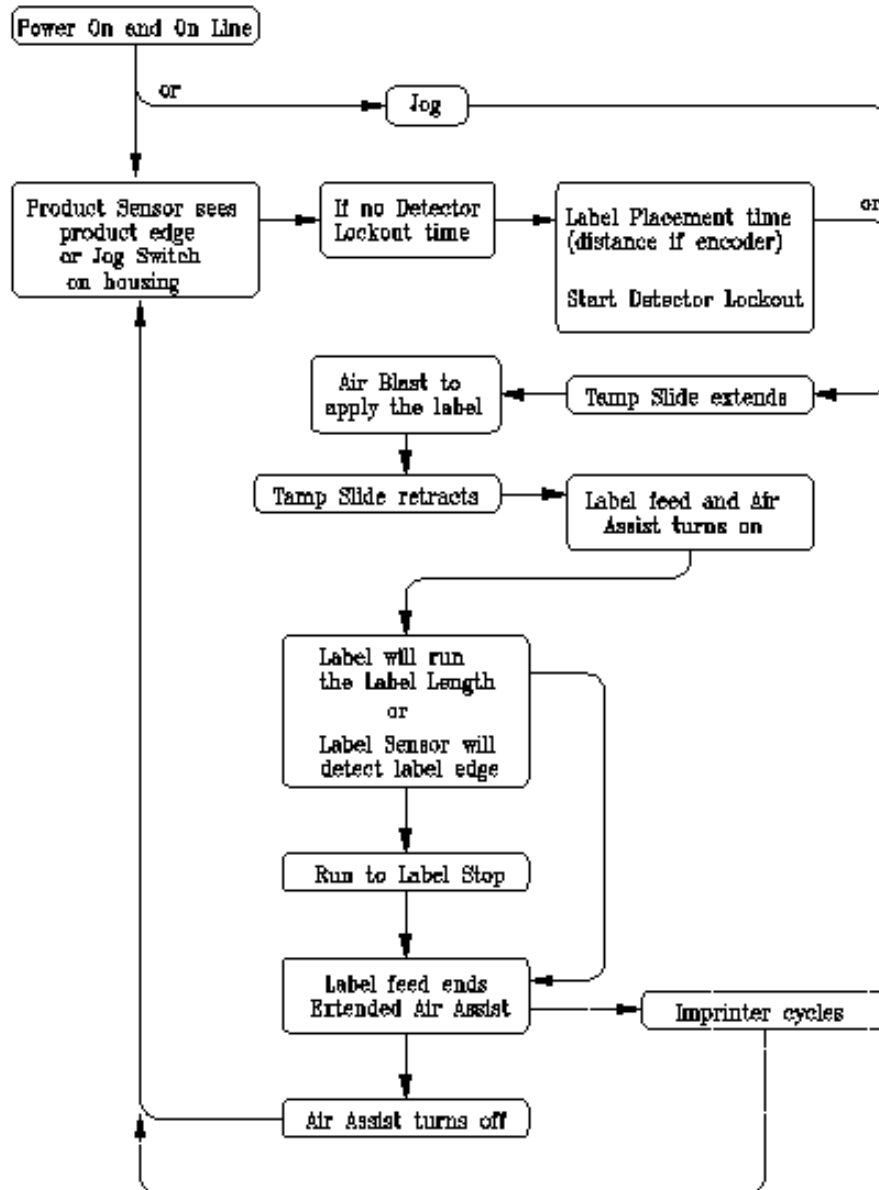
(This page is intentionally blank.)

## AIR BLOW SEQUENCE OF OPERATION

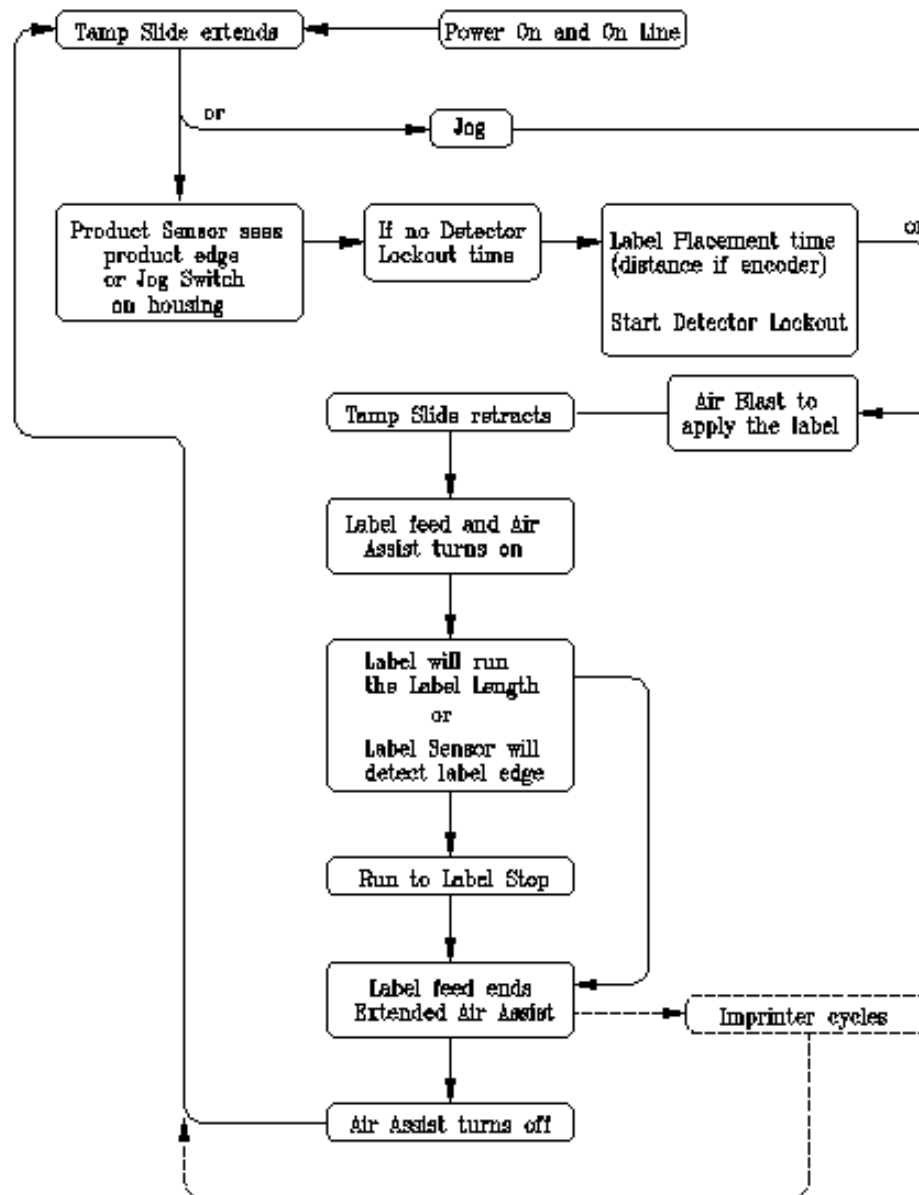




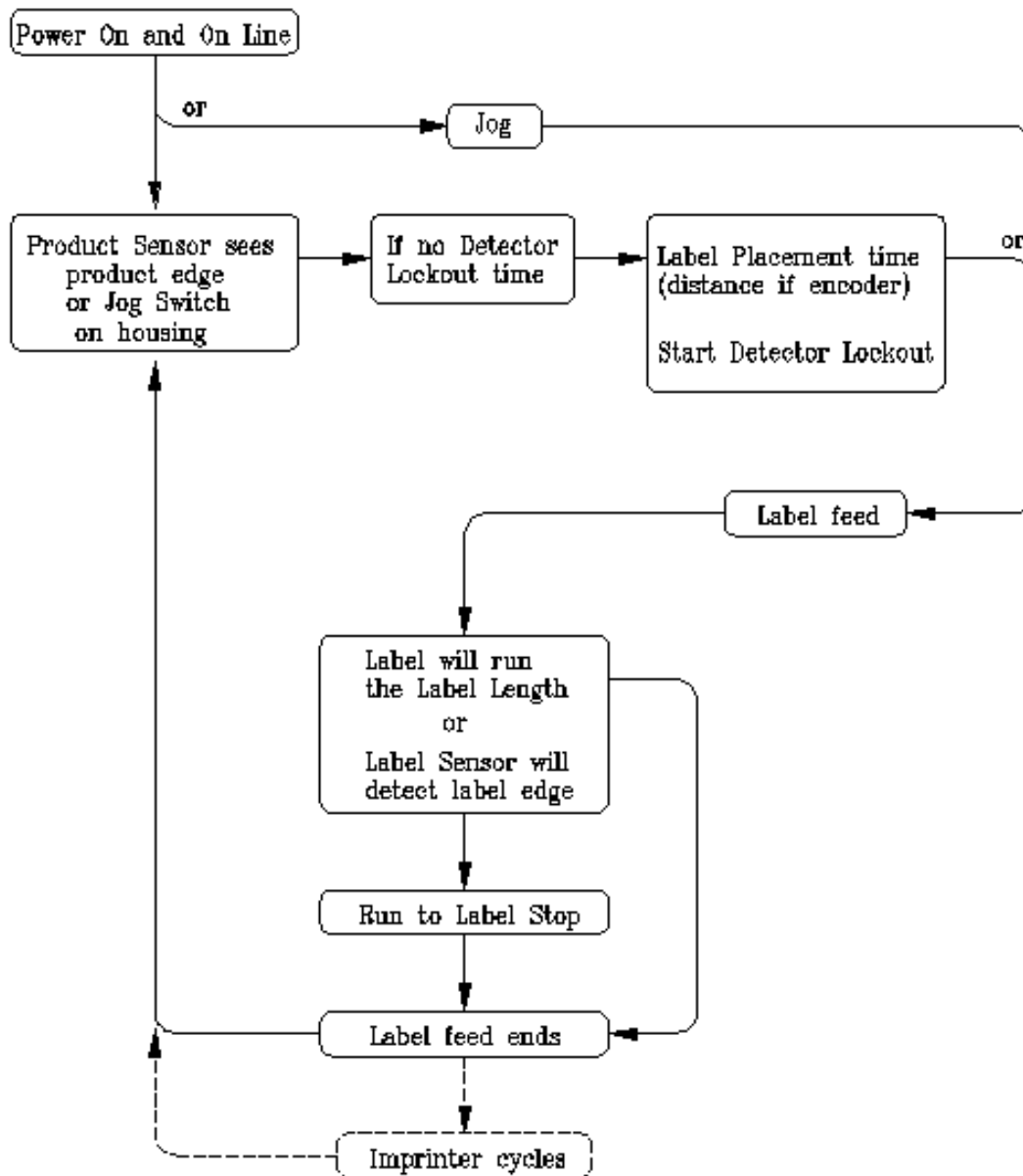
## TAMP SEQUENCE OF OPERATION



## ITB TAMP SEQUENCE OF OPERATION



## MERGE SEQUENCE OF OPERATION



(This page is intentionally blank.)

## **ACCESSORIES**

### **ELECTRONIC CROSSOVER:**

The Electronic Crossover or “Zero Downtime” accessory is an electronic interface between two labeling heads positioned in series that will monitor the primary applicator’s fault conditions and switch to a secondary applicator to prevent interruption of production flow. Includes control with all interface cabling.

### **IMPRINTER:**

The Imprinter accessory is a Hot Stamp Imprinter device mounted on special bracketry attached to the labeling head.

### **LOOSE LOOP:**

The Loose Loop accessory is designed to integrate a labeling head with a Thermal / Thermal Transfer printer in “Loose Loop” fashion. This option includes electrical modifications to the printer, sensor array to monitor loop condition, and all mounting hardware (including yard arm) to support the labeling head and printer from a vertical upright.

### **LOW LABEL DETECTION:**

The Low Label Detection accessory is a sensor that generates a signal when the unwind is low on labels. The applicator will display an alarm screen and activate the strobe light (if purchased) to inform the operator that the unwind is about to run out of labels.

### **TAMP SWITCH:**

The Tamp Switch accessory uses two sensors to control the tamp slide assembly when labeling products with differing heights. When the tamp home switch is activated, the applicator dispenses a label onto the tamp pad. The tamp return switch senses the product, a label is applied, and the tamp returns to the home position.

### **WEB BREAK DETECTION:**

The Web Break Detection accessory is a sensor that generates a signal when there is a break in the web. The applicator will display an alarm screen and flash the strobe light (if purchased) to inform the operator that the label web is broken.

(This page is intentionally blank.)

# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

360 Series Core Unit Spare Parts List		
RECOMMENDED TOOL		
Part Number	Recommended Qty	Description
PE-TE6000	1	ENTRELEC WIRING TOOL
WEAR ITEMS		
Part Number	Recommended Qty	Description
MP-200-0235	1	NIP ROLLER LIFT CAM
PM-BELT1018	1	140XLO37 NIP TO MOTOR BELT
RECOMMENDED SPARE PARTS		
Part Number	Recommended Qty	Description
ASS-200-0410	1	24VDC POWER SUPPLY
MP-200-0242 or	1	5" DRIVE ROLL w/ COATING
MP-200-2242 or	1	7.5" DRIVE ROLL w/ COATING
MP-200-5242	1	10" DRIVE ROLL w/ COATING
PE-FU2070	1	5 amp FUSE
PE-SE3080	1	FIBER OPTIC LABEL SENSOR
EXTENDED SPARE PARTS		
Part Number	Recommended Qty	Description
ASS-200-0427	1	PRODUCT DETECT SENSOR <b>**job specific**</b>
PE-RT1000-6	1	REFLECTIVE TAPE (1" WIDE x 6" LONG) <b>**job specific**</b>
PE-CO1020	1	214-3508 16/3 X 10' POWER CORD (BELDEN)
MP-DR1010	1	IMC-78005773 MOTOR CONTROLLER
PE-IN1040	1	OIP-73005774 DISPLAY DRIVER
PE-IN1041	1	OIP-51505775 DISPLAY MEMBRANE OVERLAY
PE-MO1060	1	MTR-35005685 STEPPER MOTOR
PM-BE1230	1	EW-5/8 LIFT THRUST WASHER
PM-BE1232	1	EW-3/4 REWIND CLUTCH THRUST WASHER
ASS-200-0128R or	1	REWIND BEARING BLOCK ASSEMBLY W/ SHAFT
ASS-200-0128L	1	REWIND BEARING BLOCK ASSEMBLY W/ SHAFT
SAS-200-0129O	1	OUTSIDE DRIVE ROLL SUPPORT ASSEMBLY
SAS-200-0129I	1	INSIDE DRIVE ROLL SUPPORT ASSEMBLY
ASS-200-0130 or	1	5" NIP ROLLER ASSEMBLY WITH SHAFT
ASS-200-2130 or	1	7.5" NIP ROLLER ASSEMBLY WITH SHAFT
ASS-200-5130	1	10" NIP ROLLER ASSEMBLY WITH SHAFT
SAS-200-0135 or	1	5" TENSION ROLLER ASSEMBLY w/o SHAFT
SAS-200-2135 or	1	7.5" TENSION ROLLER ASSEMBLY w/o SHAFT
SAS-200-5135	1	10" TENSION ROLLER ASSEMBLY w/o SHAFT

# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

NON-POWERED UNWIND ASSEMBLY SPARE PARTS LIST		
WEAR ITEMS		
Part Number	Recommended Qty	Description
PM-OR1007	1	O-RING
RECOMMENDED SPARE PARTS (12" NON-POWERED UNWIND)		
Part Number	Recommended Qty	Description
SAS-200-0131 or	1	5" DANCER ROLLER ASSEMBLY w/o SHAFT
SAS-200-2131 or	1	7.5" DANCER ROLLER ASSEMBLY w/o SHAFT
SAS-200-5131	1	10" DANCER ROLLER ASSEMBLY w/o SHAFT
PM-BEBF1015	1	FF-520-10 DANCER ARM BUSHING
PM-BE1266	2	DANCER ARM THRUST BEARING
PM-FASP30437	1	TENSION SPRING
ASS-200-0134	1	UNWIND BEARING BLOCK ASSEMBLY
RECOMMENDED SPARE PARTS (16" & 20" NON-POWERED UNWIND)		
Part Number	Recommended Qty	Description
SAS-200-0135 or	2	5" TENSION ROLLER ASSEMBLY w/o SHAFT
SAS-200-2135 or	2	7.5" TENSION ROLLER ASSEMBLY w/o SHAFT
SAS-200-5135	2	10" TENSION ROLLER ASSEMBLY w/o SHAFT
PM-BEBF1015	1	FF-520-10 DANCER ARM BUSHING
PM-BE1266	2	DANCER ARM THRUST BEARING
PM-FASP30480	1	TENSION SPRING
ASS-200-0134	1	UNWIND BEARING BLOCK ASSEMBLY

STANDARD REWIND ASSEMBLY SPARE PARTS LIST		
WEAR ITEMS (STANDARD REWIND)		
Part Number	Recommended Qty	Description
PM-BELT1023	1	180XLO37 NIP TO REWIND BELT
PM-CL1010	1	3" LEATHER CLUTCH PAD
ASS-200-0143	1	SLIP CLUTCH ASSEMBLY



# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

NON-POWERED UNWIND with POWERED REWIND SPARE PARTS LIST		
WEAR ITEMS		
Part Number	Recommended Qty	Description
PM-OR1040	1	CLEAR O-RING
RECOMMENDED SPARE PARTS (16" & 20" UNWIND with POWERED REWIND)		
Part Number	Recommended Qty	Description
ASS-200-0460	1	PROXIMITY SWITCH
PE-FU2065	1	3 AMP FUSE
PE-MC1109	1	MOTOR DRIVER CONTROLLER
PE-MO1008	1	LEESON GEAR MOTOR
PE-PO1030	1	5K SPEED POTENTIONMETER
PE-RE1001	1	24VDC RELAY IDEC
PE-RE1012	1	CROUZET RELAY
PE-SI1050	1	ISOLATER BOARD
PM-BEBF1015	1	FF-520-10 DANCER ARM BUSHING
PM-BE1266	2	DANCER ARM THRUST BEARING
PM-FASP30480	1	TENSION SPRING
ASS-200-0134	1	UNWIND BEARING BLOCK ASSEMBLY

# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

MERGE SPARE PARTS LIST		
WEAR ITEM		
Part Number	Recommended Qty	Description
PM-T1000 or	1	UHMW TAPE FOR 5" PEEL EDGE ( 5 7/16" Wide x 7" Lg.)
PM-T1015	1	UHMW TAPE FOR 7.5" & 10" PEEL EDGE (8" Wide x 4" Lg.)
ASS-215-0110X-X or	1	5" WIPER ASSEMBLY (specify length & material)
ASS-215-2110X-X or	1	7.5" WIPER ASSEMBLY (specify length & material)
ASS-215-5110X-X	1	10" WIPER ASSEMBLY (specify length & material)

# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

AIR BLOW SPARE PARTS LIST		
WEAR ITEM		
Part Number	Recommended Qty	Description
PM-T1010 or	1	UHMW TAPE FOR 5" PEEL EDGE (6" Wide x 4" Lg.)
PM-T1015	1	UHMW TAPE FOR 7.5" PEEL EDGE (8" Wide x 4" Lg.)
ASS-211-0113 or	1	AIR TUBE ASSEMBLY
ASS-211-0113E	1	AIR TUBE ASSEMBLY FOR EXTENDED BLOW BOX
ASS-215-0110X-X or	1	5" WIPER ASSEMBLY (specify length & material)
ASS-215-2110X-X or	1	7.5" WIPER ASSEMBLY (specify length & material)
ASS-215-5110X-X	1	10" WIPER ASSEMBLY (specify length & material)
RECOMMENDED SPARE PARTS		
Part Number	Recommended Qty	Description
MP-211-0217-7	1	AIR ASSIST TUBE <b>**THIS IS JOB SPECIFIC**</b>
ASS-211-0103 or	1	AIR TUBE MANIFOLD ASSEMBLY
ASS-211-0103E	1	AIR TUBE MANIFOLD ASSEMBLY FOR EXT. BLOW BOX
EXTENDED SPARE PARTS		
Part Number	Recommended Qty	Description
PM-FIL1010	1	WATTS FILTER
PM-VA2395M	1	5.4 WATT DC SOLENOID
PM-VA2396M	1	60 PSI AIR ASSIST REGULATOR
PM-VA2397M	1	120 PSI TAMP/BLOW REGULATOR
ASS-211-0106M	1	AIR BLOW 2-STATION VALVE BANK ASSEMBLY
ASS-211-0109	1	AIR FILTER REGULATOR ASSEMBLY

# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

RVB SPARE PARTS LIST		
WEAR ITEM		
Part Number	Recommended Qty	Description
PM-T1010 or	1	UHMW TAPE FOR 5" PEEL EDGE ( 6" Wide x 4" Lg.)
PM-T1015	1	UHMW TAPE FOR 7.5" PEEL EDGE (8" Wide x 4" Lg.)
ASS-215-0110X-X or	1	5" WIPER ASSEMBLY (specify length & material)
ASS-215-2110X-X or	1	7.5" WIPER ASSEMBLY (specify length & material)
ASS-215-5110X-X	1	10" WIPER ASSEMBLY (specify length & material)
RECOMMENDED SPARE PARTS		
Part Number	Recommended Qty	Description
MP-211-X217-X	1	AIR ASSIST TUBE <b>**JOB SPECIFIC** (SEE DWG)</b>
EXTENDED SPARE PARTS		
Part Number	Recommended Qty	Description
PM-FIL1010	1	WATTS FILTER
PM-VA2395M	1	5.4 WATT DC SOLENOID
PM-VA2396M	1	60 PSI AIR ASSIST REGULATOR
PM-VA2397M	1	120 PSI TAMP/BLOW REGULATOR
ASS-211-0112M	1	RVB 2-STATION VALVE BANK ASSEMBLY

FFS SPARE PARTS LIST		
WEAR ITEM		
Part Number	Recommended Qty	Description
PM-T1010	1	UHMW TAPE FOR 5" PEEL EDGE ( 6" Wide x 4" Lg.)
ASS-215-0110X-X or	1	5" WIPER ASSEMBLY (specify length & material)
ASS-215-2110X-X or	1	7.5" WIPER ASSEMBLY (specify length & material)
ASS-215-5110X-X	1	10" WIPER ASSEMBLY (specify length & material)
RECOMMENDED SPARE PARTS		
Part Number	Recommended Qty	Description
MP-211-X217-X	1	AIR ASSIST TUBE <b>**JOB SPECIFIC** (SEE DWG)</b>
EXTENDED SPARE PARTS		
Part Number	Recommended Qty	Description
PM-FIL1010	1	WATTS FILTER
PM-VA2395M	1	5.4 WATT DC SOLENOID
PM-VA2396M	1	60 PSI AIR ASSIST REGULATOR
PM-VA2397M	1	120 PSI TAMP/BLOW REGULATOR
ASS-211-0117M	1	FFS STYLE 2-STATION VALVE BANK ASSEMBLY

# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

TAMP SPARE PARTS LIST		
WEAR ITEM		
Part Number	Recommended Qty	Description
PM-T1010 or	1	UHMW TAPE FOR 5" PEEL EDGE (6" Wide x 4" Lg.)
PM-T1015 or	1	UHMW TAPE FOR 7.5" PEEL EDGE (8" Wide x 4" Lg.)
PM-T1010	1	UHMW TAPE FOR 10" PEEL EDGE (6" Wide x 11" Lg.)
ASS-215-0110X-X or	1	5" WIPER ASSEMBLY (specify length & material)
ASS-215-2110X-X or	1	7.5" WIPER ASSEMBLY (specify length & material)
ASS-215-5110X-X	1	10" WIPER ASSEMBLY (specify length & material)
RECOMMENDED SPARE PARTS		
Part Number	Recommended Qty	Description
MP-211-X217-X	1	AIR ASSIST TUBE <b>**JOB SPECIFIC** (SEE DWG)</b>
EXTENDED SPARE PARTS		
Part Number	Recommended Qty	Description
PM-FIL1010	1	WATTS FILTER
PM-VA2395M	1	5.4 WATT DC SOLENOID
PM-VA2396M	1	60 PSI AIR ASSIST REGULATOR
PM-VA2397M	1	120 PSI TAMP/BLOW REGULATOR
ASS-214-0105M	1	TAMP 3-STATION VALVE BANK ASSEMBLY
SLIDE ASSEMBLIES		
Part Number	Recommended Qty	Description
ASS-214-0108-1 or	1	1" SLIDE ASSEMBLY
ASS-214-0108-2 or	1	2" SLIDE ASSEMBLY
ASS-214-0108-3 or	1	3" SLIDE ASSEMBLY
ASS-214-0108-4 or	1	4" SLIDE ASSEMBLY
ASS-214-0108-6 or	1	6" SLIDE ASSEMBLY
ASS-214-0108-8 or	1	8" SLIDE ASSEMBLY
ASS-214-0108-10 or	1	10" SLIDE ASSEMBLY
ASS-214-0108-12	1	12" SLIDE ASSEMBLY

# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

SWING TAMP SPARE PARTS LIST		
WEAR ITEM		
Part Number	Recommended Qty	Description
PM-T1010 or	1	UHMW TAPE FOR 5" PEEL EDGE (6" Wide x 4" Lg.)
PM-T1015 or	1	UHMW TAPE FOR 7.5" PEEL EDGE (8" Wide x 4" Lg.)
ASS-215-0110X-X or	1	5" WIPER ASSEMBLY (specify length & material)
ASS-215-2110X-X or	1	7.5" WIPER ASSEMBLY (specify length & material)
ASS-215-5110X-X	1	10" WIPER ASSEMBLY (specify length & material)
RECOMMENDED SPARE PARTS		
Part Number	Recommended Qty	Description
MP-211-X217-X	1	AIR ASSIST TUBE <b>** JOB SPECIFIC** (SEE DWG)</b>
EXTENDED SPARE PARTS		
Part Number	Recommended Qty	Description
PM-FIL1010	1	WATTS FILTER
PM-VA2395M	1	5.4 WATT DC SOLENOID
PM-VA2396M	1	60 PSI AIR ASSIST REGULATOR
PM-VA2397M	1	120 PSI TAMP/BLOW REGULATOR
ASS-214-0105M	1	TAMP 3-STATION VALVE BANK ASSEMBLY
PM-SA0990	1	SHOCK ABSORBER (HOME)
PM-SA1000	1	SHOCK ABSORBER (EXTEND)
ROTARY ACTUATOR		
Part Number	Recommended Qty	Description
PM-AC1250	1	STANDARD DUTY ROTARY ACTUATOR <b>**NOTE** CONTACT SALES DEPARTMENT FOR HEAVY DUTY ROTARY ACTUATOR</b>

# 360 APPLICATOR SPARE PARTS LIST

When ordering parts, present Serial Number of 360

DUAL ACTION TAMP SPARE PARTS LIST		
WEAR ITEM		
Part Number	Recommended Qty	Description
PM-T1010 or	1	UHMW TAPE FOR 5" PEEL EDGE (6" Wide x 4" Lg.)
PM-T1015 or	1	UHMW TAPE FOR 7.5" PEEL EDGE (8" Wide x 4" Lg.)
PM-T1010	1	UHMW TAPE FOR 10" PEEL EDGE (6" Wide x 11" Lg.)
ASS-215-0110X-X or	1	5" WIPER ASSEMBLY (specify length & material)
ASS-215-2110X-X or	1	7.5" WIPER ASSEMBLY (specify length & material)
ASS-215-5110X-X	1	10" WIPER ASSEMBLY (specify length & material)
RECOMMENDED SPARE PARTS		
Part Number	Recommended Qty	Description
PM-SA0950	2	SHOCK ABSORBER
PM-SA0990	1	SHOCK ABSORBER (HOME)
PM-SA1000	1	SHOCK ABSORBER (EXTEND)
PM-BELT1039	1	TIMING BELT (NOT REQ'D FOR INLINE DAT)
SLIDE ASSEMBLIES		
Part Number	Recommended Qty	Description
PM-AC1237 or	1	3" SLIDE ASSEMBLY
PM-AC1239 or	1	6" SLIDE ASSEMBLY
PM-AC1241	1	8" SLIDE ASSEMBLY
ROTARY ACTUATOR		
Part Number	Recommended Qty	Description
PM-AC1248	1	STANDARD DUTY ROTARY ACTUATOR **NOTE** CONTACT SALES DEPARTMENT FOR HEAVY DUTY ROTARY ACTUATOR

# 360 APPLICATOR SPARE PARTS LIST

When ordering parts, present Serial Number of 360

360 OPTIONS SPARE PARTS LIST		
OPTIONS: RECOMMENDED SPARE PARTS (LOW LABEL, WEB BREAK ALARMS)		
Part Number	Recommended Qty	Description
PE-LI1085	1	RED LED ALARM LIGHT
ASS-200-0422	1	LOW LABEL SENSOR (w/o BRACKET)
ASS-200-0423	1	END OF WEB SENSOR (w/o BRACKET)
OPTIONS: RECOMMENDED SPARE PARTS (TAMP HOME SENSOR)		
Part Number	Recommended Qty	Description
ASS-200-0478	1	TAMP HOME SENSOR (w/o BRACKET)
** CYLINDER MUST BE DESIGNATED WITH AN "E"***		
OPTIONS: RECOMMENDED SPARE PARTS (SMART TAMP - PHOTOEYE)		
Part Number	Recommended Qty	Description
PE-SE0985	1	SM312W-QD SENSOR **JOB SPECIFIC**
OPTIONS: RECOMMENDED SPARE PARTS (SMART TAMP - MECHANICAL)		
Part Number	Recommended Qty	Description
PE-SW1110 or	1	OMRON LIMIT SWITCH (ARM STYLE)
PE-SW1105 or	1	OMRON LIMIT SWITCH (BUTTON ROLLER STYLE)
PE-SW1100	1	OMRON LIMIT SWITCH (BUTTON STYLE)
OPTIONS: RECOMMENDED SPARE PARTS (VACUUM OFF OPTION)		
Part Number	Recommended Qty	Description
ASS-200-0459	1	VACUUM SWITCH CABLE ASSEMBLY
OPTIONS: RECOMMENDED SPARE PARTS (LINE RATE COMP)		
Part Number	Recommended Qty	Description
PE-MW1000	1	ENCODER WHEEL
PE-GE2105	1	90 Deg. PULSE ENCODER
OPTIONS: RECOMMENDED SPARE PARTS (LINE RATE COMP (CONVEYOR MOUNTED))		
Part Number	Recommended Qty	Description
PE-GE2105	1	90 Deg. PULSE ENCODER
OPTIONS: RECOMMENDED SPARE PARTS (QUICK DISCONNECT PAD & MANIFOLD)		
Part Number	Recommended Qty	Description
PM-FASSBP11000	4	BALL PLUNGERS
MP-238-0270	1	QUICK CHANGE SLIDE TRANSITION PLATE



# 360 APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360

SPARE PARTS LIST FOR RETIRED ASSEMBLIES		
RECOMMENDED SPARE PARTS (16" & 20" NON-POWERED UNWIND w/ POWERED REWIND w/ DANCER)		
Part Number	Recommended Qty	Description
PM-BE1238	2	#R4 BALL BEARING
ASS-200-0460	1	PROXIMITY SWITCH
SAS-211-0120 or	2	5" IDLER ROLLER ASSEMBLY
SAS-211-2120 or	2	7.5" IDLER ROLLER ASSEMBLY
SAS-211-5120	2	10" IDLER ROLLER ASSEMBLY
PM-BE1250	2	#R8FF BALL BEARING
PE-FU2065	1	3 AMP FUSE
PE-MC1109	1	MOTOR DRIVER CONTROLLER
PE-MO1008	1	LEESON GEAR MOTOR
PE-PO1030	1	5K SPEED POTENTIOMETER
PE-RE1001	1	24VDC RELAY IDEC
PE-RE1012	1	CROUZET RELAY
PE-SI1050	1	ISOLATER BOARD
PM-BEBF1015	1	FF-520-10 DANCER ARM BUSHING
PM-BE1266	2	DANCER ARM THRUST BEARING
PM-FASP30480	2	TENSION SPRING
ASS-200-0134	1	UNWIND BEARING BLOCK ASSEMBLY
OPTIONS: RECOMMENDED SPARE PARTS (AC INCANDESCENT ALARM LIGHT - ALLEN BRADLEY)		
Part Number	Recommended Qty	Description
PE-LI2070	1	LAMP (FOR ALARM LIGHT)
PE-RE1001	1	RELAY (FOR ALARM LIGHT)

# BILL OF MATERIAL

MOD-200-0467X-X

MOD-200-0467X-X

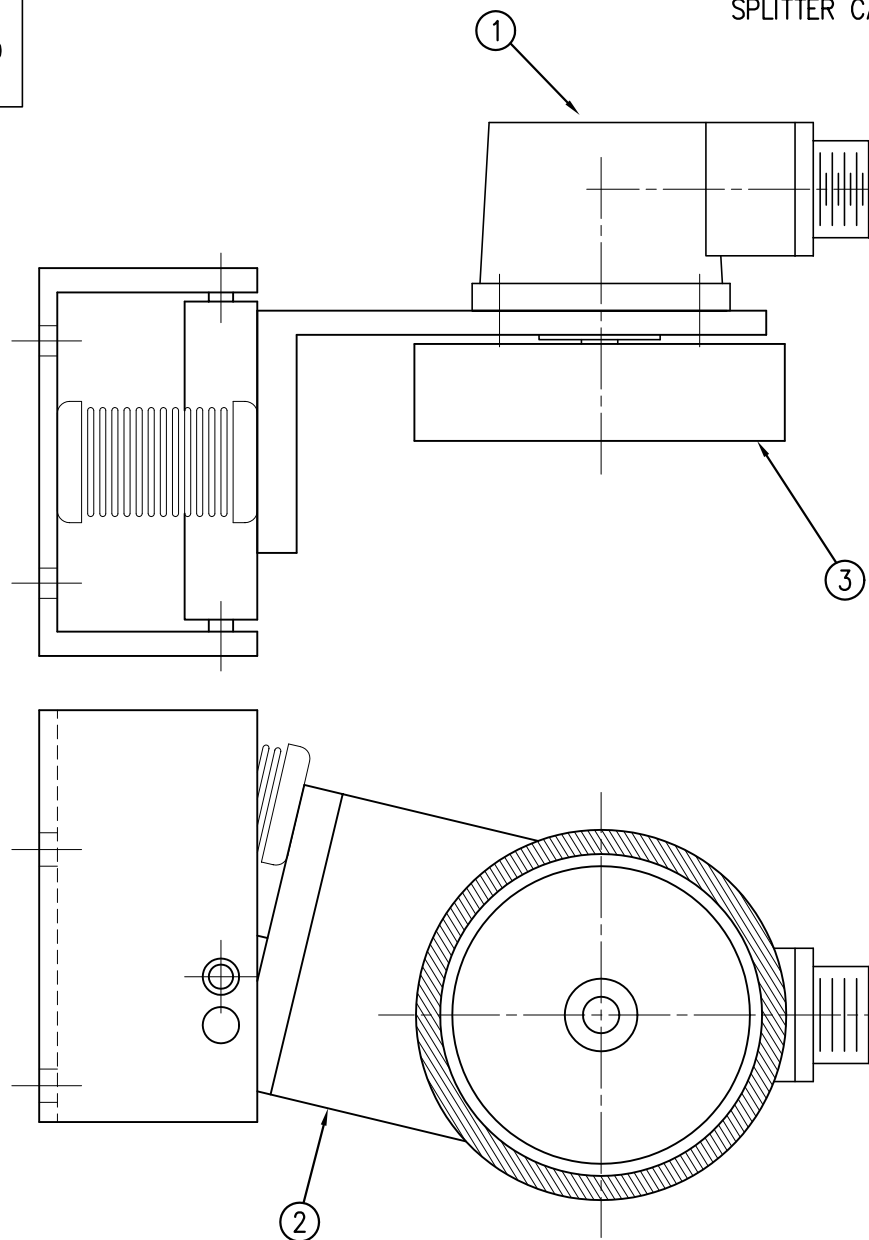
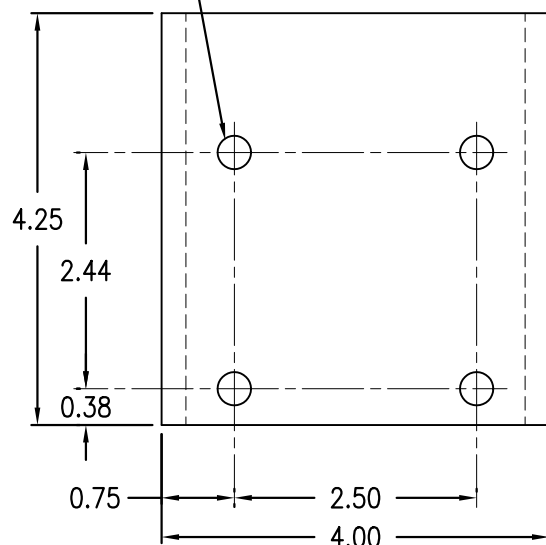
SINGLE CABLE	-0467A-	X
SPLITTER CABLE	-0467B-	X

10 FT.	10
15 FT.	15
20 FT.	20
25 FT.	25

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-0467A-X	90 Deg. ENCODER (2500 pulses/rev) with SINGLE CABLE
	1	ASS-200-0467B-X	90 Deg. ENCODER (2500 pulses/rev) with SPLITTER CABLE
②	1	PE-GE2001	ENCODER MOUNT
③	1	PE-MW1000	ENCODER WHEEL

FOR 360  
& 360A

11/32 DIA. THRU HOLES  
4 PLACES FOR MTG. SCREWS  
(TO BE PROVIDED BY CUSTOMER)



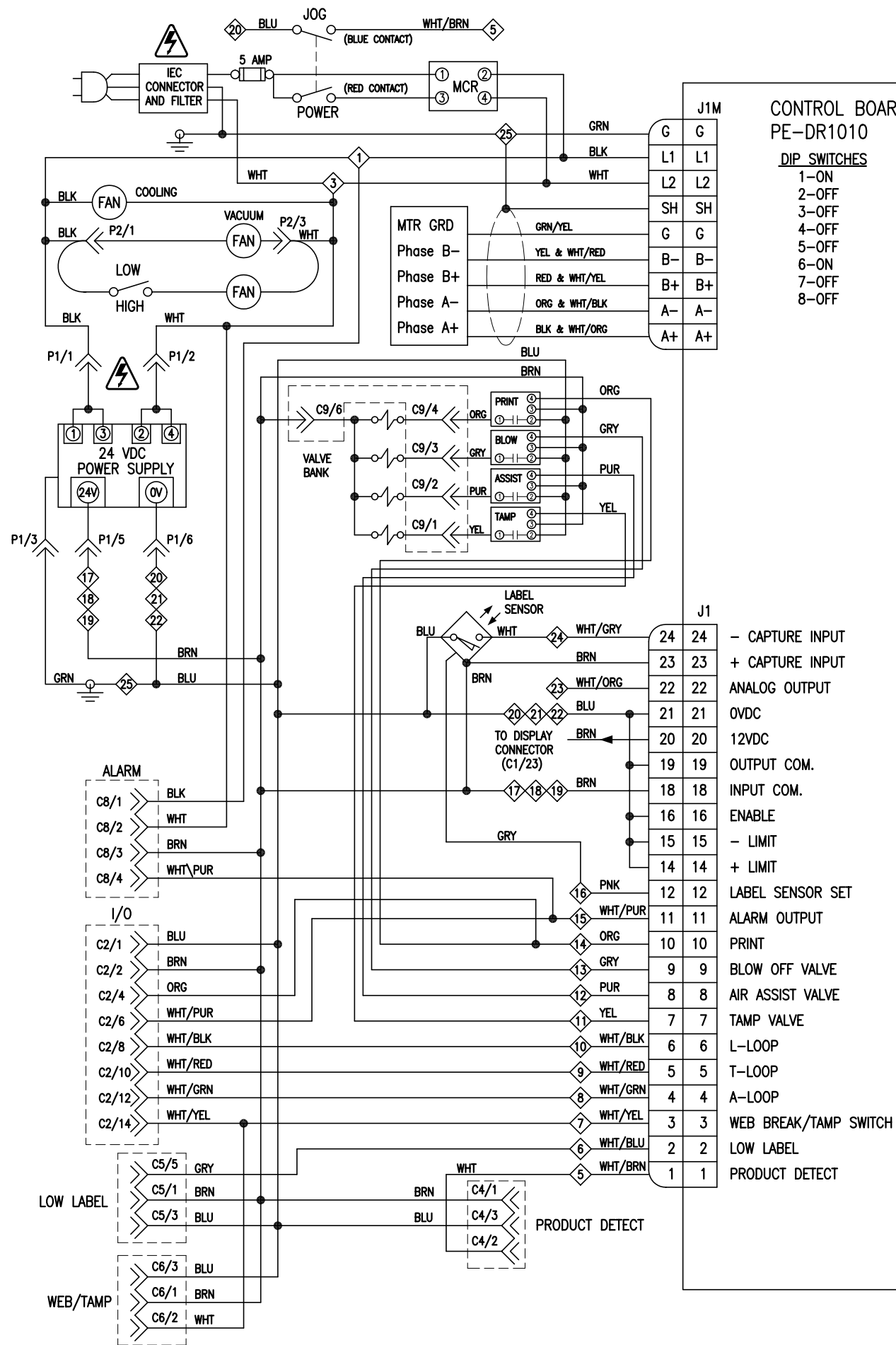
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: ELECTRICAL

PART: 90 DEG. ENCODER, MOUNT, AND CABLE

Dept. Code  
70

REV. 2	REV. DESCRIPTION CHANGED TO 2500 PULSES/REV ENCODER	REV. DATE 09/13/07	REV. BY: TDR	Scale: 1=2	Date: 11/19/01	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 200\MOD-200X-0467X-X
--------	--	-----------------------	-----------------	---------------	-------------------	---------------------	--



ASS-200-0403

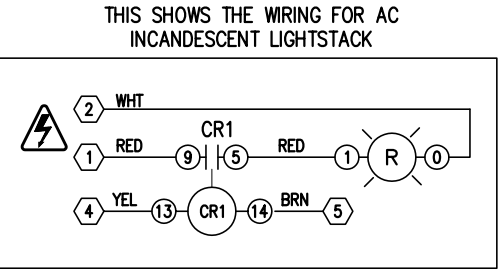
-TB1 TERMINALS			
TB1-1	AC/LINE INPUT POWER	TB1-14	LOOSE LOOP/IMPRINTER
TB1-2	AC/LINE INPUT POWER	TB1-15	ALARM OUTPUT
TB1-3	AC/NEUTRAL INPUT POWER	TB1-16	LABEL SENSOR SETUP OUTPUT
TB1-4	AC/NEUTRAL INPUT POWER	TB1-17	+24 VDC
TB1-5	PRODUCT DETECT INPUT	TB1-18	+24 VDC
TB1-6	LOW LABEL INPUT	TB1-19	+24 VDC
TB1-7	WEB BREAK OR TAMP EXT./HOME	TB1-20	0 VDC
TB1-8	ALARM LOOP PROX	TB1-21	OVDC
TB1-9	TIGHT LOOP PROX	TB1-22	OVDC
TB1-10	LOOSE LOOP PROX	TB1-23	ANALOG OUTPUT
TB1-11	TAMP VALVE	TB1-24	LABEL DETECT INPUT
TB1-12	AIR ASSIST VALVE	TB1-25	GROUND
TB1-13	VACUUM VALVE		

PE-MC1109 DRIVE SETTINGS		SIGNAL ISOLATOR
<b>JUMPERS</b>	<b>POT. SETTINGS</b>	<b>JUMPER</b>
J1A-115VAC	DB-25% (REV 10)	J1-REMOVE (REV 11)
J1B-115VAC	RESP-50%	
J2-1.7 A	IR-40%	
J3-A90	RCL-100%	
J4-15V	FCL-100%	
J5-TRQ	MAX-90%	
J6-RTS	FACC-0%	
	RACC-0%	
SPEED POT-5.50 (DEFAULT) SETTING-SPEED DEPENDENT		

LABEL BLUE WIRES ON  
SS1 AS COM & ENBL

-TB2 TERMINALS	
TB2-1	AC/LINE INPUT POWER
TB2-2	AC/NEUTRAL INPUT POWER
TB2-3	PRINT
TB2-4	ALARM
TB2-5	+24 VDC
TB2-6	0 VDC
TB2-7	
TB2-8	

ALARM	
C8/1	BLK
C8/2	WHT
C8/3	BRN
C8/4	WHT/PUR
I/O	
C2/1	BLU
C2/2	BRN
C2/4	ORG
C2/6	WHT/PUR
C2/8	WHT/BLK
C2/10	WHT/RED
C2/12	WHT/GRN
C2/14	WHT/YEL
LOW LABEL	
C5/5	GRY
C5/1	BRN
C5/3	BLU
WEB/TAMP	
C6/3	BLU
C6/1	BRN
C6/2	WHT
PROD. DET.	
C6/3	BLU
C6/1	BRN
C6/2	WHT



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 SERIES APPLICATOR: ELECTRICAL

REV. DESCRIPTION

12 NEW WIRING FOR 24 VOLT LED LIGHTSTACK

REV. DATE  
08-28-09

REV. BY:  
dkm

Date:  
02/22/99

Scale:  
1=2

Drawn By:  
BOB S.

PART: POWERED REWIND MODULE WIRING SCHEMATIC

Dept. Code  
70

F:\Engineering\Standard Parts\Applcator\360  
200\ASS-200-0403

# BILL OF MATERIAL

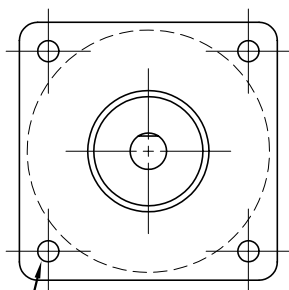
ASS-200-0467X-X

ASS-200-0467X-X

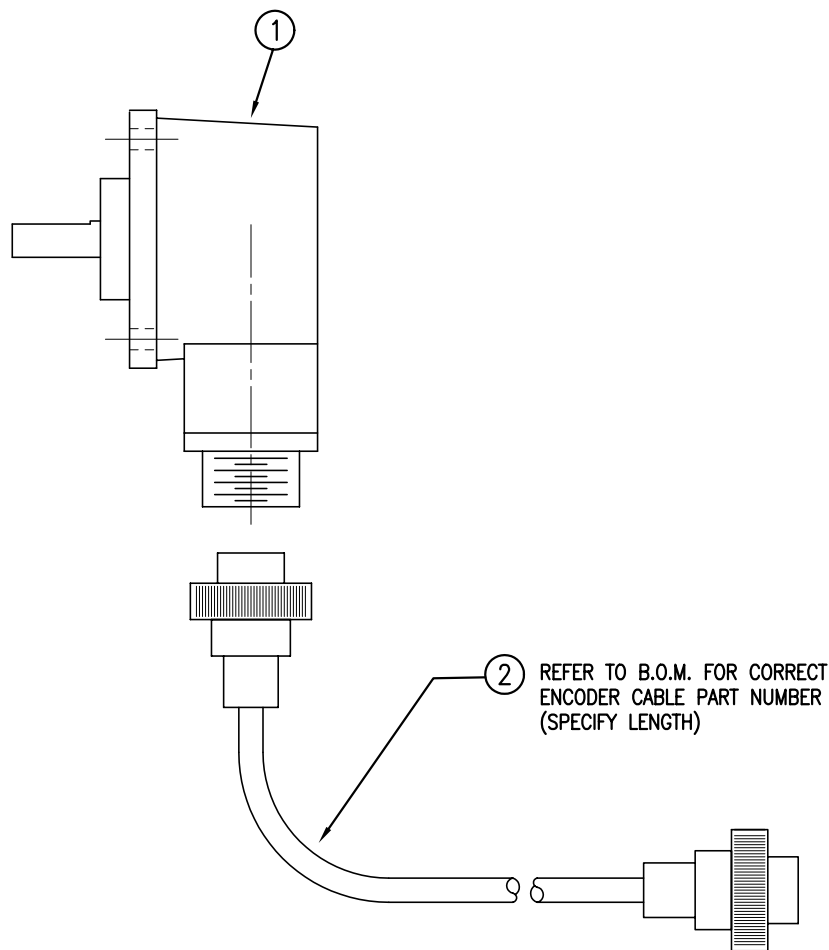
360; SINGLE CABLE -0467A-X  
360; SPLITTER CABLE -0467B-X

10 FT. 10  
15 FT. 15  
20 FT. 20  
25 FT. 25

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	PE-GE2105	90 DEG. PULSE ENCODER (2500 pulses/rev)
②	1	PE-200-0406-X	ENCODER CABLE - SINGLE
	1	PE-200-0429-X	ENCODER CABLE - SPLITTER



HOLES FOR #10-32 x 1/2 LONG  
PHILLIPS PAN HEAD w/ LOCK WASHER (4 PLACES)  
(PROVIDED BY ENCODER/BRACKET MANUFACTURER)



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.

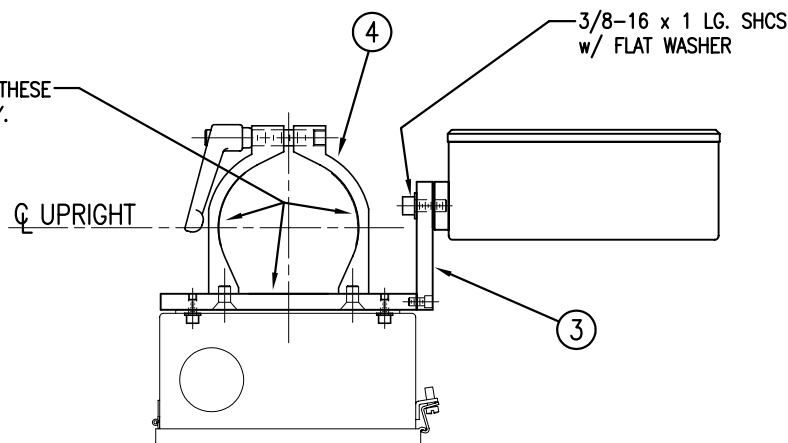
TITLE: 360 SERIES APPLICATOR: ELECTRICAL

PART: 90 DEGREE ENCODER WITH CABLE

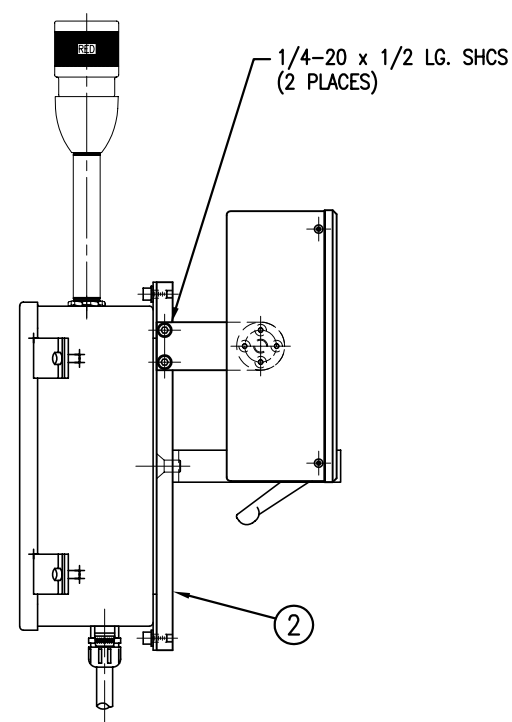
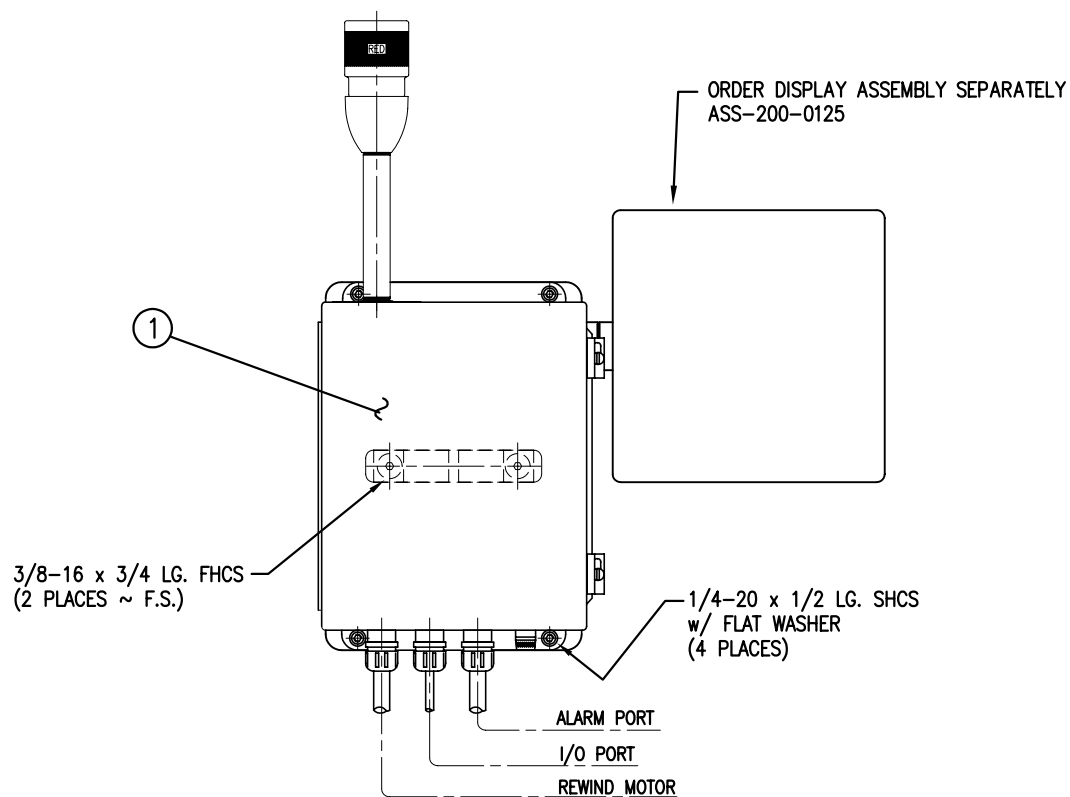
Dept. Code  
70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Appliator\360
0	NEW DRAWING	05/29/03	TDR	1=2	11/19/01	BOB S.	200\ASS-200-0467X-X

ASS-200-3161

APPLY UHMW TAPE TO THESE  
SURFACES AT ASSEMBLY.

BILL OF MATERIAL				SOLD
ASS-200-3161				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	REWIND DRIVE/ALARM LIGHT ENCLOSURE	ASS-200-3163	.
②	1	REWIND ENCLOSURE MOUNT PLATE	MP-200-3322	.
③	1	DISPLAY MOUNT	MP-200-3323	.
④	1	UPRIGHT TUBE CLAMP ASSEMBLY	ASS-CL1000	.
	10"	1" WIDE UHMW TAPE (CUT TO SUIT)	PM-T1020	.



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 SERIES APPLICATOR: 16" &amp; 20" UNWIND w/ POWERED REWIND

PART: ENCLOSURE ASSEMBLY

Dept. Code  
70REV. 2  
REV. DESCRIPTION  
ADDED 16" TO TITLEREV. DATE  
02/22/07REV. BY:  
ESScale:  
1=6Date:  
02/22/99DRAWN BY:  
BOB S.F:\Engineering\Standard Parts\Applcator\360  
200\ASS-200-3161

ASS-200-3163

NOTE: ITEM ③  
FOR PROGRAM VERSIONS 360-2B.25  
USE PE-LI2058 FLASHING LIGHT

LINE UP TAB ON  
DIAL w/ NOTCH  
IN WASHER

LOCK WASHER & WASHER  
(PROVIDED w/ ITEM ⑩)

#8-32 x 3/8 LG.  
SHCS ~ 2 PLCS.

ENLARGED VIEW  
(SCALE: 1=2)

REMOVE  
ENABLE  
JUMPER

PANEL SCREWS  
(PROVIDED w/ENCLOSURE)

#10-32 x 1/2 LG.  
SHCS w/ FLAT WASHER  
2 PLACES

## BILL OF MATERIAL

SOLD

ASS-200-3163			
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	CONTINUOUS HINGE ENCLOSURE w/ GROUNDING KIT	MP-EN2001
②	1	SINGLE RED LIGHT STACK ASSEMBLY	ASS-200-3149
③	2	1/2" NPT STEEL LOCKNUT	PE-COND1005
④	1	DRIVE MOTOR CONTROLLER	PE-MC1109
⑤	1	RELAY - MOTOR	PE-RE1012
⑥	1	SOCKET - ALARM LIGHT STACK	PE-RE1050
⑦	1	RELAY - ALARM LIGHT STACK	PE-RE1001
⑧	2	STOP CLIP	PE-RE1053
⑨	1	RELAY MOUNTING CHANNEL (CUT TO 2 3/4" LENGTH)	CP-200-0271
⑩	1	5k SPEED POTENTIOMETER	PE-P01030
⑪	1	SPEED POTENTIOMETER DIAL	PE-P02010
⑫	1	POTENTIOMETER MOUNTING BRACKET	MP-POT1000
⑬	1	TERMINAL	PE-TE6050
⑭	1	TERMINAL NUMBERS	PE-TE6051
⑮	1	FUSE HOLDER	PE-FU5005
⑯	1	3 amp FUSE	PE-FU2065
⑰	2	16/3 ELECTRICAL CORD (CUT TO 10 FT. LENGTH)	PE-C03050
⑱	1	8 CONDUCTOR CABLE (CUT TO 10 FT. LENGTH)	PE-CA2200
⑲	2	1/2" CORD GRIP (1/4" TO 3/8")	PE-C02005
⑳	1	1/2" CORD GRIP (1/8" TO 1/4")	PE-C02000
㉑	3	LOCK NUT	PE-COND1005
㉒	7	STICKY PAD	PE-PA1079
㉓	1	SIGNAL ISOLATION BOARD	PE-SI1050

#10-32 x 3/8 LG. SHCS  
w/ FLAT WASHER  
2 PLACES FOR MTG. CHANNEL

ADD LABEL

TO  
REWIND  
MOTOR

I/O  
PORT

ALARM  
PORT

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 SERIES APPLICATOR: 16" & 20" UNWIND w/ POWERED REWIND

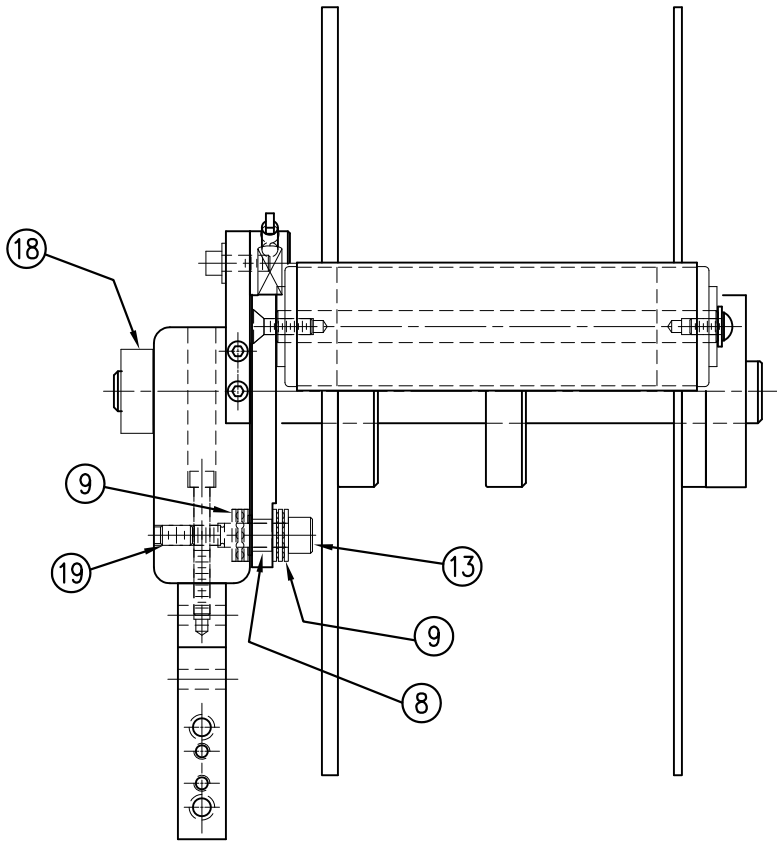
PART: REWIND DRIVE/LED ALARM LIGHT ENCLOSURE

Dept. Code  
70

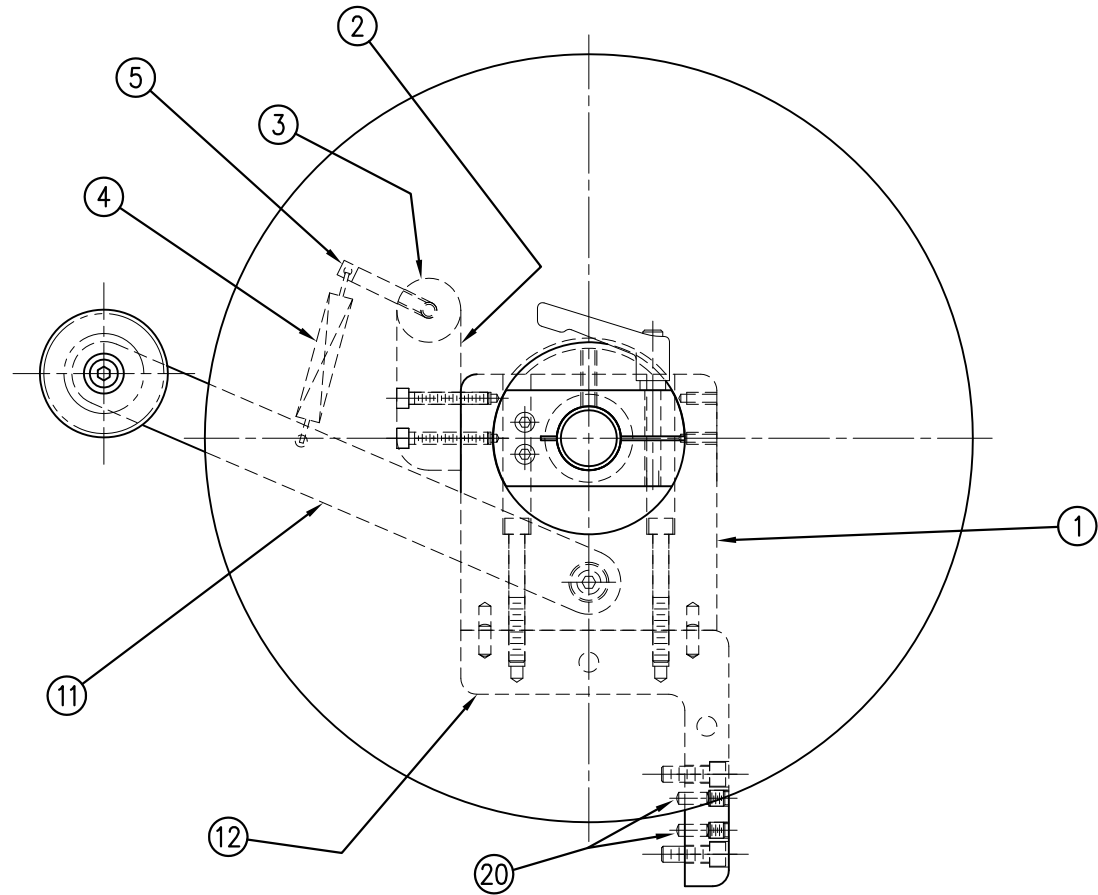
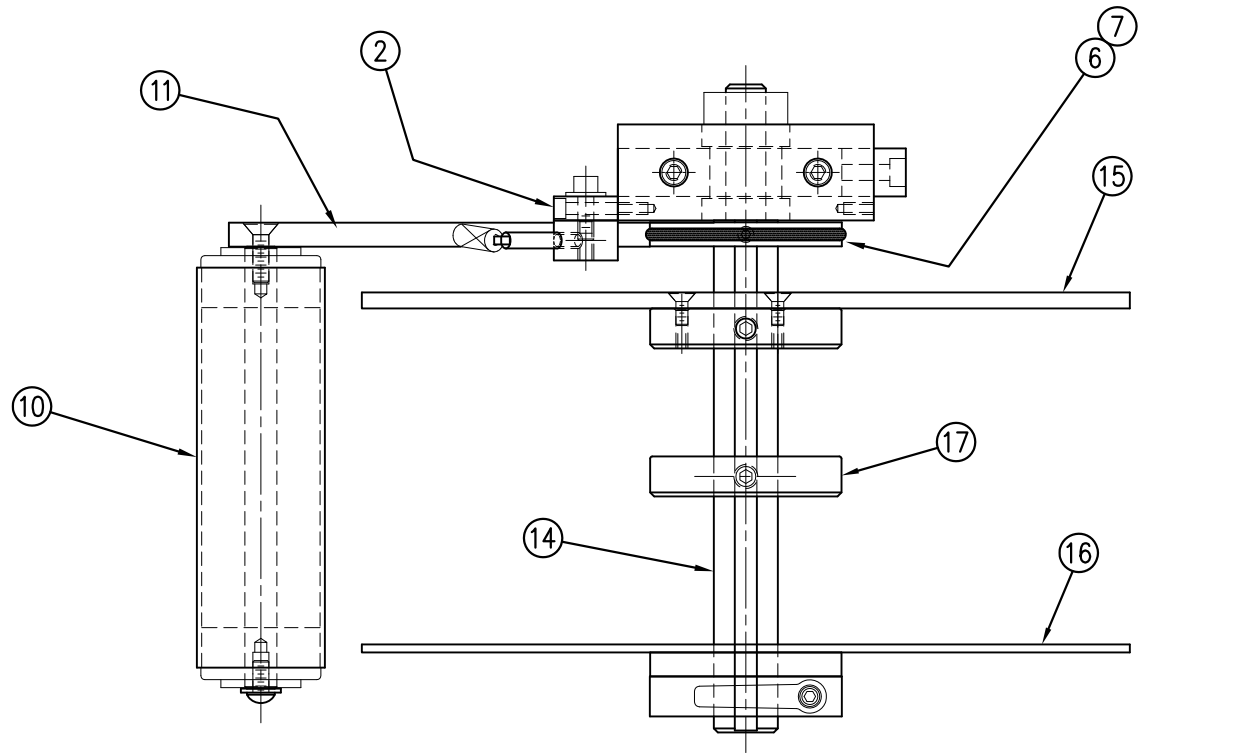
REV. 5	REV. DESCRIPTION REPLACED LIGHT STACK WITH ASS-200-3149	REV. DATE 03/06/09	REV. BY: JLM	Scale: 1=3	Date: 02/22/99	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applcator\360 200\ASS-200-3163
--------	--	-----------------------	-----------------	---------------	-------------------	---------------------	---

BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-200-X121L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	UNWIND BEARING BLOCK ASSEMBLY	ASS-200-0134	S
②	1	SPRING MOUNTING BRACKET	MP-200-0203	.
③	1	SPRING TENSION BLOCK	MP-200-0201	.
④	1	TENSION SPRING	PM-FASP30437	S
⑤	1	SPRING ANCHOR	PM-FASP30500	.
⑥	1	BRAKE HUB	MP-200-0204	.
⑦	1	O-RING ~ BUNA-N	PM-OR1007	.
⑧	1	FLANGED BUSHING	PM-BEBF1015	.
⑨	2	3/8 Ø THRUST BEARING	PM-BE1266	.
⑩	1	5/7.5 DANCER ROLL ASS'Y w/SHAFT	ASS-200-X131	S
⑪	1	12" DANCER ARM	MP-200-0202	.
⑫	1	UNWIND BLOCK MOUNT	MP-200-0209	.
⑬	1	3/8" x 1" Lg. SS SHOULDER BOLT	PM-FASB10045	.
⑭	1	5/7.5 UNWIND SHAFT	MP-200-X210	S
⑮	1	12" INSIDE UNWIND DISK	ASS-200-0132	S
⑯	1	12" OUTSIDE UNWIND DISK	ASS-200-0133	S
⑰	1	UNWIND CORE SUPPORT SPACER	MP-200-0267CS	.
⑱	1	LOCK COLLAR	PM-C01015	.
⑲	1	5/16"-18 x 1/2" Lg. SS SET SCREW	PM-FASS48061	.
⑳	2	DOWEL PIN, 3/16" Ø x 1/2" Lg.	PM-FADP0930	.
	2	1/4"-20 UNC x 3/4" SHCS	NONE	.

NOTE: ADD PM-C01025 BEHIND THE INSIDE UNWIND DISK ON 5" WIDE & 7-1/2" WIDE APPLICATORS IN REELS-UP POSITION



REDESIGNED DANCER ARM MOUNTING ANYTHING SOLD BEFORE 11/01/04 WILL BE THE OLD STYLE. UNWIND BLOCK IN ASS-200-0134 & DANCER ARM MP-200-0202 ARE NEW DESIGNS AND THRUST BEARINGS REPLACE BRONZE WASHERS.



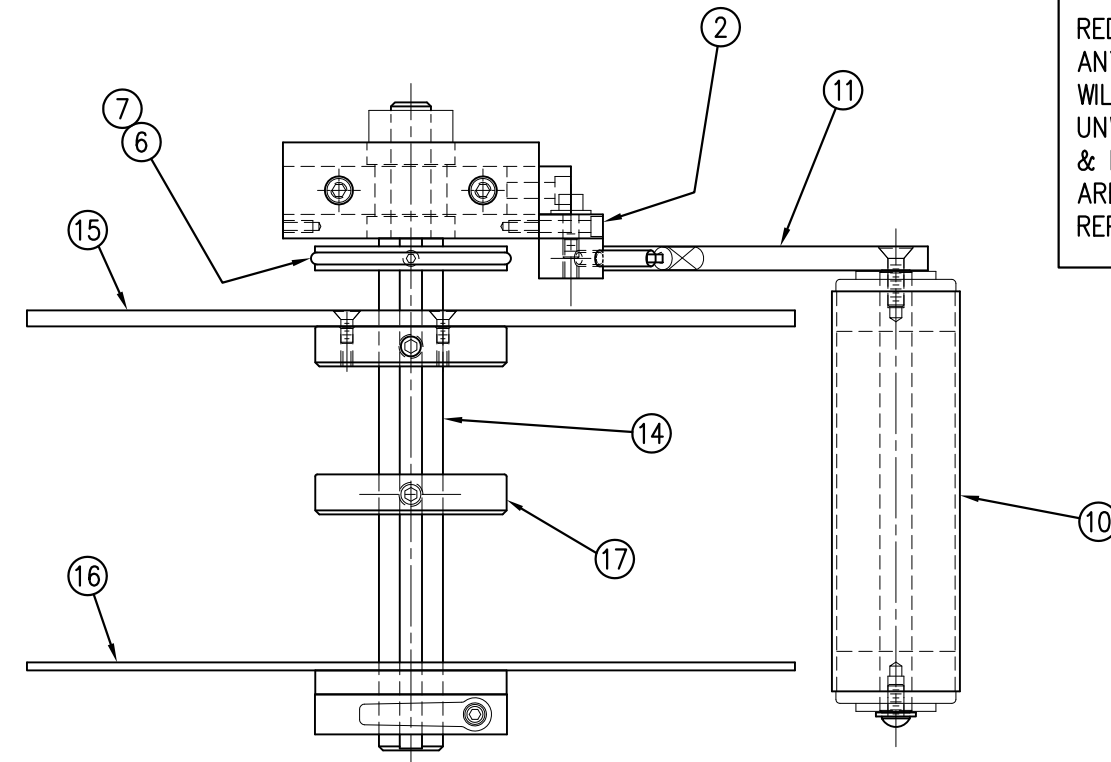
MOD-200-X121L

5" WIDE -0121L

7.5" WIDE -2121L

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 SERIES APPLICATOR: UNWIND ASSEMBLY		PART: 5/7.5/10 WIDE/LH/UNWIND ASS'Y w/12" DIA. UNWIND DISKS	
REV. 5	REV. DESCRIPTION	REV. DATE	REV. BY:
5	ADDED DOWEL PINS TO B.O.M. (ITEM #20)	11/18/05	TDR
F:\Engineering\Standard Parts\Applcator\360		DATE: 06/02/98	BOB S.
200\MOD-200-0121L		SCALE: 1=3	BOB S.
Dept. Code 70		DRAWN BY: BOB S.	

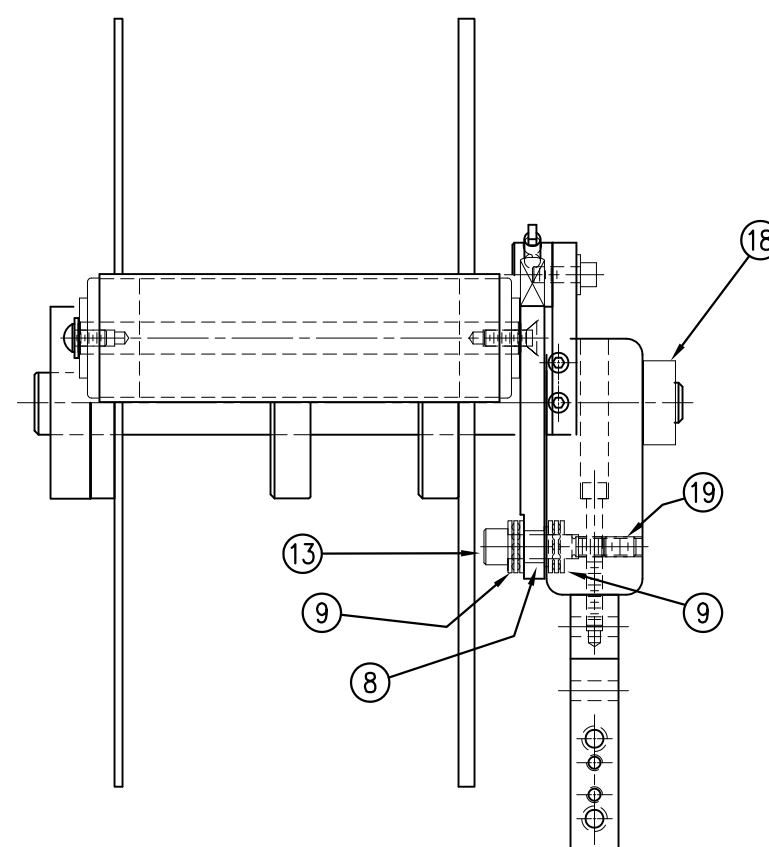
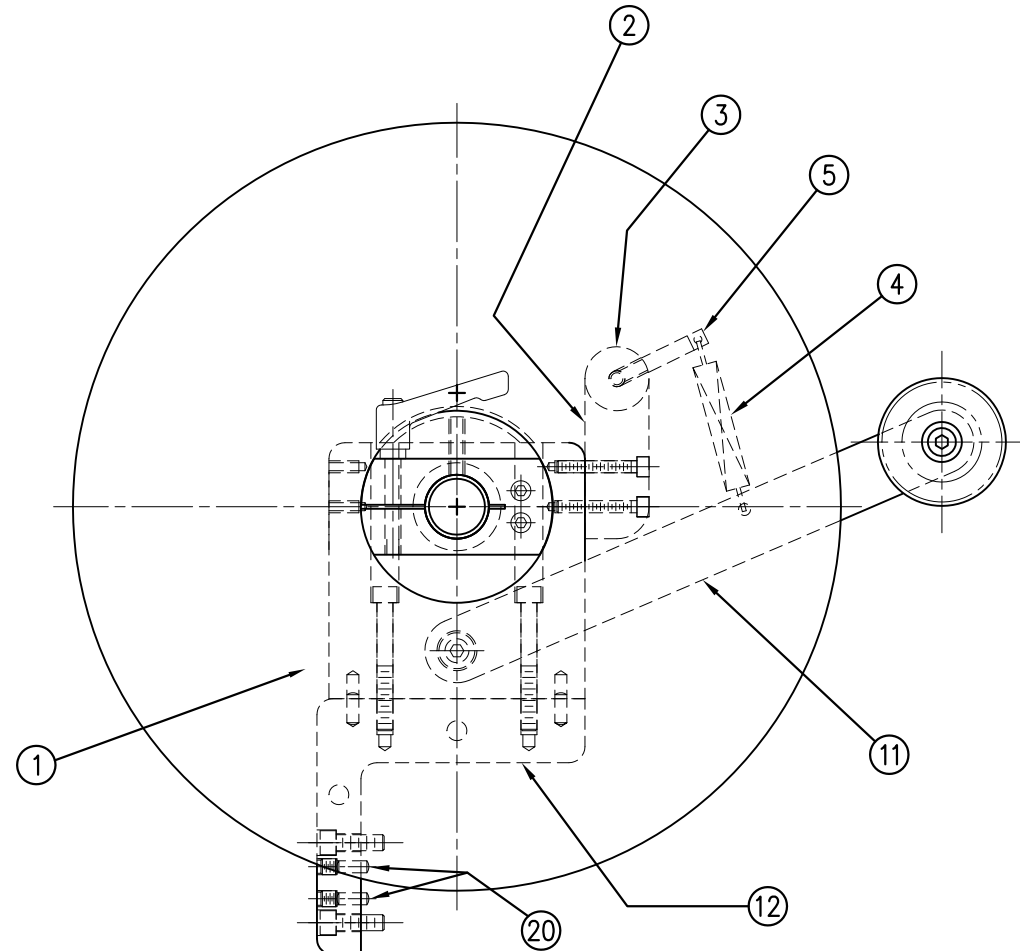




REDESIGNED DANCER ARM MOUNTING  
ANYTHING SOLD BEFORE 11/01/04  
WILL BE THE OLD STYLE.  
UNWIND BLOCK IN ASS-200-0134  
& DANCER ARM MP-200-0202  
ARE NEW DESIGNS AND THRUST BEARINGS  
REPLACE BRONZE WASHERS.

BILL OF MATERIAL				SOLD
MOD-200-X121R				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	UNWIND BEARING BLOCK ASSEMBLY	ASS-200-0134	S
②	1	SPRING MOUNTING BRACKET	MP-200-0203	.
③	1	SPRING TENSION BLOCK	MP-200-0201	.
④	1	TENSION SPRING	PM-FASP30437	S
⑤	1	SPRING ANCHOR	MP-FASP30500	.
⑥	1	BRAKE HUB	MP-200-0204	.
⑦	1	O-RING ~ BUNA-N	PM-OR1007	.
⑧	1	FLANGED BUSHING	PM-BEBF1015	.
⑨	2	3/8 Ø THRUST BEARING	PM-BE1266	S
⑩	1	5/7.5 DANCER ROLL ASS'Y w/SHAFT	ASS-200-X131	S
⑪	1	12" DANCER ARM	MP-200-0202	.
⑫	1	UNWIND BLOCK MOUNT	MP-200-0209	.
⑬	1	SHOULDER BOLT	PM-FASB10045	.
⑭	1	5/7.5 UNWIND SHAFT	MP-200-X210	S
⑮	1	12" INSIDE UNWIND DISK	ASS-200-0132	S
⑯	1	12" OUTSIDE UNWIND DISK	ASS-200-0133	S
⑰	1	UNWIND CORE SUPPORT SPACER	MP-200-0267CS	.
⑱	1	LOCK COLLAR	PM-C01015	.
⑲	1	5/16-18 SET SCREW x 1/2" LG. SS	PM-FASS48061	.
⑳	2	DOWEL PIN, 3/16" Ø x 1/2" Lg.	PM-FADP0930	.
	2	1/4"-20 UNC x 3/4" SHCS	NONE	.

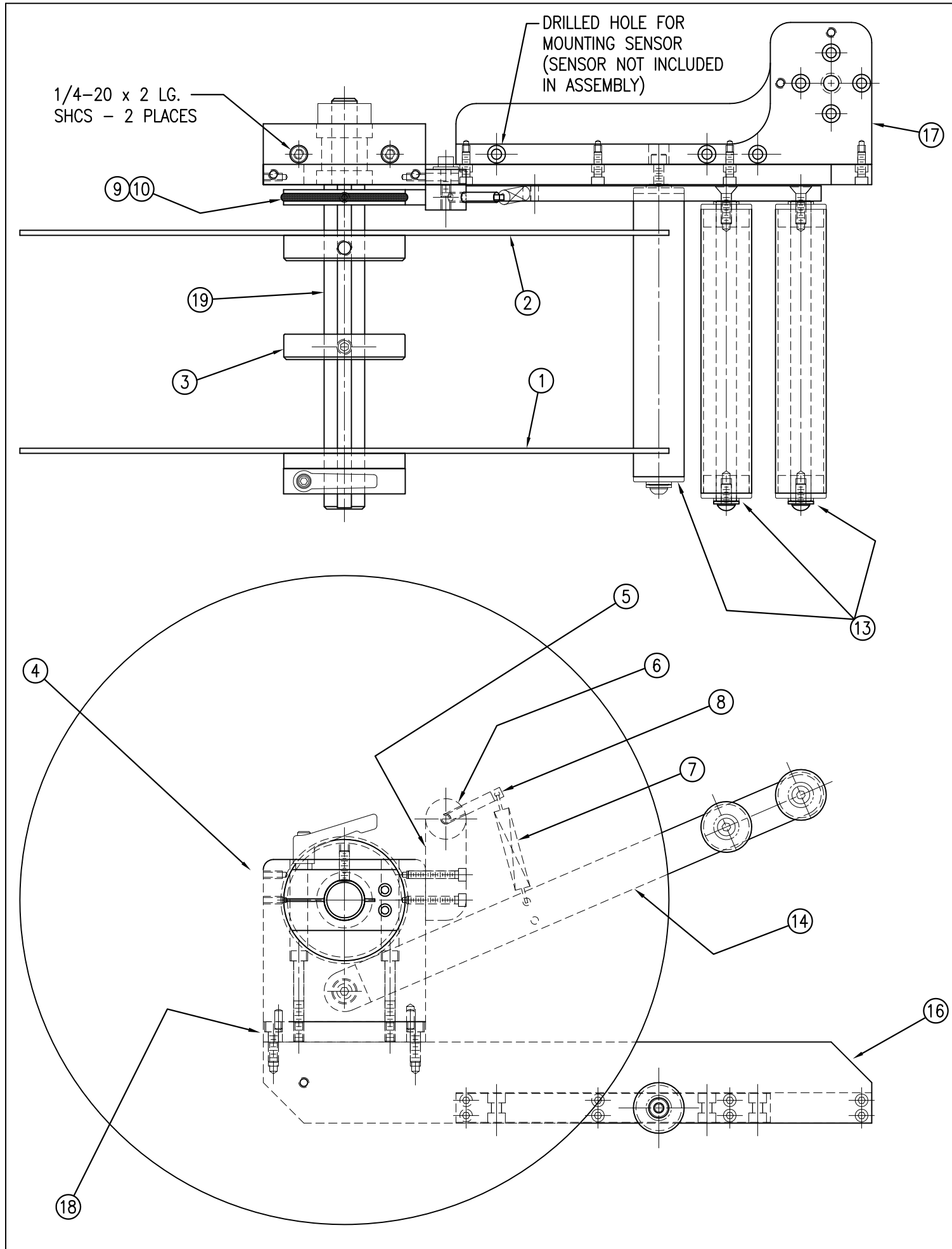
NOTE: ADD PM-C01025 BEHIND THE INSIDE UNWIND DISK  
ON 5" WIDE & 7-1/2" WIDE APPLICATORS  
IN REELS-UP POSITION AND REPLACE ASS-200-0132  
WITH ASS-200-0132A FOR ALUMINIUM DISC ASSEMBLY



MOD-200-X121R

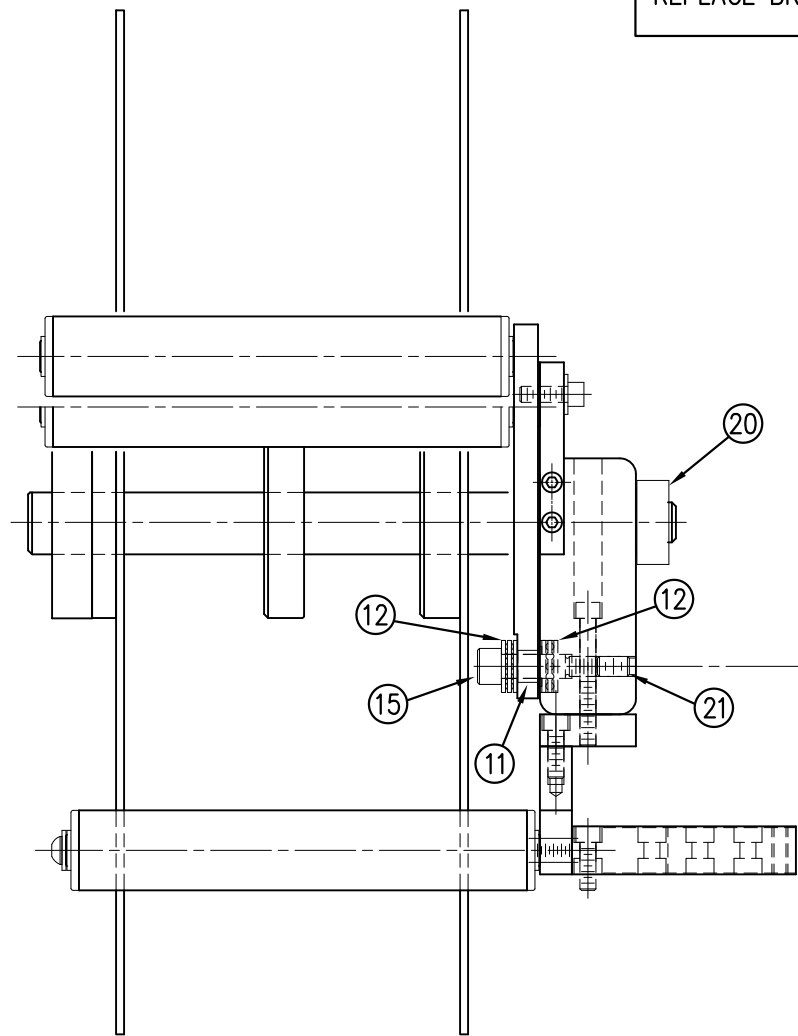
5" WIDE -0121R  
7.5" WIDE -2121R

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.				Dept. Code	70
TITLE: 360 SERIES APPLICATOR: UNWIND ASSEMBLY				PART: 5/7.5/10 WIDE/RH/ UNWIND ASS'Y w/12" UNWIND DISKS	
REV. 5	REV. DESCRIPTION	REV. DATE	REV. BY	DATE	SCALE
5	ADDED DOWEL PINS TO B.O.M. (ITEM #20)	11/18/05	TDR	06/02/98	1=3
DRAWN BY: BOB S.				F:\Engineering\Standard Parts\Applcator\360 200\MOD-200-X121R	



BILL OF MATERIAL				SOLD
MOD-200-3121L-X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	16" OUTSIDE UNWIND DISK ASS'Y.	ASS-200-3133	S
②	1	16" INSIDE UNWIND DISK ASS'Y.	ASS-200-3132	S
③	1	UNWIND CORE SUPPORT SPACER	MP-200-0267CS	.
④	1	UNWIND BEARING BLOCK ASSEMBLY	ASS-200-0134	S
⑤	1	SPRING MOUNTING BRKT.	MP-200-0203	.
⑥	1	SPRING TENSION BLOCK	MP-200-0201	.
⑦	1	TENSION SPRING	PM-FASP30480	S
⑧	1	SPRING ANCHOR	PM-FASP30500	.
⑨	1	BRAKE HUB	MP-200-0204	.
⑩	1	O-RING (BUNA N)	PM-OR1007	S
⑪	1	FLANGED BUSHING	PM-BEBF1015	.
⑫	2	3/8" Ø THRUST BEARING	PM-BE1266	.
⑬	3	5/7.5 TENSION ROLLER ASS'Y w/SHAFT	ASS-200-X135	S
⑭	1	16" DOUBLE DANCER ARM	MP-200-3202A	.
⑮	1	3/8 x 1" Lg. SS SHOULDER BOLT	PM-FASB10045	.
⑯	1	EXTENSION PLATE FOR 16" UNWIND	MP-200-3209-X	.

NOTE: ADD PM-C01025 BEHIND THE INSIDE UNWIND DISK ON 5" WIDE & 7-1/2" WIDE APPLICATORS IN REELS-UP POSITION



BILL OF MATERIAL				SOLD
MOD-200-3121L-X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
⑰	1	SUPPORT FOR 16" UNWIND	MP-200-3208	.
⑱	1	UNWIND MOUNT PLATE	MP-200-3307	.
⑲	1	5/7.5 UNWIND SHAFT	MP-200-X210	.
⑳	1	LOCK COLLAR	PM-C01015	.
㉑	1	3/8"-18 x 1/2" Lg. SS SET SCREW	PM-FASS48061	.
	4	1/4"-20 UNC x 7/8" LG. SHCS	NONE	.

REDESIGNED DANCER ARM MOUNTING ANYTHING SOLD BEFORE 11/01/04 WILL BE THE OLD STYLE. UNWIND BLOCK IN ASS-200-0134 & DANCER ARM MP-200-0202 ARE NEW DESIGNS AND THRUST BEARINGS REPLACE BRONZE WASHERS.

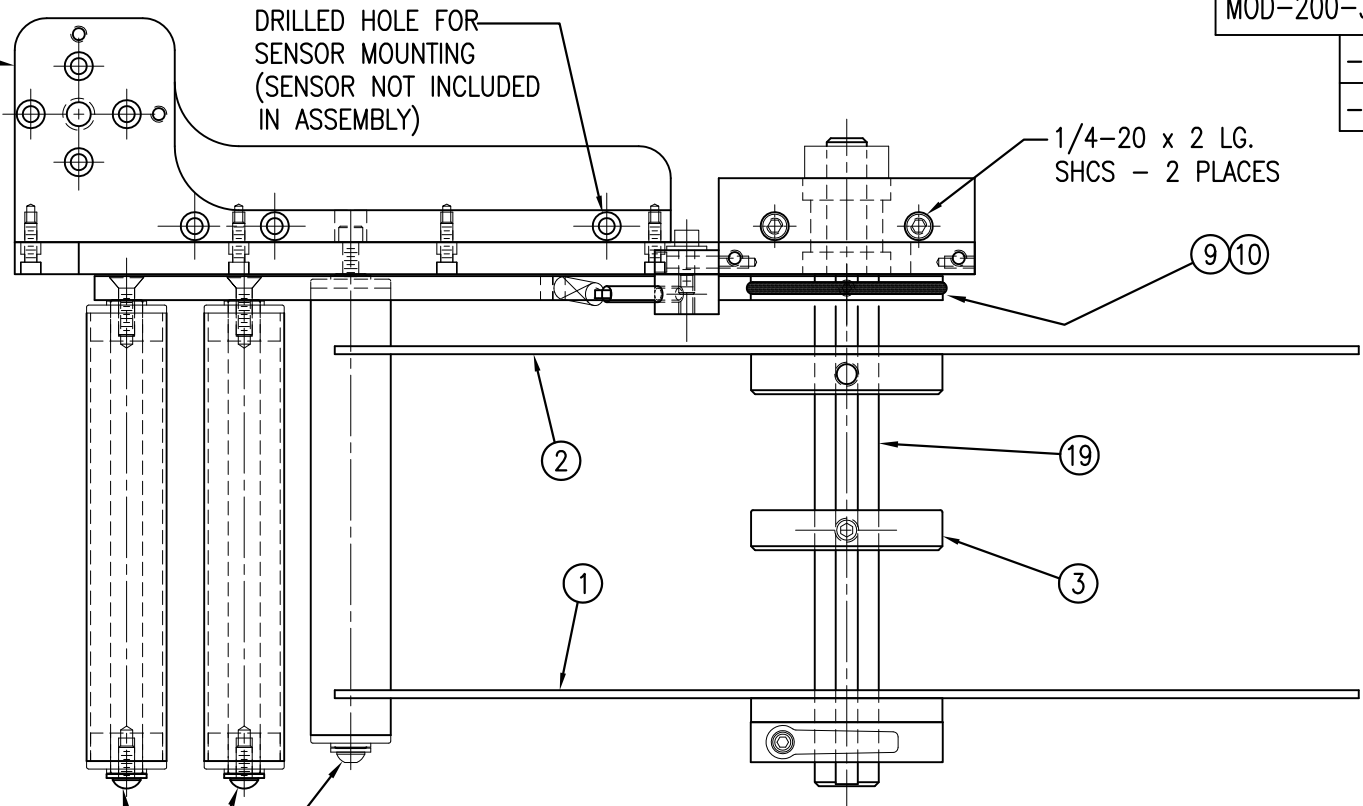
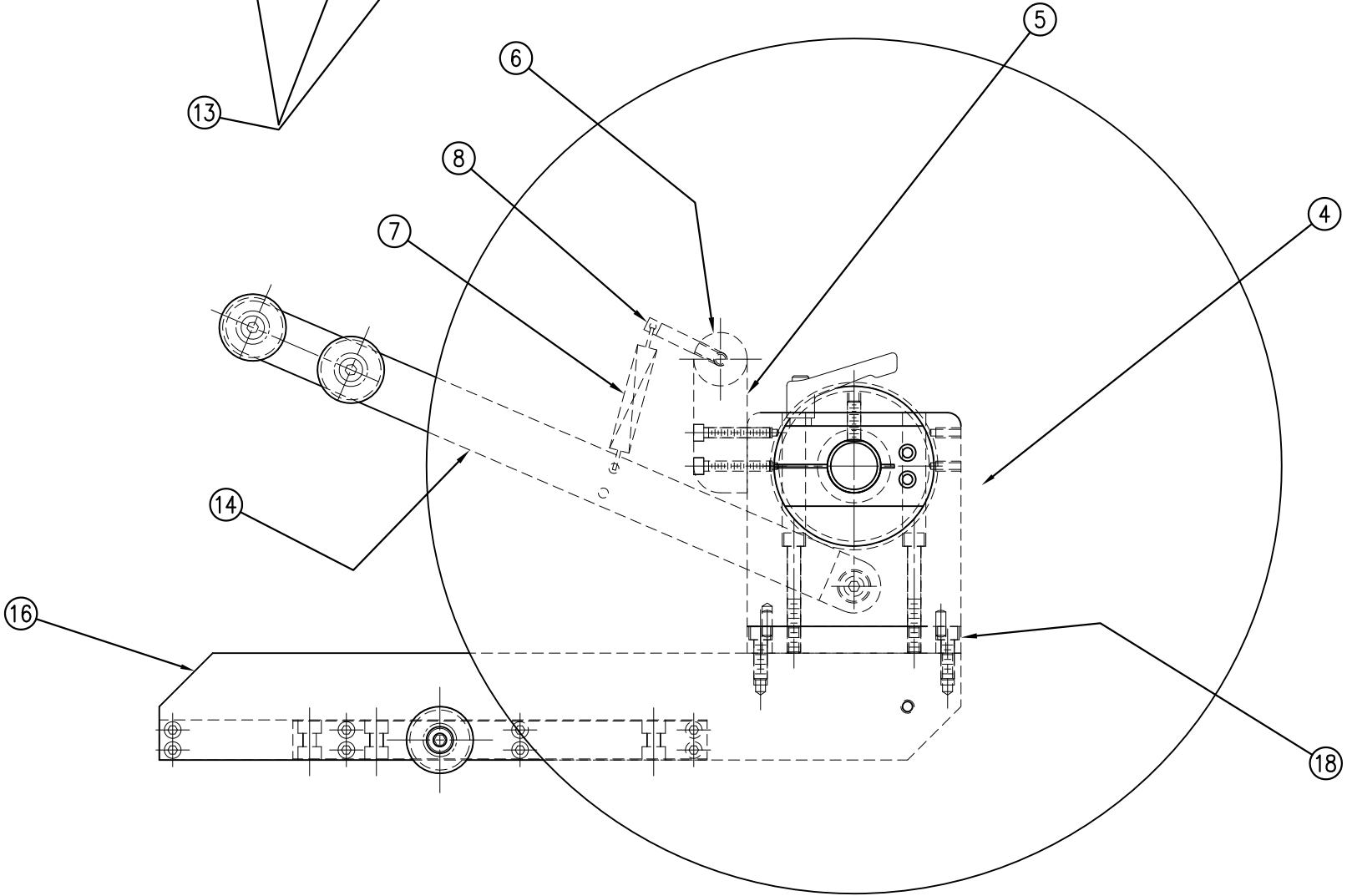
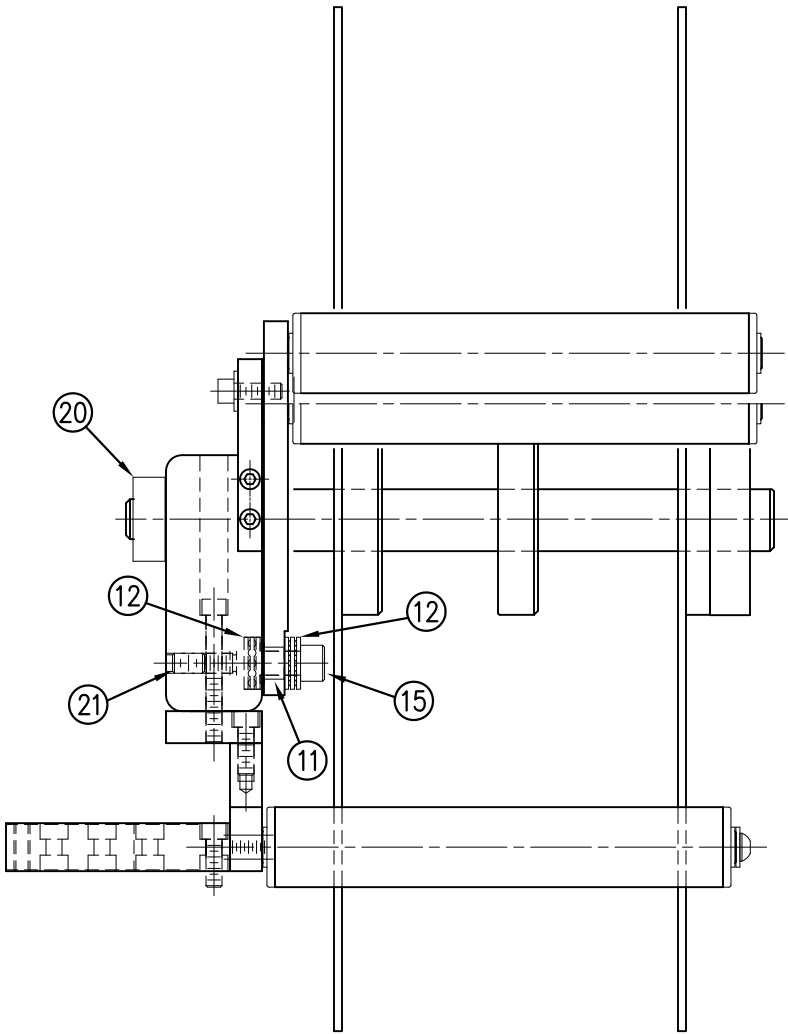
MOD-200-3121L-X  
-3121L-5  
-3121L-7

BILL OF MATERIAL				SOLD
ASSEMBLY	MOD-200-3121R-X			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	16" OUTSIDE UNWIND DISK ASS'Y.	ASS-200-3133	S
②	1	16" INSIDE UNWIND DISK ASS'Y.	ASS-200-3132	S
③	1	UNWIND CORE SUPPORT SPACER	MP-200-0267CS	.
④	1	UNWIND BEARING BLOCK ASSEMBLY	ASS-200-0134	S
⑤	1	SPRING MOUNTING BRKT.	MP-200-0203	.
⑥	1	SPRING TENSION BLOCK	MP-200-0201	.
⑦	1	TENSION SPRING	PM-FASP30480	S
⑧	1	SPRING ANCHOR	PM-FASP30500	.
⑨	1	BRAKE HUB	MP-200-0204	.
⑩	1	O-RING (BUNA N)	PM-OR1007	S
⑪	1	FLANGED BUSHING	PM-BEBF1015	.
⑫	2	3/8" Ø THRUST BEARING	PM-BE1266	.
⑬	3	5/7.5 TENSION ROLLER ASS'Y w/SHAFT	ASS-200-X135	S
⑭	1	16" DOUBLE DANCER ARM	MP-200-3202A	.
⑮	1	3/8" x 1" Lg. SS SHOULDER BOLT	PM-FASB10045	.
⑯	1	EXTENSION PLATE FOR 16" UNWIND	MP-200-3209	.

NOTE: ADD PM-C01025 BEHIND THE INSIDE UNWIND DISK ON 5" WIDE & 7-1/2" WIDE APPLICATORS IN REELS-UP POSITION

BILL OF MATERIAL				SOLD
ASSEMBLY	MOD-200-3121R-X			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
⑰	1	SUPPORT FOR 16" UNWIND	MP-200-3208	.
⑱	1	UNWIND MOUNT PLATE	MP-200-3307	.
⑲	1	5/7.5 UNWIND SHAFT	MP-200-X210	.
⑳	1	LOCK COLLAR	PM-C01015	.
㉑	1	5/16"-18 x 1/2" Lg. SS SET SCREW	PM-FASS48061	.
	4	1/4"-20 UNC x 7/8" LG. SHCS	.	.

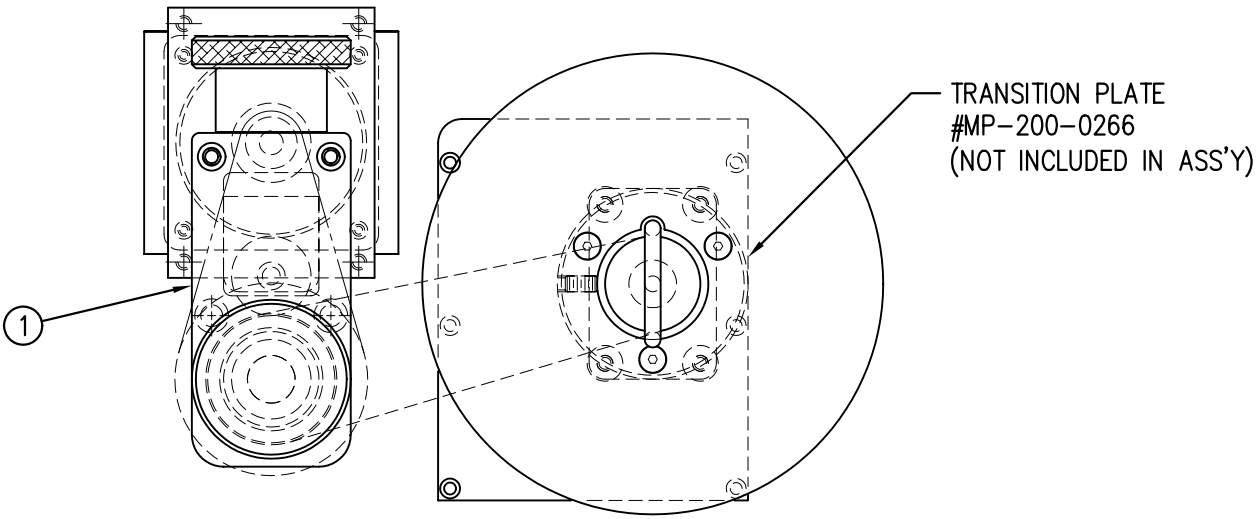
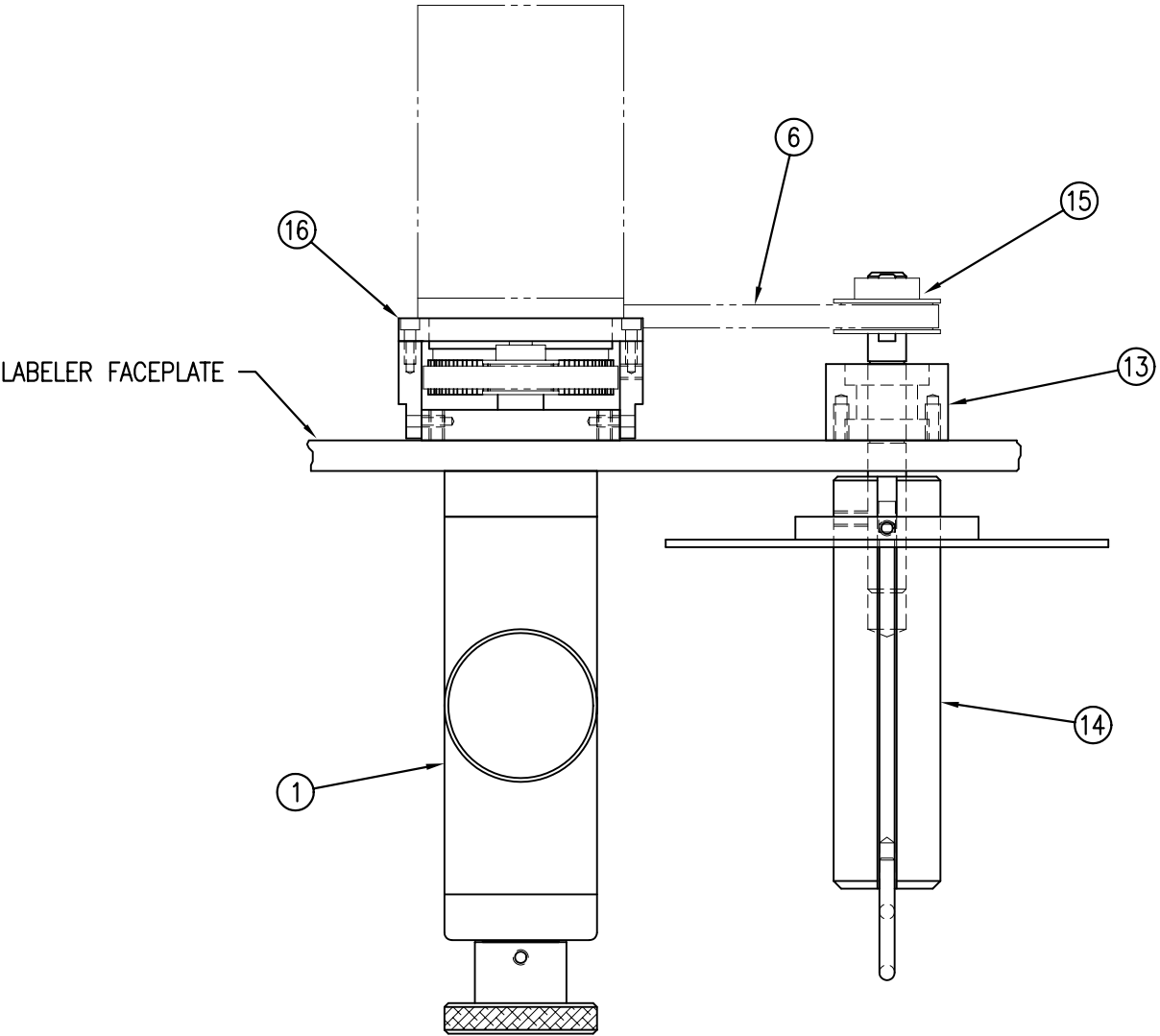
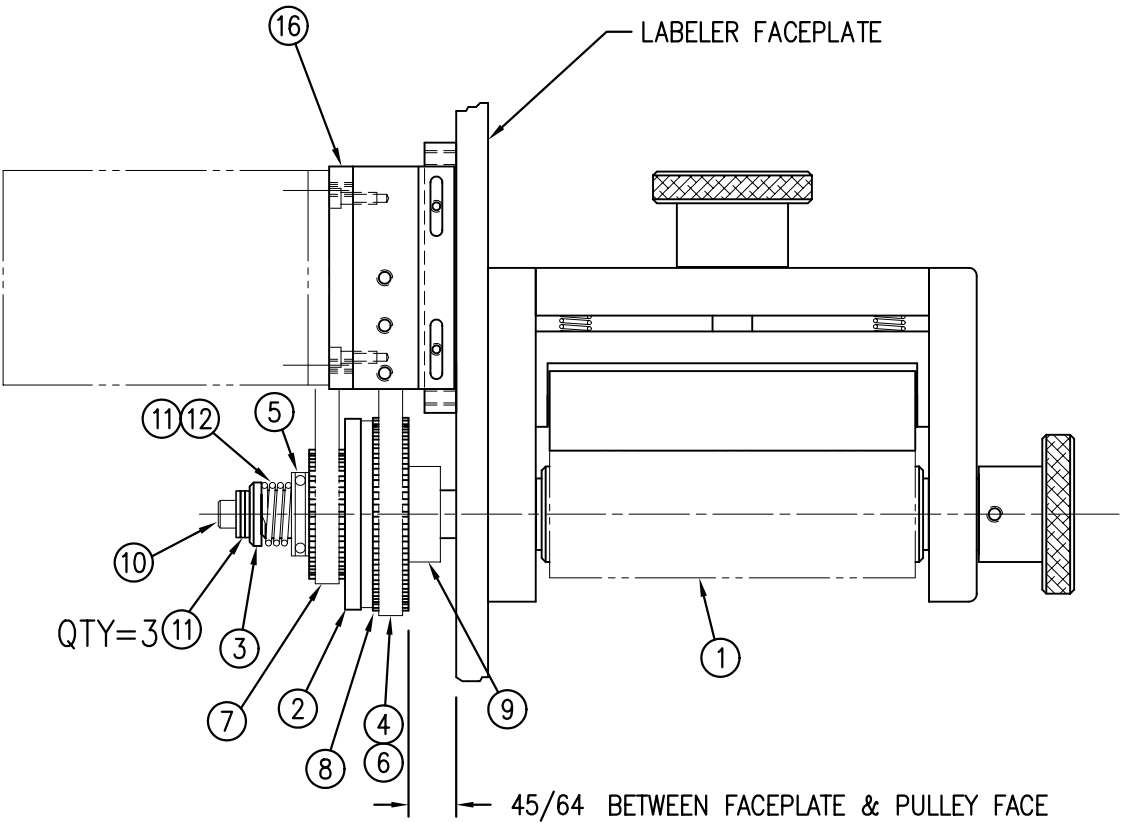
REDESIGNED DANCER ARM MOUNTING ANYTHING SOLD BEFORE 11/01/04 WILL BE THE OLD STYLE. UNWIND BLOCK IN ASS-200-0134 & DANCER ARM MP-200-0202 ARE NEW DESIGNS AND THRUST BEARINGS REPLACE BRONZE WASHERS.



MOD-200-3121R-X  
-3121R-5  
-3121R-7

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.				Dept. Code	70
TITLE: 360 SERIES APPLICATOR: UNWIND ASSEMBLY: OPTIONS				REV. DATE	10/27/06
REV. DESCRIPTION				REV. BY	TDR
2 TENSION SPRING WAS PM-FASP30437				Scale:	1=3
				Date:	03/22/99
				Drawn By:	BOB S.
				Part:	5/7.5 WIDE/RH/16" UNWIND MODULE
				Standard Parts Applicator:	360
				F:\Engineering\Standard Parts Applicator\360	200\MOD-200-3121R-X

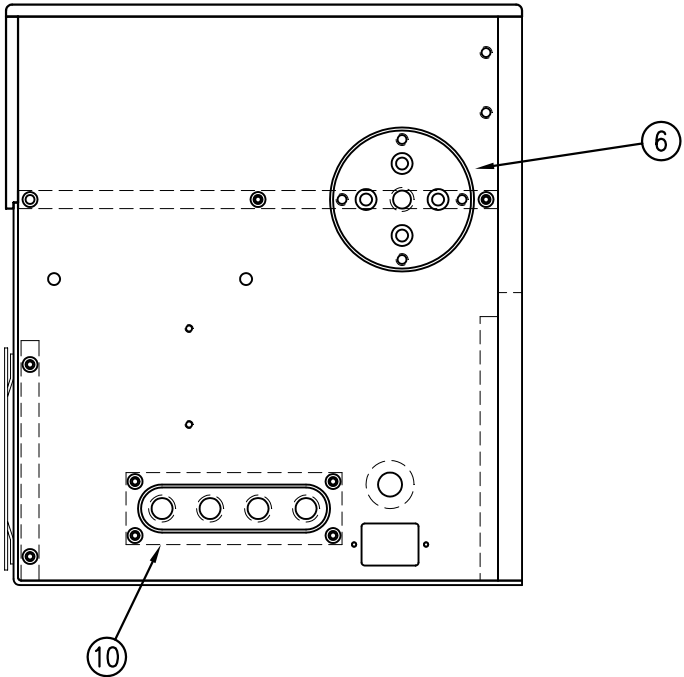
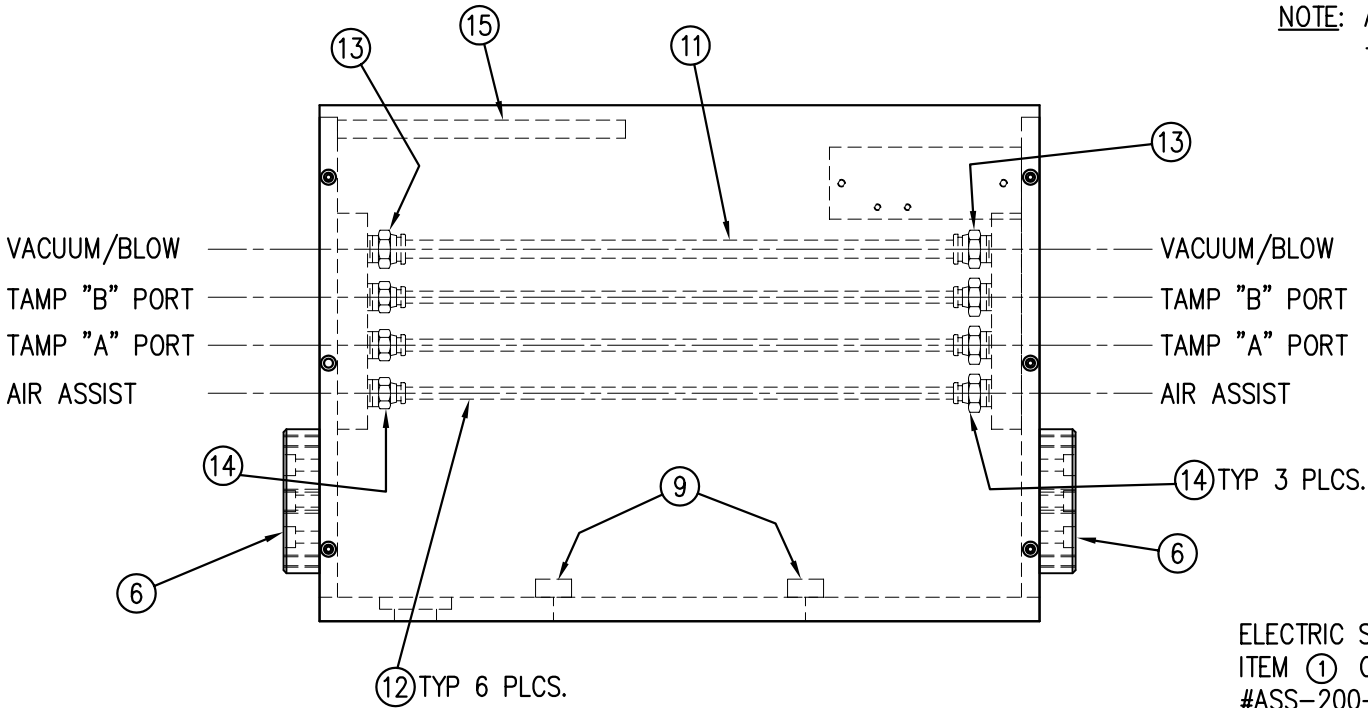
BILL OF MATERIAL			
ASS-200-X120R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-200-X142	NIP DRIVE w/REWIND & MOTOR PULLEYS - consisting of the following parts -
①		(1) ASS-200-X129	NIP ROLL DRIVE ASSEMBLY
②		(1) ASS-200-0143	SLIP CLUTCH ASSEMBLY
③		(1) MP-200-0229	CLUTCH SPRING KEEPER
④		(1) MP-200-0233	DRIVE PULLEY
⑤		(1) PM-BE1232	3/4" THRUST BEARING ASSEMBLY
⑥		(1) PM-BELT1018	TIMING BELT
⑦		(1) PM-BELT1023	TIMING BELT
⑧		(1) PM-CL1010	3" LEATHER CLUTCH PAD
⑨		(1) PM-C01020	3/4" ID LOCK COLLAR - SS
⑩		(1) PM-FASH430080	SHCS, 1/4-20 x 1.00 LG. SS
⑪		(1) PM-FASP30540	COMPRESSION SPRING
⑫		(10) PM-FAW30275	FLAT WASHER - 1/4 NOM. - SS
	1	ASS-200-X140R/L	RWD. MANDREL w/BLOCK, SHAFT & PULLEY - consisting of the following parts -
⑬		(1) ASS-200-0128R/L	REWIND BEARING BLOCK ASSEMBLY
⑭		(1) ASS-200-X147	STANDARD REWIND MANDREL
⑮		(1) MP-200-0231	REWIND PULLEY
⑯	1	ASS-200-0453	MOTOR ASSEMBLY



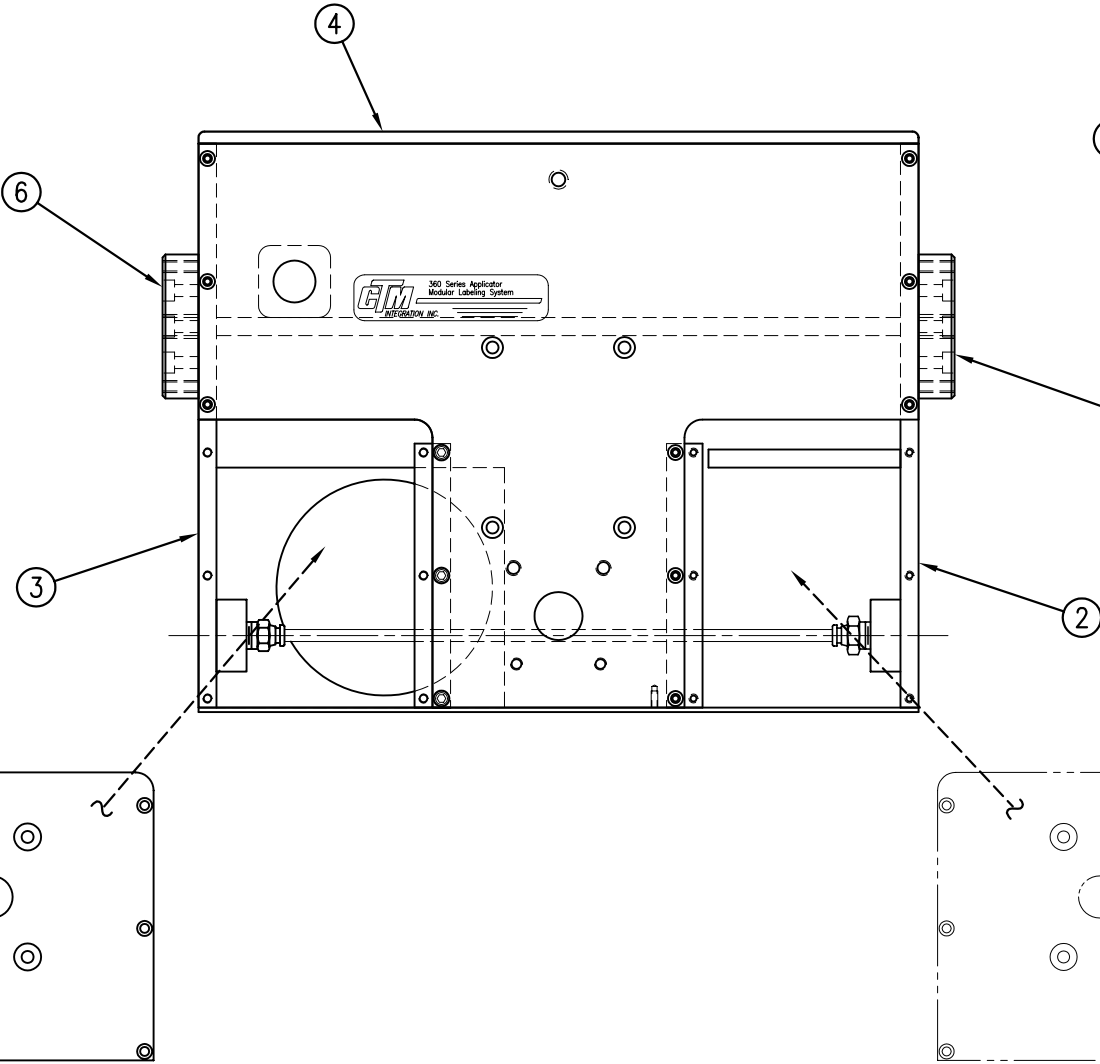
ASS-200-X120R/L		
5" WIDE	-0120R/L	
7.5" WIDE	-2120R/L	
10" WIDE	-5120R/L	

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.			
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5" / 7.5" / 10"	GROUP: HOUSING	Dept. Code 70
REV. 3	REV. DESCRIPTION: UPDATED DWG., CHG'D PART/ITEM #'s	REV. DATE: 10-12-04	REV. BY: TK
TITLE: LABEL NIP / REWIND ASSEMBLY		DATE: 06/02/98	DRAWN BY: BOB S.
F:\Engineering\Standard Parts\Applcator\360\		HOUSING ASS-200-X120RL	

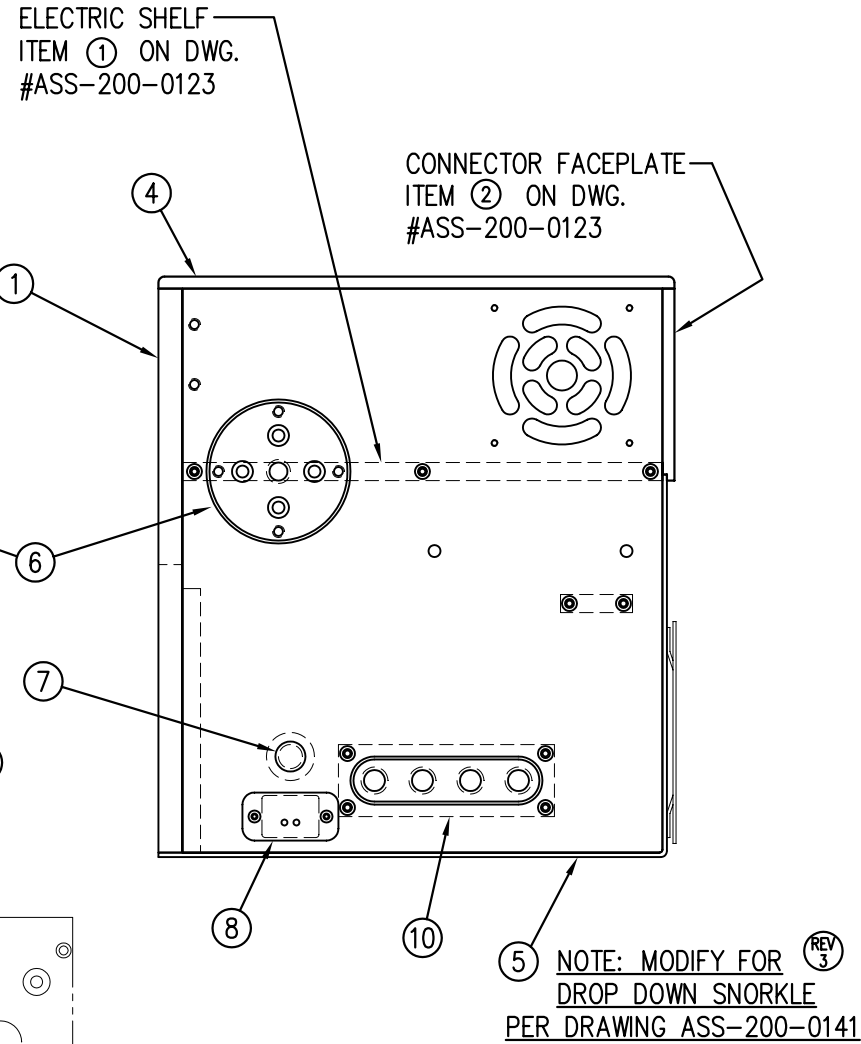
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-200-0122R/L			.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	T-PLATE	MP-200-0260	.
②	1	HOUSING RIGHT SIDE FRAME	MP-200-0258	.
③	1	HOUSING LEFT SIDE FRAME	MP-200-0259	.
④	1	ELECTRICAL TOP COVER	MP-200-0246	.
⑤	1	HOUSING COVER ASSEMBLY	ASS-200-0141	.
⑥	2	U-ARM MOUNT	MP-200-0273	.
⑦	1	PLUG	PE-EN9055	.
⑧	1	LABEL SENSOR ACCESS COVER	MP-200-0248	.
⑨	2	TIE PLATE	MP-200-0251	.
⑩	2	AIR MANIFOLD CONNECTOR	MP-200-0250	.
⑪	1	3/8" O.D. TUBING (CUT TO 12 3/4")	PM-PT1080	.
⑫	3	1/4" O.D. TUBING (CUT TO 12 5/8")	PM-PT1070	.
⑬	2	FITTING, 3/8" TUBE to 1/4" NPT STR.	PM-PF1020	.
⑭	6	FITTING, 1/4" TUBE to 1/4" NPT STR.	PM-PF1010	.
⑮	1	FAN MOUNTING PLATE	MP-200-0257	.



REWIND TRANSITION PLATE~CTM PART #MP-200-0266  
ORIENTATION & LOCATION FOR RH APPLICATOR  
(NOT INCLUDED IN ASSEMBLY)



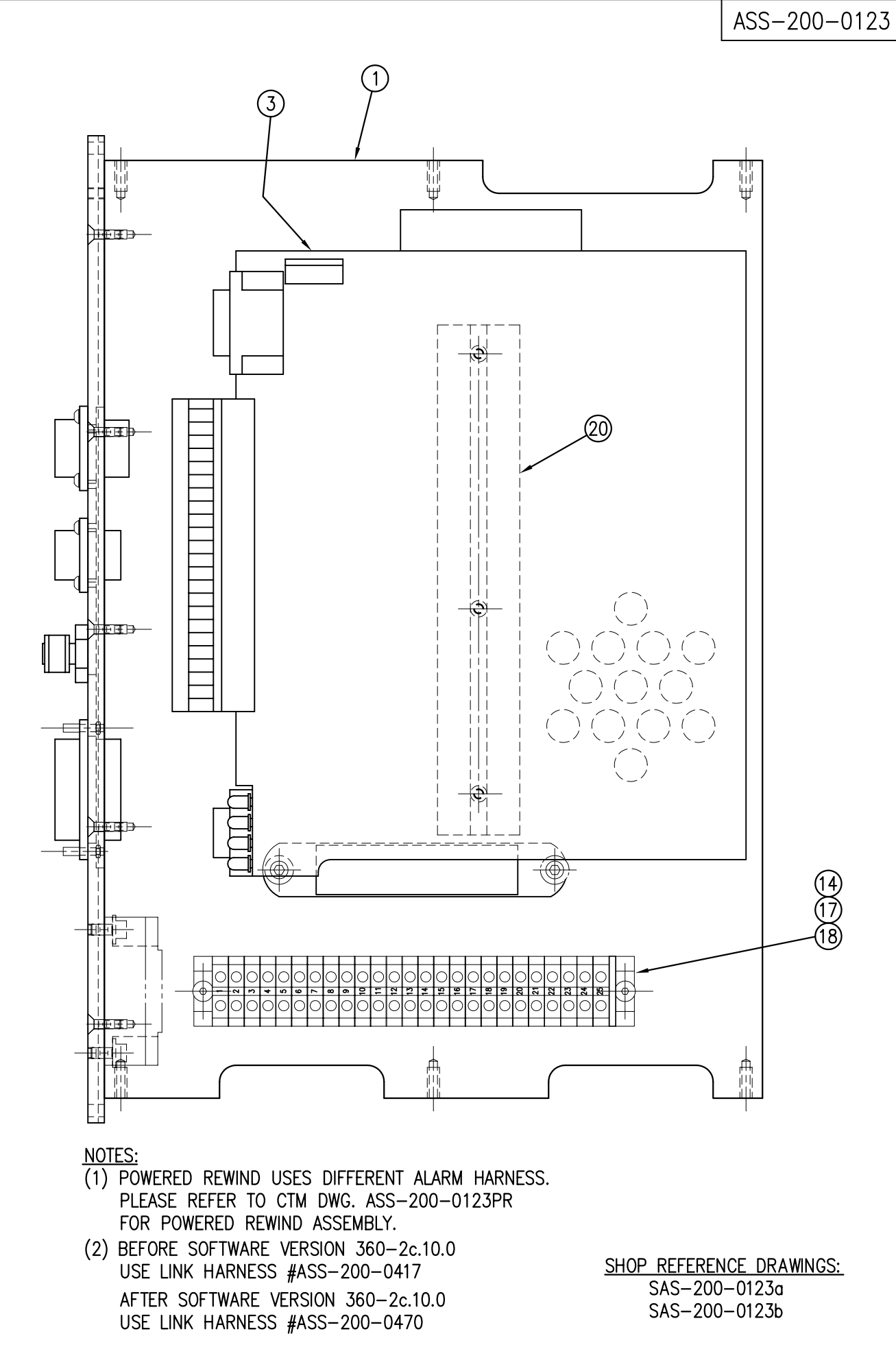
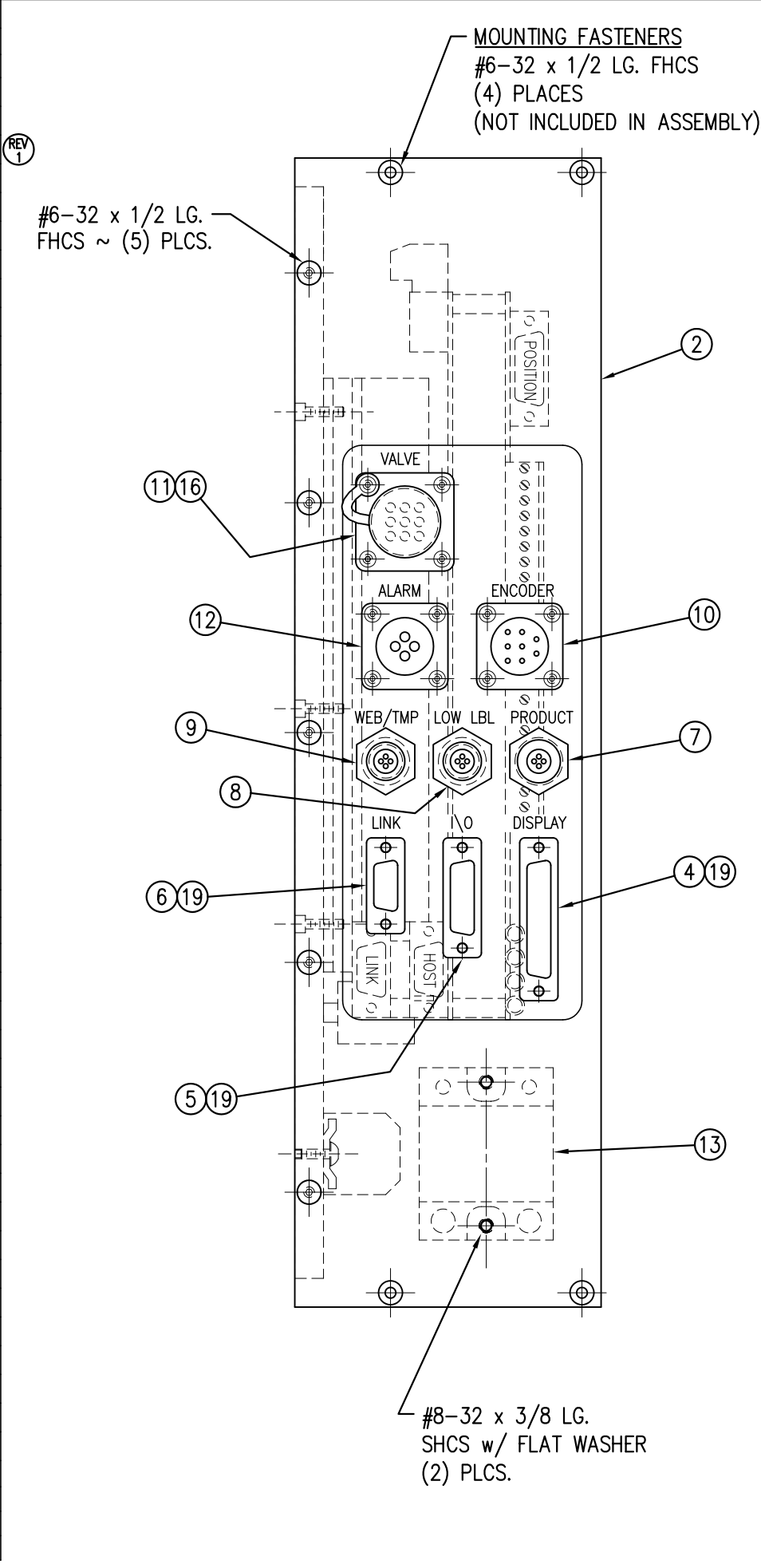
REWIND TRANSITION PLATE~CTM PART #MP-200-0266  
ORIENTATION & LOCATION FOR LH APPLICATOR  
(NOT INCLUDED IN ASSEMBLY)



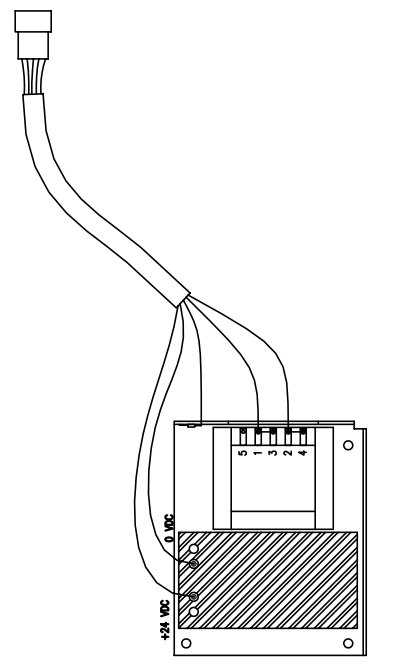
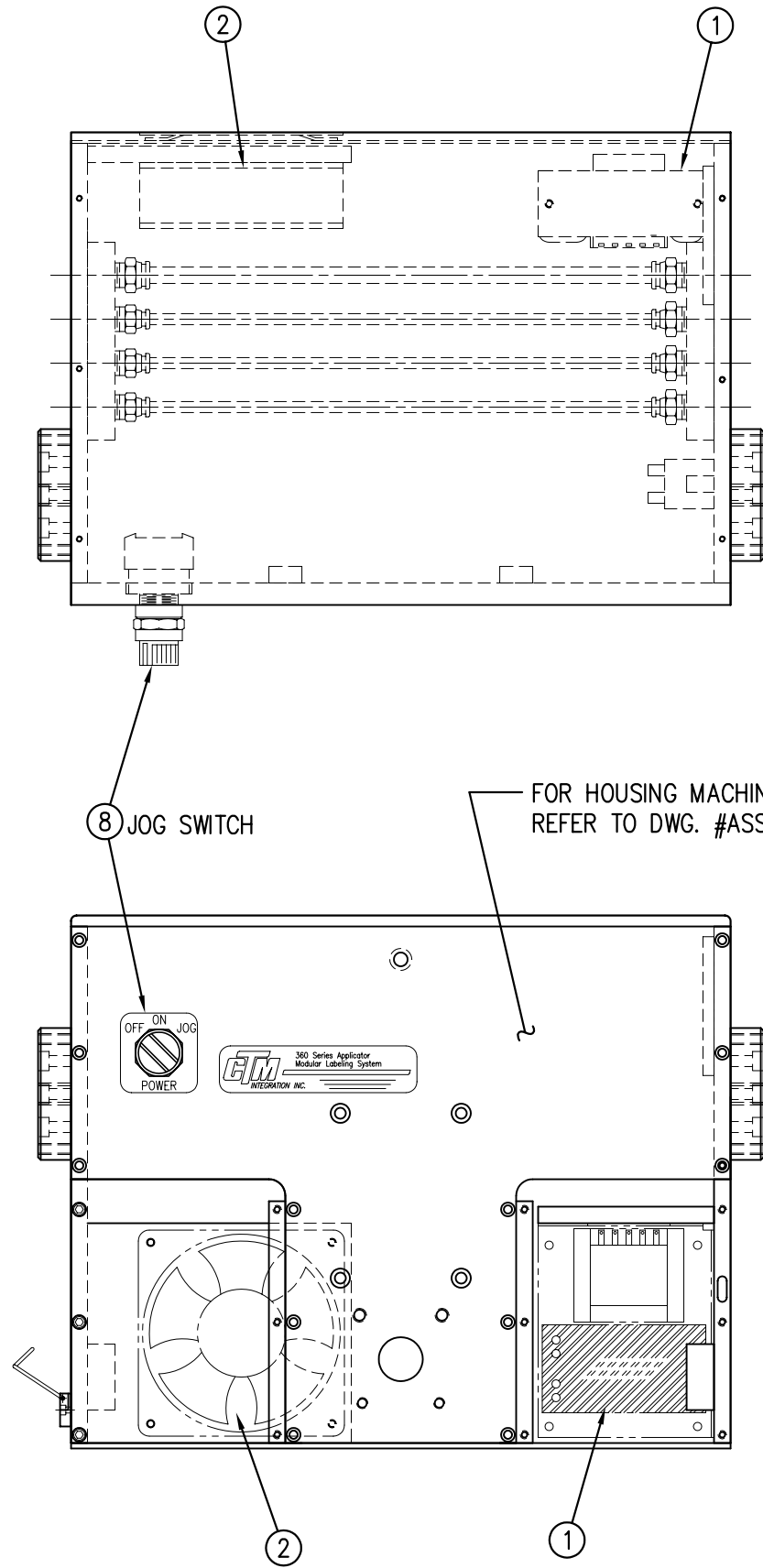
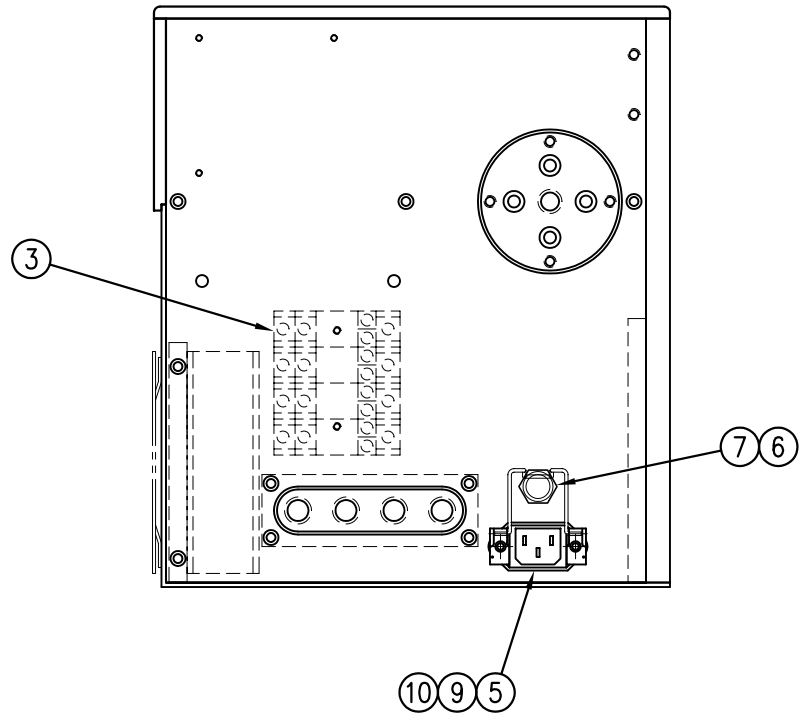
NOTE: ITEMS ⑦ & ⑧ ARE LOCATED  
ON OPPOSITE SIDE OF HOUSING  
FOR LH ASSEMBLY.

TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY				PART: APPLICATOR HOUSING ASSEMBLY				REV. DESCRIPTION			
REV. 3	ADDED MODIFICATION NOTE FOR HOUSING COVER	REV. DATE 01/31/06	REV. BY: TDR	Scale: 1=4	Date: 06/19/97	DRAWN BY: BOB S.	Dept. Code 70	REV. 3	ADDED MODIFICATION NOTE FOR HOUSING COVER	REV. DATE 01/31/06	REV. BY: TDR
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.				F:\Engineering\Standard Parts\Applcator\360\200\ASS-200-0122RL							

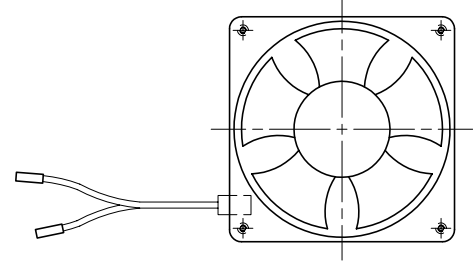
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-200-0123			.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	ELECTRIC SHELF	MP-200-0245	.
②	1	CONNECTOR FACE PLATE	MP-200-0244	.
③	1	CONTROL DRIVE BOARD	MP-DR1010	S
④	1	DISPLAY WIRE HARNESS	PE-200-0416	S
⑤	1	I/O WIRE HARNESS ASSEMBLY	PE-200-0419	S
⑥	1	LINK WIRE HARNESS ASS'Y (SEE NOTE)	PE-200-0470	S
⑦	1	PRODUCT DETECT CONN. HARN. ASS'Y.	MP-CON1019	S
⑧	1	LOW LABEL DETECT HARN. ASS'Y.	MP-CON1020	S
⑨	1	WEB BREAK CONN. HARN. ASS'Y.	MP-CON1025	S
⑩	1	ENCODER WIRE HARNESS ASSEMBLY	PE-200-0418	S
⑪	1	VALVE WIRE HARNESS ASSEMBLY	PE-200-0415	S
⑫	1	ALARM WIRE HARNESS ASSEMBLY	PE-200-0421	S
⑬	1	MCR RELAY	PE-RE1014	S
⑭	1	TERMINAL BLOCK ASSEMBLY (#1-#25)	ASS-200-0466	.
⑮	1	SOCK LINK FEMALE CONNECTOR	PE-CON2040	.
⑯	1	CONNECTOR CAP WITH STRAP	PE-CON7000	.
⑰	1	TERMINAL STRIP MOUNTING RAIL	CP-200-0279	.
⑱	2	TERMINAL STRIP END STOP	PE-TE4020	.
⑲	6	JAM SCREW, NUT & L.W.	PE-S01028	.
⑳	1	DRIVE TRANSITION PLATE	MP-200-0286	.
	1	22 AWG GREEN WIRE x 3" LONG	PE-W103403	.
	2	22 AWG BLUE WIRE x 2-1/4" LONG	PE-W103603	.
	2	22 AWG BROWN WIRE x 2-1/4" LONG	PE-W103702	.
	1	18 AWG WHITE WIRE x 2-1/2" LONG	PE-W110601	.
	1	18 AWG BLACK WIRE x 2-1/2" LONG	PE-W110701	.
	1	22 AWG GREEN WIRE x 2" LONG	PE-W103401B	.
	1	22 AWG GREEN WIRE x 2-1/2" LG.	PE-W103402B	.
	1	22 AWG GREEN WIRE x 25" LONG	PE-W1034060	.
	1	22 AWG YEL WIRE x 14-1/2" LONG	PE-W1035040	.
	2	22 AWG BLUE WIRE x 1-3/4" LONG	PE-W103601B	.
	1	22 AWG BLUE WIRE x 2" LONG	PE-W103602B	.
	2	22 AWG BLUE WIRE x 2-1/4" LONG	PE-W103603B	.
	1	22 AWG BLUE WIRE x 18" LONG	PE-W1036090	.
	1	22 AWG BROWN WIRE x 2-1/4" LG.	PE-W103702B	.
	1	22 AWG BROWN WIRE x 18" LG.	PE-W1037090	.
	1	22 AWG ORANGE WIRE x 14-1/2 LG.	PE-W1038030	.
	1	22 AWG SLATE WIRE x 14-1/2 LONG	PE-W1039020	.
	1	22 AWG VIOLET WIRE x 14-1/2 LONG	PE-W1040030	.
	1	22 AWG WHT/RED WIRE x 13 LONG	PE-W1041020	.
	1	22 AWG WHT/BLK WIRE x 13 LONG	PE-W1042020	.
	1	22 AWG WHT/GRN WIRE x 13 LONG	PE-W1043010	.
	1	22 AWG WHT/YEL WIRE x 13 LONG	PE-W1044020	.
	1	22 AWG WHT/BLU WIRE x 13 LONG	PE-W1045010	.
	1	22 AWG WHT/BRN WIRE x 13 LONG	PE-W1046030	.
	1	22 AWG WHT/ORG WIRE x 18 LONG	PE-W1047020	.
	1	22 AWG WHT/SLATE WIRE x 18 LG.	PE-W1048020	.
	1	22 AWG WHT/VIO WIRE x 14-1/2 LG.	PE-W1049010	.
	1	22 AWG PINK WIRE x 14-1/2 LONG	PE-W1060020	.
	1	18 AWG WHITE WIRE x 20 LONG	PE-W1106040	.
	1	18 AWG BLACK WIRE x 19 LONG	PE-W1107060	.
	1	1/4" ADHESIVE CABLE CLAMP	PE-PA1050	.
	3	3/8" ADHESIVE CABLE CLAMP	PE-PA1054	.
	1	DANGER HAZARD VOLTAGE LABEL	PM-WL1055	.



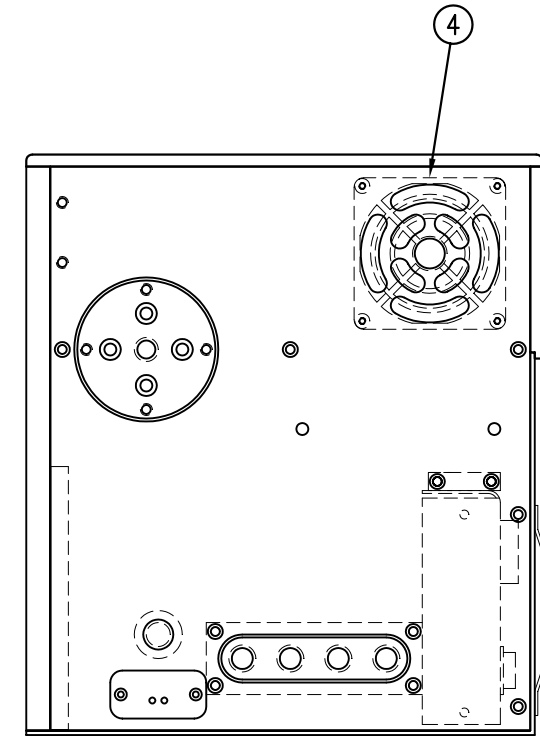
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-200-0124			.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	POWER SUPPLY ASSEMBLY	ASS-200-0410	S
②	1	FAN ASSEMBLY	ASS-200-0454	S
③	1	RELAY w/ WIRING HARNESS TO VALVE	ASS-200-0445	.
④	1	INLET FILTER	PE-FAN1130	S
⑤	1	POWER RECEPTACLE/ FILTER	PE-FI1010	S
⑥	1	FUSE HOLDER	PE-FU5005	S
⑦	1	FUSE	PE-FU2070	S
⑧	1	IDEC JOG SWITCH ASSEMBLY	ASS-200-0451	.
⑨	1	16-3 x 10 FT. POWER CORD	PE-C01020	S
⑩	1	POWER CORD CLIP ASSEMBLY	ASS-200-0148	S



ITEM ① SUPPLIED WITH WIRE HARNESS



ITEM ② SUPPLIED WITH WIRE HARNESS



AVAILABLE IN RH & LH ASSEMBLIES  
-RH ASSEMBLY SHOWN-

ASS-200-0124

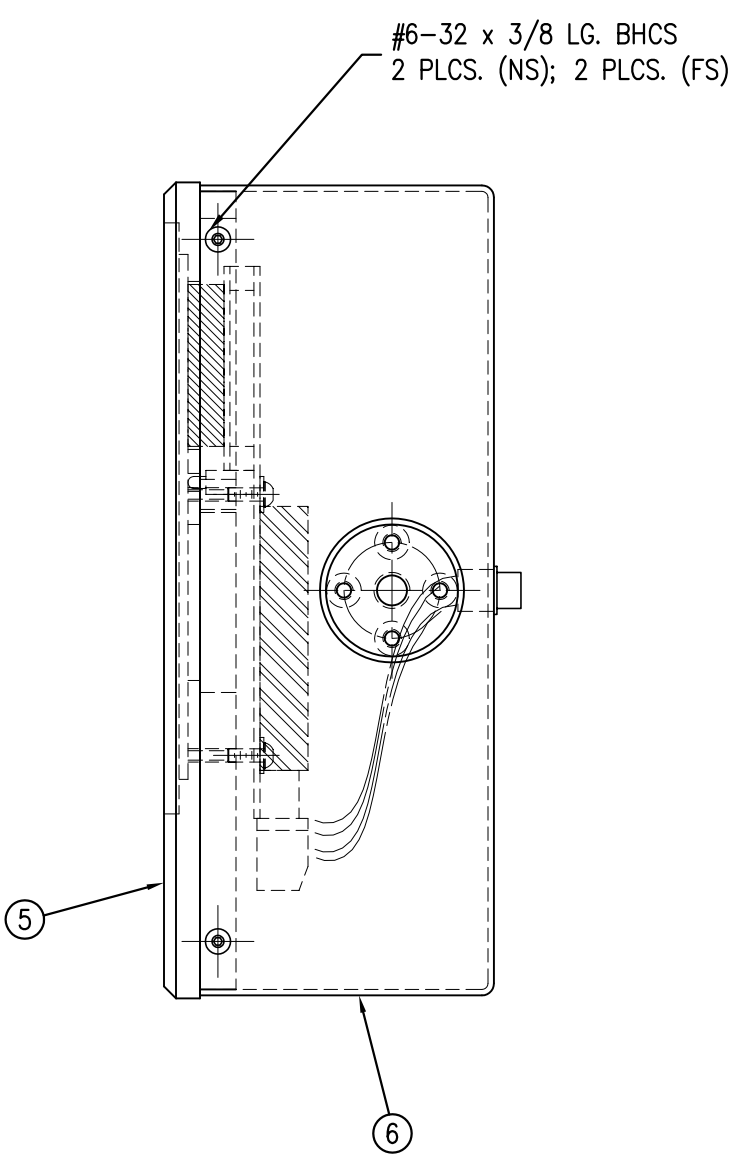
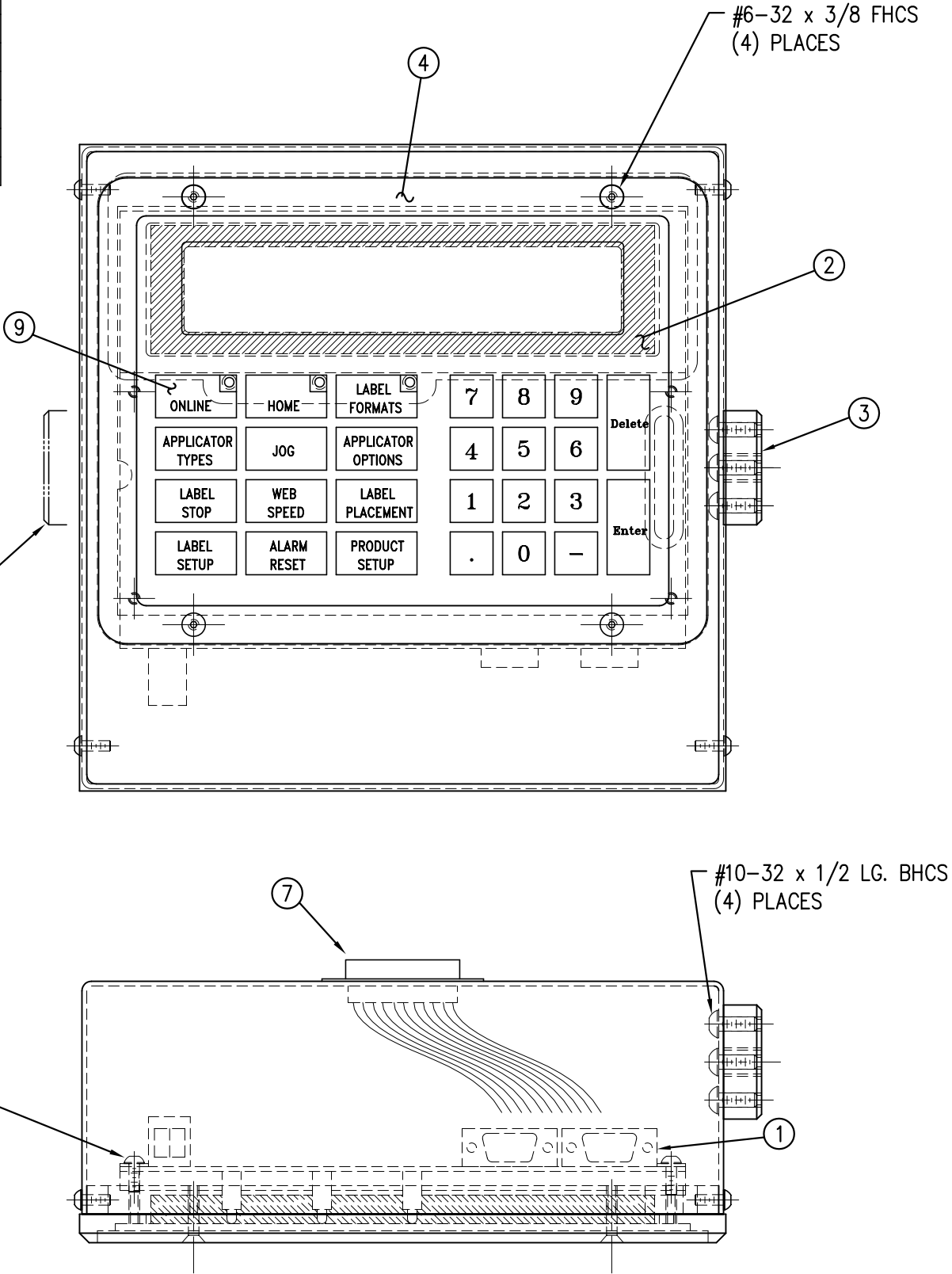
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.				Dept. Code	70
TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY				PART: APPLICATOR HOUSING COMPONENT LAYOUT	
REV. 1	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	1=4
1	ADDED ITEM #10	11/18/05	TDR	Date:	02/14/98
				Drawn By:	BOB S.
				F:\Engineering\Standard Parts\Applcator\360	200\ASS-200-0124

BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-200-0125			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	DRIVER DISPLAY BOARD	PE-IN1040	S
②	1	DISPLAY OVERLAY	PE-IN1041	S
③	1	DISPLAY MOUNTING DISK	MP-200-0262	.
④	1	DISPLAY BEZEL	MP-200-0263	.
⑤	1	DISPLAY FRONT PLATE	MP-200-0265	.
⑥	1	DISPLAY BACK COVER	PM-200-0264	.
⑦	1	DISPLAY WIRE HARNESS ASSEMBLY	PE-200-0420	.
⑧	4	STAND OFF	PE-S01000	.
⑨	1	360 DISPLAY MENU CARD	PE-DMC1000	.
	1	SHCS, 3/8"-16 x 1" LG.	NONE	.
	1	FLAT WASHER, 3/8" NOM.	NONE	.
	2	JACK SCREW, NUT & WASHER	PE-S01028	.
	1	22 AWG GREEN WIRE x 3 LONG	PE-W103404CN	.

ASS-200-0125

MOUNTING BRACKET NOT INCLUDED IN ASSEMBLY:  
STANDARD UPRIGHT MOUNT ~ #ASS-200-0138  
OPTIONAL U-ARM MOUNT ~ #ASS-200-0146

DISPLAY ASSEMBLY CAN ALSO BE MOUNTED FROM THIS SIDE BY REMOVING (4) #6-32 x 3/8 BHCS & THEN ROTATING DISPLAY COVER (ITEM ⑥) WITH ATTACHED ITEM ③ & ⑦ 180 DEGREES. THEN SECURE BACK COVER TO DISPLAY FRONT PLATE USING #6 BHCS REMOVED PREVIOUSLY.

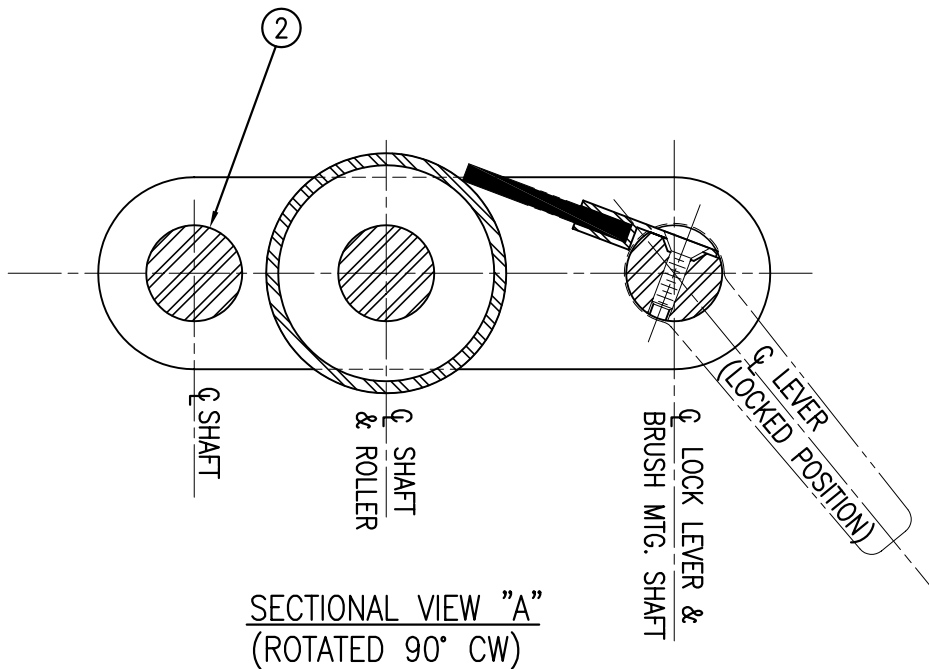
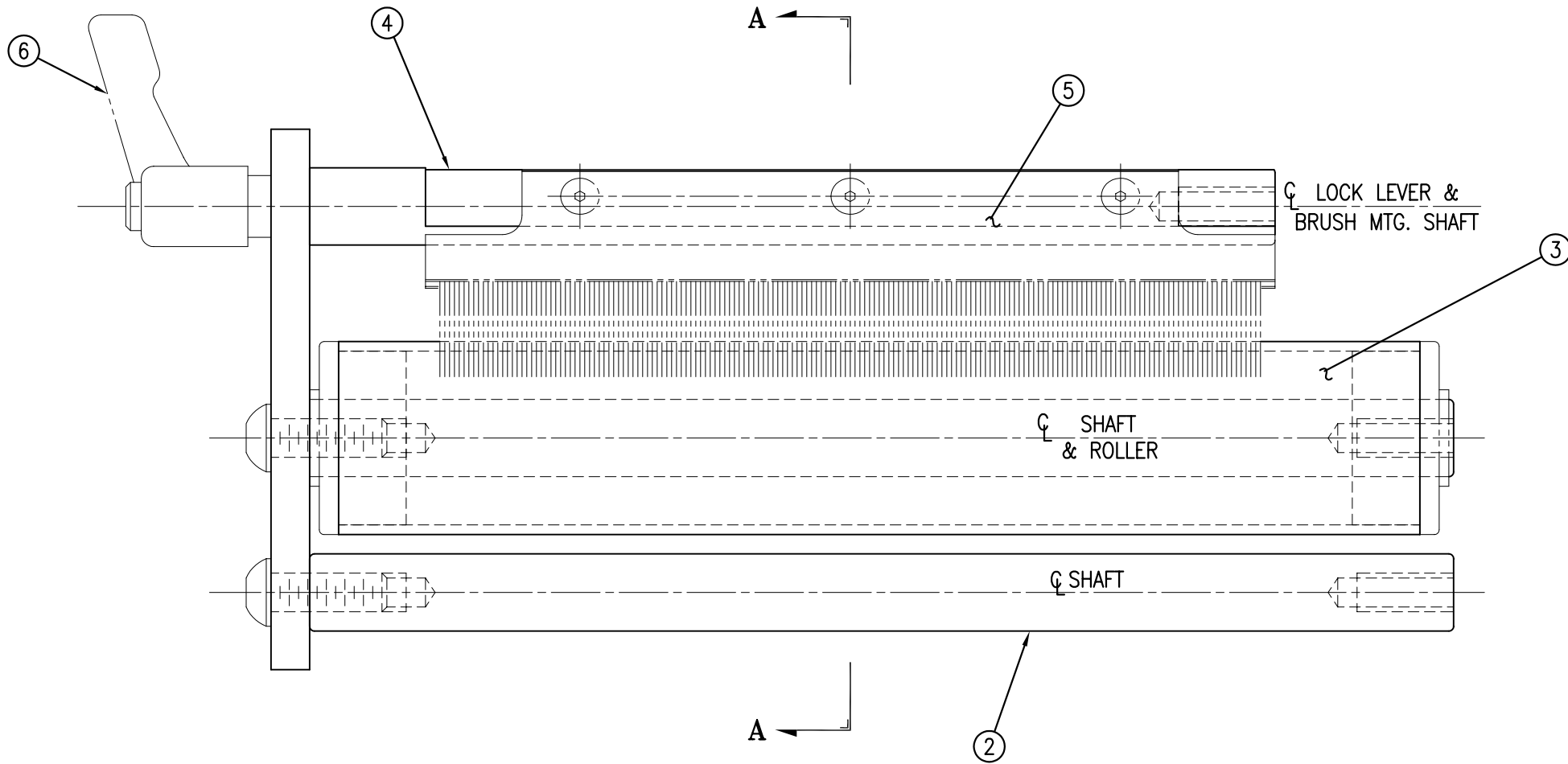
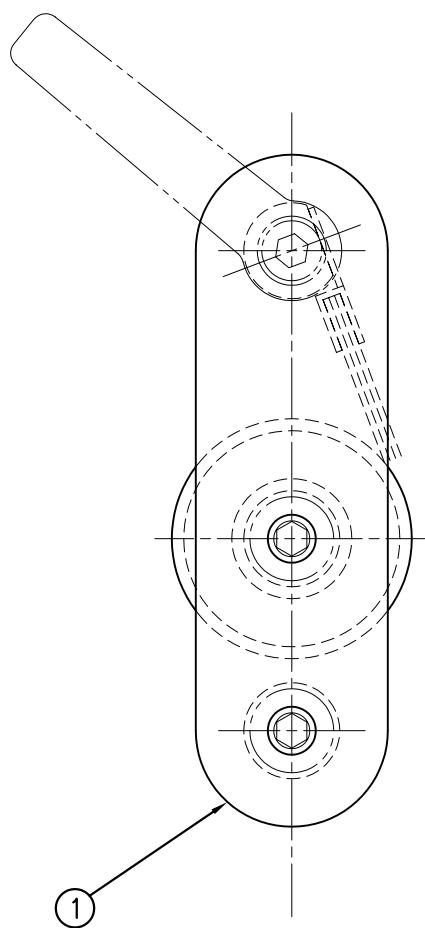


THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.				Dept. Code	70
TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY				PART: DISPLAY UNIT ASSEMBLY	
REV. DESCRIPTION	REV. DATE	REV. BY:	REV. BY:	Scale:	Date:
1	02/23/04	TDR	TDR	1=2	06/20/97
ADDED STAND-OFF & MENU CARD				BOB S.	
F:\Engineering\Standard Parts\Applcator\360				200\ASS-200-0125	



BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200-X126L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TENSION BRUSH ROLL MOUNTING BRKT.	MP-200-0256	.
②	1	5/7.5/10 TENSION ROLLER SHAFT	MP-200-X254	.
③	1	5/7.5/10 TENSION ROLL ASS'Y w/SHAFT	ASS-200-X135	S
④	1	5/7.5/10 TENSION BRUSH MTG SHAFT	MP-200-X253	.
⑤	1	5/7.5/10 TENSION BRUSH ASSEMBLY	ASS-215-X110	S
⑥	1	LOCK LEVER	PM-LL0850	.
	2	SHCS, 1/4"-20 UNC x 1" LG.	NONE	.
	2	FLAT WASHER, 1/4" NOM.	NONE	.
	2	BHCS, 1/4"-20 UNC x 3/4" LG.	NONE	.

REV 1



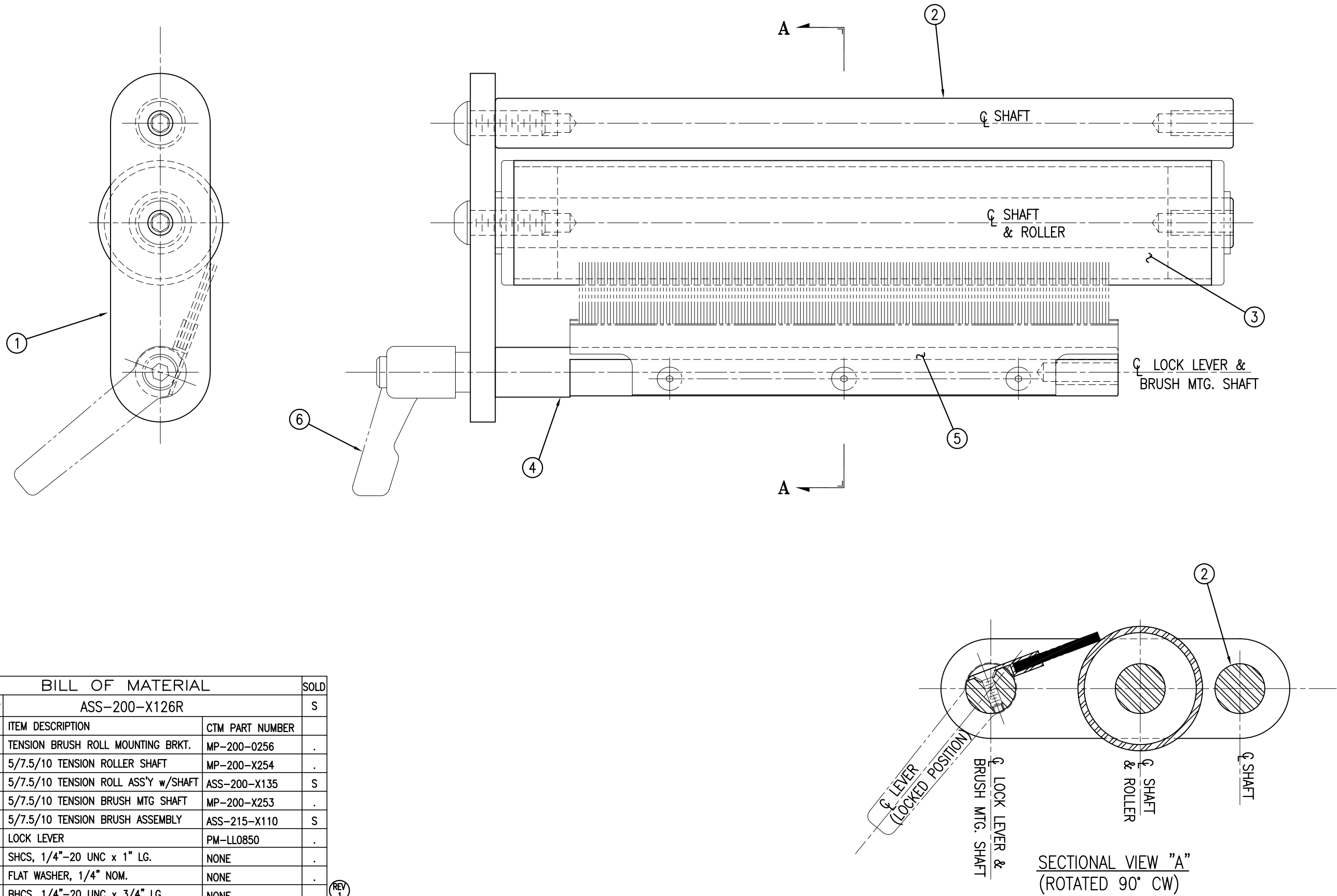
SECTIONAL VIEW "A"  
(ROTATED 90° CW)

ASS-200-X126L	
5" WIDE	-0126L
7.5" WIDE	-2126L
10" WIDE	-5126L

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 SERIES APPLICATOR: HOUSING ASSEMBLY		PART: TENSION BRUSH LH ASSEMBLY	
REV. 1	REV. DESCRIPTION	REV. DATE	REV. BY:
1	BHCS WAS LHCS	8/8/05	JAM
		Scale: 1=1	Drawn BY: BOB S.
		Date: 06/02/98	
		F:\Engineering\Standard Parts\Appliator\360	
		200\ASS-200-X126L	
		Dept. Code 70	

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200-X126R		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TENSION BRUSH ROLL MOUNTING BRKT.	MP-200-0256	.
②	1	5/7.5/10 TENSION ROLLER SHAFT	MP-200-X254	.
③	1	5/7.5/10 TENSION ROLL ASS'Y w/SHAFT	ASS-200-X135	S
④	1	5/7.5/10 TENSION BRUSH MTG SHAFT	MP-200-X253	.
⑤	1	5/7.5/10 TENSION BRUSH ASSEMBLY	ASS-215-X110	S
⑥	1	LOCK LEVER	PM-LL0850	.
	2	SHCS, 1/4"-20 UNC x 1" LG.	NONE	.
	2	FLAT WASHER, 1/4" NOM.	NONE	.
	2	BHCS, 1/4"-20 UNC x 3/4" LG.	NONE	.

REV 1

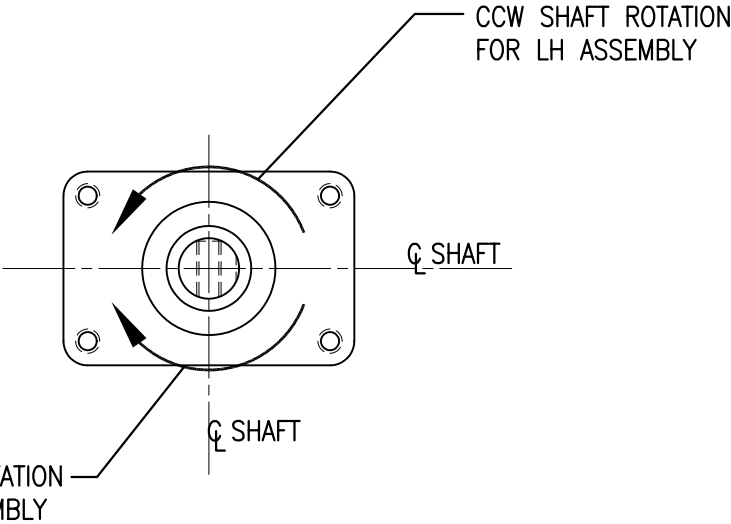
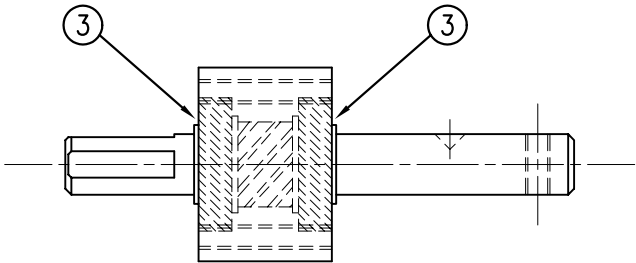
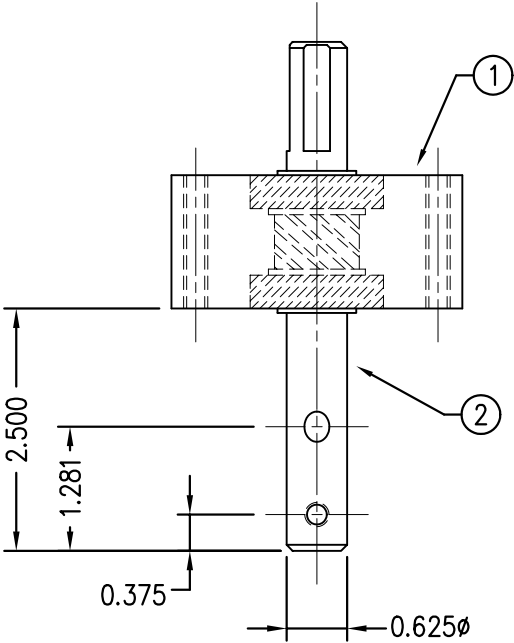


ASS-200-X126R	
5" WIDE	-0126R
7.5" WIDE	-2126R
10" WIDE	-5126R

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.				PART: TENSION BRUSH RH ASSEMBLY		Dept. Code 70	
TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY				REV. DATE	REV. BY:	Scale:	Drawn BY:
REV. DESCRIPTION				8/8/05	JAM	1=1	BOB S.
1 BHCS WAS LHCS				Date: 06/02/98		F:\Engineering\Standard Parts\Appliator\360\200\ASS-200-X126R	

BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-200-0128R/L			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	REWIND BEARING BLOCK ASSEMBLY	ASS-200-0139	.
②	1	REWIND SHAFT	MP-200-0220	.
③	2	SNAP RING	PM-FASR1010	.
	4	FHCS, 1/4"-20 UNC x 1" LG.	NONE	.

ASS-200-0128R/L



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 SERIES APPLICATOR: REWIND ASSEMBLY					PART: REWIND BEARING BLOCK ASSEMBLY				Dept. Code 70
REV. 0	REV. DESCRIPTION NEW TITLEBLOCK	REV. DATE 02/05/03	REV. BY: TDR	Scale: 1=2	Date: 02/21/98	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 200\ASS-200-0128RL		

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200-X129		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5/10 DRIVE ROLL	MP-200-X242	S
②	1	OUTSIDE DRIVE ROLL SUPPORT	MP-200-0236	.
③	1	INSIDE DRIVE ROLL SUPPORT	MP-200-0237	.
④	1	DRIVE ROLL KNOB	MP-200-0223	.
⑤	1	5/7.5/10 NIP ROLL ASSEMBLY w/SHAFT	ASS-200-X130	S
⑥	1	5/7.5/10 NIP ROLL YOKE	MP-200-X240	.
⑦	1	5/7.5/10 NIP ROLL TOP SUPPORT	MP-200-X239	.
⑧	2	COMPRESSION SPRING	PM-FASP30428	.
⑨	1	THRUST BEARING	PM-BE1230	.
⑩	1	LIFT ROD	MP-200-0214	.
⑪	1	LIFT CAM	MP-200-0235	.
⑫	1	LIFT ROD PIN	MP-200-0213	.
⑬	1	NIP ROLL KNOB	MP-200-0224	.
⑭	1	KEY	PM-FAKS30520	.
⑮	2	BALL BEARINGS	PM-BE1270	.
	2	SHCS, 5/16"-18 x 1" LG.	NONE	.
	2	SET SCREW, 1/4-20 x 1" LG.	PM-FASS45175	.
	2	LOCKNUT, 1/4-20	PM-FANU20004	.

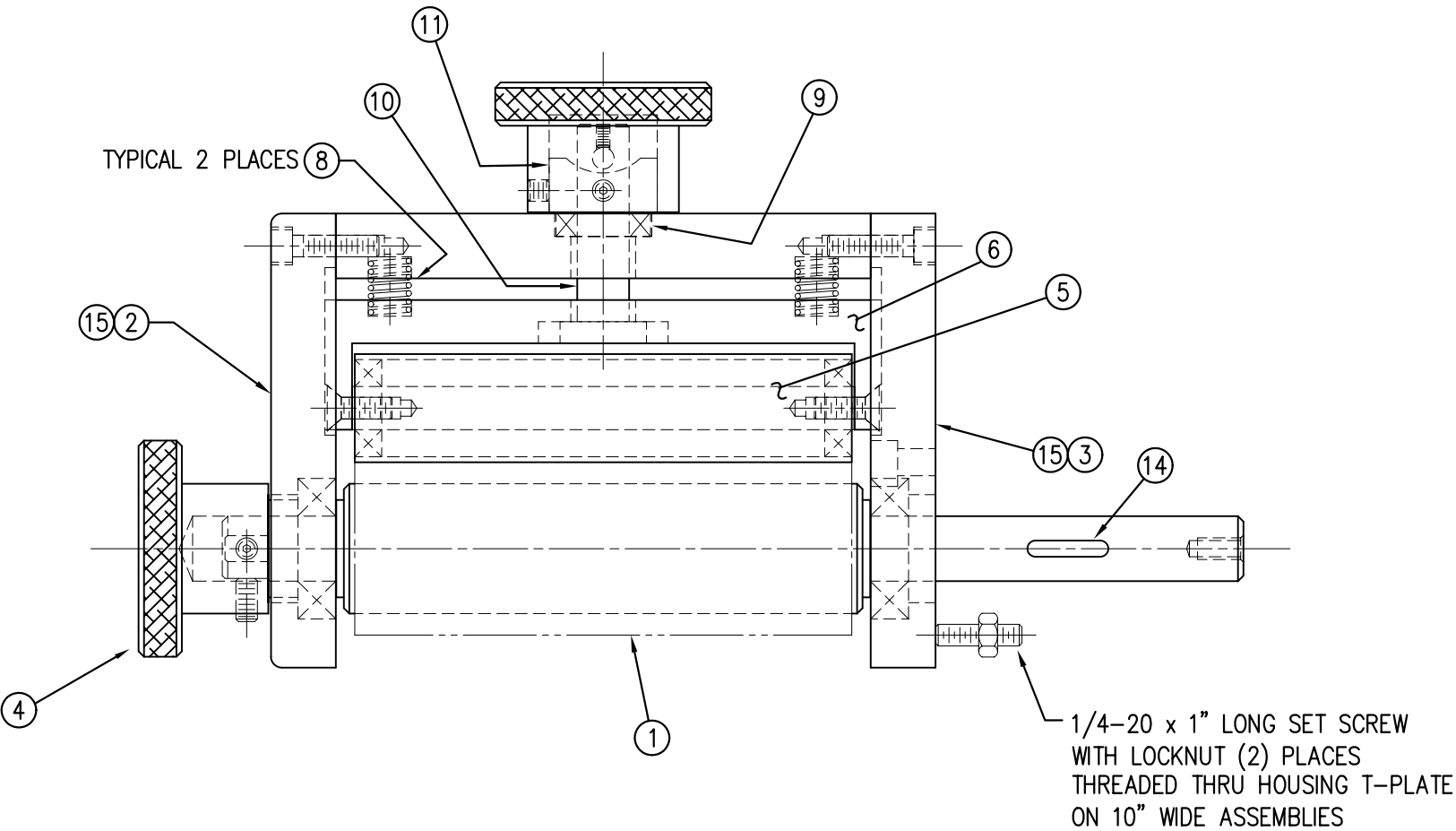
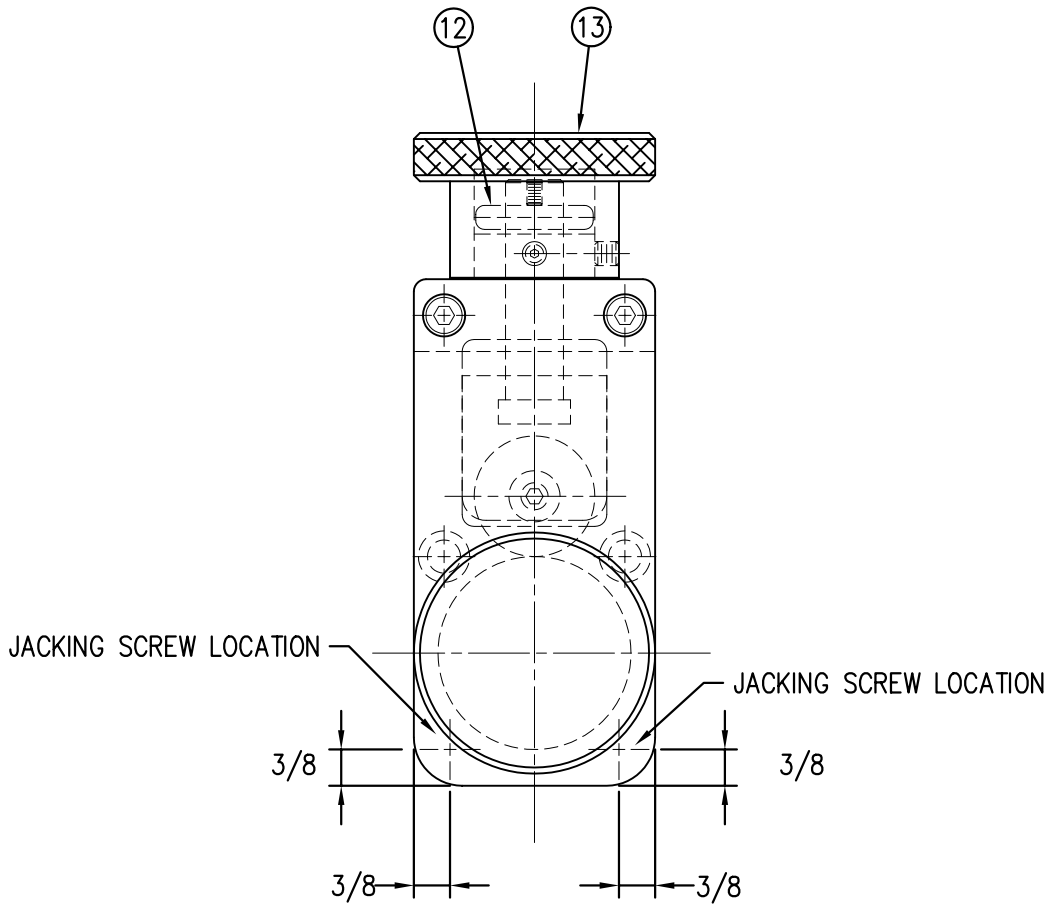
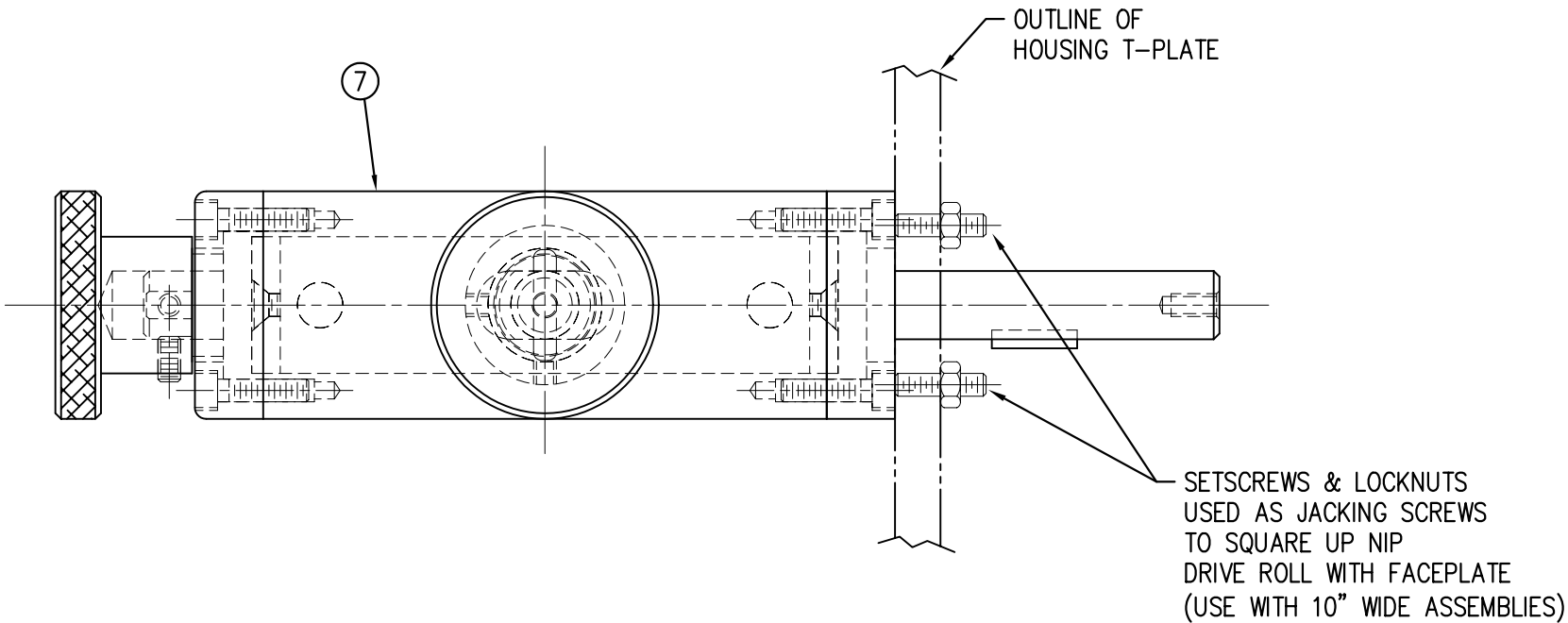
ASS-200-X129

5" WIDE -0129

7.5" WIDE -2129

10" WIDE -5129

REV. DESCRIPTION		REV. DATE	REV. BY	REV. TDD	Scale	Date	DRWN BY	Dept. Code
1	360 SERIES APPLICATOR: HOUSING ASSEMBLY	01/31/06	TDD		1"=1'	02/21/08	BDB, S	70
F:\Engineering\Standard Parts\Appliator\360								2000-V1200
ACC 2000-V1200								



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.

PART: 5/7.5/10" NIP DRIVE ROLL ASSEMBLY

TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY

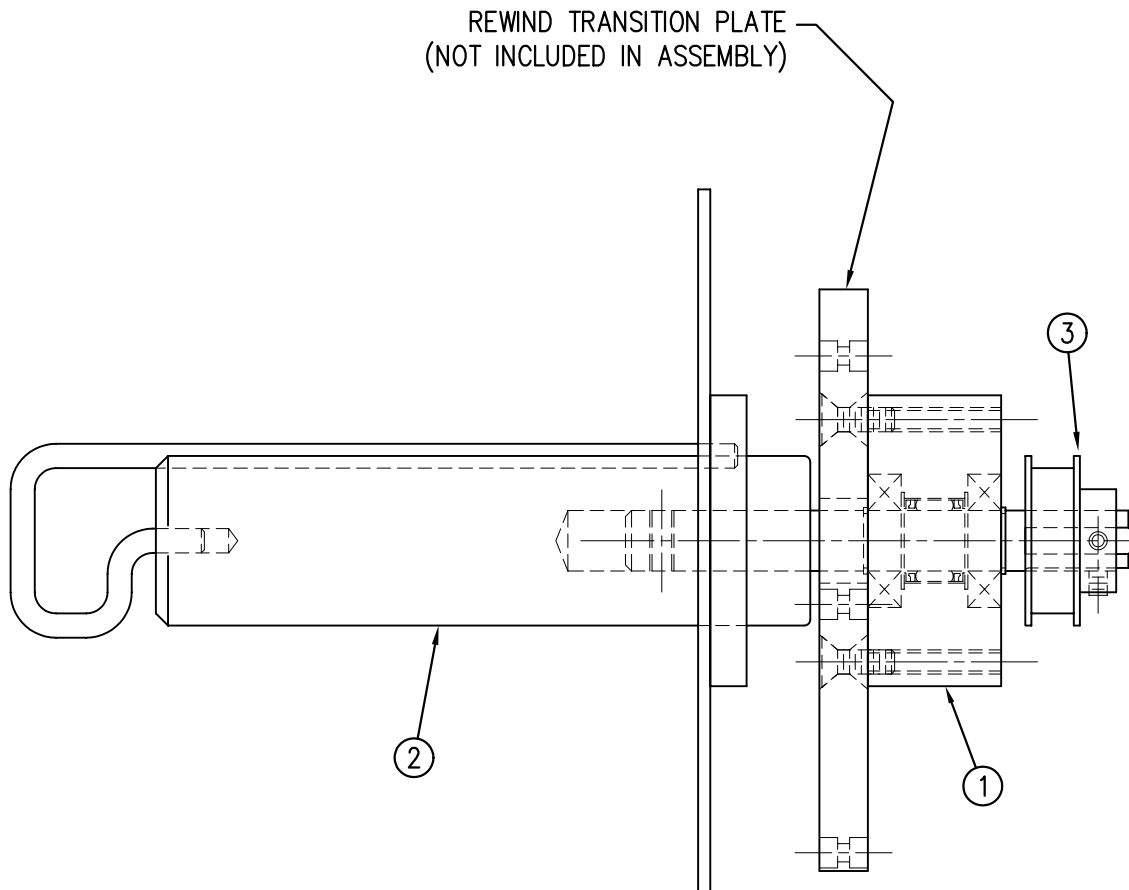
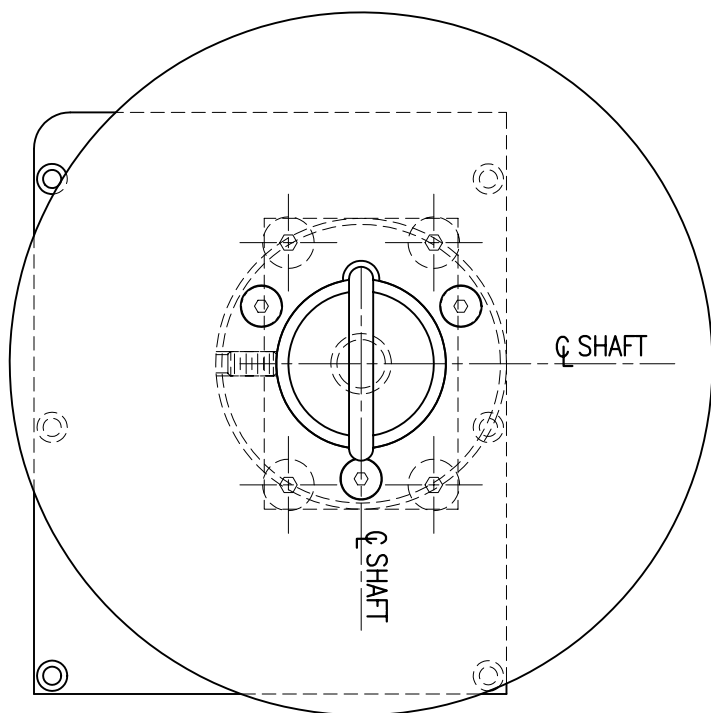
# BILL OF MATERIAL

ASS-200-X140R/L

ASS-200-X140R/L

5" WIDE	-0140R/L
7.5" WIDE	-2140R/L
10" WIDE	-5140R/L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-0128R/L	REWIND BEARING BLOCK ASSEMBLY
②	1	ASS-200-X147	STANDARD REWIND MANDREL
③	1	MP-200-0231	REWIND PULLEY



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.

APPLICATOR SERIES: 360				APPLICATOR WIDTH(S): 5"/7.5"/10"		GROUP: REWIND		TITLE: REWIND MANDREL ASSEMBLY w/ BLOCK, SHAFT & PULLEY				Dept. Code 70	
REV. 1	REV. DESCRIPTION UPDATED B.O.M.					REV. DATE 12/06/05	REV. BY: TDR	Scale: 1=2	Date: 01/18/02	DRAWN BY: TDR		F:\Engineering\Standard Parts\Applicator\360\Unwind-Rewind\ASS-200-X140RL	

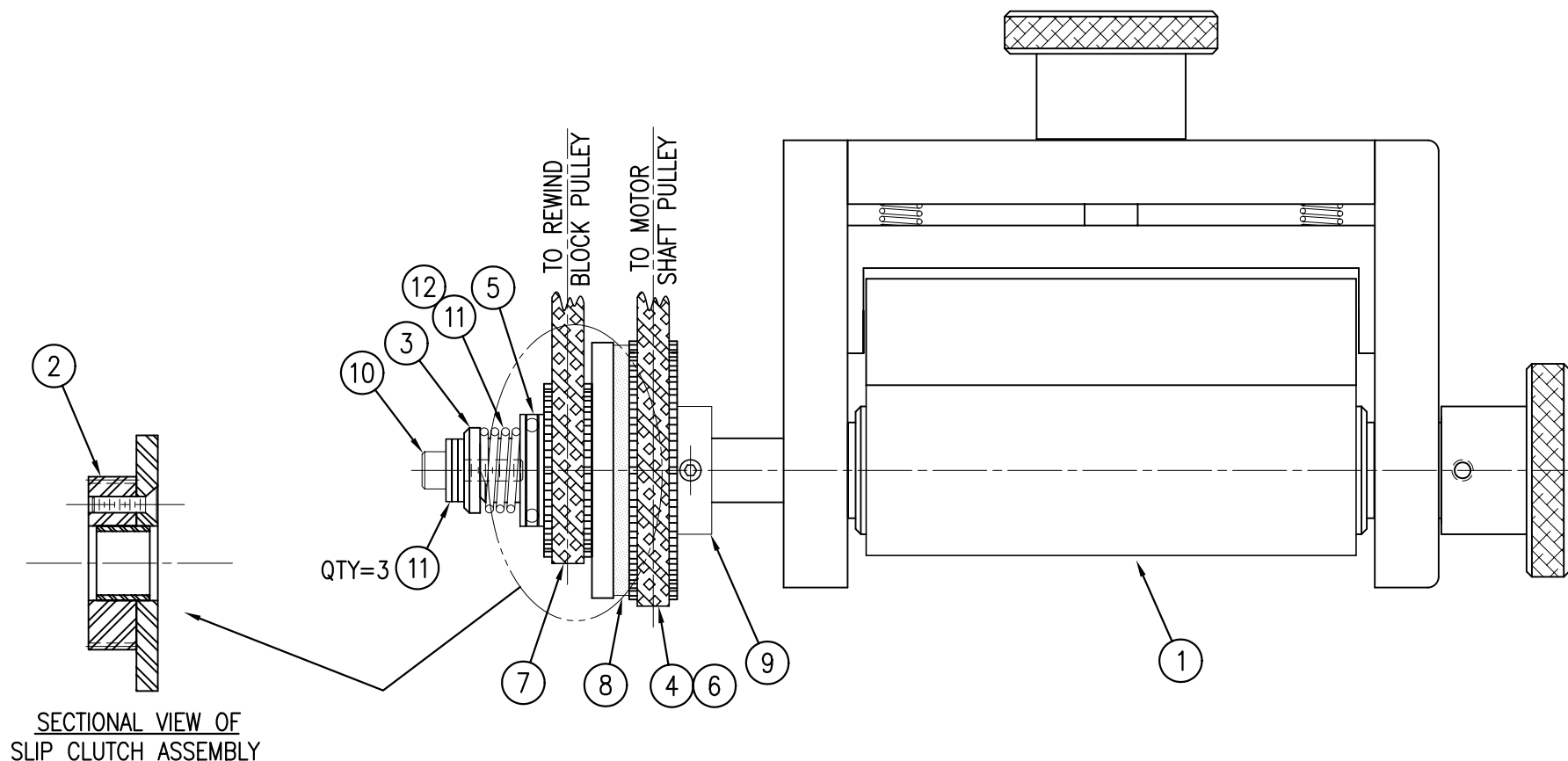
# BILL OF MATERIAL

ASS-200-X142

ASS-200-X142

5" WIDE	-0142
7.5" WIDE	-2142
10" WIDE	-5142

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-X129	NIP ROLL DRIVE ASSEMBLY
②	1	ASS-200-0143	SLIP CLUTCH ASSEMBLY
③	1	MP-200-0229	CLUTCH SPRING KEEPER
④	1	MP-200-0233	DRIVE PULLEY
⑤	1	PM-BE1232	3/4" THRUST BEARING ASSEMBLY
⑥	1	PM-BELT1018	TIMING BELT
⑦	1	PM-BELT1023	TIMING BELT
⑧	1	PM-CL1010	3" LEATHER CLUTCH PAD
⑨	1	PM-CO1020	3/4" ID LOCK COLLAR - SS
⑩	1	PM-FASH430080	SHCS, 1/4-20 x 1.00 LG. SS
⑪	1	PM-FASP30540	COMPRESSION SPRING
⑫	10	PM-FAW30275	FLAT WASHER - 1/4 NOM. - SS

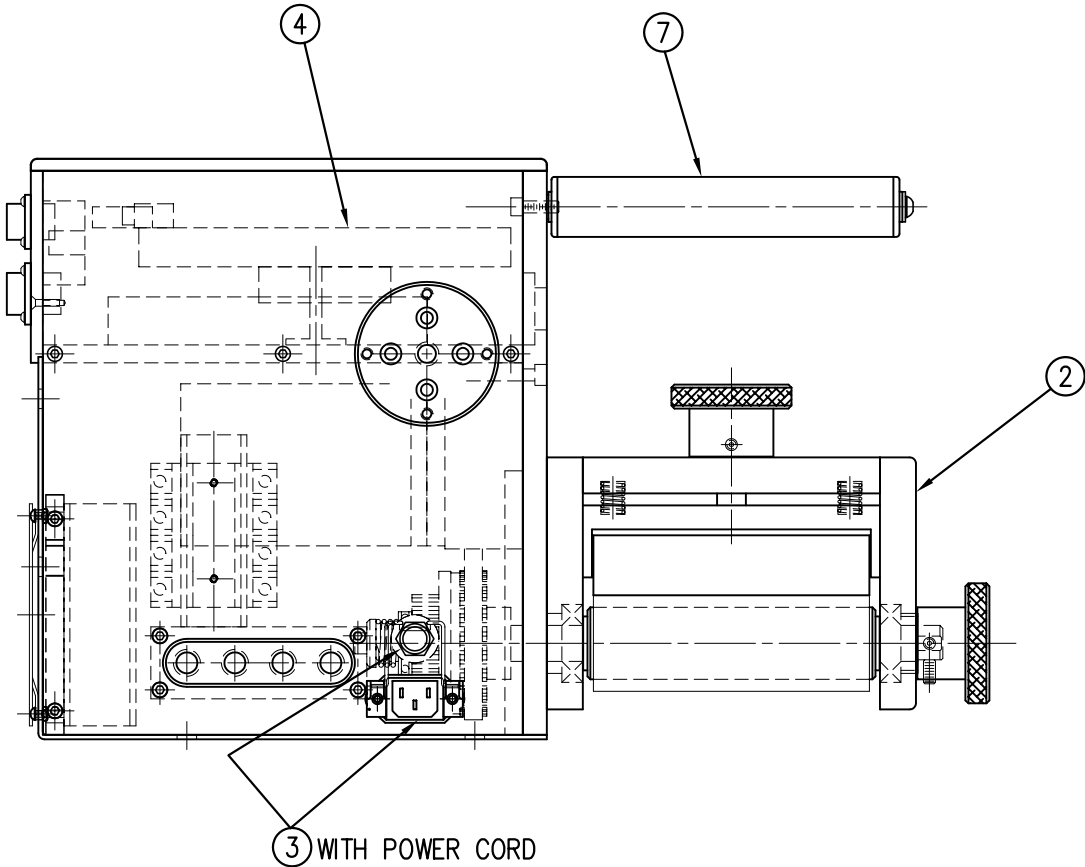


THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

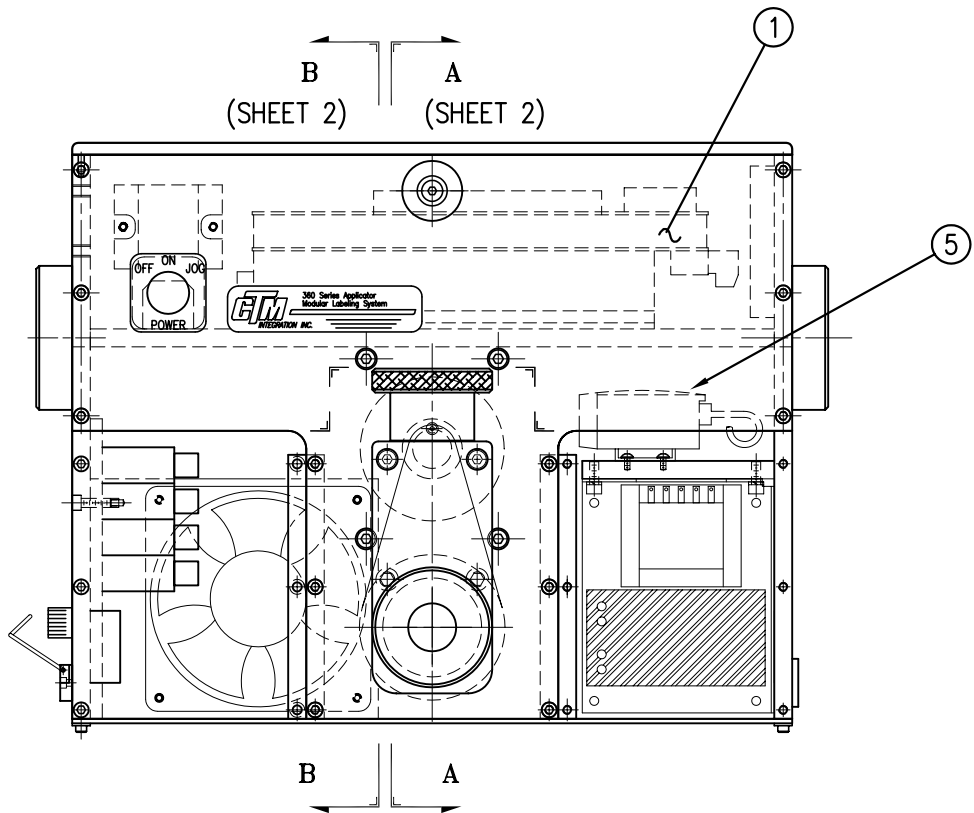
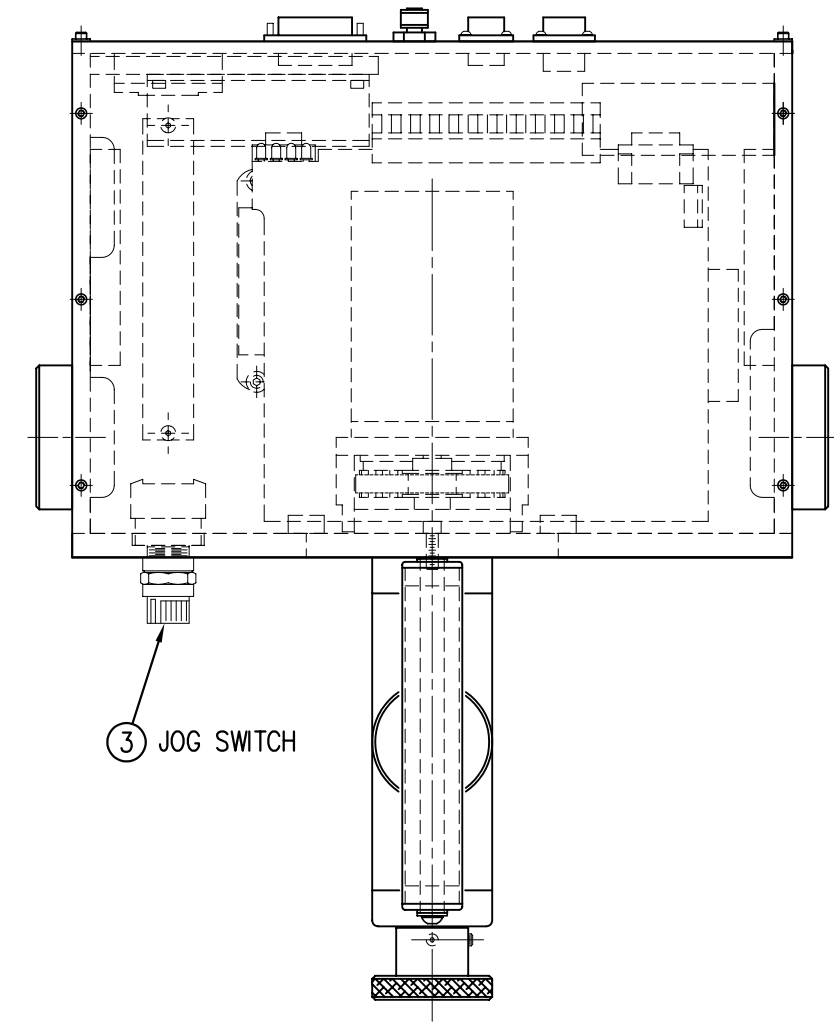
APPLICATOR SERIES: 360 SERIES				APPLICATOR WIDTH(S): 5"/7.5"/10"		GROUP: NIP DRIVE		TITLE: NIP DRIVE REWIND PULLEY & MOTOR PULLEY ASSEMBLY				Dept. Code 70	
REV. 2	REV. DESCRIPTION ADDED ASS-200-X129 TO BOM & TABULATED FOR 5/7.5/10					REV. DATE 02/19/09	REV. BY: TDR	Scale: 1=2	Date: 06/02/98	DRAWN BY: BOB S.		F:\Engineering\Standard Parts\Applicator\360\Core Unit NIP DRIVE\ASS-200-X142	

BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-200-X150R/L			.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	APPLICATOR HOUSING ASSEMBLY	ASS-200-0122R/L	.
②	1	NIP DRIVE ASSEMBLY	ASS-200-X129	S
③	1	HOUSING COMPONENTS LAYOUT	ASS-200-0124	.
④	1	ELECTRIC SHELF ASSEMBLY	ASS-200-0123	.
⑤	1	BANNER LABEL SENSOR	ASS-200-0450	S
⑥	1	STEPPER MOTOR ASSEMBLY	ASS-200-0453	.
⑦	1	5/7.5/10 TENSION ROLLER ASS'Y	ASS-200-X135	S
⑧	1	NIP/REWIND DRIVE ASSEMBLY	ASS-200-0142	.

NOTE: AVAILABLE IN RH & LH ORIENTATIONS  
- RIGHT HAND ASSEMBLY SHOWN -  
(SEE DWG #ASS-200-0122R/L FOR DIFFERENCES)

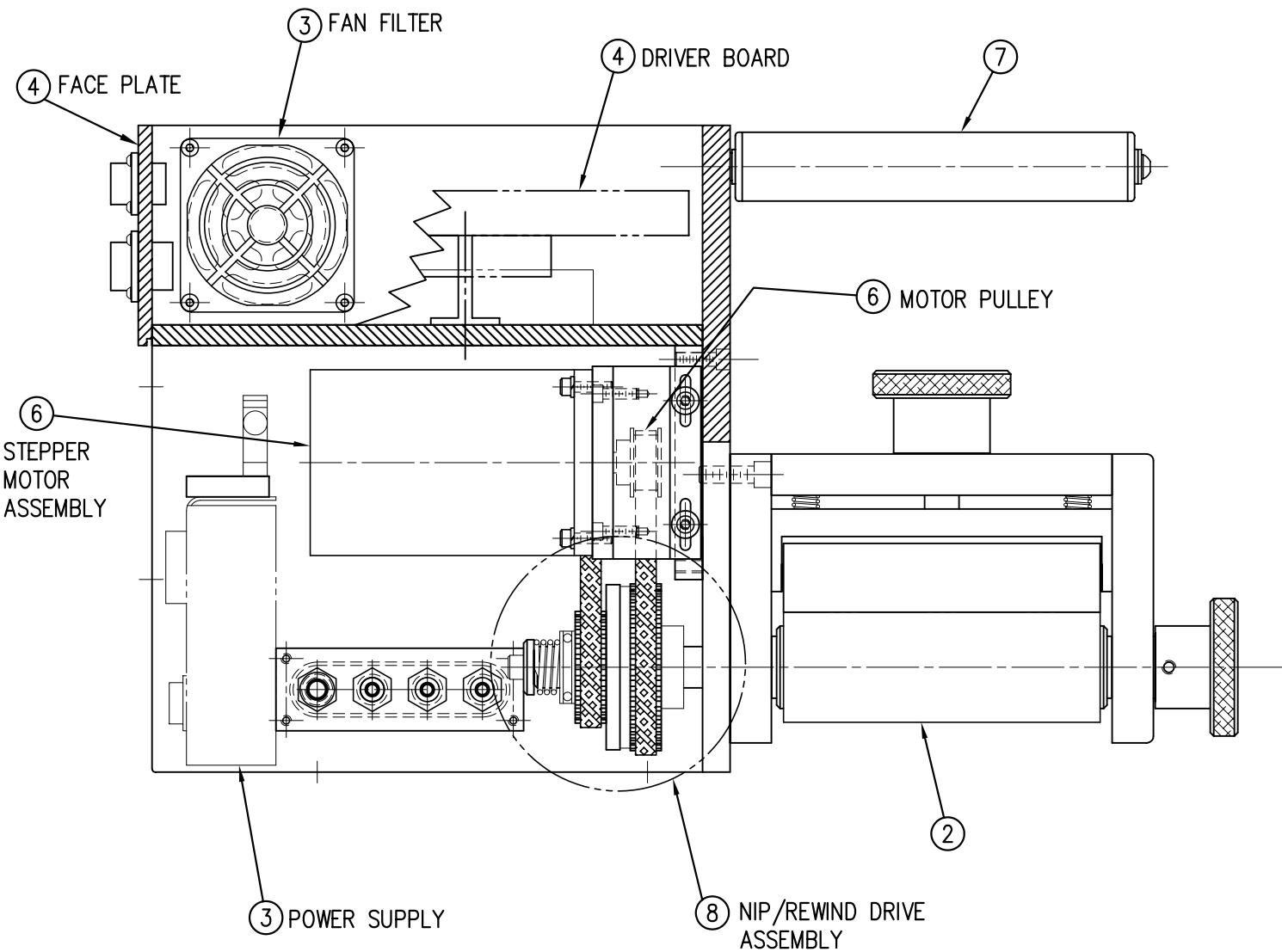


SHOP REFERENCE DRAWINGS:  
SAS-200-X150R/L (SHEETS 1 THRU 4)

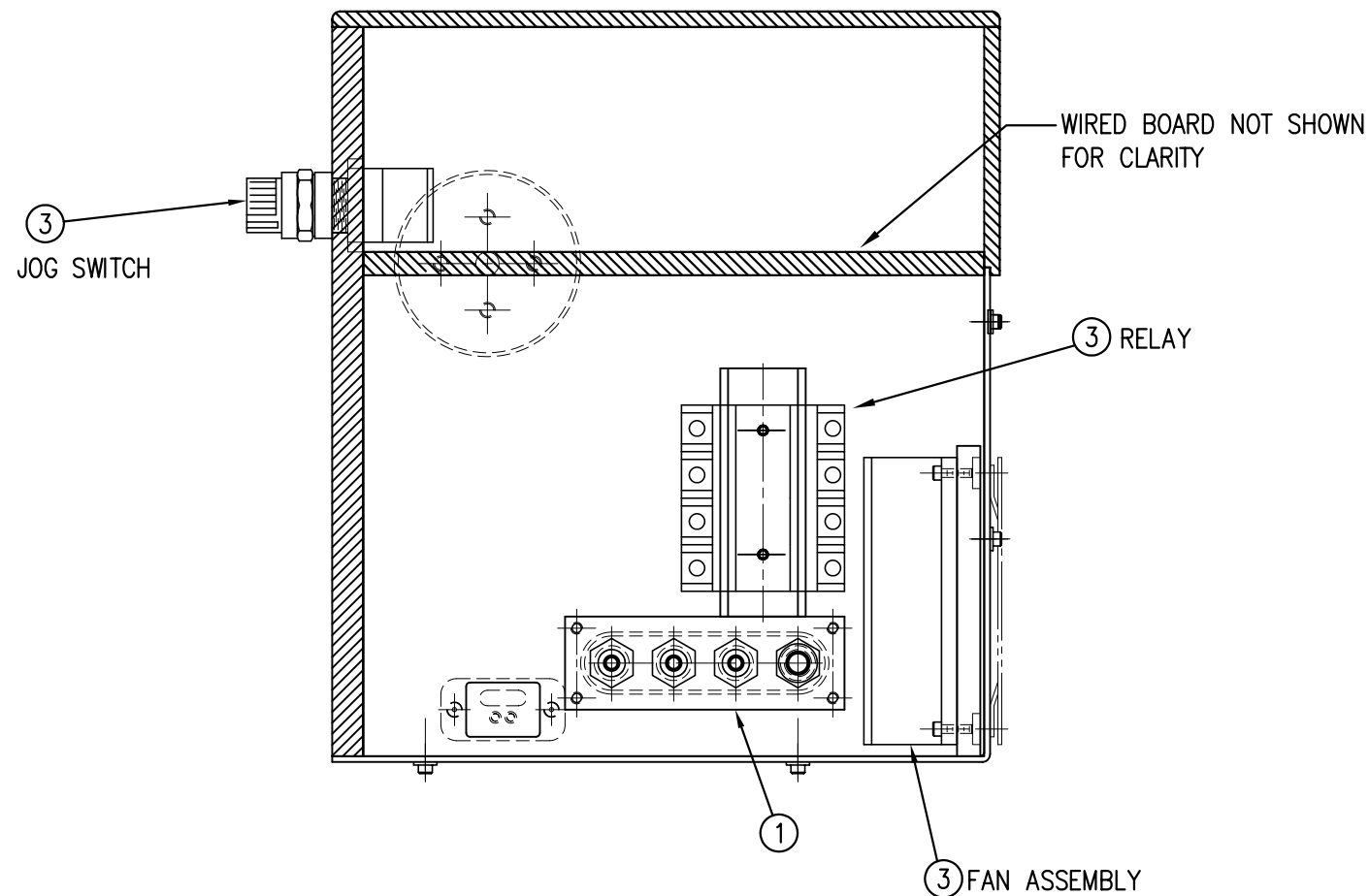


ASS-200-X150R/L	
5" WIDE	-0150R/L
7.5" WIDE	-2150R/L
10" WIDE	-5150R/L

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 SERIES APPLICATOR: HOUSING ASSEMBLY		PART: CORE UNIT for STD. REWIND (Sht 1 of 2)	
REV. 2	REV. DESCRIPTION ADDED POWER CORD CLIP ASSEMBLY	REV. BY: TDR	REV. DATE: 11/18/05
		Scale: 1=4	Date: 02/14/98
		Drawn By: BOB S.	Dept. Code: 70
		F:\Engineering\Standard Parts\Appliator\360\200\ASS-200-X150s1	



SECTION "A-A"  
(FROM SHEET 1)



SECTION "B-B"  
(FROM SHEET 1)

ASS-200-X150R/L	
5" WIDE	-0150R/L
7.5" WIDE	-2150R/L
10" WIDE	-5150R/L

NOTE: AVAILABLE IN RH & LH ORIENTATIONS  
- RIGHT HAND ASSEMBLY SHOWN -  
(SEE DWG #ASS-200-0122R/L FOR DIFFERENCES)

FOR BILL OF MATERIAL REFER TO DWG. #ASS-200-X150R/L (SHEET 1)

SHOP REFERENCE DRAWINGS:  
SAS-200-X150R/L (SHEETS 1 THRU 4)

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 SERIES APPLICATOR: HOUSING ASSEMBLY

REV. 1

REV. DESCRIPTION

1 UPDATED TITLEBLOCK

REV. DATE

02/15/03

REV. BY:

TDR

Scale:

1=3

Date:

02/14/98

Drawn By:

BOB S.

PART: CORE UNIT for STD. REWIND (Sht 2 of 2)

Dept. Code

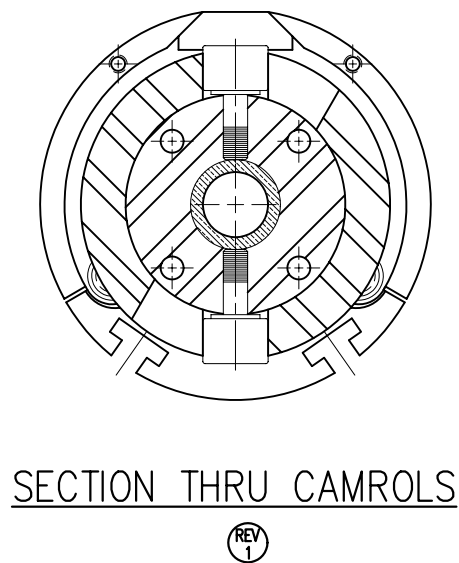
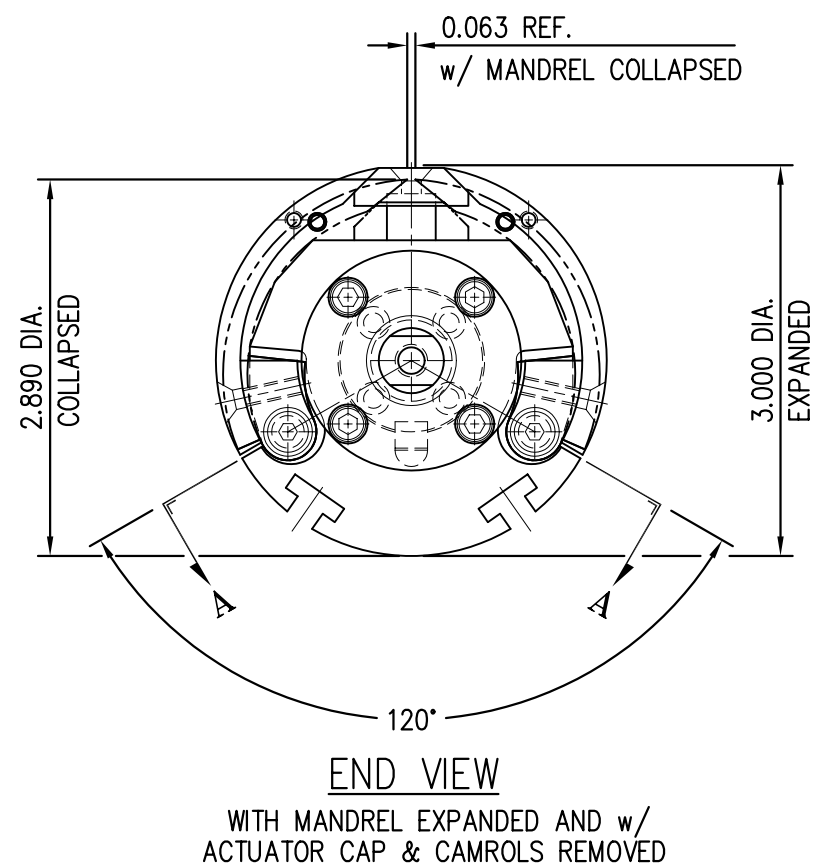
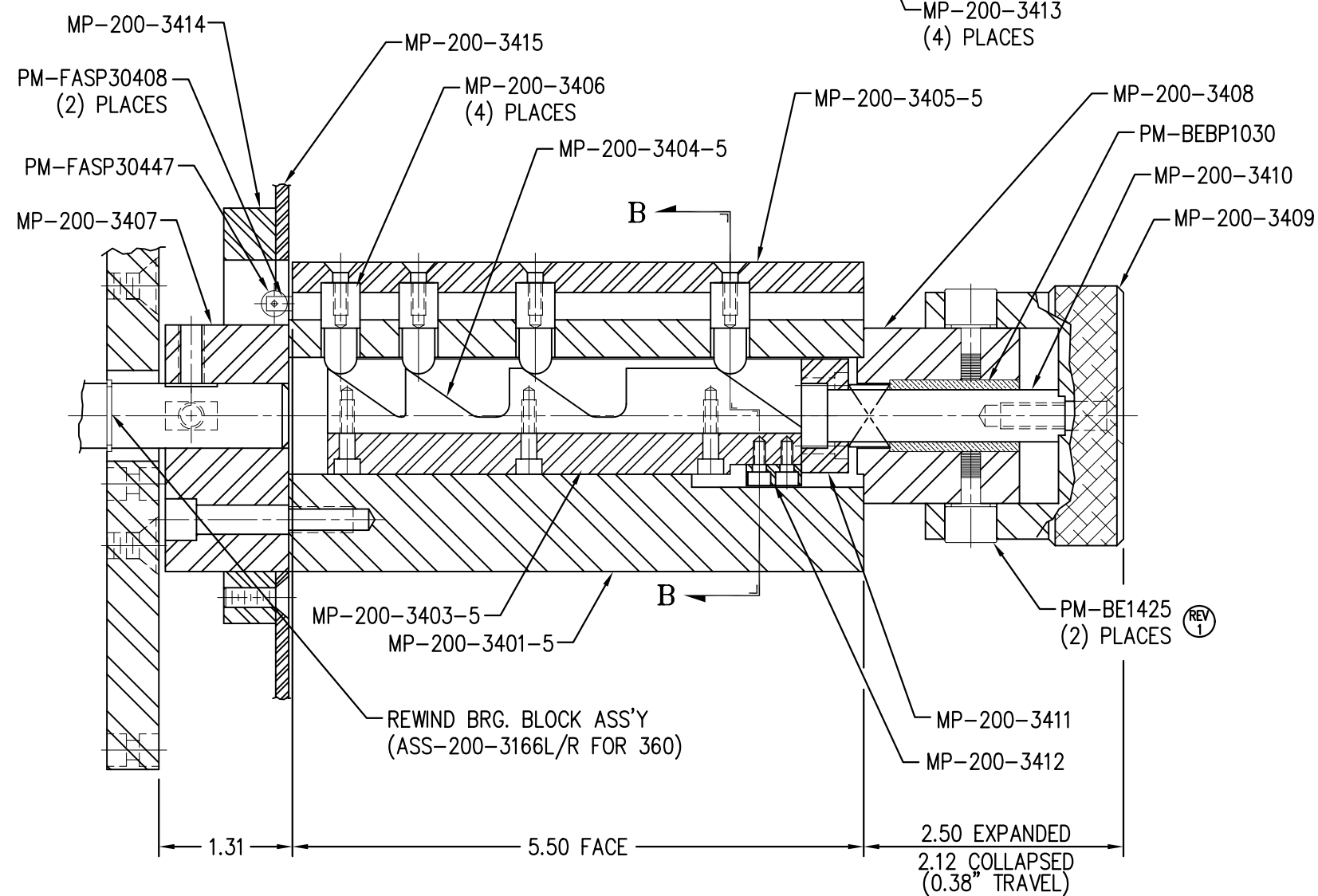
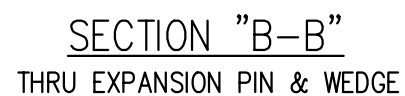
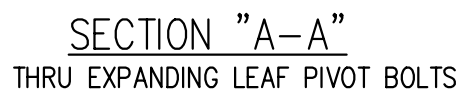
70

F:\Engineering\Standard Parts\Applcator\360

200\ASS-200-X150s2



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.									
APPLICATOR SERIES: 360 SERIES		APPLICATOR SERIES: (GROUP): 5" WIDE		TITLE: COLLAPSIBLE REWIND ASSEMBLY				Dept. Code 70	
REV:	REV. DESCRIPTION	REV. DATE	REV. BY:	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applcator\360\Rewind COLLAPSIBLE\ASS-200-3140-5	
1	REPLACED PM-BE1415 (BALL BRGS) w/ PM-BE1425 (CAMROLS)	09/19/06	TK	TK	1=1.5	07/01/06	T. KELLY		

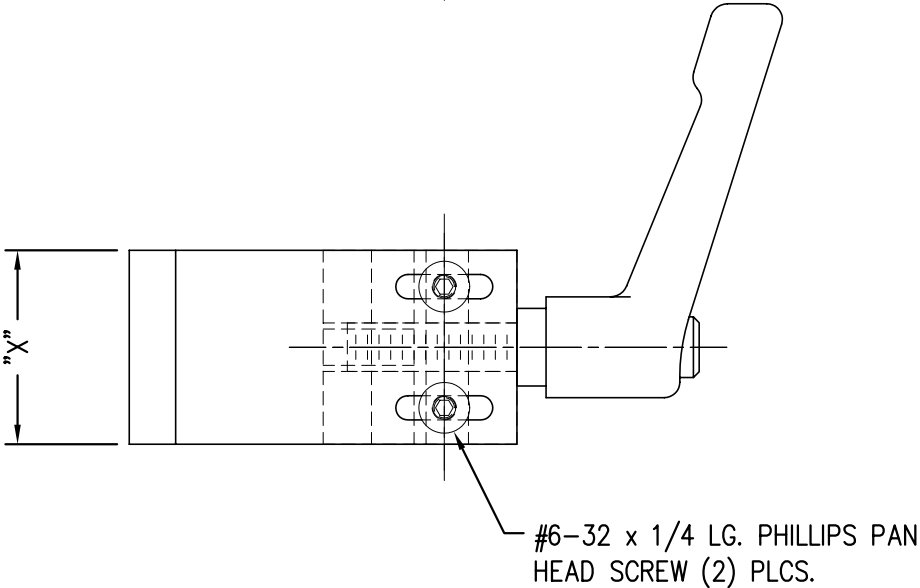
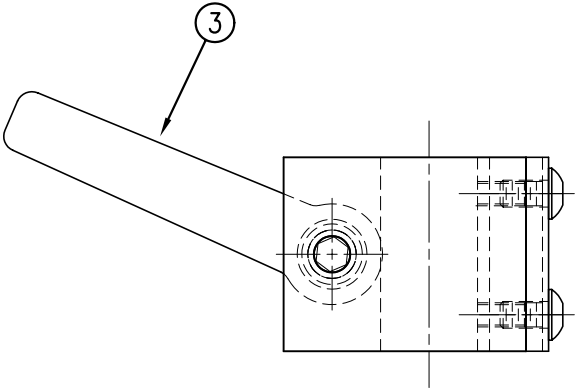
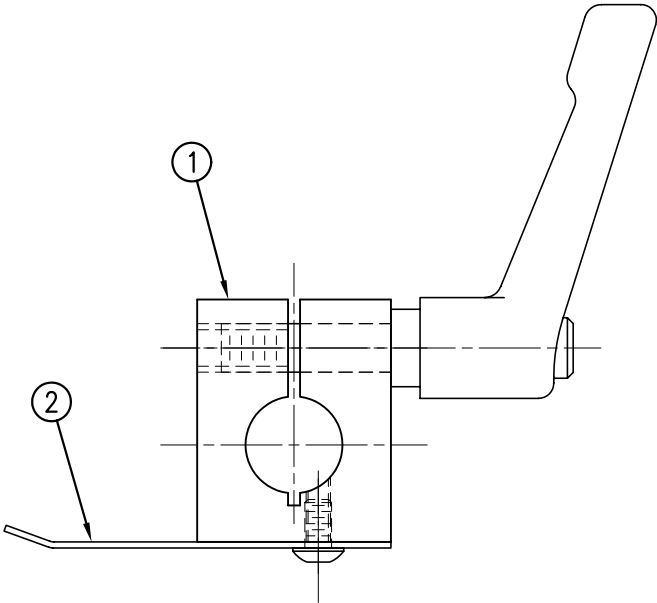


BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-0105-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	SPRING BLOCK	MP-211-0201	.
②	1	X" WIDE WEB TENSION SPRING (see note)	PM-211-0216-X	.
③	1	LOCK LEVER	PM-LL0902	.

NOTE:  
1" WIDE WEB TENSION SPRING IS STANDARD.  
2", 3" & 4" WIDTHS ARE AVAILABLE AS AN OPTION.

ASS-211-0105-X

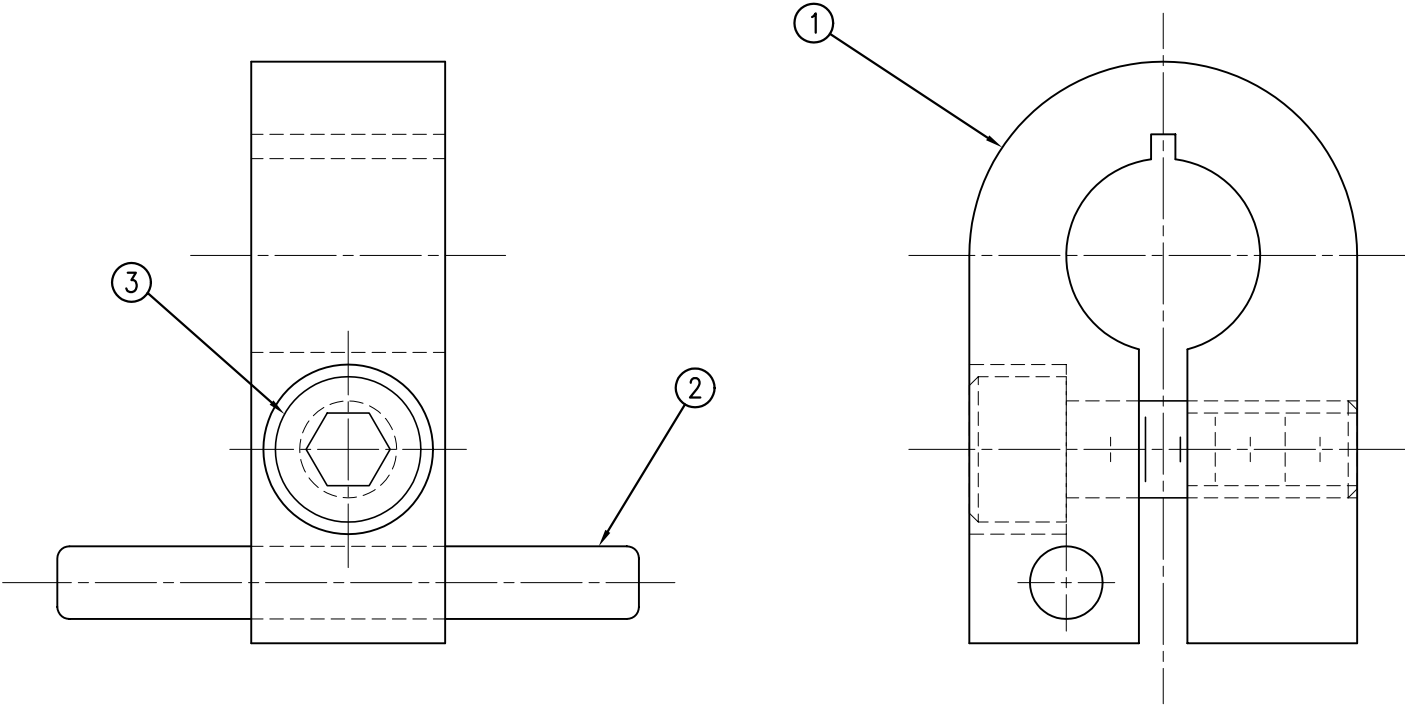
1" WIDE	-0105-1
2" WIDE	-0105-2
3" WIDE	-0105-3
4" WIDE	-0105-4



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 SERIES APPLICATOR: TAMP/BLOW/MERGE/RVB ASSEMBLY					PART: SPRING BLOCK ASSEMBLY				Dept. Code 70
REV. 0	REV. DESCRIPTION UPDATED TITLEBLOCK	REV. DATE 02/04/03	REV. BY: TDR	Scale: 1=1	Date: 02/21/98	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 211\ASS-211-0105-X		

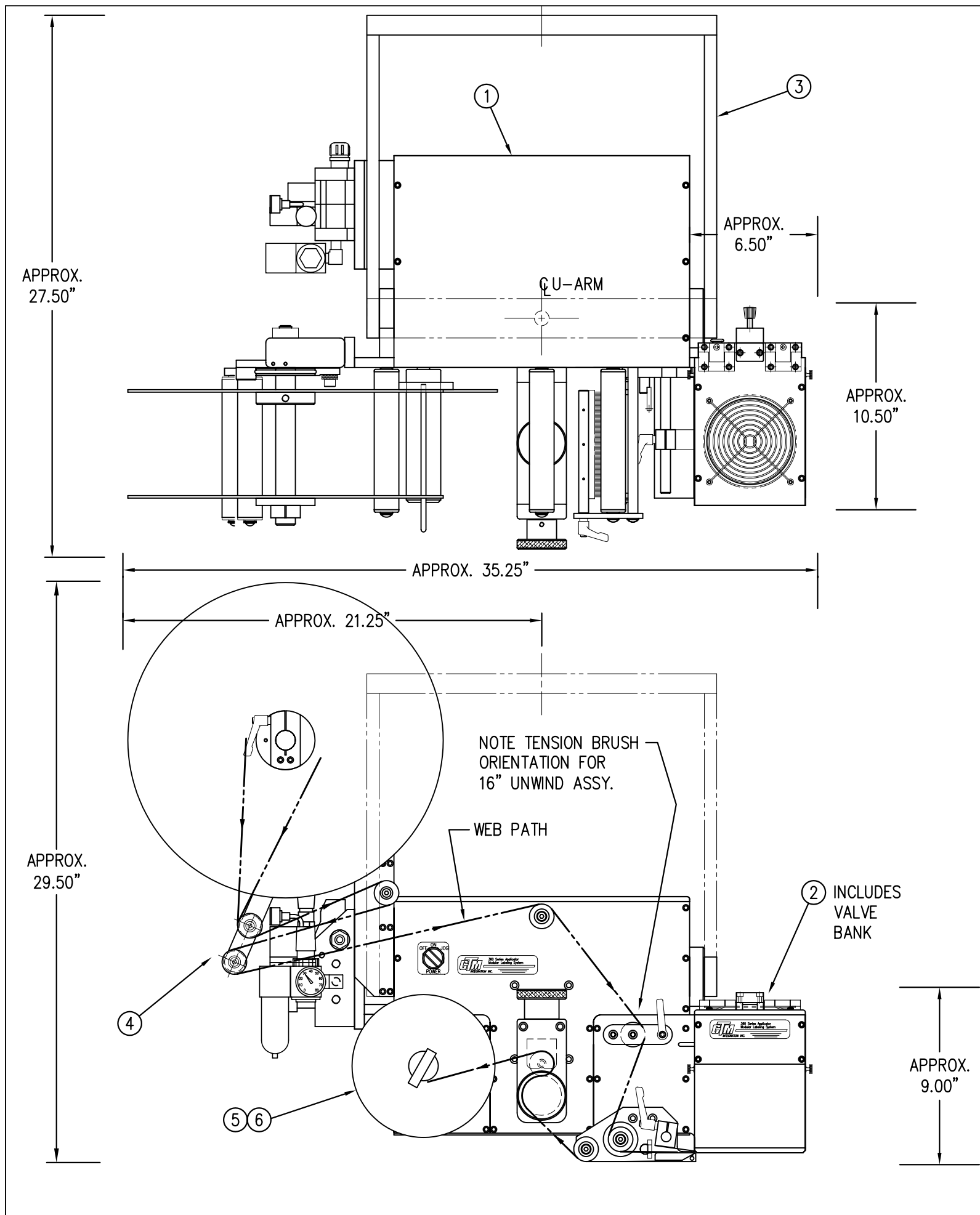
BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-0110		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	SPRING BLOCK STOP COLLAR	MP-211-0223	.
②	1	DOWEL PIN (DWG #MP-211-0224)	PM-FADP1001	.
③	1	SHCS, 1/4"-20 UNC x 3/4" LG.	NONE	.

ASS-211-0110



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 SERIES APPLICATOR: TAMP/BLOW/MERGE/RVB					PART: SPRING BLOCK STOP COLLAR ASSEMBLY				Dept. Code 70
REV. 0	REV. DESCRIPTION NEW RELEASE	REV. DATE 02/06/03	REV. BY: TDR	Scale: 2=1	Date: 02/18/02	DRAWN BY: TDR	F:\Engineering\Standard Parts\Applicator\360 211\ASS-211-0110		



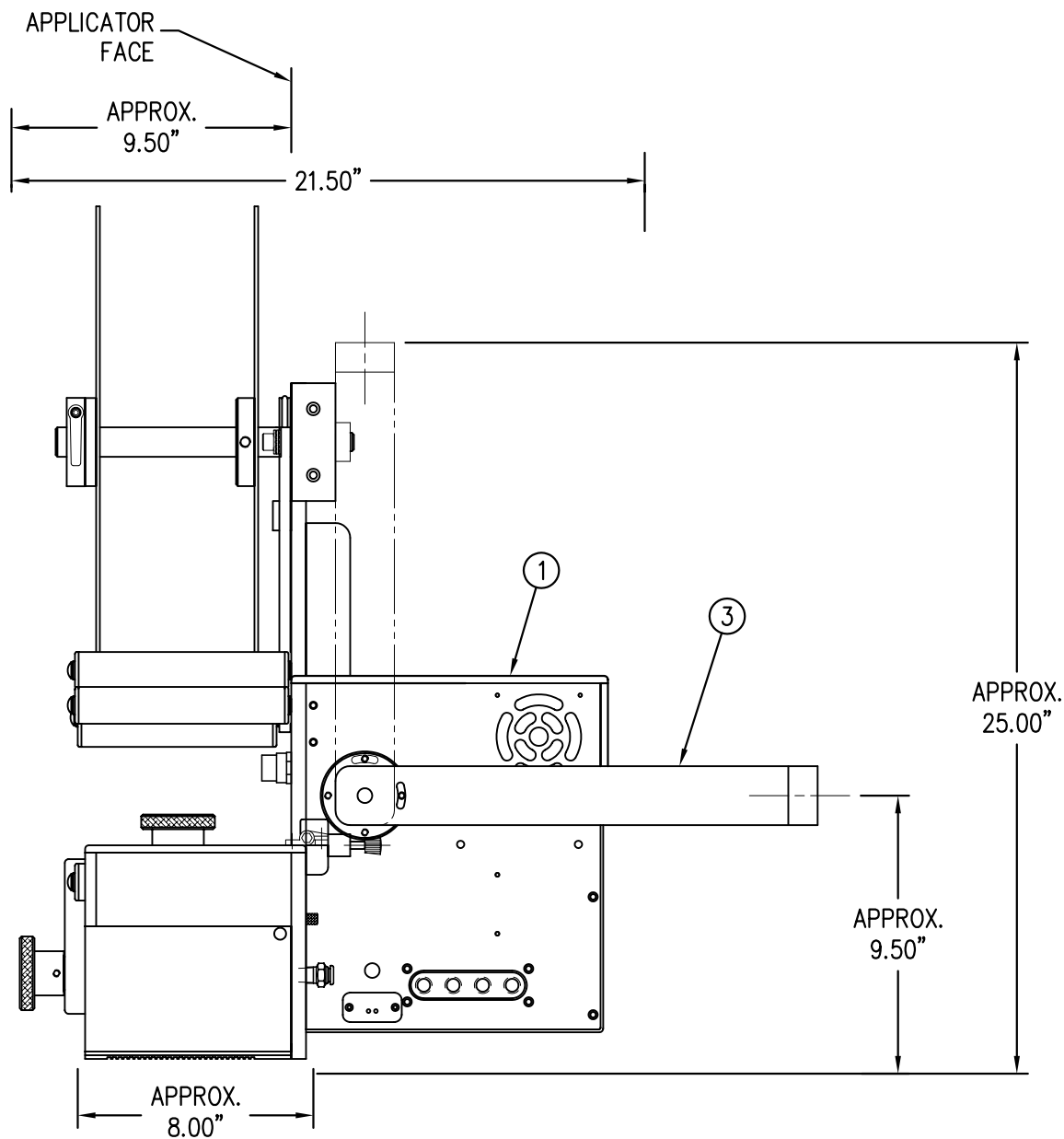


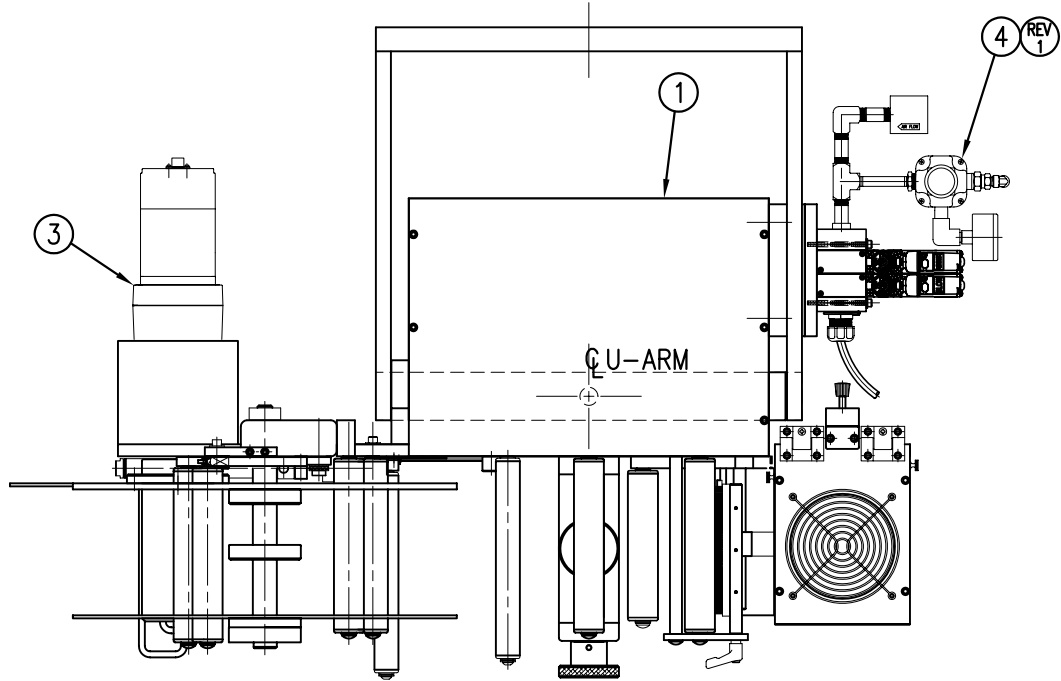
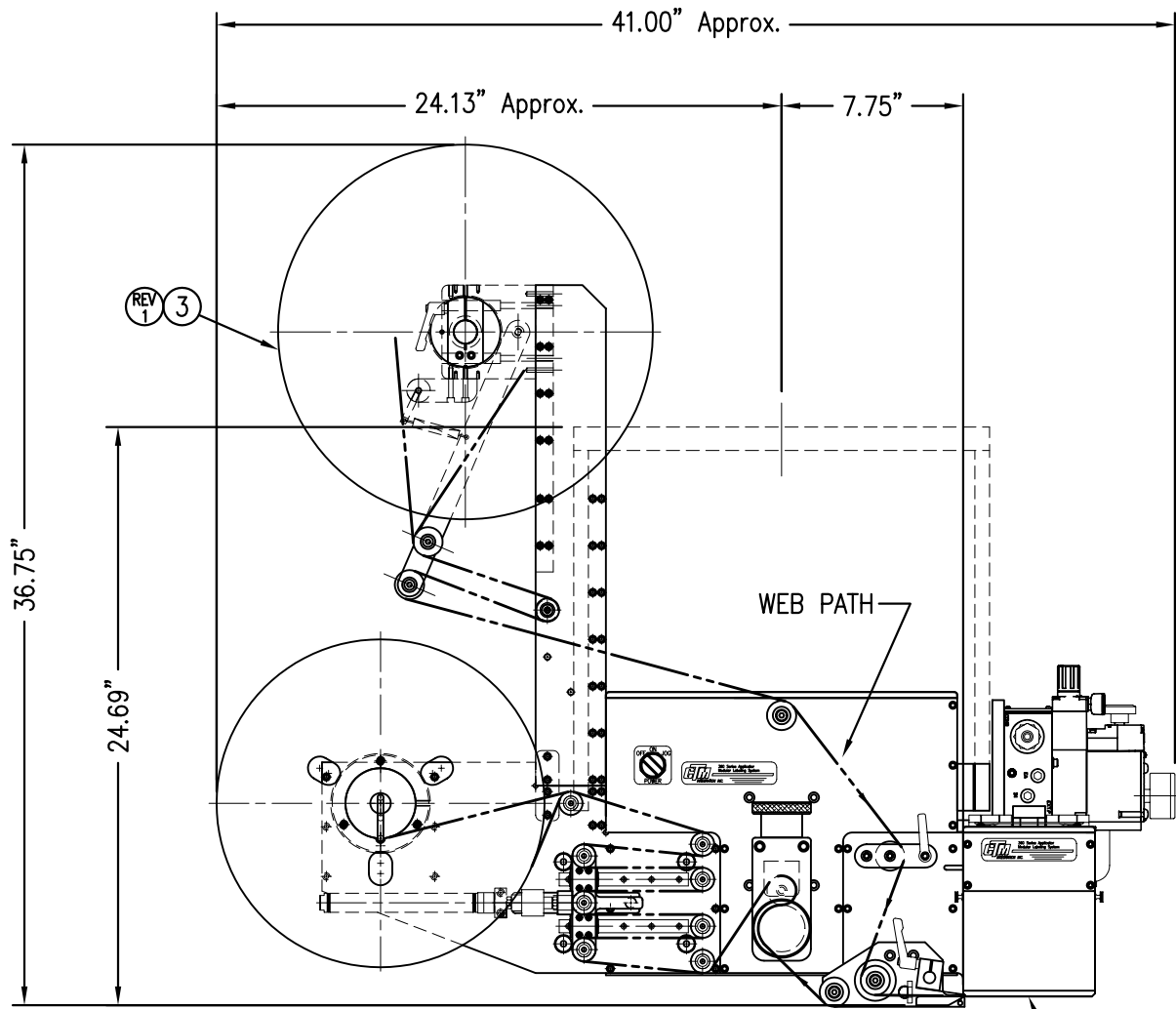
BILL OF MATERIAL				SOLD
CTM-211-0101RL-16X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; AIR BLOW NOSE MODULE	MOD-211-0101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 16" UNWIND w/ DISKS MOD.	MOD-200-3121R/L-5	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
ORDER THIS ITEM SEPARATELY: 1.) PRODUCT DETECT SENSOR				

CTM-211-0101R/L-16X	
STANDARD REWIND	-0101R/L-16S
COLLAPSIBLE REWIND	-0101R/L-16C
FILM REWIND	-0101R/L-16F

← STANDARD RWD
← FILM REWIND
← COLLAPSIBLE RWD

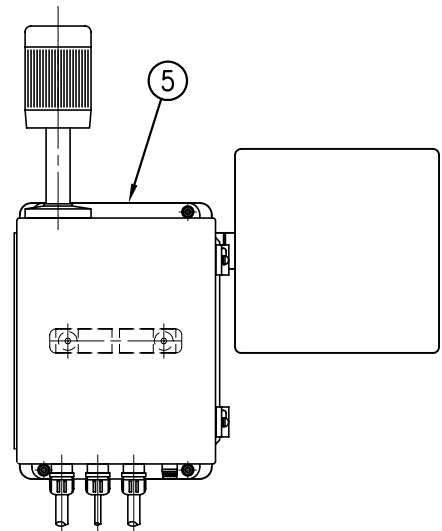
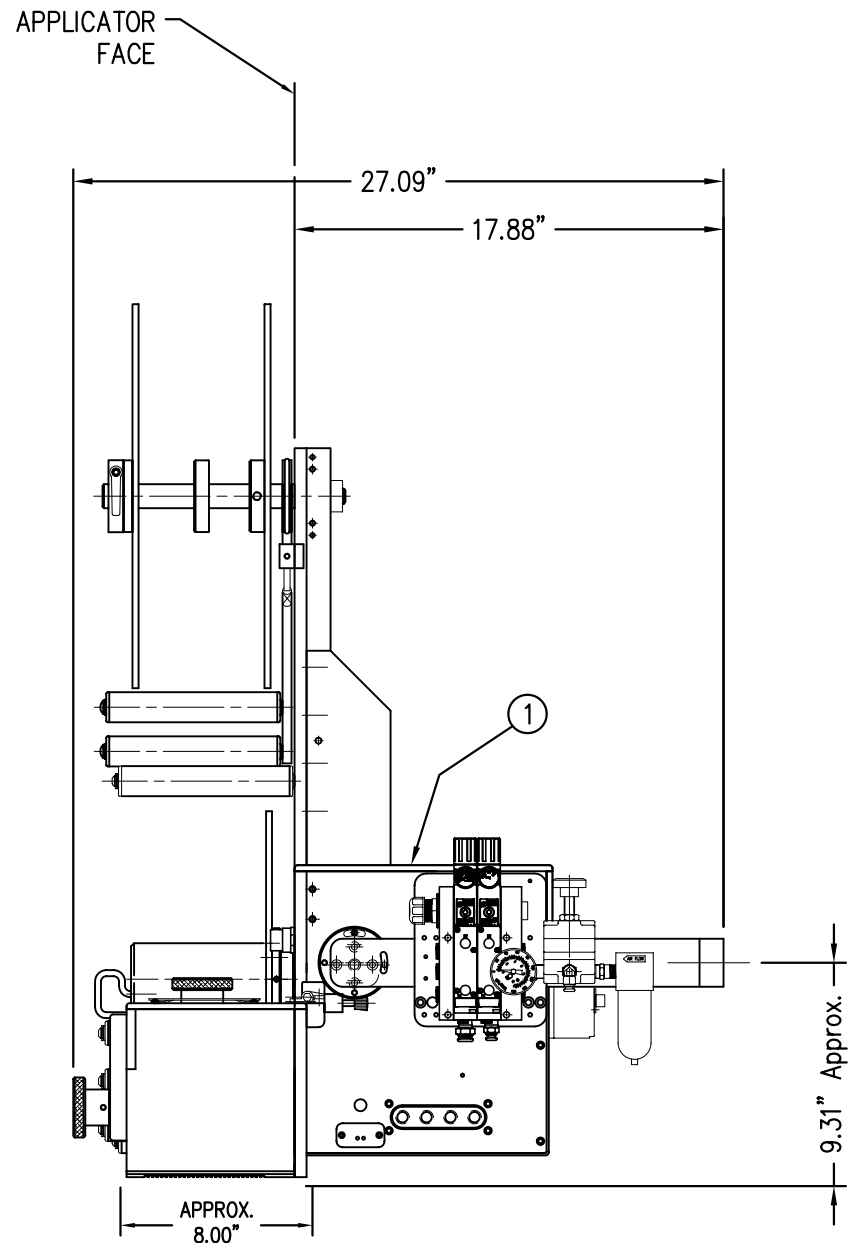
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-





2 INCLUDES VALVE BANK ASS'Y.

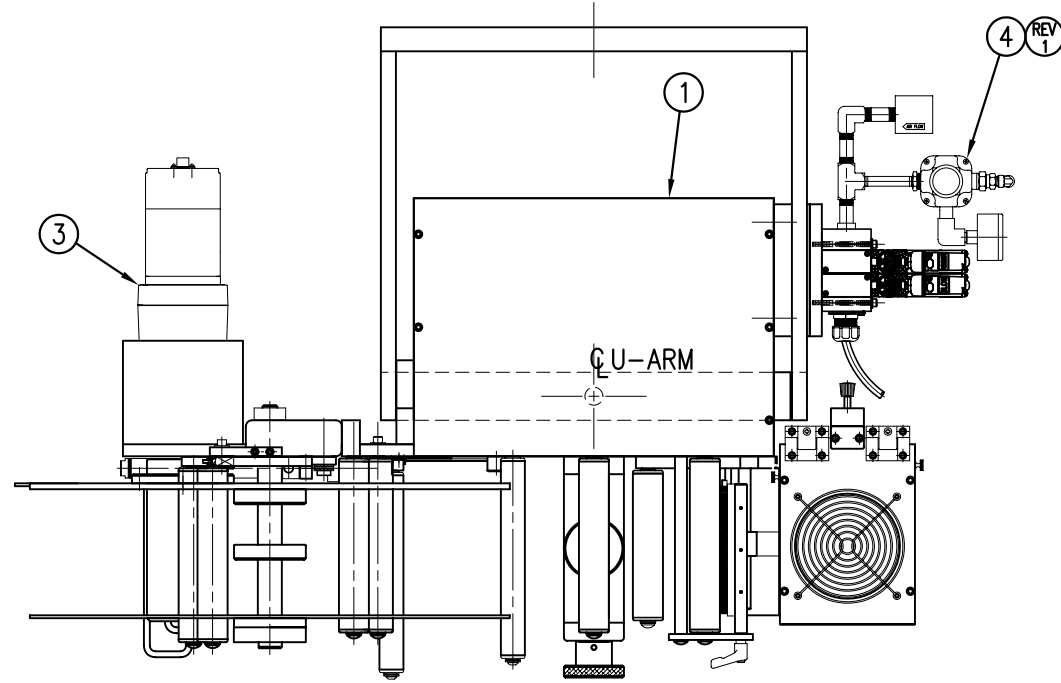
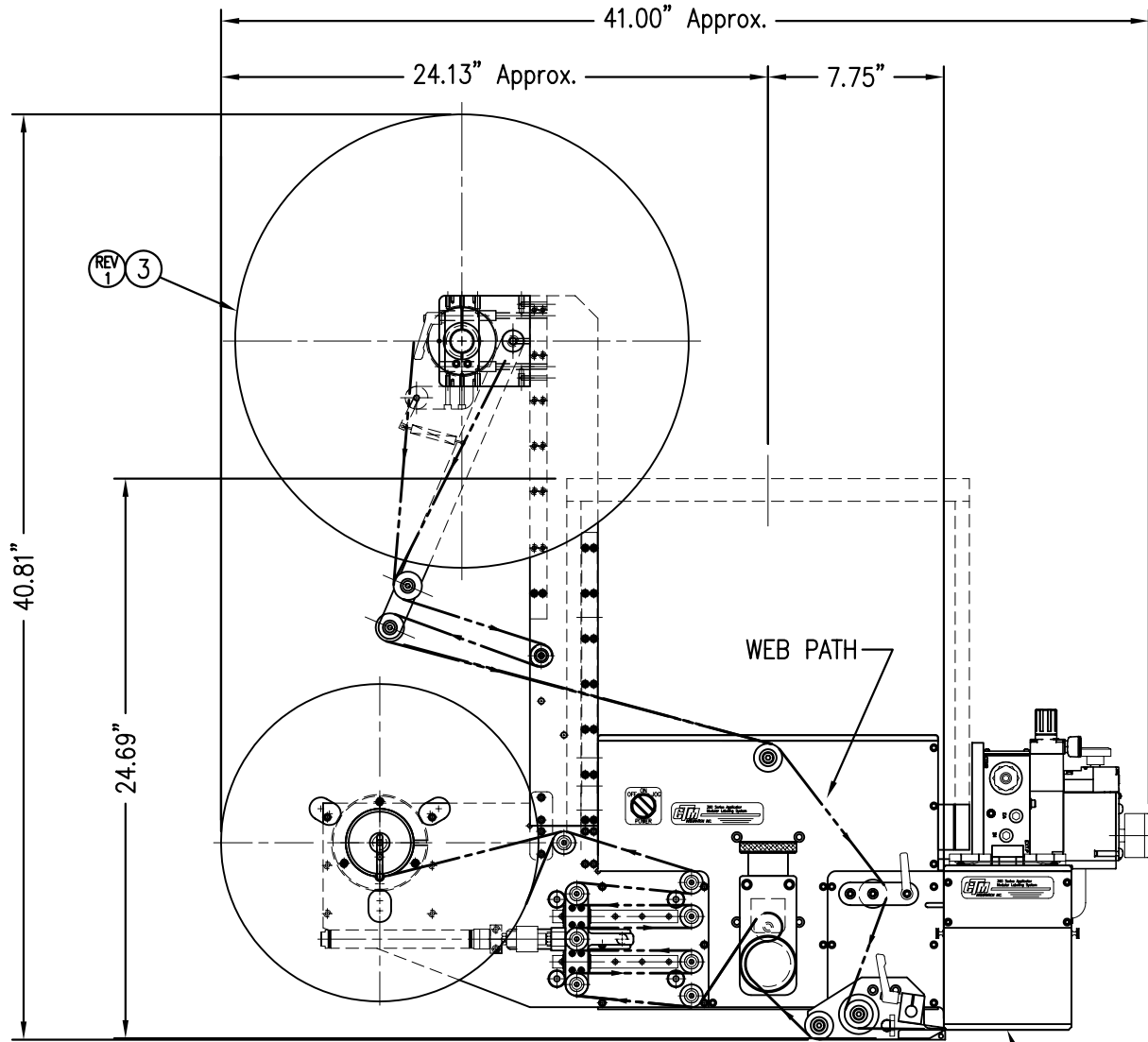
BILL OF MATERIAL				
CTM-211-0101R/L-16PXX				
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
1	1	CTM-200-0151R	5.00" WDE R.H. 360 CORE UNIT	LH
	1	CTM-200-0151L	5.00" WDE L.H. 360 CORE UNIT	RH
2	1	MOD-211-0101R	5.00" WDE R.H. AIR BLOW NOSE MODULE	
	1	MOD-211-0101L	5.00" WDE L.H. AIR BLOW NOSE MODULE	
3	1	MOD-200-3157R-5	5.0" WIDE R.H. 16" Pwr REWIND, Std MANDREL	LH
	1	MOD-200-3157L-5	5.0" WIDE L.H. 16" Pwr REWIND, Std MANDREL	RH
	1	MOD-200-3158R-5	5.0" WIDE RH 16" Pwr COLLAPSIBLE REWIND	LH
	1	MOD-200-3158L-5	5.0" WIDE LH 16" Pwr COLLAPSIBLE REWIND	RH
	1	MOD-200-3157R-5-RU	5.0" Wide, RH 16" Pwr Rewind, Std Mandrel, RU	LH
	1	MOD-200-3157L-5-RU	5.0" Wide, LH 16" Pwr Rewind, Std Mandrel, RU	RH
	1	MOD-200-3158R-5-RU	5.0" Wide, RH 16" Pwr Rewind, Collap. Mandrel, RU	LH
	1	MOD-200-3158L-5-RU	5.0" Wide, LH 16" Pwr Rewind, Collap. Mandrel, RU	RH
4	1	ASS-200-3106	HI/LO REGULATOR Assy,	
5	1	ASS-200-3161	ALARM LIGHT ASSEMBLY	
	1	OTDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE	



ALARM LIGHT / DISPLAY ASSEMBLY

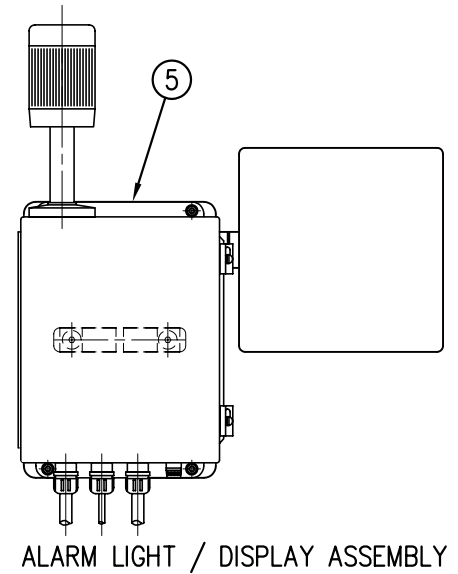
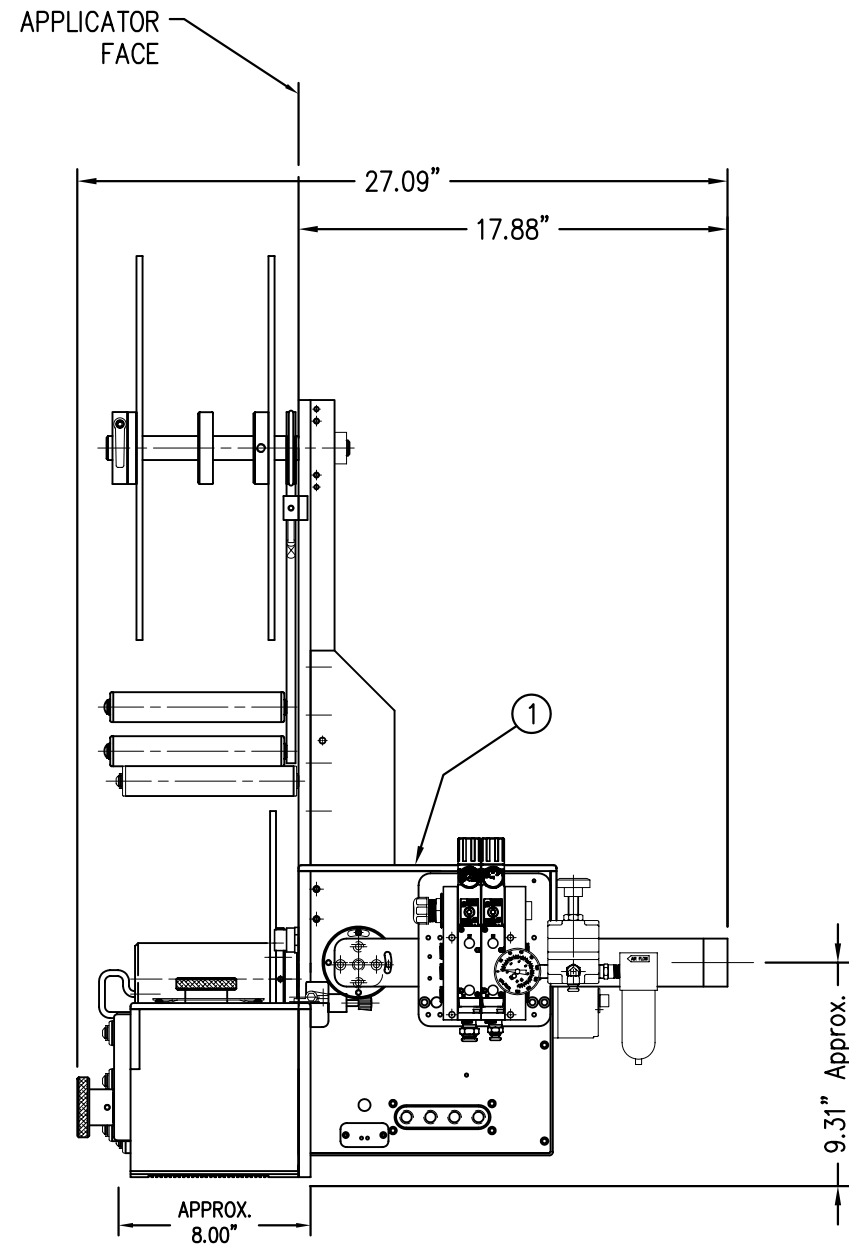
CTM-211-0101RL-16PXX	
R.H., STANDARD REWIND	-0101R-16PS
L.H., STANDARD REWIND	-0101L-16PS
R.H., COLLAPSIBLE REWIND	-0101R-16PC
L.H., COLLAPSIBLE REWIND	-0101L-16PC
R.H., STANDARD REWIND, REELS-UP	-0101R-16PS-RU
L.H., STANDARD REWIND, REELS-UP	-0101L-16PS-RU
R.H., COLLAPSIBLE REWIND, REELS-UP	-0101R-16PC-RU
L.H., COLLAPSIBLE REWIND, REELS-UP	-0101L-16PC-RU

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



② INCLUDES VALVE BANK ASS'Y.

BILL OF MATERIAL				
CTM-211-0101R/L-20PXX				
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	CTM-200-0151R	5.00" WDE R.H. 360 CORE UNIT	LH
	1	CTM-200-0151L	5.00" WDE L.H. 360 CORE UNIT	RH
②	1	MOD-211-0101R	5.00" WDE R.H. AIR BLOW NOSE MODULE	
	1	MOD-211-0101L	5.00" WDE L.H. AIR BLOW NOSE MODULE	
③	1	MOD-200-3156R-5	5.0" WIDE R.H. 20" Pwr REWIND, Std MANDREL	LH
	1	MOD-200-3156L-5	5.0" WIDE L.H. 20" Pwr REWIND, Std MANDREL	RH
	1	MOD-200-3159R-5	5.0" WIDE RH 20" Pwr COLLAPSIBLE REWIND	LH
	1	MOD-200-3159L-5	5.0" WIDE LH 20" Pwr COLLAPSIBLE REWIND	RH
	1	MOD-200-3156R-5-RU	5.0" Wide, RH 20" Pwr Rewind, Std Mandrel, RU	LH
	1	MOD-200-3156L-5-RU	5.0" Wide, LH 20" Pwr Rewind, Std Mandrel, RU	RH
	1	MOD-200-3159R-5-RU	5.0" Wide, RH 20" Pwr Rewind, Collap. Mandrel, RU	LH
	1	MOD-200-3159L-5-RU	5.0" Wide, LH 20" Pwr Rewind, Collap. Mandrel, RU	RH
④	1	ASS-200-3106	HI/LO REGULATOR Assy,	
⑤	1	ASS-200-3161	ALARM LIGHT ASSEMBLY	
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE	

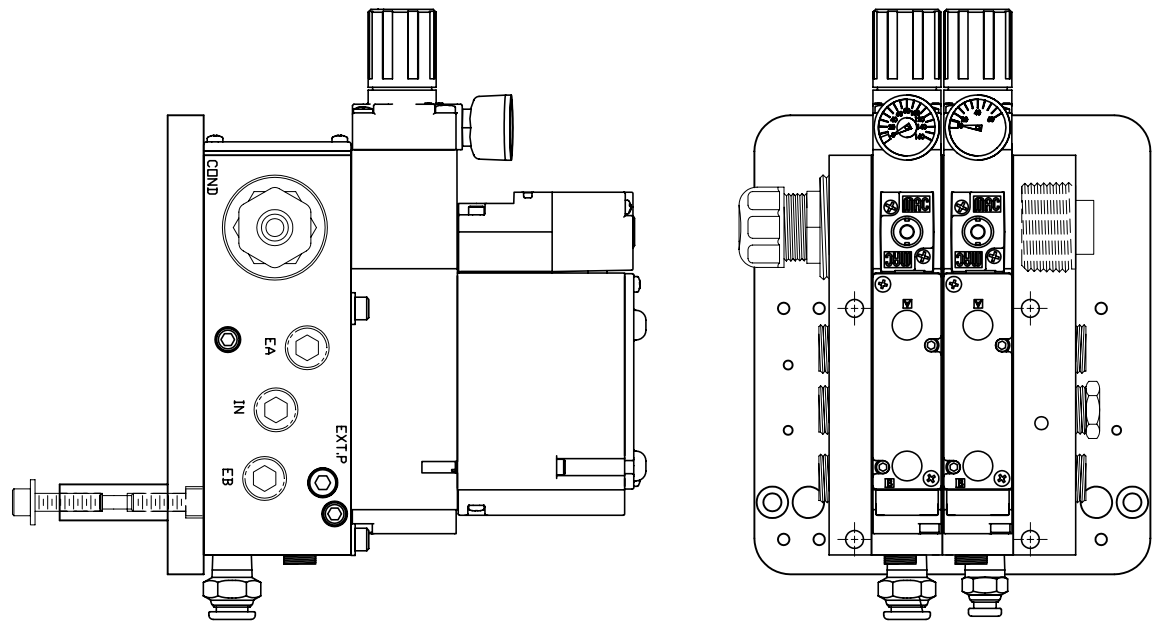


ALARM LIGHT / DISPLAY ASSEMBLY

R.H., STANDARD REWIND	-0101R-20PS
L.H., STANDARD REWIND	-0101L-20PS
R.H., COLLAPSIBLE REWIND	-0101R-20PC
L.H., COLLAPSIBLE REWIND	-0101L-20PC
R.H., STANDARD REWIND, REELS-UP	-0101R-20PS-RU
L.H., STANDARD REWIND, REELS-UP	-0101L-20PS-RU
R.H., COLLAPSIBLE REWIND, REELS-UP	-0101R-20PC-RU
L.H., COLLAPSIBLE REWIND, REELS-UP	-0101L-20PC-RU

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

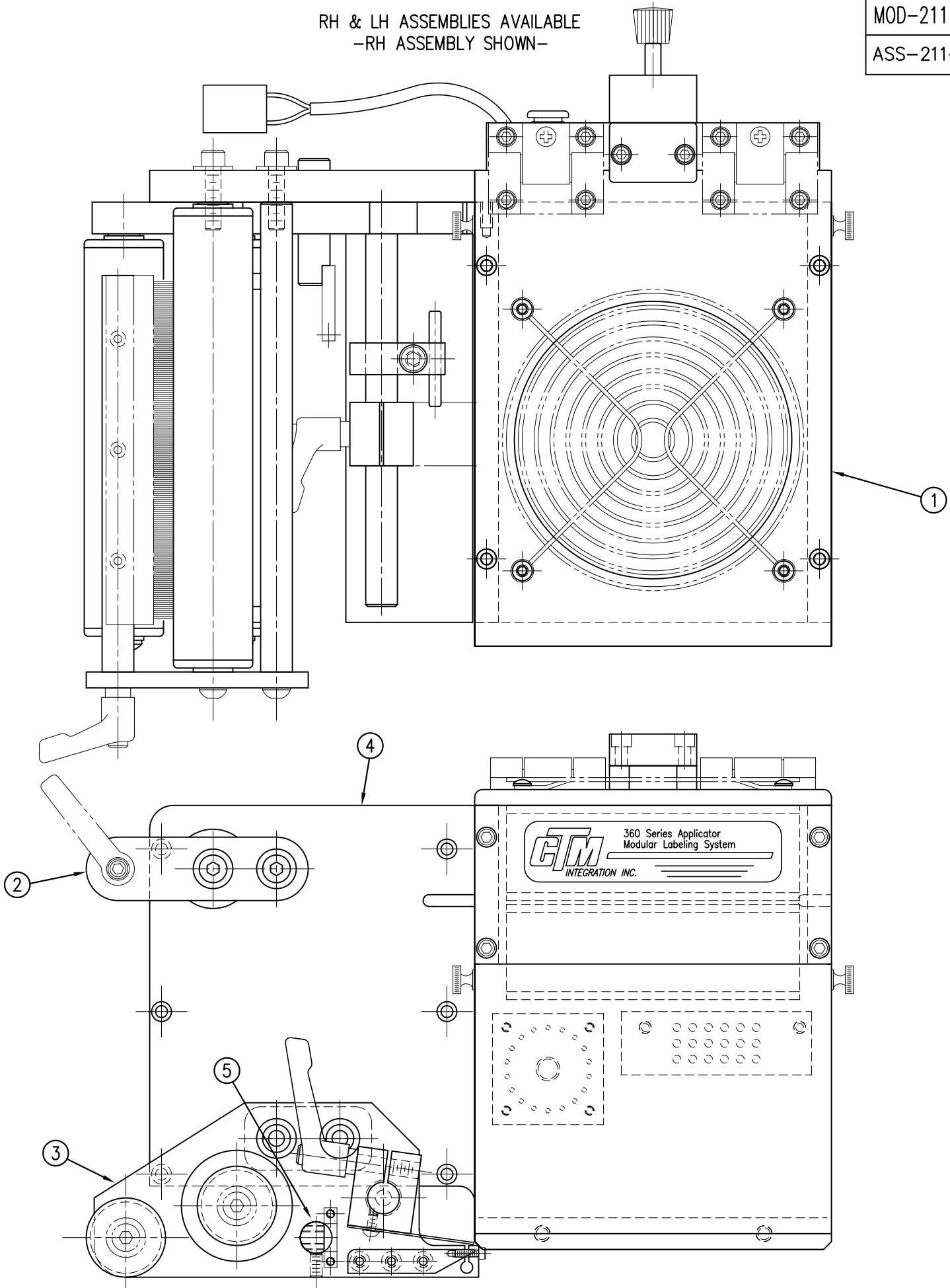
BILL OF MATERIAL			
MOD-211-0101R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-211-0101R/L	AIR BLOW BOX w/ TRANSITION PLATE
⑥	1	ASS-211-0106M	AIR BLOW VALVE BANK ASSEMBLY (MAC)



NOT TO SCALE

⑥ VALVE BANK ASSEMBLY

BILL OF MATERIAL			
ASS-211-0101R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-211-0104-A	VACUUM BOX ASSEMBLY
②	1	ASS-200-0126R/L	TENSION BRUSH ASSEMBLY
③	1	ASS-211-0102R/L	AIR BLOW PEEL EDGE ASSEMBLY
④	1	MP-211-0215	AIR BLOW BOX TRANSITION PLATE
⑤	1	ASS-211-0108-2	FIBER OPTIC SENSOR w/2" Lg. MTG. SHAFT
6		PM-FASH40128	SHCS, #10-32 x 5/8" Lg. SS

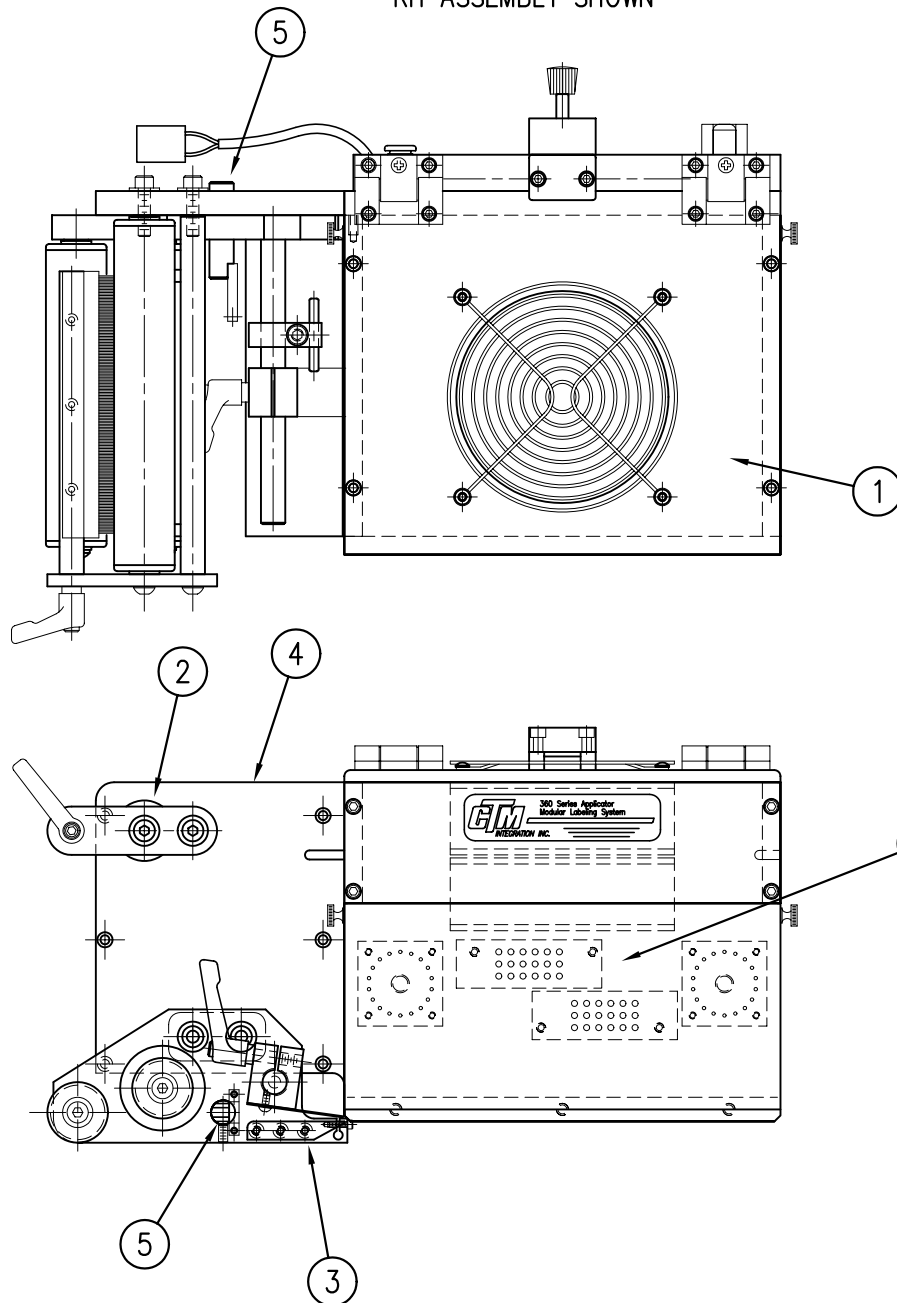


MOD-211-0101R/L  
ASS-211-0101R/L

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 SERIES APPLICATOR: AIR BLOW BOX		PART: 5" AIR BLOW BOX w/ TRANSITION PLATE	
REV. DESCRIPTION	REV. DATE	REV. BY:	Scale: 1=2
0 ADDED HINGED BRACKET; UPDATED TITLEBLOCK	02/04/03	TDR	06/23/97
		DRAWN BY:	BOB S.
		Date:	06/23/97
		Dept. Code	70
		F:\Engineering\Standard Parts\Appliator\360	211\MOD-211-0101RL



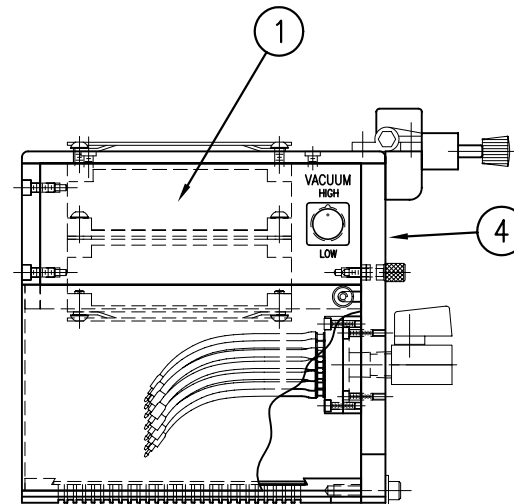
RH & LH ASSEMBLIES AVAILABLE  
- RH ASSEMBLY SHOWN -



BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-211-0101ER/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
1	1	AIR BLOW BOX w/TRANSITION PLATE	ASS-211-0101ER/L	S
6	1	AIR BLOW VALVE BANK ASSEMBLY	ASS-211-0106E	S

MOD-211-0101ER/L  
ASS-211-0101ER/L

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-0101ER/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VACUUM BOX ASSEMBLY	ASS-211-0104E-A	.
②	1	TENSION BRUSH ASSEMBLY	ASS-200-0126R/L	S
③	1	AIR BLOW PEEL EDGE ASSEMBLY	ASS-211-0102R/L	S
④	1	AIR BLOW BOX TRANSITION PLATE	MP-211-0215E	.
⑤	1	STANDARD FIBER OPTIC SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	.
6		SHCS, #10-32 x 5/8 Lg.	.	.



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.

