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

**STANDARD 360a LABEL
APPLICATOR
MAINTENANCE & SERVICE
MANUAL**

REVISION 360a-4a.1.X.XXX

Introduction

The 360a Series Modular Labeling System is a high-speed Applicator used to apply pressure sensitive labels to moving products on a production line. It is 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 Labeling Systems' 360a Series Modular Labeling System is unique in that the Main Module can be adapted to five different types of Applicators: Air Blow, Merge, Tamp, DAT or Corner Wrap by changing the Nose Assembly. The symmetrical design of the Applicator allows labels to be dispensed to the right or left side of the Applicator. 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 changed 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 Labeling Systems' 360a Series Modular Labeling System can be easily changed over to a different apply type 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 Applicator 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.

*** Tamp Pad & Manifolds as well as some Options are hand specific.**

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. Label accuracy is mostly dependent on product handling but the Label Stop at the Peel Edge will be within +/- 1/32 inch when using labels constructed with a liner that does not stretch.

For safe trouble-free operation of the applicator, carefully follow the instructions in this manual during setup, operation, label roll changes, cleaning, and maintenance.

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Definition of Machine Terms

Adhesive Strings

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

Air Assist Tube

A small diameter tube with small hole in it mounted under the peel edge. The purpose is to direct a stream of air to help the label onto the label pad.

Air Assist

The stream of air from the air assist tube.

Air Blast

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

Air Blast Jets

The flexible air blast jets press-fit into the inside face of the blow box 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.

Air Filter

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

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 blow box grid until it is dispensed onto the product.

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. *Tamp Pad & Manifold are hand specific.

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 assemblies to the product and the label is applied with an air blast. The tamp/swing extend and retract times are configured during applicator setup.

Critical Alarm

An alarm that will stop the applicator from applying labels.

Cycle Time

The amount of time it takes for the applicator to apply a label to a product and to be back in the start position, beginning with the product detect signal.

Dancer Arm

The function of the dancer arm is to release the brake on the unwind when labels are being applied and to stop the unwind mandrel when labeling stops.

Detector Lockout

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

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.

Extended Air Assist

The air assist is always on while the label is being dispensed. Extended air assist allows the air assist to stay on longer to aid in putting the label on the pad.

Inverted Tamp Blow (ITB)

A mode of operation in which the tamp pad is in the extended position waiting for the product detect signal to start the labeling sequence.

Label Feed

The moving of the label stock through the machine.

Label Liner

The backing material that supports the labels before dispensing.

Label Manifold

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

Label Pad

Mounted under the manifold and is made from white Delrin. This part supports the label before application. The label pad needs to be made to the proper size for every label.

Label Placement

The time or distance from when the product sensor is made to when the labeling sequence starts.

Label Size

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

Label Tension Brush Assembly

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

Leading Edge

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

LED

Light Emitting Diode

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's nose. When the label liner is pulled around the peel edge the label separates from the liner and is transferred to the blow box 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 blow box grid, tamp pad, or product. The tension is adjustable to accommodate varying label thickness and release properties.

Rewind

The rotating mandrel that takes up the liner after the labels have been removed.

Rewind Slip Clutch

The slip clutch is attached to the rewind and driven by the stepper motor. The pressure exerted by the slip clutch is adjustable.

Sinking Output Configuration

The 360a 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 360a applicator's low label, end of web, 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's 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. $I_{in} (\text{max}) = 15 \text{ mA}$.

Static Stack

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

Trailing Edge

The signal sent from a sensor when the last edge of a product or a label is detected.

Unwind

The rotating mandrel where the roll of labels are placed to be applied.

Vac-Blow Pad

The label pad and manifold used for a tamp applicator when a label is blown off. This arrangement uses compressed air to create vacuum and the blow-off pressure.

Valve Bank

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

Warning Alarm

This alarm serves as a warning that the applicator is low on labels.

Web Path

The path the label liner follows from the unwind assembly through the various rollers to the applicator nose and onto the rewind assembly.

System Requirements

Electrical Requirements

108 - 132 VAC, 1 Ø

5 AMPS

50/60 Hertz, Single-Phase

(There is a 90-240 volt drive available)

A three-meter long, three-wire cable with 16 AWG (1.00mm²) 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.

The applicator should not be plugged into GFCI outlets.

Air Requirements

80 PSI clean dry air (for non-merge applicators)

4 SCFM*

**In tamp applications an increase in venturi vacuum pressure may lead to higher SCFM usage*

Operating Environment

Operating Temperature: 40-104 degrees F

Humidity: 20-95% RH, non-condensing

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

360a Applicator Display

The following is general information about the display and changing values inside the display. Different screens and options available in the display are explained below as well. The 360a display is equipped with a backlight saver function. This will cause the display to automatically turn off the backlight after 60 minutes of inactivity. Any touch or critical alarm will wake the display again.

Types of Buttons Used in Display

The following are examples of buttons found in the display and what they represent. Not all buttons are shown.

These buttons will move the operator to another screen. Buttons will be various colors but will be labeled with a destination. The home button will return the operator to the home screen at any point.



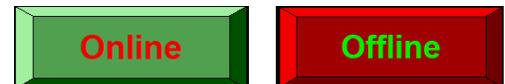
This style of buttons performs a function within the applicator. For example, they may jog the web or reset an active alarm. Various colors can be seen but they will be labeled based on their functionality.



This button will enable and disable the tamp for a tamp applicator. When enabled it will be green with red letters.



This button will bring the applicator online or offline. When online it will be green with red letters.



This style button will open a help menu with information pertinent to the section of the display the operator is in.



Alarms

There are two categories of alarms generated by the 360a Applicator: warning and critical alarms.

Warning alarms will appear in the upper right hand corner of the main menu in the status box. These alarms are not serious and in most cases the applicator will not stop applying labels. If the applicator has an alarm light, the amber light will turn on and the green light will remain on if the applicator is online.



The following are some of the warning alarms monitored by the applicator:

Inhibit – This alarm occurs when an external device inhibits the Applicator from dispensing a label by activating the Inhibit input on I/O Connector C2-12.

Tight Loop – If the loose loop option is on and the alarm prox turns on this alarm occurs causing the applicator to stop applying labels until the lower prox turns on. There is no reset button for this alarm since the loose loop controls whether the applicator is functional or not. Although the applicator is stopped, this is still considered a warning alarm since the applicator will resume labeling as soon as the printer catches up with the applicator. The tight loop status box will have a red background instead of yellow to signal the alarm condition.

Low Label – This alarm occurs when the low label sensor detects that the unwind roll is nearly out of labels.

DAT Label Placements Are Too Close – If the applicator type is a dual action tamp and the second label placement is low enough that the second label is not out onto the pad before it should be applied this alarm will occur. Increasing the second label placement will correct the problem. This also could be viewed as a rate alarm.

Multi-Label C-C Distance Is Too Low – This alarm occurs when the multi-label option is on and the applicator cannot place labels at the desired center-line distance. If the application permits, increase the label C-C distance to correct the problem. For non-merge applicators, you can try increasing the web speed value or decreasing the conveyor speed value. In Tamp Applicators, reduce the Tamp extend and retract times to the minimum. In air blow applicators, reduce the air blast time to the minimum and increase the pre-dispense time if possible. In merge applications contact the factory concerning appropriate accel and decel values for your application.

Speed Too High Compared to Max Speed – There are multiple cases that can cause a speed too high alarm, all of which occur on encoder-based applications:

Conveyor Speed Too High – This occurs on merge applications when the conveyor speed is greater than the max speed. Increase max speed or reduce conveyor speed to correct.

Profile Speed Too High – This occurs on applications using label profiling when the conveyor speed times the profile % is greater than the max speed. Decrease conveyor speed, increase max speed, or adjust the web ratio % to correct.

Over Speed Too High – This occurs when using the overspeed option and the overspeed % times the conveyor speed exceeds the max speed. Decrease conveyor speed, increase max speed, or lower the pre-apply speed to correct.

Label Placement is Too Low – This alarm occurs in encoder-based applications when the label placement distance is too small for encoder compensation to work correctly. During label placement a speed dependent distance is subtracted from the label placement value to properly position the label. If this alarm occurs, move the product detect sensor upstream more, decrease the conveyor speed, or increase the label placement value.

Imprint Dwell Too High for Label Cycle – This alarm occurs if the imprinter valve is on when the applicator is ready to dispense a label to the product, air blow grid, or tamp pad. For merge applications, no label will be dispensed. Air blow and tamp applicators will wait for the imprint dwell to timeout before dispensing a label to the grid or pad.

Critical alarms will stop the applicator (go offline) and turn the red light on in the light stack (if provided). The alarm screen will cover the current screen explaining the alarm type with an alarm reset button at the bottom of the page to clear the alarm. Critical alarms will also wake a display if it is in backlight saving mode at the time of the alarm.

The following are some of the critical alarms:

End of Web – If the end of web sensor detects a break in the web.

No Labels Found – This alarm occurs if the number of consecutive missing labels on the liner exceeds the missing label count value. If a no labels found alarm occurs when labels are present on the liner re-teach the label sensor sensitivity settings.



Printer Not Ready – This alarm occurs when the printer is paused while the applicator is controlling a printer in a loose loop format with the printer ready input signal active.

Operator Interface Cleared – This will occur if the display is disconnected from the applicator.

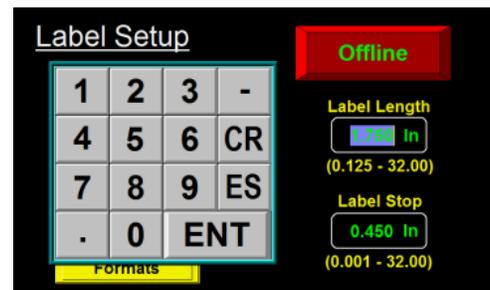
Read or Write Errors – If the applicator has trouble communicating with the display, one of these alarms may occur. Depending whether the connection is intermittent will determine whether the alarm is displayed or not.

Changing Values

Values that can be changed are in boxes displaying the current value. The box will be labeled with the variable name as well as displaying the allowed limits of that variable.

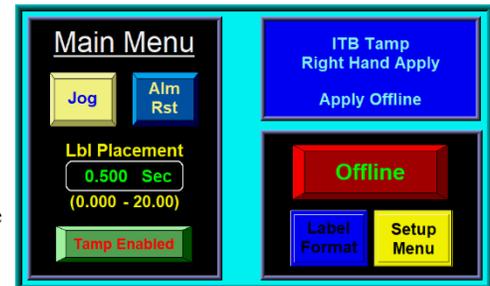


To change a value the operator will touch the screen inside the box and a keypad will appear on the screen. As numbers are inputted into the keypad the value will change. Pressing “ENT” will close the keypad and confirm the change. Pressing “ES” will close the keypad and cancel the change. Pressing “CR” will clear the inputted value. If the operator presses “ENT” after inputting a value outside of the limits the value will revert to its’ original value.



Main Menu

After the power up sequence the display will come to the main menu. The main menu gives access to the label placement option, the jog and alarm reset buttons, the menu to load label formats, enable or disable tamp, and setup menu buttons. It also provides a status box in the right-hand corner to display any alarms and the labeling rate if enabled or the applicator information if disabled. This screen will vary based on the applicator type.



Jog – Cycles the applicator if enabled. In merge applications it will dispense a label at web speed. In tamp applicators it will dispense a label onto the pad and cycle the tamp if tamp is enabled. In air blow applications it will blow the label and feed a new label onto the grid. Jog will not wait for label placement or scan distance.

Alarm Reset – Used to clear alarms from the status box in the top right of the screen. Some alarms, such as low label, do not clear automatically and will need to be cleared by the alarm reset button. If the alarm is not cleared when alarm reset is hit then the condition that is creating the alarm is still present.

Label Placement – Adjusts the label placement value of the applicator. The label placement value is explained in depth in the applicator setup section of the manual. If encoder based this value will be in inches.

Label Format – Opens a menu that allows the operator to load and view formats, but not save or delete.

Setup Menu – Takes you to the password protected setup menus to change the configuration of the applicator.

Password

The setup area of the display is password protected. The standard password is “1800.” When you go to the setup menu you will get a popup telling you that the area is password protected. A keypad will appear if the box to the left is touched. Alternatively, you may return to the home screen from this screen.

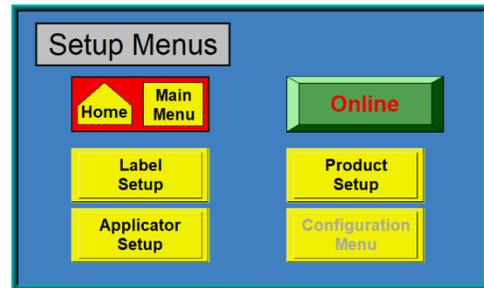


Once the password has been entered you may hit “ENTER” to confirm it. If entered correctly you will advance to your desired screen. If an incorrect password is entered a screen will be shown to notify the operator. In the even that you know you have hit the wrong number pressing “C” will clear the current entry.



Setup Menus

After entering the password, the display will show the setup menu screen. The home and main menu keys will take you back to the main menu. While in the setup menus the applicator can be set online or offline. The following submenus can be found in the setup menu:



Label Setup



Contains information pertinent to the label. Also contains the ability to erase, save, view, and load formats. See “Label Setup” section of the manual.

Applicator Setup



Contains settings pertaining to the apply portion of the applicator. See “Applicator Setup” section of the manual.

Product Setup



Contains encoder options. See “Product Setup” section of the manual.

Configuration Menu

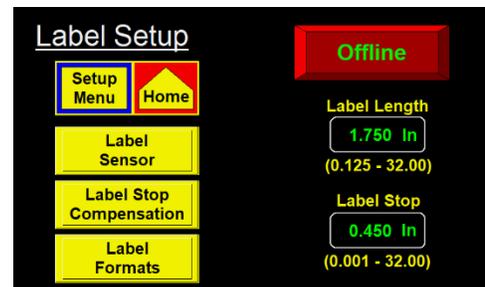


Contains applicator type and options menus. The configuration menu can only be accessed while the applicator is offline. See “Configuration Menu” section of the manual.

Label Setup

The label setup area allows the operator to save, delete, or load formats. It also allows the changing of variables that deal with the label and the ability to do a label teach sequence.

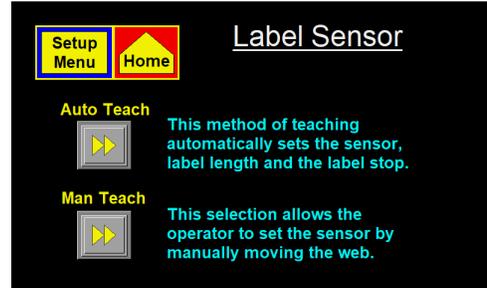
Label Length – The label length is defined as the feed length of the label plus the width of the gap between labels. Stated another way, it is the distance from the leading edge of one label to the leading edge of the next label. Since each application cycle moves the label length distance, it is important to enter the exact label length value.



Label Stop – The label stop box lets you enter the label stop distance value. The label stop value is the distance from the label edge to the label sensor. The label stop value may be changed while the applicator is running.

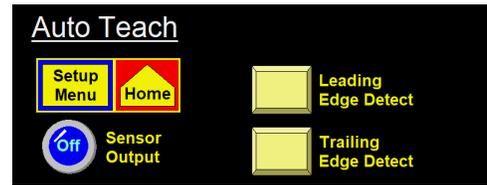
Label Sensor

This menu allows you to do a manual or auto teach of the label sensor. This will re-teach the length and stop values from the previous screen. It also lets you switch from leading edge to trailing edge on the label sensor. The edge detection should only change when the label stop value is too low or when the label stop value causes the label sensor to right at the edge / gap of the label while at the label stop position.



Auto Teach – The auto teach function not only sets the label sensor sensitivity but also calculates the label length and label stop values.

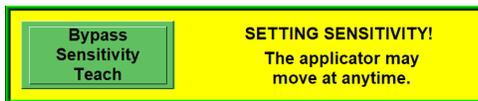
Sensor Output – This indicator will change colors based on the output of the label sensor. If set to leading edge the output will be light blue when the sensor is looking at the labels. If set to trailing edge the light will be light blue if looking at the gap.



The following steps detail the auto teach routine. Ensure the labels are webbed up correctly and the nip roller is closed before continuing:



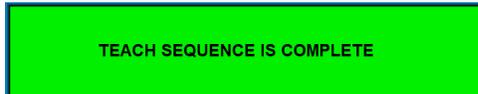
Sensor = Leading Edge
Position Label Gap Under The Label Sensor And Press "Teach".
Position the label web so that the gap is directly below the label sensor. Press the Teach button.



SETTING SENSITIVITY!
The applicator may move at anytime.
The applicator will feed 10 inches of labels to teach the sensitivity of the label sensor. If using a clear label sensor or the sensitivity is known to be correct you may hit the bypass button.



Sensor = Leading Edge
Move Label To The Label Stop Position And Press "Teach".
Next, move the label web so that the labels are at the correct label stop position. Press the teach key. Three labels will be dispensed to determine label stop and label length values.

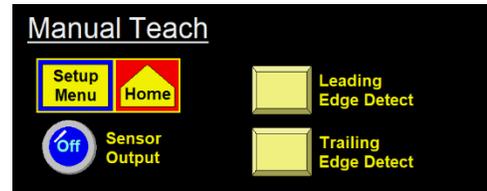


The auto teach is completed and the applicator saw the sensor output.



DID NOT SEE ANY LABELS!
(You May Have To Do A Manual Teach)
If you get this screen instead of the above screen that means the applicator did not see the sensor output. Try a manual teach.

Manual Teach – A manual teach is used when the label gap is not seen by the applicator during an auto teach. A manual teach has the same sensor output indicator as auto teach.



The below steps detail the routine of a leading-edge manual teach:



If doing a leading-edge teach first place the label and liner underneath the sensor and hit the Teach button.



Next, move the web so that the liner only is underneath the sensor. Press the teach button again.

For a trailing edge teach the following steps will be taken:



When doing trailing-edge teach the first step will be to put the liner only under the sensor. Press the teach button.



Next, move the web so that the liner and label are underneath the sensor and press the teach button again.

If a manual teach still creates a no labels seen error, verify that the sensor output is working correctly by using the sensor output indicator.

Label Stop Comp

Label stop compensation is used on encoder-based merge applicators to compensate the label stop position based on web speed. If it is found that the label stop position creeps out at high web speeds label stop compensation may be used to correct it.



Label Stop Compensation Setup

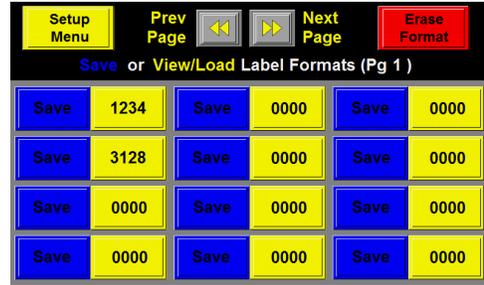
The default value for label stop compensation is 0.0015. Set the web speed to the slowest speed the product will be traveling. Use the jog key on the display or the jog switch on the applicator to dispense a couple of labels. Take note of where the label stops. Now change the web speed to the fastest the product will be traveling and jog a couple more labels. If the label stop position moved forward increase the label stop compensation. If the label stop moved back decrease the label stop compensation. It is unlikely that the compensation value will be less than 0.0015. If you can change web speeds and the label stop holds position you are finished. If needed you can adjust the label stop position, so the label stop is back where you want it. When you exit the label stop compensation screen the web speed will return to the value set in the applicator setup menu.

Label Formats

This section allows the operator to save and load different setups for different products and labels. This is useful if a customer is running several different products or labels but runs them over and over.

This format key allows the operator to save and erase formats. The setup menu key will return you to the setup menu.

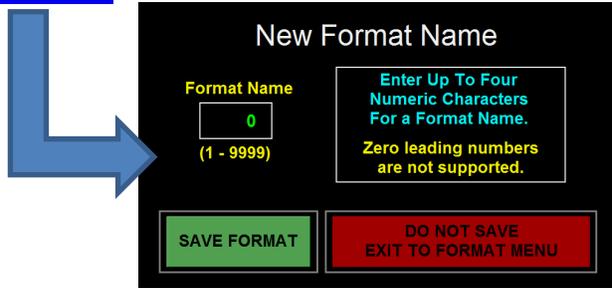
Prev Page / Next Page – The arrows will change the page of formats between 1 and 4. There are 48 total formats with 12 on each page.



Save Format



Save the current configuration as a new format. If save is pressed next to a format that already exists it will overwrite the existing format. Once pressed it gives the option to name the format.

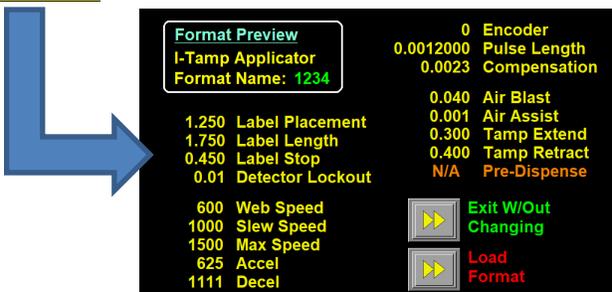


Enter a 4 number into the format name box and hit save if you wish to save the current configuration. If overwriting a format a prompt will appear ensuring the operator wishes to continue. If the format you are trying to save is empty no prompt will appear. Hitting the red button will exit back to the format menu.

Preview Format



Selecting a specific format will bring up a menu of the settings that are saved to that specific format. This allows the operator to ensure the format is the correct one prior to loading.



This screen shows the settings of some of the variables saved in this format. The format is not loaded until the “Load Format” button is pressed. The exit key will take the operator back to the format screen without loading a format.

The variables shown in the preview are not the only variables saved in a format. For a full list of variables saved with formats contact the factory.

Erasing Formats



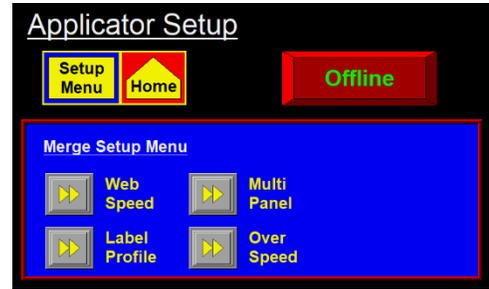
When the “Erase Format” button is pressed the screen changes to allow you to select which format you want to erase.



When the operator selects a format to erase will remove the format name to show “0000” instead. There is no second step and formats cannot be retrieved once erased.

Applicator Setup

The settings used to control the web speed and variables pertaining to your apply mode. This screen will vary depending on apply type. The “Prev Menu” button will return you to the setup menu while the “Home” key will take you to the main menu. By clicking an option in the lower half of the screen it will give you the opportunity to change that variable.



Web Speed – The speed at which the web will move in a non-encoder based application. This can be adjusted while the applicator is online. The upper limit of the web speed is set by the max speed variable.

Air Blast – The time the air blast valve is turned on. Used in air blow and tamp applications.

Tamp / Swing Extend – The time allotted for the tamp slide or rotary actuator to extend. After the timer is finished the air blast will start and the pad will begin to return home.

Tamp / Swing Retract – The time allotted for the tamp slide or rotary actuator to retract to the home position. Once the timer is completed the next label will begin feeding onto the pad.

Extended Air Assist – The time after the label is done feeding until the air assist valve turns off. Used in specific air blow and tamp applications to assist with holding the label on the grid / pad.

Pre-Dispense Time – The time before the air blast turns off that the applicator beings the label dispense. Used in air blow applications to try to increase rate. If set too high the label can feed into the air blast prior to the blast turning off.

Over Speed

The over speed option allows a merge applicator to get up to web speed faster by dispensing a set amount of label at a higher speed. This option can only be used in merge applications.



Pre-Apply Feed – The distance that the applicator will feed at the higher speed while over speed is turned on.

Pre-Apply Speed – The speed at which the applicator will feed the pre-apply feed.

$$\text{Pre-apply speed} = (\text{Web Speed}) * (\text{Pre-Apply Ratio})$$

Label Profile

The label profile option is used to assist in merging labels onto a concave or convex surface. Whenever the web ratio does not equal 100% the profile option is on. This is only used in merge applications. An example of label profile can be found below.



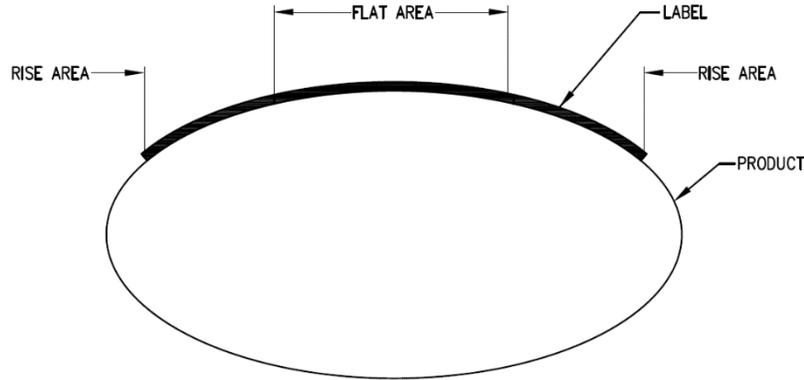
Rise Area – The distance the label travels before changing to the flat area speed. The applicator will run at web speed during rise area.

Flat Area – The distance the applicator travels at the web ratio speed.

Web Ratio – A scaling percentage applied to the web speed to adjust the labelling speed during the flat area move of the profile.

Label Profile Setup

To setup label profiling first estimate the rise and flat areas of the product. The example below shows a convex or oval product:



Once you have estimated the rise and flat areas estimate a web ratio. For this product, a convex oval, we would want the web ratio to be less than 100% because the applicator will label the flat area slower than the rise areas. In summary:

Condition	Product Shape	Speed of Rise Areas	Speed of Flat Areas
Web Ratio < 100	Convex	Web Speed * Web Ratio	Web Speed
Web Ratio = 100	Flat	Web Speed	Web Speed
Web Ratio > 100	Concave	Web Speed * Web Ratio	Web Speed

To fine tune the values of the rise and flat areas make the following adjustments:

1. Label several products under normal labeling conditions. Observe labels.
2. If the leading edges of the labels were all applied at the same position on the products go on to step #3.
 - a. If the leading edges of the labels were placed at various positions on the products, the rise area is too short. Slightly increase the rise area 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.
 - a. If the leading edge of the label is applied at the incorrect position, adjust the label placement, or re-position the product detector. 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.
 - a. If a wrinkle or bubble appears 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 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.
 - a. 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 repeat until the wrinkle is removed.
6. If the labels are applied with no wrinkles the setup is complete.
 - a. If a horizontal wrinkle appears from leading to trailing edge the flat area is too long. Slightly decrease the flat area and repeat until the wrinkle is removed.

Multi-Panel Apply

Multi-panel apply is used to merge a label onto two or three panels of a product. The encoder option must be enabled to use multi-panel apply. After enabling multi-panel, it is recommended to do an auto teach of the label sensor.



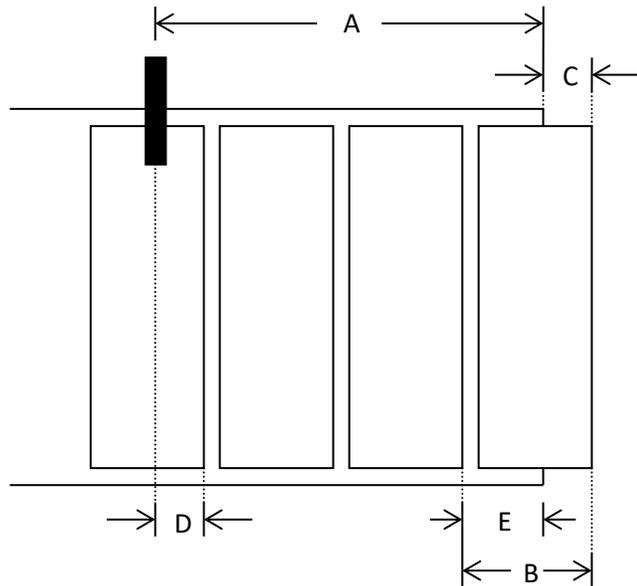
Short Feed – The distance the label is fed after label placement on product detect. This move is done at encoder speed. This will be taught by doing an auto teach of the label sensor with the multi-panel option enabled.

Prod Clear – The amount of encoder-based distance the applicator will wait before flagging out the next label. This allows a product to be removed from the labeling area before a new label is dispensed into it.

Multi-Panel Auto Teach

With the multi-panel option enabled the steps of an auto teach are changed slightly. After performing a normal auto teach the display will instruct the operator to move the leading edge of the label to the peel edge. This is used to calculate the short feed distance. The variables taught in a multi-panel auto teach can be seen below:

	Description
A	Label Sensor to Peel Edge
B	Label Length
C	Label Flag Distance
D	Label Stop Distance
E	Short Feed Distance



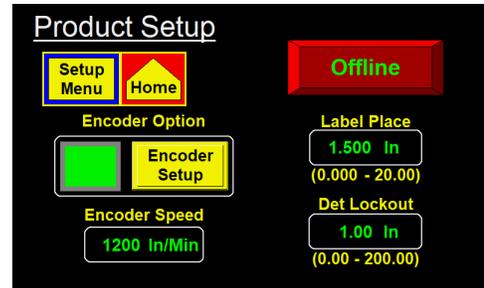
Multi-Panel Setup

Before setting up multi-panel ensure that the encoder option is installed and configured properly. Follow the below steps to setup the applicator for a multi-panel apply:

1. Enter a value for product clearance. This value should be approximately the product length or slightly longer.
2. Perform an auto teach with multi-panel enabled. For the label stop value extend the label to the proper flagged position.
3. Run products and verify that the label is applied as desired. If the label is wrapped too far around the product reduce the label stop value to bring the leading edge towards the applicator. If the label is not wrapped enough around the product increase the label stop value.
 - a. If the label stop value is changed the short feed value will need changed an equal amount in the opposite direction.

Product Setup

The product setup menu can be accessed from the setup menu and contains options and variables pertaining to the placement of the label onto the product as well as product speed. It also includes the submenu for the encoder option and adjustments for that option. The applicator can be enabled while in the product setup menu.



Label Placement – Adjusts the label placement value of the applicator. The label placement value is explained in depth in the applicator setup section of the manual. If encoder based this value will be in inches. **This label placement value mirrors the label placement located on the main menu.** It is placed here so the operator can adjust it without backing out to the main menu.

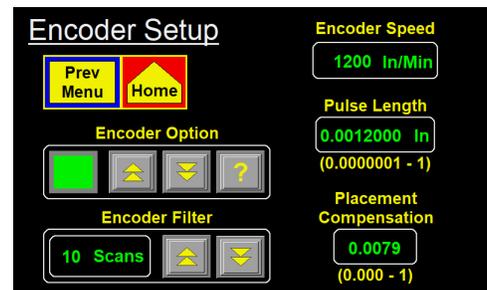
Detector Lockout – A timer, or distance if encoder based, that starts at the beginning of the labeling sequence and causes the applicator to ignore product detect signals until its completion.

Encoder Speed – A visual display of the velocity obtained from the encoder port.

$$\text{Encoder Speed} = (\text{Pulses/min from encoder}) * (\text{Pulse length})$$

Encoder Setup

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 5 VDC supply to power the encoder. 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.



Encoder Option – The encoder option keys are for turning this option on and off. If the option is on the lamp to the left of the keys will be green. While the encoder is on label placement will be in inches and not seconds.

Encoder Filter – In some applications the encoder speed varies significantly around some average value. This is especially problematic with merge applicators, low-resolution encoders, and low conveyor speeds where fewer encoder pulses are captured during the velocity calculation interval. The encoder filter function allows the operator to average the encoder speed over a range of 1 to 10 scans to produce a smoother label dispense. As with all filters the response of the applicator to the change in encoder speed is proportional to the number of Scans. The lower scan numbers are more responsive to speed changes while the higher number produces a smoother.

Pulse Length – The distance the product travels per pulse of the encoder. The pulse length may be calculated using the following formula:

$$\text{Pulse Length} = \frac{\text{Distance Product Moves Each Rev}}{(\text{Encoder Pulses Each Rev}) * 4}$$

Pulse Length Example – An encoder is mounted to a conveyor drive pulley and the circumference of that pulley is 18.75". Therefore, the product on the conveyor will travel 18.75" per revolution of encoder. The encoder is a factory-installed encoder generating 2500 pulses per revolution.

$$\text{Pulse Length} = \frac{18.75"}{(2500) * 4} = .001875 \text{ in/pulse}$$

Placement Compensation – Compensation is a number that functions within a formula to reduce the label placement value based on the encoder velocity. When products are moving faster the label dispense must begin sooner to compensate for the acceleration time of the label to the product. The following explains how to setup compensation for the different applicators:

Air Blow and Tamp Compensation Setup

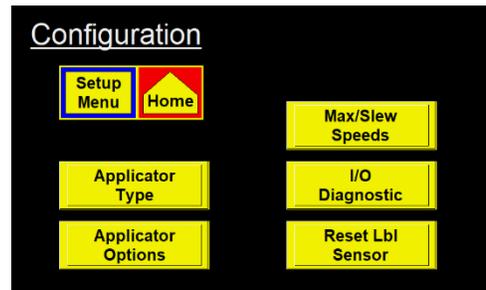
When selecting a value for rate compensation start at 0.017. Apply labels to the product at a slower speed. Then run the product at production speeds or faster. If the labels are applied in the same place the compensation is correct. If the labels move back at higher speeds **increase the compensation**. If the labels move forward **decrease the compensation**. Whenever the rate compensation value is adjusted it is advisable to re-run the product at various speeds to make sure that the labels are applied in the same position.

Merge Compensation Setup

When selecting a value for rate compensation start at 0.008. 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 the labels move back at higher speeds **increase the compensation**. If the labels move forward **decrease the compensation**. Whenever the rate compensation value is adjusted you should re-run the product at slower and faster speeds to make sure that the labels are applied in the same position.

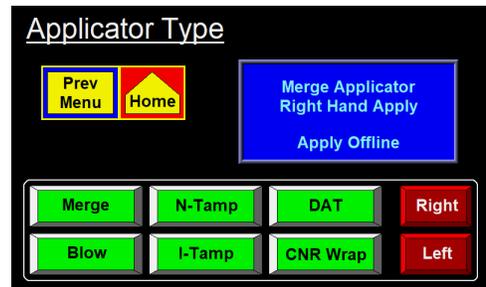
Configuration Setup

The configuration menu can be accessed from the setup menu while the applicator is offline. It provides access to settings regarding the applicator hand, type, and various options to turn on and off. Troubleshooting tools, like I/O Diagnostics, are also contained in the configuration menu.



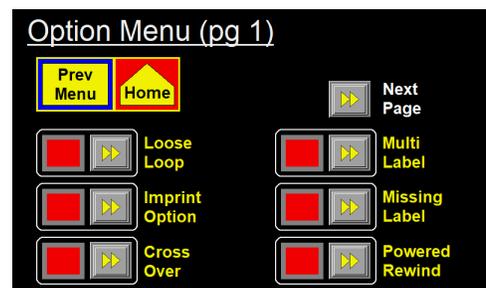
Applicator Type

The applicator type function allows the operator to choose the type of application and whether it will be in a left-hand or right-hand configuration. When switching apply types all options in the applicator will be turned off. If changing hands, the operator will be forced to cycle power to the applicator. The status box in the corner shows what the current configuration of the applicator is.



Applicator Options

The applicator options menu allows the operator to turn various options on or off. Options that are shown with a red box next to them are currently off while options with a green box are currently on. Clicking the arrows next to an option takes the user into a sub-menu that allows them to turn the option on or off as well as control variables pertaining to that option. The next page button will take the operator to a second page of options. Some options are not compatible with each other and will turn off other options when enabled. For more information about compatibility see the “Options Compatibility” chart further along in the manual.



✓ = Options are Compatible

✗ = Options are not compatible.

360a Compatibilty Chart

Options	Multi-Panel	Over-speed	Label Profile	Encoder Option	Loose Loop	Imprint	Crossover	Multi-label	Missing Label	Powered Rewind	Skip Count	Foldover	Label On Pad	Vac-off	PD Queue
Multi-Panel		✗	✗	✓	✓	✓	✗	✗	✗	✓	✗	✗	✗	✗	✗
Over-speed	✗		✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓
Label Profile	✗	✗		✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	✗	✓
Encoder Option	✓	✓	✓		✓	✓	Encoder Required	✓	✓	✓	✓	✓	✓	✓	✓
Loose Loop	✓	✓	✓	✓		✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
Imprint	✓	✓	✓	✓	✗		✓	✓	✓	✓	✓	mode 2 only	✓	mode 2 only	✗
Crossover	✗	✓	✓	Encoder Required	✓	✓		✓	✓	✓	✗	✗	✓	✓	✗
Multi-label	✗	✓	✗	✓	✓	✓	✓		✓	✓	✗	✗	✓	✗	✗
Missing Label	✗	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Powered Rewind	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Skip Count	✗	✓	✓	✓	✓	✓	✗	✗	✓	✓		✗	✓	✓	✗
Foldover	✗	✓	✓	✓	✓	mode 2 only	✗	✗	✓	✓	✗		✓	✗	✗
Label On Pad	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Vac-off	✗	✗	✗	✓	✓	mode 2 only	✓	✗	✓	✓	✓	✗	✓		✓
PD Queueing	✗	✓	✓	✓	✓	✗	✗	✗	✓	✓	✗	✗	✓	✓	

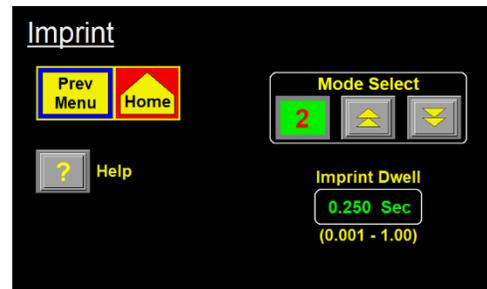
Loose Loop

The loose loop option allows labels to be printed and applied from one system by integrating a thermal printer into the web path of the applicator. Three proximity switches monitor the dancer arm position. The dancer arm assembly should be free to travel its' full length. In the resting position the lower loose loop prox will be on and the printer will not be printing. 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 a tight loop alarm condition and a warning message is displayed in the status box on the display. The applicator is inhibited from applying labels until the dancer arm returns to the lower loose loop position. When the applicator is properly set-up under normal operating conditions the arm will not reach the alarm prox position.



Imprint Option

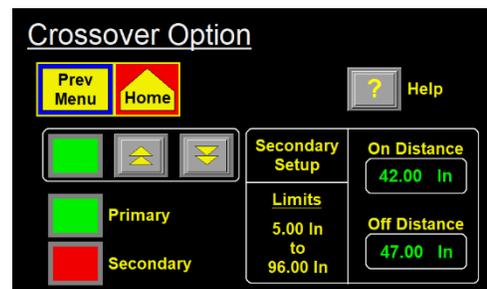
The imprinter option allows a hot stamp printer to be installed into the web path of the applicator. It is useful in instances where one-line printing or date coding is required. There are two modes for the imprinter. Mode 1 is the original sequence and is used if the applicator is controlling the imprint valve. Mode 2 is used when the imprinter has its own controller.



Dwell Value – In mode 1 the dwell value will be the time the applicator holds the imprint valve on. In mode 2 the dwell value is the amount of time the applicator waits for a sequence complete signal from the imprinter. This value should be close to the imprinter's dwell time.

Crossover

The crossover option allows for “zero downtime” operation by interconnecting two applicators. Both applicators are placed on the conveyor system with one upstream of the other. The upstream Applicator is the “Primary” labeler while the downstream applicator is the “Secondary” labeler. Crossover option requires an encoder to use. All transferring distances start synchronously based of a product detect signal on the upstream applicator. This ensures that all distances begin at the same point.

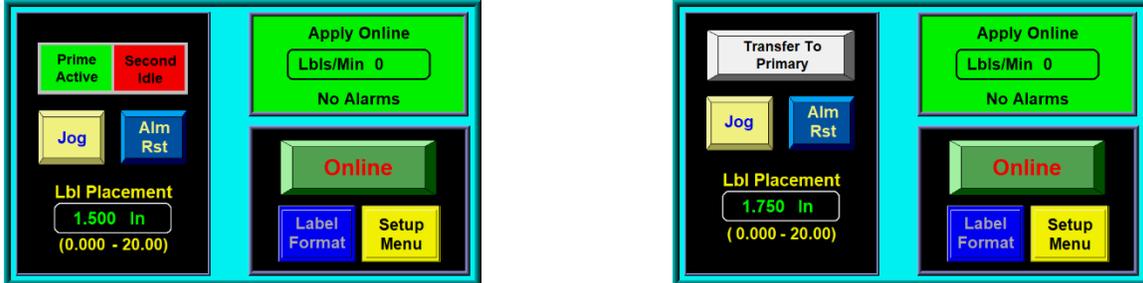


On Distance – Used only on secondary applicator. Represents the amount of distance between the primary applicator going offline (or becoming unable to label) and the secondary applicator accepting product detects. This will be approximately the distance between the peel edge of the primary applicator and the product detect of the secondary applicator.

Off Distance – Used only on secondary applicator. Represents the amount of distance the secondary labeler will continue to label after the primary has come online and a transfer is completed. This will be approximately the distance from product detect of the primary applicator to the peel edge of the secondary applicator.

Crossover Main Menu Changes

The main menu screen for both the primary and secondary applicators are changed when running in crossover. The primary display will show two lamps to allow the operator to see which applicator is currently “Active.” The secondary display will have a new button that allows the user to transfer the labeling responsibility back to primary. Both screens can be seen below with the primary screen on the left and the secondary screen on the right.



Primary to Secondary Transfer

If the primary applicator is labeling and the secondary applicator is ready the primary will begin the transfer process at the first product detect input after if it is taken offline or enters a critical alarm state. The secondary will wait the “On Distance” to pass after the process is begun before it starts labeling. This allows products that are currently labeled between the primary and secondary to pass the secondary without being labeled twice. If products are labeled twice the “On Distance” value should be increased. If products are missed by the secondary that needed labeled the “On Distance” should be decreased.

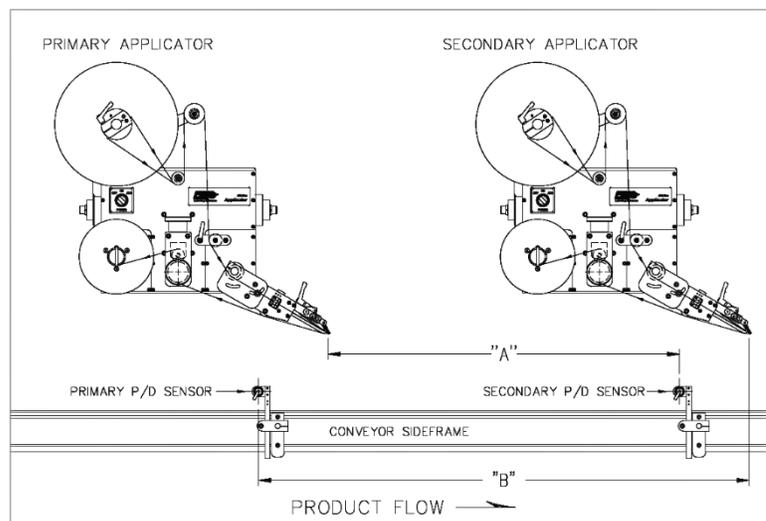
Secondary to Primary Transfer

If the secondary is labeling when the primary is brought back online the primary will not automatically start labeling. The secondary continues to label until it is taken offline, a critical or low label alarm occurs, or the “Transfer” key is pressed. If a low label alarm occurs or the “Transfer” key is pressed, the secondary sends a signal to the primary to start labeling while it continues to label. The signal occurs at the first apply cycle of the secondary after the transfer is initiated. The primary will then wait for its next product detect signal to start labeling again. Once received, the primary sends a signal to the secondary to start the “Off Sequence.” The secondary will continue to label for the “Off Distance.” If the secondary is taken offline or enters a critical while it is the active applicator products will pass by unlabeled.

Visual Crossover Representation

The image to the right represents a generalized crossover setup. The table below describes the values represented in the image.

	Description
A	Approx. “On Distance”
B	Approx. “Off Distance”



Multi-Label

The Applicator can apply multiple labels per product detect signal using the multi-label option. Multi-label will cause the applicator to detect a product as normal, wait the placement, and apply a label. After the apply is done it will wait the centerline distance and apply another until the number of labels has been satisfied. If the label rate from multi-label is faster than what the applicator can dispense a warning will occur in the status box at the main menu.



Number of Labels – The number of labels, including the original apply, that the applicator will apply based off a single product detect.

Centerline Distance – The time, or distance if encoder based, the applicator will place the label. This is measured off a centerline to centerline basis of the labels.

Missing Label

The missing label option allows the applicator to track missing labels between the label sensor and the peel edge. When the label sensor detects a missing label and the number of labels between sensor and peel edge is set up correctly the applicator will track the position of the missing label and when it reaches the peel edge advance the web at slow speed to move a label in its place. A mode 2 option is available for missing label. It is located in the “Special Options” menu of the applicator and is discussed in more detail in the “Special Options” section of the manual.



Labels Between Sensor and Peel Edge – The number of labels from the label sensor (counting any label currently under it) to the peel edge (counting any label hanging past the edge).

Powered Rewind

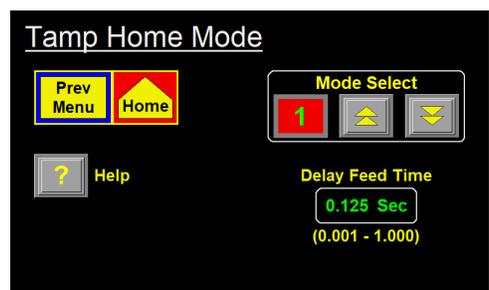
The powered rewind allows the applicator to control a motor attached to the rewind mandrel. This motor driven rewind is used in high speed applications or applications where a larger amount of waste material is collected on the rewind.

Powered rewind is a factory installed option.



Tamp Home Mode

The tamp home mode is on accessible if the applicator is set to tamp or corner wrap. There are two modes for the tamp home sensor with mode 1 being the default option. In a tamp applicator set to mode 1 the applicator looks for a tamp home input **OR** the completion of the retract timer before turning on the tamp home output. In mode 2, the applicator will only look for the tamp home input and ignore the tamp retract timer. No label would be fed out until the tamp home input is on.



Delay Feed Time – Used in Mode 2 to delay the label feed after the tamp home input is on.

Skip Count

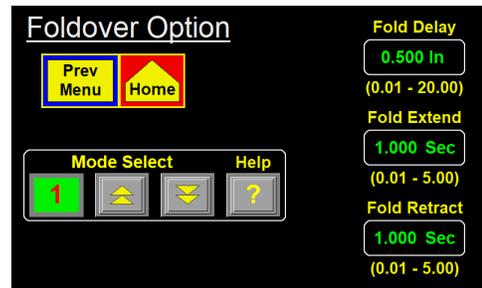
The applicator has the capability to label every “x” product. When turned on the applicator will always label the first product and skip the next “x-1” products. When skip counter is enabled and the applicator is online the status box on the main menu will change to reflect what increment the skip counter is currently at.



Label Every “x” Products – Enter the number you want to represent as “x” in the variable. For example, if “3” is entered, the applicator will label the first product, skip two product detects and label the fourth product.

Foldover

The applicator can control a fold station as part of the labeling sequence. If the foldover option is enabled the setup menu found under “Applicator Setup” will change to allow the operator to change the foldover parameters from that menu. This allows the operator to make changes without going offline.



Mode Select – The foldover option has 2 different modes to use. Mode 1 will start the foldover sequence after the applicator product detect sensor has turned off. This allows for the use of one product detect sensor for apply and feed. If using mode 1 the product detect signal must be a leading edge signal. If mode 2 is selected the applicator will apply based off the product detect signal and begin the foldover sequence based on a second fold product detect sensor. In mode 2, both sensors can be set to trailing edge.

Fold Delay – The amount of time, or distance if encoder-based, the applicator will wait to begin the fold sequence. This would start when the product detect turns off for mode 1 or when the fold product detect is active in mode 2.

Fold Extend – The amount of time the applicator will activate the fold valve to extend the foldover. This should be set high enough to ensure the label is fully wiped.

Fold Retract – the amount of time the applicator will wait after deactivating the fold valve before it completes its cycle.

Label On Pad

The label on pad option is an option that allows the applicator to provide a signal that matches the current state of a vacuum switch sensor while the blow is not on. This will allow anyone interfacing with the applicator to know whether there is currently a label on the pad or not. The option cannot be enabled while the applicator is a merge. The applicator must be equipped with a vacuum switch for this option to properly function



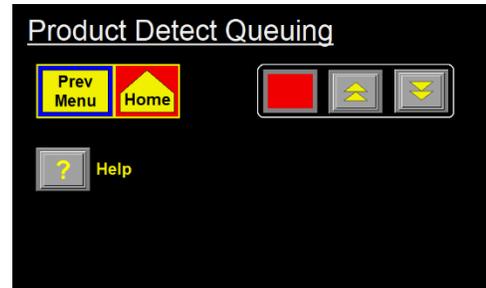
Vacuum Off Option

The applicator can be fitted with a vacuum off valve bank that allows the applicator electrical control of the vacuum flow. The sequence of normal tamp and corner wrap applications are changed with the vacuum off option enabled. Instead of feeding a label immediately after the tamp returns home the applicator will wait for the next product detect signal (with the vacuum valve off) and turn on vacuum and feed and apply the label at that point.



Product Detect Queuing

This option allows the applicator to queue up to 10 product detect signals. This allows the product detect sensor to be mounted further upstream and more than one product can be between the peel edge and the product detect sensor. If the applicator is taken offline all product detects that are queued will be lost and the products will not be labeled.

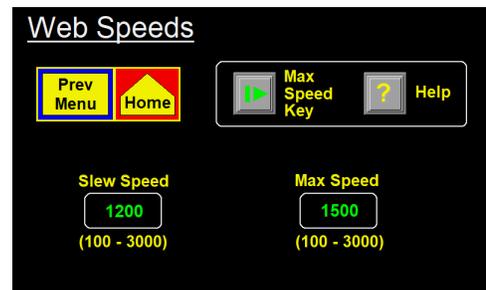


Max / Slew Speeds

The web speed menu allows access to the slew speed and max speeds of the applicator. The options in the top right for Max Speed Key only appear when the applicator is an encoder-based Merge.

Slew Speed – The speed of the web when the applicator is doing a missing label move or multi-panel label flag.

Max Speed – The high speed limit of the applicator.



Max Speed Key – Pressing this button will cause the applicator to figure out the max speed setting based off the current encoder speed. This is detailed more in the “Determining Max Speed” section found below.

Determining Max Speed

In all applications the max speed parameter sets the maximum operational speed of the applicator. The only functionality this has in non-encoder-based merge applications is to set the upper limit of the web speed variable. By having a lower max speed number, it does not allow operators to change the web speed to a value that is higher than desired.

When setting max speed in an encoder-based merge applicator the max speed key can be used. To use the max speed key set the conveyor to the fastest speed which labeling will occur. Ensure the encoder setup is completed and press the max speed key.

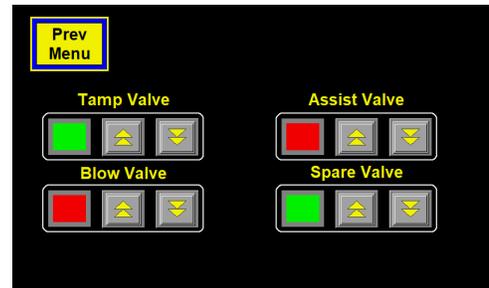
A general rule of thumb for the max speed is to set it 33% higher than the fastest product speed. This would mean if the product is running 1800"/min the max speed could be set to approx.:

$$\text{Max Speed} = 2400"/\text{min} = (1800) * (1.33)$$

Note: Applicators running at speeds higher than 1500"/min should have a powered rewind. Applicators running faster than 2100"/min should have a powered rewind and powered unwind device.

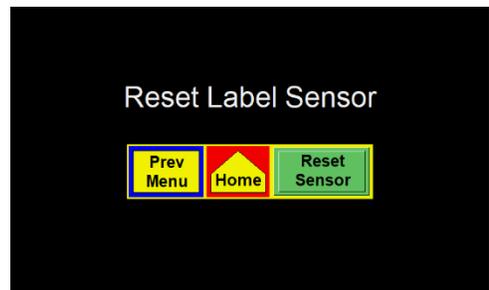
I/O Diagnostics

The I/O Diagnostics is a troubleshooting tool that allows the operator to verify the status of inputs to the controller as well as force outputs on. In the input example (below to the left) the product detect and tamp home inputs are active. In the output example (below to the right) the tamp and spare valve signals are being forced on and will be outputting. When exiting I/O diagnostics all inputs and outputs return to their proper state.



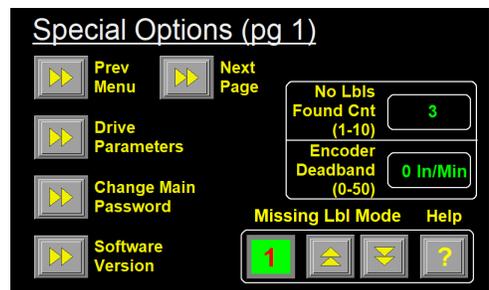
Reset Label Sensor

Pressing reset sensor will factory default the label sensor and change the applicator and sensor to trailing edge detection. After a reset the display will go to the label sensor setup screen so that the operator can setup the sensor again.



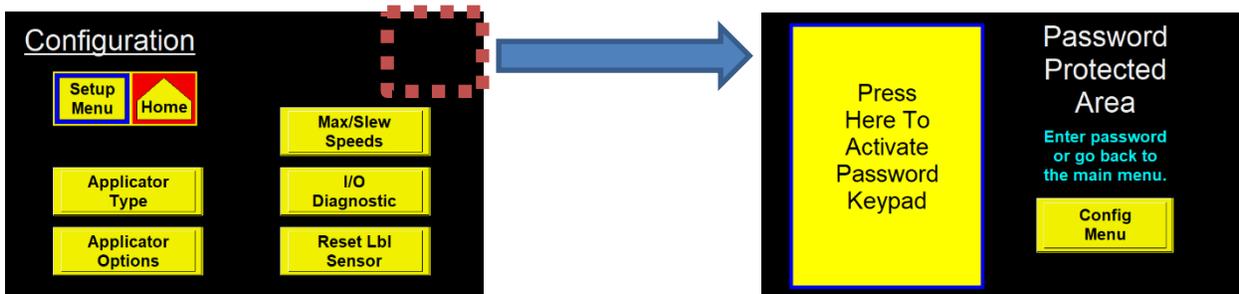
Special Options Menu

The special options menu is a hidden menu that contains parameters that need to be behind a second password. Many of these parameters should only be changed after contacting the factory. The next page button opens a second page of options.



Accessing the Special Options menu

The special options menu is accessed through the Configuration Menu. While in the configuration menu touch the top right corner of the screen (as shown by the red box below) to enter the special options menu. Upon pressing the top right corner, the operator will be prompted to enter the special options password.



No Labels Found Count – The number of consecutive missing labels on the liner before a critical alarm occurs.

Software Version – Provides the version of software installed on the applicator as well as a list of previous base versions and revisions.

Encoder Deadband – A filter added to the encoder that causes the applicator to ignore encoder signals less than the input speed.

Missing Label Mode – If the applicator is set to Tamp or Air Blow the missing label option has the ability to go to mode 2. More information about Missing Label can be found in the “Applicator Options” section of the manual.

Placement To Time – If the applicator is set to Merge and is encoder-based the missing label window turns into a toggle for placement to time. Placement to time allows the applicator to be encoder-based for its web speed while having a time-based label placement. Used commonly on systems that wrap the label around products.

Drive Parameters

The drive parameters menu allows the operator to adjust parameters related to the applicator’s stepper motor.

Accel / Decel – The rate at which the motor starts and stops its moves. Increasing these values can lead to quicker starting and stopping and potentially cause erratic web handling.

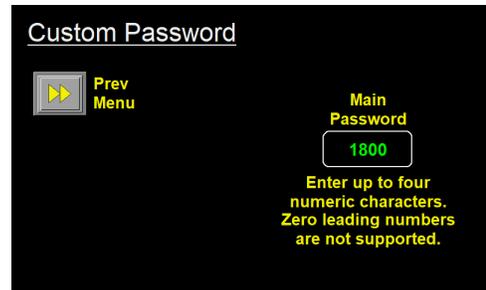
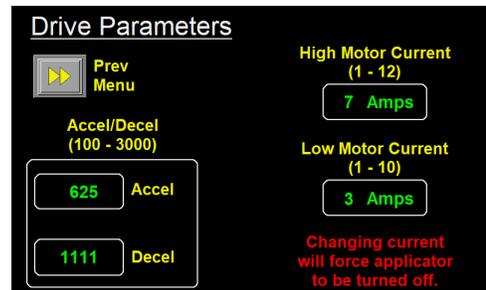
High / Low Motor Current – The amount of current provided to the stepper motor. Consult factory prior to changing.

Custom Password

All applicators from the factory will have the password “1800” by default. This can be changed to any number 1-9999. The applicator will not recognize leading zeroes as numbers (I.E. 0001 is the same password as 1).

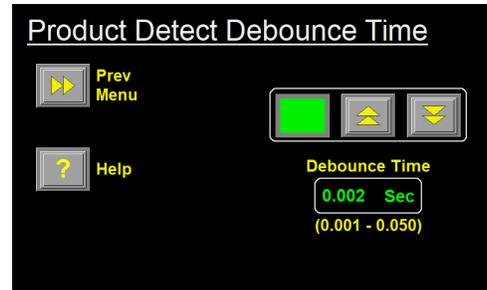
Auto Online Option

When enabled, the auto online option means that when the applicator has finished its power-up sequence it will automatically be placed online. If the applicator is set to anything other than a merge the operator will be responsible for jogging the first label. If the applicator is not jogged the first product through will not be labeled.



Product Detect Debounce Time

When enabled, the product detect debounce time will cause the applicator to ignore product detect signals that are not held on for the duration of the timer. Increasing debounce time will increase the minimum value for label placement.

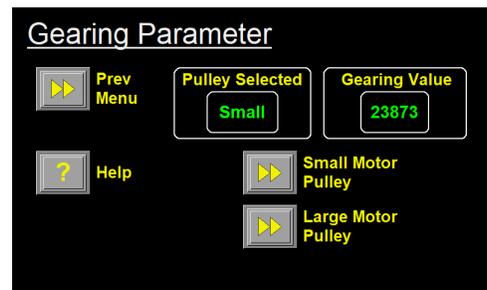


Label Sensor Model

For a brief amount of time during the life of the 360a Applicator a different label sensor was used. This screen allows the operator to select between the D10 model (very common) or the DF-G3 (very uncommon). The sensors have different teach sequences. Once this option is set it will not change, even for a factory default.

Gearing Parameter

The operator may choose between a large or small pulley size. This selection changes the gearing value displayed. Factory build 360a's are installed with a large pulley. The small pulley option will only be used on applicators that were upgraded from 360 to 360a. Factory defaulting the applicator does not change this value.

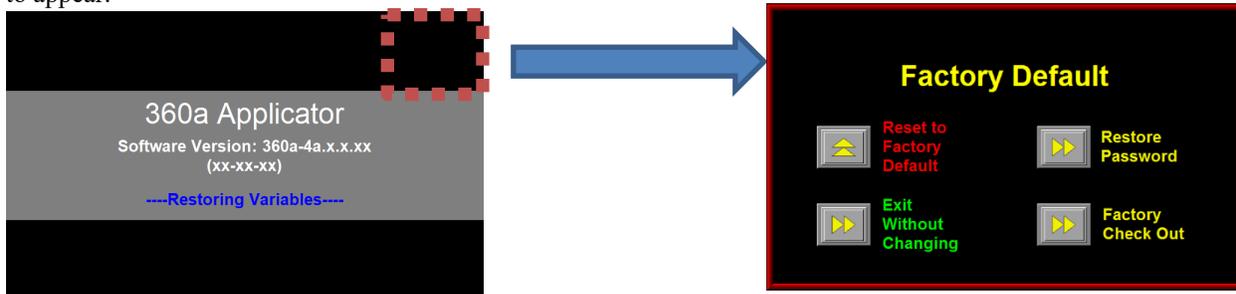


Factory Default Menu

The factory default menu contains the options to factory default the applicator and to restore the original password.

Accessing the Factory Default Menu

The factory default screen can be accessed from the power-up screen. On power-up, the screen shown below will appear for about five seconds. Pressing the upper right hand corner of the display causes the Factory Default Screen to appear.



Reset To Factory Default

Pressing the “Reset to Factory Default” key will prompt the operator to choose between a full factory default which deletes the saved formats or a factory default that clears settings but does not delete formats.

Restore Password

This is used to restore the main Setup Menu password in case it was changed. Pressing restore password will allow you to restore it to “1800”.



360a Display Flow Chart

This section contains a flow chart of the display menus of a 360a. The flow chart can be scrolled through. Clicking the buttons like the one below will take you to the corresponding section of the flow chart.

**SETUP MENU
LABEL
FORMATS**

SOFTWARE SCREEN

360a Applicator
 Software Version: 360a-4a.x.x.xx
 (xx-xx-xx)
 ----Restoring Variables----

Hidden Button

FACTORY DEFAULT



MAIN MENU

Factory Default

Reset to Factory Default
 Exit Without Changing
 Restore Password
 Factory Check Out

Factory Default

Select Restore Default Type
 Partial - saves Label Formats!
 Complete!

Loading Variables

..... Please Wait

Press Here To Activate Password Keypad

Entering The Correct Password Will Reset The Main Password To The Factory Default Setting.

Exit W/Out Changing

Merge / Air Blow

Main Menu

Jog Alm Rst

Lbl Placement
0.250 In
(0.000 - 20.00)

Merge Applicator Right Hand Apply
Apply Offline

Offline

Label Format Setup Menu

Normal / Inverted Tamp

Main Menu

Jog Alm Rst

Lbl Placement
0.500 Sec
(0.000 - 20.00)

Tamp Enabled

ITB Tamp Right Hand Apply
Apply Offline

Offline

Label Format Setup Menu

Dual Action Tamp

Main Menu

Jog Alm Rst

Swing Place
3.000 In
(0.00 - 20.00)

Tamp Place
8.000 In
(3.00 - 99.99)

Tamp Enabled

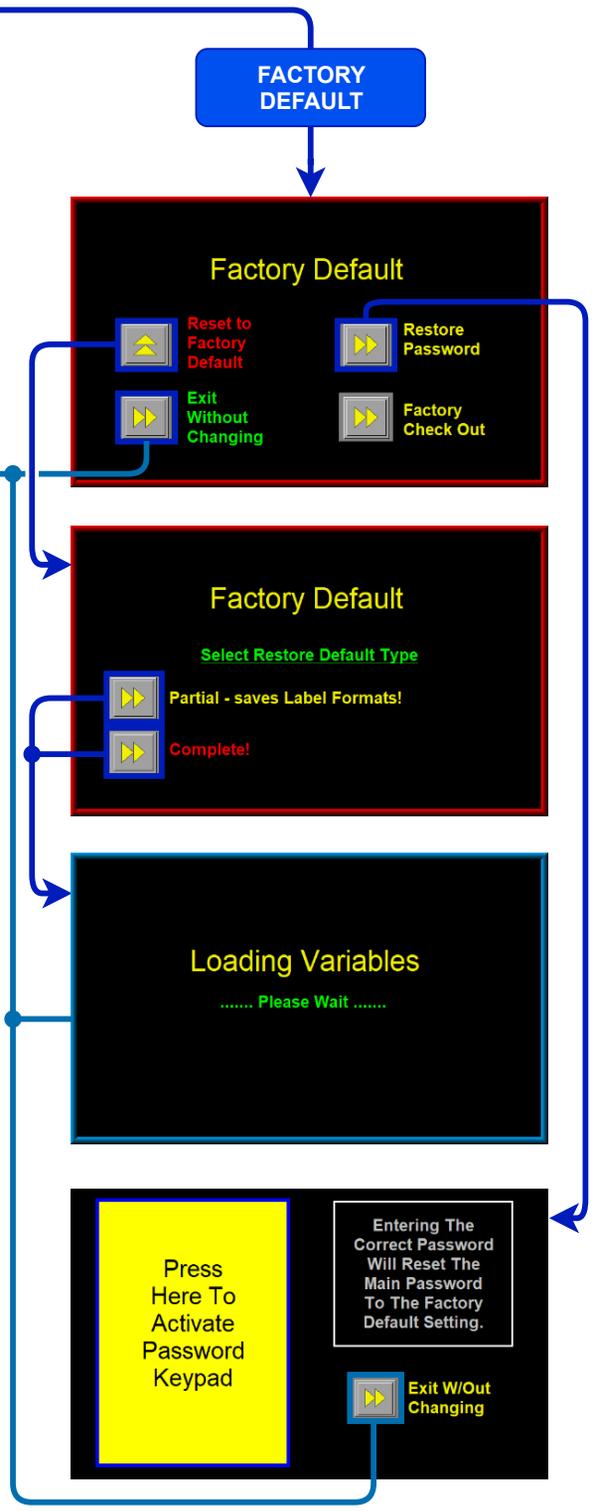
DAT Leading Edge Right Hand Apply
Apply Offline

Offline

Label Format Setup Menu

SETUP MENU

MAIN MENU LABEL FORMATS



MAIN MENU LABEL FORMATS

Formats

Prev Page Next Page

Formats Pg: 1

Home	Main Menu	1111	0000	0000
		1234	0000	0000
Last Loaded Format		0000	0000	0000
1111		0000	0000	0000

SETUP MENU LABEL FORMATS

Label Setup

Prev Page Next Page

Erase Format

Save or View/Load Label Formats (Pg 0)

Save	0000	Save	0000	Save	0000
Save	0000	Save	0000	Save	0000
Save	0000	Save	0000	Save	0000
Save	0000	Save	0000	Save	0000

Format Preview

1 Encoder

Merge Applicator 0.0012000 Pulse Length

Format Name: 0000 0.0079 Compensation

1.250 Label Placement N/A Air Blast

5.085 Label Length N/A Air Assist

1.850 Label Stop N/A Tamp Extend

0.01 Detector Lockout N/A Tamp Retract

0.01 Detector Lockout N/A Pre-Dispense

600 Web Speed

1000 Slew Speed

1500 Max Speed

650 Accel

1111 Decel

Exit W/Out Changing

Load Format

New Format Name

Format Name

1111

(1 - 9999)

Enter Up To Four Numeric Characters For a Format Name.

Zero leading numbers are not supported.

SAVE FORMAT

DO NOT SAVE EXIT TO FORMAT MENU

Loading Variables

..... Please Wait

Format Exists!

Do You Want To Over-Write?

Do Not Over-Write

Over-Write Format

IF LOADING FORMATS FROM HOME SCREEN

IF LOADING FORMATS FROM SETUP MENU

Label Setup

Prev Page Next Page

Load Format

Erase Formats (Pg 1)

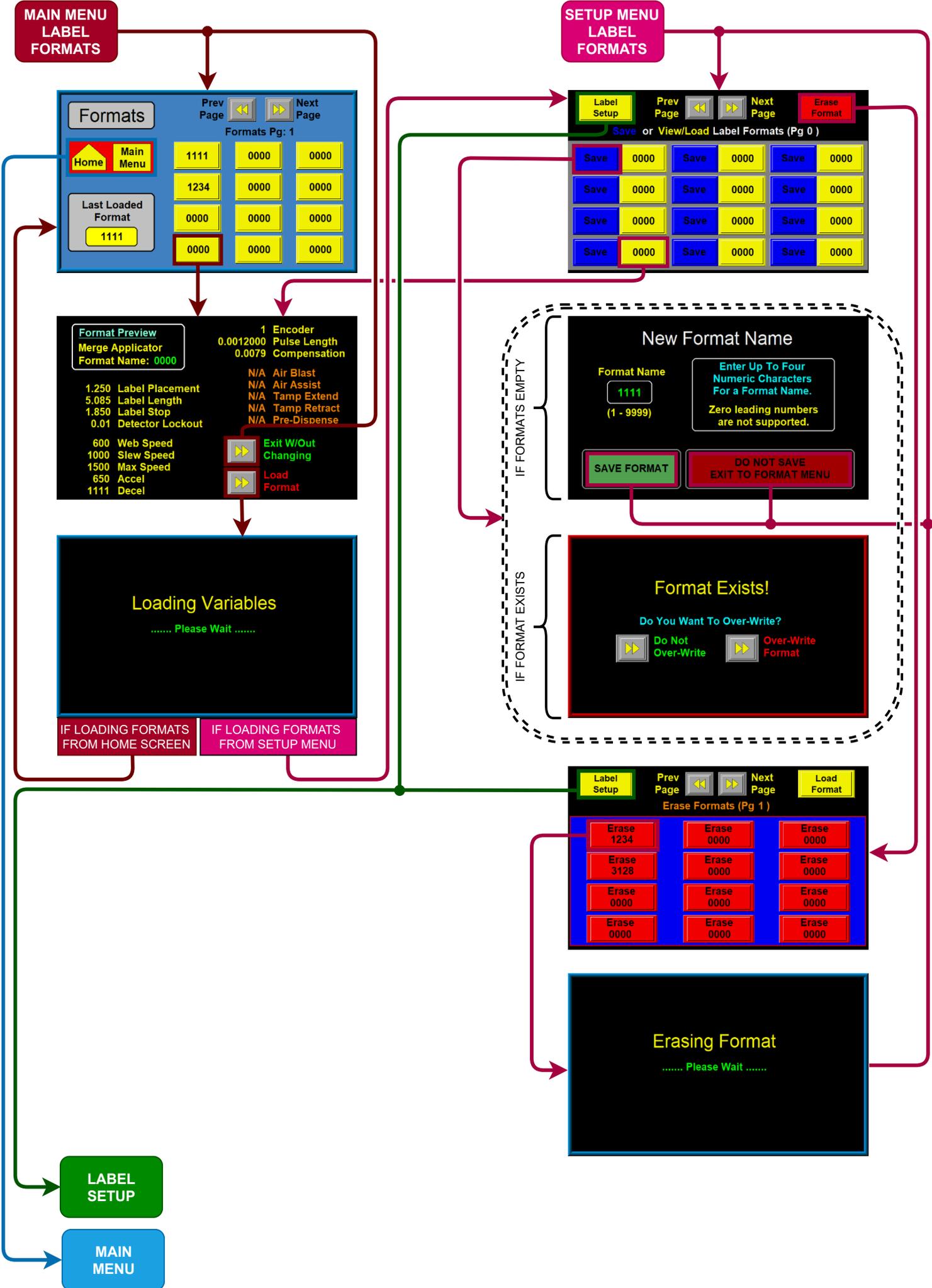
Erase 1234	Erase 0000	Erase 0000
Erase 3128	Erase 0000	Erase 0000
Erase 0000	Erase 0000	Erase 0000
Erase 0000	Erase 0000	Erase 0000

Erasing Format

..... Please Wait

LABEL SETUP

MAIN MENU



LABEL SETUP

Label Setup

Setup Menu Home

Label Sensor

Label Stop Compensation

Label Formats

Offline

Label Length
5.085 In
(0.125 - 32.00)

Label Stop
1.850 In
(0.001 - 32.00)

Lbl Stop Comp

Setup Menu Home

Jog Label

Label Stop Compensation
0.0000
(0.0000 - 1)

Label Stop
1.850 In
(0.001 - 32.00)

Web Speed
0 In/Min
(100 - 3000)

Label Sensor

Setup Menu Home

Auto Teach

Man Teach

This method of teaching automatically sets the sensor, label length and the label stop.

This selection allows the operator to set the sensor by manually moving the web.

Auto Teach

Setup Menu Home

Sensor Output

Leading Edge Detect

Trailing Edge Detect

Teach

Sensor = Leading Edge

Position Label Gap Under The Label Sensor And Press "Teach".

Bypass Sensitivity Teach

SETTING SENSITIVITY!

The applicator may move at anytime.

APPLICATOR WILL MOVE ON ITS OWN

Teach

Sensor = Leading Edge

Move Label To The Label Stop Position And Press "Teach".

TEACH SEQUENCE IS COMPLETE

Manual Teach

Setup Menu Home

Sensor Output

Leading Edge Detect

Trailing Edge Detect

Teach

Leading Teach (part1)

Put Label & Liner Under The Label Sensor. (Press Teach)

Teach

Leading Teach (part2)

Put Liner Only Under The Label Sensor. (Press Teach)

Teaching.....