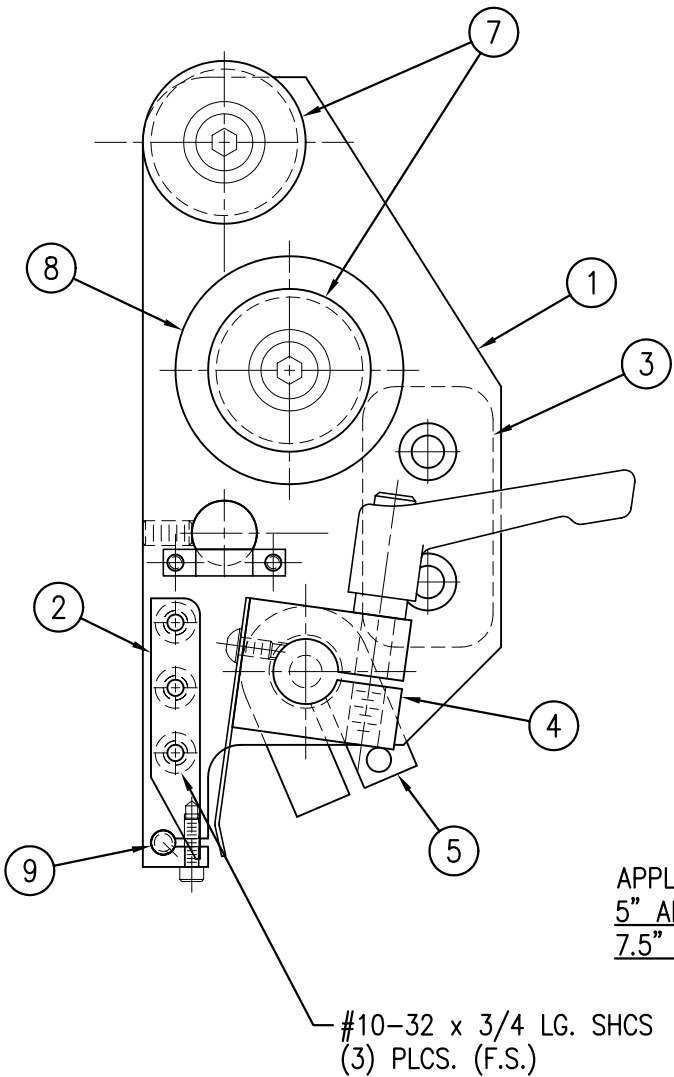
TITLE: 360 SERIES APPLICATOR: 5.5 x 9.0 AIR BLOW BOX

PART: BLOW BOX ASSEMBLY w/TRANSITION PLATE

Dept. Code  
70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\System Components:
0	-	-	XXX	1=4	03/01/06	J. Greeneisen	360\MOD-211-0101ERL

BILL OF MATERIAL			
ASS-211-X102R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-211-0212	PEEL EDGE MOUNTING PLATE
②	1	MP-211-X208	PEEL EDGE (w/ TAPE)
③	1	MP-211-0207	PEEL EDGE TIE NUT
④	1	ASS-211-0105-1	SPRING BLOCK ASSEMBLY
	2	ASS-211-0105-1	SPRING BLOCK ASSEMBLY
⑤	1	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY
	2	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY
⑥	1	PM-211-X206	SPRING BLOCK MOUNTING SHAFT
⑦	2	ASS-211-X120	IDLER ROLLER ASSEMBLY
⑧	2	MP-211-0210	GUIDE COLLAR w/ SET SCREW
⑨	1	MP-211-X217-X	AIR ASSIST TUBE
10	2	PM-FASH430081	SHCS, 1/4-20 x 1.25 LG. SS
ORDER ONE OF THE FOLLOWING SENSOR OPTIONS SEPARATELY			
#ASS-211-0108 ~ SENSOR (STD. MTG. ROD)			
#ASS-211-0107 ~ SENSOR (EXTENDED REACH)			

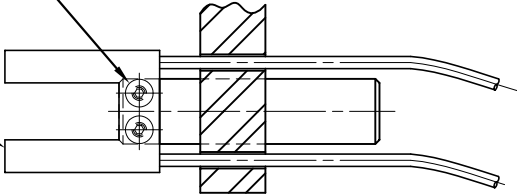


APPLY (1) STRIP OF UHMW TAPE TO PEEL EDGE  
5" APPLICATOR ~ 6" WIDE x 4-1/8" LG.  
7.5" APPLICATOR ~ 5-7/16" WIDE x 9-5/8" LG.

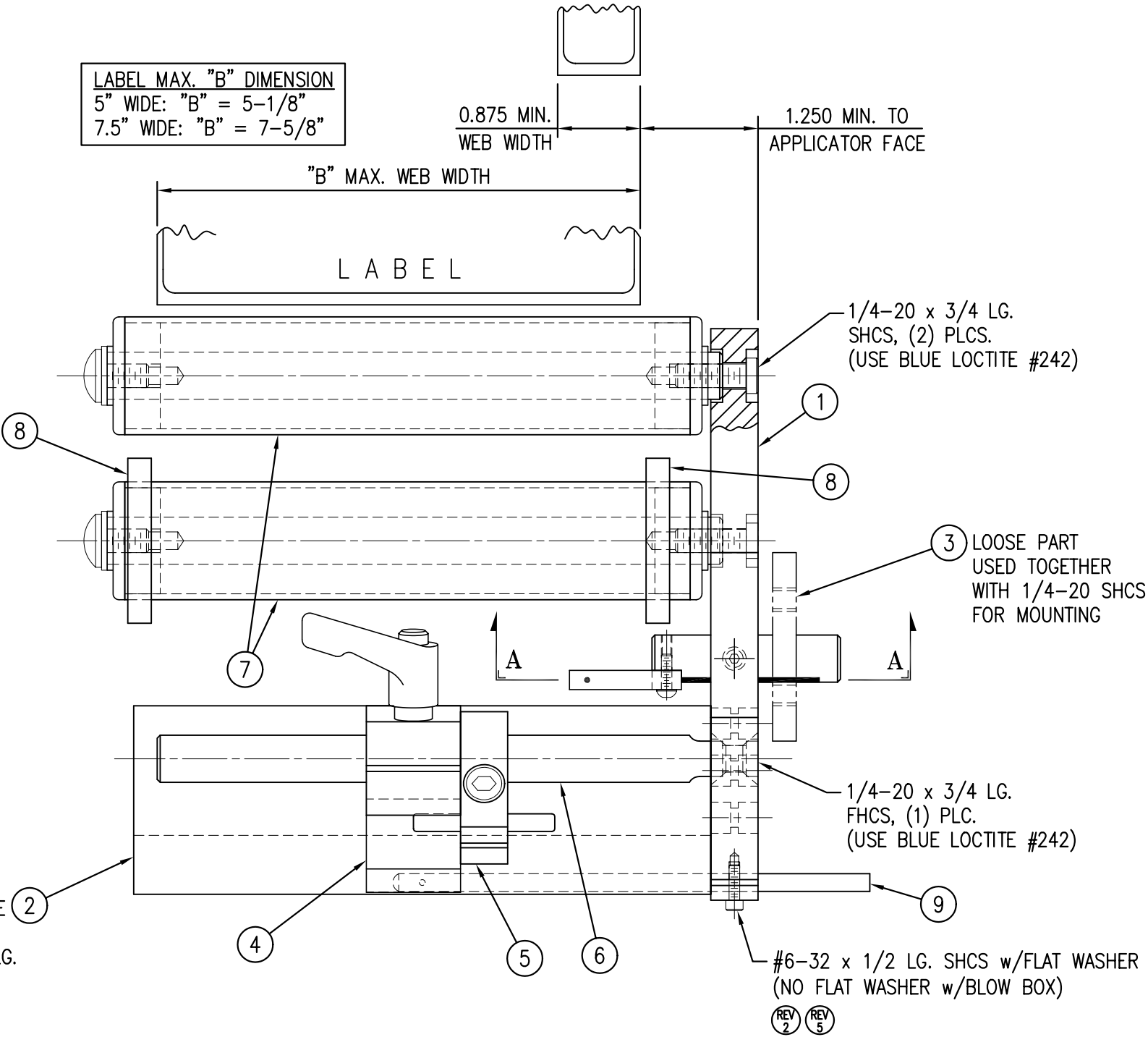
#10-32 x 3/4 LG. SHCS  
(3) PLCS. (F.S.)

NOTE: SENSOR NOT INCLUDED IN ASS'Y  
ORDER SEPARATELY ~ SEE B.O.M. NOTE

#4-40 x 3/8 LG.  
BHCS - 2 PLACES



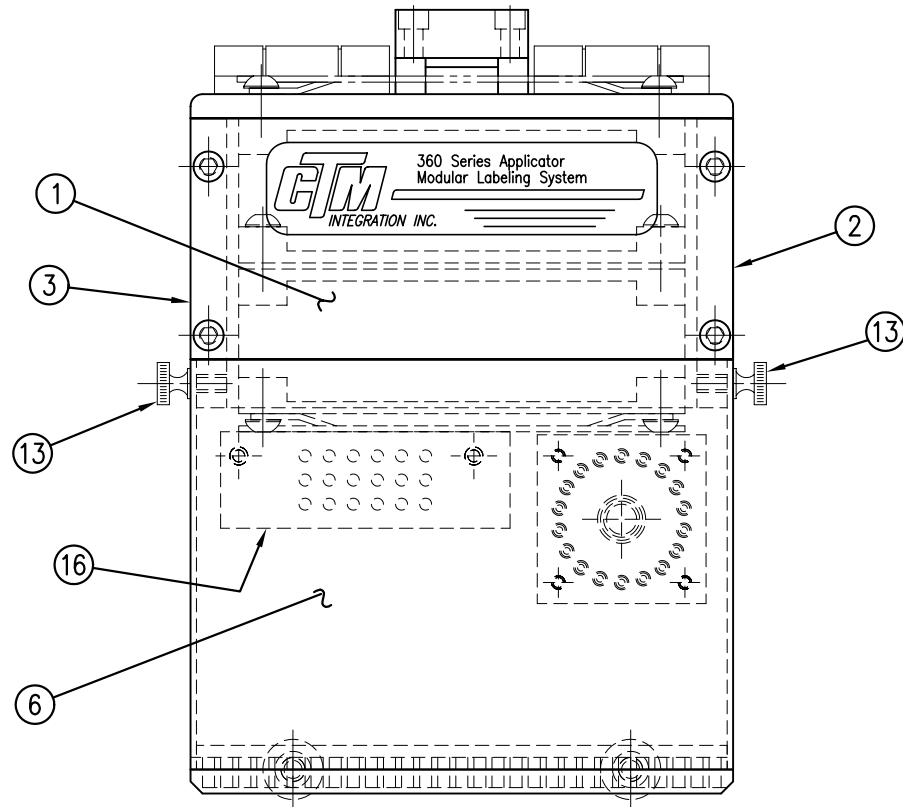
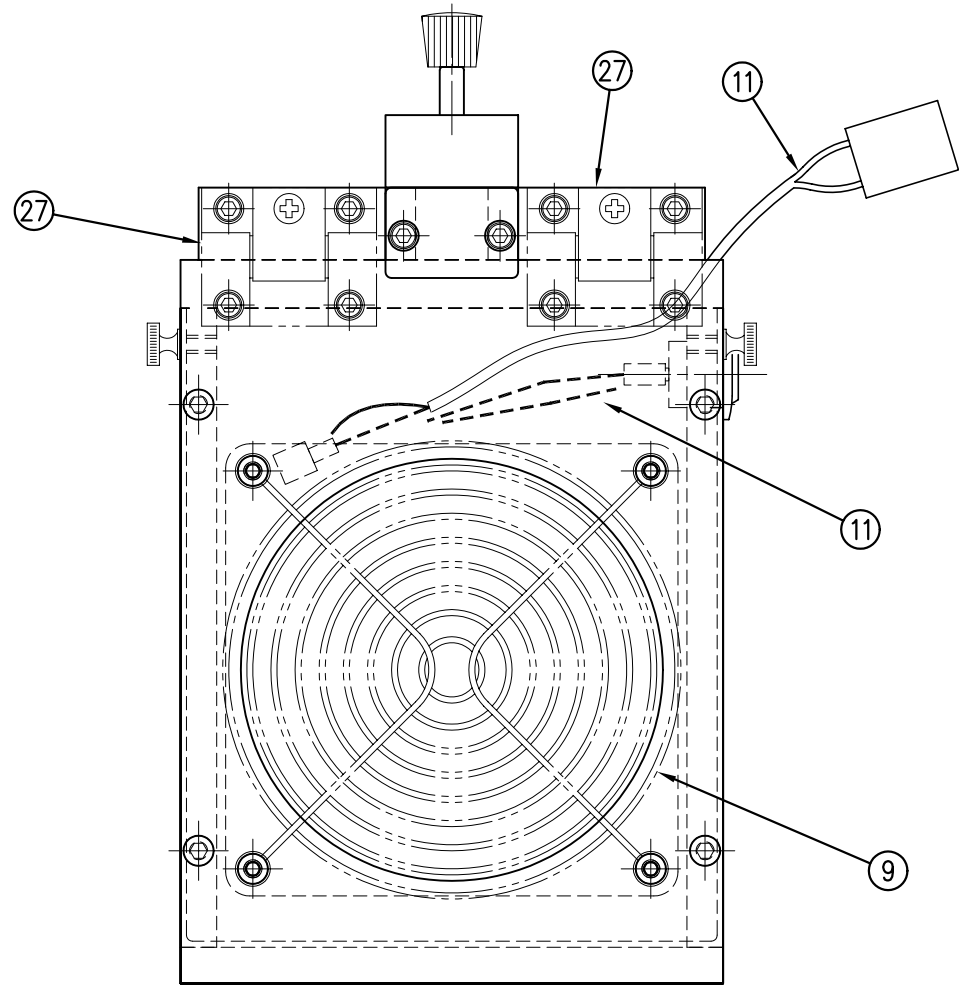
SECTION "A"



RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-  
-5" WIDE SHOWN-

ASS-211-X102R/L  
5" WIDE -0102R/L  
7.5" WIDE -2102R/L  
REFER TO CTM DWG.#  
ASS-214-5102R/L  
FOR 10" WIDTH

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.			
APPLICATOR SERIES: 360 SERIES		GROUP: AIR BLOW/RVB/TAMP SNORKLES	
REV: 6		REV: 5	
REV. DESCRIPTION		REV. DATE	
6		04/18/06	
REV. BY: TK		REV. BY: TK	
Scale: 1=1.5		Date: 06/23/97	
DRAWN BY: BOB S.		TITLE: PEEL EDGE ASSEMBLY	
F:\Engineering\Standard Parts\Applcator\360\Shared Parts		Dept. Code 70	
PEEL EDGE ASS-211-X102RL			



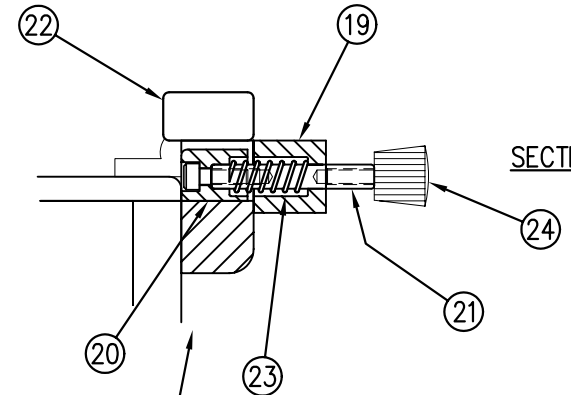
BILL OF MATERIAL				SOLD
ASS-211-0104				.
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
	1	1	FAN BOX FRONT	MP-211-0203
	2	1	FAN BOX SIDE (SILK SCREEN)	MP-211-0202R
	3	1	FAN BOX SIDE	MP-211-0202L
	4	1	FAN BOX TOP	MP-211-0213
	5	1	BLOW BOX GRID	MP-211-0214
	6	1	BLOW BOX ACCESS DOOR	PM-211-0211
	7	1	BLOW BOX TOP FAN	MP-211-0218
	8	1	BLOW BOX BOTTOM FAN	MP-211-0219
	9	2	FAN HOUSING GUARD	PE-FAN1080
	10	1	HI/LO AIR BLOW SWITCH	PE-SW3000
		1	BLOW BOX FAN WIRING HARNESS FOR STANDARD BLOW BOX	PE-200-0413-A
	11	1	BLOW BOX FAN WIRING HARNESS FOR 6" & 12" SNORKLES	ASS-200-0413-B
		1	BLOW BOX FAN WIRING HARNESS FOR 18" & 24" SNORKLES	ASS-200-0413-C
	12	1	PRESTOLOK BRASS FITTING (1/4 NPT MALE - 3/8 TUBE FEMALE)	PM-PF1020
		1	TUBE FTG, ELBOW (3/8 TUBE-1/4 NPT)	PM-PF1060
	13	2	BRASS THUMB SCREWS	PM-TS1010
	14	1	AIR BLOW TUBE MANIFOLD SUB-BASE	MP-211-0220
	15	1	AIR BLOW TUBE MANIFOLD ASS'Y.	ASS-211-0103
	16	1	AIR BLOW AIR TUBE HOLDER	MP-211-0222
	17	1	BLOW BOX GRID COVER	MP-211-0227
	18	1	HINGE BRACKET	MP-211-0240

BILL OF MATERIAL				SOLD
ASS-211-0104 (continued)				.
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
	19	1	SPRING PIN BRACKET	MP-211-0241
	20	1	STOP BLOCK	MP-211-0242
	21	1	SPRING PIN	MP-211-0243
	22	1	STOP BLOCK	MP-211-0244
	23	1	COMPRESSION SPRING	PM-FASP30430
	24	1	PLASTIC KNOB	PM-HK1070
	25	2	CAPTIVE SCREW	PM-TS1050
	26	2	SPLIT WASHER	PM-FAW30615
	27	2	ADJUSTABLE FRICTION HINGE	PM-HI1030
		1	WARNING LABEL	PM-WL1220

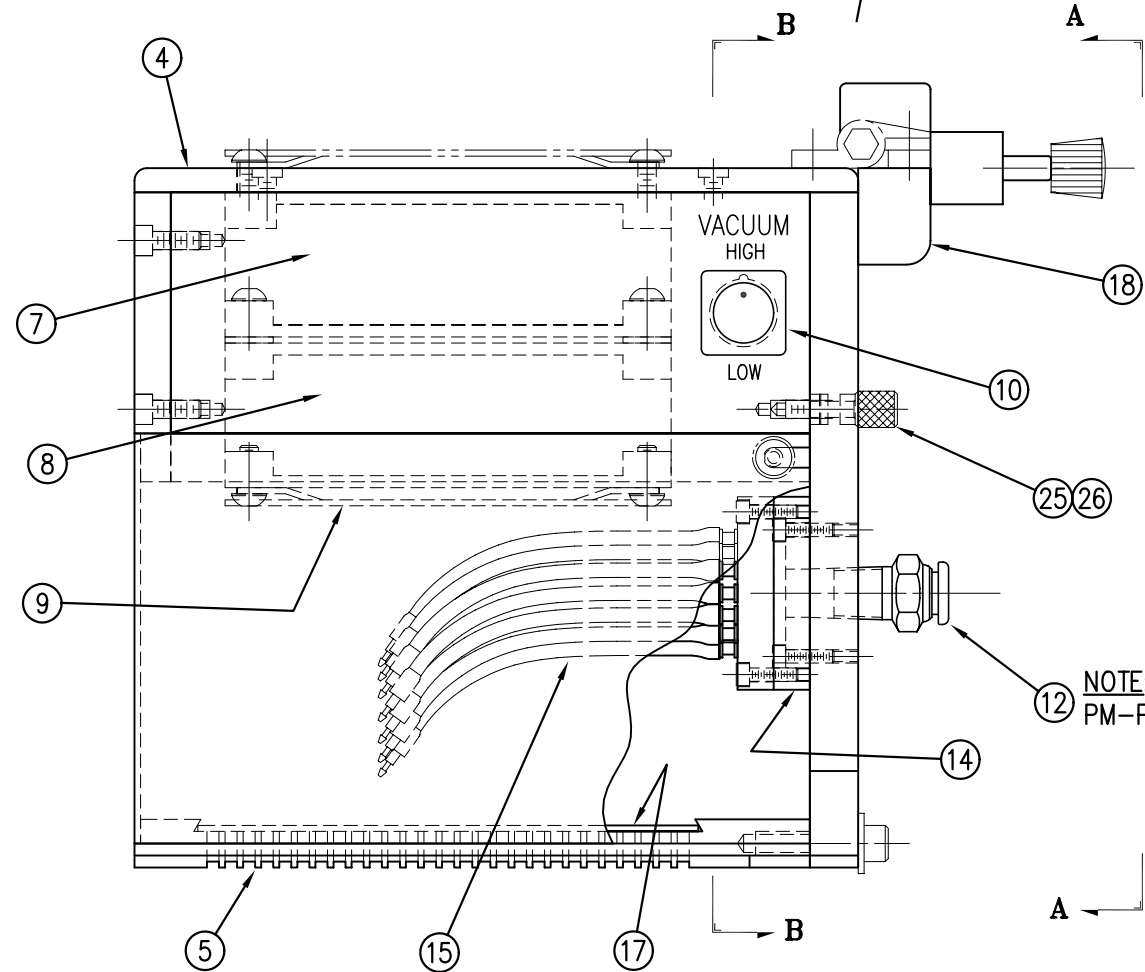
REV 2

FOR STD.

FOR SNORKLES



SECTIONAL VIEW

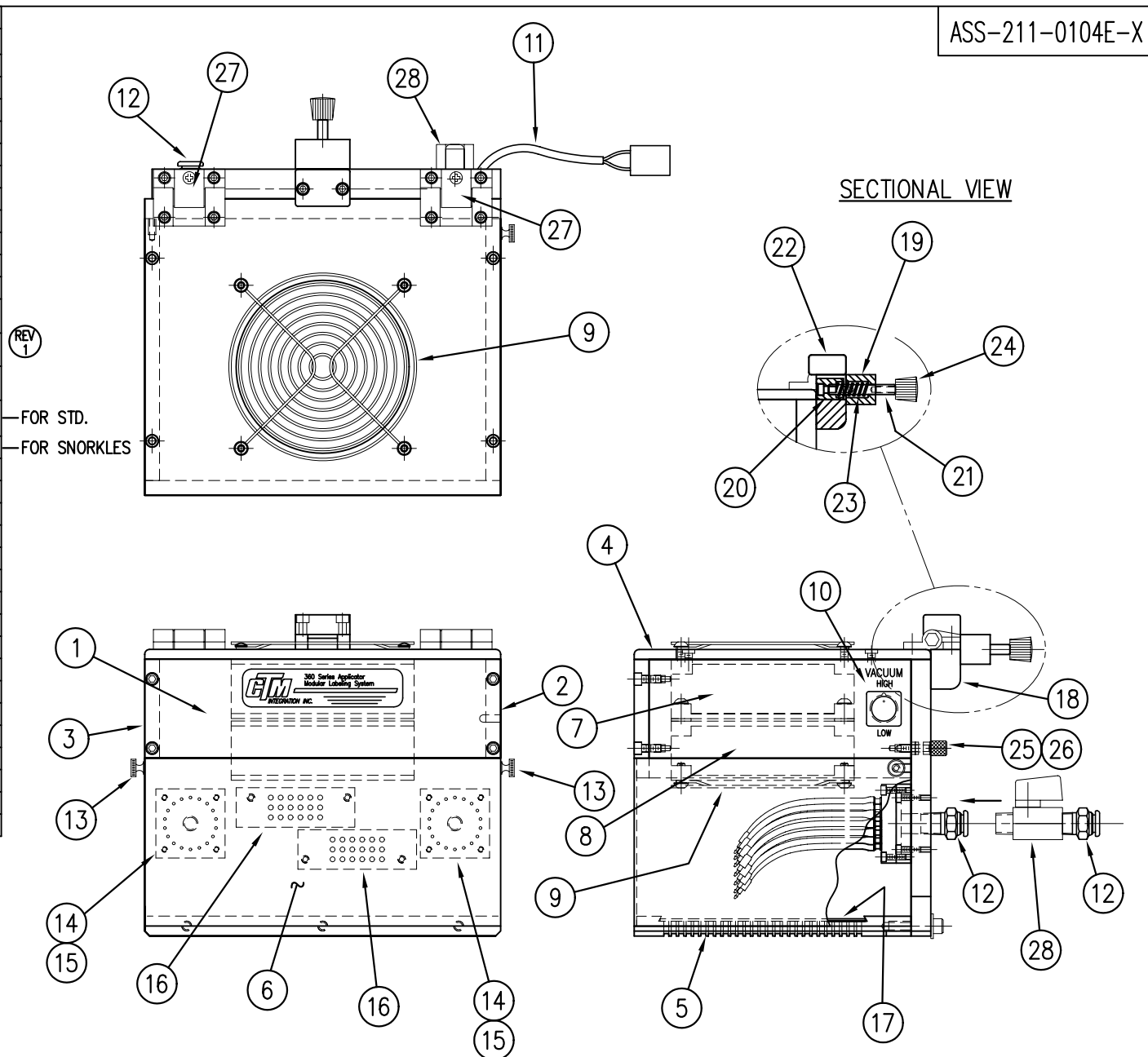


NOTE: CHANGE TO ELBOW PM-PF1060 FOR SNORKLES

ASS-211-0104-X  
FOR STD. BLOW BOX -0104-A  
6 & 12 SNORKLES -0104-B  
18 & 24 SNORKLES -0104-C

BILL OF MATERIAL			SOLD
ASSEMBLY	ASS-211-0104E-X		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	FAN BOX FRONT	MP-211-0203E
②	1	FAN BOX SIDE (SILK SCREEN)	MP-211-0202R
③	1	FAN BOX SIDE	MP-211-0202L
④	1	FAN BOX TOP	MP-211-0213E
⑤	1	BLOW BOX GRID	MP-211-0214E
⑥	1	BLOW BOX ACCESS DOOR	PM-211-0211E
⑦	1	BLOW BOX TOP FAN	MP-211-0218
⑧	1	BLOW BOX BOTTOM FAN	MP-211-0219
⑨	2	FAN HOUSING GUARD	PE-FAN1080
⑩	1	HI/LO AIR BLOW SWITCH	PE-SW3000
⑪	1	BLOW BOX FAN WIRING HARNESS FOR STANDARD BLOW BOX	PE-200-0413-A
	1	BLOW BOX FAN WIRING HARNESS FOR 6" & 12" SNORKLES	ASS-200-0413-B
	1	BLOW BOX FAN WIRING HARNESS FOR 18" & 24" SNORKLES	ASS-200-0413-C
⑫	2	PRESTOLOK BRASS FITTING (1/4 NPT MALE - 3/8 TUBE FEMALE)	PM-PF1020
	2	TUBE FTG. ELBOW (3/8 TUBE-1/4 NPT)	PM-PF1060
⑬	2	BRASS THUMB SCREWS	PM-TS1010
⑭	2	AIR BLOW TUBE MANIFOLD SUB-BASE	MP-211-0220
⑮	2	AIR BLOW TUBE MANIFOLD ASS'Y.	ASS-211-0103E
⑯	2	AIR BLOW AIR TUBE HOLDER	MP-211-0222
⑰	1	BLOW BOX GRID COVER	MP-211-0227E
⑱	1	HINGE BRACKET	MP-211-0240E
⑲	1	SPRING PIN BRACKET	MP-211-0241
⑳	1	STOP BLOCK	MP-211-0242
㉑	1	SPRING PIN	MP-211-0243
㉒	1	STOP BLOCK	MP-211-0244
㉓	1	COMPRESSION SPRING	PM-FASP30430
㉔	1	PLASTIC KNOB	PM-HK1070
㉕	2	CAPTIVE SCREW	PM-TS1050
㉖	2	SPLIT WASHER	PM-FAW30615
㉗	2	ADJUSTABLE FRICTION HINGE	PM-HI1030
㉘	1	BALL VALVE, 1/4 NPT (MALE-FEMALE)	PM-FT1500
㉙	1	WARNING LABEL	PM-WL1220

NOTE: TUBE HOLDERS SHOWN  
IN RH LAYOUT



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 SERIES APPLICATOR: 5.5 x 9 AIR BLOW BOX

PART: BLOW BOX ASSEMBLY w/TRANSITION PLATE

Dept. Code  
70

REV. 2 REV. DESCRIPTION  
ITEM #12 QUANTITY WAS 1; ITEM #15 NOW FOR EXT. BOX

REV. DATE  
03/22/07

REV. BY:  
TDR

Scale:  
1=4

Date:  
03/01/06

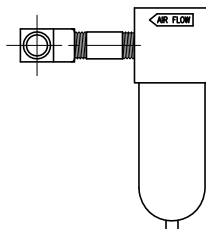
DRAWN BY:  
J. Greeneisen

F:\Engineering\Standard Parts\System Components:  
360\ASS-211-0104E-X

BILL OF MATERIAL			
ASS-211-0106M			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0202	VALVE FASTENING PLATE
②	1	MP-214-0206	VALVE MOUNTING PLATE
③	1	ASS-200-0452M	VALVE CABLE
④	1	PM-VA2358M	2 STATION MAC VALVE BANK
⑤	1	PE-CO2000	CORD GRIP
⑥	1	PE-COND1084	STEEL REDUCER
⑦	2	PM-FI1200	1/4" NPT PLUG
⑧	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑨	5	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
⑩	1	PM-PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
⑪	1	PM-PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
⑫	1	ASS-214-0106	AIR FILTER ASSEMBLY
⑬	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑭	1	PM-MU1027	MUFFLER
○	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
○	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
○	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
○	4	PM-FAW30265	#10 SS FLAT WASHER
○	2	PM-FAW30275	1/4" SS FLAT WASHER

**VALVE BANK SPARE PARTS:**

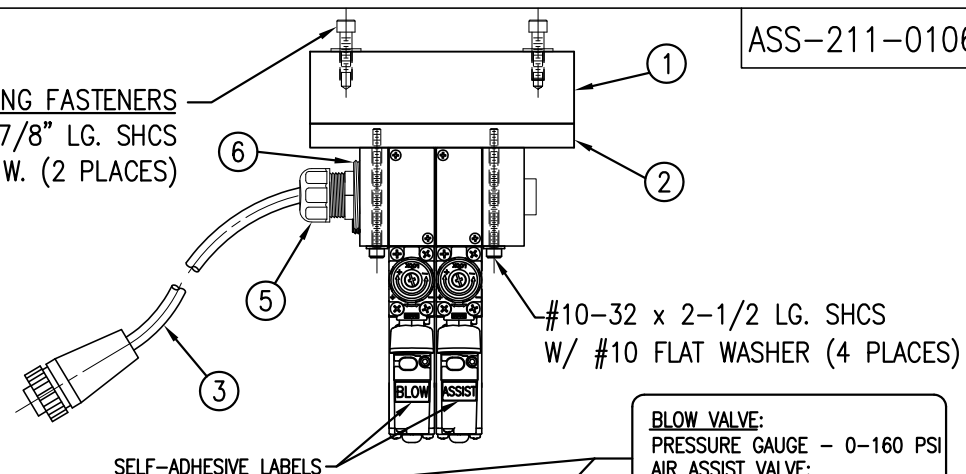
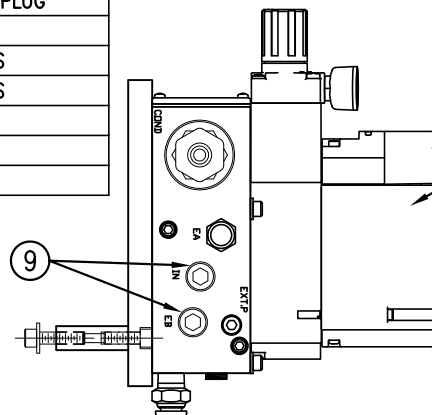
SOLENOID: #PM-VA2395M  
 AIR ASSIST REGULATOR W/GUAGE: #PM-VA2396M  
 BLOW/TAMP/IMPRINTER REGULATORS W/GUAGE: #PM-VA2397M  
 AIR ASSIST REGULATOR GUAGE: #PM-VA2382M  
 BLOW/TAMP/IMPRINTER REGULATOR GUAUES: #PM-VA2380M



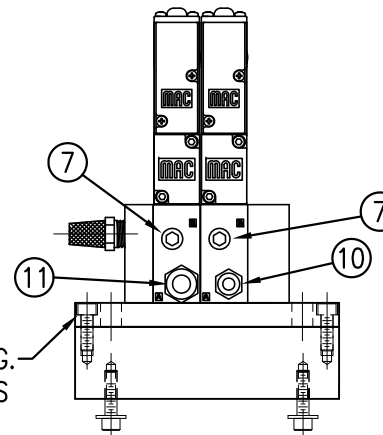
⑫ AIR FILTER  
 SHIP LOOSE  
 -CUSTOMER TO INSTALL -

MOUNTING FASTENERS  
 1/4-20 x 7/8" LG. SHCS  
 w/ F.W. (2 PLACES)

REV 1



1/4-20 x 3/4 LG.  
 SHCS - 2 PLACES



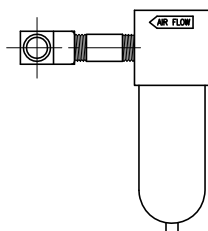
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

APPLICATOR SERIES: 360		APPLICATOR WIDTH(S): 5"/7.5"/10"		GROUP: VALVE BANKS		TITLE: AIR BLOW 2 STATION VALVE BANK ASSEMBLY with FILTER					Dept. Code 70		
REV. DESCRIPTION 2 ADDED MUFFLER		REV. DATE 12/09/09		REV. BY: TDR		Scale: 1=4		Date: 04/03/07		DRAWN BY: E. SANOR		F:\Engineering\Standard Parts\Applcator\360\360\ASS-211-0106M	

BILL OF MATERIAL			
ASS-211-0106EM			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0202	VALVE FASTENING PLATE
②	1	MP-214-0206	VALVE MOUNTING PLATE
③	1	ASS-200-0452M	VALVE CABLE
④	1	PM-VA2358M	2 STATION MAC VALVE BANK
⑤	1	PE-CO2000	CORD GRIP
⑥	1	PE-COND1084	STEEL REDUCER
⑦	2	PM-FI1200	1/4" NPT PLUG
⑧	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑨	5	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
⑩	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑪	2	PM-PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
⑫	1	PM-PF1125	1/4" NPT X 7/8" LG. CLOSE NIPPLE
⑬	1	PM-FI1450	WYE BRASS FITTING, 1/4" NPT
⑭	1	PM-PF1055	FITTING, 1/4" TUBE w/ 1/4" NPT 90°
⑮	1	ASS-214-0106	AIR FILTER ASSEMBLY
⑯	1	PM-MU1027	MUFFLER
○	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
○	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
○	2	PM-FAW30275	1/4" SS FLAT WASHER
○	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
○	4	PM-FAW30265	#10 SS FLAT WASHER

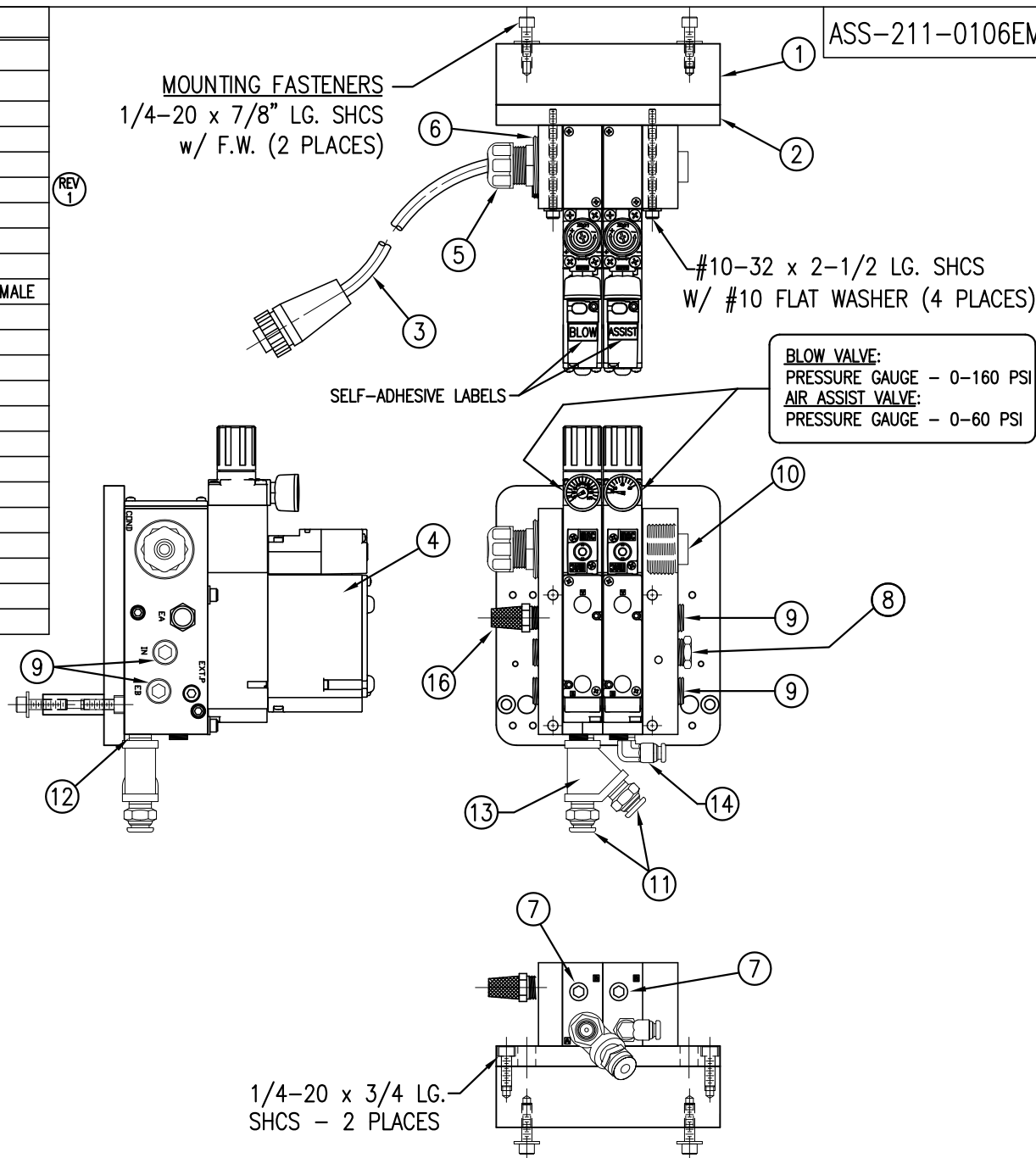
VALVE BANK SPARE PARTS:

SOLENOID: #PM-VA2395M  
 AIR ASSIST REGULATOR W/GUAGE: #PM-VA2396M  
 BLOW/TAMP/IMPRINTER REGULATORS W/GUAGE: #PM-VA2397M  
 AIR ASSIST REGULATOR GUAGE: #PM-VA2382M  
 BLOW/TAMP/IMPRINTER REGULATOR GAUGES: #PM-VA2380M



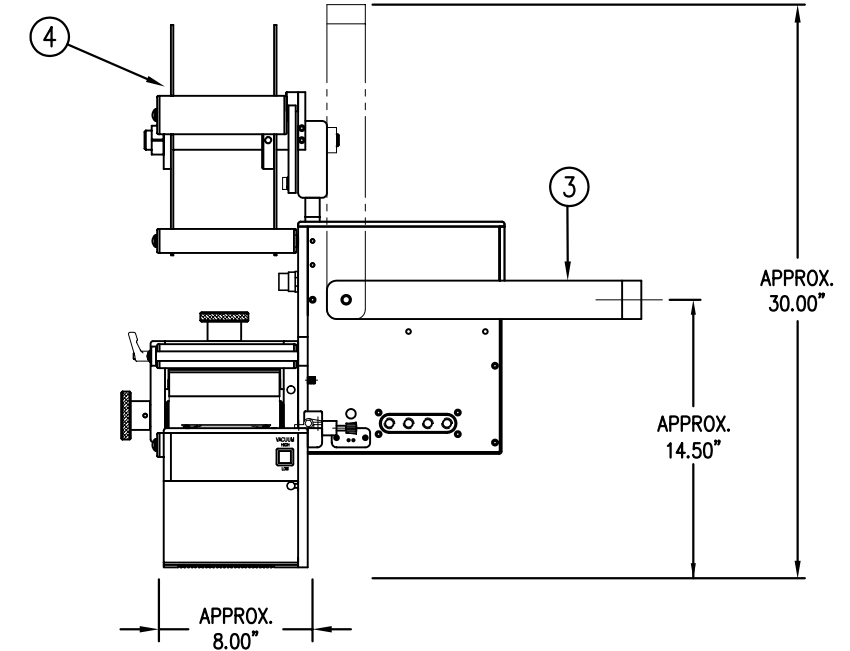
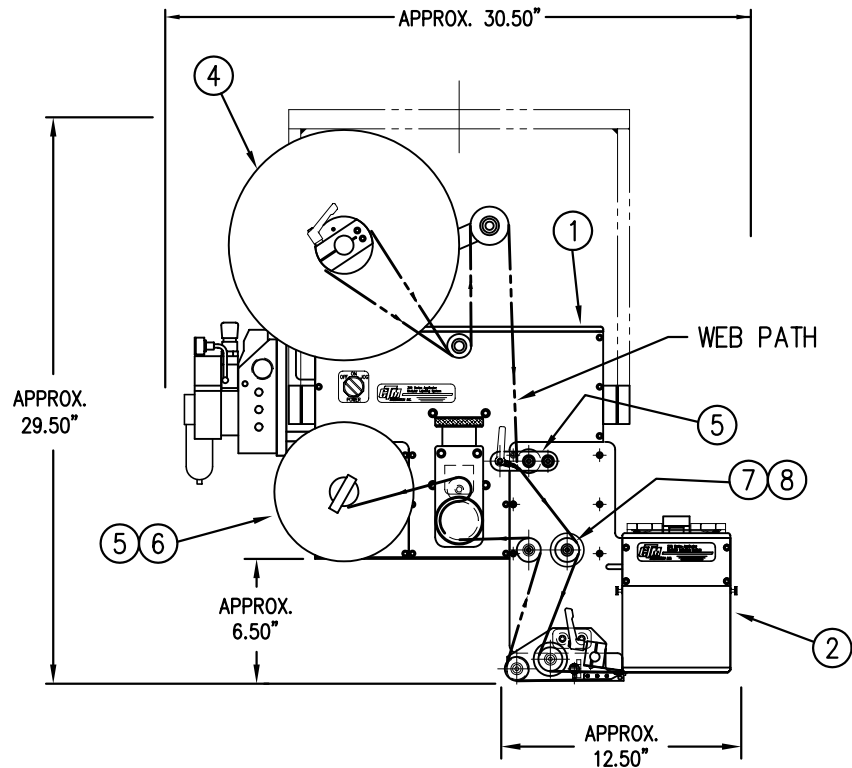
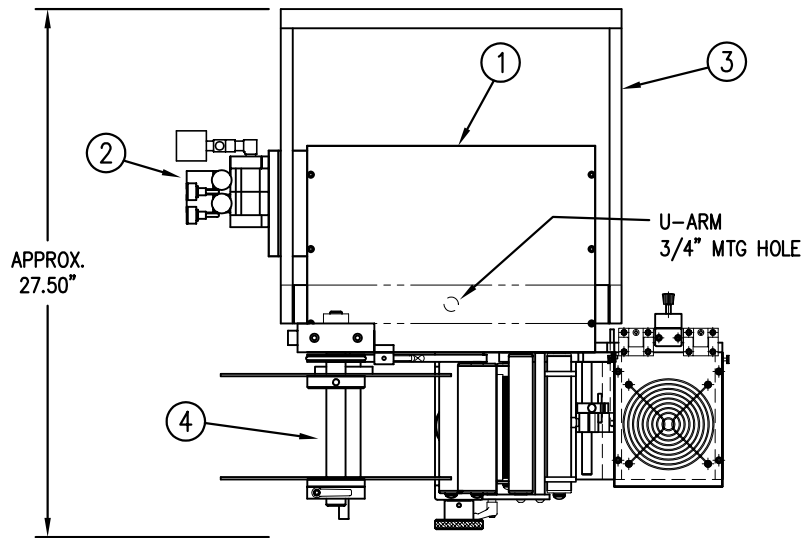
⑮ AIR FILTER  
 SHIP LOOSE  
 -CUSTOMER TO INSTALL -

REV 1



ASS-211-0106EM

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.			
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: VALVE BANKS	TITLE: EXTENDED AIR BLOW 2 STATION VALVE BANK ASSEMBLY with FILTER
REV. 2	REV. DESCRIPTION ADDED MUFFLER	REV. DATE 12/15/09	REV. BY: TDR
Scale: 1=4	Date: 04/09/07	DRAWN BY: E. SANOR	F:\Engineering\Standard Parts\Applcator\360\ 360\ASS-211-0106EM
Dept. Code 70			



BILL OF MATERIAL				SOLD
CTM-211-0121RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; AIR BLOW BOX NOSE MODULE	MOD-211-0101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR & CABLE	ASS-200-0427	S

CTM-211-0121R/L-12X

STANDARD REWIND -0121R/L-12S  
 COLLAPSIBLE REWIND -0121R/L-12C  
 FILM REWIND -0121R/L-12F

— STD & FILM REWIND  
 — COLLAPSIBLE RWD  
 — STANDARD RWD  
 — FILM REWIND  
 — COLLAPSIBLE RWD

REV 1

RH & LH ASSEMBLIES AVAILABLE  
 —RH ASSEMBLY SHOWN—

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 SERIES APPLICATOR: AIR BLOW BOX: SNORKEL

PART: AIR BLOW BOX w/ 6" D.D. SNORKEL & 12" UNWIND ASS'Y

Dept. Code  
70

REV. 1  
 REV. DESCRIPTION  
 NEW COLLAPSIBLE MANDREL

REV. DATE  
 10/16/07

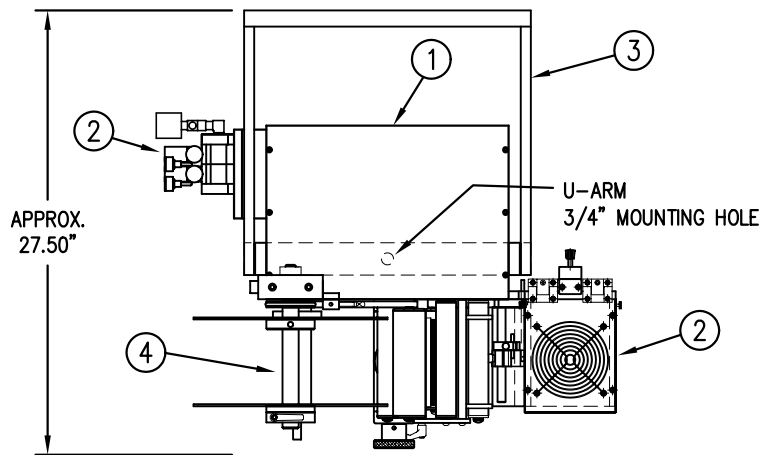
REV. BY:  
 TDR

Scale:  
 1=10

Date:  
 09/28/00

DRAWN BY:  
 BOB S.

F:\Engineering\Standard Parts\Applicator\360  
 211\CTM-211-0121RL-12X

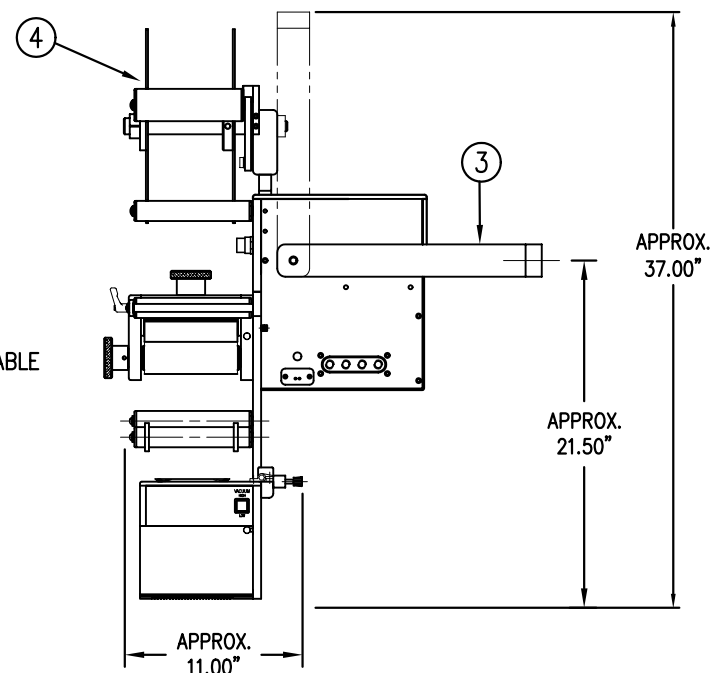
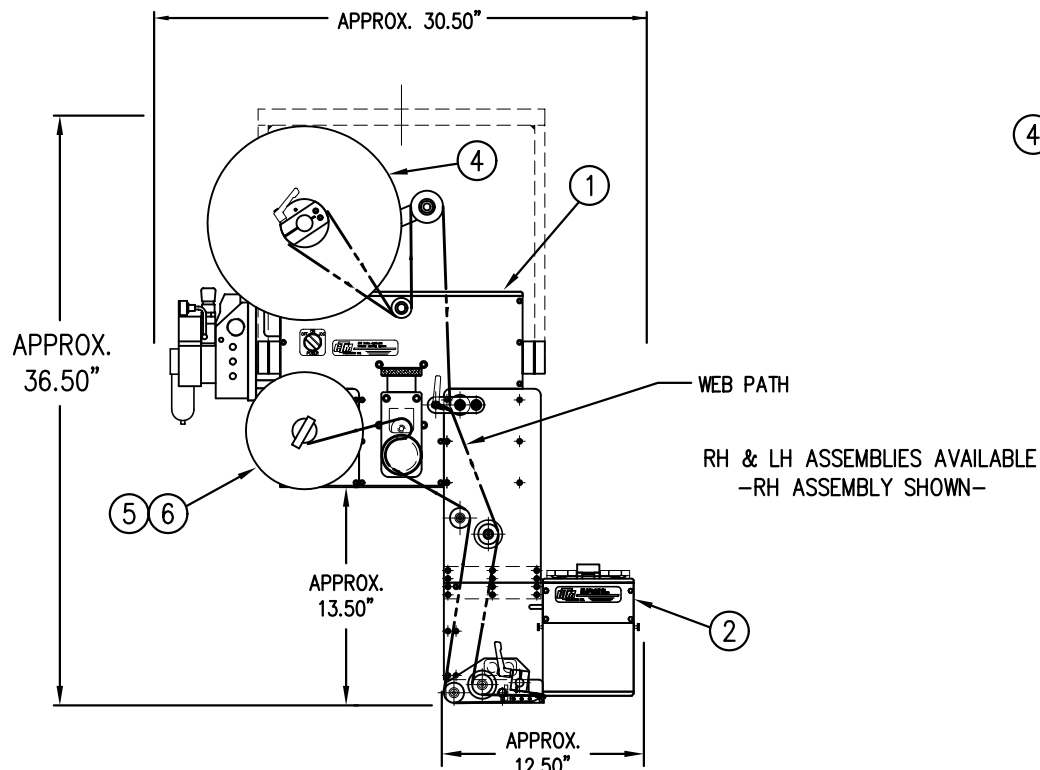


BILL OF MATERIAL				SOLD
CTM-211-0122RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; AIR BLOW w/ 12" DD SNORK.	MOD-211-0122R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR & CABLE	ASS-200-0427	S

STANDARD REWIND	-0122R/L-12S
COLLAPSIBLE REWIND	-0122R/L-12C
FILM REWIND	-0122R/L-12F

— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

REV  
1



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.

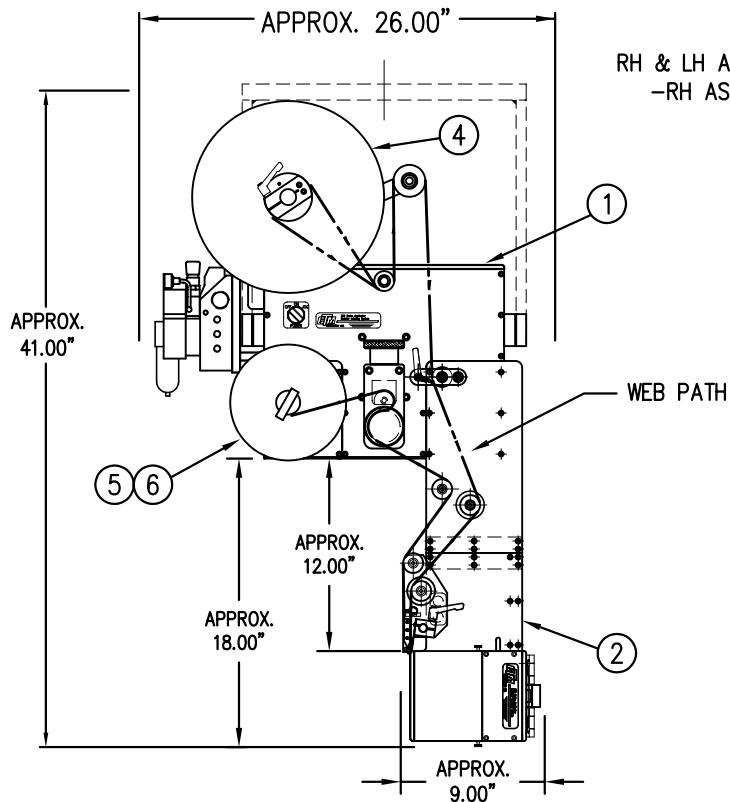
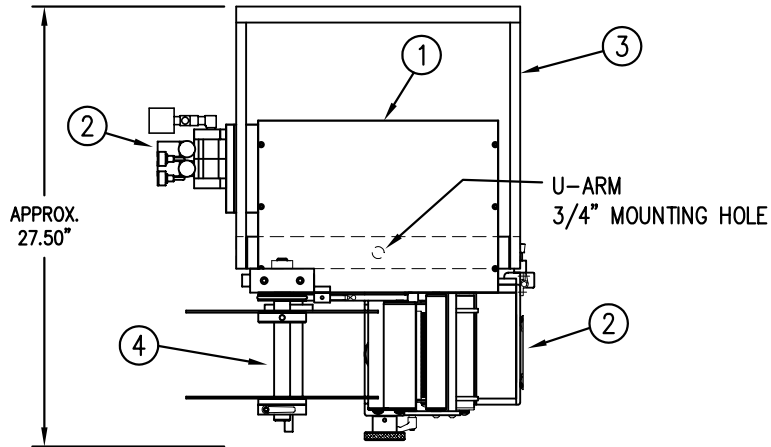
TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX: SNORKLE (Sht. 1 of 2)

PART: AIR BLOW BOX w/ 12" DROP DOWN SNORKEL (HORIZONTAL ASSY)

Dept. Code  
70

REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=12	Date: 03/10/99	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 211\CTM-211-0122RL-12Xs1
--------	---	-----------------------	-----------------	----------------	-------------------	---------------------	--





BILL OF MATERIAL				SOLD
CTM-211-0122RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; AIR BLOW w/ 12" DD SNORK.	MOD-211-0122R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR & CABLE	ASS-200-0427	S

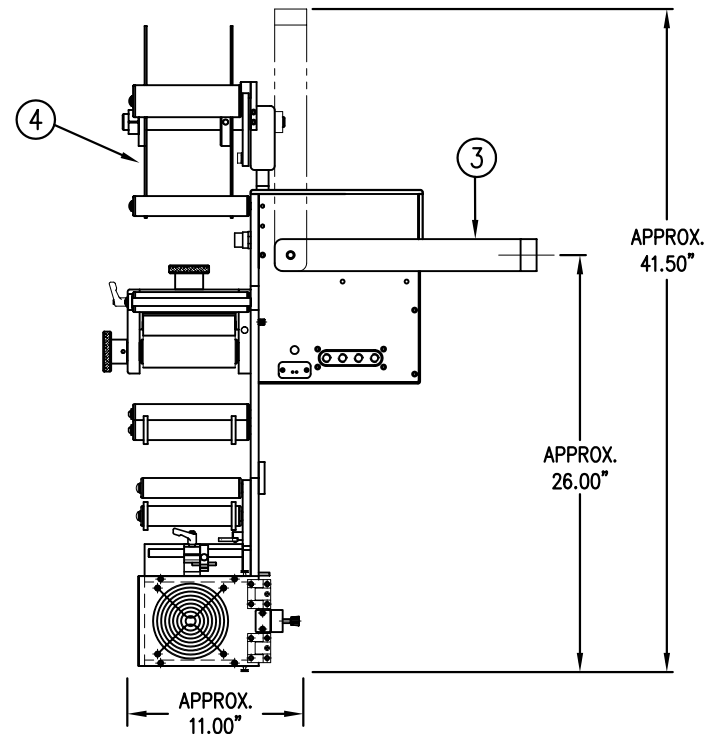
CTM-211-0122R/L-12X

STANDARD REWIND -0122R/L-12S

COLLAPSIBLE REWIND -0122R/L-12C

FILM REWIND -0122R/L-12F

REV 1



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 SERIES APPLICATOR: AIR BLOW BOX: SNORKEL (Sht. 2 of 2)

PART: AIR BLOW BOX w/ 12" DROP DOWN SNORKEL (VERTICAL ASSY)

Dept. Code 70

REV. 1  
REV. DESCRIPTION  
NEW COLLAPSIBLE MANDREL

REV. DATE  
10/16/07

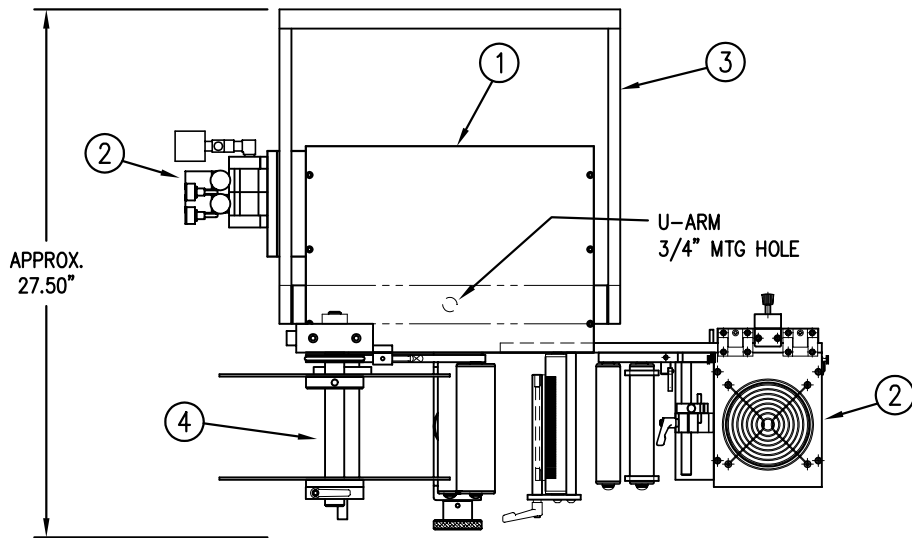
REV. BY:  
TDR

Scale:  
1=12

Date:  
03/10/99

DRAWN BY:  
BOB S.

F:\Engineering\Standard Parts\Applcator\360  
211\CTM-211-0122RL-12Xs2



BILL OF MATERIAL			SOLD
CTM-211-0125RL-12X			S
ASSEMBLY	ITEM QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L
②	1	5" WIDE; AIR BLOW w/6" EXT. SNORKLE	MOD-211-0125R/L
③	1	U-ARM ASSEMBLY	WAS-200-0247
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147
	1	FILM REWIND MANDREL	ASS-200-0137
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138
	1	PRODUCT DETECT SENSOR & CABLE	ASS-200-0427

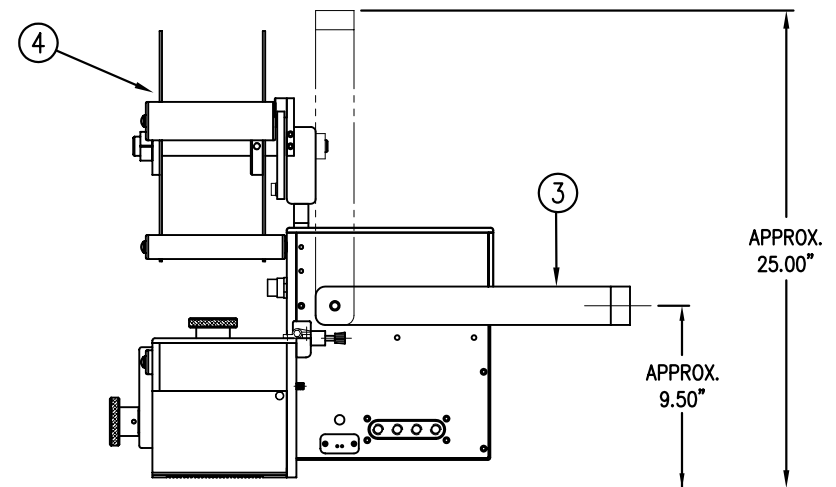
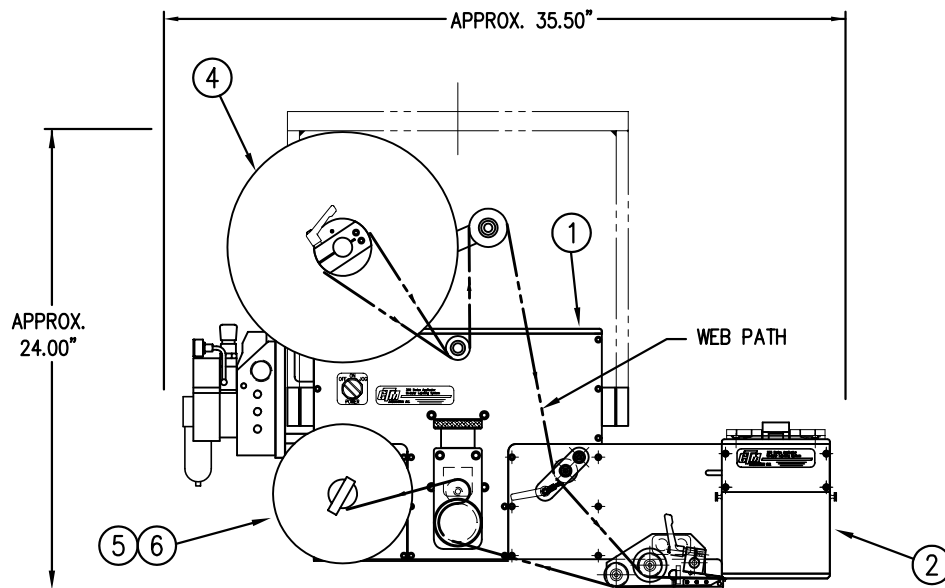
CTM-211-0125R/L-12X

STANDARD REWIND -0125R/L-12S  
 COLLAPSIBLE REWIND -0125R/L-12C  
 FILM REWIND -0125R/L-12F

— STD & FILM REWIND  
 — COLLAPSIBLE RWD  
 — STANDARD RWD  
 — FILM REWIND  
 — COLLAPSIBLE RWD

REV 1

RH & LH ASSEMBLIES AVAILABLE  
 —RH ASSEMBLY SHOWN—



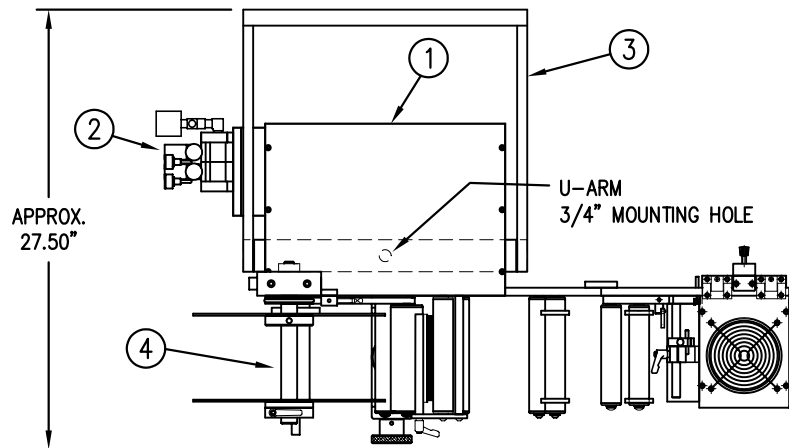
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX: SNORKEL

PART: AIR BLOW BOX w/ 6" EXT. SNORKEL & 12" UNWIND ASS'Y

Dept. Code  
70

REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=10	Date: 09/28/00	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applcator\360 211\CTM-211-0125RL-12X
--------	---	-----------------------	-----------------	----------------	-------------------	---------------------	---



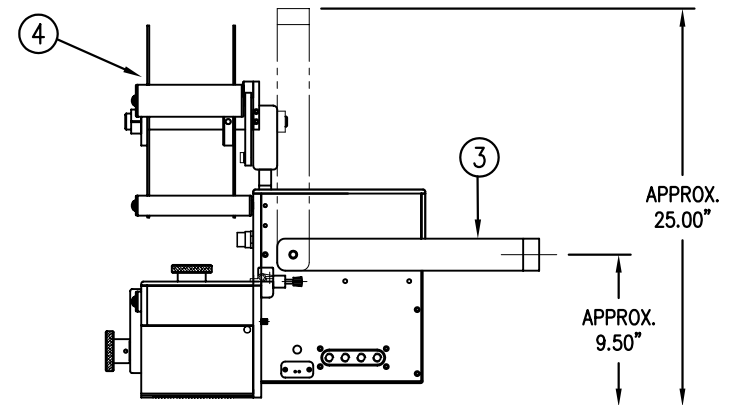
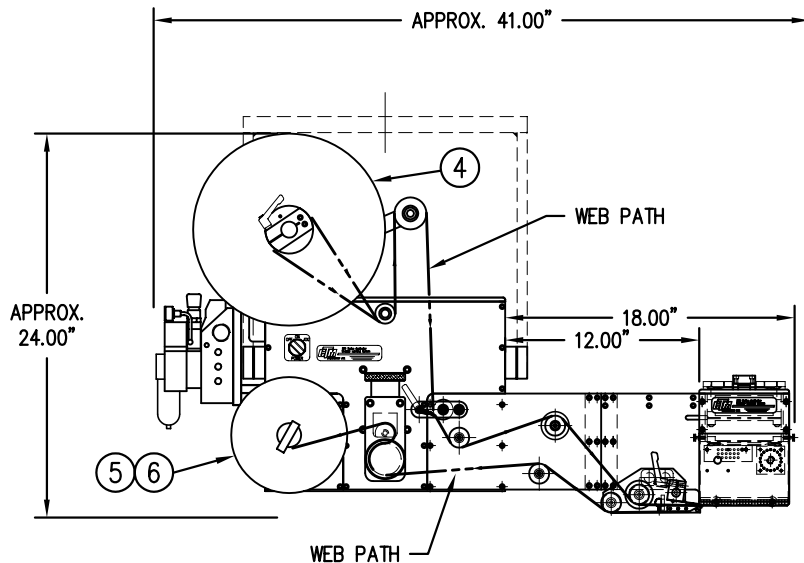
BILL OF MATERIAL				SOLD
CTM-211-0126RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; AIR BLOW w/12" EXT. SNORKEL	MOD-211-0126R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	5" WIDE STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	5" WIDE FILM REWIND MANDREL	ASS-200-0137	S
	1	5" WIDE COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

CTM-211-0126R/L-12X	
STANDARD REWIND	-0126R/L-12S
COLLAPSIBLE REWIND	-0126R/L-12C
FILM REWIND	-0126R/L-12F

— STD & FILM REWIND	REV 1
— COLLAPSIBLE RWD	
— STANDARD RWD	
— FILM REWIND	
— COLLAPSIBLE RWD	

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



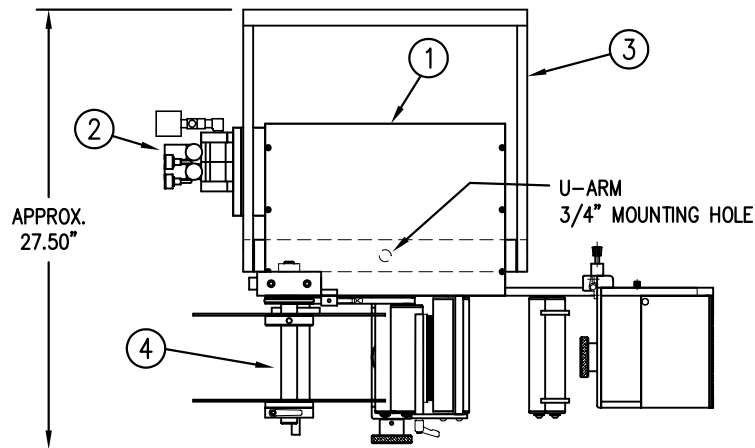
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX: SNORKEL (Sht. 1 of 2)

PART: AIR BLOW BOX w/ 12" EXTENDED SNORKEL (HORIZONTAL ASSY)

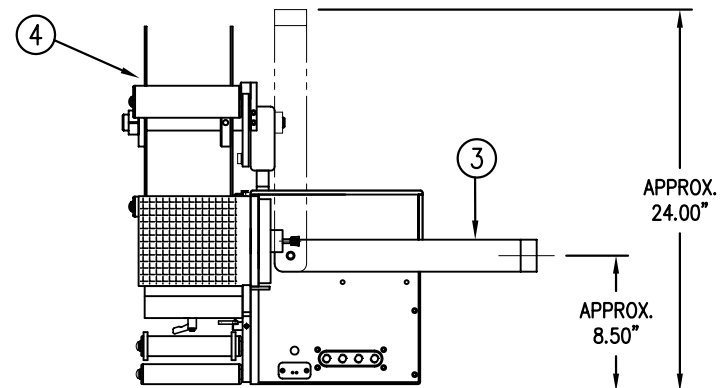
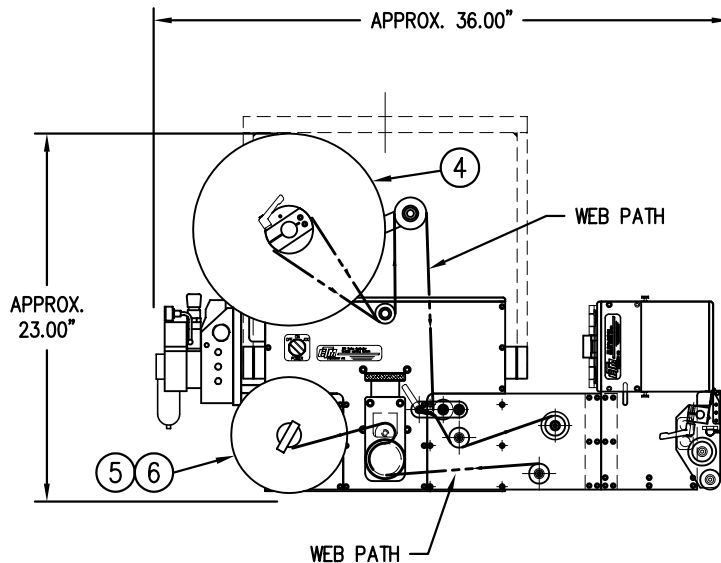
Dept. Code 70

REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=12	Date: 03/10/99	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applcator\360 211\CTM-211-0126RL-12Xs1
--------	---	-----------------------	-----------------	----------------	-------------------	---------------------	---



BILL OF MATERIAL				SOLD
ASSEMBLY		CTM-211-0126RL-12X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; AIR BLOW w/12" EXT. SNORKEL	MOD-211-0126R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	5" WIDE STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	5" WIDE FILM REWIND MANDREL	ASS-200-0137	S
	1	5" WIDE COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

CTM-211-0126R/L-12X	
STANDARD REWIND	-0126R/L-12S
COLLAPSIBLE REWIND	-0126R/L-12C
FILM REWIND	-0126R/L-12F
(REV 1) RH & LH ASSEMBLIES AVAILABLE -RH ASSEMBLY SHOWN-	



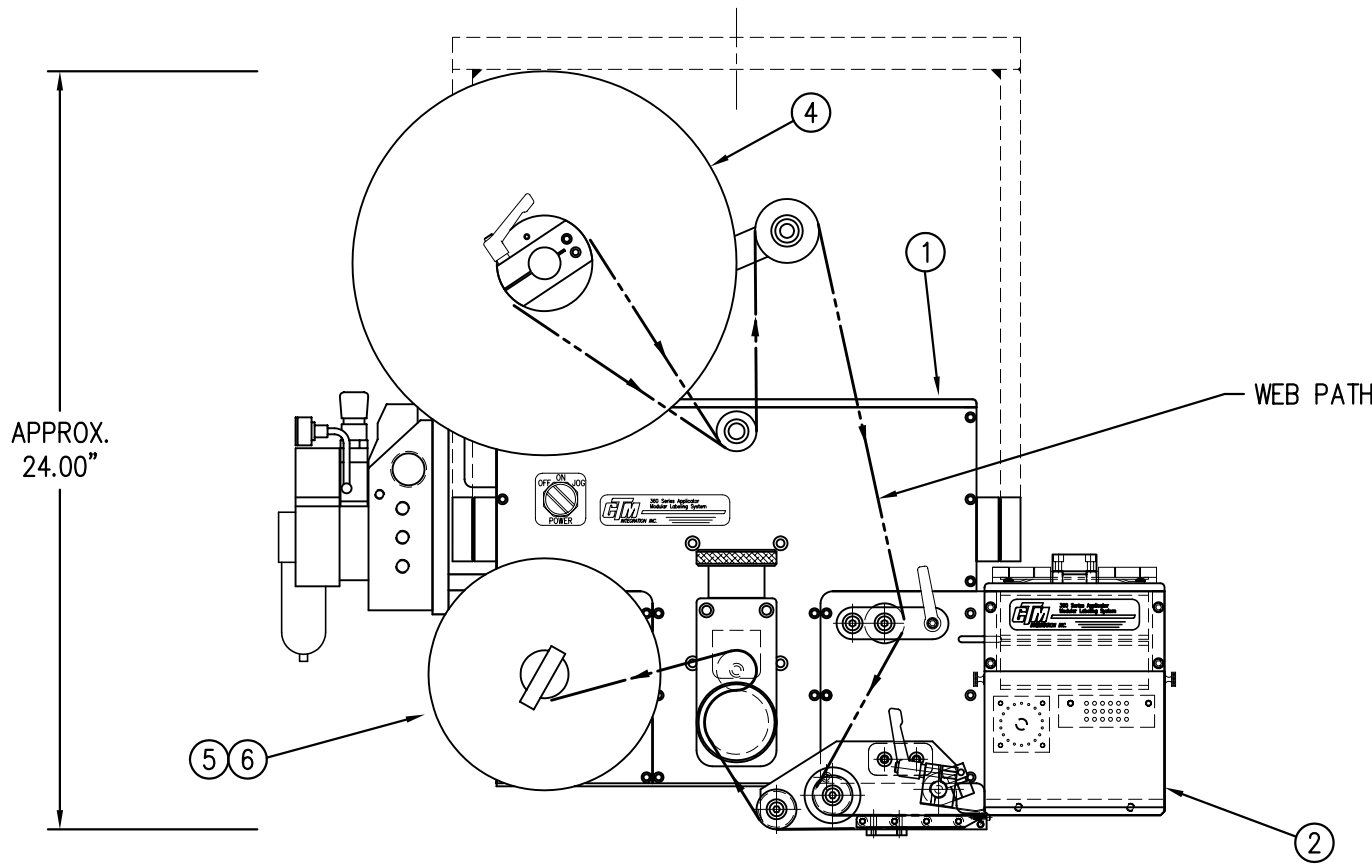
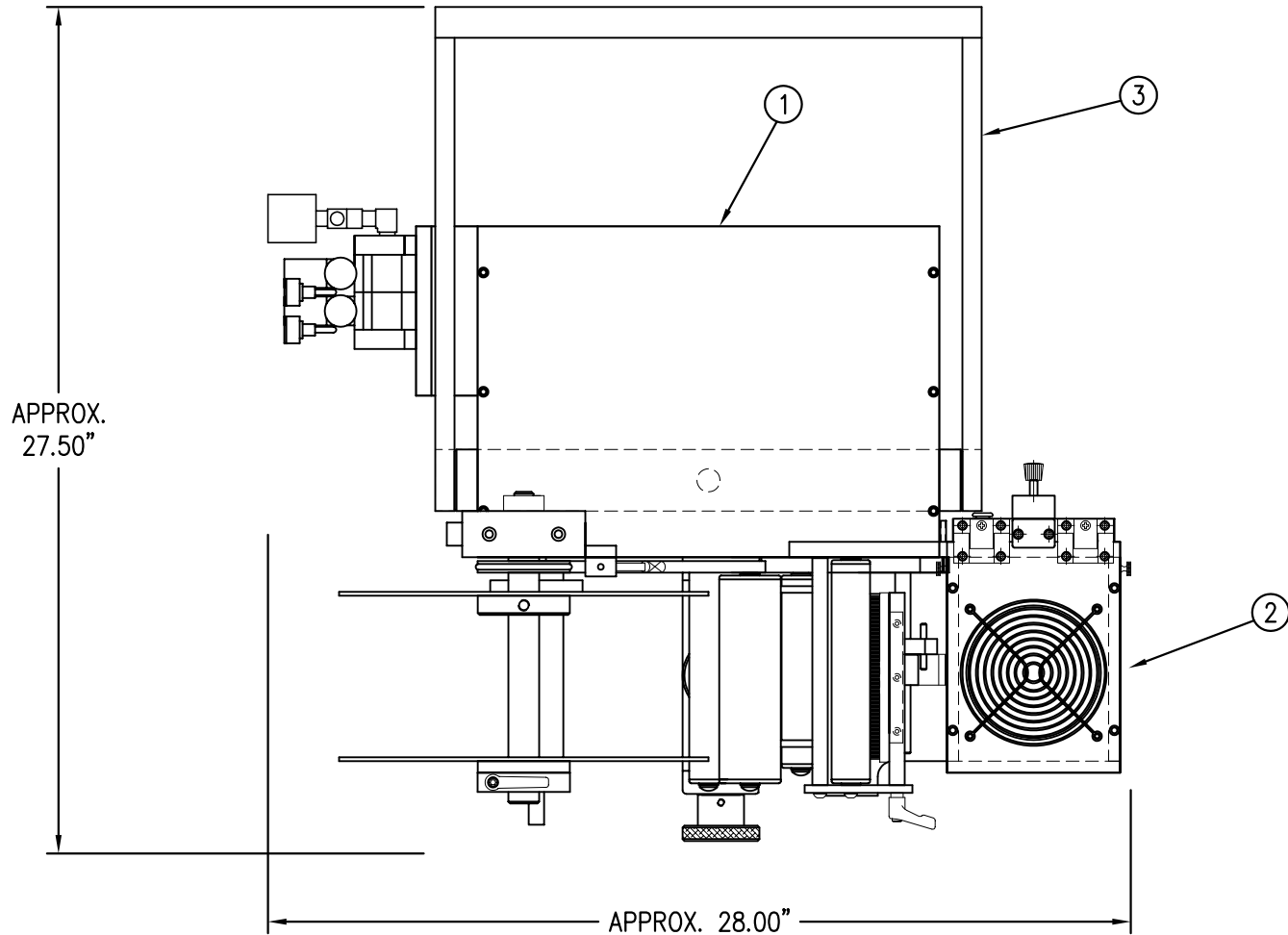
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX: SNORKEL (Sht. 2 of 2)

PART: AIR BLOW BOX w/ 12" EXTENDED SNORKEL (VERTICAL ASSY)

Dept. Code  
70

REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=12	Date: 03/10/99	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 211\CTM-211-0126RL-12Xs2
--------	---	-----------------------	-----------------	----------------	-------------------	---------------------	--

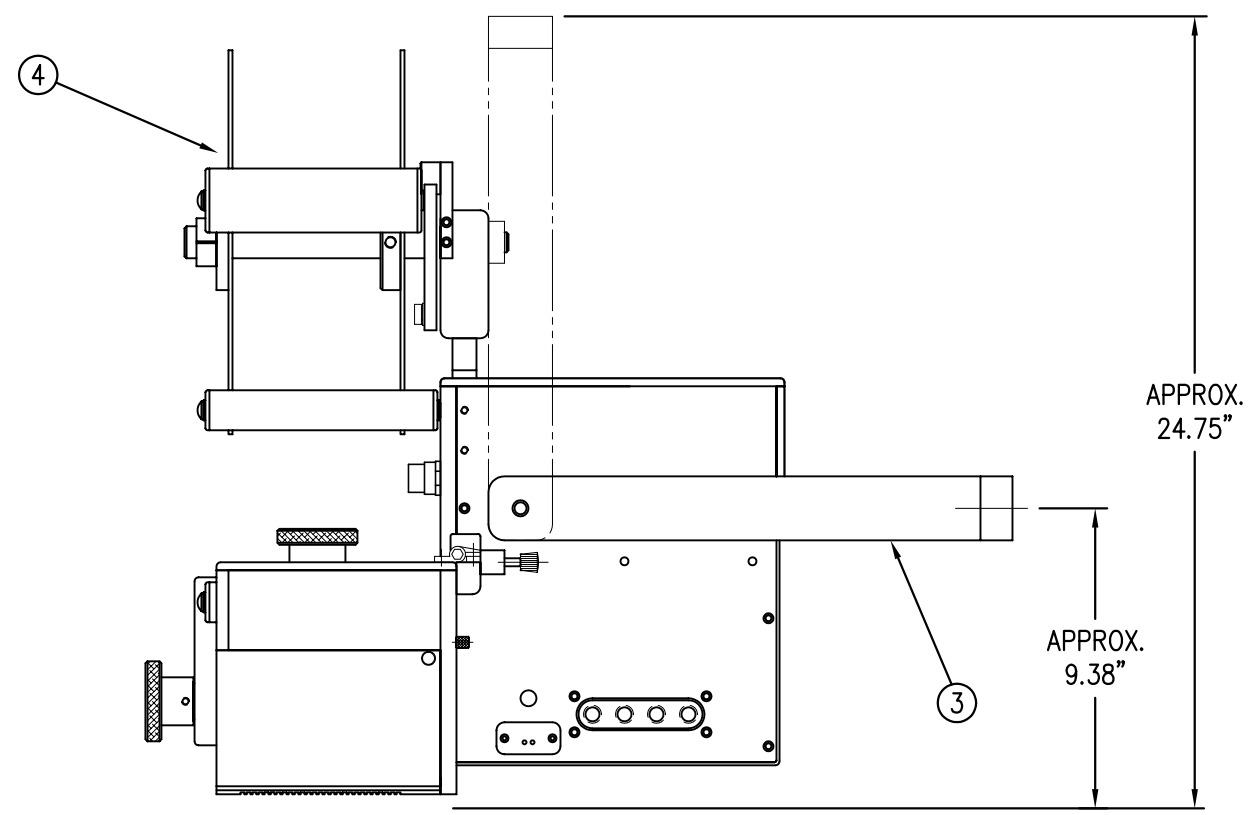


BILL OF MATERIAL				SOLD
CTM-211-3101RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; BLOW CLR. LBL. NOSE MODULE	MOD-211-3101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND ASSY	ASS-200-0121R/L	.
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
⑥	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

ORDER CLEAR LABEL SENSOR SEPARATELY  
① #ASS-200-0430-A ~ FOR LRD2100  
#ASS-200-0430-B ~ FOR LRD6110

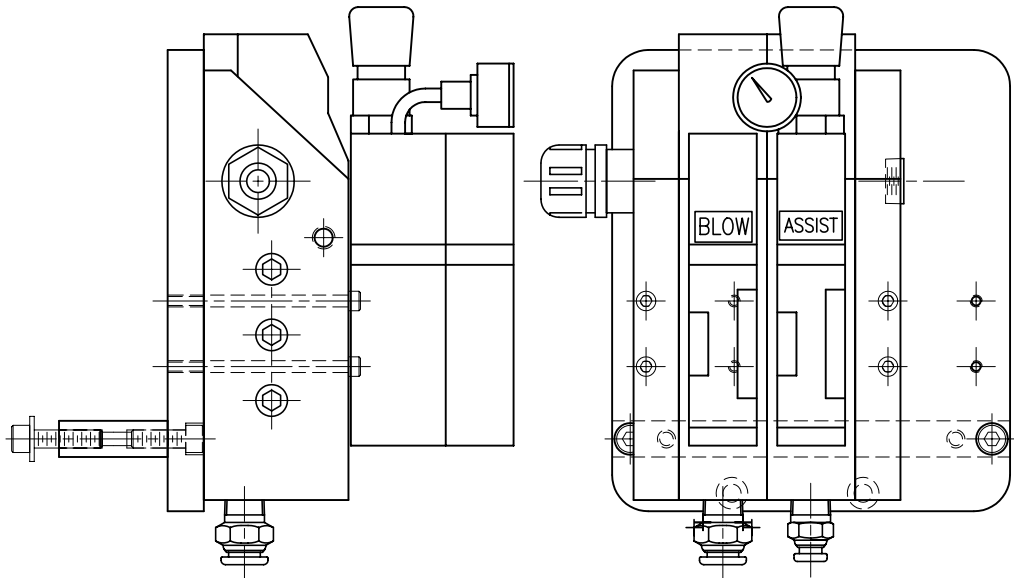
- ← STD & FILM REWIND
- ← COLLAPSIBLE RWD
- ← STANDARD RWD
- ← FILM REWIND
- ← COLLAPSIBLE RWD

CTM-211-3101R/L-12X	
STANDARD REWIND	-3101RL-12S
COLLAPSIBLE REWIND	-3101RL-12C
FILM REWIND	-3101RL-12F
RH & LH ASSEMBLIES AVAILABLE -RH ASSEMBLY SHOWN-	



BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-211-3101R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	BLOW BOX ASS'Y w/ TRANSITION PLATE	ASS-211-3101R/L	S
⑤	1	AIR BLOW VALVE BANK ASSEMBLY	ASS-211-0106	S
	1	FTG, 1/4" TUBE to 1/4" NPT	PM-PF1010	.
	2	FTG, 3/8" TUBE to 1/4" NPT MALE	PM-PF1020	.
	1	BUSHING, 1/8" NPT FEMALE to 1/4"NPT MALE	PM-PF1105	.
	1	HOSE BARB, 1/4" TUBE to 1/8" NPT	PM-PF1169	.
	1	3/8" OD SMC TUBING x 14" Lg.	PM-PT1080	.
	1	AIR ASSIST TUBING x 12"	PM-AH1000	.
ORDER CLEAR LABEL SENSOR SEPARATELY #PE-SE2000 ~ FOR LRD2100 #PE-SE2050 ~ FOR LRD6110				

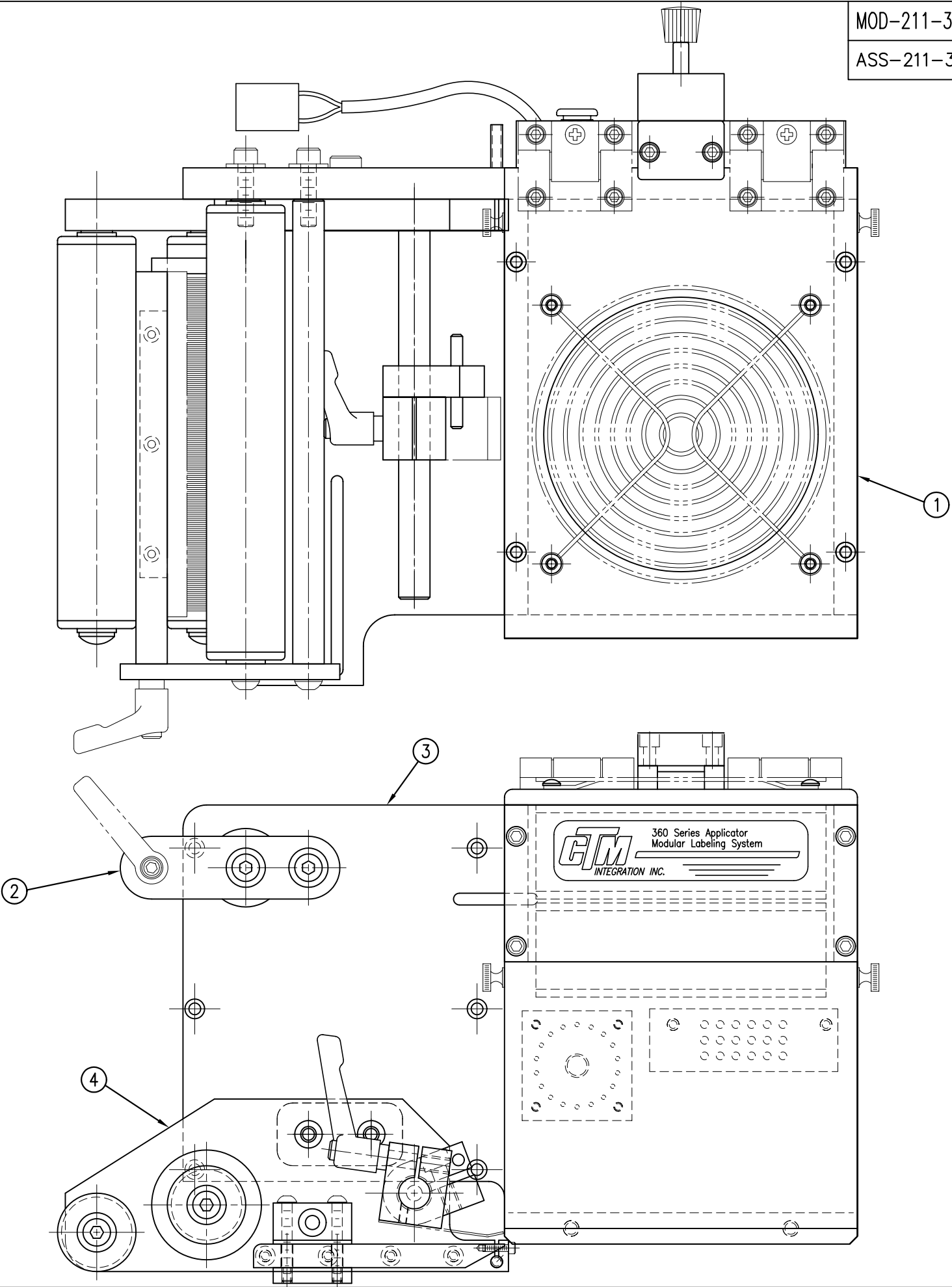
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



⑤ VALVE BANK ASSEMBLY  
SCALE: 8"=1'-0"

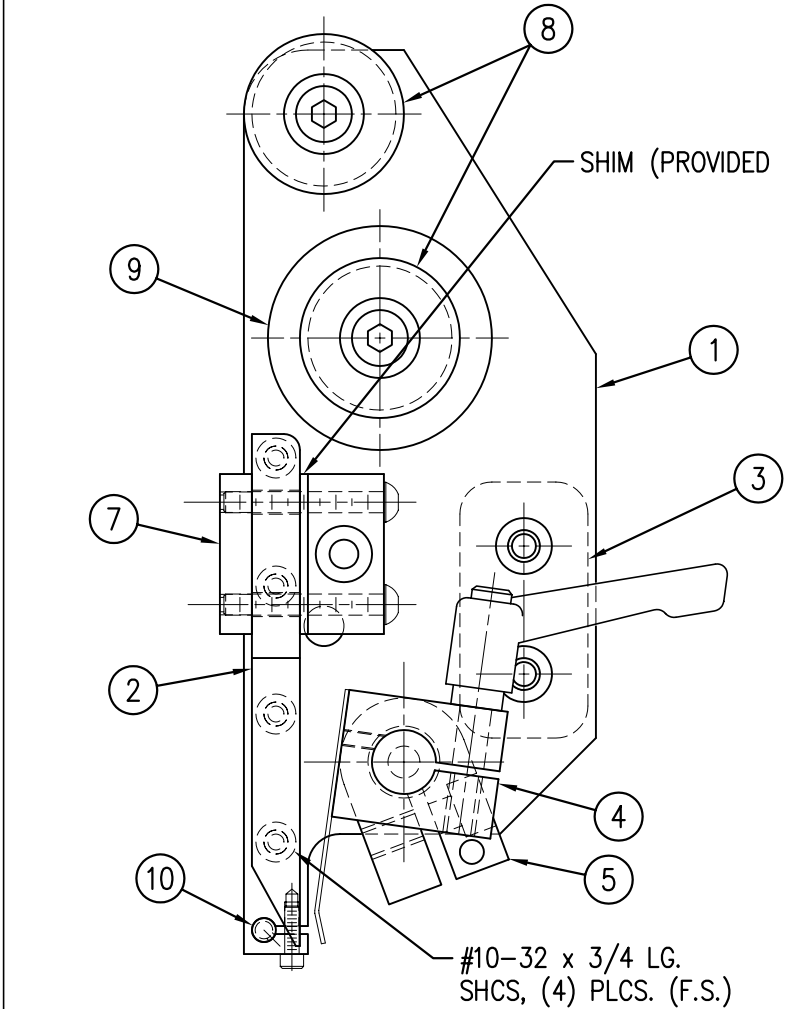
BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-3101R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VACUUM BOX ASSEMBLY	ASS-211-0104-A	.
②	1	5" TENSION BRUSH ASSEMBLY	ASS-200-X126R/L	.
③	1	AIR BLOW BOX TRANSITION PLATE	MP-211-0215	.
④	1	AIR BLOW CLEAR LABEL PEEL EDGE ASSY	ASS-211-3102R/L-5	S
	6	SHCS, #10-32 x 5/8" LG.	NONE	.
ORDER CLEAR LABEL SENSOR SEPARATELY #PE-SE2000 ~ FOR LRD2100 #PE-SE2050 ~ FOR LRD6110				

REV 1



MOD-211-3101R/L  
ASS-211-3101R/L

BILL OF MATERIAL			
ASS-211-3102R/L-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-211-3301	CLEAR LABEL PEEL EDGE MOUNTING PLATE
②	1	MP-214-3302-X	LH CLEAR LABEL PEEL EDGE (w/ TAPE)
③	1	MP-214-3303-X	RH CLEAR LABEL PEEL EDGE (w/ TAPE)
④	1	MP-211-0207	PEEL EDGE TIE NUT
⑤	1	ASS-211-0105-1	SPRING BLOCK ASSEMBLY
	2	ASS-211-0105-1	SPRING BLOCK ASSEMBLY
⑥	1	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY
	2	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY
⑦	1	PM-211-X206	SPRING BLOCK MOUNTING SHAFT
⑧	1	MP-214-3301	CLEAR LABEL SENSOR NUT PLATE
⑨	2	ASS-211-X120	IDLER ROLLER ASSEMBLY w/ SHAFT
⑩	2	MP-211-0210	GUIDE COLLAR w/ SET SCREW
⑪	1	MP-211-X217-X	AIR ASSIST TUBE
⑫	2	PE-CC1050	1/4" NYLON LOOP CLAMP
12	2	PM-FASH430081	SHCS, 1/4-20 x 1.25 LG. SS
ORDER LRD 6110 CLEAR LABEL SENSOR SEPARATELY #ASS-200-0430			

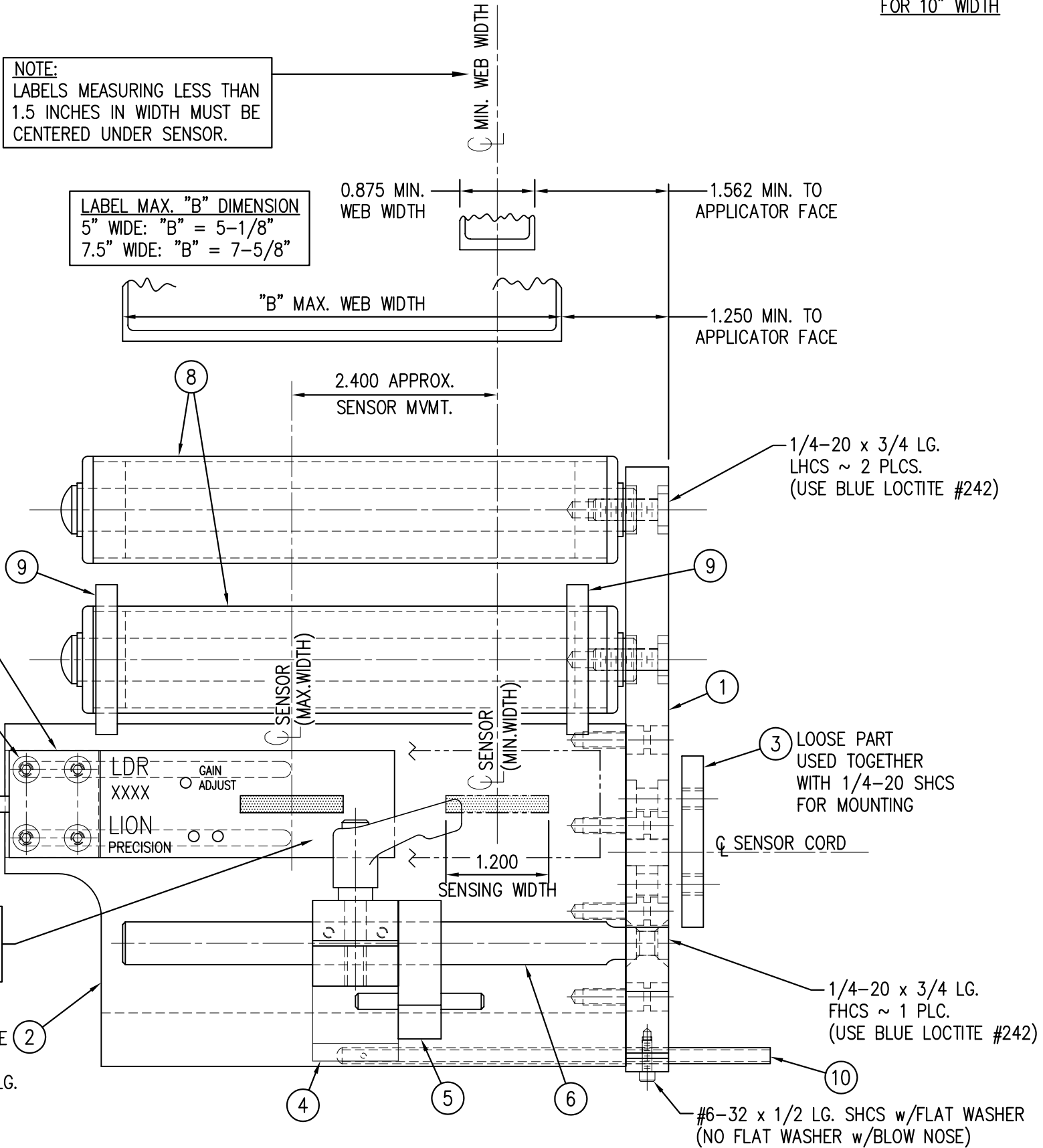


APPLY (1) STRIP OF UHMW TAPE TO PEEL EDGE  
5" APPLICATOR ~ 6" WIDE x 4-1/8" LG.  
7.5" APPLICATOR ~ 5-7/16" WIDE x 8-5/8" LG.

(4) #8-32 x 1-1/2" Lg. SHCS  
USE ITEM ⑪ TO SECURE SENSOR  
CORD w/ ONE BHCS.

SENSOR NOT INCLUDED  
IN ASSEMBLY

NOTE: USE ITEM ⑪ TO SECURE  
SENSOR CORD. CLAMP REQUIRES  
(1) M4x10 BHCS THIS END.

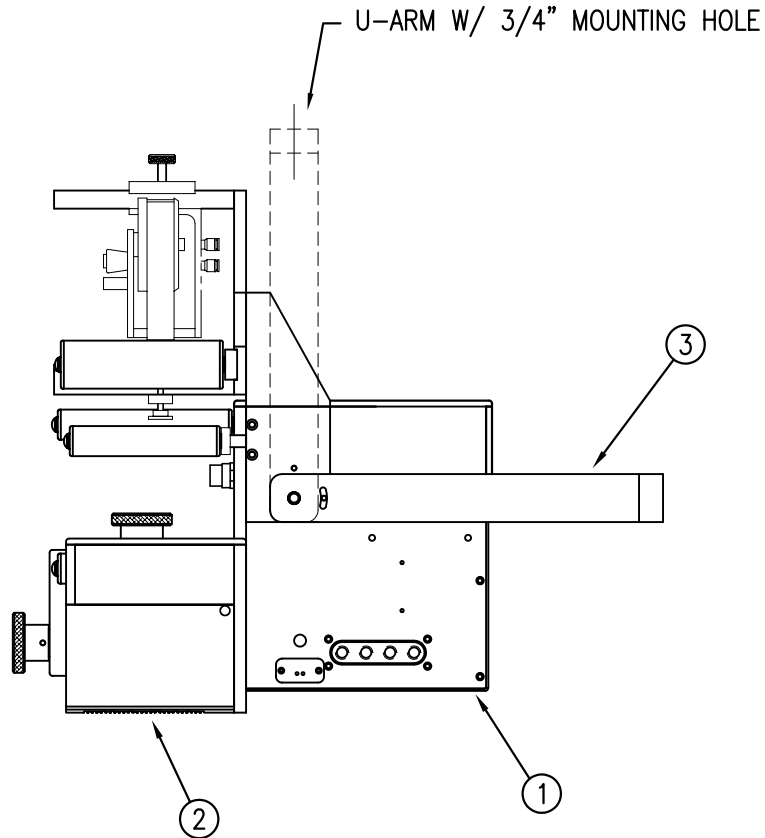
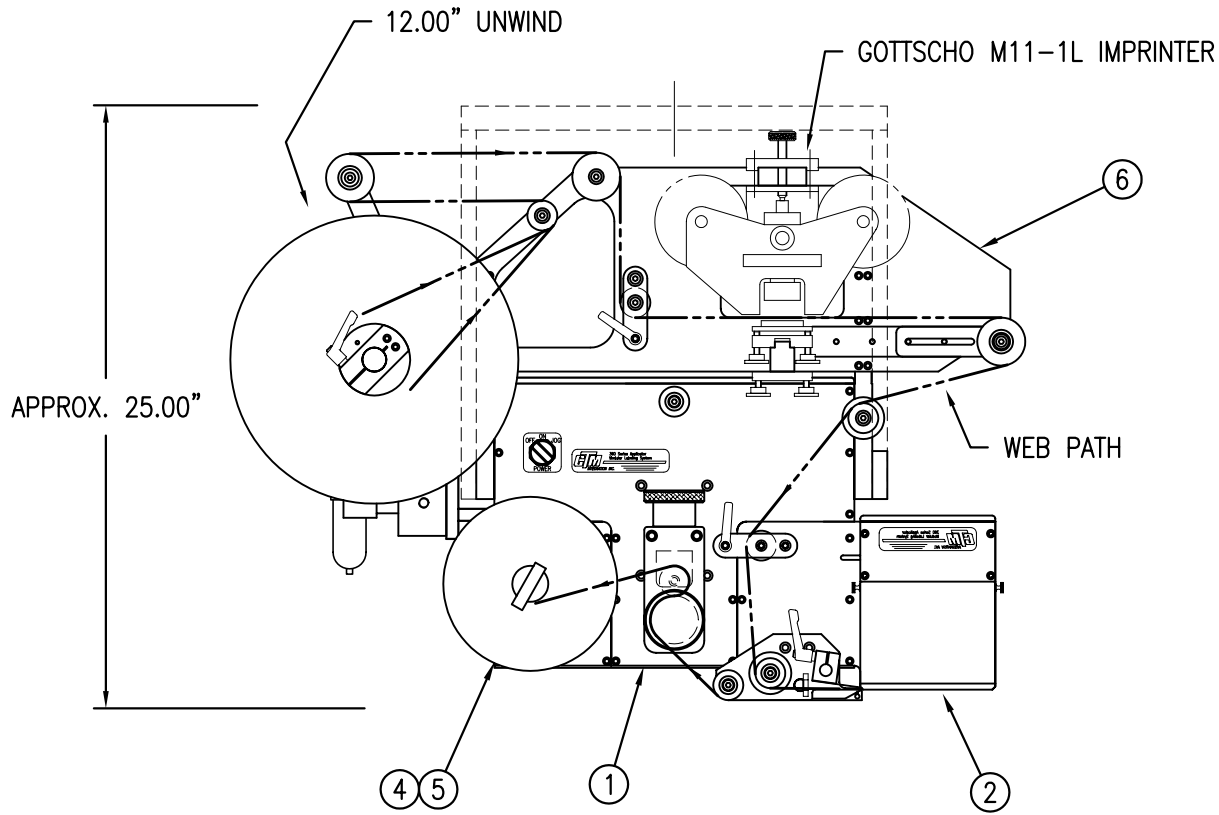
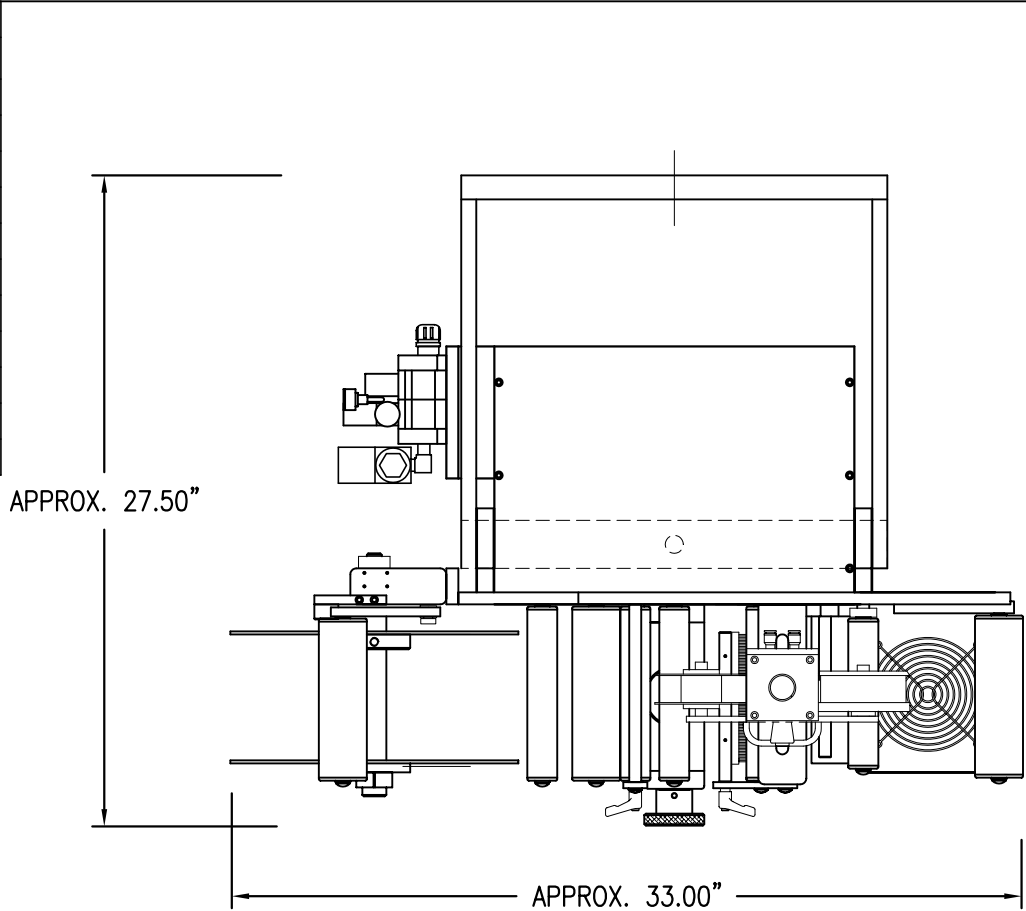


RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-  
-5" WIDE SHOWN-

ASS-211-3102R/L-X  
5" WIDE -3102R/L-5  
7.5" WIDE -3102R/L-7  
REFER TO CTM DWG.#  
ASS-211-3102R/L-10  
FOR 10" WIDTH

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.			
APPLICATOR SERIES: 360	REV. DESCRIPTION: 6	REV. DATE: 01/23/08	REV. BY: TDR
APPLICATOR SERIES: 5" 7.5"	REV. DATE: 09/15/98	REV. BY: BOB S.	REV. DATE: 09/15/98
TITLE: CLEAR LABEL PEEL EDGE ASSEMBLY			
F:\Engineering\Standard Parts\Applcator\360\Shared Parts\PEEL EDGE\ASS-211-3102RL-X			
Dept. Code 70			

BILL OF MATERIAL				SOLD
ASSEMBLY		CTM-211-4101R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	S
②	1	5" WIDE; AIR BLOW BOX NOSE MODULE	MOD-211-0101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; STD REWIND BLOCK & SHAFT	ASS-200-0145R/L	S
⑤	1	5" REWIND MANDREL	ASS-200-0147	S
⑥	1	GOTTSCHO IMPRINTER ASSEMBLY	ASS-200-4101R/L-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S



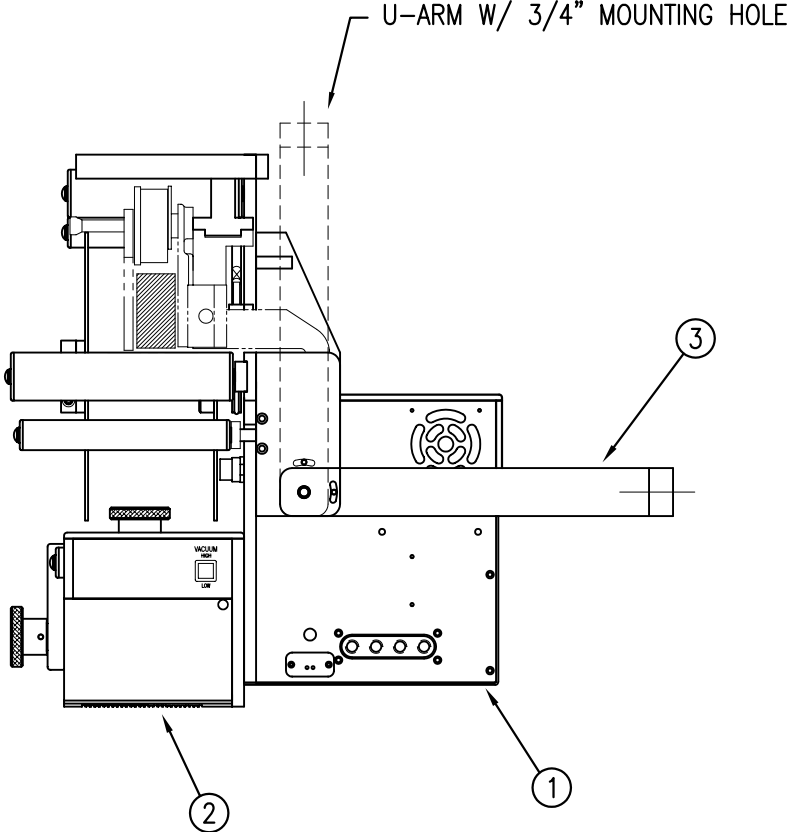
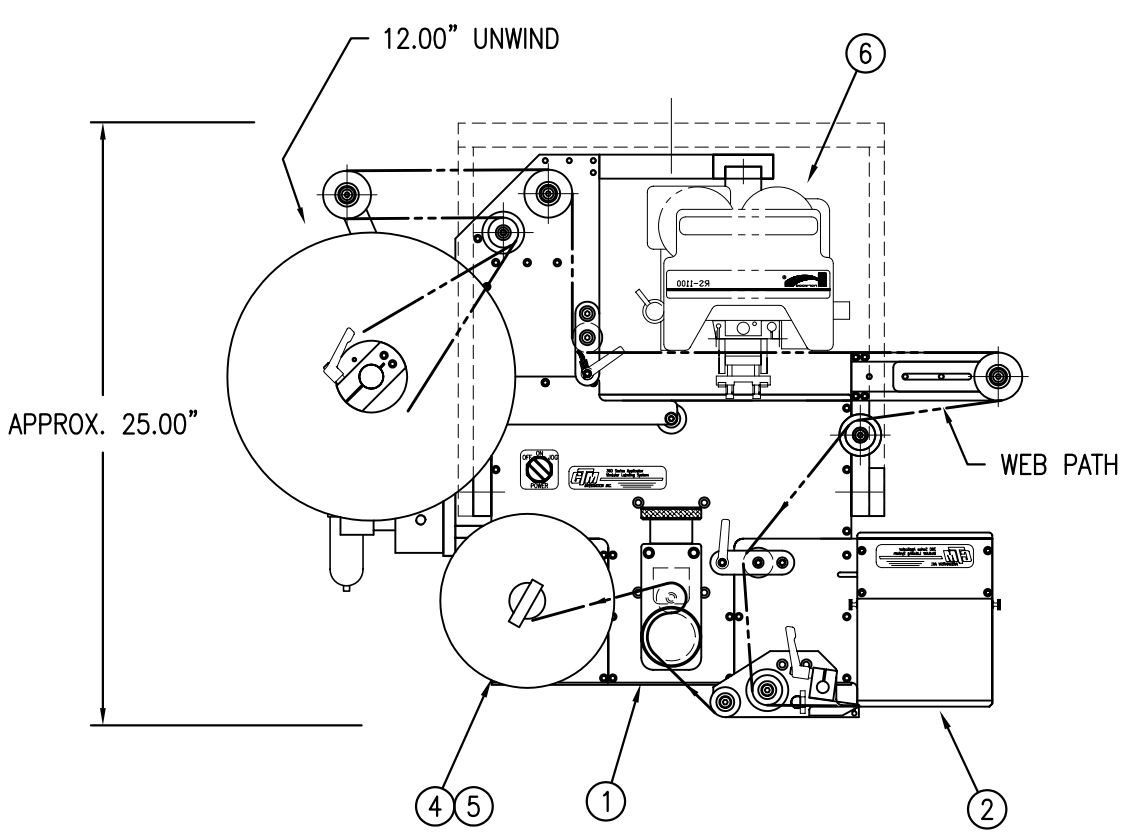
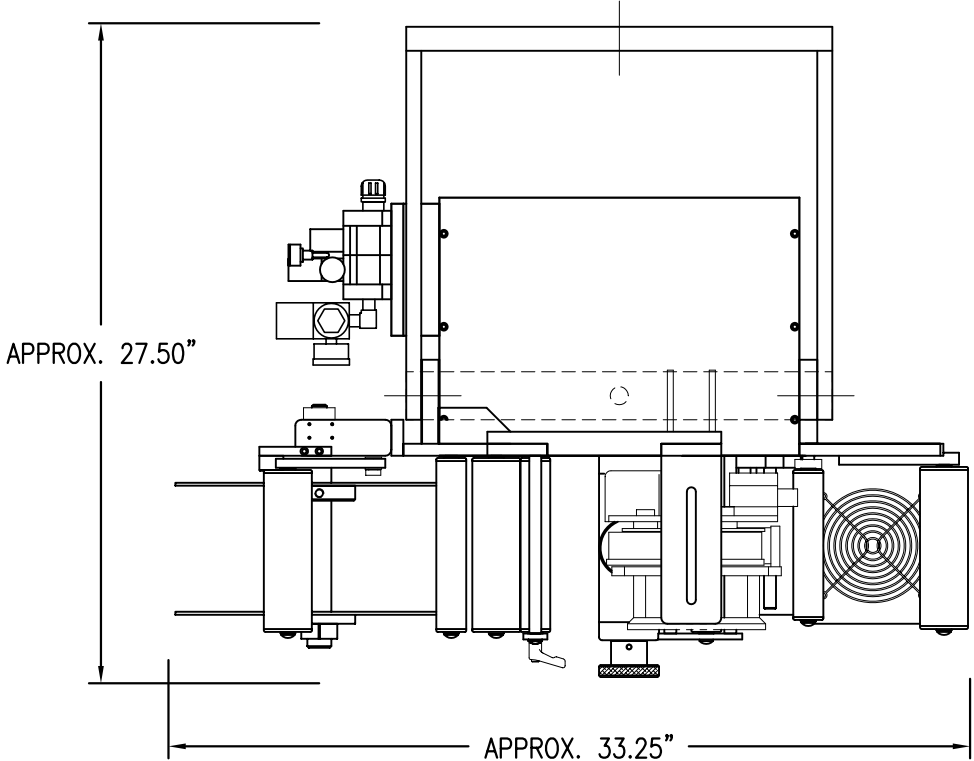
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

CTM-211-4101R/L-X
-4101R/L-12S
-4101R/L-16S

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 SERIES APPLICATOR: AIR BLOW BOX		PART: 5" WIDE: AIR BLOW w/GOTTSCHO IMPRINTER ASSEMBLY	
REV. DESCRIPTION	REV. DATE	REV. BY:	REV. BY:
O NEW TITLEBLOCK; DWG. No. WAS 200-3635	07/08/03	TDR	TDR
F:\Engineering\Standard Parts\Appliator\360		211\CTM-211-4101RL-X	
BOB S.		BOB S.	
Date: 09/15/99		Scale: 1=8	
Dept. Code 70		Dept. Code 70	



BILL OF MATERIAL				SOLD
ASSEMBLY		CTM-211-4102R/L-12S		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	S
②	1	5" WIDE; AIR BLOW BOX NOSE MODULE	MOD-211-0101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; STD REWIND BLOCK & SHAFT	ASS-200-0145R/L	S
⑤	1	5" STANDARD REWIND MANDREL	ASS-200-0147	S
⑥	1	NORWOOD IMPRINTER ASSEMBLY	ASS-200-4102R/L-12	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S



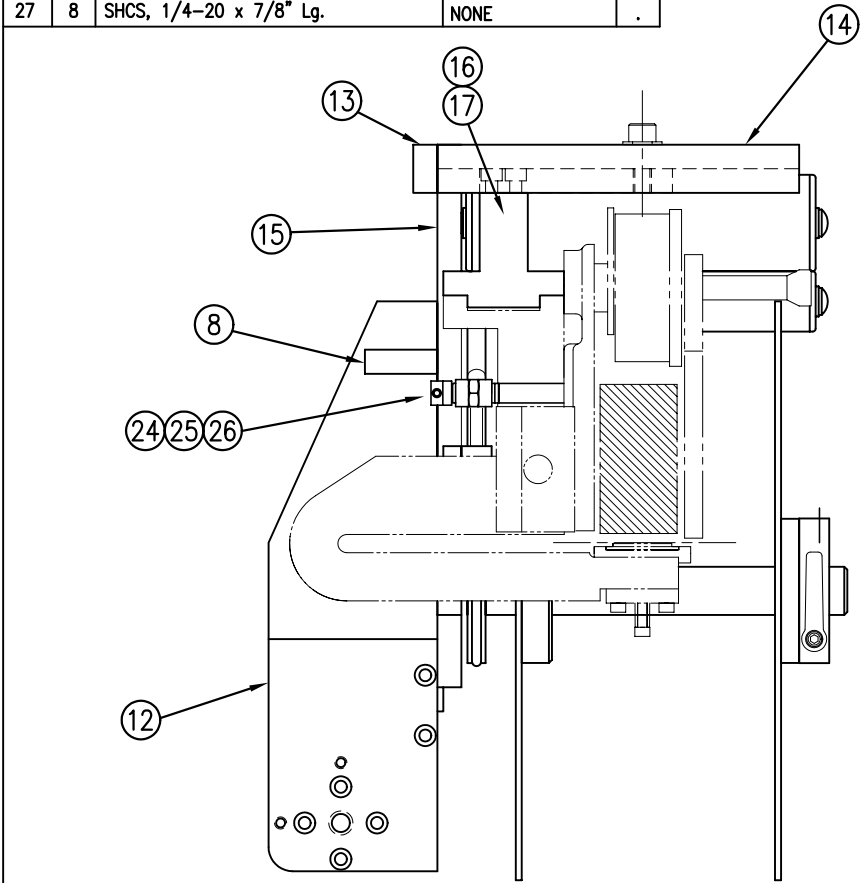
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

CTM-211-4102R/L-12S

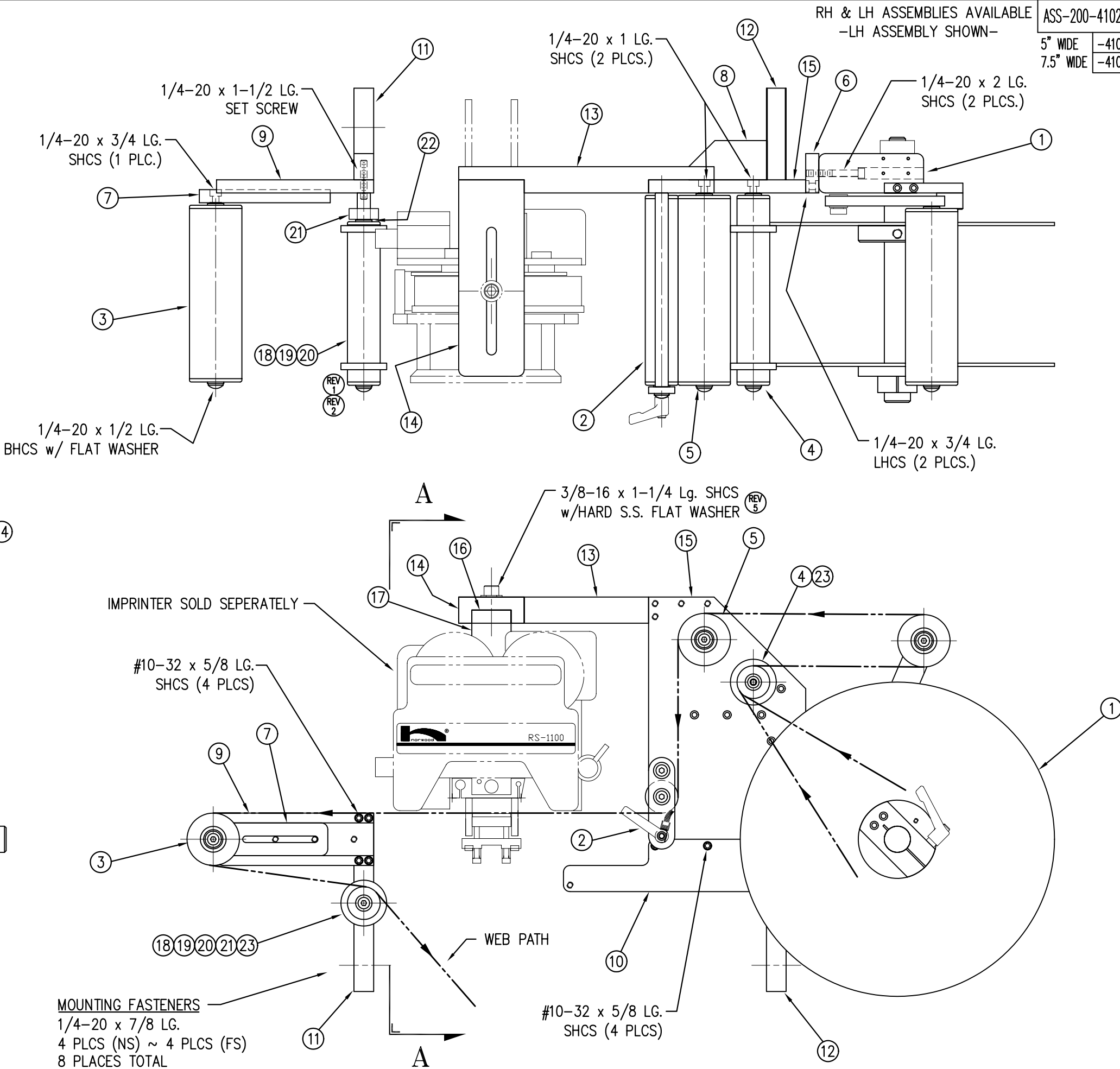
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.				Dept. Code	70
TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX				PART: 5" WIDE: AIR BLOW w/NORWOOD IMPRINTER ASSEMBLY	
REV. DESCRIPTION	REV. DATE	REV. BY:	REV. BY:	Scale:	Date:
0 NEW TITLEBLOCK; DWG. No. WAS 200-3641	07/08/03	TDR	TDR	1=8	01/06/00
DRAWN BY: BOB S.				F:\Engineering\Standard Parts\Appliator\360	
				211\CTM-211-4102RL-12S	



BILL OF MATERIAL			SOLD
ASSEMBLY	ASS-200-4102R/L-X-12		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5";7.5" WIDE; 12" UNWIND ASSY	MOD-200-X121R/L
②	1	5";7.5" TENSION BRUSH ASSEMBLY	ASS-200-X126R/L
③	1	5";7.5" DANCER ROLLER ASSEMBLY	ASS-200-X131
④	1	5";7.5" TENSION ROLLER ASSEMBLY	ASS-200-X135
⑤	1	5";7.5" IMPRINTER GUIDE ROLLER ASS'Y	ASS-200-4104-X
⑥	1	12" UNWIND ASSEMBLY MOUNTING PLATE	MP-200-4201
⑦	1	REGISTRATION ROLLER SLIDE PLATE	MP-200-4202
⑧	1	IMPRINTER PLATE GUSSET	MP-200-4230
⑨	1	REGISTRATION ROLLER MTG. PLATE	MP-200-4231
⑩	1	IMPRINTER PLATE BOTTOM SUPPORT	MP-200-4232
⑪	1	REGISTRATION SUPPORT ARM	MP-200-4233
⑫	1	IMPRINTER MOUNT PLATE	MP-200-4234
⑬	1	RS-1100 MOUNTING ARM	MP-200-4235
⑭	1	RS-1100 SLIDE BAR (5"; 7.5")	MP-200-4236-X
⑮	1	IMPRINTER PLATE	MP-200-4237
⑯	1	RS-1100 ADAPTER MOUNT PLATE	MP-200-4238
⑰	1	RS-1100 ADAPTER MOUNT	MP-200-4239
⑱	1	5"; 7.5" IDLER ROLLER	MP-211-X209
⑲	1	5"; 7.5" TENSION ROLLER SHAFT	PM-200-X254
⑳	2	ROLLER CAP	PM-200-0295-1.25
㉑	1	1/2" ID LOCK COLLAR	PM-C01005
㉒	1	RED FIBER WASHER	PM-FAW30920
㉓	4	GUIDE COLLAR FOR 1.25"Ø ROLLER	MP-211-0210
㉔	1	1/8" NPT x 2.50" Lg. PIPE NIPPLE	PM-PF1139
㉕	1	1/8" NPT PIPE COUPLING	PM-PF1080
㉖	1	90° HOSE BARB, 1/8 NPT - 1/4 TUBE	PM-PF1169
27	8	SHCS, 1/4-20 x 7/8" Lg.	NONE



SECTION A-A

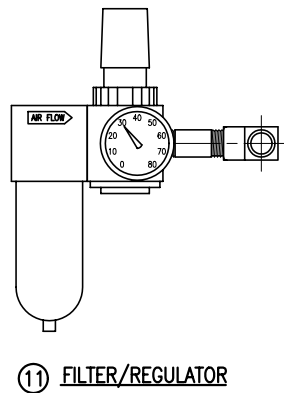


RH & LH ASSEMBLIES AVAILABLE  
-LH ASSEMBLY SHOWN-

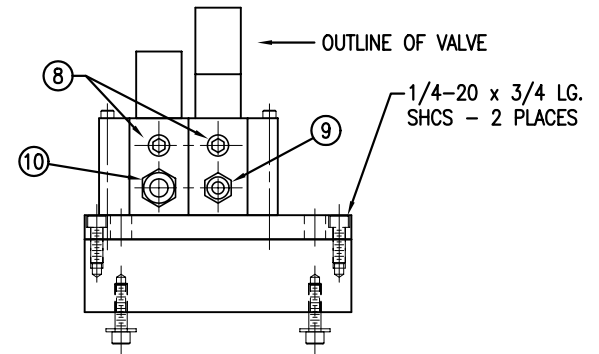
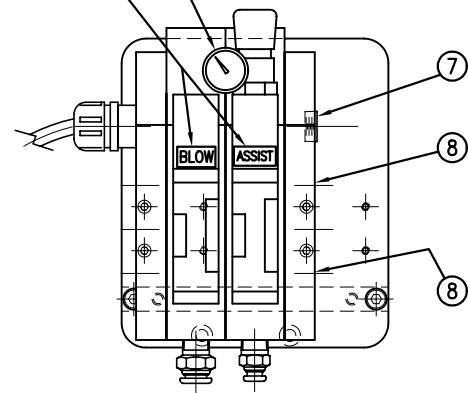
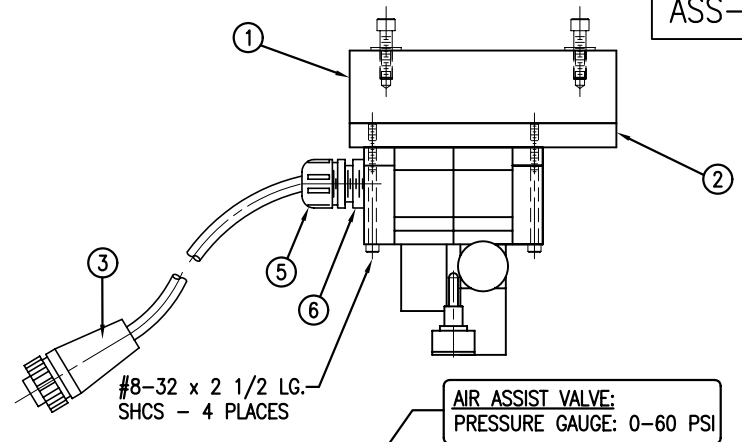
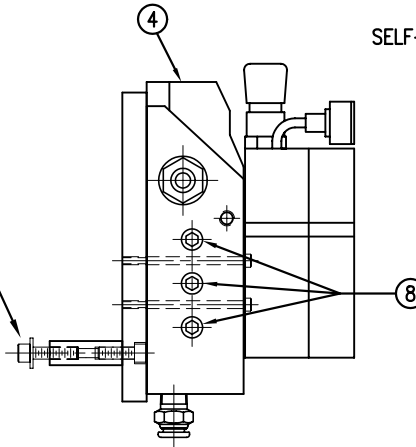
ASS-200-4102R/L-X-12	Dept. Code
5" WIDE	-4102R/L-5-12
7.5" WIDE	-4102R/L-7-12

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.			PART: 5" / 7.5" WIDE IMPRINTER ASSEMBLY		
TITLE: 360 SERIES APPLICATOR: NOR-WOOD IMPRINTER	REV. DATE	REV. BY	REV. DATE	REV. BY	REV. DATE
REV. 6	10/18/07	TDR	REV. 5	09/15/99	BOB S.
REV. DESCRIPTION	REV. DATE	REV. BY	REV. DATE	REV. BY	REV. DATE
6	ADDED ITEMS 22 THRU 26		5	09/15/99	BOB S.
F:\Engineering\Standard Parts\Applcator\360			200\ASS-200-4102RL-X-12		

BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-211-0106			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VALVE FASTENING PLATE	MP-214-0202	.
②	1	VALVE MOUNTING PLATE	MP-214-0206	.
③	1	VALVE CABLE	PE-200-0405	.
④	1	VALVE BANK	PM-VA2356	.
⑤	1	CORD GRIP	PE-CO2000	.
⑥	1	BUSHING, 3/4" NPT TO 1/2" NPT	PE-COND1080	.
⑦	1	3/4" NPT PLUG	PE-EN9110	.
⑧	7	1/4" NPT PLUG	PM-FT1200	.
⑨	1	FITTING, 1/4" TUBE w/ 1/4" NPT STRT	PM-PF1010	.
⑩	1	FITTING, 3/8" TUBE w/ 1/4" NPT STRT	PM-PF1020	.
⑪	1	FILTER/REGULATOR ASSEMBLY	ASS-211-0109	S
	2	SHCS, 1/4"-20 UNC x 7/8" LG.	NONE	.
	2	FLAT WASHER, 1/4" NOM. (STAINLESS)	NONE	.



MOUNTING FASTENERS  
1/4"-20 x 7/8" LG. SHCS  
w/ F.W. (2 PLACES)



FOR PNEUMATIC SCHEMATIC REFER TO:  
#ASS-200-0511

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 SERIES APPLICATOR: AIR BLOW BOX

PART: PNEUMATIC VALVE BANK ASSEMBLY

Dept. Code  
70

REV. 0  
REV. DESCRIPTION  
NEW TITLEBLOCK

REV. DATE  
04/11/03

REV. BY:  
TDR

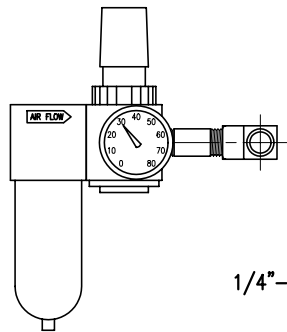
Scale:  
1=4

Date:  
06/02/98

DRAWN BY:  
BOB S.

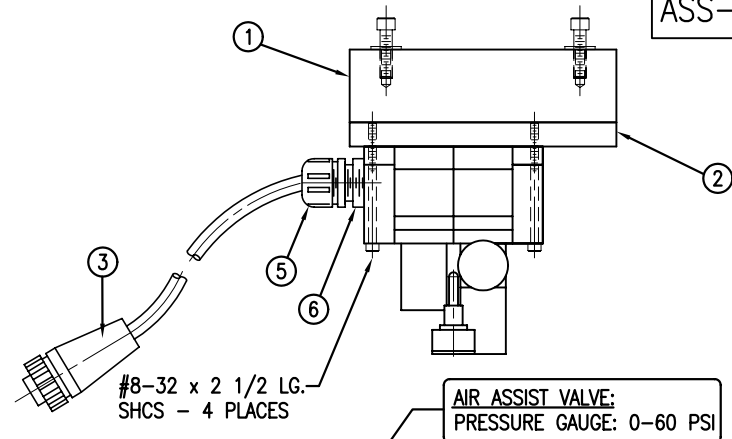
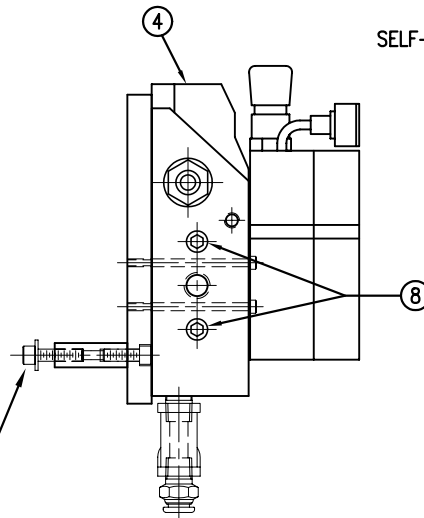
F:\Engineering\Standard Parts\Appliator\360  
211\ASS-211-0106

BILL OF MATERIAL				SOLD
ASS-211-0106E				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VALVE FASTENING PLATE	MP-214-0202	.
②	1	VALVE MOUNTING PLATE	MP-214-0206	.
③	1	VALVE CABLE	PE-200-0405	.
④	1	2-STATION VALVE BANK WITH "BLOW" VALVE MODIFIED PER DRAWING MP-211-0265	PM-VA2356	.
⑤	1	CORD GRIP	PE-CO2000	.
⑥	1	BUSHING, 3/4" NPT TO 1/2" NPT	PE-COND1080	.
⑦	1	3/4" NPT PLUG	PE-EN9110	.
⑧	7	1/4" NPT PLUG	PM-FT1200	.
⑨	1	FITTING, 1/4" TUBE w/ 1/4" NPT 90°	PM-PF1055	.
⑩	2	FITTING, 3/8" TUBE w/ 1/4" NPT STRT	PM-PF1020	.
⑪	1	WYE BRASS FITTING, 1/4" NPT	PM-FT1450	.
⑫	1	1/4" CLOSE NIPPLE	PM-PF1125	.
⑬	1	FILTER/REGULATOR ASSEMBLY	ASS-211-0109	S
	2	SHCS, 1/4"-20 UNC x 7/8" LG.	NONE	.
	2	FLAT WASHER, 1/4" NOM. (STAINLESS)	NONE	.