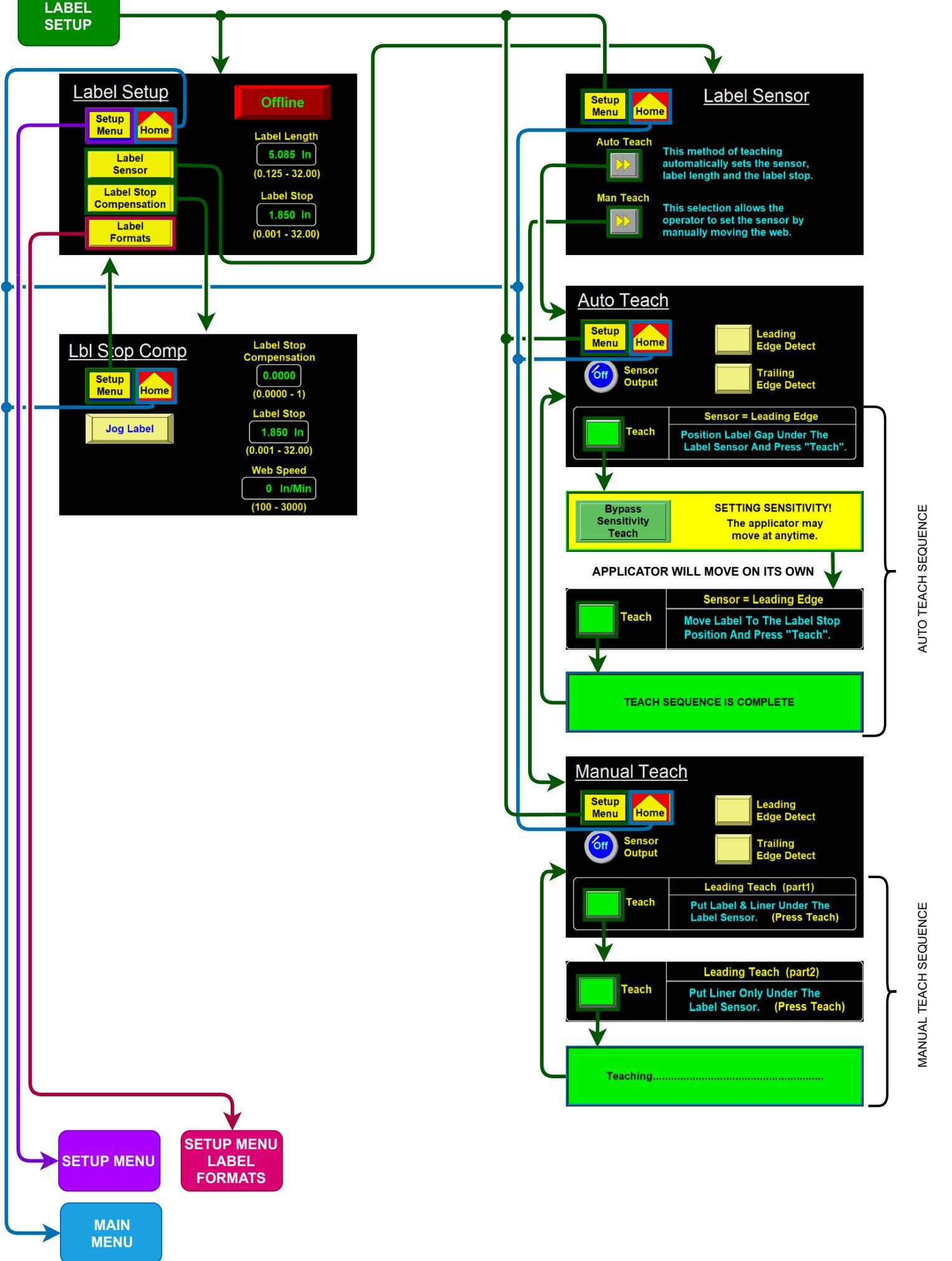
AUTO TEACH SEQUENCE

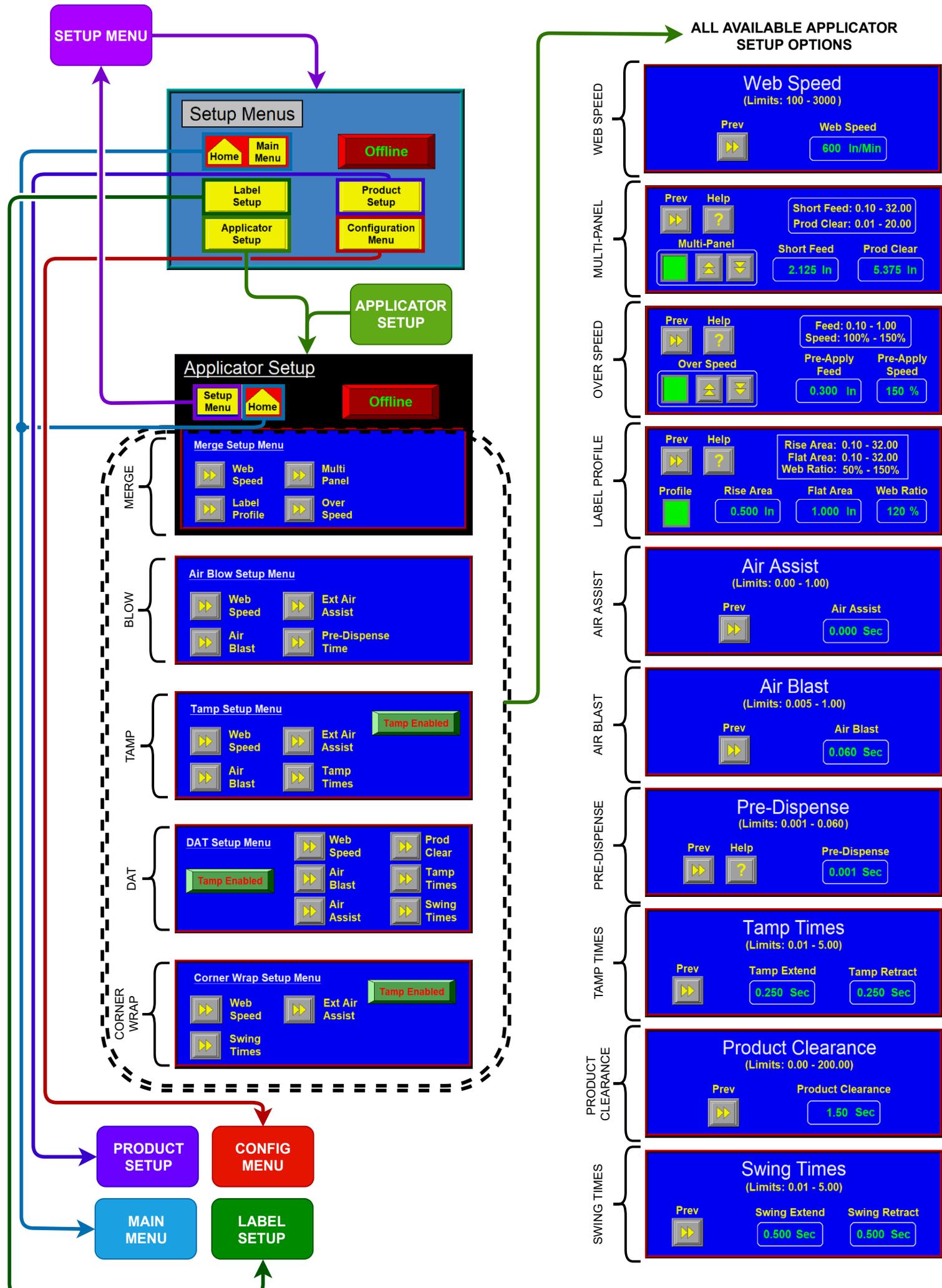
MANUAL TEACH SEQUENCE

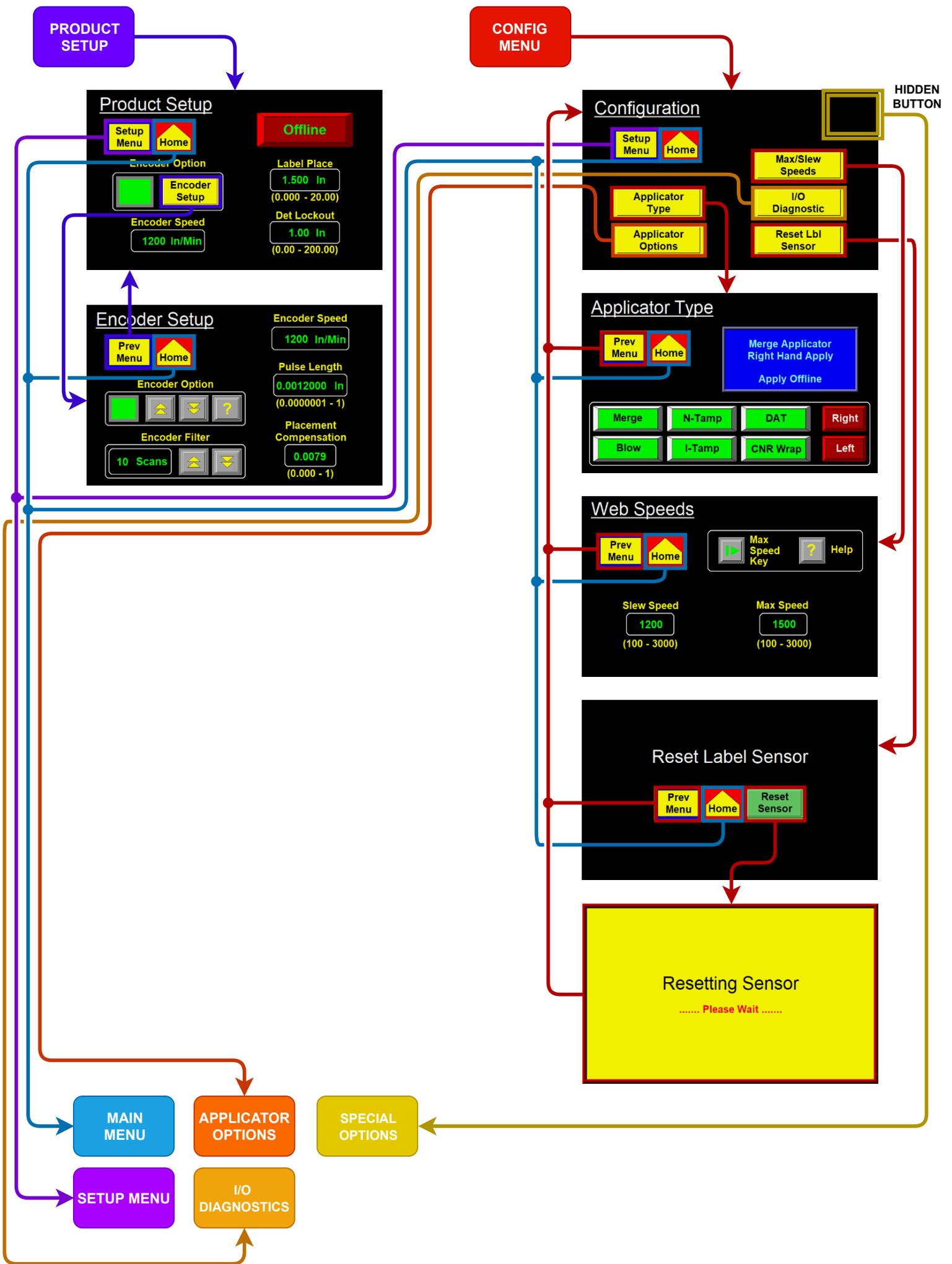
SETUP MENU

SETUP MENU LABEL FORMATS

MAIN MENU







I/O DIAGNOSTICS

I/O Diagnostic

Prev Menu Home

Monitor Inputs

Output Port 0 Diagnostic

Output Port 1 Diagnostic

Output Port 2 Diagnostic

Prev Menu

<input type="radio"/> A-Loop	<input type="radio"/> Fold PD
<input type="radio"/> T-Loop	<input type="radio"/> Label On Pad
<input type="radio"/> Low Lbl	<input type="radio"/> Iprt Dwl
<input type="radio"/> EOW	<input type="radio"/> Iprt Alm
<input type="radio"/> Jog	<input type="radio"/> XOver Active
<input type="radio"/> Inhibit	<input type="radio"/> Xover Rdy
<input checked="" type="radio"/> Prod Det	<input type="radio"/> Rwnd On
<input type="radio"/> Lbl Sens	<input checked="" type="radio"/> Tmp Home
<input type="radio"/> Swg Home/ Tmp Rtrn	<input type="radio"/> Spare
<input type="radio"/> Spare	<input type="radio"/> Spare

Prev Menu

Tamp Valve <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Assist Valve <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Blow Valve <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Spare Valve <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Prev Menu

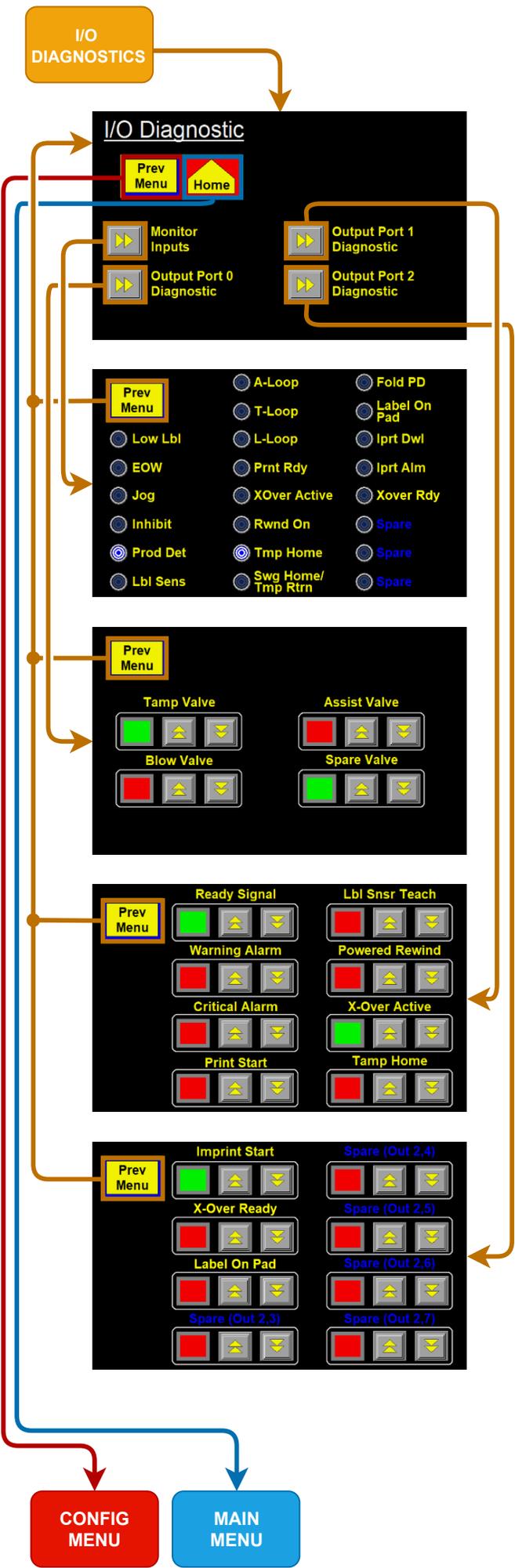
Ready Signal <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Lbl Snsr Teach <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Warning Alarm <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Powered Rewind <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Critical Alarm <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	X-Over Active <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Print Start <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Tamp Home <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Prev Menu

Imprint Start <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Spare (Out 2,4) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
X-Over Ready <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Spare (Out 2,5) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Label On Pad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Spare (Out 2,6) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Spare (Out 2,3) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Spare (Out 2,7) <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

CONFIG MENU

MAIN MENU



APPLICATOR OPTIONS

Option Menu (pg 1)

Prev Menu Home Next Page

Loose Loop Multi Label

Imprint Option Missing Label

Cross Over Powered Rewind

Option Menu (pg 2)

Prev Page Home

Tamp Home Mode Label On Pad

Skip Count Vacuum Off

Fold Over Prod Det Queuing

Loose Loop

Loose Loop

Prev Menu Home

Help

Tamp Home Mode

Tamp Home Mode

Prev Menu Home

Mode Select

Delay Feed Time

0.001 Sec (0.001 - 1.000)

Help

Imprint

Imprint Option

Prev Menu Home

Mode Select

Imprint Dwell

0.001 Sec (0.001 - 1.00)

Help

Skip Counter

Skip Count

Prev Menu Home

Label Every "x" Products

2 (2 - 10,000)

Help

Crossover Option

Cross Over

Prev Menu Home

Help

Secondary Setup	On Distance
Limits	45.00 In
5.00 In to 96.00 In	Off Distance
Primary	47.00 In
Secondary	

Foldover Option

Fold Over

Prev Menu Home

Mode Select Help

Fold Delay

0.100 In (0.01 - 20.00)

Fold Extend

0.500 Sec (0.01 - 5.00)

Fold Retract

0.500 Sec (0.01 - 5.00)

Multi-Lbl Option

Multi Label

Prev Menu Home

Number of Labels

3 Labels (1 - 99)

Centerline Dist

0.500 In (0.125 - 99.00)

Help

Label On Pad Option

Label On Pad

Prev Menu Home

Help

Missing Label

Missing Label

Prev Menu Home

LbIs Between Sensor and Peel Edge

3 (1 - 20)

Help

Vacuum Off Option

Vacuum Off

Prev Menu Home

Help

Powered Rewind

Powered Rewind

Prev Menu Home

Help

Product Detect Queuing

Prod Det Queuing

Prev Menu Home

Help

MAIN MENU

CONFIG MENU

SPECIAL OPTIONS

Special Options (pg 1)

Prev Menu Next Page

No Lbls Found Cnt (1-10) **3**

Encoder Deadband (0-50) **0 In/Min**

Missing Lbl Mode **1** Help

Drive Parameters

Change Main Password

Software Version

Drive Parameters

Prev Menu

High Motor Current (1 - 12) **7 Amps**

Low Motor Current (1 - 10) **3 Amps**

Accel/Decel (100 - 3000)

625 Accel

1111 Decel

Changing current will force applicator to be turned off.

Custom Password

Prev Menu

Main Password **1800**

Enter up to four numeric characters. Zero leading numbers are not supported.

Software Version

Prev Menu

360a-4a.1.0.04
(01-15-18)

View Program Changes

Special Options (pg 2)

Prev Page

Auto Online Option **Gearing Parameter**

PD Debounce Option

Label Sensor Model

Auto Online Option

Prev Menu

Help

Product Detect Debounce Time

Prev Menu

Help

Debounce Time **0.002 Sec**
(0.001 - 0.050)

Label Sensor Model

Prev Menu

Banner Label Sensor Model **D10**

Help

Gearing Parameter

Prev Menu

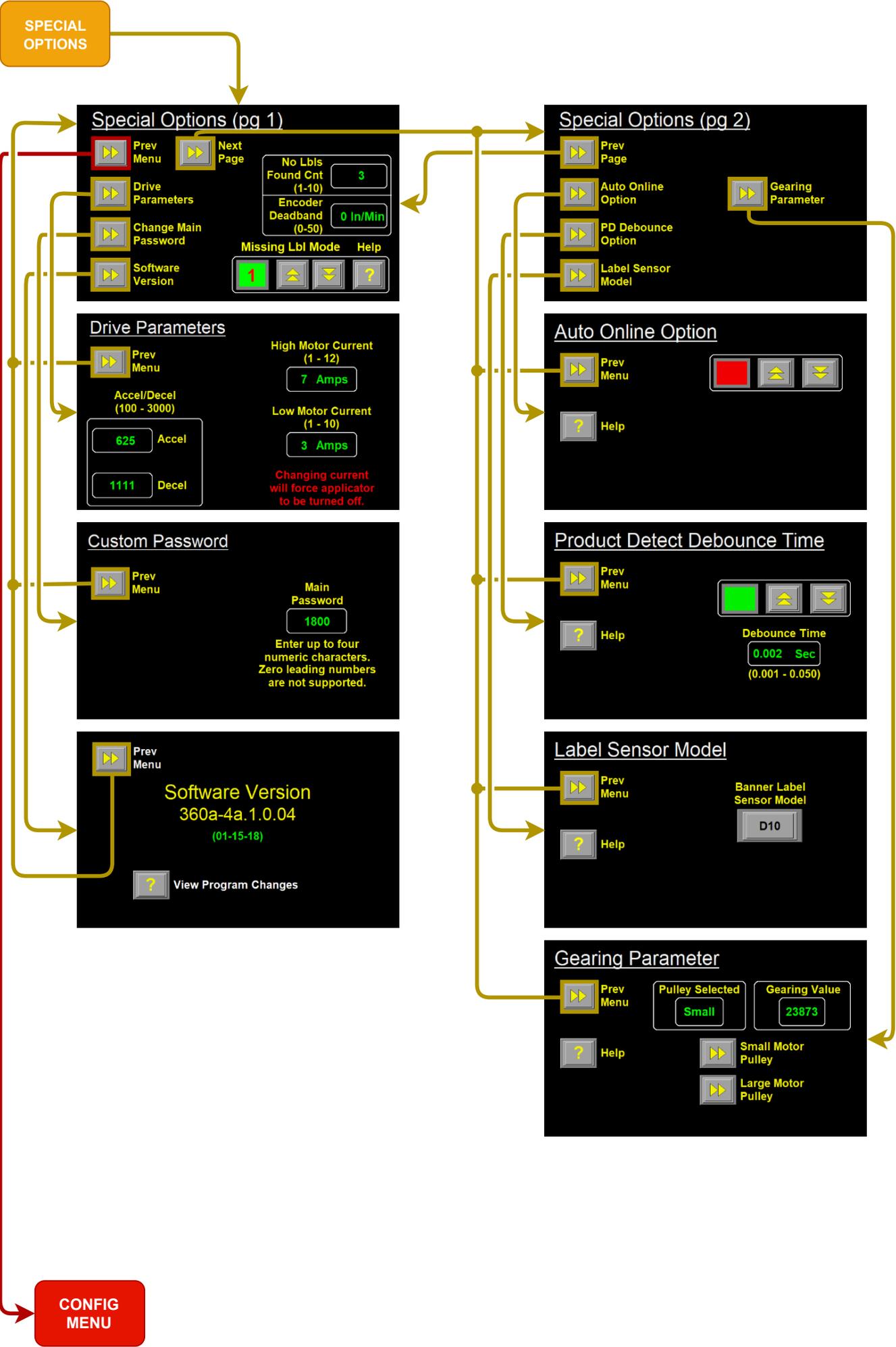
Pulley Selected **Small** Gearing Value **23873**

Help

Small Motor Pulley

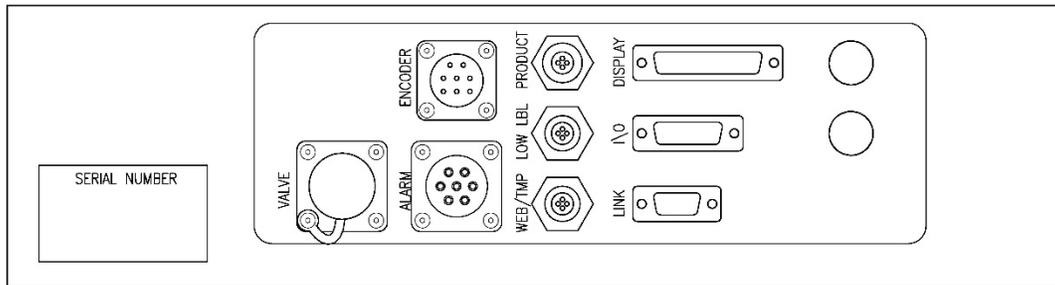
Large Motor Pulley

CONFIG MENU



Connector Faceplate

This section covers all standard connectors available on the rear-panel of the applicator.



I/O

A DB-15 connector pre-wired for the operator to tie into to monitor various signals. For more information on the I/O signals and pin numbers see the “I/O Harness” drawing in the “Drawings” section of the manual.

Alarm

A connector to tie in an alarm light stack. Pre-wired to support up to a three light stack where Red is Critical Alarm, Amber is Warning Alarm, and Green is Ready Signal.

Valve

This connector can power up to four valves on one valve bank. The valve bank can be configured to the applicator needs.

Product

A four pin connector to plug the product detect sensor into.

Low Label

A five pin connector to plug the low label sensor into if a low label sensor is being used.

EOW

A different five pin connector to plug an end of web sensor into if it is being used.

Encoder

The encoder is plugged into this connector. Once plugged in the encoder option will need enabled in the Product Setup menu.

Display

The display connects to the applicator here.

Link

The link port is used to interconnect two labeling applicators in “zero downtime” applications. See the crossover section in the “Applicator Options” section for more information. This port is only installed if the crossover option is used.

360a I/O Port Functions

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

- **Pin #1** (DC Power): 0 VDC
- **Pin #2** (DC Power): 24 VDC at 200ma
- **Pin #3** (System Ready): If there are no critical alarms, the applicator is online, and the inhibit input off, then the ready output is on.
- **Pin #4** (Warning Alarm): This output will turn on when the applicator enters a warning alarm state. The signal will stay low until the alarm is reset. Refer to the “Alarms” section for the complete list of warning alarms.
- **Pin #5** (Critical Alarm): This output will turn on when the applicator enters a critical alarm state. The signal will stay low until the alarm is reset. Refer to the “Alarms” section for the complete list of critical alarms.
- **Pin #6** (A-Loop In): This input is only used when the applicator is connected to an external printer in a loose loop fashion. When this input is active, the applicator will enter the alarm loop state.
- **Pin #7** (T-Loop In): This input is only used when the applicator is connected to an external printer in a loose loop fashion. When this input is active, the applicator will activate the print start output.
- **Pin #8** (Loose Loop In): This input is only used when the applicator is connected to an external printer in a loose loop fashion. When this input is active, the applicator will turn off the print start output.
- **Pin #9** (Printer Ready): This input is used to monitor the ready signal from an external printer.
- **Pin #10** (Print Start): This output is used to signal an external printer when to start its printing sequence.
- **Pin #11** (Product Detect): Taking this input low will start the labeling sequence of the applicator.
- **Pin #12** (Inhibit): This input will stop the applicator from applying labels and the system ready output will be turned off while this input is on.
- **Pin #13** (Spare): Not Connected
- **Pin #14** (Spare): Not Connected
- **Pin #15** (Spare): Not Connected

360a General Setup Procedures

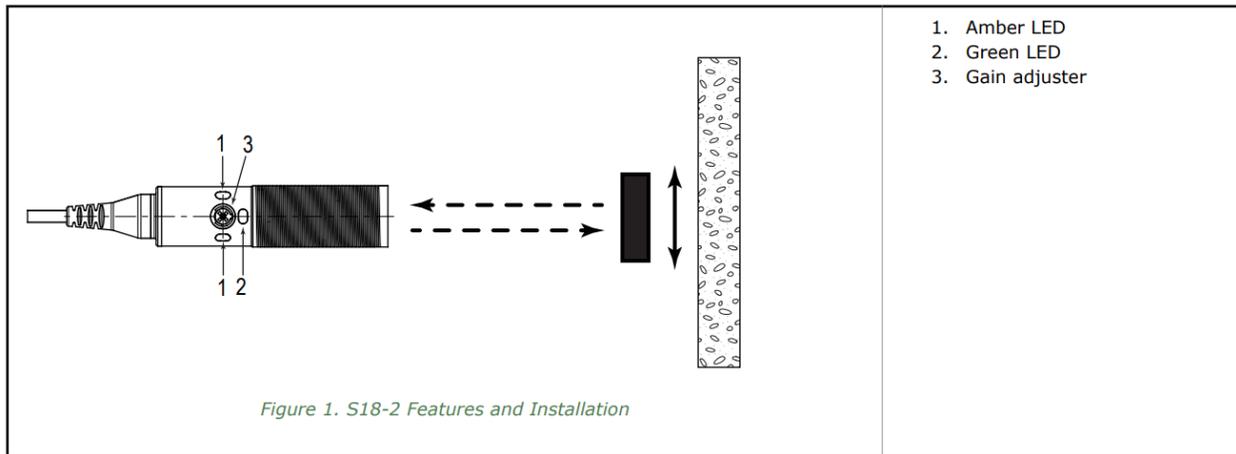
The following procedures detail the setup of various components that can be included with a standard 360a.

Sensors

The following are standard sensors CTM uses on applicators that require setting up. These may or may not be installed on your applicator. If there is a sensor on your applicator that is not covered, and you would like more information please contact the factory.

Banner S18-2 Sensor

This style sensor can be a retroreflective, diffused, or polarized sensor that comes with various types of reflectors as well as a potted or quick disconnect cable.



Retroreflective Setup

Make sure there is power to the sensor and both it and the reflector are properly mounted. Ensure that the green LED is on when looking at the sensor. Move a product between the sensor and the reflector and the amber LED will turn on. To switch to trailing edge functionality the sensor will need the white and black wires switched inside of the applicator.

Polarized Retroreflective Setup

Make sure there is power to the sensor and both it and the reflector are properly mounted. Ensure that the green LED is on when looking at the sensor. Move a product between the sensor and the reflector and the amber LED will turn on. To switch to trailing edge functionality the sensor will need the white and black wires switched inside of the applicator. The polarized sensor will need a depolarizing reflector in order to sense clear products.

Diffused Setup

Ensure that the sensor is properly mounted. Place the product in front of the sensor and adjust the gain pot until the lights on the sensor are fully on and are no longer blinking. Remove the product from in front of the sensor and verify that the sensor turns off. If the product has multiple colors on it, set the gain using the darkest part of the product.

Banner D10 Fiber Optic sensor

This fiber optic sensor is used in the 360 and 360a applicators and may be used to sense products on a system. There are two modes of teaching: Dynamic and Static

Dynamic method is used when teaching the sensor while the system is moving products.

Static teaching is the most common and involves teaching an on state then teaching the off state.

Keys and LEDs

Two push buttons, Dynamic (+) and Static (-), may be used to access and set programming parameters.

The Output Select Indicator indicates the mode of operation:

- Teach = RED
- Run = GREEN

Returning To Run Mode

TEACH and SETUP modes may be exited two ways: by allowing the 60-second time-out, or by canceling out of the process. In TEACH mode, the sensor will return to RUN mode without saving any of the new settings; in SETUP mode, the sensor will return to RUN mode but save all of the new settings. To cancel out of TEACH mode, press and hold the STATIC (-) button for 2 seconds; to cancel out of SETUP mode, press and hold both the STATIC (-) and Dynamic (+) button for 2 seconds.

Dynamic Teach Procedure

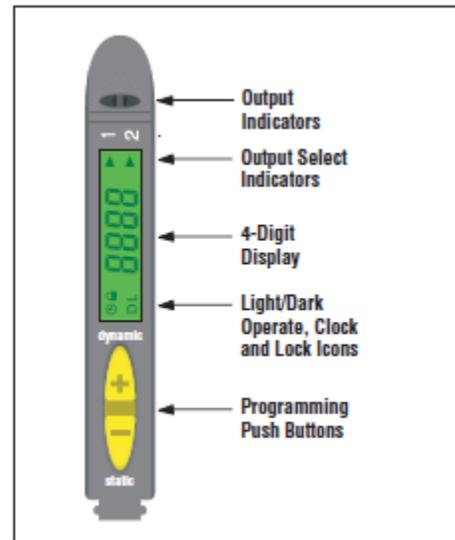
Dynamic TEACH is used to program sensitivity during actual machine run conditions. During Dynamic TEACH, the sensor takes multiple samples of the light and dark conditions and automatically sets the sensitivity at the optimum level. Dynamic TEACH activates the sensor's adaptive threshold system, which continuously tracks minimum and maximum signal levels, and automatically maintains centering of the switch point between light and dark conditions. The adaptive threshold system remains in effect during RUN mode to automatically adjust for changes in the light or the dark conditions.

When Dynamic TEACH mode is used to program sensitivity, the output ON state (light or dark operate) will remain as it was last programmed. To change to either light or dark operate, use the SETUP mode.

Sensitivity may be adjusted at any time when the sensor is in RUN mode by clicking the (+) and (-) buttons. When a manual adjustment is made, the adaptive threshold system is disabled.

Programming

Press and hold the (+) button while running products on the conveyor at production spacing past the sensor fiber. The display should show "dyn". Release the (+) button when a number of product have passed. The screen will display "PASS" if the teach was successful. A value is then displayed indicating the contrast value. The following table shows the scale for the contrast values.



Contrast Values	
500+	Excellent: Very stable operation.
100-500	Good: Minor sensing variables will not affect sensing reliability.
32-99	Low: Minor sensing variables may affect sensing reliability.
0-31	Marginal: Consider an alternate sensing scheme.

Static Teach Procedure

Static TEACH is the traditional setup method, used when two conditions can be presented by the user. The sensor locates a single sensing threshold (the switchpoint) midway between the two taught conditions, with the Output ON condition on one side, and the Output OFF condition on the other.

Programming

With power to the sensor body and the fiber optics mounted, place a product in front of the fibers. Press and hold the (-) button until “1St” is displayed. Press the (-) button. Remove the product and press the (-) button again. If it was a good setup the sensor display will read “PASS”.



Configuration

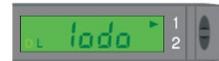
Active Channel Select

Single-click both buttons simultaneously until the pointer moves to the channel 1 indicator.

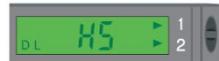


Factory Default Settings

Press and hold the (+) and (-) buttons until the display shows “Iodo”.



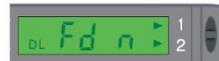
Press the (-) button 3 times, slowly enough to allow the display to change with each push of the button until the display shows “HS”



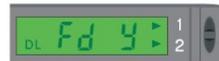
Press the (-) button 4 times repeatedly until the display shows “tr y”.



Press the (-) button 2 times, slowly enough to allow the display to change with each push of the button until the display shows “Fd n”.



Press the (+) button to toggle the display to show “Fd y”.

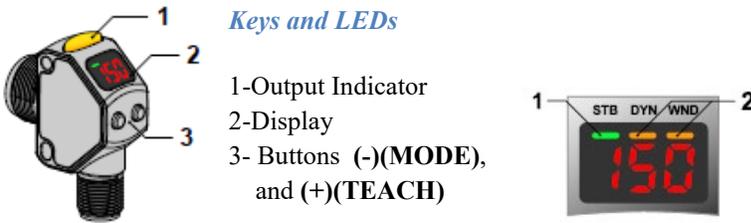


Return to Run Mode

Either hold both (+) and (-) buttons simultaneously for 2 seconds or allow the 60-second time-out to occur.

Banner Q3X Laser sensor

This laser sensor is used to sense products on a system. Basic instructions and descriptions are listed in this section. If additional information is required refer to the manufacture instruction literature.



- 1-Stability Indicator (STB = Green)
- 2-Active TEACH Indicators
 - DYN = Dynamic TEACH selected (Amber)
 - WND = Symmetric window thresholds are active (Amber)

Laser Description and Safety Information



CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Do not attempt to disassemble this sensor for repair. A defective unit must be returned to the manufacturer.

Class 2 Lasers

Class 2 lasers are lasers that emit visible radiation in the wavelength range from 400 nm to 700 nm, where eye protection is normally afforded by aversion responses, including the blink reflex. This reaction may be expected to provide adequate protection under reasonably foreseeable conditions of operation, including the use of optical instruments for intrabeam viewing.

Class 2 Laser Safety Notes

Low-power lasers are, by definition, incapable of causing eye injury within the duration of a blink (aversion response) of 0.25 seconds. They also must emit only visible wavelengths (400 to 700 nm). Therefore, an ocular hazard may exist only if individuals overcome their natural aversion to bright light and stare directly into the laser beam.



Laser wavelength: 655 nm

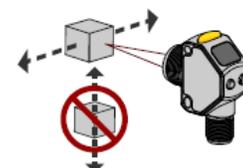
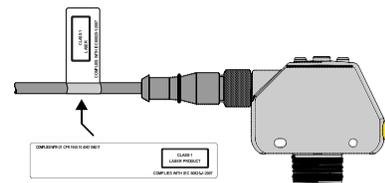
Output: < 0.42 mW

Pulse Duration: 5 μ s

The safety label must be installed on Q3X sensors that are used in the United States.

NOTE: Position the label on the cable in a location that has minimal chemical exposure.

1. Remove the protective cover from the adhesive on the label.
2. Wrap the label around the Q3X cable, as shown.
3. Press the two halves of the label together.



Installation

Correct sensor-to-target orientation is important to ensure proper sensing. To ensure reliable detection, orient the sensor as shown in relation to the target to be detected

Basic TEACH Instructions

Use the following instructions to teach the Q3X sensor.

1. Align the sensor to a stable reference surface.
2. Rigidly mount the sensor in this alignment.
3. Press and hold **TEACH** for longer than 2 seconds to start the TEACH mode.
4. Present the target.
5. Press **TEACH** to teach the reference surface. The reference surface is taught, the currently selected switch point value is displayed, and the sensor returns to run mode. Press **TEACH** to teach the target. The target is taught and the sensor waits for the second target, if required by the selected **TEACH** mode, or returns to Run mode. Complete steps 6 and 7 only if prompted by the sensor for the selected **TEACH** mode:
6. Present the second target.
7. Press **TEACH** to teach the target. The target is taught and the sensor returns to Run mode.

Manual Adjustments

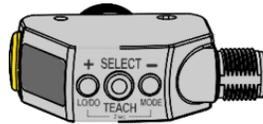
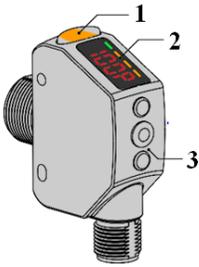
Manually increase or decrease gain using the \oplus and \ominus buttons.

1. From Run mode, press either \oplus or \ominus one time. The current signal strength value flashes slowly.
2. Press \oplus to increase the sensor gain or \ominus to decrease the sensor gain. After 1 second of inactivity, the new normalized signal strength value flashes rapidly, the new setting is accepted, and the sensor returns to Run mode.

Banner Q4X Laser sensor

This laser sensor is used to sense products on a system. Basic instructions and descriptions are listed in this section. If additional information is required refer to the manufacture instruction literature.

Keys and LEDs



- 1-Output Indicator
- 2-Display
- 3- Buttons (**SELECT**)(**TEACH**), **(+)**(**LO/DO**), and **(-)**(**MODE**)

Laser Description and Safety Information



CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Do not attempt to disassemble this sensor for repair. A defective unit must be returned to the manufacturer.

Class 1 Lasers

Class 1 lasers are lasers that are safe under reasonably foreseeable conditions of operation, including the use of optical instruments for intrabeam viewing.



Laser wavelength: 655 nm

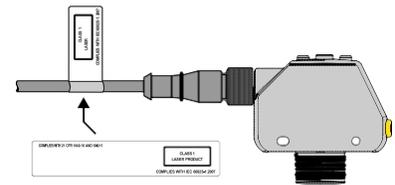
Output: < 0.20 mW

The safety label must be installed on Q4X sensors that are used in the United States.

Pulse Duration: 7 μ s to 2 ms

NOTE: Position the label on the cable in a location that has minimal chemical exposure.

1. Remove the protective cover from the adhesive on the label.
2. Wrap the label around the Q4X cable, as shown.
3. Press the two halves of the label together.



Installation

Optimize the reliable detection of objects by applying these principals when selecting your reference surface, positioning your sensor relative to the reference surface, and presenting your target.

1. Select a reference surface with these characteristics where possible:
 - Matte or diffuse surface finish
 - Fixed surface with no vibration
 - Dry surface with no build-up of oil, water, or dust
2. Position the reference surface between 50 and 300 mm.
3. Position the target to be detected as close to the sensor as possible, and as far away from the reference surface as possible.
4. Angle the sensing beam relative to the target and relative to the reference surface 10 degrees or more.

Basic TEACH Instructions

Use the following instructions to teach the Q4X sensor.

1. Align the sensor to a stable reference surface.
2. Rigidly mount the sensor in this alignment.
3. Press and hold **TEACH** for longer than 2 seconds to start the TEACH mode.
4. Press **TEACH** to teach the reference surface. The reference surface is taught, the currently selected switch point value is displayed, and the sensor returns to run mode.

The Q4X sensor records the distance to the reference surface and the amount of laser light returned by the reference surface. The output is switched when an object passing between the sensor and the reference surface changes the perceived distance or amount of returned light. The Q4X is able to detect the very small changes caused by transparent and clear objects. Typical reference surfaces are metal machine frame, conveyor side rail, or mounted plastic targets.

Manual Adjustments

Manually adjust the sensor switch point using the  and  buttons.

3. From Run mode, press either  or  one time. The current switch point value flashes slowly.
4. Press  to move the switch point up or  to move the switch point down. After 1 second of inactivity, the new switch point value flashes rapidly, the new setting is accepted, and the sensor returns to Run mode.

After the TEACH process is completed, the taught reference point, a combination of the measured distance and returned signal intensity from the reference target, is recorded by the sensor. Use the push buttons to manually adjust the switch point. Manual adjustment changes the sensitivity of the thresholds around the taught reference point but does not move the taught reference point. Press  to increase the sensitivity and press  to decrease the sensitivity. After re-positioning the sensor or changing the reference target, re-teach the sensor.

The display shows the current match percentage relative to the taught reference point. The switch point defines the sensitivity; the output switches when the current match percentage crosses the switch point.

Your specific application may require some adjustment of the switch point, but these values are recommended starting switch points for common applications.

Switch point (%)	Typical Applications
75 (default)	Default, recommended for PET bottles and Trays
88	Recommended for thin films
50	Recommended for tinted brown, tinted green, or water-filled containers

Light Operate/Dark Operate

The default output configuration is light operate. To switch between light operate and dark operate, use the following instructions:

1. Press and hold **LO/DO** for longer than 2 seconds. The current selection displays.
2. Press **LO/DO** again. The new selection flashes slowly.
3. Press **SELECT** to change the output configuration and return to Run mode.

NOTE: If neither **SELECT** nor **LO/DO** are pressed after step 2, the new selection flashes slowly for a few seconds, then flashes quickly and the sensor automatically changes the output configuration and returns to Run mode.

!!! CAUTION !!!

DISCONNECT AIR AND POWER TO THE APPLICATOR BEFORE PERFORMING THE FOLLOWING PROCEDURES. THERE IS RISK OF BEING CAUGHT IN THE NIP ROLLER IF THE APPLICATOR CYCLES UNEXPECTEDLY.



Threading Labels

The following section will detail the threading of labels on the 360a applicator. Refer to the “Web Path” section of the drawings for an accurate diagram of your applicator.

1. Remove the outer unwind disk.
2. Ensure the inner unwind disk is at least 1 ¼” away from the applicator faceplate.
3. Slide a roll of labels over the unwind hubs and push against the inside disk. Make sure the labels are face up as they come off the unwind. A core support can be used for wider rolls of labels. Replace the outer disk and lock into place.
4. Remove approximately 3 feet of labels from the liner on the leading part of the label roll.
5. Thread labels through the applicator referring to the proper web path diagram.
 - a. When going through the nip and drive rollers turn the knob on top of the nip assembly to “open” the two rollers”
 - b. If the applicator is an air blow or tamp make sure the web goes between the peel edge and air assist tube.
6. Remove the rewind pin and lay the label liner over the pin slot. Replace the pin so it is holding label liner against rewind mandrel.
7. Align guide collars with the unwind assembly.
8. “Close” the nip roller assembly so the nip roller is touching the drive roller.
9. Make sure the label tension brush is against the roller and holding pressure against the web.
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.
11. Run multiple labels so that any tracking issues are corrected.

Label Setup

The following sections will detail the processes of teaching and positioning of the label sensor as well as the variables that are changed during a teach sequence. This will include setups for proper label feeds.

Label Sensor Setup

The label sensor is a “U”-shaped optical sensor that is connected to the sensor electronics with fiber optic cable. To ensure 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 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 label.

Auto Setup

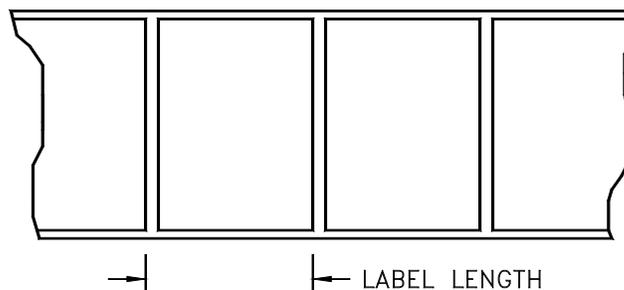
In auto setup the applicator will automatically set the label sensitivity, label length, and label stop values. Also, it will calculate the short feed distance if the multi-panel apply option is enabled prior to running auto setup. Refer to the “Label Sensor” Display Section in this manual. Select whether you want to sense the leading or trailing edge of the label and follow the instructions there.

Manual Setup

The manual setup function is provided due to instances where auto teaching does not work. It adds in extra steps to teach the same variables taught in the auto teach. Refer to the “Label Sensor” Display Section of the manual for more information.

Label Length Setup

You can manually input the label length into the applicator instead of doing a teach. The length needs to include the gap between labels. The below diagram shows an example of label length.



NOTE: It’s important to set the label length to exactly what it is. 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. If a valuable is entered that is outside of the allowable values the display will reset the value to its previous number.

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 applicator or the product being labeled. When the setup on the applicator is finished, run through the following steps to verify your setup is complete.

Static Test for Tamp and Air Blow

1. Make sure the labels are consistently stopping in the same place on the label pad or grid. If they are 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 360a manual and follow the suggestions. When this is corrected go back and try the static test again. If there were no label stop issues go to step 3.
3. Make sure the label pad or grid 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 step 5.
5. Work with the air pressure and the position of the air assist tube until the label feeds more consistently onto the pad or grid. Re-try the static test. If the results are still not good enough, go to step 6. Otherwise go to 7. If having difficulties correctly positioning the air assist tube and pressure refer to the "Labeler Setup" section of the manual.
6. Ensure that there are no flaws with the label stock. Try another roll of labels and see if the stack changes.
7. Check the distance from the label pad or grid to the product. If the distance is too large, the labels may float too much. Try lowering the applicator so the label pad or grid just clears the product (within 1/8").
8. If the applicator type is a tamp or RVB, make sure the label pad is made for the label you're using. Uncovered holes on the pad will reduce the available vacuum used to hold the label in place and results will be uncertain.
9. If the applicator type is an air blow, make the air tube pattern is correct. If the tubes are improperly balanced the label will not stack well.

Static Test for Merge

Apply one label to a product. Run the same product past the applicator at the same speed and none of the variables in the applicator changed. If the two labels stack, you are finished.

Check label stop. If it is not consistent, reset the label sensor. Retry static test. If good you are done; if not make sure the product is being consistently presented to the applicator.

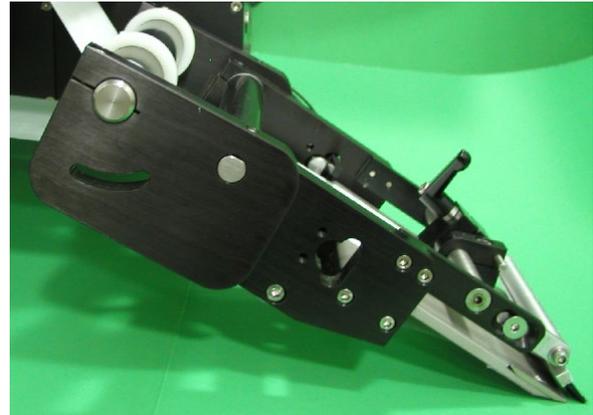
360a Labeler Setup

Merge Applicator Setup

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

A merge nose assembly can be seen on the right. This assembly allows the labels to be wiped on to the product and includes a brush at the end of the assembly.

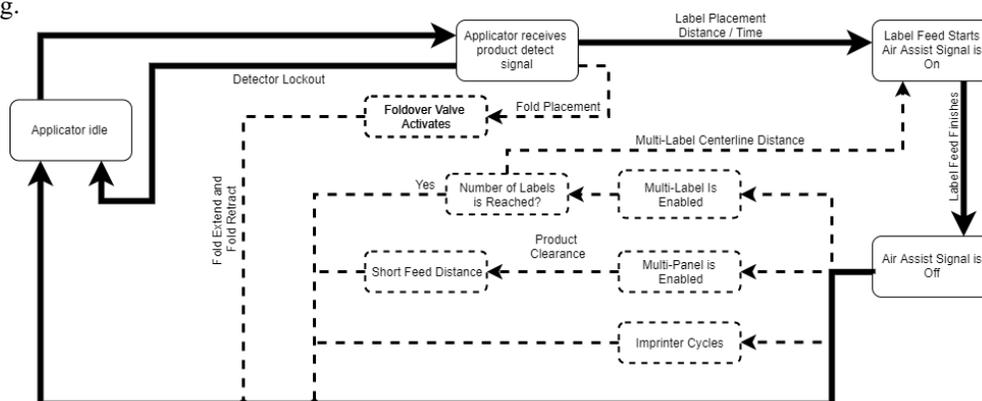
When setting up a merge applicator for the first time follow the below steps to ensure all settings are correct:



1. Under applicator type in the configuration menu of the display, select “merge” apply type. Also, indicate whether it is in a right-hand or left-hand configuration. If there were any options turned on, they will be turned off when changing applicator types. If the dispense direction is changed and the applicator type menu is exited, the applicator will force the operator to cycle the power to the applicator before any other changes can be made.
2. 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.
3. 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 aid in the tacking of the label to the product. It is not made to be a wipe down.**
4. Label stop can be set so that the label is flagged past the peel edge but must miss the passing product. If the label stop were to hit a passing product the label could tack without the applicator cycling.
5. Web speed should be set to match the speed of the product. If encoder-based the encoder options should be set so that the displayed speed in the product setup portion of the display is correct.
6. Turn on all applicator options which you need for your apply (multilabel, overspeed, etc.).

Merge Applicator Flow Chart

The below image represents the cycle of a merge applicator. Some cycle-affecting options are depicted by dotted lines. Any step that has multiple arrows leading to it indicates that multiple steps must be complete prior to advancing.



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 standstill 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.

The below steps detail setting up the air blow nose to run labels properly:



1. Under applicator type in the configuration menu of the display, select “air blow” applicator. Also, indicate whether it is in a right-hand or left-hand configuration. If there were any options turned on, they will be turned off when changing applicator types. If the dispense direction is changed and the applicator type menu is exited, the applicator will force the operator to cycle the power to the applicator before any other changes can be made.
2. Place the applicator as close to the product as you can without hitting it.
3. Turn any additional options needed on and ensure the labels are threaded and taught correctly. For more information about setting up labels refer to the “Label Setup” section of the manual.

Air Blow Peel Edge Alignment

1. Turn power on to the applicator and make sure it's offline.
2. Advance the web by hand 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 ¼ socket head 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. **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.**
4. Repeat step #2 to check label angle. Re-adjust if needed. You can now move onto setting up the label stop.

Air Blow Label Stop

1. With the applicator online, jog a couple of labels. Monitor the label stopping position
2. Label stop position should be set to stop the leading edge of the label 1/32” from the peel edge tip.
3. If needed, adjust the label stop value and repeat. Once set proceed to the Air Blow Grid Setup.

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 into the Storage Block. **WARNING: Make sure the air jet tubes are not in the axial fan.**
3. The blow box is equipped with two (2) fans and a switch. With the switch in LOW position, only one (1) fan will run. With the switch in the HIGH position, both fans run. Select the appropriate switch position to ensure that enough vacuum is generated to hold the label in place.

Air Blow Air Assist Setup

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. The following steps detail the setup of the air assist tube:

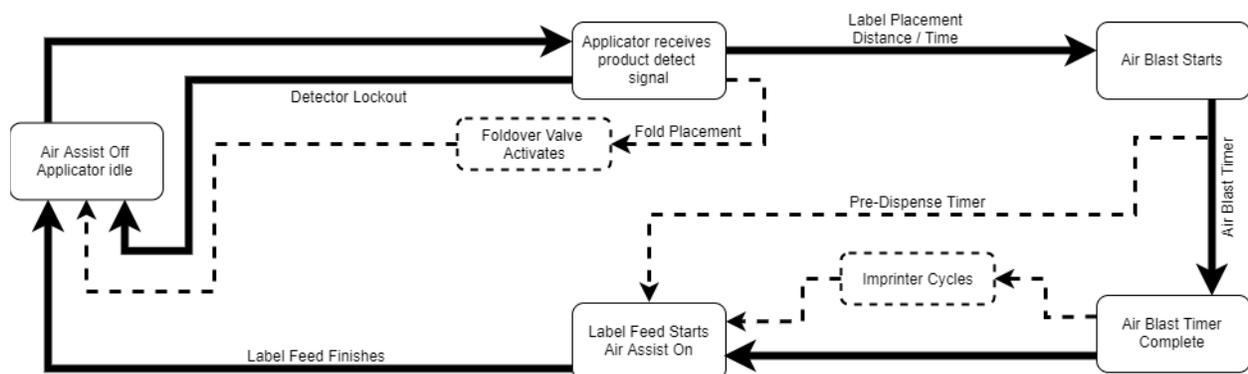
1. Adjust the air assist tube so it's blowing into the center of the label. Ensure that the label feeds out against the grid properly.
2. The regulator for the air assist is on the valve bank and should be set between 10 and 15 PSI. This is a typical setting, but it may be changed as needed.
3. If a longer air assist is needed to help position the label, enter the applicator setup menu on the display and press the ext air assist key; here you can enter a value between .000-1 second. Refer to the "applicator setup" portion of the manual for more information.

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 air blast regulator assembly located on the valve bank. Typically, the air blast pressure will be set to 40-50 PSI. The adjustable air blast timer can be set between .005-1 second. This adjustment can be found in the "applicator setup" portion of the manual.

Air Blow Flow Chart

The below image represents the cycle of an air blow applicator. Some cycle-affecting options are depicted by dotted lines. Any step that has multiple arrows leading to it indicates that multiple steps must be complete prior to advancing. Not all options are shown as not all options effect the cycle.



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.

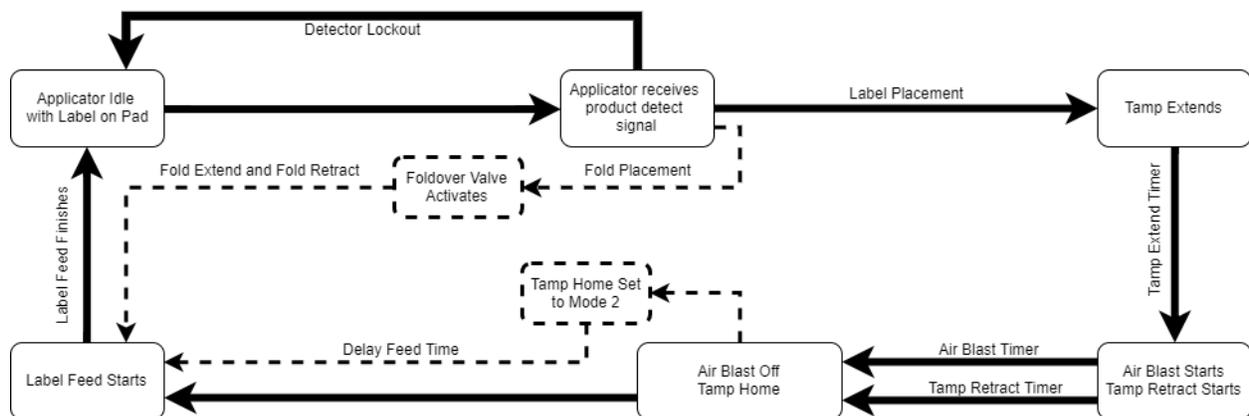
NOTE: Before proceeding, make sure you’ve selected Tamp in the APPLICATOR TYPE MENU on the display. Choose one of the following types of tamping action:

- **NORMAL TAMP:** A label feeds out onto the label pad and the applicator 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 applicator 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 three (3) modes of operation: Swing first then tamp (Leading), Tamp first then swing (Trailing) or inverted swing then inverted tamp (Inverted). Within all modes, a swing only and a side only option is available.
- **CORNER WRAP:** The label feeds out onto the label pad and the applicator will wait for the product detect signal to apply a label to the front panel and then around the corner to the side panel. This applicator type must be used with a Hi/Lo pressure valve bank so that the product can push through the extended swing arm.

If selecting normal tamp or ITB tamp use the following setup guides to setup the tamp for tamp application. If selecting DAT or cornerwrap continue to the “DAT Applicator Setup” or “Cornerwrap Applicator Setup” sections of the manual.

Normal Tamp Flow Chart

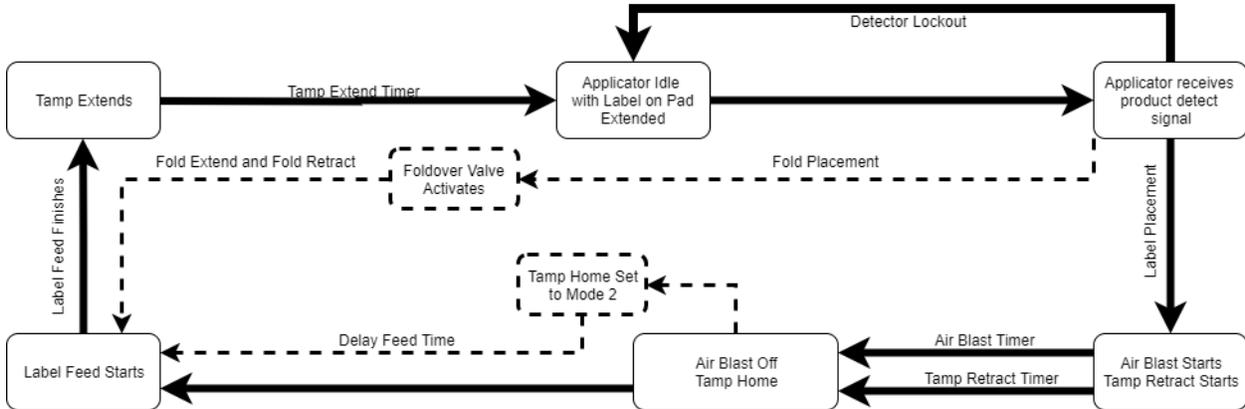
The below image represents the cycle of a normal tamp applicator. Some cycle-affecting options are depicted by dotted lines. Any step that has multiple arrows leading to it indicates that multiple steps must be complete prior to advancing. Not all options are shown as not all options effect the cycle.



NOTE: Use of Tamp Home and Tamp Return sensors will override the settings of the Tamp Extend and Tamp Retract timers.

Inverted Tamp (ITB) Flow Chart

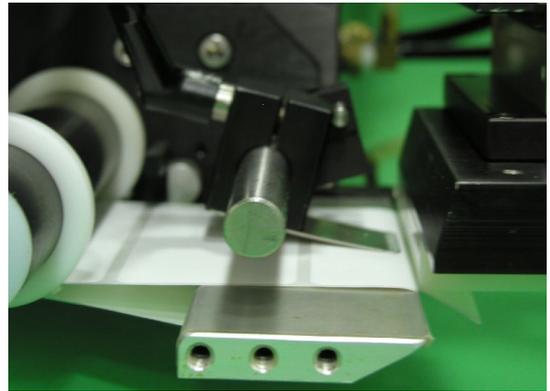
The below image represents the cycle of an inverted tamp applicator. Some cycle-affecting options are depicted by dotted lines. Any step that has multiple arrows leading to it indicates that multiple steps must be complete prior to advancing. Not all options are shown as not all options effect the cycle.



NOTE: Use of Tamp Home and Tamp Return sensors will override the settings of the Tamp Extend and Tamp Retract timers.

Tamp Peel Edge Alignment

1. Turn the power on, turn on the air to the applicator, and make sure the applicator is offline.
2. Advance the web by hand 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 should be.
3. To adjust the peel edge, loosen the two ¼ socket head 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 (1/16"). Repeat step #2 to check label angle. Re-adjust if needed. If the setup looks correct move onto the tamp label stop guide.



Tamp Vacuum Pressure Setup

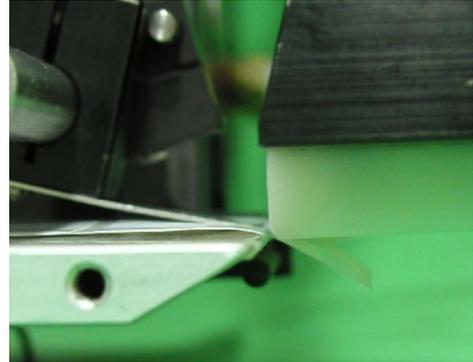
The tamp pad vacuum is generated by a vacuum venturi located on the applicator's valve bank. This vacuum is used to hold the label on the label pad until the air blast releases it. Too much or too little vacuum can affect label placement on the pad. The amount of vacuum may be changed by adjusting the air pressure to the vacuum regulator feeding the venturi. A setting of 20 PSI is typical, but it may be changed as needed. If the label is fluttering during label feed it may be due to too high vacuum pressure.

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 Setup

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 30 and 40PSI. 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, enter the applicator setup menu on the display and press the ext air assist key; here you can enter a value between .000-1 second. Refer to the "applicator setup" section of the manual for more information.



Tamp Air Blast Setup

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. If the air blast time needs changed, enter the applicator setup menu on the display and press the air blast key; here you can enter a value between .005-1 second. Additional information can be found in the "applicator setup" section of the manual.

Tamp Slide Setup

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 are 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 (flow controls) are provided on the air cylinder to adjust the tamp extend and retract speed. Turning the knobs clockwise will slow the movement of the cylinder. Turning the knobs counterclockwise 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 applicator setup menu of the display.

Tamp Extend Time

The tamp extend time is the time allotted to fully extend the tamp slide assembly. After the tamp extend time elapses, an air blast forces the label off the label pad onto the product. In order to keep cycle time low, set the extend time so that the air blast occurs when the slide reaches the fully extended position.

To change the tamp extend time ensure that the flow controls are properly set up. Enter the applicator setup menu on the display. Open the tamp times menu and enter a value under tamp extend between .01-5 seconds. Additional information about adjusting tamp times can be found in the applicator setup section of the manual.

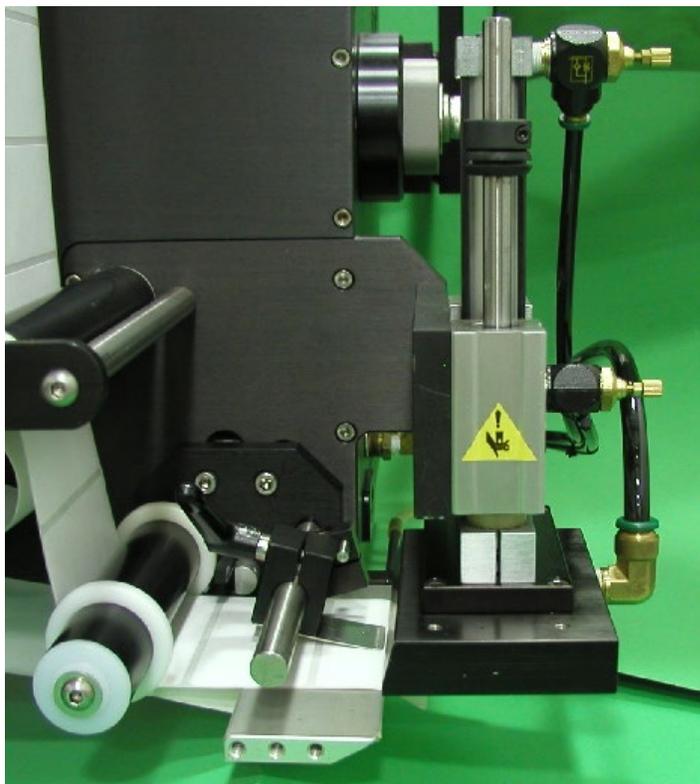
Tamp Retract Time

The tamp retract time is the time allotted 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 increases cycle time.

To change the tamp retract time enter the applicator setup menu on the display. Press “tamp times” and enter a value under “tamp retract” between .01-5 seconds. Additional information about adjusting tamp times can be found in the applicator setup section of the manual.

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.

Seen below: A right handed tamp cylinder mounted to a 360a Applicator. The flow controls can be seen on the right side of the image. The tamp cylinder in this image has had its stroke length shortened.

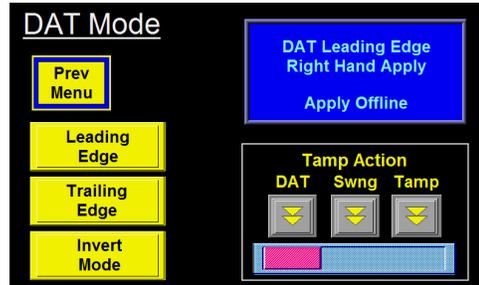


Dual Action Tamp (DAT) Setup

When the applicator type setting is set to Dual Action Tamp various options become incompatible and the sequence of labeling changes depending on which style of DAT is selected. This section will explain those changes and explain how to setup the applicator to function properly as a DAT.

Selecting DAT Type

If Dual Action Tamp (DAT) is selected from the applicator type menu, the submenu shown at the right appears allowing the operator to define the type of motion that occurs during each product application cycle. The operator should select leading, trailing or invert depending on the Mode Type you need. The operator then can choose the tamp action within it (Dual, Swing Only or Tamp Only). When the DAT Type is changed, the label placement(s) will be changed to the factory default values of 0.25. The sequences are described in the following section:

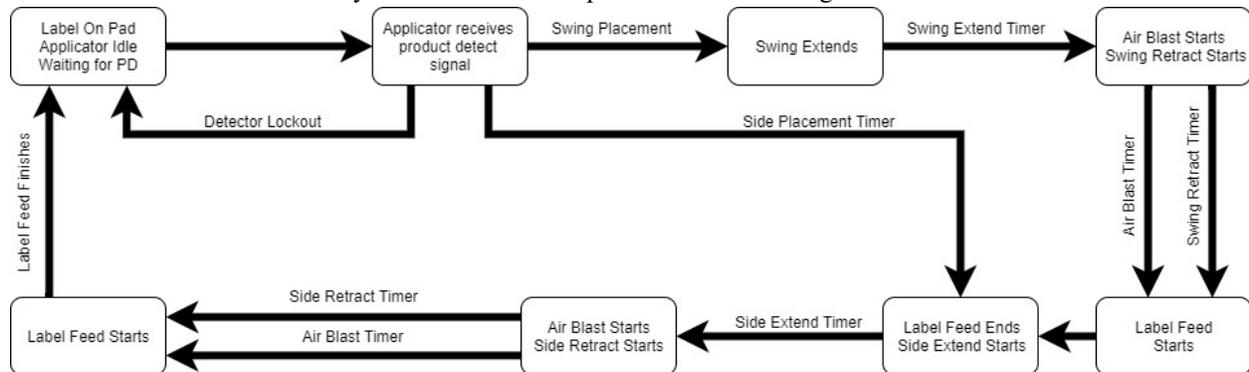


DAT: Leading Edge

With the applicator online and a label on the pad, the labeler receives a product detect signal. After waiting the swing label placement distance or time, the label pad swings 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 onto the pad and the applicator waits for the side label placement distance or time. The side label placement distance or time is started at the same time as the swing label placement. When the side label placement is reached, the tamp assembly extends toward the side of the product. The applicator waits the tamp extend time, blows the label onto the product, starts to retract the tamp assembly, and starts the tamp retract timer. At the end of the retract time, another label is fed onto the label pad.

DAT: Leading Edge Flow Chart

The below image depicts the cycle of a DAT set to leading edge. Any step that has multiple arrows into it means the timer / distances run concurrently and must all be complete before continuing.



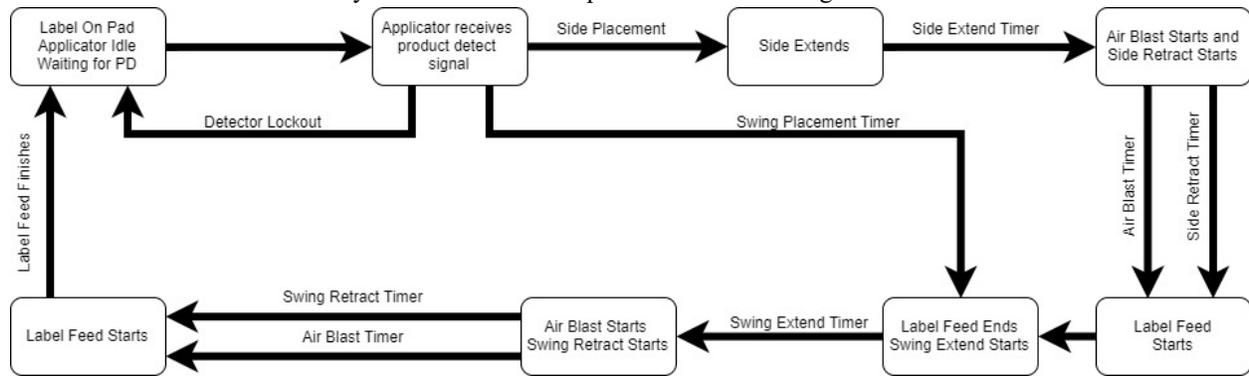
NOTE: If tamp / swing home and retract sensors are installed they will override the tamp / swing home / retract timers.

DAT: Trailing Edge

With the applicator online and a label on the pad, the labeler receives a product detect signal. After waiting the side label placement distance or time, the label pad extends to the side of the product. At the end of the side extend time, the air blast valve turns on to apply a label to the side panel of the product, the tamp assembly starts to return home, and the side retract timer is started. When the side retract timer finishes, a label is fed onto the pad and the applicator waits for the swing label placement distance or time. The swing label placement distance or time is started at the same time as the side label placement. When the swing label placement is reached, the label pad swings behind the product. The applicator waits the swing extend time, blows the label onto the product, starts to retract the swing arm, and starts the swing retract timer. At the end of the retract time, another label is fed onto the label pad.

DAT: Trailing Edge Flow Chart

The below image depicts the cycle of a DAT set to trailing edge. Any step that has multiple arrows into it means the timer / distances run concurrently and must all be complete before continuing.



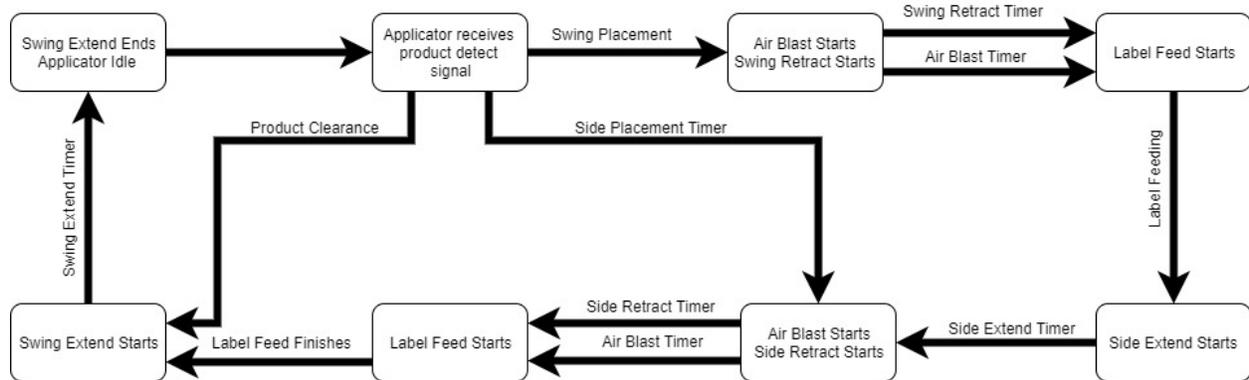
NOTE: If tamp / swing home and retract sensors are installed they will override the tamp / swing home / retract timers.

DAT: Inverted Mode

With the applicator online and a label on the pad, the label pad swings out into product flow and waits for a product detect signal. Once a signal has been received, the applicator will start the product clearance and side label placement times or distances while it waits the swing label placement time or distance. When the swing label placement is finished, the applicator will blow the label off the pad onto the front of the product. At the same time the label pad swings home and the retract timer starts. At the end of the swing retract time, another label is fed out onto the pad and the tamp valve turns on moving the pad to the side of the product. The tamp extend timer starts here and when complete, the applicator will wait for the side label placement to finish. When both are done, the label is blown onto the side of the product, the tamp valve turns off causing the label pad to retract and the tamp retract time starts. At the end of the tamp retract time, another label is fed out onto the pad. The applicator will then wait for the product clearance time or distance to finish and then the label pad will swing back out into product flow, ready to start the sequence again.

DAT: Inverted Flow Chart

The below image depicts the cycle of a DAT set to inverted. Any step that has multiple arrows into it means the timer / distances run concurrently and must all be complete before continuing.



NOTE: If tamp / swing home and retract sensors are installed they will override the tamp / swing home / retract timers.

Incompatible DAT Options

When DAT applicator type is selected various options become incompatible. The following options can not be enabled while the application type is DAT:

- Loose Loop
- Imprinter
- Product Detect Queueing
- Foldover
- Multi-Label
- Powered Rewind
- Vacuum Off

DAT Label Placement Setup

When the applicator is set to DAT, a second label placement value appears in the main and product setup menus. The first placement value corresponds to the first tamp action while the second placement value corresponds to the second tamp action. The allowed values are between 0 and 20 seconds or inches for the first and between 0 and 99 for the second label placement. A suggested lower range limit appears below the second label placement value. Its value varies depending on the first label placement, extend and retract values for the applicator.



NOTE: If the first part of the cycle is not completed by the time / distance of the second label placement has passed the second label will be applied late and a warning alarm will be generated. To correct, shorten the cycle time of the first cycle or decrease product speed.

DAT Applicator Setup Menu

Applicator setup menu for the DAT is shown to the right. Once tamp or swing times are selected, both extend and retract timers are accessible for changing. The extend timers determine how long the tamp or swing valves are on before the air blast occurs. The extend timers should be set long enough to ensure that the label pad is fully extended before the air blast occurs. The retract timers determine how long the valve will be off before a label is fed onto the label pad. The retract timer values should be set long enough to ensure that the label pad is home before feeding a label.



DAT General Setup Procedures

1. The label stop must be properly set for the applicator to work correctly. Adjust the label stop value to position the label at 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 tamp applicator setup section of the manual. It is important to adjust the rotary actuator so the label pad is level with the applicator. **The rotary actuator's internal stops control 100% of where the swing arm stops – the shocks act as a “buffer” only!** See the rotary actuator stop adjustment guidelines section.
3. Make sure the label is aligned with the pad so there is no over-hang. To adjust this, move the liner web in or out by adjusting the guide collars and unwind disks.
4. Position the air assist tube with the hole(s) centered on the label and pointing approximately ¼”in from the label pad edge. The air pressure should be set at 20-30 psi. Press “jog” to dispense a label. If the label doesn't feed out against the label pad or the vacuum doesn't capture it, increase the air pressure. Continue until the vacuum captures the label.
 - a. **Warning:** there are other factors that can keep the label from staying on label pad. You may need more vacuum, increased or decreased label dive, or the air assist tube may need to be rotated.
5. Air pressure for the tamp slide and rotary actuator should start at 40 psi, the air blast at 40-60 psi, and the vacuum pump at 20 psi.
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 results in fewer labels/min a value to start at is 0.06 seconds. The air blast time applies to both the swing and tamp sequences.

DAT Rotary Actuator Stop Adjustment Guidelines

1. Determine application – reels-up, overhead and above etc. Keep in mind the gravity factor / weight of the pad and manifold as this will be a factor of the supplied air pressure coming from the swing valve bank regulator – good starting pressure is 40 PSI.
2. Adjust airflow needle valves, which are located on the side of the longest “tube” of the rotary actuator, with a flat blade screwdriver. Turning the screw CW – decreases the airflow. Turning the screw CCW – increases the airflow. Typical flow control setting is ½ turn CCW from full CW. **Note: Proper flow control settings will provide an smooth and controlled cycle.**
3. Properly set up for the 90-degree swing tamp. With proper amount of air pressure going to the rotary actuator, loosen the retract jam nut, which is located on the end of the longest rotary actuator tube. Use a 3/16” allen wrench and turn the stop set screw cw. This action will move the swing tamp arm away from the tamp home shock. The tamp home shock should protrude from the stop coupling by 1/8” – 3/16”. If this is not the case – make the necessary adjustments. Once this is set, turn the retract setscrew CCW until the swing arm has come to rest against the home stop shock coupling. Tighten the jam nut.
4. Set the extend rotary stop as per above instructions. You will notice the extend shock does not have a stop coupling. This shock should be adjusted to allow for one half of its travel to be compressed when the swing arm is extended.

DAT Shock Absorbers and Flow Controls

Both the linear and rotary actuators have shock absorbers that need to be adjusted. The swing home shock has a stop collar installed. This collar should be adjusted to provide 1/8” of shock travel. To 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 each end of the longer cylinders. Turning the screw in with a small screwdriver slows the arm’s rotational speed and turning it out speeds the arm up. The slide shock absorbers are larger and have longer strokes to ensure a smooth stop when moving larger loads. The shocks should be adjusted to ensure that there is at least 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 to ensure the shock stays in place. The flow controls for the slide are mounted on the valve bank. Screwing the knob in slows the speed of the slide’s action while turning the knob out speeds it up.

DAT Static Label Test

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

To test repeatability, configure the applicator for tamp only action. Position the applicator with the tamp assembly extended and the label pad approximately 1/8" away from the product. Jog several labels onto the product. If the label stack is within the desired tolerances, go to the "product setup" section of this insert. If not, go through the following suggestions to help find the problem.

1. Make sure the labels are consistently stopping in the same place on the label pad. If they are 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 360a manual and follow the suggestions. When this is corrected go back and try the static test again. If there were no label stop issues, 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 step 5.
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. If having difficulties correctly positioning the air assist tube and pressure refer to the "Labeler Setup" section of the manual.
6. Ensure that there are no flaws with the label stock. Try another roll of labels and see if the stack changes.
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 applicator so the label pad just clears the product (within 1/8").
8. Make sure the label pad is made for the label you're using. Uncovered holes on the pad will reduce the available vacuum used to hold the label in place and results will be uncertain.

Positioning DAT 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.

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 be placed on the product. 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. Once the applicator is properly positioned the product detect sensor can be mounted.

Mounting DAT Product Detect Sensor

Before going through this section, make sure the extend and retract times are properly setup. The following setup 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 first label placement to 0.001 and turn the conveyor on. Place a product on the conveyor and watch when the label is blown from the label pad. If the product hit the label pad before it retracted, move the product detect 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 second label placement. If it was applied too early, increase the label placement. If the second label placement is too low compared to the cycle time for the first half of the labeling sequence, a warning will be displayed saying “label placement is too low”.

Corner Wrap Setup

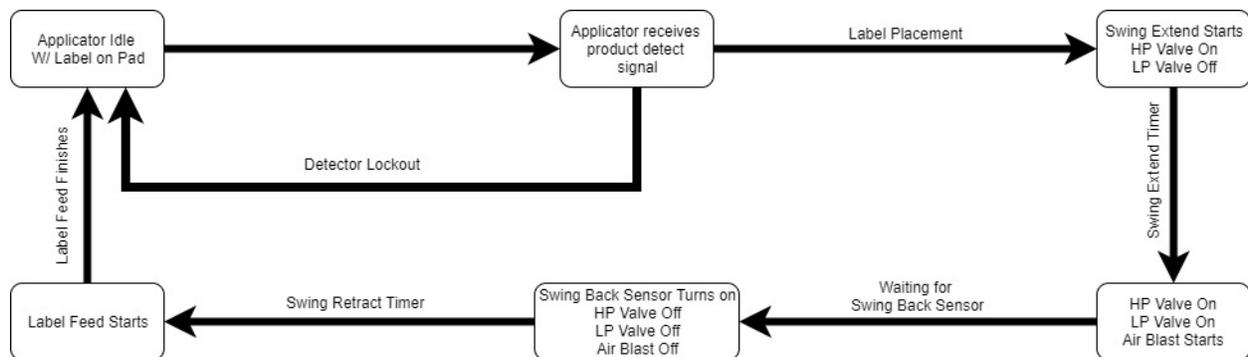
Available in program 360a-4a.1.0.03 and newer.

Corner Wrap Sequence

With the applicator online and a label on the pad, the labeler receives a product detect signal. After waiting the label placement distance or time, the label pad swings out in front of the product using the HP swing valve. At the end of the swing extend time, the air blast and LP swing valves turn on to apply a label to the leading panel of the product. The product should contact the label pad at the roughly the same time that LP swing valve turns on. The swing arm will remain extended at low pressure as the product pushes it out of its path. When the product passes in front of the swing back sensor, the HP swing, LP swing and blow valves will turn off and the swing retract time is started. When the swing retract time is complete, the next label will be dispensed.

Corner Wrap Flow Chart

The below image depicts the cycle of a corner wrap. Any step that has multiple arrows into it means the timer / distances run concurrently and must all be complete before continuing.



NOTE: If swing home and retract sensors are installed, they will override the swing home and retract timers.

Corner Wrap General Setup Procedures

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

1. The label stop must be properly set for the applicator to work correctly. Adjust the label stop value to position the label at or slightly back from the peel edge.
2. The resting swing arm 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 tamp applicator setup section of the manual. It is important to adjust the rotary actuator so the label pad is level with the applicator. **The rotary actuator's internal stops control 100% of where the swing arm stops – the shocks act as a “buffer” only!** See the rotary actuator stop adjustment guidelines section which is found in the dual action tamp (DAT) setup section of this manual.
3. Make sure the label is aligned with the pad so there is no over-hang. To adjust this, move the liner web in or out by adjusting the guide collars and unwind disks.
4. Position the air assist tube with the hole(s) centered on the label and pointing approximately ¼” in from the label pad edge. The air pressure should be set at 20-30 PSI. Press “jog” to dispense a label. If the label doesn't feed out against the label pad or the vacuum doesn't capture it, increase the air pressure. Continue until the vacuum captures the label.
5. Air pressure for the HP swing and LP swing should start at 40 PSI and 10 PSI respectively. The air blast pressure should start around 5 PSI and the vacuum at 20 PSI.
 - a. It is not uncommon to not use any air blast for a cornerwrap application.
6. The LP swing pressure setting may need to be adjusted depending on the weight of the product and the amount of friction between the product and the conveyor. Too much pressure and the product cannot push through the swing arm assembly and too little pressure will not adhere the label to the surface of the product.
7. The air blast PSI should not be set so high that the label is actually blown off the label pad when the blast valve is activated. The air blast is used to break the vacuum hold of the label so that the label can be wiped onto the product.

Corner Wrap Static Label Test

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

To test repeatability, increase the air blast pressure to 40 PSI and disable the encoder option. Position the applicator with the swing arm assembly extended and the label pad approximately 1/8” away from the product. Place the applicator online and wave your hand in front of the product detect sensor. Once the swing arm rotates out to the product and the label is blown off the label pad, wave your hand in front of the swing back sensor. Apply several labels to the same product, if the label stack is within the desired tolerances continue to the Corner Wrap Product Setup section of the manual. If not go through the peel edge setup and label stop setup sections of the corner wrap manual. Once the setup has been verified, reduce the air blast PSI back to its original pressure and, if needed, enable the encoder option.

Positioning A Corner Wrap 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.

With the air and power off to the applicator, rotate the swing arm to the extended position. 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 be placed on the front panel of the product. While the swing arm is extended, verify that the label pad is square to the conveyor in both directions so that the label will be applied and wrapped in a straight line around the corner of the product.

Positioning the Product Detect and Swing Back Sensors

Before going through this section, make sure the extend and retract times are properly setup. Verify the applicator is in its' final position as well.

NOTE: 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 label placement to 0.001 and turn the conveyor on. Place a product on the conveyor and watch/listen for when the LP swing and blow valves activate. If the product hit the label pad before the swing arm was in the low-pressure state, move the product detect sensor upstream more. If swing arm entered the low-pressure state too soon, move the sensor downstream. Ideally, the swing arm should go to the low-pressure state as soon as the product touches the label pad.

Once the product detect sensor position is set, next the swing back sensor position will be set. The swing arm should begin to retract once the label has been wrapped around the corner and the remaining length has been wiped on the side panel of the product. If the swing arm retracted too late, move the swing back sensor further upstream. If the swing arm retracted too early, move the swing back sensor further downstream. There is no programmed delay between the moment that the swing back sensor is activated to the time that the swing arm begins to return to the home position.

360a Product Setup

The applicator should be setup and have successfully passed the static test before continuing with this section. If you have skipped the applicator setup section and have trouble with the application here, it will leave you with more areas to troubleshoot while fixing the problem. Regardless of which type of applicator nose you are using; it is important to control the product prior to labeling. If you do not present the product to the applicator in the same position at uniform speed, label positioning may not be consistent on the product. If necessary, install guide rails to ensure products follow the same path along the conveyor.

Ensure that any applicator sensors have been installed and mounted properly before continuing.

Label Placement

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

Higher Label Placement = Label moves back on product

Lower Label Placement = Label moves forward on product

Label placement can be changed from the main menu or the product setup screen.

Detector Lockout

The product detector lockout function is used if more than one product detect signal is generated per product. If encoder-based then detector lockout is in inches; if not encoder-based then it is in seconds. The lockout starts at the beginning of a labeling sequence and the applicator will ignore all product detect signals until the lockout time or distance is finished. To add detector lockout, go to the product setup menu and change the detector lockout value.

Encoder Setup

Adding an encoder to the applicator is a good way to handle products that are varying in speed. If setup properly, the applicator will compensate the label placement position for all applicator types. In merge applications, the encoder accounts for product speed changes during the label dispense to ensure good labeling performance. Also, the encoder changes the label placement units to inches. This makes it much easier for the operator to setup the applicator because the parameter is independent of the product speed.

A couple notes about encoder usage are listed below:

- Label placement units with the encoder option on are in inches; not seconds.
- The encoder option will not be accurate with the tamp applicator set to normal tamp. This is because the tamp extend remains time based.
- 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.
- If the direction of the encoder pulses are reversed the wiring in the applicator can be switched by swapping the A+ and A- wires in TB21 and TB22 inside the applicator
 - **WARNING: MAKE WIRING CHANGES WITH THE APPLICATOR POWERED OFF AND DISCONNECTED FROM THE POWER SOURCE.**

360a General Maintenance Procedures

The following procedures detail the maintenance of various components that can be included with a standard 360a.

!!! CAUTION !!!

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Preventative Maintenance

Note: Since all applicator types are being covered in this section some maintenance steps may not apply to your applicator. When doing less common maintenance (i.e. semi-annual) still include the steps from the more frequent maintenance.

Daily Maintenance

1. Examine the peel edge, blow box 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.
4. Clean the printhead and platen roller each time you change ribbon. Refer to the printer manual for the correct procedure and additional daily checks. Only applies to loose loops.

Weekly Maintenance

1. Clean rollers, blow box 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.

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 the air inlet filter.

Semi-Annual Maintenance

1. Replace the air inlet filter and clean collection bowl.
2. Clean inside and outside of applicator using an industrial vacuum cleaner.
 - a. **Do not use compressed air to blow dust off 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.

!!! CAUTION !!!

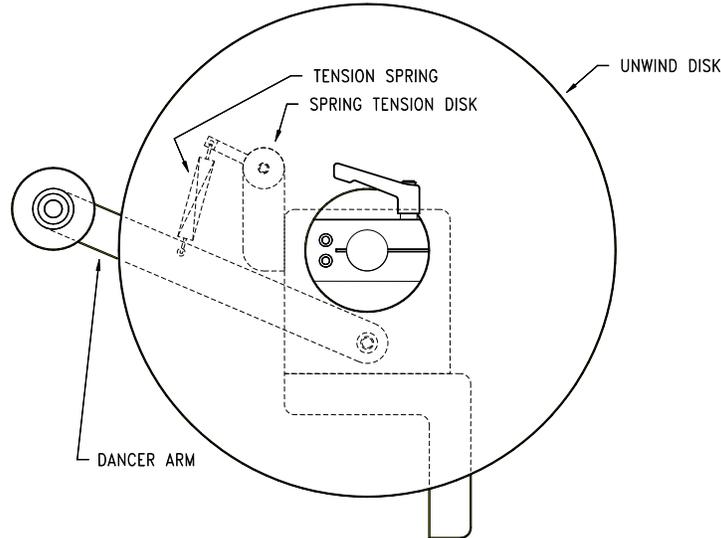
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Dancer Arm Adjustment

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 releases the unwind mandrel when the applicator is cycled.

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



Rewind Slip Clutch

Tension adjustments 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.

!!! CAUTION !!!

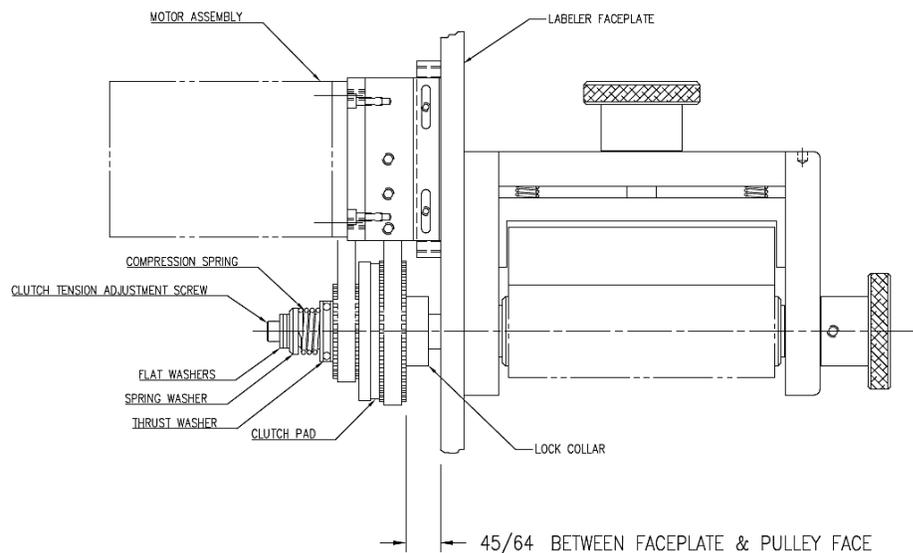
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Adjusting Slip Clutch

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

1. Remove all AC power and air to the applicator.
2. Remove the 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 disk, 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 spring 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 applicator.
10. Test the applicator and observe the rewind from beginning to end of a roll of labels.
11. Re-adjust if necessary.



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Drive Belt Adjustment

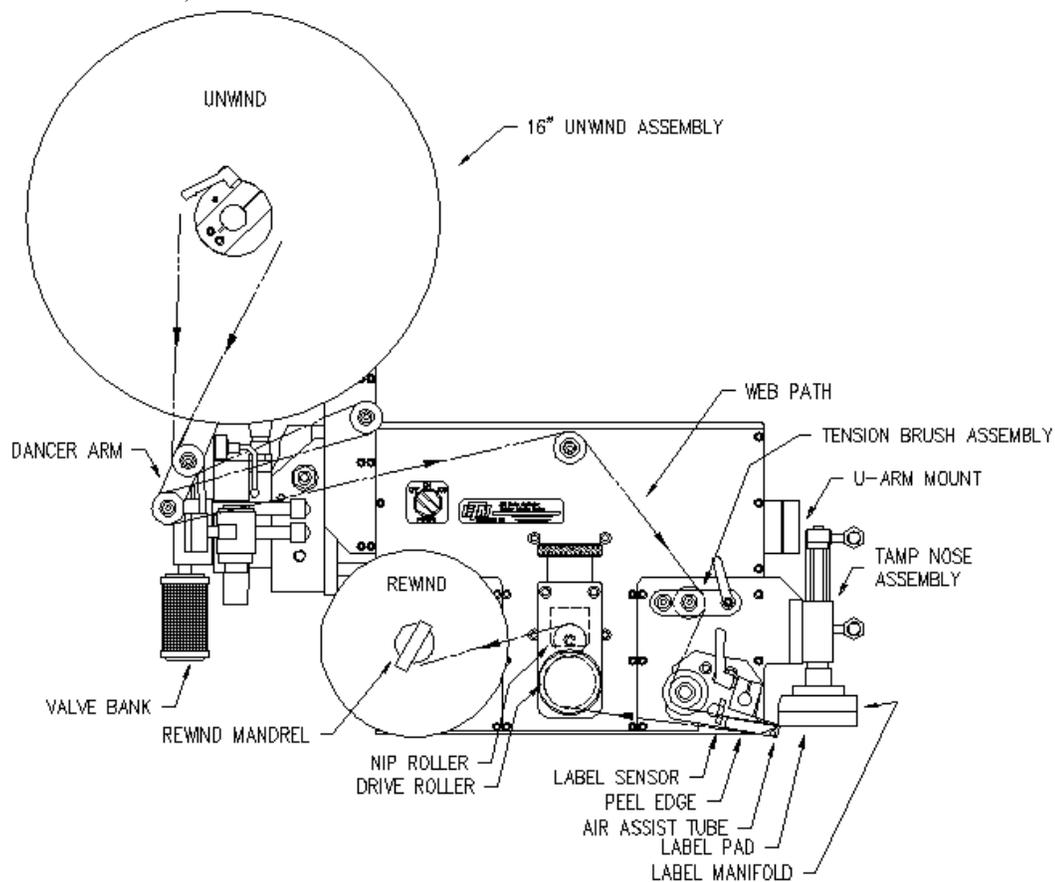
1. Remove all AC power and air to the applicator.
2. Remove the lower stainless cover. Rotate the 360a so the drive roll assembly is facing the floor. This orientation will aid you when it comes time to set angular alignment.
3. Remove the air lines interconnecting the two sides of the applicator to 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 360a 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 the belt's 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 –
 - a. One method to verify angular alignment is to use 2 pcs. of 1/2" wide X .025" thick banding material/strapping cut approximately 8" long. Place each piece 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 the Motor Mount Side Frames are running parallel to the Faceplate. Verify that the belt tension is correct – see step #8 below. Snug the 4 screws, remove banding strips, and finish tightening the 4 screws.
7. Disengage nip roller and turn the drive roller. Make sure there is no severe catching as you turn the roller.
8. Check the 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".
 - a. Do not over tighten the belts. This may result in shortened motor life. If the 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.

Changing Dispense Hand

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 below will help 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**).



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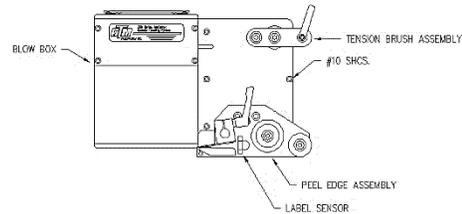


Nose Assembly Removal

The following guides detail the removal of the various nose assemblies available for the 360a. Locate the assembly pertaining to the nose on your applicator and follow the steps.

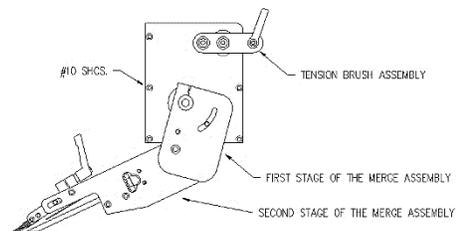
Blow Box Nose Assembly removal

- 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.



Merge Nose Assembly Installation

- 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.



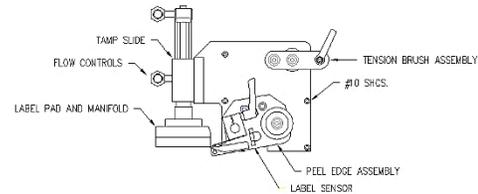
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Tamp Nose Assembly Removal

- 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.



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: **“BLOW/TAMP” 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**).
- 5) If the applicator is a tamp, change the tamp assembly to the opposite hand dispense (See: **TAMP ASSEMBLY CHANGEOVER**).
- 6) Remove the tension brush assembly and reassemble on the opposite side of the nose mounting plate.

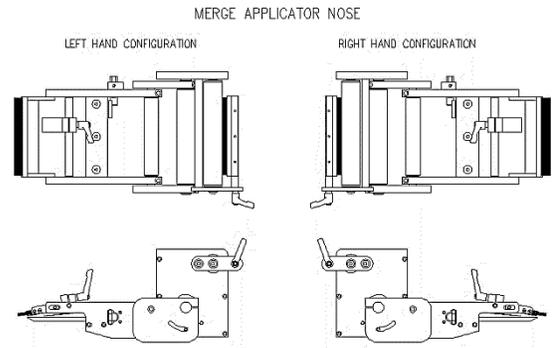
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Merge Peel Edge Changeover

- 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.

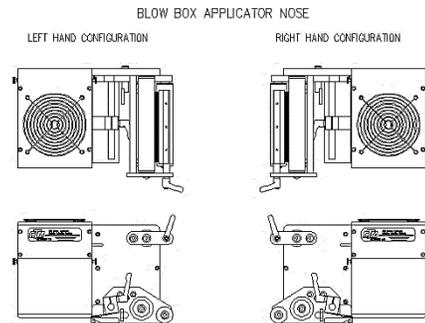


Blow Box Peel Edge Changeover

- 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 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.



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Tamp Peel Edge Changeover

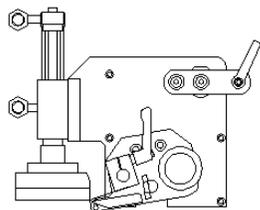
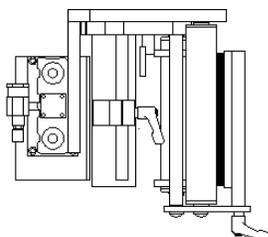
- 1) Remove the label sensor from the peel edge assembly and remount on the opposite side making sure that the fiber cables are threaded through the holes from the opposite side. The open end of the U-shaped sensor should face towards the inside.
- 2) Remove the guide rollers and remount to the opposite 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

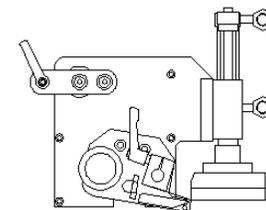
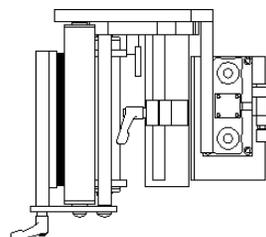
- 1) Disconnect the air hoses for the tamp assembly at the applicator housing.
- 2) Remove the tamp assembly mounting plate from the nose assembly mounting plate.
- 3) Remove the two screws holding the tamp air cylinder to its mounting plate.
- 4) Mount the tamp air cylinder to the opposite side of the 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



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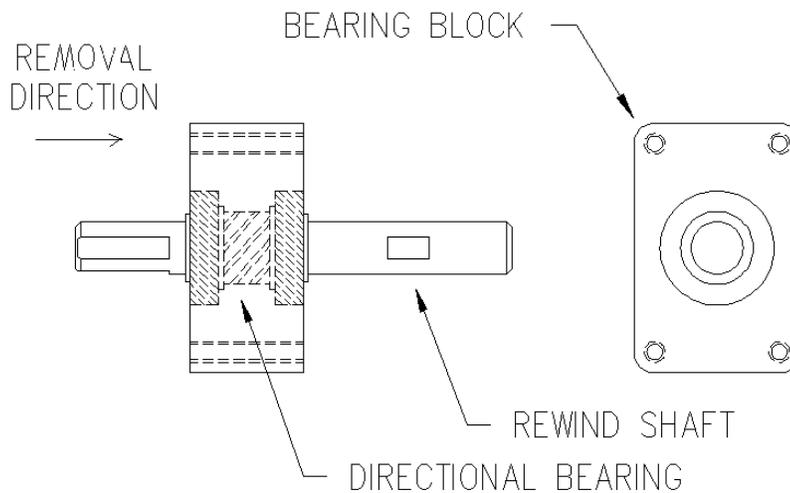


Rewind Removal

- 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 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.



!!! CAUTION !!!

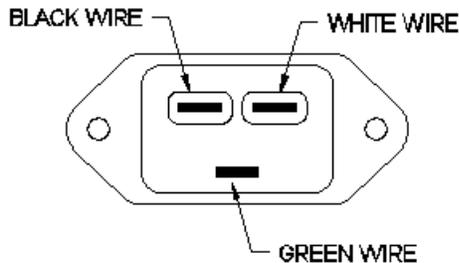
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Wiring Changeover

- 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 fast-on 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 below)

Note: All wiring comes from the factory long enough to be wired either left or right hand.



**Power Entry Module Wiring
(looking into the backside)**

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.

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 ¼” 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.

!!! CAUTION !!!

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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.

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 ¼” 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.

360a Troubleshooting Chart

The below chart serves to provide common causes and solutions for common problems.

Troubleshooting Chart

PROBLEM	POSSIBLE CAUSE	SOLUTION
The power switch is on, but no cooling fan or display	Power cord defective or unplugged	Inspect and correct
	AC Fuse Blown	Determine cause and replace fuse
The power switch is on, cooling fan is on but no display	Display cable is not plugged into back of applicator	Reconnect cable
	Loss of 24 VDC	Contact the factory
	Defective cable	Replace cable
	Defective display	Replace display
The power switch is on, cooling fan is on, but display is stuck at restoring variables	Check for LEDs indicator lights on drive board	Contact the factory
Label liner breaking	Labels are threaded incorrectly	Check threading diagram, rethread as needed
	Bad roll of labels	Replace label roll, contact label manufacturer
	Heavy die cuts in labels	
	Labels came with nicks in the side of the roll	
	Guide collars are causing nicks / damage to label stock	Adjust guide collars to line up with unwind disk. Ensure 1/64" gap between collar and liner
	Adhesive build up on peel edge	Clean peel edge surface
	Peel bar tension spring too tight	Release spring tension and apply only light tension
Label does not advance when the applicator is online and jog is pressed	Nip roller not engaged against drive roller	Inspect and correct
	Drive belt is broken	Replace belt
	Lost key in drive pulley	Walk through slip clutch removal guide and replace key in proper step. Reassemble drive pulley.

Label advances but does not stop in the same place every time or does not stop in the right place	Label sensor needs setup	Refer to label sensor setup in the “Label Setup” section of the manual	
	Label sensor not looking at a label	Move label sensor to ensure label path is in front of sensor	
	Label sensor or fiber cable is damaged	Replace label sensor	
	Nip roller is not engaged against drive roller	Inspect and correct	
	Label length set wrong	Refer to label length setup in “Label Setup” section of manual	
	Label stop set wrong	Refer to label stop setup in the “Label Setup” section of the manual	
Label liner is not winding up	Rewind slip clutch needs tensioning or replaced	See “Slip Clutch Adjustment” in the maintenance section of manual	
	One-way clutch bearing not working	Replace rewind shaft assembly	
	Broken rewind belt	Replace rewind belt	
Labels are not held on label grid (Air Blow)	Vacuum fan not working	Check for blown fuse	
		Obstruction in fan	
		Replace fans	
Labels are not held on label pad (Tamp)	Peel edge out of adjustment	Refer to the “Peel Edge Setup” section of the manual	
		Not enough vacuum on pad	Inspect for clogged or defective venturi. Replace if needed
			Venturi exhaust is blocked
Label fails to leave the label grid or label pad (Air blow or Tamp)	Air Blow: Too much vacuum	Switch to Low on vacuum fans	
		Remove masking	
	Air Blow: Incorrect air jet pattern	Inspect and correct	
	Air Blow and Tamp: No air blast occurs	Air blast time too low, adjust	
		Bad valve, replace	

360a Display Faults

The operator interface will display warnings and alarms that pertain to the application. The following are screens that will help diagnose a drive or display problem that is more serious in nature than the standard alarms.

Drive Faults

The drive fault screen will list four (4) things that will stop the applicator from running when they occur. Without this screen, it would be impossible to know why the applicator stopped.



Overcurrent

This fault occurs when the drive current has exceeded its configured maximum value. Ensure that there are no obstructions in the web path and that the unwind brake releases properly. If these items are correct, reduce the motor accel and decel values to their factory default values and re-run the application. If the mechanical system and setup is correct, consult the factory to determine if the drive current value is appropriate for your application.

Amp fault

If this occurs, there has been a failure on the drive board. The factory should be consulted if this occurs.

E-stop

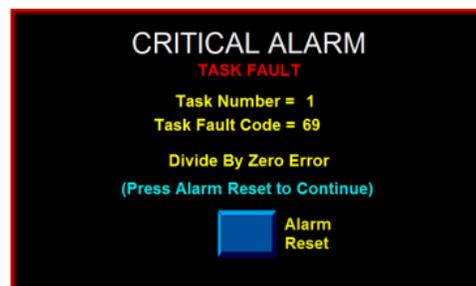
In the future, the operator will be allowed to enable the e-stop protection circuit to the drive. If this circuit were enabled and open, an e-stop fault would occur. **Currently this is disabled in the applicator.**

Amp temp

This alarm occurs when the drive amplifier temperature exceeds the upper limit. If this alarm occurs, clean the applicator's air filter and ensure that the cooling fan is running properly. Also, ensure that there are no obstructions in the web path and that the unwind brake releases properly. If possible reduce accel and decel values to factory defaults and lower the application speed. If the mechanical system and setup is correct, consult the factory to determine if the drive current value is appropriate for your application.

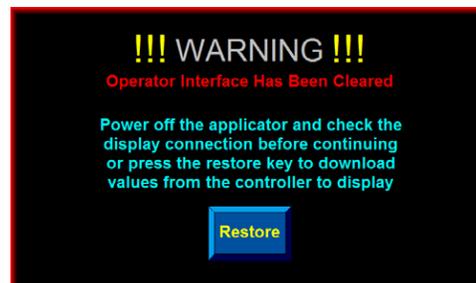
Task Fault

If a controller task fault occurs, the screen shown to the right appears. This occurs due to a programming issue. Contact the factory with the task fault number and fault explanation shown on the screen. Only program versions after 360a-4a.1.0.02 will list the fault code number.



Cleared Display Variables

At power up, the applicator's controller sends all the system variables to the display. While the applicator is powered, the controller looks to see if the display variables have changed. If for some reason the variables are reset to zero, a warning screen is displayed indicating that the display has lost its variables. Pressing the "restore" key re-loads the variables and clears the alarm. It has the same effect as powering the unit off and restarting the system. **Typically this occurs when the display cable is unplugged.**



Display Write Error

When necessary, the controller attempts multiple reads or writes to the display. If it gets no response, a read / write error screen is displayed. If this occurs, contact the factory since it is likely a programming issue or a hardware failure.



Software Mismatch Error

If the display and controller programs do not match, a software mismatch screen appears to warn the operator that both devices do not support some screens or functions. This can happen if the drive program is updated and the display program is not or vice versa.



360a Accessories

The following is a partial list of accessories available for the 360a applicator.

Electronic Crossover

The electronic crossover or “zero downtime” accessory is an electronic interface between two labeling applicators positioned in series on a conveyor system. The crossover system monitors the primary applicator’s fault conditions and switches to a secondary applicator to prevent interruption of production flow. When purchasing this option, make sure you receive (2) link port harnesses, (1) crossover cable and an encoder assembly with a splitter cable.

Imprinter

The imprinter accessory is a hot stamp imprinter device mounted on special bracketry attached to the applicator. This normally is a factory-installed unit. Please contact the factory concerning the types of imprinters supported.

Loose Loop

The loose loop accessory is designed to integrate an applicator with a direct thermal / thermal transfer printer in a “loose loop” fashion. This option includes electrical modifications to the printer, sensor array to monitor loop position, and mounting hardware to support the applicator and printer from a vertical upright (includes yard arm). Since there are many printers and configurations, please contact the factory with your specific needs.

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 status box at the main menu, it will also activate the amber light on the alarm light stack (if purchased) to inform the operator that the unwind is about to run out of labels. This option may be field installed.

Tamp Switch

A tamp switch accessory is available for tamp applicators that uses one (1) or two (2) sensors to control the tamp slide assembly. When the tamp home switch is activated, the applicator dispenses a label onto the tamp pad. When the tamp return switch senses a product, the label is applied to the product and the tamp pad returns to the peel edge.

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 activate the red light on the alarm light stack (if purchased) to inform the operator that the label web is broken.

16” And 20” Unwinds

The factory can supply applicators with larger unwinds assemblies for longer run applications. Before purchasing an unwind assembly, consult the factory to determine if the speed of application and the amount of waste requires a powered rewind assembly.

Powered Rewind

A powered rewind assembly is used in high-speed applications and in cases where it is necessary to windup additional waste from an oversized unwind assembly. This is a factory-installed option.

Clear Film Rewind Mandrels

There are several types of rewind mandrels designed to aid in the removal of liner waste when a film label liner is used. Please contact the factory with details of your application.

Core Adapter

Standard core adapters for the 360a come in 3” and 6” diameters. Please contact the factory for nonstandard diameters.

Alarm Light Stack

The 360a can handle up to three (3) alarm lights:

Red - Critical alarm

Amber - Warning alarm

Green - Ready signal

Light stacks may be purchased in one (1) or three (3) light configurations. A description of the different alarms can be found in the “Alarms” section of the manual.

Line Rate Compensation

This kit includes an encoder and interface cable. Splitter cables may be purchased to allow one encoder to drive multiple applicators.

Clear Label Sensor

A label sensor is available for the 360a applicator that detects clear labels on a clear liner.

Hardened Peel Edge Tips

For applications where changing the peel edge tape is difficult or where the liner material is causing premature wear, CTM offers a hardened peel edge for air blow, tamp, and merge applicator types. Please contact the factory for details and availability.

Snorkels

CTM has a large variety of snorkel options to place the applicator nose close to the labeling operation while the applicator’s body remains farther away. Consult the factory to match a solution to your requirements.

360a Standard Spare Parts

The following drawings detail the spare parts that can be purchased for the 360a.

Due to the versatility of the 360a applicator many parts will not be applicable for your specific applicator. Consult the drawings as well as the spare parts lists to find the appropriate parts.

When ordering spare parts please provide the serial number of the applicator. This will ensure the correct parts are ordered.

360a APPLICATOR SPARE PARTS LIST
When Ordering parts, present Serial Number of 360a

360a 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-200a-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	SM312LV PRODUCT DETECT W/CONNECTOR
PE-RT1000-6	1	REFLECTIVE TAPE (1" WIDE x 6" LONG)
PE-CO1020	1	214-3508 16/3 X 10' POWER CORD (BELDEN)
MP-DR1005	1	STEPPER MOTOR CONTROLLER
MP-IN1012	1	APPLICATOR TOUCH SCREEN
ASS-200A-1034 or	1	STEPPER MOTOR (BLACK) - 5 amp
ASS-200A-1036	1	HIGH TORQUE STEPPER MOTOR (Burgandy) - 10 amp
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
PE-FAN1115	1	REPLACEMENT FAN FILTER

360a APPLICATOR SPARE PARTS LIST
When Ordering parts, present Serial Number of 360a

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

360a APPLICATOR SPARE PARTS LIST
When Ordering parts, present Serial Number of 360a

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" NON-POWERED 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 POTENTIOMETER
PE-RE1063	3	RELAY
PE-RE1013	1	SOLID STATE 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

360a APPLICATOR SPARE PARTS LIST
When Ordering parts, present Serial Number of 360a

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 7" 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)

360a APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360a

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 **THIS IS JOB SPECIFIC**
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

360a APPLICATOR SPARE PARTS LIST
When Ordering parts, present Serial Number of 360a

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-211-0217-7	1	AIR ASSIST TUBE **THIS IS JOB SPECIFIC**
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-211-0217-5	1	AIR ASSIST TUBE **THIS IS JOB SPECIFIC**
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

360a APPLICATOR SPARE PARTS LIST

When Ordering parts, present Serial Number of 360a

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-211-0217-7	1	AIR ASSIST TUBE **THIS IS JOB SPECIFIC**
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

360a APPLICATOR SPARE PARTS LIST
When Ordering parts, present Serial Number of 360a

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-211-0217-7	1	AIR ASSIST TUBE **JOB SPECIFIC**
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 **NOTE** CONTACT SALES DEPARTMENT FOR HEAVY DUTY ROTARY ACTUATOR

360a APPLICATOR SPARE PARTS LIST

When ordering parts, present Serial Number of 360a

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

360a APPLICATOR SPARE PARTS LIST

When ordering parts, present Serial Number of 360a

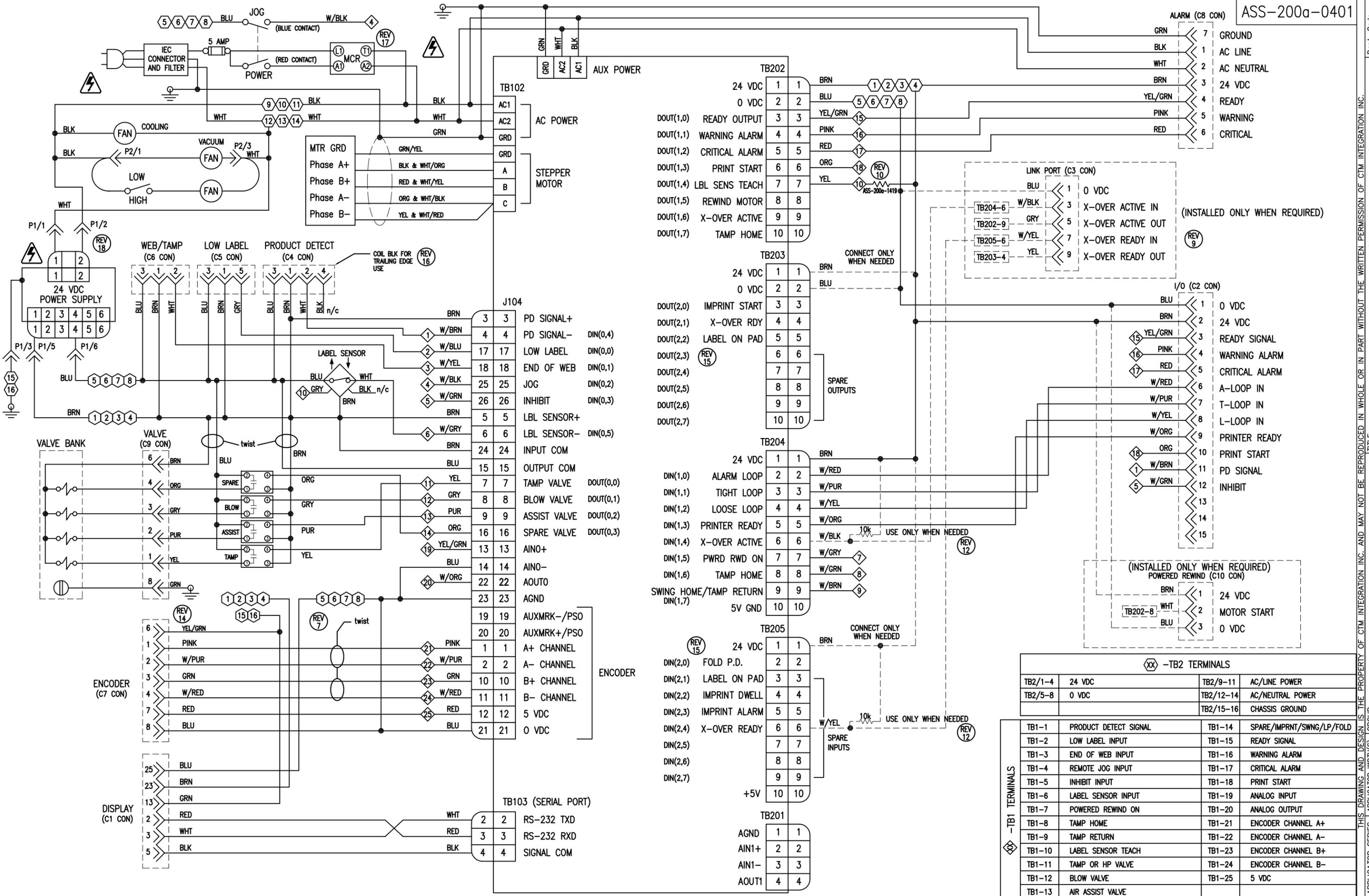
360a OPTIONS SPARE PARTS LIST		
OPTIONS: RECOMMENDED SPARE PARTS (LOW LABEL, WEB BREAK ALARMS)		
Part Number	Recommended Qty	Description
PE-LI1088	1	RED,YELLOW,GREEN LED ALARM LIGHT (BANNER)
ASS-200-0422	1	LOW LABEL SENSOR (w/o BRACKET)
ASS-200-0423	1	END OF WEB SENSOR (w/o BRACKET)
OPTIONS: RECOMMENDED SPARE PARTS (TAMP HOME SENSOR)		
Part Number	Recommended Qty	Description
ASS-200A-0478	1	TAMP HOME SENSOR (w/o BRACKET)
** CYLINDER MUST BE DESIGNATED WITH AN "E"***		
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
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

360a APPLICATOR SPARE PARTS LIST
When Ordering parts, present Serial Number of 360a

RETIRED UNWIND & REWIND SPARE PARTS LIST		
RECOMMENDED SPARE PARTS (16" & 20" NON-POWERED with 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 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	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)

360a Standard Drawings

The following drawings detail the components that can be included with a standard 360a.



ALARM (C8 CON)

GRN	7	GROUND
BLK	1	AC LINE
WHT	2	AC NEUTRAL
BRN	3	24 VDC
YEL/GRN	4	READY
PINK	5	WARNING
RED	6	CRITICAL

LINK PORT (C3 CON)

1	0 VDC
3	X-OVER ACTIVE IN
5	X-OVER ACTIVE OUT
7	X-OVER READY IN
9	X-OVER READY OUT

I/O (C2 CON)

1	0 VDC
2	24 VDC
3	READY SIGNAL
4	WARNING ALARM
5	CRITICAL ALARM
6	A-LOOP IN
7	T-LOOP IN
8	L-LOOP IN
9	PRINTER READY
10	PRINT START
11	PD SIGNAL
12	INHIBIT

(INSTALLED ONLY WHEN REQUIRED)
POWERED REWIND (C10 CON)

1	24 VDC
2	MOTOR START
3	0 VDC

XX -TB2 TERMINALS

TB2/1-4	24 VDC	TB2/9-11	AC/LINE POWER
TB2/5-8	0 VDC	TB2/12-14	AC/NEUTRAL POWER
		TB2/15-16	CHASSIS GROUND

-TB1 TERMINALS

TB1-1	PRODUCT DETECT SIGNAL	TB1-14	SPARE/IMPRNT/SWNG/LP/FOLD
TB1-2	LOW LABEL INPUT	TB1-15	READY SIGNAL
TB1-3	END OF WEB INPUT	TB1-16	WARNING ALARM
TB1-4	REMOTE JOG INPUT	TB1-17	CRITICAL ALARM
TB1-5	INHIBIT INPUT	TB1-18	PRINT START
TB1-6	LABEL SENSOR INPUT	TB1-19	ANALOG INPUT
TB1-7	POWERED REWIND ON	TB1-20	ANALOG OUTPUT
TB1-8	TAMP HOME	TB1-21	ENCODER CHANNEL A+
TB1-9	TAMP RETURN	TB1-22	ENCODER CHANNEL A-
TB1-10	LABEL SENSOR TEACH	TB1-23	ENCODER CHANNEL B+
TB1-11	TAMP OR HP VALVE	TB1-24	ENCODER CHANNEL B-
TB1-12	BLOW VALVE		
TB1-13	AIR ASSIST VALVE		

TB202

24 VDC	1	1	BRN	1	2	3	4
0 VDC	2	2	BLU	5	6	7	8
DOUT(1,0)	READY OUTPUT	3	3	YEL/GRN	15		
DOUT(1,1)	WARNING ALARM	4	4	PINK	16		
DOUT(1,2)	CRITICAL ALARM	5	5	RED	17		
DOUT(1,3)	PRINT START	6	6	ORG	18	REV 10	
DOUT(1,4)	LBL SENS TEACH	7	7	YEL	19		
DOUT(1,5)	REWIND MOTOR	8	8				
DOUT(1,6)	X-OVER ACTIVE	9	9				
DOUT(1,7)	TAMP HOME	10	10				

TB203

24 VDC	1	1	BRN				
0 VDC	2	2	BLU				
DOUT(2,0)	IMPRINT START	3	3				
DOUT(2,1)	X-OVER RDY	4	4				
DOUT(2,2)	LABEL ON PAD	5	5				
DOUT(2,3)		6	6				
DOUT(2,4)		7	7				
DOUT(2,5)		8	8				
DOUT(2,6)		9	9				
DOUT(2,7)		10	10				

TB204

24 VDC	1	1	BRN				
DIN(1,0)	ALARM LOOP	2	2	W/RED			
DIN(1,1)	TIGHT LOOP	3	3	W/PUR			
DIN(1,2)	LOOSE LOOP	4	4	W/YEL			
DIN(1,3)	PRINTER READY	5	5	W/ORG			
DIN(1,4)	X-OVER ACTIVE	6	6	W/BLK	10k	USE ONLY WHEN NEEDED	REV 12
DIN(1,5)	PWRD RWD ON	7	7	W/GRY	7		
DIN(1,6)	TAMP HOME	8	8	W/GRN	8		
SWING HOME/TAMP RETURN	DIN(1,7)	9	9	W/BRN	9		
		10	10				

TB205

24 VDC	1	1	BRN				
DIN(2,0)	FOLD P.D.	2	2				
DIN(2,1)	LABEL ON PAD	3	3				
DIN(2,2)	IMPRINT DWELL	4	4				
DIN(2,3)	IMPRINT ALARM	5	5				
DIN(2,4)	X-OVER READY	6	6	W/YEL	10k	USE ONLY WHEN NEEDED	REV 12
DIN(2,5)		7	7				
DIN(2,6)		8	8				
DIN(2,7)		9	9				
		10	10				

TB201

AGND	1	1					
AIN1+	2	2					
AIN1-	3	3					
AOUT1	4	4					

TB102

AC1							
AC2							
GRD							
GRD							
A							
B							
C							

J104

3	3	PD SIGNAL+					
4	4	PD SIGNAL-	DIN(0,4)				
17	17	LOW LABEL	DIN(0,0)				
18	18	END OF WEB	DIN(0,1)				
25	25	JOG	DIN(0,2)				
26	26	INHIBIT	DIN(0,3)				
5	5	LBL SENSOR+					
6	6	LBL SENSOR-	DIN(0,5)				
24	24	INPUT COM					
15	15	OUTPUT COM					
7	7	TAMP VALVE	DOUT(0,0)				
8	8	BLOW VALVE	DOUT(0,1)				
9	9	ASSIST VALVE	DOUT(0,2)				
16	16	SPARE VALVE	DOUT(0,3)				
13	13	AINO+					
14	14	AINO-					
22	22	AOUTO					
23	23	AGND					
19	19	AUXMRK-/PSO					
20	20	AUXMRK+/PSO					
1	1	A+ CHANNEL					
2	2	A- CHANNEL					
10	10	B+ CHANNEL					
11	11	B- CHANNEL					
12	12	5 VDC					
21	21	0 VDC					

TB103 (SERIAL PORT)

2	2	RS-232 TXD					
3	3	RS-232 RXD					
4	4	SIGNAL COM					

BILL OF MATERIAL

MOD-200-0467X-X

MOD-200-0467X-X

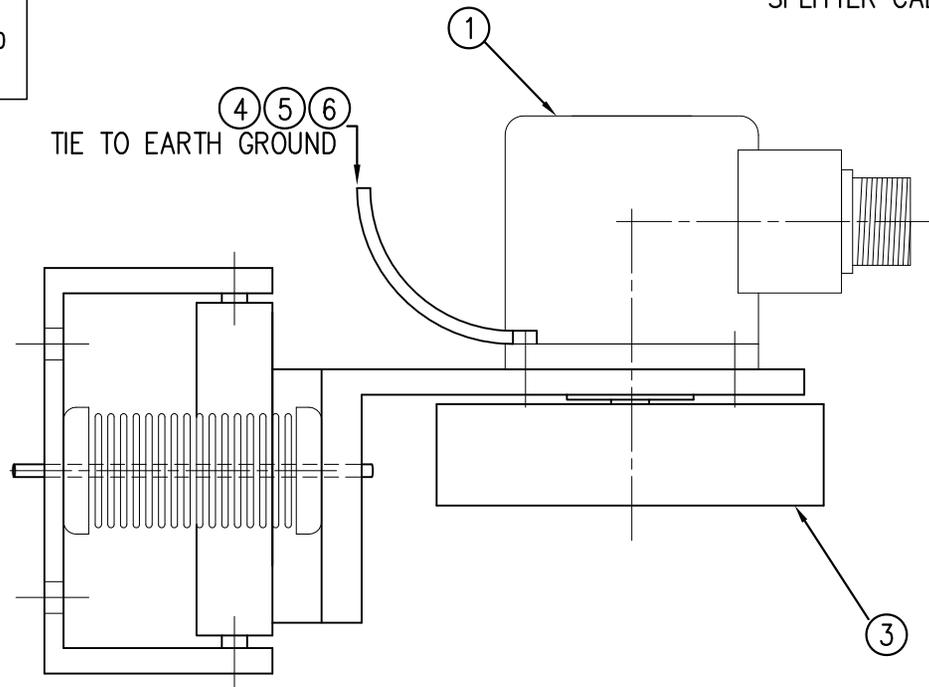
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-0467A-X	90 Deg. ENCODER (2500 pulses/rev) with SINGLE CABLE
	1	ASS-200-0467B-X	90 Deg. ENCODER (2500 pulses/rev) with SPLITTER CABLE
②	1	PE-GE2001	ENCODER MOUNT
③	1	PE-MW1000	ENCODER WHEEL
④	1	PM-FAW30676	18-8 #10 EXTERNAL TOOTH WASHER
⑤	6	PE-W1620	18 AWG GRN/YEL WIRE (ft)
⑥	1	PE-WC1006	RING CONNECTOR

FOR 360 & 360A

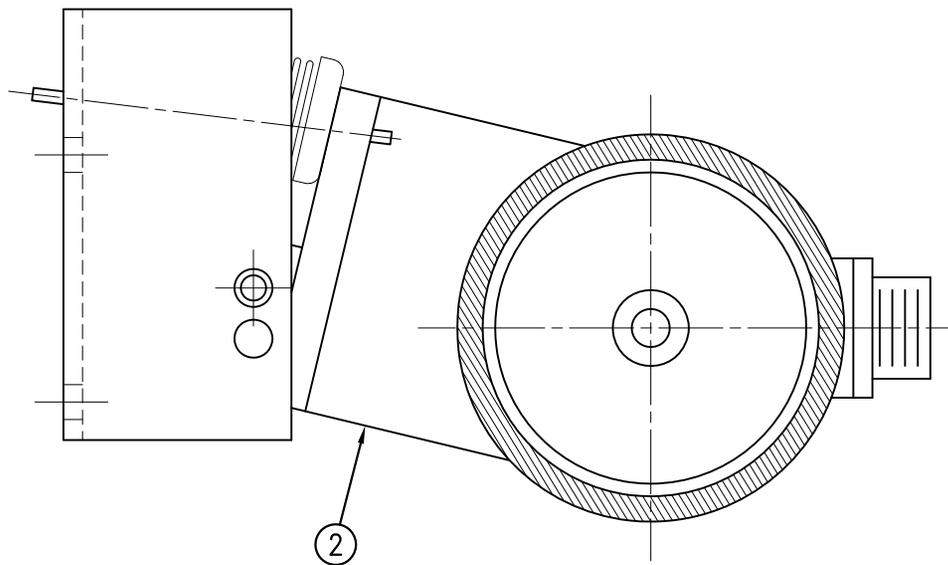
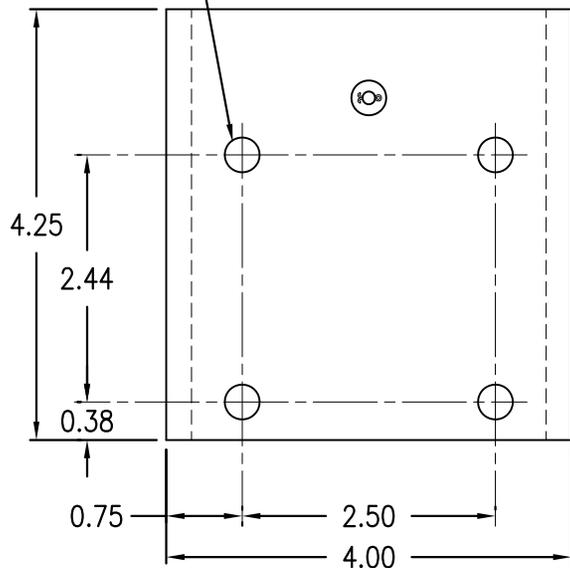
SINGLE CABLE	-0467A-X
SPLITTER CABLE	-0467B-X

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

TIE TO EARTH GROUND



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



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: ELECTRICAL	TITLE: 90 DEGREE ENCODER w/MOUNTING & CABLE	Dept. Code 70
REV. 4	REV. DESCRIPTION REVISED ENCODER TO SHOW CORRECT HEIGHT	REV. DATE 09/22/20	REV. BY: BNT	Scale: 1=2 Date: 11/19/01 DRAWN BY: BOB S.

F:\Engineering\Standard Parts\Appliator\360 SERIES\
360a\MOD\MOD-200-0467X-X

BILL OF MATERIAL

ASS-200-0450

ASS-200-0450

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	PE-SE1045	BANNEL LABEL SENSOR
②	4	PE-SH1000	GRAY SOLDER SLEEVE 22-26 AWG
③	1	PE-ST1010	3/16"Ø SHRINK TUBE x 1/2" LONG
	1	PE-W1031030	22 AWG (WHITE) WIRE x 5" LONG
	1	PE-W1036120	22 AWG (BLUE) WIRE x 5" LONG
	1	PE-W1037120	22 AWG (BROWN) WIRE x 5" LONG
	1	PE-W1039040	22 AWG (GRAY) WIRE x 5" LONG

REV 6

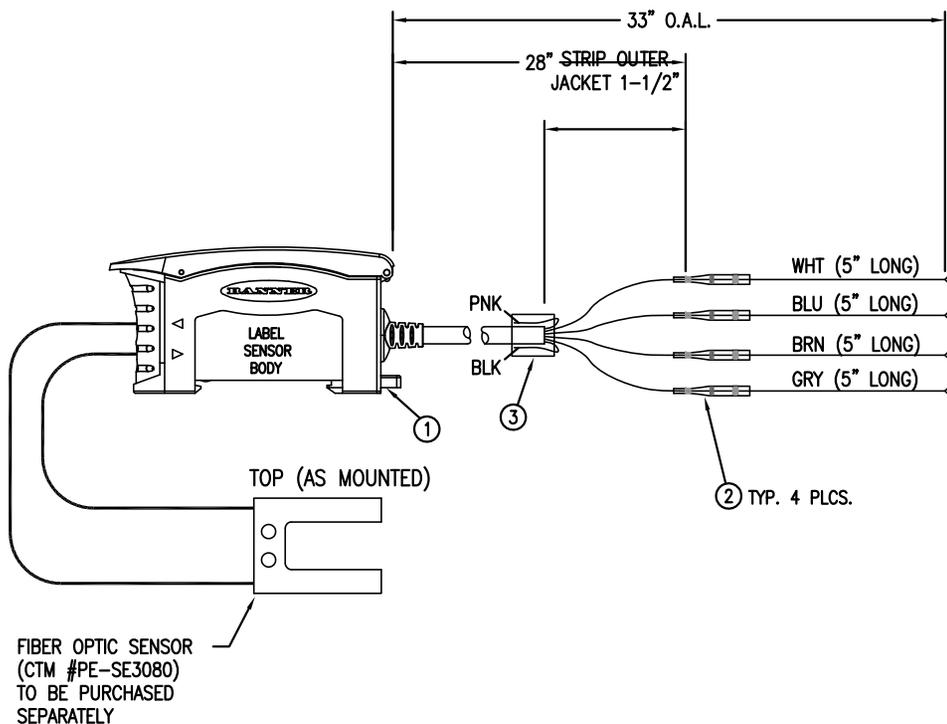
REV 1

ASSEMBLY NOTES:

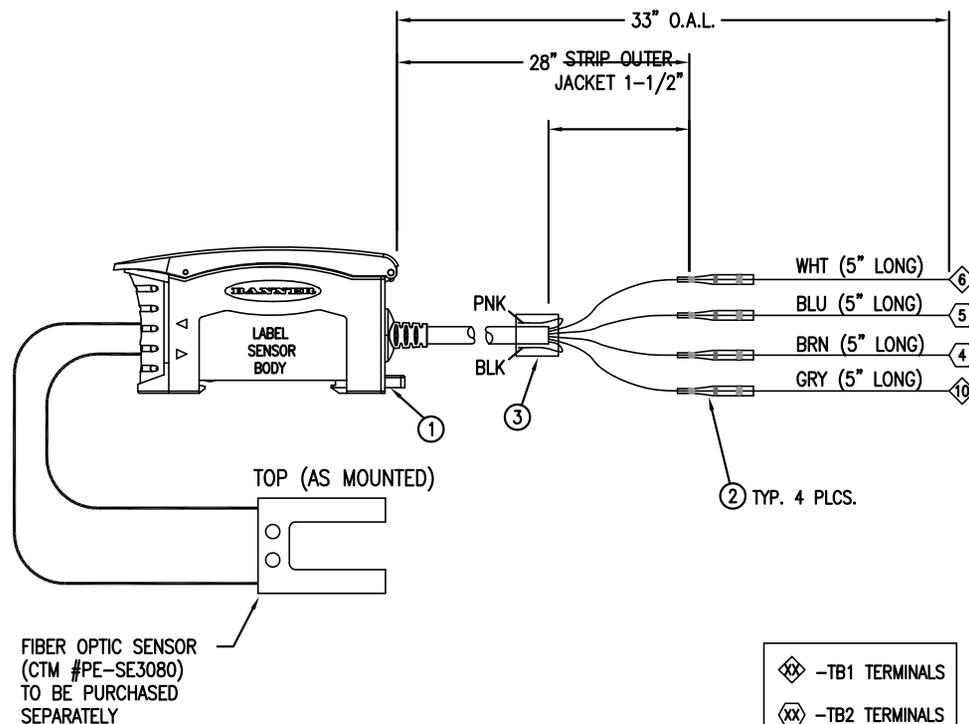
- 1) STRIP CABLE OUTER JACKET BACK 1-1/2" TO EXPOSE FOUR WIRES.
- 2) CUT BLK AND PNK WIRES TO ABOUT 1/4" LONG
- 6) APPLY ONE PIECE OF 3/16"Ø x 1/2" LONG SHRINK TUBE OVER END, CAPTURING PINK & BLACK WIRES WITH SHRINK TUBE
- 2) STRIP EACH OF THE FOUR WIRES BACK 3/8".
- 3) INSERT WIRES INTO SOLDER SLEEVES SO ONLY BARE WIRE IS IN SOLDER RING, MATCHING WIRE EXTENSION COLOR WITH SAME COLOR CABLE WIRE.
- 4) HEAT WITH HEAT GUN UNTIL SOLDER HAS MELTED.
- 5) ALLOW SOLDER TO COOL BEFORE MOVING OR PULLING ON WIRES.

NOTE: SEND SENSOR MOUNTING BRACKET (REV 2) with (2) #6-32 x 3/8" Lg. BHCS

360 SERIES APPLICATOR



360A SERIES APPLICATOR



⊠ -TB1 TERMINALS
⊞ -TB2 TERMINALS

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: ELECTRICAL	TITLE: BANNER LABEL SENSOR (INSIDE CORE UNIT)	Dept. Code 70
REV. 8	REV. DESCRIPTION REPLACED 3/32" SHRINK TUBE WITH GRAY SOLDER SLEEVES	REV. DATE 02/07/19	REV. BY: BNT	Scale: 1=6
			Date: 01/03/07	DRAWN BY: BOB S.
				F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\ASS\ASS-200-0450

BILL OF MATERIAL

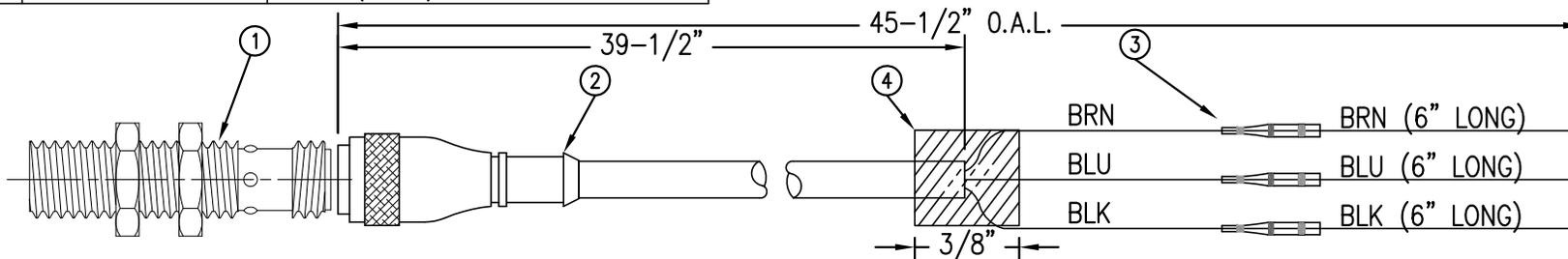
ASS-200-0460

ASS-200-0460

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	PE-SE10108	3 mm Q.D. INDUCTIVE PROX. SENSOR
②	1	PE-SE3045	4-PIN EUROFAST 6-1/2' STRAIGHT CABLE
③	3	PE-SL1000	GRAY SOLDER SLEEVE 22-26 AWG
④	1	PE-ST1015	1/4"Ø SHRINK TUBE x 3/8" LONG
○	1	PE-W1036120	22 AWG (BLUE) WIRE x 6" LONG
○	1	PE-W1032	22 AWG (BLACK) WIRE x 6" LONG
○	1	PE-W1037120	22 AWG (BROWN) WIRE x 6" LONG

ASSEMBLY NOTES:

- 1) CUT CABLE TO 39-1/2"
- 2) STRIP CABLE OUTER JACKET BACK 1-1/2" TO EXPOSE FOUR WIRES.
- 3) STRIP 3/8" OFF BRN, BLU & BLK WIRES.
- 4) CUT WHT TO 1/4" LONG. FOLD OVER AND CAP W/ 3/8" OF 1/4" SHRINK TUBE
- 5) INSERT CABLE WIRE AND MATCHING EXTENSION INTO SOLDER SLEEVE.
- 6) ENSURE ONLY BARE WIRE IS IN THE SOLDER RING. HEAT WITH HEAT GUN UNTIL SOLDER MELTS.
- 7) ALLOW SOLDER TO COOL BEFORE MOVING OR PULLING ON WIRES.



SEE
TERMINAL
CONNECTIONS
BELOW

POWERED REWIND "CARRIAGE STYLE" (NEW)

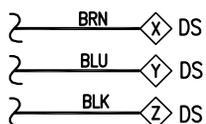
- USE 1 PROX. SENSOR.

POWERED REWIND "DANCER-ARM STYLE" (OLD)

- PROGRAM VERSION 360-2c.10.3 USES 2 SENSORS.
- PROGRAM VERSION PRIOR TO 360-2c.10.3 USES 3 SENSORS.

360 SERIES

- PROGRAM VERSION MUST BE 360-2c.10.3 OR NEWER.

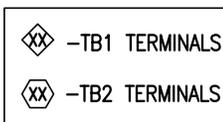
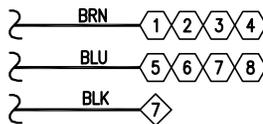


NOTE:
SEE TABLE FOR
CONNECTION PTS.

WIRE CONNECTION POINTS

SENSOR USAGE	WIRE CONNECTION		
	X	Y	Z
ON PROX	18	21	9
ON PROX	17	20	9

360A SERIES



360 SERIES ONLY



NOTE:
SEE TABLE FOR
CONNECTION PTS.

WIRE CONNECTION POINTS

① THIS PROX WAS REMOVED FOR PROGRAM VERSION: 360-2c.10.3

SENSOR USAGE	WIRE CONNECTION		
	X	Y	Z
OFF PROX	19	22	10
ON PROX	18	21	9
ON PROX	17	20	9

② ①
② ①

①

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: ELECTRICAL	TITLE: PROXIMITY SENSOR ASSEMBLY (FOR NEW/OLD POWERED REWIND)	Dept. Code 70
REV. 7	REV. DESCRIPTION REPLACED 3/32" SHRINK TUBE WITH GRAY SOLDER SLEEVE	REV. DATE 02/08/19	REV. BY: BNT	Scale: 1=2 Date: 04/16/02 DRAWN BY: BOB S.
			F:\Engineering\Standard Parts\Appliator\360 SERIES\ 360a\ASS\ASS-200-0460	

BILL OF MATERIAL

ASS-200-0467X-X

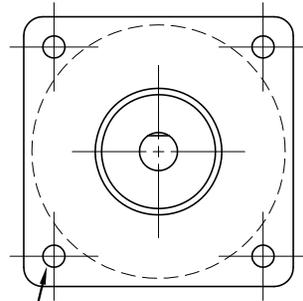
ASS-200-0467X-X

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

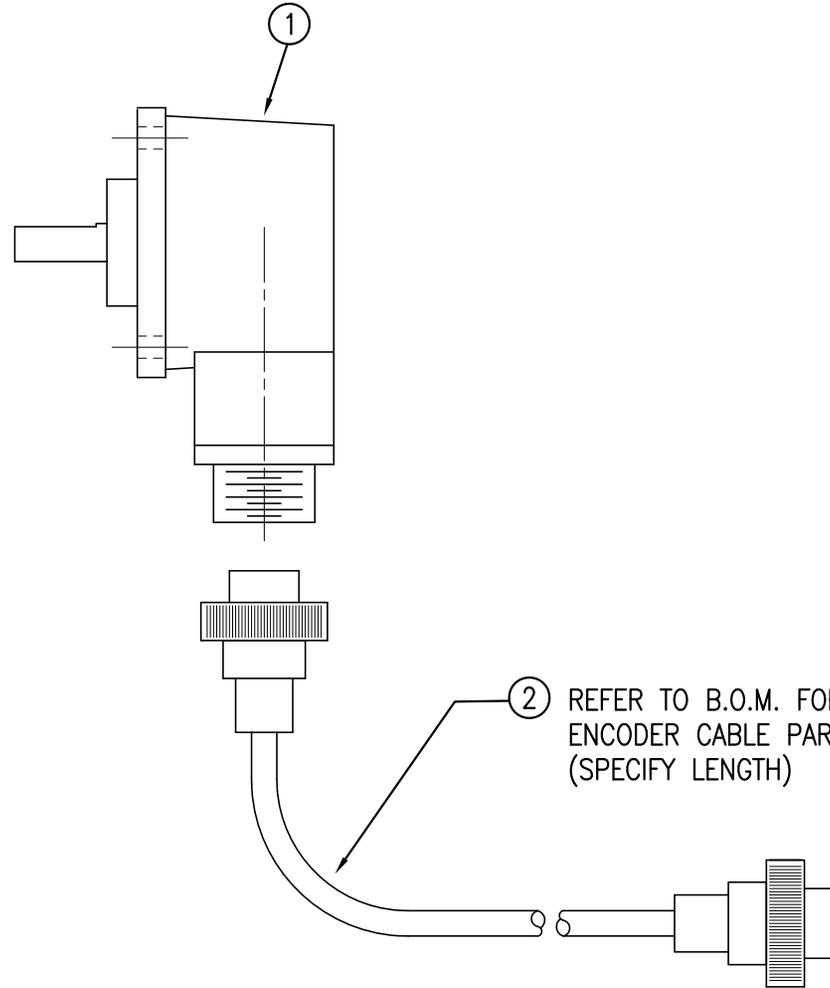
10 FT.	10
15 FT.	15
20 FT.	20
25 FT.	25

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

NOTE: IF THIS ASSEMBLY IS USED ON A 3600a YOU MUST ADD ASS-200A-0418 TO THE BOM



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



REFER TO B.O.M. FOR CORRECT ENCODER CABLE PART NUMBER (SPECIFY LENGTH)

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: ELECTRICAL	TITLE: 90 DEGREE ENCODER w/ CABLE				Dept. Code 70
REV. 1	REV. DESCRIPTION ADDED NOTE ABOUT USING ON 3600a	REV. DATE 10/2/19	REV. BY: TDR	Scale: 1=2	Date: 11/19/01	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Appliator\360 SERIES\ 360a\ASS\ASS-200-0467X-X

BILL OF MATERIAL

MOD-200-X121XL

MOD-200-X121XL

5" WIDE -0121L

7.5" WIDE -2121L

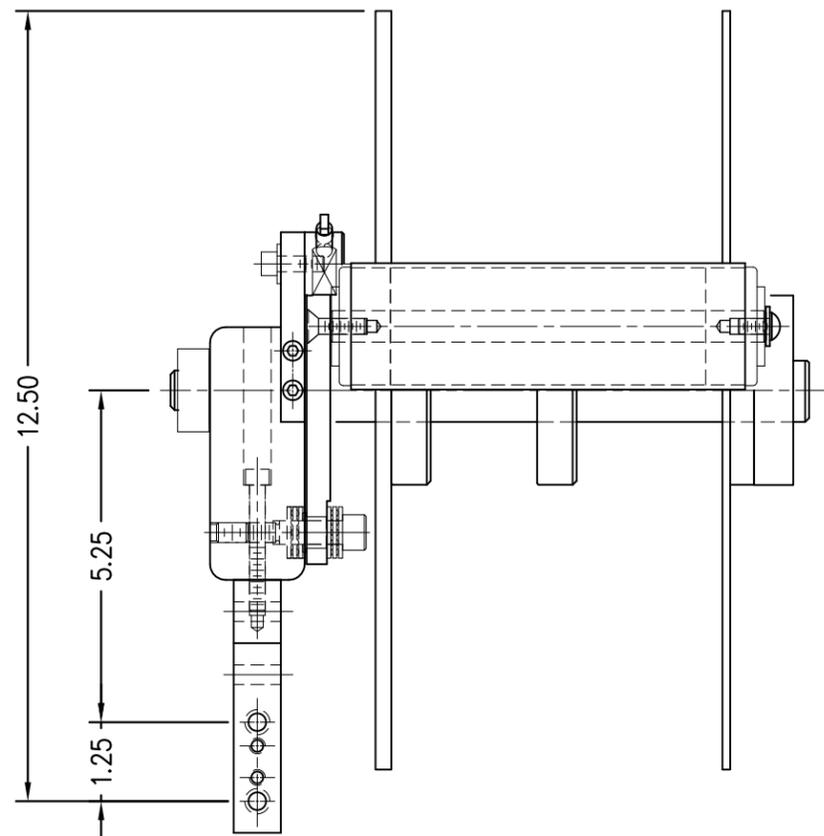
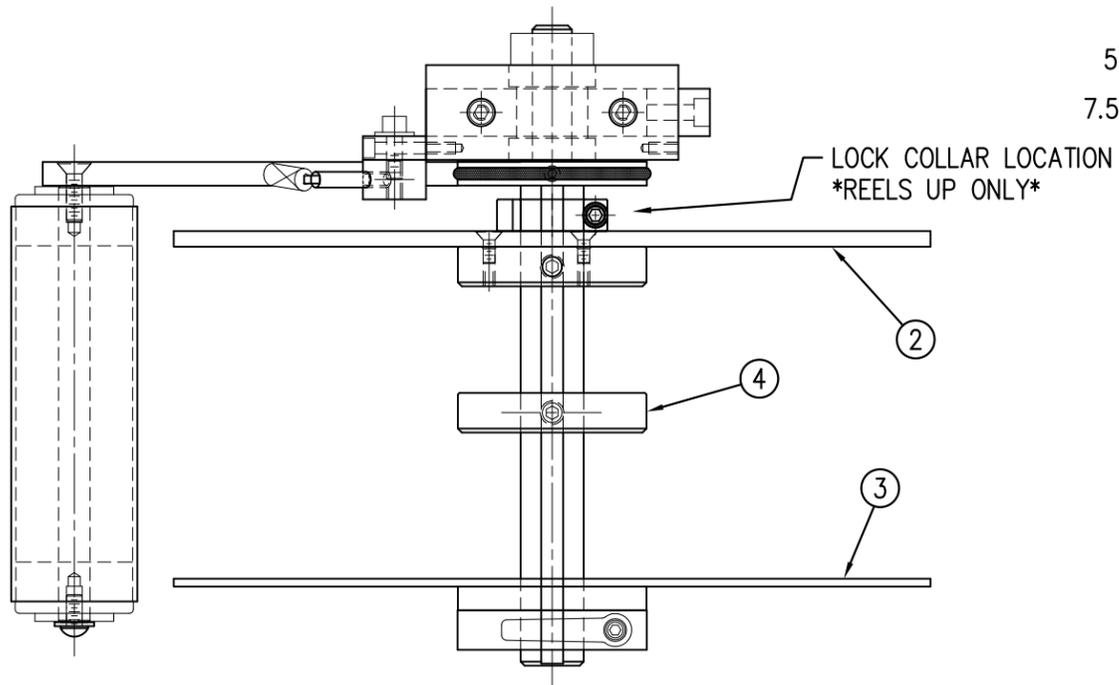
5" WIDE (REELS UP) -0121AL

7.5" WIDE (REELS UP) -2121AL

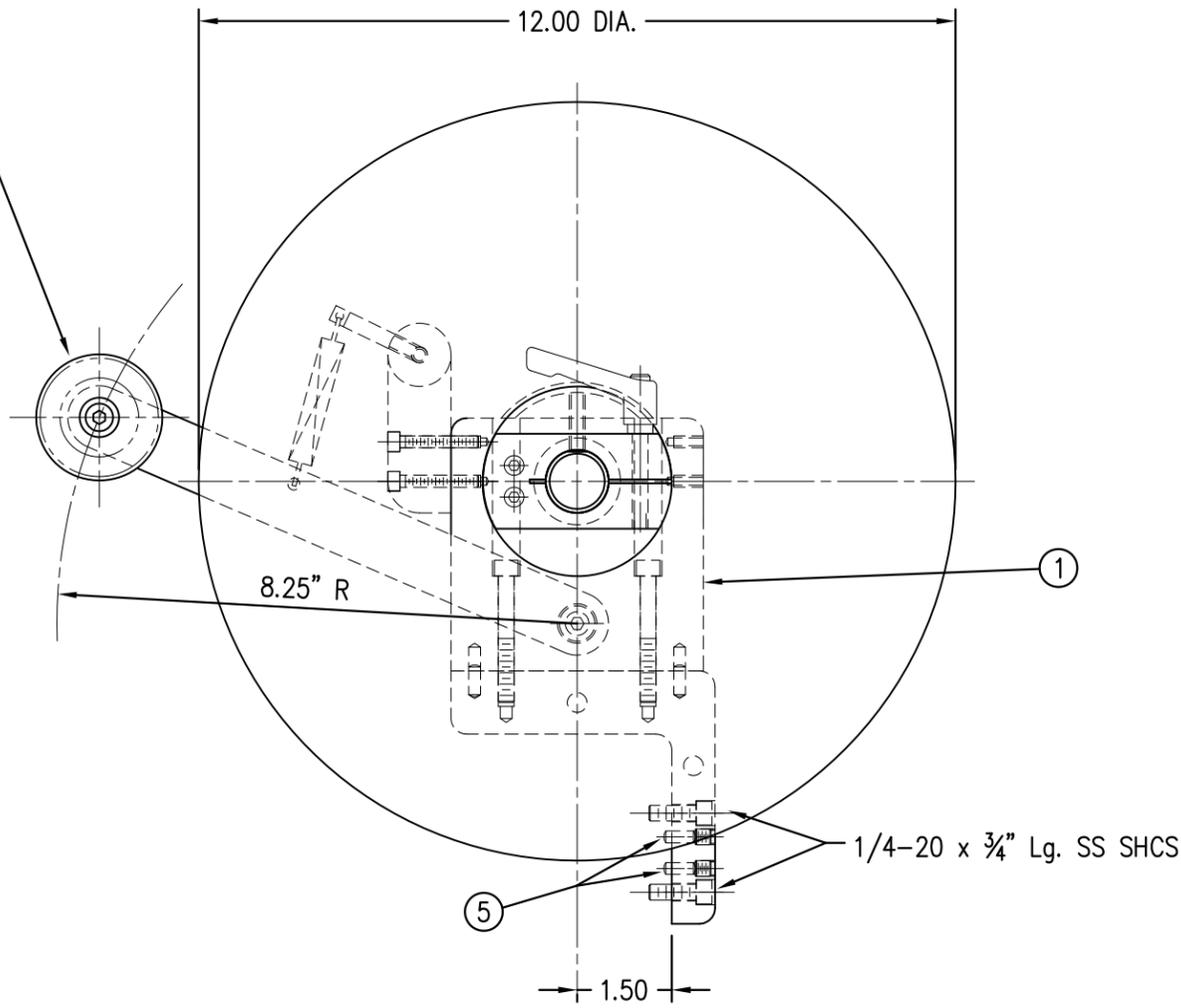
Dept. Code 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\MOD\MOD-200-X121XL
 TITLE: LH UNWIND ASSEMBLY with 12" DIA. UNWIND DISKS
 DRAWN BY: BOB S.
 Date: 06/02/98
 Scale: 1=3
 REV. DATE 01/16/20
 REV. BY: TDR
 REV. DESCRIPTION 8 REMOVED NOTE FOR PM-C01025 BUT SHOWED LOCATION
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 GROUP: UNWIND ASSEMBLY
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ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-200-X121L	5"/7.5" UNWIND SHELF ASSEMBLY - LH
②	1	ASS-200-0132	12" DIA. INSIDE UNWIND DISK - LEXAN
	1	ASS-200-0132A	12" DIA. INSIDE UNWIND DISK - ALUMINUM REELS-UP
③	1	ASS-200-0133	OUTSIDE UNWIND DISK
④	1	MP-200-0267CS	UNWIND CORE SUPPORT SPACER
⑤	2	PM-FADP0930	DOWEL PIN, 3/16" ϕ x 1/2" Lg.
	2	PM-FASH430078	1/4"-20 x 3/4" Lg. SS 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.