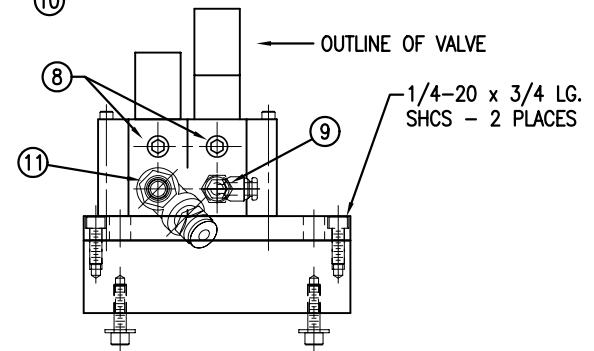
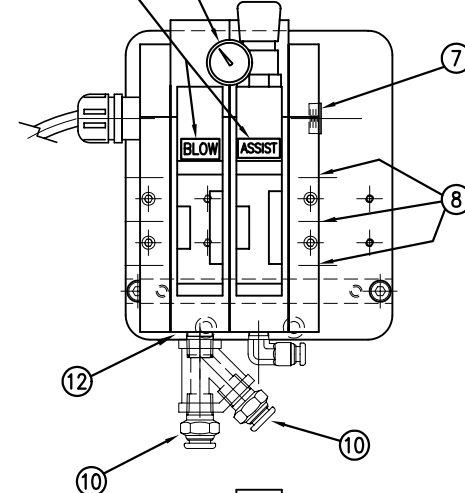
⑬ FILTER/REGULATOR

MOUNTING FASTENERS  
1/4"-20 x 7/8" LG. SHCS  
w/ F.W. (2 PLACES)



SELF-ADHESIVE LABEL

AIR ASSIST VALVE:  
PRESSURE GAUGE: 0-60 PSI



FOR PNEUMATIC SCHEMATIC REFER TO:  
#ASS-200-0511

ASS-211-0106E

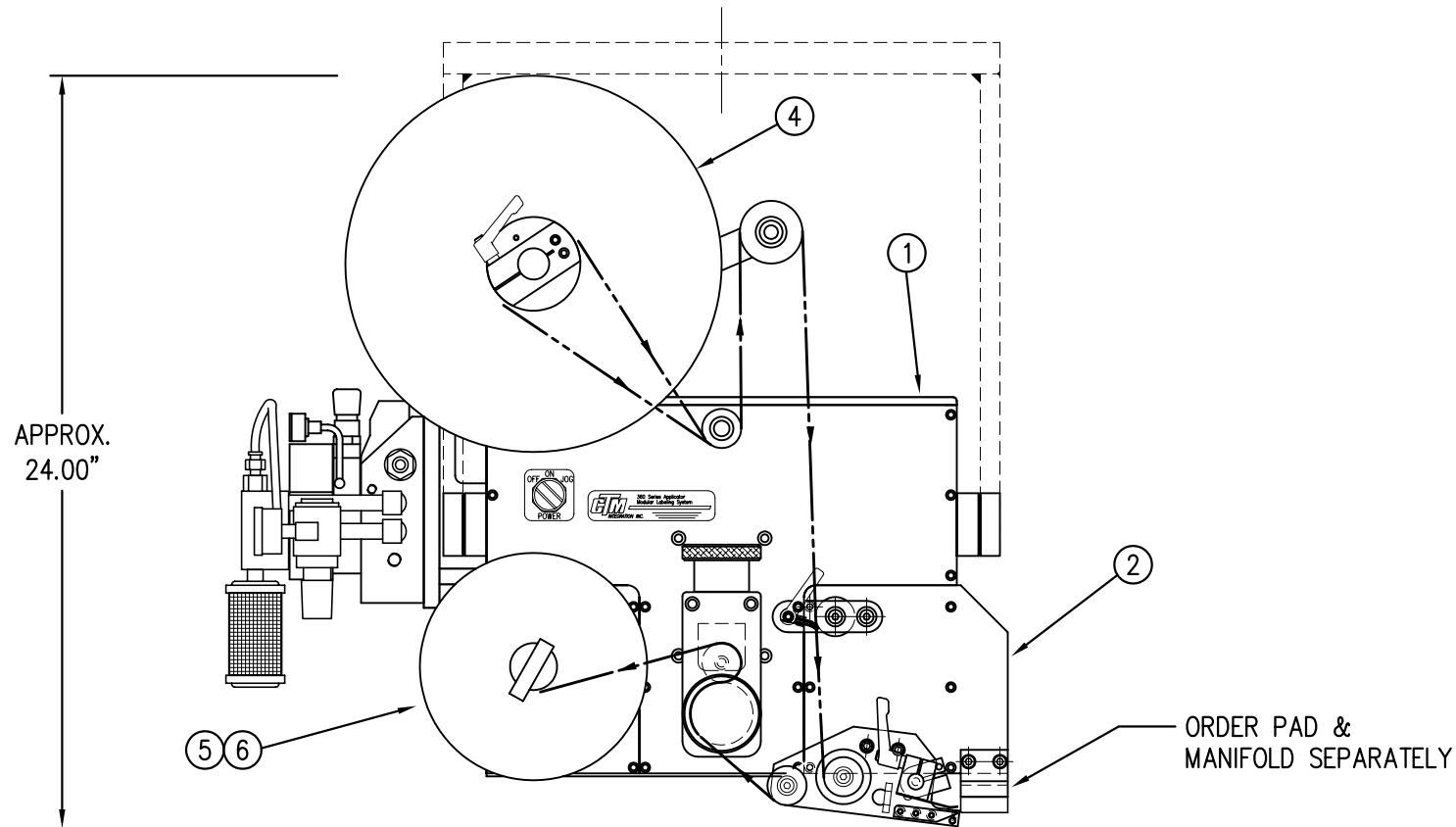
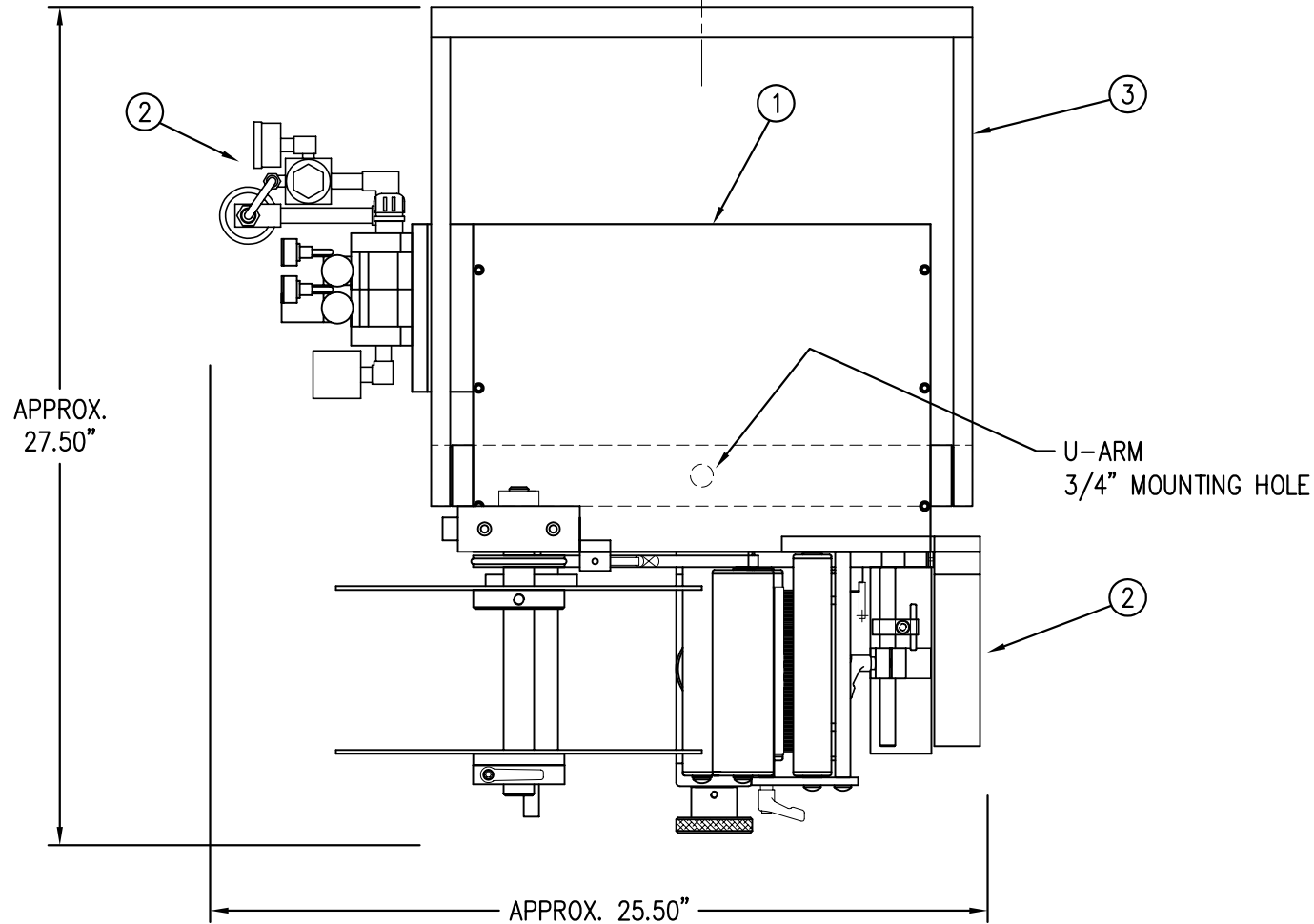
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: EXTENDED AIR BLOW BOX

PART: PNEUMATIC VALVE BANK ASSEMBLY

Dept. Code  
70

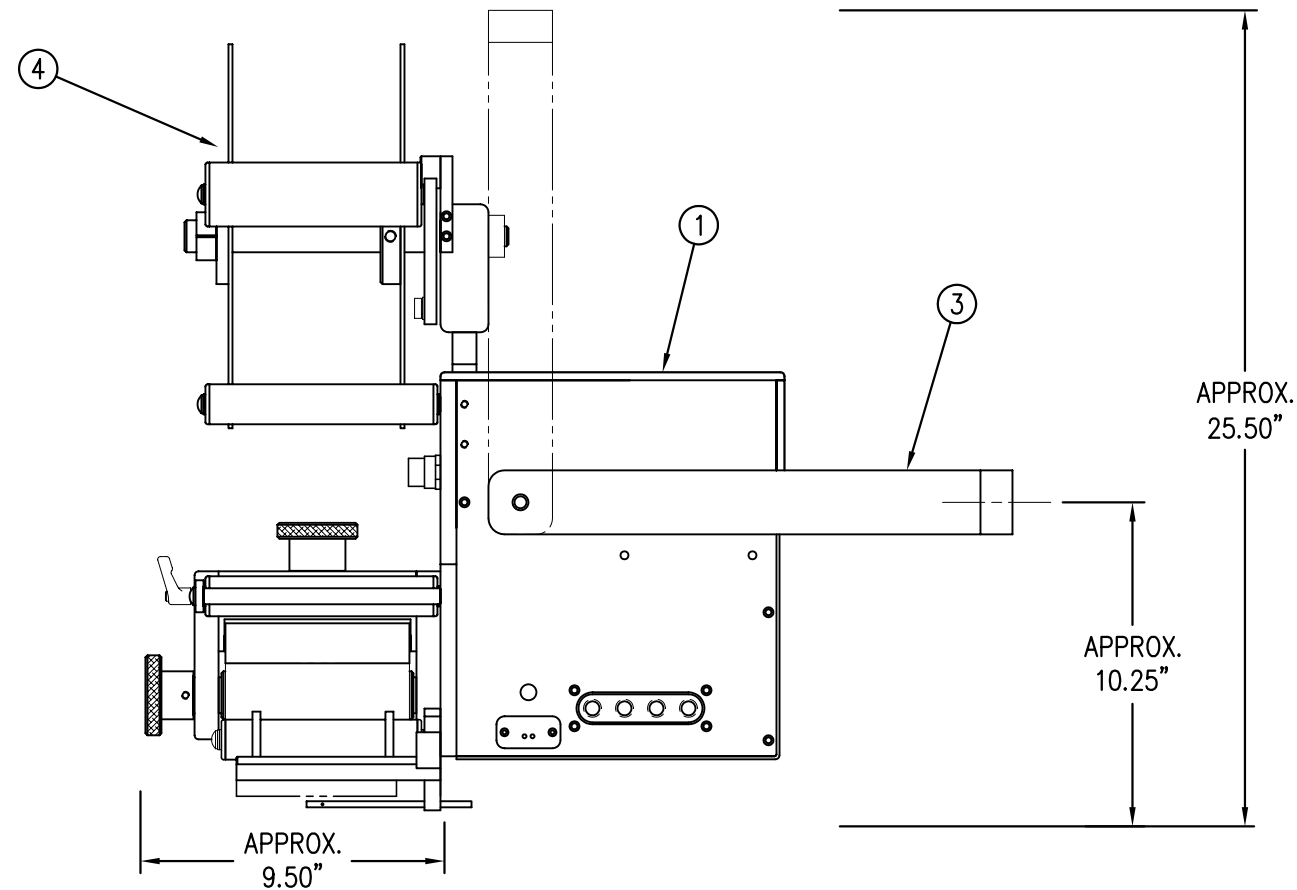
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:
0	-	-	XXX	1=4	08/03/06	Tracy Rhodes	F:\Engineering\Standard Parts\Applcator\360 211\ASS-211-0106E



BILL OF MATERIAL				SOLD
CTM-211-0111RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; RVB NOSE MODULE	MOD-211-0111R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND ASSY	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
ORDER THESE ITEMS SEPARATELY:				
1.) LABEL PAD				
2.) LABEL MANIFOLD				
3.) PRODUCT DETECT SENSOR				

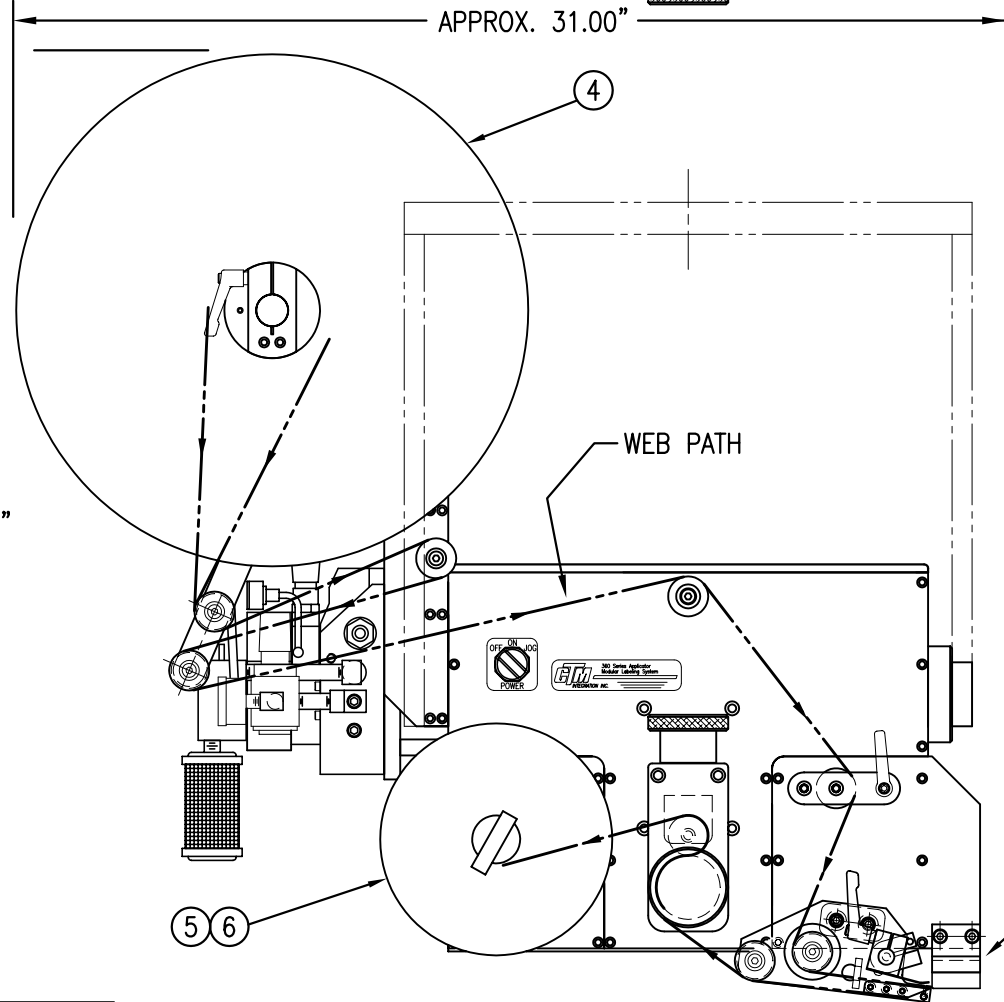
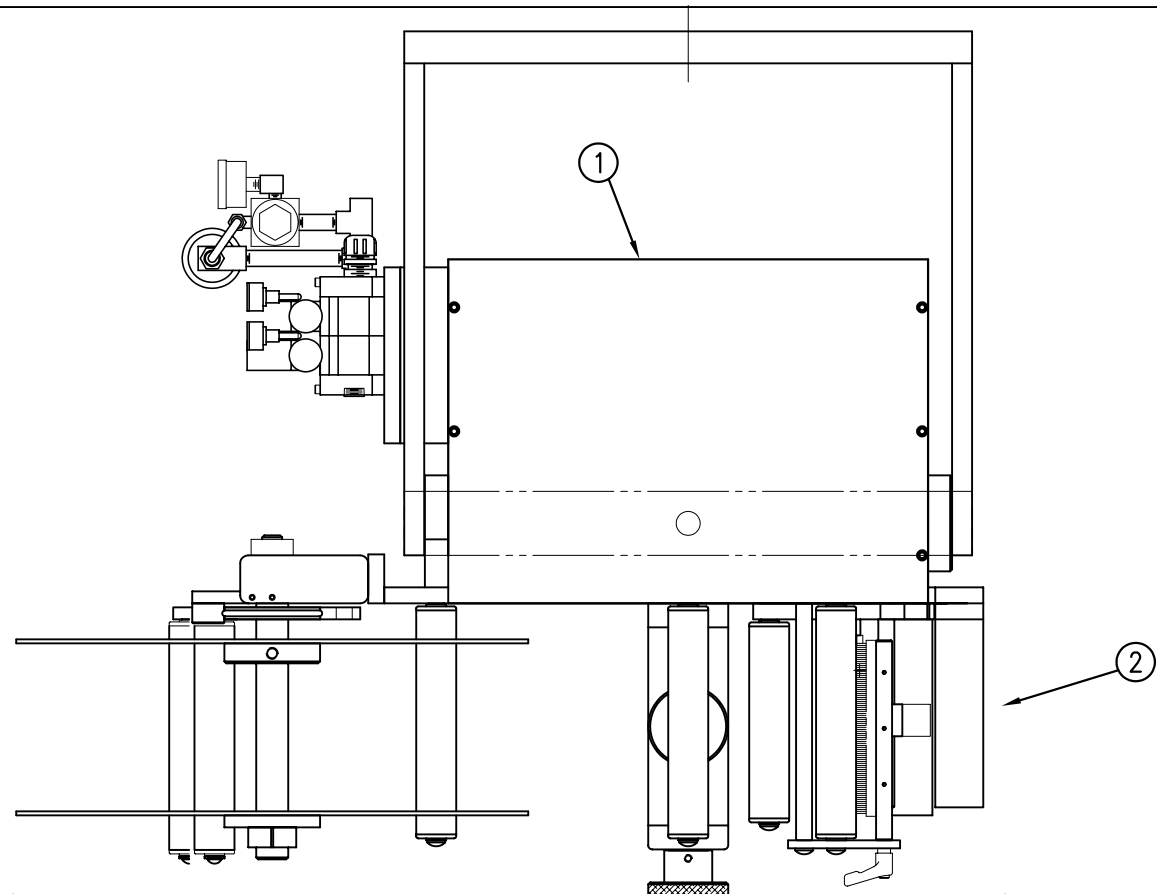
NOTE:  
PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY.  
(FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)

MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS.  
OTHER SIZES ARE CUSTOM.



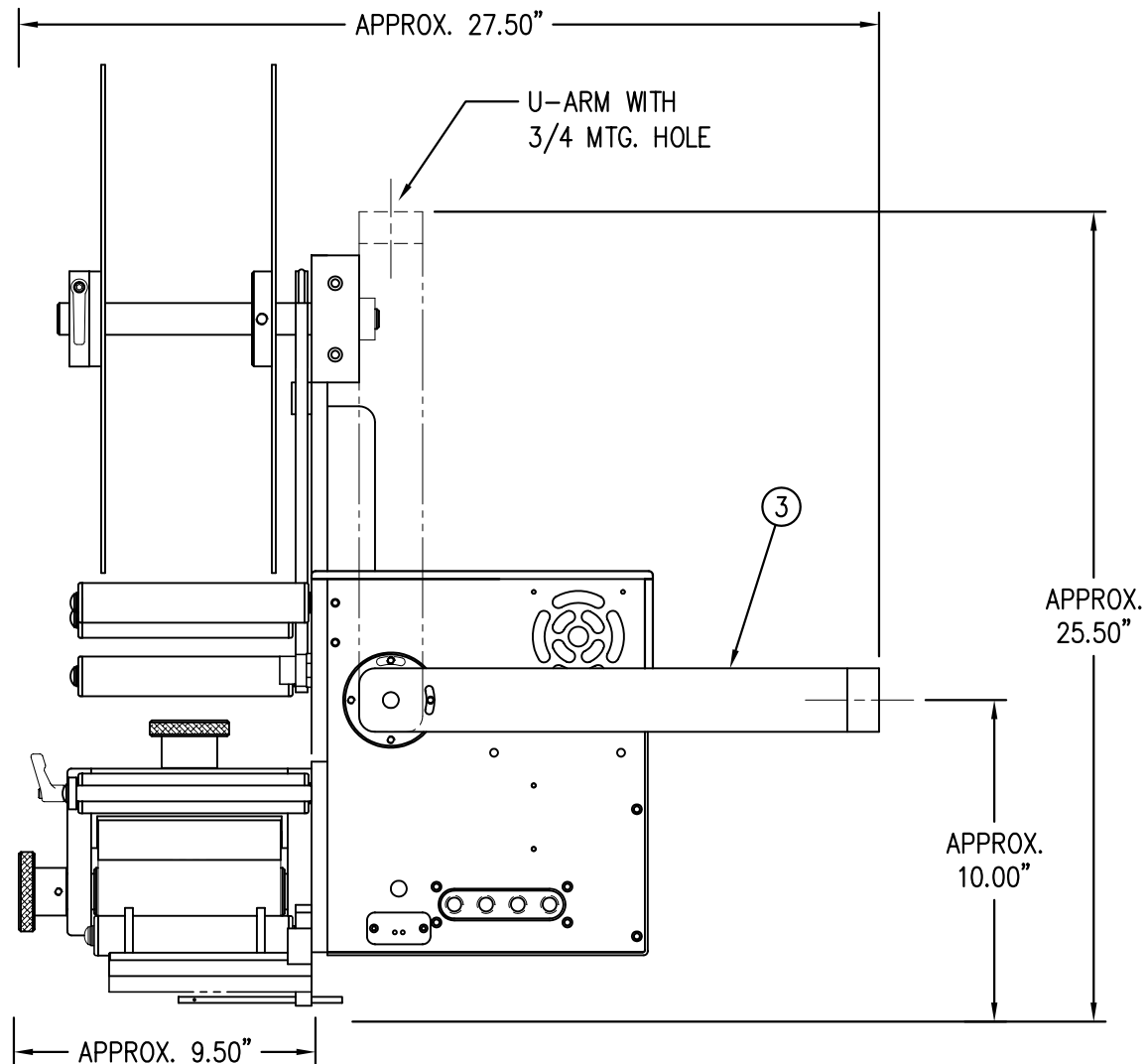
CTM-211-0111R/L-12X	
STANDARD REWIND	-0111RL-12S
COLLAPSIBLE REWIND	-0111RL-12C
FILM REWIND	-0111RL-12F

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

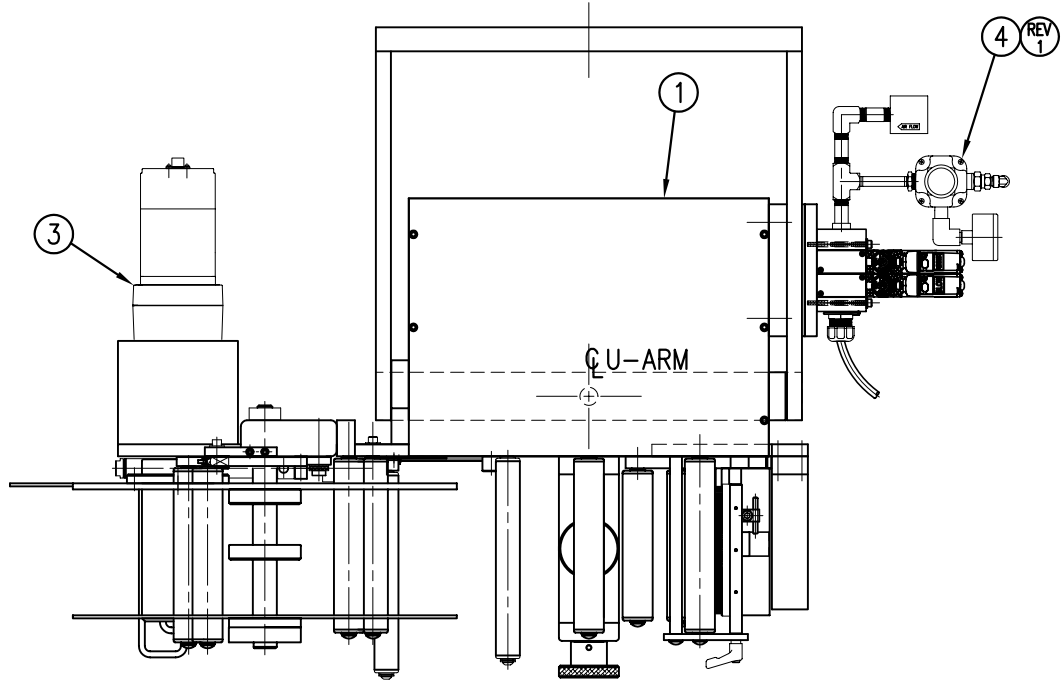
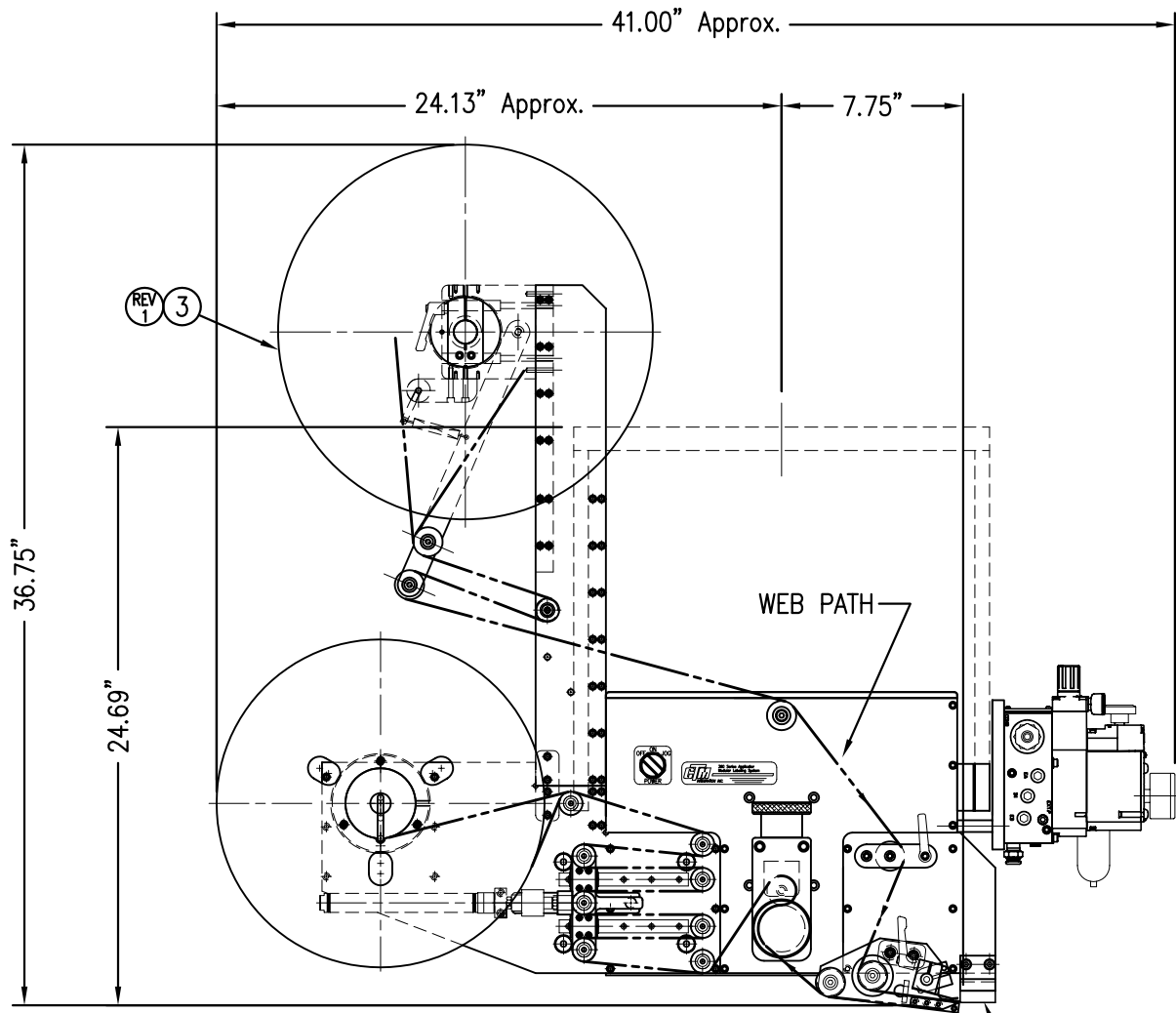


BILL OF MATERIAL				SOLD
CTM-211-0111RL-16X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; RVB NOSE MODULE	MOD-211-0111R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 16" UNWIND ASSY	MOD-200-3121R/L-5	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
ORDER THESE ITEMS SEPARATELY: 1.) LABEL PAD 2.) LABEL MANIFOLD 3.) PRODUCT DETECT SENSOR				

NOTE: PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY.  
(FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)  
MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS.  
OTHER SIZES ARE CUSTOM.

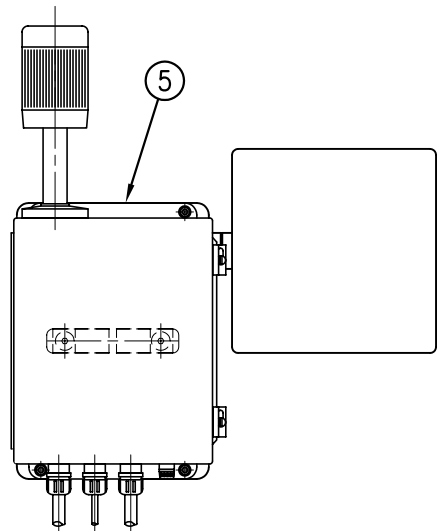
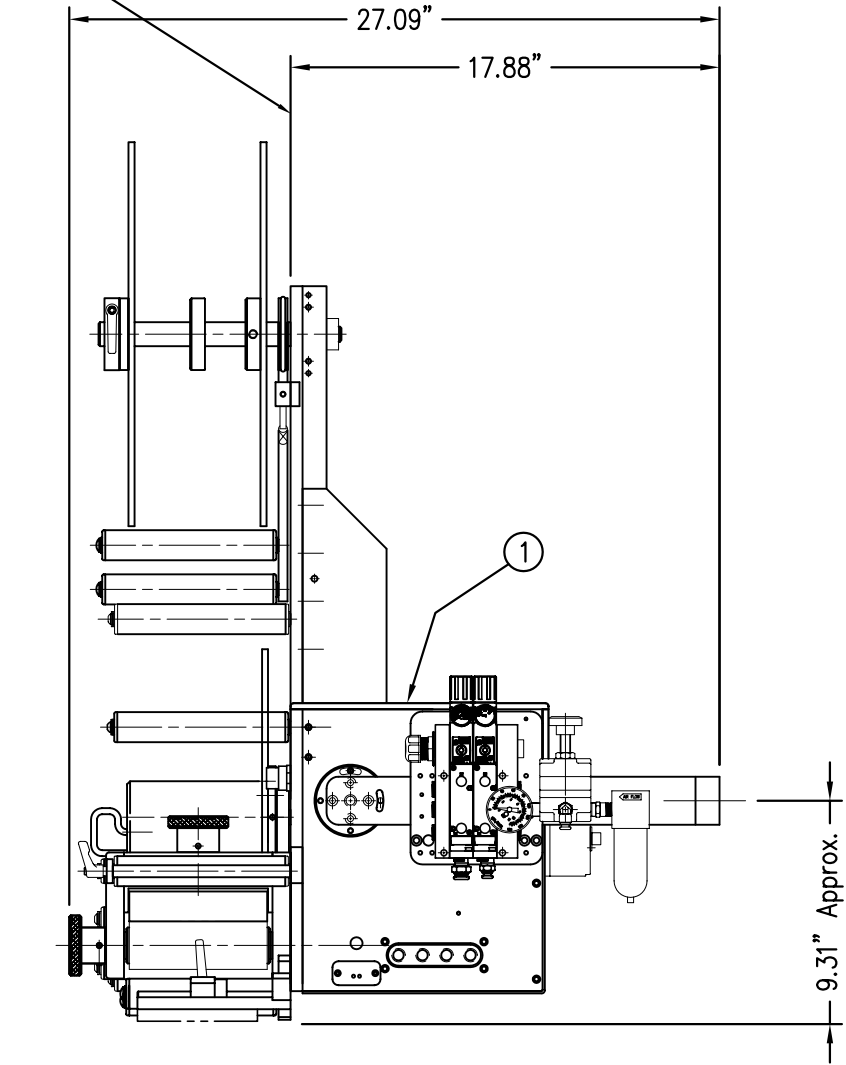


CTM-211-0111R/L-16X  
STANDARD REWIND -0111R/L-16S  
COLLAPSIBLE REWIND -0111R/L-16C  
FILM REWIND -0111R/L-16F  
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



② INCLUDES VALVE BANK Assy.  
ORDER PAD & MANIFOLD SEPARATELY

APPLICATOR  
FACE



ALARM LIGHT / DISPLAY ASSEMBLY

BILL OF MATERIAL				
CTM-211-0111R/L-16PXX				
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	CTM-200-0151R	5.00" WDE R.H. 360 CORE UNIT	RH
	1	CTM-200-0151L	5.00" WDE L.H. 360 CORE UNIT	LH
②	1	MOD-211-0111R	5.00" WDE R.H. RVB NOSE MODULE	RH
	1	MOD-211-0111L	5.00" WDE L.H. RVB NOSE MODULE	LH
③	1	MOD-200-3157R-5	5.0" WIDE R.H. 16" Pwr REWIND, Std MANDREL	RH
	1	MOD-200-3157L-5	5.0" WIDE L.H. 16" Pwr REWIND, Std MANDREL	LH
	1	MOD-200-3158R-5	5.0" WIDE RH 16" Pwr COLLAPSIBLE REWIND	RH
	1	MOD-200-3158L-5	5.0" WIDE LH 16" Pwr COLLAPSIBLE REWIND	LH
	1	MOD-200-3157R-5-RU	5.0" Wide, RH 16" Pwr Rewind, Std Mandrel, RU	RH
	1	MOD-200-3157L-5-RU	5.0" Wide, LH 16" Pwr Rewind, Std Mandrel, RU	LH
	1	MOD-200-3158R-5-RU	5.0" Wide, RH 16" Pwr Rewind, Collap. Mandrel, RU	RH
	1	MOD-200-3158L-5-RU	5.0" Wide, LH 16" Pwr Rewind, Collap. Mandrel, RU	LH
④	1	ASS-200-3106	HI/LO REGULATOR Assy,	
⑤	1	ASS-200-3161	ALARM LIGHT ASSEMBLY	
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE	

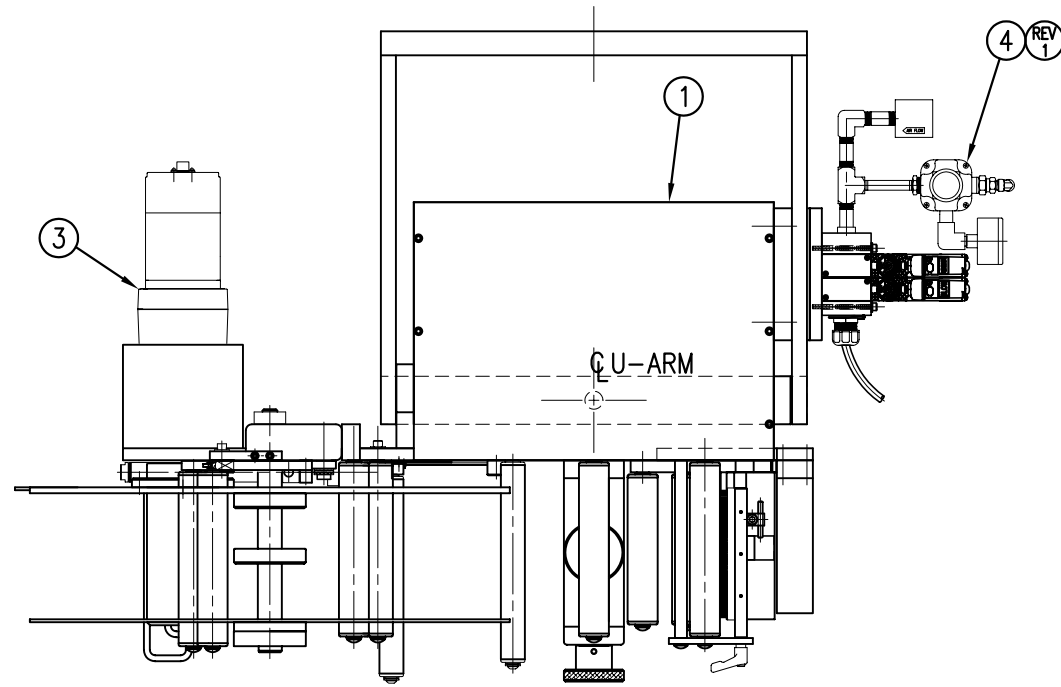
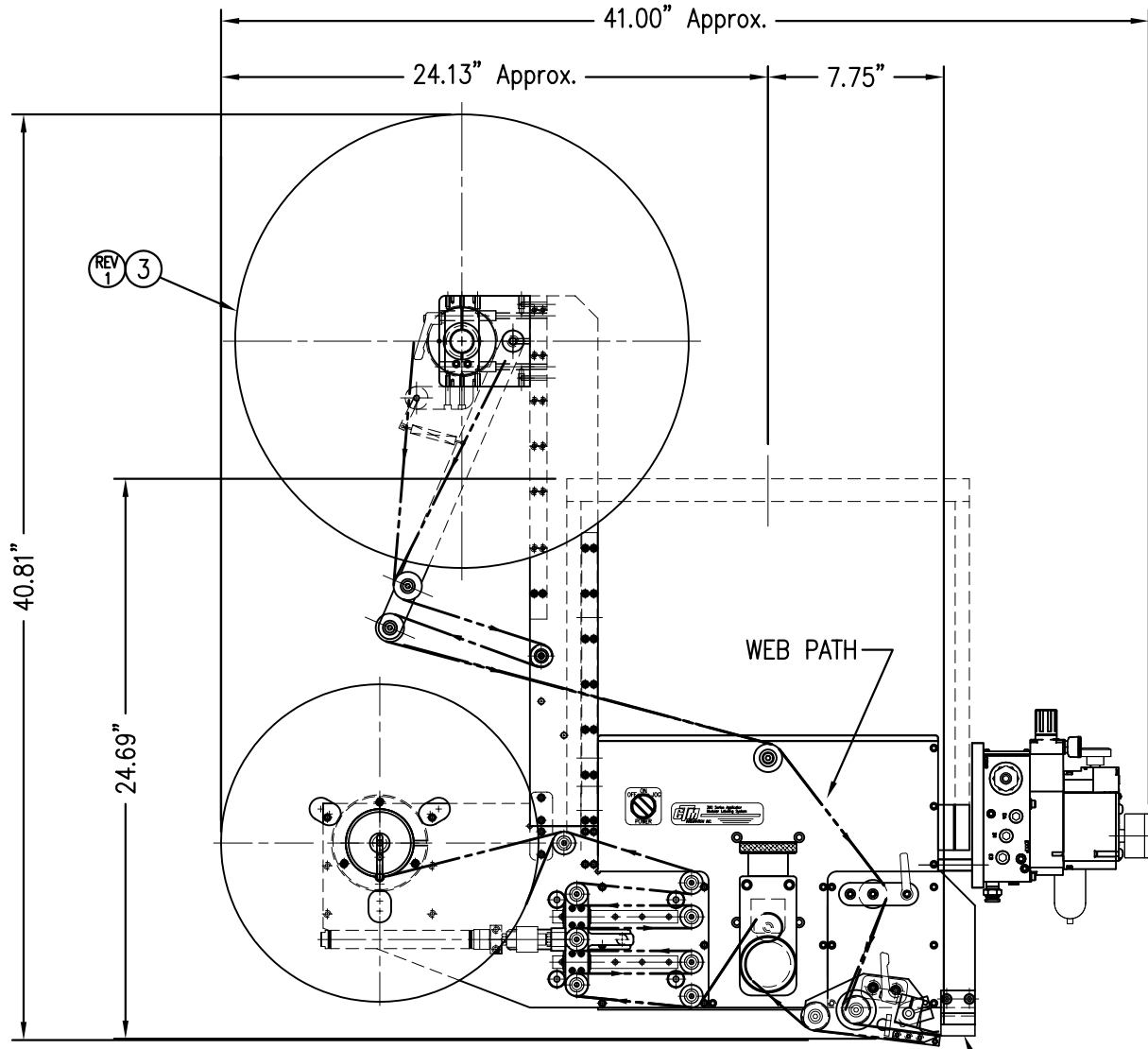
NOTE:  
PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY.  
(FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)  
  
MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS.  
OTHER SIZES ARE CUSTOM.

CTM-211-0111RL-16PXX

R.H., STANDARD REWIND	-0111R-16PS
L.H., STANDARD REWIND	-0111L-16PS
R.H., COLLAPSIBLE REWIND	-0111R-16PC
L.H., COLLAPSIBLE REWIND	-0111L-16PC
R.H., STANDARD REWIND, REELS-UP	-0111R-16PS-RU
L.H., STANDARD REWIND, REELS-UP	-0111L-16PS-RU
R.H., COLLAPSIBLE REWIND, REELS-UP	-0111R-16PC-RU
L.H., COLLAPSIBLE REWIND, REELS-UP	-0111L-16PC-RU

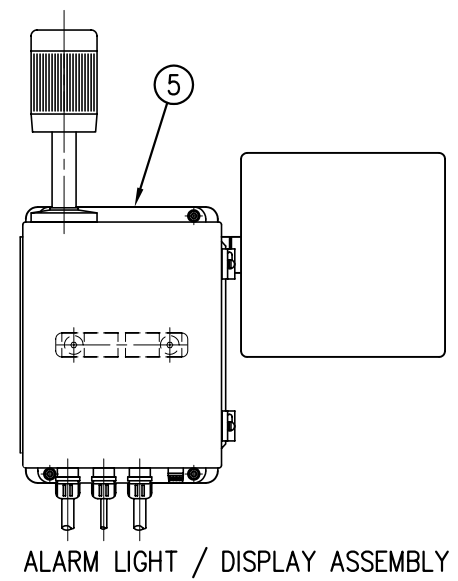
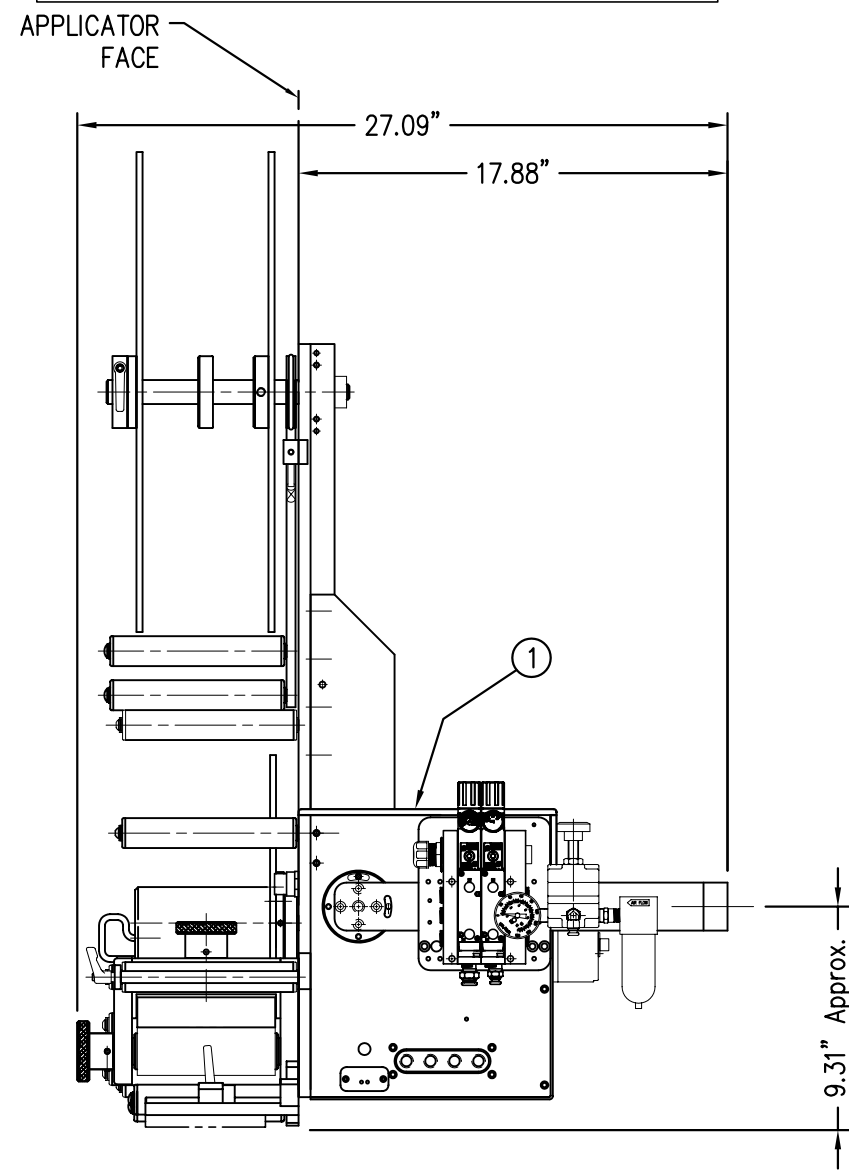
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-





② INCLUDES VALVE BANK Assy.  
ORDER PAD & MANIFOLD SEPARATELY

BILL OF MATERIAL				
CTM-211-0111R/L-20PXX				
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	CTM-200-0151R	5.00" WIDE R.H. 360 CORE UNIT	RH
	1	CTM-200-0151L	5.00" WIDE L.H. 360 CORE UNIT	LH
②	1	MOD-211-0111R	5.00" WIDE R.H. RVB NOSE MODULE	RH
	1	MOD-211-0111L	5.00" WIDE L.H. RVB NOSE MODULE	LH
③	1	MOD-200-3156R-5	5.0" WIDE R.H. 20" Pwr REWIND, Std MANDREL	RH
	1	MOD-200-3156L-5	5.0" WIDE L.H. 20" Pwr REWIND, Std MANDREL	LH
	1	MOD-200-3159R-5	5.0" WIDE RH 20" Pwr COLLAPSIBLE REWIND	RH
	1	MOD-200-3159L-5	5.0" WIDE LH 20" Pwr COLLAPSIBLE REWIND	LH
	1	MOD-200-3156R-5-RU	5.0" Wide, RH 20" Pwr Rewind, Std Mandrel, RU	RH
	1	MOD-200-3156L-5-RU	5.0" Wide, LH 20" Pwr Rewind, Std Mandrel, RU	LH
	1	MOD-200-3159R-5-RU	5.0" Wide, RH 20" Pwr Rewind, Collap. Mandrel, RU	RH
	1	MOD-200-3159L-5-RU	5.0" Wide, LH 20" Pwr Rewind, Collap. Mandrel, RU	LH
④	1	ASS-200-3106	HI/LO REGULATOR Assy,	
⑤	1	ASS-200-3161	ALARM LIGHT ASSEMBLY	
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE	
<div>NOTE: PAD &amp; MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY. (FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)  MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS. OTHER SIZES ARE CUSTOM.</div>				



CTM-211-0111RL-20PXX	
R.H., STANDARD REWIND	-0111R-20PS
L.H., STANDARD REWIND	-0111L-20PS
R.H., COLLAPSIBLE REWIND	-0111R-20PC
L.H., COLLAPSIBLE REWIND	-0111L-20PC
R.H., STANDARD REWIND, REELS-UP	-0111R-20PS-RU
L.H., STANDARD REWIND, REELS-UP	-0111L-20PS-RU
R.H., COLLAPSIBLE REWIND, REELS-UP	-0111R-20PC-RU
L.H., COLLAPSIBLE REWIND, REELS-UP	-0111L-20PC-RU

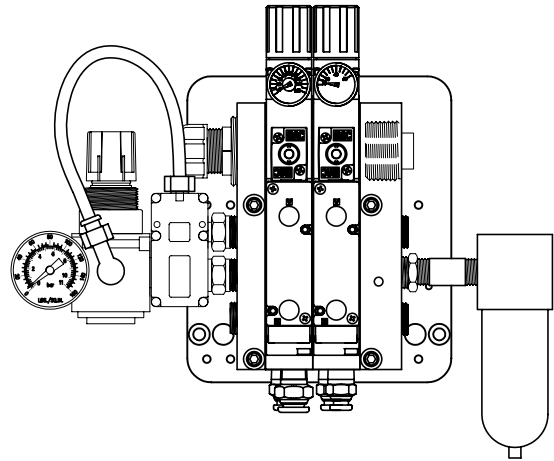
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

BILL OF MATERIAL			
MOD-211-0111R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-211-0111	RVB w/ TRANSITION PLATE
⑥	1	ASS-211-0112M	RVB VALVE BANK ASSEMBLY (MAC)

NOTE:

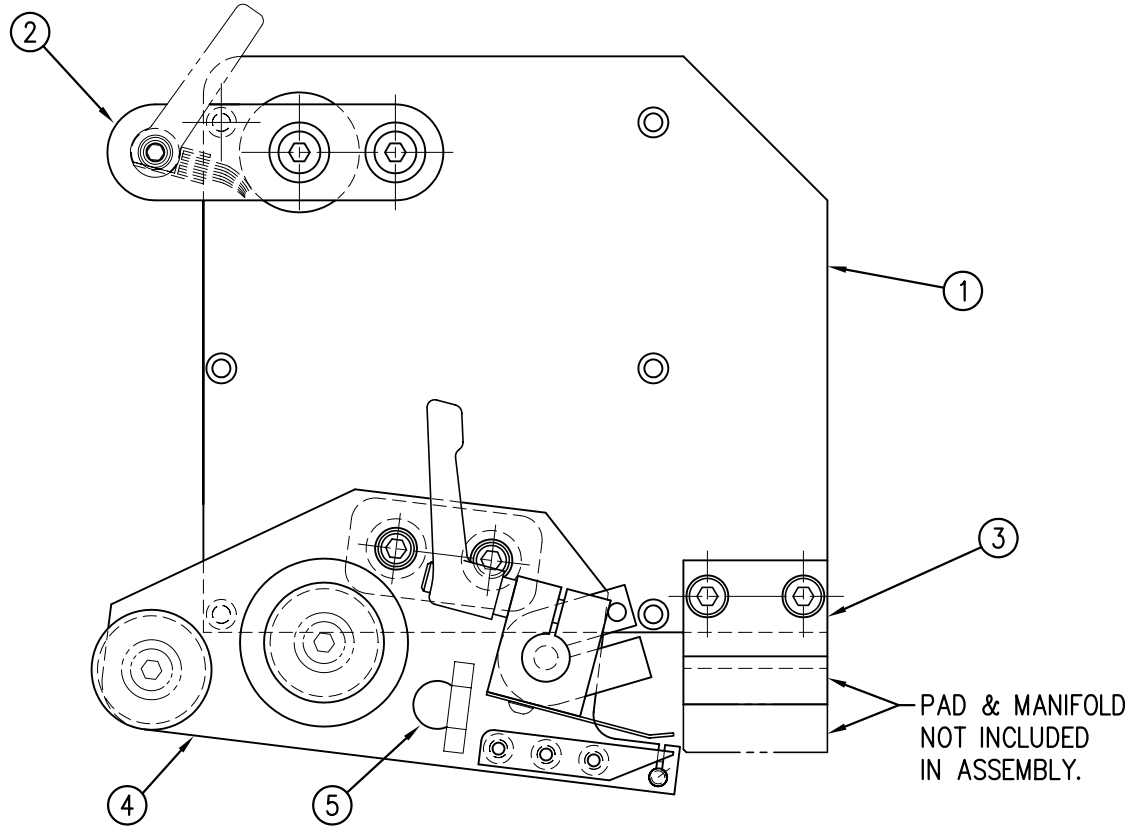
PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY.  
(FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)

MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS.  
OTHER SIZES ARE CUSTOM.



⑥ VALVE BANK ASSEMBLY  
SCALE: 3"=1'-0"

BILL OF MATERIAL			
ASS-211-0111R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-211-0235	RVB TRANSITION PLATE
②	1	ASS-200-0126R/L	TENSION BRUSH ASSEMBLY
③	1	MP-211-0237	MANIFOLD MOUNT PLATE
④	1	ASS-211-0102R/L	AIR BLOW PEEL EDGE
⑤	1	ASS-211-0108-2	FIBER OPTIC SENSOR w/2" MTG. SHAFT
	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS



RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

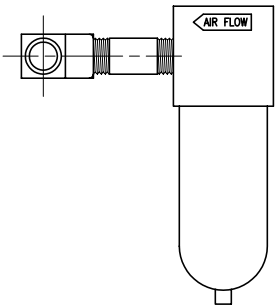
MOD-211-0111R/L  
ASS-211-0111R/L

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 SERIES APPLICATOR: RVB		PART: 5" WIDE RVB NOSE ASSEMBLY	
REV. DESCRIPTION	REV. DATE	REV. BY:	REV. DATE
0 NEW TITLEBLOCK; ADDED VALVE BANK FOR MODULE	04/21/03	TDR	09/01/99
F:\Engineering\Standard Parts\Appliator\360		211\MOD-211-0111RL	
Dept. Code		70	
BOB S.		BOB S.	

BILL OF MATERIAL			
ASS-211-0112M			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0202	VALVE FASTENING MOUNTING PLATE
②	1	MP-214-0206	VALVE MOUNTING PLATE
③	1	PE-200-0405	VALVE CABLE
④	1	PM-REG1500	REGULATOR
⑤	1	PM-VA2384	0-160 PSI PRESSURE GUAGE
⑥	2	PM-PF1180	NPT 90° STREET ELBOW 1/8" FEMALE TO 1/8" MALE
⑦	1	PM-PUMP1010	VACUUM PUMP, 55 PSI FEED PRESSURE, MUFFLED EXHAUST
⑧	1	PM-VA2358M	2 STATION MAC VALVE BANK
⑨	1	PE-CO2000	CORD GRIP
⑩	3	PM-FT1200	1/4" NPT SOCKET HEAD PLUG
⑪	1	PM-PF1200	TEE 1/4" NPT FEMALE 3 ENDS
⑫	1	PM-PF1143	NIPPLE, 1/4" NPT X 1 1/2" LG.
⑬	1	PM-PF1220	ADAPTOR, 3/8" NPT FEMALE TO 1/4" NPT MALE
⑭	1	PM-PF1157	REDUCER, 3/8" NPT TO 1/8" NPT
⑮	1	PM-PF1159	FITTING, 3/8" NPT MALE BOTH ENDS
⑯	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑰	1	PE-COND1084	STEEL REDUCER
⑱	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑲	1	PM-PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
⑳	1	PM-PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
㉑	1	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
㉒	10.5"	PM-PT1070	1/4" OD TUBING
㉓	1	ASS-214-0106	AIR FILTER
㉔	1	PM-PF1055	90° ELBOW 1/4" TUBE TO 1/4" NPT MALE
○	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
○	2	PM-FAW30275	1/4" SS FLAT WASHER
○	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
○	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
○	4	PM-FAW30265	#10 SS FLAT WASHER

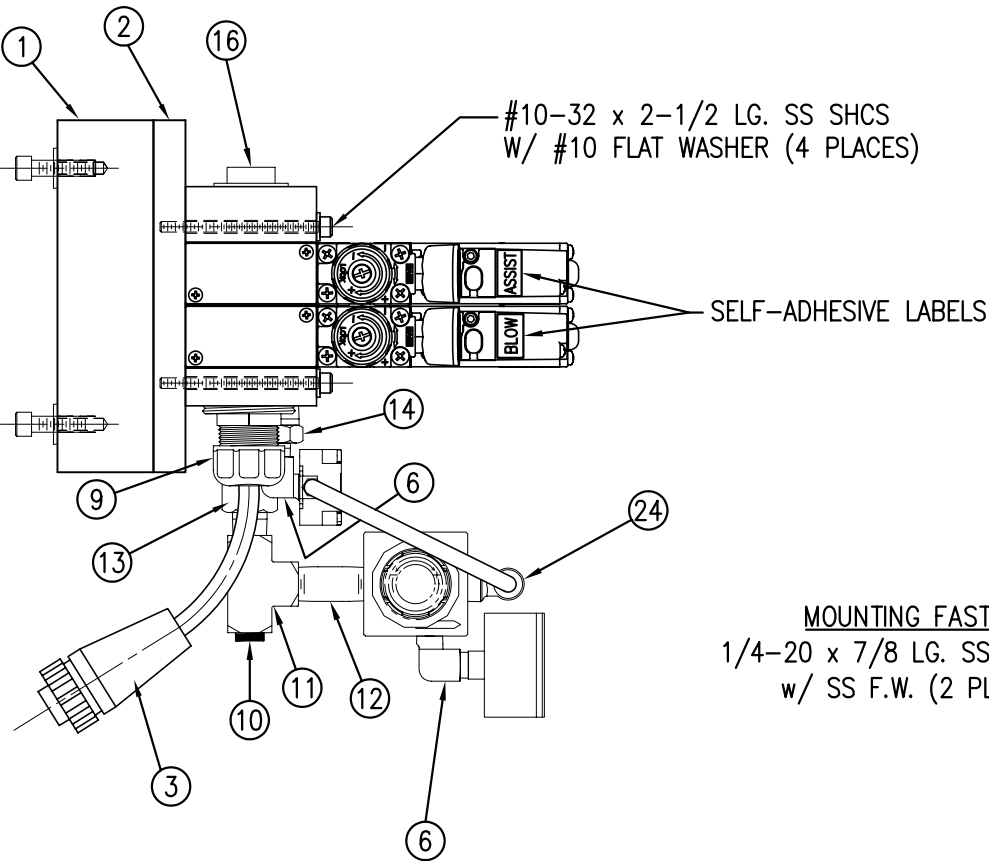
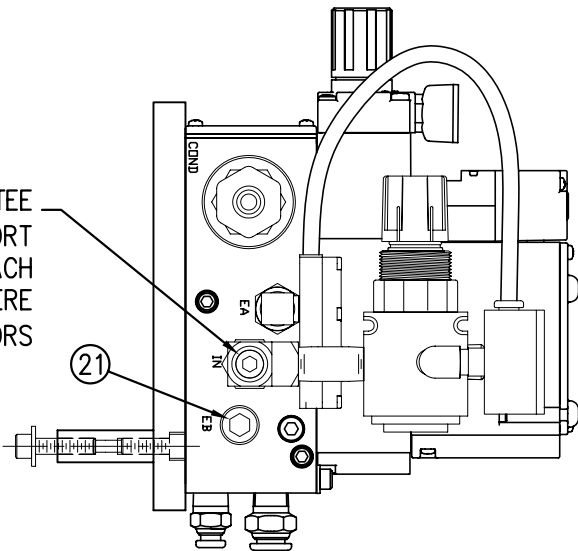
VALVE BANK SPARE PARTS:

SOLENOID: #PM-VA2395M  
 AIR ASSIST REGULATOR W/GUAGE: #PM-VA2396M  
 BLOW/TAMP/IMPRINTER REGULATORS W/GUAGE: #PM-VA2397M  
 AIR ASSIST REGULATOR GUAGE: #PM-VA2382M  
 BLOW/TAMP/IMPRINTER REGULATOR GUAAGES: #PM-VA2380M

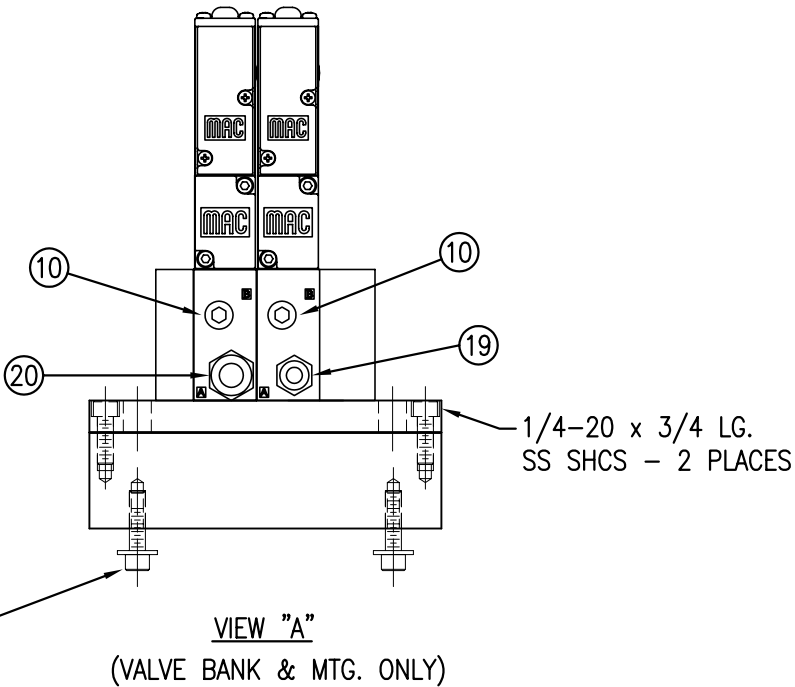


②③ AIR FILTER  
 SHIP LOOSE  
 -CUSTOMER TO INSTALL -

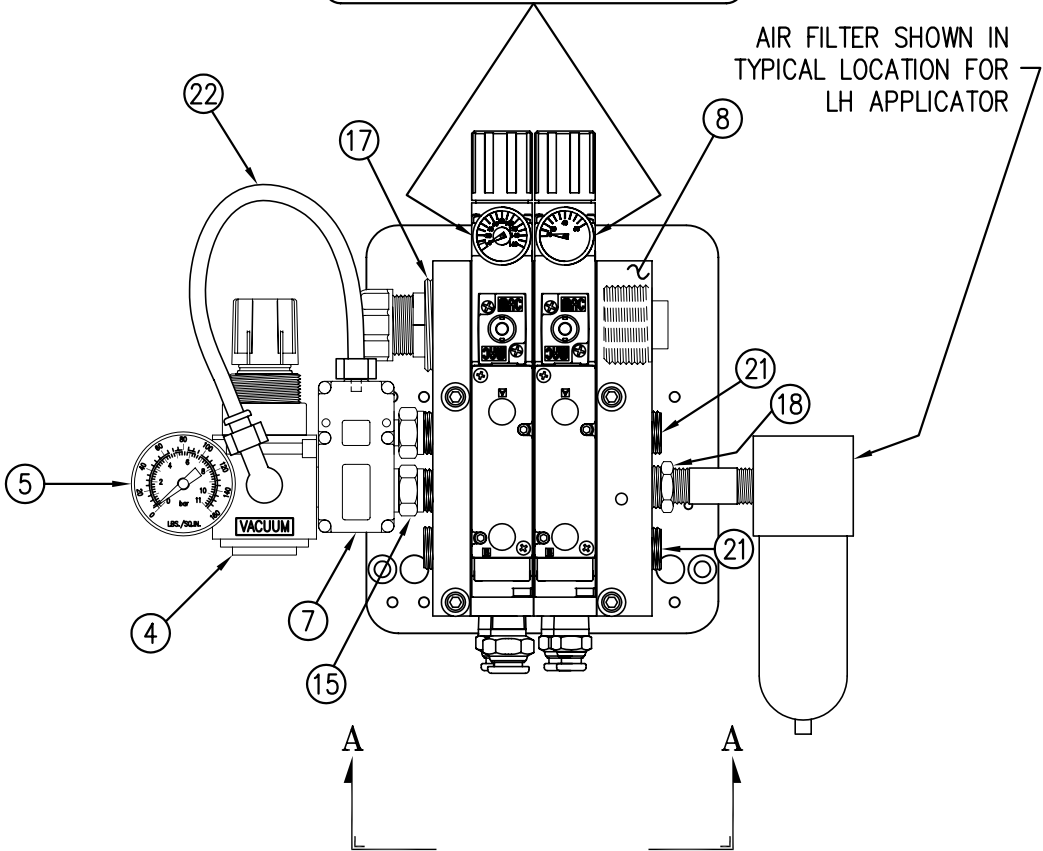
MOVE PLUG FROM TEE  
 ON THIS SIDE TO "IN" PORT  
 ON OPPOSITE SIDE & ATTACH  
 AIR FILTER ASSEMBLY HERE  
 (TO TEE) FOR RH APPLICATORS



MOUNTING FASTENERS  
 1/4-20 x 7/8 LG. SS SHCS  
 w/ SS F.W. (2 PLACES)



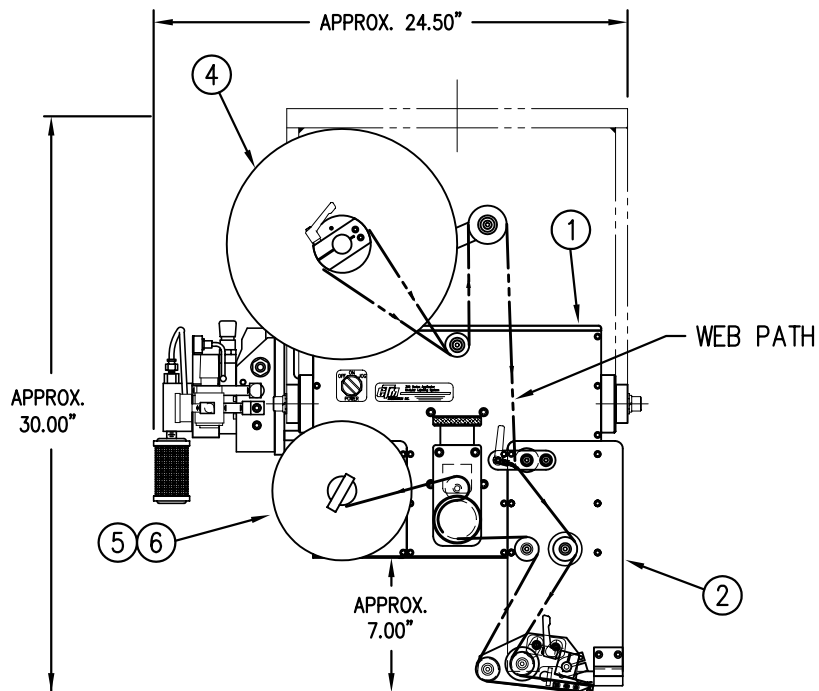
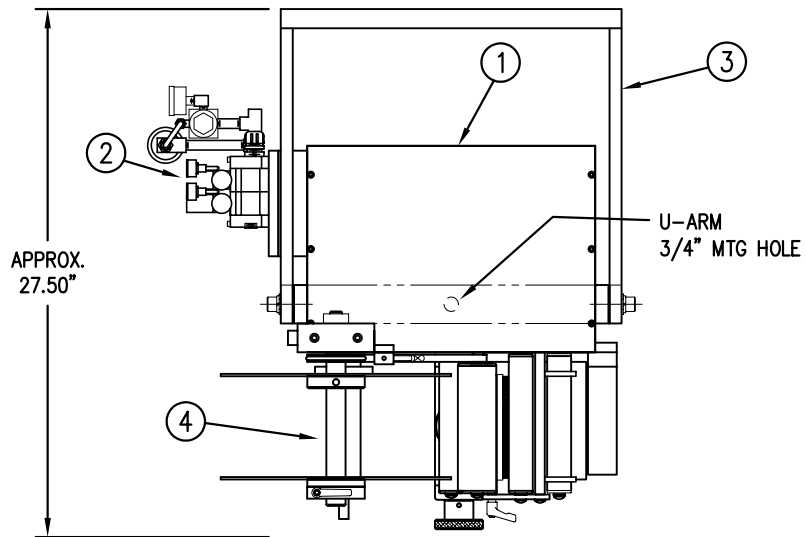
TAMP & BLOW VALVE:  
 PRESSURE GAUGE - 0-160 PSI  
 AIR ASSIST VALVE:  
 PRESSURE GAUGE - 0-60 PSI



AIR FILTER SHOWN IN  
 TYPICAL LOCATION FOR  
 LH APPLICATOR

ASS-211-0112M

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.			
APPLICATOR SERIES: 360		APPLICATOR WIDTH(S): 5"7.5"/10"	
REV. DESCRIPTION		REV. DATE	
0 -		1 -	
REV. BY: xxx		REV. DATE: 04/03/07	
SCALE: 1=3		DRAWN BY: E. SANOR	
TITLE: R/B 2 STATION VALVE BANK ASSEMBLY		F:\Engineering\Standard Parts\Applcator\360\	
DEPT. CODE: 70		360\ASS-211-0112M	



# BILL OF MATERIAL

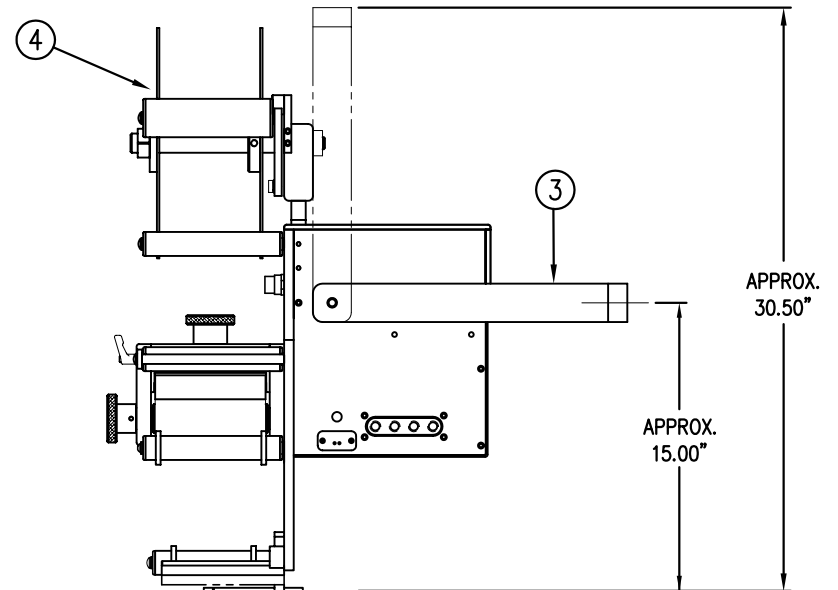
ASSEMBLY		CTM-211-0130RL-12X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; RVB w/6" DD SNORKEL	MOD-211-0130R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

CTM-211-0130R/L-12X

STANDARD REWIND -0130R/L-12S  
COLLAPSIBLE REWIND -0130R/L-12C  
FILM REWIND -0130R/L-12F

REV 1

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



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 SERIES APPLICATOR: RVB ASSEMBLY: SNORKEL

PART: 5" WIDE: RVB w/ 6" D.D. SNORKEL & 12" UNWIND ASS'Y

Dept. Code 70

REV. 1 REV. DESCRIPTION  
NEW COLLAPSIBLE MANDREL

REV. DATE  
10/16/07

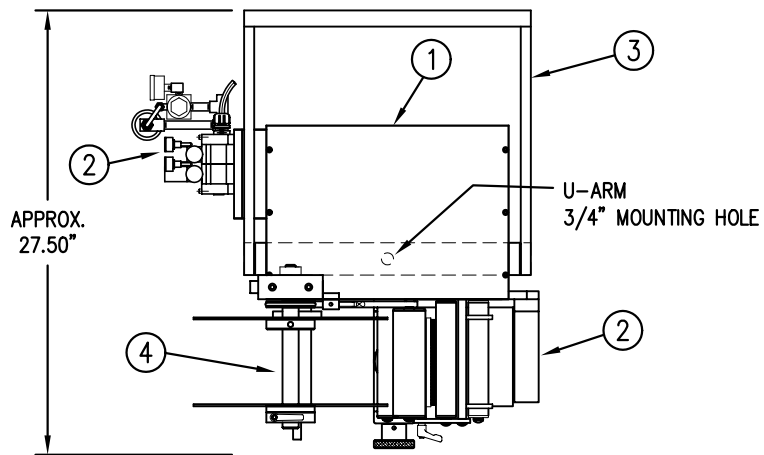
REV. BY:  
TDR

Scale:  
1=10

Date:  
09/28/00

DRAWN BY:  
BOB S.

F:\Engineering\Standard Parts\Applcator\360  
211\CTM-211-0130RL-12X

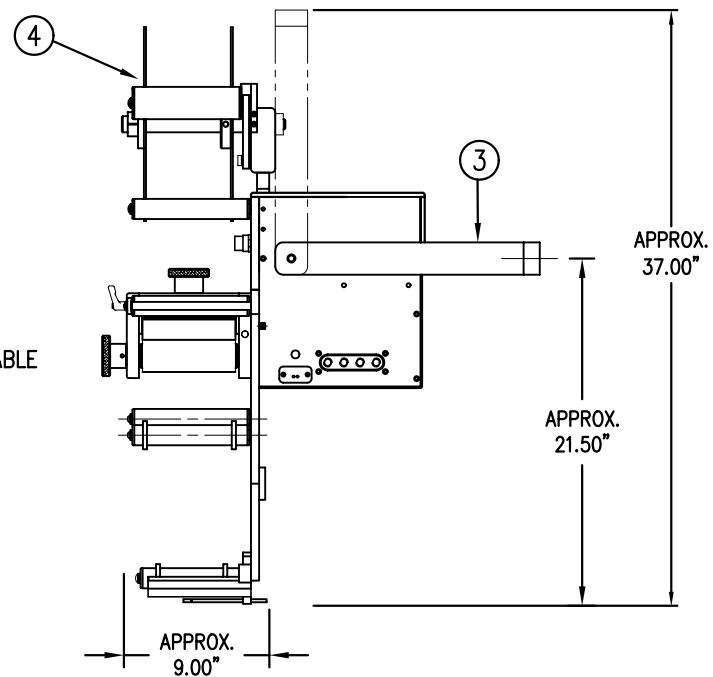
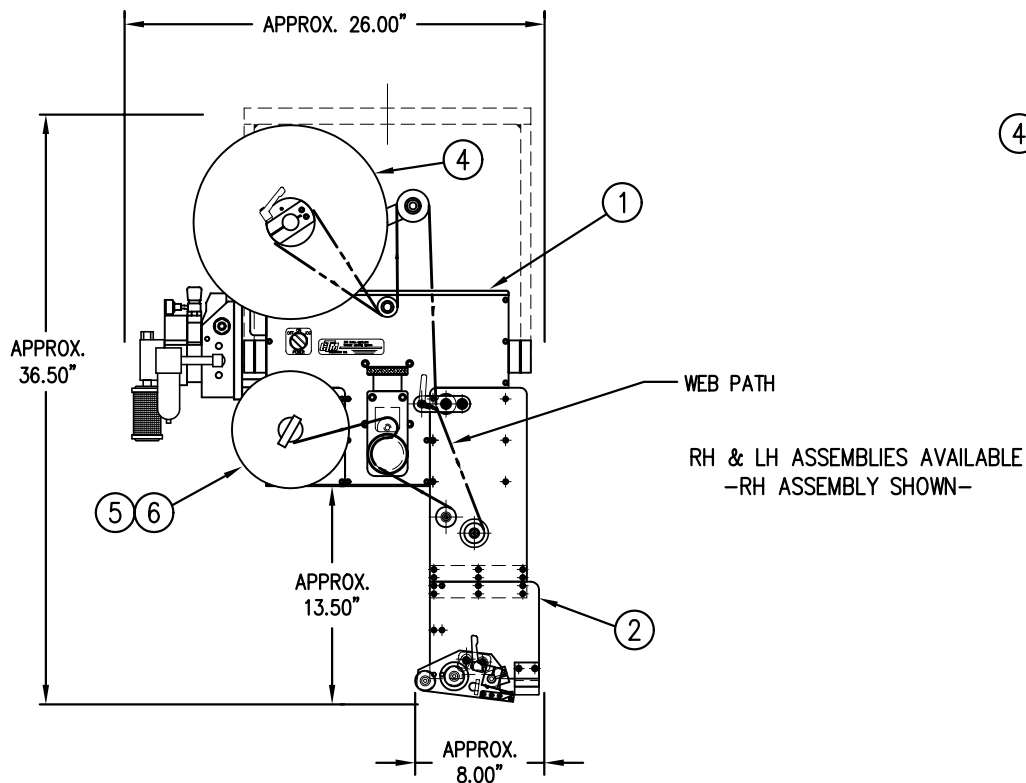


BILL OF MATERIAL				SOLD
CTM-211-0131RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; RVB w/ 12" DD SNORK.	MOD-211-0131R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

CTM-211-0131R/L-12X	
STANDARD REWIND	-0131R/L-12S
COLLAPSIBLE REWIND	-0131R/L-12C
FILM REWIND	-0131R/L-12F

— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

REV  
1



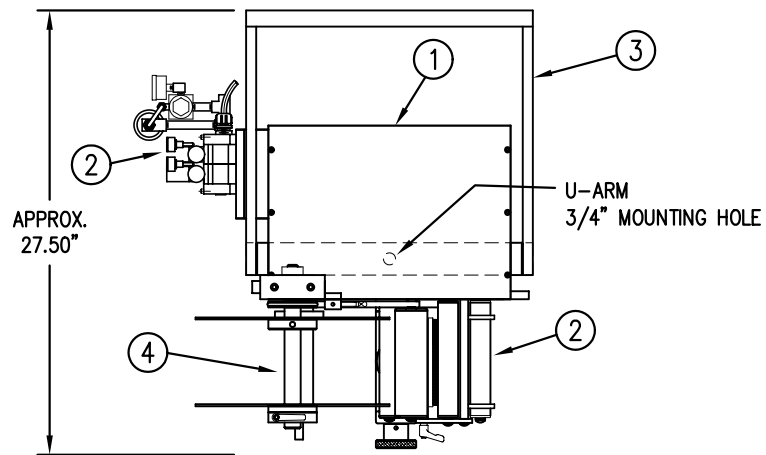
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: RVB ASSEMBLY: SNORKEL (Sht. 1 of 2)

PART: 5" WIDE: RVB w/ 12" DROP DOWN SNORKEL (HORIZONTAL ASSY)

Dept. Code  
70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applcator\360
1	NEW COLLAPSIBLE MANDREL	10/16/07	TDR	1=12	03/10/99	BOB S.	211\CTM-211-0131RL-12Xs1

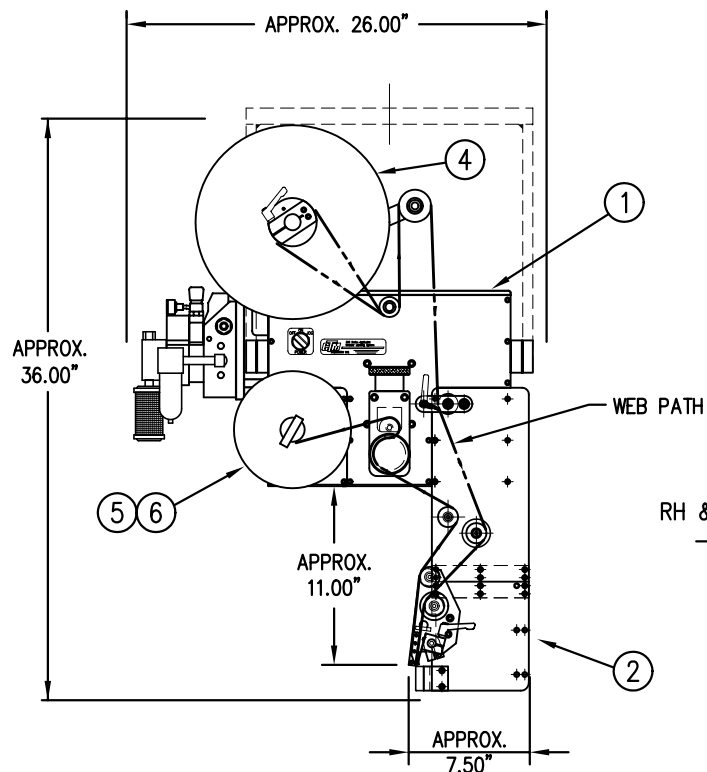


BILL OF MATERIAL				SOLD
CTM-211-0131RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; RVB w/ 12" DD SNORK.	MOD-211-0131R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	5" STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	5" FILM REWIND MANDREL	ASS-200-0137	S
	1	5" COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

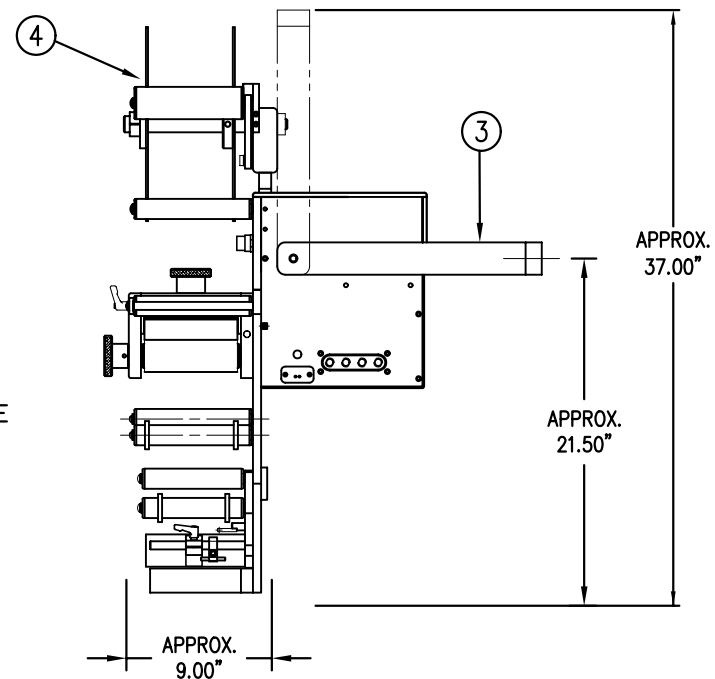
STANDARD REWIND	-0131R/L-12S
COLLAPSIBLE REWIND	-0131R/L-12C
FILM REWIND	-0131R/L-12F

— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

(REV 1)



RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



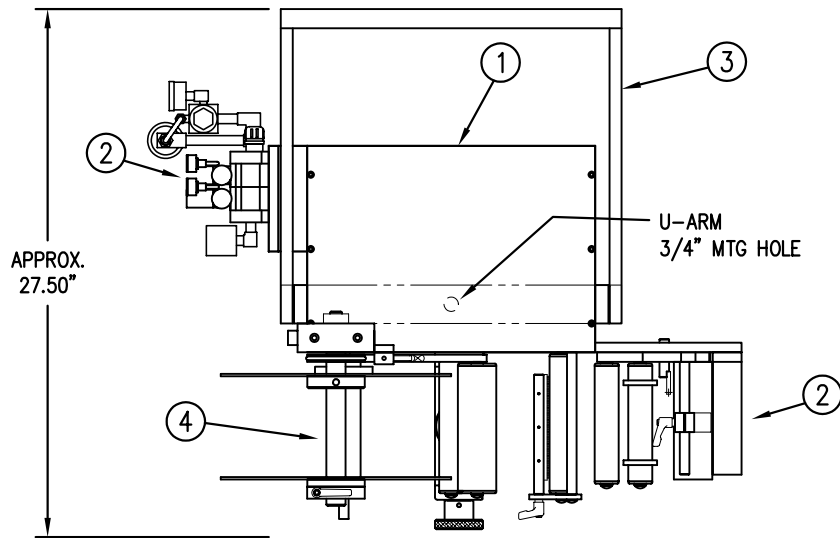
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: RVB ASSEMBLY: SNORKEL (Sht. 2 of 2)

PART: 5" WIDE: RVB w/ 12" DROP DOWN SNORKEL (VERTICAL ASSY)

Dept. Code  
70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applcator\360
1	NEW COLLAPSIBLE MANDREL	10/16/07	TDR	1=12	03/10/99	BOB S.	211\CTM-211-0131RL-12Xs2



BILL OF MATERIAL				SOLD
CTM-211-0134RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE;RVB w/6" EXT. SNORKEL	MOD-211-0134R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

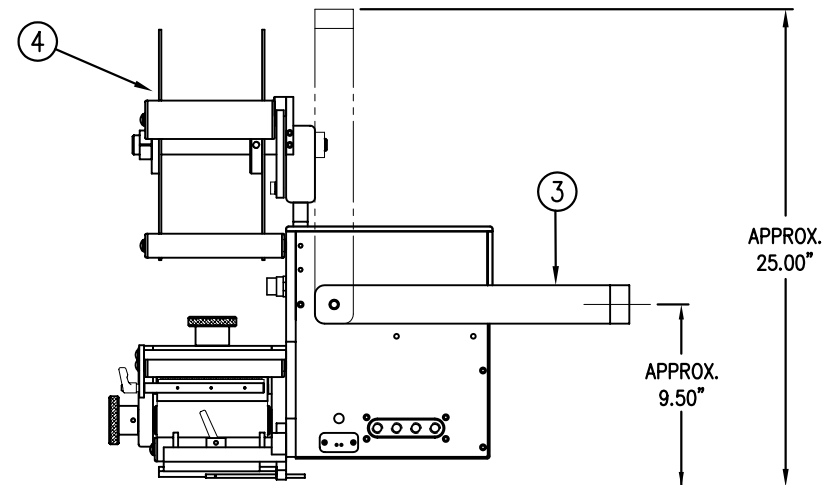
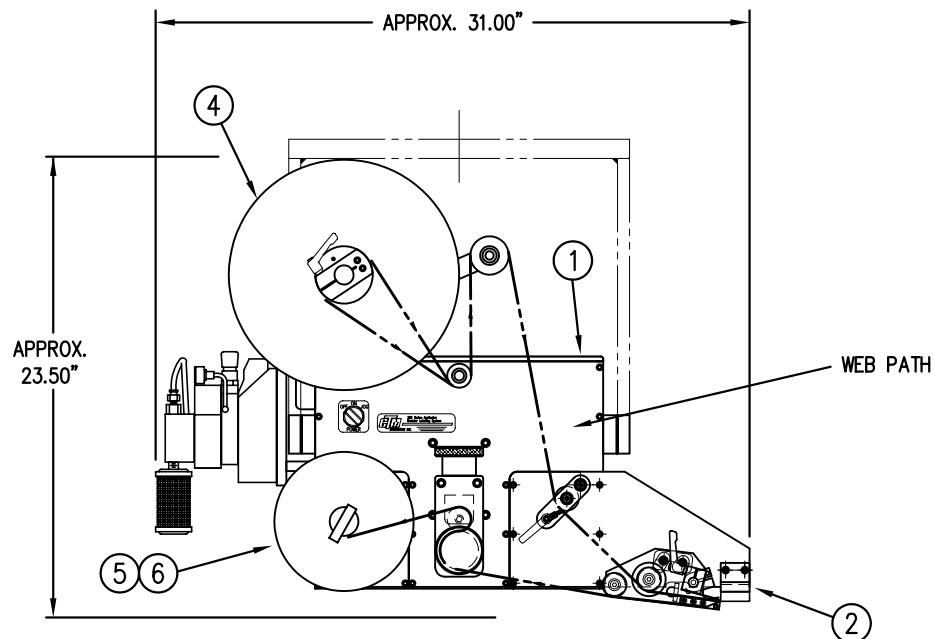
CTM-211-0134R/L-12X

STANDARD REWIND	-0134R/L-12S
COLLAPSIBLE REWIND	-0134R/L-12C
FILM REWIND	-0134R/L-12F

— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

REV 1

RH & LH ASSEMBLIES AVAILABLE  
—RH ASSEMBLY SHOWN—



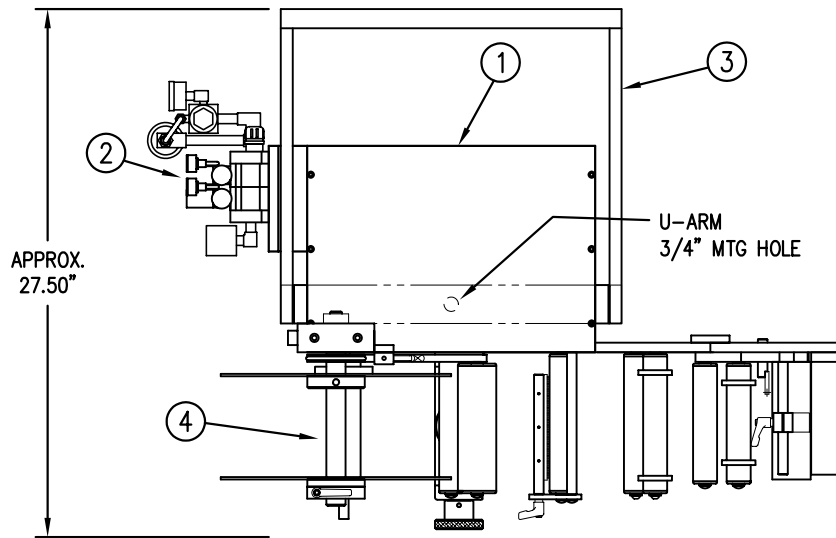
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: RVB: SNORKEL

PART: RVB w/ 6" EXT. SNORKEL & 12" UNWIND ASS'Y

Dept. Code  
70

REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=10	Date: 09/28/00	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applcator\360 211\CTM-211-0134RL-12X
--------	---	-----------------------	-----------------	----------------	-------------------	---------------------	---



BILL OF MATERIAL				SOLD
CTM-211-0135RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE;RVB w/12" EXT. SNORKEL	MOD-211-0135R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

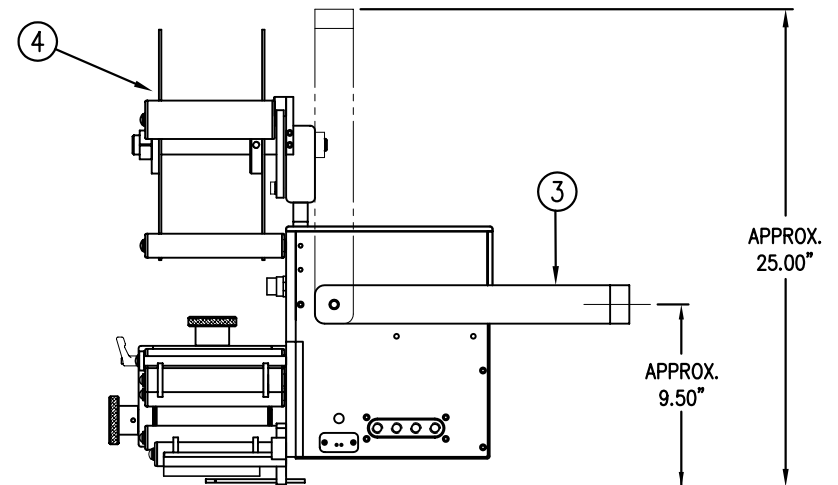
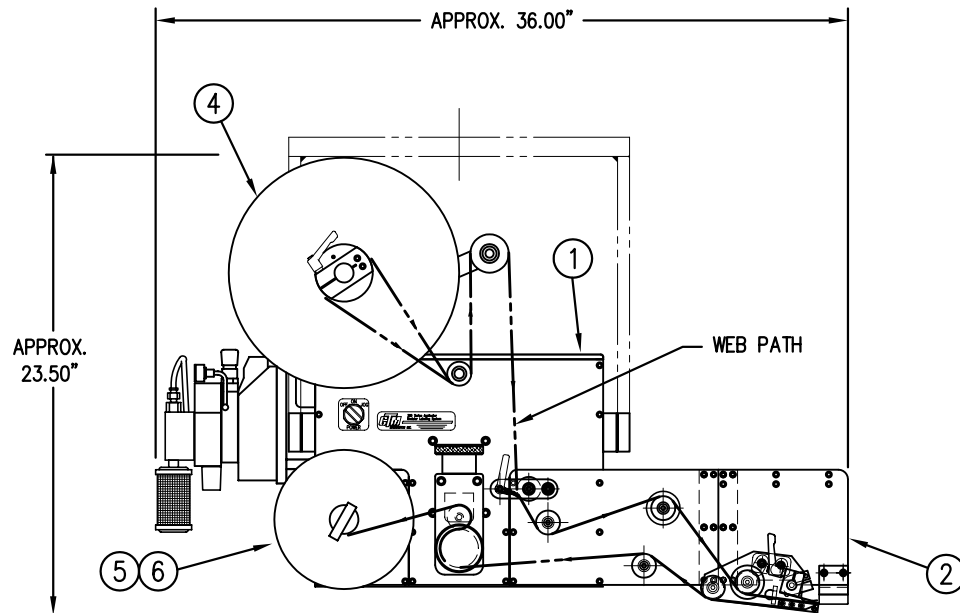
CTM-211-0135R/L-12X

STANDARD REWIND	-0135R/L-12S
COLLAPSIBLE REWIND	-0135R/L-12C
FILM REWIND	-0135R/L-12F

— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

REV 1

RH & LH ASSEMBLIES AVAILABLE  
—RH ASSEMBLY SHOWN—



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.

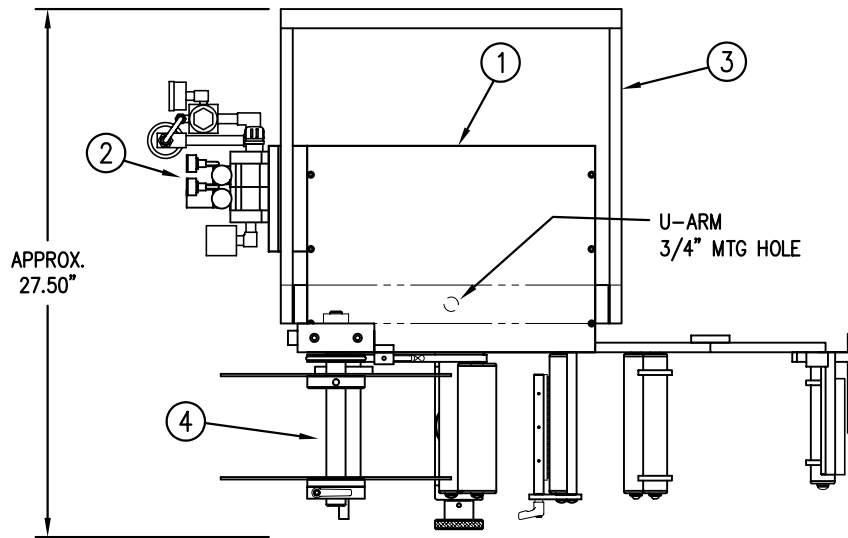
TITLE: 360 SERIES APPLICATOR: RVB: SNORKEL (Sht. 1 of 2)

PART: RVB w/ 12" EXT. SNORKEL & 12" UNWIND ASS'Y

Dept. Code  
70

REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=10	Date: 09/28/00	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applcator\360 211\CTM-211-0135RL-12Xs1
--------	---	-----------------------	-----------------	----------------	-------------------	---------------------	---





BILL OF MATERIAL				SOLD
ASSEMBLY CTM-211-0135RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE;RVB w/12" EXT. SNORKEL	MOD-211-0135R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

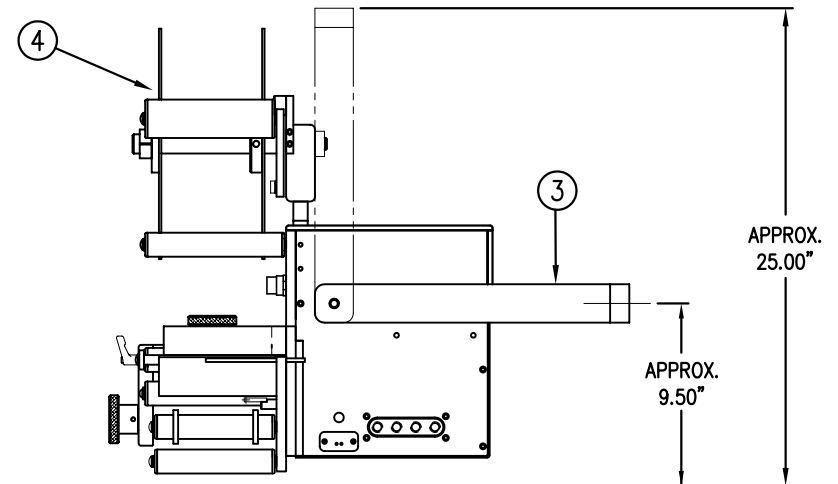
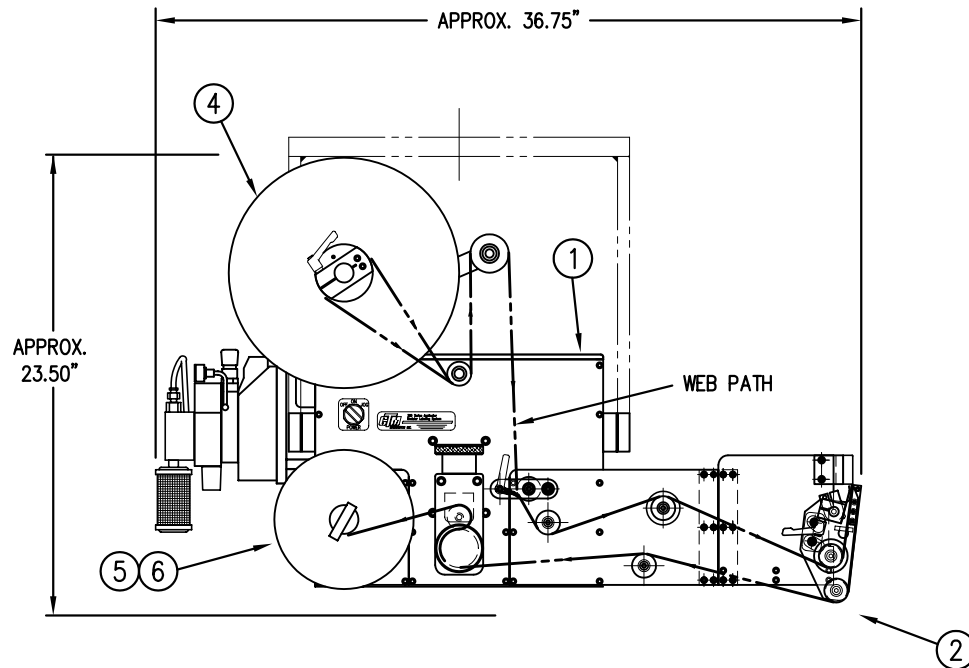
CTM-211-0135R/L-12X

STANDARD REWIND	-0135R/L-12S
COLLAPSIBLE REWIND	-0135R/L-12C
FILM REWIND	-0135R/L-12F

— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

REV 1

RH & LH ASSEMBLIES AVAILABLE  
—RH ASSEMBLY SHOWN—



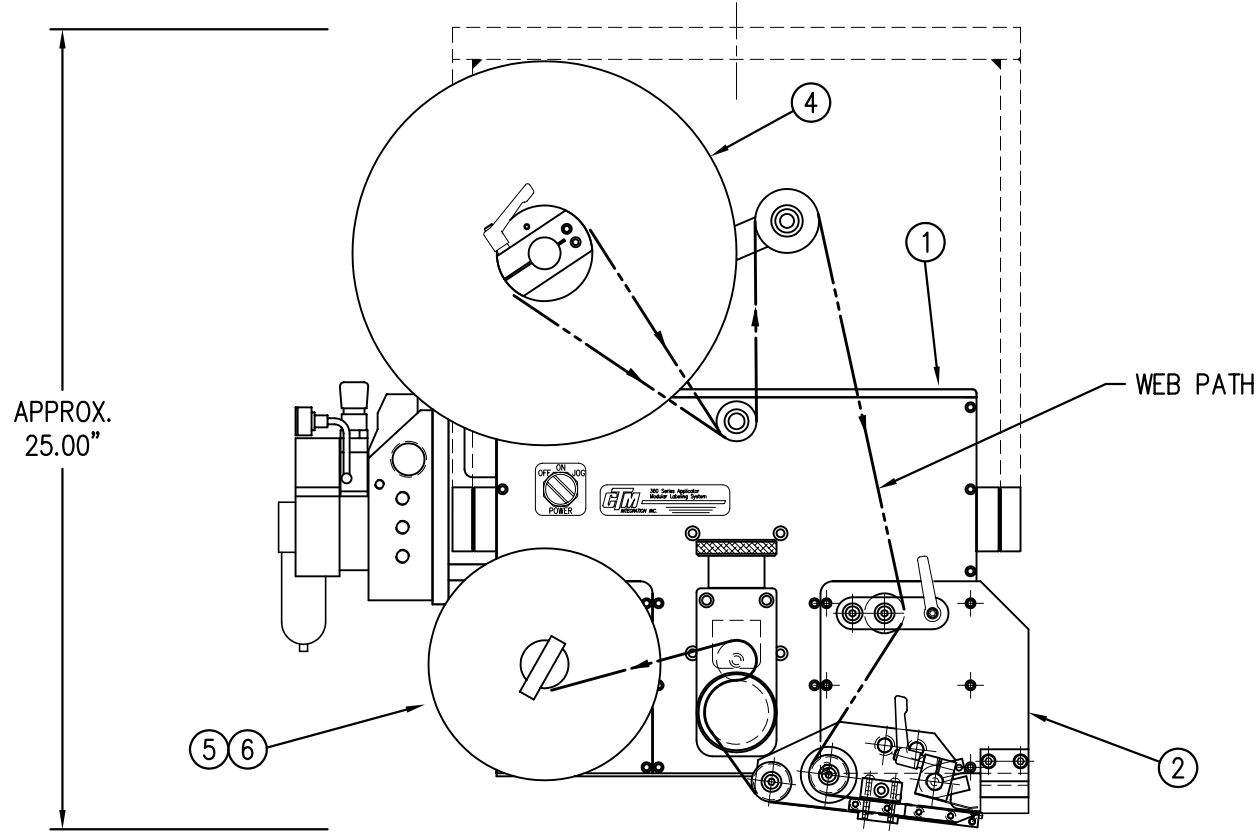
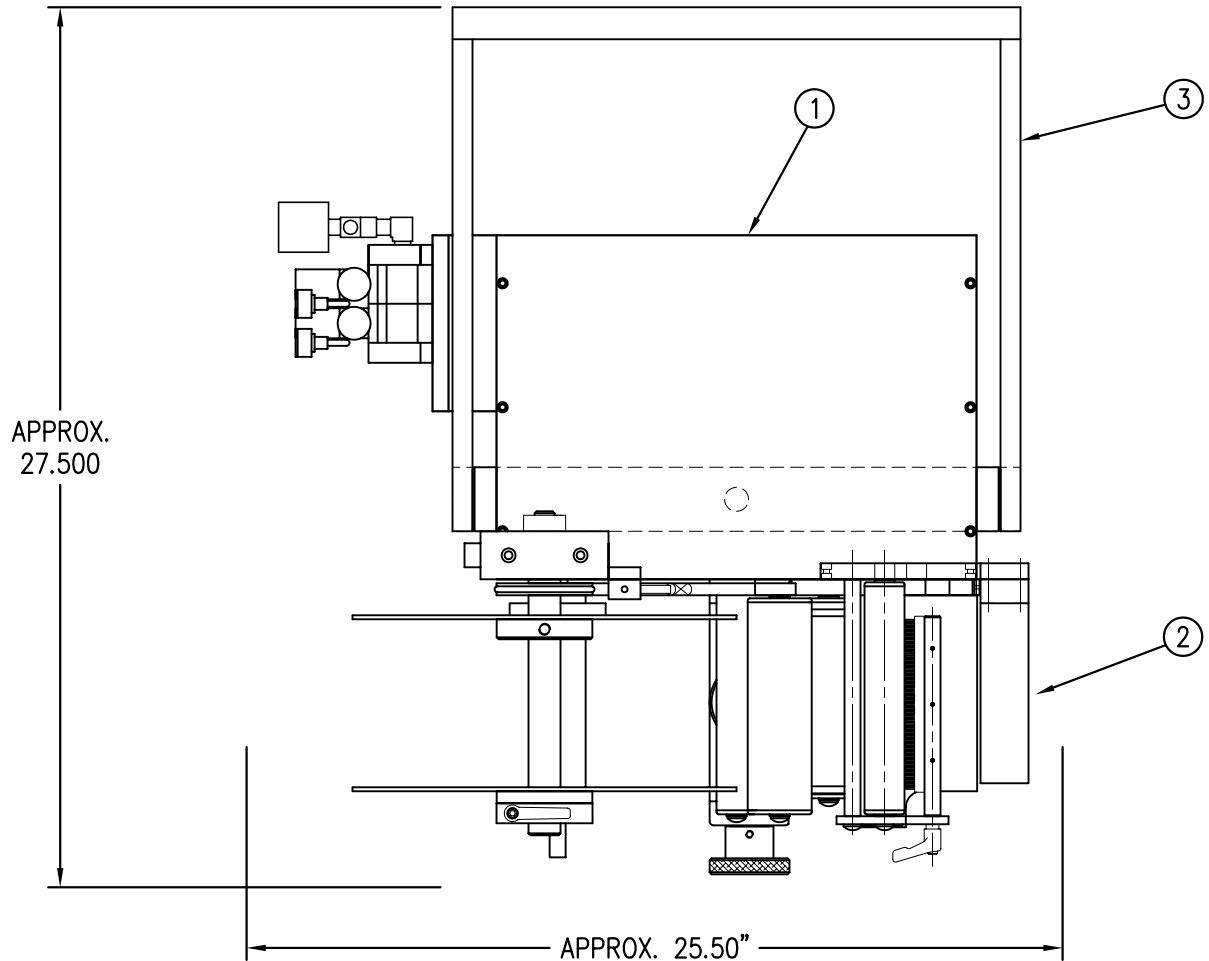
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: RVB: SNORKEL (Sht. 2 of 2)

PART: RVB w/ 12" EXT. SNORKEL (VERT. Assy) & 12" UNWIND

Dept. Code 70

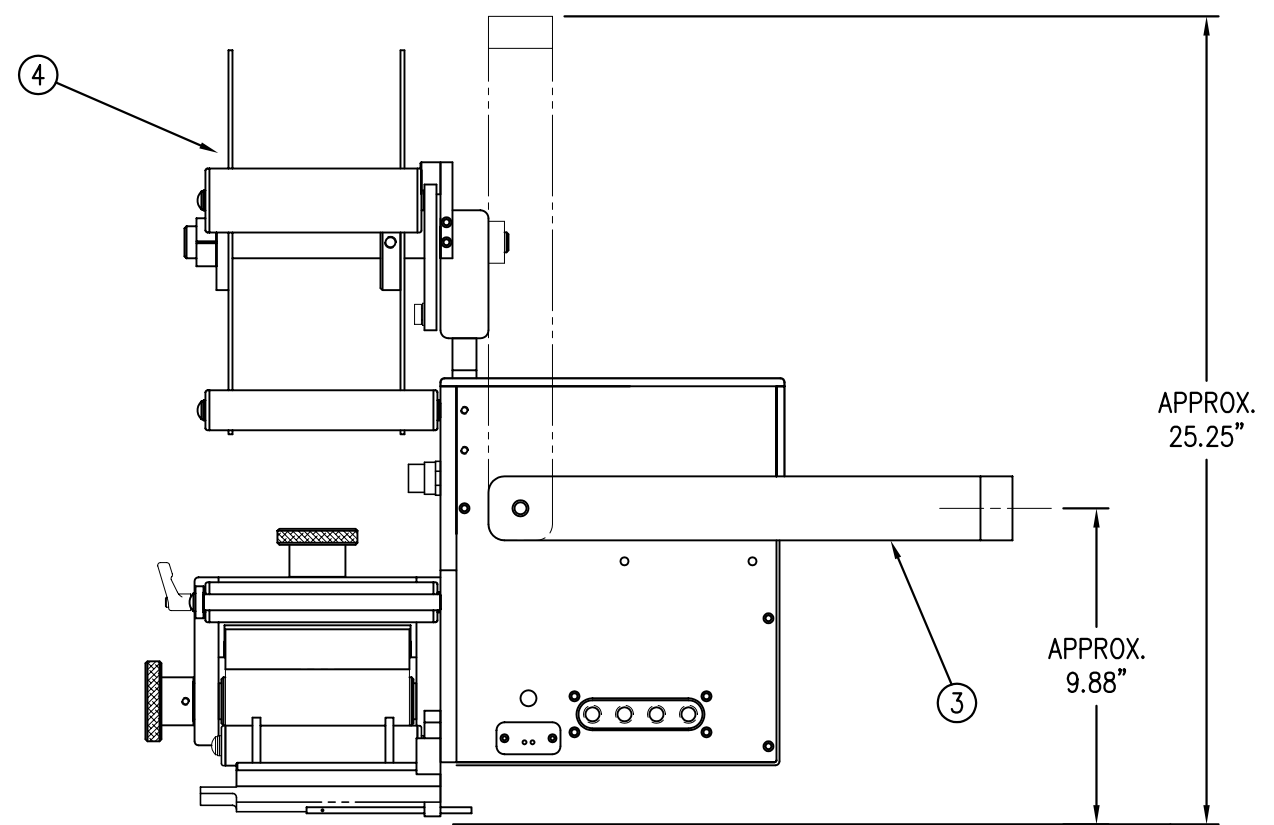
REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=10	Date: 09/28/00	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Appliator\360 211\CTM-211-0135RL-12Xs2
--------	---	-----------------------	-----------------	----------------	-------------------	---------------------	---



BILL OF MATERIAL				SOLD
CTM-211-3111R/L-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	.
②	1	5" WIDE; RVB CLR. LBL. NOSE MODULE	MOD-211-3111R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; 12" UNWIND ASSY	ASS-200-0121R/L	.
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S
	1	FILM REWIND MANDREL	ASS-200-0137	S
⑥	1	COLLAPSIBLE MANDREL	ASS-200-3140-5	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER CLEAR LABEL SENSOR SEPARATELY				
REV 1 #ASS-200-0430-A ~ FOR LRD2100				
#ASS-200-0430-B ~ FOR LRD6110				

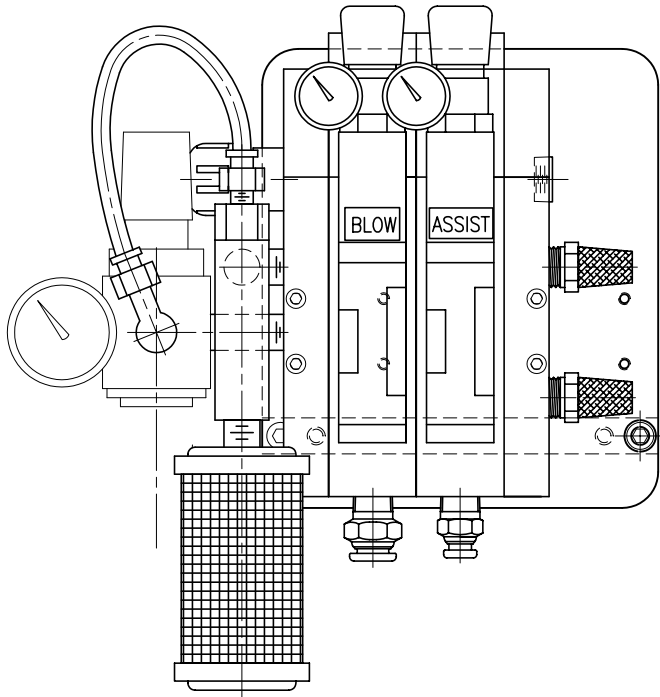
← STD & FILM REWIND	REV 2
← COLLAPSIBLE RWD	
← STANDARD RWD	
← FILM REWIND	
← COLLAPSIBLE RWD	

CTM-211-3111R/L-12X	
STANDARD REWIND	-3111RL-12S
COLLAPSIBLE REWIND	-3111RL-12C
FILM REWIND	-3111RL-12F
RH & LH ASSEMBLIES AVAILABLE -RH ASSEMBLY SHOWN-	



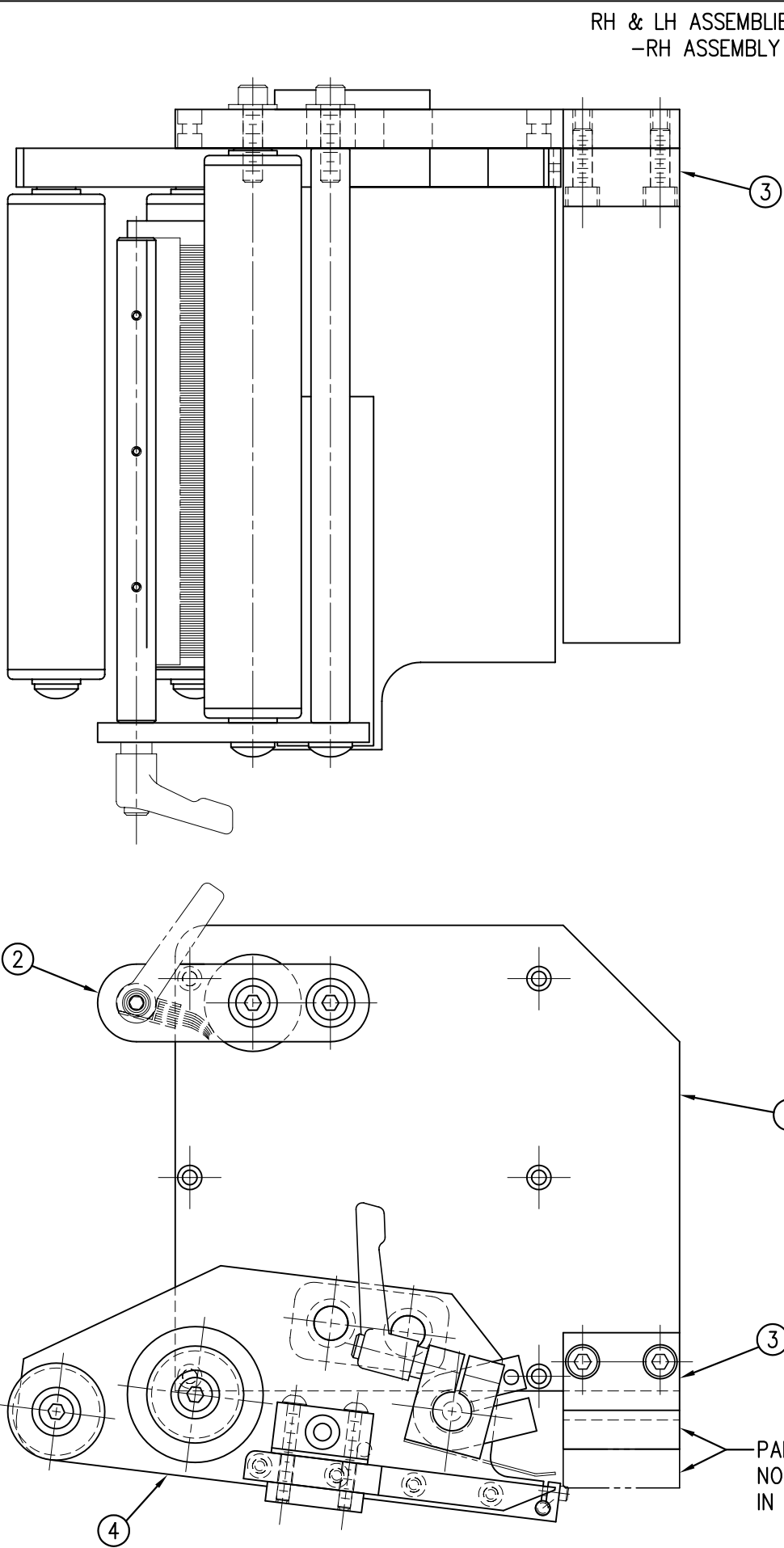
BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-211-3111R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	RVB w/TRANSITION PLATE	ASS-211-3111R/L	S
⑤	1	RVB VALVE BANK ASSEMBLY	ASS-211-0112	S
ORDER CLEAR LABEL SENSOR SEPARATELY				
REV 1 #ASS-200-0430-A ~ FOR LRD2100				
#ASS-200-0430-B ~ FOR LRD6110				

NOTE:  
PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOM TO ORDER SEPARATELY.  
(FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)  
MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS.  
OTHER SIZES ARE CUSTOM.



⑤ VALVE BANK ASSEMBLY  
SCALE: 8"=1'-0"

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-3111R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	RVB TRANSITION PLATE	MP-211-0235	.
②	1	5" TENSION BRUSH ASSEMBLY	ASS-200-0126R/L	.
③	1	MANIFOLD MOUNT PLATE	MP-211-0237	.
④	1	5" CLR. LBL. AIR BLOW PEEL EDGE ASSY	ASS-211-3102R/L	S
	6	SHCS, #10-32 x 5/8" LG.	NONE	.
ORDER CLEAR LABEL SENSOR SEPARATELY				
REV 1 #ASS-200-0430-A ~ FOR LRD2100				
#ASS-200-0430-B ~ FOR LRD6110				

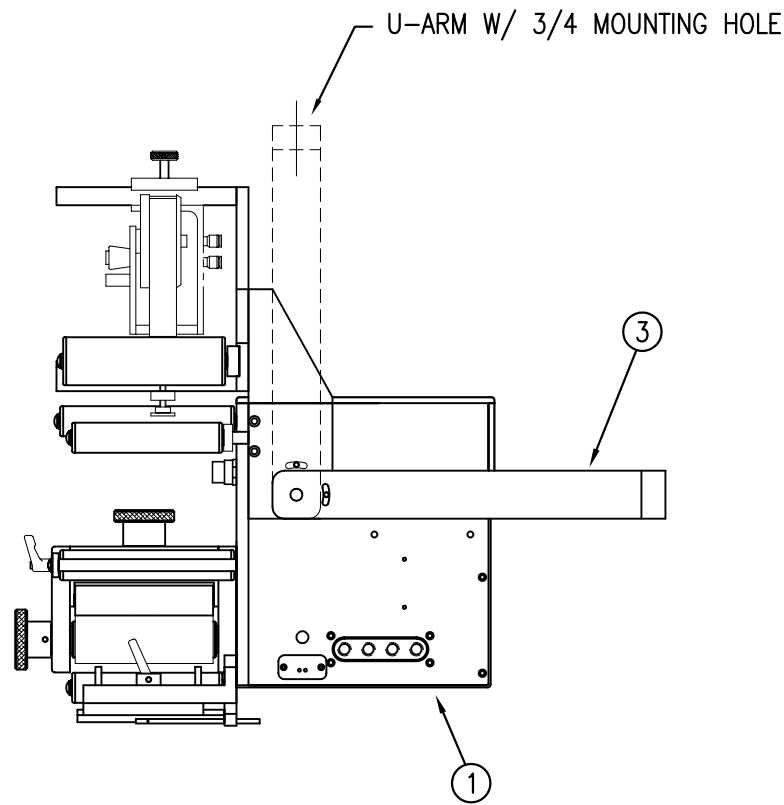
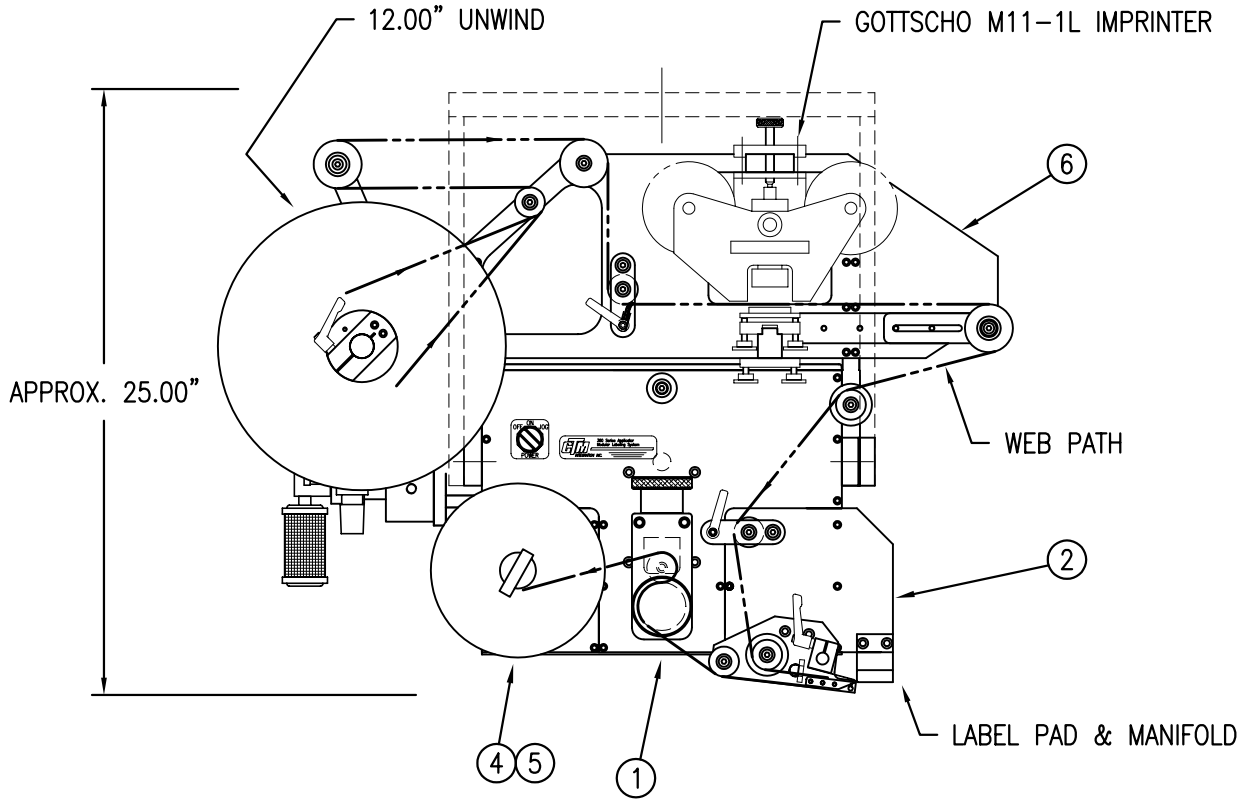
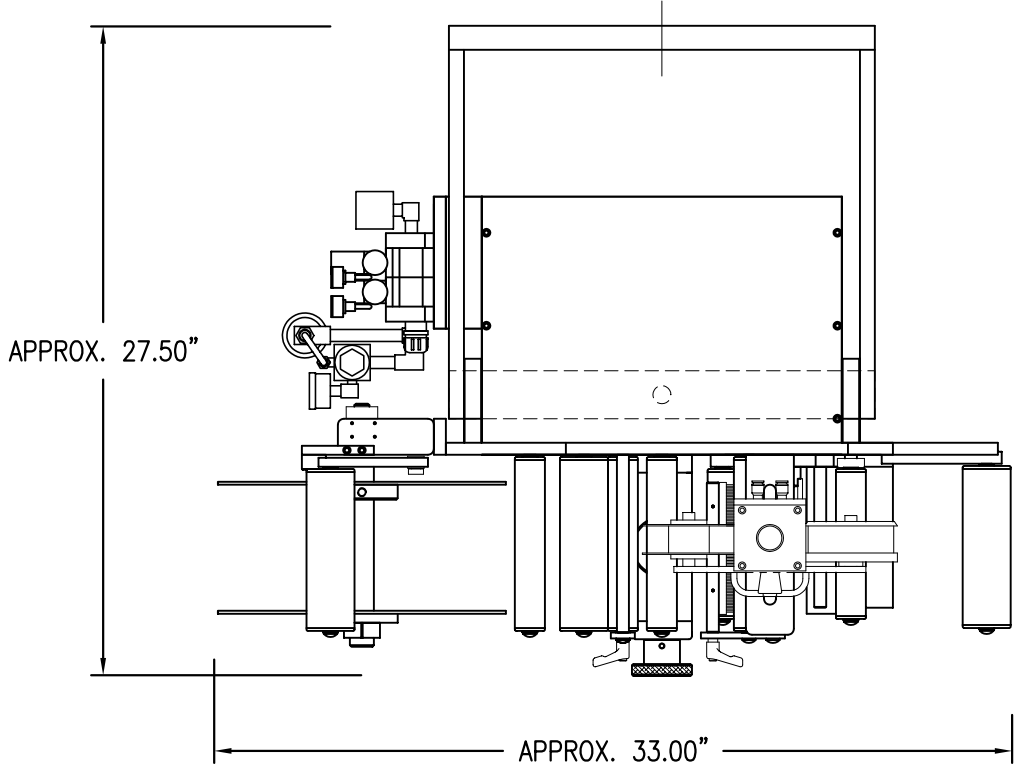


RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

MOD-211-3111R/L  
ASS-211-3111R/L

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.				Dept. Code	70
TITLE: 360 SERIES APPLICATOR: RVB: CLEAR LABEL				PART: 5" WIDE RVB NOSE ASSEMBLY	
REV. DESCRIPTION	REV. DATE	REV. BY:	REV. BY:	Date:	F:\Engineering\Standard Parts\Appliator\360
1	CHANGED PE-SE2000 TO ASS-200-0430-A & PE-SE2050 TO ASS-200-0430-B	02/28/06	TDR	1=2 09/01/99	211\MOD-211-3111RL
				BOB S.	

BILL OF MATERIAL				SOLD
ASSEMBLY		CTM-211V-4101R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	S
②	1	5" WIDE; RVB NOSE MODULE	MOD-211-0111R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; STD REWIND BLOCK & SHAFT	ASS-200-0145R/L	S
⑤	1	5" STANDARD REWIND MANDREL	ASS-200-0147	S
⑥	1	GOTTSCHO IMPRINTER ASSEMBLY	ASS-200-4101R/L-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S



NOTE:  
PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY.  
(FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)

MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS.  
OTHER SIZES ARE CUSTOM.

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

CTM-211V-4101R/L-X

-4101R/L-12S

-4101R/L-16S

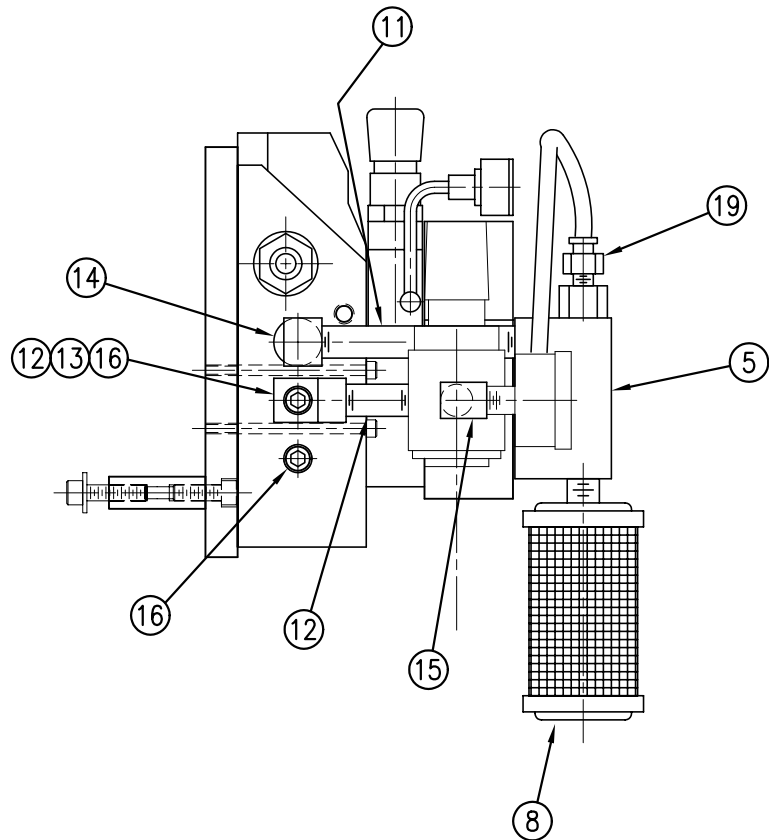
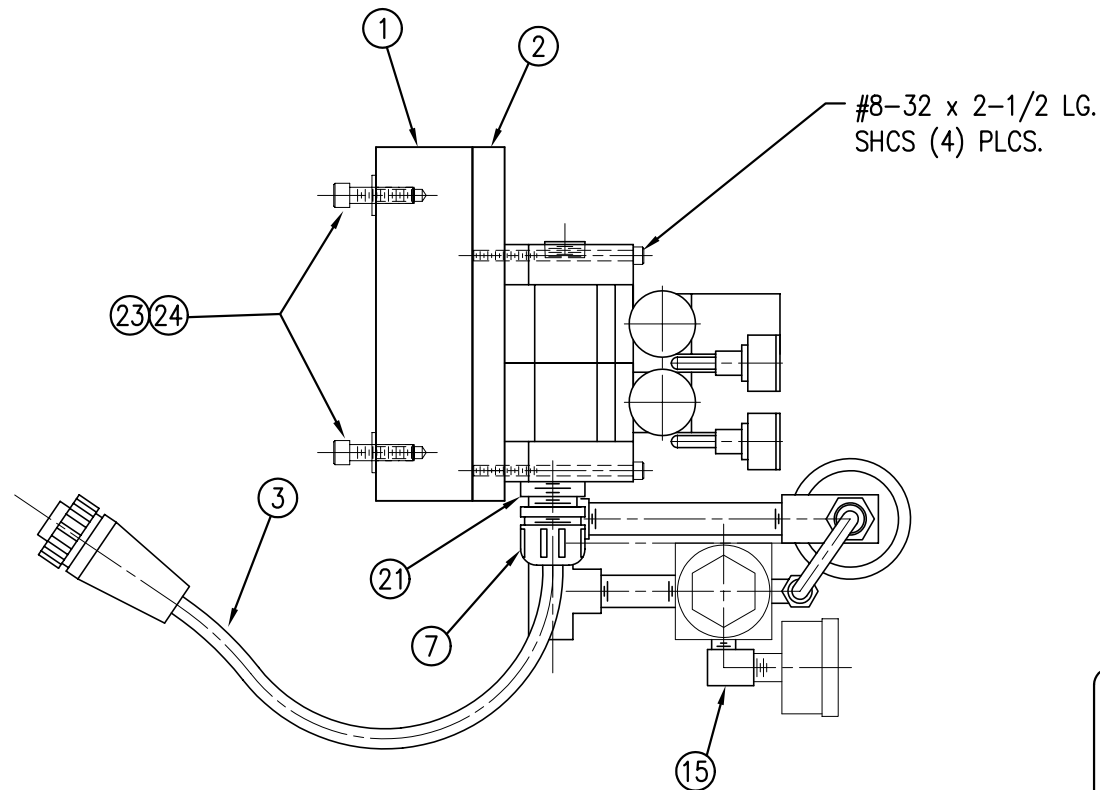
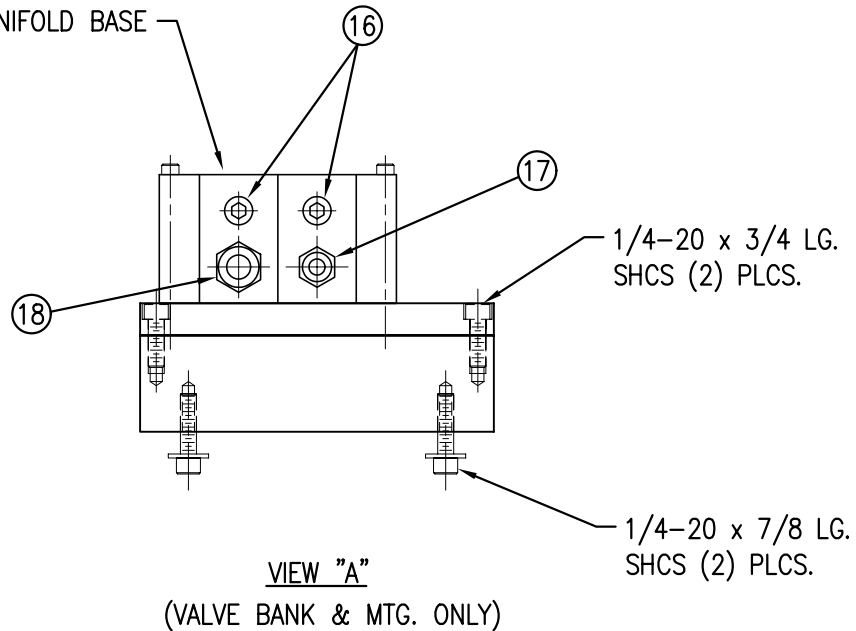
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.				Dept. Code	70
TITLE: 360 SERIES APPLICATOR: RVB ASSEMBLY				PART: 5" WIDE: RVB w/ GOTTSCHO IMPRINTER	
REV. DESCRIPTION	REV. DATE	REV. BY	REV. BY	Scale:	Date:
O NEW TITLEBLOCK; DWG. No. WAS 200-3638	07/08/03	TDR	TDR	1=8	09/15/99
F:\Engineering\Standard Parts\Appliator\360				DRAWN BY: BOB S.	
				211\CTM-211V-4101RL-X	



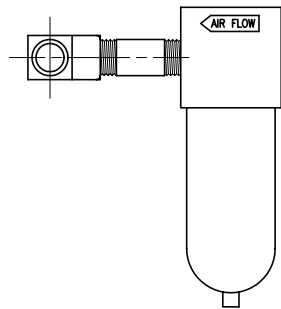
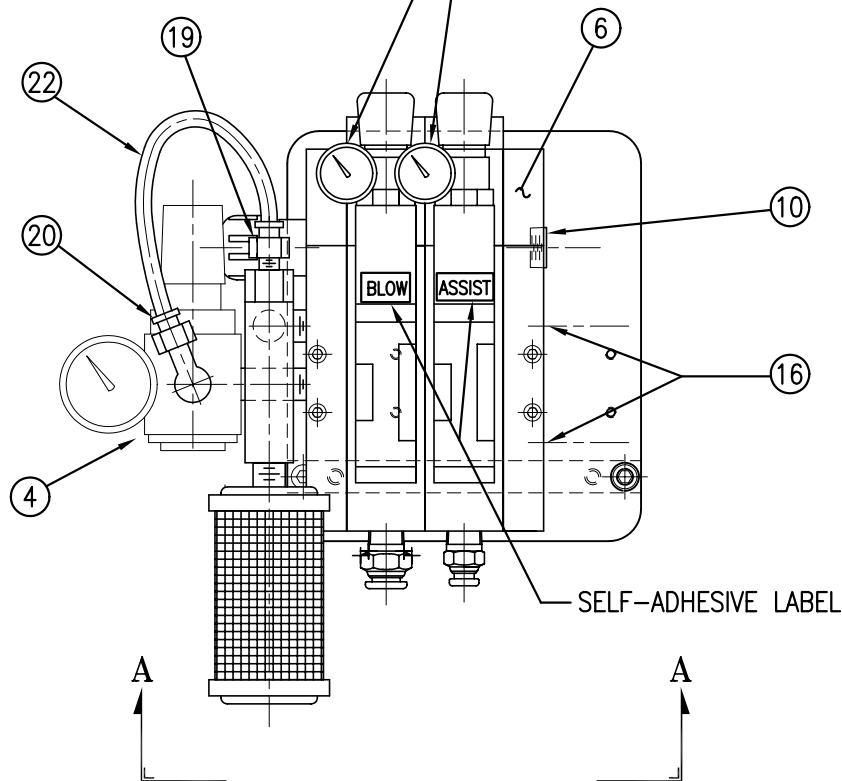
BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-0112		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VALVE FASTENING PLATE	MP-214-0202	.
②	1	VALVE MOUNTING PLATE	MP-214-0206	.
③	1	VALVE CABLE	PE-200-0405	.
④	1	REGULATOR w/ GAUGE	PM-REG1500	.
⑤	1	VACUUM PUMP	PM-PUMP1000	.
⑥	1	VALVE BANK	PM-VA2358	.
⑦	1	CORD GRIP	PE-CO2000	.
⑧	1	EXHAUST MUFFLER	PM-MU1021	.
⑨	1	AIR FILTER	ASS-214-0106	S
⑩	1	3/4" NPT PLUG	PE-EN9110	.
⑪	1	1/4" x 3-1/2" NIPPLE	PM-PF1141	.
⑫	2	1/4" x 1-1/2" NIPPLE	PM-PF1143	.
⑬	1	1/4" TEE	PM-PF1200	.
⑭	1	1/4" STREET ELBOW	PM-PF1185	.
⑮	1	1/8" STREET ELBOW	PM-PF1180	.
⑯	5	1/4" NPT PLUG	PM-FT1200	.
⑰	1	FITTING, 1/4" TUBE to 1/4" NPT STRT	PM-PF1010	.
⑱	1	FITTING, 3/8" TUBE to 1/4" NPT STRT	PM-PF1020	.
⑲	1	FITTING, 1/4" TUBE to 1/8" NPT STRT	PM-PF1005	.
⑳	1	FITTING, 1/4" TUBE to 1/4" NPT ELBOW	PM-PF1055	.
㉑	1	BUSHING, NPT 3/4" MALE to 1/2" FEMALE	PE-COND1080	.
㉒	1	1/4" O.D. POLYURETHANE TUBING (CUT TO 7" LENGTH)	PM-PT1070	.
㉓	2	SHCS, 1/4"-20 UNC x 7/8" LG.	NONE	.
㉔	2	FLAT WASHER, 1/4" NOM. (STAINLESS)	NONE	.