2" DIA. DANCER ROLLER

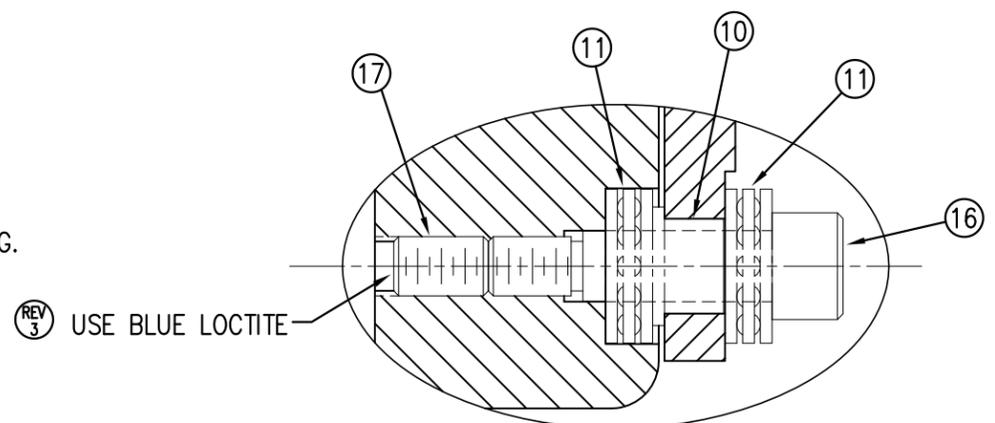
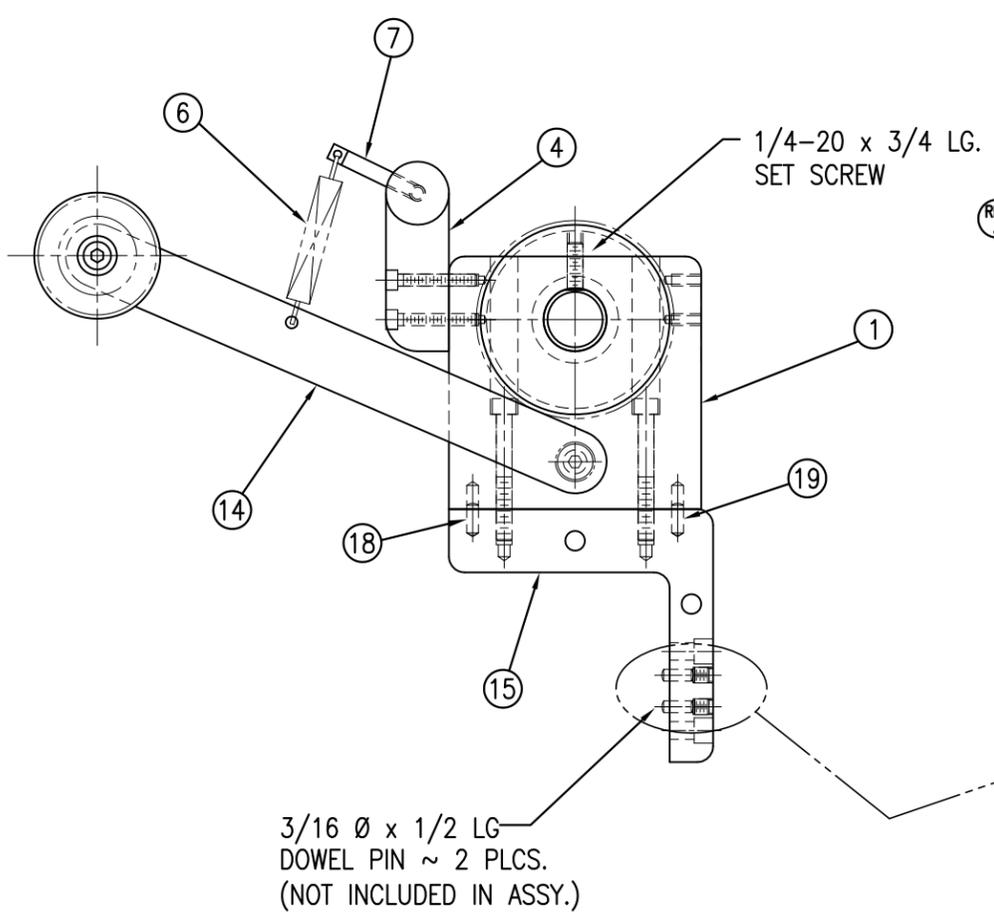
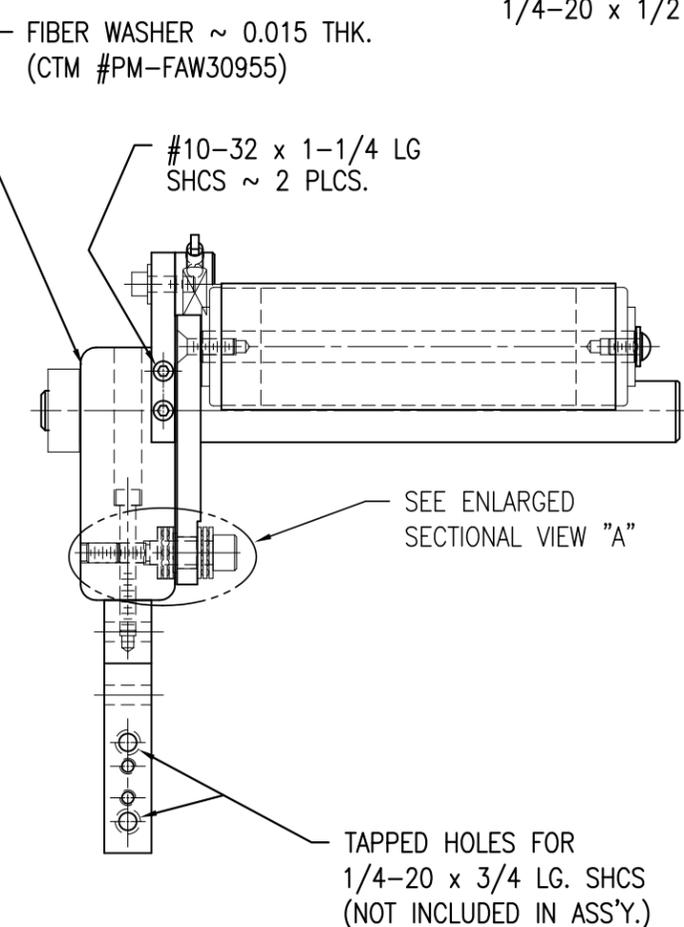
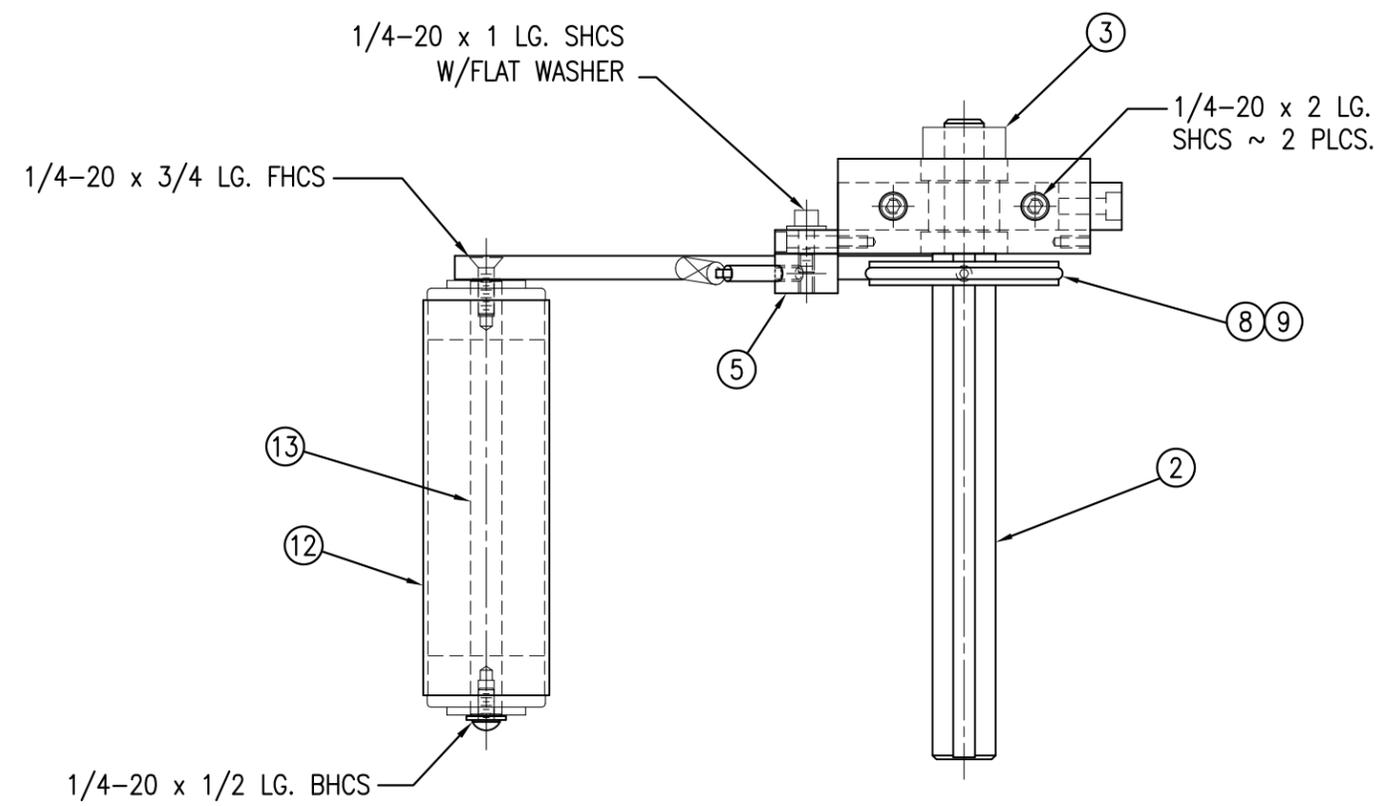


BILL OF MATERIAL

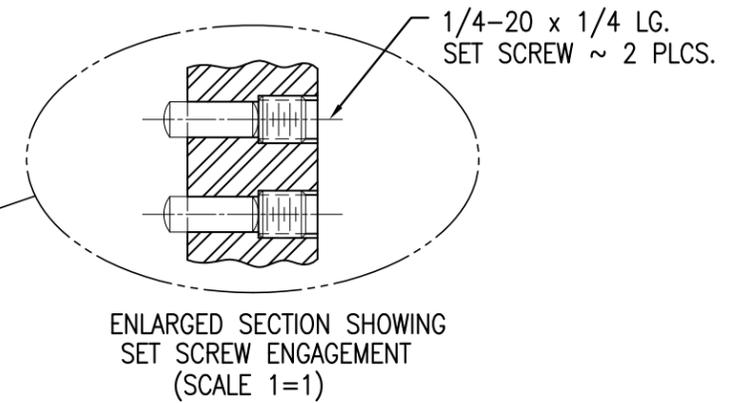
SAS-200-X121L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-0134	UNWIND BLOCK ASSEMBLY
②	1	MP-200-X210	5"/7.5" UNWIND SHAFT
③	1	PM-C01015	LOCK COLLAR
④	1	MP-200-0203	SPRING MOUNTING BRACKET
⑤	1	MP-200-0201	SPRING TENSION BLOCK
⑥	1	PM-FASP30437	TENSION SPRING
⑦	1	PM-FASP30500	SPRING ANCHOR
⑧	1	MP-200-0204	BRAKE HUB
⑨	1	PM-OR1007	O-RING, BUNA-N
⑩	1	PM-BEBF1015	FLANGED BUSHING
⑪	2	PM-BE1266	3/8" Ø THRUST BEARING
⑫	1	ASS-200-X131	5"/7.5" DANCER ROLLER w/ SHAFT - consisting of the following parts -
⑬	(1)	SAS-200-X131	5"/7.5" DANCER ROLLER w/ END CAPS
⑬	(1)	MP-200-X205	5"/7.5" DANCER ROLLER SHAFT
⑭	1	MP-200-0202	12" DANCER ARM
⑮	1	MP-200-0209	UNWIND BLOCK MOUNT
⑯	1	PM-FASB10045	3/8" Ø x 1" Lg. SS SHOULDER BOLT
⑰	1	PM-FASS48061	5/16"-18 x 1/2" Lg. SS SET SCREW w/CUP
⑱	2	PM-FADP0930	DOWEL PIN, 3/16" Ø x 1/2" Lg.
	1	PM-FAW30955	5/8" ID x 7/8 OD GRAY FIBER WASHER

SAS-200-X121L	
5" WIDE	-0121L
7.5" WIDE	-2121L

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 GROUP: UNWIND ASSEMBLY
 TITLE: LH 12" UNWIND ASSEMBLY
 DATE: 09/24/14
 SCALE: 1=3
 DRAWN BY: BOB S.
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\SAS\SAS-200-X121L



⑱ ENLARGED SECTIONAL VIEW "A" (SCALE 1=1)



BILL OF MATERIAL

MOD-200-X121XR

MOD-200-X121XR

5" WIDE	-0121R
7.5" WIDE	-2121R
5" WIDE (REELS UP)	-0121AR
7.5" WIDE (REELS UP)	-2121AR

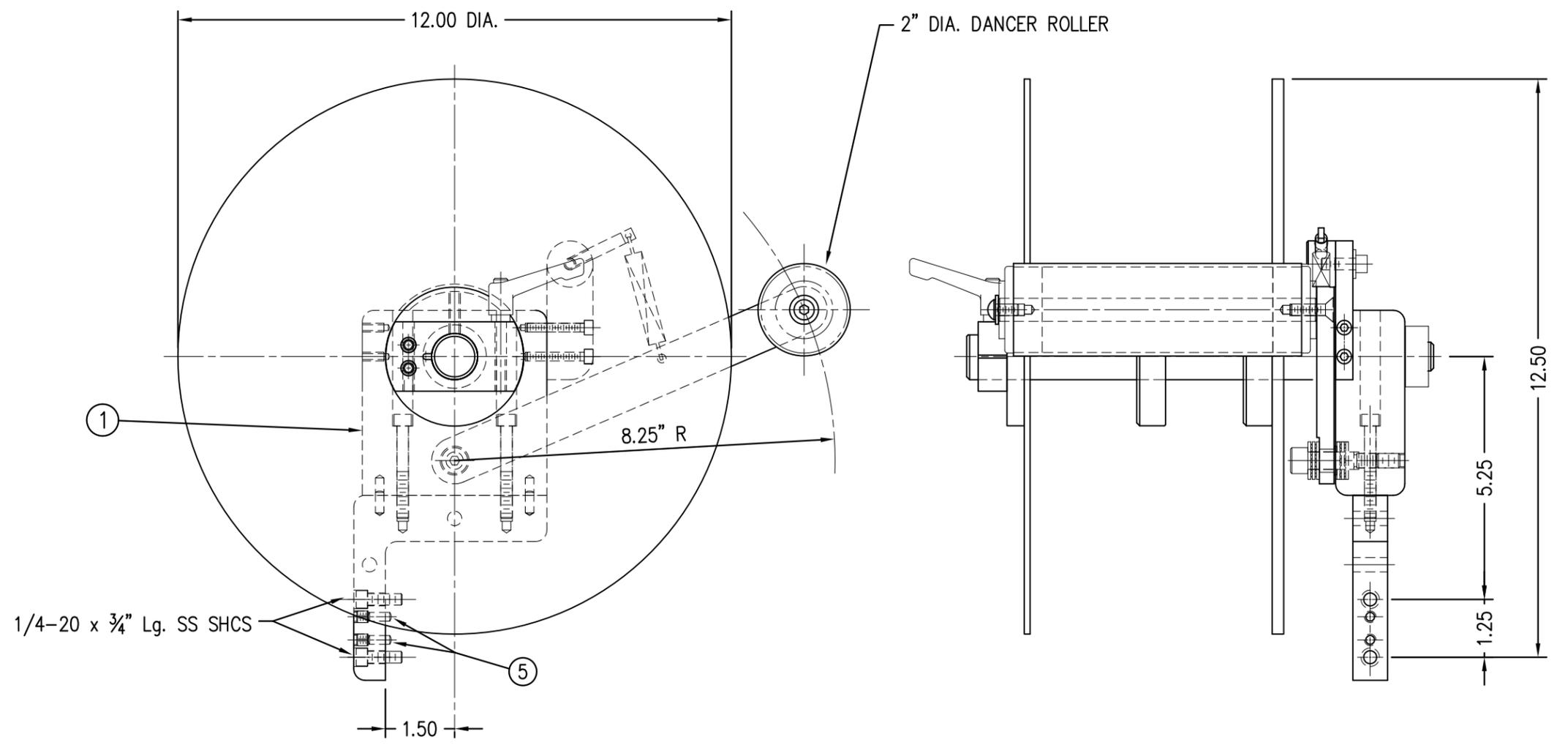
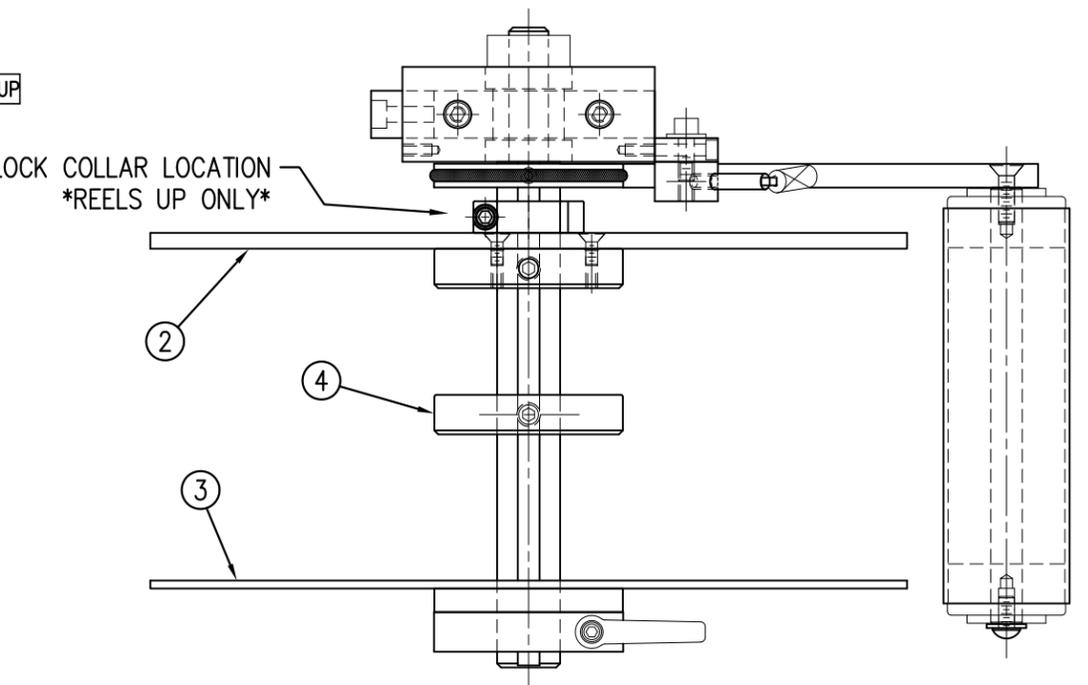
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.
 TITLE: RH UNWIND ASSEMBLY with 12" DIA. UNWIND DISKS
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 REV. DATE: 01/16/20
 REV. BY: TDR
 SCALE: 1=3
 DATE: 06/02/98
 DRAWN BY: BOB S.
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\MOD\MOD-200-X121XR

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-200-X121R	5"/7.5" UNWIND SHELF ASSEMBLY - RH
②	1	ASS-200-0132	12" DIA. INSIDE UNWIND DISK - LEXAN
	1	ASS-200-0132A	12" DIA. INSIDE UNWIND DISK - ALUMINUM
③	1	ASS-200-0133	OUTSIDE UNWIND DISK
④	1	MP-200-0267CS	UNWIND CORE SUPPORT SPACER
⑤	2	PM-FADP0930	DOWEL PIN, 3/16" ϕ x 1/2" Lg.
	2	PM-FASH430078	1/4"-20 x 3/4" Lg. SS SHCS

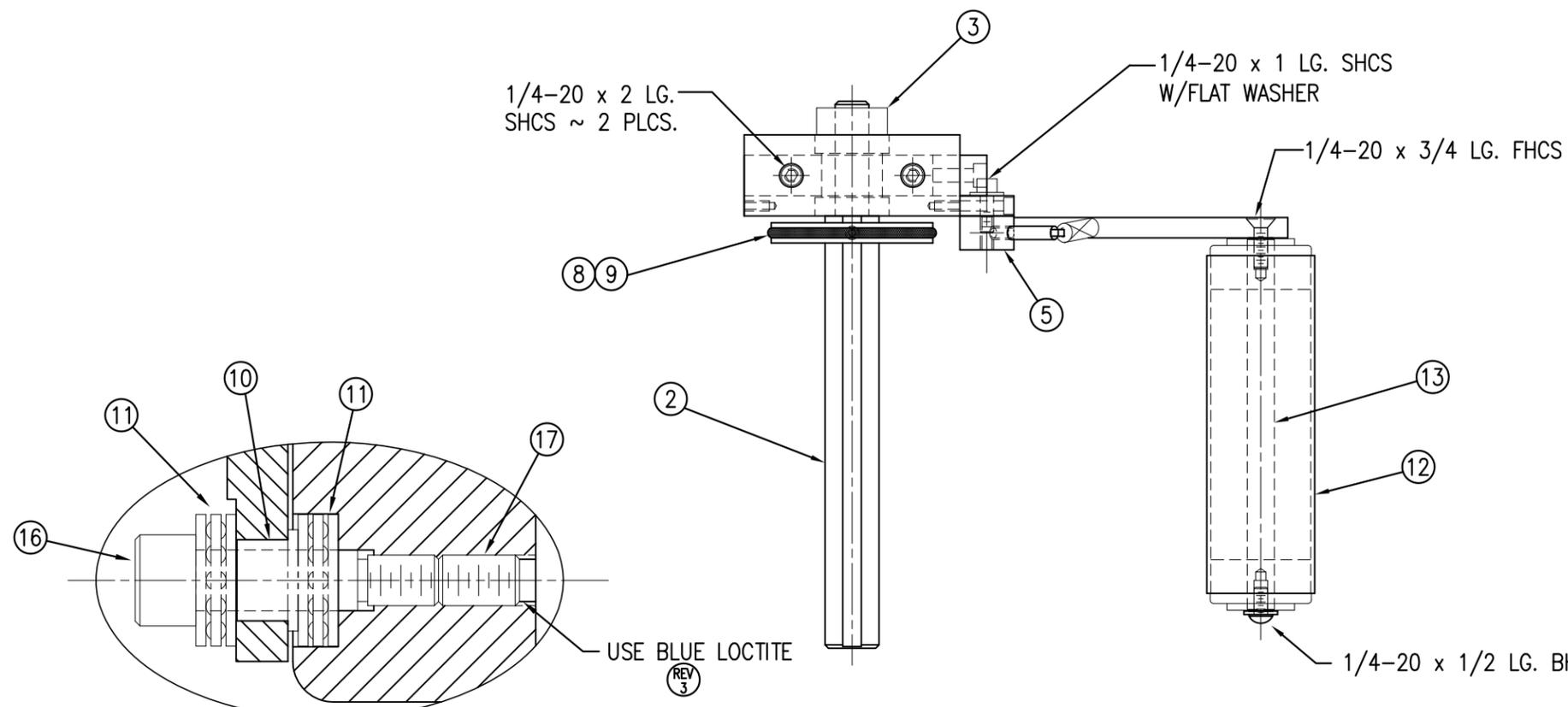
REELS-UP

LOCK COLLAR LOCATION
REELS UP ONLY

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.

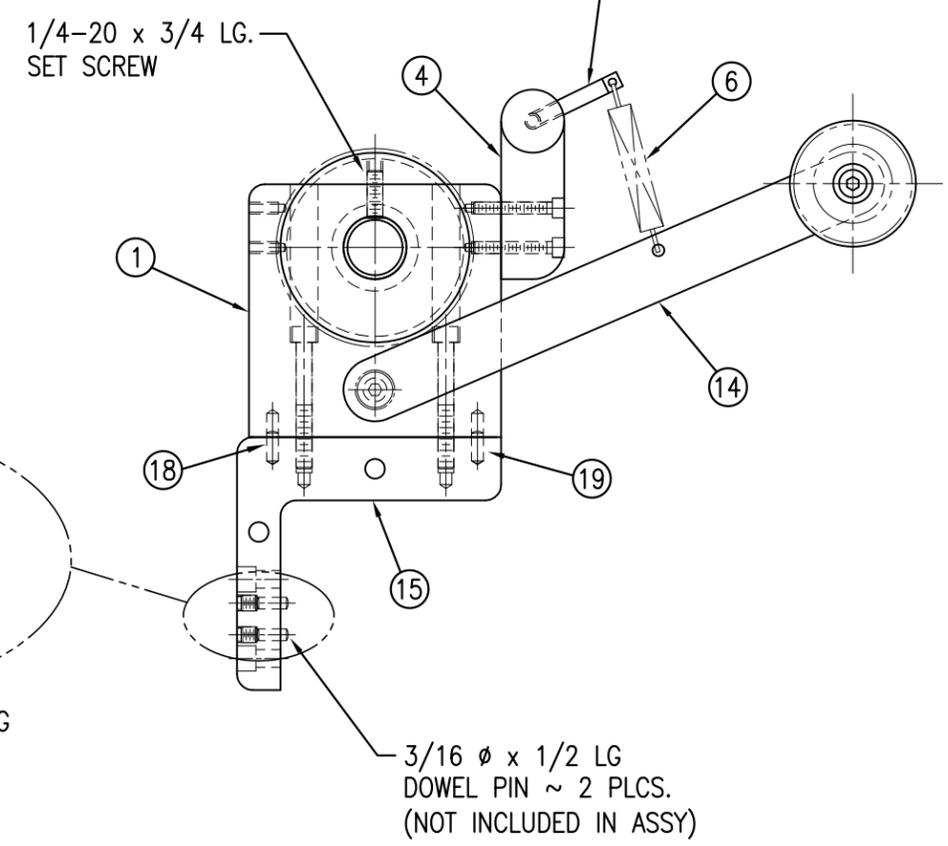


REV. 8 REMOVED NOTE FOR PM-C01025 BUT SHOWED LOCATION

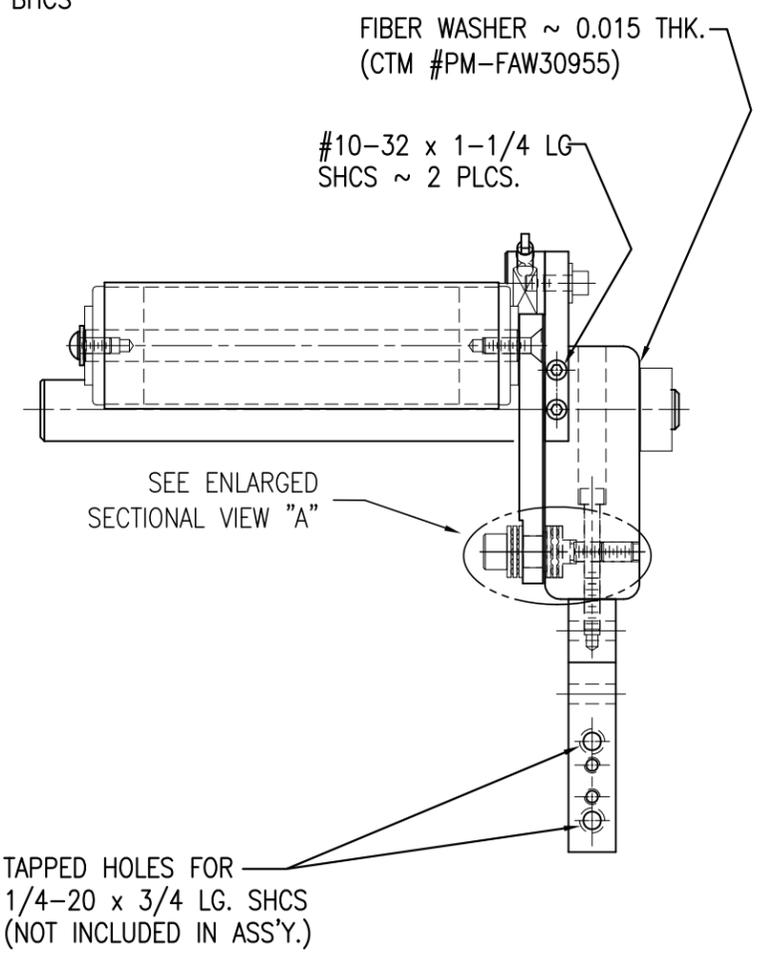


BILL OF MATERIAL			
SAS-200-X121R			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-0134	UNWIND BLOCK ASSEMBLY
②	1	MP-200-X210	5"/7.5" UNWIND SHAFT
③	1	PM-C01015	LOCK COLLAR
④	1	MP-200-0203	SPRING MOUNTING BRACKET
⑤	1	MP-200-0201	SPRING TENSION BLOCK
⑥	1	PM-FASP30437	TENSION SPRING
⑦	1	PM-FASP30500	SPRING ANCHOR
⑧	1	MP-200-0204	BRAKE HUB
⑨	1	PM-OR1007	O-RING, BUNA-N
⑩	1	PM-BEBF1015	FLANGED BUSHING
⑪	2	PM-BE1266	3/8" Ø THRUST BEARING
⑫	1	ASS-200-X131	5"/7.5" DANCER ROLLER w/ SHAFT - consisting of the following parts -
⑬	(1)	SAS-200-X131	5"/7.5" DANCER ROLLER w/ END CAPS
⑬	(1)	MP-200-X205	5"/7.5" DANCER ROLLER SHAFT
⑭	1	MP-200-0202	12" DANCER ARM
⑮	1	MP-200-0209	UNWIND BLOCK MOUNT
⑯	1	PM-FASB10045	3/8" Ø x 1" Lg. SS SHOULDER BOLT
⑰	1	PM-FASS48061	5/16"-18 x 1/2" Lg. SS SET SCREW w/CUP
⑱	2	PM-FADP0930	DOWEL PIN, 3/16" Ø x 1/2" Lg.
⑱	1	PM-FAW30955	5/8" ID x 7/8" OD GRAY FIBER WASHER

REV 1 ENLARGED SECTIONAL VIEW "A"
(SCALE 1=1)

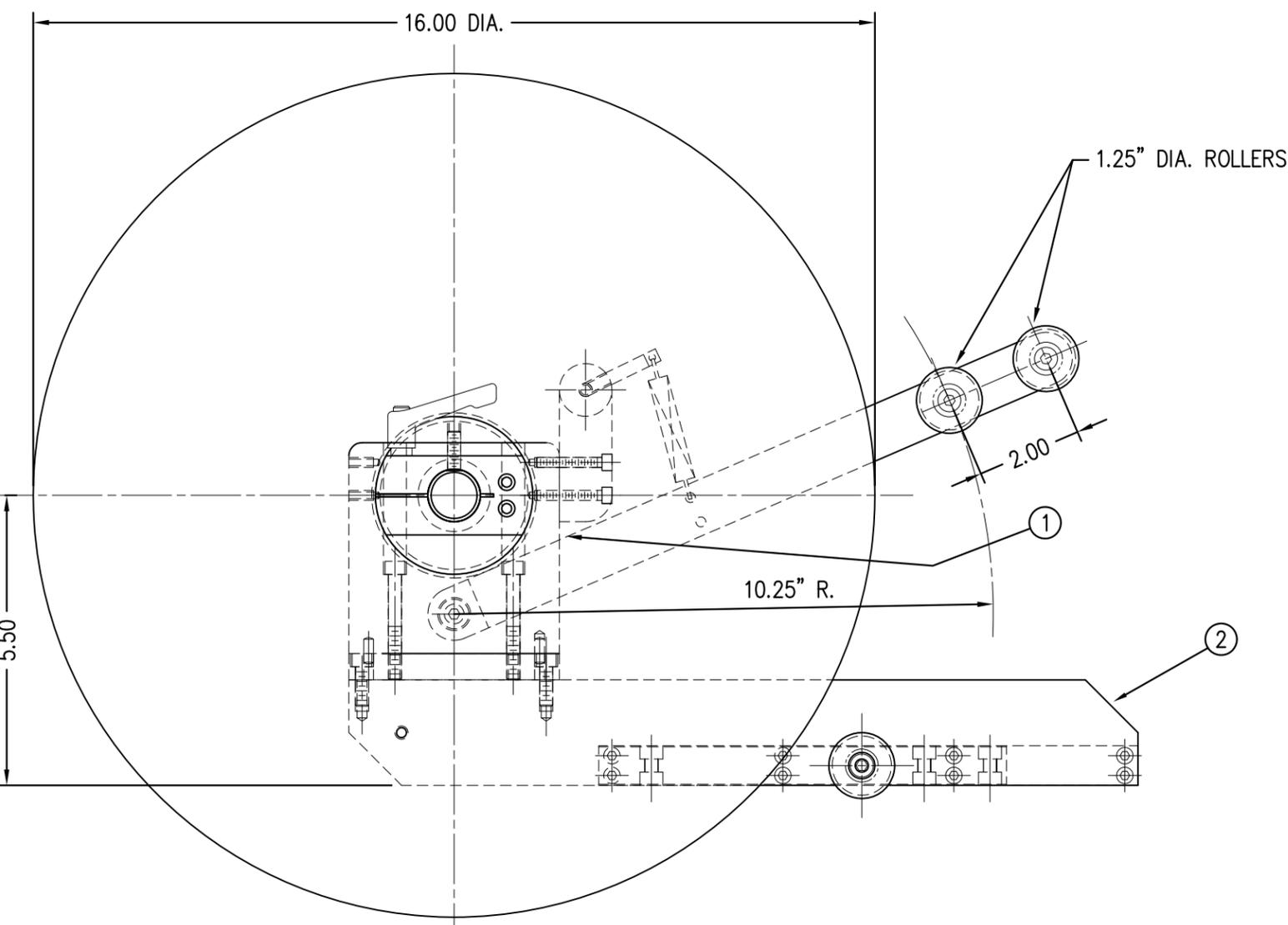
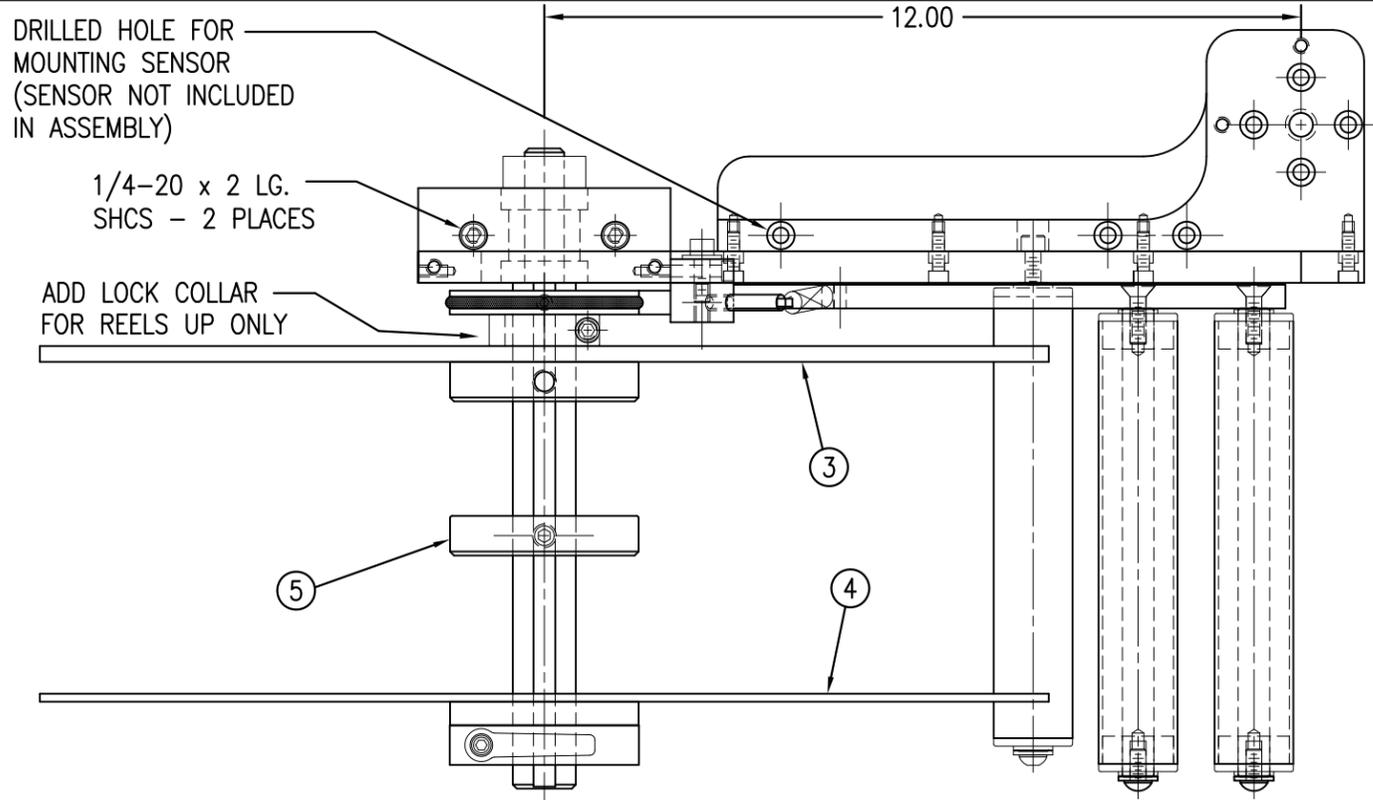


ENLARGED SECTION SHOWING
SET SCREW ENGAGEMENT
(SCALE 1=1)



REV 5 SAS-200-X121R
5" WIDE -0121R
7.5" WIDE -2121R

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 REV. DATE: 07/19/2019
 REV. BY: ES
 SCALE: 1=3
 DATE: 06/02/98
 DRAWN BY: BOB S.
 TITLE: RH 12" UNWIND ASSEMBLY
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\SAS\SAS-200-X121R
 Dept. Code: 70
 REV. DESCRIPTION: 5 DRAWING NUMBER CORRECTION



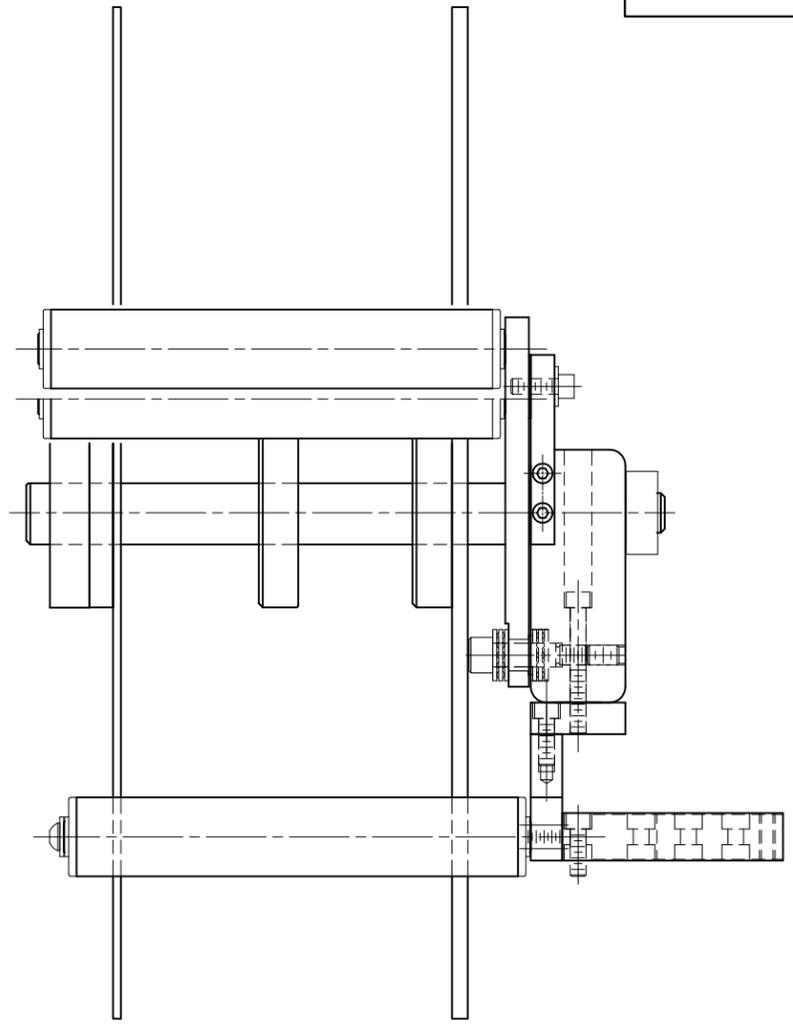
BILL OF MATERIAL			
MOD-200-3121L-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-200-3121AL-X	16" UNWIND ASSY FOR 5" WIDE CORE UNIT
②	1	SAS-200-3121BL-X	16" UNWIND MOUNTING ASSY FOR 5" WIDE CORE UNIT
③	1	ASS-200-3132	16" DIA. INSIDE UNWIND DISK - LEXAN
	1	ASS-200-3132A	16" DIA. INSIDE UNWIND DISK - ALUMINUM
④	1	ASS-200-3133	16" DIAMETER OUTSIDE UNWIND DISK
⑤	1	MP-200-0267CS	UNWIND CORE SUPPORT SPACER

REELS UP

MOD-200-3121L-X	
5" WIDE	-3121L-5
7.5" WIDE	-3121L-7
5" WIDE/REELS UP	-3121AL-5
7.5" WIDE/REELS UP	-3121AL-7

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.



BILL OF MATERIAL

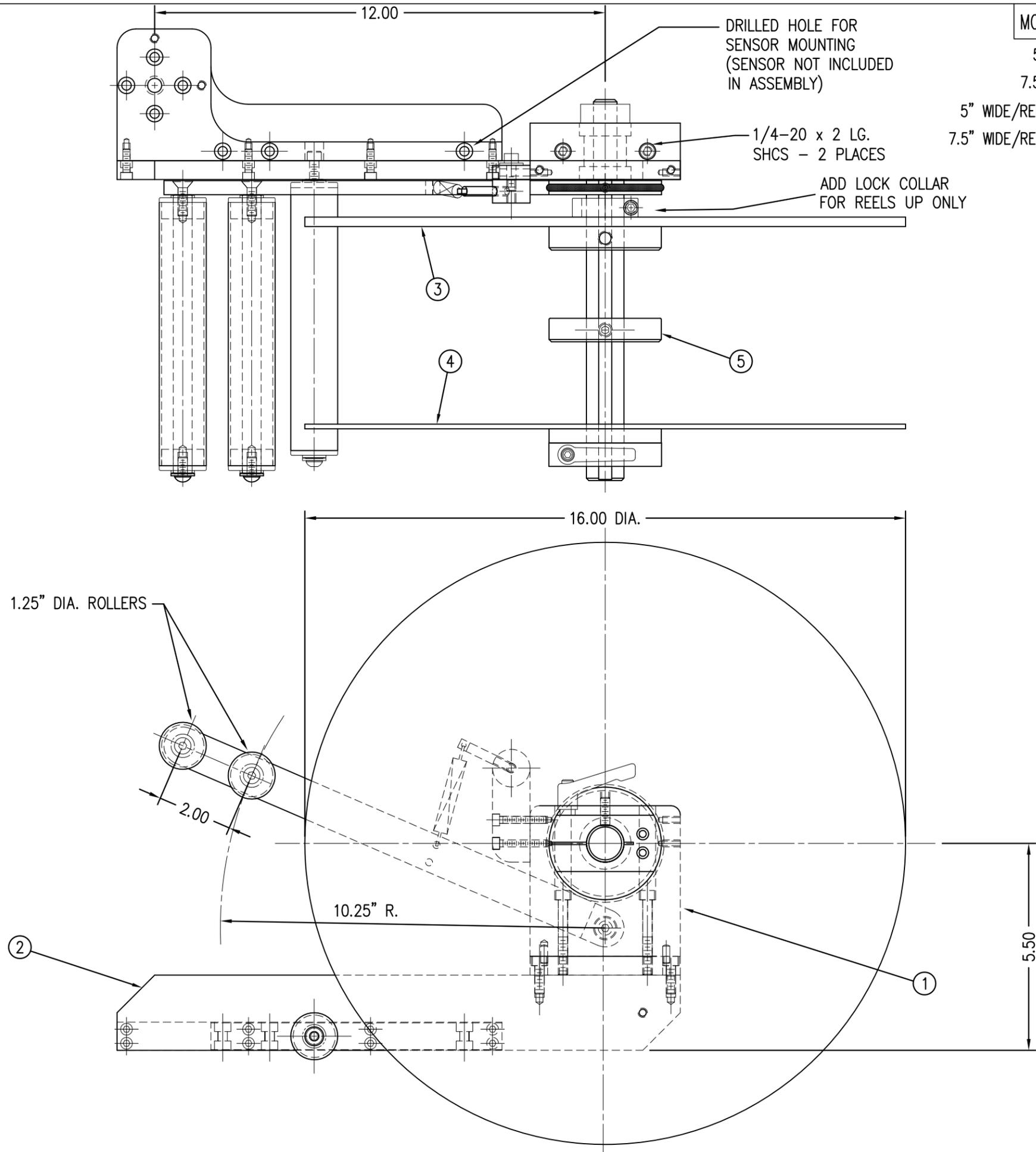
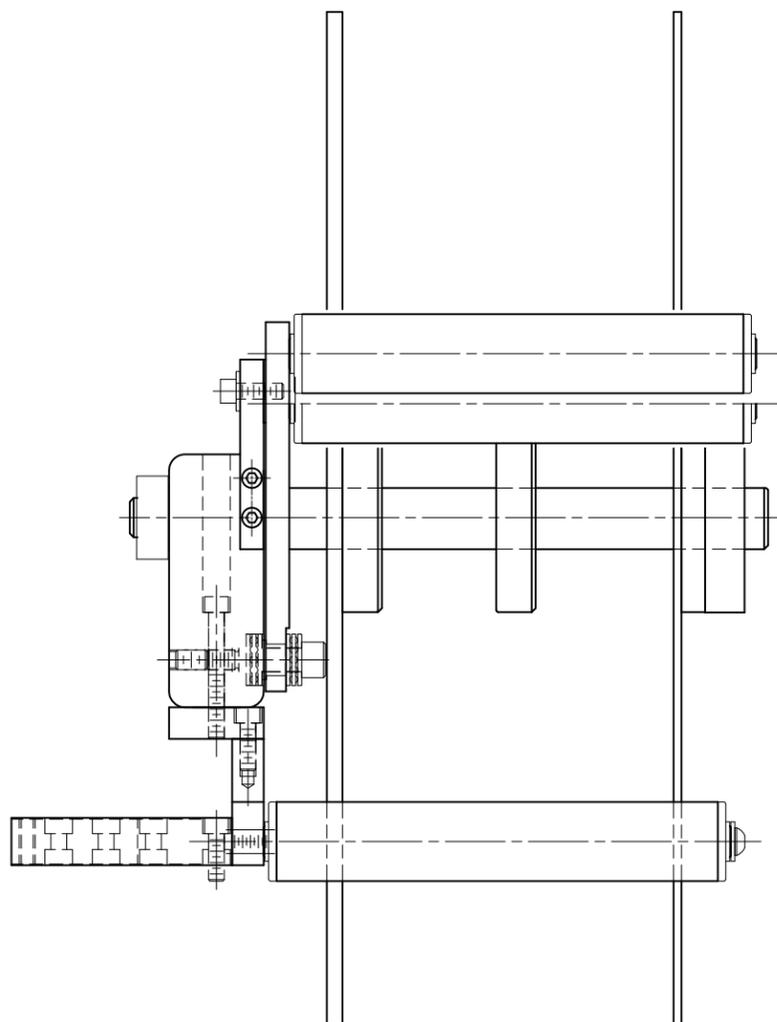
MOD-200-3121XR-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-200-3121AR-X	16" UNWIND ASSY FOR 5" WIDE CORE UNIT
②	1	SAS-200-3121BR-X	16" UNWIND MOUNTING ASSY FOR 5" WIDE CORE UNIT
③	1	ASS-200-3132	16" DIA. INSIDE UNWIND DISK - LEXAN
	1	ASS-200-3132A	16" DIA. INSIDE UNWIND DISK - ALUMINUM
④	1	ASS-200-3133	16" DIAMETER OUTSIDE UNWIND DISK
⑤	1	MP-200-0267CS	UNWIND CORE SUPPORT SPACER

REELS UP

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.



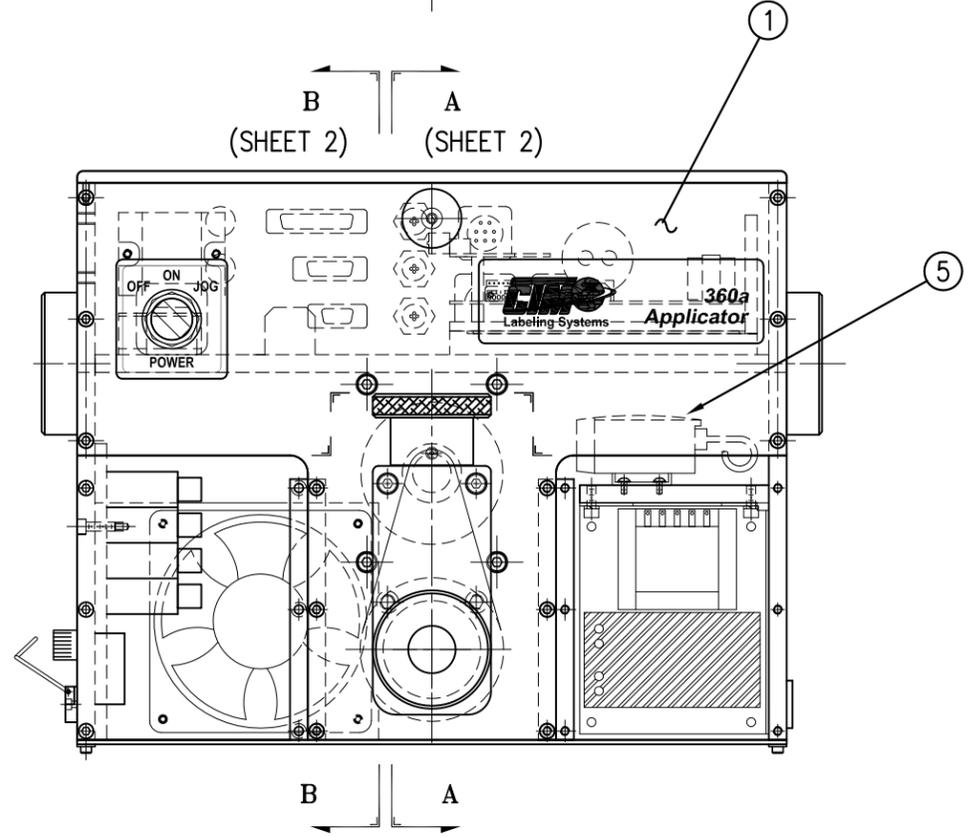
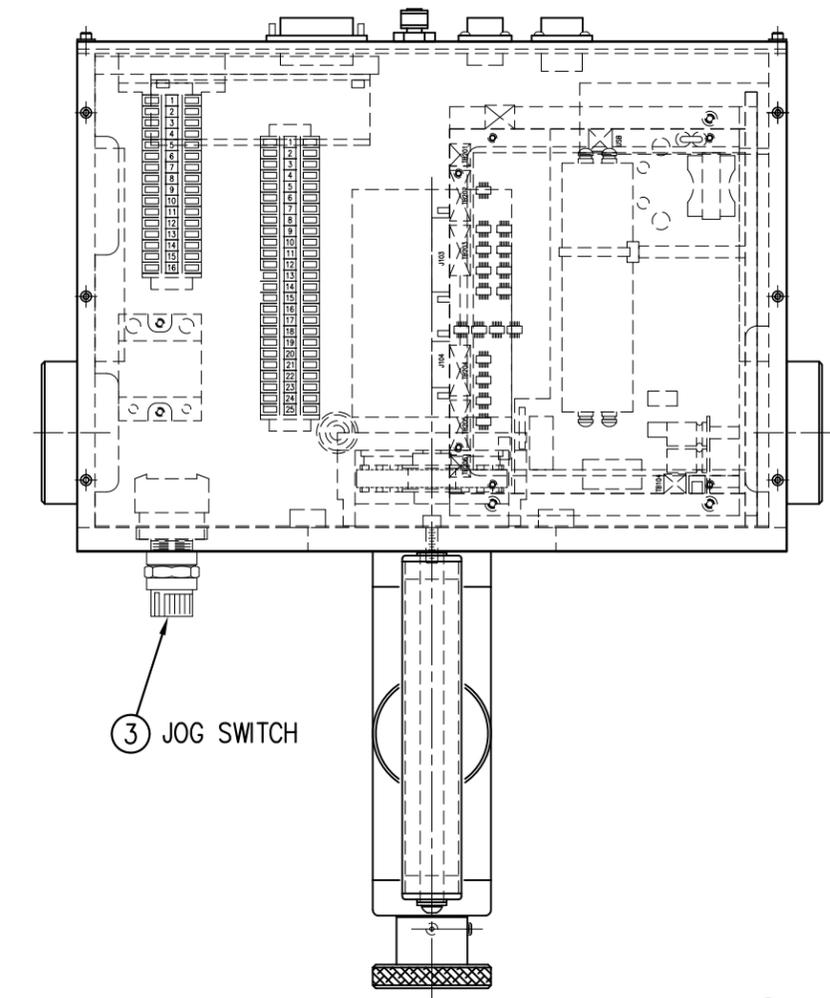
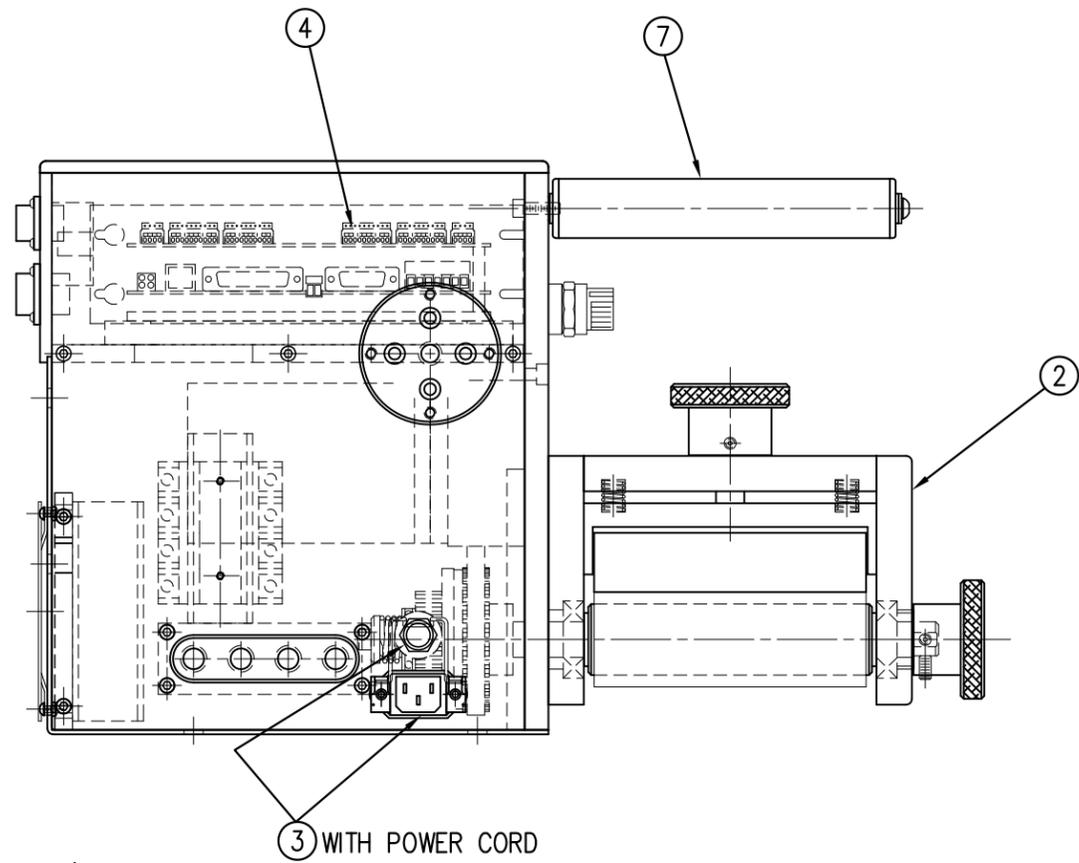
MOD-200-3121R-X	
5" WIDE	-3121R-5
7.5" WIDE	-3121R-7
5" WIDE/REELS UP	-3121AR-5
7.5" WIDE/REELS UP	-3121AR-7

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 REV. DATE: 07/18/18
 REV. BY: TDR
 SCALE: 1=3
 DATE: 03/22/99
 DRAWN BY: BOB S.
 TITLE: 16" UNWIND MODULE - RH
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\MOD\MOD-200-3121R-X

BILL OF MATERIAL				SOLD
ASS-200a-X150R/L				.
ASSEMBLY	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-200a-0124	.
④	1	ELECTRIC SHELF ASSEMBLY	ASS-200a-0123	.
⑤	1	BANNER LABEL SENSOR	ASS-200-0450	S
⑥	1	STEPPER MOTOR ASSEMBLY	ASS-200a-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)

VIEW
PRINT



ASS-200a-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.

APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"/10"
 REV. DESCRIPTION: 2 UPDATED HOUSING FACEPLATE

TITLE: CORE UNIT FOR STD. REWIND (Sht 1 of 2)

REV. DATE: 09/12/17
 REV. BY: TDR

Date: 08/01/07
 Scale: 1=4
 DRAWN BY: BOB S./TDR

Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200a-X150R/Ls1

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

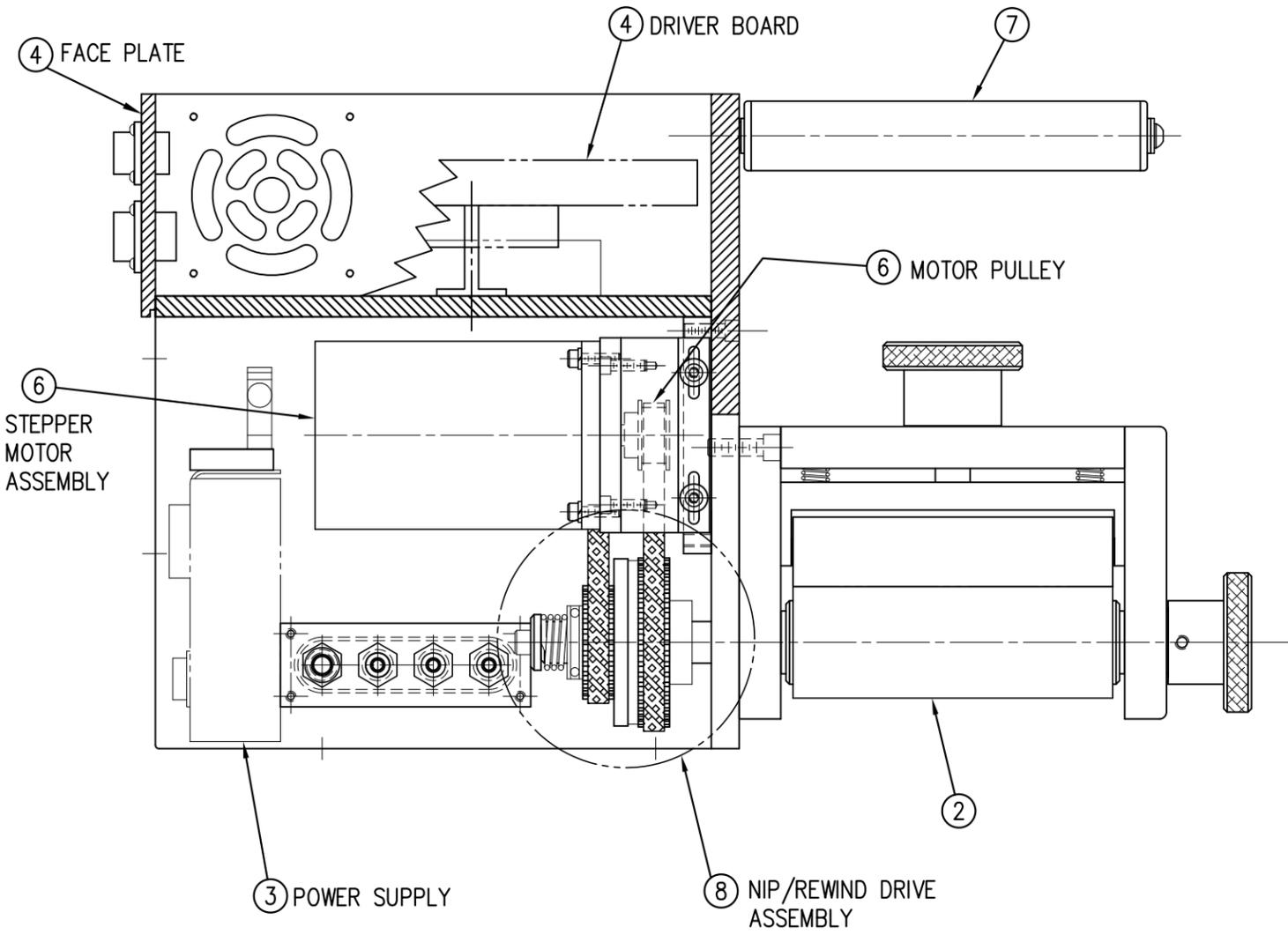
ASS-200a-X150R/L

5" WIDE -0150R/L

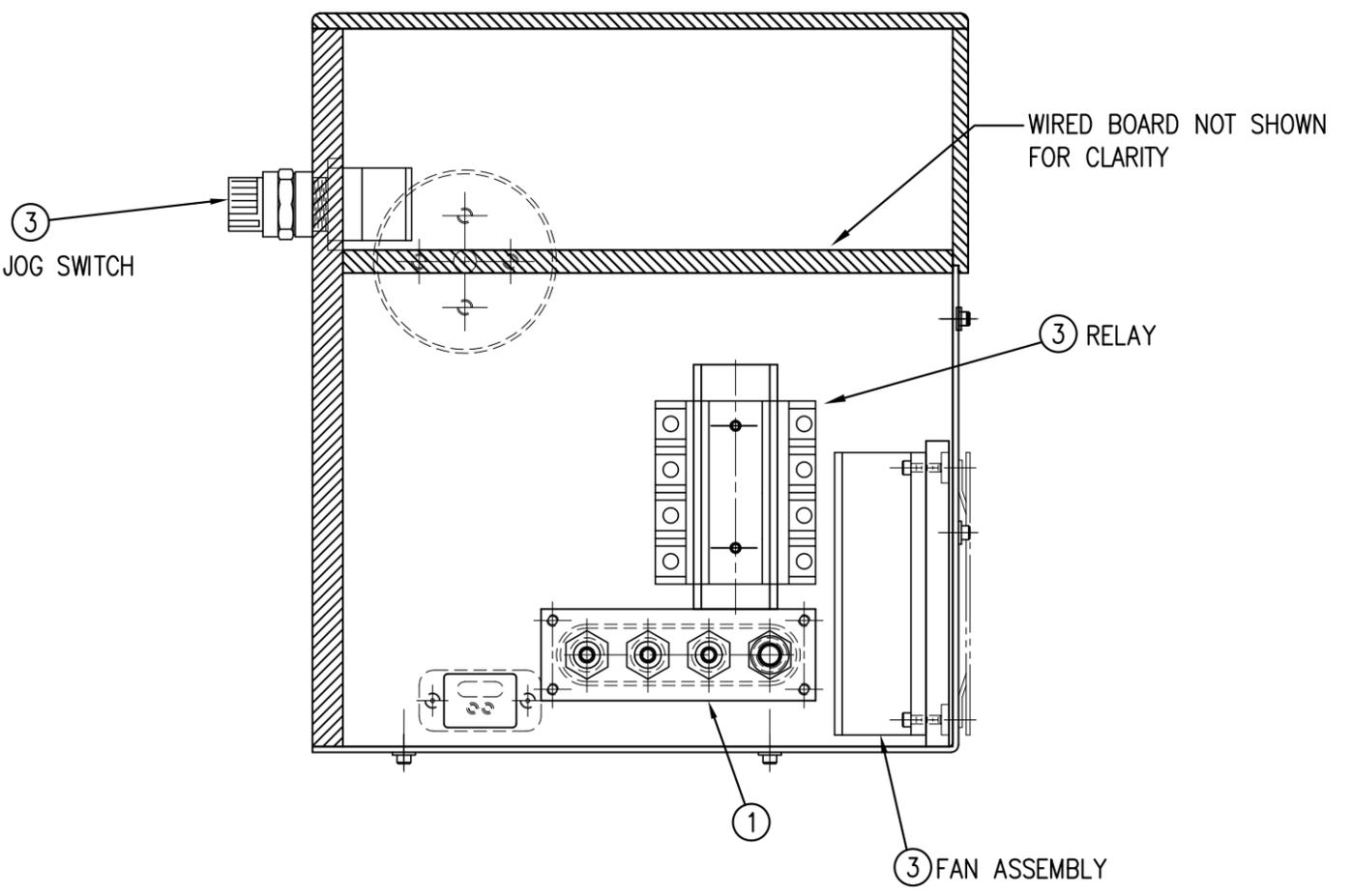
7.5" WIDE -2150R/L

10" WIDE -5150R/L

Dept. Code 70
 TITLE: CORE UNIT FOR STD. REWIND (Sht 2 of 2)
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200a-X150R/Ls2
 REV. DESCRIPTION 1 NEW DRAWING CREATED FROM ASS-200-X150R/Ls2
 REV. DATE 08/02/07
 REV. BY: TDR
 SCALE: 1=3
 DATE: 02/14/98
 DRAWN BY: BOB S./TDR



SECTION "A-A"
(FROM SHEET 1)



SECTION "B-B"
(FROM SHEET 1)

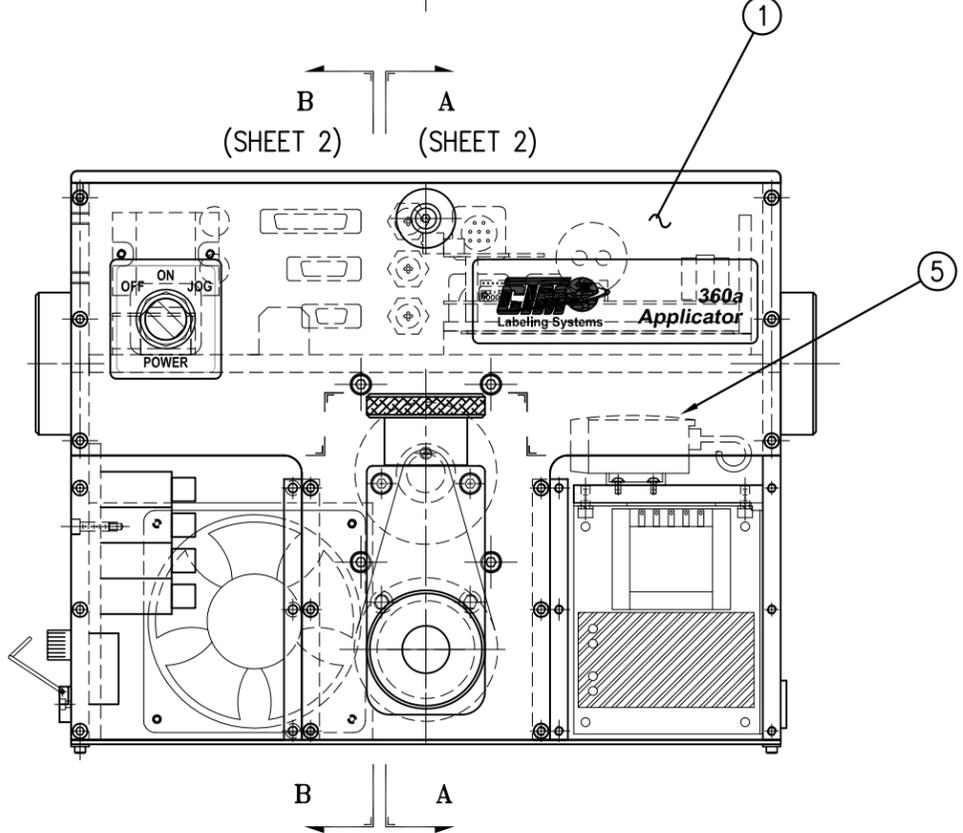
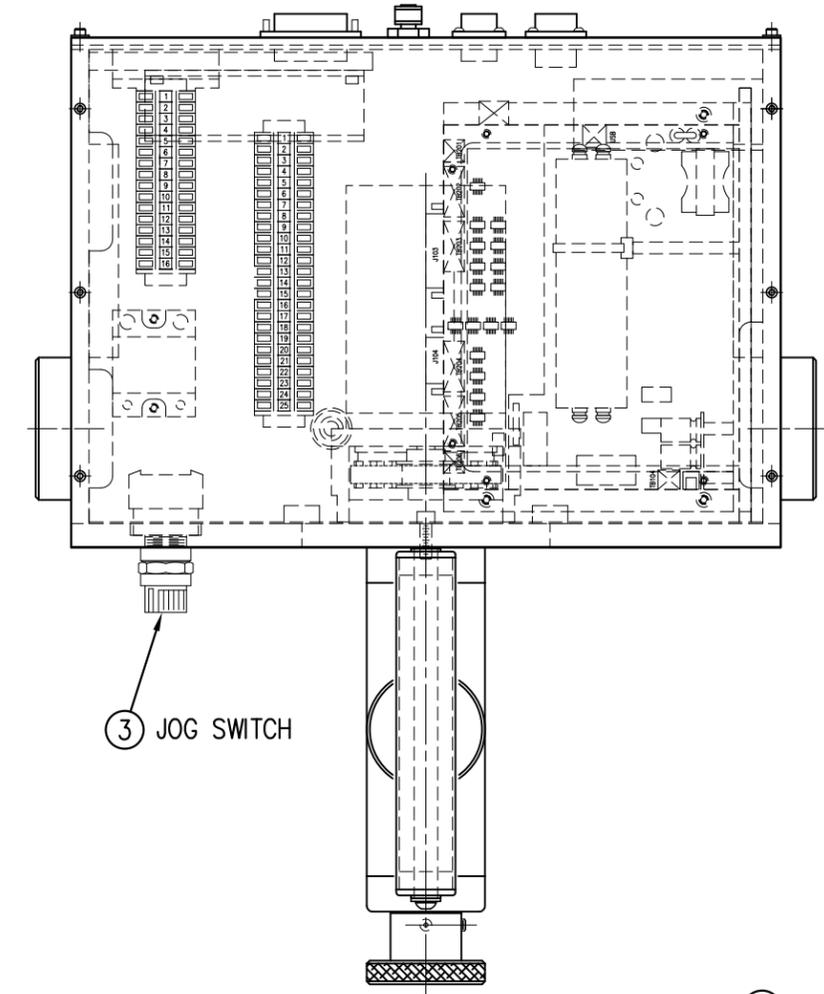
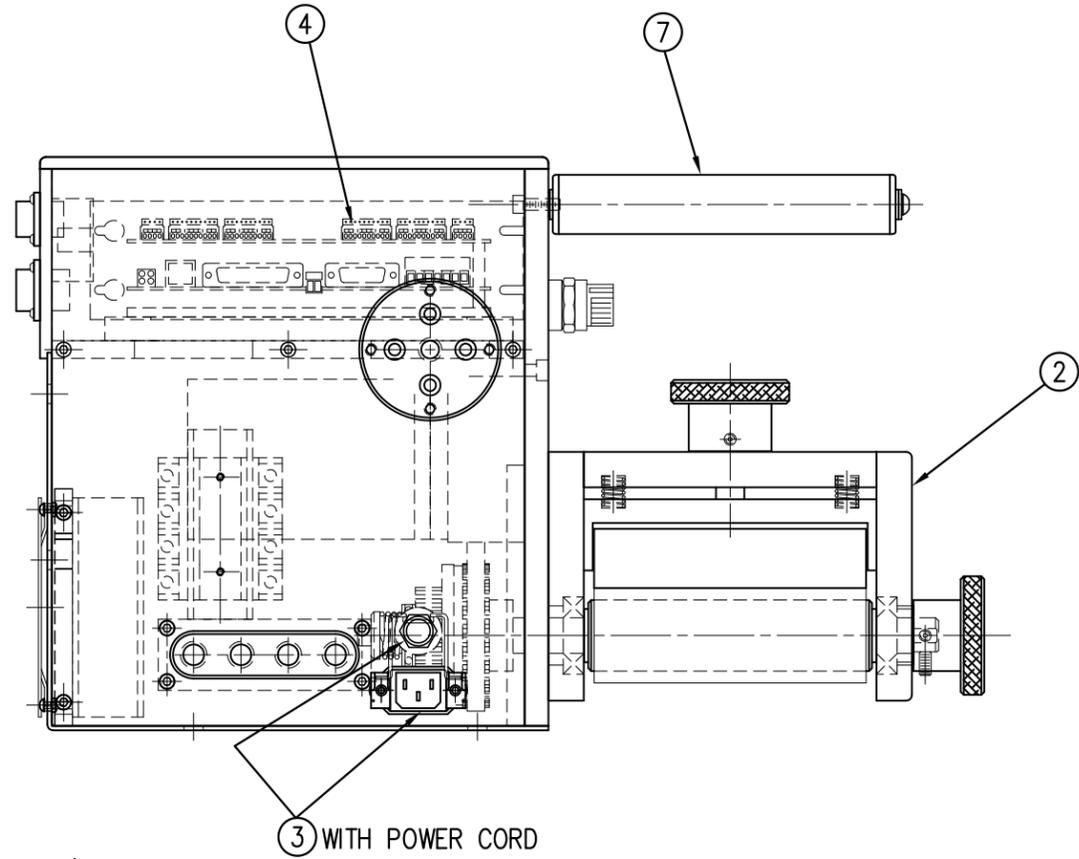
NOTE: AVAILABLE IN RH & LH ORIENTATIONS
 - RIGHT HAND ASSEMBLY SHOWN -
 (SEE DWG #ASS-200-0122R/L FOR DIFFERENCES)

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

BILL OF MATERIAL				SOLD
ASS-200a-X151R/L				.
ASSEMBLY	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-200a-0124	.
④	1	ELECTRIC SHELF ASSEMBLY	ASS-200a-0123	.
⑤	1	BANNER LABEL SENSOR	ASS-200-0450	S
⑥	1	STEPPER MOTOR ASSEMBLY	ASS-200a-0453-HS	REV 2
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)

VIEW
PRINT



ASS-200a-X151R/L	
5" WIDE	-0151R/L
7.5" WIDE	-2151R/L
10" WIDE	-5151R/L

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 TITLE: CORE UNIT FOR POWERED REWIND (Sht 1 of 2)
 APPLICATOR SERIES: 360 APPLICATOR WIDTH(S): 5" / 7.5" / 10" GROUP: HOUSING ASSEMBLY
 REV. DATE: 09/12/17 REV. BY: TDR SCALE: 1=4 DATE: 08/01/07 DRAWN BY: TDR
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200a-X151R/Ls1
 Dept. Code 70
 REV. DESCRIPTION 3 UPDATED FACEPLATE

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

ASS-200a-X151R/L

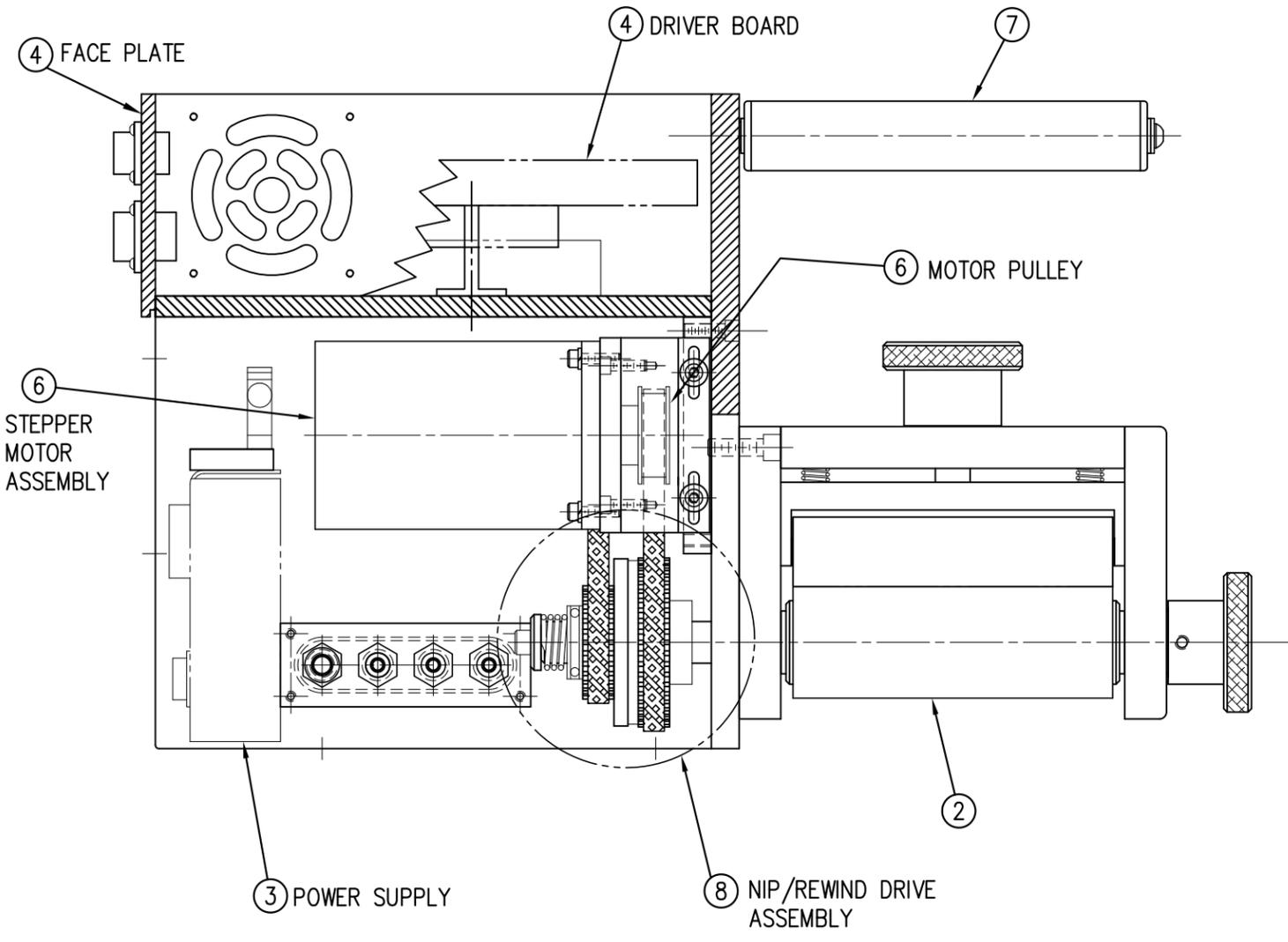
5" WIDE -0151R/L

7.5" WIDE -2151R/L

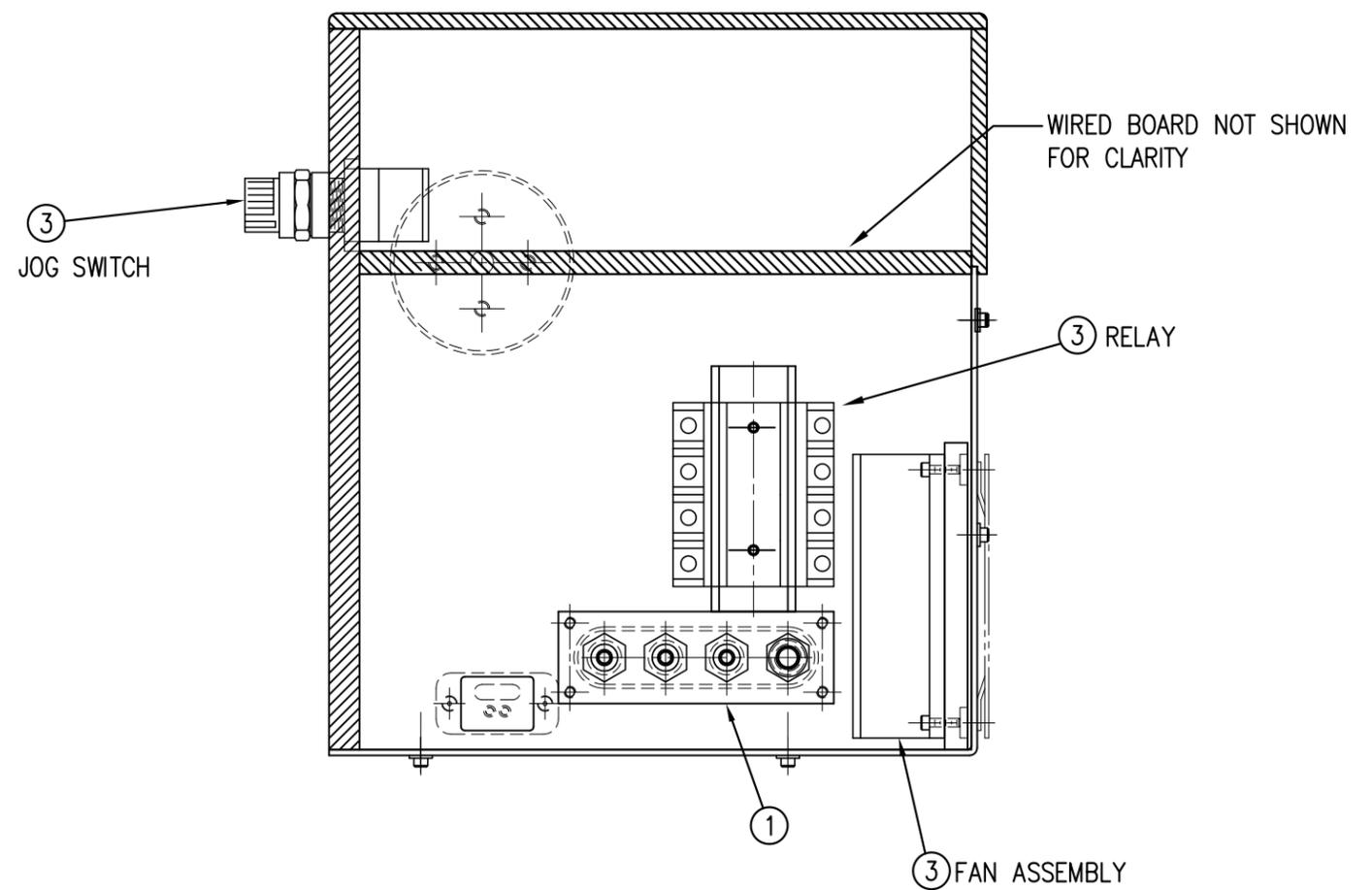
10" WIDE -5151R/L

Dept. Code	70
APPLICATOR SERIES	360
APPLICATOR WIDTH(S)	5"/7.5"/10"
GROUP	HOUSING ASSEMBLY
REV. DESCRIPTION	2 STEPPER MOTOR CALLOUT WAS ASS-200-0453
REV. DATE	11/30/07
REV. BY	TDR
Scale	1=3
Date	02/14/98
DRAWN BY	BOB S./TDR
F:\Engineering\Standard Parts\Applcator\360 SERIES\	360a\ASS-200a-X151Rls2

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



SECTION "A-A"
(FROM SHEET 1)



SECTION "B-B"
(FROM SHEET 1)

FOR BILL OF MATERIAL REFER TO DWG. #ASS-200a-X151R/L (SHEET 1)

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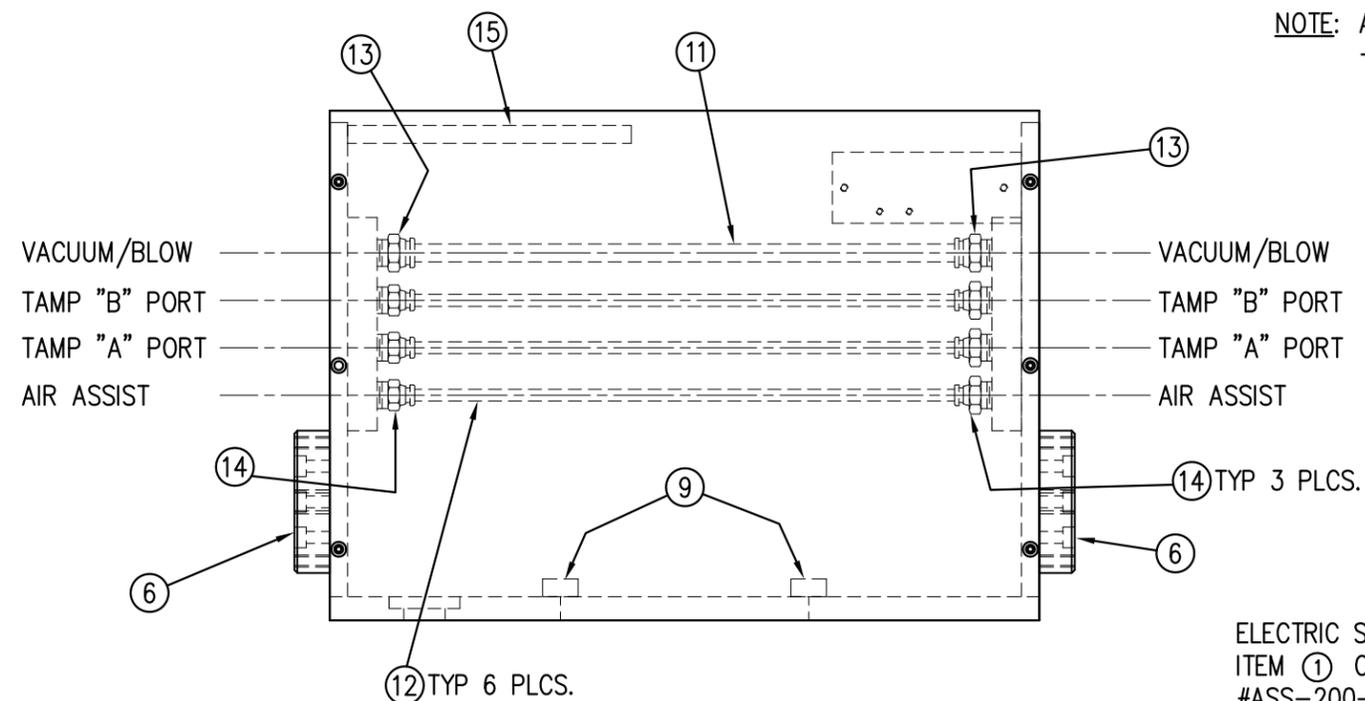
BILL OF MATERIAL

ASS-200-0122R/L

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

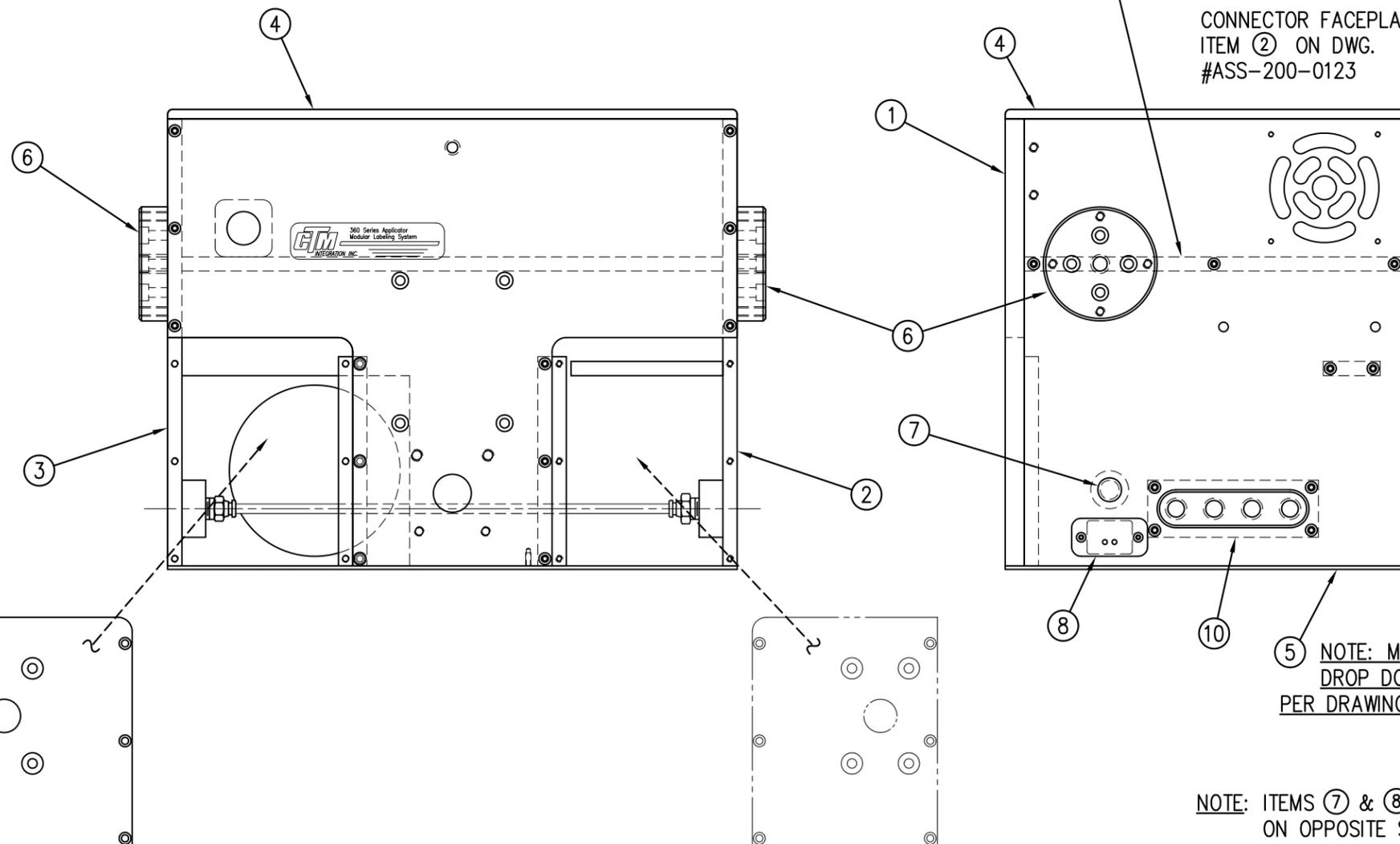
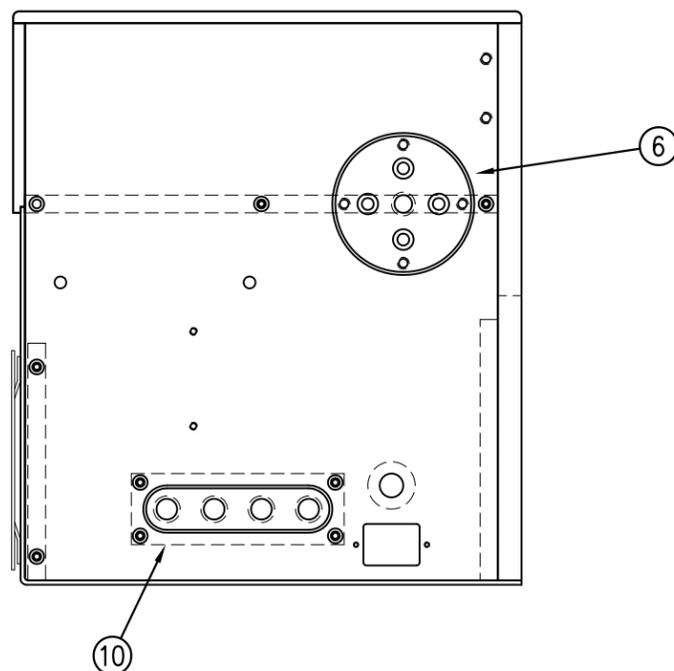
NOTE: AVAILABLE IN RH & LH ORIENTATIONS
- RIGHT HAND ASSEMBLY SHOWN -

ASS-200-0122R/L



ELECTRIC SHELF
ITEM ① ON DWG.
#ASS-200-0123

CONNECTOR FACEPLATE
ITEM ② ON DWG.
#ASS-200-0123



⑤ NOTE: MODIFY FOR ^{REV 3}
DROP DOWN SNORKLE
PER DRAWING ASS-200-0141

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

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)

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 HOUSING ASSEMBLY
 360 SERIES 5"7.5"/10"
 REV. DATE 01/31/06
 REV. BY TDR
 SCALE 1=4
 DATE 06/19/97
 DRAWN BY BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200-0122R/L
 Dept. Code 70

BILL OF MATERIAL

ASS-200a-0123-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-200a-0123b	ELECTRIC SHELF
②	1	SAS-200a-0123a-X	CONNECTOR FACE PLATE
③	1	PE-200A-1410	J104 WIRING HARNESS
④	1	ASS-200A-1411	TB202 WIRING HARNESS
⑤	1	ASS-200A-1412	TB204 WIRING HARNESS
⑥	1	ASS-200A-1415	TB102/POWER WIRING HARNESS
⑦	1	ASS-200A-1418	TB104/AUX. POWER WIRING HARNESS

ASS-200a-0123-X

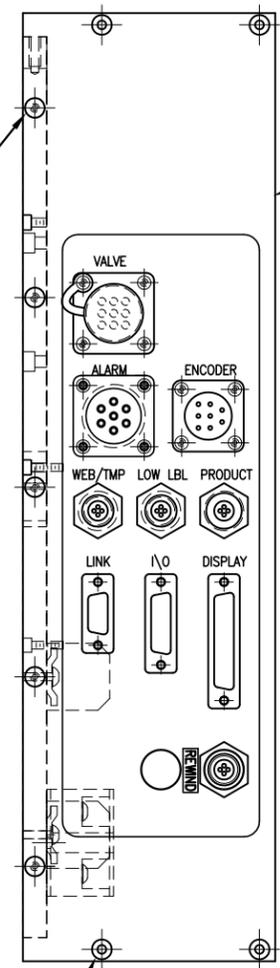
STANDARD REWIND ASS-200a-0123-S

POWERED REWIND ASS-200a-0123-P

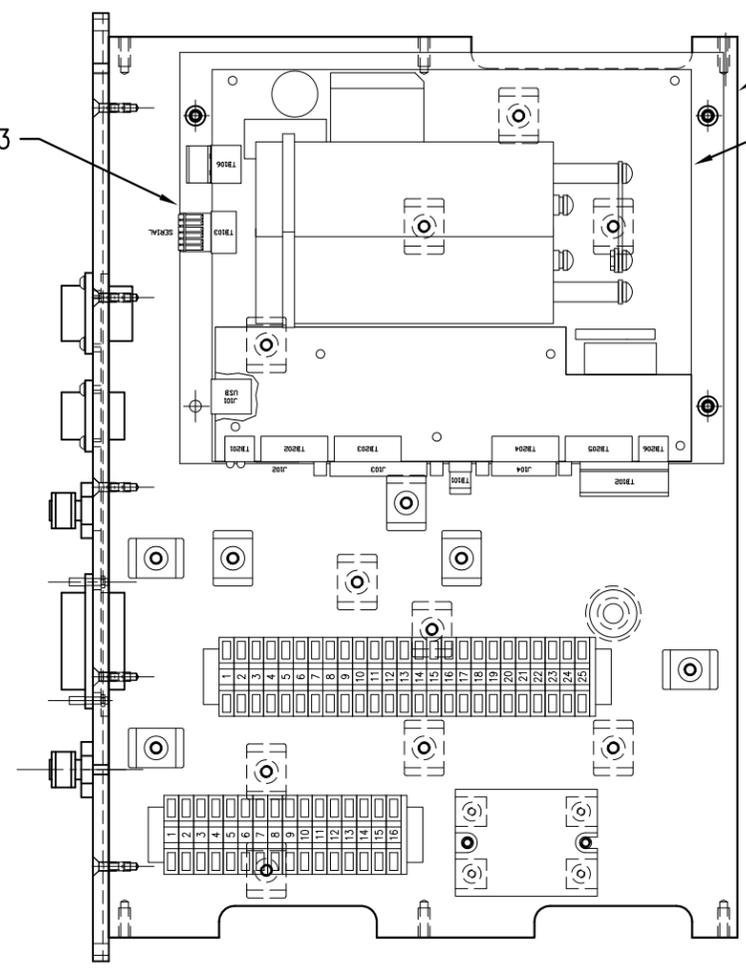
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5" / 7.5" / 10"
 REV. DATE: 09/12/17
 REV. BY: TDR
 SCALE: 1=3
 DATE: 05/10/08
 DRAWN BY: E. SANOR
 TITLE: WIRED BOARD ASSEMBLY FOR STD. & POWERED REWIND APPLICATORS
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200a-0123-X

#6-32 x 1/2 LG. FHCS ~ (5) PLCS.

MOUNTING FASTENERS
 #6-32 x 1/2 LG. FHCS
 (4) PLACES
 (NOT INCLUDED IN ASSEMBLY)



TB103

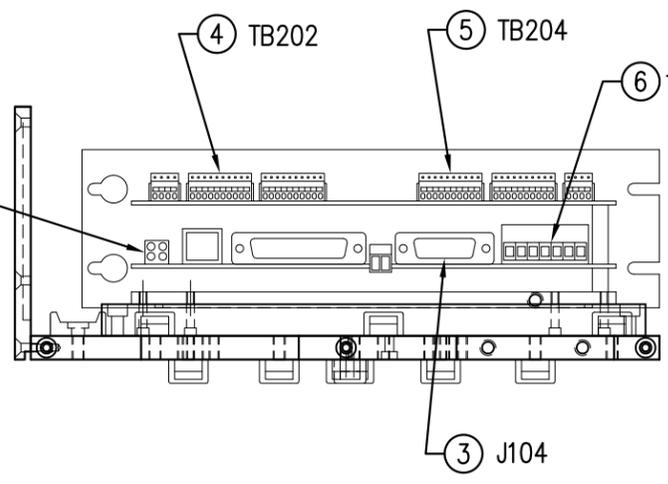


①

⑦

TB104

LED INDICATOR



SIDE VIEW
 TERMINAL STRIPS AND MCR
 OMITTED FOR CLARITY

SHOP REFERENCE DRAWINGS:
 SAS-200a-0123a-X
 SAS-200a-0123b

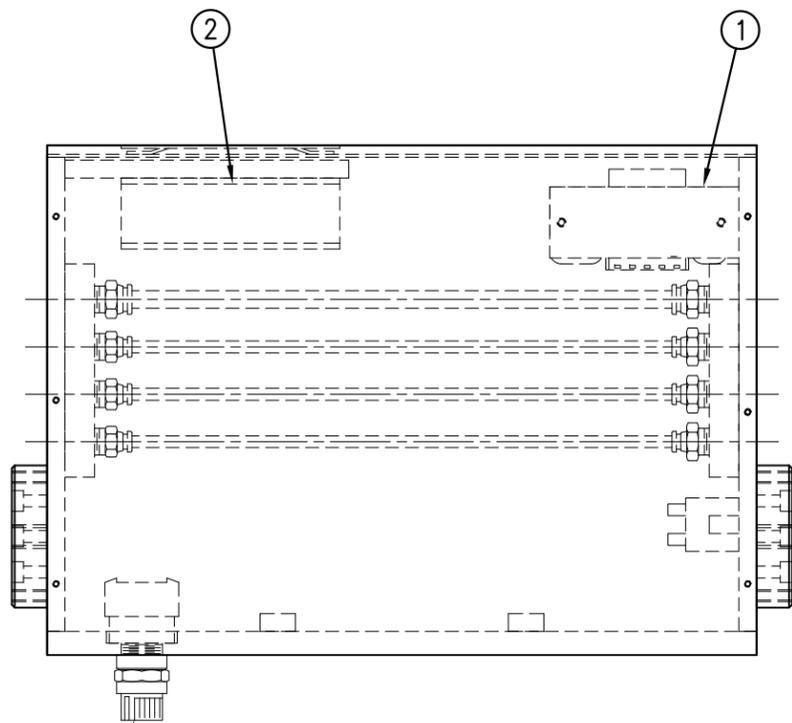
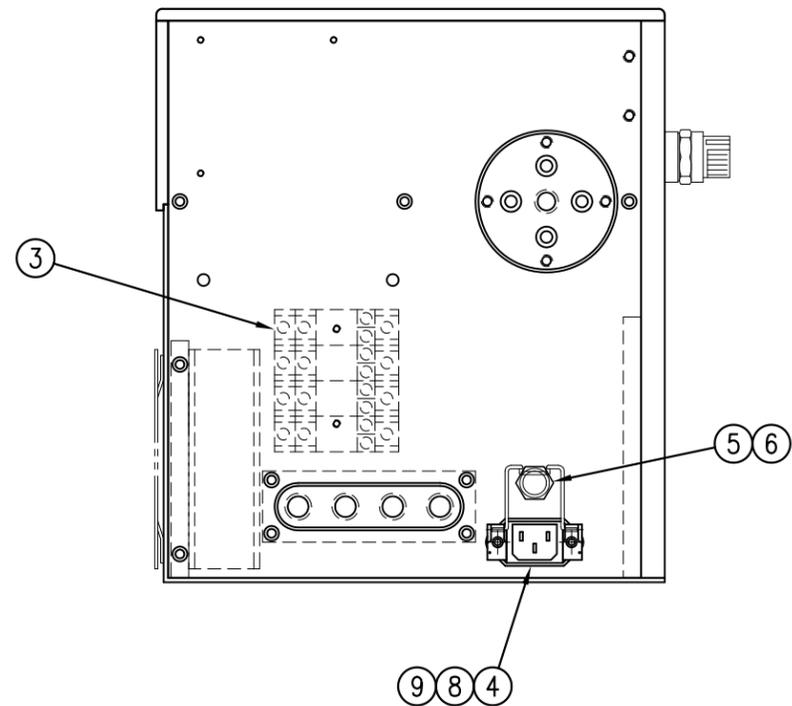
BILL OF MATERIAL

SOLD

ASS-200a-0124

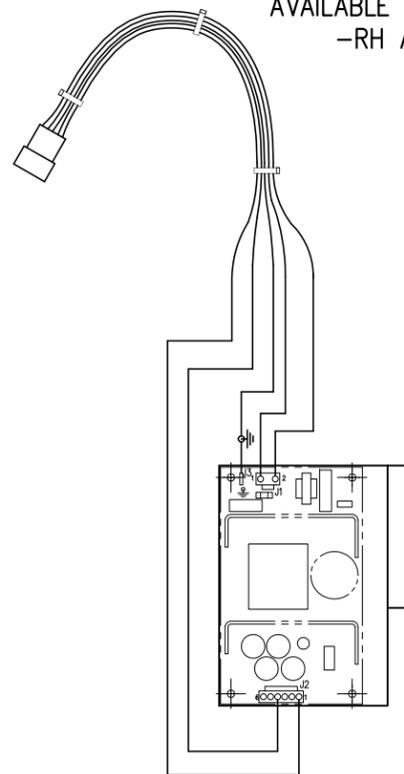
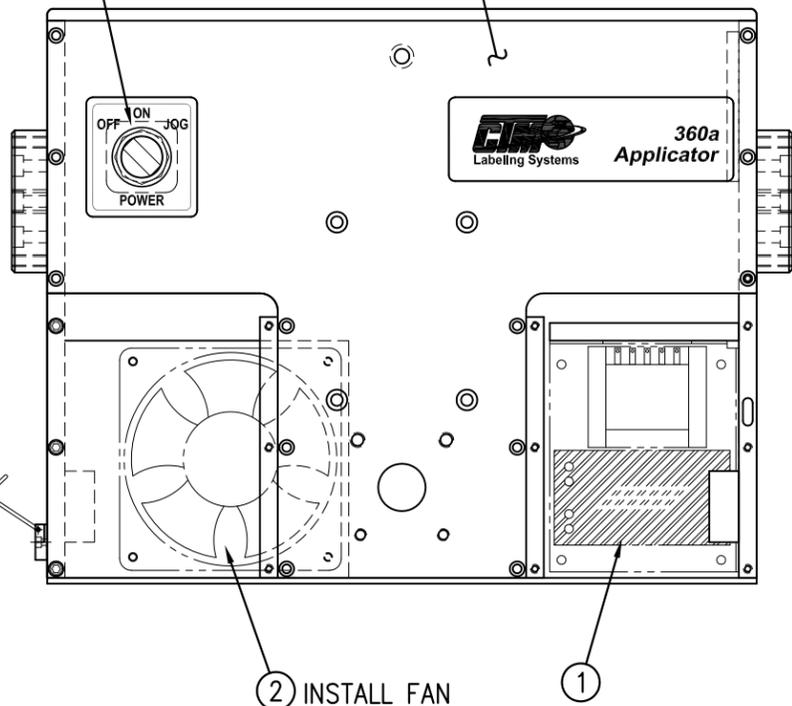
ASSEMBLY	ASS-200a-0124			SOLD
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	POWER SUPPLY ASSEMBLY	ASS-200a-0410	S
②	1	FAN ASSEMBLY	ASS-200-0454	S
③	1	RELAY w/ WIRING HARNESS TO VALVE	ASS-200A-0445	.
④	1	POWER RECEPTICLE/ FILTER	PE-FI1012	S
⑤	1	FUSE HOLDER	PE-FU5005	S
⑥	1	FUSE	PE-FU2070	S
⑦	1	IDEC JOG SWITCH ASSEMBLY	ASS-200-0451	.
⑧	1	16-3 x 10 FT. POWER CORD	PE-C01020	S
⑨	1	POWER CORD CLIP ASSEMBLY	ASS-200-0148	S

VIEW PRINT

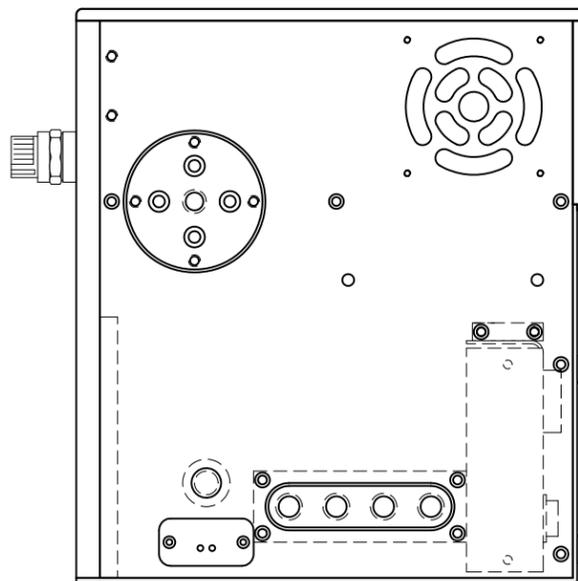
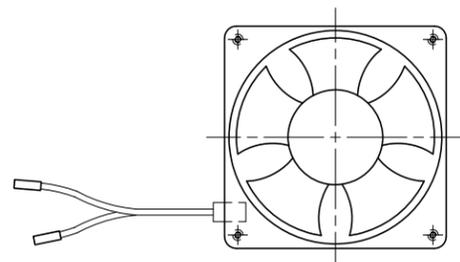


⑦ JOG SWITCH

FOR HOUSING MACHINED COMPONENTS REFER TO DWG. #ASS-200-0122R/L



AVAILABLE IN RH & LH ASSEMBLIES
-RH ASSEMBLY SHOWN-



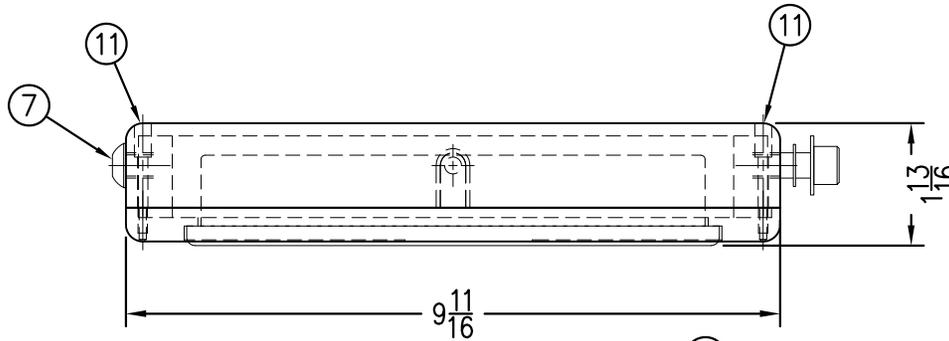
BILL OF MATERIAL

ASS-200a-0126-X

ASS-200a-0126-X

5 FT. CABLE (STD)	-0126
10 FT. CABLE	-0126-10
15 FT. CABLE	-0126-15

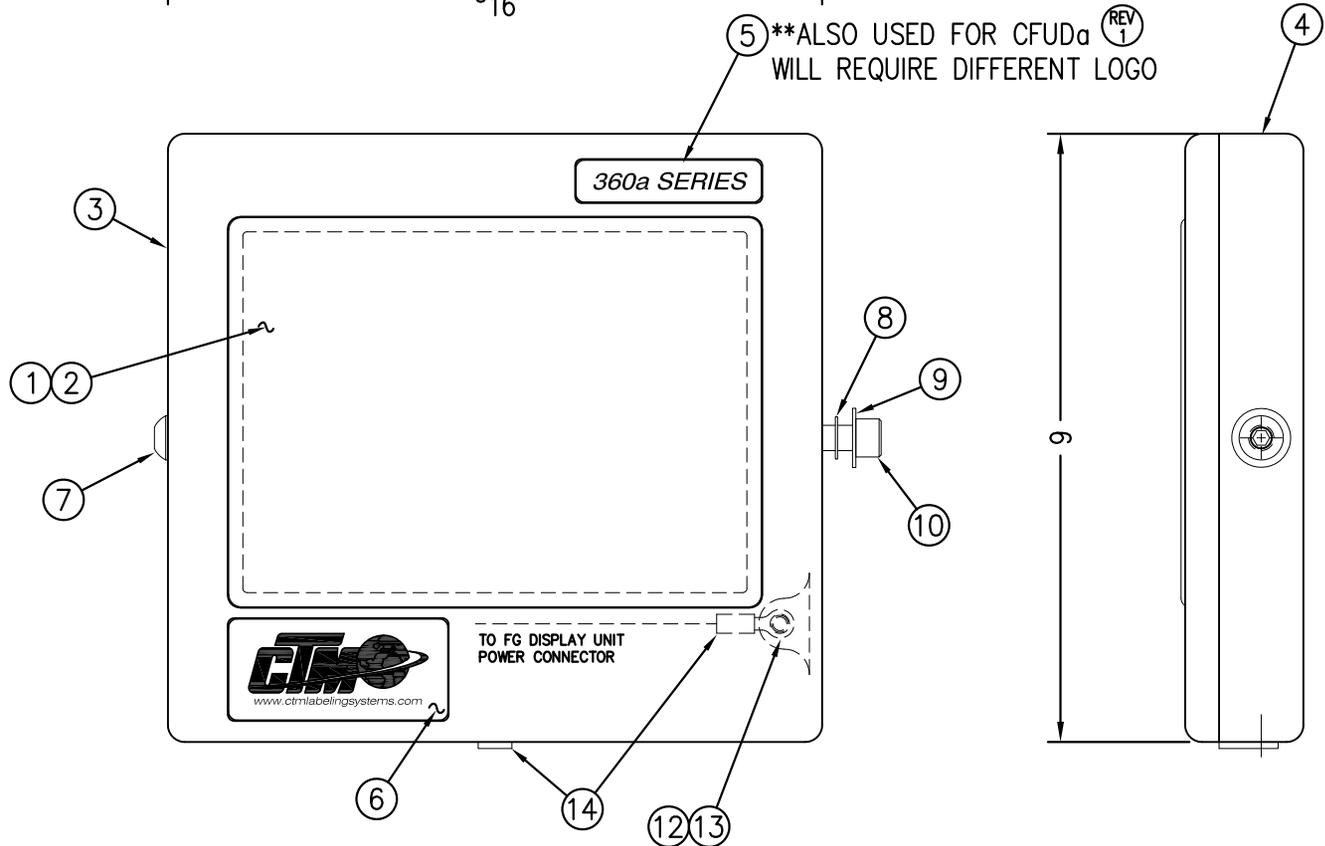
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-IN1013	MAPLE DISPLAY INTERFACE (TOUCH SCREEN)
②	4	PM-FAPH10522	M4 X 16mm SS PAN HEAD PHILLIPS
③	1	MP-200a-0263	HMI 5070LB DISPLAY FACE PLATE
④	1	MP-200a-0264	HMI 5070LB DISPLAY BACK COVER
⑤	1	PM-LB1023	360a SERIES LABEL
⑥	1	PM-LB1021	CTM LABEL
⑦	1	PM-FABH35580	3/8-16 X 1/2 Lg. SS BHCS
⑧	1	PM-FAW32500	3/8 BLACK NYLON WASHER
⑨	1	PM-FAW30285	3/8" SS WASHER
⑩	1	PM-FASH430194	3/8"-16 x 1" LG. SS SHCS
⑪	4	PM-FASH428006	6-32 X 1" Lg SS SHCS
⑫	1	PM-FABH35500	1/4-20 X 1/2" Lg SS BHCS
⑬	2	PM-FAW30685	LOCK WASHER 1/4 EXTERNAL-TOOTH STN STL
⑭	1	PE-200a-0408-X	APPLICATOR TO DISPLAY CABLE



⑤ **ALSO USED FOR CFUDa ^{REV 1} WILL REQUIRE DIFFERENT LOGO

MOUNTING BRACKET NOT INCLUDED IN ASSEMBLY:

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



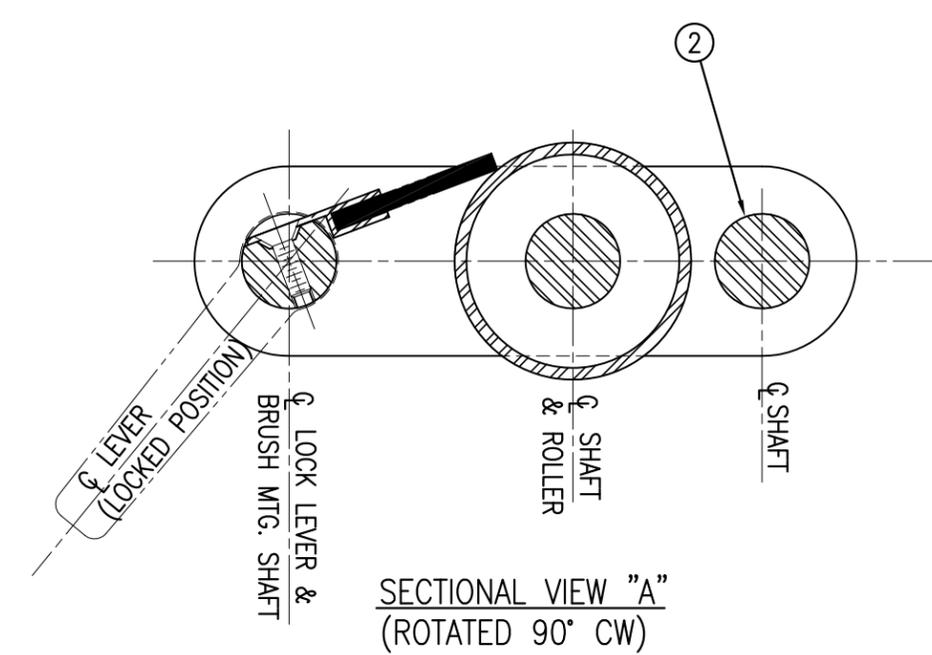
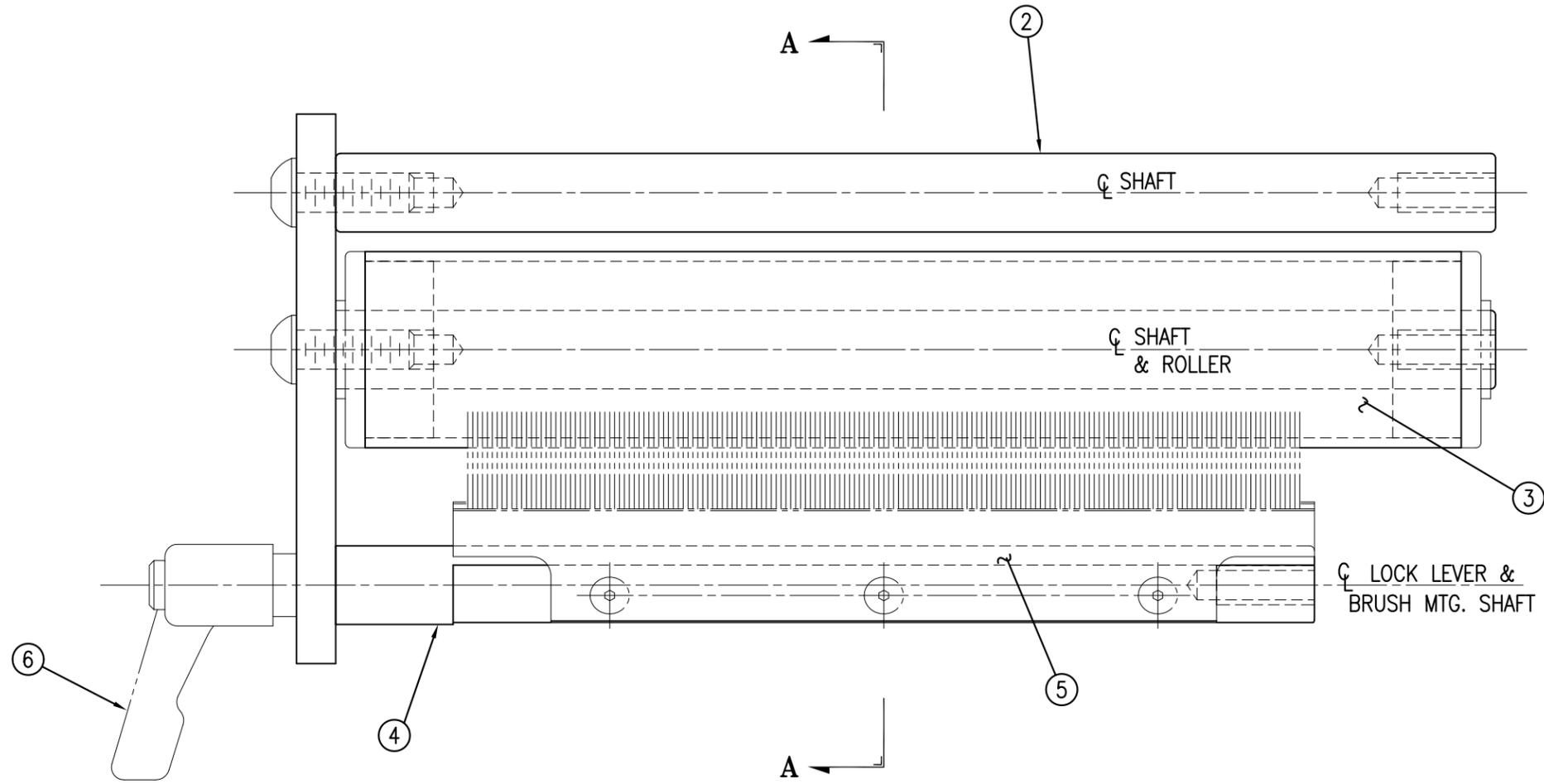
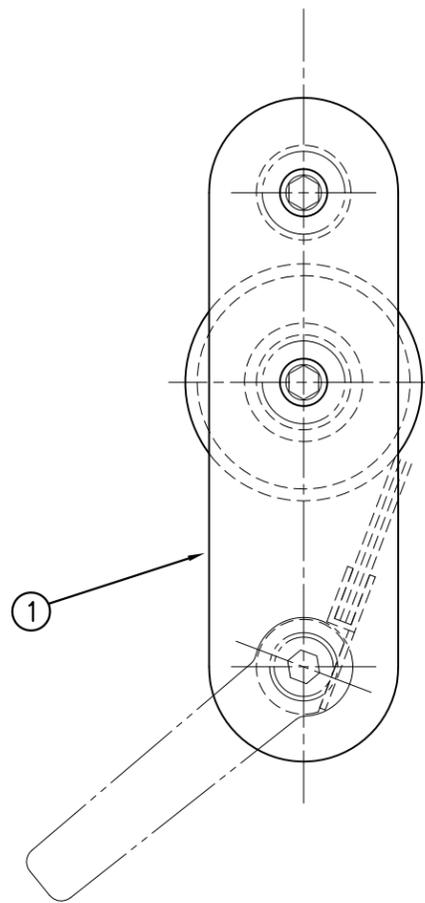
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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: HOUSING	TITLE: MAPLE DISPLAY UNIT ASSEMBLY				Dept. Code 70
REV. 1	REV. DESCRIPTION ADDED LOGO NOTE	REV. DATE 05/30/18	REV. BY: TK	Scale: 1=3	Date: 2/29/16	DRAWN BY: J. Greeneisen	F:\Engineering\Standard Parts\Appliator\360 SERIES\ 360a\ASS\ASS-200a-0126

ASS-200-X126

5" WIDE	-0126R
7.5" WIDE	-2126R
10" WIDE	-5126R

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 APPLICATOR SERIES: 360 APPLICATOR WIDTH(S): 5" / 7.5" / 10" GROUP: HOUSING
 TITLE: TENSION BRUSH ASSEMBLY
 REV. DATE: 03/06/18 REV. BY: TDR SCALE: 1=1 DATE: 06/02/98 DRAWN BY: BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200-X126
 Dept. Code 70
 REV. DESCRIPTION 2 REMOVED RH / LH DESIGNATION



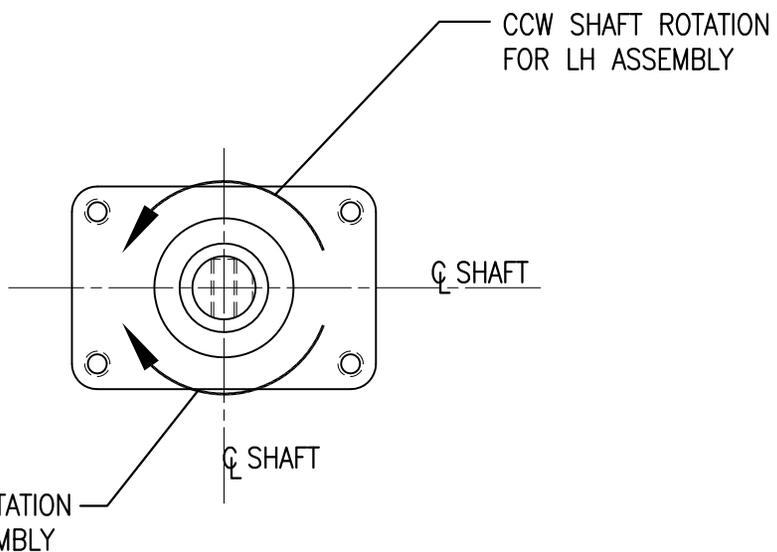
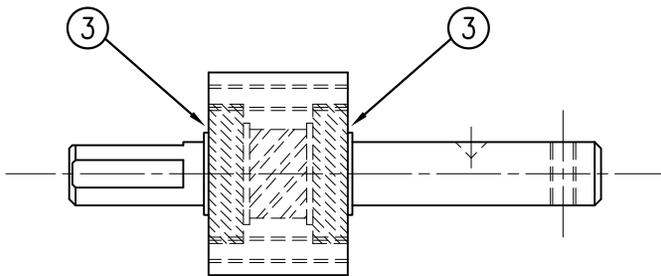
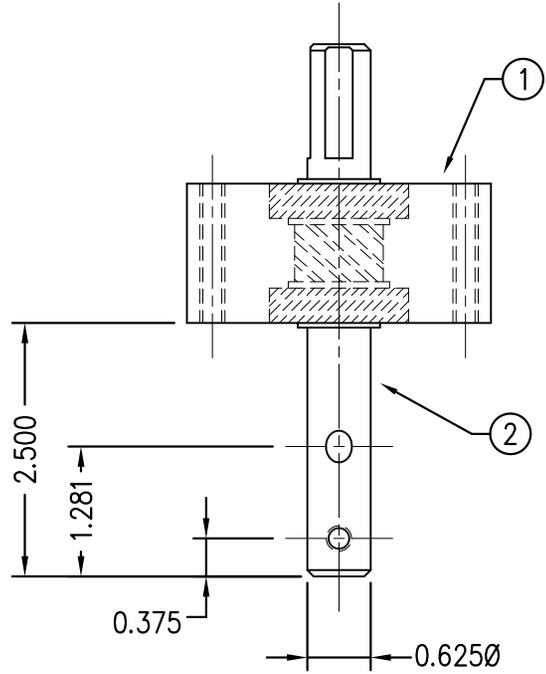
BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-200-X126R			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	TENSION BRUSH ROLL MOUNTING BRKT.	MP-200-0256	.
②	1	5/7.5/10 TENSION ROLLER SHAFT	MP-200-X254	.
③	1	5/7.5/10 TENSION ROLL ASS'Y w/SHAFT	ASS-200-X135	S
④	1	5/7.5/10 TENSION BRUSH MTG SHAFT	MP-200-X253	.
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

BILL OF MATERIAL

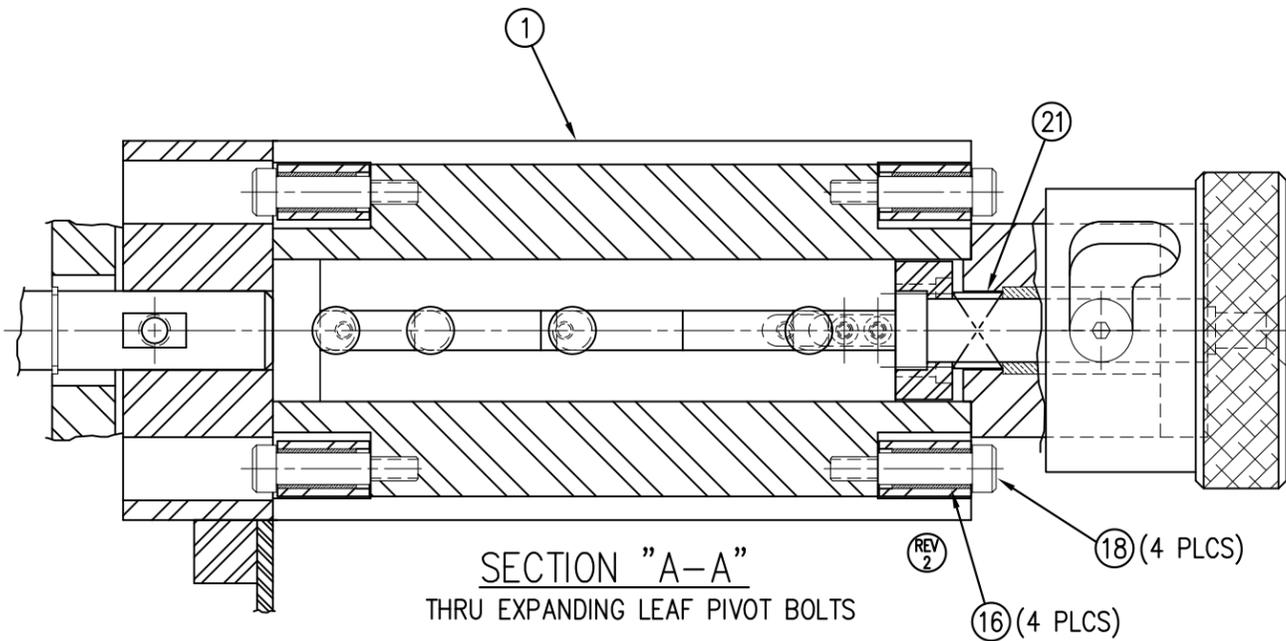
ASS-200-0128R/L

ASSEMBLY		ASS-200-0128R/L		SOLD
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	.

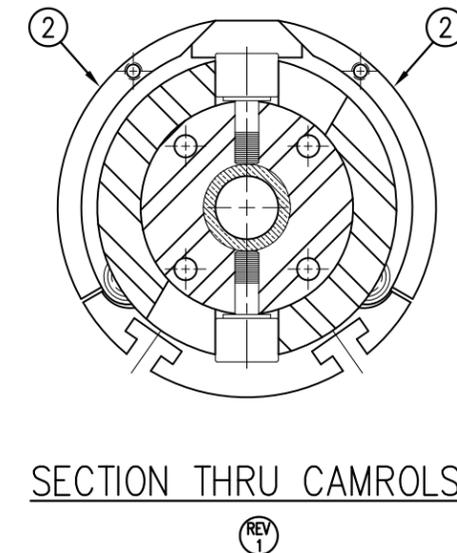
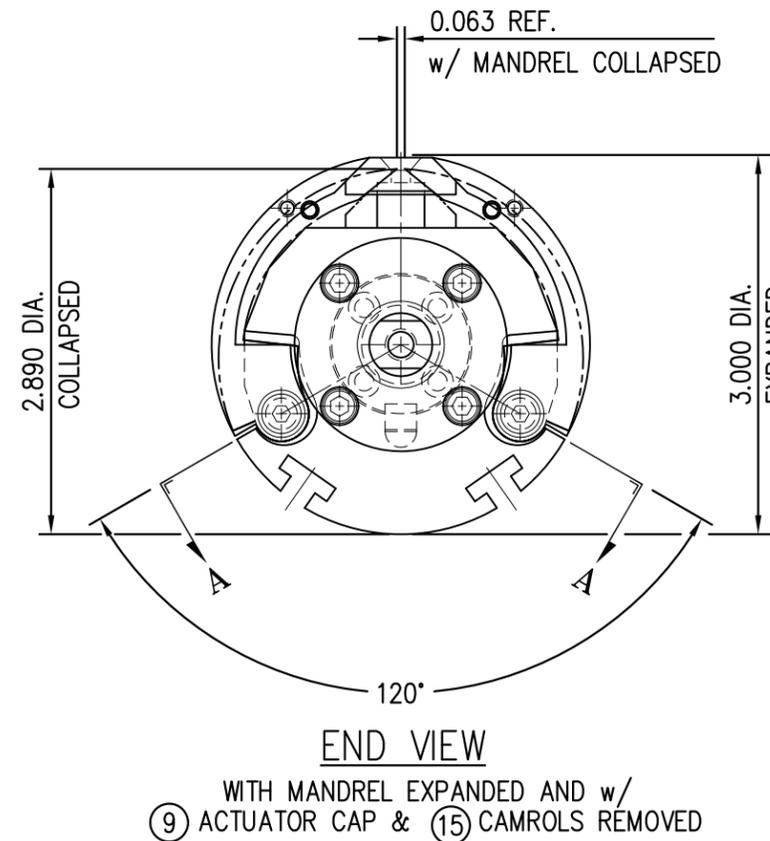
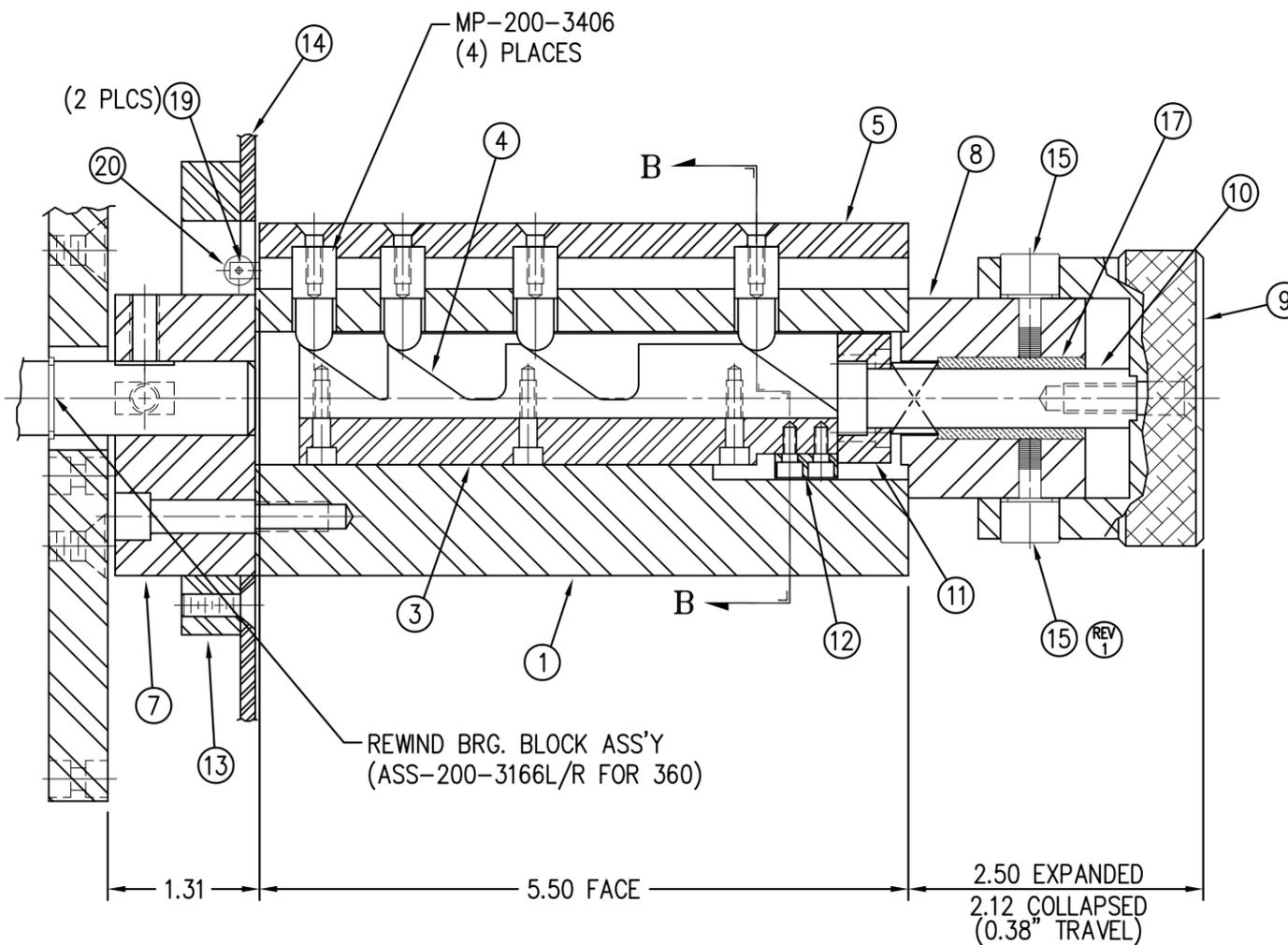
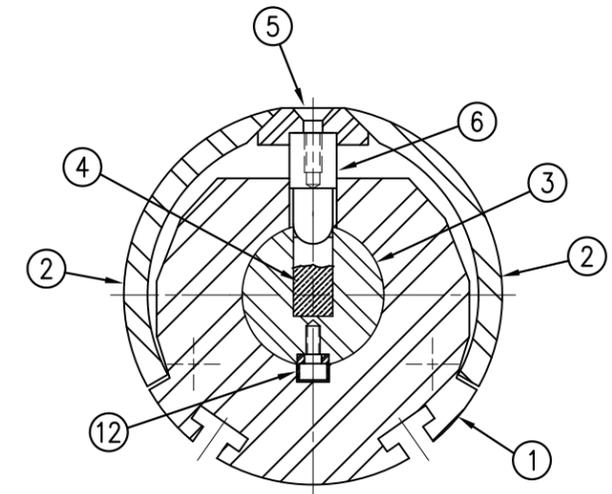


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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: REWIND ASSEMBLY	TITLE: REWIND BEARING BLOCK ASSEMBLY			Dept. Code 70
REV. 0	REV. DESCRIPTION NEW TITLEBLOCK	REV. DATE 02/05/03	REV. BY: TDR	Scale: 1=2	Date: 02/21/98	DRAWN BY: BOB S.
F:\Engineering\Standard Parts\Appliator\360 SERIES\360a\ASS\ASS-200-0128RL						

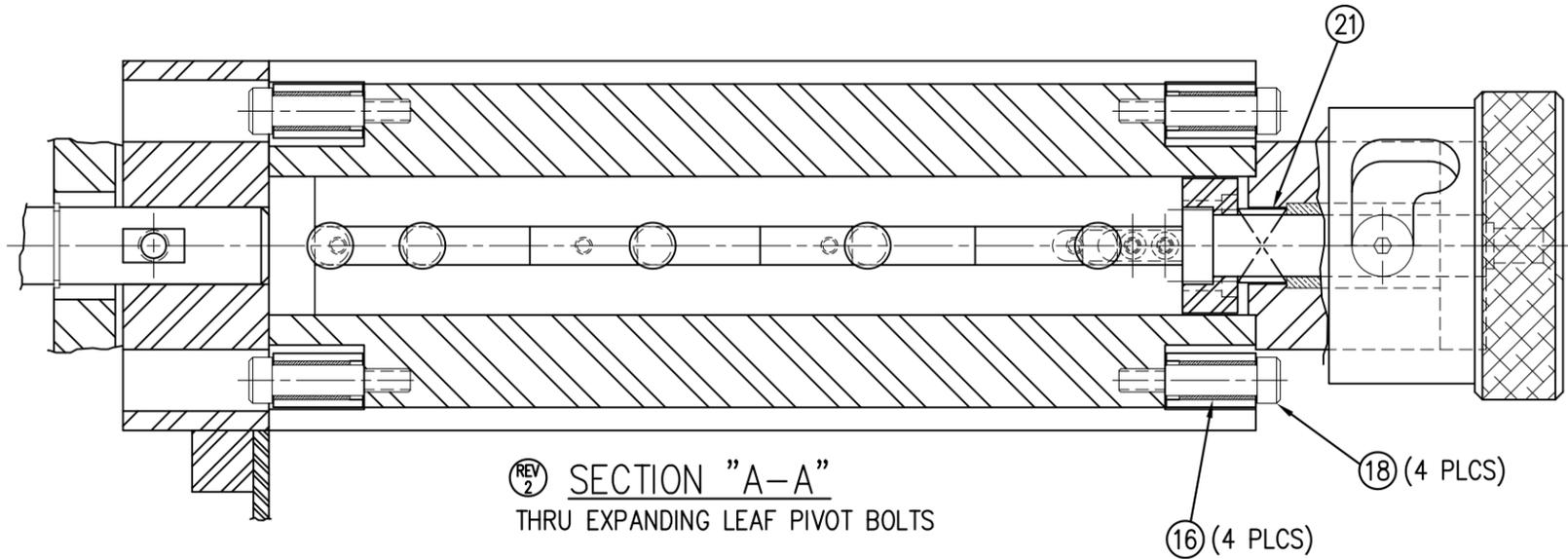


BILL OF MATERIAL			
ASS-200-3140-5			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200-3401-5	FIXED SEGMENT
②	2	MP-200-3402-5	EXPANDING LEAF
③	1	MP-200-3203-5	SLIDING SHAFT
④	1	MP-200-3404-5	WEDGE BAR
⑤	1	MP-200-3405-5	EXPANSION BAR
⑥	4	MP-200-3406	EXPANSION PIN
⑦	1	MP-200-3407	REAR CAP
⑧	1	MP-200-3408	FRONT CAP
⑨	1	MP-200-3409	ACTUATOR CAP
⑩	1	MP-200-3410	ACTUATOR PIN
⑪	1	MP-200-3411	RETAINER PIN
⑫	1	MP-200-3412	BOLT IN KEY
⑬	1	MP-200-3414	REWIND DISK HUB
⑭	1	MP-200-3415	LEXAN REWIND DISK
⑮	2	PM-BE1425	CAM FOLLOWER BEARING
⑯	4	PM-BEBP0980	BRONZE SLEEVE BEARING
⑰	1	PM-BEBP1030	BRONZE SLEEVE BEARING
⑱	4	PM-FASB10053	SHOULDER BOLT, SS
⑲	2	PM-FASP30408	SPRING ANCHOR
⑳	1	PM-FASP30447	EXTENSION SPRING
㉑	1	PM-FASP30523	COMPRESSION SPRING
㉒	1	PM-LB1035	"EXPAND-COLLAPSE" LABEL

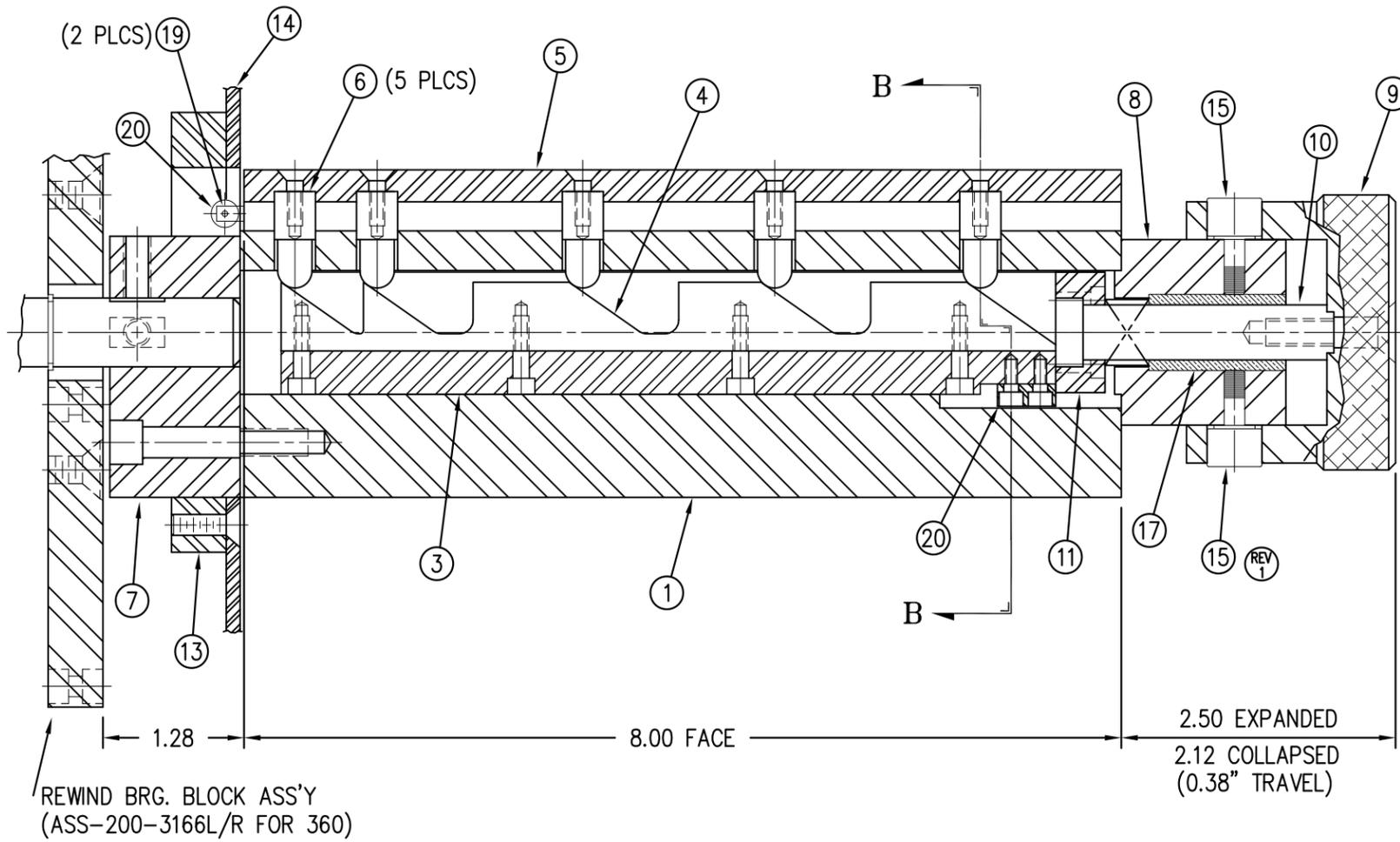


ASS-200-3140-5

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 APPLICATOR SERIES: 360 SERIES
 APPLICATOR SERIES: 5" WIDE
 REV. DESCRIPTION: 2 CORRECTED SECTION "A-A", REMOVED MP-200-3413
 TITLE: COLLAPSIBLE REWIND ASSEMBLY
 REV. BY: TK
 REV. DATE: 12/05/18
 SCALE: 1=1.5
 DATE: 07/01/06
 DRAWN BY: T. KELLY
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Appliator\360 SERIES\360a\ASS-200-3140-5

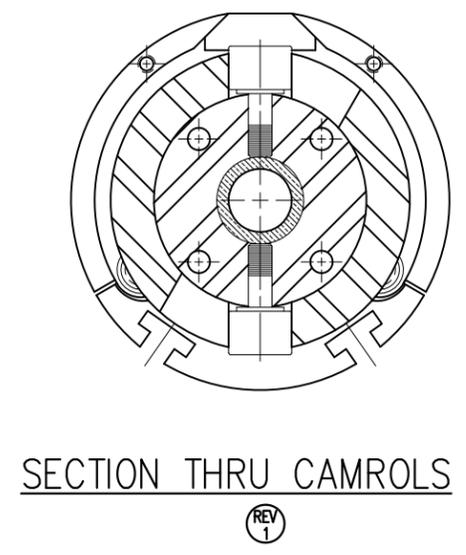
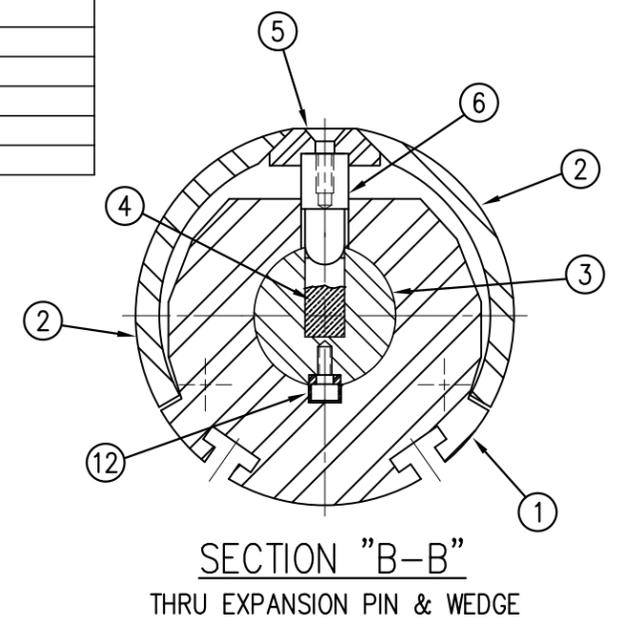
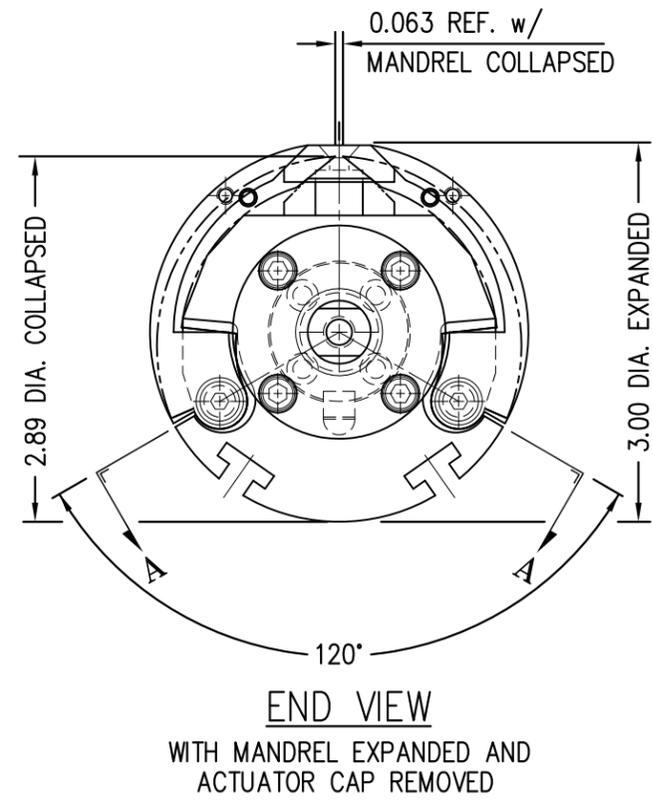


REV 2 SECTION "A-A"
THRU EXPANDING LEAF PIVOT BOLTS



REWIND BRG. BLOCK ASS'Y
(ASS-200-3166L/R FOR 360)

BILL OF MATERIAL			
ASS-200-3140-7			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200-3401-7	FIXED SEGMENT
②	2	MP-200-3402-7	EXPANDING LEAF
③	1	MP-200-3203-7	SLIDING SHAFT
④	1	MP-200-3404-7	WEDGE BAR
⑤	1	MP-200-3405-7	EXPANSION BAR
⑥	5	MP-200-3406	EXPANSION PIN
⑦	1	MP-200-3407	REAR CAP
⑧	1	MP-200-3408	FRONT CAP
⑨	1	MP-200-3409	ACTUATOR CAP
⑩	1	MP-200-3410	ACTUATOR PIN
⑪	1	MP-200-3411	RETAINER PIN
⑫	1	MP-200-3412	BOLT IN KEY
⑬	1	MP-200-3414	REWIND DISK HUB
⑭	1	MP-200-3415	LEXAN REWIND DISK
⑮	2	PM-BE1425	CAM FOLLOWER BEARING
⑯	4	PM-BEBP0980	BRONZE SLEEVE BEARING
⑰	1	PM-BEBP1030	BRONZE SLEEVE BEARING
⑱	4	PM-FASB10053	SHOULDER BOLT, SS
⑲	2	PM-FASP30408	SPRING ANCHOR
⑳	1	PM-FASP30447	EXTENSION SPRING
㉑	1	PM-FASP30523	COMPRESSION SPRING
㉒	1	PM-LB1035	"EXPAND-COLLAPSE" LABEL



ASS-200-3140-7

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 APPLICATOR SERIES: 360 SERIES
 APPLICATOR SERIES: 7.5" WIDE
 GROUP: REWIND
 TITLE: COLLAPSIBLE REWIND ASSEMBLY
 REV. DATE: 12/05/18
 REV. BY: TK
 SCALE: 1=1.5
 DATE: 07/11/06
 DRAWN BY: T. KELLY
 DEPT. CODE: 70
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BILL OF MATERIAL

ASS-200-X129

ASS-200-X129

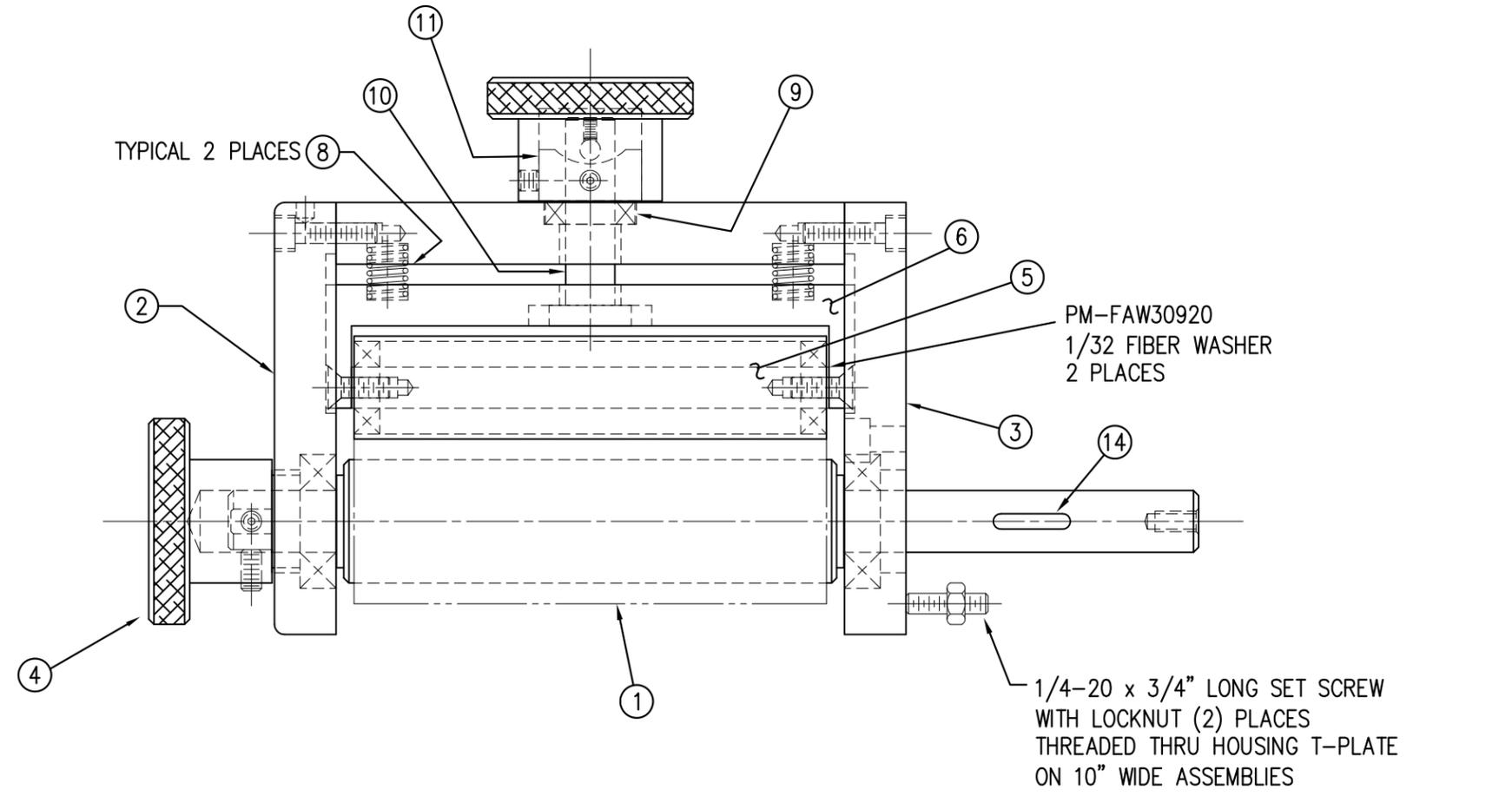
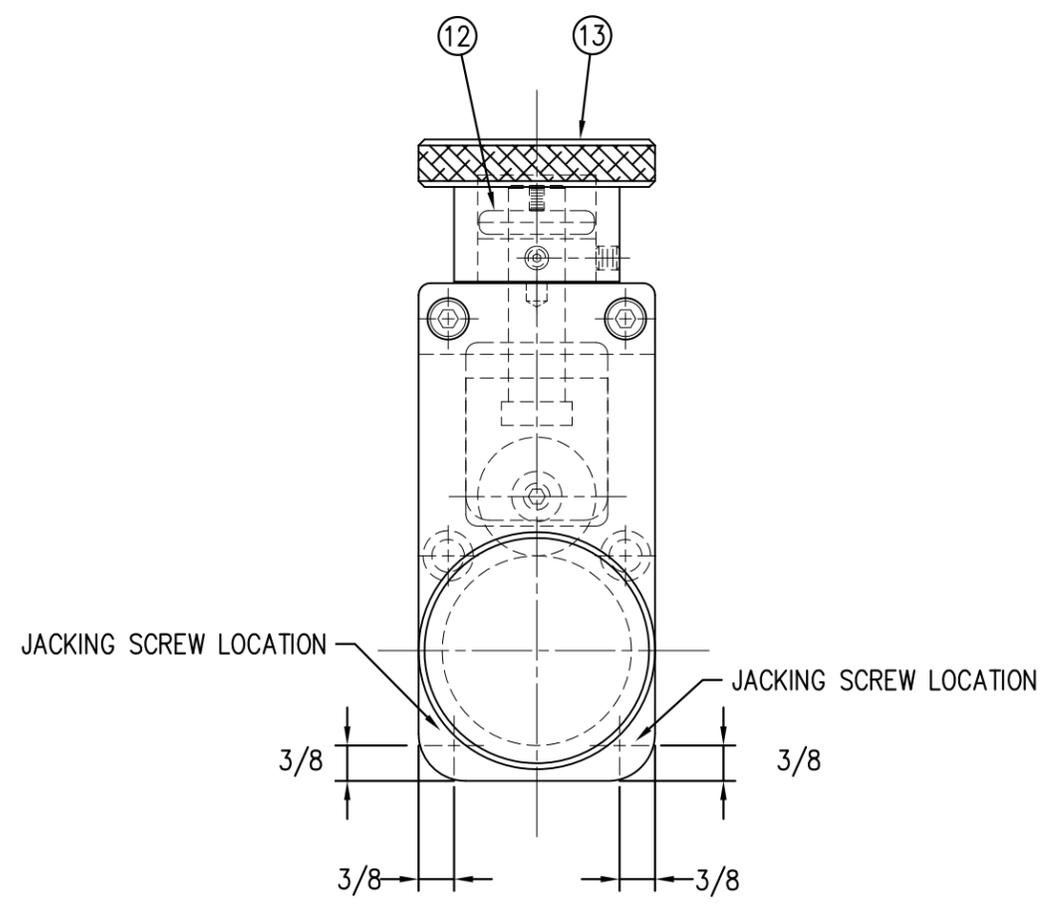
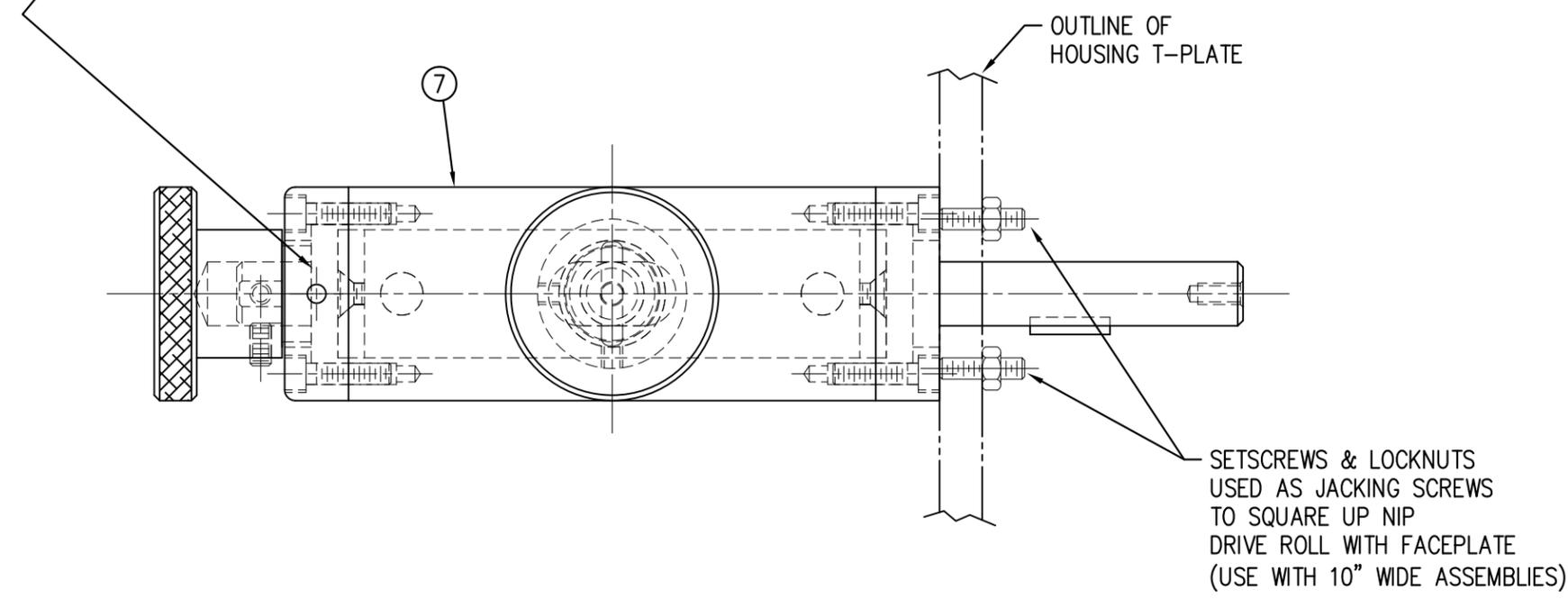
5" WIDE	-0129
7.5" WIDE	-2129
10" WIDE	-5129

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 APPLICATOR SERIES: 360 APPLICATOR WIDTH(S): 5" / 7.5" / 10" GROUP: HOUSING ASSEMBLY
 REV. DATE: 01/21/19 REV. BY: TDR REV. DATE: 02/21/98 SCALE: 1=2 DRAWN BY: BOB S. TITLE: NIP DRIVE ROLL ASSEMBLY
 Dept. Code: 70 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200-X129

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200-X242	5/7.5/10 DRIVE ROLL
②	1	SAS-200-0129o	OUTSIDE DRIVE ROLL SUPPORT
③	1	SAS-200-0129i	INSIDE DRIVE ROLL SUPPORT
④	1	MP-200-0223	DRIVE ROLL KNOB
⑤	1	ASS-200-X130	5/7.5/10 NIP ROLL ASSEMBLY w/ SHAFT
⑥	1	MP-200/X240	5/7.5/10 NIP ROLL YOKE
⑦	1	MP-200-X239	5/7.5/10 NIP ROLL TOP SUPPORT
⑧	2	PM-FASP30428	COMPRESSION SPRING
⑨	1	PM-BE1230	THRUST BEARING
⑩	1	MP-200-0214	LIFT ROD
⑪	1	MP-200-0235	LIFT CAM
⑫	1	MP-200-0213	LIFT ROD PIN
⑬	1	MP-200-0224	NIP ROLL KNOB
⑭	1	PM-FAKS30520	KEY
	2	PM-FASH430154	SHCS, 5/16"-18 x 1" Lg.
	2	PM-FASS48058	SET SCREW, 1/4-20 x 3/4" Lg.
	2	PM-FANU20004	LOCKNUT, 1/4-20
	2	PM-FAW30920	RED 1/32 FIBER WASHER
	2	PM-FASH430079	SHCS, 1/4-20 x 7/8" Lg.