VALVE BANK SPARE PARTS:  
SOLENOID: #PM-VA2395  
AIR ASSIST REGULATOR: #PM-VA2396  
BLOW/TAMP/IMPRINTER REGULATORS: #PM-VA2397

OUTLINE OF MANIFOLD BASE



TAMP & BLOW VALVE:  
PRESSURE GAUGE - 0-160 PSI  
AIR ASSIST VALVE:  
PRESSURE GAUGE - 0-60 PSI

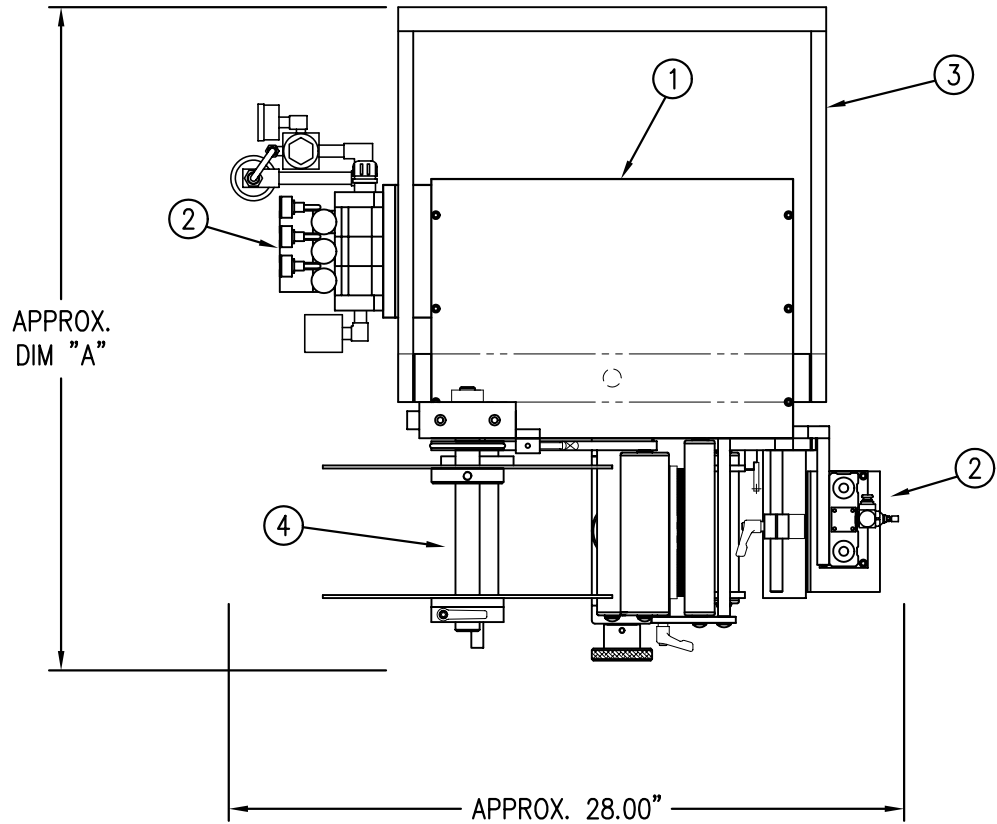


9 AIR FILTER

ASS-211-0112

TITLE: 360 SERIES APPLICATOR: RVB				PART: PNEUMATIC VALVE BANK ASSEMBLY				Dept. Code	
REV. 1	REV. DESCRIPTION	ADDED GRADE PARTS LIST NOTE	1	REV. DATE	REV. BY	REV. DATE	REV. BY	70	70
F:\Engineering\Standard Parts\Applcator\360				F:\Engineering\Standard Parts\Applcator\360				360	
041 ACC 041				041 ACC 041				041	

PART NO.	DIM "A"
CTM-214-0101R/L-12X	27.50
CTM-214-2101R/L-12X	30.00
CTM-214-5101R/L-12X	32.50



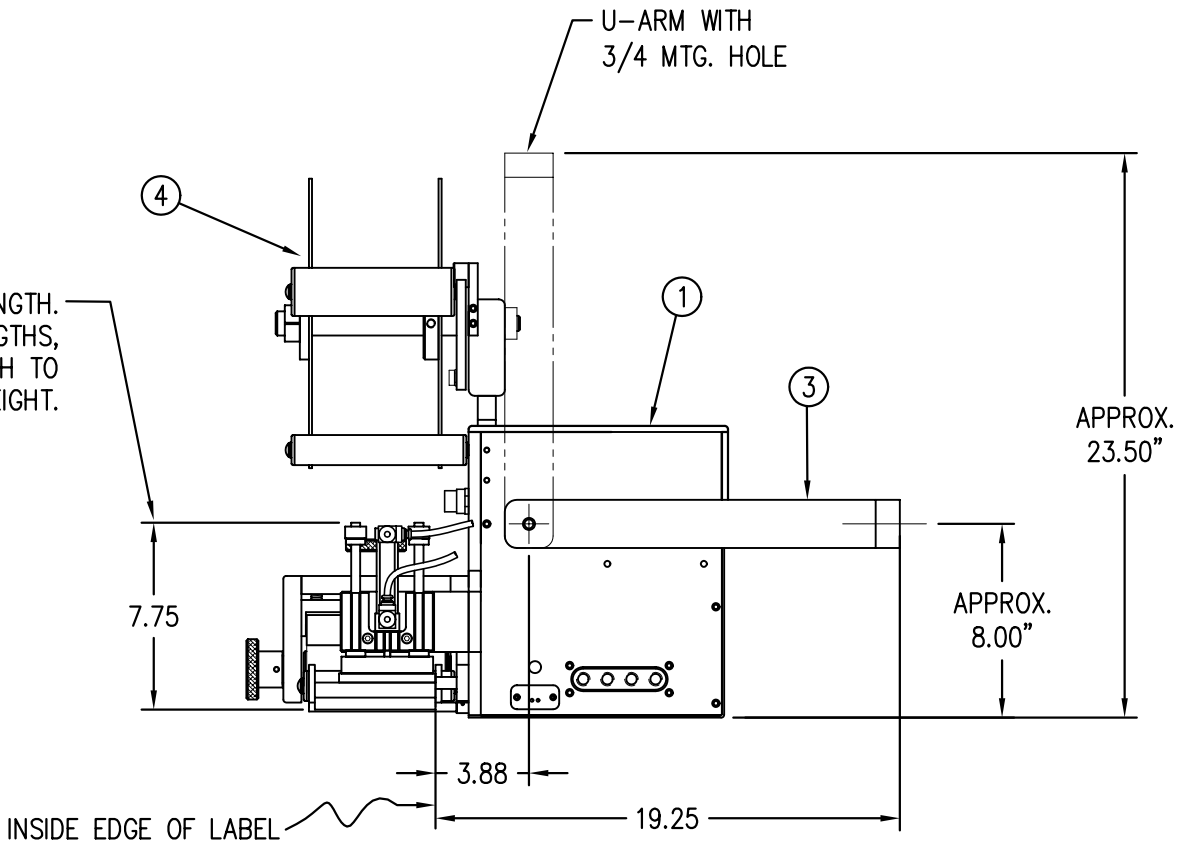
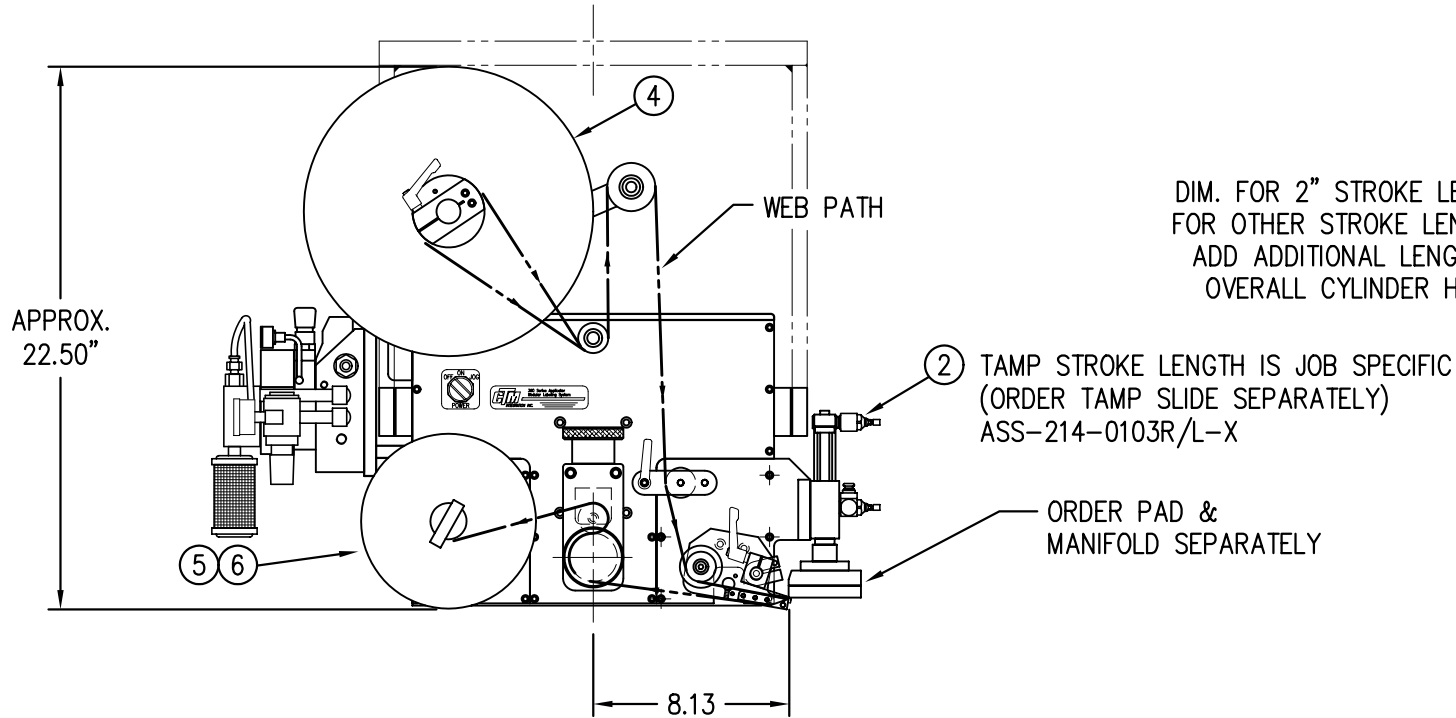
BILL OF MATERIAL				SOLD
CTM-214-X101RL-12X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5/10 TAMP NOSE MODULE SPECIFY STROKE LENGTH	MOD-214-X101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
ORDER THESE ITEMS SEPARATELY				
1.) TAMP SLIDE w/ MOUNTING PLATES				
2.) LABEL PAD				
3.) LABEL MANIFOLD				
4.) PRODUCT DETECT SENSOR				

CTM-214-X101R/L-12X			
5" WIDE	-0101R/L-12	X	
7.5" WIDE	-2101R/L-12	X	
10" WIDE	-5101R/L-12	X	

STANDARD REWIND S  
COLLAPSIBLE REWIND C  
FILM REWIND F

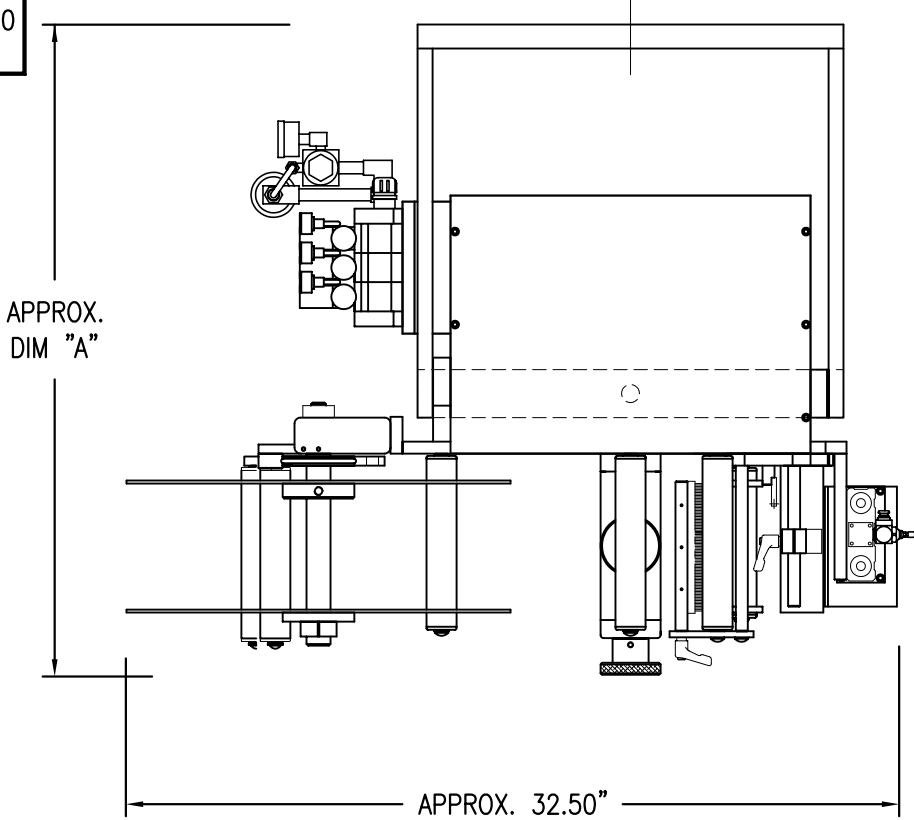
RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216



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.			
PART: 5" / 7.5" / 10" WIDE: TAMP w/ 12" UNWIND ASSEMBLY			
TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY	REV. DATE: 09/12/07	REV. BY: TDR	DATE: 11/19/98
REV. 1	DESCRIPTION: UPDATED BOM FOR NEW COLLAPSIBLE MANDREL	DRAWN BY: BOB S.	Dept. Code: 70
F:\Engineering\Standard Parts\Applcator\360\214\CTM-214-X101RL-12X			

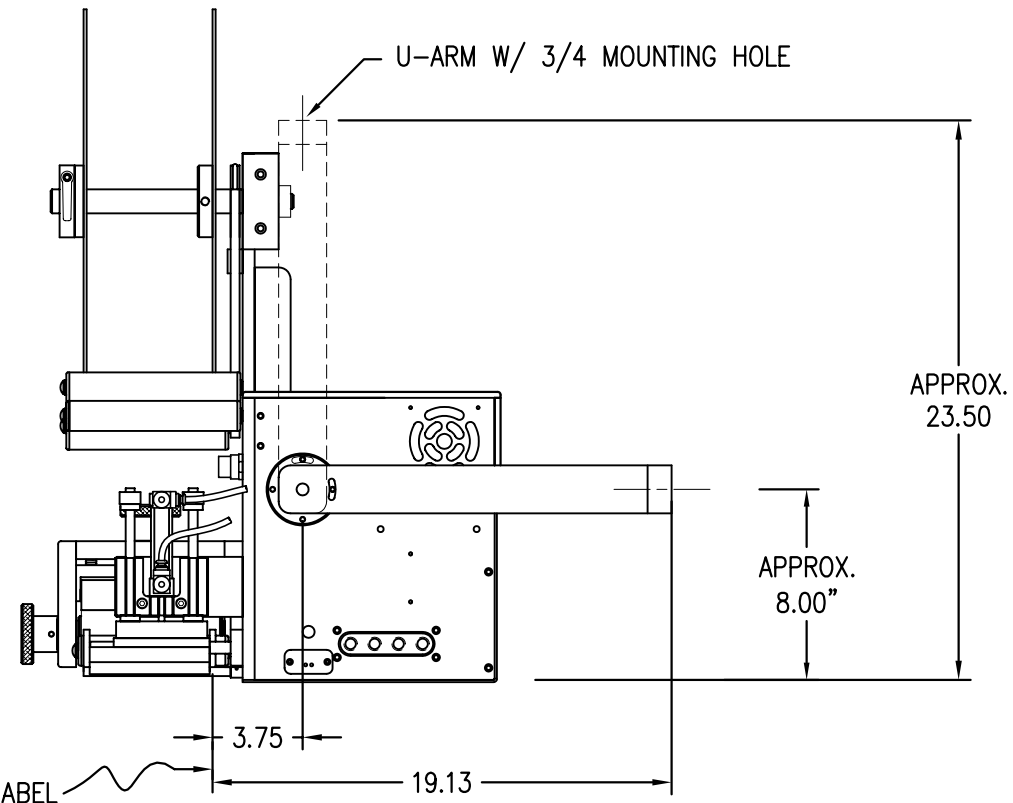
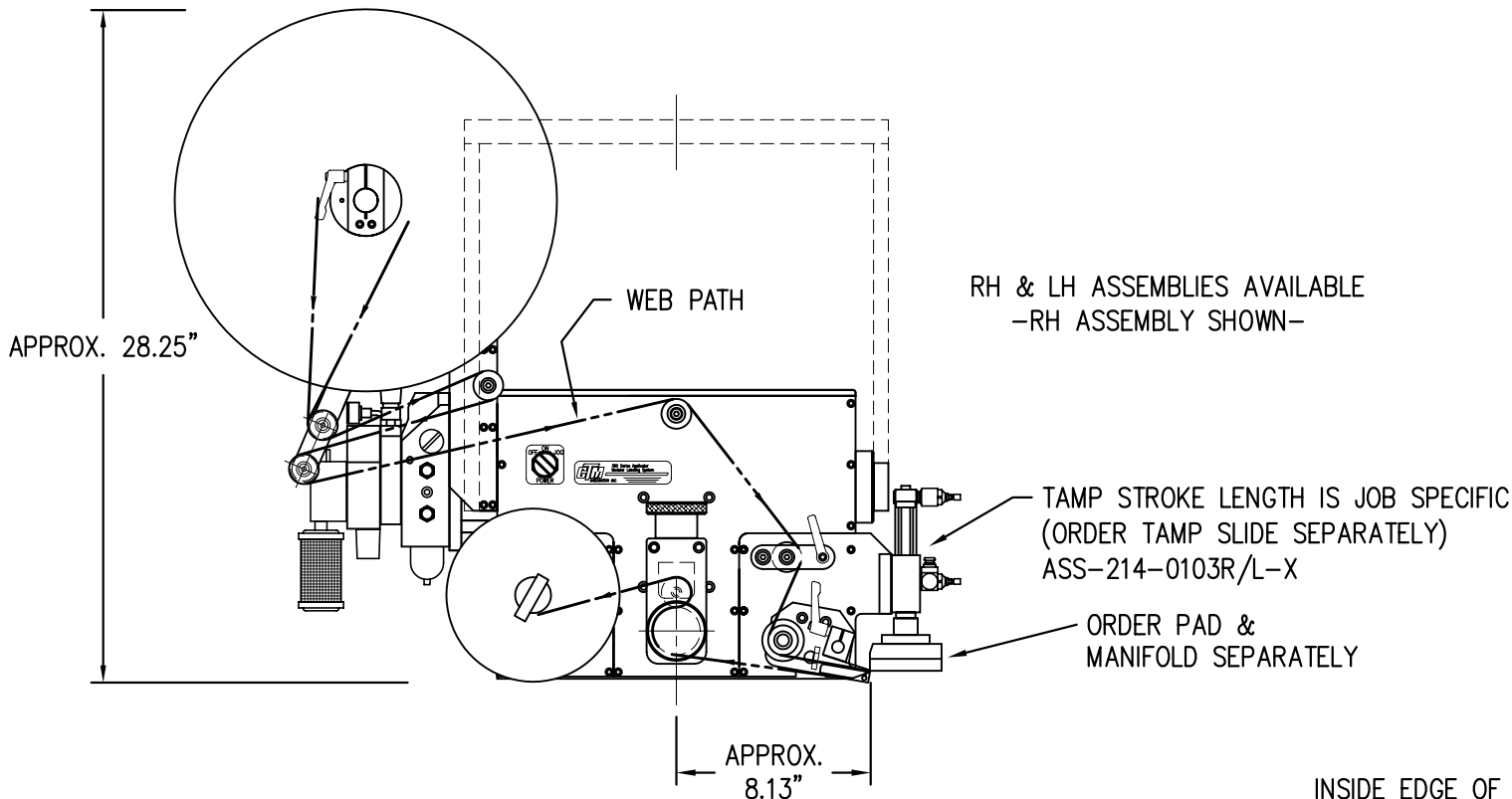
PART NO.	DIM "A"
CTM-214-0101R/L-16S	27.50
CTM-214-0101R/L-16C	
CTM-214-0101R/L-16F	
CTM-214-2101R/L-16S	30.00
CTM-214-2101R/L-16C	
CTM-214-2101R/L-16F	



BILL OF MATERIAL				SOLD
CTM-214-X101RL-16X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5 WIDE; TAMP NOSE MODULE	MOD-214-X101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5" CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
ORDER THESE ITEMS SEPARATELY				
1.) TAMP SLIDE w/ MOUNTING PLATES				
2.) LABEL PAD				
3.) LABEL MANIFOLD				
4.) PRODUCT DETECT SENSOR				

CTM-214-X101R/L-16X		
5" WIDE	-0101RL-16	X
7.5" WIDE	-2101RL-16	X

STANDARD REWIND S  
COLLAPSIBLE REWIND C  
FILM REWIND F





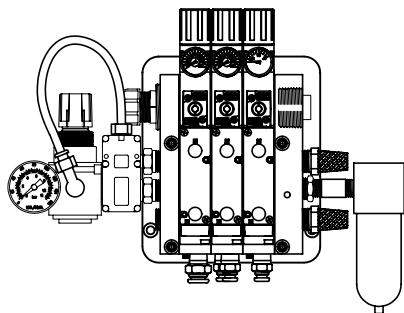
# BILL OF MATERIAL

MOD-214-X101R/L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-214-X101R/L	TAMP ASSEMBLY w/TRANSITION PLATE
⑤	1	ASS-214-0105M	TAMP VALVE BANK ASSEMBLY (MAC)
	1	PM-AH1000	AIR ASSIST TUBING x 12" Lg.
	5	PM-PF1010	1/4 TUBE to 1/4 NPT MALE CONNECTOR
	2	PM-PF1020	3/8 TUBE to 1/4 NPT MALE CONNECTOR
	1	PM-PF1105	1/8 NPT FEMALE to 1/4 NPT MALE BUSHING
	1	PM-PF1169	1/4 TUBE TO 1/8 NPT MALE HOSE BARB ELBOW
	1	PM-PT1070	1/4" OD SMC TUBING x 40" Lg.
	1	PM-PT1080	3/8" OD SMC TUBING x 36" Lg.

## ORDER THESE ITEMS SEPARATELY:

- 1.) TAMP SLIDE w/MOUNTING PLATE....ASS-214-X103R/L-X
- 2.) LABEL PAD
- 3.) LABEL MANIFOLD



⑤ VALVE BANK ASSEMBLY  
SCALE: 2"=1'-0"

# BILL OF MATERIAL

ASS-214-X101R/L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0207	TAMP TRANSITION PLATE
②	1	ASS-200-X126R/L	TENSION BRUSH ASSEMBLY
③	1	ASS-214-X102R/L	TAMP PEEL EDGE ASSEMBLY
④	1	ASS-211-0108-2	FIBER OPTIC SENSOR w/ 2" MTG. SHAFT
	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS

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 SERIES APPLICATOR: TAMP ASSEMBLY

PART: TAMP ASSEMBLY w/ TRANSITION PLATE

Dept. Code  
70

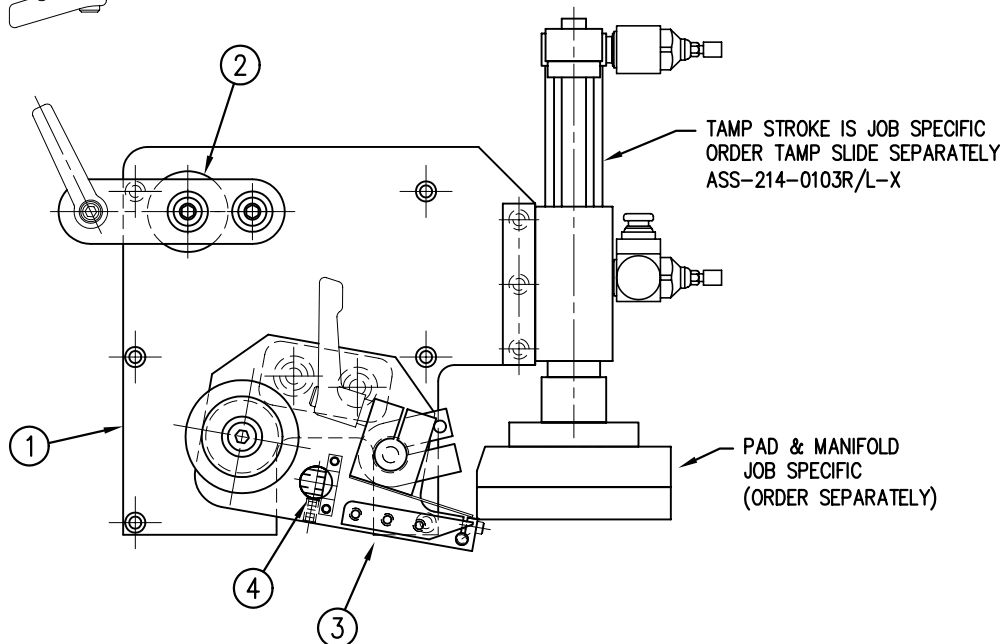
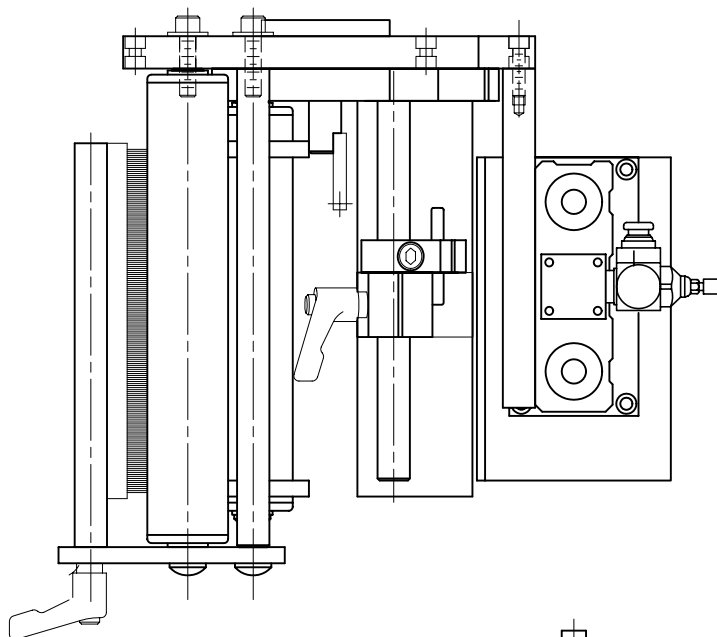
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applcator\360
0	NEW TITLEBLOCK	04/08/03	TDR	1=3	06/14/97	BOB S.	214\MOD-214-X101RL

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

MOD-214-X101R/L

ASS-214-X101R/L

5" WIDE -0101R/L  
7.5" WIDE -2101R/L

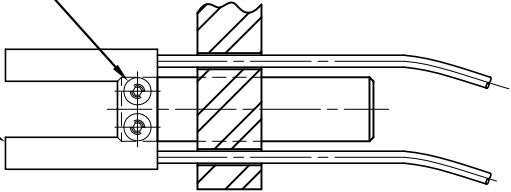


BILL OF MATERIAL			
ASS-214-X102R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0205	PEEL EDGE MOUNTING PLATE
②	1	MP-211-X208	PEEL EDGE (w/ TAPE)
③	1	MP-211-0207	PEEL EDGE TIE NUT
④	1	ASS-211-0105-1	SPRING BLOCK ASSEMBLY
	2	ASS-211-0105-1	SPRING BLOCK ASSEMBLY
⑤	1	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY
	2	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY
⑥	1	PM-211-X206	SPRING BLOCK MOUNTING SHAFT
⑦	1	ASS-211-X120	IDLER ROLLER ASSEMBLY
⑧	2	MP-211-0210	GUIDE COLLAR w/ SET SCREW
⑨	1	MP-211-X217-X	AIR ASSIST TUBE
10	2	PM-FASH430081	SHCS, 1/4-20 x 1.25 LG. SS
ORDER ONE OF THE FOLLOWING SENSOR OPTIONS SEPARATELY			
#ASS-211-0108 ~ SENSOR (STD. MTG. ROD)			
#ASS-211-0107 ~ SENSOR (EXTENDED REACH)			

5 WIDE
7.5 WIDE
5 WIDE
7.5 WIDE

NOTE: SENSOR NOT INCLUDED IN ASS'Y  
ORDER SEPARATELY ~ SEE B.O.M. NOTE

#4-40 x 3/8 LG.  
BHCS - 2 PLACES

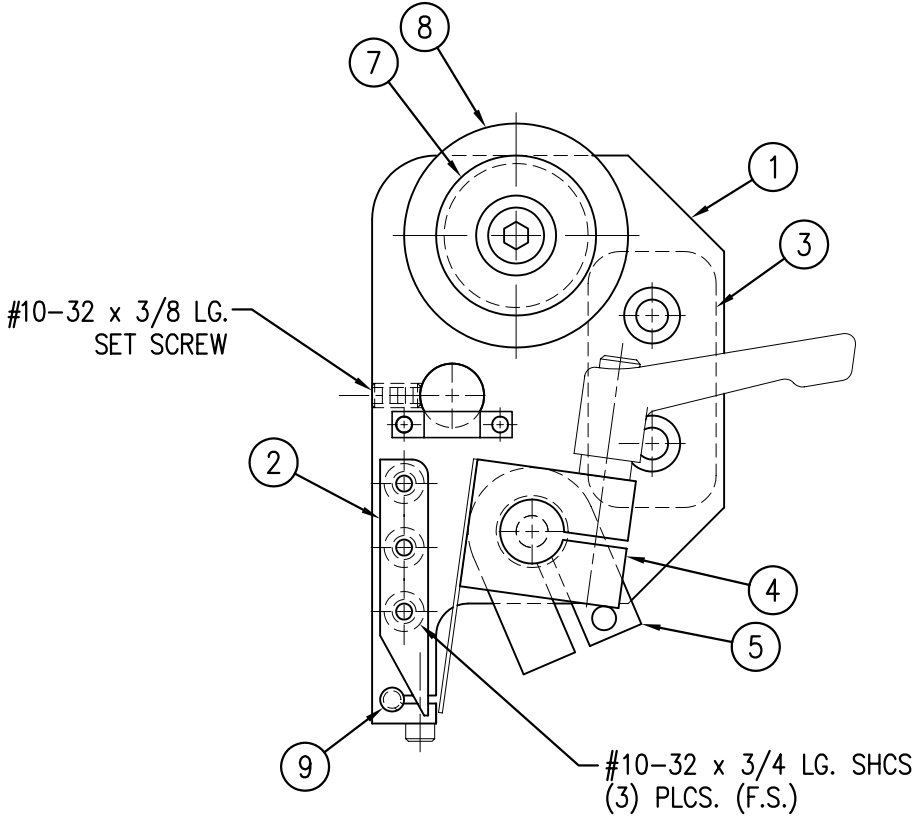


SECTION "A"

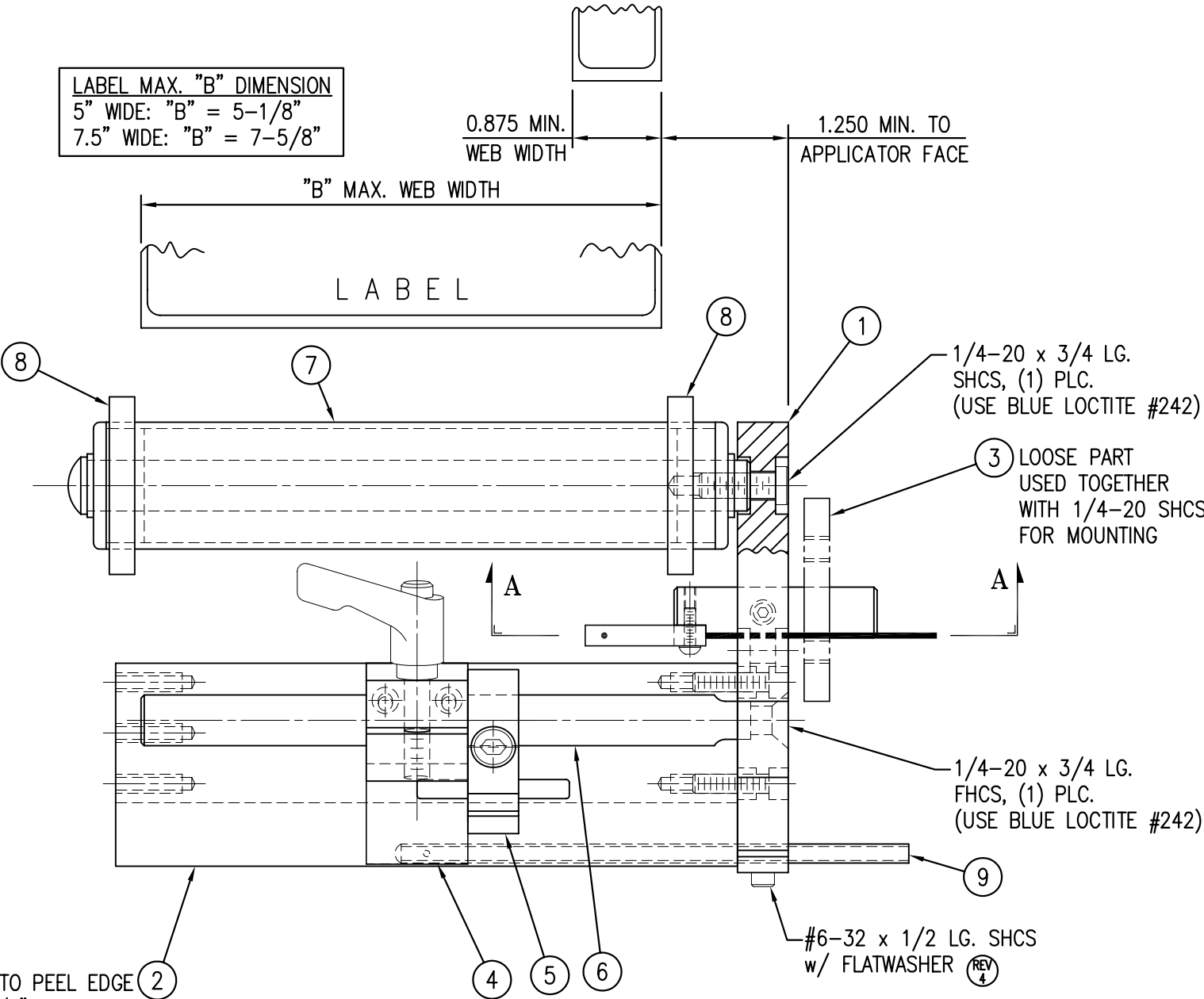
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-  
-5" WIDE SHOWN-

ASS-214-X102R/L	
5" WIDE	-0102R/L
7.5" WIDE	-2102R/L

REFER TO CTM DWG.#  
ASS-214-5102R/L  
FOR 10" WIDTH



APPLY (1) STRIP OF UHMW TAPE TO PEEL EDGE  
5" APPLICATOR ~ 6" WIDE x 4-1/8" LG.  
7.5" APPLICATOR ~ 5-7/16" WIDE x 9-5/8" LG.



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.			
APPLICATOR SERIES: 360 SERIES	APPLICATOR SERIES: 5" / 7.5"	STD. TAMP / DAT	TITLE: PEEL EDGE ASSEMBLY
REV. DESCRIPTION: 5 UPDATED BOM & TITLE BLOCK	REV. DATE: 04/19/06	REV. BY: TK	REV. DATE: 09/28/99
F:\Engineering\Standard Parts\Applcator\360\Shared Parts		BOB S.	Dept. Code 70

360 BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-0103R/L-XQ		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TAMP SLIDE ("X" STROKE LENGTH)	ASS-214-0108-X	S
②	1	SLIDE MOUNT PLATE	MP-214-0204	.
③	1	QUICK CHANGE MANIFOLD TRANS. PLATE	MP-214-0227	.
④	2	FLOW CONTROL	PM-PF2060	S
⑤	3	SHCS, #10-32 x 3/4" LG.	NONE	.

RH & LH MOUNTING AVAILABLE  
-RH MOUNTING SHOWN-

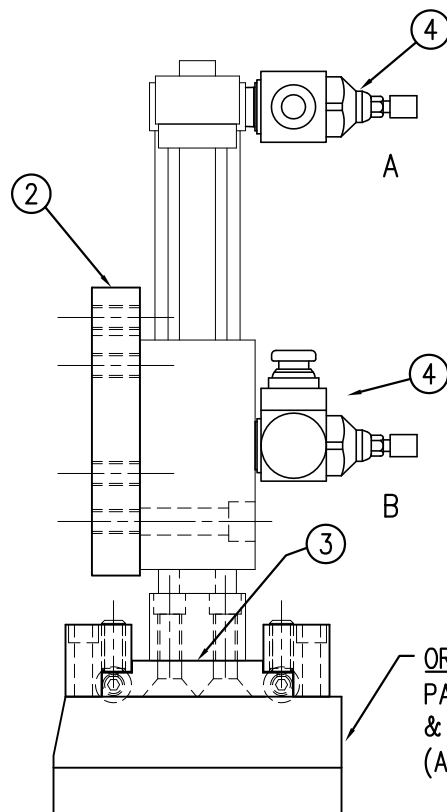
ASS-214-0103R/L-XQ

1" STROKE	-0103R/L-1Q
2" STROKE	-0103R/L-2Q
3" STROKE	-0103R/L-3Q
4" STROKE	-0103R/L-4Q
6" STROKE	-0103R/L-6Q

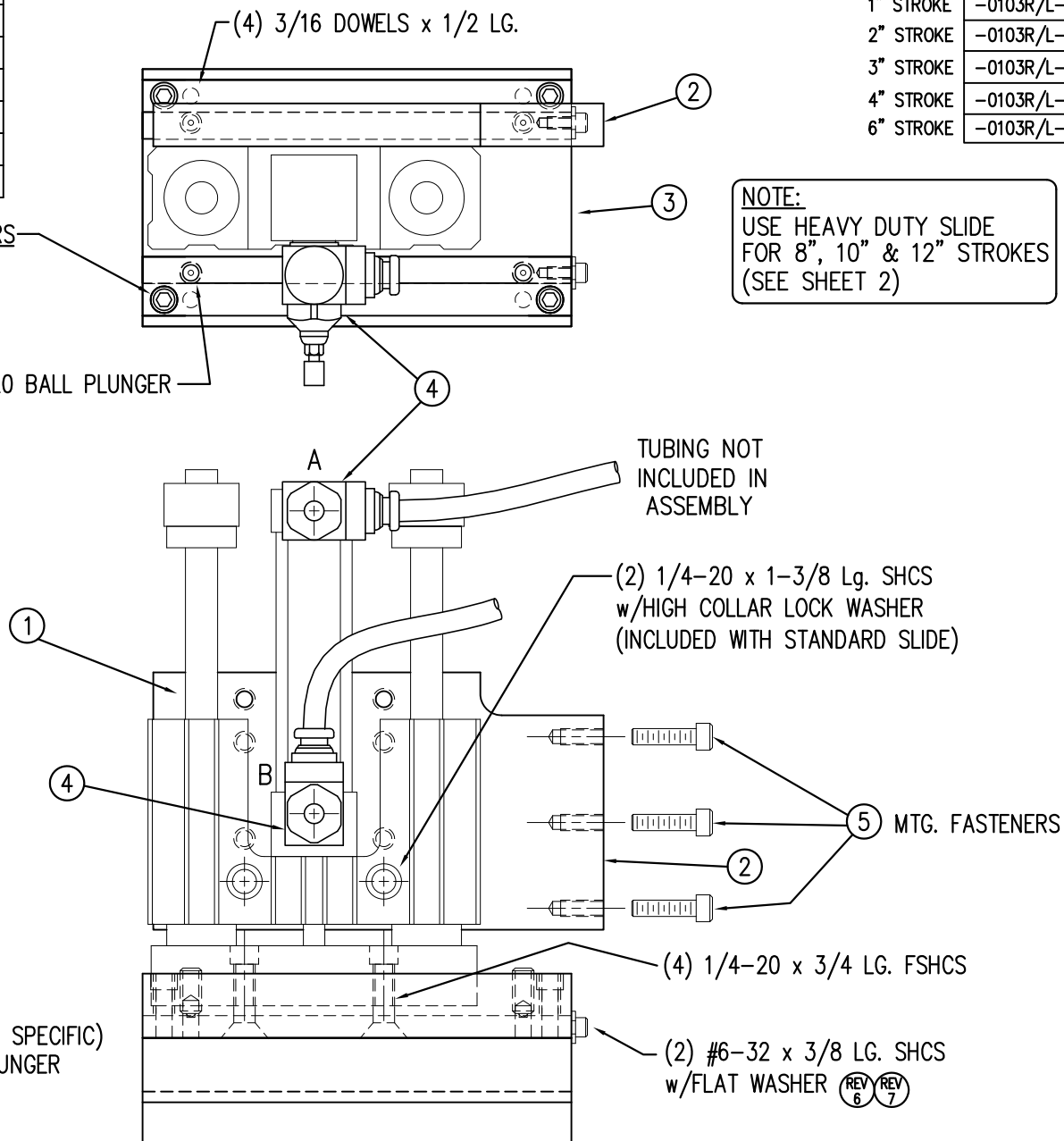
**NOTE:**  
USE HEAVY DUTY SLIDE  
FOR 8", 10" & 12" STROKES  
(SEE SHEET 2)

MANIFOLD MOUNTING FASTENERS  
(4) #10-32 x 3/4 LG. SHCS  
(NOT INCLUDED IN ASS'Y)

(4) 1/4-20 BALL PLUNGER



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



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 SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 1 of 2)

PART: STANDARD SLIDE ASS'Y FOR 360 APPLICATOR w/QUICK CHANGE PAD

Dept. Code  
70

REV. 7  
REV. DESCRIPTION  
SHOWED #6-32 (QC STOPS) IN CORRECT LOCATION

REV. DATE  
03/23/10

REV. BY:  
TDR

Scale:  
1=2

Date:  
02/21/98

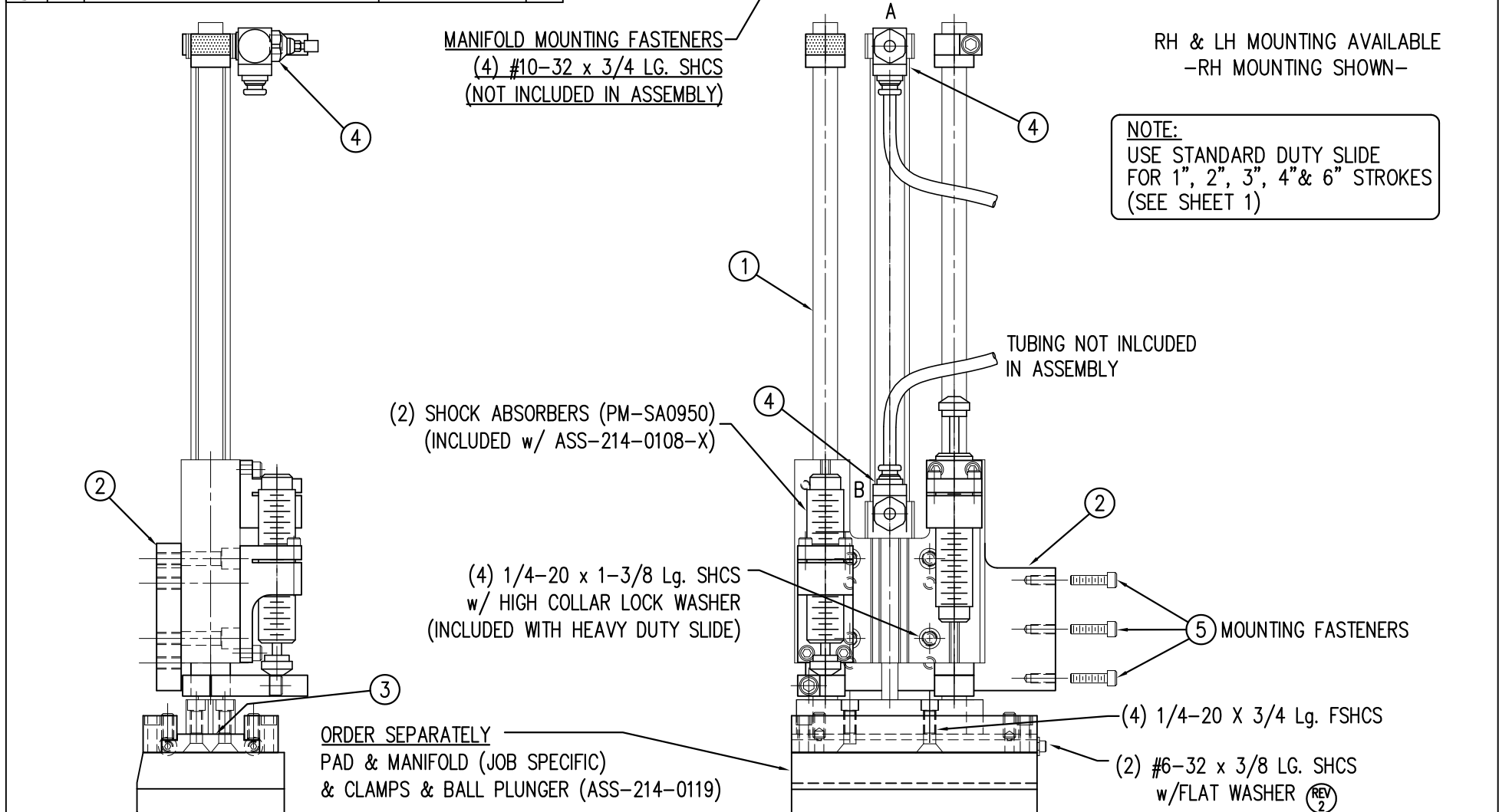
DRAWN BY:  
BOB S.

F:\Engineering\Standard Parts\Applicator\360  
214\ASS-214-0103RL-XQs1

360 BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-0103R/L-XQ		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TAMP SLIDE ("X" STROKE LENGTH)	ASS-214-0108-X	S
②	1	SLIDE MOUNT PLATE	MP-214-0204	.
③	1	QUICK CHANGE MANIFOLD TRANS. PLATE	MP-214-0227	.
④	2	FLOW CONTROL	PM-PF2060	S
⑤	3	SHCS, #10-32 x 3/4" LG.	NONE	.

ASS-214-0103R/L-XQ

8" STROKE	-0103R/L-8Q
10" STROKE	-0103R/L-10Q
12" STROKE	-0103R/L-12Q



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 SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 2 of 2)				PART: HEAVY DUTY SLIDE ASS'Y FOR 360 APPLICATOR w/QUICK CHANGE PAD				Dept. Code 70
REV. 3	REV. DESCRIPTION SHOWED #6-32 SHCS (QC STOPS) IN CORRECT LOCATION	REV. DATE 03/23/10	REV. BY: TDR	Scale: 1=3	Date: 02/21/98	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 214\ASS-214-0103RL-XQs2	

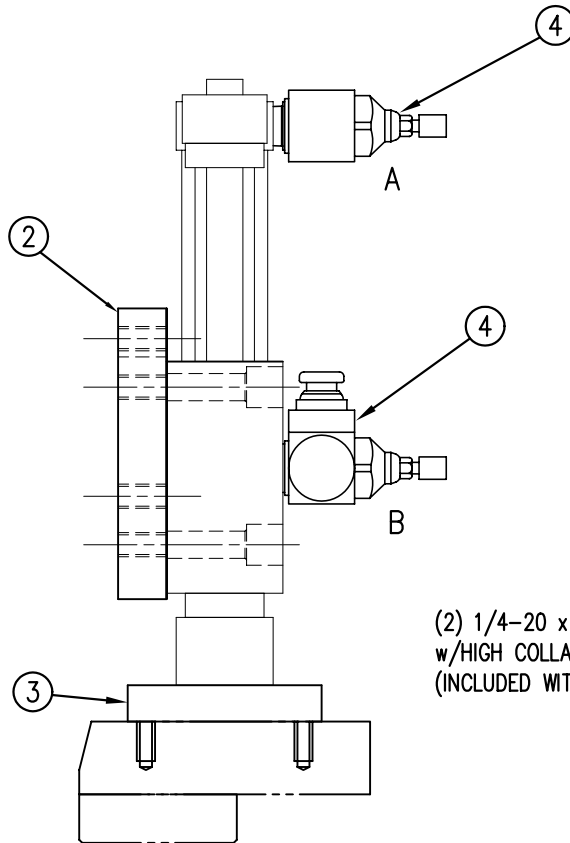
RH & LH MOUNTING AVAILABLE  
-RH MOUNTING SHOWN-

ASS-214-0103R/L-X

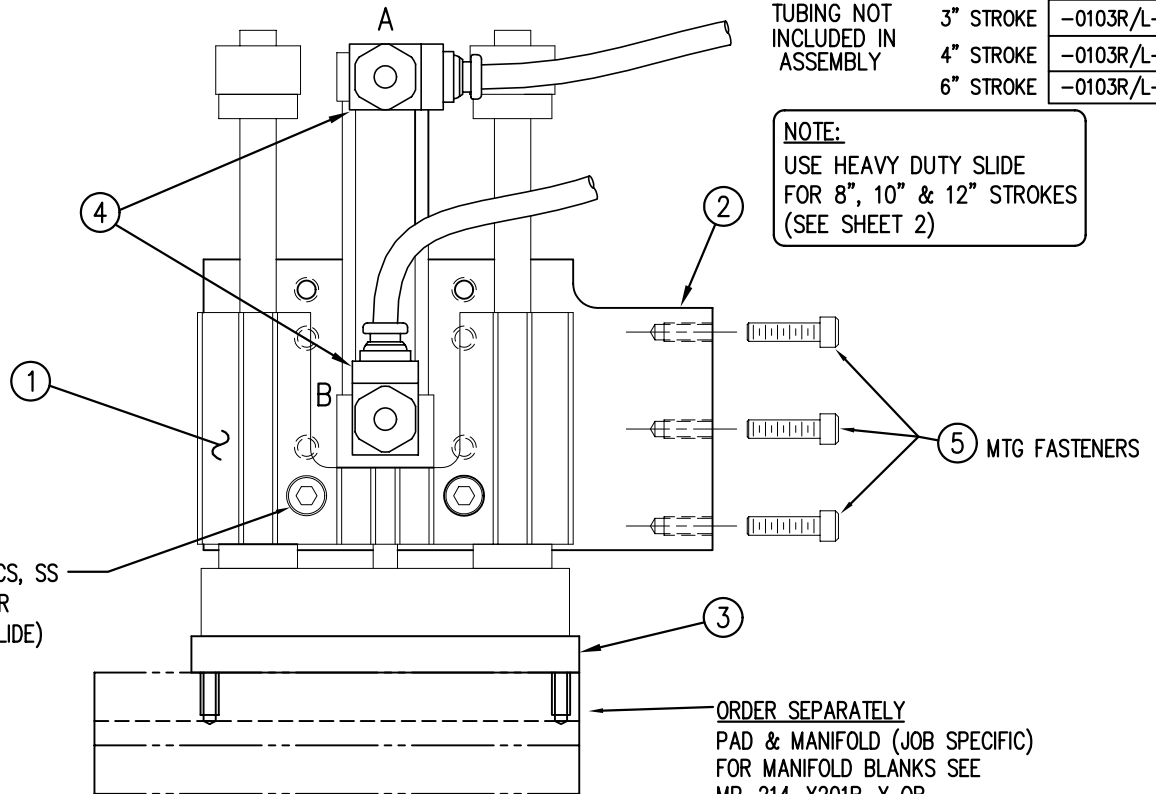
1" STROKE	-0103R/L-1
2" STROKE	-0103R/L-2
3" STROKE	-0103R/L-3
4" STROKE	-0103R/L-4
6" STROKE	-0103R/L-6

TUBING NOT  
INCLUDED IN  
ASSEMBLY

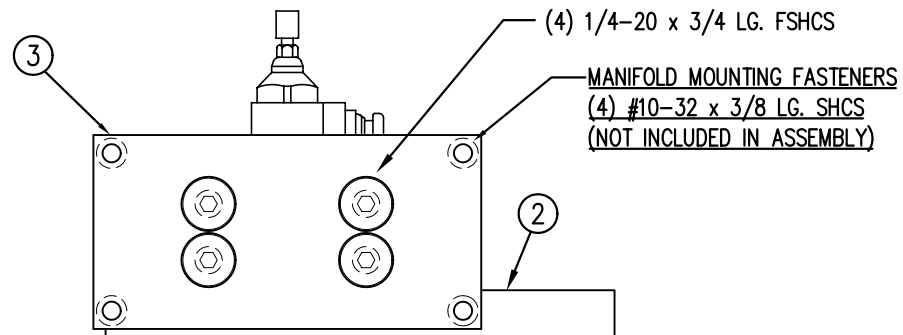
**NOTE:**  
USE HEAVY DUTY SLIDE  
FOR 8", 10" & 12" STROKES  
(SEE SHEET 2)



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



ORDER SEPARATELY  
PAD & MANIFOLD (JOB SPECIFIC)  
FOR MANIFOLD BLANKS SEE  
MP-214-X201R-X OR  
MP-214-X201L-X



MANIFOLD MOUNTING FASTENERS  
(4) #10-32 x 3/8 LG. SHCS  
(NOT INCLUDED IN ASSEMBLY)

### 360 BILL OF MATERIAL

ASSEMBLY				SOLD
ASS-214-0103R/L-X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TAMP SLIDE ("X" STROKE LENGTH)	ASS-214-0108-X	S
②	1	SLIDE MOUNT PLATE	MP-214-0204	.
③	1	TAMP MANIFOLD TRANSITION PLATE	MP-214-0203	.
④	2	FLOW CONTROL	PM-PF2060	S
⑤	3	SHCS, #10-32 x 3/4" LG.	PM-FASH430078	.

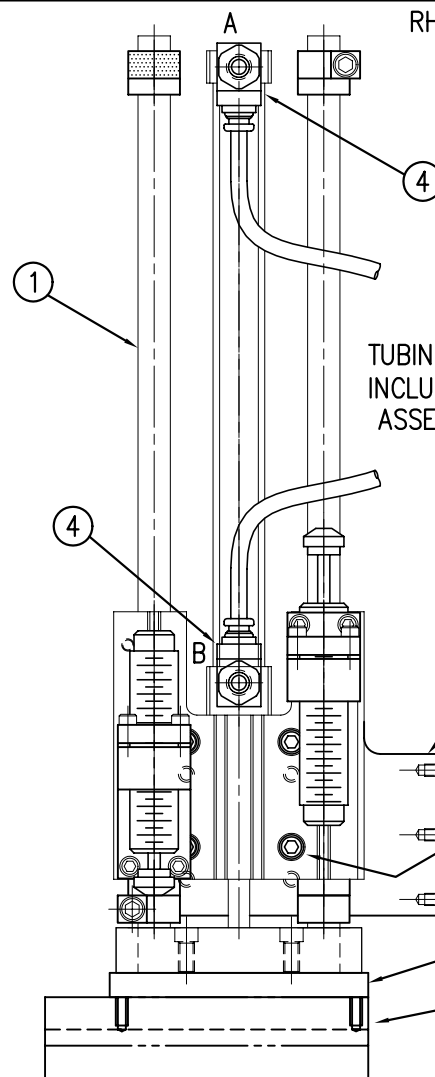
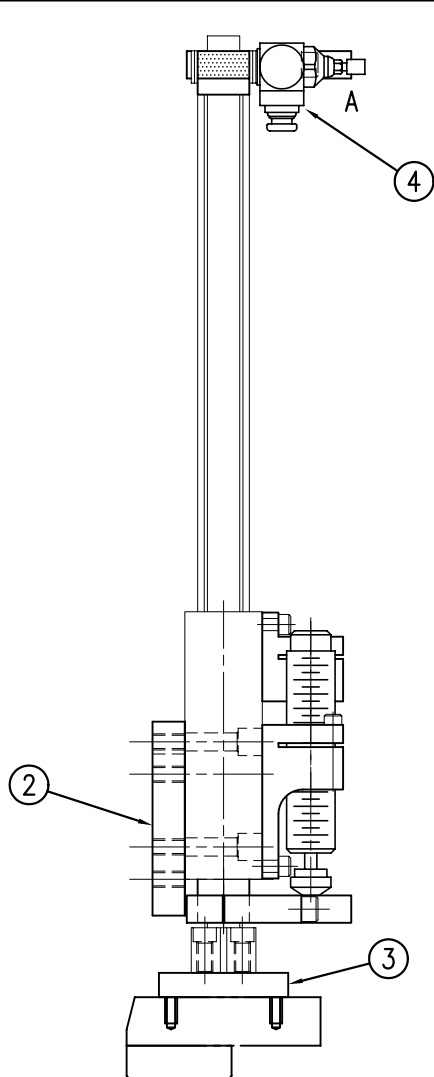
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.

TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 1 of 2)

PART: STANDARD SLIDE ASSEMBLY FOR 360 APPLICATOR

Dept. Code  
70

REV. 5	REV. DESCRIPTION CREATED SHEET 1 & 2	REV. DATE 03/21/06	REV. BY TDR	Scale: 1=2	Date: 02/21/98	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Appliator\360 214\ASS-214-0103RL-Xs1
--------	---	-----------------------	----------------	---------------	-------------------	---------------------	---



RH & LH MOUNTING AVAILABLE  
-RH MOUNTING SHOWN-

ASS-214-0103R/L-X	
8" STROKE	-0103R/L-8
10" STROKE	-0103R/L-10
12" STROKE	-0103R/L-12

TUBING NOT  
INCLUDED IN  
ASSEMBLY

NOTE:  
USE STANDARD DUTY SLIDE  
FOR 1", 2", 3", 4" & 6" STROKES  
(SEE SHEET 1)

(5) MOUNTING FASTENERS

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

ORDER SEPARATELY  
PAD & MANIFOLD (JOB SPECIFIC)  
FOR MANIFOLD BLANKS SEE  
MP-214-X201R-X OR  
MP-214-X201L-X

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

MANIFOLD MOUNTING FASTENERS  
(4) #10-32 x 3/8 LG. SHCS  
(NOT INCLUDED IN ASSEMBLY)

360 BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-214-0103R/L-X			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
(1)	1	TAMP SLIDE ("X" STROKE LENGTH)	ASS-214-0108-X	S
(2)	1	SLIDE MOUNT PLATE	MP-214-0204	.
(3)	1	TAMP MANIFOLD TRANSITION PLATE	MP-214-0203	.
(4)	2	FLOW CONTROL	PM-PF2060	S
(5)	3	SHCS, #10-32 x 3/4" LG.	PM-FASH430078	.

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 SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 2 of 2)

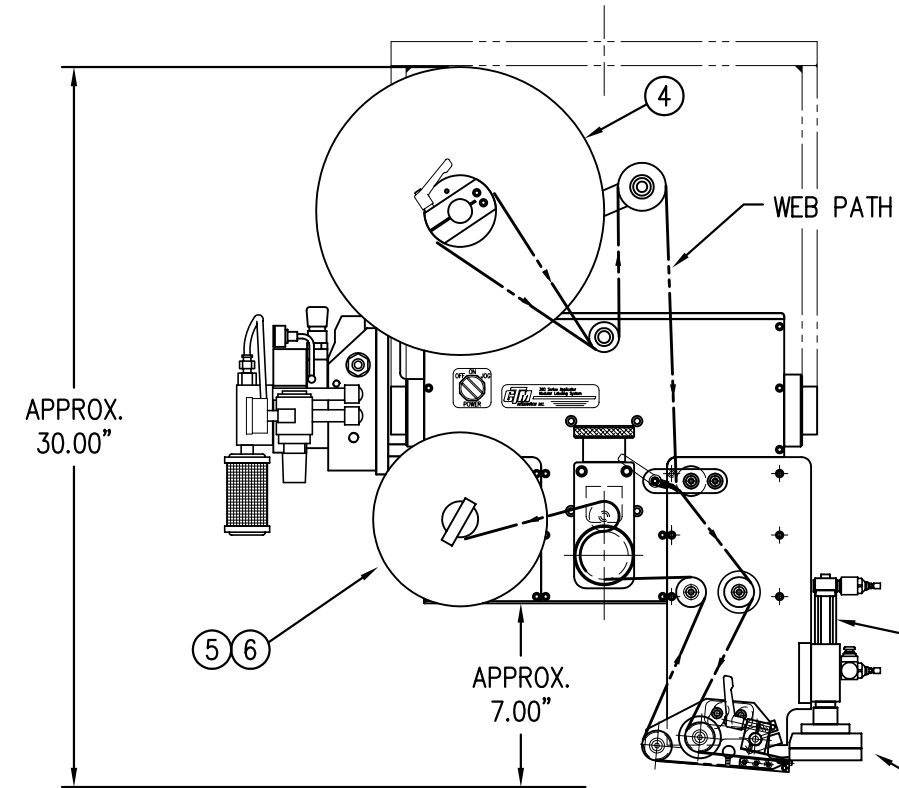
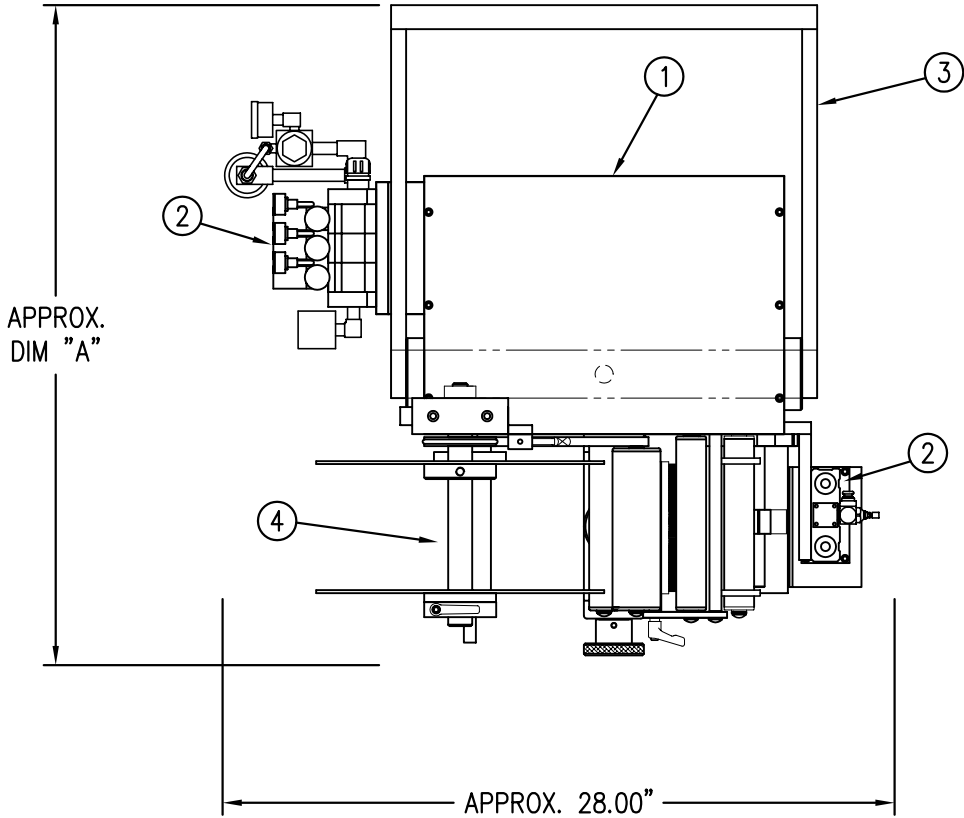
PART: HEAVY DUTY SLIDE ASSEMBLY FOR 360 APPLICATOR

Dept. Code  
70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applcator\360
1	NEW SHEET 2	03/21/06	TDR	1=3	02/21/98	BOB S.	214\ASS-214-0103RL-Xs2



PART NO.	DIM "A"
CTM-214-0120R/L-12X	27.50
CTM-214-2120R/L-12X	30.00
CTM-214-5120R/L-12X	32.50



DIM. FOR 2" STROKE LENGTH.  
FOR OTHER STROKE LENGTHS,  
ADD ADDITIONAL LENGTH TO  
OVERALL CYLINDER HEIGHT.

② TAMP STROKE LENGTH IS JOB SPECIFIC  
(ORDER TAMP SLIDE SEPARATELY)  
ASS-214-0103R/L-X

ORDER PAD &  
MANIFOLD SEPARATELY

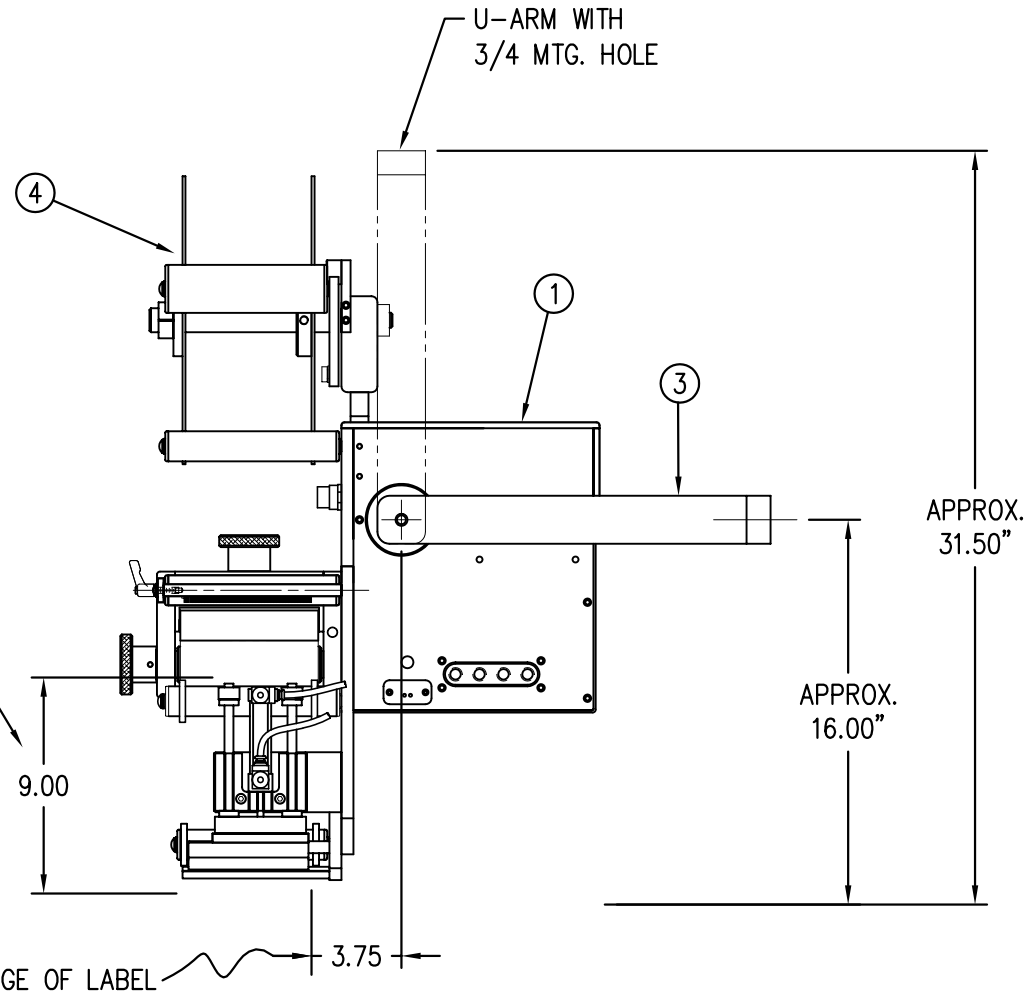
BILL OF MATERIAL				SOLD
CTM-214-X120RL-12X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5/10 TAMP NOSE w/6" DD SNRKL. SPECIFY STROKE LENGTH	MOD-214-X120R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-X138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY				
1.) TAMP SLIDE w/ MOUNTING PLATES				
2.) LABEL PAD				
3.) LABEL MANIFOLD				

← STD & FILM REWIND	S
← COLLAPSIBLE RWD	C
← STANDARD RWD	S
← FILM REWIND	F
← COLLAPSIBLE RWD	F

STANDARD REWIND S  
COLLAPSIBLE REWIND C  
FILM REWIND F

RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216

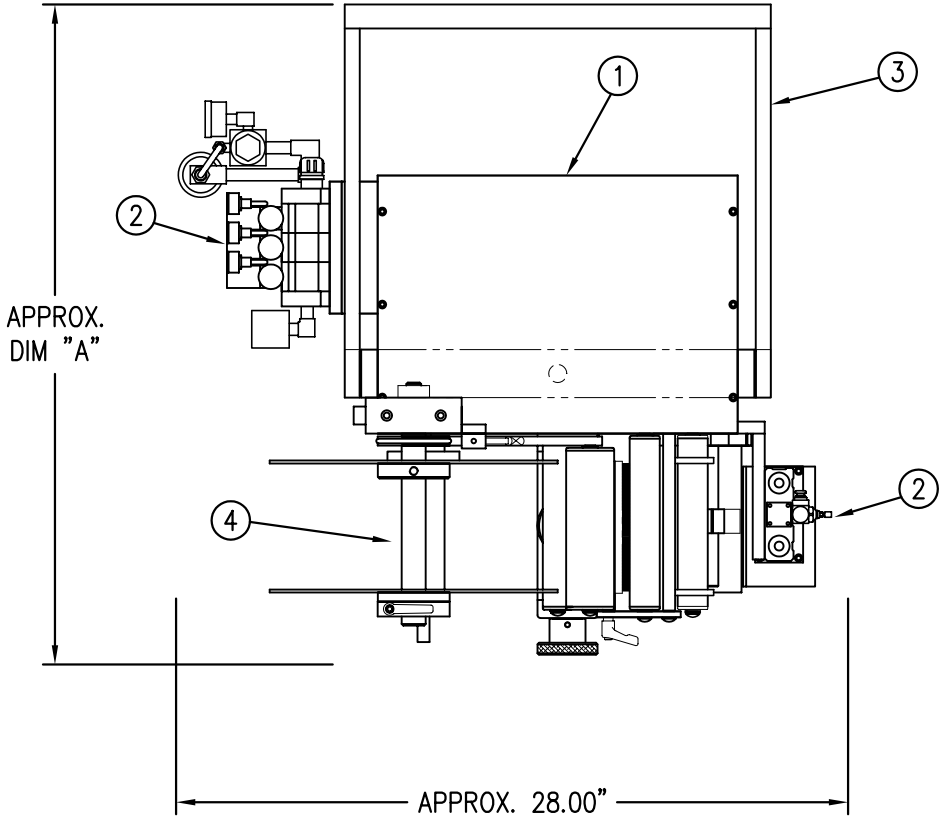


CTM-214-X120R/L-12X			
5" WIDE	-0120R/L-12	X	
7.5" WIDE	-2120R/L-12	X	
10" WIDE	-5120R/L-12	X	

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 SERIES APPLICATOR: TAMP ASSEMBLY: SNORKEL			
REV. 1	REV. DESCRIPTION	REV. DATE	REV. BY
1	NEW COLLAPSIBLE MANDREL	10/16/07	TDR
F:\Engineering\Standard Parts\Applcator\360		Scale: 1=8	Date: 09/28/00
214\CTM-214-X120RL-12X		BOB S.	Drawn By:
Part Code		Part Code	Part Code
APPLY TO		APPLY TO	APPLY TO
UNWIND ASSEMBLY		UNWIND ASSEMBLY	UNWIND ASSEMBLY
6" DD SNORKEL & 12" UNWIND		6" DD SNORKEL & 12" UNWIND	6" DD SNORKEL & 12" UNWIND
PART: 5"/7.5"/10" WIDE: TAMP w/		PART: 5"/7.5"/10" WIDE: TAMP w/	PART: 5"/7.5"/10" WIDE: TAMP w/



PART NO.	DIM "A"
CTM-214-0121R/L-12X	27.50
CTM-214-2121R/L-12X	30.00
CTM-214-5121R/L-12X	32.50



BILL OF MATERIAL				SOLD
CTM-214-X121RL-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5/10 TAMP NOSE w/12" DD SNRKL. SPECIFY STROKE LENGTH	MOD-214-X121R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-X138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY 1.) TAMP SLIDE w/ MOUNTING PLATES 2.) LABEL PAD 3.) LABEL MANIFOLD				

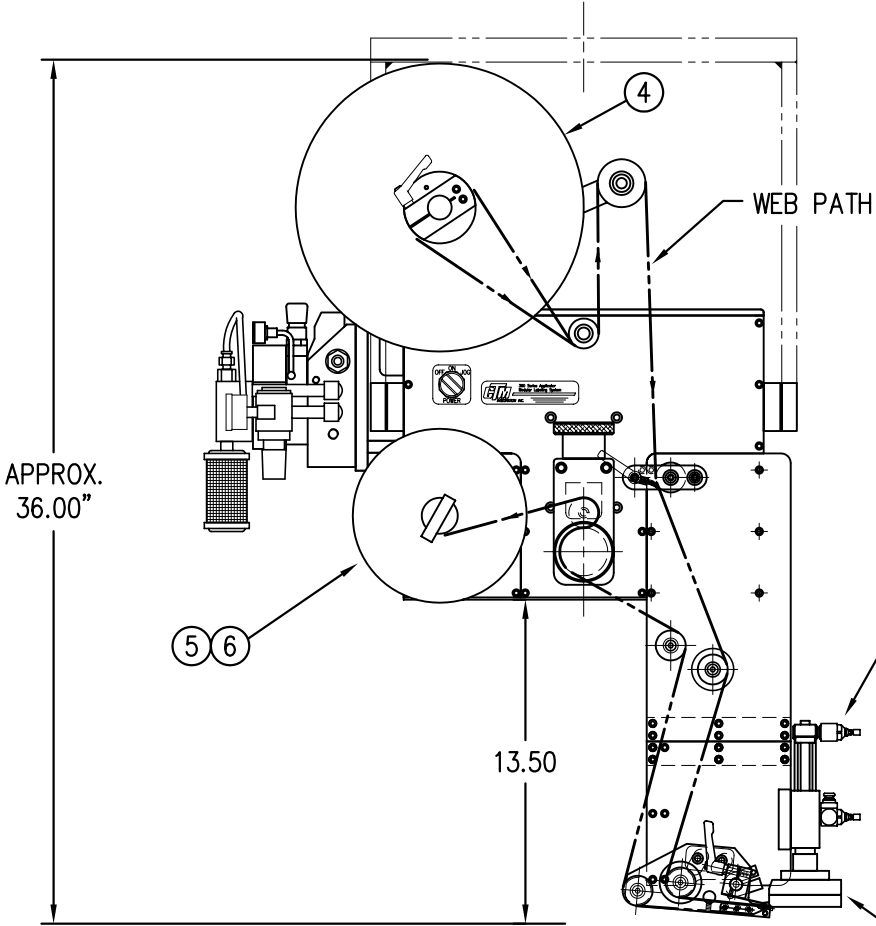
← STD & FILM REWIND	
← COLLAPSIBLE RWD	
← STANDARD RWD	
← FILM REWIND	
← COLLAPSIBLE RWD	

CTM-214-X121R/L-12X			
5" WIDE	-0121R/L-12	X	
7.5" WIDE	-2121R/L-12	X	
10" WIDE	-5121R/L-12	X	

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

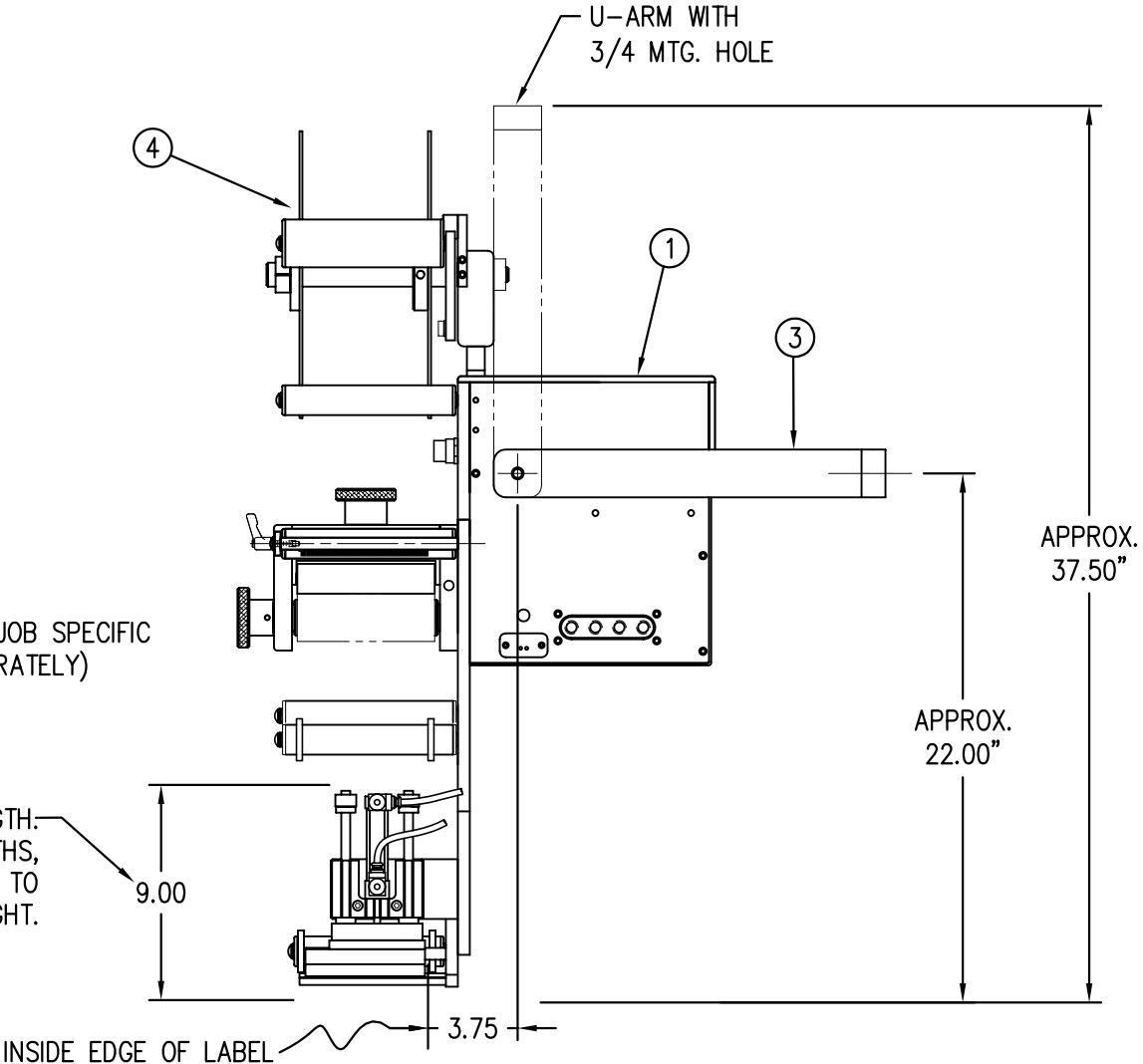
NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216



② TAMP STROKE LENGTH IS JOB SPECIFIC  
(ORDER TAMP SLIDE SEPARATELY)  
ASS-214-0103R/L-X

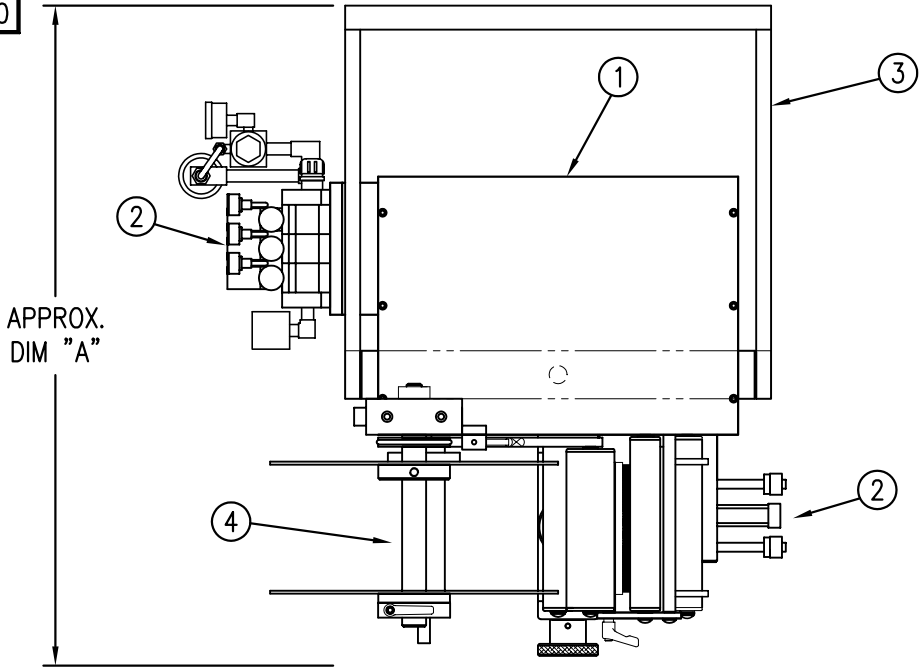
DIM. FOR 2" STROKE LENGTH.  
FOR OTHER STROKE LENGTHS,  
ADD ADDITIONAL LENGTH TO  
OVERALL CYLINDER HEIGHT.

ORDER PAD &  
MANIFOLD SEPARATELY



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 SERIES APPLICATOR: TAMP ASSEMBLY: SNORKEL					PART: 5"/7.5"/10": TAMP w/ 12" DD SNORKEL (HORIZ. ASSY) & 12" UNWIND				
REV. 1	REV. DESCRIPTION	REV. DATE	REV. BY	REV. BY	Scale:	Date:	Drawn By:	Bob S.	Dept. Code
1	NEW COLLAPSIBLE MANDREL	10/26/07	TDR	TDR	1=8	09/28/00			70
					F:\Engineering\Standard Parts\Applcator\360				
					214\CTM-214-X121RL-12Xs1				

PART NO.	DIM "A"
CTM-214-0121R/L-12X	27.50
CTM-214-2121R/L-12X	30.00
CTM-214-5121R/L-12X	32.50



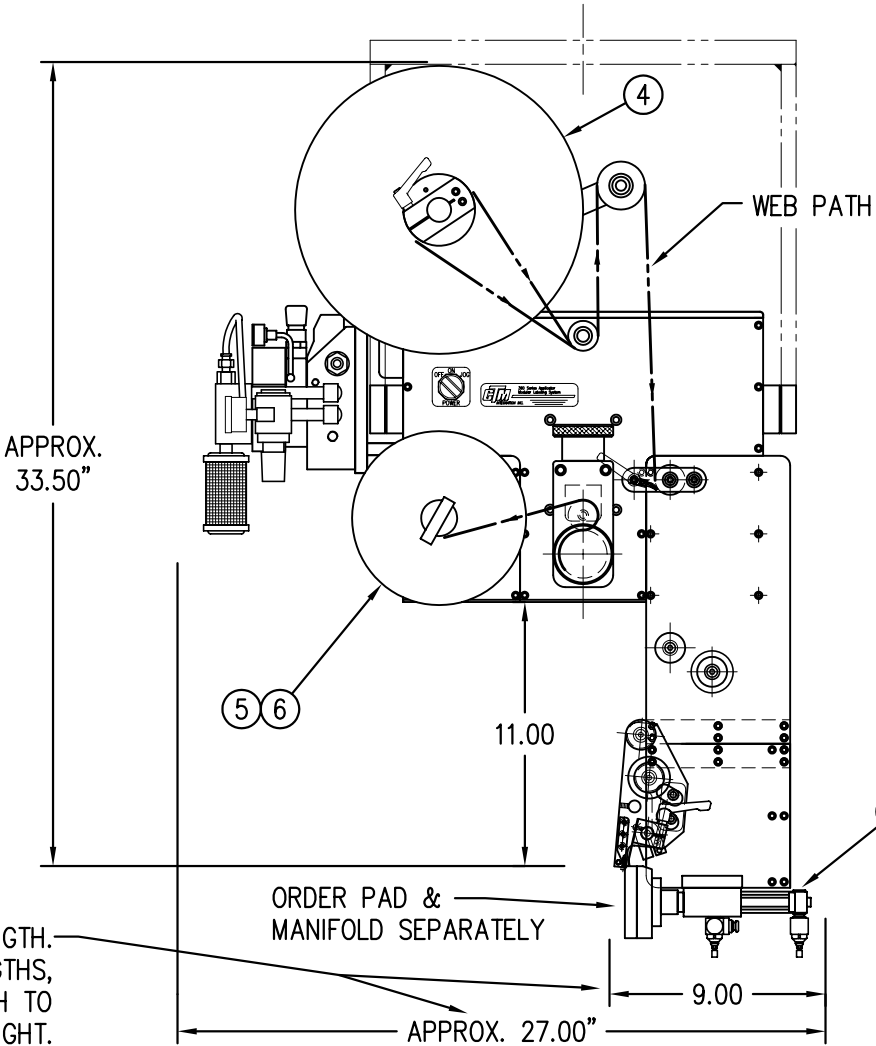
BILL OF MATERIAL					SOLD
CTM-214-X121RL-12X					S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L	.	
②	1	5/7.5/10 TAMP NOSE w/12" DD SNRKL. SPECIFY STROKE LENGTH	MOD-214-X121R/L	S	
③	1	U-ARM ASSEMBLY	WAS-200-0247	.	
④	1	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S	
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S	← COLLAPSIBLE RWD (REV 1)
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-X138	.	
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S	
ORDER THESE ITEMS SEPARATELY 1.) TAMP SLIDE w/ MOUNTING PLATES 2.) LABEL PAD 3.) LABEL MANIFOLD					

RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

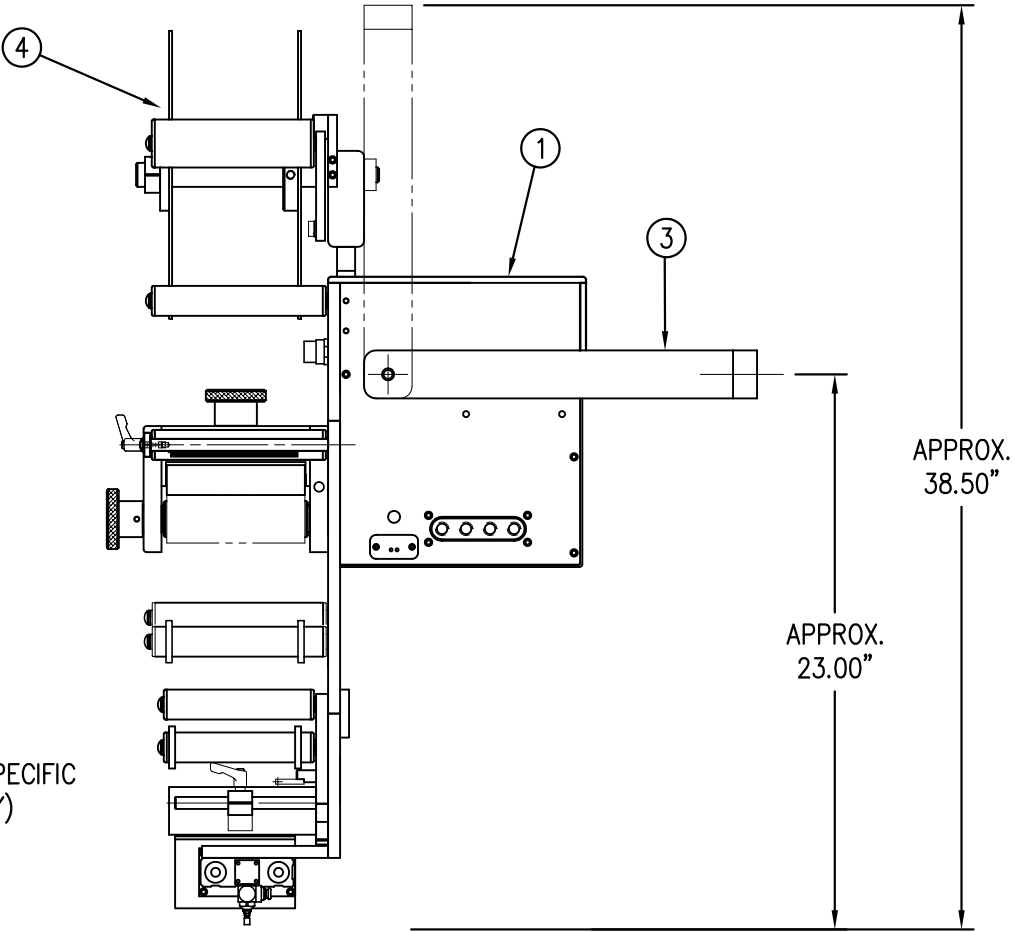
CTM-214-X121R/L-12X			
5" WIDE	-0121R/L-12	X	
7.5" WIDE	-2121R/L-12	X	
10" WIDE	-5121R/L-12	X	

STANDARD REWIND S  
COLLAPSIBLE REWIND C  
FILM REWIND F

NOTE: UNWIND MTG. BRACKET FOR 5" & 7.5" WIDE APPLICATORS DIFFERS FROM 10" WIDE. FOR 10" WIDE MTG. BRACKET REFER TO DWG. MP-200-5216

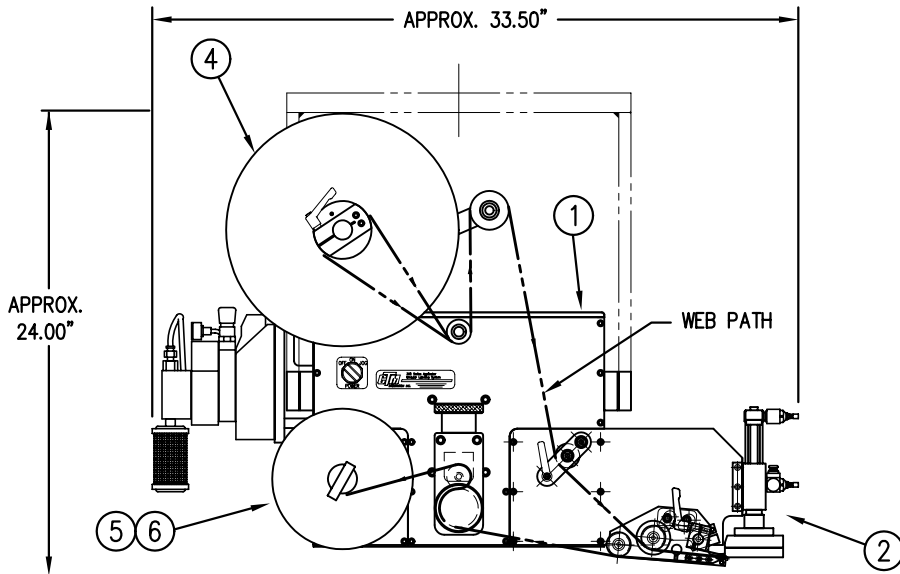
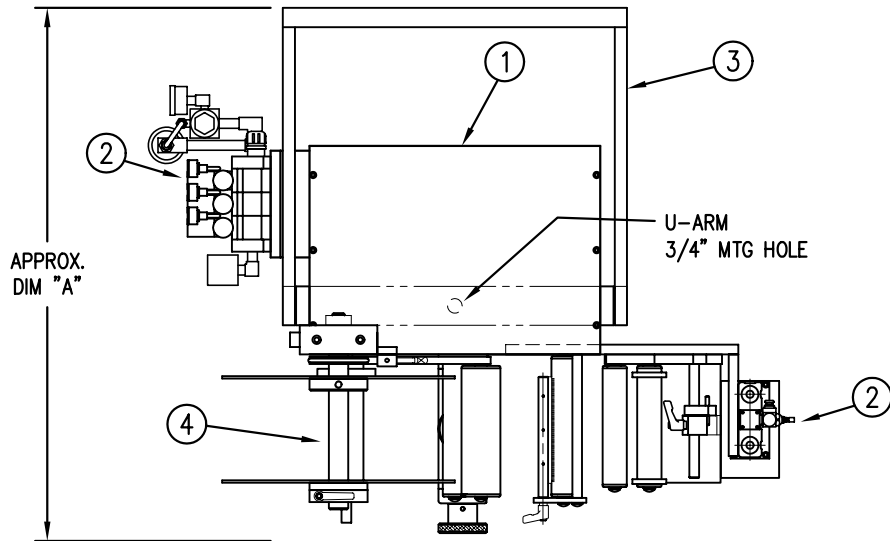


② TAMP STROKE LENGTH IS JOB SPECIFIC (ORDER TAMP SLIDE SEPARATELY)  
ASS-214-0103R/L-X



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 SERIES APPLICATOR: TAMP ASSEMBLY: SNORKEL					PART: 5"/7.5"/10": TAMP w/ 12" DD SNORKEL (VERT. ASSY) & 12" UNWIND				
REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY TDR	REV. BY TDR	Scale: 1=8	Date: 09/28/00	BOB S.	Dept. Code 70	F:\Engineering\Standard Parts\Applcator\360 214\CTM-214-X121RL-12Xs2

PART NO.	DIM "A"
CTM-214-0124R/L-12X	27.50
CTM-214-2124R/L-12X	30.00
CTM-214-5124R/L-12X	32.50



# BILL OF MATERIAL

ASSEMBLY		CTM-214-X124RL-12X		SOLD
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5/10 WIDE; TAMP w/6" EXT. SNK.	MOD-214-X124R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5/10 WIDE; 12" UNWIND w/DISKS	MOD-200-X121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	5/7.5/10 STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	5/7.5/10 FILM REWIND MANDREL	ASS-200-X137	S
	1	5/7.5/10 COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5" CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-X138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

CTM-214-X124R/L-12X

5" WIDE	-0124R/L-12	X
7.5" WIDE	-2124R/L-12	X
10" WIDE	-5124R/L-12	X

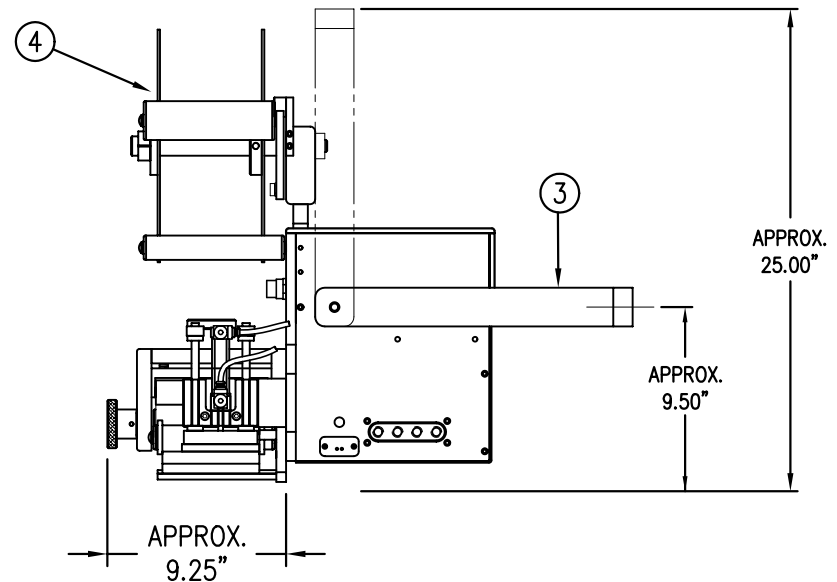
— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

REV 1

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216



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.

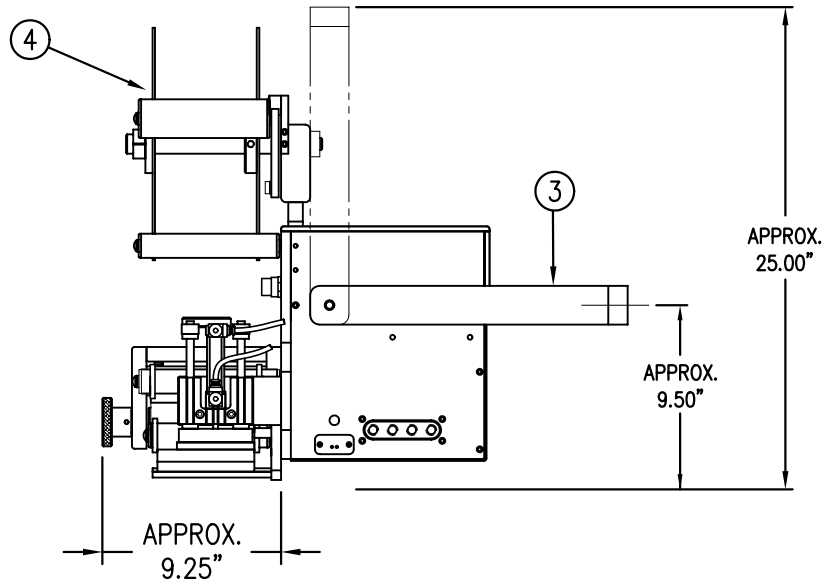
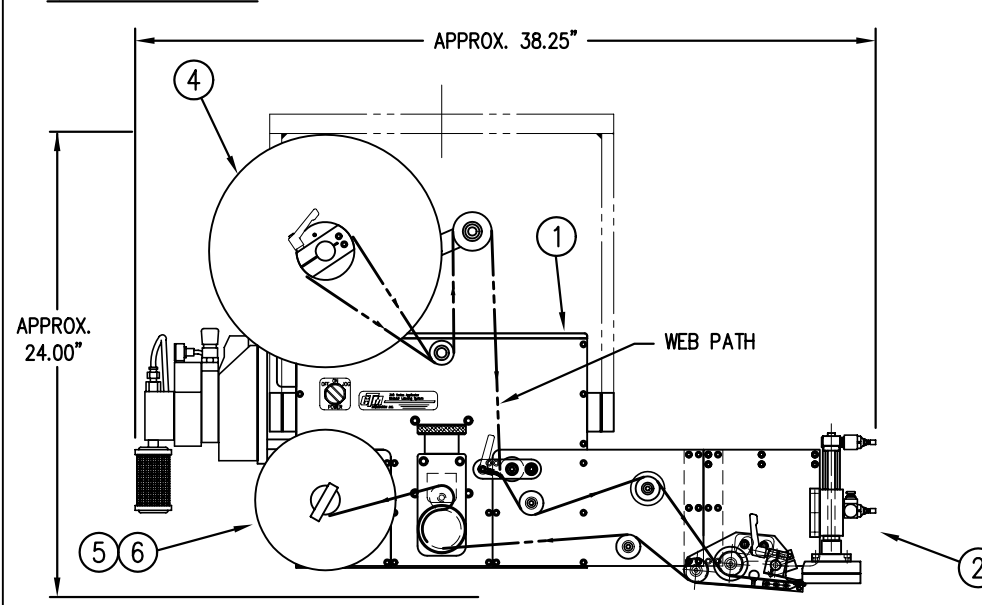
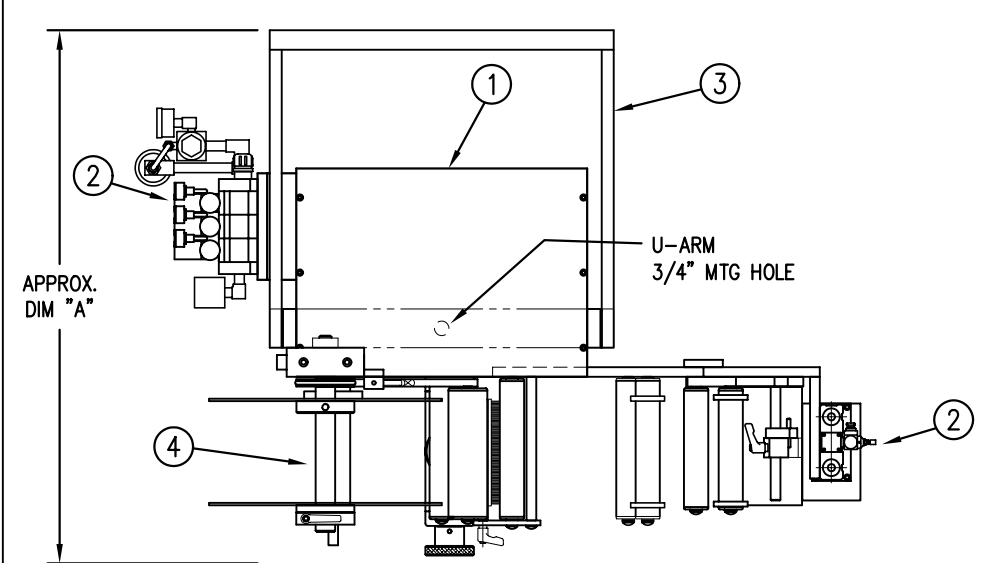
TITLE: 360 SERIES APPLICATOR: TAMP: SNORKEL

PART: 5/7.5/10 TAMP: w/ 6" EXT. SNORKEL & 12" UNWIND ASS'Y

Dept. Code  
70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applcator\360
1	NEW COLLAPSIBLE MANDREL	10/16/07	TDR	1=10	09/28/00	BOB S.	214\CTM-214-X124RL-12X

PART NO.	DIM "A"
CTM-214-0125R/L-12X	27.50
CTM-214-2125R/L-12X	30.00
CTM-214-5125R/L-12X	32.50



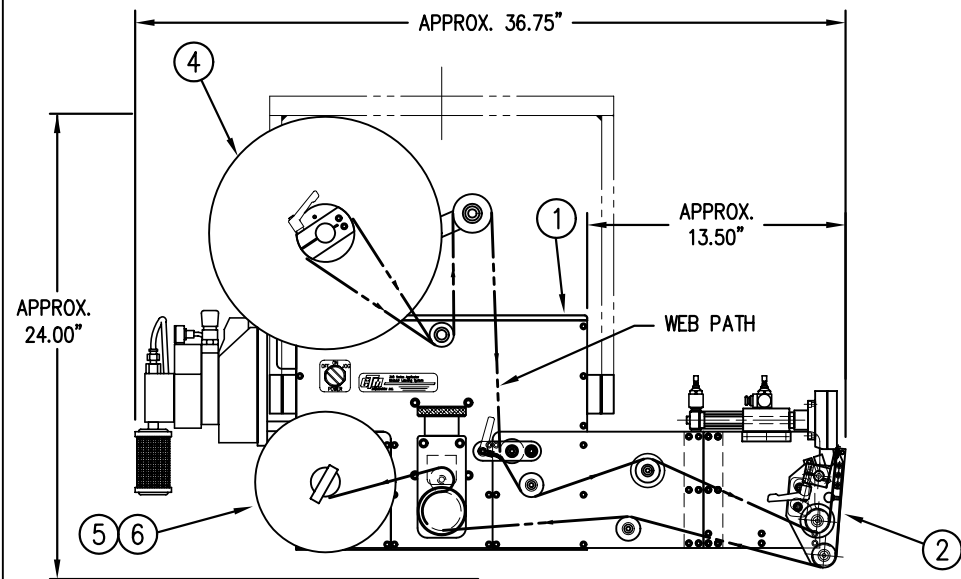
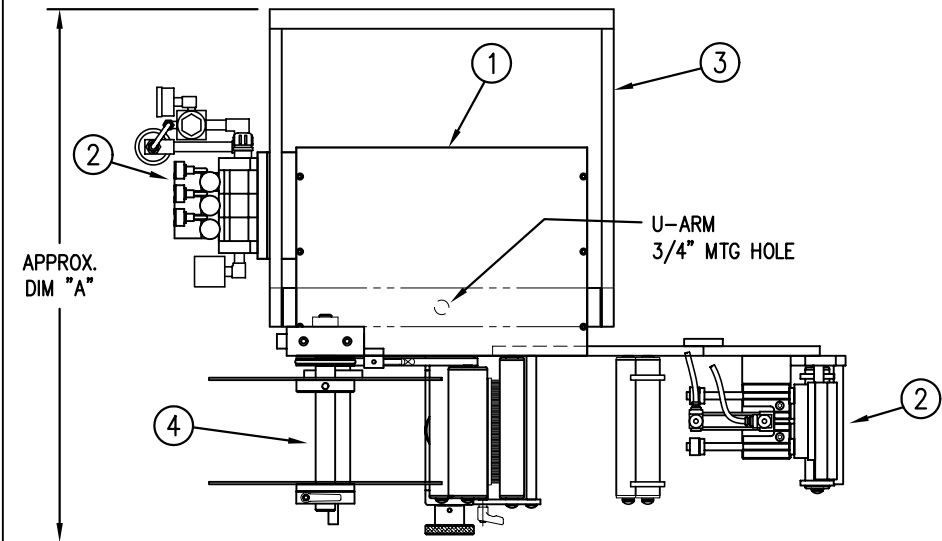
BILL OF MATERIAL				SOLD
CTM-214-X125RL-12X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5/7.5/10	WIDE; CORE UNIT	ASS-200-X150R/L
	1	5/7.5/10	WIDE;TAMP w/12" EXT. SNKL.	MOD-214-X125R/L
	1	U-ARM	ASSEMBLY	WAS-200-0247
	1	5/7.5/10	WIDE; 12" UNWIND w/DISKS	MOD-200-X121R/L
⑤	1	STD	REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L
	1	COLLAPSIBLE	REWIND BLK & SHAFT	ASS-200-3167R/L
⑥	1	5/7.5/10	STANDARD MANDREL (SHOWN)	ASS-200-X147
	1	5/7.5/10	FILM REWIND MANDREL	ASS-200-X137
	1	5/7.5/10	COLLAPSIBLE MANDREL	ASS-200-3140-X
	1	DISPLAY	UNIT ASSEMBLY	ASS-200-0125
	1	APPLICATOR	TO DISPLAY UNIT-5" CABLE	PE-200-0407-5
	1	DISPLAY	UNIT MOUNT ASSEMBLY	ASS-200-X138
	1	PRODUCT	DETECT SENSOR	ASS-200-0427

CTM-214-X125R/L-12X			
5" WIDE	-0125R/L-12	X	
7.5" WIDE	-2125R/L-12	X	
10" WIDE	-5125R/L-12	X	
<div> <div>STD &amp; FILM REWIND</div> <div>COLLAPSIBLE RWD</div> <div>STANDARD RWD</div> <div>FILM REWIND</div> <div>COLLAPSIBLE RWD</div> </div>			
<div> <div>STANDARD REWIND</div> <div>COLLAPSIBLE REWIND</div> <div>FILM REWIND</div> </div>			

RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216

PART NO.	DIM "A"
CTM-214-0125R/L-12X	27.50
CTM-214-2125R/L-12X	30.00
CTM-214-5125R/L-12X	32.50



# BILL OF MATERIAL

ASSEMBLY			CTM-214-X125RL-12X	SOLD
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5/10 WIDE;TAMP w/12" EXT. SNKL	MOD-214-X125R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5/10 WIDE; 12" UNWIND w/DISKS	MOD-200-X121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	5/7.5/10 STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	5/7.5/10 FILM REWIND MANDREL	ASS-200-X137	S
	1	5/7.5/10 COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5" CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-X138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S

CTM-214-X125R/L-12X

5" WIDE	-0125R/L-12	X
7.5" WIDE	-2125R/L-12	X
10" WIDE	-5125R/L-12	X

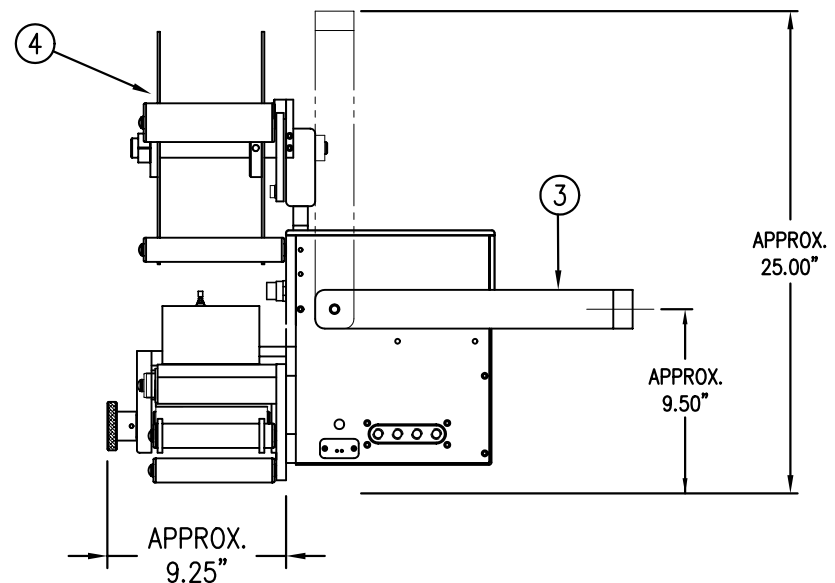
← STD & FILM REWIND
← COLLAPSIBLE RWD
← STANDARD RWD
← FILM REWIND
← COLLAPSIBLE RWD

REV 1

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216



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.

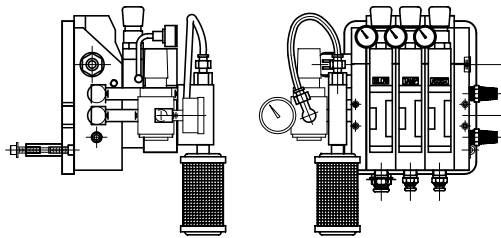
TITLE: 360 SERIES APPLICATOR: TAMP: SNORKEL

PART: 5/7.5/10 TAMP: w/12" EXT. SNKL (VERT. ASSY) & 12" UNWIND

Dept. Code  
70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applcator\360
1	NEW COLLAPSIBLE MANDREL	10/16/07	TDR	1=10	09/28/00	BOB S.	214\CTM-214-X125RL-12Xs2

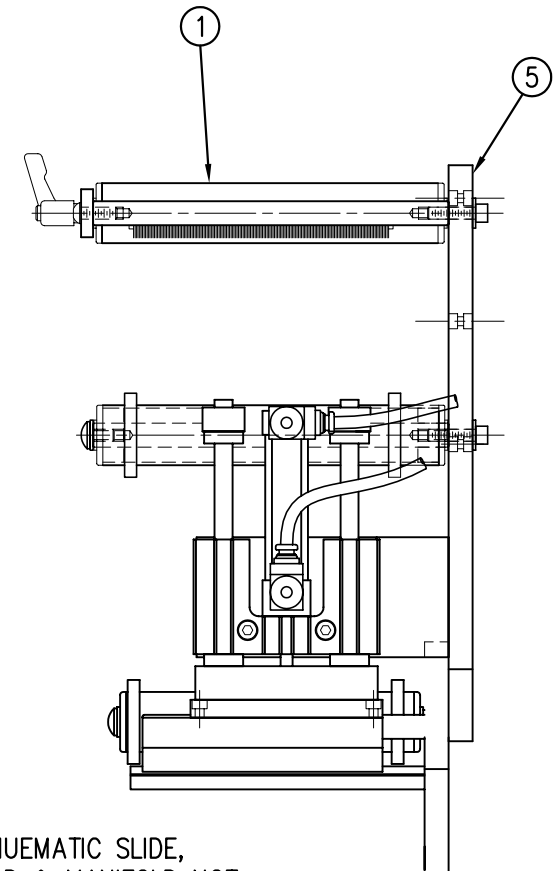
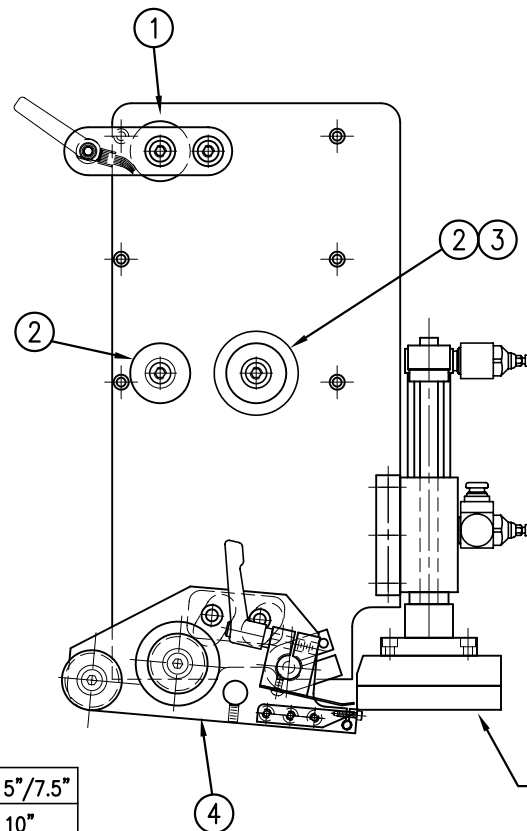
BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-214-X120R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	5/7.5/10 TAMP 6" DD SNORKEL ASSY.	ASS-214-X120R/L	S
⑥	1	TAMP VALVE BANK	ASS-214-0105	S
	1	1/4" O.D. SMC TUBING x 50"	PM-PT1070	.
	1	3/8" O.D SMC TUBING x 40"	PM-PT1080	.
	1	AIR ASSIST TUBING x 20"	PM-AH1000	.
	5	1/4 TUBE - 1/4 NPT MALE CONNECTOR	PM-PF1010	.
	2	3/8 TUBE - 1/4 NPT MALE CONNECTOR	PM-PF1020	.
	1	BUSHING, 1/8 NPT FEMALE-1/4 NPT MALE	PM-PF1105	.
	1	1/4 TUBE-1/8 NPT MALE HOSE BARB	PM-PF1169	.



⑥ VALVE BANK ASSEMBLY  
SCALE: 2"=1'-0"

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-X120R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5/10 TENSION BRUSH ASS'Y.	ASS-200-X126R/L	S
②	2	5/7.5/10 TENSION ROLLER ASS'Y.	ASS-200-X135	S
③	2	GUIDE COLLAR	MP-211-0210	S
④	1	5/7.5 PEEL EDGE ASSEMBLY	ASS-211-X102R/L	S
	1	10 PEEL EDGE ASSEMBLY	ASS-214-5102R/L	S
⑤	1	6" TAMP DROP DOWN SNORKEL PLATE	MP-200-3364	.
	6	SHCS, #10-32 UNC x 5/8" LG.	NONE	.
	1	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S

NOTE: CYLINDER STROKE LENGTH IS JOB SPECIFIC.

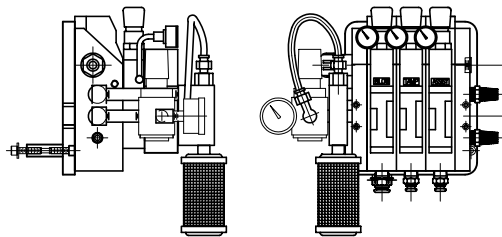


PNEUMATIC SLIDE,  
PAD & MANIFOLD NOT  
INCLUDED IN ASSEMBLY  
(JOB SPECIFIC)

MOD-214-X120R/L	
ASS-214-X120R/L	
5" WIDE	-0120R/L
7.5" WIDE	-2120R/L
10" WIDE	-5120R/L

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 SERIES APPLICATOR: TAMP ASSEMBLY		PART: 6" DROP DOWN SNORKEL	
REV. 0		REV. DATE 05/21/03	
REV. DESCRIPTION NEW TITLEBLOCK; DWG. No. WAS 200-3195		REV. BY: TDR	
Scale: 1=4		Date: 3/10/99	
DRAWN BY: BOB S.		F:\Engineering\Standard Parts\Applcator\360	
		214\MOD-214-X120RL	
		Dept. Code 70	

BILL OF MATERIAL				SOLD
ASSEMBLY	MOD-214-X121R/L			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	12" DD SNKL TAMP ASSY	ASS-214-X121R/L	S
⑨	1	TAMP VALVE BANK	ASS-214-0105	S
	1	AIR ASSIST TUBE x 28" Lg.	PM-AH1000	.
	5	FTG, 1/4 TUBE to 1/4 NPT MALE	PM-PF1010	.
	2	FTG, 3/8 TUBE to 1/4 NPT MALE	PM-PF1020	.
	1	BUSHING, 1/8 NPT FEMALE to 1/4 NPT MALE	PM-PF1105	.
	1	HOSE BARB ELBOW 1/4 TUBE to 1/8 NPT MALE	PM-PF1169	.
	1	1/4 OD SMC TUBING x 56" Lg.	PM-PT1070	.
	1	3/8 OD SMC TUBING x 46" Lg.	PM-PT1080	.



⑨ VALVE BANK ASSEMBLY  
SCALE: 2"=1'-0"

BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-214-X121R/L			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5 TENSION BRUSH ASS'Y	ASS-200-X126R/L	S
②	1	TAMP SNORKEL TRANSITION PLATE	MP-200-3350	.
③	1	12" DROP DOWN SNORKEL PLATE	MP-200-3354	.
④	1	SPLICE PLATE	MP-200-3353	.
⑤	2	5/7.5 TENSION ROLLER ASS'Y	ASS-200-X135	S
⑥	2	GUIDE COLLAR	MP-211-0210	S
⑦	1	5/7.5 TAMP PEEL EDGE	ASS-211-X102R/L	S
	6	SHCS, #10-32 x 5/8" LG.	NONE	.
	1	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

MOD-214-X121R/L

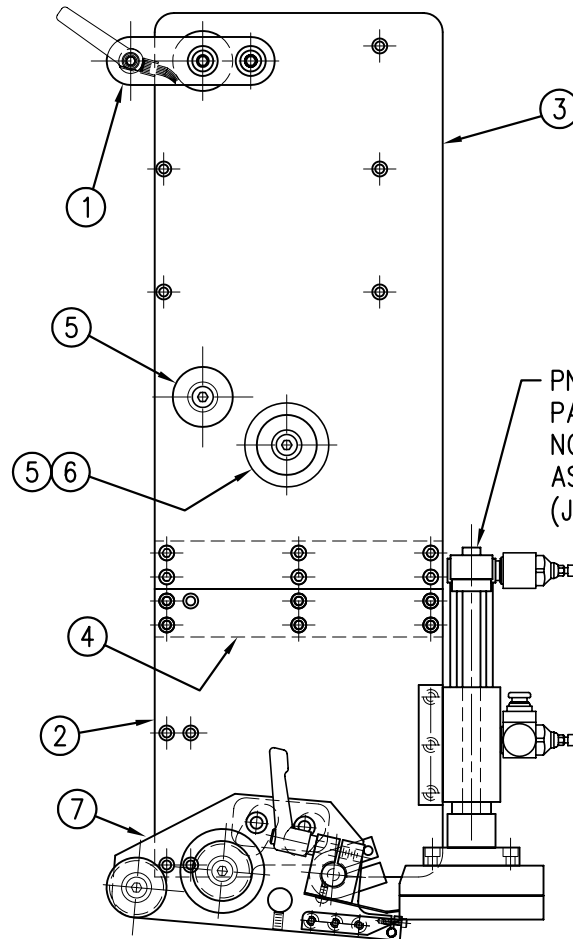
ASS-214-X121R/L

5" WIDE -0121R/L

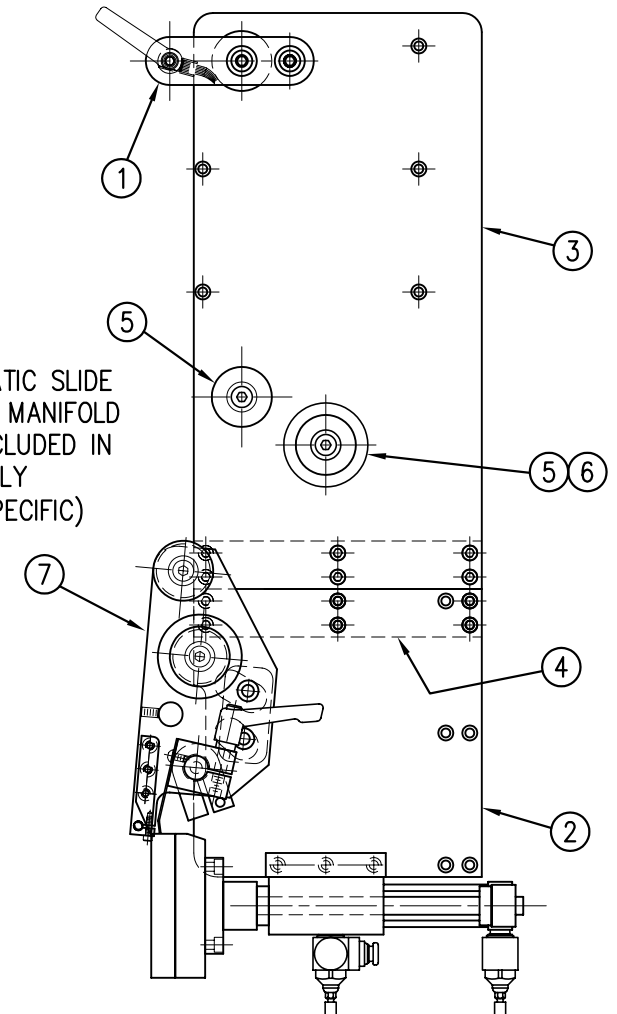
7.5" WIDE -2121R/L

NOTE: PLEASE INDICATE WHETHER HORIZONTAL  
OR VERTICAL ASSEMBLY IS REQUIRED.

HORIZONTAL ASSEMBLY



VERTICAL ASSEMBLY



PNEUMATIC SLIDE  
PAD, & MANIFOLD  
NOT INCLUDED IN  
ASSEMBLY  
(JOB SPECIFIC)

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 SERIES APPLICATOR: TAMP ASSEMBLY

PART: 12" DROP DOWN SNORKEL ASSEMBLY

Dept. Code  
70

REV. 0 REV. DESCRIPTION  
NEW TITLEBLOCK; DWG. No. WAS 200-3178

REV. DATE  
05/21/03

REV. BY:  
TDR

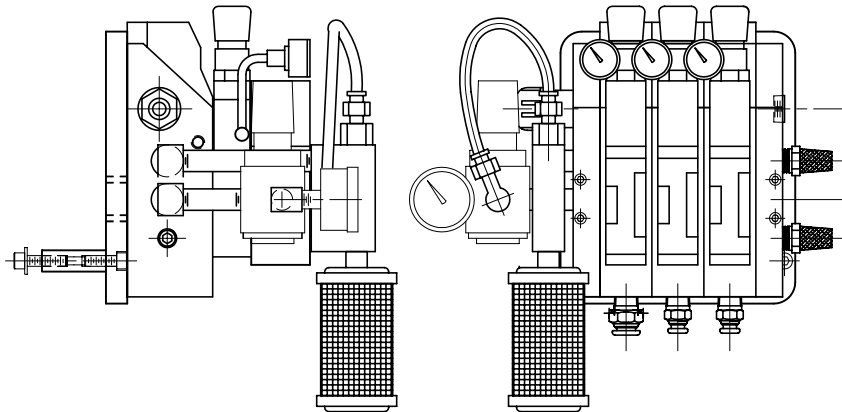
Scale:  
1=4

Date:  
03/10/99

DRAWN BY:  
BOB S.

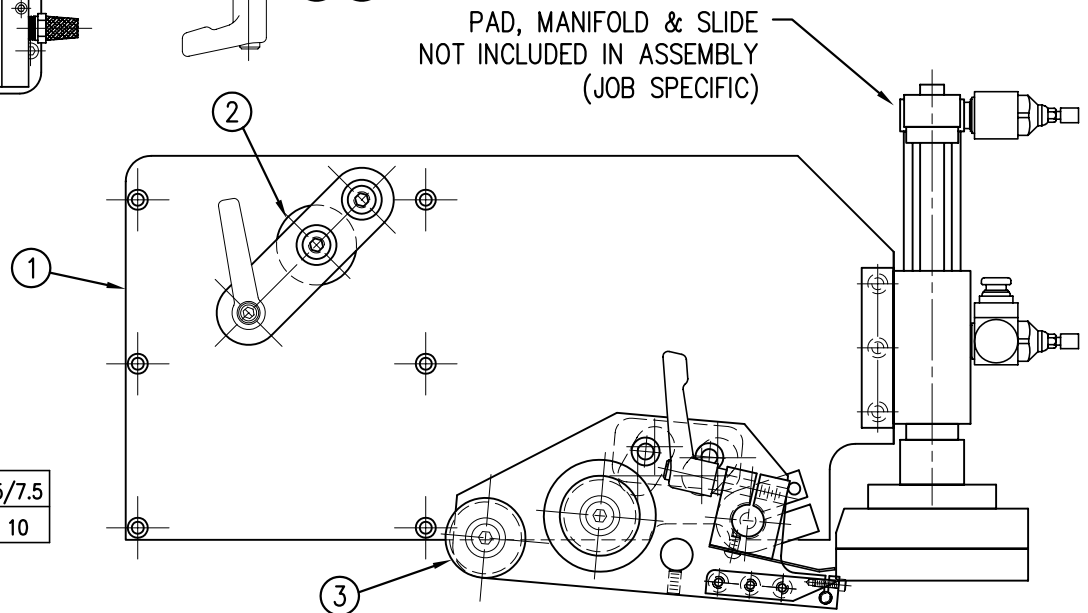
F:\Engineering\Standard Parts\Applcator\360  
200\MOD-214-X121RL

BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-214-X124R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	5/7.5/10 ~ TAMP 6" EXT. SNKL ASSY.	ASS-214-X124R/L	S
④	1	TAMP VALVE BANK ASSEMBLY	ASS-214-0105	S
	1	AIR ASSIST TUBING x 20" Lg.	PM-AH1000	.
	5	1/4 TUBE to 1/4 NPT MALE CONNECTOR	PM-PF1010	.
	2	3/8 TUBE to 1/4 NPT MALE CONNECTOR	PM-PF1020	.
	1	1/8 NPT FEMALE to 1/4 NPT MALE BUSHING	PM-PF1105	.
	1	1/4 TUBE to 1/8 NPT MALE HOSE BARB ELBOW	PM-PF1169	.
	1	1/4" OD SMC TUBING x 50" Lg.	PM-PT1070	.
	1	3/8" OD SMC TUBING x 40" Lg.	PM-PT1080	.



④ VALVE BANK

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-X124R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TAMP 6" EXTENDED SNORKEL PLATE	MP-200-3365	.
②	1	5/7.5/10 TENSION BRUSH ASSEMBLY	ASS-200-X126R/L	S
③	1	5/7.5 PEEL EDGE ASSEMBLY	ASS-211-X102R/L	S FOR 5/7.5
	1	10 PEEL EDGE ASSEMBLY	ASS-214-5102R/L	S FOR 10
	6	SHCS, #10-32 x 5/8" LG.	NONE	.
	1	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S



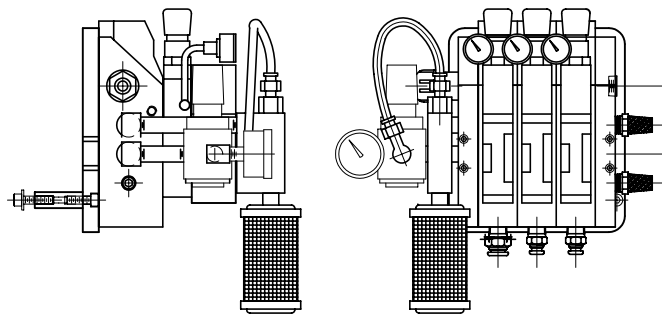
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

MOD-214-X124R/L	
ASS-214-X124R/L	
5" WIDE	-0124R/L
7.5" WIDE	-2124R/L
10" WIDE	-5124R/L

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 SERIES APPLICATOR: TAMP ASSEMBLY		PART: 6" EXTENDED SNORKEL ASSEMBLY	
REV. 0	REV. DESCRIPTION NEW TITLEBLOCK; DWG. No. WAS 200-3196	REV. DATE 05/21/03	REV. BY: TDR
		Scale: 1=3	Date:
		DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 214\MOD-214-X124RL
			Dept. Code 70



BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-214-X125R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	5/7.5 ~ TAMP 6" EXT. P.E. ASSY	ASS-214-X125R/L	S
⑨	1	TAMP VALVE BANK ASSEMBLY	ASS-214-0105	S
	1	AIR ASSIST TUBING x 28" Lg.	PM-AH1000	.
	5	1/4 TUBE to 1/4 NPT MALE CONNECTOR	PM-PF1010	.
	2	3/8 TUBE to 1/4 NPT MALE CONNECTOR	PM-PF1020	.
	1	1/8 NPT FEMALE to 1/4 NPT MALE BUSHING	PM-PF1105	.
	1	1/4 TUBE to 1/8 NPT MALE HOSE BARB ELBOW	PM-PF1169	.
	1	1/4" OD SMC TUBING x 56" Lg.	PM-PT1070	.
	1	3/8" OD SMC TUBING x 46" Lg.	PM-PT1080	.



⑧ VALVE BANK ASSEMBLY  
SCALE: 2"=1'-0"

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-X125R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	12" EXTENDED SNORKEL PLATE	MP-200-3357	.
②	1	TAMP TRANSITION PLATE	MP-200-3350	.
③	1	SPLICE PLATE	MP-200-3353	.
④	1	5/7.5 WIDE TENSION BRUSH ASS'Y	ASS-200-X126R/L	S
⑤	3	5/7.5 TENSION ROLLER ASS'Y	ASS-200-X135	S
⑥	2	GUIDE COLLAR	MP-211-0210	S
⑦	1	5/7.5 PEEL EDGE ASSEMBLY	ASS-211-X102R/L	S FOR 5/7.5
	1	10 PEEL EDGE ASSEMBLY	ASS-214-5102R/L	S FOR 10
	6	SHCS, #10-32 x 5/8" LG.	NONE	.
	1	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S

**NOTE:**  
PLEASE INDICATE WHETHER  
HORIZONTAL OR VERTICAL  
ASSEMBLY IS REQUIRED.

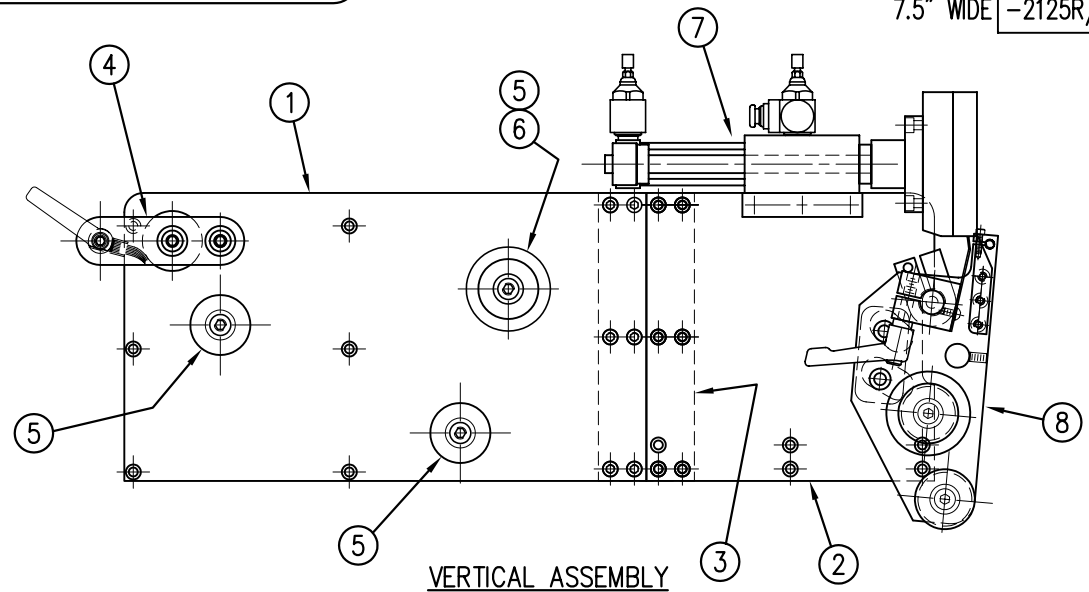
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

MOD-214-X125R/L

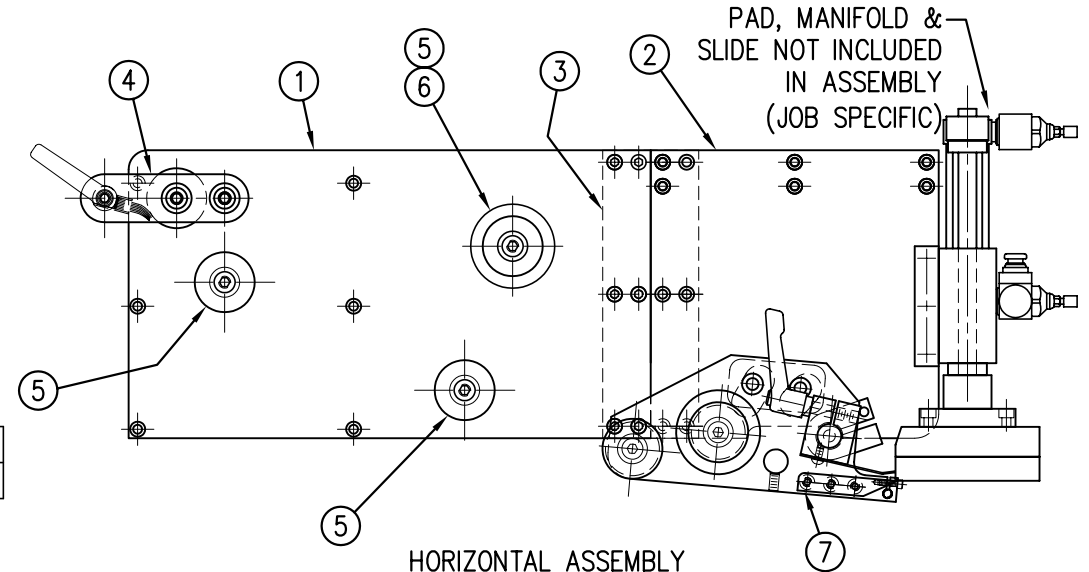
ASS-214-X125R/L

5" WIDE -0125R/L

7.5" WIDE -2125R/L



VERTICAL ASSEMBLY



HORIZONTAL ASSEMBLY

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 SERIES APPLICATOR: TAMP ASSEMBLY

PART: 12" EXTENDED SNORKEL ASSEMBLY

Dept. Code  
70

REV. 0 REV. DESCRIPTION  
NEW TITLEBLOCK; DWG No. WAS 200-3190

REV. DATE  
05/21/03

REV. BY:  
TDR

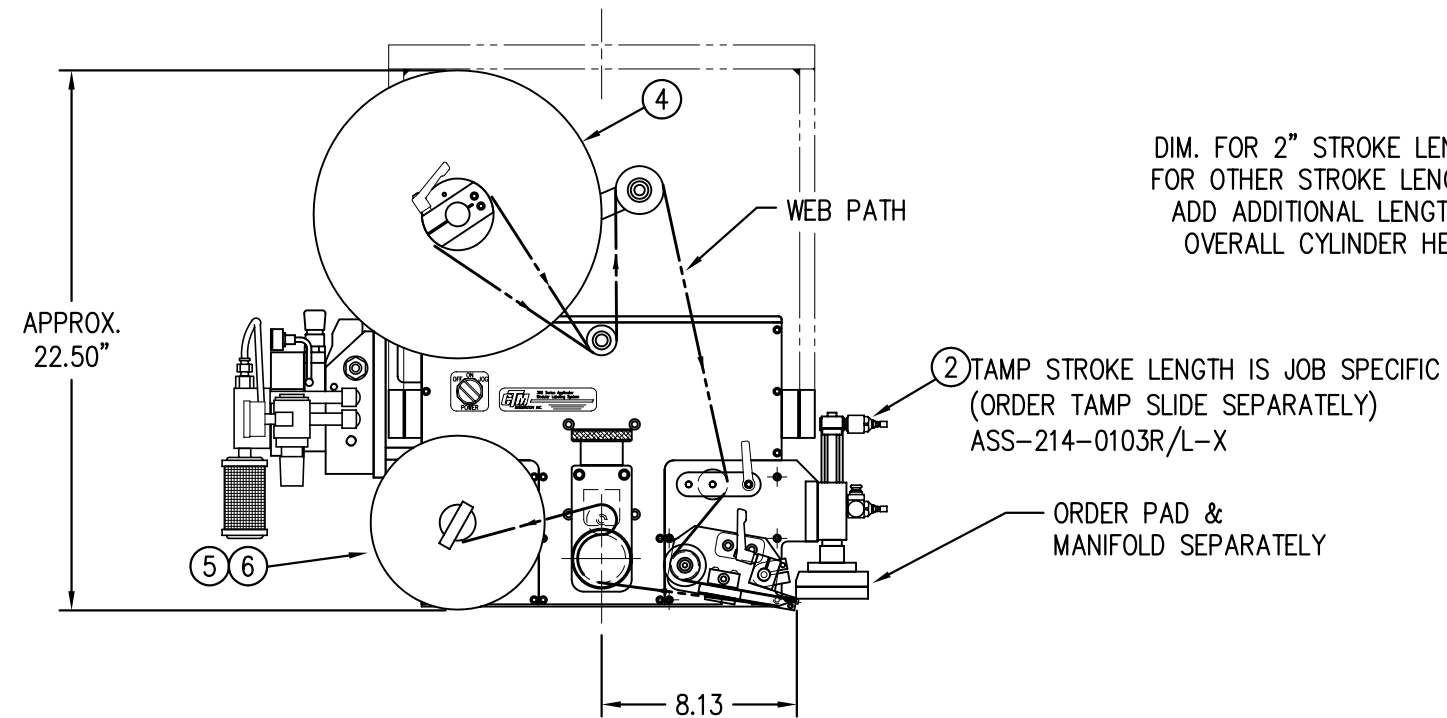
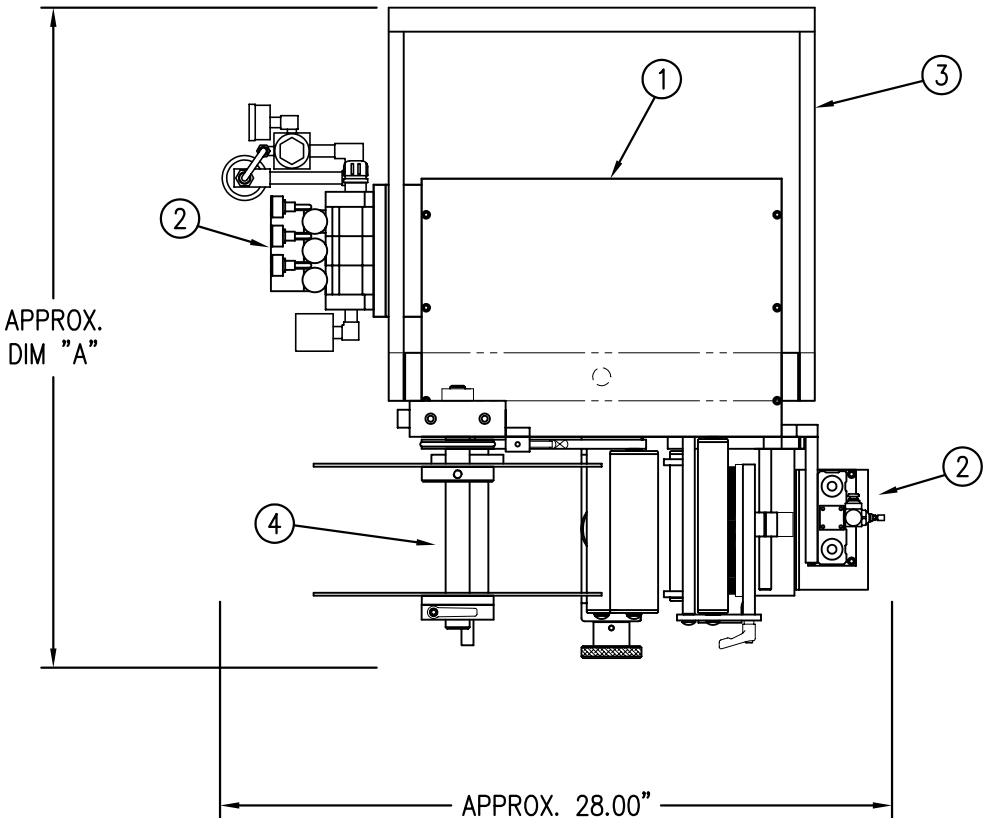
Scale:  
1=4

Date:  
03/10/99

DRAWN BY:  
BOB S.

F:\Engineering\Standard Parts\Applicator\360  
214\MOD-214-X125RL

PART NO.	DIM "A"
CTM-214-3101R/L-5-12X	27.50
CTM-214-3101R/L-7-12X	30.00
CTM-214-3101R/L-10-12S	32.50



DIM. FOR 2" STROKE LENGTH.  
FOR OTHER STROKE LENGTHS,  
ADD ADDITIONAL LENGTH TO  
OVERALL CYLINDER HEIGHT.