REV 3

NOTE: 0.219 DIA. DRILL IN PART MP-200-0236 (REV 2) IS ONLY ADDED FOR CE APPLICATORS OR FOR OTHER APPLICATORS WHEN THE GUARD OPTION (ASS-200-X152) IS ORDERED



REV. DESCRIPTION: 3 UPDATED BOM

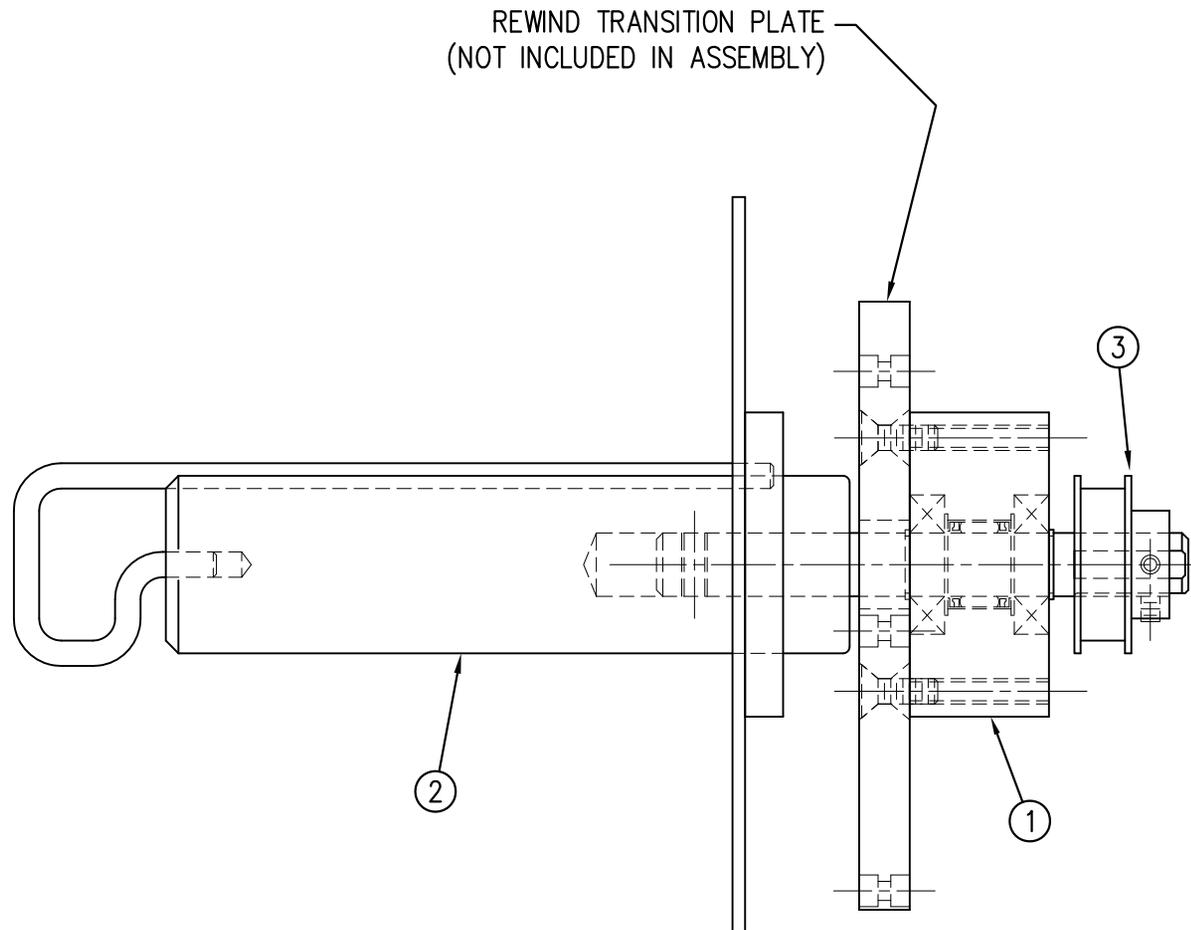
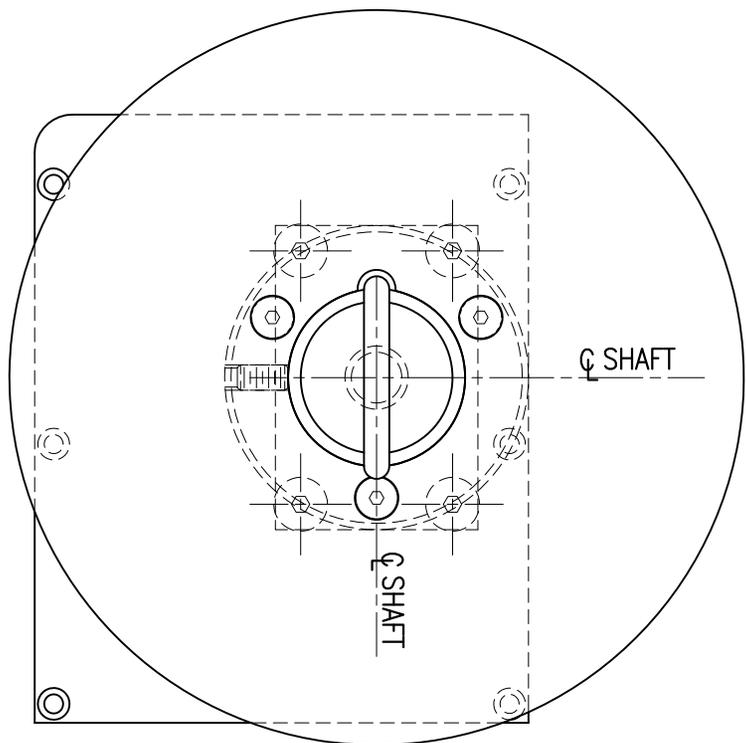
BILL OF MATERIAL

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



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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 SERIES\ 360a\ASS\ASS-200-X140RL

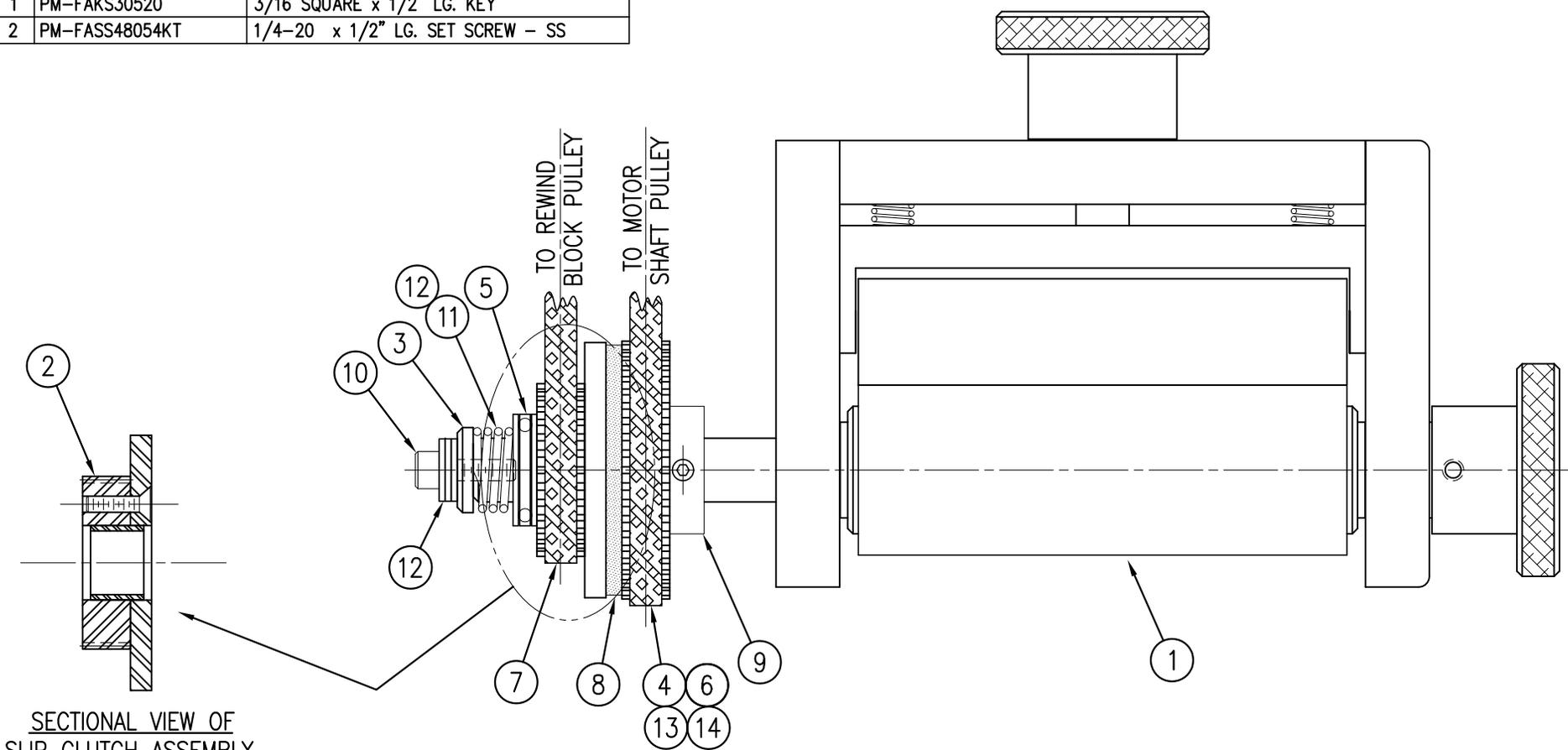
BILL OF MATERIAL

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-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
⑬	1	PM-FAKS30520	3/16 SQUARE x 1/2" LG. KEY
⑭	2	PM-FASS48054KT	1/4-20 x 1/2" LG. SET SCREW - SS



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APPLICATOR SERIES: 360	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 SERIES\ 360a\ASS\ASS-200-X142

BILL OF MATERIAL

ASS-211-0105-X

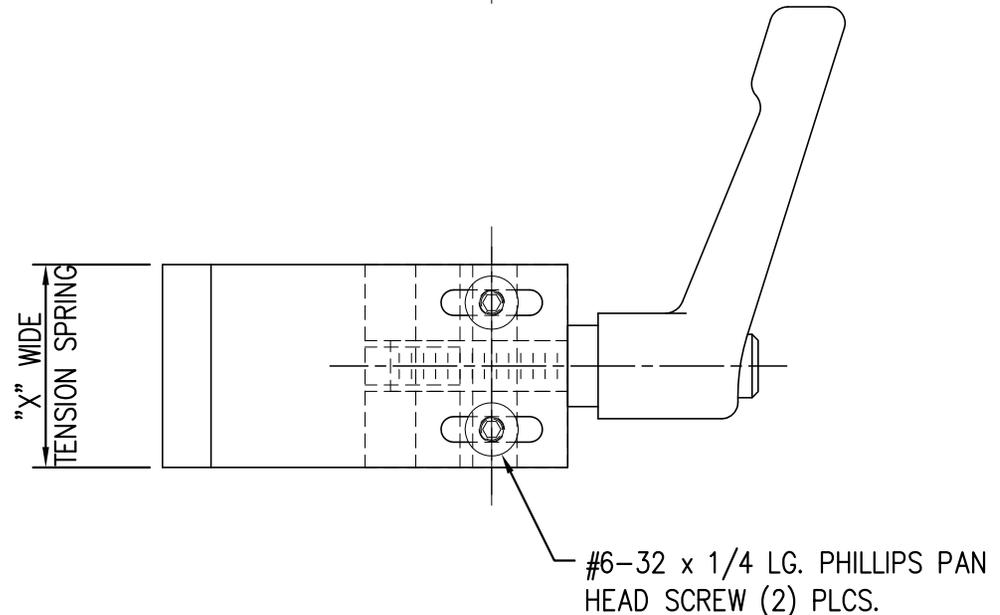
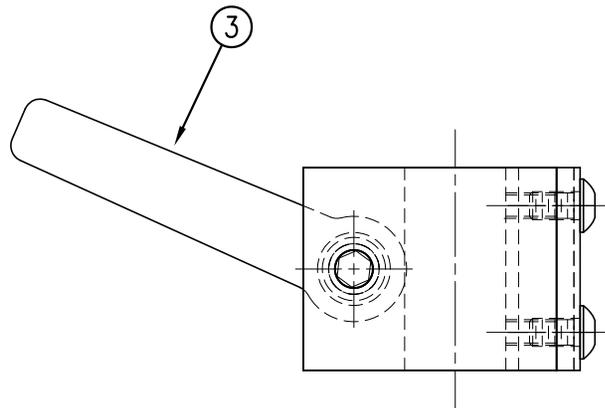
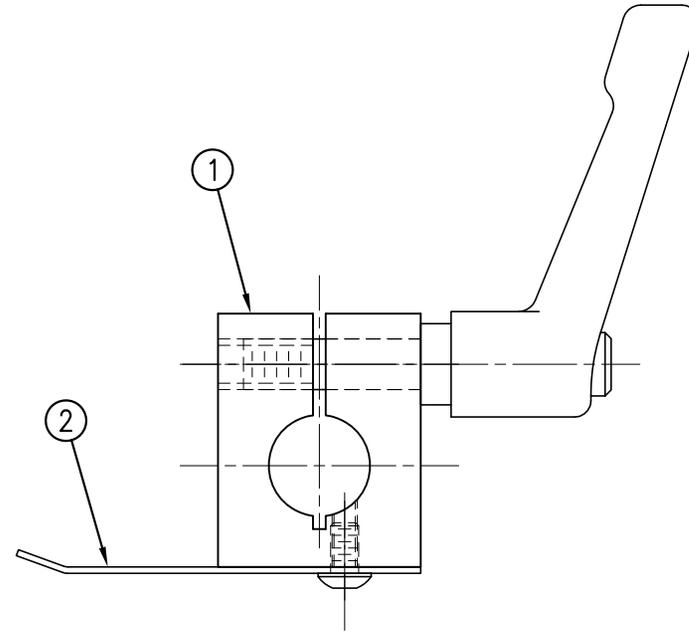
ASS-211-0105-X

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

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-211-0201	SPRING BLOCK
②	1	PM-211-0216-X	"X" WIDE WEB TENSION SPRING (see note)
③	1	PM-LL0902	LOCK LEVER, 1/4-20 x 0.98 LG. SS

NOTE:

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



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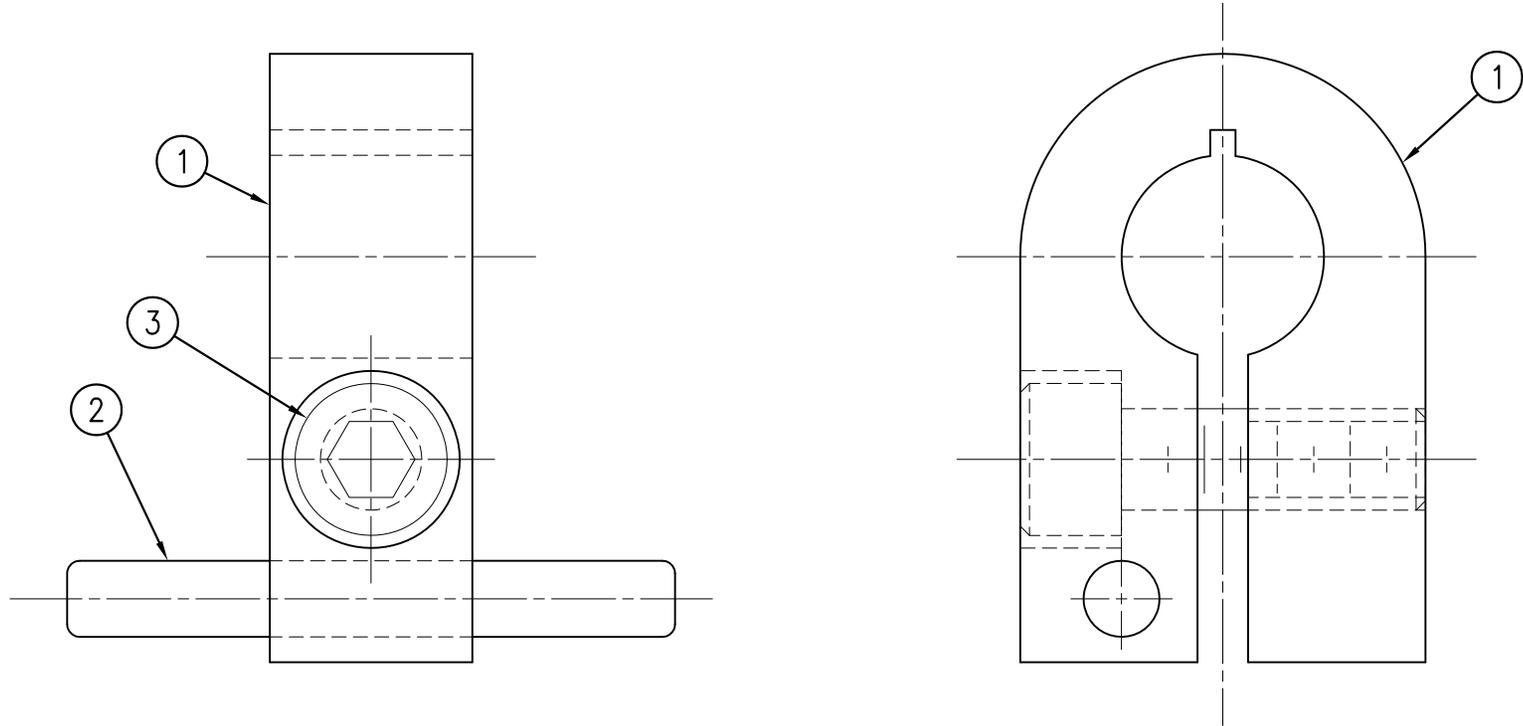
APPLICATOR SERIES: 360/3600	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: TAMP/BLOW/MERGE/RVB	TITLE: SPRING BLOCK ASSEMBLY	Dept. Code 70
REV. 1	REV. DESCRIPTION UPDATED BOM & TITLE BLOCK	REV. DATE 03/17/06	REV. BY: TK	Scale: 1=1 Date: 02/21/98 DRAWN BY: BOB S.
			F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\ASS\ASS-211-0105-X	

BILL OF MATERIAL

ASS-211-0110

ASS-211-0110

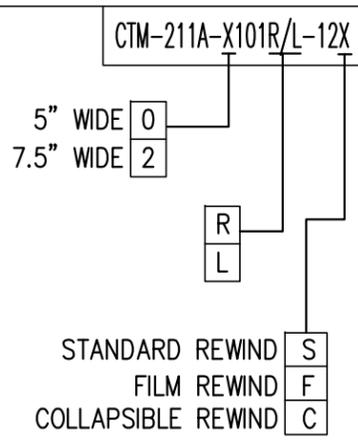
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-211-0223	SPRING BLOCK STOP COLLAR
②	1	PM-FADP1001	DOWEL PIN, 3/16" DIA. x 1.50 LG.
③	1	PM-FASH430078	SHCS, 1/4-20 x 0.75 LG. SS



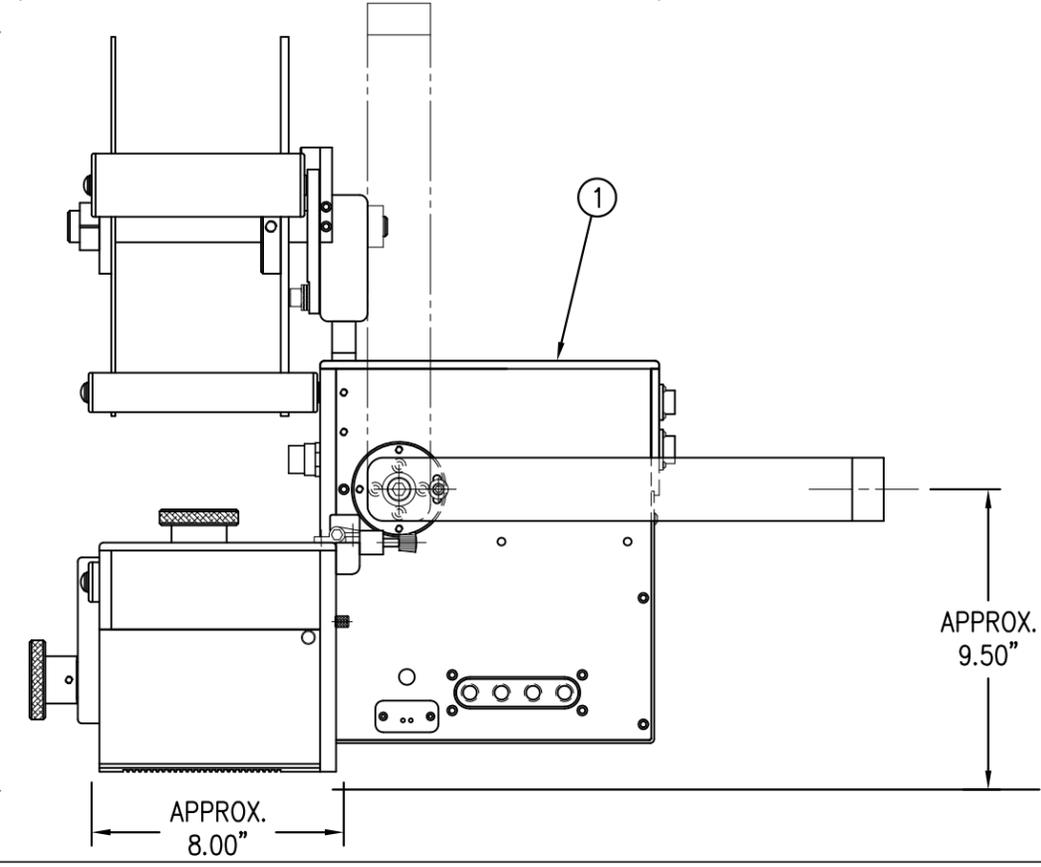
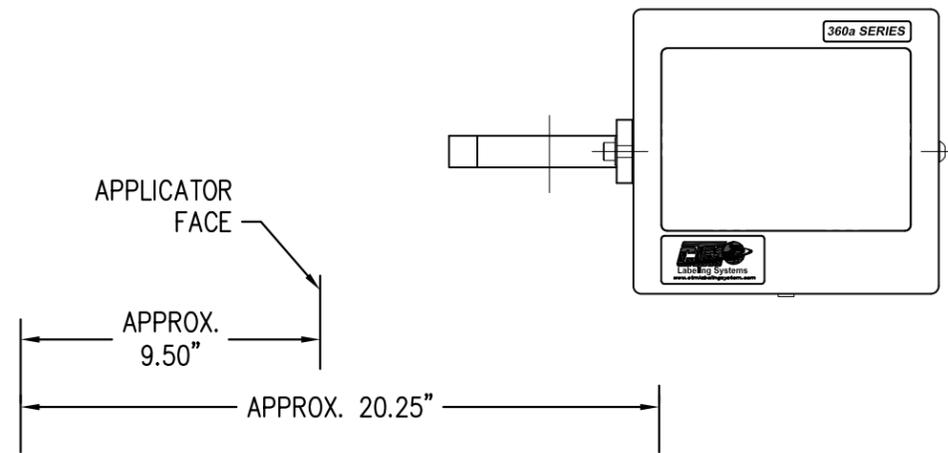
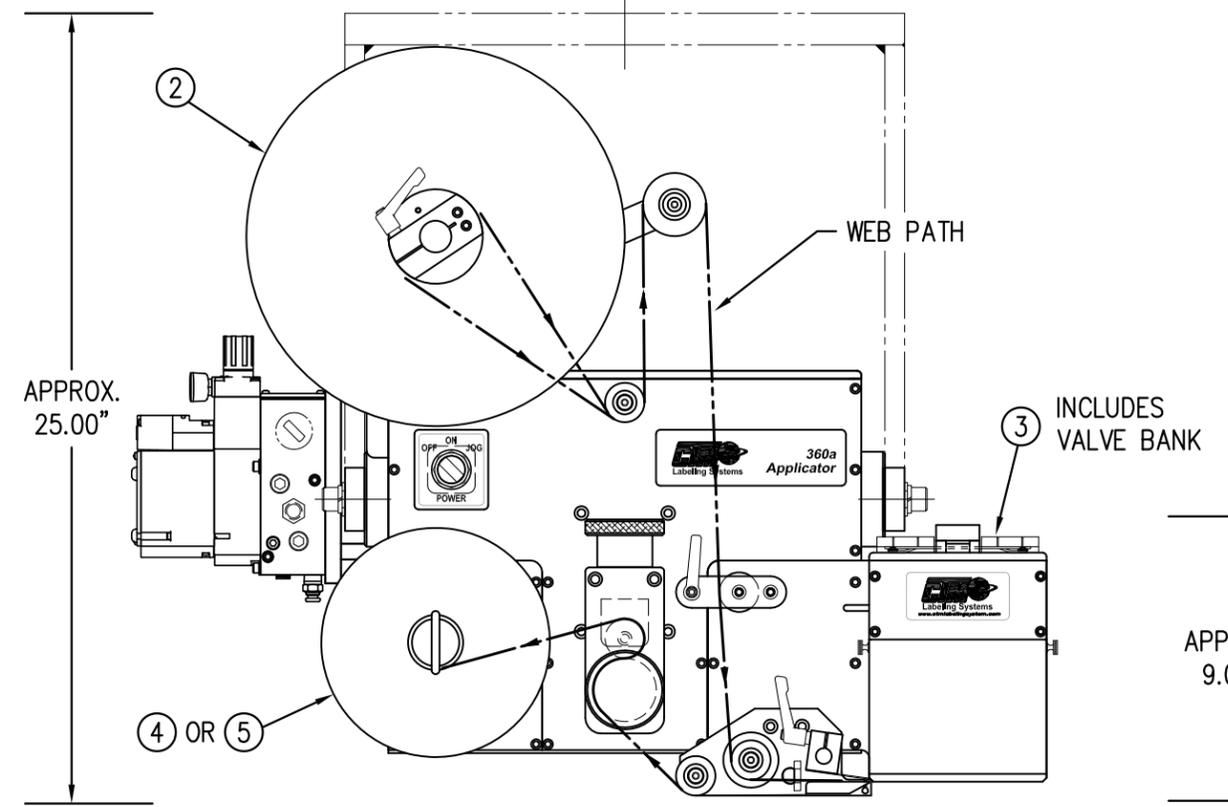
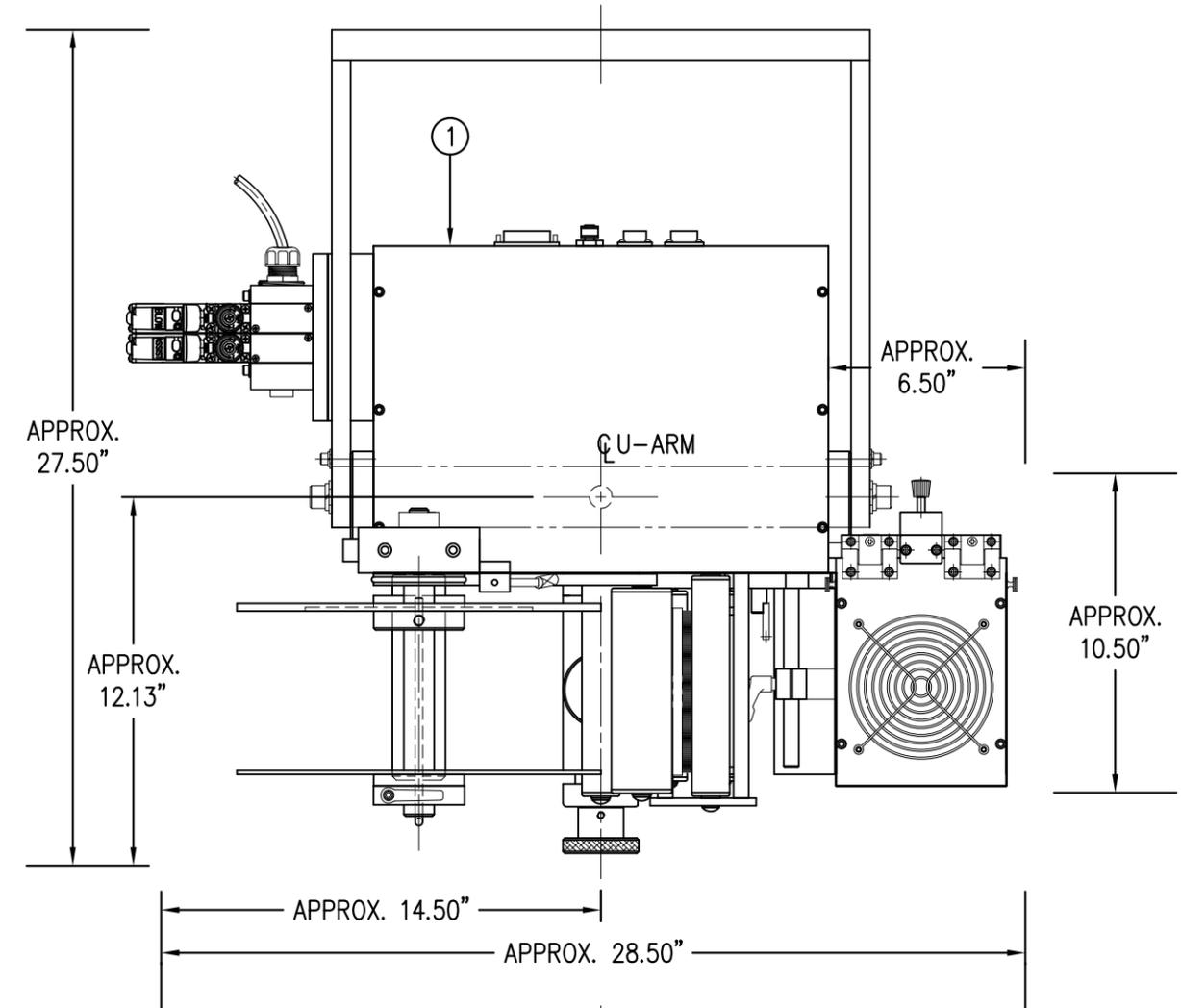
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APPLICATOR SERIES: 360/3600	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: TAMP/BLOW/MERGE/RVB	TITLE: SPRING BLOCK STOP COLLAR ASSEMBLY	Dept. Code 70
REV. 1	REV. DESCRIPTION UPDATED BOM & TITLE BLOCK	REV. DATE 03/14/06	REV. BY: TK	Scale: 2=1
			Date: 02/18/02	DRAWN BY: TDR
				F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\ASS\ASS-211-0110

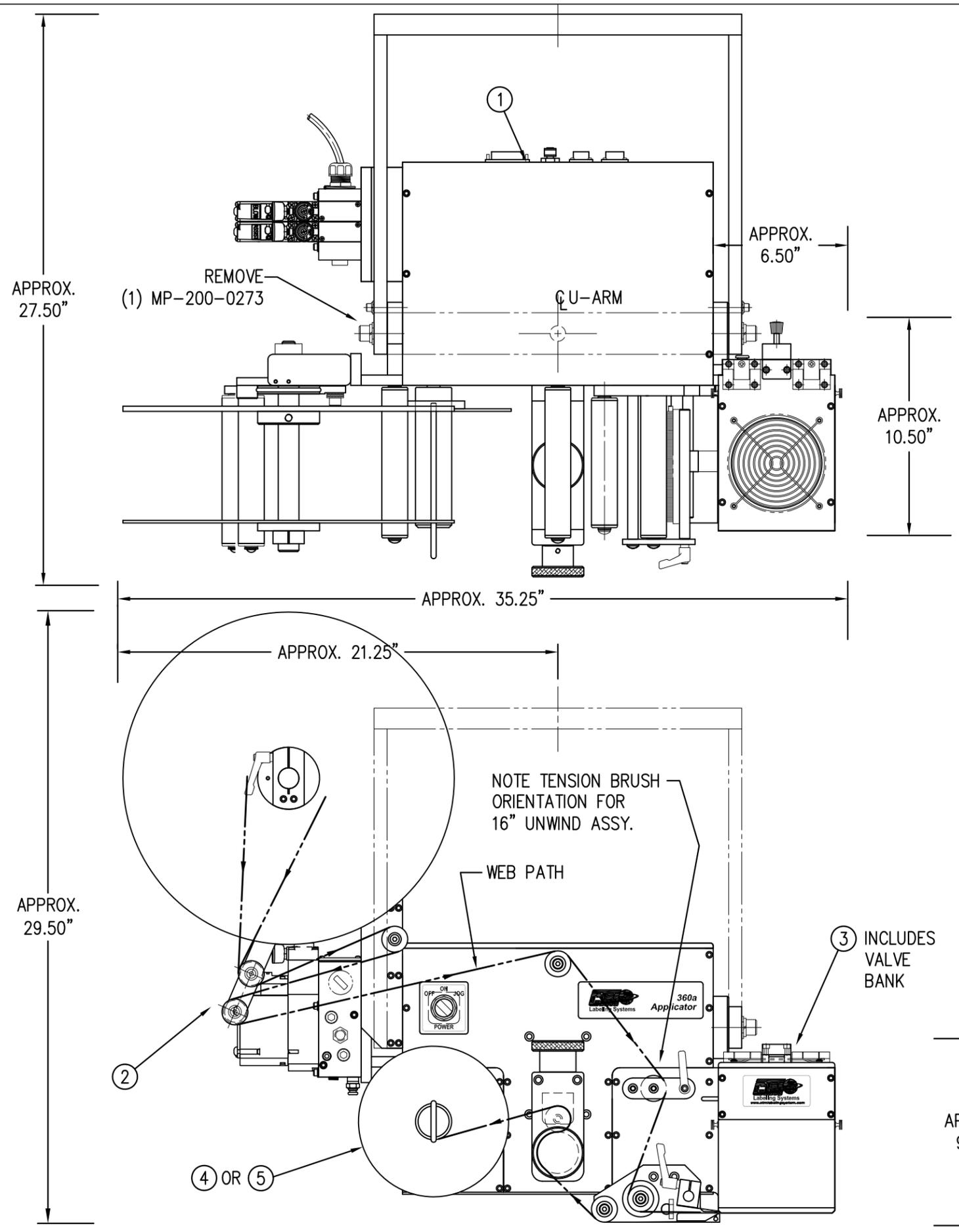
BILL OF MATERIAL			
CTM-211A-X101R/L-12X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	5/7.5 CORE UNIT ASSEMBLY
②	1	MOD-200-X121R/L	5/7.5 12" UNWIND ASSEMBLY
③	1	MOD-211-X101R/L	5/7.5 AIR BLOW BOX NOSE ASSEMBLY
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)



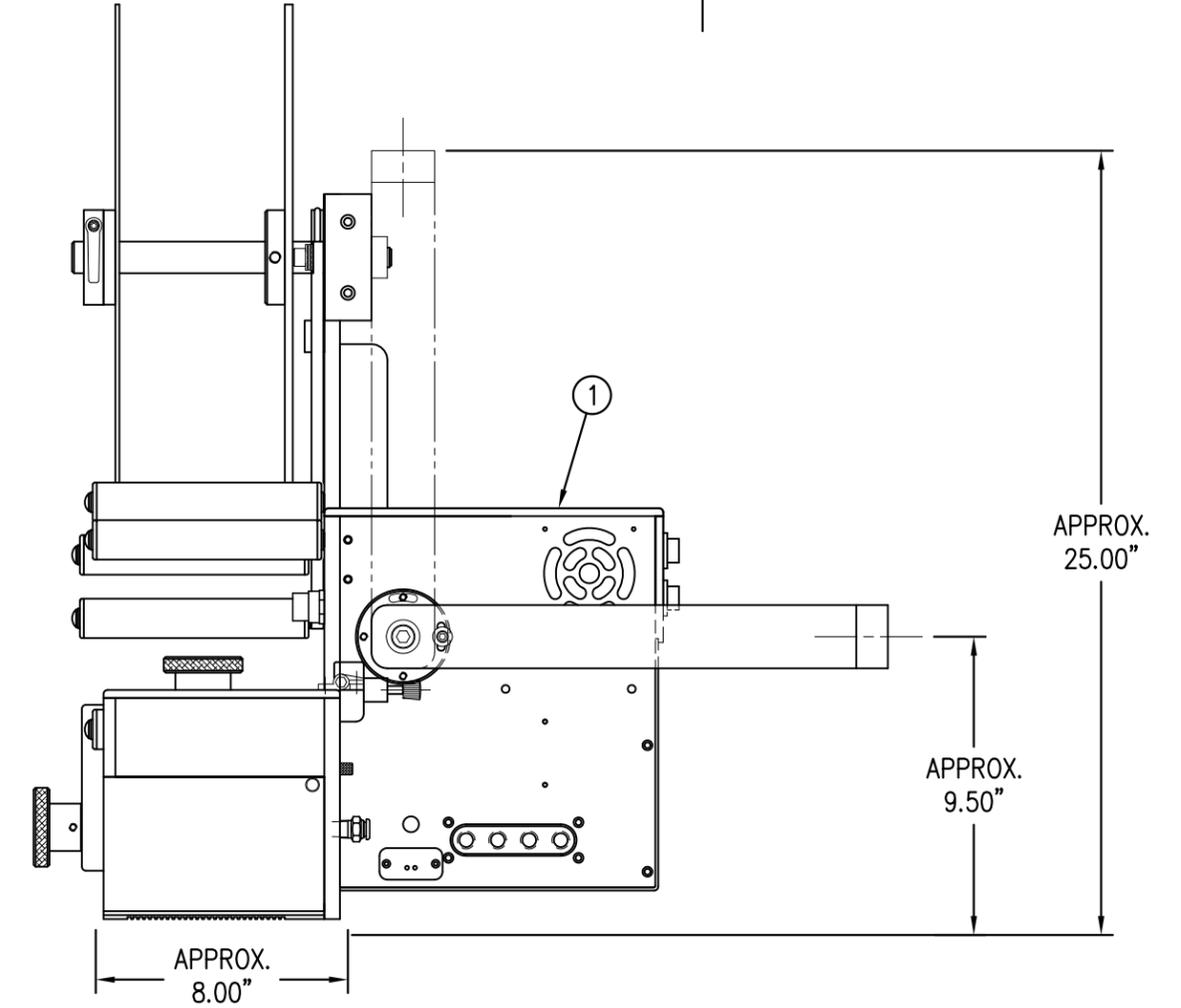
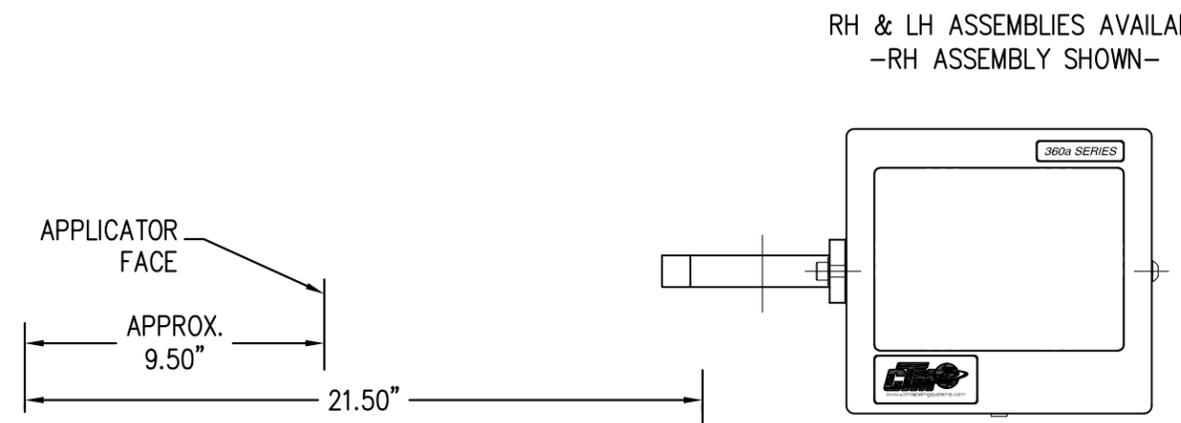
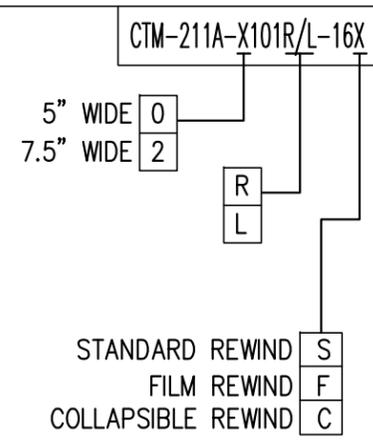
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



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.
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 GROUP: AIR BLOW
 TITLE: 360a AIR BLOW APPLICATOR w/ 12" UNWIND
 REV. DESCRIPTION: 1 NEW DRAWING FOR 360a - UPDATE DECALS & DISPLAY
 REV. BY: TDR
 REV. DATE: 12/15/17
 SCALE: 1=5
 DATE: 12/15/17
 DRAWN BY: T. Rhodes
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\CTM-211A-X101RL-12X
 Dept. Code: 70



BILL OF MATERIAL			
CTM-211A-X101R/L-16X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	5/7.5 CORE UNIT ASSEMBLY
②	1	MOD-200-3121R/L-X	5/7.5 16" UNWIND ASSEMBLY
③	1	MOD-211-X101R/L	5/7.5 AIR BLOW BOX NOSE ASSEMBLY
④	1	ASS-200-X147	5/7.5 STANDARD REWIND MANDREL
	1	ASS-200-X137	5/7.5 FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	5/7.5 COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)



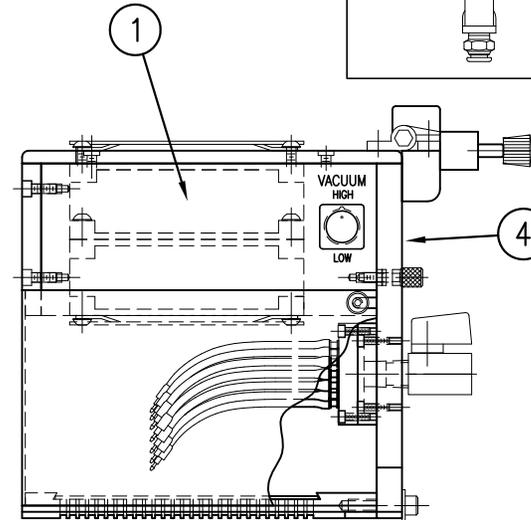
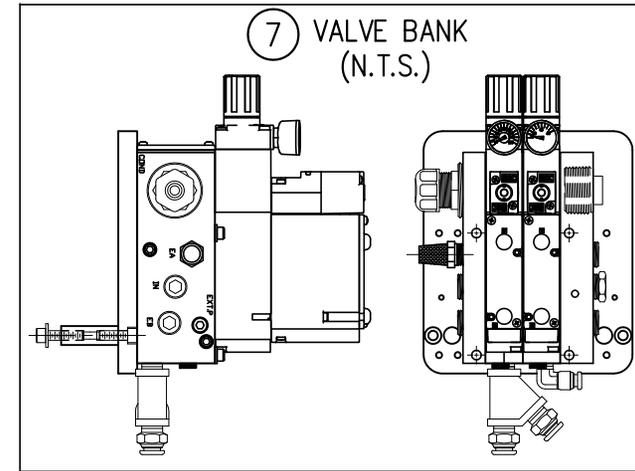
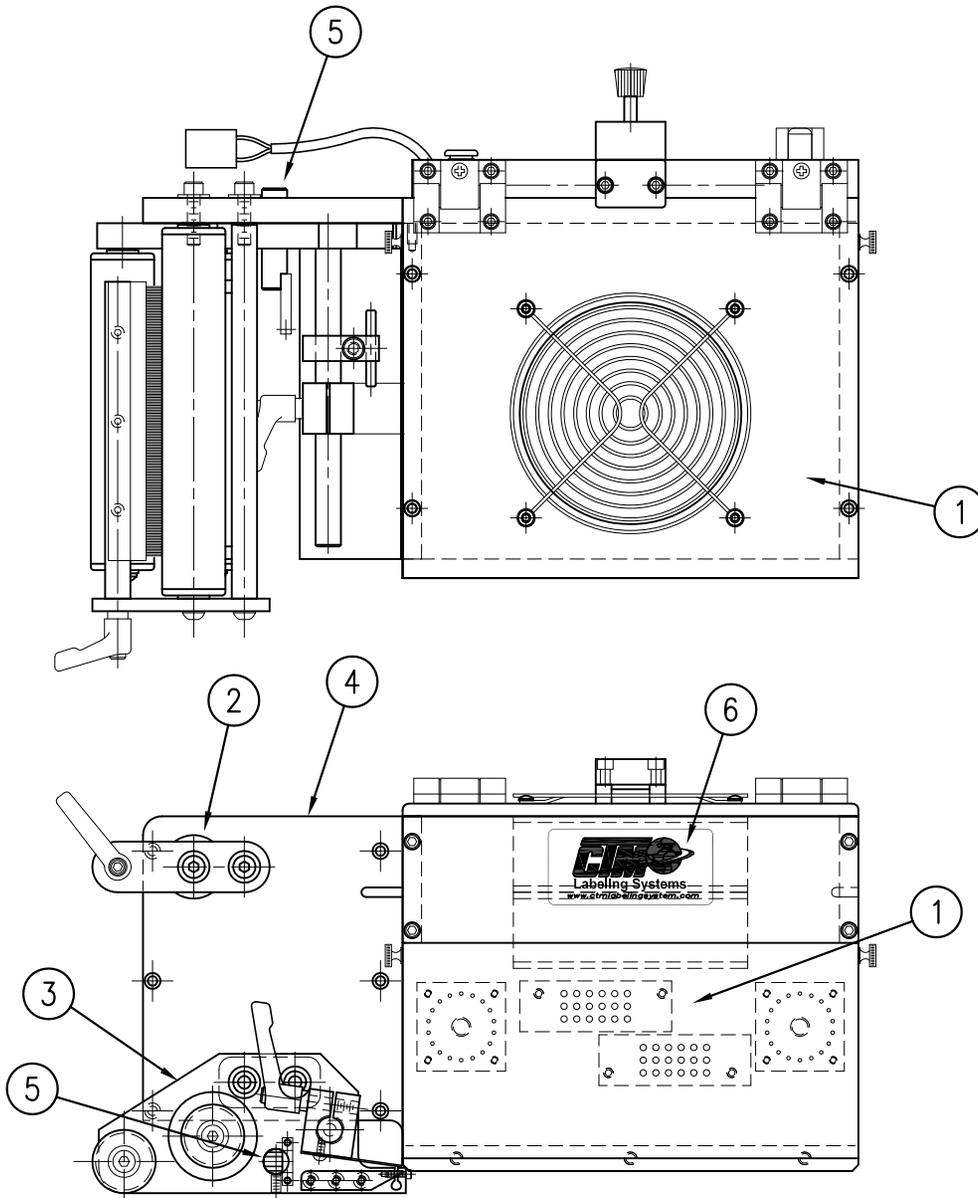
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 REV. DESCRIPTION: 1 NEW DRAWING FOR 360a - UPDATE DECALS & DISPLAY
 REV. DATE: 12/15/17
 REV. BY: TDR
 SCALE: 1=5
 DATE: 12/15/17
 DRAWN BY: T. Rhodes
 TITLE: 360a AIR BLOW APPLICATOR w/ 16" UNWIND
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\CTM-211A-X101RL-16X

RH & LH ASSEMBLIES AVAILABLE
 - RH ASSEMBLY SHOWN -

BILL OF MATERIAL			
MOD-211-0101ER/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	1	ASS-211-0101ER/L	AIR BLOW BOX w/TRANSITION PLATE
7	1	ASS-211-0106EM	VACUUM BOX VALVE BANK

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

BILL OF MATERIAL			
ASS-211-0101ER/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-211-0104E-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-211-0215E	AIR BLOW BOX TRANSITION PLATE
⑤	1	ASS-211-0108-2	STANDARD FIBER OPTIC SENSOR w/ 2" Lg. MOUNTING SHAFT
⑥	1	PM-LB1021	CTM LOGO
6	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS



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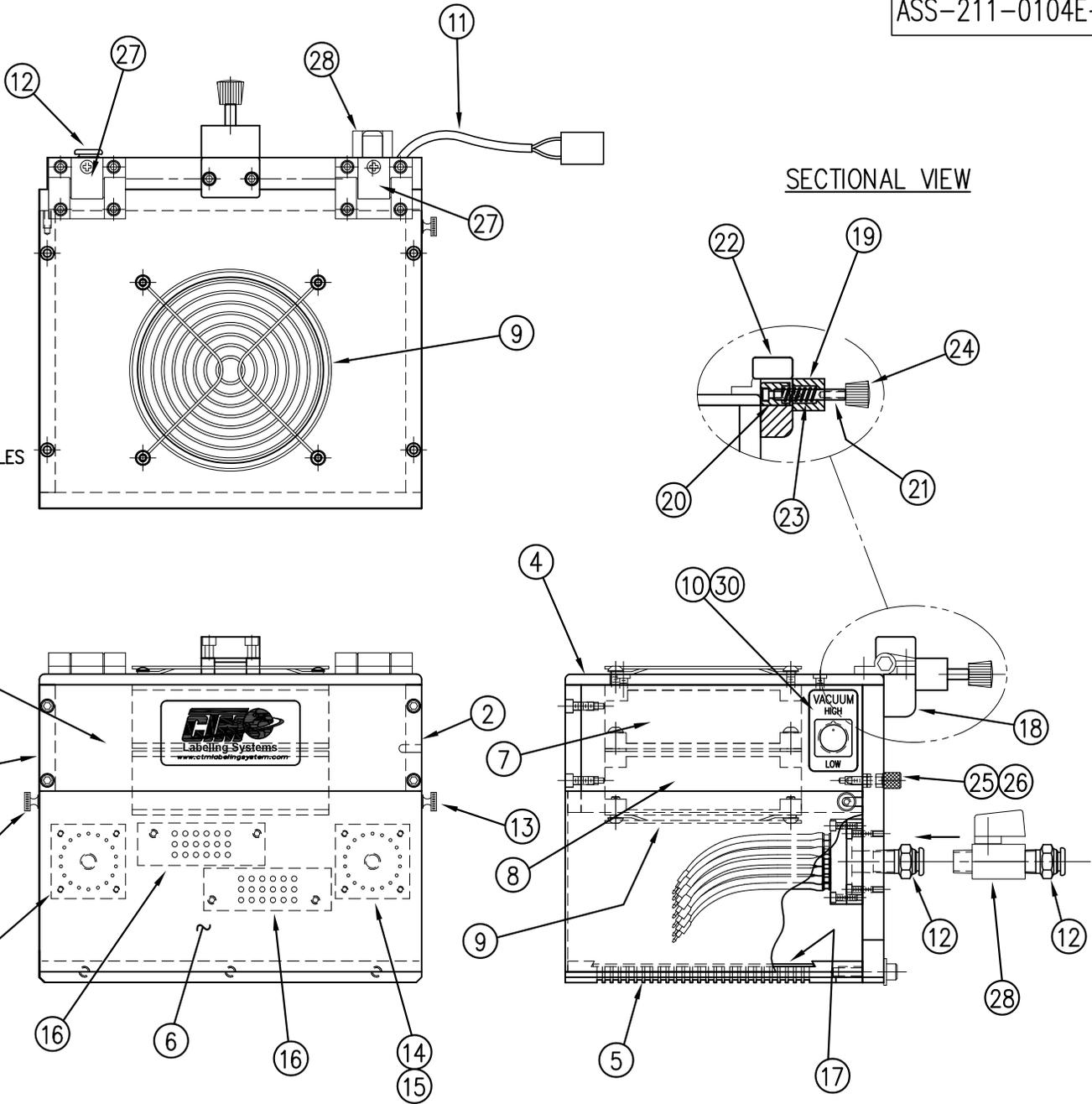
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: AIR BLOW	TITLE: BLOW BOX ASSEMBLY w/TRANSITION PLATE	Dept. Code 70
REV. 2	REV. DESCRIPTION ADDED CTM LOGO	REV. DATE 10/21/16	REV. BY: TDR	Scale: 1=4
			DATE: 03/01/06	DRAWN BY: J. Greeneisen
				F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\MOD\MOD-211-0101ER/L

BILL OF MATERIAL

ASSEMBLY	ASS-211-0104E-X		SOLD
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
11	1	BLOW BOX FAN WIRING HARNESS FOR 6" & 12" SNORKLES	ASS-200-0413-B
11	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
12	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	CTM LOGO LABEL	PM-LB1021
30	1	VACUUM HI/LO LABEL	PM-LB1036
	1	WARNING LABEL	PM-WL1220

REV 1

REV 3



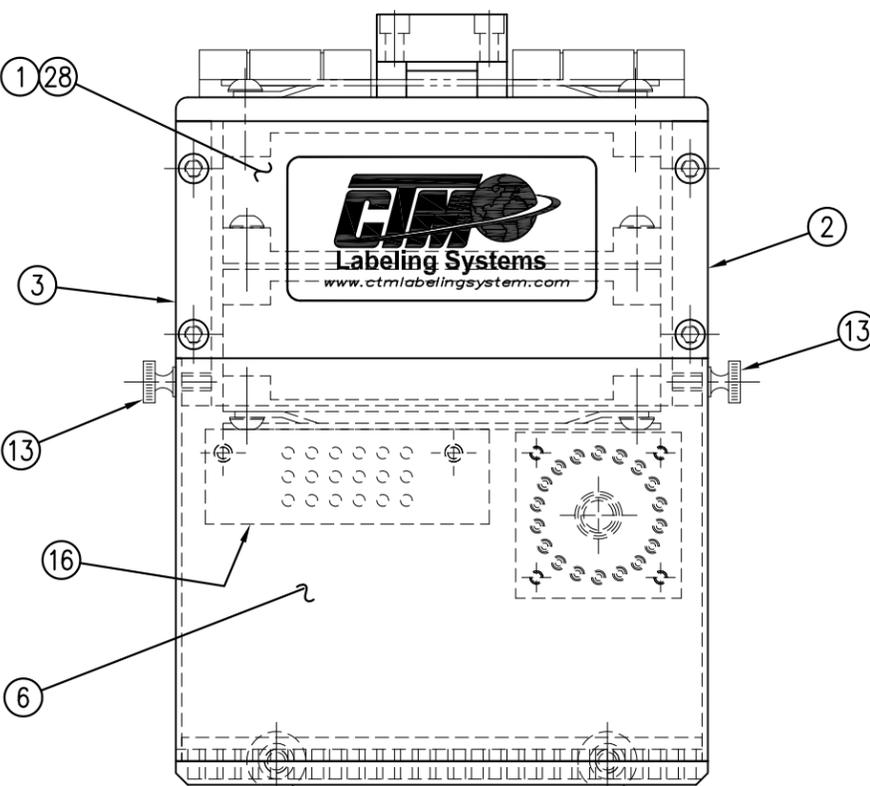
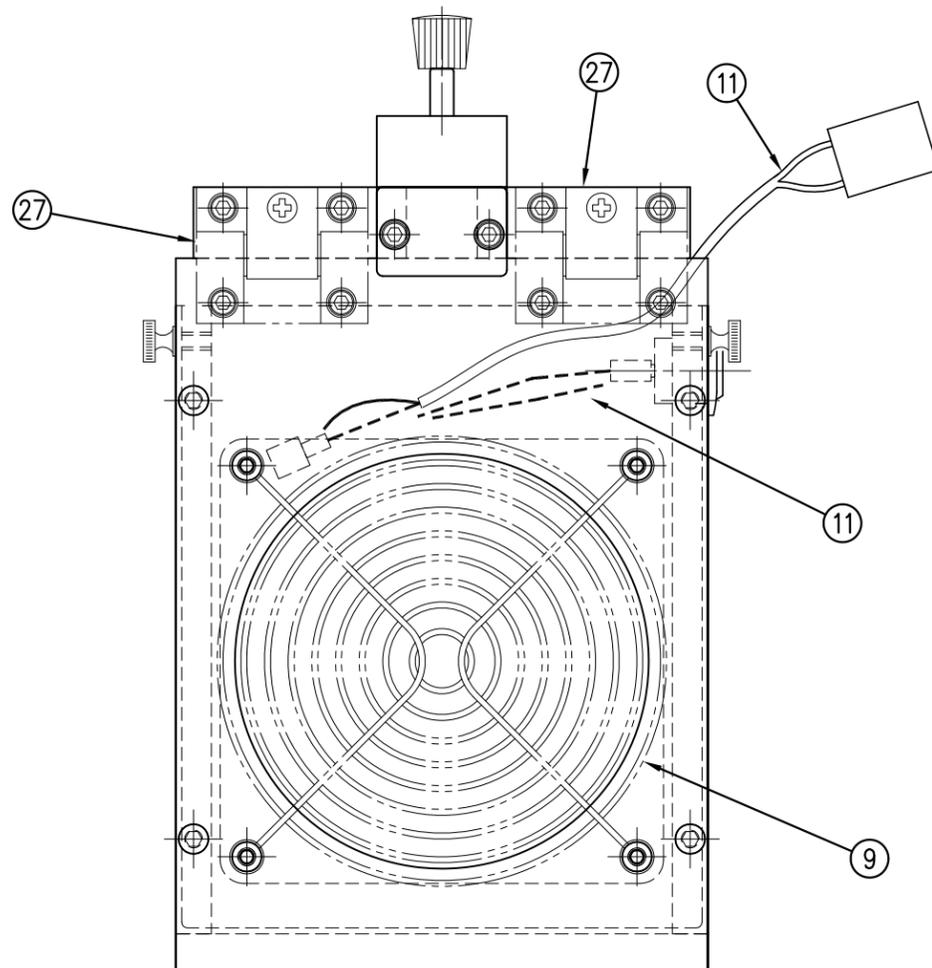
FOR STD.
FOR SNORKLES

SECTIONAL VIEW

NOTE: TUBE HOLDERS SHOWN IN RH LAYOUT

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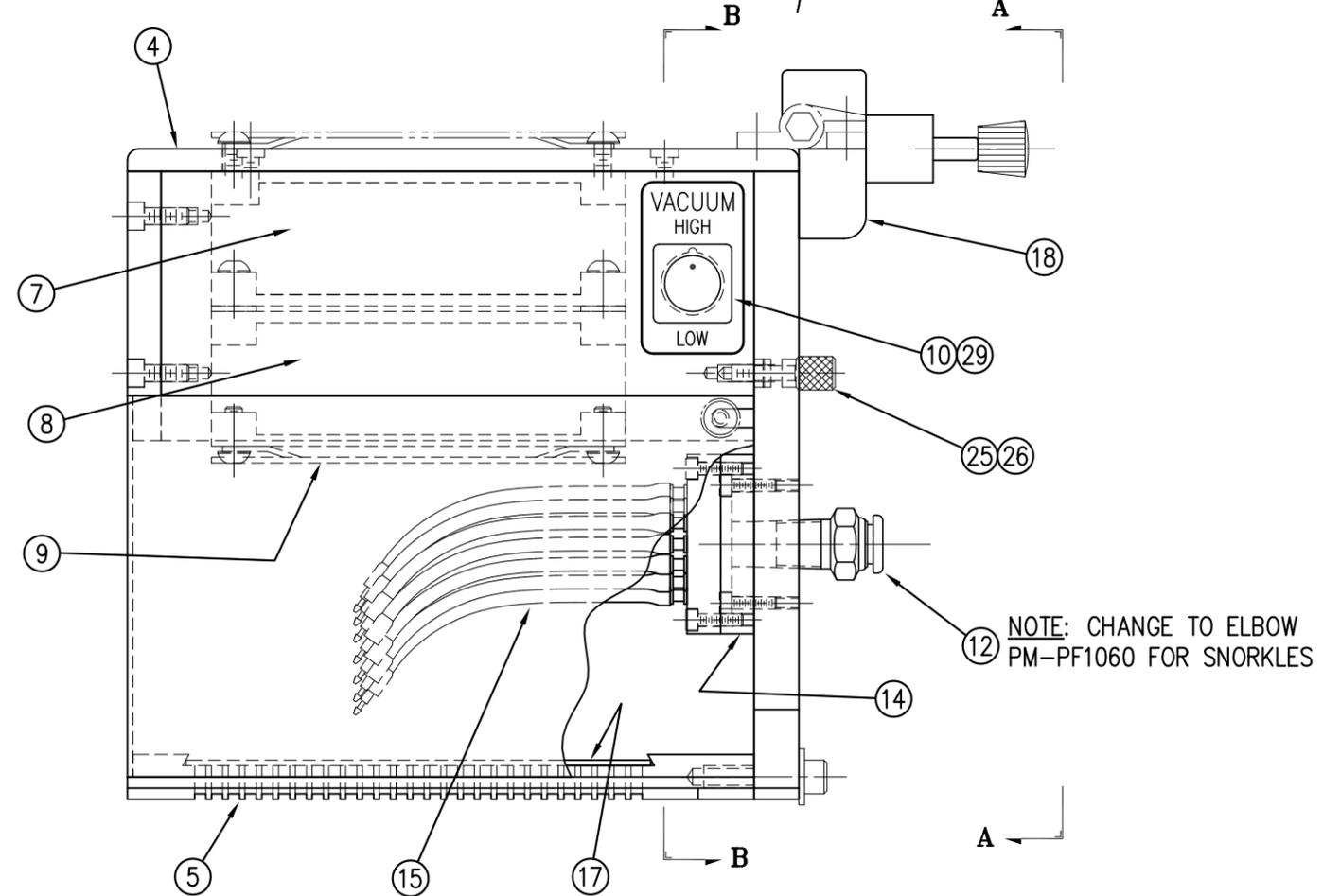
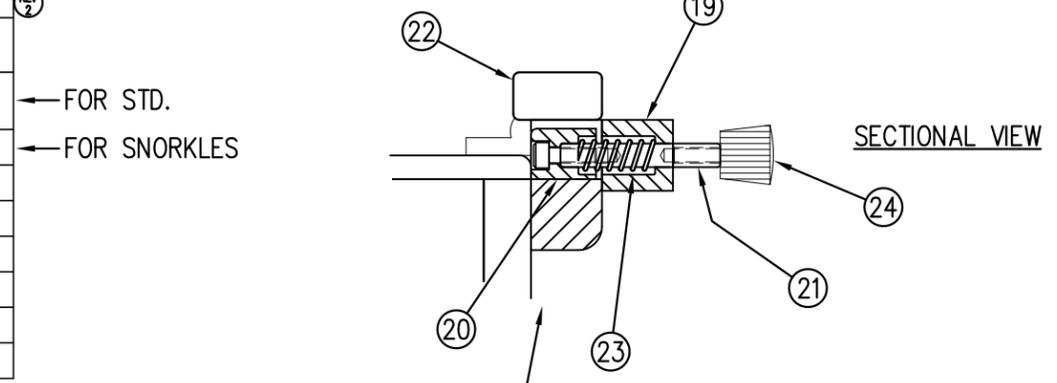
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: AIR BLOW BOX	TITLE: EXTENDED BLOW BOX ASSEMBLY w/ TRANSITION PLATE	Dept. Code 70
REV. 3	REV. DESCRIPTION ADDED CTM LOGO LABELS	REV. DATE 12/27/16	REV. BY: TDR	Scale: 1=4
		Date: 03/01/06	DRAWN BY: J. Greeneisen	F:\Engineering\Standard Parts\Appliator\360 SERIES\360a\ASS\ASS-211-0104E-X



BILL OF MATERIAL				SOLD
ASS-211-0104				.
ASSEMBLY	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	.
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	REV 2
	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	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	S
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	CTM LOGO LABEL	PM-LB1021	.
㉙	1	VACUUM SWITCH HI/LO LABEL	PM-LB1036	.
	1	WARNING LABEL	PM-WL1220	.

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



NOTE: CHANGE TO ELBOW PM-PF1060 FOR SNORKLES

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 APPLICATOR SERIES: 360
 REV. DATE: 12/27/16
 TITLE: AIR BLOW BOX
 REV. BY: TDR
 SCALE: 1=2
 DATE: 02/21/98
 DRAWN BY: BOB S.
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-211-0104-X

BILL OF MATERIAL

ASS-211-0106EM

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-C02000	CORD GRIP
⑥	1	PE-COND1084	STEEL REDUCER
⑦	2	PM-FT1200	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-FT1450	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

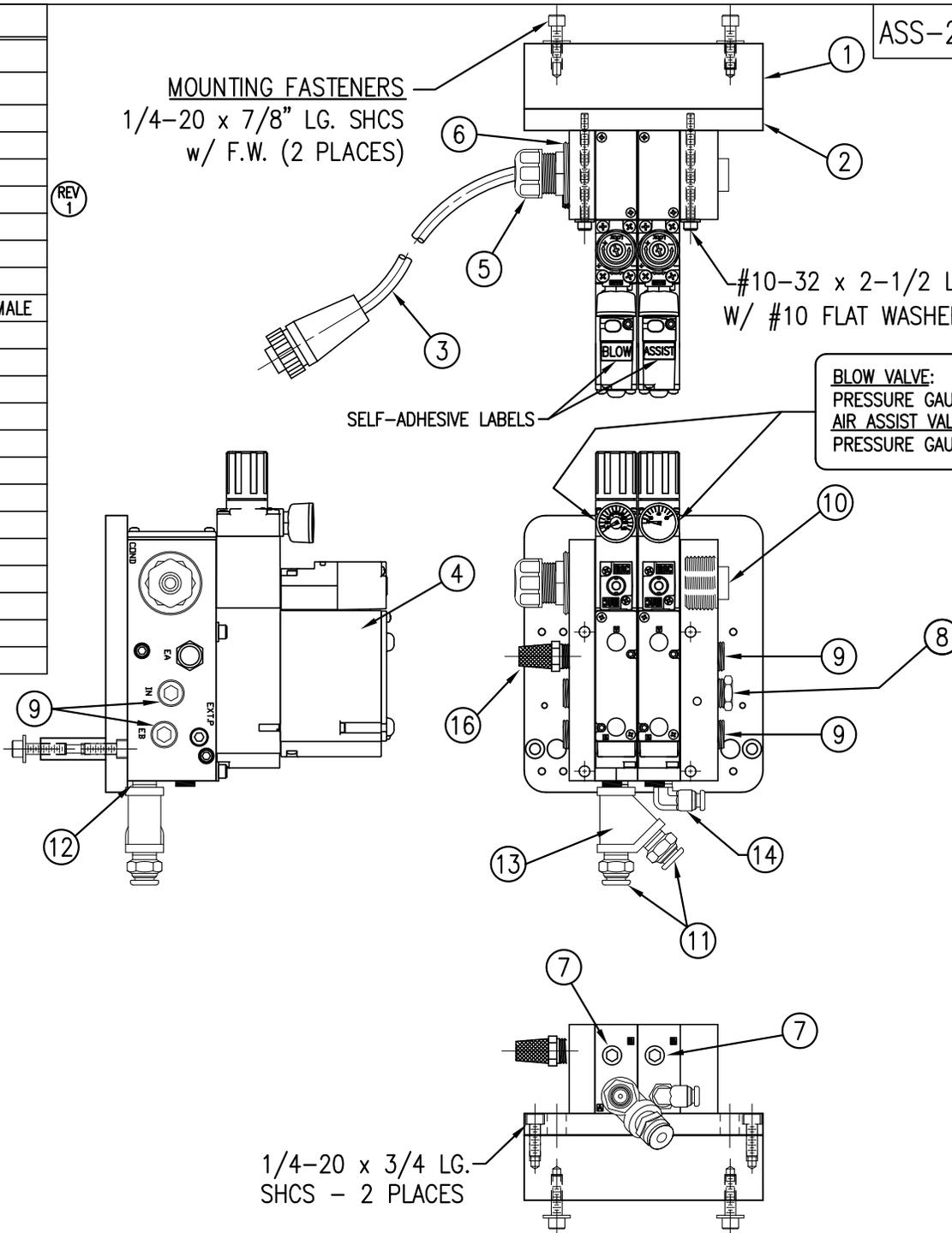
REV 1

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

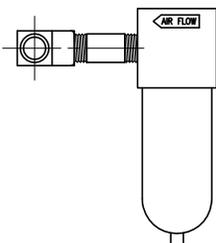
#10-32 x 2-1/2 LG. SHCS
W/ #10 FLAT WASHER (4 PLACES)

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

SELF-ADHESIVE LABELS



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 GUAUGES: #PM-VA2380M



⑮ AIR FILTER
SHIP LOOSE
-CUSTOMER TO INSTALL -

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

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: VALVE BANKS	TITLE: EXTENDED AIR BLOW 2 STATION VALVE BANK ASSEMBLY with FILTER	Dept. Code 70
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\Appliator\360 SERIES\ 360a\ASS\ASS-211-0106EM

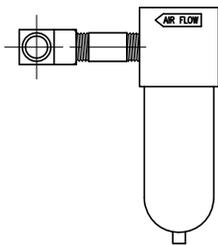
BILL OF MATERIAL

ASS-211-0106M

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-FT1200	1/4" NPT PLUG
⑧	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑨	4	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

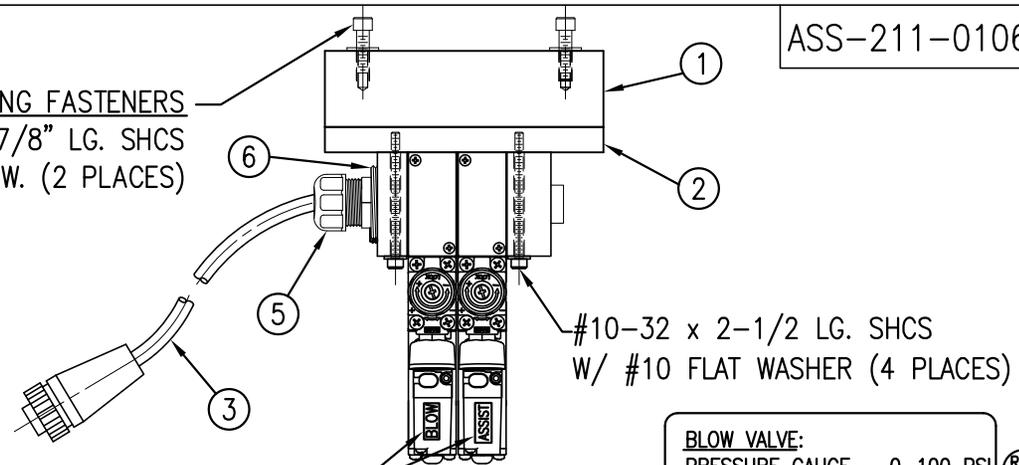
VALVE BANK SPARE PARTS:
 SOLENOID: #PM-VA2395M
 AIR ASSIST REGULATOR W/GUAGE: #PM-VA2396M
 BLOW/TAMP/IMPRINTER REGULATORS W/GUAGE: #PM-VA2397M
 AIR ASSIST REGULATOR GUAGE: #PM-VA2382M
 BLOW/TAMP/IMPRINTER REGULATOR GAUGES: #PM-VA2380M



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

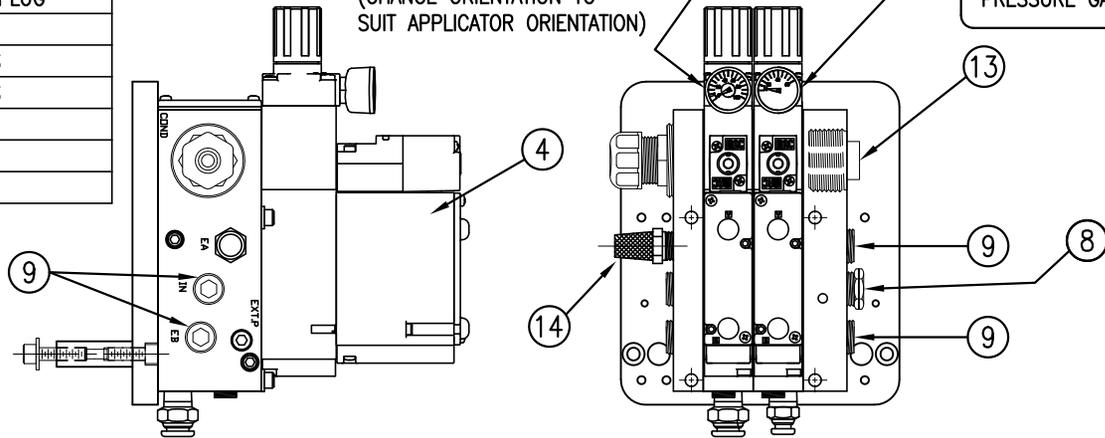


#10-32 x 2-1/2 LG. SHCS
 W/ #10 FLAT WASHER (4 PLACES)

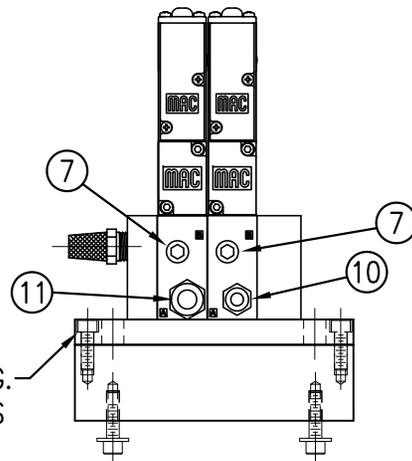
REV 4 SELF-ADHESIVE LABELS
 (CHANGE ORIENTATION TO
 SUIT APPLICATOR ORIENTATION)

BLOW VALVE:
 PRESSURE GAUGE - 0-100 PSI
 AIR ASSIST VALVE:
 PRESSURE GAUGE - 0-60 PSI

REV 3



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



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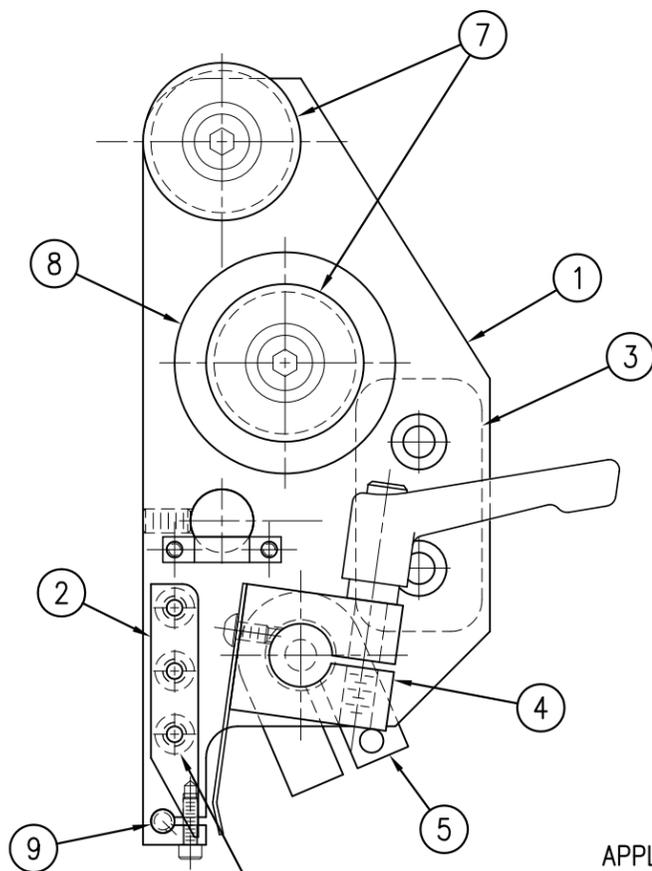
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: VALVE BANKS	TITLE: AIR BLOW 2 STATION VALVE BANK ASSEMBLY with FILTER	Dept. Code 70
REV. 4	REV. DESCRIPTION ROTATED ADHESIVE LABELS 90 DEGREES	REV. DATE 06/01/20	REV. BY: TDR	Scale: 1=4
		Date: 04/03/07	DRAWN BY: E. SANOR	F:\Engineering\Standard Parts\Appliator\360 SERIES\ 360a\ASS\ASS-211-0106M

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	5 WIDE
	2	ASS-211-0105-1	SPRING BLOCK ASSEMBLY	7.5 WIDE
⑤	1	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY	5 WIDE
	2	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY	7.5 WIDE
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)



#10-32 x 3/4 LG. SHCS
 (3) PLCS. (F.S.)
 (USE BLUE LOCTITE #242)

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.

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

ASS-211-X102R/L

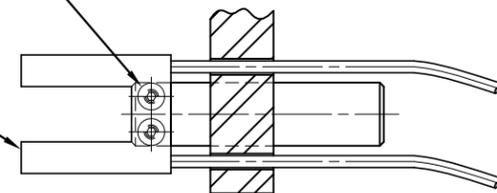
5" WIDE -0102R/L

7.5" WIDE -2102R/L

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

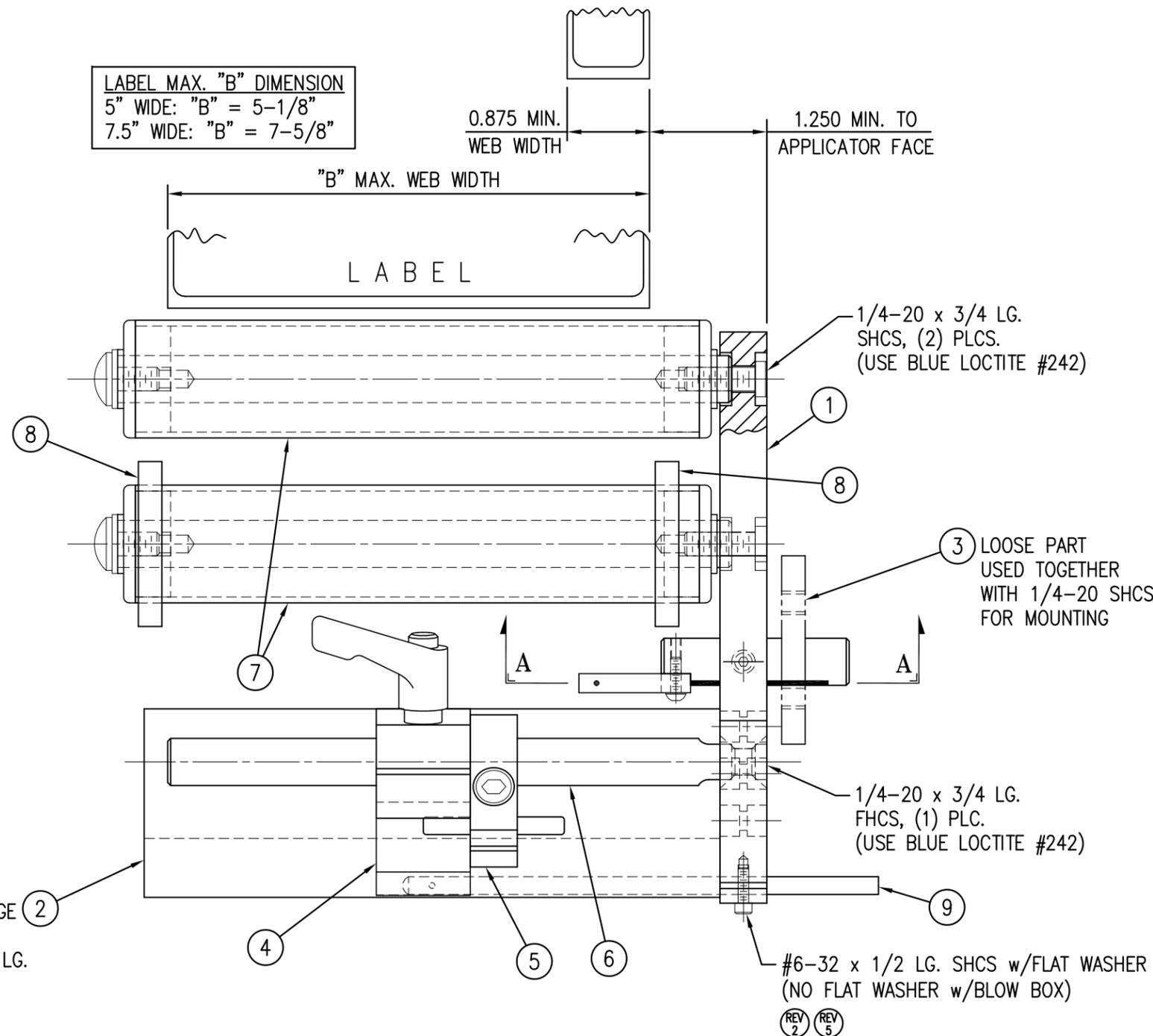
NOTE: SENSOR NOT INCLUDED IN ASS'Y
 ORDER SEPARATELY ~ SEE B.O.M. NOTE

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



SECTION "A"

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



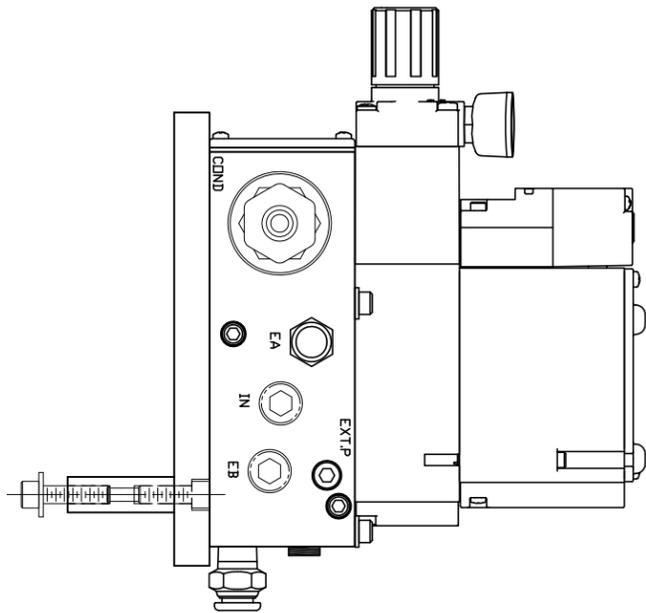
REV 2 REV 5

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 SERIES: 5"/7.5"
 GROUP: AIR BLOW/RVB/TAMP SNORKLES
 TITLE: PEEL EDGE ASSEMBLY
 REV. DATE: 04/18/06
 REV. BY: TK
 SCALE: 1=1.5
 DATE: 06/23/97
 DRAWN BY: BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-211-X102R/L
 Dept. Code: 70

BILL OF MATERIAL

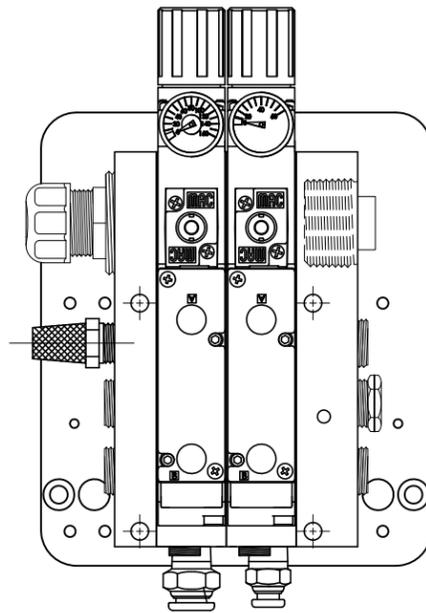
MOD-211-3101R/L-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-211-3101R/L-X	BLOW BOX ASSY w/TRANSITION PLATE
⑤	1	ASS-211-0106M	AIR BLOW MAC VALVE ASSEMBLY
	1	PM-PF1010	FTG, 1/4" TUBE to 1/4" NPT
	2	PM-PF1020	FTG, 3/8" TUBE to 1/4" NPT MALE
	1	PM-PF1105	BUSHING, 1/8" NPT FEMALE to 1/4" NPT MALE
	1	PM-PF1169	HOSE BARB, 1/4" TUBE to 1/8" NPT
	1	PM-PT1080	3/8" OD SMC TUBING x 14" Lg.
	1	PM-AH1000	AIR ASSIST TUBING x 12" Lg.



⑤ VALVE BANK ASSEMBLY
SCALE: 8"=1'-0"

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



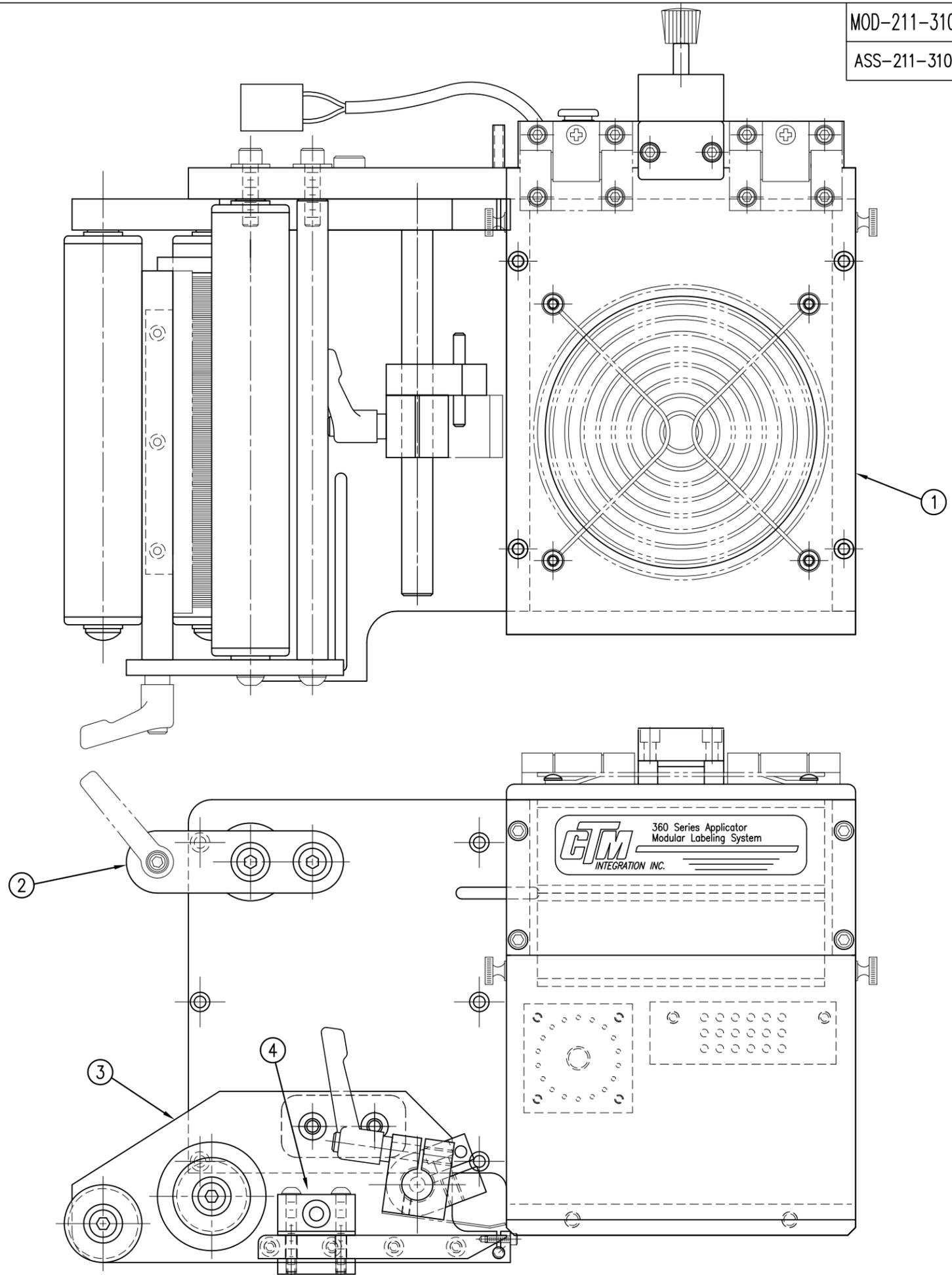
BILL OF MATERIAL

ASS-211-3101R/L-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-211-X101R/L	VACUUM BOX WITH TRANSITION PLATE
②	1	ASS-200-X126	5"/7.5" TENSION BRUSH ASSEMBLY
③	1	ASS-211-3102R/L-X	AIR BLOW CLEAR LABEL PEEL EDGE
④	1	ASS-200-0431	LRD 6300 CLEAR LABEL SENSOR
	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS

REV 1

REV 2



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

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 TITLE: RH AIR BLOW BOX NOSE w/CLEAR LABEL SENSING
 REV. DESCRIPTION: 2 CHANGED CLR LABEL SENSOR (WAS ASS-200-0430)
 REV. BY: TDR
 REV. DATE: 10/31/17
 SCALE: 1=2
 DATE: 08/23/97
 DRAWN BY: BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\MOD-211-3101RL-X
 Dept. Code: 70

BILL OF MATERIAL

ASS-211-3102R/L-X

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

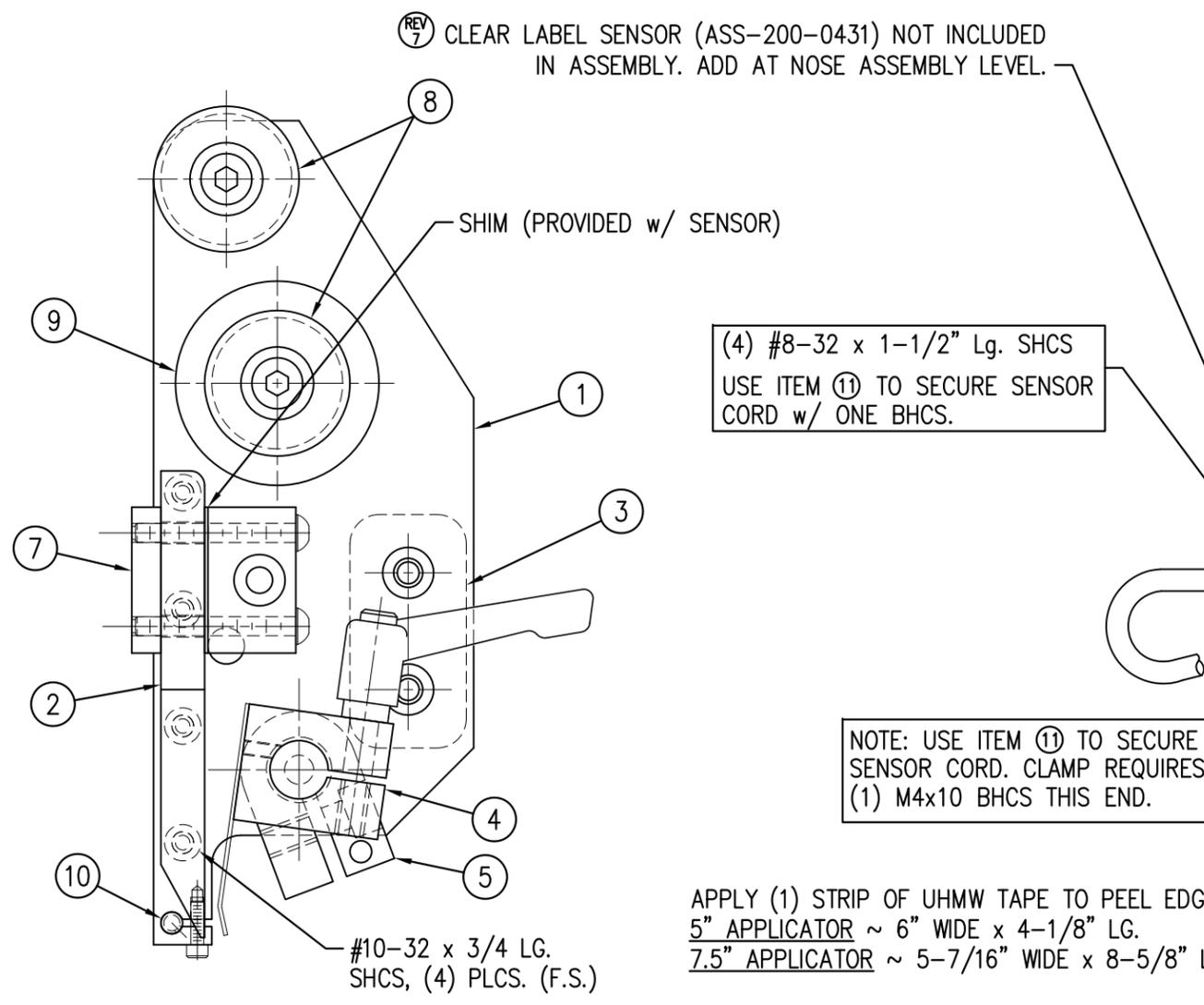
REFER TO CTM DWG.#
 ASS-211-3102R/L-10
 FOR 10" WIDTH

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.
 TITLE: CLEAR LABEL PEEL EDGE ASSEMBLY
 APPLICATOR SERIES: 360
 REV. DATE: 01/09/19
 REV. BY: TDR
 SCALE: 1=1.5
 DATE: 09/15/98
 DRAWN BY: BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-211-3102RL-X
 Dept. Code: 70
 REV. DESCRIPTION: 8 UPDATED DRAWING TO SHOW LRD6300
 APPLICATOR SERIES: 360
 GROUP: 5"/7.5"

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)	LH
②	1	MP-214-3303-X	RH CLEAR LABEL PEEL EDGE (w/ TAPE)	RH
③	1	MP-211-0207	PEEL EDGE TIE NUT	
④	1	ASS-211-0105-1	SPRING BLOCK ASSEMBLY	5 WIDE
④	2	ASS-211-0105-1	SPRING BLOCK ASSEMBLY	7.5 WIDE
⑤	1	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY	5 WIDE
⑤	2	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY	7.5 WIDE
⑥	1	PM-211-X206	SPRING BLOCK MOUNTING SHAFT	
⑦	1	MP-214-3301	CLEAR LABEL SENSOR NUT PLATE	
⑧	2	ASS-211-X120	IDLER ROLLER ASSEMBLY w/ SHAFT	
⑨	2	MP-211-0210	GUIDE COLLAR w/ SET SCREW	
⑩	1	MP-211-X217-X	AIR ASSIST TUBE	
⑪	2	PE-CC1050	1/4" NYLON LOOP CLAMP	
12	2	PM-FASH430081	SHCS, 1/4-20 x 1.25 LG. SS	

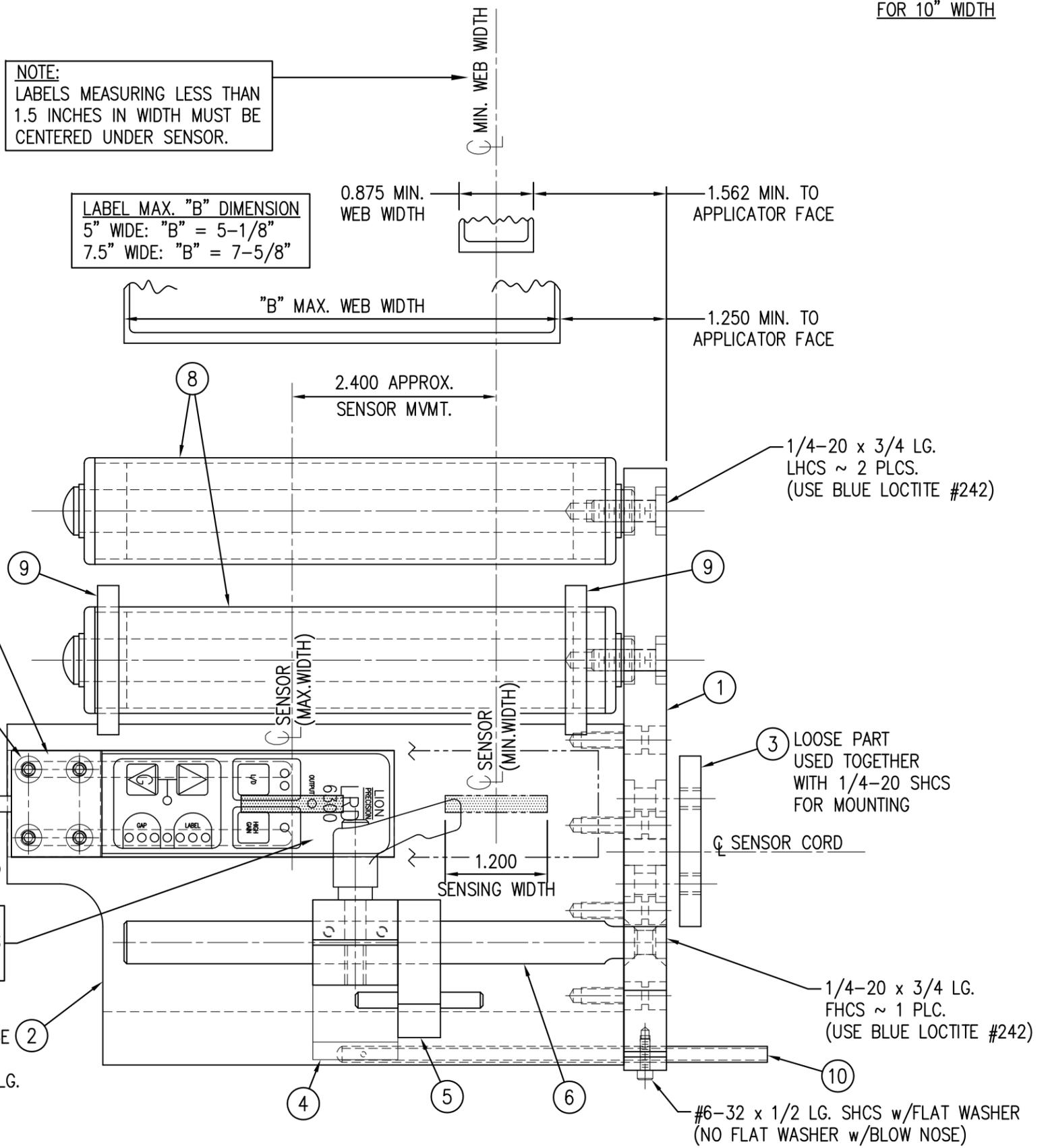
NOTE:
 LABELS MEASURING LESS THAN
 1.5 INCHES IN WIDTH MUST BE
 CENTERED UNDER SENSOR.

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



(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.

BILL OF MATERIAL

ASS-211-3102R/L-10

RH & LH ASSEMBLIES AVAILABLE ASS-211-3102R/L-10
 -RH ASSEMBLY SHOWN-

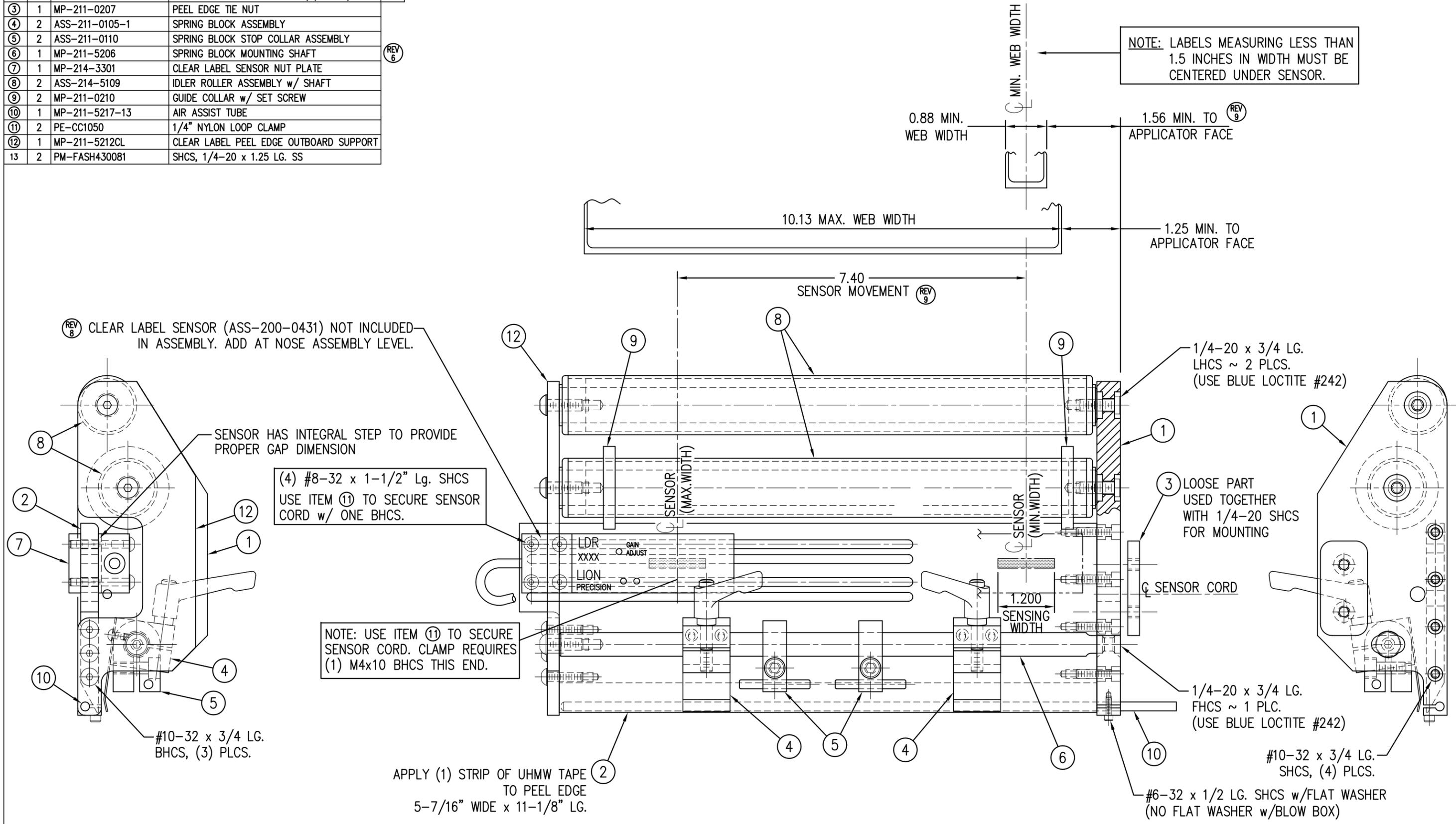
REFER TO CTM DWG.#
 ASS-211-3102R/L-X
 FOR 5" & 7.5" WIDTHS

Dept. Code 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-211-3102RL-10
 TITLE: CLEAR LABEL PEEL EDGE ASSEMBLY
 DRAWN BY: BOB S.
 Date: 03/10/99
 Scale: 1=2
 REV. DATE: 06/21/18
 REV. BY: TDR
 REV. DESCRIPTION: 9 SHOWED THE NEW SLOT MODIFICATIONS & UPDATED DIMENSIONS
 APPLICATOR SERIES: 360
 APPLICATOR SERIES GROUP: TAMP
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ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-211-3301	CLEAR LABEL PEEL EDGE MOUNTING PLATE
②	1	MP-214-3302-10	LH CLEAR LABEL PEEL EDGE (w/ TAPE) LH
②	1	MP-214-3303-10	RH CLEAR LABEL PEEL EDGE (w/ TAPE) RH
③	1	MP-211-0207	PEEL EDGE TIE NUT
④	2	ASS-211-0105-1	SPRING BLOCK ASSEMBLY
⑤	2	ASS-211-0110	SPRING BLOCK STOP COLLAR ASSEMBLY
⑥	1	MP-211-5206	SPRING BLOCK MOUNTING SHAFT
⑦	1	MP-214-3301	CLEAR LABEL SENSOR NUT PLATE
⑧	2	ASS-214-5109	IDLER ROLLER ASSEMBLY w/ SHAFT
⑨	2	MP-211-0210	GUIDE COLLAR w/ SET SCREW
⑩	1	MP-211-5217-13	AIR ASSIST TUBE
⑪	2	PE-CC1050	1/4" NYLON LOOP CLAMP
⑫	1	MP-211-5212CL	CLEAR LABEL PEEL EDGE OUTBOARD SUPPORT
13	2	PM-FASH430081	SHCS, 1/4-20 x 1.25 LG. SS

REV 6

NOTE: LABELS MEASURING LESS THAN 1.5 INCHES IN WIDTH MUST BE CENTERED UNDER SENSOR.



REV 8 CLEAR LABEL SENSOR (ASS-200-0431) NOT INCLUDED IN ASSEMBLY. ADD AT NOSE ASSEMBLY LEVEL.

SENSOR HAS INTEGRAL STEP TO PROVIDE PROPER GAP DIMENSION

(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 5-7/16" WIDE x 11-1/8" LG.

1/4-20 x 3/4 LG. LHCS ~ 2 PLCS. (USE BLUE LOCTITE #242)

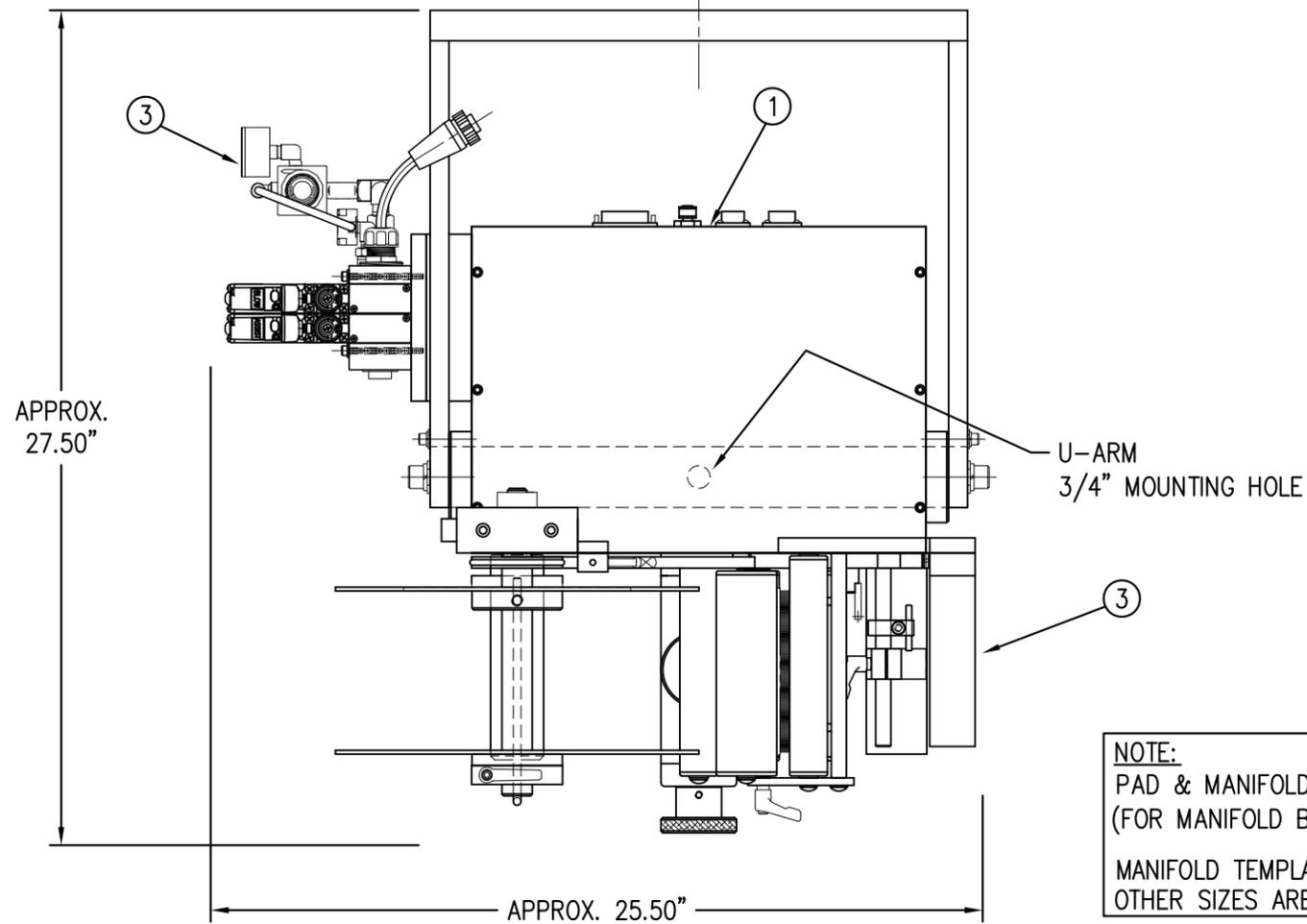
③ LOOSE PART USED TOGETHER WITH 1/4-20 SHCS FOR MOUNTING

1/4-20 x 3/4 LG. FHCS ~ 1 PLC. (USE BLUE LOCTITE #242)

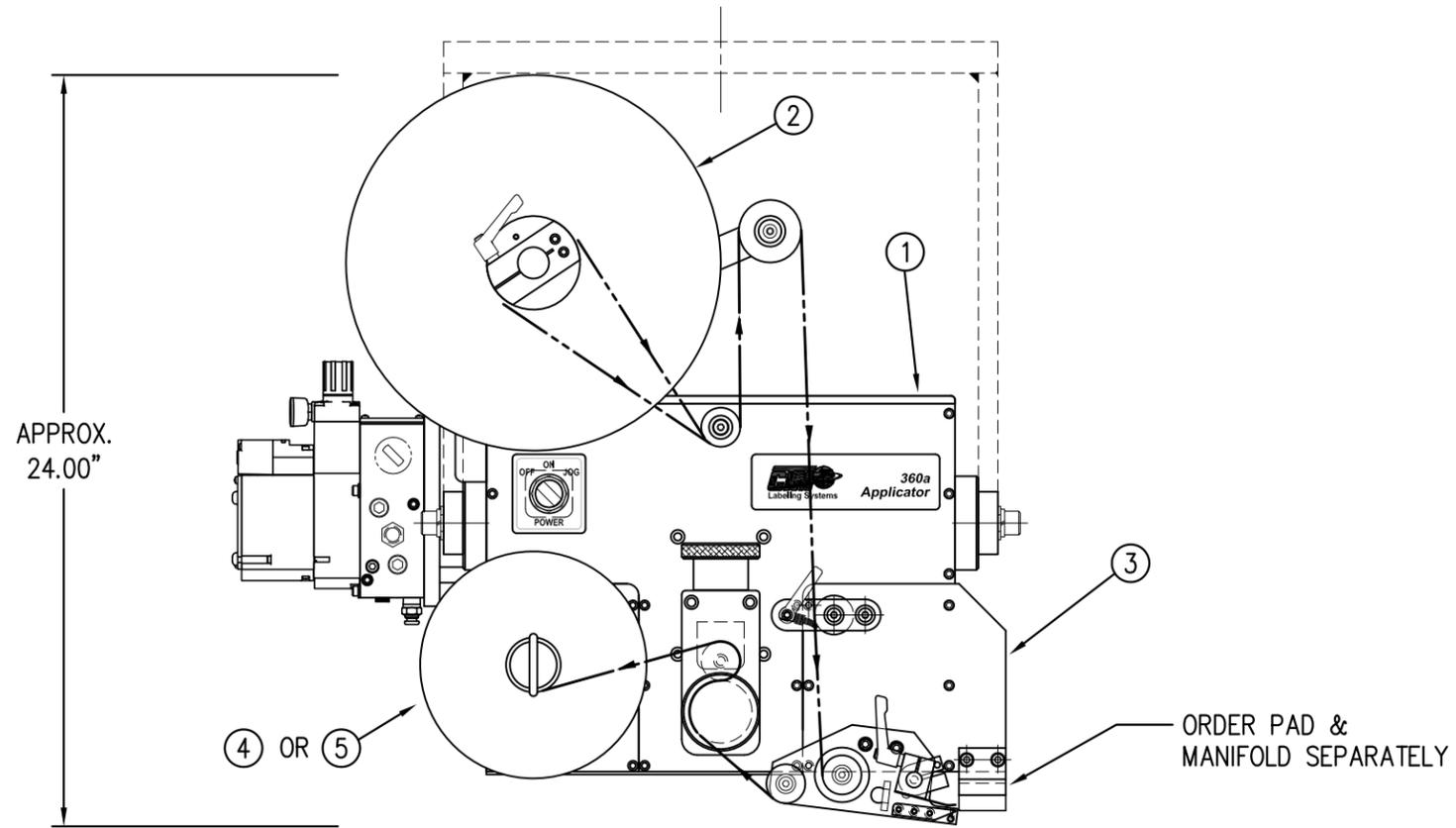
#10-32 x 3/4 LG. SHCS, (4) PLCS.

#6-32 x 1/2 LG. SHCS w/FLAT WASHER (NO FLAT WASHER w/BLOW BOX)

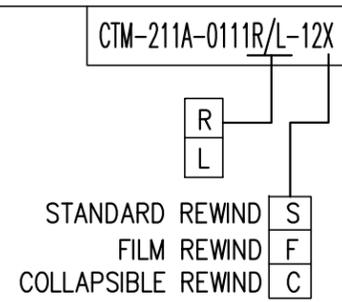
#10-32 x 3/4 LG. BHCS, (3) PLCS.



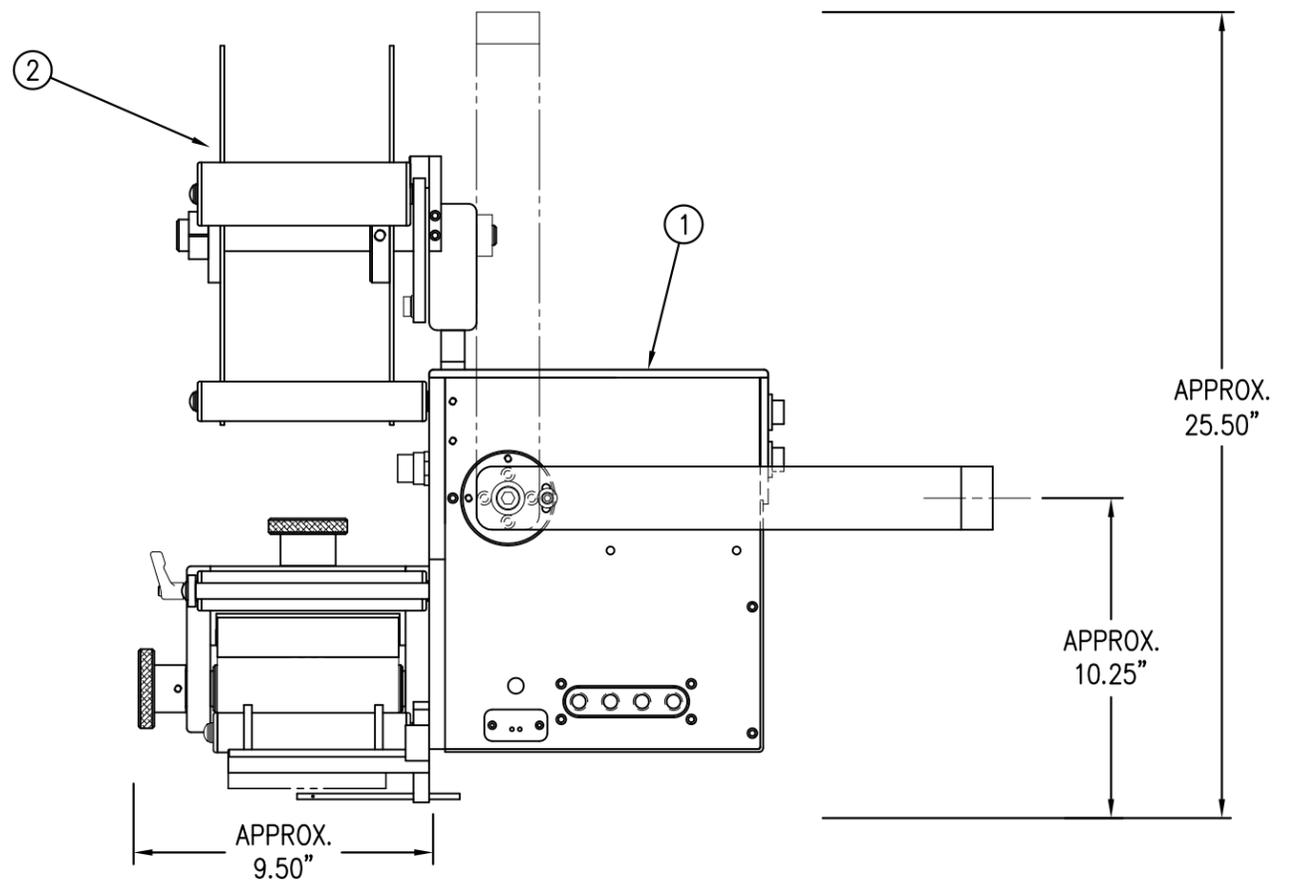
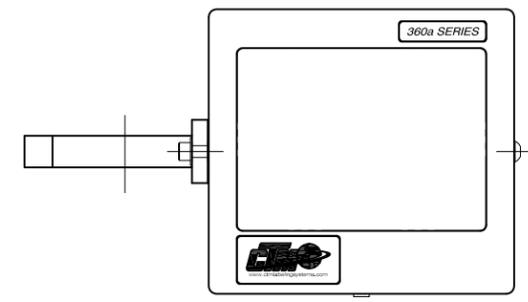
NOTE:
 PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY.
 (FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)
 MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS.
 OTHER SIZES ARE CUSTOM.



BILL OF MATERIAL			
CTM-211A-0111R/L-12X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-0150R/L	5" CORE UNIT ASSEMBLY
②	1	MOD-200-0121R/L	5" 12" UNWIND ASSEMBLY
③	1	MOD-211-0111R/L	5" AIR BLOW BOX NOSE ASSEMBLY
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	PAD & MANIFOLD (LABEL SIZE IS JOB SPECIFIC)
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)

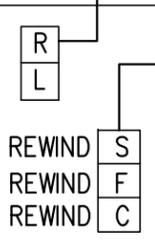


RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-



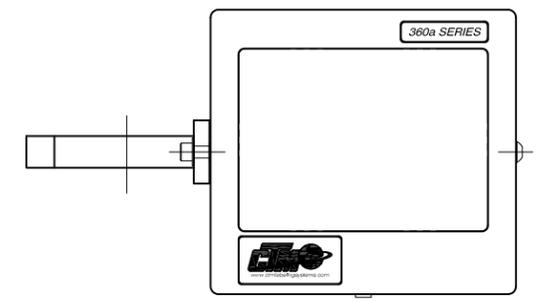
BILL OF MATERIAL			
CTM-211A-0111R/L-16X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-0150R/L	5" CORE UNIT ASSEMBLY
②	1	MOD-200-3121R/L-5	5", 16" UNWIND ASSEMBLY
③	1	MOD-211-0111R/L	5" RVB NOSE ASSEMBLY
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	PAD & MANIFOLD (LABEL SIZE IS JOB SPECIFIC)
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)

CTM-211A-0111R/L-16X

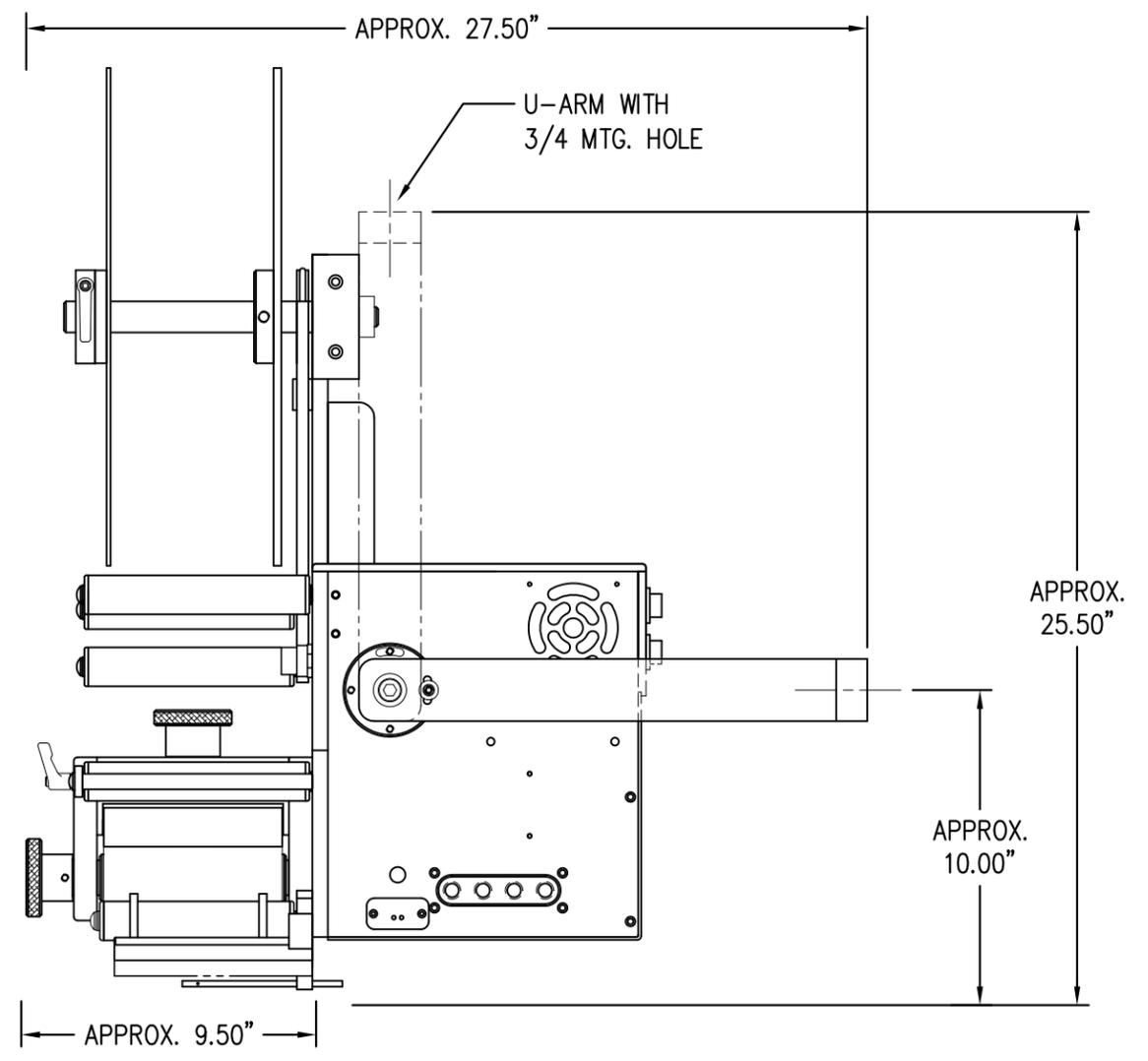
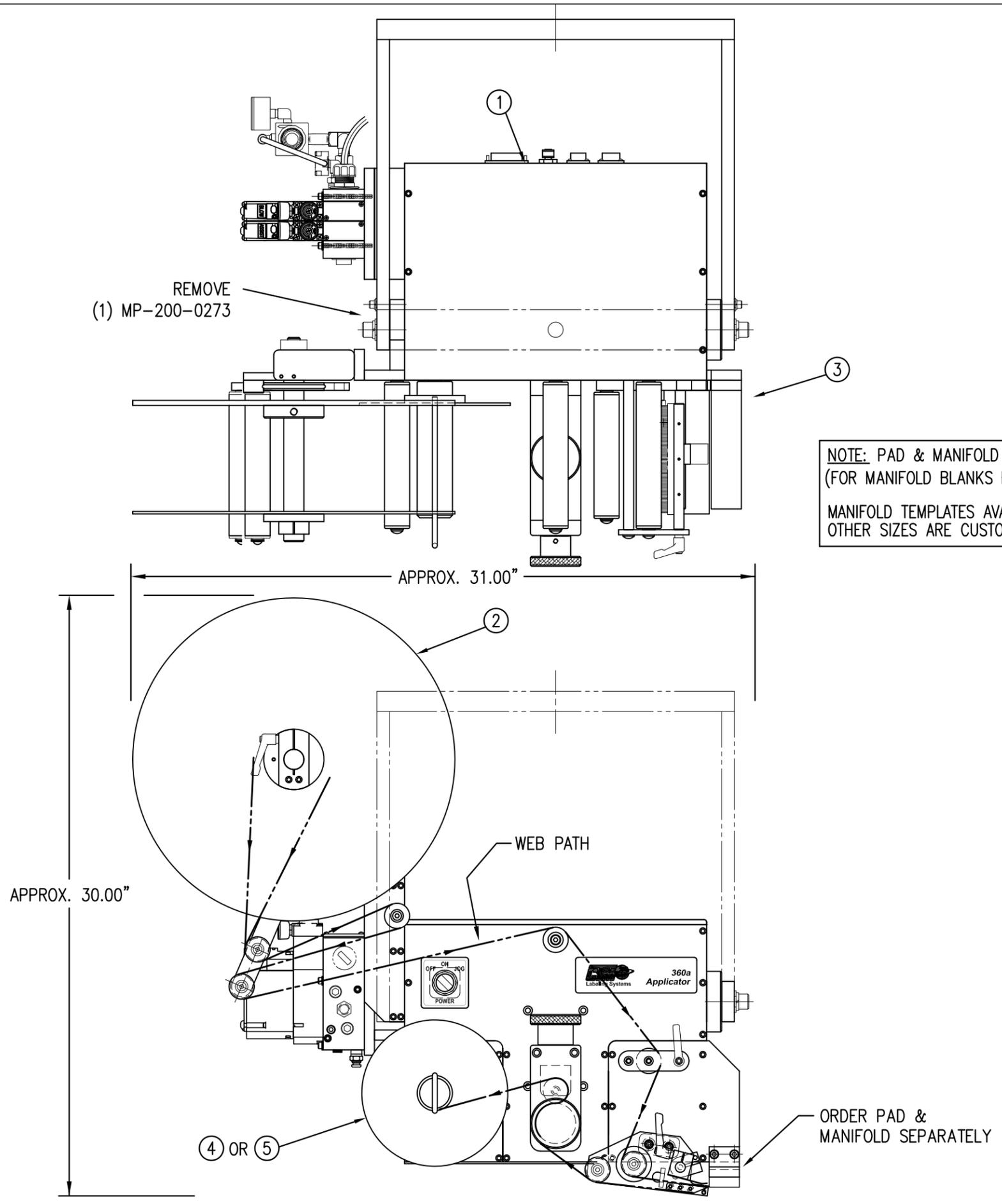


STANDARD REWIND S
FILM REWIND F
COLLAPSIBLE REWIND C

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



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.



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 Dept. Code 70
 TITLE: 360a RVB APPLICATOR w/ 16" UNWIND
 F:\Engineering\Standard Parts\Appliator\360 SERIES\360a\CTM-211A-0111RL-16X
 Date: 12/15/17
 DRAWN BY: T. Rhodes
 Scale: 1=5
 REV. DATE 12/15/17
 REV. BY: TDR
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 GROUP: RVB
 REV. DESCRIPTION 1 NEW DRAWING FOR 360a - UPDATE DECALS & DISPLAY

BILL OF MATERIAL

MOD-211-0111R/L

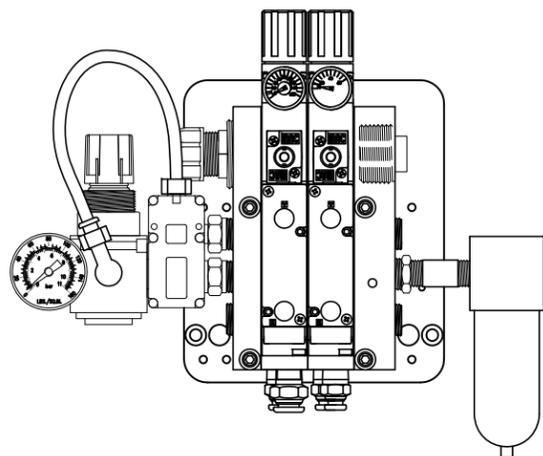
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-211-0111	RVB w/ TRANSITION PLATE
⑤	1	ASS-211-0112M	RVB VALVE BANK ASSEMBLY (MAC)

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

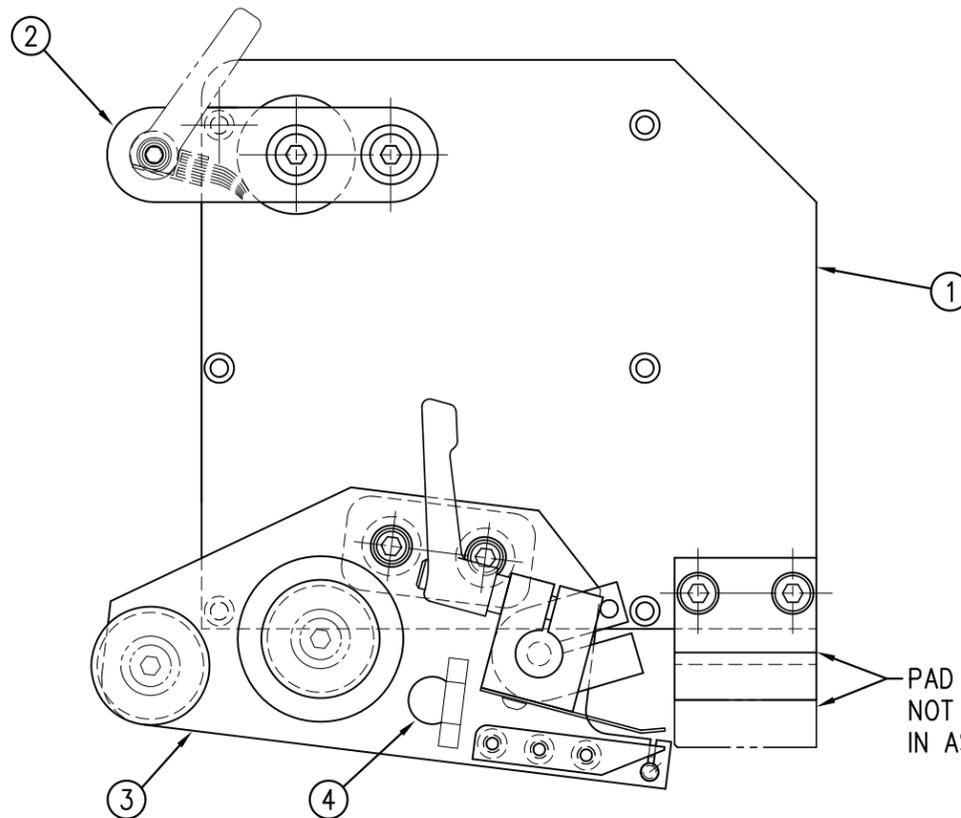
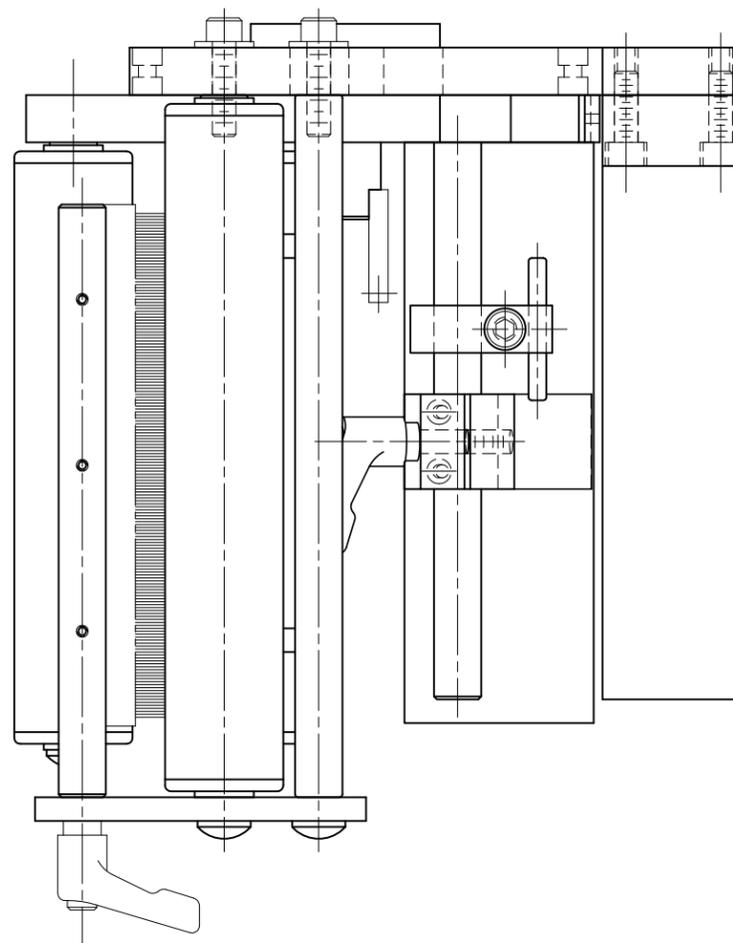
MOD-211-0111R/L
ASS-211-0111R/L

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"
 REV. DESCRIPTION: 1 REMOVED MP-211-0237 MNTG BLOCK FROM ASSEMBLY BOM
 REV. DATE: 11/23/15
 REV. BY: JLG
 SCALE: 1=2
 DATE: 09/01/99
 DRAWN BY: BOB S.
 TITLE: 5" WIDE RVB NOSE ASSEMBLY
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\MOD\MOD-211-0111RL

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.



⑤ VALVE BANK ASSEMBLY
SCALE: 3"=1'-0"



PAD & MANIFOLD
NOT INCLUDED
IN ASSEMBLY.

BILL OF MATERIAL

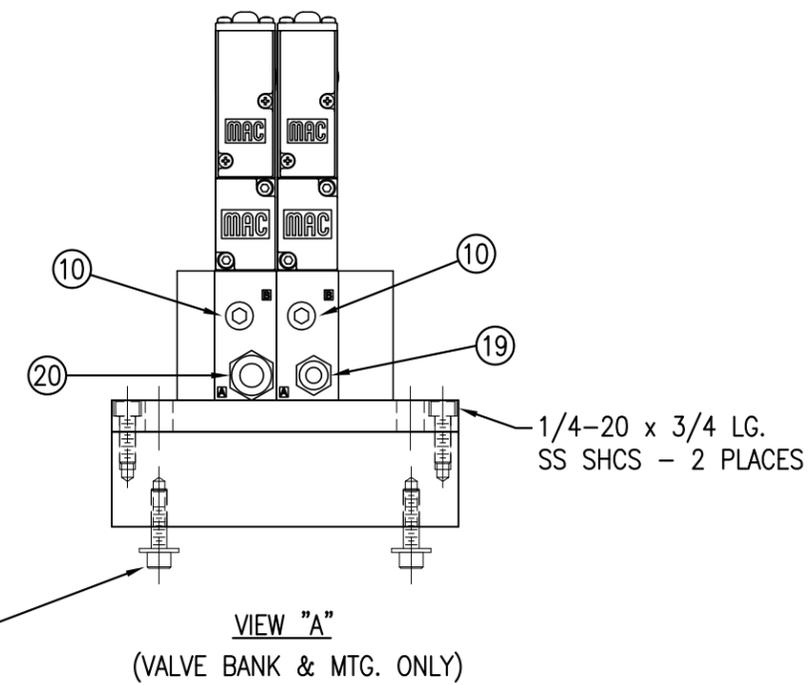
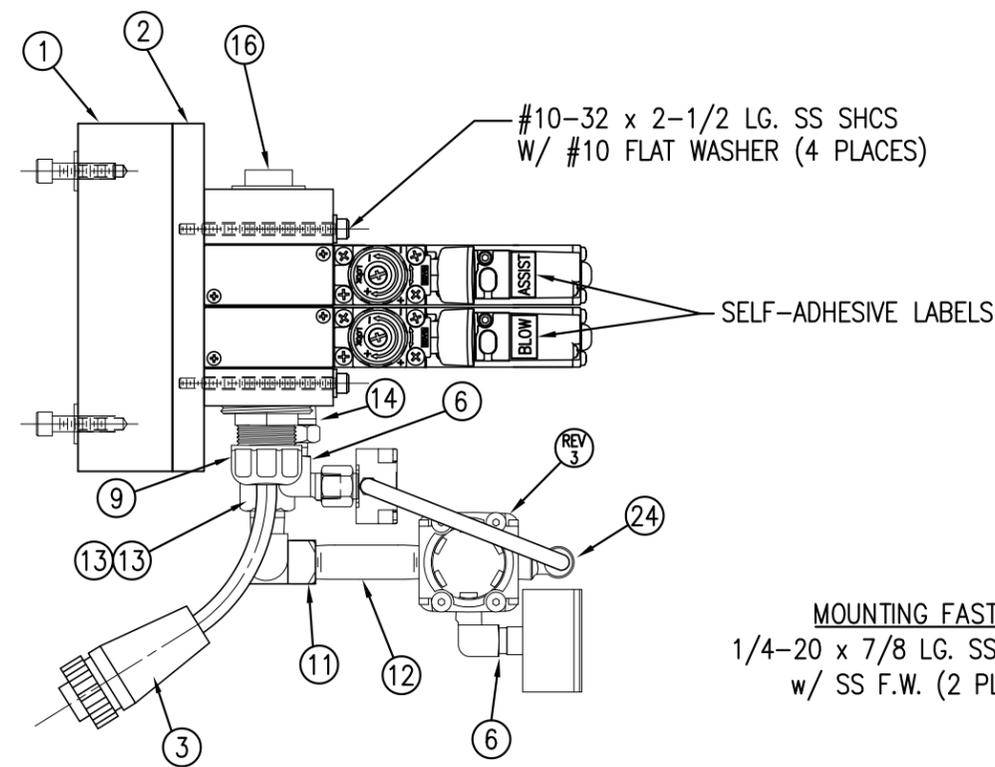
ASS-211-0111R/L

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	ASS-211-0102R/L	AIR BLOW PEEL EDGE
④	1	ASS-211-0108-2	FIBER OPTIC SENSOR w/2" MTG. SHAFT
	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS

BILL OF MATERIAL

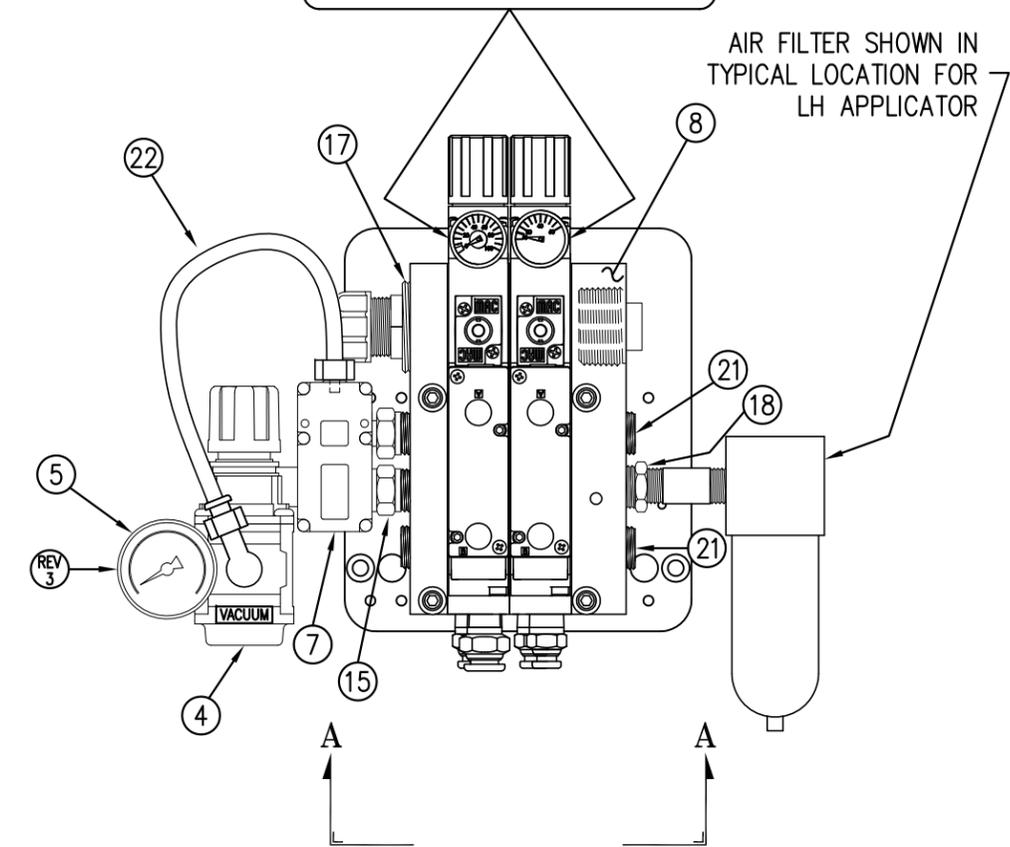
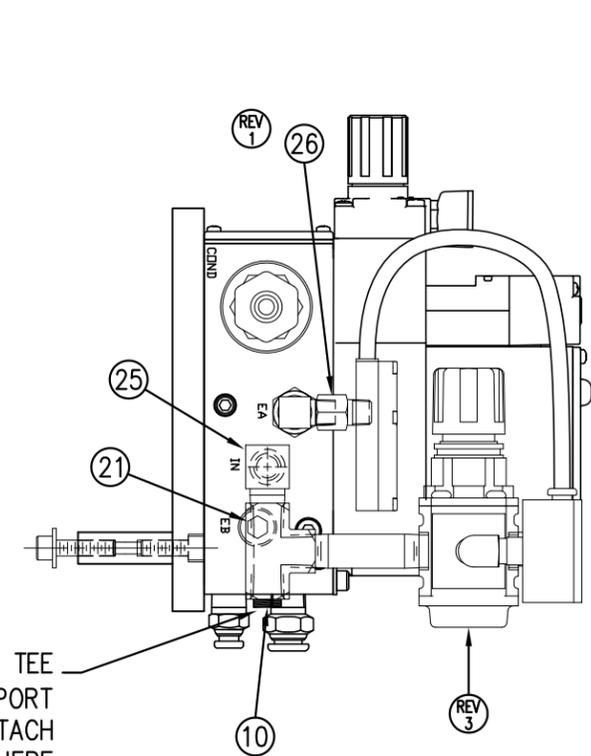
ASS-211-0112M

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	ASS-200-0452M	VALVE CABLE
4	1	PM-REG1500	REGULATOR (INCLUDES PM-VA2381)
5	-	PM-VA2381	0-60 GAUGE. (INCLUDED w/ PM-REG1500)
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-C02000	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-PF1145	NIPPLE, 1/4" NPT X 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	3	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
25	1	PM-PF1185	90° STREET ELBOW, 1/4" NPT
26	1	PM-PF1216	ADAPTER, 1/8 NPT MALE/FEMALE
27	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
28	2	PM-FAW30275	1/4" SS FLAT WASHER
29	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
30	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
31	4	PM-FAW30265	#10 SS FLAT WASHER

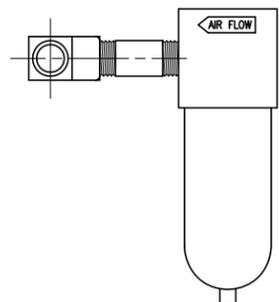


TAMP & BLOW VALVE:
PRESSURE GAUGE - 0-100 PSI
AIR ASSIST VALVE:
PRESSURE GAUGE - 0-60 PSI

AIR FILTER SHOWN IN
TYPICAL LOCATION FOR
LH APPLICATOR



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 GAUGE: #PM-VA2382M
BLOW/TAMP/IMPRINTER REGULATOR GAUGES: #PM-VA2380M



23 AIR FILTER
SHIP LOOSE
-CUSTOMER TO INSTALL -

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5" / 7.5" / 10"
 REV. DESCRIPTION: 3 REVISED FOR NEW PARKER REGULATOR. CTM P/N NOT CHANGED
 REV. DATE: 03/13/20
 REV. BY: BNT
 TITLE: RVB 2 STATION VALVE BANK ASSEMBLY
 SCALE: 1=3
 DATE: 04/03/07
 DRAWN BY: E. SANOR
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-211-0112M

BILL OF MATERIAL

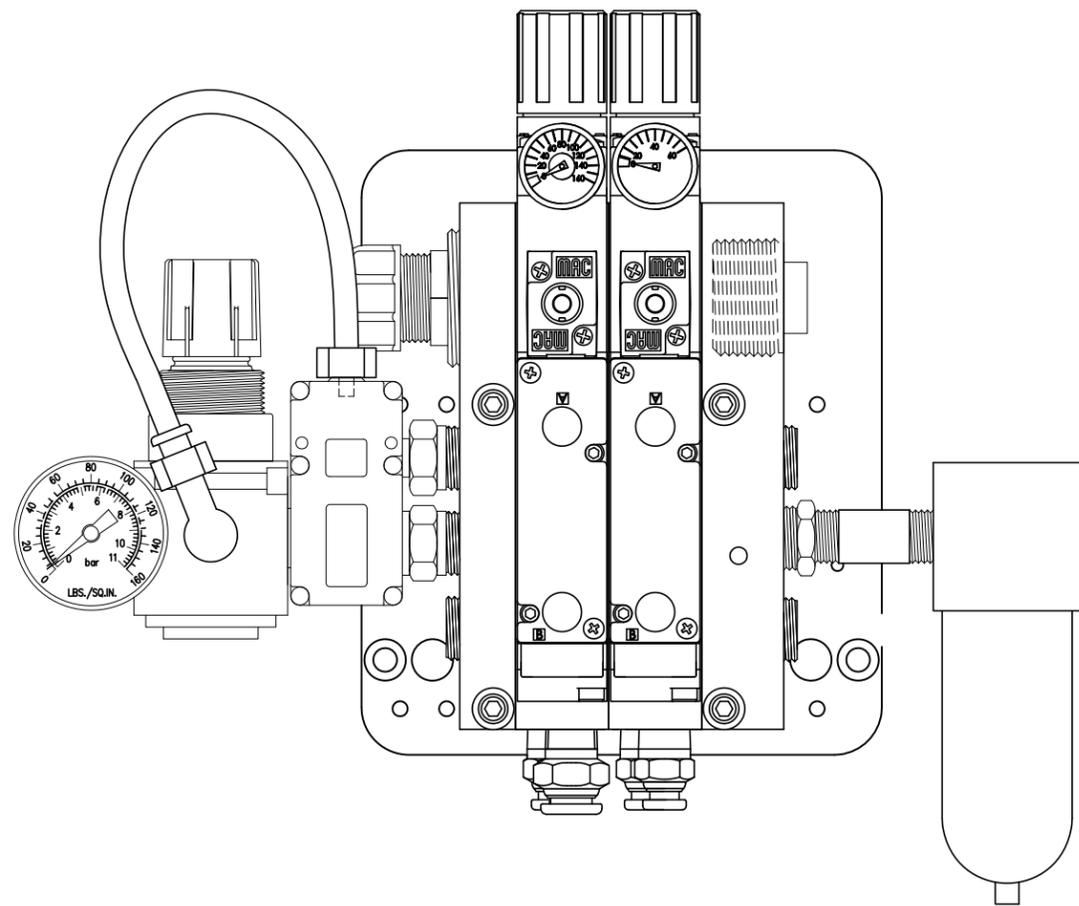
MOD-211-3111R/L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-211-3111R/L	RVB w/ TRANSITION PLATE
⑤	1	ASS-211-0112M	RVB 2-STATION MAC VALVE BANK
	1	PM-PF1010	FTG, 1/4" TUBE to 1/4" NPT
	2	PM-PF1020	FTG, 3/8" TUBE to 1/4" NPT MALE
	1	PM-PF1105	BUSHING, 1/8" NPT FEMALE to 1/4" NPT MALE
	1	PM-PF1169	HOSE BARB, 1/4" TUBE to 1/8" NPT
	1	PM-PT1080	3/8" OD SMC TUBING x 14" Lg.
	1	PM-AH1000	AIR ASSIST TUBING x 12" Lg.