BILL OF MATERIAL				SOLD
CTM-214-3101RL-X-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5/10 CLR. LBL. TAMP NOSE MOD. SPECIFY STROKE LENGTH	MOD-214-3101R/L-X	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-X138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY				
1.) CLEAR LABEL SENSOR #ASS-200-0430-A ~ FOR LRD2100 #ASS-200-0430-B ~ FOR LRD6110				
2.) TAMP SLIDE w/ MOUNTING PLATES				
3.) LABEL PAD				
4.) LABEL MANIFOLD				

REV 1

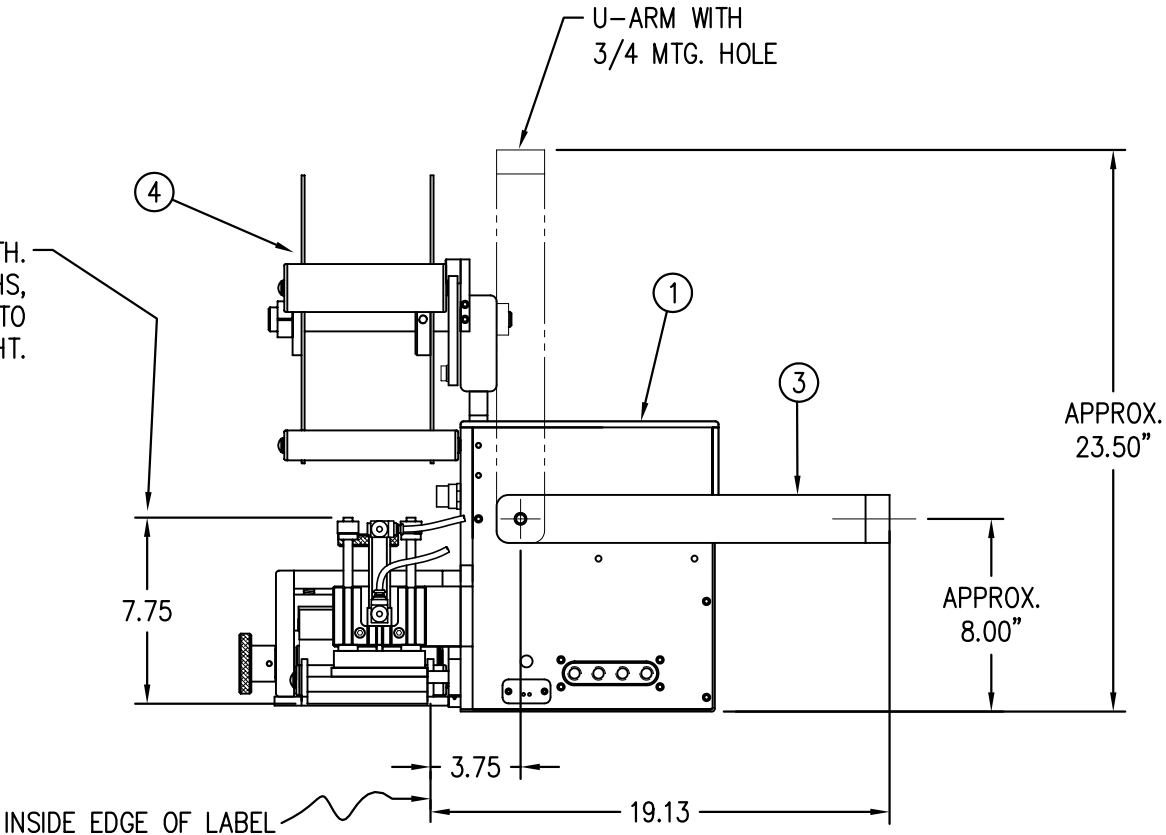
REV 2

← STD & FILM REWIND
← COLLAPSIBLE RWD
← STANDARD RWD
← FILM REWIND
← COLLAPSIBLE RWD

5" WIDE; STD. REWIND	CTM-214-3101R/L-X-12X
5" WIDE; FILM REWIND	-3101R/L-5-12S
5" WIDE; COLLAPSE RWD	-3101R/L-5-12F
7.5" WIDE; STD. REWIND	-3101R/L-5-12C
7.5" WIDE; FILM REWIND	-3101R/L-7-12S
7.5" WIDE; COLLAPSE RWD	-3101R/L-7-12F
10" WIDE; STD. REWIND	-3101R/L-7-12C
	-3101R/L-10-12S

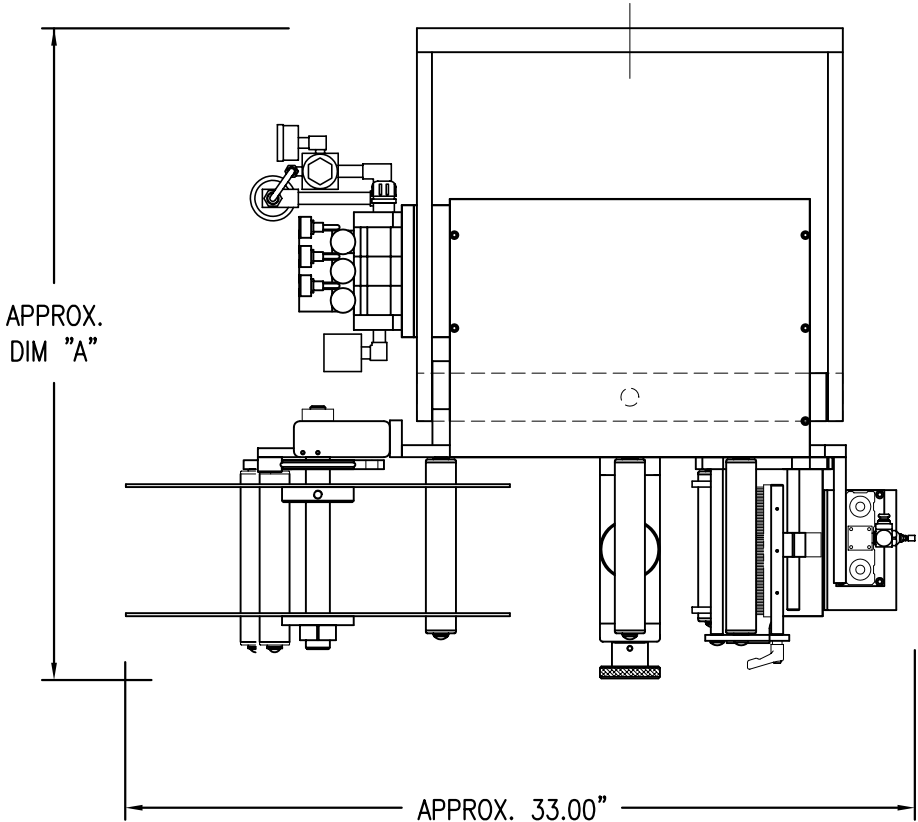
RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216



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 SERIES APPLICATOR: TAMP ASSEMBLY									
PART: 5" / 7.5" / 10" WIDE: CLR. LBL. TAMP w/12" UNWIND ASSEMBLY									
Dept. Code 70									
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applcator\360		
2	NEW COLLAPSIBLE MANDREL	10/16/07	TDR	1=8	11/19/98	BOB S.	214\CTM-214-310IRL-X-12X		

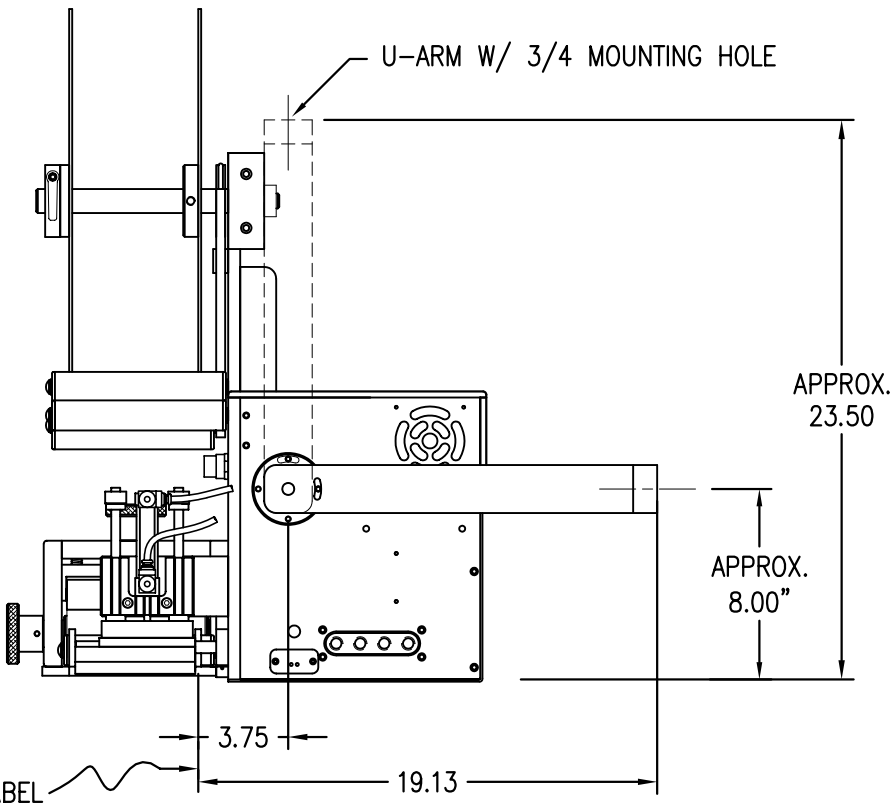
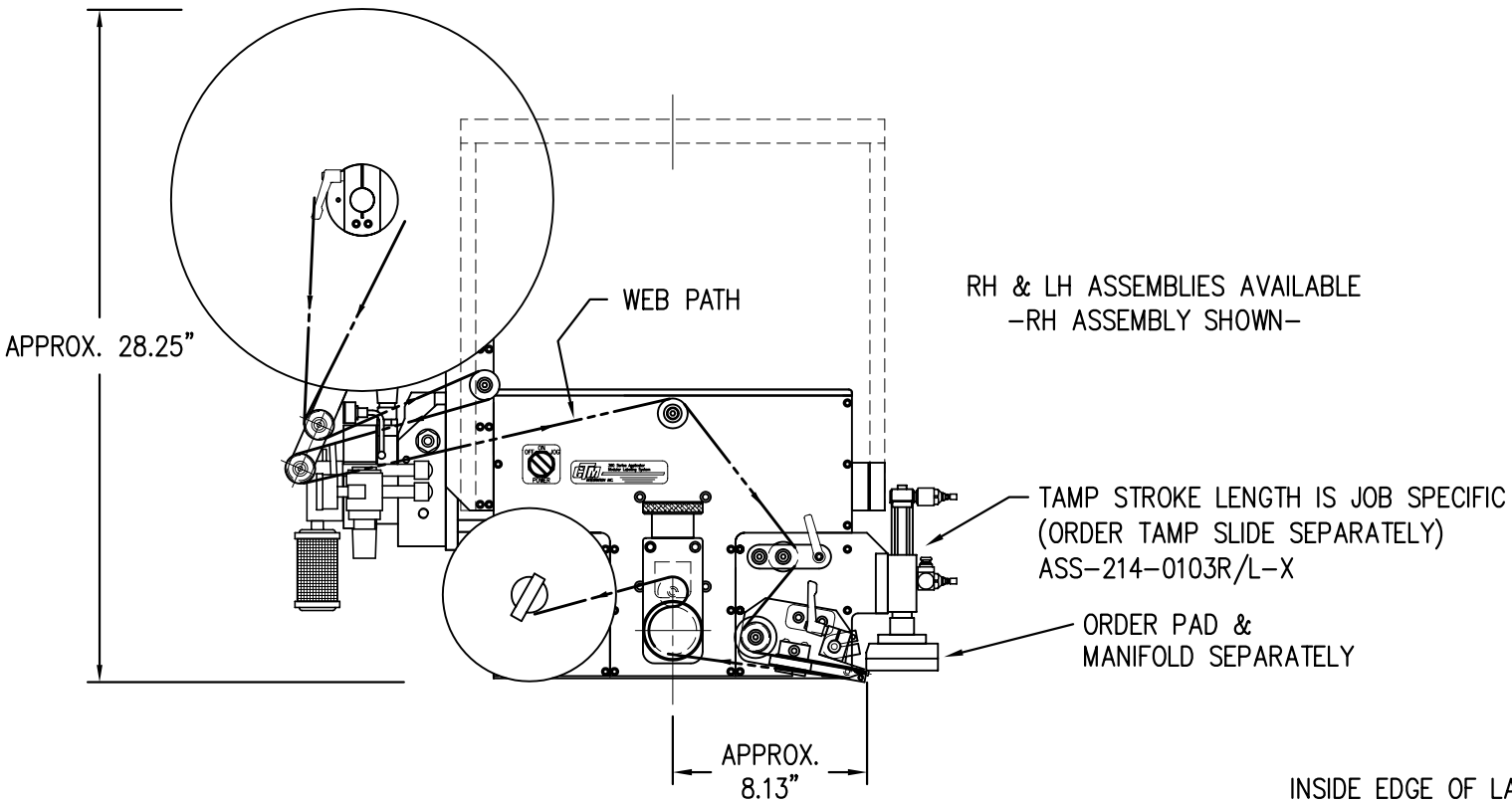
PART NO.	DIM "A"
CTM-214-3101R/L-5-16S	27.50
CTM-214-3101R/L-5-16C	
CTM-214-3101R/L-5-16F	
CTM-214-3101R/L-7-16S	30.00
CTM-214-3101R/L-7-16C	
CTM-214-3101R/L-7-16F	



BILL OF MATERIAL				SOLD
CTM-214-3101RL-X-16X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5 WIDE; CLR. LBL. TAMP NOSE MOD.	MOD-214-3101R/L-X	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5" CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-X138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY				
1.) CLEAR LABEL SENSOR				
#ASS-200-0430-A ~ FOR LRD2100				
#ASS-200-0430-B ~ FOR LRD6110				
2.) TAMP SLIDE w/ MOUNTING PLATES				
3.) LABEL PAD				
4.) LABEL MANIFOLD				

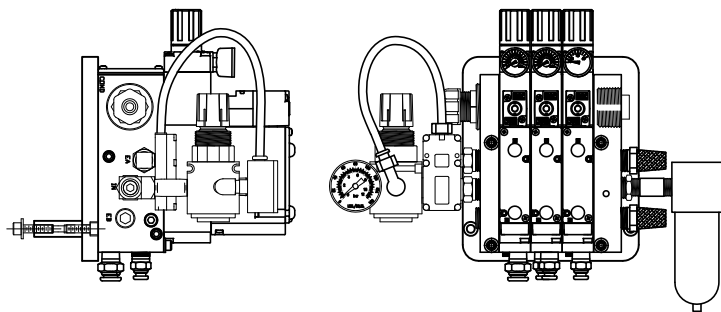
CTM-214-3101R/L-X-16X		
5" WIDE	-3101RL-5-16	X
7.5" WIDE	-3101RL-7-16	X

STANDARD REWIND S  
COLLAPSIBLE REWIND C  
FILM REWIND F



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 SERIES APPLICATOR: TAMP ASSEMBLY				PART: 5/7.5/10 WIDE; CLR. LBL. TAMP w/ 16" UNWIND ASSEMBLY			Dept. Code 70		
REV. DESCRIPTION 2 NEW COLLAPSIBLE MANDREL				REV. DATE 10/16/07			REV. BY: TDR		
				Scale: 1=8			Date: 08/30/99		
							DRAWN BY: BOB S.		
							F:\Engineering\Standard Parts\Applcator\360		
							214\CTM-214-3101RL-X-16X		

BILL OF MATERIAL			
MOD-214-3101R/L-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-214-3101R/L-X	TAMP ASSEMBLY w/ TRANSITION PLATE
⑤	1	ASS-214-0105M	TAMP VALVE BANK ASSEMBLY
	1	PM-AH1000	AIR ASSIST TUBING x 12" LONG
	5	PM-PF1010	1/4 TUBE to 1/4 MALE CONNECTOR
	2	PM-PF1020	3/8 TUBE to 1/4 NPT MALE CONNECTOR
	1	PM-PF1105	1/8 NPT FEMALE to 1/4 NPT MALE BUSHING
	1	PM-PF1169	1/4 TUBE to 1/8 NPT MALE HOSE BARB ELBOW
	1	PM-PT1070	1/4" OD SMC TUBING x 40" LONG
	1	PM-PT1080	3/8" OD SMC TUBING x 36" LONG



⑤ VALVE BANK ASSEMBLY  
SCALE: 2"=1'-0"

BILL OF MATERIAL			
ASS-214-3101R/L-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0207	TAMP TRANSITION PLATE
②	1	ASS-200-X126R/L	5/7.5/10 TENSION BRUSH ASSEMBLY
③	1	ASS-214-3102R/L-X	5/7.5/10 CLR. LABL. TAMP PEEL EDGE ASSY.
④	1	ASS-200-0430	6110 CLEAR LABEL SENSOR
	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS

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.			
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: TAMP ASSEMBLY	TITLE: TAMP CLEAR LABEL PEEL EDGE ASSEMBLY w/ TRANSITION PLATE
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx
Scale: 1=3		Date: 06/14/97	DRAWN BY: BOB S.
F:\Engineering\Standard Parts\Appliator\360\		TAMP\ASS-214-3101RL-X	
Dept. Code 70			

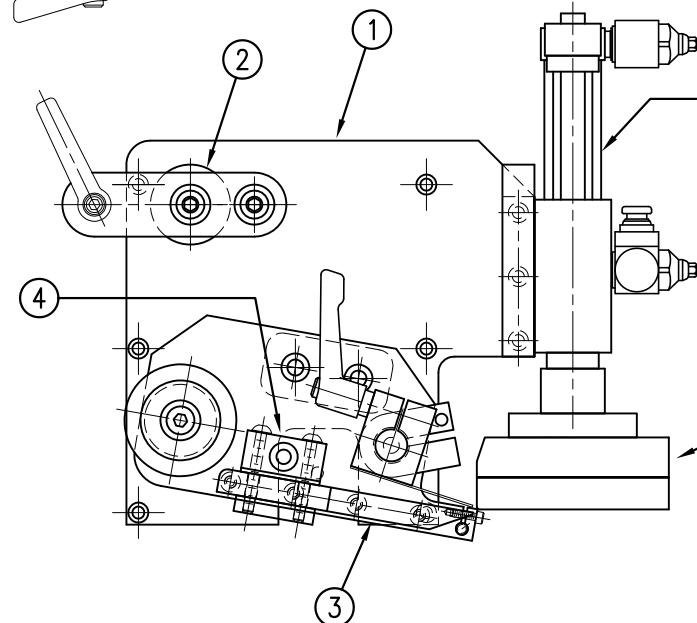
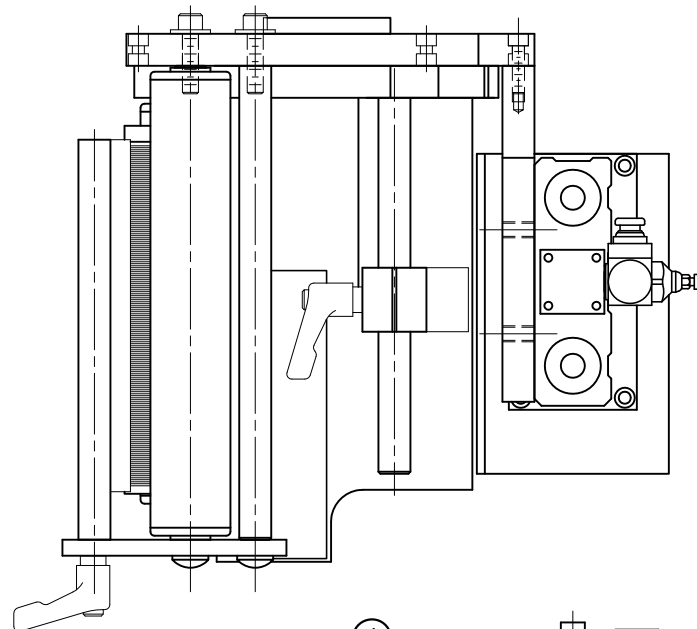
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

MOD-214-3101R/L-X

ASS-214-3101R/L-X

5" WIDE -3101R/L-5

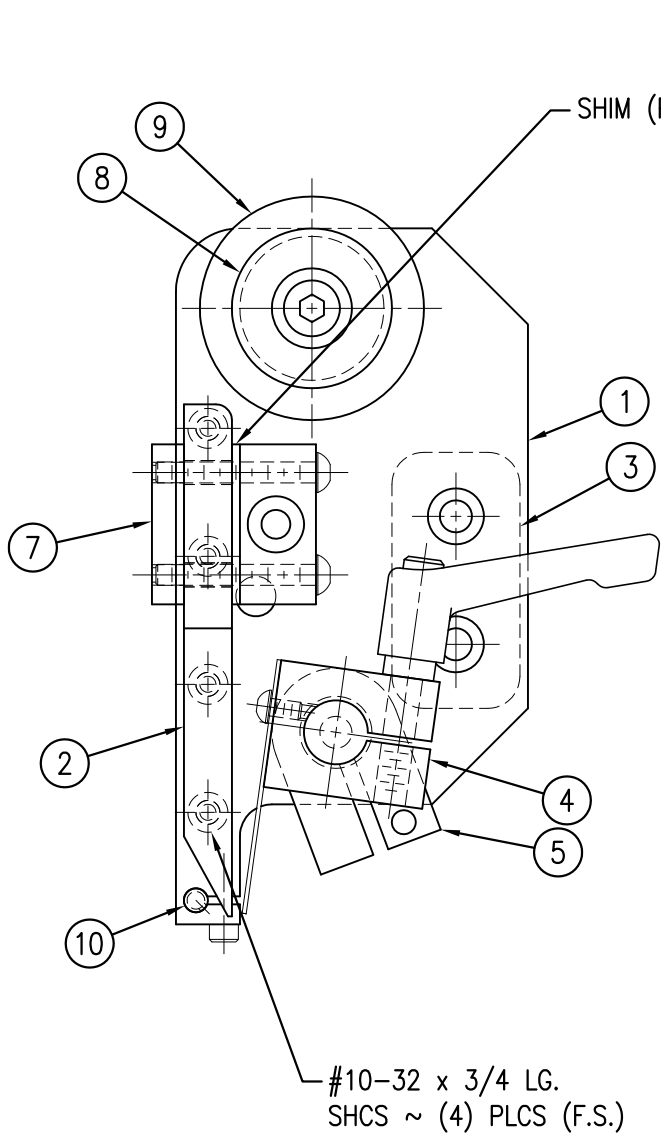
7.5" WIDE -3101R/L-7



TAMP STROKE IS JOB SPECIFIC  
ORDER TAMP SLIDE SEPARATELY  
ASS-214-0103R/L-X

PAD & MANIFOLD  
JOB SPECIFIC  
(ORDER SEPARATELY)

BILL OF MATERIAL			
ASS-214-3102R/L-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-3304	CLEAR LABEL PEEL EDGE MOUNTING PLATE
②	1	MP-214-3302-X	LH CLEAR LABEL PEEL EDGE (w/ TAPE) LH
③	1	MP-214-3303-X	RH CLEAR LABEL PEEL EDGE (w/ TAPE) RH
④	1	MP-211-0207	PEEL EDGE TIE NUT
⑤	1	ASS-211-0105-1	SPRING BLOCK ASSEMBLY 5 WIDE
	2	ASS-211-0105-1	SPRING BLOCK ASSEMBLY 7.5 WIDE
⑥	1	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY 5 WIDE
	2	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY 7.5 WIDE
⑦	1	PM-211-X206	SPRING BLOCK MOUNTING SHAFT
⑧	1	MP-214-3301	CLEAR LABEL SENSOR NUT PLATE
⑨	1	ASS-211-X120	IDLER ROLLER ASSEMBLY
⑩	2	MP-211-0210	GUIDE COLLAR w/ SET SCREW
⑪	1	MP-211-X217-X	AIR ASSIST TUBE
⑫	2	PE-CC1050	1/4" NYLON LOOP CLAMP
12	2	PM-FASH430081	SHCS, 1/4-20 x 1.25 LG. SS
ORDER LRD 6110 CLEAR LABEL SENSOR SEPARATELY #ASS-200-0430			



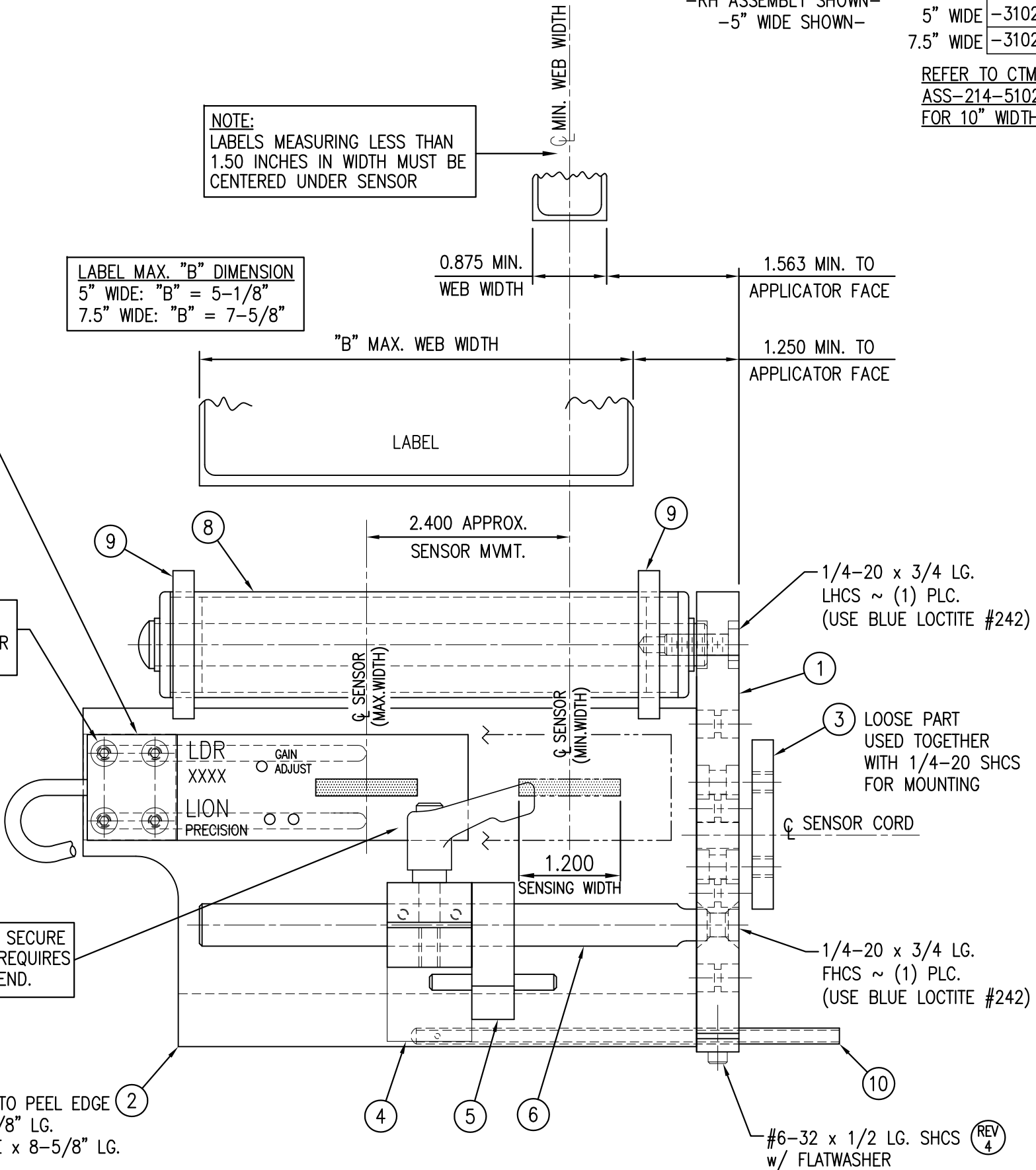
(4) #8-32 x 1-1/2" Lg. SHCS  
USE ITEM ⑪ TO SECURE SENSOR  
CORD w/ ONE BHCS.

NOTE: USE ITEM ⑪ TO SECURE  
SENSOR CORD. CLAMP REQUIRES  
(1) M4x10 BHCS THIS END.

APPLY (1) STRIP OF UHMW TAPE TO PEEL EDGE  
5" APPLICATOR ~ 6" WIDE x 4-1/8" LG.  
7.5" APPLICATOR ~ 5-7/16" WIDE x 8-5/8" LG.

LABEL MAX. "B" DIMENSION  
5" WIDE: "B" = 5-1/8"  
7.5" WIDE: "B" = 7-5/8"

NOTE:  
LABELS MEASURING LESS THAN  
1.50 INCHES IN WIDTH MUST BE  
CENTERED UNDER SENSOR



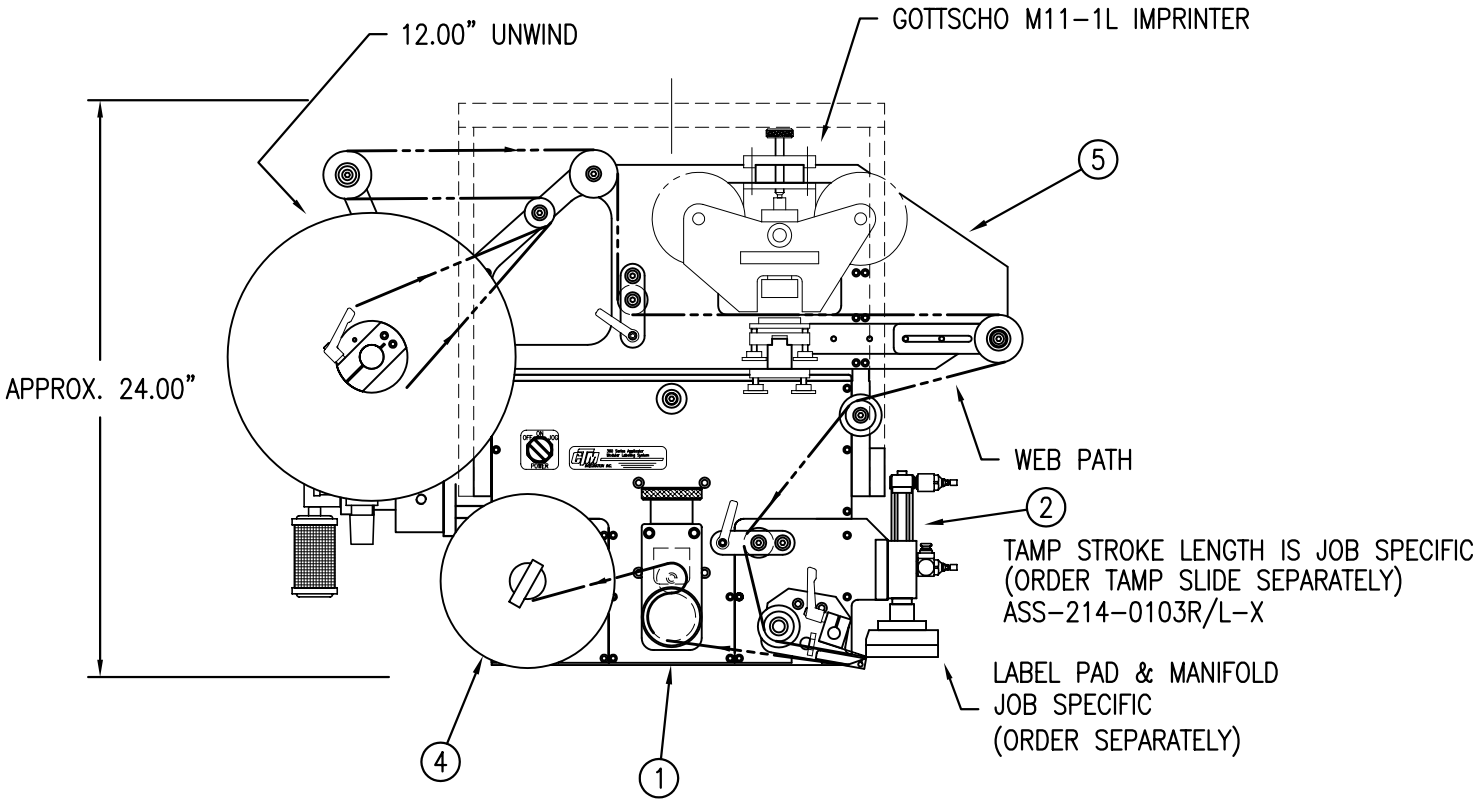
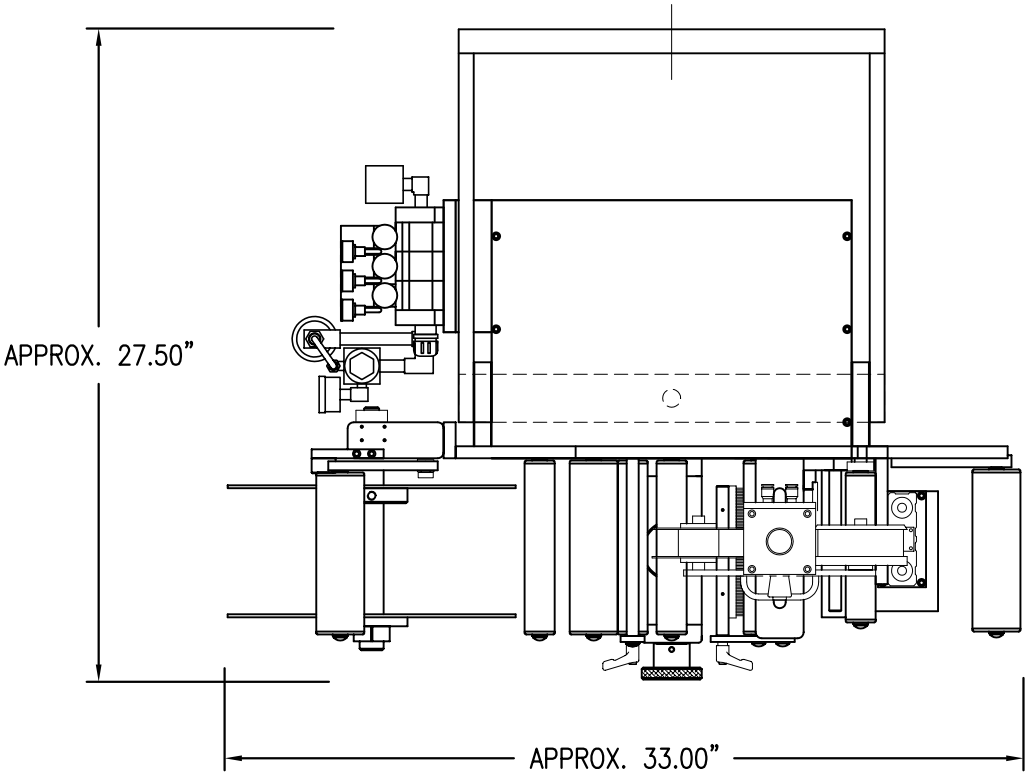
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-  
-5" WIDE SHOWN-

ASS-214-3102R/L-X  
5" WIDE -3102R/L-5  
7.5" WIDE -3102R/L-7

REFER TO CTM DWG.#  
ASS-214-5102R/L  
FOR 10" WIDTH

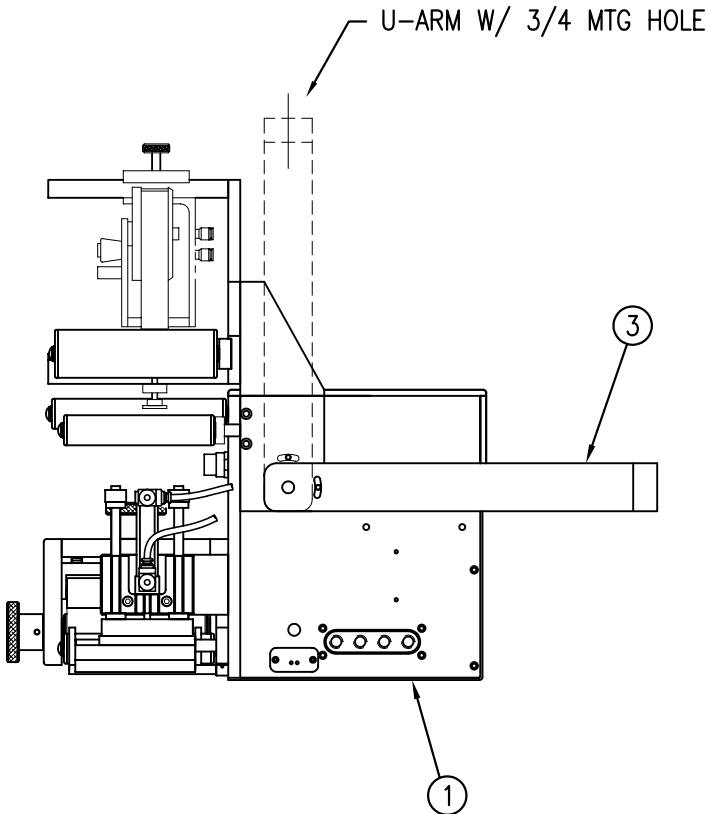
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.			
APPLICATOR SERIES: 360 SERIES	APPLICATOR SERIES: 5" / 7.5"	GROUP: TAMP	REV. DESCRIPTION: 6 REMOVED LRD 2100 CLEAR LABEL SENSOR
REV. DATE: 01/23/08	REV. BY: TDR	REV. DATE: 09/03/98	REV. BY: BOB S.
TITLE: PEEL EDGE ASSEMBLY		Date: 09/03/98	Scale: 1=1.5
F:\Engineering\Standard Parts\Applcator\360\Shared Parts		PEEL EDGE ASS-214-3102RL-X	
Dept. Code 70			

BILL OF MATERIAL				SOLD
ASSEMBLY		CTM-214-4101R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5" WIDE; CORE UNIT	ASS-200-0150R/L	S
②	1	5" WIDE; TAMP NOSE MODULE	MOD-214-0101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5" WIDE; STD REWIND BLOCK & SHAFT	ASS-200-0145R/L	S
⑤	1	GOTTSCHO IMPRINTER ASSEMBLY	ASS-200-4101	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY				
1.) TAMP SLIDE w/ MOUNTING PLATES				
2.) LABEL PAD				
3.) LABEL MANIFOLD				



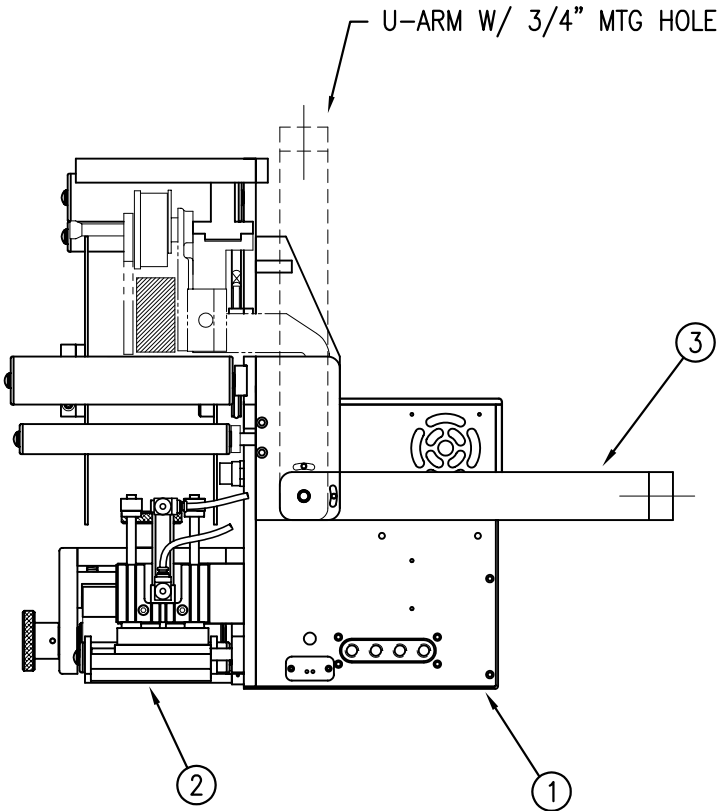
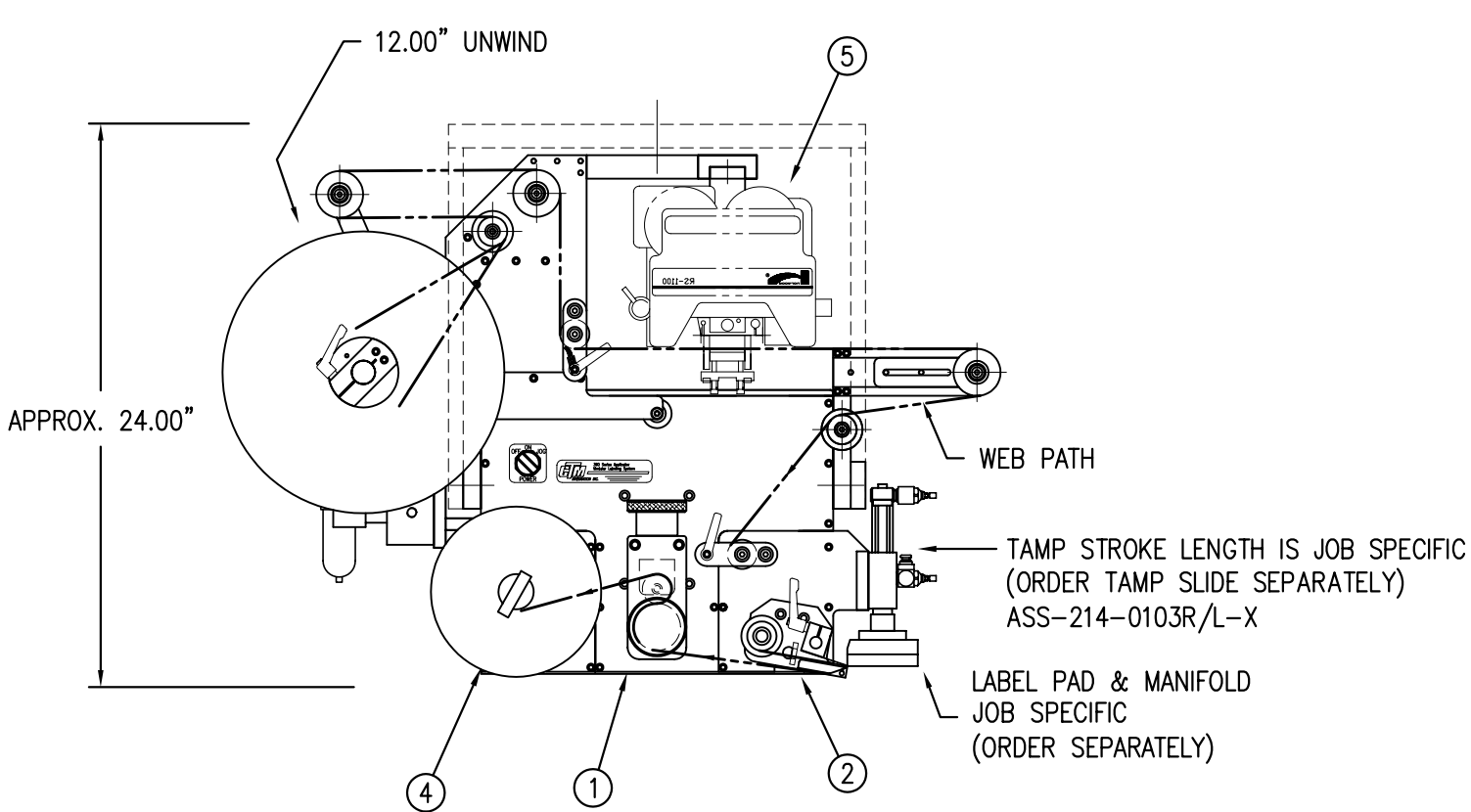
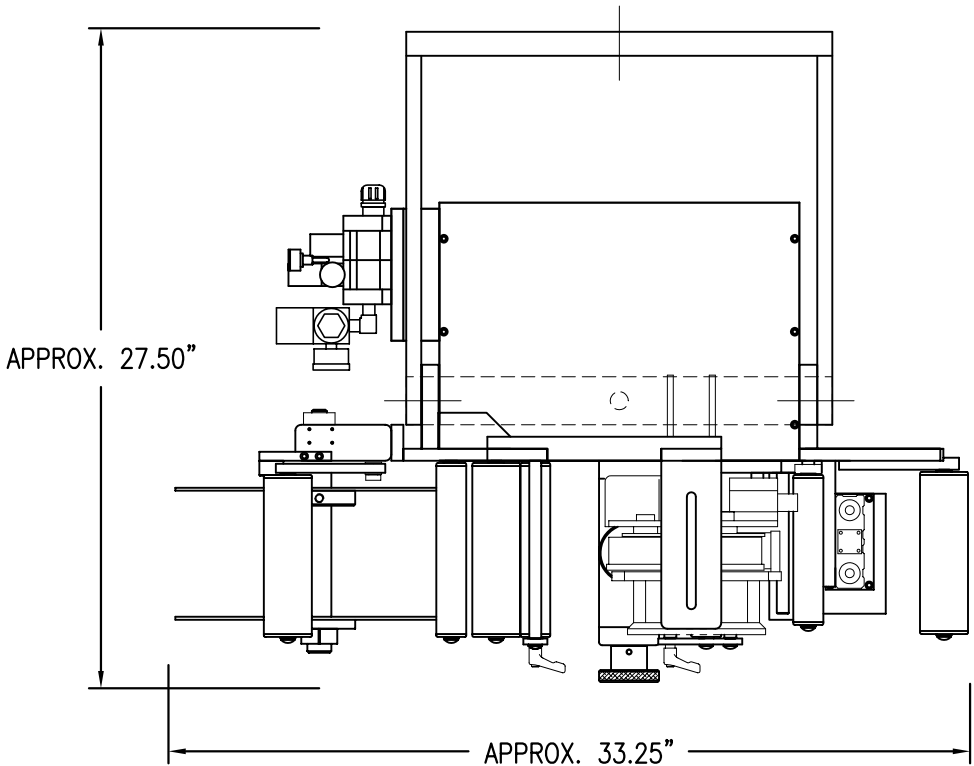
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

CTM-214-4101R/L



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.				Dept. Code	70
TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY				PART: 5" WIDE: TAMP ASSY w/ GOTTSCHO IMPRINTER	
REV. DESCRIPTION	REV. DATE	REV. BY:	REV. BY:	Scale:	Date:
O NEW TITLEBLOCK; DWG. No. WAS 200-3636	07/08/03	TDR	TDR	1=8	09/15/99
				Drawn BY:	BOB S.
				F:\Engineering\Standard Parts\Appliator\360	
				214\CTM-214-4101RL	

BILL OF MATERIAL				SOLD
ASSEMBLY		CTM-214-4102R/L-X-12S		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5"; 7.5" WIDE; CORE UNIT	ASS-200-X150R/L	S
②	1	5"; 7.5" WIDE; TAMP NOSE MODULE	MOD-214-X101R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5";7.5" WIDE; STD RWD BLOCK & SHAFT	ASS-200-X145R/L	S
⑤	1	NORWOOD IMPRINTER ASSEMBLY	ASS-200-4102R/L-X-12	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY 1.) TAMP SLIDE w/ MOUNTING PLATES 2.) LABEL PAD 3.) LABEL MANIFOLD				



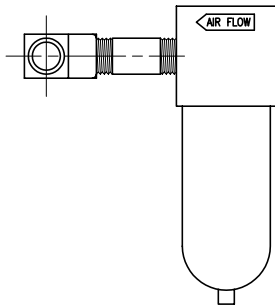
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

CTM-214-4102R/L-X-12S	
5" WIDE	-4102R/L-5-12S
7.5" WIDE	-4102R/L-7-12S

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 SERIES APPLICATOR: TAMP ASSEMBLY		PART: 5" / 7.5" WIDE: TAMP w/NORWOOD IMPRINTER ASSEMBLY	
REV. 1	REV. DESCRIPTION	REV. BY: TDR	DATE: 01/06/00
TABULATED DRAWING FOR 5" & 7.5" APPLICATORS		REV. DATE: 05/04/05	DRAWN BY: BOB S.
		Scale: 1=8	Date: 01/06/00
		Dept. Code	70
		F:\Engineering\Standard Parts\Applcator\360	214\CTM-214-4102RL-X-12S

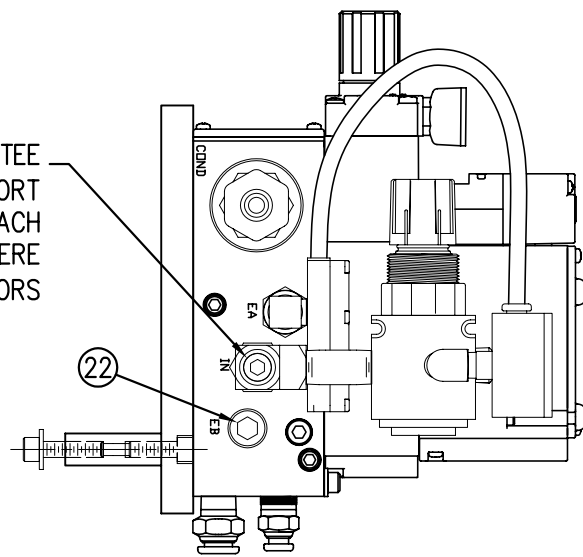
BILL OF MATERIAL			
ASS-214-0107M			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0202	VALVE FASTENING MOUNTING PLATE
②	1	MP-214-0206	VALVE MOUNTING PLATE
③	1	PE-200-0405	VALVE CABLE
④	1	PM-REG1500	REGULATOR
⑤	1	PM-VA2384	0-160 PSI PRESSURE GUAGE
⑥	2	PM-PF1180	NPT 90° STREET ELBOW 1/8" FEMALE TO 1/8" MALE
⑦	1	PM-PUMP1010	VACUUM PUMP, 55 PSI FEED PRESSURE, MUFFLED EXHAUST
⑧	1	PM-VA2361M	4 STATION MAC VALVE BANK
⑨	1	PE-CO2000	CORD GRIP
⑩	2	PM-MU1027	3/8" NPT MALE BRONZE EXHAUST MUFFLER
⑪	3	PM-FT1200	1/4" NPT SOCKET HEAD PLUG
⑫	1	PM-PF1200	TEE 1/4" NPT FEMALE 3 ENDS
⑬	1	PM-PF1143	NIPPLE, 1/4" NPT X 1 1/2" LG.
⑭	1	PM-PF1220	ADAPTOR, 3/8" NPT FEMALE TO 1/4" NPT MALE
⑮	1	PM-PF1157	REDUCER, 3/8" NPT TO 1/8" NPT
⑯	1	PM-PF1159	FITTING, 3/8" NPT MALE BOTH ENDS
⑰	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑱	1	PE-COND1084	STEEL REDUCER
⑲	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑳	5	PM-PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
㉑	1	PM-PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
㉒	1	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
㉓	10.5"	PM-PT1070	1/4" OD TUBING
㉔	1	ASS-214-0106	AIR FILTER
㉕	2	PM-PA1800	FLOW CONTROLS
㉖	1	PM-PF1055	90° ELBOW 1/4" TUBE TO 1/4" NPT MALE
○	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
○	2	PM-FAW30275	1/4" SS FLAT WASHER
○	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
○	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
○	4	PM-FAW30265	#10 SS FLAT WASHER

VALVE BANK SPARE PARTS:  
SOLENOID: #PM-VA2395M  
AIR ASSIST REGULATOR W/GUAGE: #PM-VA2396M  
BLOW/TAMP/IMPRINTER REGULATORS W/GUAGE: #PM-VA2397M  
AIR ASSIST REGULATOR GUAGE: #PM-VA2382M  
BLOW/TAMP/IMPRINTER REGULATOR GUAGES: #PM-VA2380M

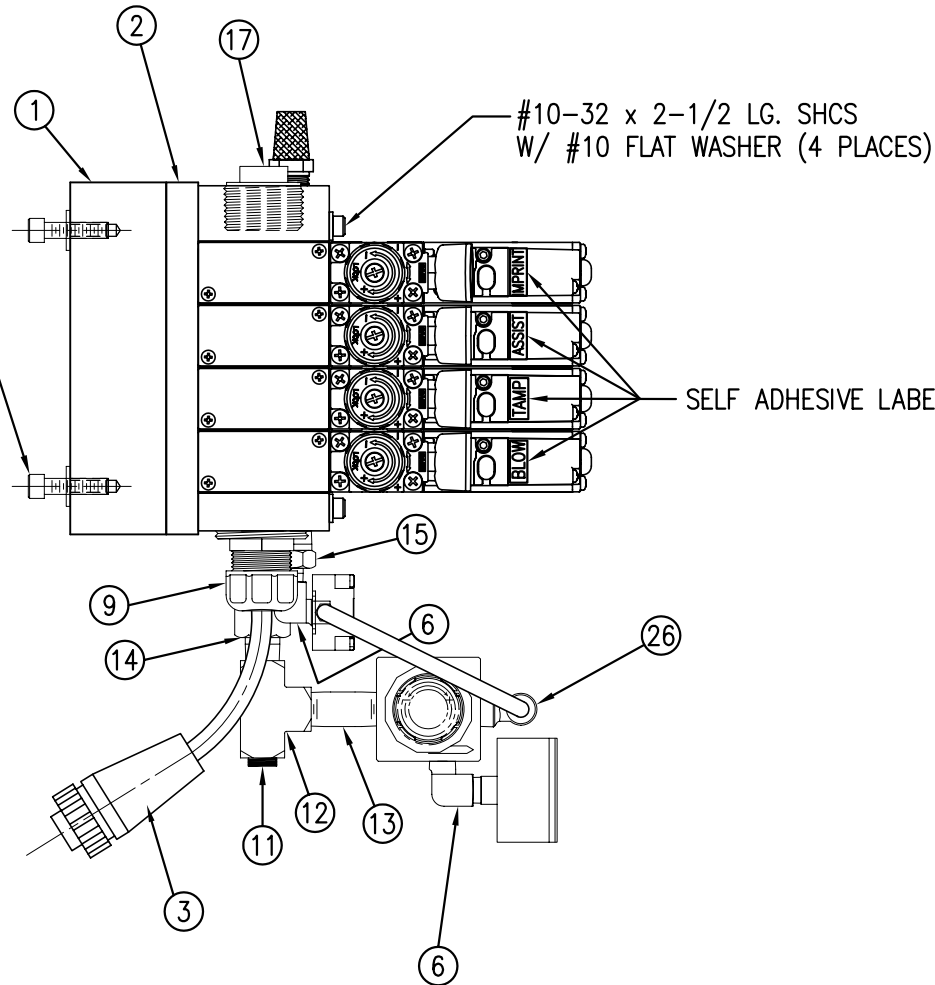


②④ AIR FILTER  
SHIP LOOSE  
-CUSTOMER TO INSTALL -

MOVE PLUG FROM TEE  
ON THIS SIDE TO "IN" PORT  
ON OPPOSITE SIDE & ATTACH  
AIR FILTER ASSEMBLY HERE  
(TO TEE) FOR RH APPLICATORS

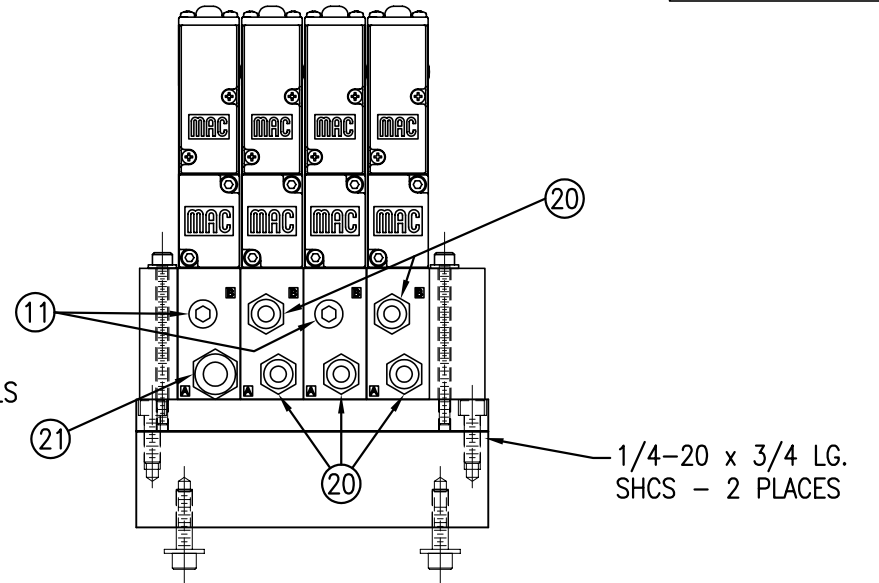


MOUNTING FASTENERS  
1/4-20 x 7/8 LG. SHCS  
w/ F.W. (2 PLACES)



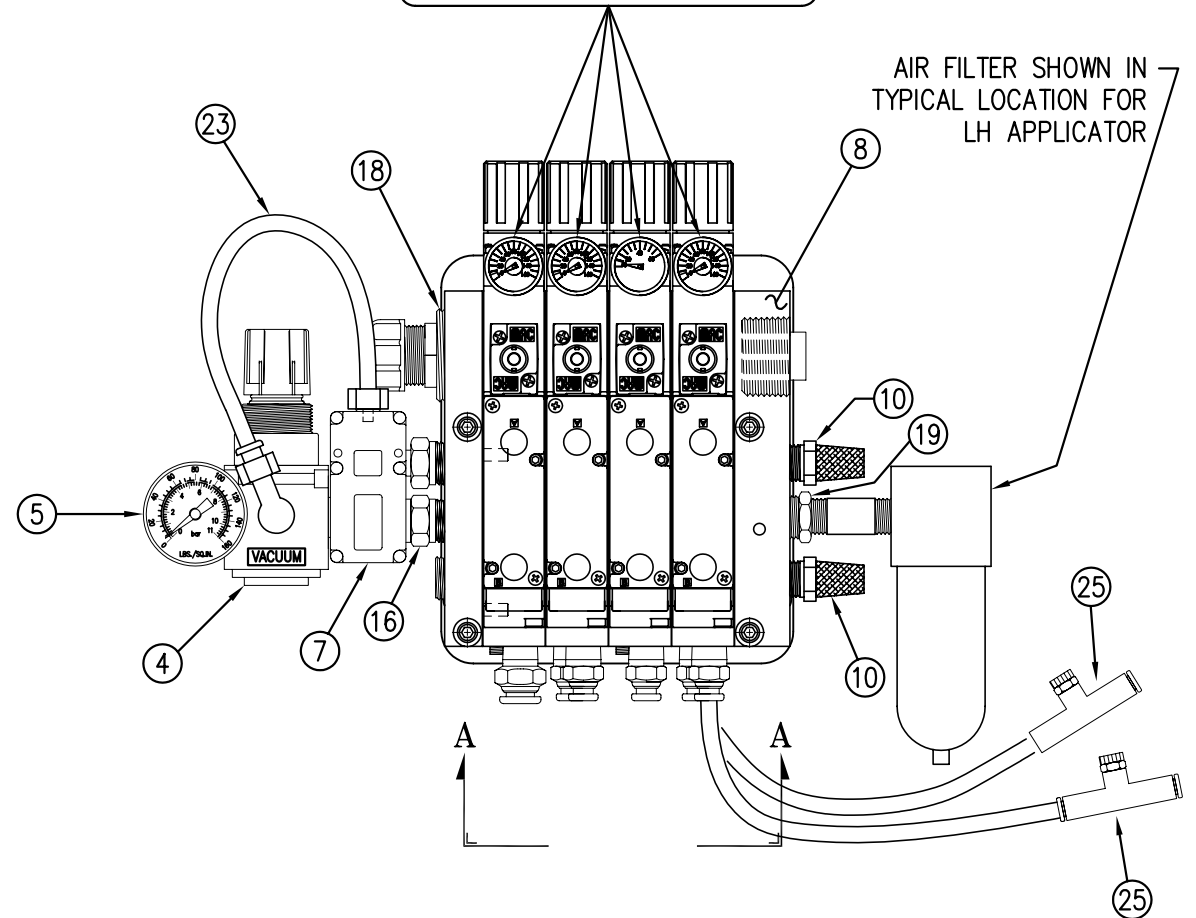
#10-32 x 2-1/2 LG. SHCS  
W/ #10 FLAT WASHER (4 PLACES)

SELF ADHESIVE LABELS



END VIEW "A"  
(VALVE BANK & MTG. ONLY)

TAMP, IMPRINT & BLOW VALVE:  
PRESSURE GAUGE - 0-160 PSI  
AIR ASSIST VALVE:  
PRESSURE GAUGE - 0-60 PSI



AIR FILTER SHOWN IN  
TYPICAL LOCATION FOR  
LH APPLICATOR

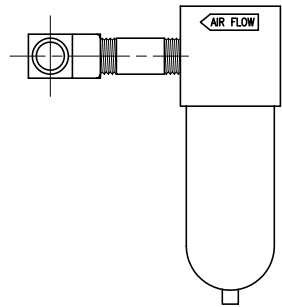
ASS-214-0107M

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.			
APPLICATOR SERIES: 360		APPLICATOR WIDTH(S): 5"7.5"/10"	
REV. DESCRIPTION		REV. DATE	
0 -		1 -	
REV. BY: xxx		REV. DATE: 04/02/07	
Scale: 1=3		DRAWN BY: E. SANOR	
Date: 04/02/07		F:\Engineering\Standard Parts\Applcator\360\	
TITLE: IMPRINTER VALVE BANK ASSEMBLY		Dept. Code 70	
360 ASS-214-0107M		360 ASS-214-0107M	



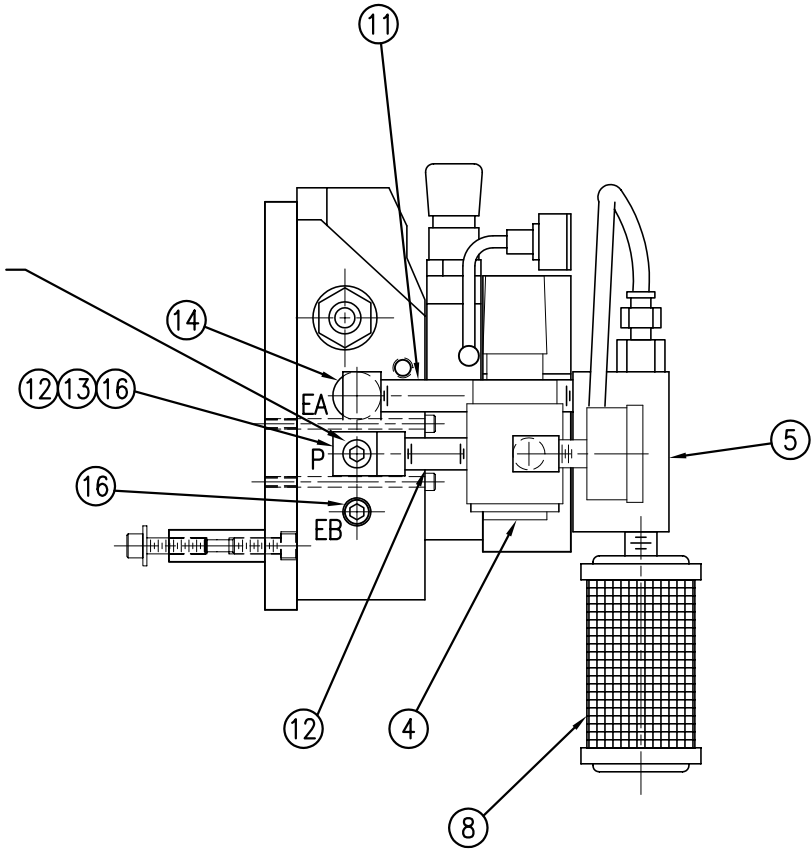
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-214-0105			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VALVE FASTENING MOUNTING PLATE	MP-214-0202	.
②	1	VALVE MOUNTING PLATE	MP-214-0206	.
③	1	VALVE CABLE	PE-200-0405	.
④	1	REGULATOR/GAUGE (PM-VA2384)	PM-REG1500	.
⑤	1	VACUUM PUMP	PM-PUMP1000	.
⑥	1	VALVE BANK	PM-VA2355	.
⑦	1	CORD GRIP	PE-C02000	.
⑧	1	EXHAUST MUFFLER	PM-MU1021	.
⑨	2	1/4" BRONZE EXHAUST MUFFLER	PM-MU1025	.
⑩	1	3/4" NPT PLUG	PE-EN9110	.
⑪	1	1/4" x 3-1/2" LG. NIPPLE	PM-PF1141	.
⑫	2	1/4" x 1-1/2" LG. NIPPLE	PM-PF1143	.
⑬	1	1/4" TEE	PM-PF1200	.
⑭	1	1/4" STREET ELBOW	PM-PF1185	.
⑮	1	1/8" STREET ELBOW	PM-PF1180	.
⑯	4	1/4" NPT PLUG	PM-FT1200	.
⑰	3	FITTING, 1/4" TUBE w/ 1/4" NPT STRT	PM-PF1010	.
⑱	1	FITTING, 3/8" TUBE w/ 1/4" NPT STRT	PM-PF1020	.
⑲	1	FITTING, 1/4" TUBE w/ 1/8" NPT STRT	PM-PF1005	.
⑳	1	FITTING, 1/4" TUBE w/1/4" NPT ELBOW	PM-PF1055	.
㉑	1	BUSHING, NPT 3/4" MALE to 1/2" FEMALE	PE-COND1080	.
㉒	1	1/4" O.D. POLYURETHANE TUBING (CUT TO 7" LENGTH)	PM-PT1070	.
㉓	1	AIR FILTER	ASS-214-0106	.
	2	1/4"-20 UNC x 7/8" LG. SHCS	NONE	.
	2	1/4" FLAT WASHER	NONE	.

VALVE BANK SPARE PARTS:  
 SOLENOID: #PM-VA2395  
 AIR ASSIST REGULATOR: #PM-VA2396  
 BLOW/TAMP/IMPRINTER REGULATORS: #PM-VA2397

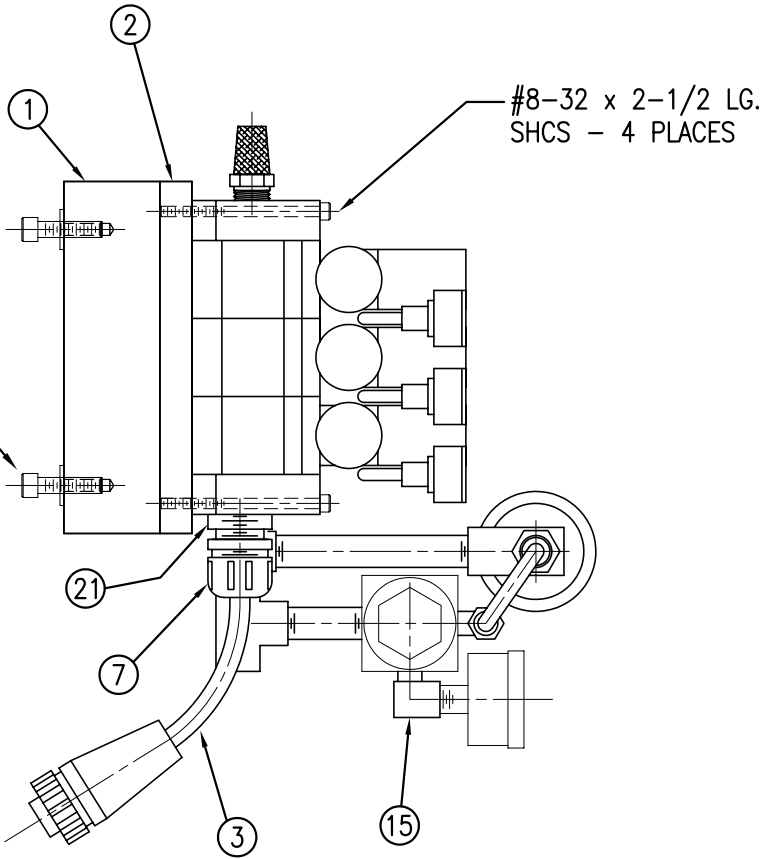


㉓ AIR FILTER  
 SHIP LOOSE  
 -CUSTOMER TO INSTALL -

MOVE PLUG FROM "P" PORT  
 ON THIS SIDE TO "P" PORT  
 ON OPPOSITE SIDE & ATTACH  
 AIR FILTER ASSEMBLY HERE  
 (TO TEE) FOR RH APPLICATORS

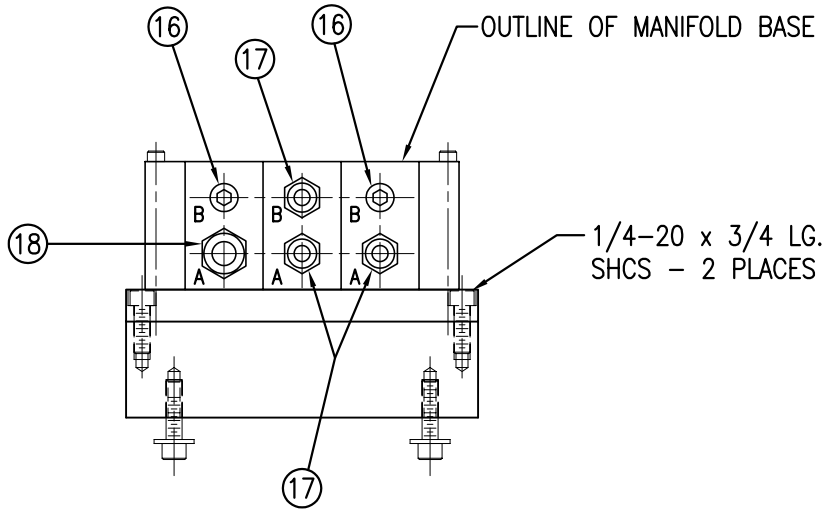


MOUNTING FASTENERS  
 1/4-20 x 7/8 LG. SHCS  
 w/ F.W. (2 PLACES)

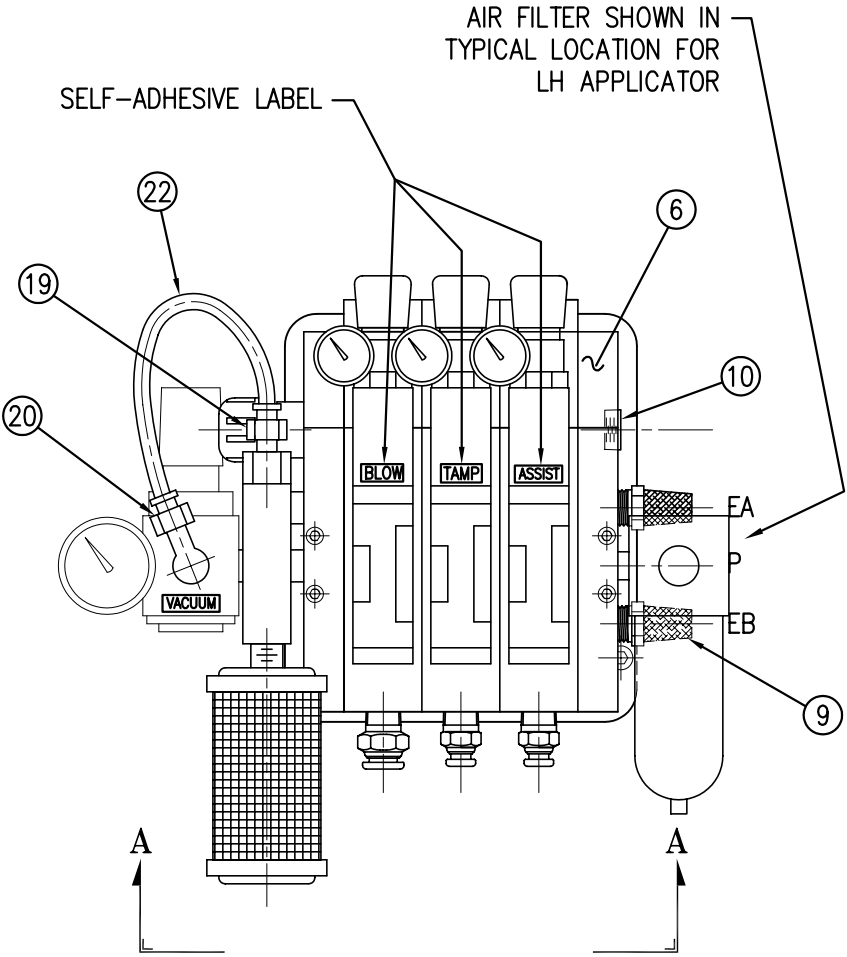


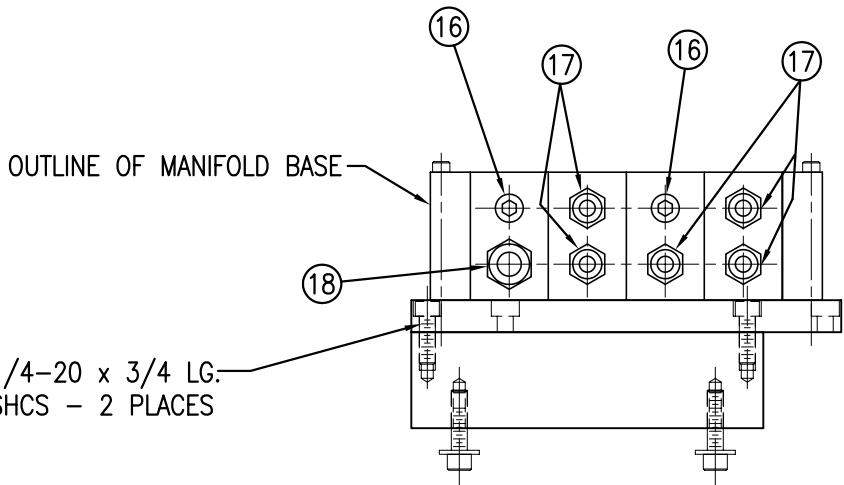
NOTE: AIR SUPPLY ALWAYS ENTERS FROM BACK OF APPLICATOR – CHANGE PIPING TO SUIT

ASS-214-0105

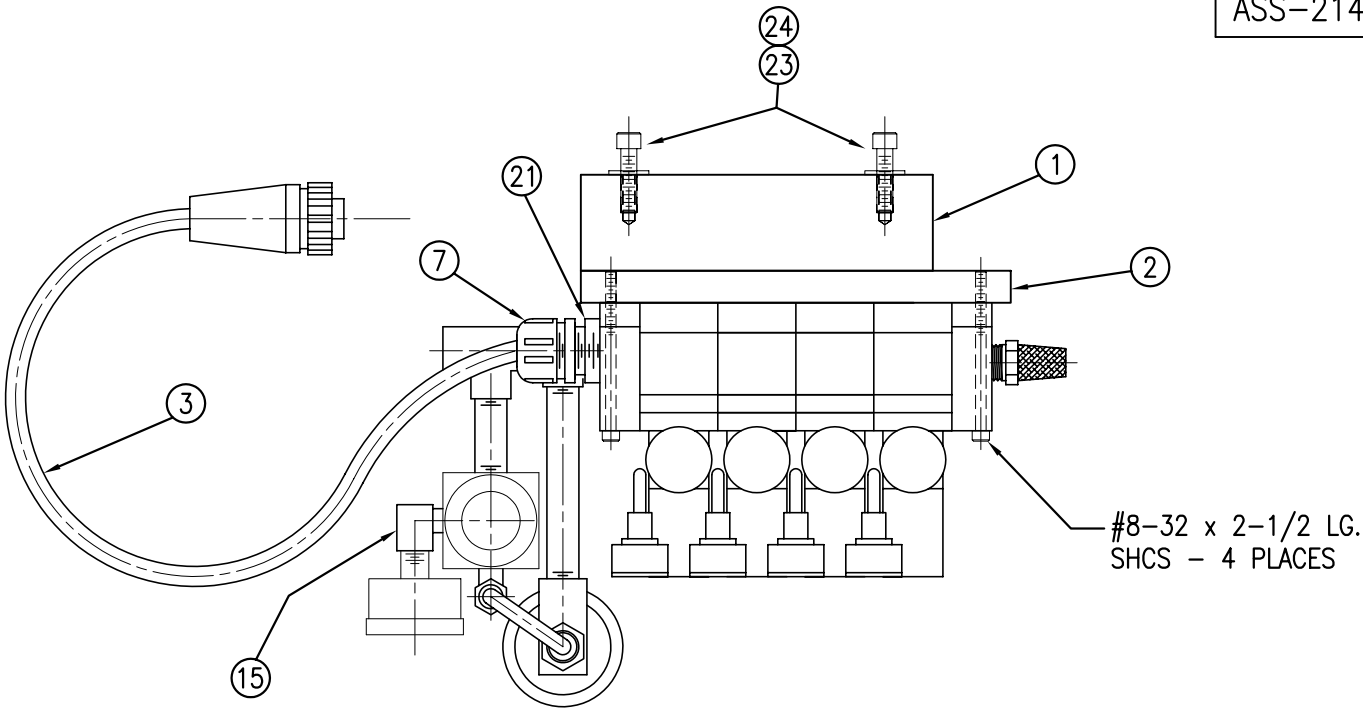


END VIEW "A"  
 (VALVE BANK & MTG. ONLY)

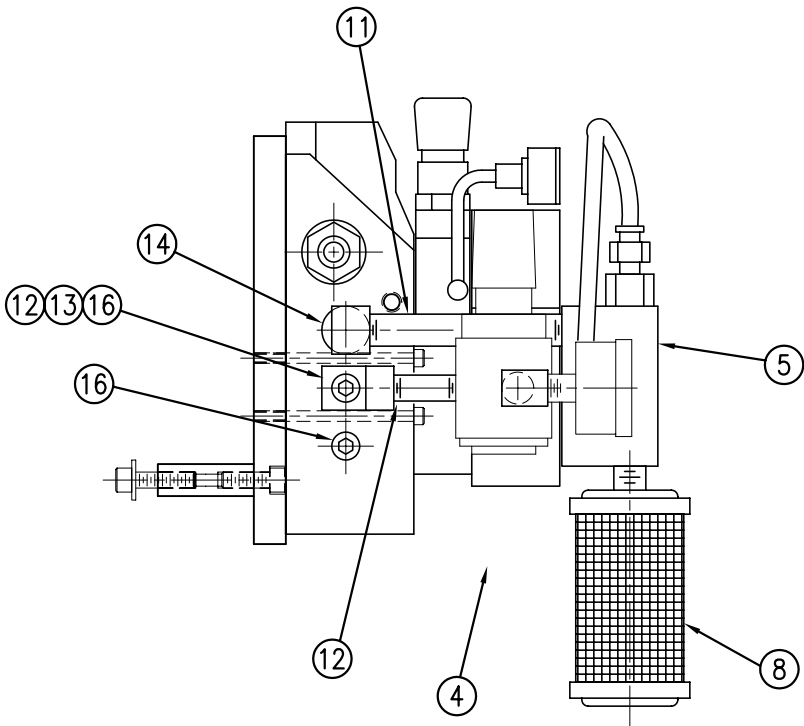




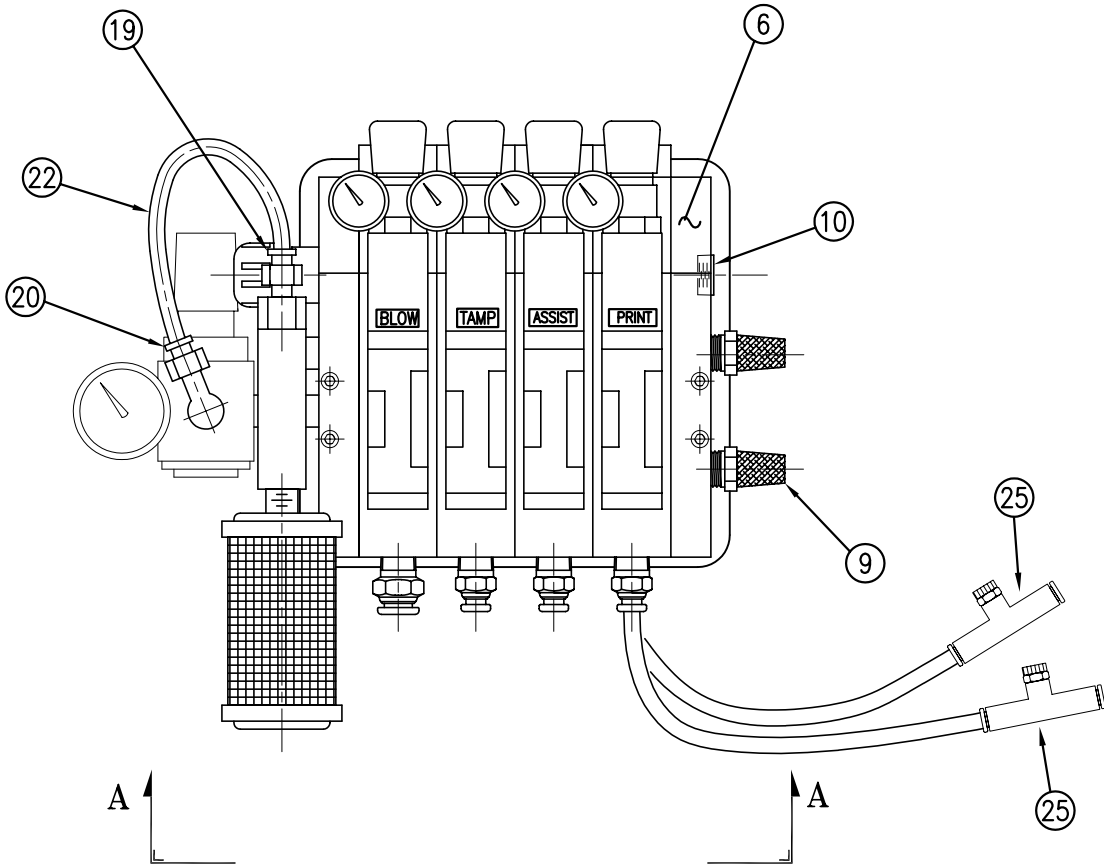
END VIEW "A"  
(VALVE BANK & MTG. ONLY)



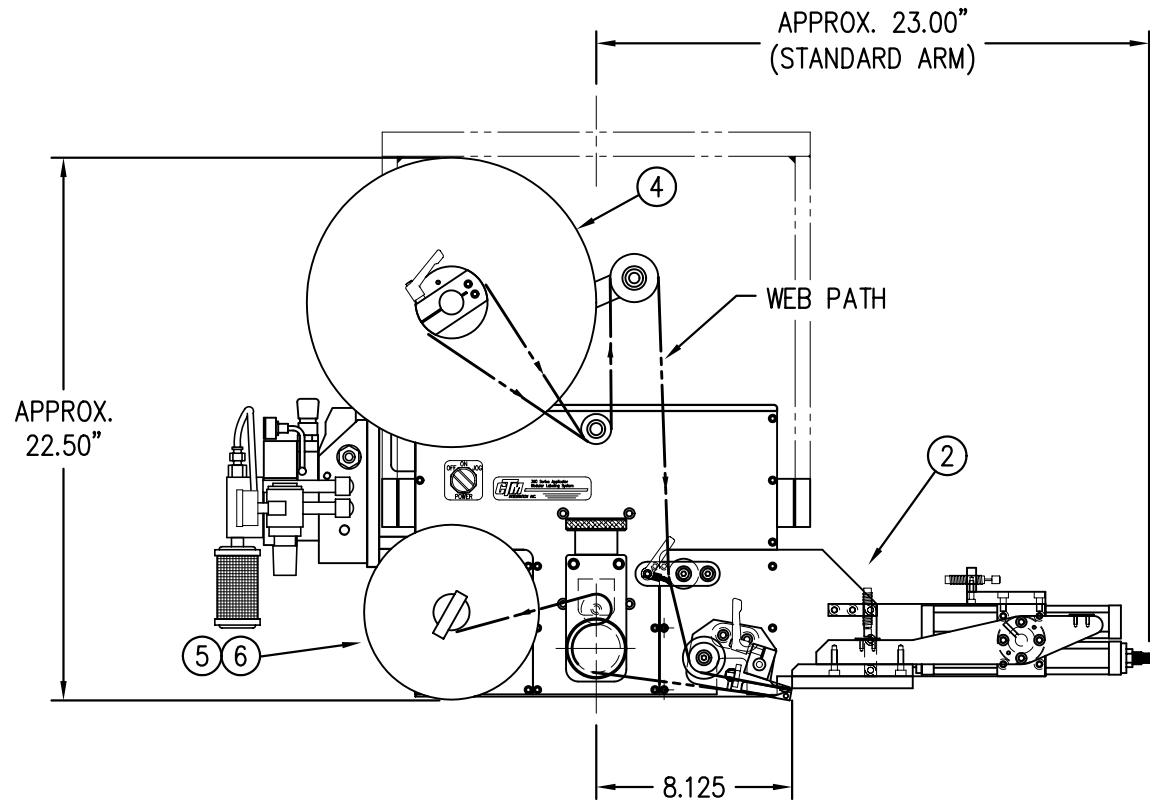
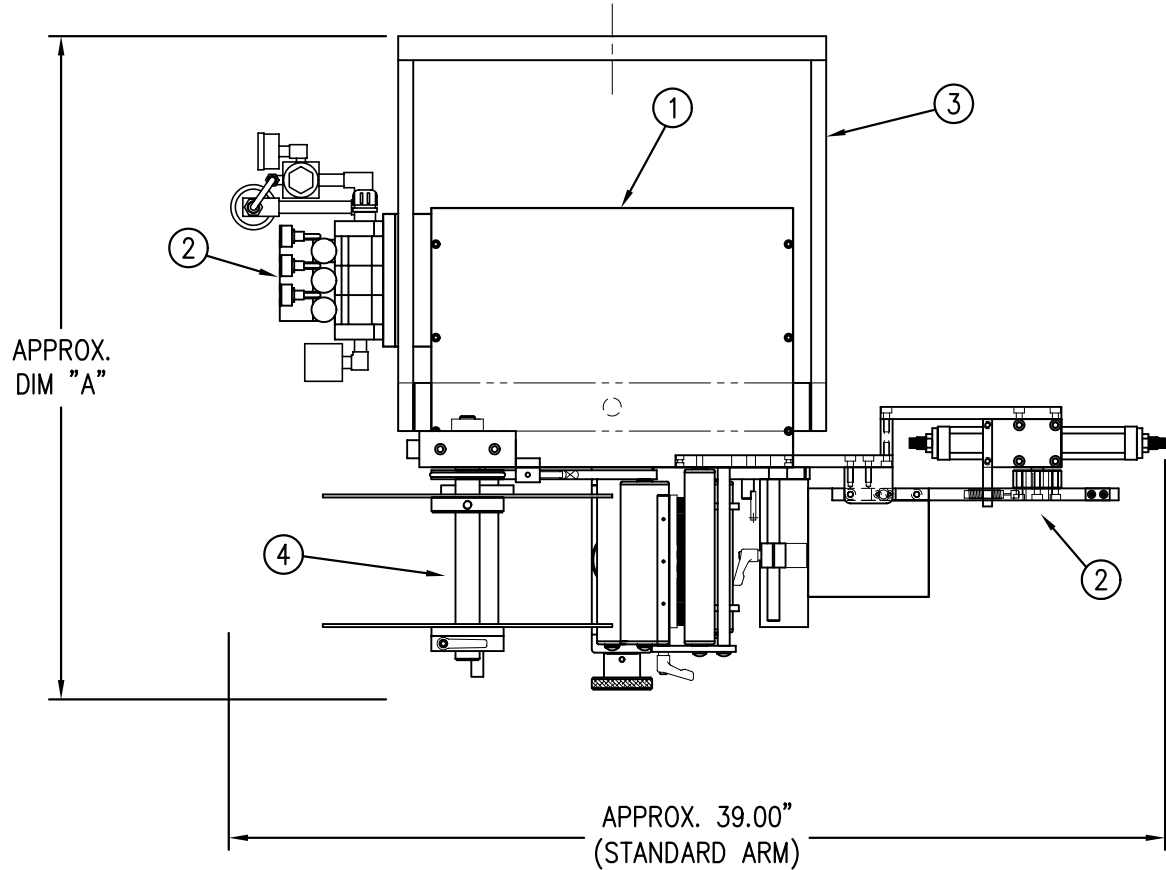
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-214-0107			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VALVE FASTENING PLATE	MP-214-0202	.
②	1	VALVE MOUNTING PLATE	MP-214-0206E	.
③	1	VALVE CABLE	PE-200-0405	.
④	1	REGULATOR/GAUGE(PM-VA2384)	PM-REG1500	.
⑤	1	VACUUM PUMP	PM-PUMP1000	.
⑥	1	VALVE BANK	PM-VA2361	.
⑦	1	CORD GRIP	PE-C02000	.
⑧	1	EXHAUST MUFFLER	PM-MU1021	.
⑨	2	1/4" BRONZE EXHAUST MUFFLER	PM-MU1025	.
⑩	1	3/4" NPT PLUG	PE-EN9110	.
⑪	1	1/4" x 3-1/2" LG. NIPPLE	PM-PF1141	.
⑫	2	1/4" x 1-1/2" LG. NIPPLE	PM-PF1143	.
⑬	1	1/4" TEE	PM-PF1200	.
⑭	1	1/4" STREET ELBOW	PM-PF1185	.
⑮	1	1/8" STREET ELBOW	PM-PF1180	.
⑯	4	1/4" NPT PLUG	PM-FT1200	.
⑰	5	FITTING, 1/4" TUBE w/ 1/4" NPT STRT	PM-PF1010	.
⑱	1	FITTING, 3/8" TUBE w/ 1/4" NPT STRT	PM-PF1020	.
⑲	1	FITTING, 1/4" TUBE w/ 1/8" NPT STRT	PM-PF1005	.
⑳	1	FITTING, 1/4" TUBE w/ 1/4" NPT ELBOW	PM-PF1055	.
㉑	1	BUSHING, NPT 3/4" MALE to 1/2" FEMALE	PE-COND1080	.
㉒	1	1/4" O.D. POLYURETHANE TUBING (CUT TO 7" LENGTH)	PM-PT1070	.
㉓	2	1/4"-20 UNC x 7/8" LG. SHCS	NONE	.
㉔	2	1/4" FLAT WASHER	NONE	.
㉕	2	FLOW CONTROLS	PM-PA1800	.



VALVE BANK SPARE PARTS:  
SOLENOID: #PM-VA2395  
AIR ASSIST REGULATOR: #PM-VA2396  
BLOW/TAMP/IMPRINTER REGULATORS: #PM-VA2397



PART NO.	DIM "A"
CTM-214-0110R/L-X-12X	27.50
CTM-214-2110R/L-X-12X	30.00



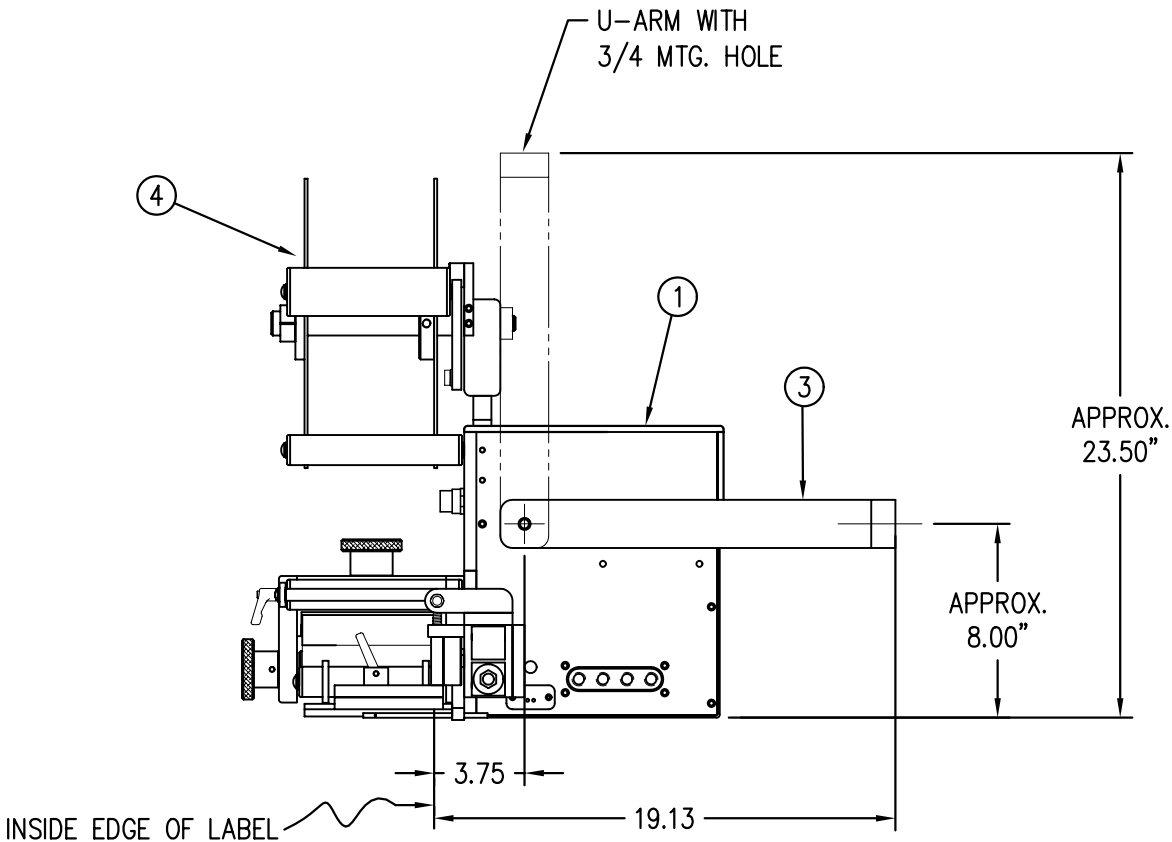
BILL OF MATERIAL				SOLD
CTM-214-X110RL-X-12X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
	①	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L
	②	1	5/7.5 SWING TAMP	MOD-214-X110R/L
	③	1	U-ARM ASSEMBLY	WAS-200-0247
	④	1	5/7.5 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L
⑤	1	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L
	1	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L
⑥	1	1	STANDARD MANDREL (SHOWN)	ASS-200-X147
	1	1	FILM REWIND MANDREL	ASS-200-X137
	1	1	COLLAPSIBLE MANDREL	ASS-200-3140-X
		1	DISPLAY UNIT ASSEMBLY	ASS-200-0125
		1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5
		1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138
ORDER THESE ITEMS SEPARATELY:				
1.) TAMP SLIDE				
2.) LABEL PAD				
3.) LABEL MANIFOLD				
4.) PRODUCT DETECT SENSOR				

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

← STD & FILM REWIND
← COLLAPSIBLE RWD
← STANDARD RWD
← FILM REWIND
← COLLAPSIBLE RWD

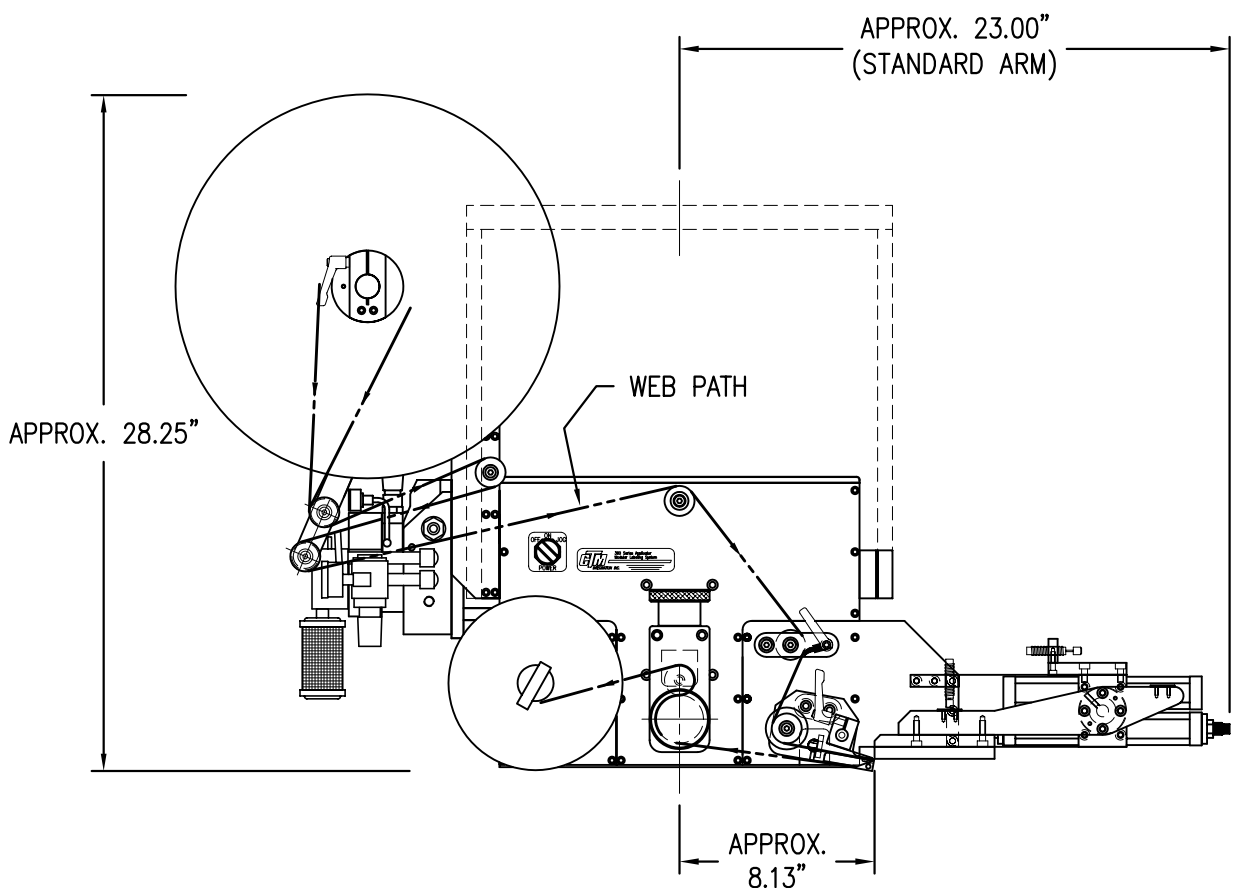
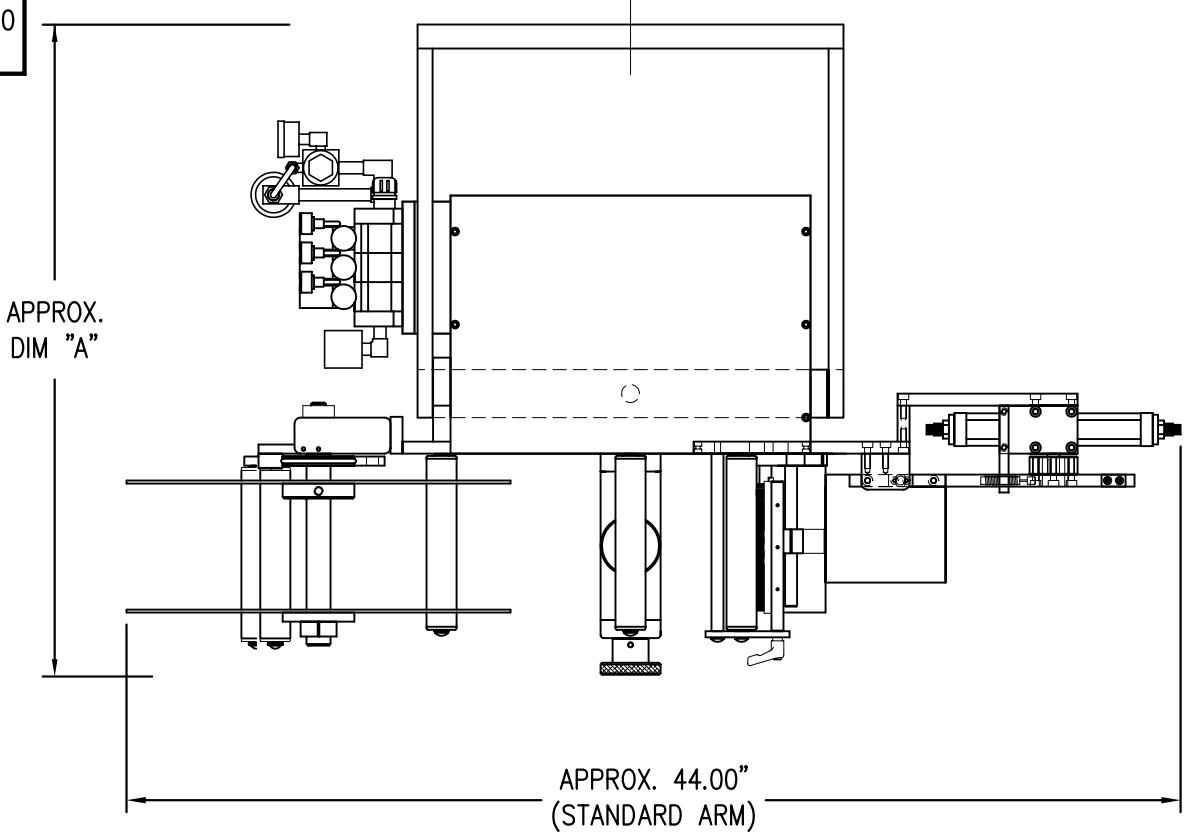
CTM-214-X110R/L-12X			
5" WIDE STD. SWG. ARM	-0110R/L-12	X	
5" WIDE 2" OS SWG. ARM	-0110R/L-2-12	X	
5" WIDE 4" OS SWG. ARM	-0110R/L-4-12	X	
7.5" WIDE STD. SWG. ARM	-2110R/L-12	X	
7.5" WIDE 2" OS SWG. ARM	-2110R/L-2-12	X	
7.5" WIDE 4" OS SWG. ARM	-2110R/L-4-12	X	

STANDARD REWIND S  
COLLAPSIBLE REWIND C  
FILM REWIND F



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.				Dept. Code	70
PART: 5" / 7.5" WIDE: SWING TAMP w/ 12" UNWIND ASSEMBLY				F:\Engineering\Standard Parts\Applcator\360\214\CTM-214-X110RL-X-12X	
TITLE: 360 SERIES APPLICATOR: SWING TAMP ASSEMBLY				REV. DATE	09/12/07
REV. DESCRIPTION				REV. BY:	TDR
1 UPDATED BOM FOR NEW COLLAPSIBLE MANDREL				DATE:	11/04/99
				DRAWN BY:	BOB S.

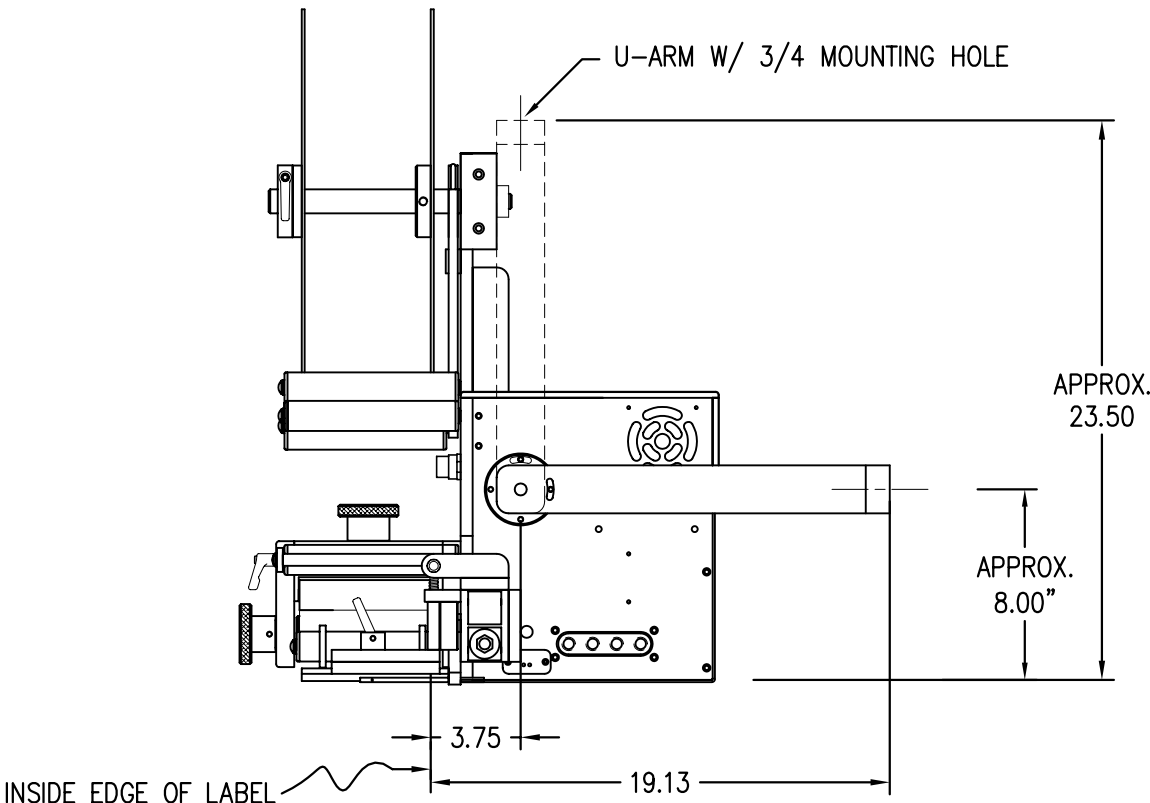
PART NO.	DIM "A"
CTM-214-0110R/L-16S	27.50
CTM-214-0110R/L-16C	
CTM-214-0110R/L-16F	
CTM-214-2110R/L-16S	30.00
CTM-214-2110R/L-16C	
CTM-214-2110R/L-16F	



BILL OF MATERIAL				SOLD
CTM-214-X110RL-16X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5 WIDE; SWING TAMP	MOD-214-X110R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
ORDER THESE ITEMS SEPARATELY:				
1.) TAMP SLIDE				
2.) LABEL PAD				
3.) LABEL MANIFOLD				
4.) PRODUCT DETECT SENSOR				

CTM-214-X110R/L-16X				Dept. Code
5" WIDE	-0110RL-16	X		70
7.5" WIDE	-2110RL-16	X		
STANDARD REWIND				S
COLLAPSIBLE REWIND				C
FILM REWIND				F

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

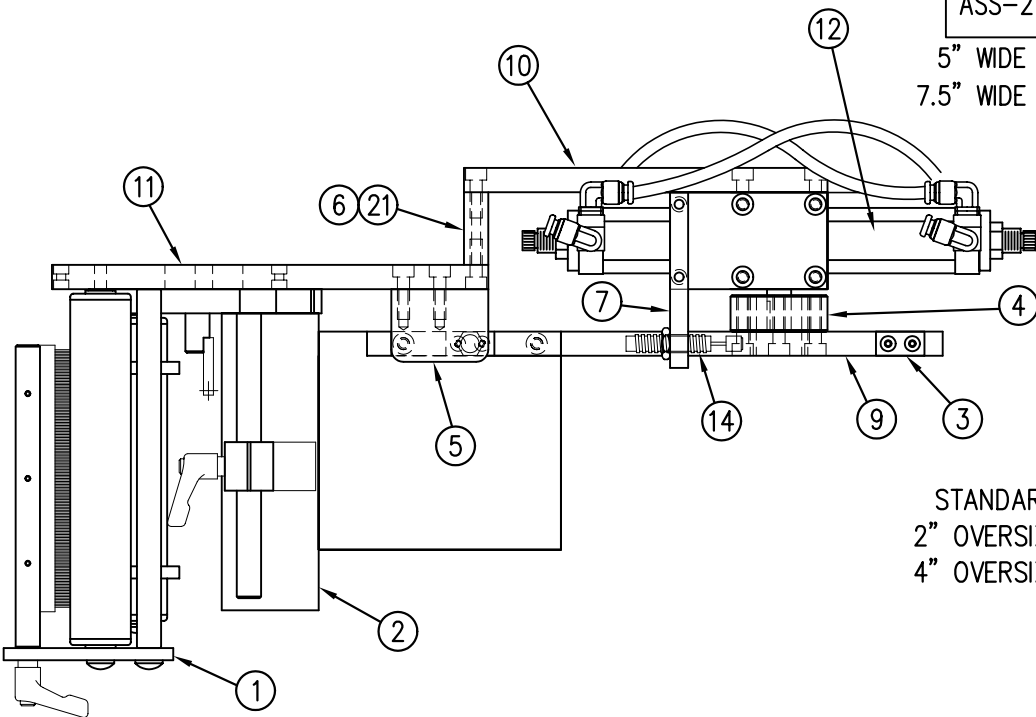


THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.									
TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY					PART: 5/7.5/10 WIDE SWING TAMP w/ 16" UNWIND ASSEMBLY				
REV. 1	REV. DESCRIPTION	REV. DATE	REV. BY:	REV. BY:	Scale:	Date:	Drawn BY:	Engineering	Parts Applicator
1	UPDATED BOM FOR NEW COLLAPSIBLE MANDREL	09/12/07	TDR	TDR	1=8	11/04/99	BOB S.	214	CTM-214-X110RL-16X

BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-214-X110R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
1	1	5/7.5 SWING TAMP ASSEMBLY	ASS-214-X110R/L-X	S
1	1	TAMP 3-STATION VALVE BANK ASS'Y	ASS-214-0105M	S

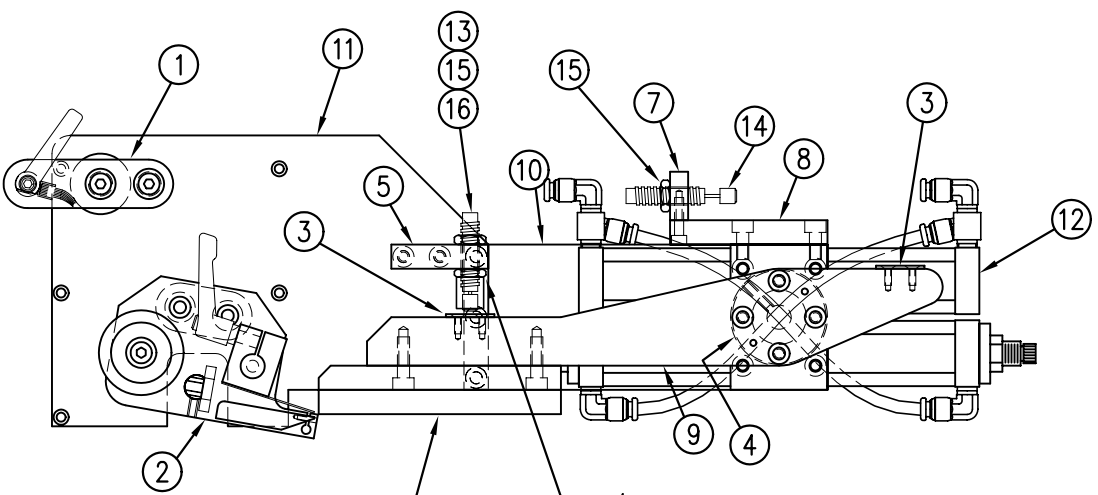
REV 3

MOD-214-X110R/L-X
ASS-214-X110R/L-X
5" WIDE -0110R/L-X
7.5" WIDE -2110R/L-X



STANDARD	-0
2" OVERSIZE	-2
4" OVERSIZE	-4

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-X110R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5 TENSION BRUSH ASS'Y	ASS-200-X126R/L	S
②	1	5/7.5 TAMP PEEL EDGE ASSEMBLY	ASS-214-X102R/L	.
③	2	SHOCK STRIKE PLATE	MP-214-0210	.
④	1	ROTARY ACTUATOR HUB DETAIL	MP-214-0211	.
⑤	1	HOME SHOCK MOUNT	MP-214-0212	.
⑥	1	OFFSET BLOCK	MP-214-0213	.
⑦	1	EXTEND SHOCK MOUNT	MP-214-0214	.
⑧	1	EXTEND SHOCK/ACTUATOR TRANS. PLATE	MP-214-0215	.
⑨	1	SWING ARM	MP-214-0217-X	.
⑩	1	ROTARY ACTUATOR MOUNTING PLATE	MP-214-0218-X	.
⑪	1	TRANSITION PLATE	MP-214-0219	.
⑫	1	90° ROTARY ACTUATOR	PM-AC1250	S
⑬	1	MC-25L SHOCK ABSORBER	PM-SA0990	.
⑭	1	MC-25H SHOCK ABSORBER	PM-SA1000	.
⑮	2	LOCK NUT (FOR LIGHT DUTY SHOCK)	MP-214-0242	.
⑯	1	SHOCK STOP COLLAR	PM-C01040	.
⑰	2	STR. TEE, 1/8" MALE NPT x (2) FEMALE 1/8" NPT	PM-PF1205	.
⑱	4	FTG, 1/8" NPT TO 1/4" TUBE 90° ELBOW	PM-PF1050	.
⑲	2	FTG, 1/8" NPT TO 1/4" TUBE 90° ELBOW SWMEL	PM-PF1030	.
⑳	2	1/4" O.D. SMC TUBING x 7" LONG	PM-PT1070	.
㉑	4	3/16" Ø DOWEL PIN x 1/2" Lg.	PM-FADP0930	.
6		SHCS, #10-32 x 5/8" LG.	NONE	.
1		STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S



LABEL PAD & MANIFOLD (JOB SPECIFIC)

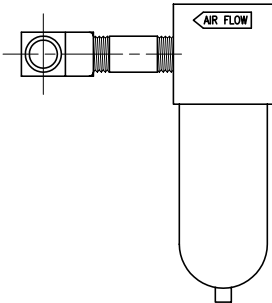
3/8-32 NUT IS PART OF ITEM #13

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 SERIES APPLICATOR: TAMP ASSEMBLY					PART: 5"/7.5" WIDE SWING TAMP ASSEMBLY					Dept. Code 70
REV. 3	REV. DESCRIPTION CHANGED TO MAC VALVE			REV. DATE 09/12/07	REV. BY: TDR	Scale: 1=3	Date: 11/4/99	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Appliator\360 214\MOD-214-X110RL-X	

BILL OF MATERIAL			
ASS-214-0105M			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0202	VALVE FASTENING MOUNTING PLATE
②	1	MP-214-0206	VALVE MOUNTING PLATE
③	1	PE-200-0405	VALVE CABLE
④	1	PM-REG1500	REGULATOR
⑤	1	PM-VA2384	0-160 PSI PRESSURE GUAGE
⑥	2	PM-PF1180	NPT 90° STREET ELBOW 1/8" FEMALE TO 1/8" MALE
⑦	1	PM-PUMP1010	VACUUM PUMP, 55 PSI FEED PRESSURE, MUFFLED EXHAUST
⑧	1	PM-VA2355M	3 STATION MAC VALVE BANK
⑨	1	PE-CO2000	CORD GRIP
⑩	2	PM-MU1027	3/8" NPT MALE BRONZE EXHAUST MUFFLER
⑪	3	PM-FT1200	1/4" NPT SOCKET HEAD PLUG
⑫	1	PM-PF1200	TEE 1/4" NPT FEMALE 3 ENDS
⑬	1	PM-PF1143	NIPPLE, 1/4" NPT X 1 1/2" LG.
⑭	1	PM-PF1220	ADAPTOR, 3/8" NPT FEMALE TO 1/4" NPT MALE
⑮	1	PM-PF1157	REDUCER, 3/8" NPT TO 1/8" NPT
⑯	1	PM-PF1159	FITTING, 3/8" NPT MALE BOTH ENDS
⑰	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑱	1	PE-COND1084	STEEL REDUCER
⑲	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑳	3	PM-PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
㉑	1	PM-PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
㉒	1	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
㉓	10.5"	PM-PT1070	1/4" OD TUBING
㉔	1	ASS-214-0106	AIR FILTER
㉕	1	PM-PF1055	90° ELBOW 1/4" TUBE TO 1/4" NPT MALE
○	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
○	2	PM-FAW30275	1/4" SS FLAT WASHER
○	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
○	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
○	4	PM-FAW30265	#10 SS FLAT WASHER

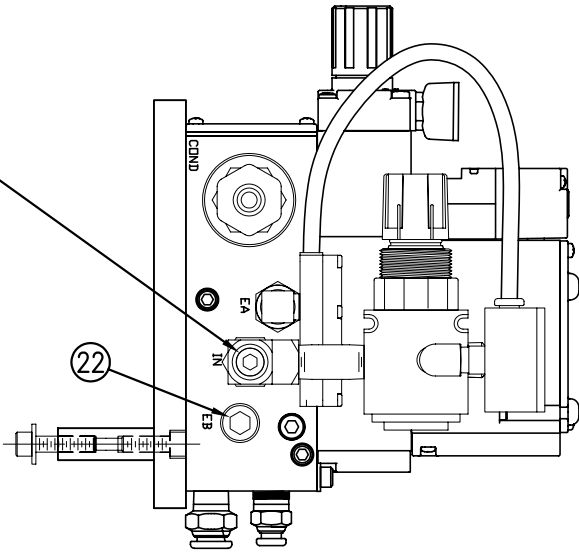
VALVE BANK SPARE PARTS:

SOLENOID: #PM-VA2395M  
AIR ASSIST REGULATOR W/GUAGE: #PM-VA2396M  
BLOW/TAMP/IMPRINTER REGULATORS W/GUAGE: #PM-VA2397M  
AIR ASSIST REGULATOR GUAGE: #PM-VA2382M  
BLOW/TAMP/IMPRINTER REGULATOR GUAAGES: #PM-VA2380M



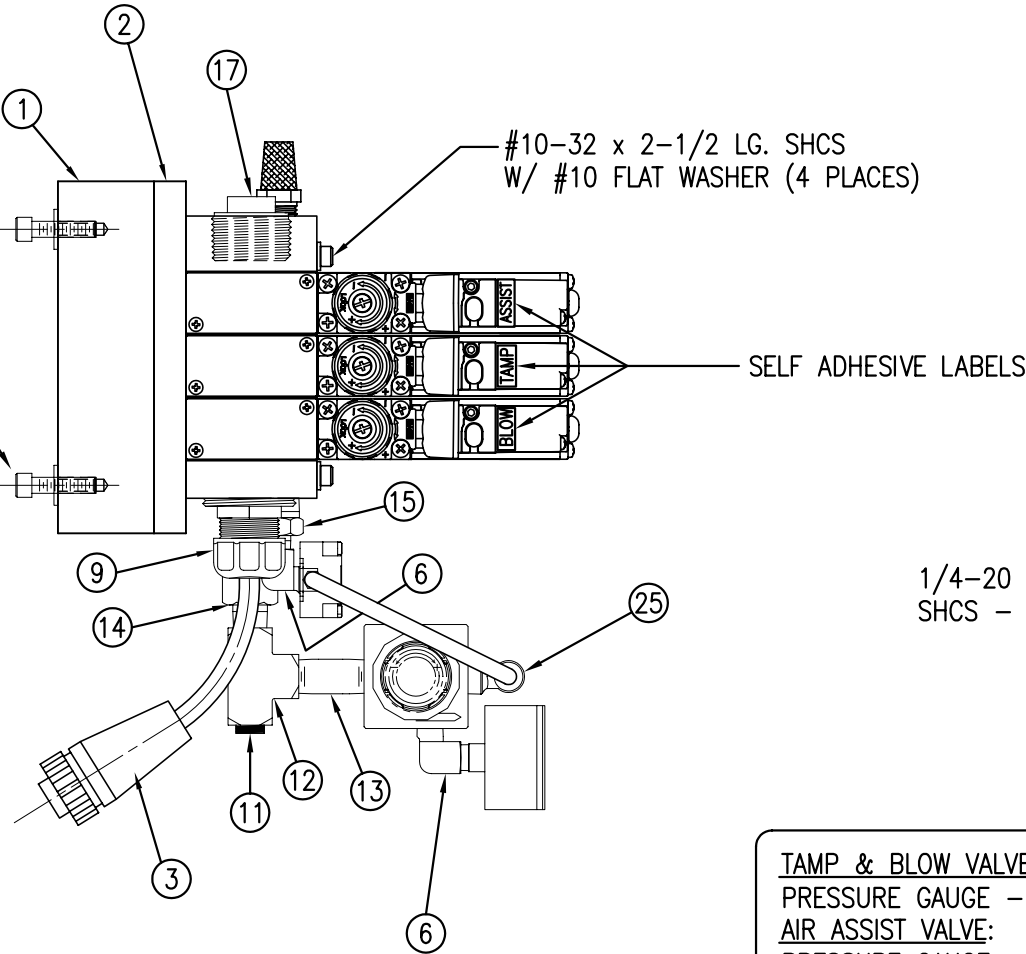
②④ AIR FILTER  
SHIP LOOSE  
-CUSTOMER TO INSTALL -

MOVE PLUG FROM TEE  
ON THIS SIDE TO "IN" PORT  
ON OPPOSITE SIDE & ATTACH  
AIR FILTER ASSEMBLY HERE  
(TO TEE) FOR RH APPLICATORS



NOTE: AIR SUPPLY ALWAYS ENTERS FROM BACK OF APPLICATOR - CHANGE PIPING TO SUIT

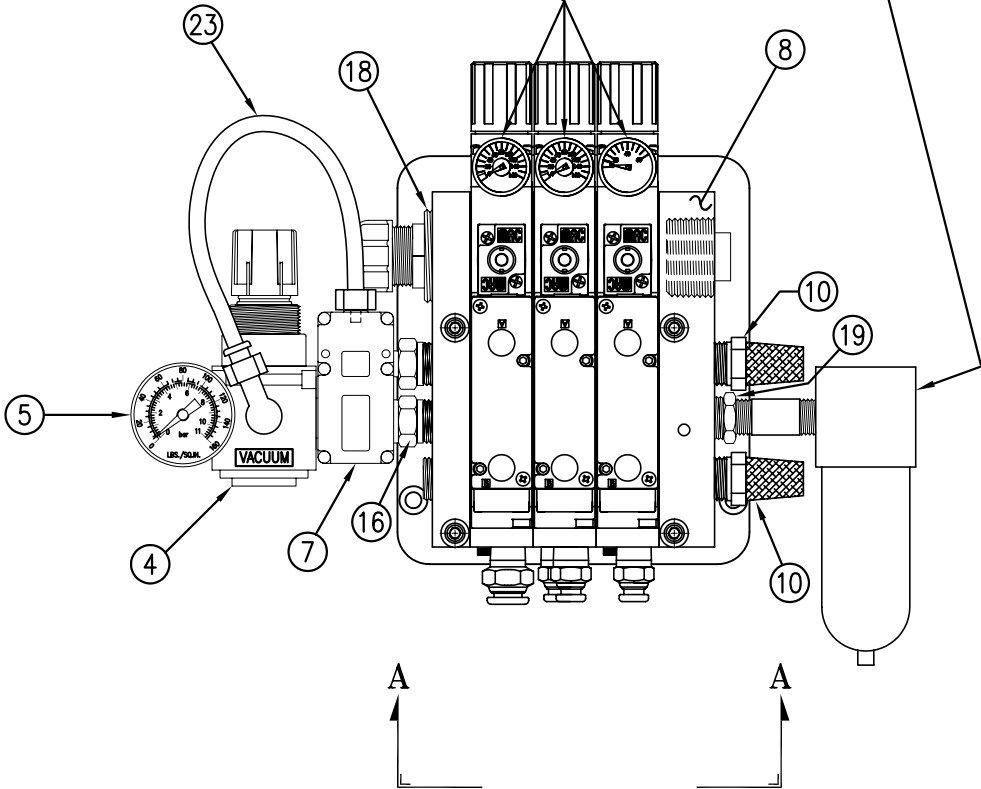
ASS-214-0105M



END VIEW "A"  
(VALVE BANK & MTG. ONLY)

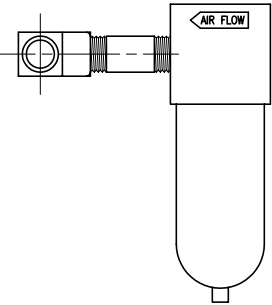
TAMP & BLOW VALVE:  
PRESSURE GAUGE - 0-160 PSI  
AIR ASSIST VALVE:  
PRESSURE GAUGE - 0-60 PSI

AIR FILTER SHOWN IN  
TYPICAL LOCATION FOR  
LH APPLICATOR



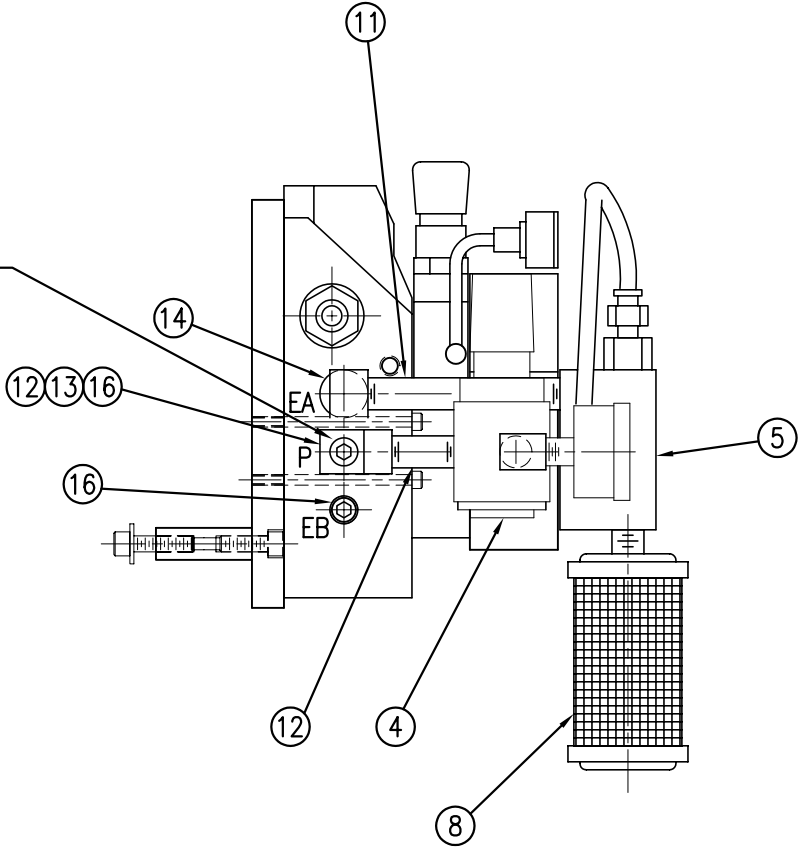
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-214-0105			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VALVE FASTENING MOUNTING PLATE	MP-214-0202	.
②	1	VALVE MOUNTING PLATE	MP-214-0206	.
③	1	VALVE CABLE	PE-200-0405	.
④	1	REGULATOR/GAUGE (PM-VA2384)	PM-REG1500	.
⑤	1	VACUUM PUMP	PM-PUMP1000	.
⑥	1	VALVE BANK	PM-VA2355	.
⑦	1	CORD GRIP	PE-C02000	.
⑧	1	EXHAUST MUFFLER	PM-MU1021	.
⑨	2	1/4" BRONZE EXHAUST MUFFLER	PM-MU1025	.
⑩	1	3/4" NPT PLUG	PE-EN9110	.
⑪	1	1/4" x 3-1/2" LG. NIPPLE	PM-PF1141	.
⑫	2	1/4" x 1-1/2" LG. NIPPLE	PM-PF1143	.
⑬	1	1/4" TEE	PM-PF1200	.
⑭	1	1/4" STREET ELBOW	PM-PF1185	.
⑮	1	1/8" STREET ELBOW	PM-PF1180	.
⑯	4	1/4" NPT PLUG	PM-FT1200	.
⑰	3	FITTING, 1/4" TUBE w/ 1/4" NPT STRT	PM-PF1010	.
⑱	1	FITTING, 3/8" TUBE w/ 1/4" NPT STRT	PM-PF1020	.
⑲	1	FITTING, 1/4" TUBE w/ 1/8" NPT STRT	PM-PF1005	.
⑳	1	FITTING, 1/4" TUBE w/1/4" NPT ELBOW	PM-PF1055	.
㉑	1	BUSHING, NPT 3/4" MALE to 1/2" FEMALE	PE-COND1080	.
㉒	1	1/4" O.D. POLYURETHANE TUBING (CUT TO 7" LENGTH)	PM-PT1070	.
㉓	1	AIR FILTER	ASS-214-0106	.
	2	1/4"-20 UNC x 7/8" LG. SHCS	NONE	.
	2	1/4" FLAT WASHER	NONE	.

VALVE BANK SPARE PARTS:  
SOLENOID: #PM-VA2395  
AIR ASSIST REGULATOR: #PM-VA2396  
BLOW/TAMP/IMPRINTER REGULATORS: #PM-VA2397



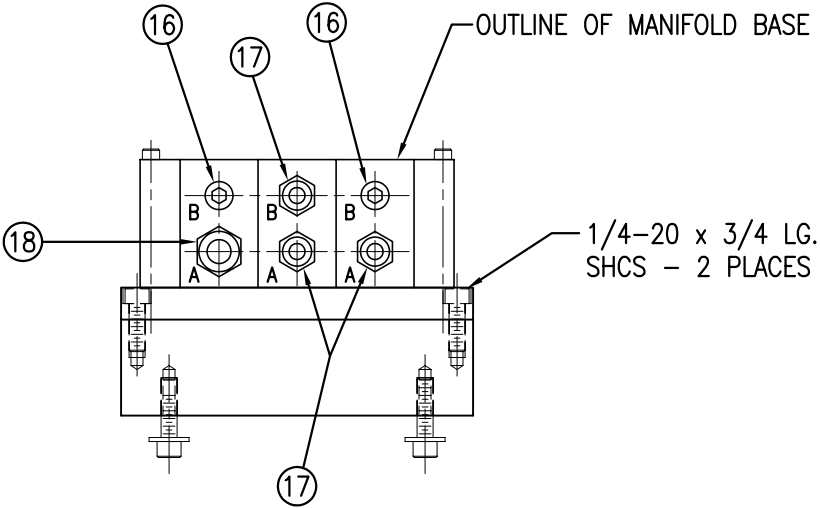
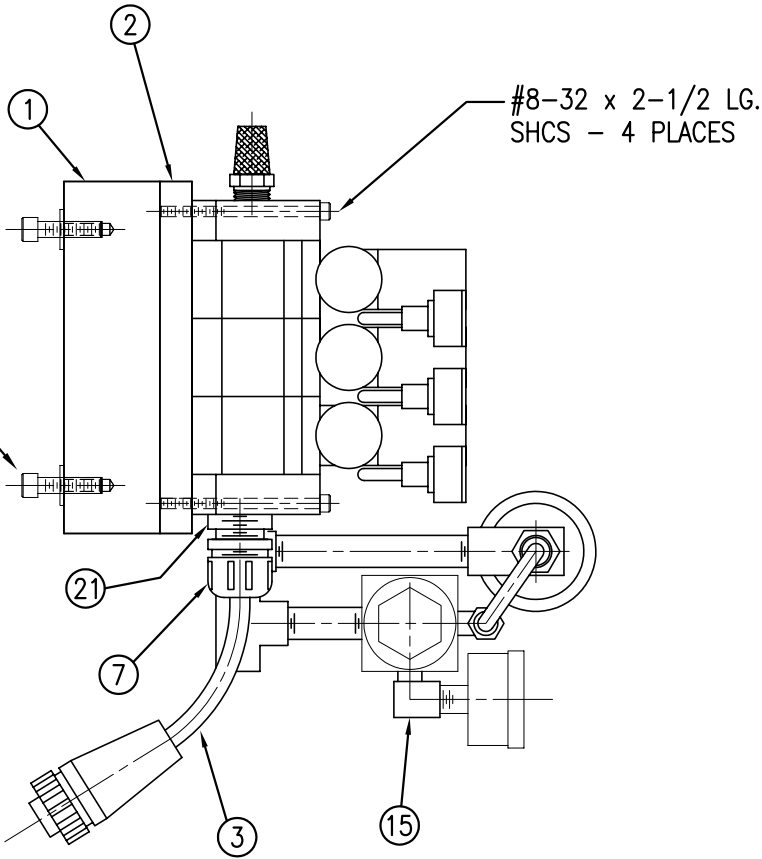
②③ AIR FILTER  
SHIP LOOSE  
-CUSTOMER TO INSTALL -

MOVE PLUG FROM "P" PORT  
ON THIS SIDE TO "P" PORT  
ON OPPOSITE SIDE & ATTACH  
AIR FILTER ASSEMBLY HERE  
(TO TEE) FOR RH APPLICATORS

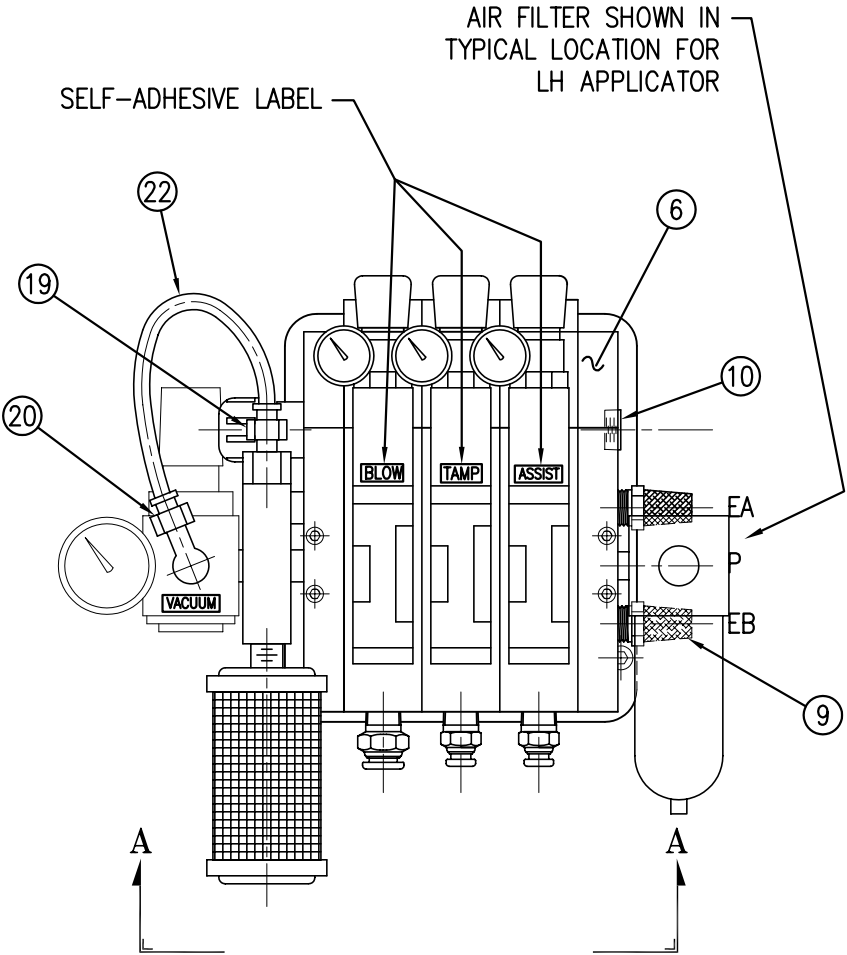


MOUNTING FASTENERS  
1/4-20 x 7/8 LG. SHCS  
w/ F.W. (2 PLACES)

NOTE: AIR SUPPLY ALWAYS ENTERS FROM BACK OF APPLICATOR – CHANGE PIPING TO SUIT



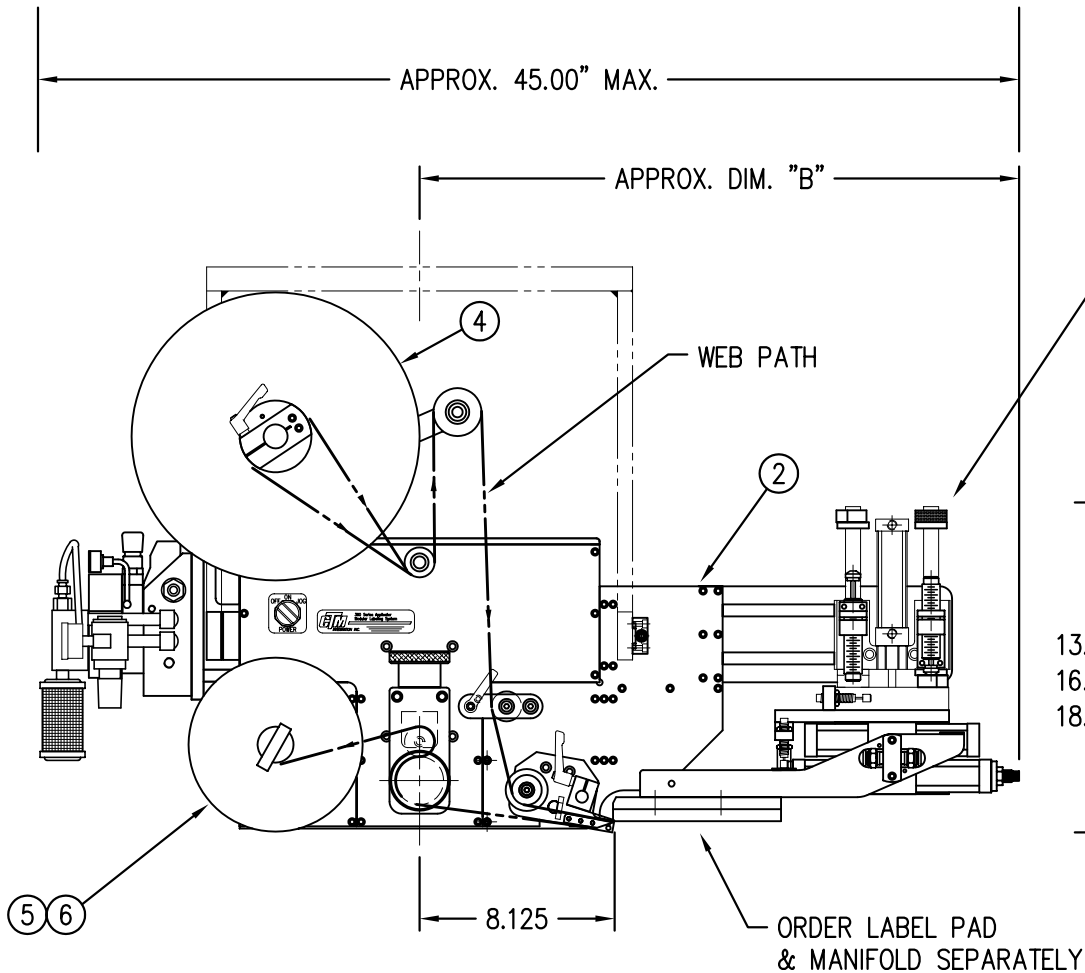
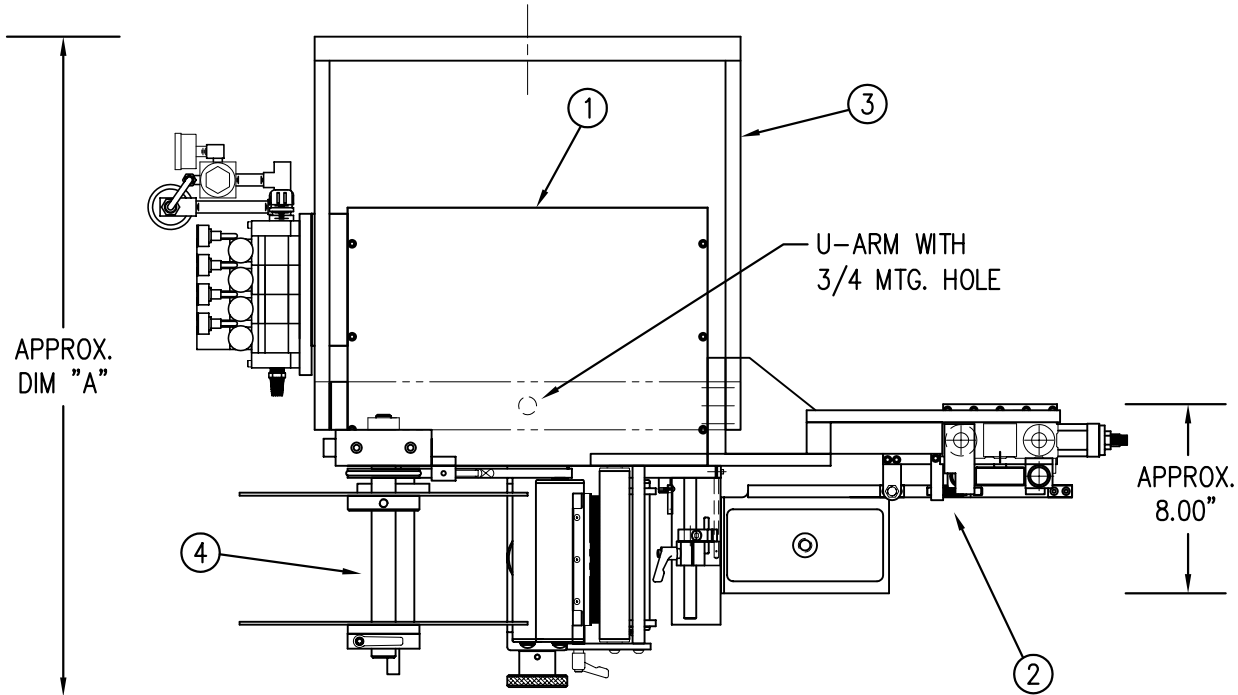
END VIEW "A"  
(VALUE BANK & MTG. ONLY)



PART NO.	DIM "A"
CTM-214-0115R/L-X-12X	27.50
CTM-214-2115R/L-X-12X	30.00

PART NO.	DIM "B"
CTM-214-X115R/L-0-12X	25.00
CTM-214-X115R/L-2-12X	27.00
CTM-214-X115R/L-4-12X	29.00

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



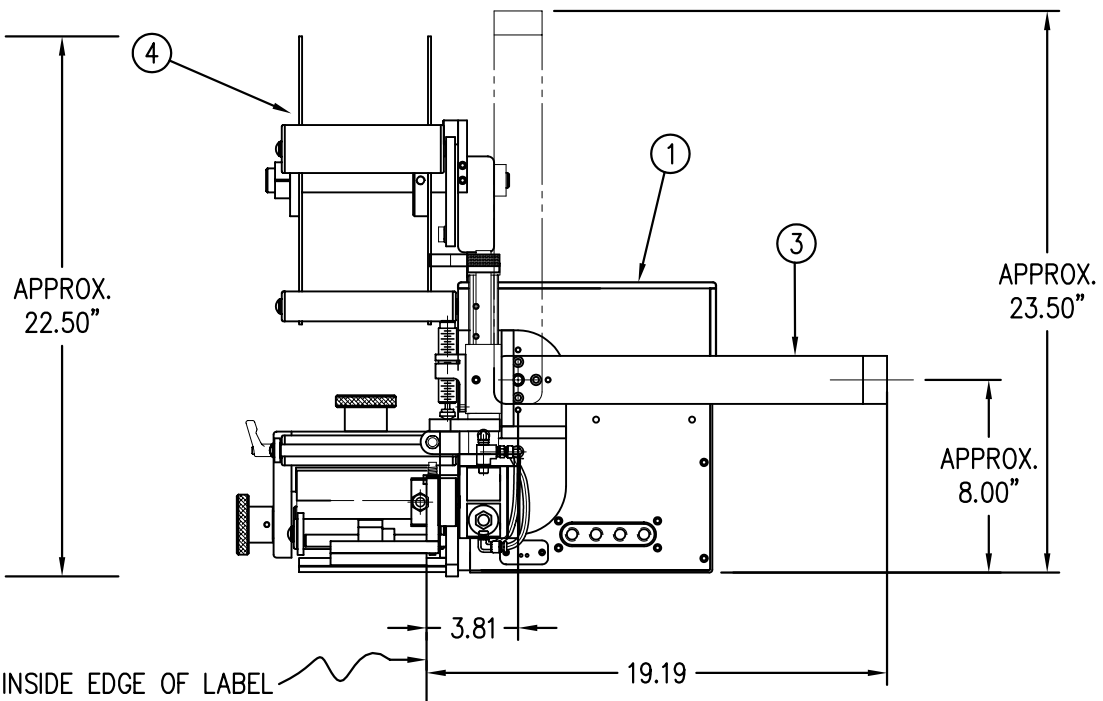
BILL OF MATERIAL				SOLD
CTM-214-X115RL-X-12X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.
	1	5/7.5 DAT MODULE	MOD-214-X115R/L-X	S
	1	U-ARM ASSEMBLY	WAS-200-0247	.
	1	5/7.5 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S
	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE RWD BLOCK & SHAFT	ASS-200-3167R/L	S
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
⑥	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY:				
1) TAMP SLIDE				
2.) LABEL PAD				
3.) LABEL MANIFOLD				

← STD & FILM REWIND
← COLLAPSIBLE REWIND
← STANDARD RWD
← FILM REWIND
← COLLAPSIBLE REWIND

5" WIDE; STD SWG STD REWIND	-0115R/L-0-12S
5" WIDE; STD SWG FILM REWIND	-0115R/L-0-12F
5" WIDE; STD SWG COLLAPSIBLE RWD	-0115R/L-0-12C
5" WIDE; 2 OS SWG STD REWIND	-0115R/L-2-12S
5" WIDE; 2 OS SWG FILM REWIND	-0115R/L-2-12F
5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-0115R/L-2-12C
5" WIDE; 4 OS SWG STD REWIND	-0115R/L-4-12S
5" WIDE; 4 OS SWG FILM REWIND	-0115R/L-4-12F
5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-0115R/L-4-12C
7.5" WIDE; STD SWG STD REWIND	-2115R/L-0-12S
7.5" WIDE; STD SWG FILM REWIND	-2115R/L-0-12F
7.5" WIDE; STD SWG COLLAPSIBLE RWD	-2115R/L-0-12C
7.5" WIDE; 2 OS SWG STD REWIND	-2115R/L-2-12S
7.5" WIDE; 2 OS SWG FILM REWIND	-2115R/L-2-12F
7.5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-2115R/L-2-12C
7.5" WIDE; 4 OS SWG STD REWIND	-2115R/L-4-12S
7.5" WIDE; 4 OS SWG FILM REWIND	-2115R/L-4-12F
7.5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-2115R/L-4-12C

SLIDE STROKE LENGTH IS JOB SPECIFIC  
(ORDER SLIDE SEPARATELY)  
3" STROKE: PM-AC1237  
6" STROKE: PM-AC1239  
8" STROKE: PM-AC1241

APPROXIMATELY  
13.75" (FOR 3" STROKE)  
16.75" (FOR 6" STROKE)  
18.75" (FOR 8" STROKE)



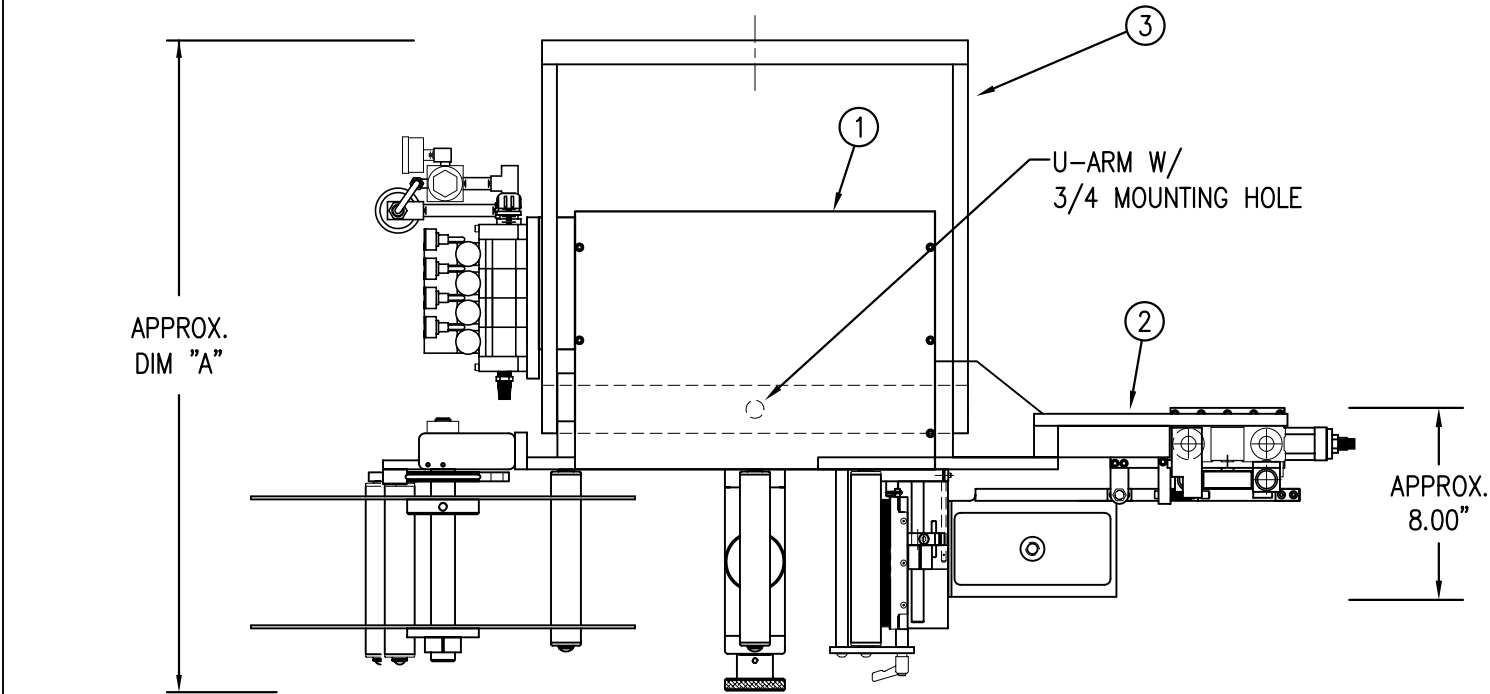


PART NO.	DIM "A"
CTM-214-0115R/L-X-16X	27.50
CTM-214-2115R/L-X-16X	30.00

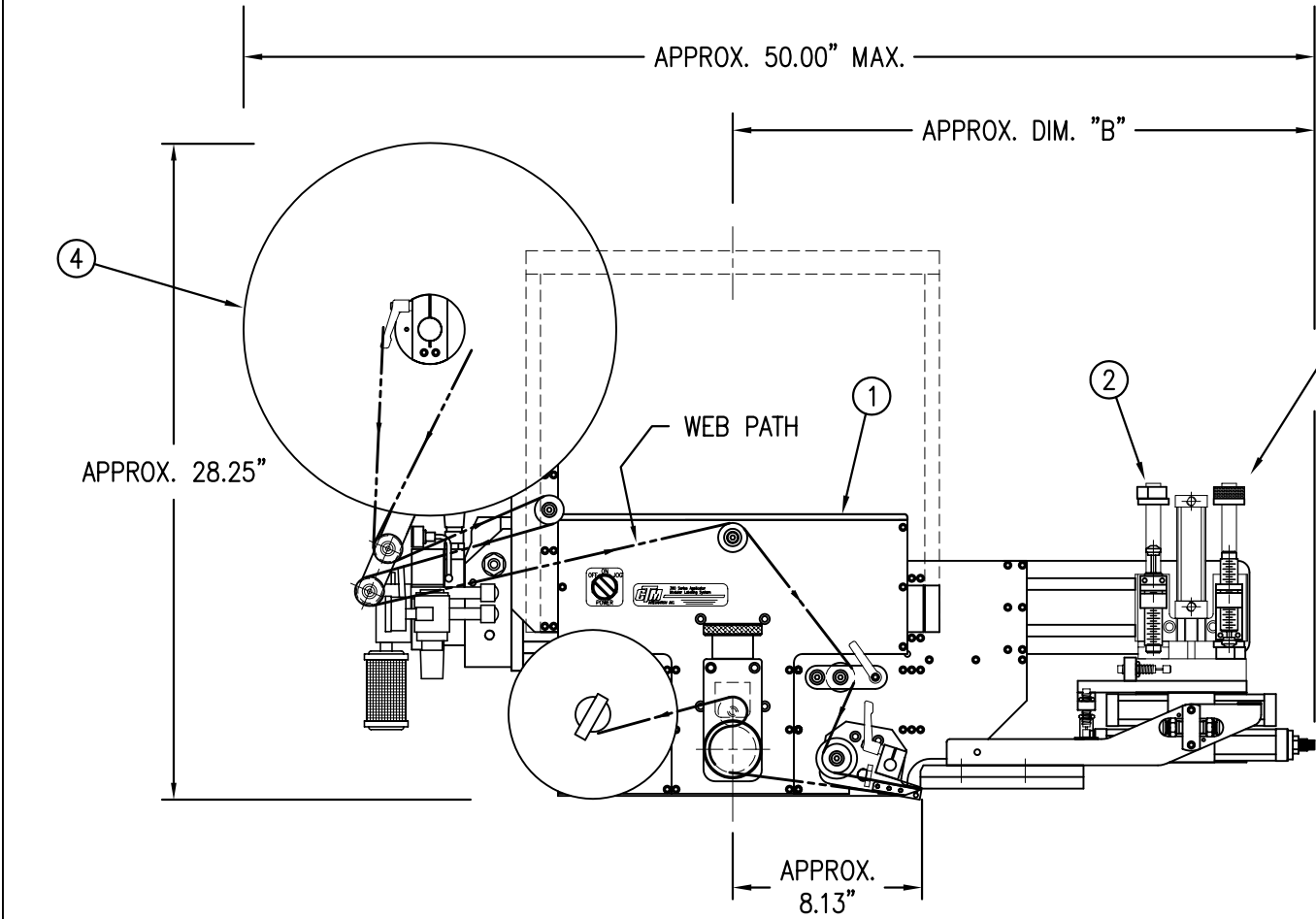
PART NO.	DIM "B"
CTM-214-X115R/L-0-16X	25.00
CTM-214-X115R/L-2-16X	27.00
CTM-214-X115R/L-4-16X	29.00

BILL OF MATERIAL				SOLD
CTM-214-X115RL-X-16X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5 WIDE; IN-LINE DAT ASS'Y	MOD-214-X115R/L-X	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
ORDER THESE ITEMS SEPARATELY:				
1.) TAMP SLIDE				
2.) LABEL PAD				
3.) LABEL MANIFOLD				
4.) PRODUCT DETECT SENSOR				

CTM-214-X115R/L-X-16X		Dept. Code
5" WIDE; STD SWG	-0115R/L-0-16S	70
STD REWIND	-0115R/L-0-16F	
5" WIDE; STD SWG	-0115R/L-0-16C	
FILM REWIND	-0115R/L-2-16S	
5" WIDE; 2 OS SWG	-0115R/L-2-16F	
STD REWIND	-0115R/L-2-16C	
5" WIDE; 2 OS SWG	-0115R/L-4-16S	
COLLAPSIBLE RWD	-0115R/L-4-16F	
5" WIDE; 4 OS SWG	-0115R/L-4-16C	
STD REWIND	-2115R/L-0-16S	
5" WIDE; STD SWG	-2115R/L-0-16F	
FILM REWIND	-2115R/L-0-16C	
7.5" WIDE; STD SWG	-2115R/L-2-16S	
COLLAPSIBLE RWD	-2115R/L-2-16F	
7.5" WIDE; 2 OS SWG	-2115R/L-2-16C	
STD REWIND	-2115R/L-4-16S	
7.5" WIDE; 2 OS SWG	-2115R/L-4-16F	
COLLAPSIBLE RWD	-2115R/L-4-16C	
7.5" WIDE; 4 OS SWG	-2115R/L-4-16F	
STD REWIND	-2115R/L-4-16C	

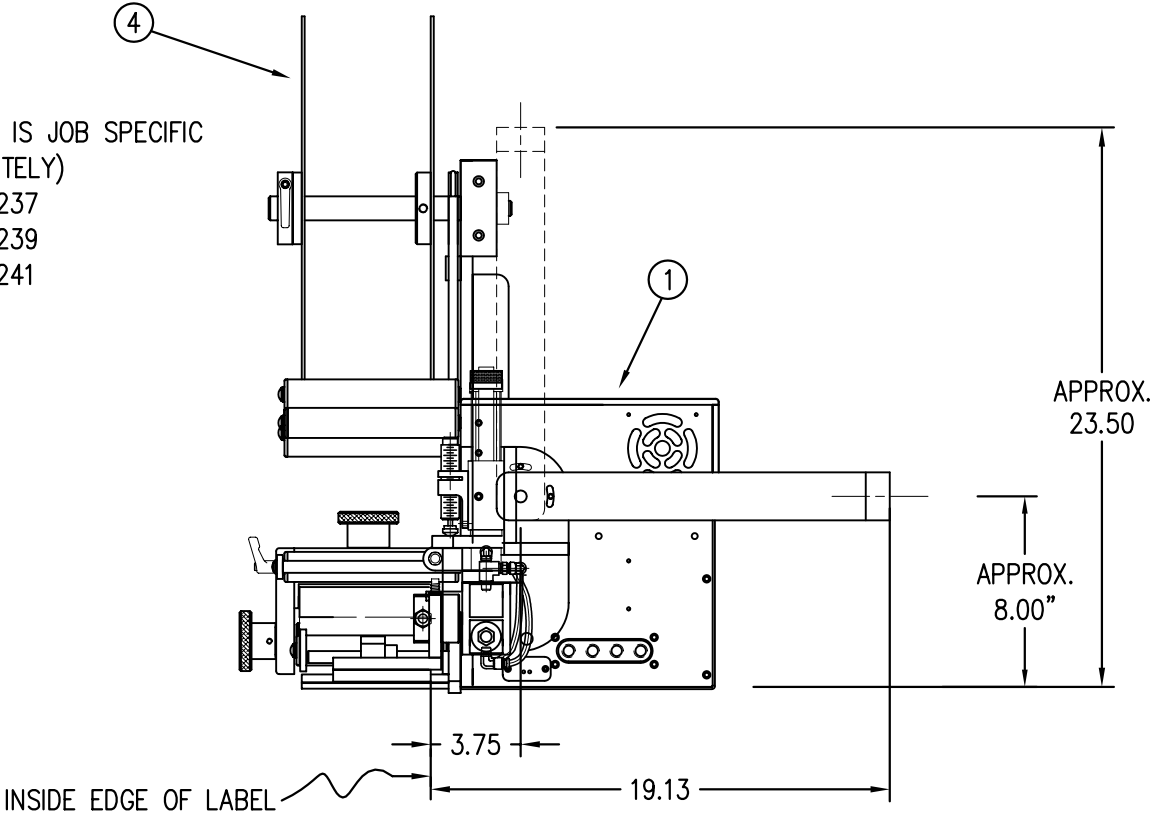


RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



SLIDE STROKE LENGTH IS JOB SPECIFIC  
(ORDER SLIDE SEPARATELY)  
3" STROKE: PM-AC1237  
6" STROKE: PM-AC1239  
8" STROKE: PM-AC1241

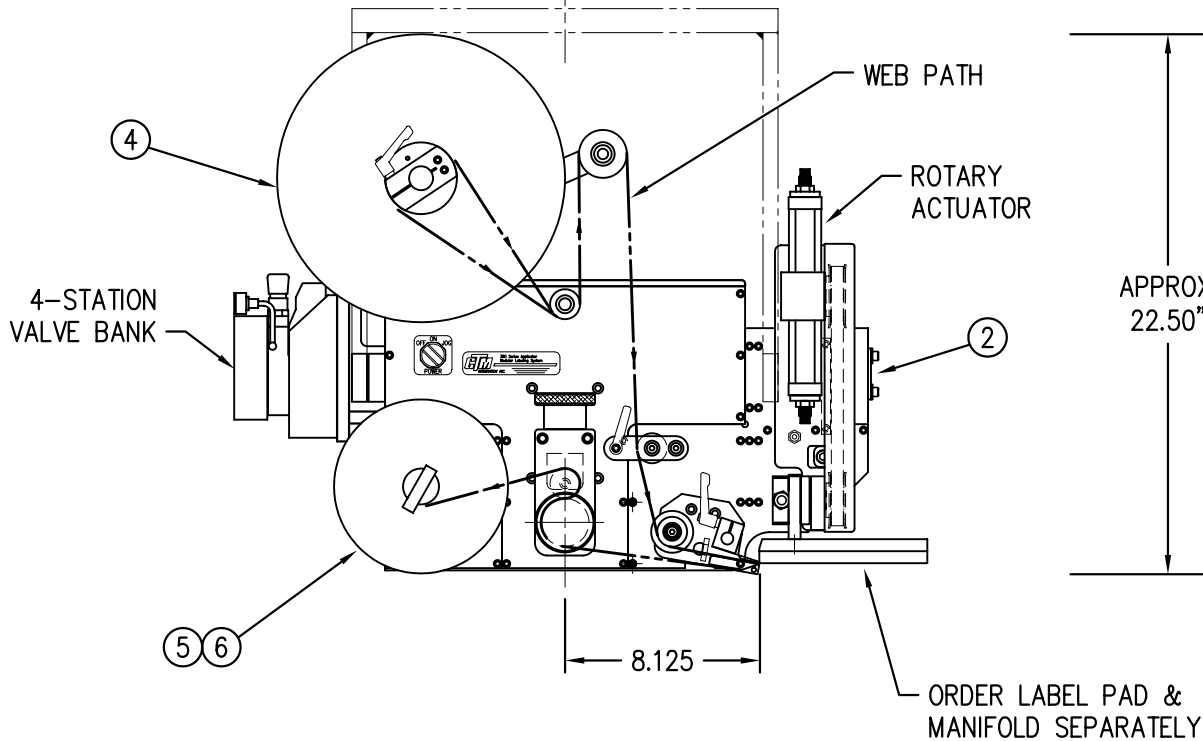
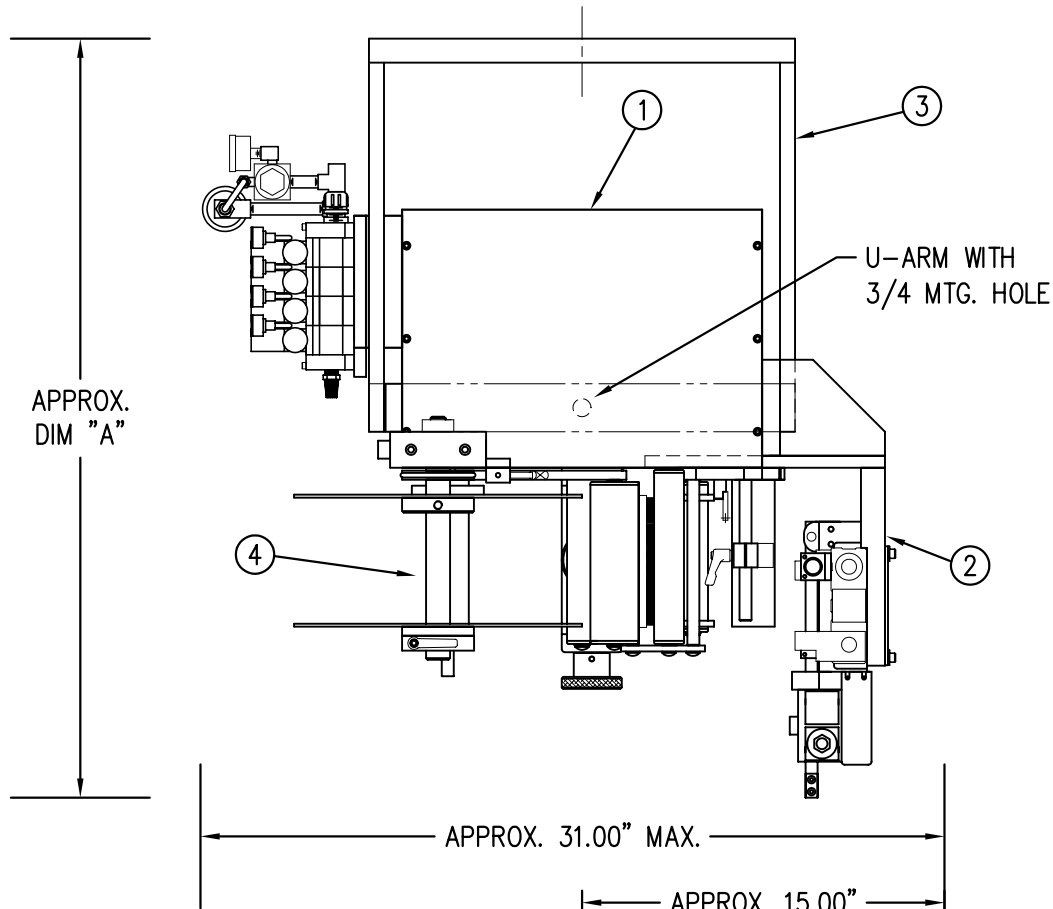
APPROXIMATELY  
13.75" (FOR 3" STROKE)  
16.75" (FOR 6" STROKE)  
18.75" (FOR 8" STROKE)



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 SERIES APPLICATOR: DUAL ACTION TAMP ASSEMBLY		PART: 5" / 7.5" WIDE IN-LINE DAT TAMP w/ 16" UNWIND ASSEMBLY	
REV. 1	REV. DATE 09/12/07	REV. BY: TDR	REV. DATE 11/04/99
1		360	
UPDATED BOM FOR NEW COLLAPSIBLE MANDREL		BOB S.	
		F:\Engineering\Standard Parts\Appliator\360	
		214-CTM-214-X115RL-X-16X	

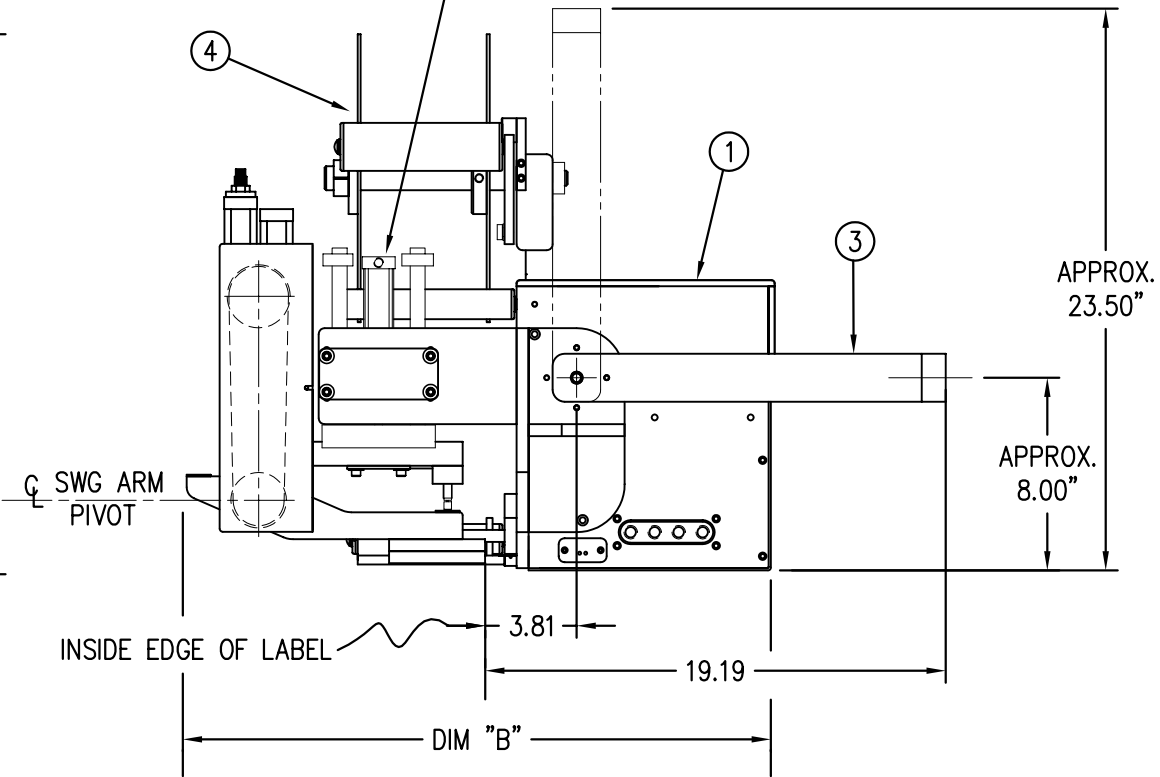
PART NO.	DIM "A"	DIM "B"
CTM-214-X116R/L-0-12X	31.75	24.50
CTM-214-X116R/L-2-12X	32.75	26.50
CTM-214-X116R/L-4-12X	34.75	28.50

RH & LH ASSEMBLIES AVAILABLE  
 -RH ASSEMBLY SHOWN-



BILL OF MATERIAL				SOLD
CTM-214-X116RL-X-12X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5 DAT MODULE (PERPENDICULAR TO FLOW)	MOD-214-X116R/L-X	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S ← STD & FILM RWD
		COLLAPSIBLE REWIND BLOCK & SHAFT	ASS-200-3167R/L	S ← COLLAPSE REWIND
		STANDARD MANDREL (SHOWN)	ASS-200-X147	S ← STANDARD RWD
		FILM REWIND MANDREL	ASS-200-X137	S ← FILM REWIND
⑥	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S ← COLLAPSE REWIND
		DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY: 1.) TAMP SLIDE 2.) LABEL PAD 3.) LABEL MANIFOLD				

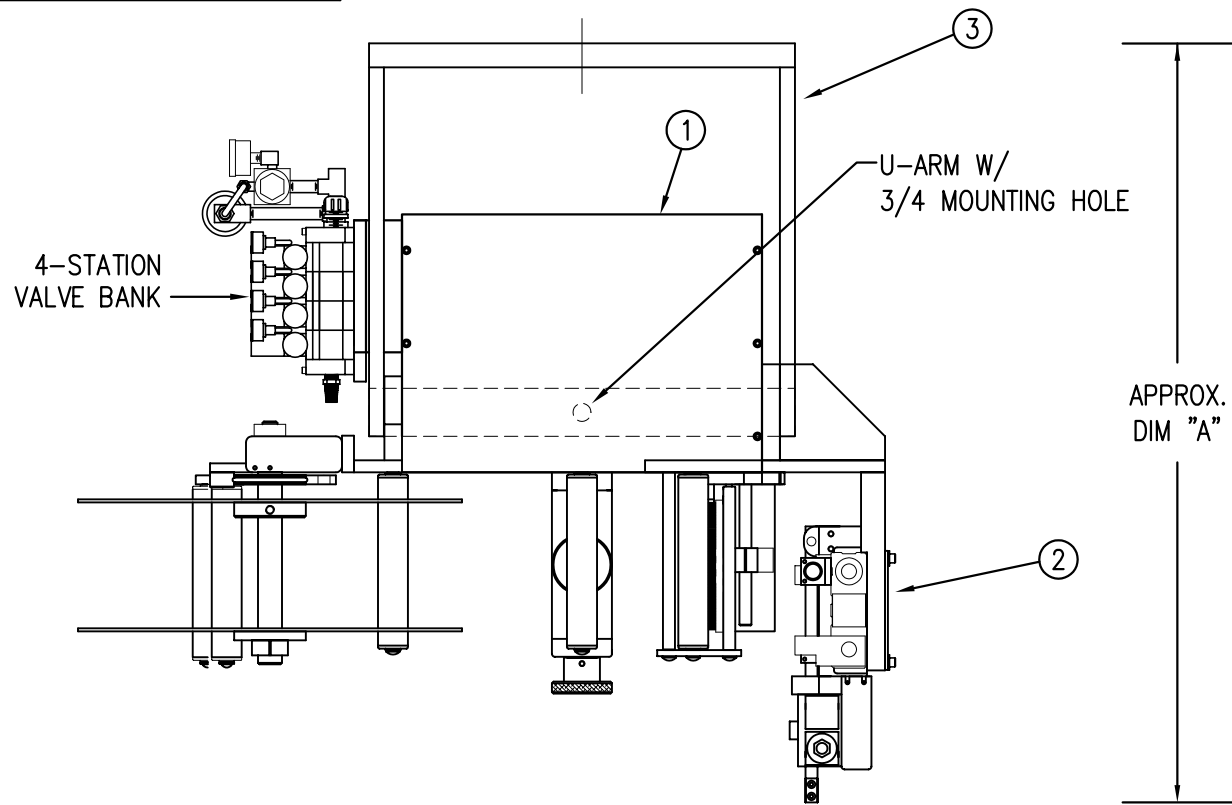
SLIDE STROKE LENGTH IS JOB SPECIFIC  
 (ORDER SLIDE SEPARATELY)  
 3" STROKE: PM-AC1237  
 6" STROKE: PM-AC1239  
 8" STROKE: PM-AC1241



CTM-214-X116R/L-X-12X	
5" WIDE; STD SWG STD REWIND	-0116R/L-0-12S
5" WIDE; STD SWG FILM REWIND	-0116R/L-0-12F
5" WIDE; STD SWG COLLAPSIBLE RWD	-0116R/L-0-12C
5" WIDE; 2 OS SWG STD REWIND	-0116R/L-2-12S
5" WIDE; 2 OS SWG FILM REWIND	-0116R/L-2-12F
5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-0116R/L-2-12C
5" WIDE; 4 OS SWG STD REWIND	-0116R/L-4-12S
5" WIDE; 4 OS SWG FILM REWIND	-0116R/L-4-12F
5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-0116R/L-4-12C
7.5" WIDE; STD SWG STD REWIND	-2116R/L-0-12S
7.5" WIDE; STD SWG FILM REWIND	-2116R/L-0-12F
7.5" WIDE; STD SWG COLLAPSIBLE RWD	-2116R/L-0-12C
7.5" WIDE; 2 OS SWG STD REWIND	-2116R/L-2-12S
7.5" WIDE; 2 OS SWG FILM REWIND	-2116R/L-2-12F
7.5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-2116R/L-2-12C
7.5" WIDE; 4 OS SWG STD REWIND	-2116R/L-4-12S
7.5" WIDE; 4 OS SWG FILM REWIND	-2116R/L-4-12F
7.5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-2116R/L-4-12C

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 SERIES APPLICATOR: DUAL ACTION TAMP ASSEMBLY		REV. DATE	REV. BY:
REV. DESCRIPTION		10/16/07	TDR
1 ADDED COLLAPSIBLE MANDREL OPTION			
PART: 5" / 7.5" / 10" WIDE: DAT (PERPENDICULAR TO FLOW) w/ 1/2" UNWIND ASSEMBLY		Scale:	1=8
Date:		11/04/99	
DRAWN BY:		BOB S.	
Dept. Code		70	
F:\Engineering\Standard Parts\Applcator\360			
214\CTM-214-X116RL-X-12X			

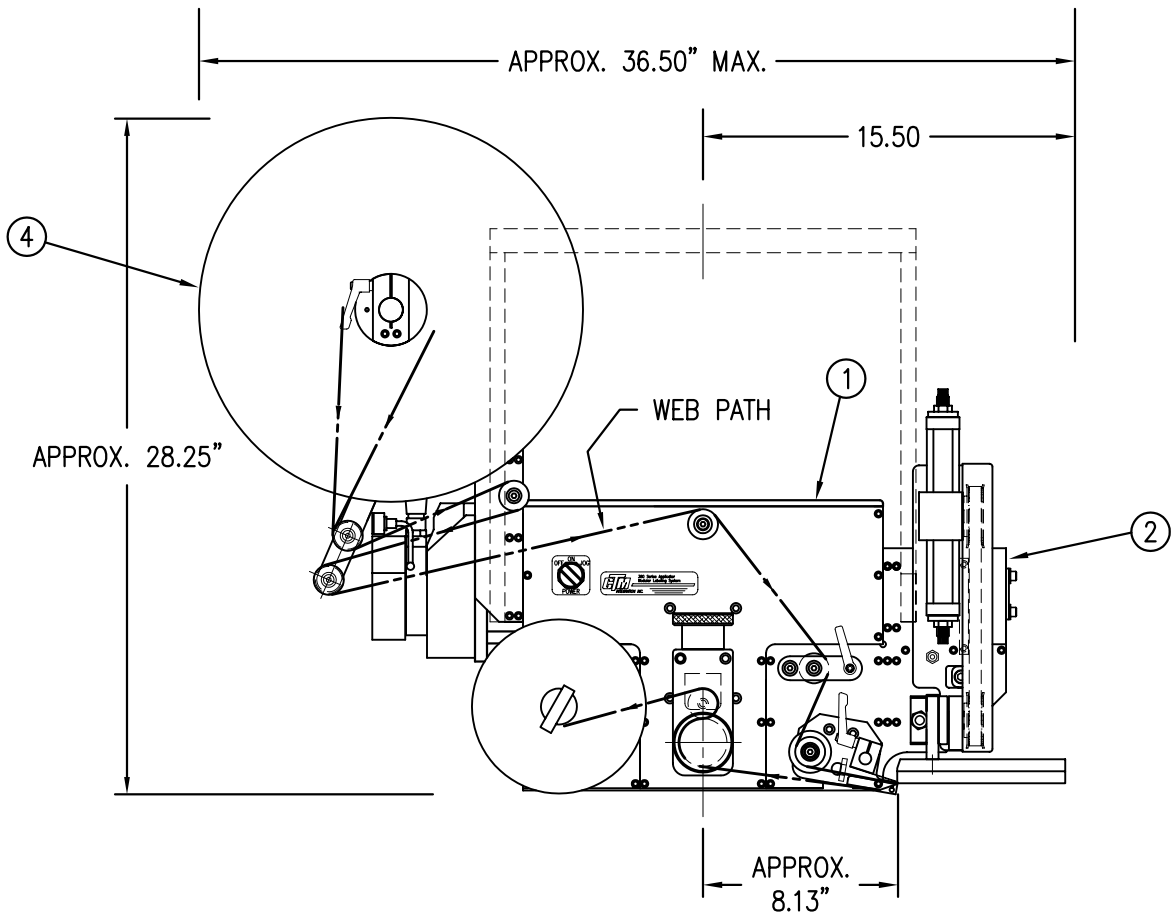
PART NO.	DIM "A"	DIM "B"
CTM-214-X116R/L-0-16X	31.75	24.50
CTM-214-X116R/L-2-16X	33.75	26.50
CTM-214-X116R/L-4-16X	35.75	28.50



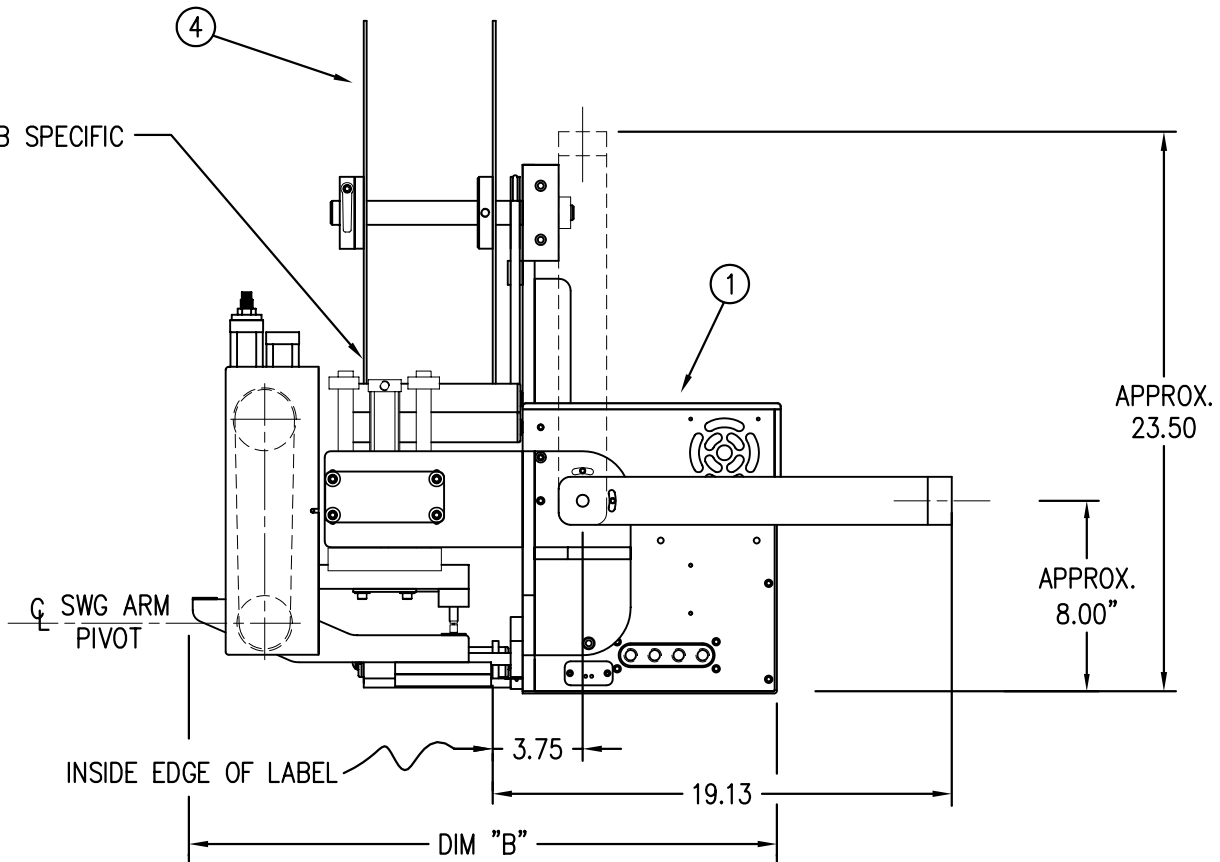
BILL OF MATERIAL				SOLD
CTM-214-X116RL-X-16X				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.
②	1	5/7.5 WIDE; IN-LINE DAT ASS'Y	MOD-214-X116R/L-X	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S
ORDER THESE ITEMS SEPARATELY				
1.) TAMP SLIDE				
2.) LABEL PAD				
3.) LABEL MANIFOLD				
4.) PRODUCT DETECT SENSOR				

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

CTM-214-X116R/L-X-16X		Dept. Code
5" WIDE; STD SWG	-0116R/L-0-16S	70
STD REWIND		
5" WIDE; STD SWG	-0116R/L-0-16F	
FILM REWIND		
5" WIDE; STD SWG	-0116R/L-0-16C	
COLLAPSIBLE RWD		
5" WIDE; 2 OS SWG	-0116R/L-2-16S	
STD REWIND		
5" WIDE; 2 OS SWG	-0116R/L-2-16F	
FILM REWIND		
5" WIDE; 2 OS SWG	-0116R/L-2-16C	
COLLAPSIBLE RWD		
5" WIDE; 4 OS SWG	-0116R/L-4-16S	
STD REWIND		
5" WIDE; 4 OS SWG	-0116R/L-4-16F	
FILM REWIND		
5" WIDE; 4 OS SWG	-0116R/L-4-16C	
COLLAPSIBLE RWD		
7.5" WIDE; STD SWG	-2116R/L-0-16S	
STD REWIND		
7.5" WIDE; STD SWG	-2116R/L-0-16F	
FILM REWIND		
7.5" WIDE; STD SWG	-2116R/L-0-16C	
COLLAPSIBLE RWD		
7.5" WIDE; 2 OS SWG	-2116R/L-2-16S	
STD REWIND		
7.5" WIDE; 2 OS SWG	-2116R/L-2-16F	
FILM REWIND		
7.5" WIDE; 2 OS SWG	-2116R/L-2-16C	
COLLAPSIBLE RWD		
7.5" WIDE; 4 OS SWG	-2116R/L-4-16S	
STD REWIND		
7.5" WIDE; 4 OS SWG	-2116R/L-4-16F	
FILM REWIND		
7.5" WIDE; 4 OS SWG	-2116R/L-4-16C	
COLLAPSIBLE RWD		

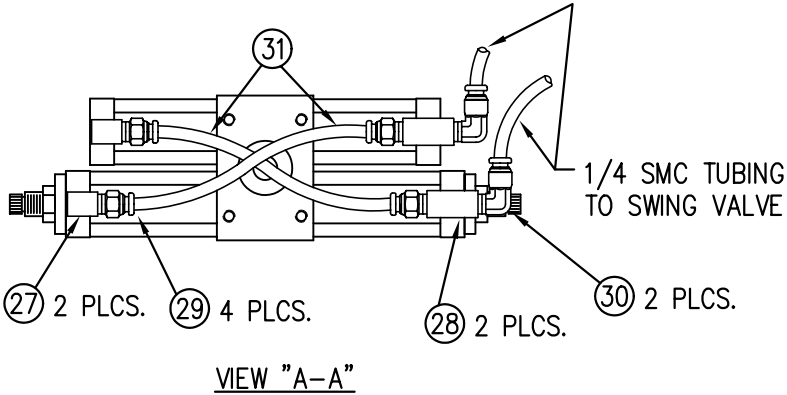


SLIDE STROKE LENGTH IS JOB SPECIFIC  
(ORDER SLIDE SEPARATELY)  
3" STROKE: PM-AC1237  
6" STROKE: PM-AC1239  
8" STROKE: PM-AC1241

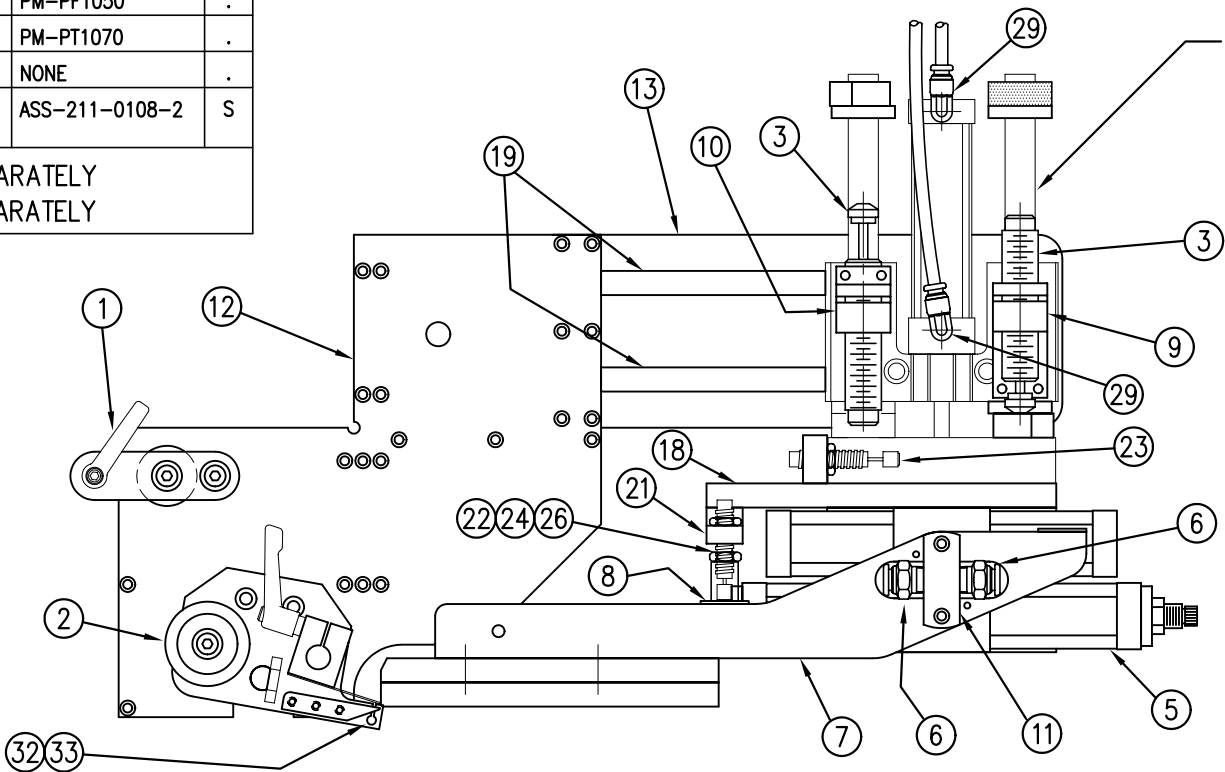


BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-X115R/L-X		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5 TENSION BRUSH ASSEMBLY	ASS-200-X126R/L	S
②	1	5/7.5 TAMP PEEL EDGE ASSEMBLY	ASS-214-X102R/L	S
③	2	SC-300 SHOCK ABSORBER	PM-SA0950	.
④	1	ROTARY ACTUATOR HUB	MP-214-0211	.
⑤	1	ROTARY ACTUATOR	PM-AC1248	.
⑥	2	3/8" TUBE TO 1/4" NPT CONNECTOR	PM-PF1020	.
⑦	1	SWING ARM (STD, 2" O.S., 4" O.S.)	MP-238-0312R/L-X	.
⑧	2	STRIKE PLATE	MP-214-0210	.
⑨	1	SHOCK MOUNT	MP-238-0314	.
⑩	1	SHOCK MOUNT	MP-238-0315	.
⑪	1	AIR MANIFOLD	MP-238-0313	.
⑫	1	DAT TRANSITION PLATE	MP-214-0230	.
⑬	1	DAT SLIDE MOUNT (STD, 2 OS, 4 OS)	MP-214-0231-X	.
⑭	1	DAT MOUNTING EAR	MP-214-0232	.
⑮	1	DAT MOUNT GUSSET	MP-214-0233	.
⑯	1	DAT MOUNT OFFSET BLOCK	MP-214-0234	.
⑰	1	ROTARY ACTUATOR MOUNTING PLATE	MP-214-0235	.
⑱	1	SLIDE TO ROTARY TRANSITION PLATE	MP-214-0236	.
⑲	2	DAT MOUNT STIFFENER (STD, 2 OS, 4 OS)	MP-214-0237-X	.
⑳	1	ROTARY EXTENDED SHOCK MOUNT	MP-214-0238	.
㉑	1	ROTARY RETRACTED SHOCK MOUNT	MP-214-0239	.
㉒	1	MC-25L SHOCK ABSORBER	PM-SA0990	.
㉓	1	MC-25H SHOCK ABSORBER	PM-SA1000	.
㉔	1	STOP COLLAR	PM-C01040	.
㉕	1	MOUNTING EAR NUT	MP-214-0240	.
㉖	1	LOCK NUT (FOR LIGHT DUTY SHOCK)	MP-214-0242	.
㉗	2	1/8 NPT STREET ELBOW	PM-PF1180	.
㉘	2	1/8 NPT BRANCH TEE	PM-PF1203	.
㉙	4	FTG, 1/4 TUBE x 1/8 NPT STRAIGHT	PM-PF1005	.
㉚	4	FTG, 1/4 TUBE x 1/8 NPT 90 ELBOW	PM-PF1050	.
㉛	2	1/4" OD SMC TUBING x 7" LG.	PM-PT1070	.
	4	SHCS, 1/4-20 x 7/8" LG.	NONE	.
	1	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S
ORDER PAD & MANIFOLD SEPARATELY ORDER PNEUMATIC SLIDE SEPARATELY				

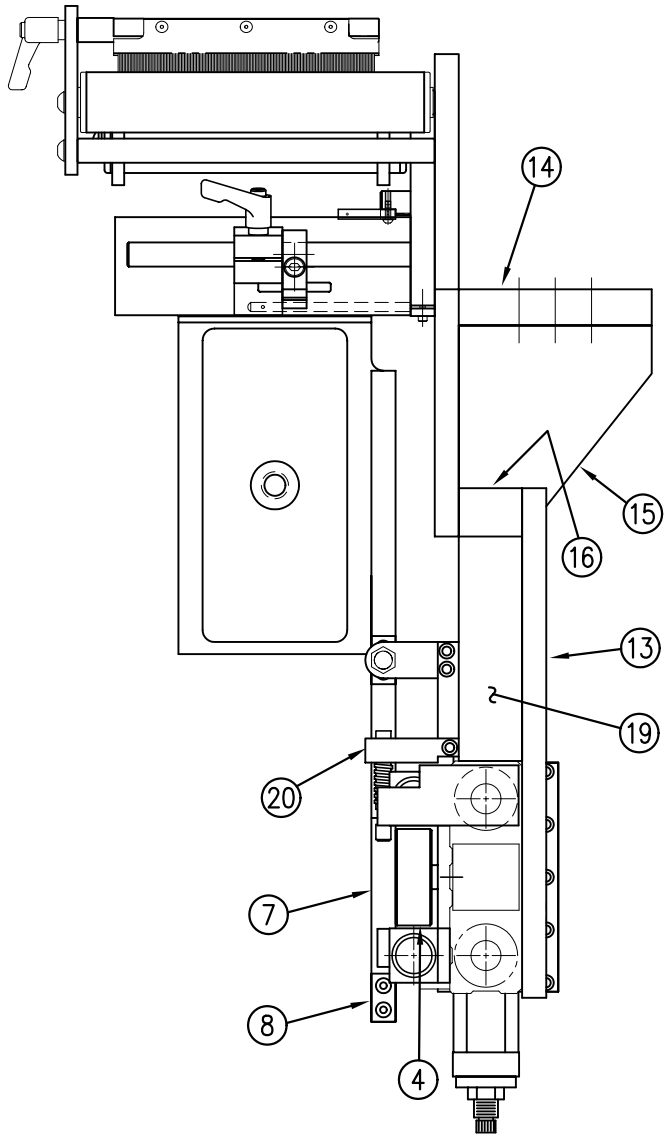
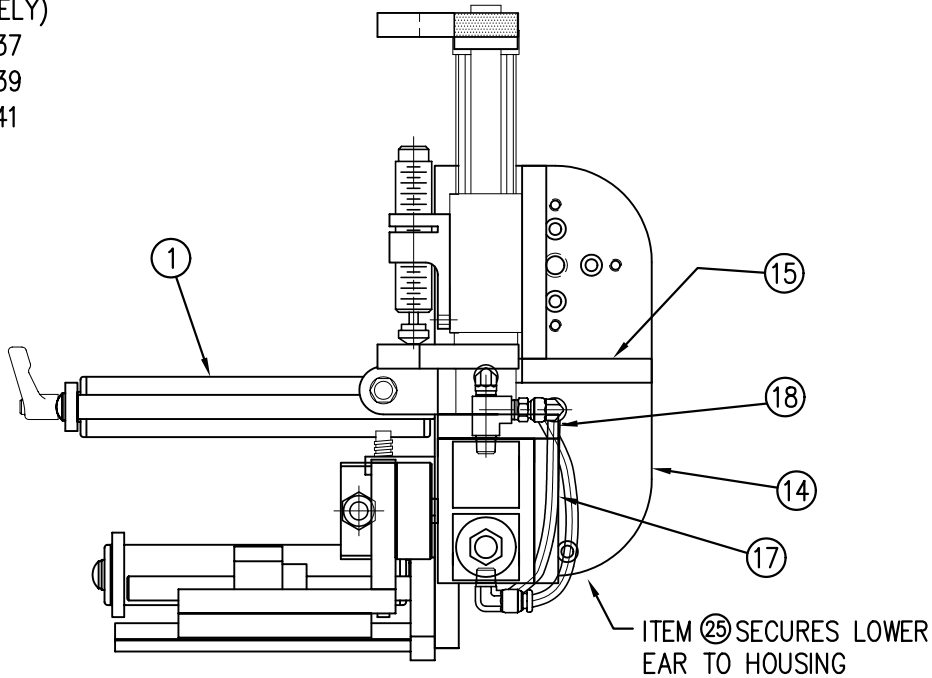
BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-214-X115R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	360 DAT ASSEMBLY (REELS UP)	ASS-214-X115R/L-X	S
㉜	1	AIR ASSIST TUBE	MP-211-2217-7	.
㉝	1	AIR ASSIST TUBING x 15" LG.	PM-AH1000	.
㉞	1	4-STATION VALVE BANK	ASS-238-0142M	S
㉟	1	VALVE MOUNTING PLATE	MP-214-0206	.
㊱	1	VALVE FASTENING PLATE	MP-214-0202	.
	1	1/4" OD SMC TUBING x 169" LG. (CUT TO SUIT)	PM-PT1070	.
	1	3/8" OD SMC TUBING x 68" LG. (CUT TO SUIT)	PM-PT1080	S
	4	FTG, 1/4 TUBE x 1/8 NPT 90° MALE EL SW	PM-PF1030	.
	1	FTG, 3/8 TUBE x 1/4 NPT 90° MALE EL SW	PM-PF1045	.
	4	FTG, 1/4 TUBE x 1/8 NPT STRAIGHT	PM-PF1005	.
	1	FTG, 3/8 TUBE x 1/4 NPT 90° MALE EL	PM-PF1060	.
ORDER PAD & MANIFOLD SEPARATELY ORDER PNEUMATIC SLIDE SEPARATELY				



VIEW "A-A"

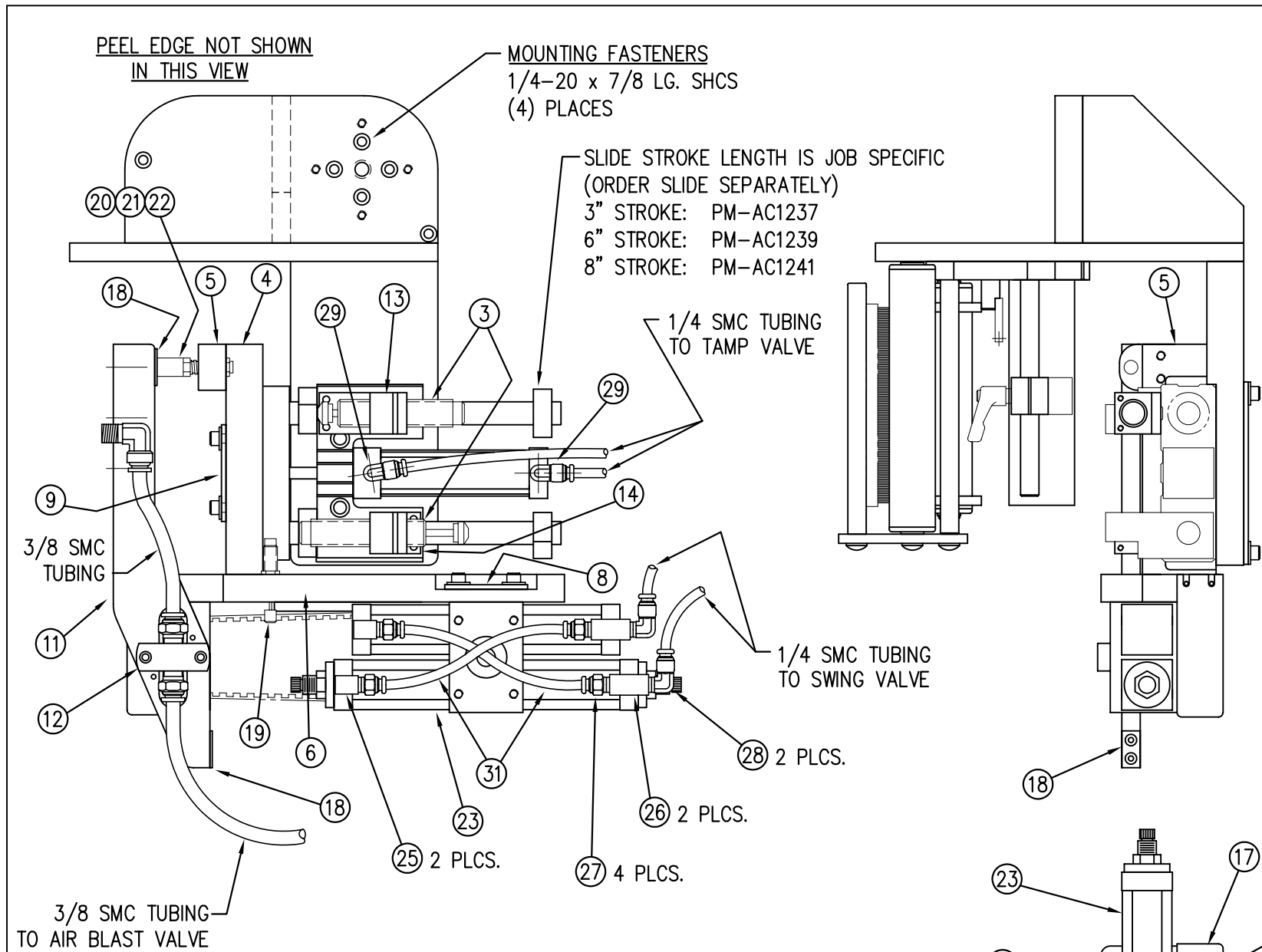


SLIDE STROKE LENGTH IS JOB SPECIFIC  
(ORDER SLIDE SEPARATELY)  
3" STROKE: PM-AC1237  
6" STROKE: PM-AC1239  
8" STROKE: PM-AC1241



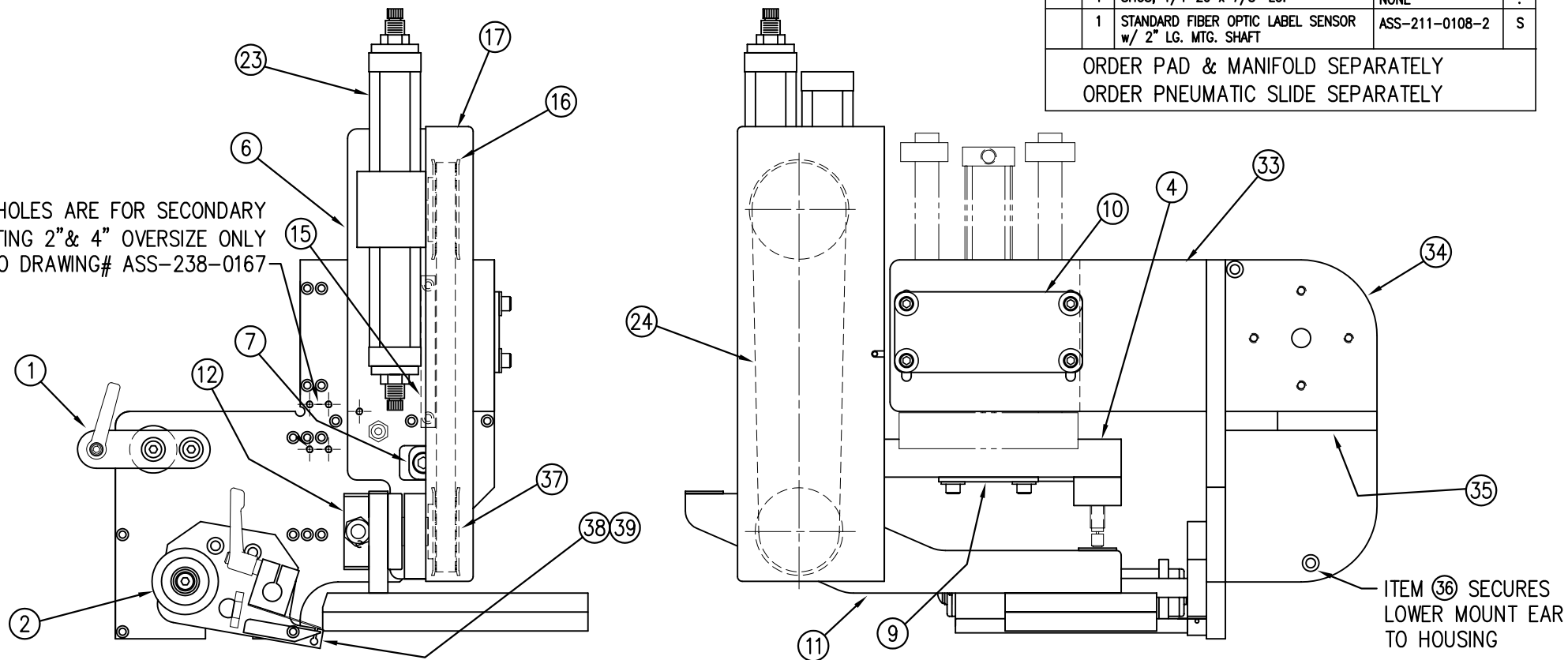
MOD-214-X115R/L-X	
ASS-214-X115R/L-X	
5" WIDE	-0115R/L-X
7.5" WIDE	-2115R/L-X
STANDARD	-0
2" OVERSIZE	-2
4" OVERSIZE	-4

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 SERIES APPLICATOR: DAT (REELS UP CONFIG.)		PART: 5/7.5 WIDE; DAT NOSE ASSEMBLY	
REV. 2	REV. DESCRIPTION FIXED VALVE BANK BOM ENTRIES	REV. DATE 09/12/07	REV. BY TDR
F:\Engineering\Standard Parts\Applcator\360		DATE 03/27/03	SCALE 1=4
214\MOD-214-X115RL-X		DRAWN BY DKM	DEPT. CODE 70



BILL OF MATERIAL				SOLD
ASSEMBLY	MOD-214-X116R/L-X			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	360 DAT ASSEMBLY	ASS-214-X116R/L-X	S
38	1	AIR ASSIST TUBE	MP-211-2217-7	.
39	1	AIR ASSIST TUBING x 15" LG.	PM-AH1000	.
	1	4-STATION VALVE BANK	ASS-238-0142M	S
	1	VALVE MOUNTING PLATE	MP-214-0206E	.
	1	VALVE FASTENING PLATE	MP-238-0238	.
	1	VALVE NUT PLATE	MP-238-0239	.
	1	1/4" OD SMC TUBING x 169" LG. (CUT TO SUIT)	PM-PT1070	.
	1	3/8" OD SMC TUBING x 68" LG. (CUT TO SUIT)	ASS-214-0107	S
	4	FTG, 1/4 TUBE x 1/8 NPT 90° MALE EL SW	PM-PF1030	.
	1	FTG, 3/8 TUBE x 1/4 NPT 90° MALE EL SW	PM-PF1045	.
	4	FTG, 1/4 TUBE x 1/8 NPT STRAIGHT	PM-PF1005	.
	1	FTG, 3/8 TUBE x 1/4 NPT 90° MALE EL	PM-PF1060	.
ORDER PAD & MANIFOLD SEPARATELY ORDER PNEUMATIC SLIDE SEPARATELY				

NOTE: #10-32 HOLES ARE FOR SECONDARY SHOCK MOUNTING 2" & 4" OVERSIZE ONLY REFER TO DRAWING# ASS-238-0167



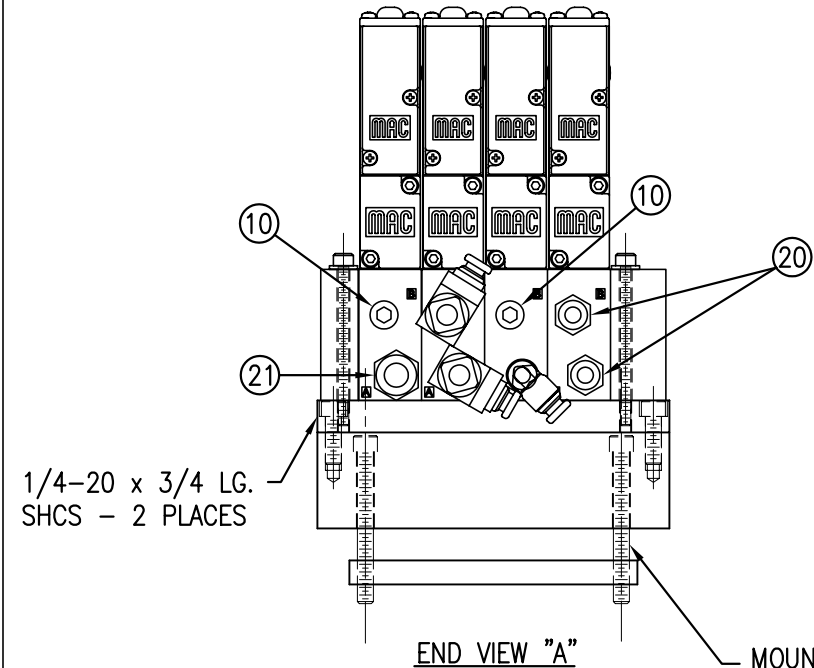
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-214-X116R/L-X			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
1	1	5/7.5 TENSION BRUSH ASSEMBLY	ASS-200-X126R/L	S
2	1	5/7.5 TAMP PEEL EDGE ASSEMBLY	ASS-214-X102R/L	S
3	2	SC-300 SHOCK ABSORBER	PM-SA0950	.
4	1	SLIDE TRANSITION PLATE	MP-238-0302R/L	.
5	1	SWING HOME SHOCK MOUNT	MP-238-0303	.
6	1	ROTARY ACTUATOR MOUNT PLATE	MP-238-0304R/L	.
7	1	ROTARY MOUNT NUT PLATE	PM-238-0305	.
8	1	ROTARY ACTUATOR NUT PLATE	PM-238-0306	.
9	1	SLIDE NOSE NUT PLATE	PM-238-0307	.
10	1	SLIDE BODY NUT PLATE	PM-238-0308	.
11	1	STD/2" OS/4" OS SWING ARM	MP-238-0312R/L-X	.
12	1	SWING ARM AIR MANIFOLD	MP-238-0313	.
13	1	SLIDE HOME SHOCK MOUNT	MP-238-0314	.
14	1	SLIDE EXTEND SHOCK MOUNT	MP-238-0315	.
15	1	GUARD SUPPORT	MP-238-0316	.
16	1	ROTARY ACTUATOR PULLEY	MP-238-0318	.
17	1	SWING ASSEMBLY DRIVE GUARD	PM-238-0319R/L	.
18	2	SHOCK STRIKE PLATES	MP-214-0210	.
19	1	MC25H SWING EXTEND SHOCK	PM-SA1000	S
20	1	MC25L SWING HOME SHOCK	PM-SA0990	S

CONTINUED

RH & LH ASSEMBLIES AVAILABLE -RH ASSEMBLY SHOWN-		MOD-214-X116R/L-X
		ASS-214-X116R/L-X
5" WIDE	-0116R/L-X	
7.5" WIDE	-2116R/L-X	
STANDARD	-0	
2" OVERSIZE	-2	
4" OVERSIZE	-4	

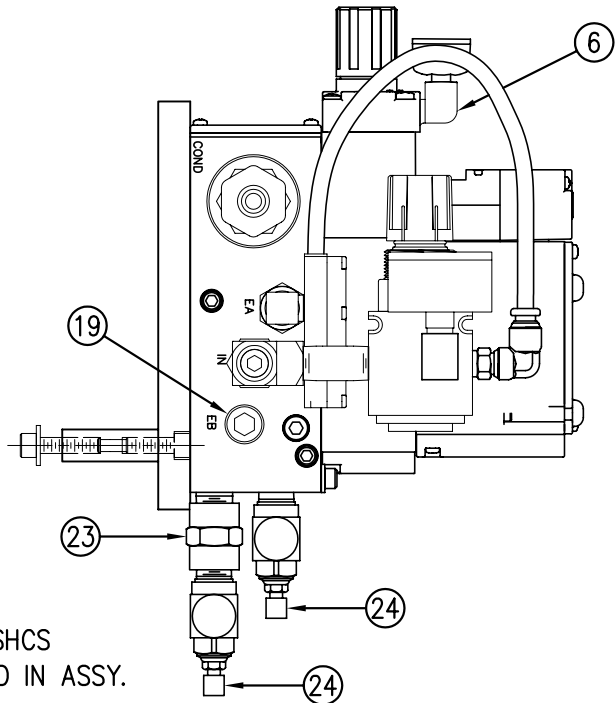
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-214-X116R/L-X (CONTINUED)			.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
21	1	SHOCK STOP COLLAR	PM-C01040	.
22	1	LOCK NUT FOR MC25L SHOCK	MP-214-0242	.
23	1	ROTARY ACTUATOR	PM-AC1248	S
24	1	SWING ARM TIMING BELT	PM-BELT1039	S
25	2	1/8 NPT STREET ELBOW	PM-PF1180	.
26	2	1/8 NPT BRANCH TEE	PM-PF1203	.
27	4	FTG, 1/4 TUBE x 1/8 NPT STRAIGHT	PM-PF1005	.
28	4	FTG, 1/4 TUBE x 1/8 NPT 90° ELBOW	PM-PF1050	.
29	.	.	.	.
30	2	3/8 TUBE x 1/4 NPT MALE CONNECTOR	PM-PF1020	.
31	2	1/4" OD SMC TUBING x 7" LONG	PM-PT1070	.
32	1	DAT TRANSITION PLATE	MP-214-0230	.
33	1	STD/2" OS/4" OS DAT SLIDE MOUNT PLATE	MP-214-0241-X	.
34	1	DAT MOUNTING EAR	MP-214-0232	.
35	1	DAT MOUNT GUSSET	MP-214-0233	.
36	1	MOUNTING EAR NUT	MP-214-0240	.
37	1	SWING ARM PIVOT ASSEMBLY	ASS-238-0141	.
4	.	SHCS, 1/4-20 x 7/8" LG.	NONE	.
1	.	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S
ORDER PAD & MANIFOLD SEPARATELY ORDER PNEUMATIC SLIDE SEPARATELY				

BILL OF MATERIAL			
ASS-238-0142M			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	PM-VA2361M	4 STATION MAC VALVE BANK
②	1	PE-200-0405	VALVE CABLE
③	1	PE-CO2000	CORD GRIP
④	1	PM-REG1500	REGULATOR
⑤	1	PM-VA2384	0-160 PSI PRESSURE GUAGE
⑥	5	PM-PF1180	NPT 90° STREET ELBOW 1/8" FEMALE TO 1/8" MALE
⑦	1	PM-PUMP1010	VACUUM PUMP, 55 PSI FEED PRESSURE, MUFFLED EXHAUST
⑧	2	PM-MU1027	3/8" NPT MALE BRONZE EXHAUST MUFFLER
⑨	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑩	3	PM-FT1200	1/4" NPT SOCKET HEAD PLUG
⑪	1	PM-PF1200	TEE 1/4" NPT FEMALE 3 ENDS
⑫	1	PM-PF1143	NIPPLE, 1/4" NPT X 1 1/2" LG.
⑬	1	PM-PF1055	FTG, 1/4 TUBE to 1/4 NPT 90° ELBOW
⑭	1	PM-PF1220	ADAPTOR, 3/8" NPT FEMALE TO 1/4" NPT MALE
⑮	1	PM-PF1157	REDUCER, 3/8" NPT TO 1/8" NPT
⑯	1	PM-PF1159	FITTING, 3/8" NPT MALE BOTH ENDS
⑰	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑱	1	PE-COND1084	STEEL REDUCER
⑲	1	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
⑳	2	PM-PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
㉑	1	PM-PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
㉒	10.5"	PM-PT1070	1/4" OD TUBING
㉓	1	PM-PF1085	FTG, 1/4 NPT COUPLING
㉔	2	PM-PF2070	FLOW CONTROL, 1/4 TUBE x 1/4 NPT
㉕	1	PM-PF1035	FTG, 1/4 TUBE to 1/4 NPT 90° SWVL.
㉖	1	PM-PF1120	1/8 NPT CLOSE NIPPLE (3/4" Lg.)
㉗	1	PM-PF1170	FTG, 1/8 NPT to 1/8 NPT 90° FEMALE ELB.
○	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
○	4	PM-FAW30265	#10 SS FLAT WASHER



END VIEW "A"

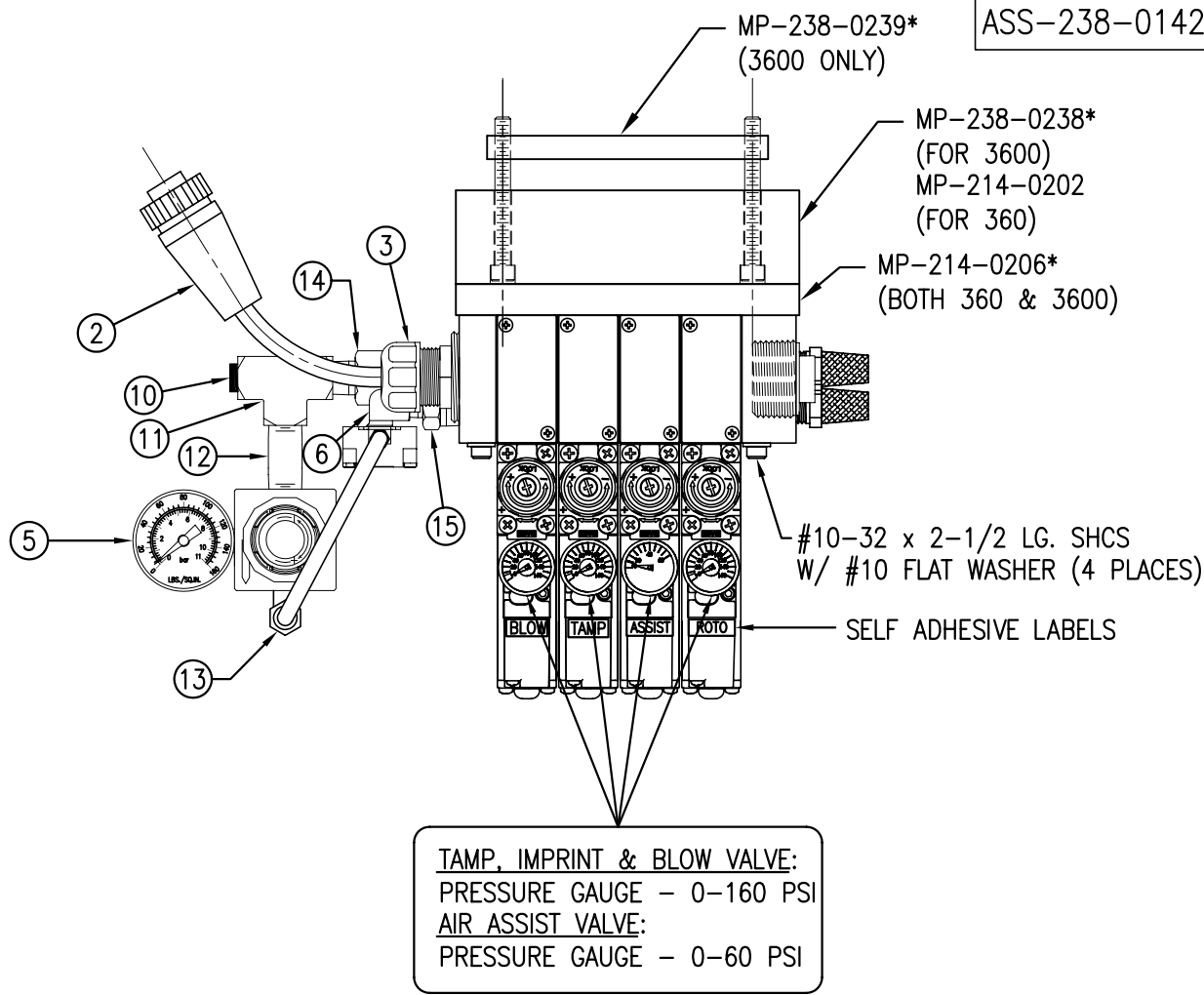
MOUNTING FASTENERS  
1/4-20 x 2-1/4 LG. SHCS  
(2 PLCS) NOT INCLUDED IN ASSY.



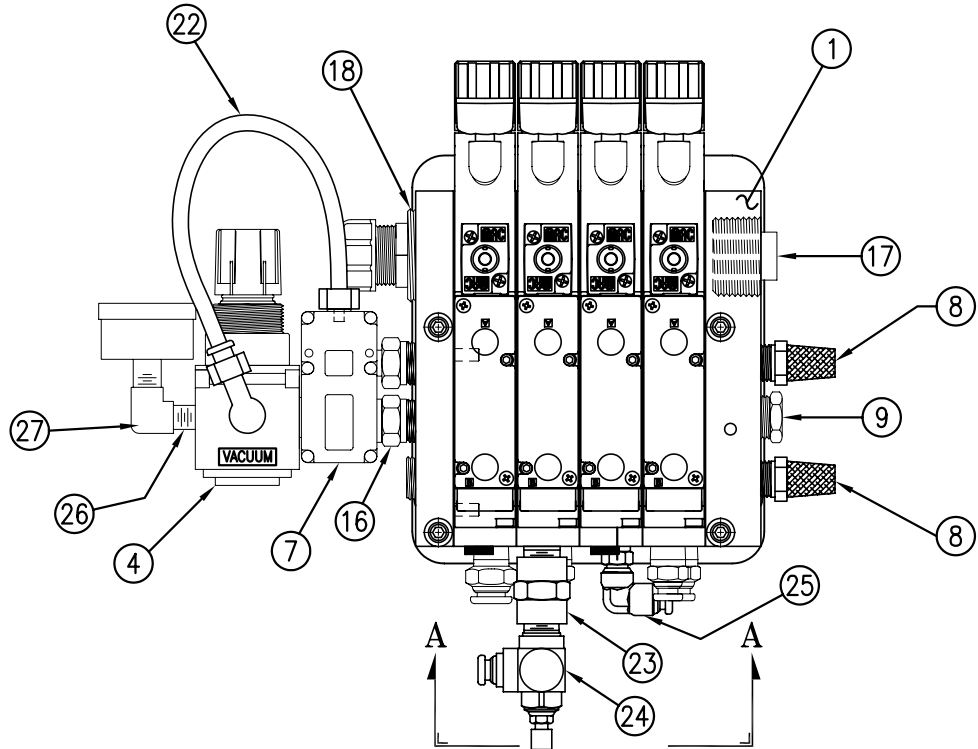
\* MOUNTING PLATES NOT INCLUDED IN ASSEMBLY

VALVE BANK SPARE PARTS:

SOLENOID: #PM-VA2395M  
AIR ASSIST REGULATOR W/GUAGE: #PM-VA2396M  
BLOW/TAMP/IMPRINTER REGULATORS W/GUAGE: #PM-VA2397M  
AIR ASSIST REGULATOR GUAGE: #PM-VA2382M  
BLOW/TAMP/IMPRINTER REGULATOR GUAUES: #PM-VA2380M



TAMP, IMPRINT & BLOW VALVE:  
PRESSURE GAUGE - 0-160 PSI  
AIR ASSIST VALVE:  
PRESSURE GAUGE - 0-60 PSI



FLOW CONTROL (N.S.)  
NOT SHOWN FOR CLARITY

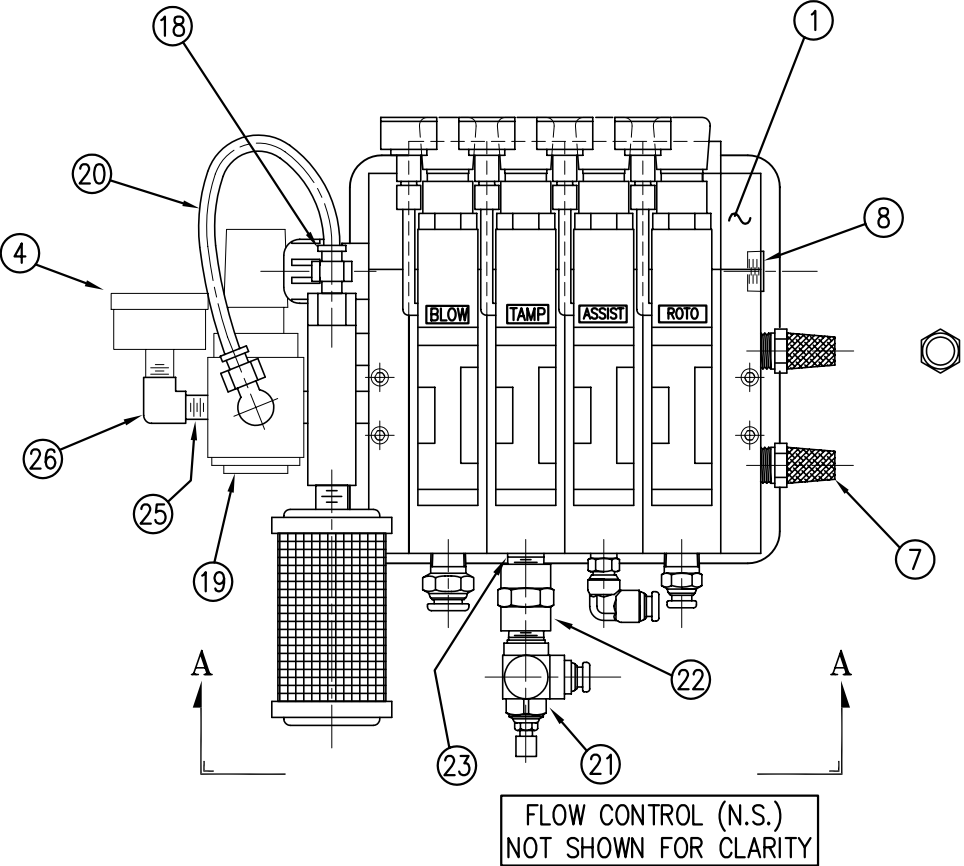
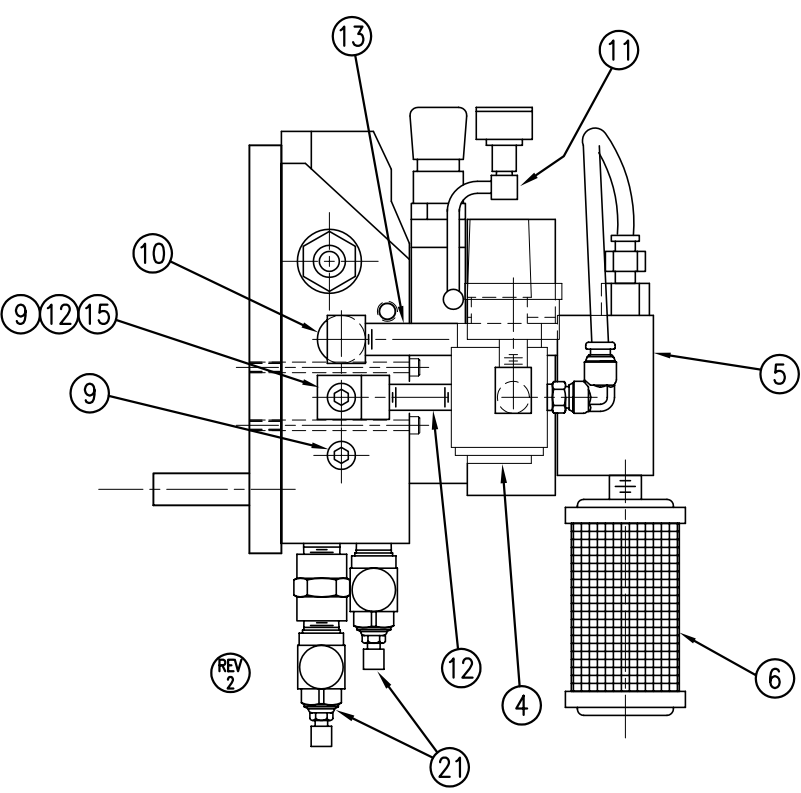
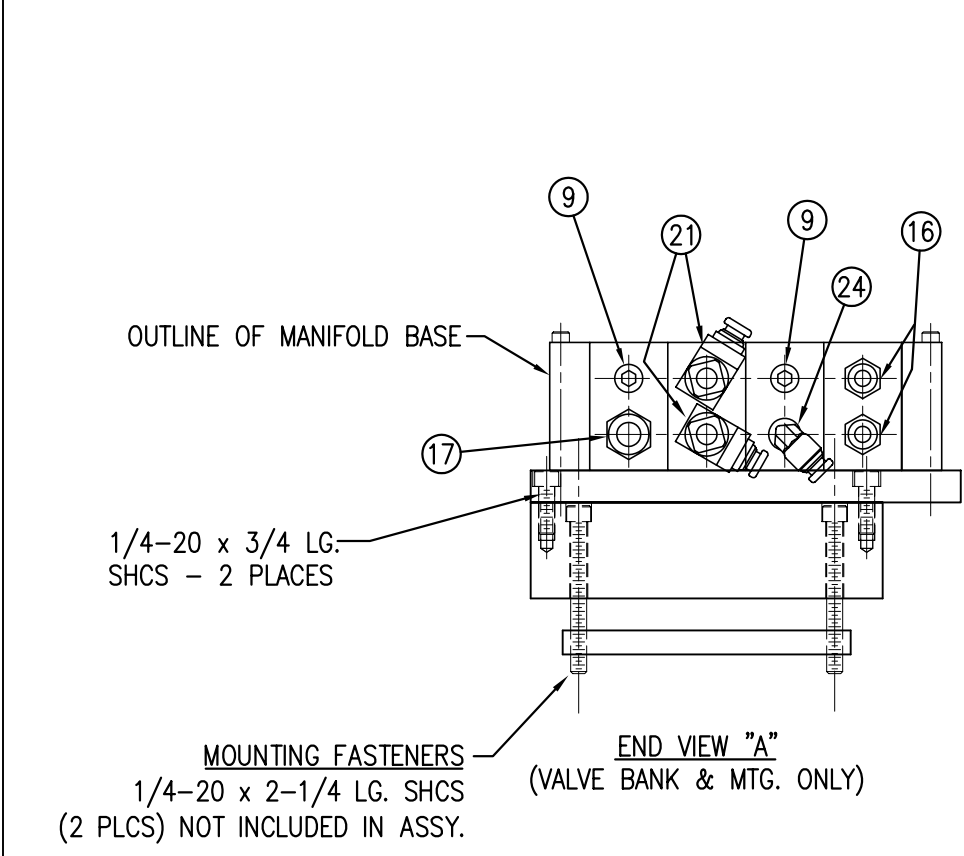
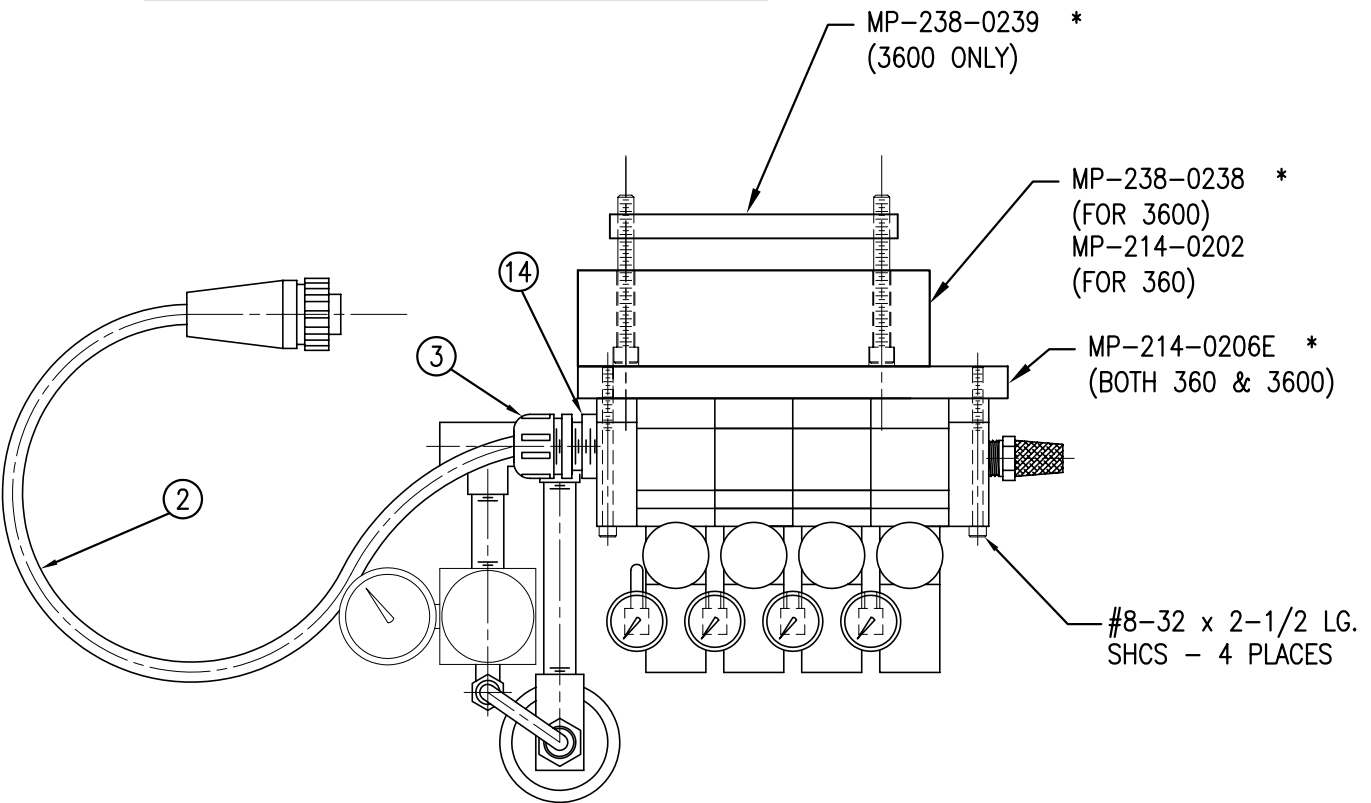
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-238-0142			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	4 STATION VALVE BANK	PM-VA2361	S
②	1	VALVE CABLE	PE-200-0405	.
③	1	CORD GRIP	PE-C02000	.
④	1	REGULATOR / GAUGE	PM-REG1500	.
⑤	1	VACUUM PUMP	PM-PUMP1000	.
⑥	1	EXHAUST MUFFLER	PM-MU1021	.
⑦	2	1/4" BRONZE EXHAUST MUFFLER	PM-MU1025	.
⑧	1	3/4" NPT PLUG	PM-EN9110	.
⑨	4	1/4" NPT PLUG	PM-F11200	.
⑩	1	1/4" NPT STREET ELBOW	PM-PF1185	.
⑪	4	STREET ELBOW, #10-32 THREAD	PM-PF2050	.
⑫	2	PIPE NIPPLE, 1/4" NPT x 1-1/2" Lg.	PM-PF1143	.
⑬	1	PIPE NIPPLE, 1/4" NPT x 3-1/2" Lg.	PM-PF1141	.
⑭	1	BUSHING, 3/4" NPT to 1/2" NPT	PE-COND1080	.
⑮	1	1/4" NPT TEE, FEMALE 3-ENDS	PM-PF1200	.
⑯	2	FTG, 1/4 TUBE to 1/4 NPT STRAIGHT	PM-PF1010	.
⑰	1	FTG, 3/8 TUBE to 1/4 NPT STRAIGHT	PM-PF1020	.
⑱	1	FTG, 1/4 TUBE to 1/8 NPT STRAIGHT	PM-PF1005	.
⑲	1	FTG, 1/4 TUBE to 1/4 NPT 90° ELBOW	PM-PF1055	.
⑳	1	1/4" O.D. POLYURETHANE TUBING (CUT TO 7" LENGTH)	PM-PT1070	.
㉑	2	FLOW CONTROL, 1/4 TUBE x 1/4 NPT	PM-PF2070	.
㉒	1	FTG, 1/4 NPT COUPLING	PM-PF1085	.
㉓	1	1/4 NPT CLOSE NIPPLE	PM-PF1125	.
㉔	1	FTG, 1/4 TUBE to 1/4 NPT 90° SWVL.	PM-PF1035	.
㉕	1	1/8 NPT CLOSE NIPPLE (3/4" Lg.)	PM-PF1120	.
㉖	1	FTG, 1/8 NPT to 1/8 NPT 90° FEMALE ELB.	PM-PF1170	.

ASSEMBLY NOTE:  
TURN GAUGES TO 90°, ADD  
FLOW CONTROLS @ VALVE  
BANK, PUT 90° SWIVEL  
ELBOW @ ASSIST ON VALVE  
BANK

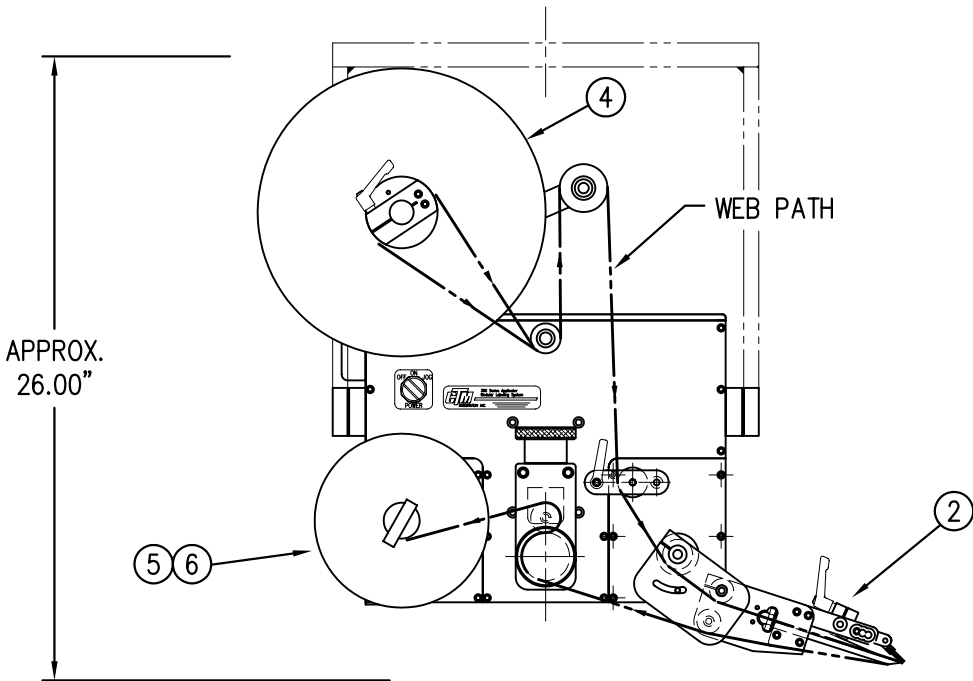
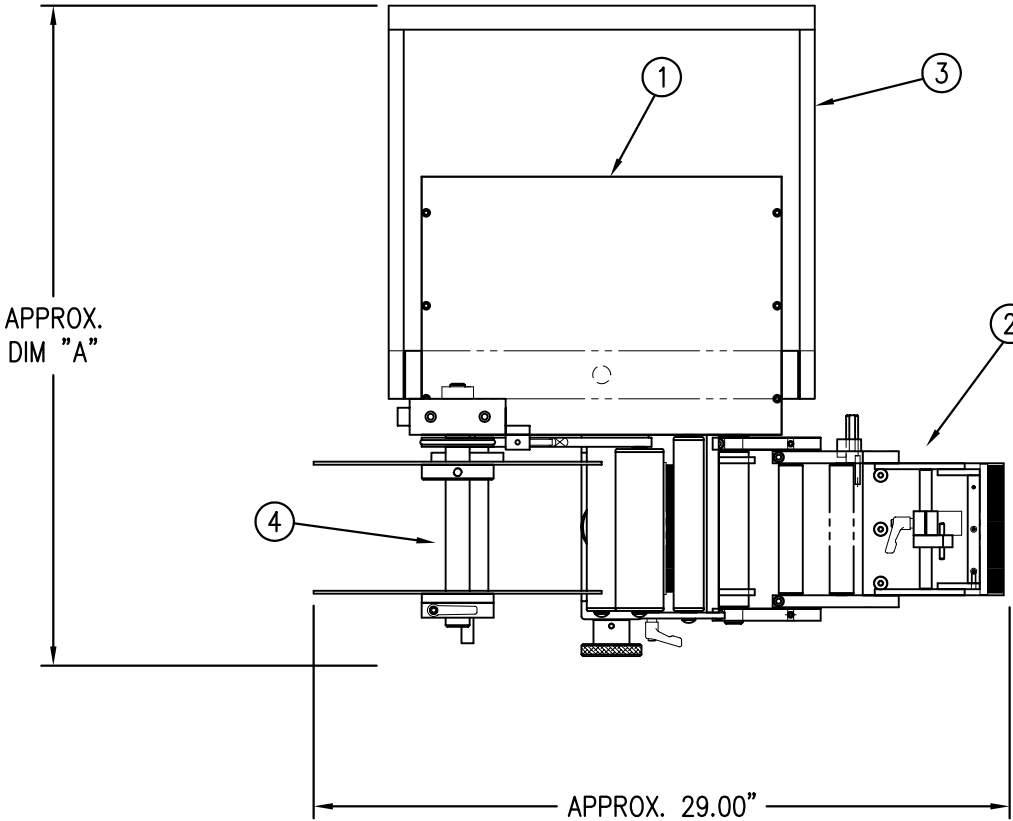
VALVE BANK SPARE PARTS:  
SOLENOID: #PM-VA2395  
AIR ASSIST REGULATOR: #PM-VA2396  
BLOW/TAMP/ROTARY ACTUATOR REGULATORS: #PM-VA2397

\* MOUNTING PLATES NOT INCLUDED IN ASSEMBLY

ASS-238-0142



PART NO.	DIM "A"
CTM-215-0105R/L-12X	27.50
CTM-215-2105R/L-12X	30.00
CTM-215-5105R/L-12X	32.50



BILL OF MATERIAL				SOLD
CTM-215-X105RL-12X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
	①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L
	②	1	5/7.5/10 MERGE NOSE MODULE	MOD-215-X105R/L
	③	1	U-ARM ASSEMBLY	WAS-200-0247
	④	1	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L
⑤	1	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L
	1	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L
⑥	1	1	STANDARD MANDREL (SHOWN)	ASS-200-X147
	1	1	FILM REWIND MANDREL	ASS-200-X137
	1	1	COLLAPSIBLE MANDREL	ASS-200-3140-X
		1	DISPLAY UNIT ASSEMBLY	ASS-200-0125
		1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5
		1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138
ORDER THIS ITEM SEPARATELY: 1.) PRODUCT DETECT SENSOR				

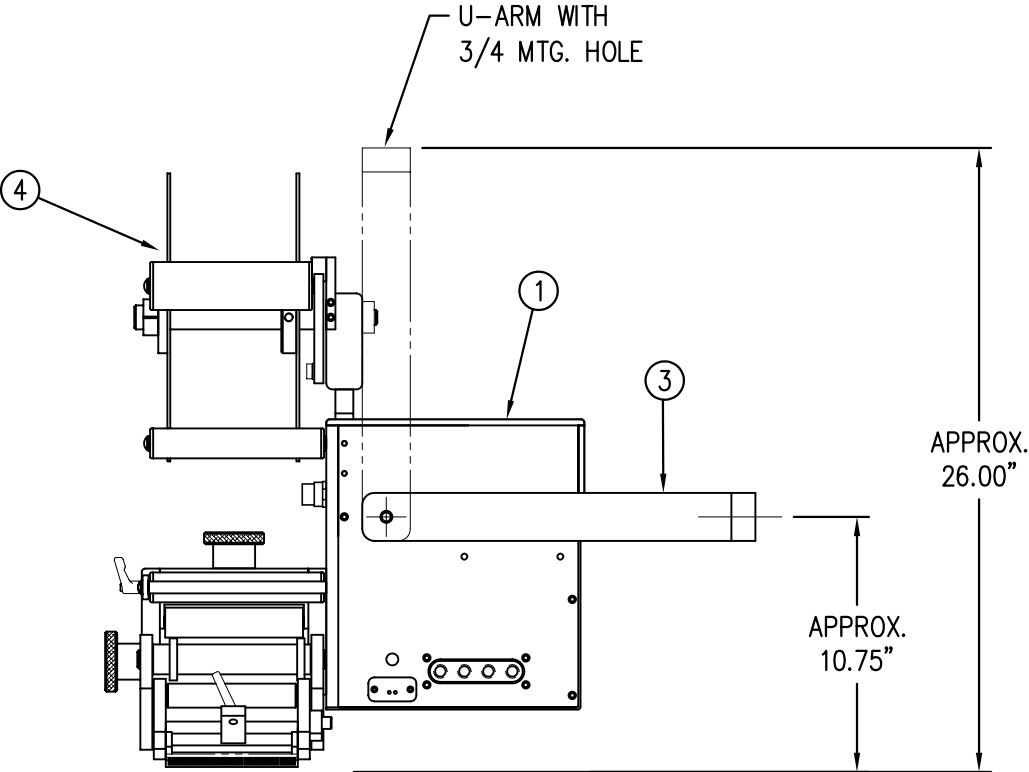
← STD & FILM REWIND	S
← COLLAPSIBLE RWD	C
← STANDARD RWD	S
← FILM REWIND	S
← COLLAPSIBLE RWD	F

CTM-215-X105R/L-12X			
5" WIDE	-0105R/L-12	X	
7.5" WIDE	-2105R/L-12	X	
10" WIDE	-5105R/L-12	X	

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

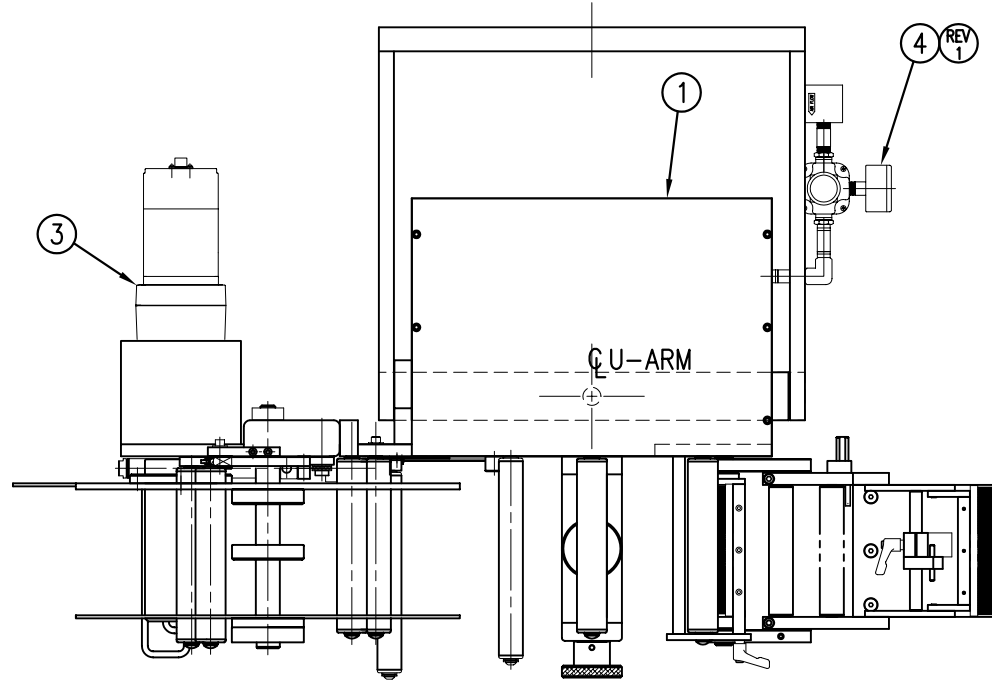
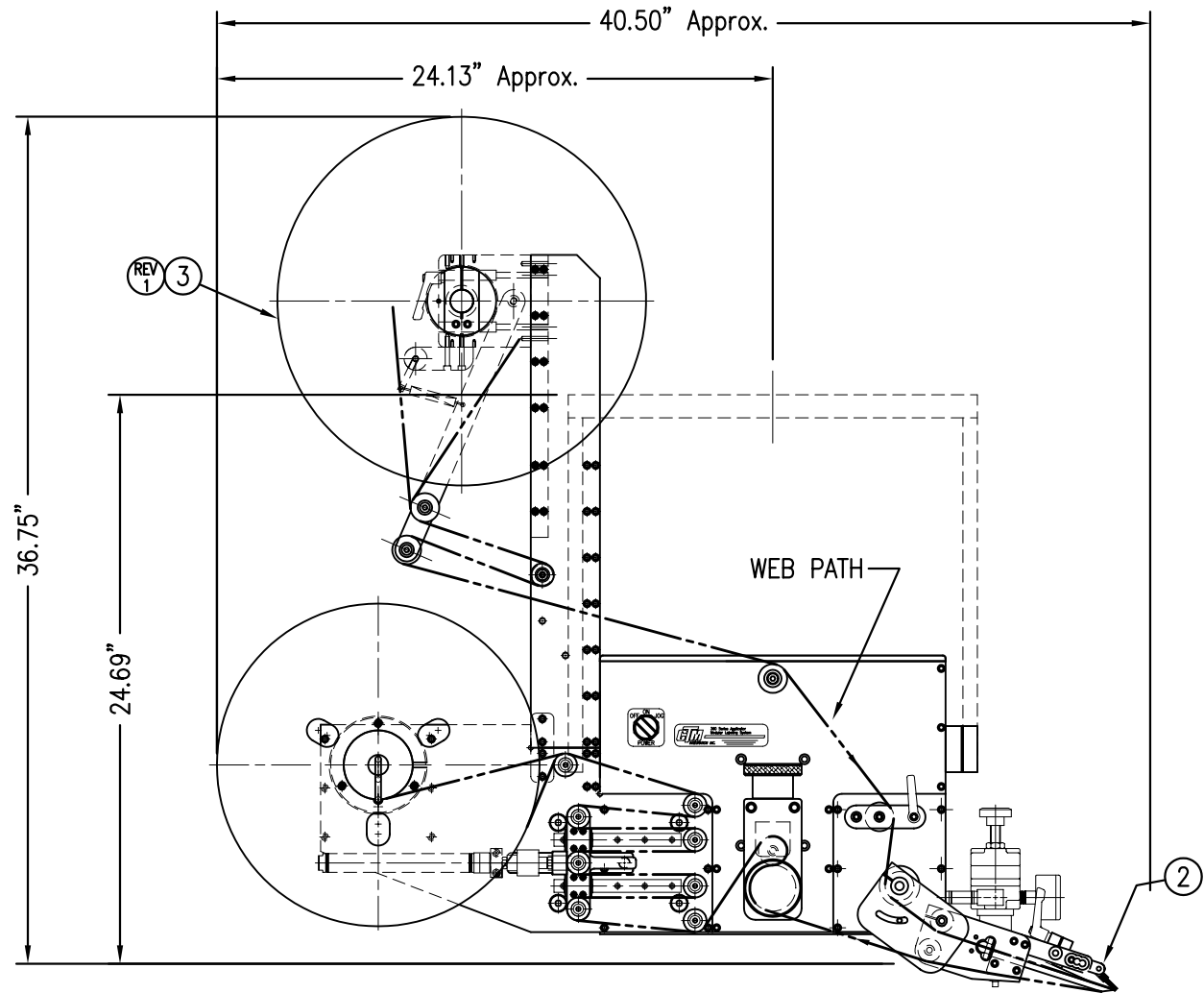
NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216



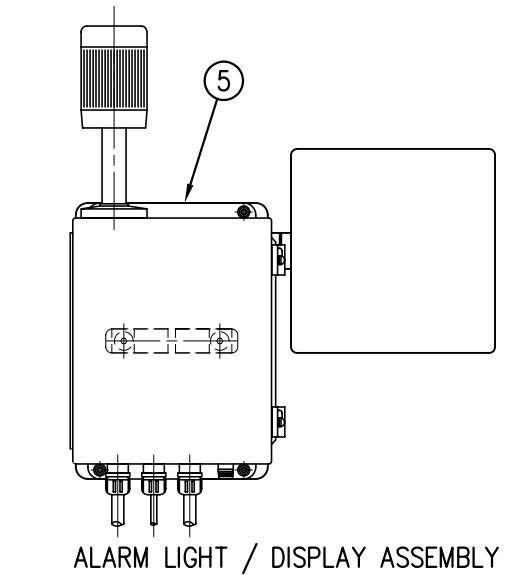
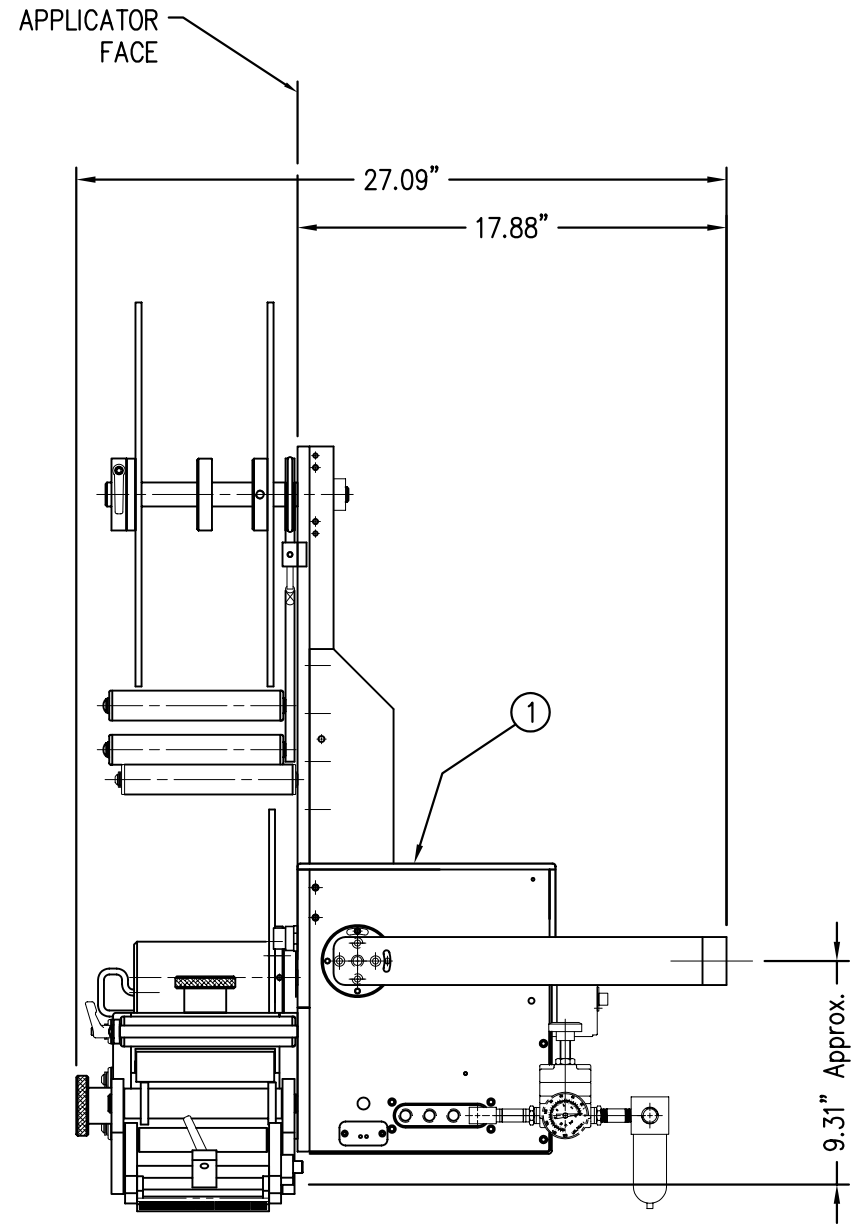
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.									
TITLE: 360 SERIES APPLICATOR: MERGE ASSEMBLY									
REV. 1	REV. DESCRIPTION	REV. DATE	REV. BY:	REV. BY:	REV. BY:	REV. BY:	REV. BY:	REV. BY:	REV. BY:
1	UPDATED BOM FOR NEW COLLAPSIBLE MANDREL	09/12/07	TDR	TDR	TDR	TDR	TDR	TDR	TDR
F:\Engineering\Standard Parts\Applcator\360				Date: 02/22/99		Scale: 1=8		BOB S.	
F:\Engineering\Standard Parts\Applcator\360				Dept. Code 70		PART: 5"/7.5"/10" WIDE: MERGE w/12" UNWIND ASSEMBLY		215\CTM-215-X105RL-12X	





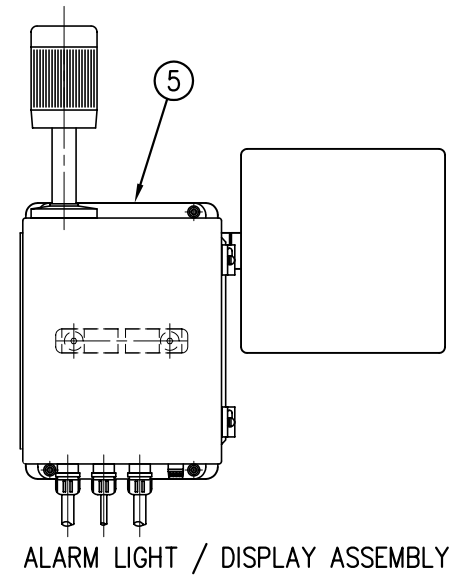
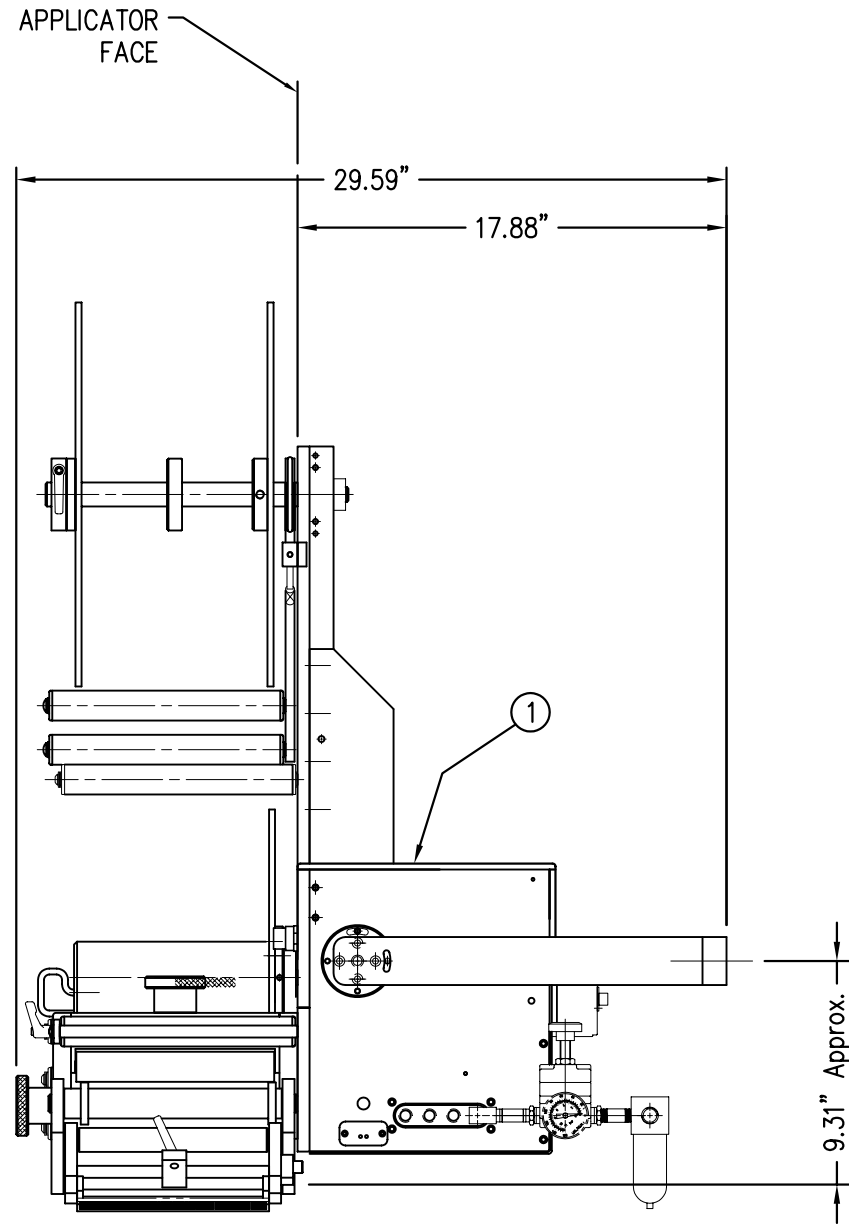
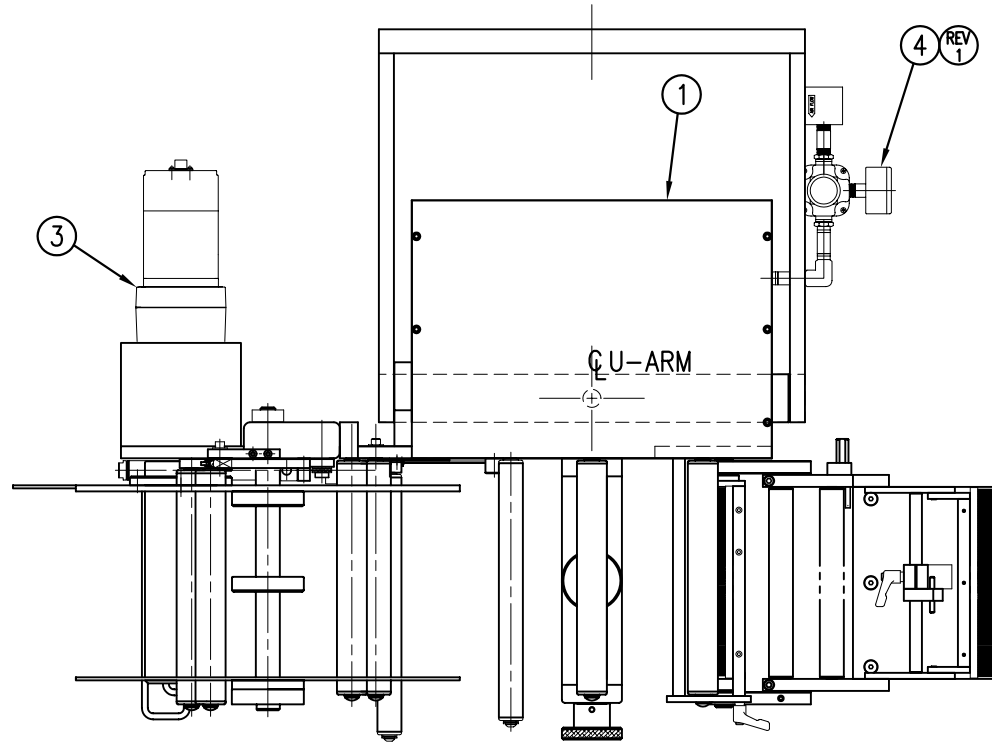
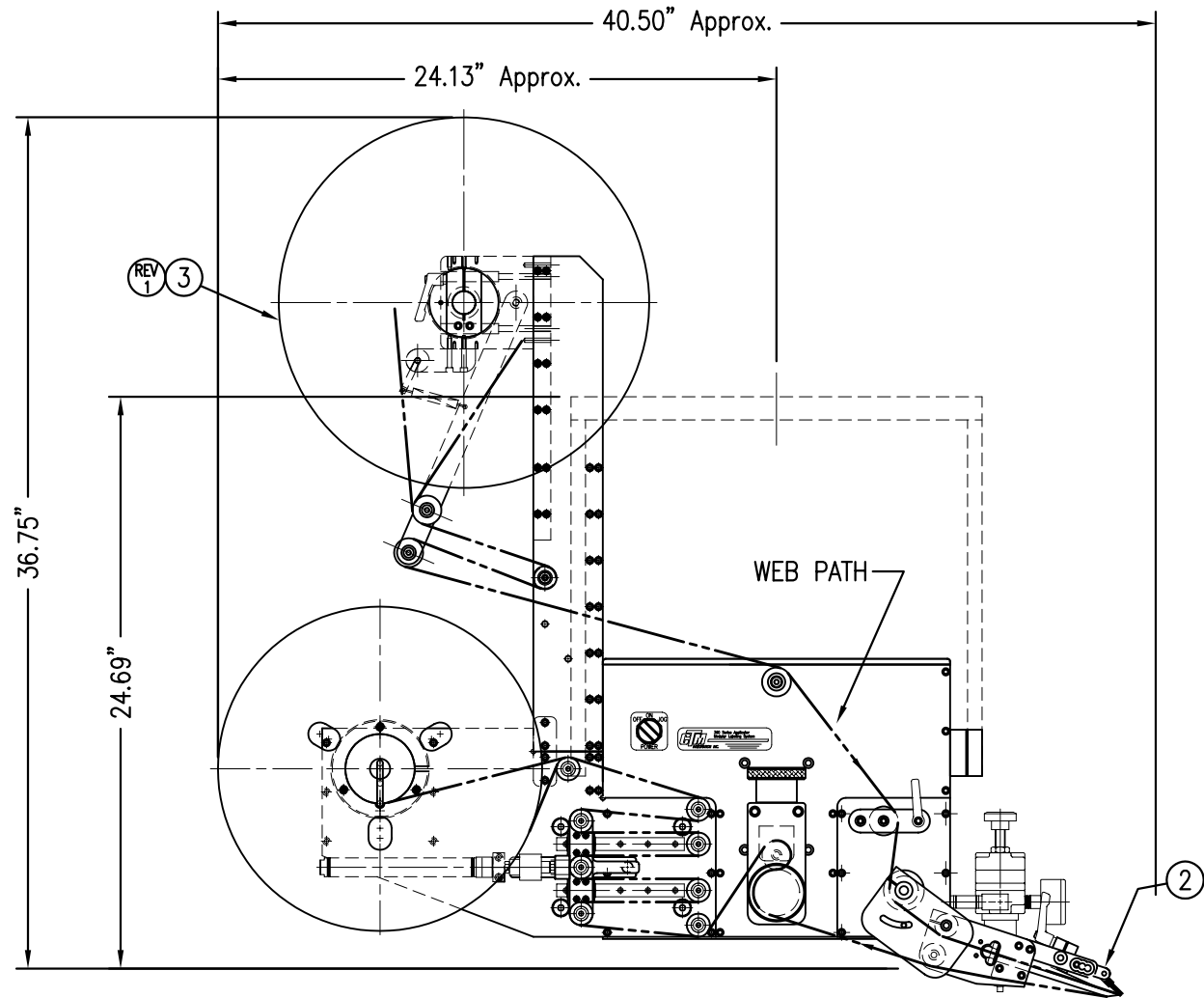


BILL OF MATERIAL				
CTM-215-0105R/L-16PXX				
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	CTM-200-0151R	5.00" WDE R.H. 360 CORE UNIT	LH
	1	CTM-200-0151L	5.00" WDE L.H. 360 CORE UNIT	RH
②	1	MOD-215-0105R	5.00" WDE R.H. MERGE NOSE MODULE	
	1	MOD-215-0105L	5.00" WDE L.H. MERGE NOSE MODULE	
③	1	MOD-200-3157R-5	5.0" WIDE R.H. 16" Pwr REWIND, Std MANDREL	LH
	1	MOD-200-3157L-5	5.0" WIDE L.H. 16" Pwr REWIND, Std MANDREL	RH
	1	MOD-200-3158R-5	5.0" WIDE RH 16" Pwr COLLAPSIBLE REWIND	LH
	1	MOD-200-3158L-5	5.0" WIDE LH 16" Pwr COLLAPSIBLE REWIND	RH
	1	MOD-200-3157R-5-RU	5.0" Wide, RH 16" Pwr Rewind, Std Mandrel, RU	LH
	1	MOD-200-3157L-5-RU	5.0" Wide, LH 16" Pwr Rewind, Std Mandrel, RU	RH
	1	MOD-200-3158R-5-RU	5.0" Wide, RH 16" Pwr Rewind, Collap. Mandrel, RU	LH
	1	MOD-200-3158L-5-RU	5.0" Wide, LH 16" Pwr Rewind, Collap. Mandrel, RU	RH
④	1	ASS-200-3107	HI/LO REGULATOR Assy, (w/FILTER)	
⑤	1	ASS-200-3161	ALARM LIGHT ASSEMBLY	
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE	



CTM-215-0105RL-16PXX	
R.H., STANDARD REWIND	-0105R-16PS
L.H., STANDARD REWIND	-0105L-16PS
R.H., COLLAPSIBLE REWIND	-0105R-16PC
L.H., COLLAPSIBLE REWIND	-0105L-16PC
R.H., STANDARD REWIND, REELS-UP	-0105R-16PS-RU
L.H., STANDARD REWIND, REELS-UP	-0105L-16PS-RU
R.H., COLLAPSIBLE REWIND, REELS-UP	-0105R-16PC-RU
L.H., COLLAPSIBLE REWIND, REELS-UP	-0105L-16PC-RU

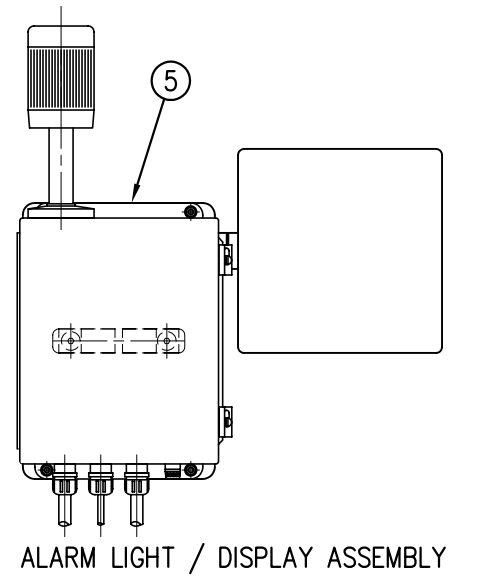
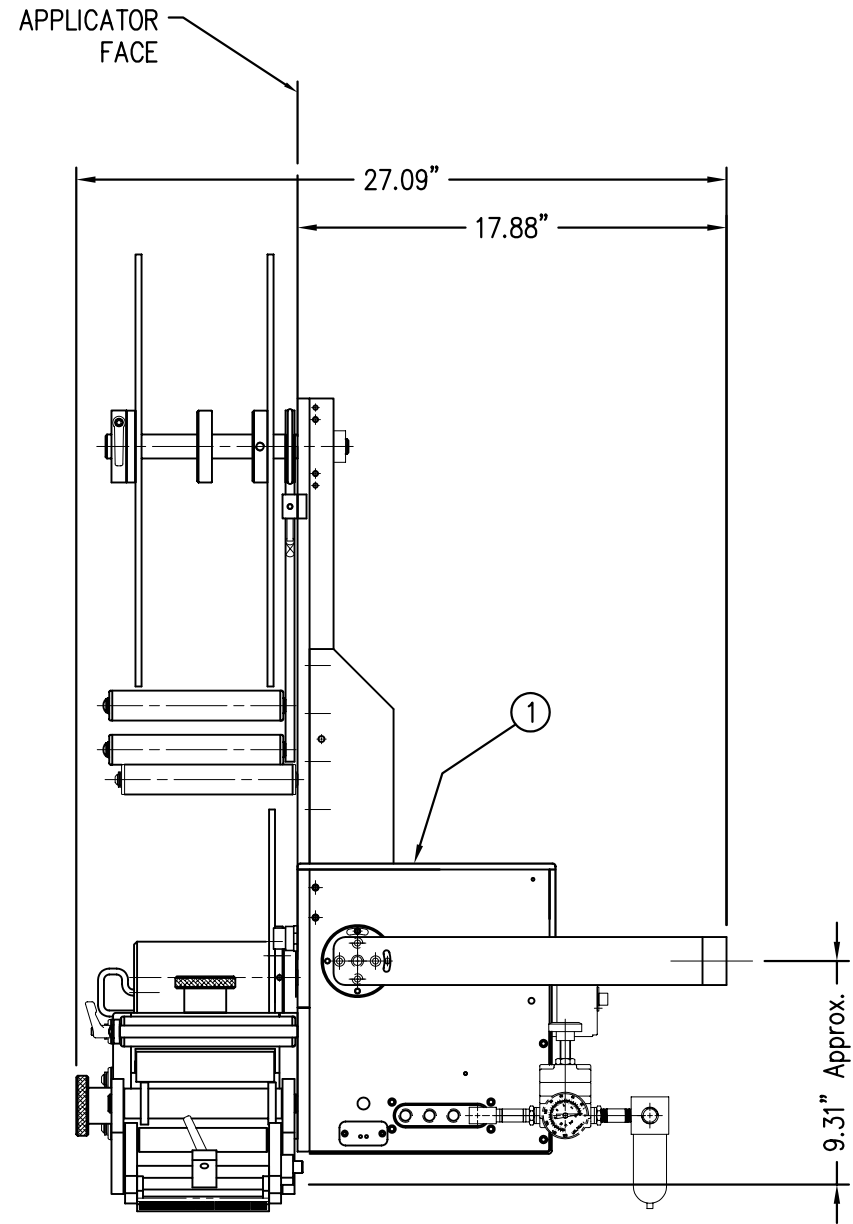
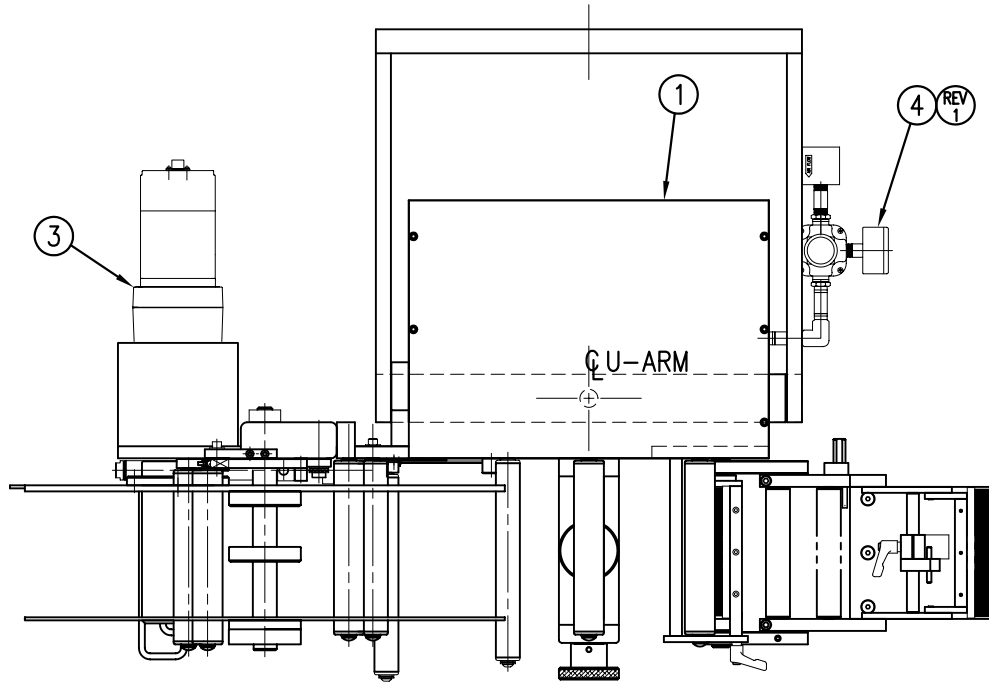
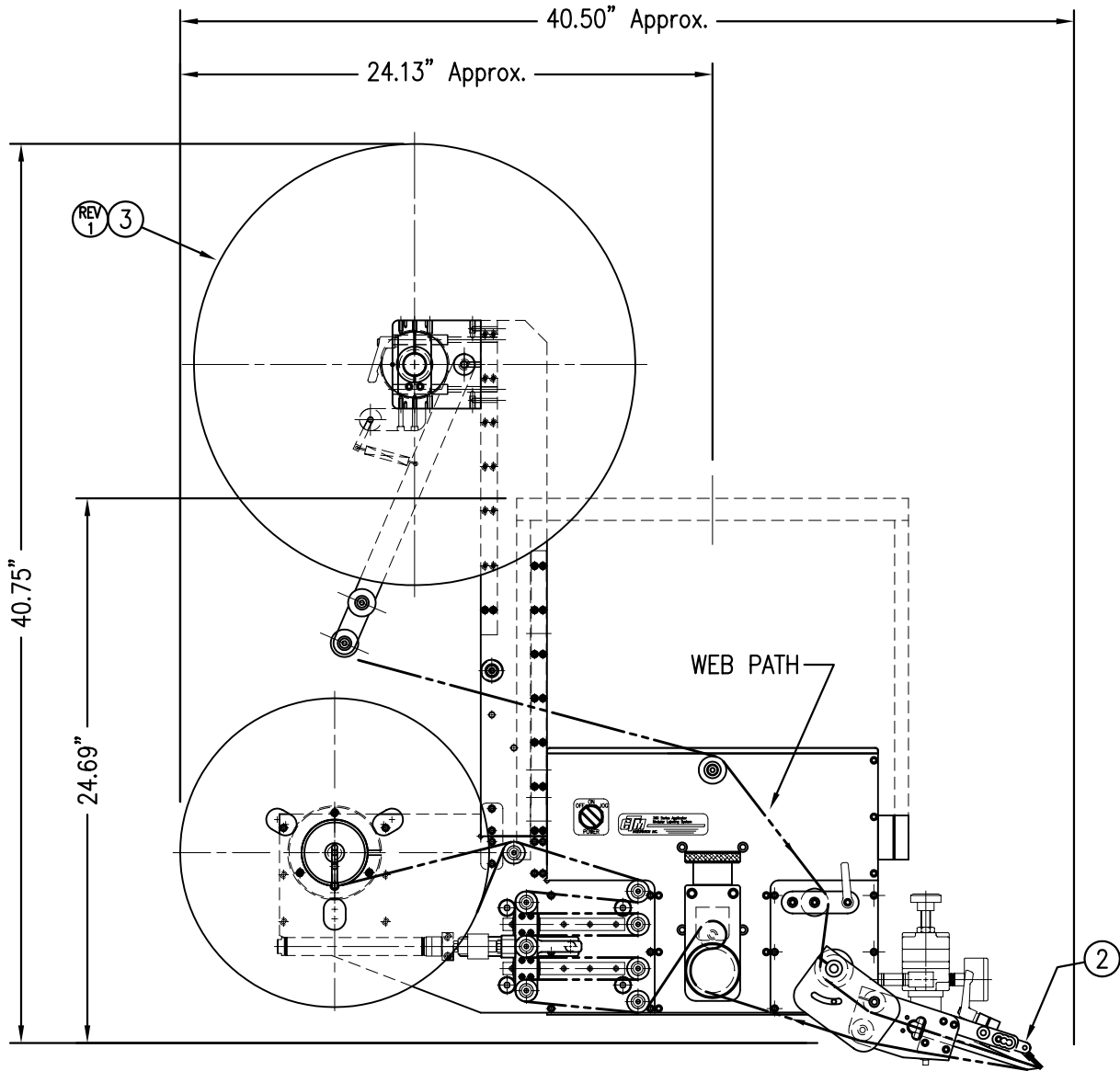
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



BILL OF MATERIAL				
CTM-215-2105R/L-16PXX				
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	CTM-200-2151R	7.50" WDE R.H. 360 CORE UNIT	LH
	1	CTM-200-2151L	7.50" WDE L.H. 360 CORE UNIT	RH
②	1	MOD-215-2105R	7.50" WDE R.H. MERGE NOSE MODULE	
	1	MOD-215-2105L	7.50" WDE L.H. MERGE NOSE MODULE	
③	1	MOD-200-3157R-7	7.5" WDE R.H. 16" Pwr REWIND, Std MANDREL	LH
	1	MOD-200-3157L-7	7.5" WDE L.H. 16" Pwr REWIND, Std MANDREL	RH
	1	MOD-200-3158R-7	7.5" WIDE RH 16" Pwr COLLAPSIBLE REWIND	LH
	1	MOD-200-3158L-7	7.5" WIDE LH 16" Pwr COLLAPSIBLE REWIND	RH
	1	MOD-200-3157R-7-RU	7.5" Wide, RH 16" Pwr Rewind, Std Mandrel, RU	LH
	1	MOD-200-3157L-7-RU	7.5" Wide, LH 16" Pwr Rewind, Std Mandrel, RU	RH
	1	MOD-200-3158R-7-RU	7.5" Wide, RH 16" Pwr Rewind, Collap. Mandrel, RU	LH
	1	MOD-200-3158L-7-RU	7.5" Wide, LH 16" Pwr Rewind, Collap. Mandrel, RU	RH
④	1	ASS-200-3107	HI/LO REGULATOR Assy, (w/FILTER)	
⑤	1	ASS-200-3161	ALARM LIGHT ASSEMBLY	
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE	

CTM-215-2105RL-16PXX	
R.H., STANDARD REWIND	-2105R-16PS
L.H., STANDARD REWIND	-2105L-16PS
R.H., COLLAPSIBLE REWIND	-2105R-16PC
L.H., COLLAPSIBLE REWIND	-2105L-16PC
R.H., STANDARD REWIND, REELS-UP	-2105R-16PS-RU
L.H., STANDARD REWIND, REELS-UP	-2105L-16PS-RU
R.H., COLLAPSIBLE REWIND, REELS-UP	-2105R-16PC-RU
L.H., COLLAPSIBLE REWIND, REELS-UP	-2105L-16PC-RU

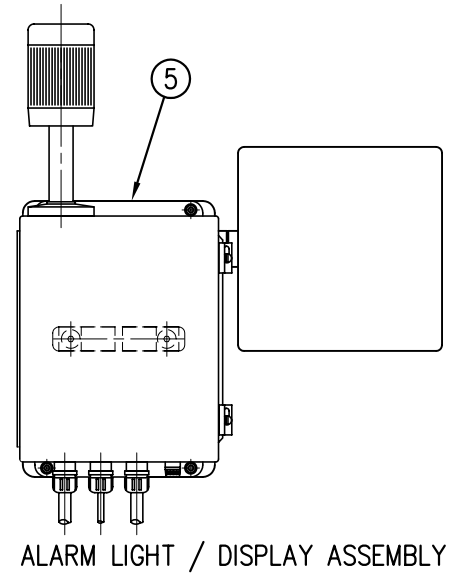
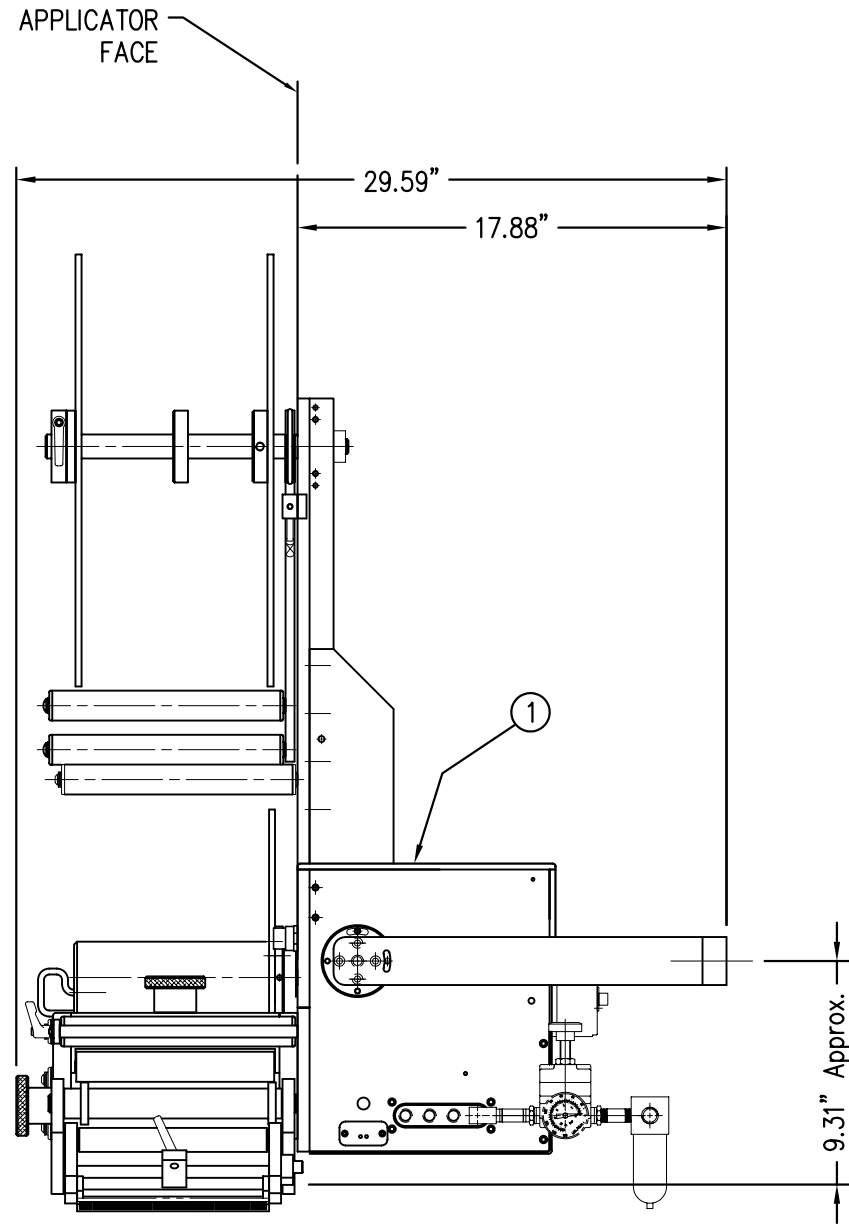
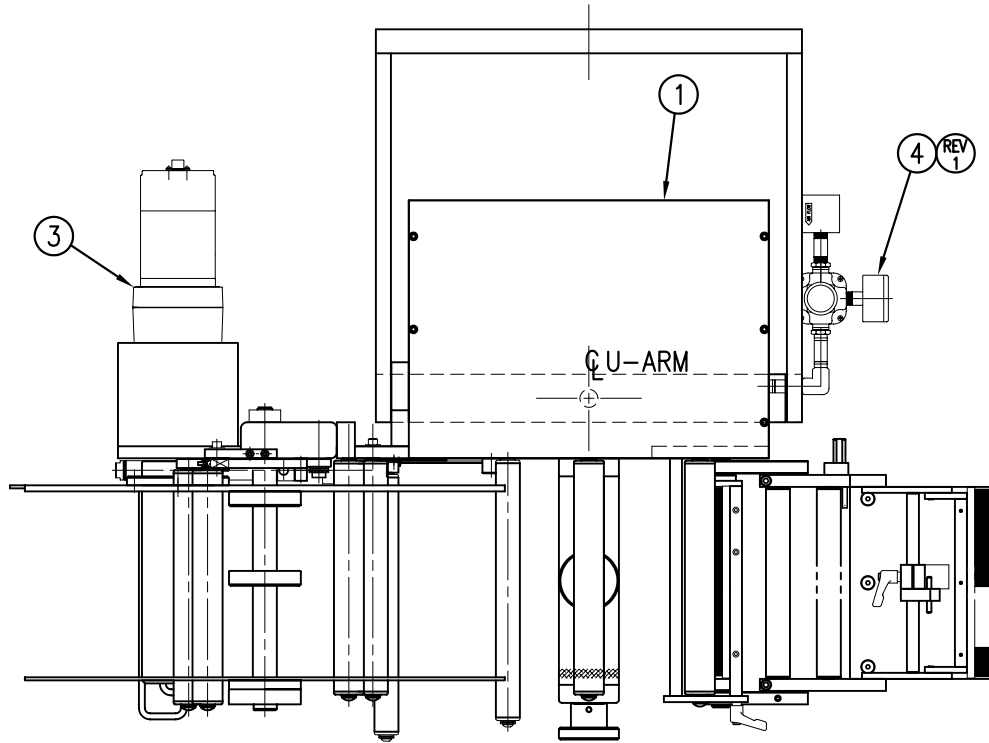
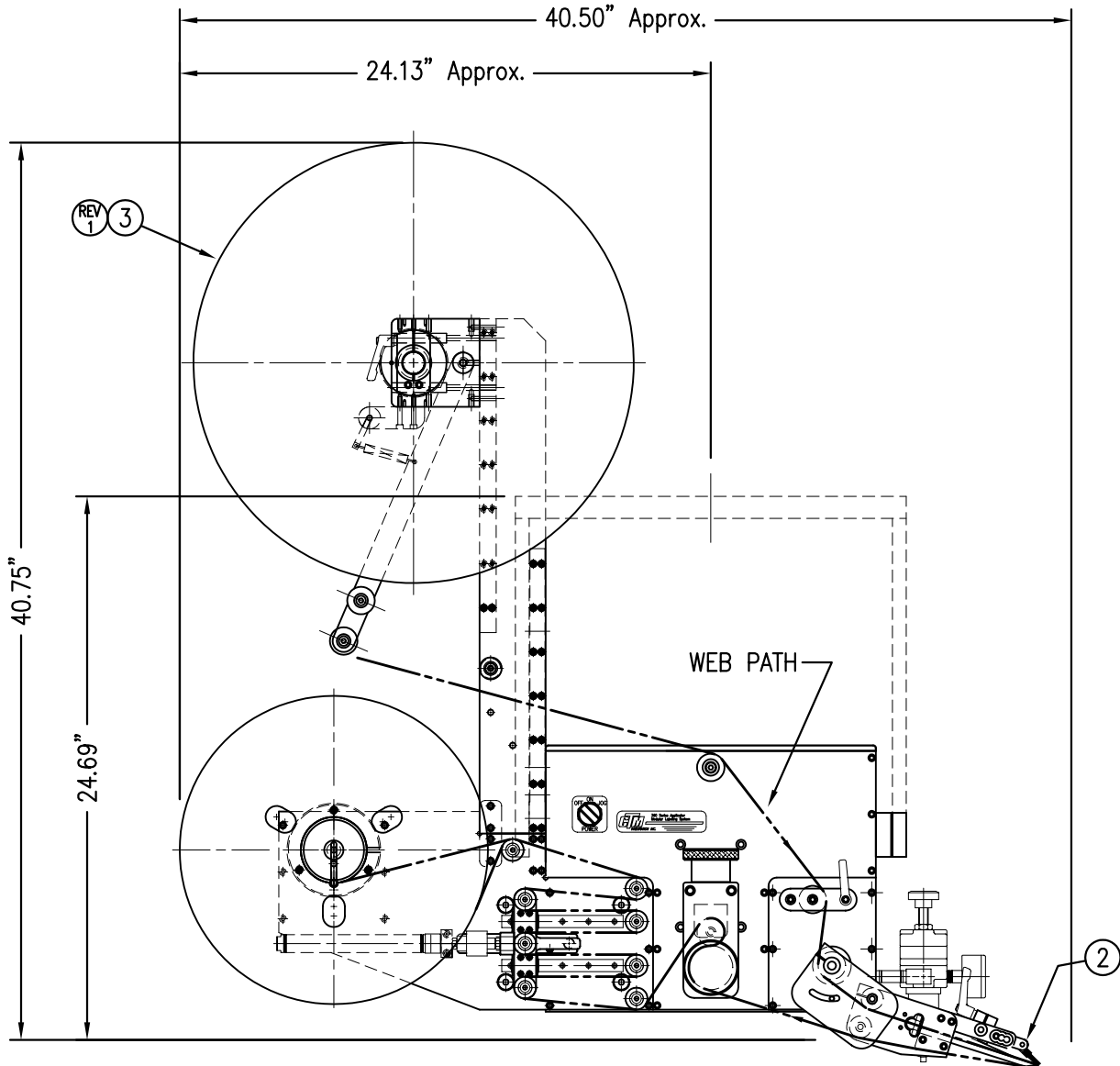
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-



BILL OF MATERIAL				
CTM-215-0105R/L-20PXX				
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	CTM-200-0151R	5.00" WDE R.H. 360 CORE UNIT	LH
	1	CTM-200-0151L	5.00" WDE L.H. 360 CORE UNIT	RH
②	1	MOD-215-0105R	5.00" WDE R.H. MERGE NOSE MODULE	
	1	MOD-215-0105L	5.00" WDE L.H. MERGE NOSE MODULE	
③	1	MOD-200-3156R-5	5.0" WDE R.H. 20" Pwr REWIND, Std MANDREL	LH
	1	MOD-200-3156L-5	5.0" WDE L.H. 20" Pwr REWIND, Std MANDREL	RH
	1	MOD-200-3159R-5	5.0" WDE RH 20" Pwr COLLAPSIBLE REWIND	LH
	1	MOD-200-3159L-5	5.0" WDE LH 20" Pwr COLLAPSIBLE REWIND	RH
	1	MOD-200-3156R-5-RU	5.0" Wide, RH 20" Pwr Rewind, Std Mandrel, RU	LH
	1	MOD-200-3156L-5-RU	5.0" Wide, LH 20" Pwr Rewind, Std Mandrel, RU	RH
	1	MOD-200-3159R-5-RU	5.0" Wide, RH 20" Pwr Rewind, Collap. Mandrel, RU	LH
	1	MOD-200-3159L-5-RU	5.0" Wide, LH 20" Pwr Rewind, Collap. Mandrel, RU	RH
④	1	ASS-200-3107	HI/LO REGULATOR Assy, (w/FILTER)	
⑤	1	ASS-200-3161	ALARM LIGHT ASSEMBLY	
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE	

CTM-215-0105RL-20PXX	
R.H., STANDARD REWIND	-0105R-20PS
L.H., STANDARD REWIND	-0105L-20PS
R.H., COLLAPSIBLE REWIND	-0105R-20PC
L.H., COLLAPSIBLE REWIND	-0105L-20PC
R.H., STANDARD REWIND, REELS-UP	-0105R-20PS-RU
L.H., STANDARD REWIND, REELS-UP	-0105L-20PS-RU
R.H., COLLAPSIBLE REWIND, REELS-UP	-0105R-20PC-RU
L.H., COLLAPSIBLE REWIND, REELS-UP	-0105L-20PC-RU

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

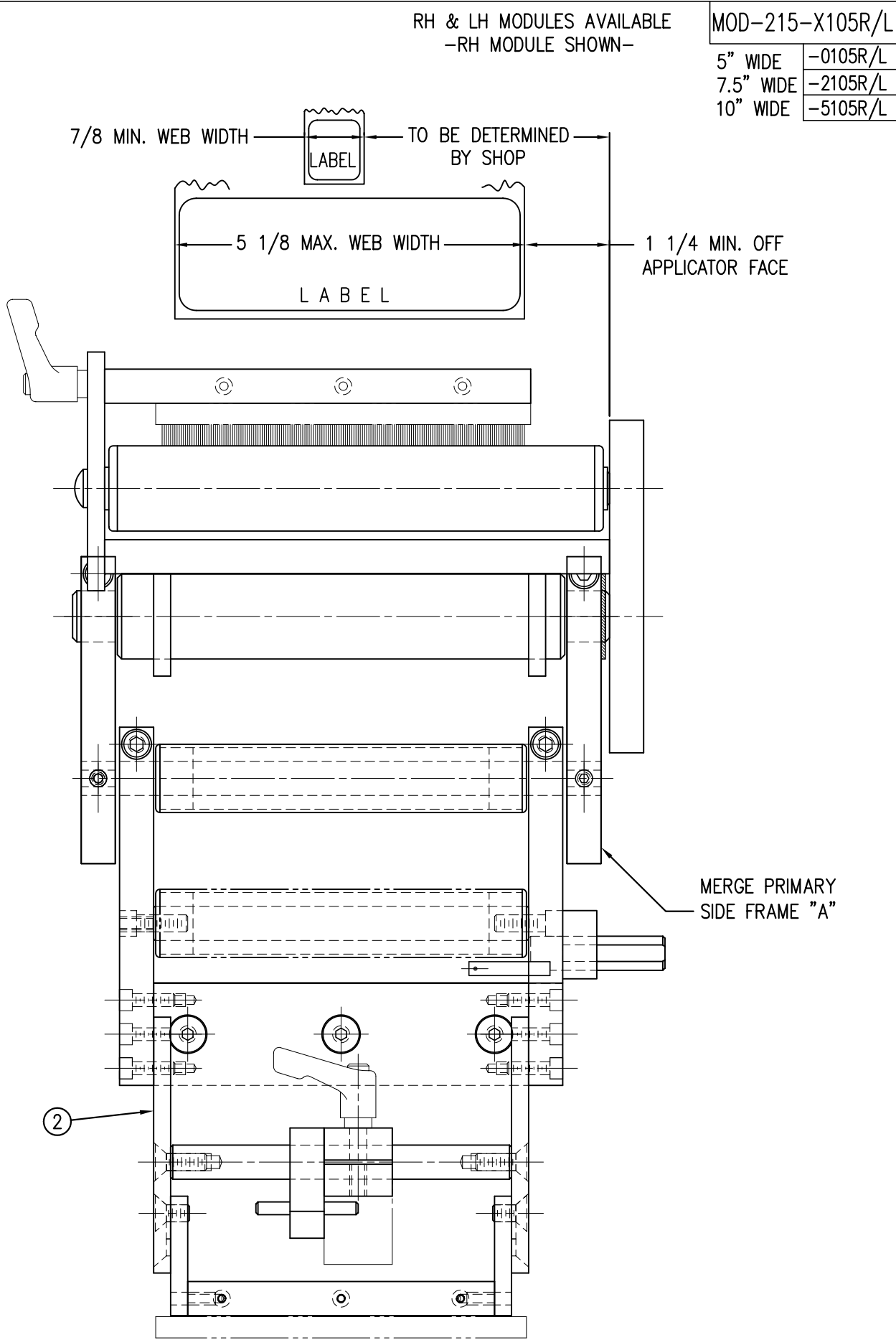
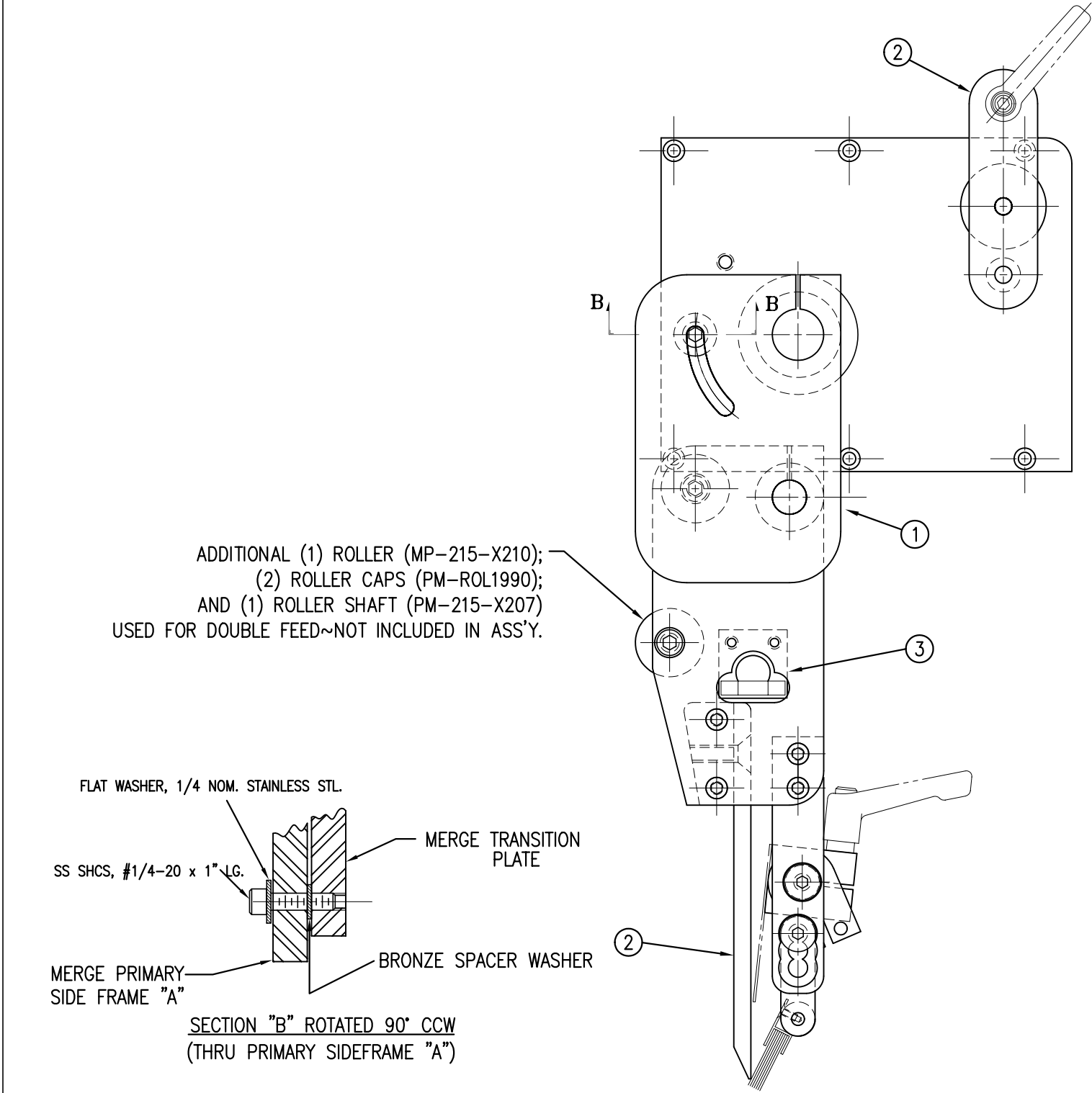


BILL OF MATERIAL				
CTM-215-2105R/L-20PXX				
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	CTM-200-2151R	7.50" WDE R.H. 360 CORE UNIT	LH
	1	CTM-200-2151L	7.50" WDE L.H. 360 CORE UNIT	RH
②	1	MOD-215-2105R	7.50" WDE R.H. MERGE NOSE MODULE	
	1	MOD-215-2105L	7.50" WDE L.H. MERGE NOSE MODULE	
③	1	MOD-200-3156R-7	7.5" WIDE R.H. 20" Pwr REWIND, Std MANDREL	LH
	1	MOD-200-3156L-7	7.5" WIDE L.H. 20" Pwr REWIND, Std MANDREL	RH
	1	MOD-200-3159R-7	7.5" WIDE RH 20" Pwr COLLAPSIBLE REWIND	LH
	1	MOD-200-3159L-7	7.5" WIDE LH 20" Pwr COLLAPSIBLE REWIND	RH
	1	MOD-200-3156R-7-RU	7.5" Wide, RH 20" Pwr Rewind, Std Mandrel, RU	LH
	1	MOD-200-3156L-7-RU	7.5" Wide, LH 20" Pwr Rewind, Std Mandrel, RU	RH
	1	MOD-200-3159R-7-RU	7.5" Wide, RH 20" Pwr Rewind, Collap. Mandrel, RU	LH
	1	MOD-200-3159L-7-RU	7.5" Wide, LH 20" Pwr Rewind, Collap. Mandrel, RU	RH
④	1	ASS-200-3107	HI/LO REGULATOR Assy, (w/FILTER)	
⑤	1	ASS-200-3161	ALARM LIGHT ASSEMBLY	
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE	

CTM-215-2105RL-20PXX	
R.H., STANDARD REWIND	-2105R-20PS
L.H., STANDARD REWIND	-2105L-20PS
R.H., COLLAPSIBLE REWIND	-2105R-20PC
L.H., COLLAPSIBLE REWIND	-2105L-20PC
R.H., STANDARD REWIND, REELS-UP	-2105R-20PS-RU
L.H., STANDARD REWIND, REELS-UP	-2105L-20PS-RU
R.H., COLLAPSIBLE REWIND, REELS-UP	-2105R-20PC-RU
L.H., COLLAPSIBLE REWIND, REELS-UP	-2105L-20PC-RU

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

BILL OF MATERIAL			
MOD-215-X105R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-215-X105BR	MERGE NOSE MOUNTING ASSEMBLY - RH
	1	SAS-215-X105BL	MERGE NOSE MOUNTING ASSEMBLY - LH
②	1	SAS-215-X105AR	MERGE NOSE ASSEMBLY - RH
	1	SAS-215-X105AL	MERGE NOSE ASSEMBLY - LH
③	1	ASS-211-0108-2	FIBER OPTIC LABEL SENSOR ASSEMBLY with 2" MOUNTING ROD
	6	PM-FASH429075	SS SHCS, #10-32 x 5/8" LG.

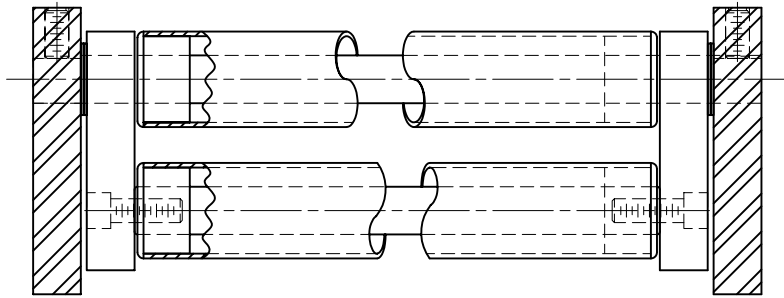


RH & LH MODULES AVAILABLE  
-RH MODULE SHOWN-

MOD-215-X105R/L	
5" WIDE	-0105R/L
7.5" WIDE	-2105R/L
10" WIDE	-5105R/L

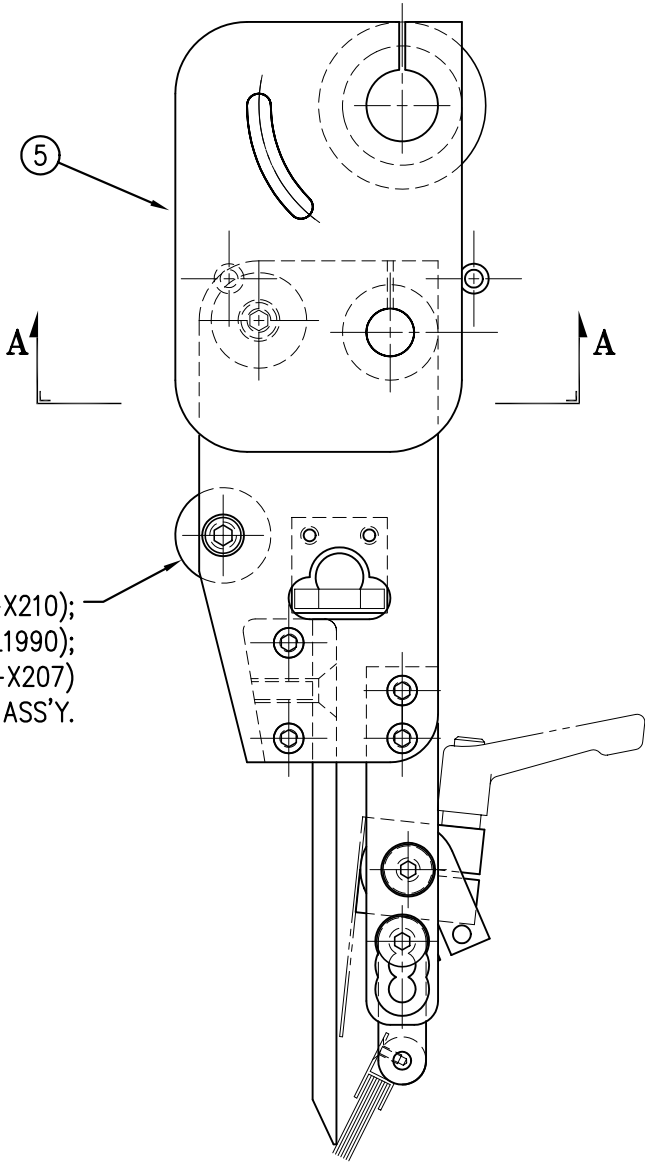
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.			
APPLICATOR SERIES: 360/360A	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: MERGE	Dept. Code 70
REV. DATE: 05/23/07	REV. BY: ES	Scale: 1=2	Date: 02/11/00
REV. DESCRIPTION: O NEW TITLEBLOCK & UPDATED BOM	REV. BY: BOB S.	Scale: 1=2	Date: 02/11/00
F:\Engineering\Standard Parts\Applcator\360\215\MOD-215-X105R			

BILL OF MATERIAL			
ASS-215-X106R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-215-X115	MERGE PRIMARY ROLLER ASSEMBLY
②	1	MP-215-X209	5/7.5/10 PRIMARY ROLLER SHAFT
③	2	MP-211-0210	GUIDE COLLAR
④	1	PM-BEBT1028	BRONZE WASHER
⑤	1	SAS-215-X105AR/L	MERGE NOSE ASSEMBLY
⑥	1	ASS-211-0108-2	FIBER OPTIC LABEL SENSOR ASSEMBLY with 2" MOUNTING ROD



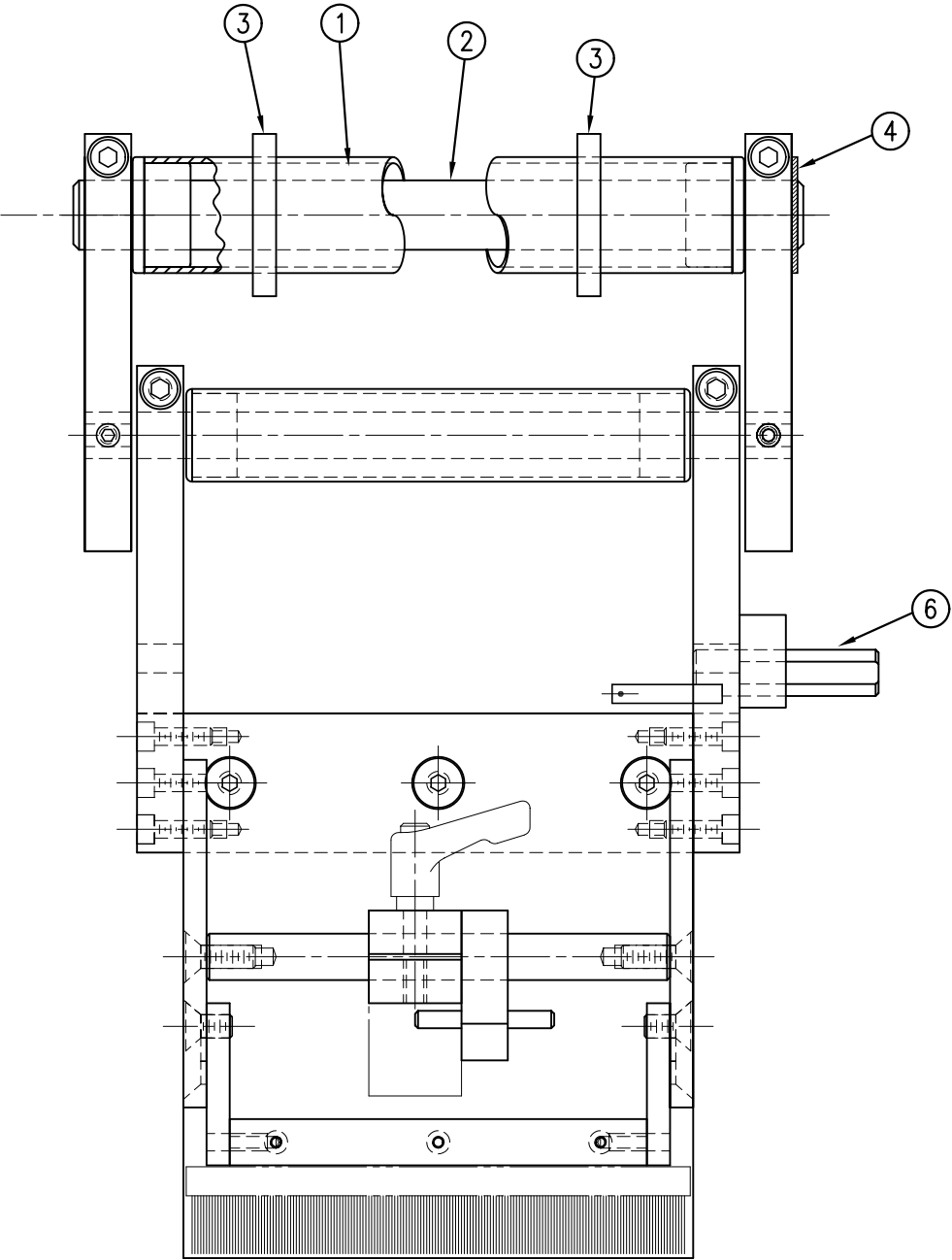
SECTION "A" - ROTATED 90° CCW  
(SHOWING SECONDARY MERGE ROLLERS)

ADDITIONAL (1) ROLLER (MP-215-X210);  
(2) ROLLER CAPS (PM-ROL1990);  
AND (1) ROLLER SHAFT (MP-215-X207)  
USED FOR DOUBLE FEED~NOT INCLUDED IN ASS'Y.



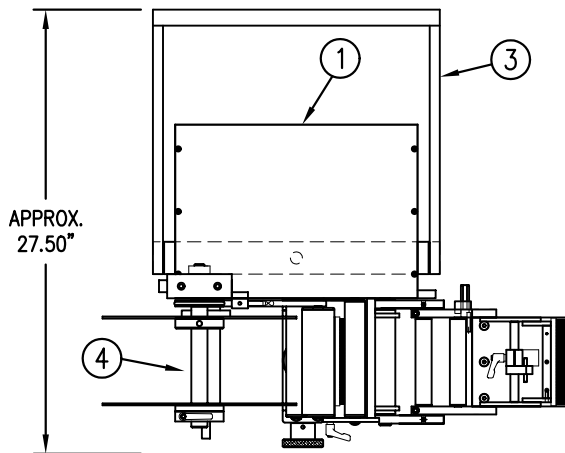
RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

ASS-215-X106R/L	
5" WIDE	-0106R/L
7.5" WIDE	-2106R/L
10" WIDE	-5106R/L



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.				Dept. Code 70	
APPLICATOR SERIES: 360/360A		APPLICATOR WIDTH(S): 5"/7.5"/10"		GROUP: MERGE	
REV. O	REV. DESCRIPTION NEW TITLEBLOCK & UPDATED BOM	REV. DATE 05/08/07	REV. BY ES	Scale: 1=2	Date: 02/11/00
TITLE: 5/7.5/10 NOSE ASSEMBLY				DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applcator 360\360 ASS-215-X106RL

PART NO.	DIM "A"
CTM-215-0120R/L-12X	27.50
CTM-215-2120R/L-12X	30.00
CTM-215-5120R/L-12S	32.50



BILL OF MATERIAL				SOLD
CTM-215-X120RL-12X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1		5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L
②	1		5/7.5/10; MERGE w/ 12" DD SNORKLE	MOD-215-X120R/L
③	1		U-ARM ASSEMBLY	WAS-200-0247
④	1		5/7.5/10; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L
⑤	1		STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L
	1		COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L
⑥	1		5/7.5/10 STANDARD MANDREL (SHOWN)	ASS-200-X147
	1		5/7.5 FILM REWIND MANDREL	ASS-200-X137
	1		5/7.5 COLLAPSIBLE MANDREL	ASS-200-3140-X
	1		DISPLAY UNIT ASSEMBLY	ASS-200-0125
	1		APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5
	1		DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138
	1		PRODUCT DETECT SENSOR	ASS-200-0427

CTM-215-X120R/L-12X

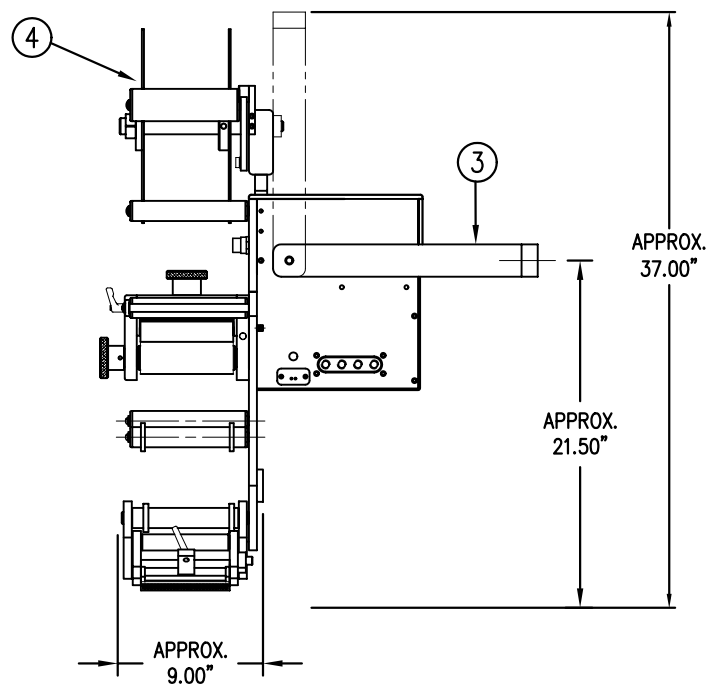
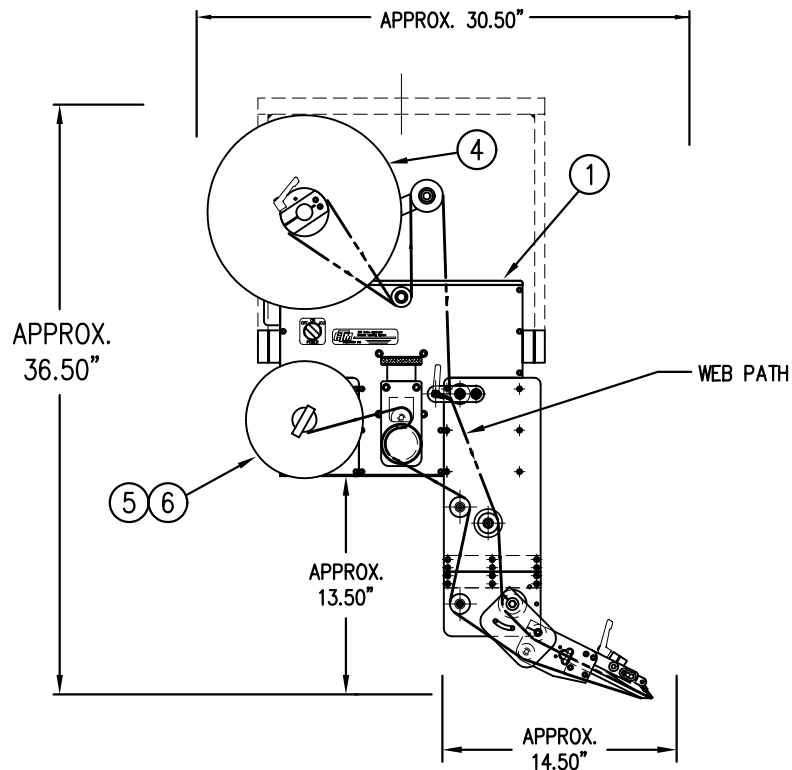
5" WIDE	-0120R/L-12	X
7.5" WIDE	-2120R/L-12	X
10" WIDE	-5120R/L-12S	

— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

RH & LH ASSEMBLIES AVAILABLE  
-5" WIDE; RH ASSEMBLY SHOWN-

NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216



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 SERIES APPLICATOR: MERGE: SNORKEL

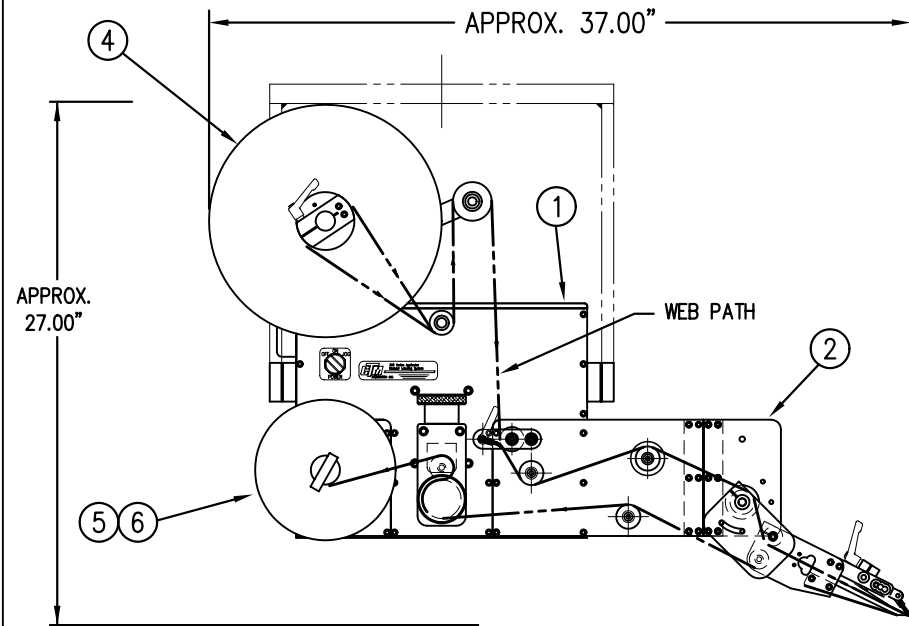
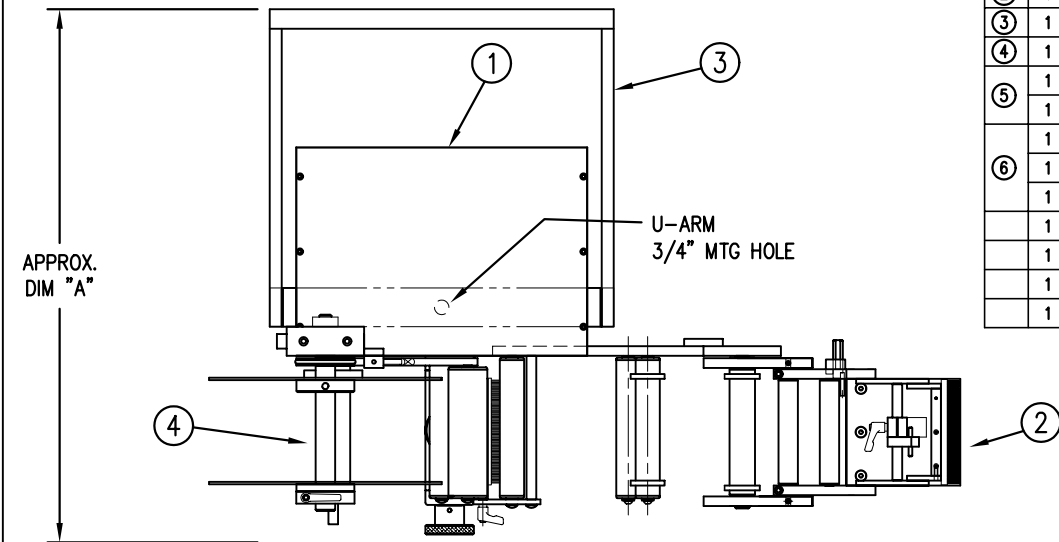
PART: 5/7.5/10 MERGE w/ 12" DROP DOWN SNORKEL (HORIZ. ASSY)

Dept. Code  
70

REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE REWIND	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=12	Date: 03/10/99	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applcator\360 215\CTM-215-X120RL-12Xs1
--------	--	-----------------------	-----------------	----------------	-------------------	---------------------	---



PART NO.	DIM "A"
CTM-215-0123R/L-12X	27.50
CTM-215-2123R/L-12X	30.00
CTM-215-5123R/L-12S	32.50



BILL OF MATERIAL				SOLD
CTM-215-X123RL-12X				S
ASSEMBLY	ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
	①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200-X150R/L
	②	1	5/7.5/10 WIDE;MERGE w/12" EXT. SNKL	MOD-215-X123R/L
	③	1	U-ARM ASSEMBLY	WAS-200-0247
	④	1	5/7.5/10 WIDE; 12" UNWIND w/DISKS	MOD-200-X121R/L
⑤	1	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L
	1	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L
⑥	1	1	5/7.5/10 STANDARD MANDREL (SHOWN)	ASS-200-X147
	1	1	5/7.5/10 FILM REWIND MANDREL	ASS-200-X137
	1	1	5/7.5/10 COLLAPSIBLE MANDREL	ASS-200-3140-X
	1	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125
	1	1	APPLICATOR TO DISPLAY UNIT-5" CABLE	PE-200-0407-5
	1	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138
	1	1	PRODUCT DETECT SENSOR	ASS-200-0427

CTM-215-X123R/L-12X

5" WIDE	-0123R/L-12	X
7.5" WIDE	-2123R/L-12	X
10" WIDE	-5123R/L-12S	

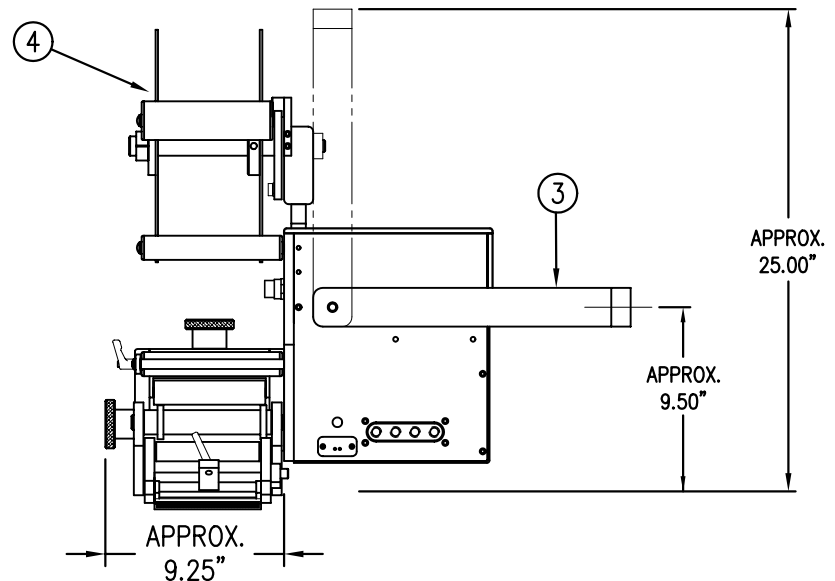
— STD & FILM REWIND
— COLLAPSIBLE RWD
— STANDARD RWD
— FILM REWIND
— COLLAPSIBLE RWD

REV 1

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

RH & LH ASSEMBLIES AVAILABLE  
-5' WIDE; RH ASSEMBLY SHOWN-

NOTE: UNWIND MTG. BRACKET FOR  
5" & 7.5" WIDE APPLICATORS DIFFERS  
FROM 10" WIDE. FOR 10" WIDE MTG.  
BRACKET REFER TO DWG. MP-200-5216



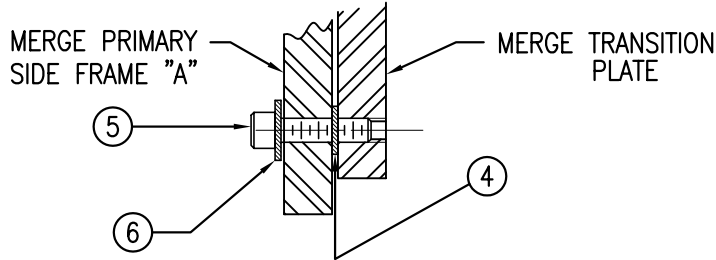
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.				PART: 5/7.5/10 MERGE: w/ 12" EXT. SNORKEL & 12" UNWIND ASS'Y				Dept. Code 70
TITLE: 360 SERIES APPLICATOR: MERGE: SNORKEL								
REV. 1	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. DATE 10/16/07	REV. BY: TDR	Scale: 1=10	Date: 09/28/00	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applcator\360 215\CTM-215-X123RL-12X	



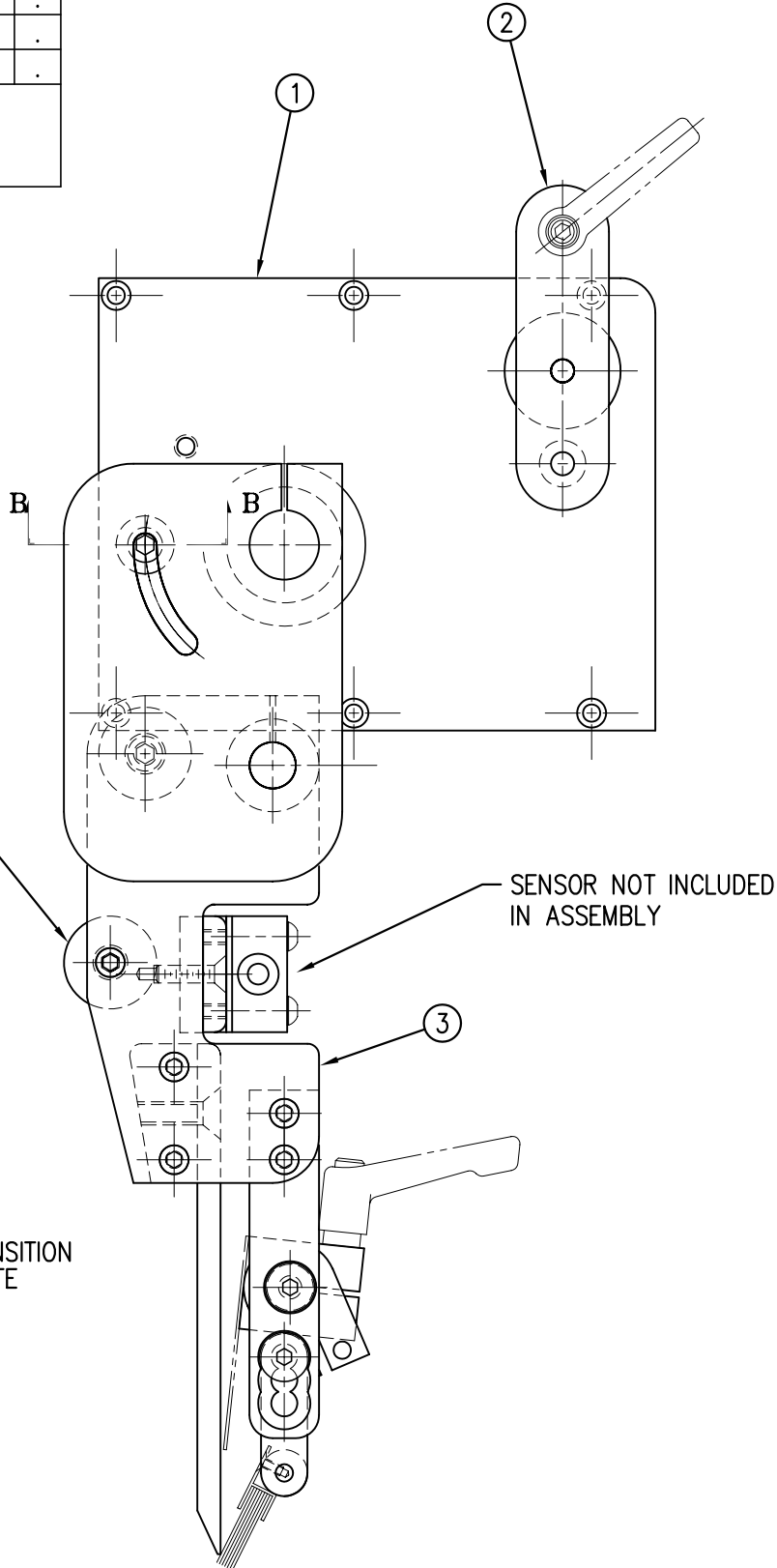
BILL OF MATERIAL				SOLD
ASSEMBLY	MOD-215-3101R/L-X			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	MERGE TRANSITION PLATE	MP-215-0212	.
②	1	5/7.5/10 TENSION BRUSH ASSEMBLY	ASS-200-X126R/L	S
③	1	5/7.5/10 MERGE CLR. LABEL NOSE ASS'Y	ASS-215-3102R/L-X	.
④	1	BRONZE SPACER WASHER	PM-BEBT1000	.
⑤	1	SHCS, #1/4-20 x 1" LG.	.	.
⑥	1	FLAT WASHER, 1/4 NOM. STAINLESS STL.	.	.
	6	SHCS, #10-32 x 5/8" LG.	NONE	.
ORDER CLEAR LABEL SENSOR SEPARATELY #PE-SE2000 ~ FOR LRD2100 #PE-SE2050 ~ FOR LRD6110				

REV 1

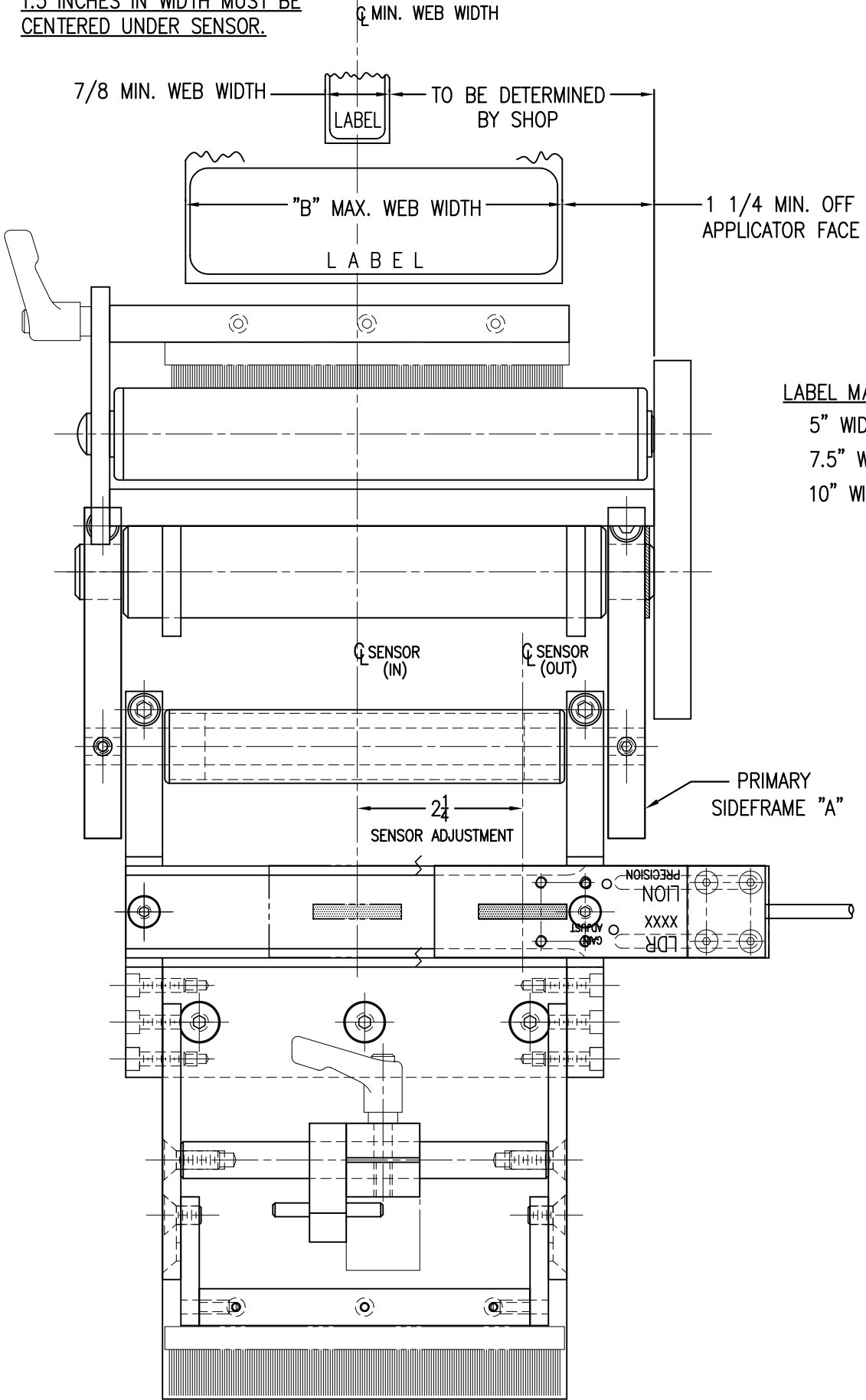
ADDITIONAL (1) ROLLER (MP-215-X210);  
(2) ROLLER CAPS (PM-ROL1990);  
AND (1) ROLLER SHAFT (MP-215-X207)  
USED FOR DOUBLE FEED~NOT INCLUDED IN ASS'Y.



SECTION "B" ROTATED 90° CCW  
(THRU PRIMARY SIDEFRAME "A")



LABELS MEASURING LESS THAN  
1.5 INCHES IN WIDTH MUST BE  
CENTERED UNDER SENSOR.



RH & LH MODULES AVAILABLE  
-RH MODULE SHOWN-

MOD-215-3101R/L-X	
5" WIDE	-3101R/L-5
7.5" WIDE	-3101R/L-7
10" WIDE	-3101R/L-10

LABEL MAX. WIDTH ( "B" DIM. )  
5" WIDE: "B" = 5-1/8"  
7.5" WIDE: "B" = 7-5/8"  
10" WIDE: "B" = 10-1/8"

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 SERIES APPLICATOR: MERGE ASSEMBLY		PART: CLEAR LABEL NOSE ASSEMBLY WITH TRANSITION PLATE	
REV. DESCRIPTION	REV. DATE	REV. BY	REV. DATE
1 FIXED TYPO	07/26/05	TDR	02/11/00
F:\Engineering\Standard Parts\Applcator\360		BOB S.	
215\MOD-215-3101RL-X		Dept. Code 70	

BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-215-3102R/L-X			.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5/10 PRIMARY ROLLER	MP-215-X211	.
②	2	ROLL CAP	MP-215-0215	.
③	1	PRIMARY ROLLER SHAFT	MP-215-0209	.
④	2	GUIDE COLLAR	MP-211-0210	S
⑤	1	BRONZE WASHER	PM-BEBT1028	.
⑥	2	MERGE PRIMARY SIDE FRAME (1 AS DETAILED - 1 OPPOSITE HAND)	MP-215-0221	.
⑦	1	SECONDARY SIDE FRAME (AS DETAILED)	MP-215-3303A	.
⑧	1	SECONDARY SIDE FRAME (OPP. HAND)	MP-215-33030	.
⑨	2	5/7.5/10 SECONDARY ROLLER	MP-215-X210	.
⑩	4	ROLL CAP	PM-200-0295-1	.
⑪	1	5/7.5/10 SECONDARY ROLLER SHAFT	PM-215-X207	.
⑫	1	5/7.5/10 SECONDARY PIVOT PIN	MP-215-X225	.
⑬	1	BRUSH MOUNT EXT. PLATE (AS DETAILED)	MP-215-0220A	.
⑭	1	BRUSH MOUNT EXT. PLATE (OPP. HAND)	MP-215-02200	.
⑮	1	MERGE PEEL EDGE	MP-215-0214	S
⑯	1	PEEL EDGE SUPPORT	MP-215-0204	.
⑰	1	SPRING BLOCK MOUNTING ROD	PM-215-0222	.
⑱	1	SPRING BLOCK	ASS-211-0105-1	S
⑲	2	SPRING BLOCK	ASS-211-0105-1	S
⑲	1	SPRING BLOCK STOP COLLAR	ASS-211-0110	S
⑲	2	SPRING BLOCK STOP COLLAR	ASS-211-0110	S
⑳	4	FIBER WASHER 3/4" O.D. x 1/2" I.D. x .03" THICK	PM-FAW30920	.
㉑	1	MERGE NOSE BRUSH ASSEMBLY	ASS-215-X107	S
㉒	1	CLEAR LABEL SENSOR MOUNT	MP-215-3302	.
㉓	1	CLEAR LABEL SENSOR NUT PLATE	MP-214-3301	.
㉔	2	1/4" BLK. NYLON LOOP STRAP	PE-CC1050	.

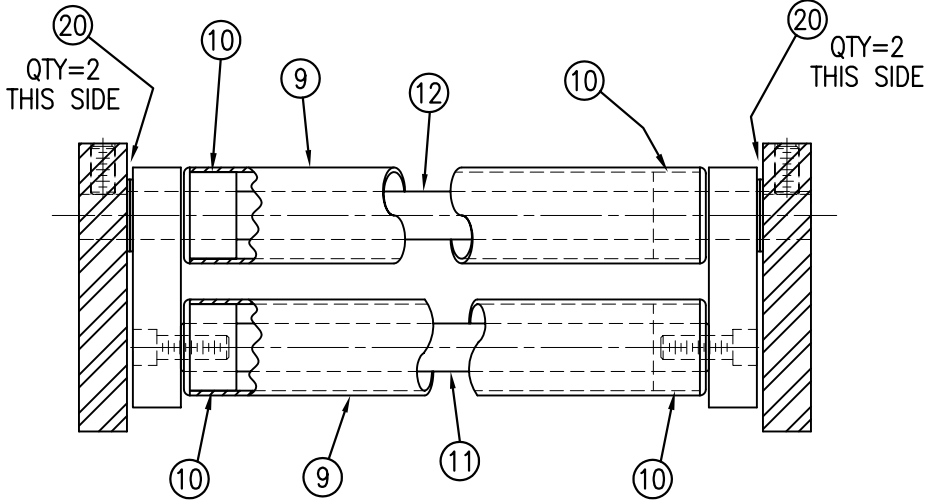
NOTE: ORDER LRD 6110 CLEAR LABEL SENSOR SEPARATELY  
CLEAR LABEL SENSOR (#LRD6110) ~ #PE-SE2050

RH & LH ASSEMBLIES AVAILABLE  
-RH ASSEMBLY SHOWN-

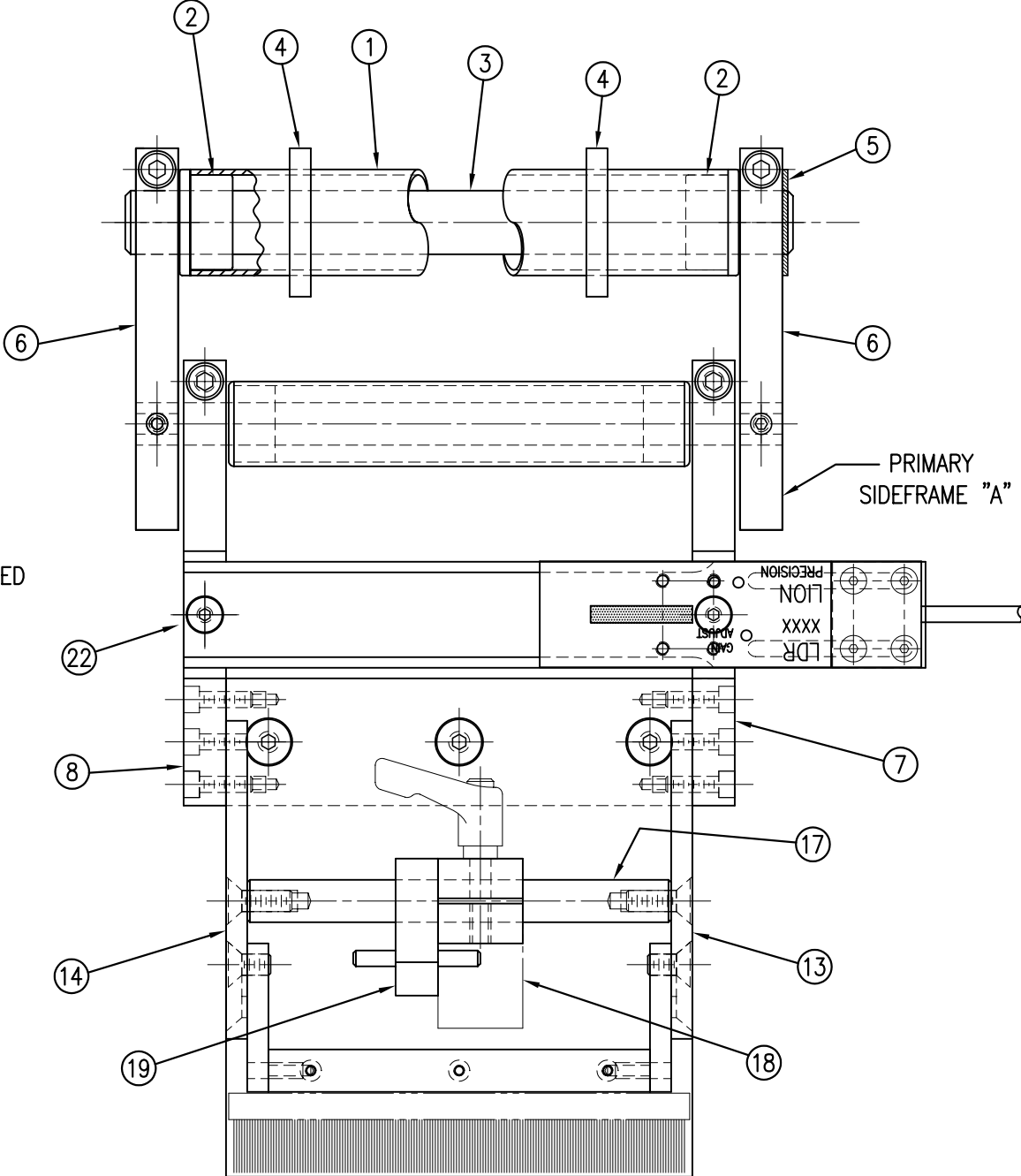
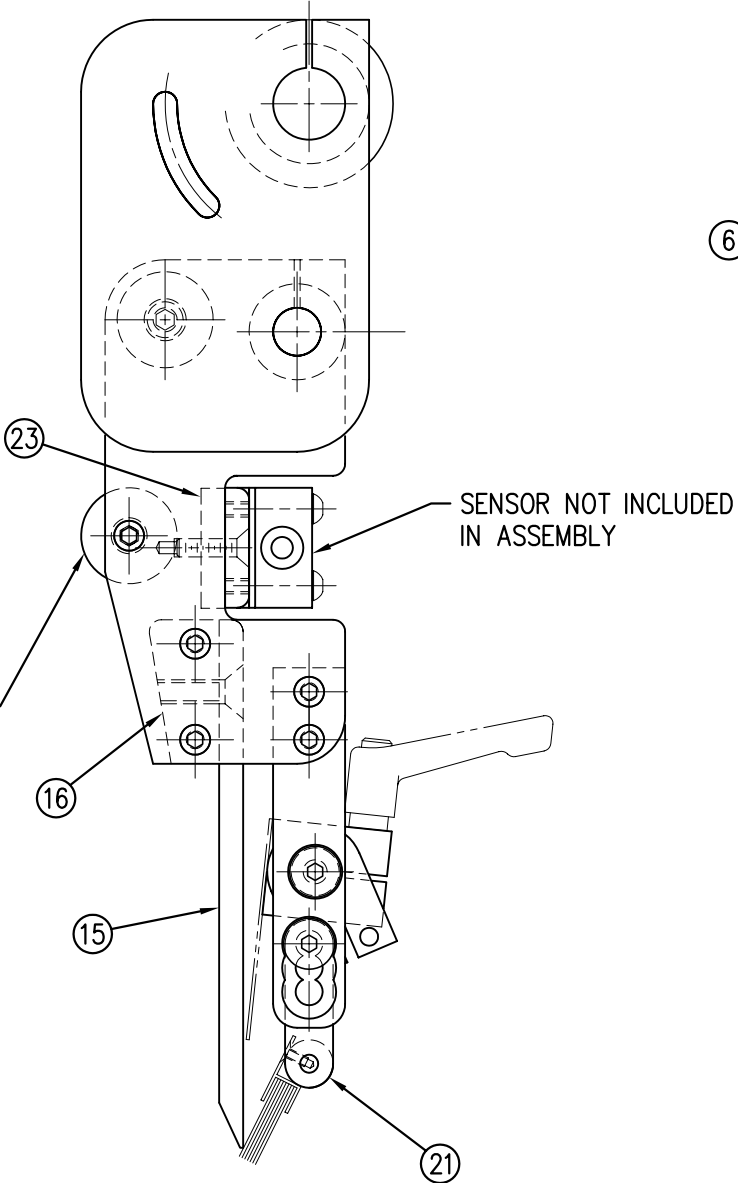
ASS-215-3102R/L-X	
5" WIDE	-3102R/L-5
7.5" WIDE	-3102R/L-7
10" WIDE	-3102R/L-10

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 SERIES APPLICATOR: MERGE ASSEMBLY	REV. DESCRIPTION
2	REV. 2 REMOVED LRD 2100 CLEAR LABEL SENSOR
REV. DATE	01/23/08
REV. BY:	TDR
Scale:	1=2
Date:	02/11/00
Drawn By:	BOB S.
Part:	5/7.5/10 CLEAR LABEL NOSE ASSEMBLY
Dept. Code	70
F:\Engineering\Standard Parts\Applcator\360	215\ASS-215-3102RL-X

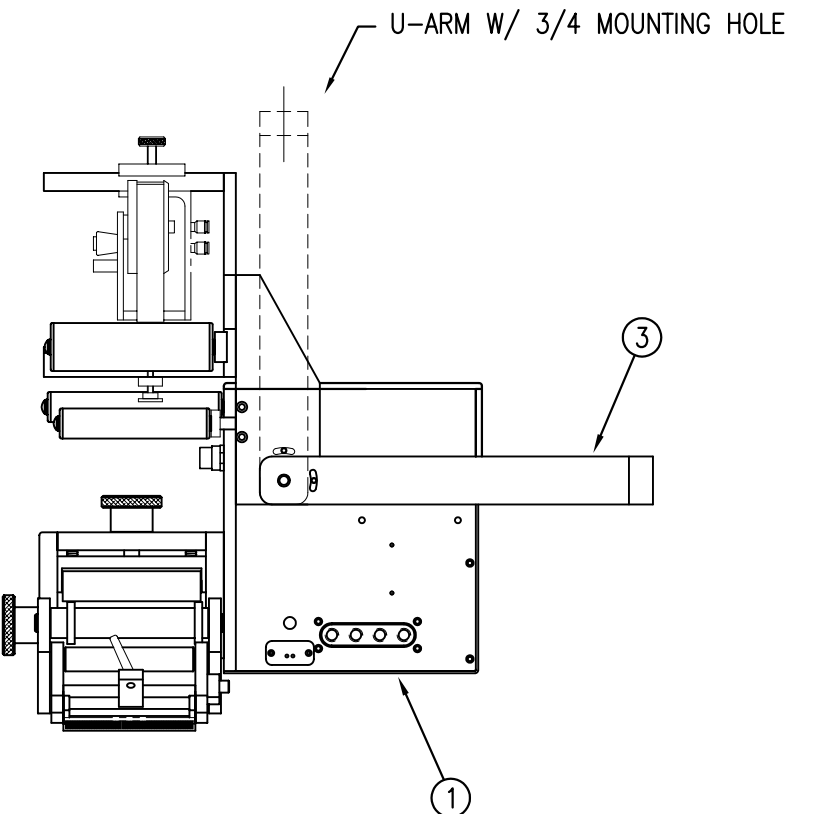
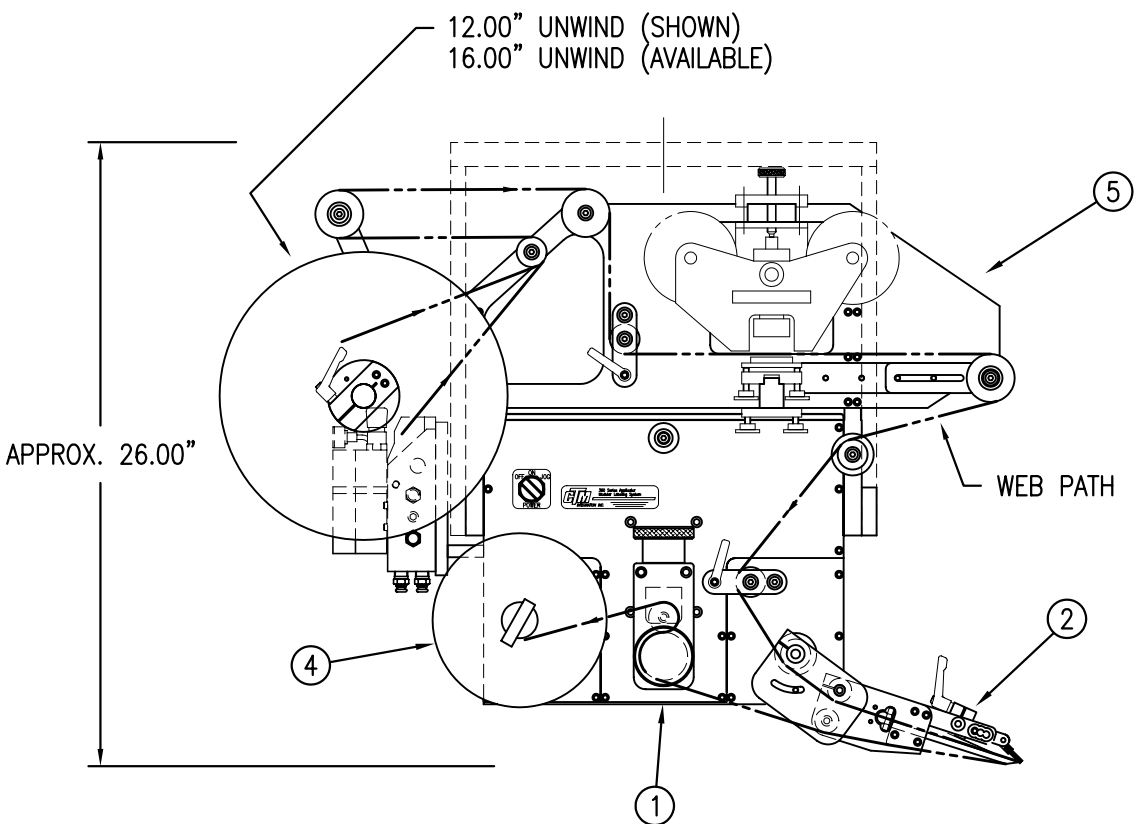
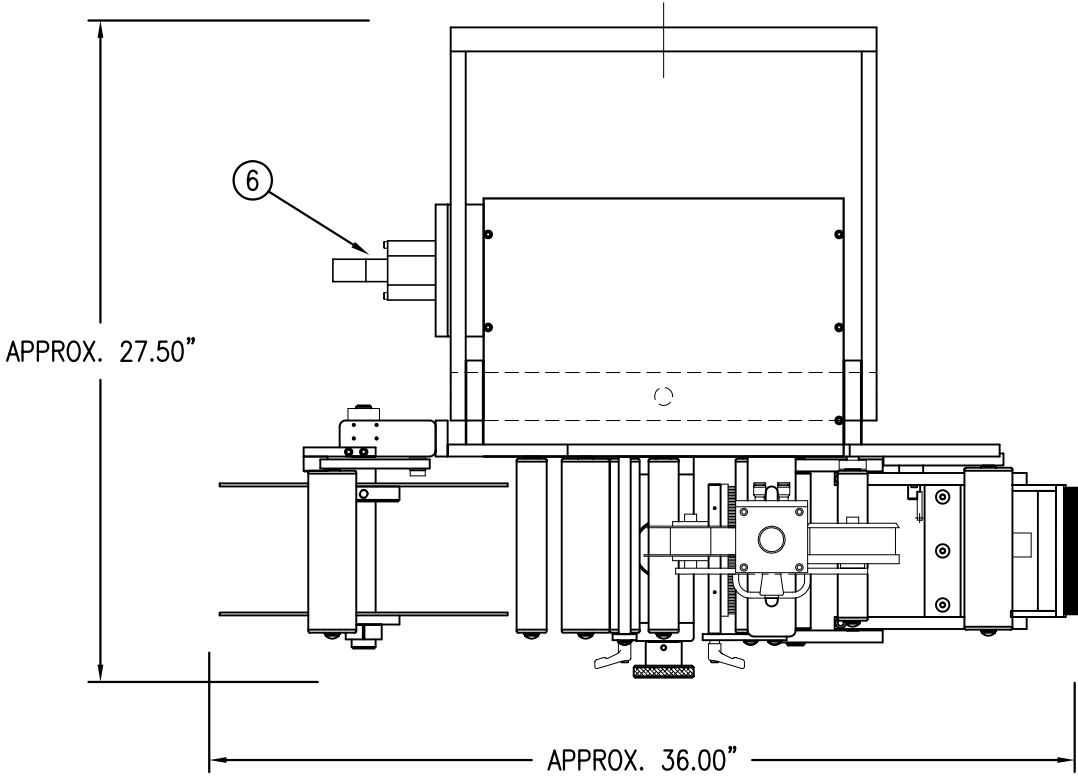
ADDITIONAL (1) ROLLER (MP-215-X210);  
(2) ROLLER CAPS (PM-ROL1990);  
AND (1) ROLLER SHAFT (MP-215-X207)  
USED FOR DOUBLE FEED~NOT INCLUDED IN ASS'Y.



SECTION "A" - ROTATED 90° CW  
(SHOWING SECONDARY MERGE ROLLERS)



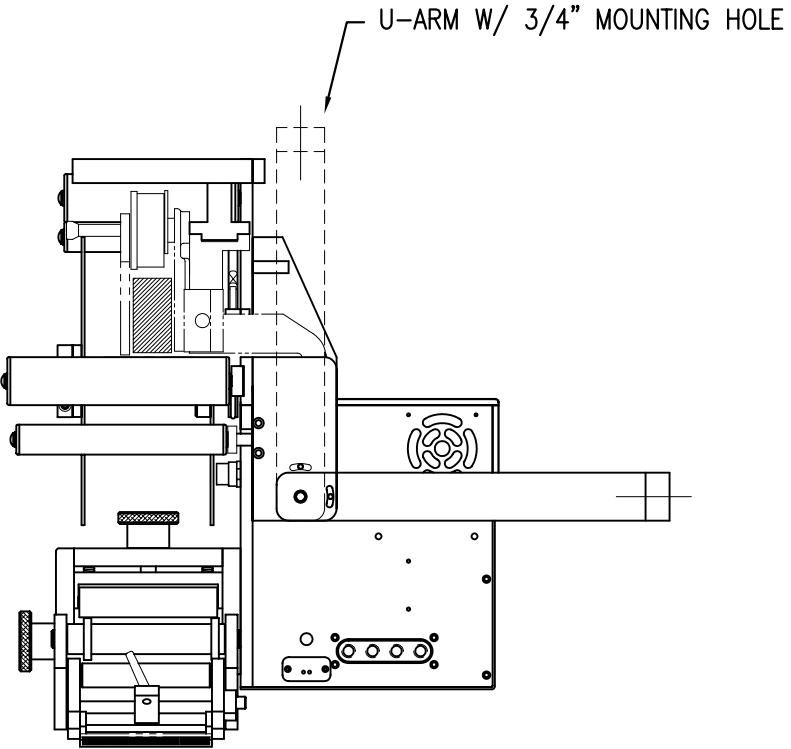
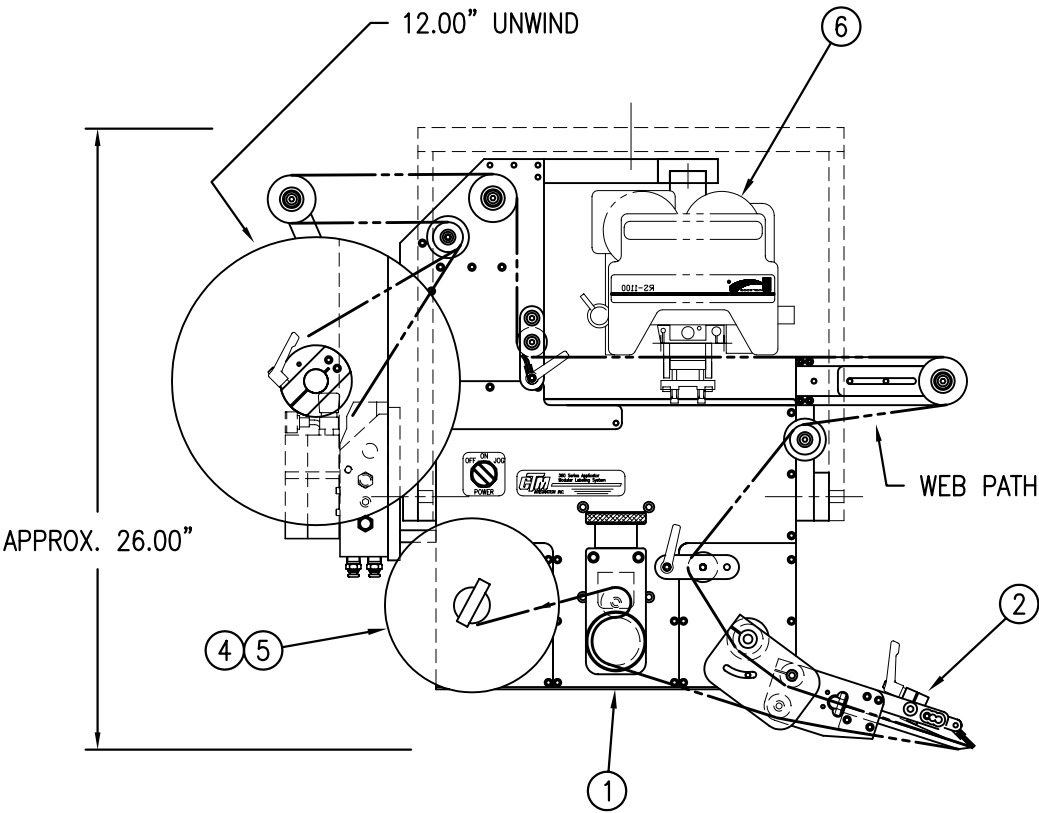
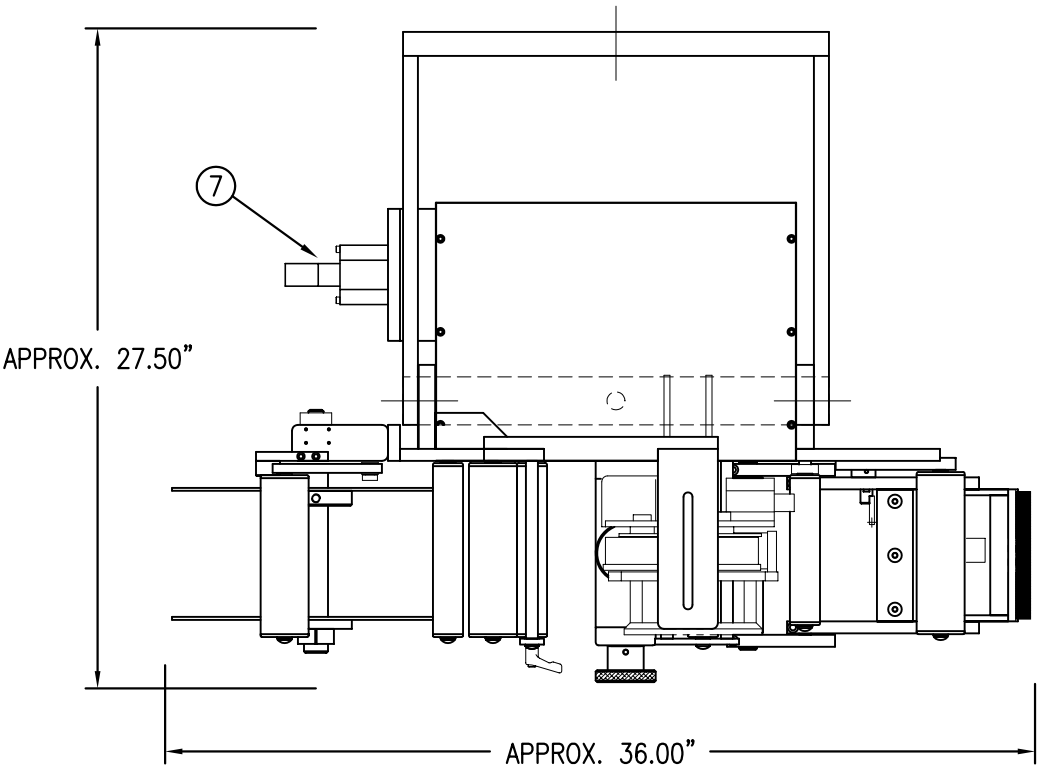
BILL OF MATERIAL				SOLD
ASSEMBLY	CTM-215-4101R/L-X-XS			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5"/7.5" WIDE; CORE UNIT	ASS-200-X150R/L-IMP	S
②	1	5"/7.5" WIDE; MERGE NOSE MODULE	MOD-215-X105R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5"/7.5"; STD REWIND BLOCK & SHAFT	ASS-200-0145R/L	S
		5"/7.5"; COLLAPSE RWD BLOCK & SHAFT	ASS-200-3167R/L	S
⑤	1	5"/7.5"; STD REWIND MANDREL	ASS-200-X147	S
	1	5"/7.5"; FILM REWIND MANDREL	ASS-200-X137	S
	1	5"/7.5"; COLLAPSIBLE REWIND MANDREL	ASS-200-3140-X	S
⑥	1	5"/7.5" GOTTSCHO w/ 12" UNWIND ASS'Y	ASS-200-4101R/L-X-12	S
	1	5"/7.5" GOTTSCHO w/ 16" UNWIND ASS'Y	ASS-200-4101R/L-X-16	S
⑦	1	VALVE BANK FOR IMPRINTER	ASS-215-0109	.
8	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
9	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
10	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
11	1	PRODUCT DETECT SENSOR	ASS-200-0427	S



RH & LH ASSEMBLIES AVAILABLE		CTM-215-4101R/L-X-XX
-RH ASSEMBLY SHOWN-		
5" WIDE:	12" UNWIND STD. RWD.	-4101R/L-5-12S
5" WIDE:	12" UNWIND FILM RWD.	-4101R/L-5-12F
5" WIDE:	12" UNWIND STD. RWD.	-4101R/L-5-12C
5" WIDE:	16" UNWIND STD. RWD.	-4101R/L-5-16S
7.5" WIDE:	12" UNWIND STD. RWD.	-4101R/L-7-12S
7.5" WIDE:	12" UNWIND FILM RWD.	-4101R/L-7-12F
7.5" WIDE:	12" UNWIND COLLAPSE RWD.	-4101R/L-7-12C

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 SERIES APPLICATOR: MERGE ASSEMBLY		PART: 5"/7.5" WIDE: MERGE ASSY w/ GOTTSCHO IMPRINTER	
REV. 2	REV. DESCRIPTION 2 NEW COLLAPSIBLE MANDREL	REV. BY: TDR	REV. DATE: 10/16/07
Scale: 1=8		Date: 09/15/99	Dept. Code 70
F:\Engineering\Standard Parts\Applcator\360		F:\Engineering\Standard Parts\Applcator\360	
215\CTM-215-4101R-L-X-XX		BOB S.	

BILL OF MATERIAL				SOLD
ASSEMBLY	CTM-215-4102R/L-X-12X			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5"/7.5 WIDE; CORE UNIT	ASS-200-X150R/L-IMP	S
②	1	5"/7.5" WIDE; MERGE NOSE MODULE	MOD-215-X105R/L	S
③	1	U-ARM ASSEMBLY	WAS-200-0247	.
④	1	5"/7.5"; STD REWIND BLOCK & SHAFT	ASS-200-0145R/L	S
		5"/7.5"; COLLAPSE RWD BLOCK & SHAFT	ASS-200-3167R/L	S
⑤	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S
⑥	1	5"/7.5" NORWOOD IMPRINTER ASSEMBLY	ASS-200-4102R/L-X-12	S
⑦	1	VALVE BANK FOR IMPRINTER	ASS-215-0109	.
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S



CTM-215-4102R/L-X-12X	
5" WIDE; STD	-4102-5-12S
5" WIDE; FILM	-4102-5-12F
5" WIDE; COLLAPSE	-4102-5-12C
7.5" WIDE; STD	-4102-7-12S
7.5" WIDE; FILM	-4102-7-12F
7.5" WIDE; COLLAPSE	-4102-7-12C

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 SERIES APPLICATOR: MERGE ASSEMBLY		PART: 5"/7.5" WIDE; MERGE w/ NORWOOD IMPRINTER ASSEMBLY	
REV. 3	REV. DESCRIPTION NEW COLLAPSIBLE MANDREL	REV. BY: TDR	REV. DATE: 10/16/07
Scale: 1=8		Date: 01/06/00	Drawn BY: BOB S.
F:\Engineering\Standard Parts\Appliator\360		Dept. Code 70	215\CTM-215-4102RL-X-12X

# BILL OF MATERIAL

ASS-215-0109M

ASS-215-0109M

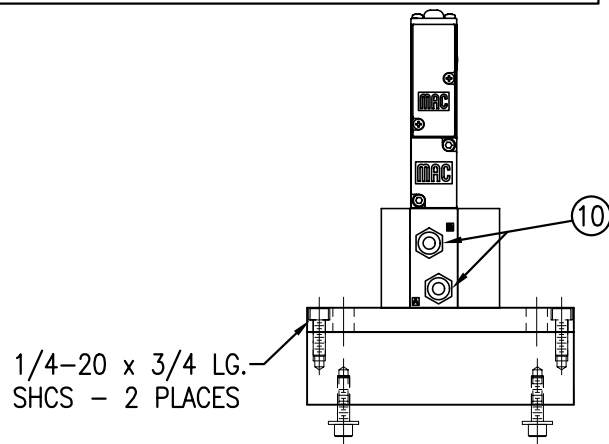
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0202	VALVE FASTENING PLATE
②	1	MP-214-0206	VALVE MOUNTING PLATE
③	1	PE-200-0405	VALVE CABLE
④	1	PM-VA2300M	SINGLE STATION MAC VALVE BANK
⑤	1	PE-C02000	CORD GRIP
⑥	1	PE-COND1084	STEEL REDUCER
⑦	2	PM-MU1027	3/8" NPT MALE BRONZE EXHAUST MUFFLER
⑧	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑨	3	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
⑩	2	PM-PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
⑪	2	PM-PA1800	FLOW CONTROLS
⑫	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
○	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
○	2	PM-FAW30275	1/4" SS FLAT WASHER
○	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
○	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
○	4	PM-FAW30265	#10 SS FLAT WASHER

## VALVE BANK SPARE PARTS:

SOLENOID: #PM-VA2395M

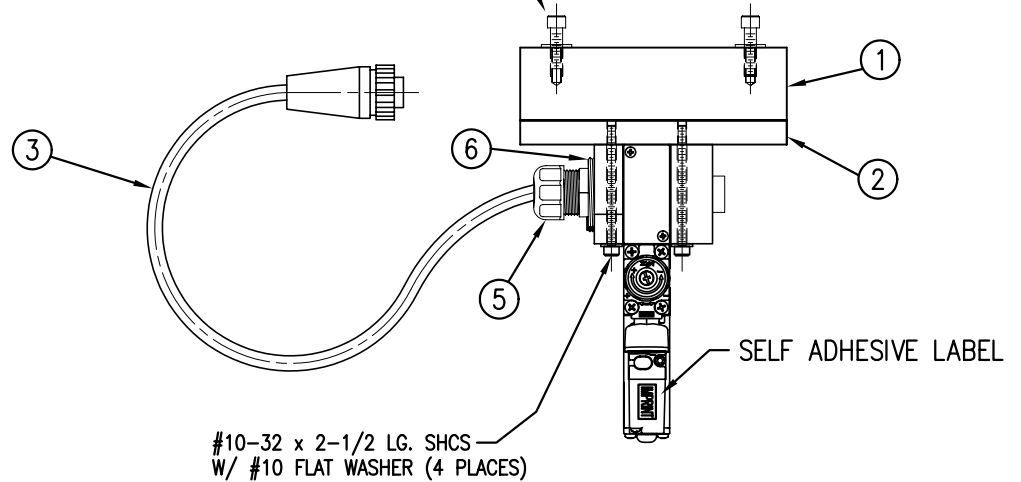
BLOW/TAMP/IMPRINTER REGULATORS W/GUAGE: #PM-VA2397M

BLOW/TAMP/IMPRINTER REGULATOR GUAGES: #PM-VA2380M

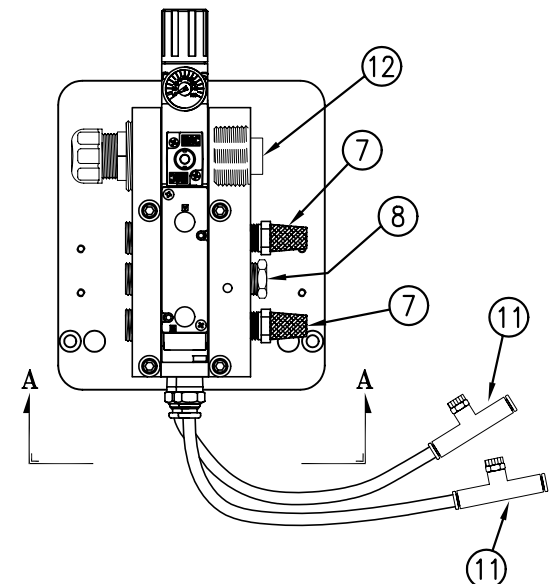
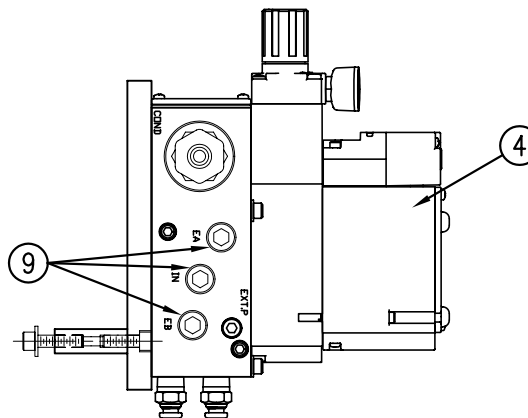


END VIEW "A"  
(VALVE BANK & MTG. ONLY)

MOUNTING FASTENERS  
1/4-20 x 7/8" LG. SHCS  
w/ F.W. (2 PLACES)



#10-32 x 2-1/2 LG. SHCS  
w/ #10 FLAT WASHER (4 PLACES)



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.

THIS DRAWING AND DESIGN IS THE PROPERTY OF CHM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CHM INTEGRATION INC.										
APPLICATOR SERIES: 360		APPLICATOR WIDTH(S): 5"/7.5"/10"		GROUP: VALVE BANKS		TITLE: MERGE/ IMPRINTER VALVE BANK ASSEMBLY				Dept. Code 70
REV. 0	REV. DESCRIPTION —			REV. DATE —	REV. BY: XXX	Scale: 1=4	Date: 04/02/07	DRAWN BY: E. SANOR	F:\Engineering\Standard Parts\Appliator\360\ 360\ASS-215-0109M	

# BILL OF MATERIAL

SOLD

ASS-215-0109

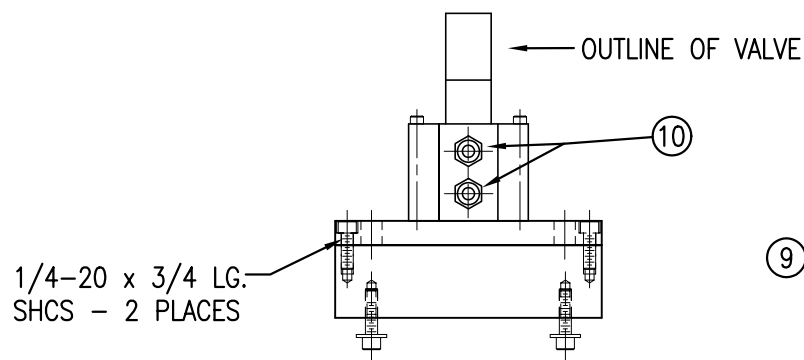
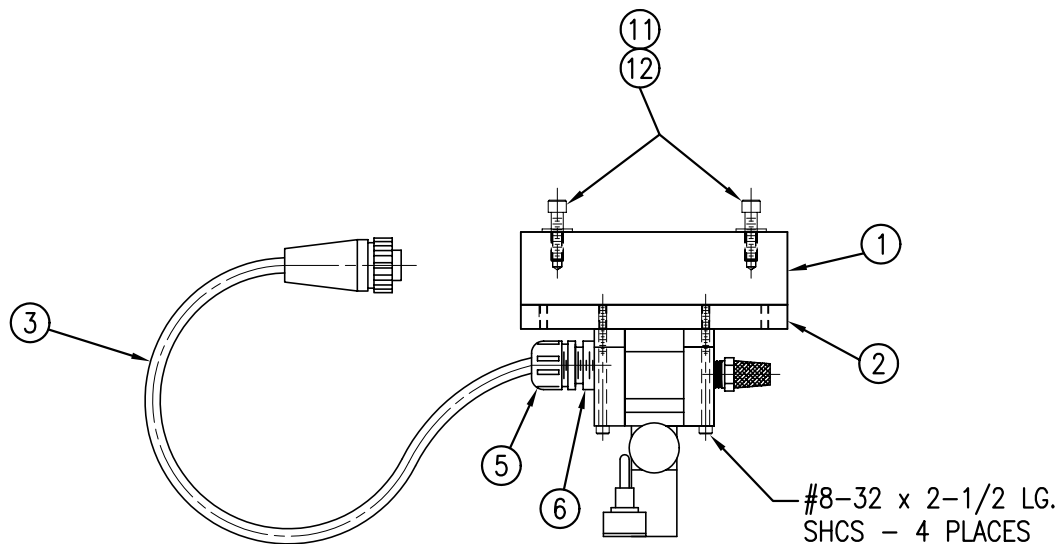
ASSEMBLY		ASS-215-0109		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VALVE FASTENING PLATE	MP-214-0202	.
②	1	VALVE MOUNTING PLATE	MP-214-0206	.
③	1	VALVE CABLE	PE-200-0405	.
④	1	VALVE BANK	PM-VA2300	.
⑤	1	CORD GRIP	PE-CO2000	.
⑥	1	BUSHING, 3/4" NPT to 1/4" NPT	PE-COND1080	.
⑦	2	1/4" BRONZE EXHAUST MUFFLER	PM-MU1025	.
⑧	1	3/4" NPT PLUG	PE-EN9110	.
⑨	3	1/4" NPT PLUG	PM-FT1200	.
⑩	2	FITTING, 1/4" TUBE to 1/4" NPT STR.	PM-PF1010	.
⑪	2	1/4"-20 UNC x 7/8" LG. SHCS	NONE	.
⑫	2	1/4" FLAT WASHER	NONE	.

## VALVE BANK SPARE PARTS:

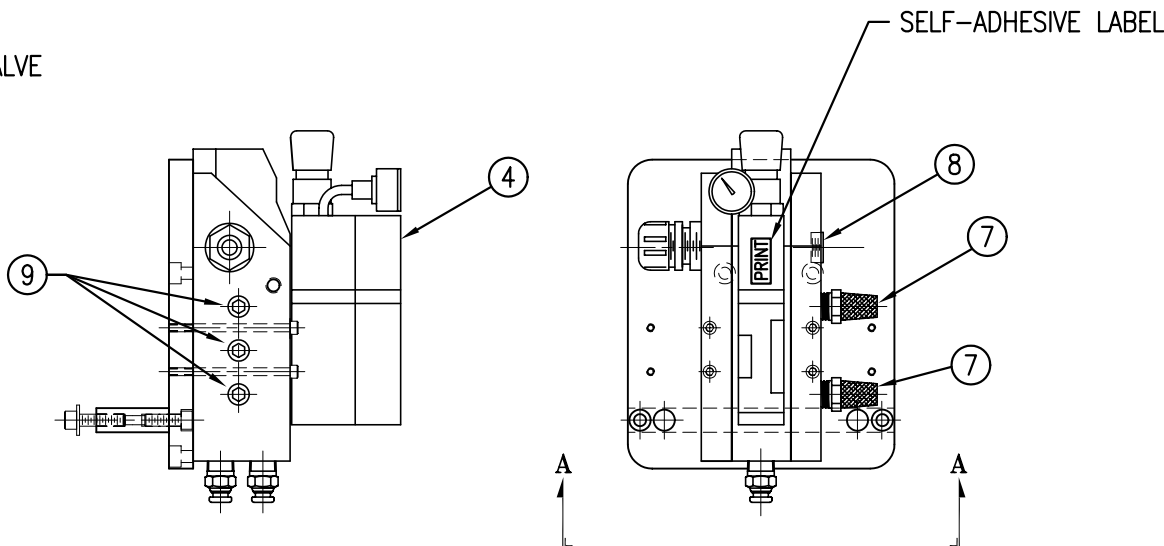
SOLENOID: #PM-VA2395

AIR ASSIST REGULATOR: #PM-VA2396

BLOW/TAMP/IMPRINTER REGULATORS: #PM-VA2397



END VIEW "A"  
(VALVE BANK & MTG. ONLY)



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 SERIES APPLICATOR: MERGE ASSEMBLY

PART: MERGE/ IMPRINTER VALVE BANK ASSEMBLY

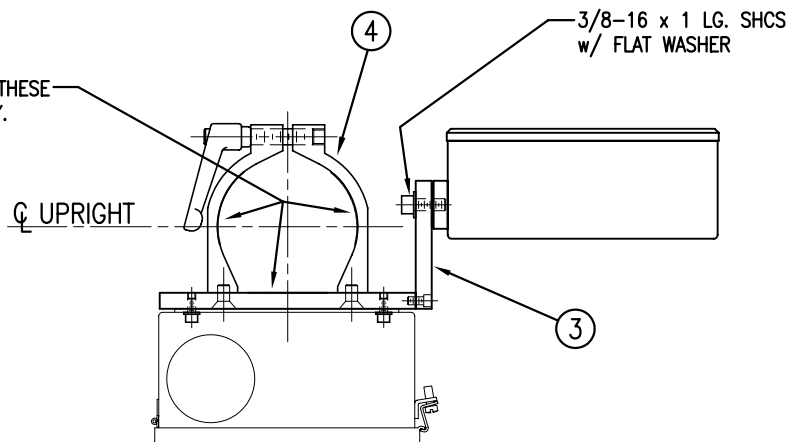
Dept. Code  
70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Appliator\360
1	ADDED SPARE PARTS LIST NOTE	02/16/05	TDR	1=4	10-15-01	BOB S.	215\ASS-215-0109

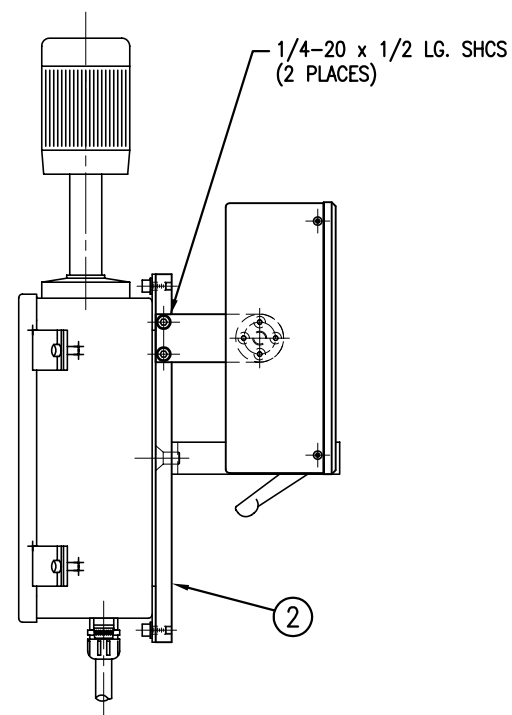
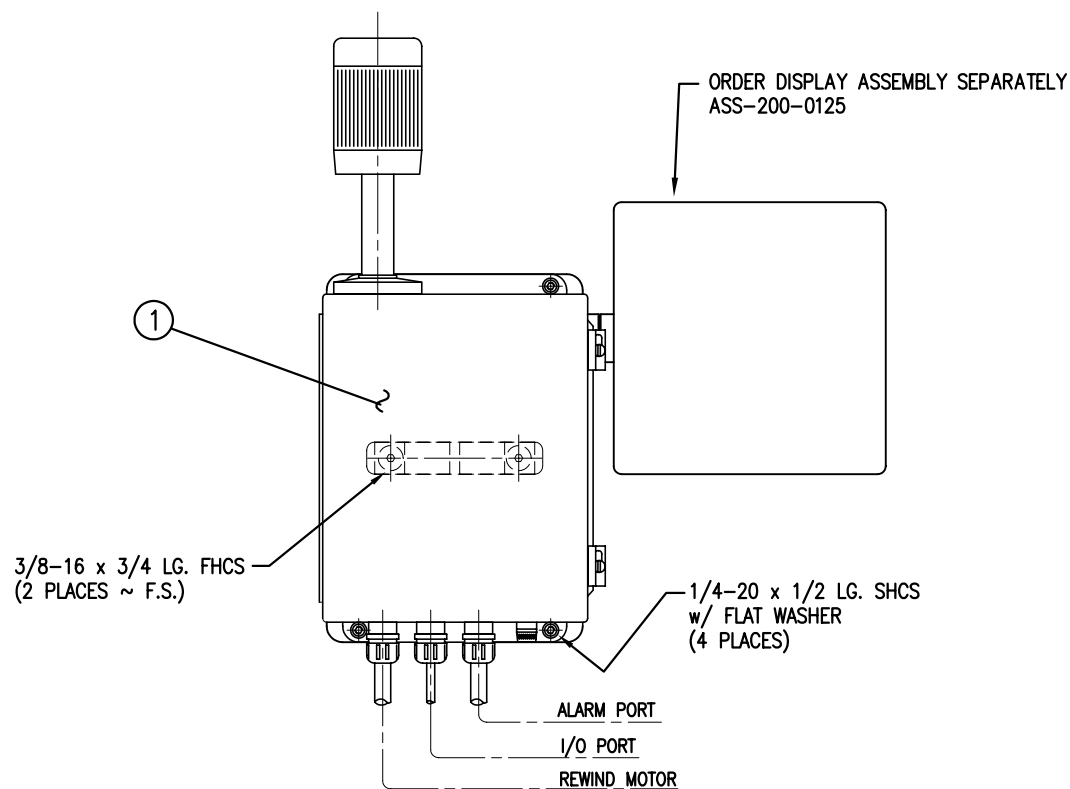


ASS-200-3161-AC

APPLY UHMW TAPE TO THESE SURFACES AT ASSEMBLY.



BILL OF MATERIAL				SOLD
ASS-200-3161-AC				S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	REWIND DRIVE/ALARM LIGHT ENCLOSURE	ASS-200-3163	.
②	1	REWIND ENCLOSURE MOUNT PLATE	MP-200-3322	.
③	1	DISPLAY MOUNT	MP-200-3323	.
④	1	UPRIGHT TUBE CLAMP ASSEMBLY	ASS-CL1000	.
10"		1" WIDE UHMW TAPE (CUT TO SUIT)	PM-T1020	.



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 SERIES APPLICATOR: 16" & 20" UNWIND w/ POWERED REWIND				PART: ENCLOSURE ASSEMBLY w/ AC INCANDESCENT LIGHT				Dept. Code 70
REV. 3	REV. DESCRIPTION OBSOLETE ASSEMBLY RENAMED (WAS ASS-200-3161)	REV. DATE 08/28/09	REV. BY: TDR	Scale: 1=6	Date: 02/22/99	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Appliator\360 200\ASS-200-3161-AC	

ASS-200-3163-AC

NOTE: ITEM ③  
FOR PROGRAM VERSIONS 360-2B.25  
USE PE-LI2058 FLASHING LIGHT

LINE UP TAB ON  
DIAL w/ NOTCH  
IN WASHER

LOCK WASHER & WASHER  
(PROVIDED w/ ITEM ⑩)

#8-32 x 3/8 LG.  
SHCS ~ 2 PLCS.

ENLARGED VIEW  
(SCALE: 1=2)

REMOVE  
ENABLE  
JUMPER

PANEL SCREWS  
(PROVIDED w/ENCLOSURE)

#10-32 x 1/2 LG.  
SHCS w/ FLAT WASHER  
2 PLACES

## BILL OF MATERIAL

SOLD

ASS-200-3163-AC			
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER
①	1	CONTINUOUS HINGE ENCLOSURE w/ GROUNDING KIT	MP-EN2001
②	1	LIGHT POLE	PE-LI2000
③	1	RED STEADY LIGHT (SEE NOTE)	PE-LI2032
④	1	DRIVE MOTOR CONTROLLER	PE-MC1109
⑤	1	RELAY - MOTOR	PE-RE1012
⑥	1	SOCKET - ALARM LIGHT STACK	PE-RE1050
⑦	1	RELAY - ALARM LIGHT STACK	PE-RE1001
⑧	2	STOP CLIP	PE-RE1053
⑨	1	RELAY MOUNTING CHANNEL (CUT TO 2 3/4" LENGTH)	CP-200-0271
⑩	1	5k SPEED POTENTIOMETER	PE-P01030
⑪	1	SPEED POTENTIOMETER DIAL	PE-P02010
⑫	1	POTENTIOMETER MOUNTING BRACKET	MP-POT1000
⑬	1	TERMINAL	PE-TE6050
⑭	1	TERMINAL NUMBERS	PE-TE6051
⑮	1	FUSE HOLDER	PE-FU5005
⑯	1	3 amp FUSE	PE-FU2065
⑰	2	16/3 ELECTRICAL CORD (CUT TO 10 FT. LENGTH)	PE-C03050
⑱	1	8 CONDUCTOR CABLE (CUT TO 10 FT. LENGTH)	PE-CA2200
⑲	2	1/2" CORD GRIP (1/4" TO 3/8")	PE-C02005
⑳	1	1/2" CORD GRIP (1/8" TO 1/4")	PE-C02000
㉑	3	LOCK NUT	PE-COND1005
㉒	7	STICKY PAD	PE-PA1079
㉓	1	SIGNAL ISOLATION BOARD	PE-SI1050

#10-32 x 3/8 LG. SHCS  
w/ FLAT WASHER  
2 PLACES FOR MTG. CHANNEL

ADD LABEL

TO  
REWIND  
MOTOR

I/O  
PORT

ALARM  
PORT

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 SERIES APPLICATOR: 16" & 20" UNWIND w/ POWERED REWIND

PART: REWIND DRIVE/AC INCANDESCENT ALARM LIGHT ENCLOSURE

Dept. Code  
70

REV. 5 REV. DESCRIPTION  
OBSOLETE ASSEMBLY RENAMED (WAS ASS-200-3163)

REV. DATE  
08/28/09

REV. BY:  
TDR

Scale:  
1=3

Date:  
02/22/99

DRAWN BY:  
BOB S.

F:\Engineering\Standard Parts\Applicator\360  
200\ASS-200-3163-AC

B.O.M. (SINGLE LIGHT STACK)				SOLD
ASSEMBLY		ASS-200-4105-XX		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	LABELER TO LIGHT STACK CABLE	PE-200-0409	.
②	1	ALARM LIGHT ENCLOSURE ASS'Y.	ASS-200-4221	.
③	1	LIGHT STACK BASE	PE-LI2001	.
④	1	RELAY	PE-RE1001	.
⑤	1	RELAY SOCKET	PE-RE1050	.
⑥	1	DIN RAIL	CP-200-0271	REV 3
⑦	1	1/2" GASKET	PE-COND1150	.
⑧	1	CORD GRIP	PE-CO2005	.
⑨	1	1/2" CLOSED NIPPLE	PE-COND1167	.
⑩	2	1/2" LOCKNUT	PE-COND1005	REV 2
⑪	1	RED STEADY LIGHT (SEE NOTE)	PE-LI2032	.
	1	AMBER STEADY LIGHT (SEE NOTE)	PE-LI2034	.
⑫	1	ALARM LIGHT MOUNTING ASSEMBLY	ASS-200-4106	.
	1	22 AWG WHT/RED WIRE x 10" LONG	PE-W104101B	.

NOTE:  
PRIOR TO PROGRAM VERSION 360-2c.10.0  
THE PURCHASED LIGHTS (ITEM ⑪) WERE  
FLASHING LIGHTS AND THEIR CORRESPONDING  
PART NOS. WERE  
#PE-LI2058 FOR RED FLASHING LIGHT  
#PE-LI2059 FOR AMBER FLASHING LIGHT

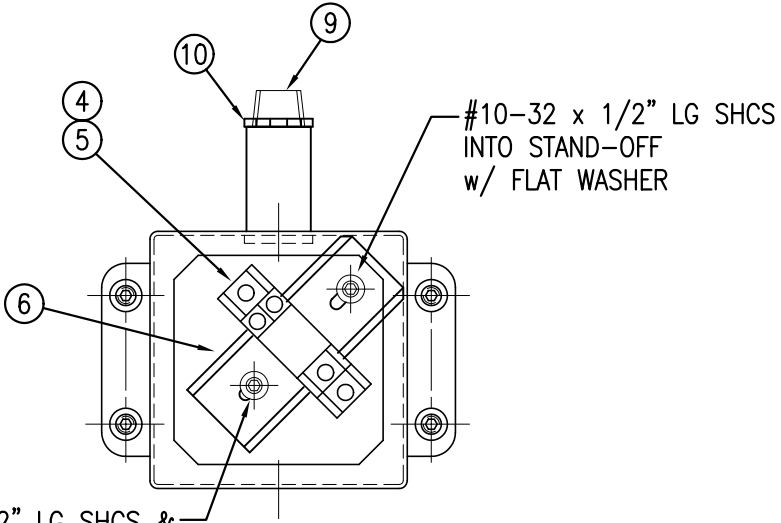
REV 3

REV 2

CHOOSE LIGHT COLOR

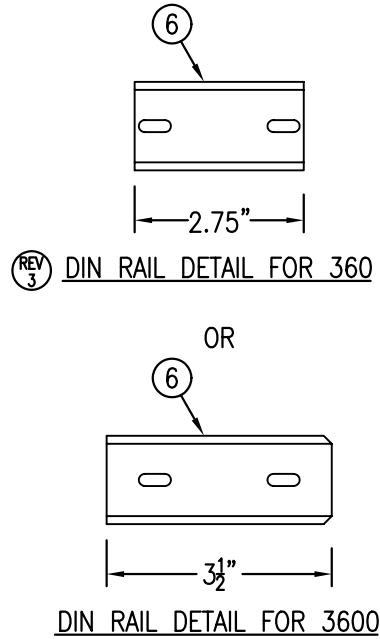
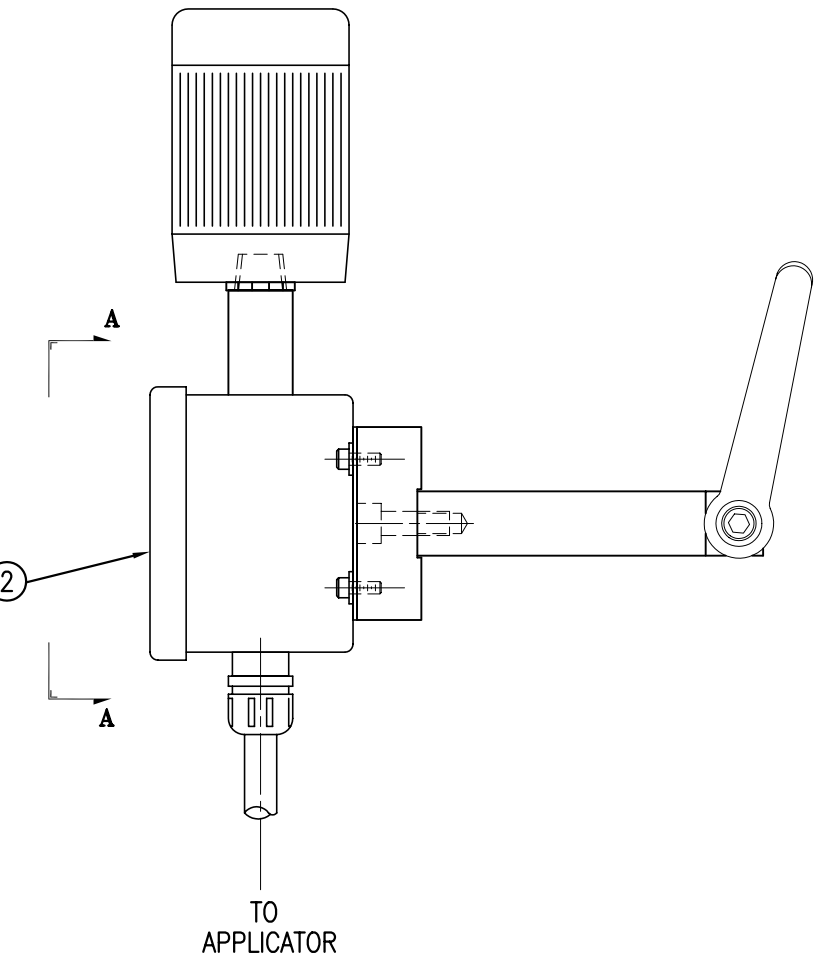
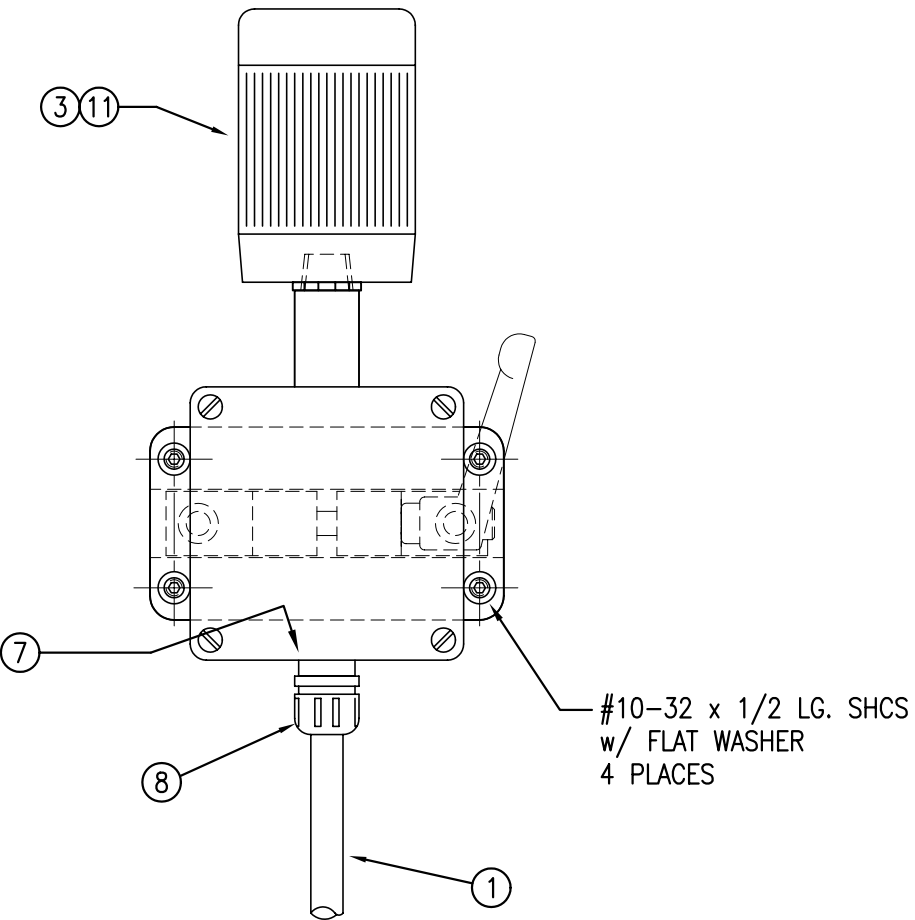
ASSY w/MTG. BRACKET

FOR WIRING  
PRIOR TO PROGRAM VERSION 360-2c.10.0 - USE ASS-200-0455  
PROGRAM VERSION 360-2c.10.0 AND LATER - USE ASS-200-0472



USE #10-32 x 1/2" LG SHCS &  
NUT AS A STAND-OFF

END VIEW "A"  
(WITH COVER REMOVED)



ASS-200-4105-XX	
RED LIGHT	-4105-R
RED LIGHT w/BACKET	-4105-RB
AMBER LIGHT	-4105-A
AMBER LIGHT w/BACKET	-4105-AB

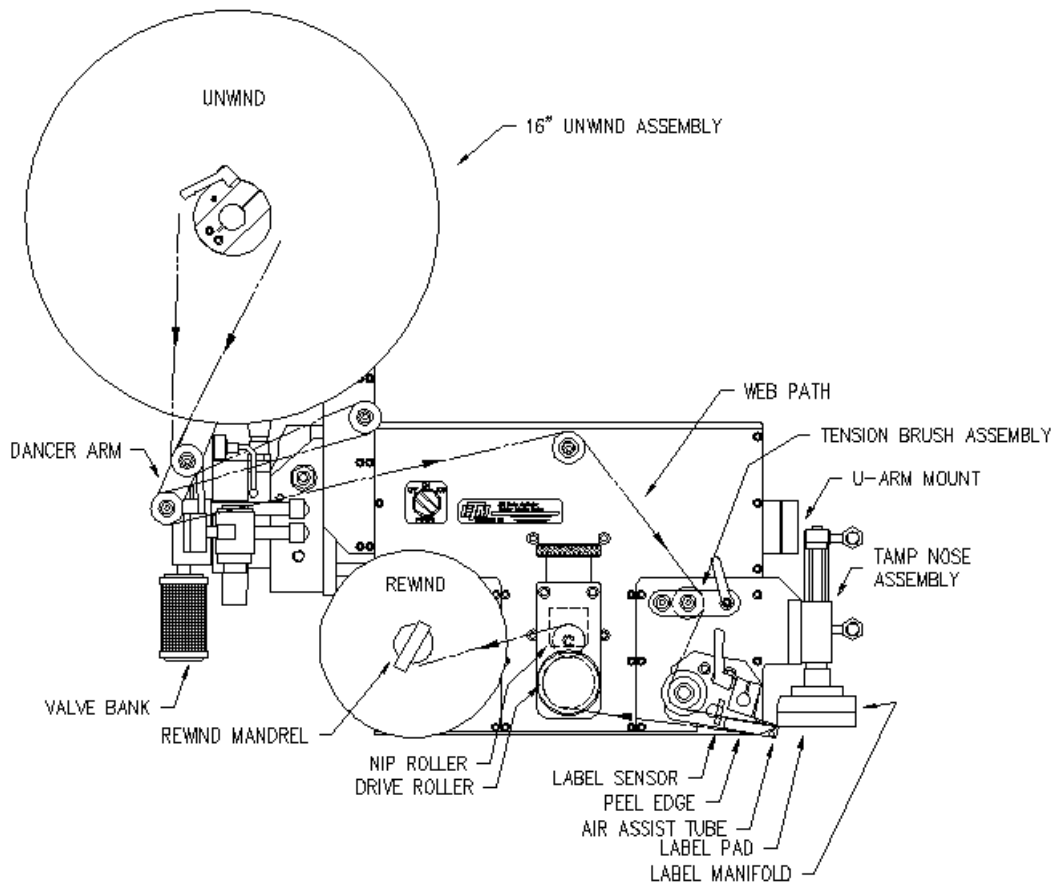
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.		Dept. Code	70
TITLE: 360 SERIES APPLICATOR: HOUSING		PART: ALARM LIGHT STACK ENCLOSURE ASSEMBLY	
REV. DESCRIPTION	REV. DATE	REV. BY:	Date:
4 REMOVED DBL LT OPTION FOR SPLITTING OF THE ALARMS ON 360	05/20/08	TDR	11/19/01
F:\Engineering\Standard Parts\Appliator\360		DRAWN BY: BOB S.	
200\ASS-200-4105-XX		F:\Engineering\Standard Parts\Appliator\360	

## CHANGING TO OPPOSITE HAND DISPENSE

When performing an applicator changeover, the nose assembly, unwind assembly, rewind, and wiring are first changed to the opposite hand dispense. Then each component assembly is remounted on the opposite side of the applicator. The symmetry of the applicator main module and the individual parts facilitate the changeover process but it can be confusing if care is not exercised. The explanation and diagrams to follow will hopefully guide you through this process.

### APPLICATOR CHANGEOVER

- 1) Remove the nose assembly (See: **NOSE ASSEMBLY REMOVAL**).
- 2) Change the applicator nose assembly to the opposite hand dispense (See: **NOSE ASSEMBLY CHANGEOVER**).
- 3) Remove the rewind assembly from the applicator (See: **REWIND REMOVAL**).
- 4) Change the rewind assembly to the opposite hand dispense (See: **REWIND CHANGEOVER**).
- 5) Change the wiring to the opposite side of the applicator (See: **WIRING CHANGEOVER**).
- 6) Change the unwind assembly to the opposite hand dispense.
- 7) If the applicator is a Tamp or Air Blow, move the valve assembly to the opposite side of the machine.
- 8) Install the rewind assembly on the opposite side of the machine (See: **REWIND INSTALLATION**).
- 9) Install the nose assembly on the opposite side of the machine (See: **NOSE ASSEMBLY INSTALLATION**).

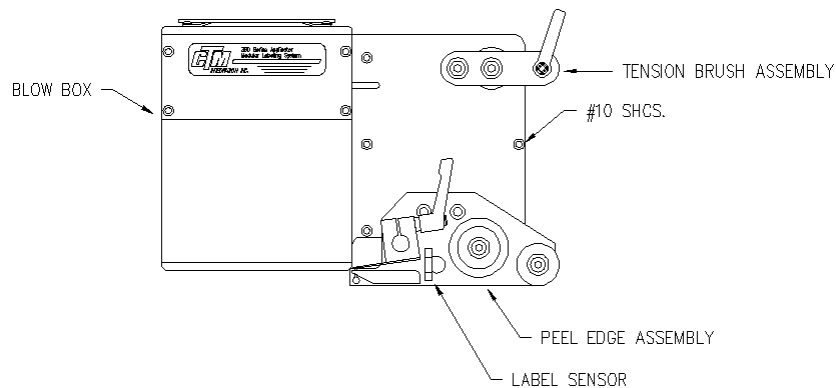


## NOSE ASSEMBLY REMOVAL AND INSTALLATION INSTRUCTIONS

**NOTE: DISCONNECT THE POWER CORD AND AIR SUPPLY FROM THE MACHINE BEFORE ATTEMPTING ANY OF THE FOLLOWING PROCEDURES. FAILURE TO FOLLOW THIS PRECAUTION COULD RESULT IN INJURIES FROM MOVING PARTS OR ELECTRICAL SHOCK!**

### BLOW BOX NOSE ASSEMBLY REMOVAL

- 1) Remove the stainless steel cover from the bottom of the applicator.
- 2) Remove the air tubes interconnecting the two sides of the applicator.
- 3) Disconnect the fiber optic cables from the label sensor mounted on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Gently remove the two fiber cables from the sensor.
- 4) Cut the tie wraps securing the fibers to the adhesive mounting pads and gently pull the fiber optic cable out of the wiring clamps and through the holes in the fiber optic mounting plate.
- 5) Unplug the blow box fan connector located on the underside of the electronic shelf.
- 6) Disconnect the hoses for the air assist tube and the air blast manifold at the applicator housing.
- 7) Remove the peel edge assembly to gain access to the #10 mounting screws.
- 8) Remove the six #10 mounting screws holding the nose assembly to the housing.



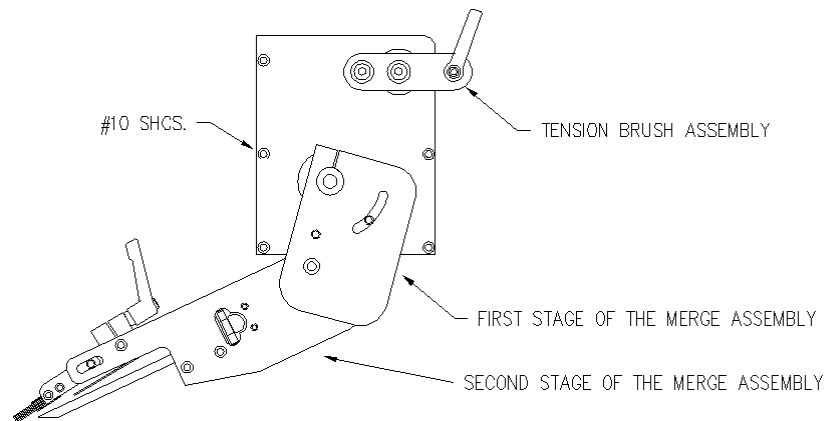
### BLOW BOX NOSE ASSEMBLY INSTALLATION

- 1) Make sure that the peel edge assembly is removed from the blow box nose assembly.
- 2) Install the blow box nose assembly using the six #10 mounting screws making sure that the fan harness is tucked inside the applicator housing.
- 3) Plug the blow box fan harness into its connector on the underside of the electronic shelf.
- 4) Install the peel edge assembly using the two 1/4" screws and the peel edge nut.
- 5) Make sure the label sensor is installed in the peel edge with the optical fibers running through the two holes in the peel edge side frame. Run the optical fibers through the two holes in the mounting plate.
- 6) Re-connect the fiber optic cable to the label sensor located on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Plug the emitter fiber (from the lower fork in the label sensor) into the out going arrow connection on the sensor housing and the detector (from the upper fork in the sensor) to the incoming arrow connection. Slide the cinching mechanism downward and close the top cover on the sensor.
- 7) Neatly tie wrap any excess fiber optic cable to the adhesive pads located near the fiber mounting plate.  
**Note: The excess fiber should be formed into a loop greater than 3" in diameter to avoid kinking the fiber.**
- 8) Install the air tubes interconnecting the two sides of the applicator.
- 9) Replace the stainless steel housing cover.

**NOTE: DISCONNECT THE POWER CORD AND AIR SUPPLY FROM THE MACHINE BEFORE ATTEMPTING ANY OF THE FOLLOWING PROCEDURES. FAILURE TO FOLLOW THIS PRECAUTION COULD RESULT IN INJURIES FROM MOVING PARTS OR ELECTRICAL SHOCK!**

### MERGE NOSE ASSEMBLY REMOVAL

- 1) Remove the stainless steel cover on the bottom of the applicator.
- 2) Remove the air tubes interconnecting the two sides of the applicator.
- 3) Disconnect the fiber optic cables from the label sensor mounted on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Gently remove the two fiber cables from the sensor.
- 4) Cut the tie wraps securing the fibers to the adhesive mounting pads and gently pull the fiber optic cable out of the wiring clamps and through the holes in the mounting plate.
- 5) Remove the fiber optic mounting plate from the side of the applicator housing.
- 6) Rotate the first stage of the merge nose downward to gain access to the #10 mounting screws.
- 7) Remove the six #10 mounting screws holding the nose assembly to the housing.



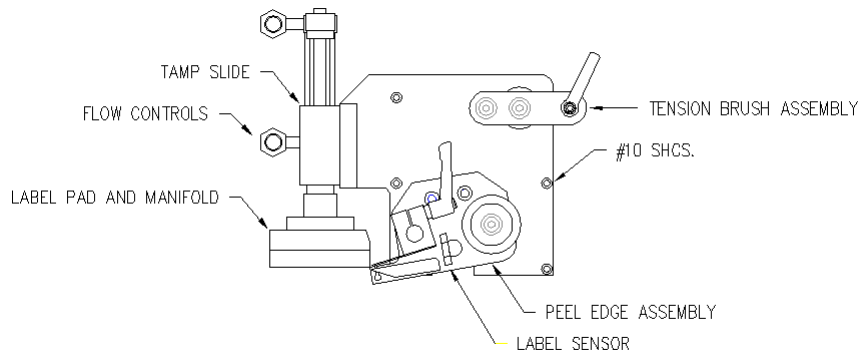
### MERGE NOSE ASSEMBLY INSTALLATION

- 1) Rotate the first stage of the merge nose downward to gain access to the #10 mounting screws.
- 2) Install the merge nose assembly using the six #10 mounting screws.
- 3) Re-position the first stage of the merge nose.
- 4) Make sure the label sensor is installed in the peel edge. Run the optical fibers through the two holes in the mounting plate on the applicator housing.
- 5) Re-connect the fiber optic cable to the label sensor located on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Plug the emitter fiber (from the lower fork in the label sensor) into the out going arrow connection on the sensor housing and the detector (from the upper fork in the sensor) to the incoming arrow connection. Slide the cinching mechanism downward and close the top cover on the sensor housing.
- 6) Neatly tie wrap any excess fiber optic cable to the adhesive pads located near the fiber mounting plate.  
**Note: The excess fiber should be formed into a loop greater than 3" in diameter to avoid kinking the fiber.**
- 7) Install the air tubes interconnecting the two sides of the applicator.
- 8) Replace the stainless steel housing cover.

**NOTE: DISCONNECT THE POWER CORD AND AIR SUPPLY FROM THE MACHINE BEFORE ATTEMPTING ANY OF THE FOLLOWING PROCEDURES. FAILURE TO FOLLOW THIS PRECAUTION COULD RESULT IN INJURIES FROM MOVING PARTS OR ELECTRICAL SHOCK!**

### TAMP NOSE ASSEMBLY REMOVAL

- 1) Remove the stainless steel cover from the bottom of the applicator.
- 2) Remove the air tubes interconnecting the two sides of the applicator.
- 3) Disconnect the fiber optic cables from the label sensor mounted on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Gently remove the two fiber cables from the sensor.
- 4) Cut the tie wraps securing the fibers to the adhesive mounting pads. Pull the fiber optic cable out of the wiring clamps.
- 5) Disconnect the hoses for the tamp cylinder, air assist tube, and air blast at the applicator housing.
- 6) Remove the peel edge assembly to gain access to the #10 mounting screws.
- 7) Remove the six #10 mounting screws holding the nose assembly to the housing.



### TAMP NOSE ASSEMBLY INSTALLATION

- 1) Make sure that the peel edge assembly is removed from the tamp nose assembly.
- 2) Install the tamp nose assembly using the six #10 mounting screws.
- 3) Install the peel edge assembly using the two 1/4" screws and the peel edge nut.
- 4) Make sure the label sensor is installed in the peel edge. Run the optical fibers through the two holes in the mounting plate.
- 5) Re-connect the fiber optic cable to the label sensor located on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Plug the emitter fiber (from the lower fork in the label sensor) into the out going arrow connection on the sensor housing and the detector (from the upper fork in the sensor) to the incoming arrow connection. Slide the cinching mechanism downward and close the top cover on the sensor housing.
- 6) Neatly tie wrap any excess fiber optic cable to the adhesive pads located near the fiber mounting plate.  
**Note: The excess fiber should be formed into a loop greater than 3" in diameter to avoid kinking the fiber.**
- 7) Install the air tubes interconnecting the two sides of the applicator.
- 8) Replace the stainless steel housing cover.

## NOSE ASSEMBLY CHANGEOVER

When changing the nose assembly to the opposite hand dispense, all parts are first transferred to the opposite side of the mounting plate. Then the entire nose assembly is rotated 180 degrees and remounted to the opposite side of the applicator.

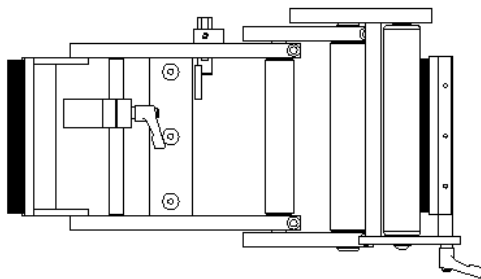
- 1) Remove the peel edge assembly from the nose assembly mounting plate. On a merge applicator, note the position of the bronze washers between the mounting plate and the peel edge assembly.
- 2) Change the applicator peel edge assembly to the opposite hand dispense (See: “**APPLICATOR” PEEL EDGE CHANGEOVER**).
- 3) Re-mount the peel edge assembly to the opposite side of the nose assembly mounting plate. On a merge applicator, re-install the bronze washers between the peel edge assembly and the mounting plate.
- 4) If the applicator is an air blow, change the blow box grid/fan to the opposite hand dispense (See: **BLOW BOX GRID/FAN ASSEMBLY CHANGEOVER**).
- 4) If the applicator is a tamp, change the tamp assembly to the opposite hand dispense (See: **TAMP ASSEMBLY CHANGEOVER**).
- 5) Remove the tension brush assembly and reassemble on the opposite side of the nose mounting plate.

## MERGE PEEL EDGE CHANGEOVER

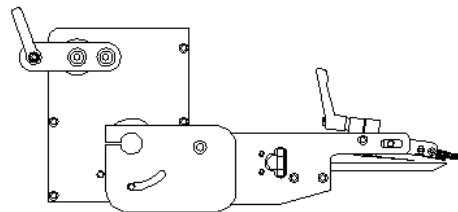
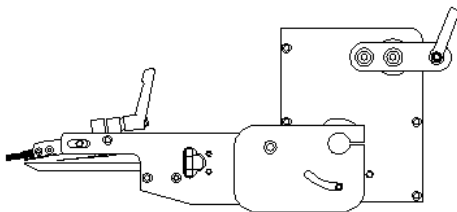
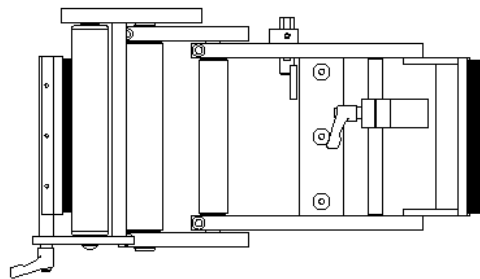
- 1) Remove the label sensor from the peel edge and remount on the opposite side rail. The open end of the U-shaped sensor should face towards the inside.

### MERGE APPLICATOR NOSE

LEFT HAND CONFIGURATION



RIGHT HAND CONFIGURATION





**BLOW BOX PEEL EDGE CHANGEOVER**

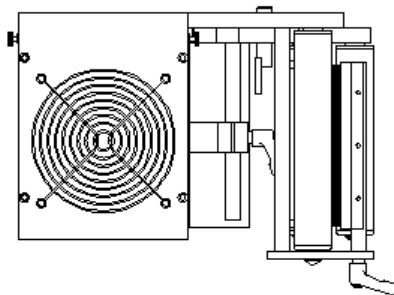
- 1) Remove the label sensor from the peel edge assembly and remount on the opposite side making sure that the fiber cables are threaded through from the opposite side. The open end of the U-shaped sensor should face towards the inside.
- 2) Remove the guide rollers and remount to the opposite side of the peel edge mounting plate.
- 3) Remove the peel edge and remount to the opposite side of the mounting plate using the tapped holes on the other end of the peel edge. Make sure the beveled edge is down and facing the same direction as it was originally.
- 4) Remove the label tension spring mounting bar and remount on the opposite side. The tension spring and the adjustment stop must be reversed on the mounting bar as well.
- 5) Remove the air assist tube and insert through the opposite side of the mounting plate and re-attach.

**BLOW BOX GRID/FAN ASSEMBLY CHANGEOVER**

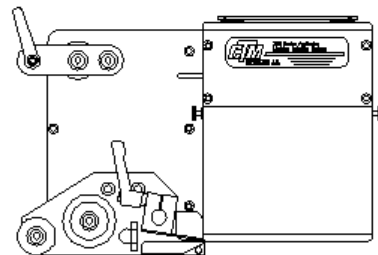
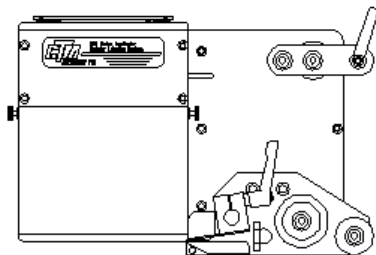
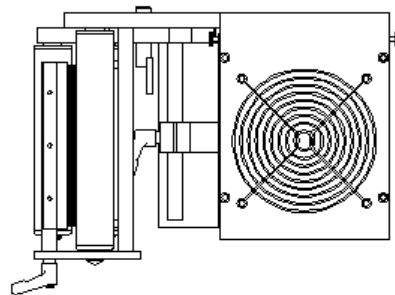
- 1) Remove the air blast fitting from the back of the nose assembly mounting plate and set aside.
- 2) Loosen the two knurled knobs on the back of the fan box and lock it in the upright position.
- 3) Remove the air blast manifold, label grid, and the air jet storage block. Remount on the opposite side of the nose assembly mounting plate.
- 4) Pull the fan wiring harness through the slotted opening in the nose mounting plate.
- 5) Remove the four screws holding the fan box hinge to the mounting plate and remount the fan box on the opposite side of the nose mounting plate.
- 6) Push the fan wiring harness through the slotted opening from the opposite side.
- 7) Re-install the air blast fitting in the nose assembly mounting plate.

BLOW BOX APPLICATOR NOSE

LEFT HAND CONFIGURATION



RIGHT HAND CONFIGURATION



**TAMP PEEL EDGE CHANGEOVER**

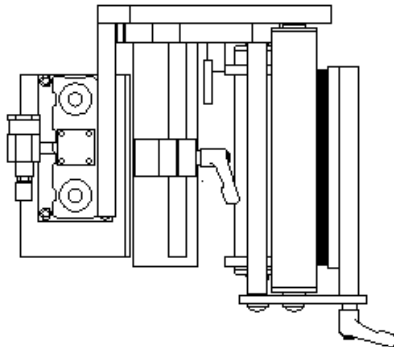
- 1) Remove the label sensor from the peel edge assembly and remount on the opposite side making sure that the fiber cables are threaded through the holes from the opposite side. The open end of the U-shaped sensor should face towards the inside.
- 2) Remove the guide rollers and remount to the opposite side of the peel edge mounting plate.
- 3) Remove the peel edge and remount to the opposite side of the mounting plate using the tapped holes on the other end of the peel edge. Make sure the beveled edge is down and facing the same direction as it was originally.
- 4) Remove the label tension spring mounting bar and remount on the opposite side. The tension spring and the adjustment stop must be reversed on the mounting bar as well.
- 5) Remove the air assist tube and insert through the opposite side of the mounting plate and re-attach.

**TAMP ASSEMBLY CHANGEOVER**

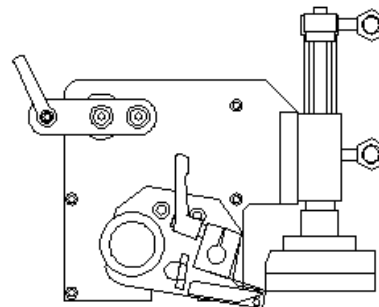
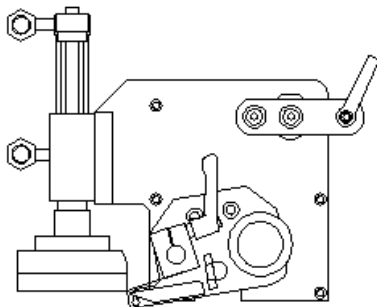
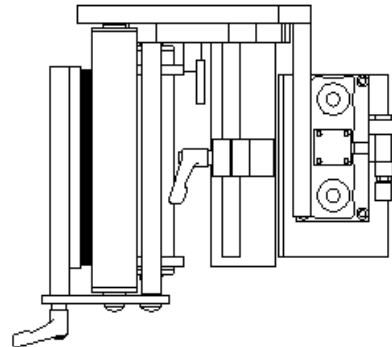
- 1) Disconnect the air hoses for the tamp assembly at the applicator housing.
- 2) Remove the tamp assembly mounting plate from the nose assembly mounting plate.
- 3) Remove the two screws holding the tamp air cylinder to its mounting plate.
- 4) Mount the tamp air cylinder to the opposite side of the tamp assembly mounting plate.
- 5) Re-attach the tamp assembly mounting plate to the opposite side of the nose assembly mounting plate.

**TAMP APPLICATOR NOSE**

LEFT HAND CONFIGURATION



RIGHT HAND CONFIGURATION



### REWIND REMOVAL

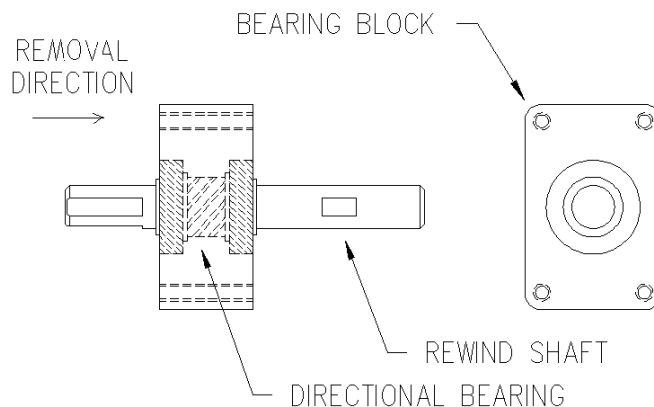
- 1) Remove the belt connecting the rewind clutch to the motor.
- 2) Remove the rewind mandrel from its drive shaft.
- 3) Remove the six #10 screws that hold the rewind mounting plate to the housing.

### REWIND INSTALLATION

- 1) Attach the rewind mounting plate to the housing using the six #10 screws.
- 2) Install the rewind mandrel on the mandrel drive shaft.
- 3) Install the belt connecting the rewind clutch to the motor.

### REWIND CHANGEOVER

- 1) Remove the bearing block that is mounted to the rewind transition plate.
- 2) Remove the pulley from the shaft making sure to note its position relative to the end of the shaft.
- 3) Remove the snap ring from the pulley side of the assembly and push the rewind shaft out through the mandrel side. **Note: The shaft diameter on the mandrel side is larger than it is on the pulley side.**  
**Do not attempt to force the shaft out through the pulley side!**
- 4) Re-install the shaft in the opposite side of the bearing block and replace the snap ring. **Note: The shaft can only rotate in one direction due to a directional bearing in the bearing block.**
- 5) Install the pulley on the shaft in the same position as it was previously.
- 6) Re-mount bearing block to the opposite side of the transition plate.

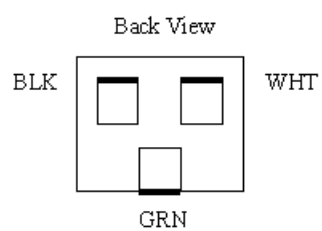


### WIRING CHANGEOVER

- 1) Remove the tie wraps holding the AC power wiring and the label sensor fiber optic cable to the adhesive pads near the wiring entry points.
- 2) Remove the faston terminal connections at the fuse holder and the AC power entry module.
- 3) Cut the tie-wraps securing the blow box fan connector to the adhesive mounting pad and move the connector to the opposite side of the machine. Secure the connector in place with the open end towards the side frame.
- 4) Move wiring to the opposite side of the applicator and neatly tie wrap in place.
- 5) Swap the AC power entry module and the fuse holder with the fiber optic plate and the fuse holder plug.
- 6) Re-connect the terminals for the fuse holder and the AC power entry module (see drawing on the next page ).

**Note: All wiring comes from the factory long enough to be wired either left or right hand.**

Power Entry Module Wiring



(This page is intentionally blank.)