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.

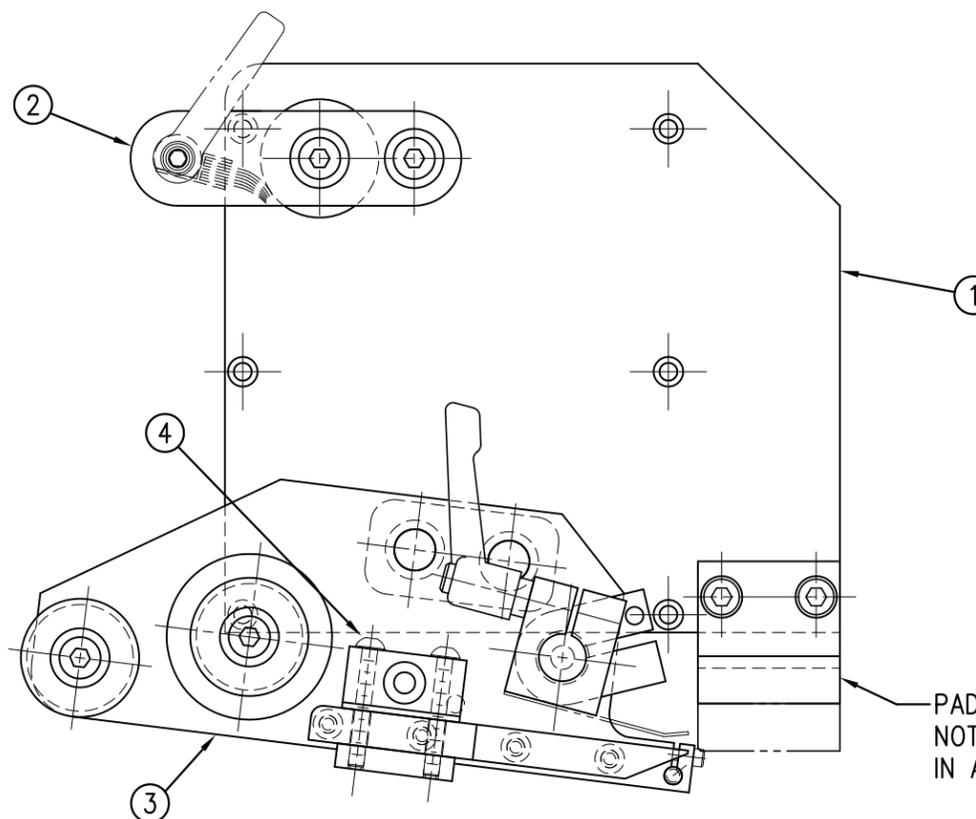
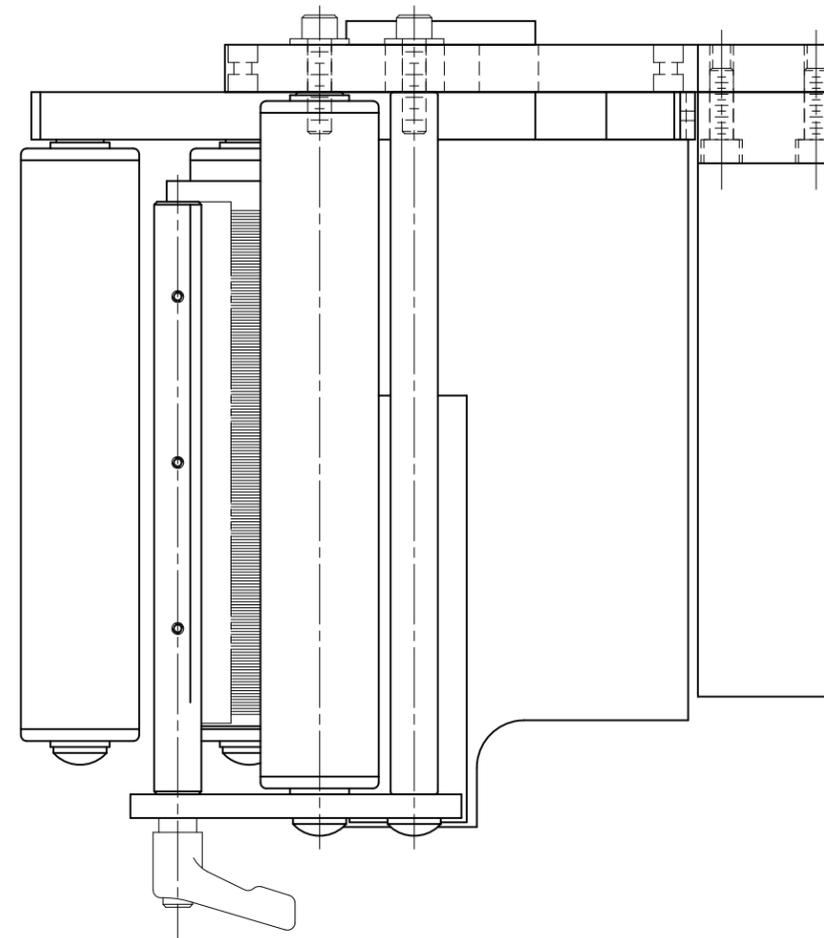


⑤ VALVE BANK ASSEMBLY

BILL OF MATERIAL

ASS-211-3111R/L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-211-0235	RVB TRANSITION PLATE
②	1	ASS-200-0126	5" WIDE TENSION BRUSH ASSEMBLY
③	1	ASS-211-3102R/L	5" WIDE CLEAR LABEL AIR BLOW PEEL EDGE
④	1	ASS-200-0431	LRD 6300 CLEAR LABEL SENSOR
	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS



RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

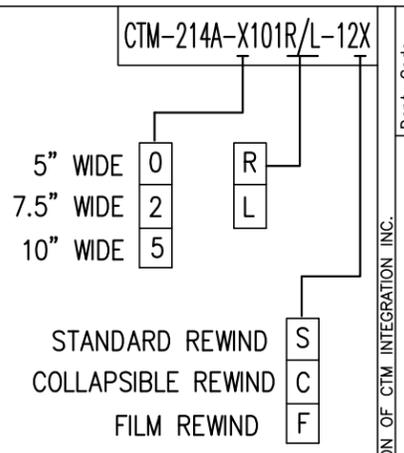
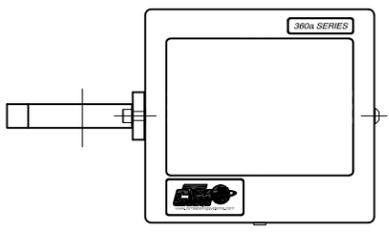
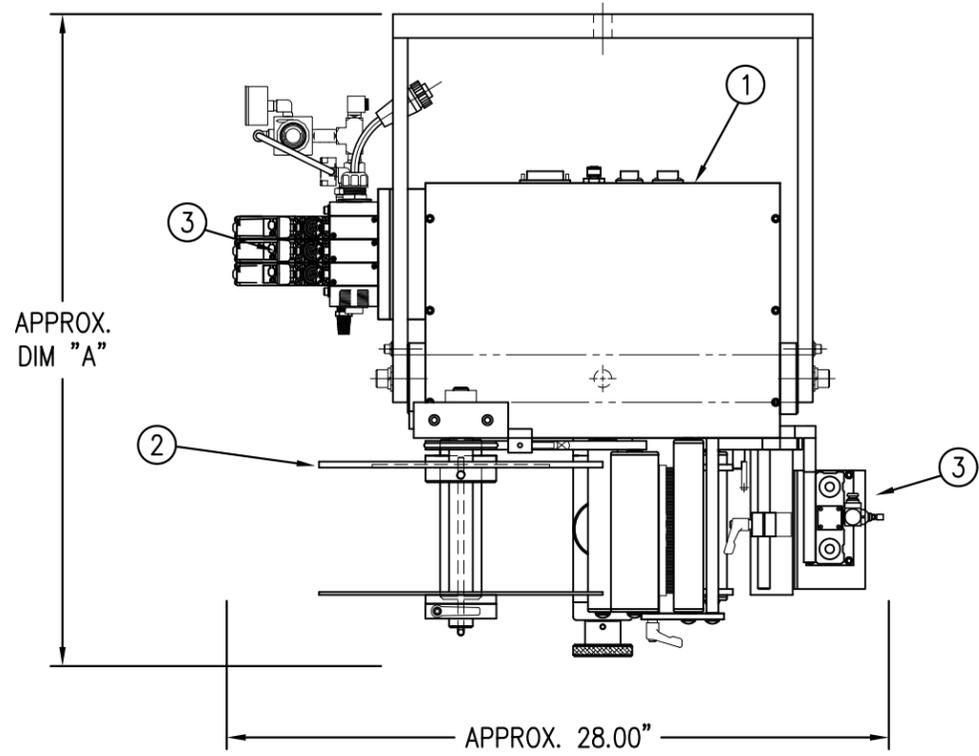
MOD-211-3111R/L

ASS-211-3111R/L

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"
 REV. DESCRIPTION: 3 UPDATED TENSION BRUSH NUMBER (ASS-200-0126)
 REV. DATE: 10/31/17
 REV. BY: TDR
 SCALE: 1=2
 DATE: 09/01/99
 DRAWN BY: BOB S.
 TITLE: CLEAR LABEL RVB NOSE ASSEMBLY
 Dept. Code: 70
 F:\Engineering\Standard Parts\Appliator\360 SERIES\F:\Engineering\Standard Parts\Appliator\360 SERIES\360a\MOD\MOD-211-3111RL

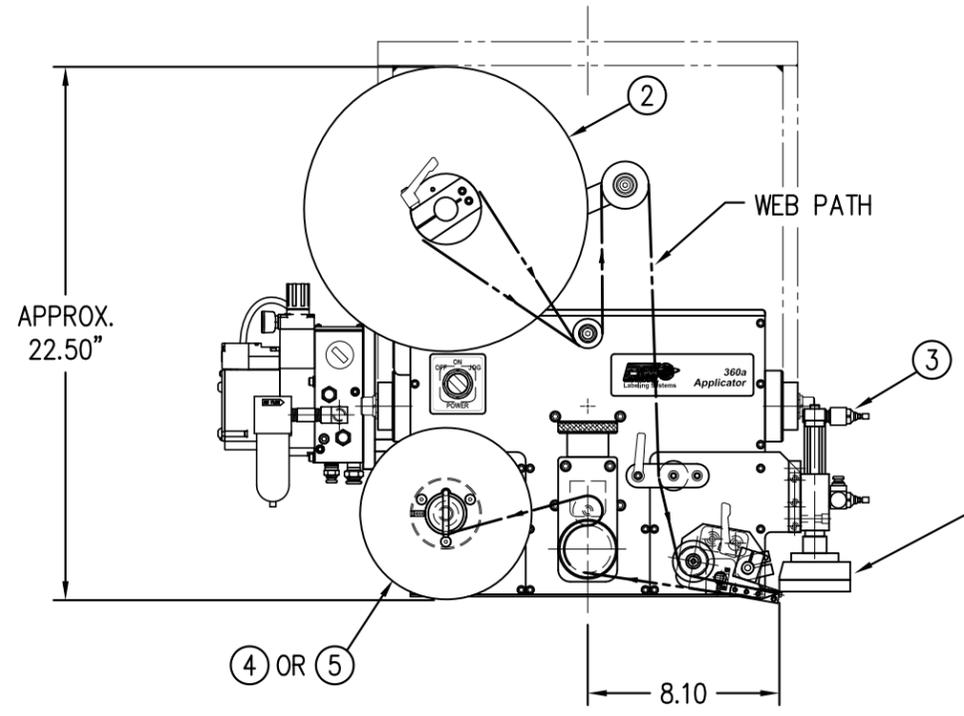
PART NO.	DIM "A"
CTM-214-0101R/L-12X	27.50
CTM-214-2101R/L-12X	30.00
CTM-214-5101R/L-12X	32.50

BILL OF MATERIAL			
CTM-214A-X101RL-12X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	5/7.5/10 360a CORE UNIT ASSEMBLY
②	1	MOD-200-X121R/L	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.
③	1	MOD-214-X101R/L	5/7.5/10 TAMP NOSE MODULE SPECIFY STROKE LENGTH
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	TAMP SLIDE ASSEMBLY (ASS-214-0103R/L-X) (JOB SPECIFIC)
	1	ORDER SEPARATELY	PAD & MANIFOLD (LABEL SIZE IS JOB SPECIFIC)
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)



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

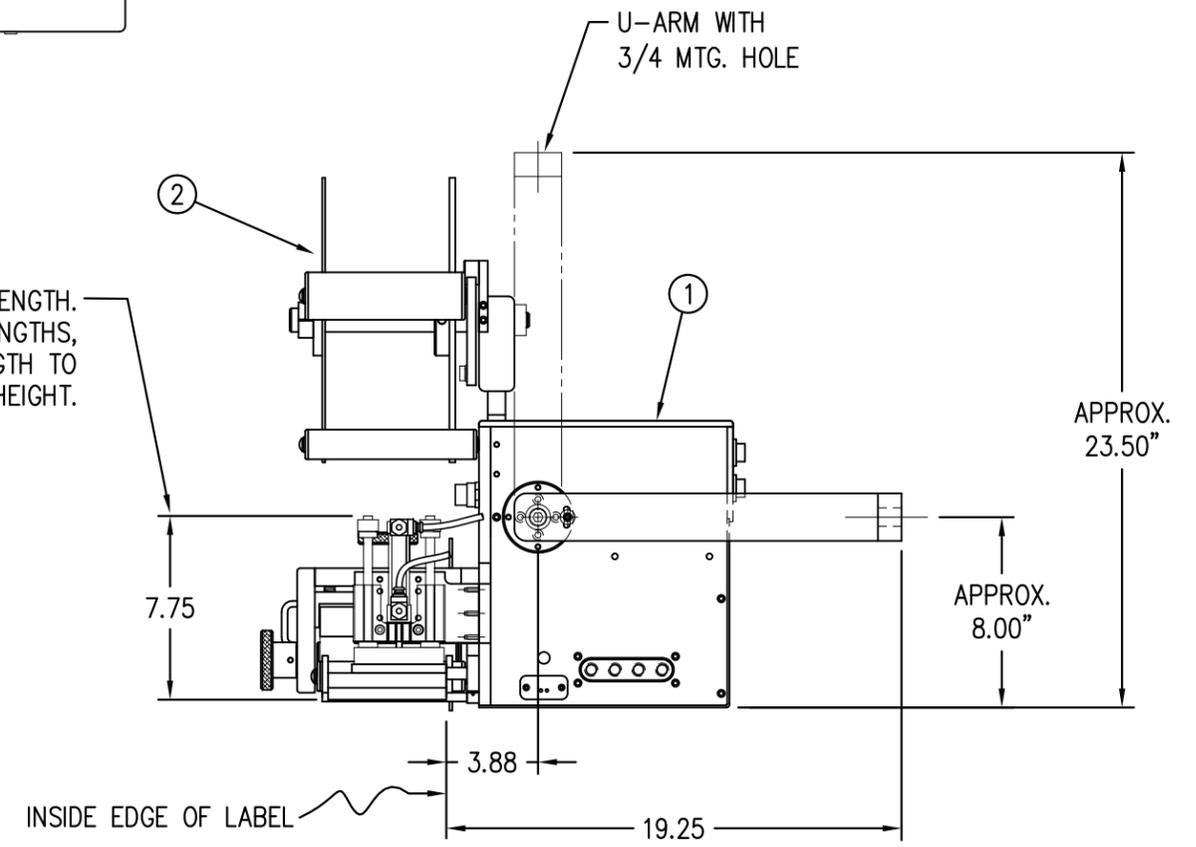
NOTE: UNWIND MTG. BRACKET FOR 5" & 7.5" WIDE APPLICATORS DIFFERS FROM 10" WIDE. FOR 10" WIDE MTG. BRACKET REFER TO DWG. MP-200-5216



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

③ TAMP STROKE LENGTH IS JOB SPECIFIC (ORDER TAMP SLIDE SEPARATELY) ASS-214-0103R/L-X

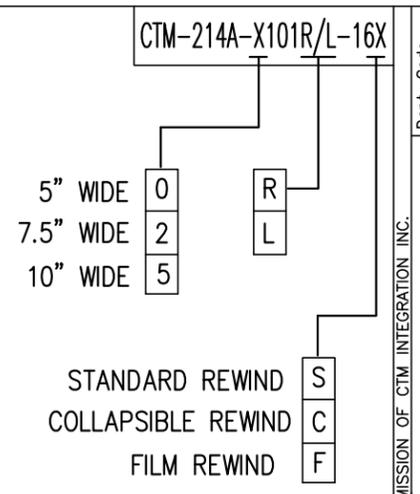
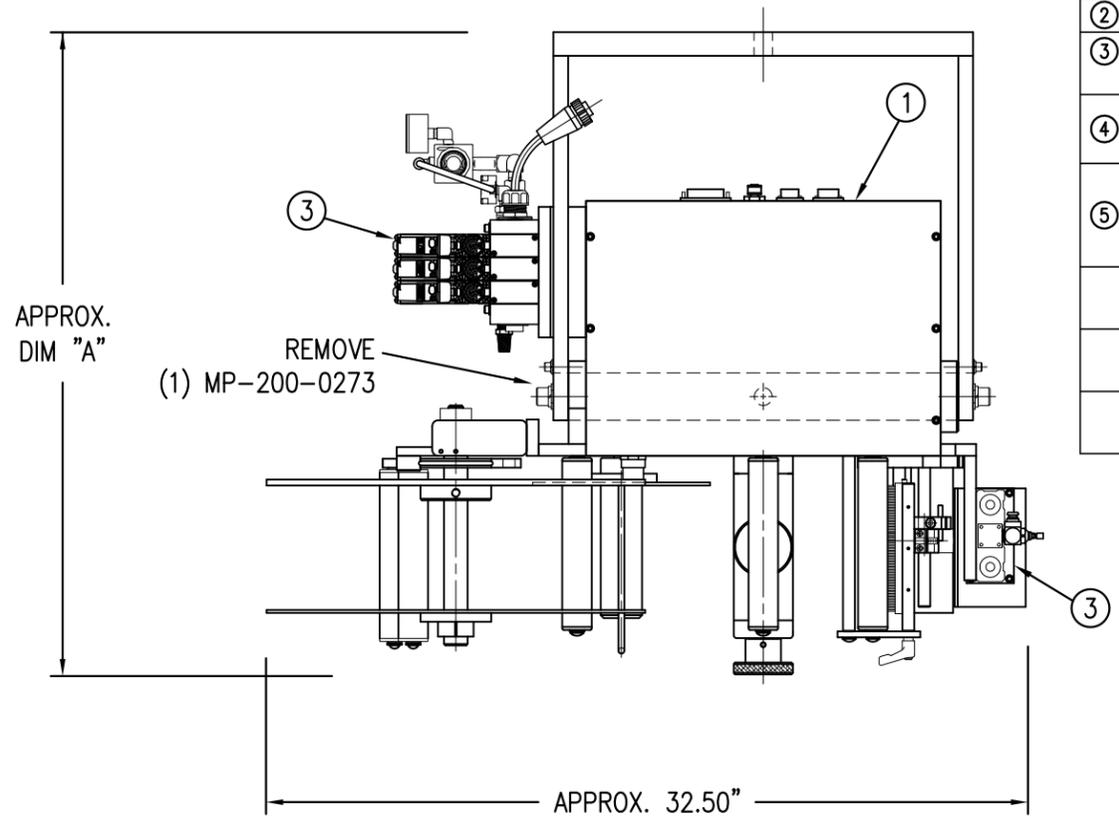
ORDER PAD & MANIFOLD SEPARATELY



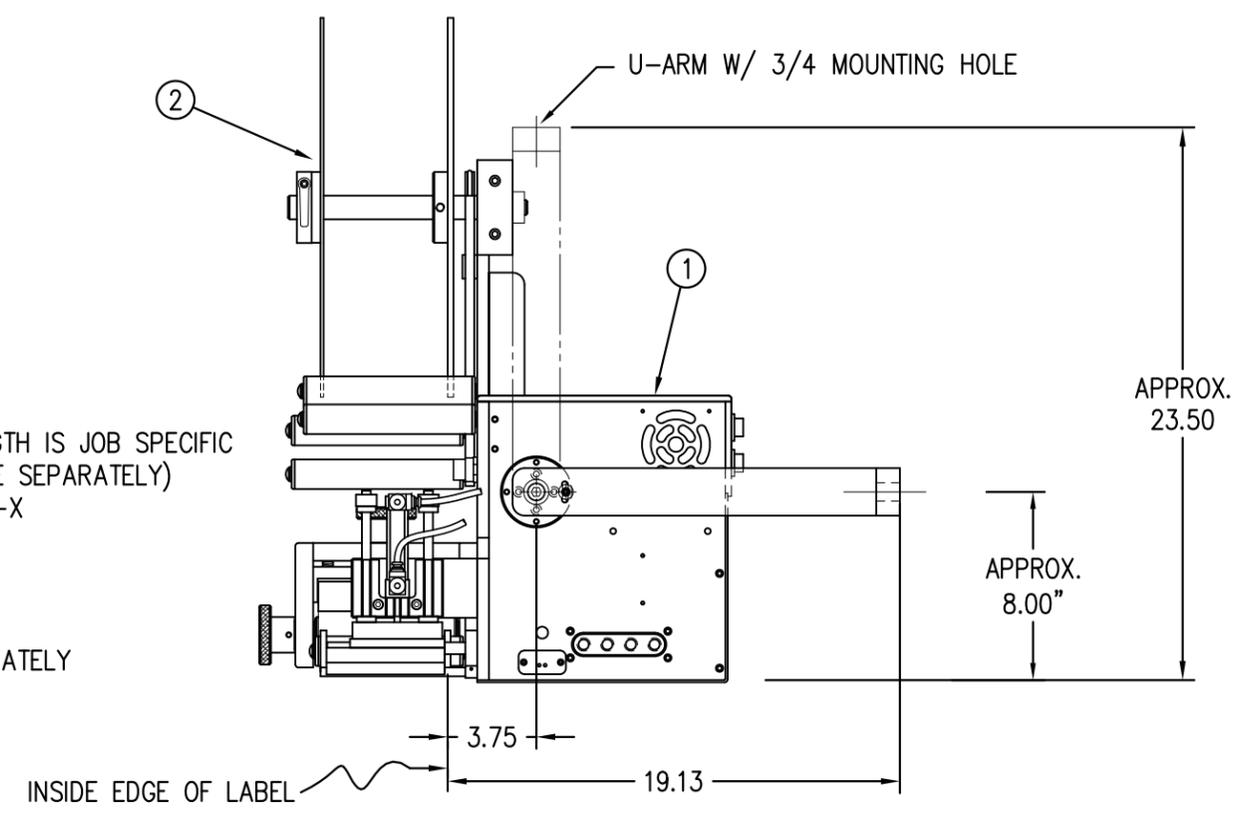
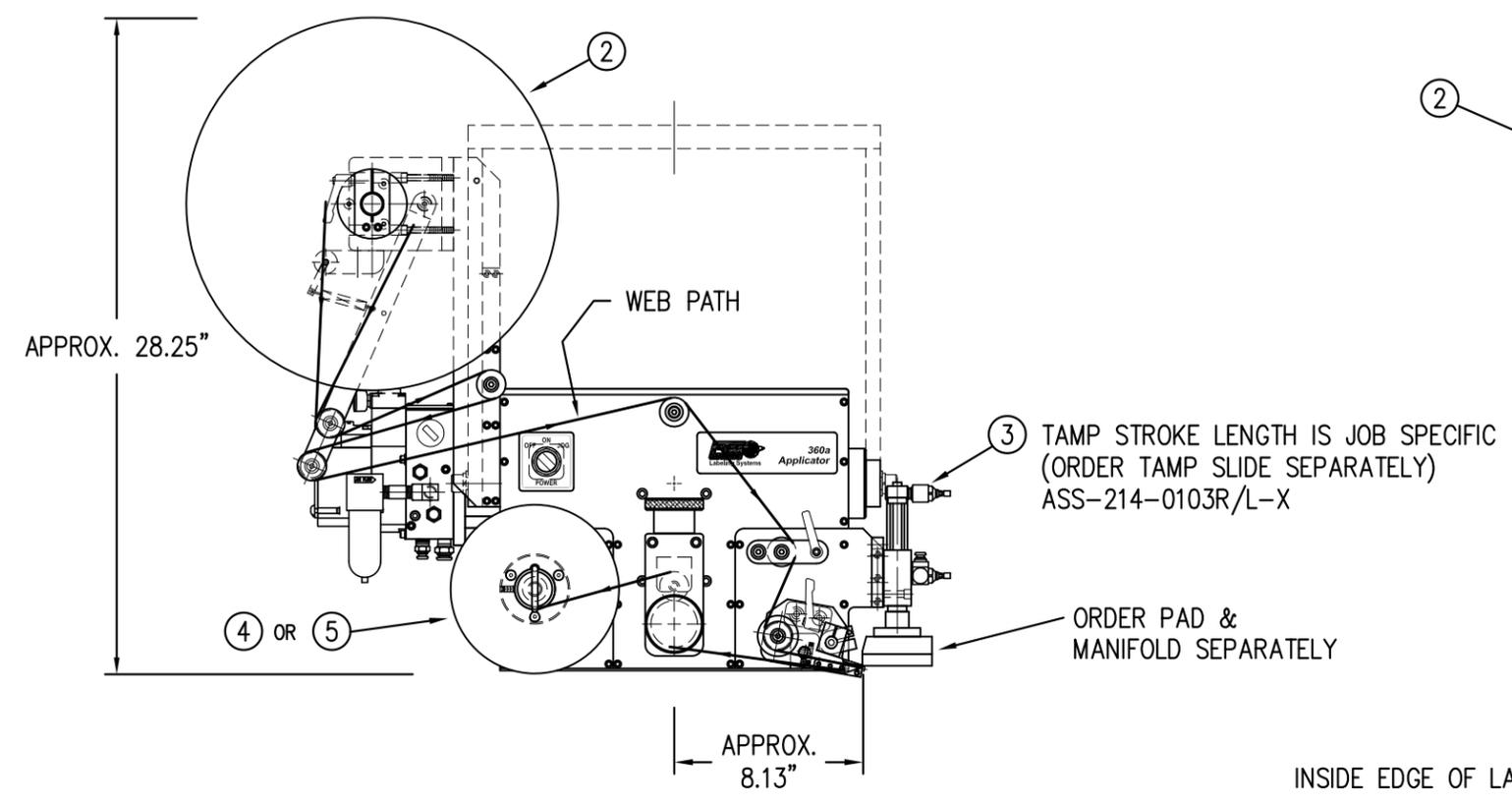
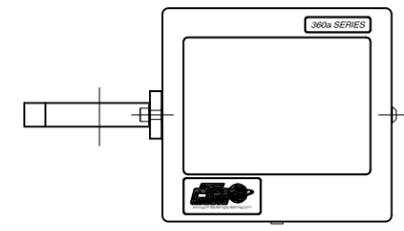
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 Dept. Code 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\CTM-214A-X101RL-12X
 TITLE: TAMP w/12" UNWIND ASSEMBLY
 DRAWN BY: T. Rhodes
 Date: 12/15/17
 Scale: 1=8
 REV. DATE 12/15/17
 REV. BY: TDR
 REV. DESCRIPTION 1 NEW DRAWING FOR 360a - UPDATE DECALS & DISPLAY
 APPLICATOR WIDTH(S): 5"/7.5"/10"
 APPLICATOR SERIES: 360
 GROUP: TAMP ASSEMBLY

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

BILL OF MATERIAL			
CTM-214A-X101RL-16X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	5/7.5/10 360a CORE UNIT ASSEMBLY
②	1	MOD-200-3121R/L-X	5/7.5/10 WIDE; 16" UNWIND w/ DISKS MOD.
③	1	MOD-214-X101R/L	5/7.5/10 TAMP NOSE MODULE SPECIFY STROKE LENGTH
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	TAMP SLIDE ASSEMBLY (ASS-214-0103R/L-X) (JOB SPECIFIC)
	1	ORDER SEPARATELY	PAD & MANIFOLD (LABEL SIZE IS JOB SPECIFIC)
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)



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



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 Dept. Code 70
 F:\Engineering\Standard Parts\Appliator\360 SERIES\360a\CTM-214A-X101RL-16X
 TITLE: TAMP w/16" UNWIND ASSEMBLY
 DRAWN BY: T. Rhodes
 Date: 12/15/17
 Scale: 1=8
 REV. DATE 12/15/17
 REV. BY TDR
 REV. DESCRIPTION 1 NEW DRAWING FOR 360a - UPDATE DECALS & DISPLAY
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"/10"

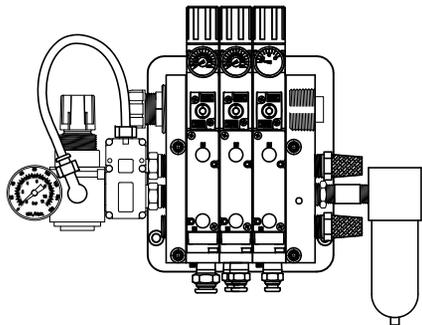
BILL OF MATERIAL

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



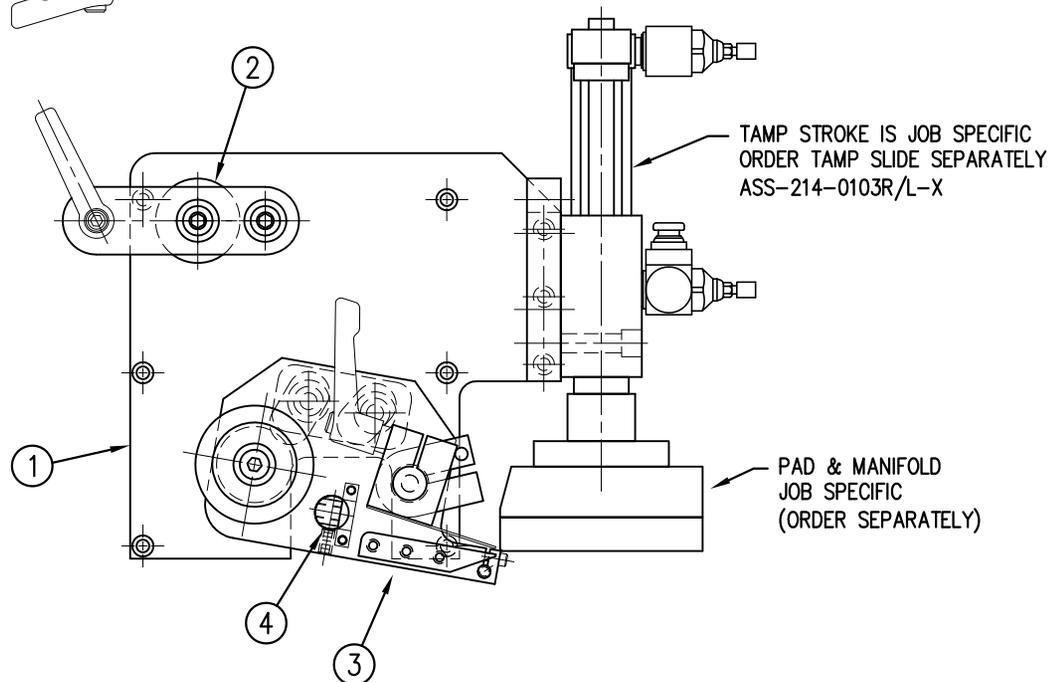
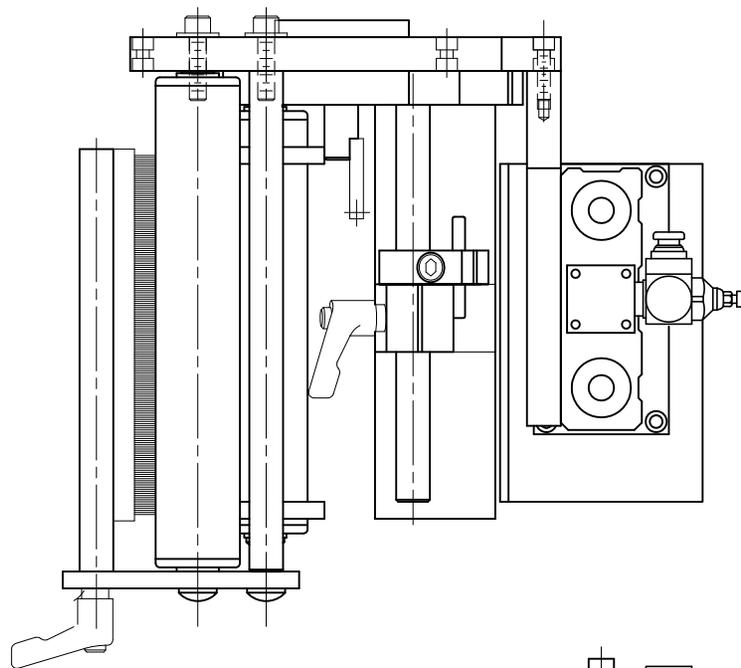
⑤ VALVE BANK ASSEMBLY
SCALE: 2"=1'-0"

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

MOD-214-X101RL

ASS-214-X101R/L

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



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

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APPLICATOR SERIES: 360
APPLICATOR WIDTH(S): 5"/7.5"
GROUP: TAMP ASSEMBLY

TITLE: TAMP ASSEMBLY w/ TRANSITION PLATE

Dept. Code 70

REV. 0
REV. DESCRIPTION
NEW TITLEBLOCK

REV. DATE
04/08/03

REV. BY:
TDR

Scale: 1=3
Date: 06/14/97

DRAWN BY:
BOB S.

F:\Engineering\Standard Parts\Applicator\360 SERIES\
360a\MOD\MOD-214-X101RL

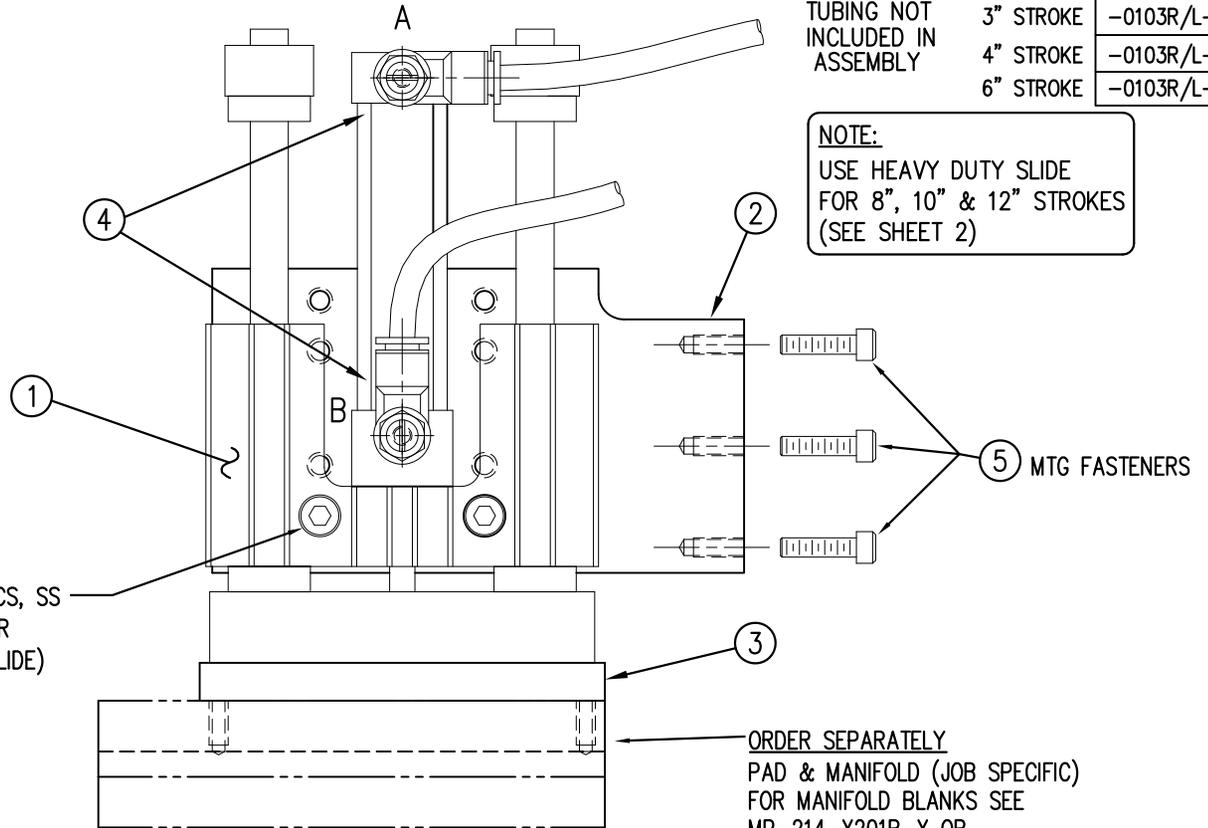
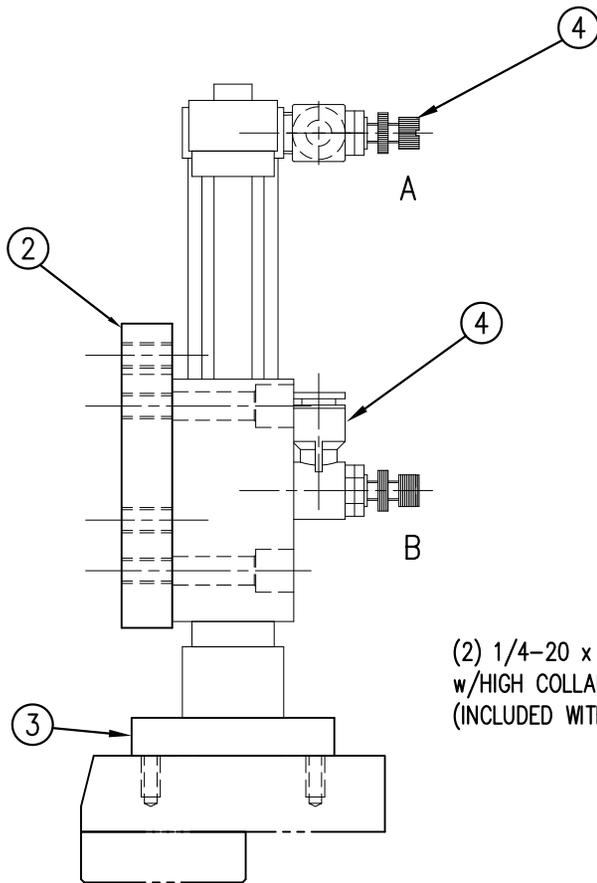
RH & LH MOUNTING AVAILABLE
-RH MOUNTING SHOWN-

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)

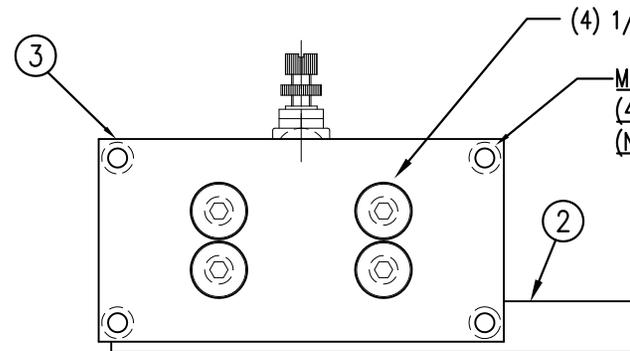


(2) 1/4-20 x 1-3/8 Lg. SHCS, SS
w/HIGH COLLAR LOCK WASHER
(INCLUDED WITH STANDARD SLIDE)

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

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

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

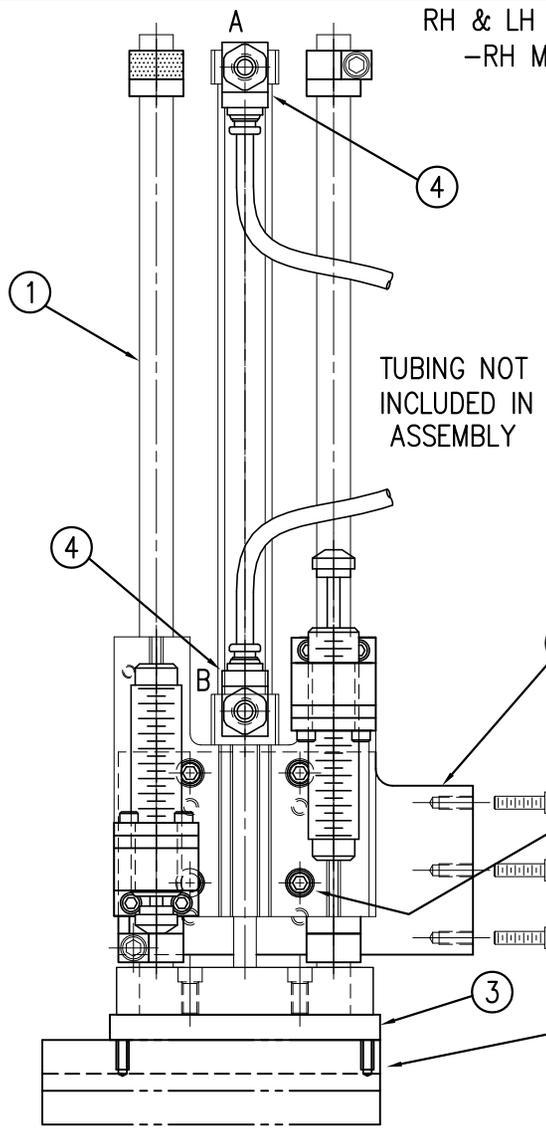
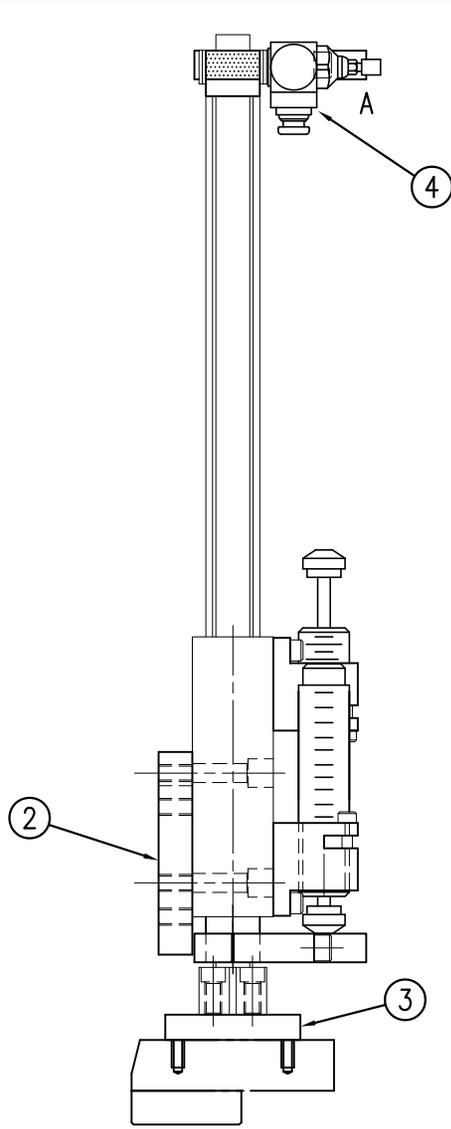


360 BILL OF MATERIAL

ASSEMBLY	ASS-214-0103R/L-X		SOLD
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 .

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: TAMP ASSEMBLY	TITLE: STANDARD SLIDE ASSEMBLY for 360a APPLICATOR	Dept. Code 70
REV. 6	REV. DESCRIPTION UPDATED FLOW CONTROLS	REV. DATE 11/02/11	REV. BY: JLM Scale: 1=2 Date: 02/21/98	DRAWN BY: BOB S. F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\ASS\ASS-214-0103RL-Xs1



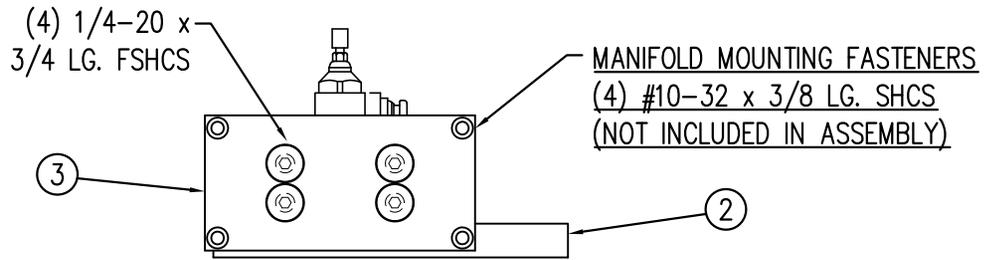
RH & LH MOUNTING AVAILABLE
-RH MOUNTING SHOWN-

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

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



BILL OF MATERIAL

ASS-214-0103R/L-X

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

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: TAMP ASSEMBLY	TITLE: HEAVY DUTY SLIDE ASSEMBLY for 360a APPLICATOR	Dept. Code 70
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REV. 2	REV. DESCRIPTION UPDATED SHOCK MOUNTING BRACKETS	REV. DATE 09/09/19	REV. BY: TDR	Scale: 1=3	Date: 02/21/98	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Appliator\360 SERIES\ 360a\ASS\ASS-214-0103RL-Xs2
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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	.

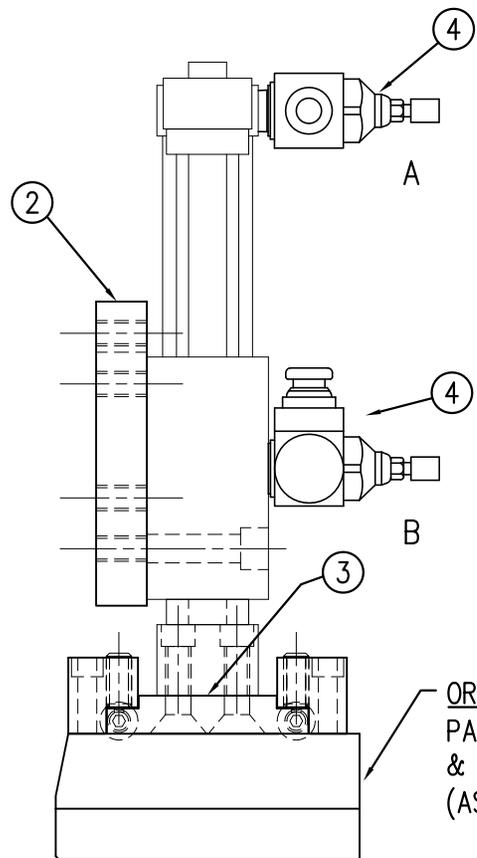
RH & LH MOUNTING AVAILABLE
-RH MOUNTING SHOWN-

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

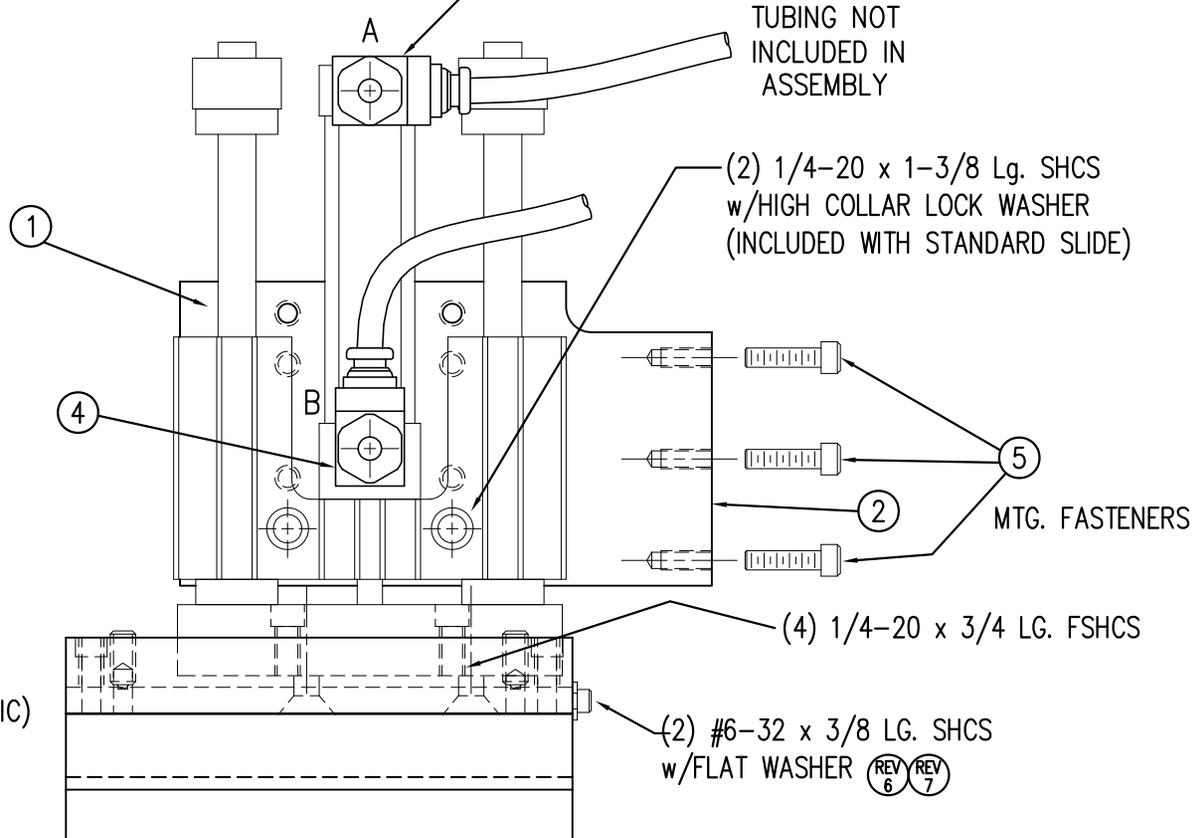
MANIFOLD MOUNTING FASTENERS
(4) #10-32 x 3/4 LG. SHCS
(NOT INCLUDED IN ASS'Y)

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

(4) 1/4-20 BALL PLUNGER



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



TUBING NOT INCLUDED IN ASSEMBLY

MTG. FASTENERS

REV 6 REV 7

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: TAMP ASSEMBLY	TITLE: STANDARD SLIDE ASS'Y for 360a 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\Appliator\360 SERIES\ 360a\ASS\ASS-214-0103RL-XQs1

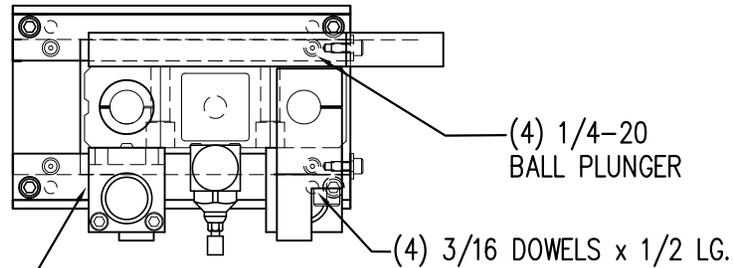
BILL OF MATERIAL

ASS-214-0103R/L-XQ

ASS-214-0103R/L-XQ

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

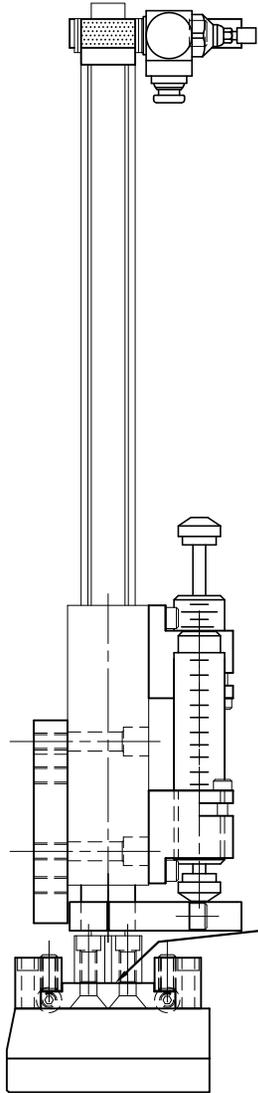
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-214-0108-X	TAMP SLIDE ("X" STROKE LENGTH)
②	1	MP-214-0204	SLIDE MOUNT PLATE
③	1	MP-214-0227	QUICK CHANGE MANIFOLD TRANSITION PLATE
④	2	FLOW CONTROL	PM-PF2060
⑤	3	PM-FASH429080	SHCS, #10-32 x 3/4" Lg.



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

RH & LH MOUNTING AVAILABLE
 -RH MOUNTING SHOWN-

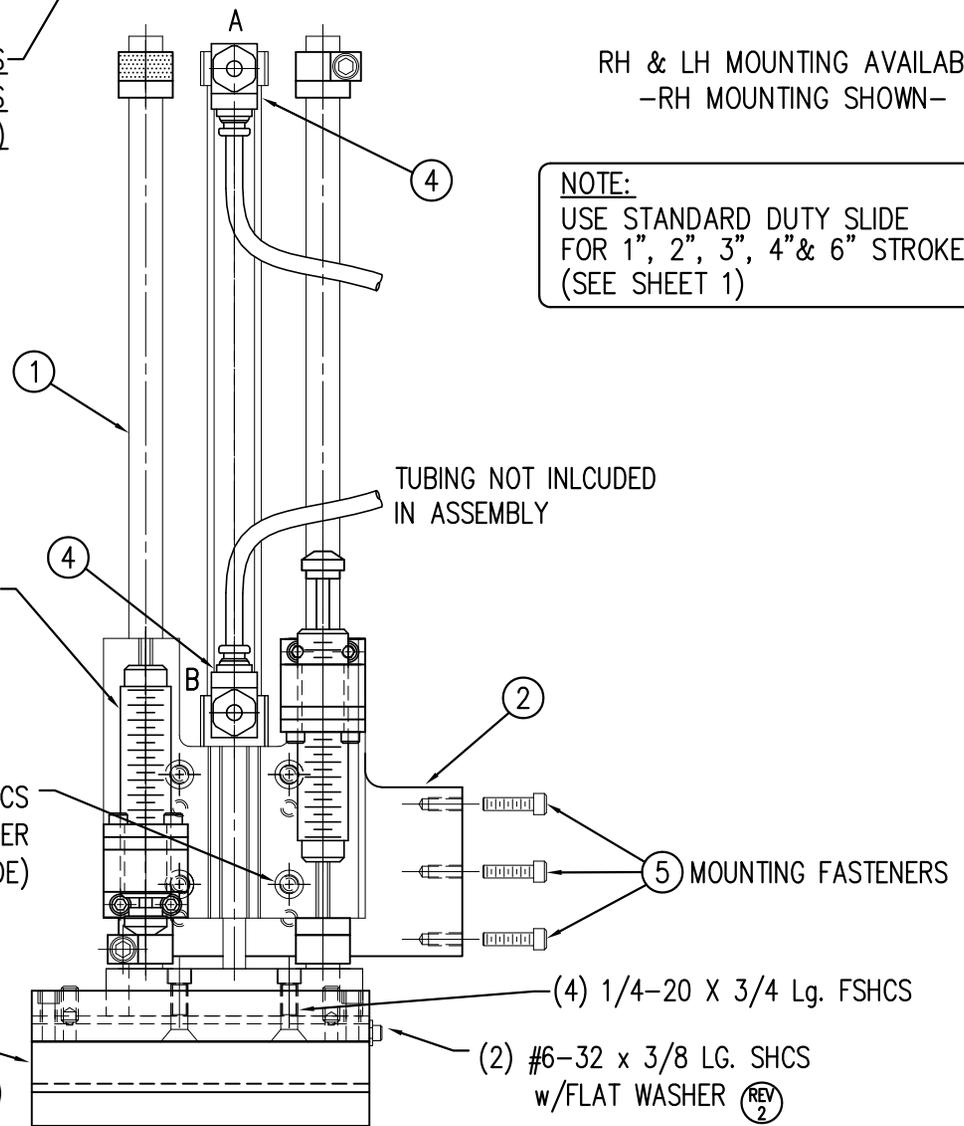
NOTE:
 USE STANDARD DUTY SLIDE
 FOR 1", 2", 3", 4" & 6" STROKES
 (SEE SHEET 1)



(2) SHOCK ABSORBERS (PM-SA0950)
 (INCLUDED w/ ASS-214-0108-X)

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

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



TUBING NOT INCLUDED
 IN ASSEMBLY

(5) MOUNTING FASTENERS

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

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

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: TAMP ASSEMBLY	TITLE: HEAVY DUTY SLIDE ASS'Y for 360a APPLICATOR w/QUICK CHANGE PAD	Dept. Code 70
REV. 4	REV. DESCRIPTION UPDATED SHOCK MOUNTING BRACKETS	REV. DATE 09/09/19	REV. BY: TDR	Scale: 1=3
			Date: 02/21/98	DRAWN BY: BOB S.
				F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\ASS\ASS-214-0103RL-XQs2

BILL OF MATERIAL

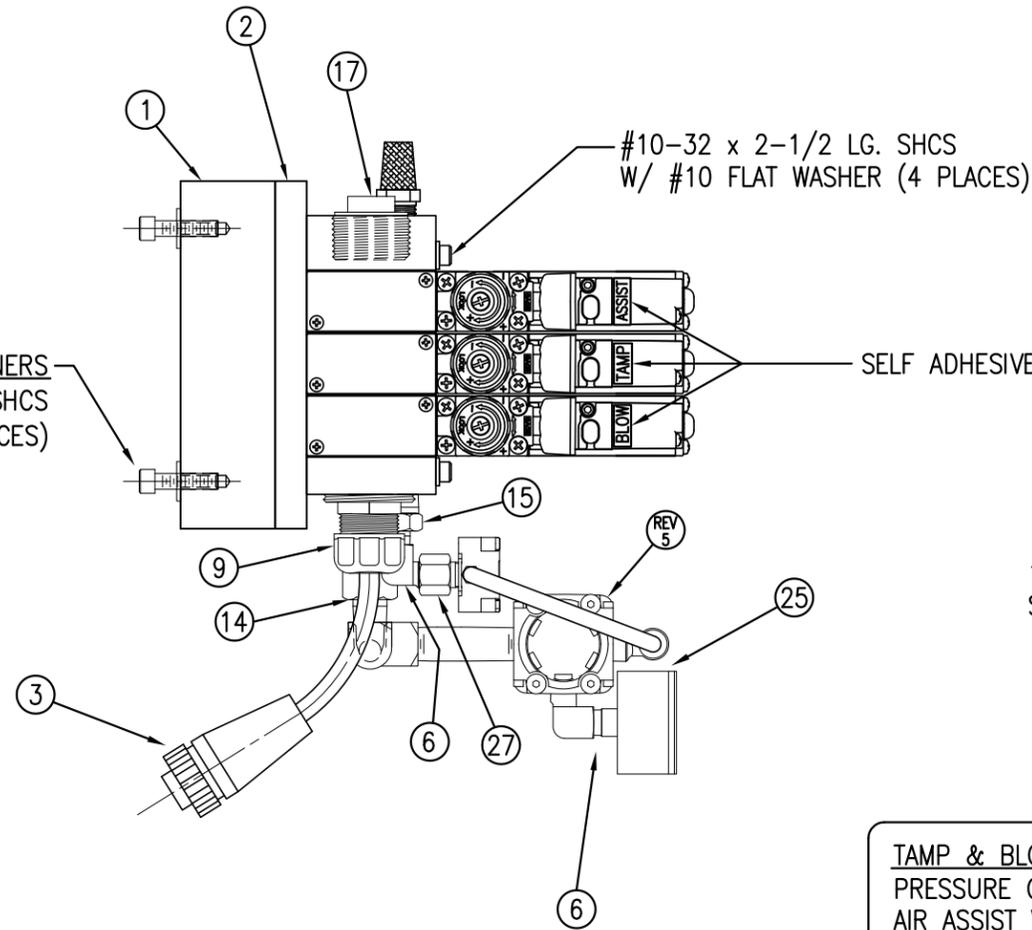
ASS-214-0105M

NOTE: AIR SUPPLY ALWAYS ENTERS FROM BACK OF APPLICATOR - CHANGE PIPING TO SUIT

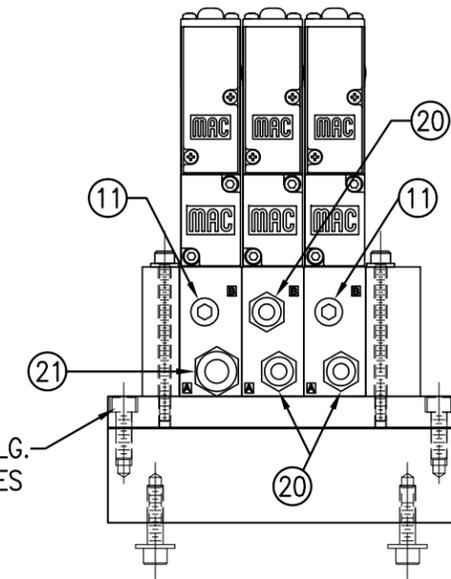
ASS-214-0105M

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	ASS-200-0452M	VALVE CABLE
4	1	PM-REG1500	REGULATOR (INCLUDES PM-VA2381)
5	-	PM-VA2381	0-60 PSI GAUGE (INCLUDED w/ PM-REG1500)
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-C02000	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-PF1145	NIPPLE, 1/4" NPT X 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
26	1	PM-PF1185	90° STREET ELBOW, 1/4 NPT MALE/FEMALE
27	1	PM-PF1216	ADAPTER, 1/8 NPT MALE/FEMALE
2	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
2	2	PM-FAW30275	1/4" SS FLAT WASHER
2	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
4	4	PM-FASH429088	#10 x 2-1/2" Lg. SS SHCS
4	4	PM-FAW30265	#10 SS FLAT WASHER

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



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

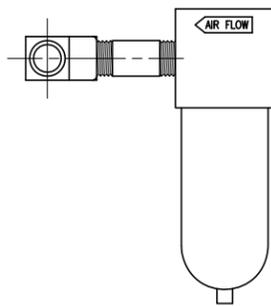


TAMP & BLOW VALVE:
PRESSURE GAUGE - 0-100 PSI
AIR ASSIST VALVE:
PRESSURE GAUGE - 0-60 PSI

AIR FILTER SHOWN IN
TYPICAL LOCATION FOR
LH APPLICATOR

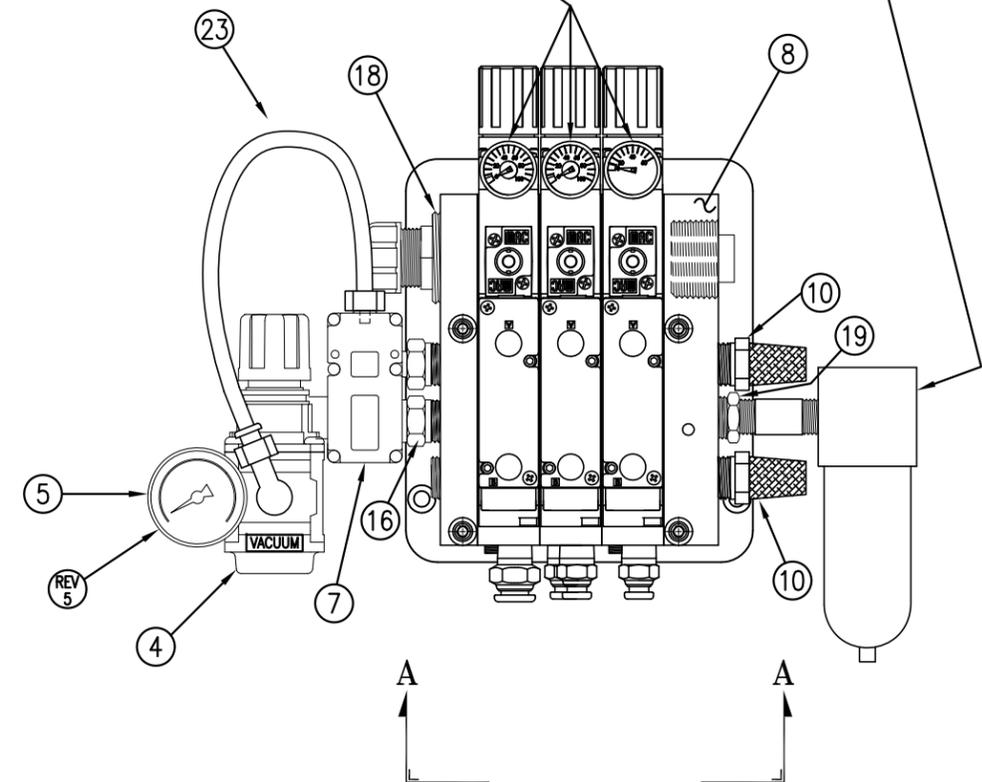
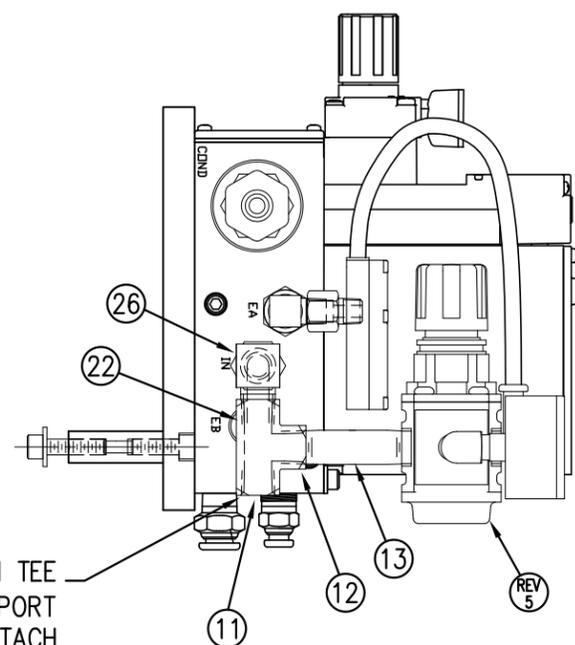
VALVE BANK SPARE PARTS:

- 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



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

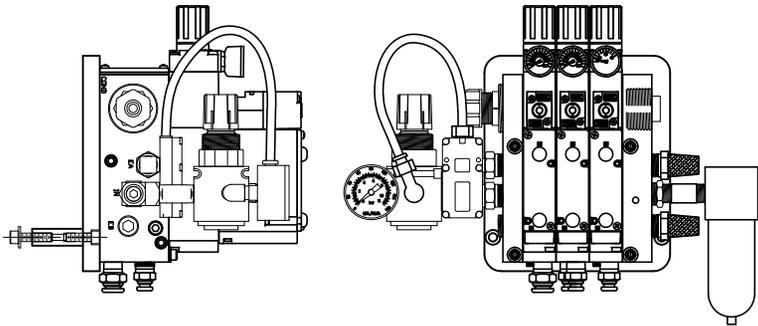


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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5" / 7.5" / 10"
 GROUP: VALVE BANKS
 REV. DESCRIPTION: 5 REVISED FOR NEW PARKER REGULATOR. CTM P/N DOES NOT CHANGE
 REV. BY: BNT
 REV. DATE: 03/13/20
 TITLE: 3 STATION VALVE BANK ASSEMBLY (TAMP)
 SCALE: 1=3
 DATE: 03/28/07
 DRAWN BY: E. SANOR
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-214-0105M
 Dept. Code: 70

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



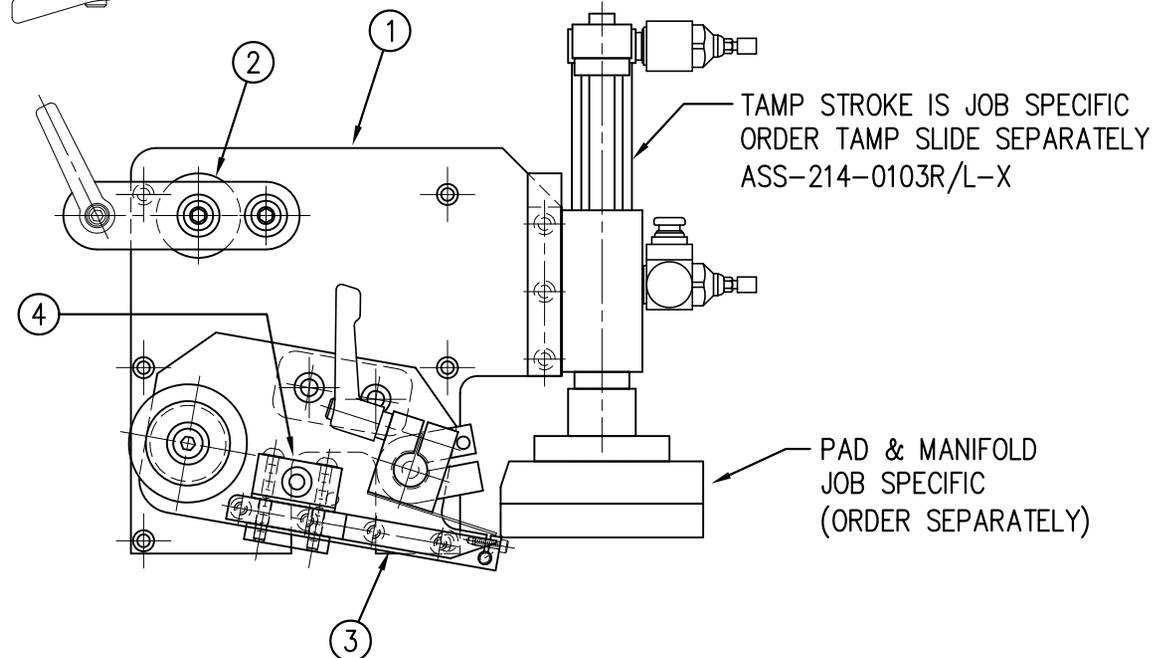
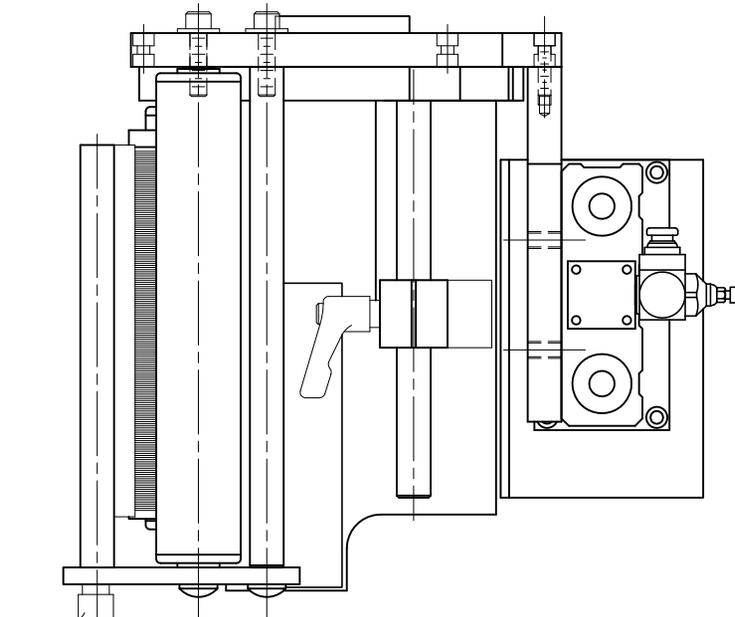
⑤ VALVE BANK ASSEMBLY
SCALE: 2"=1'-0"

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



BILL OF MATERIAL

ASS-214-3101R/L-X

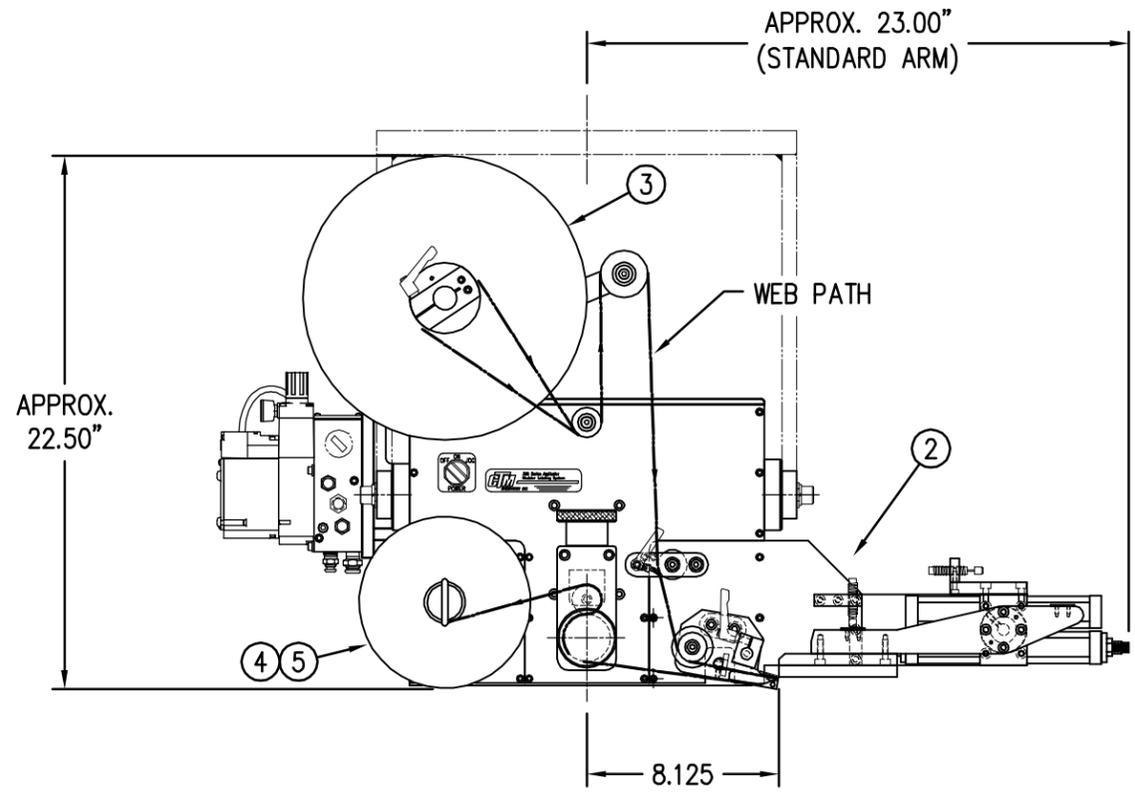
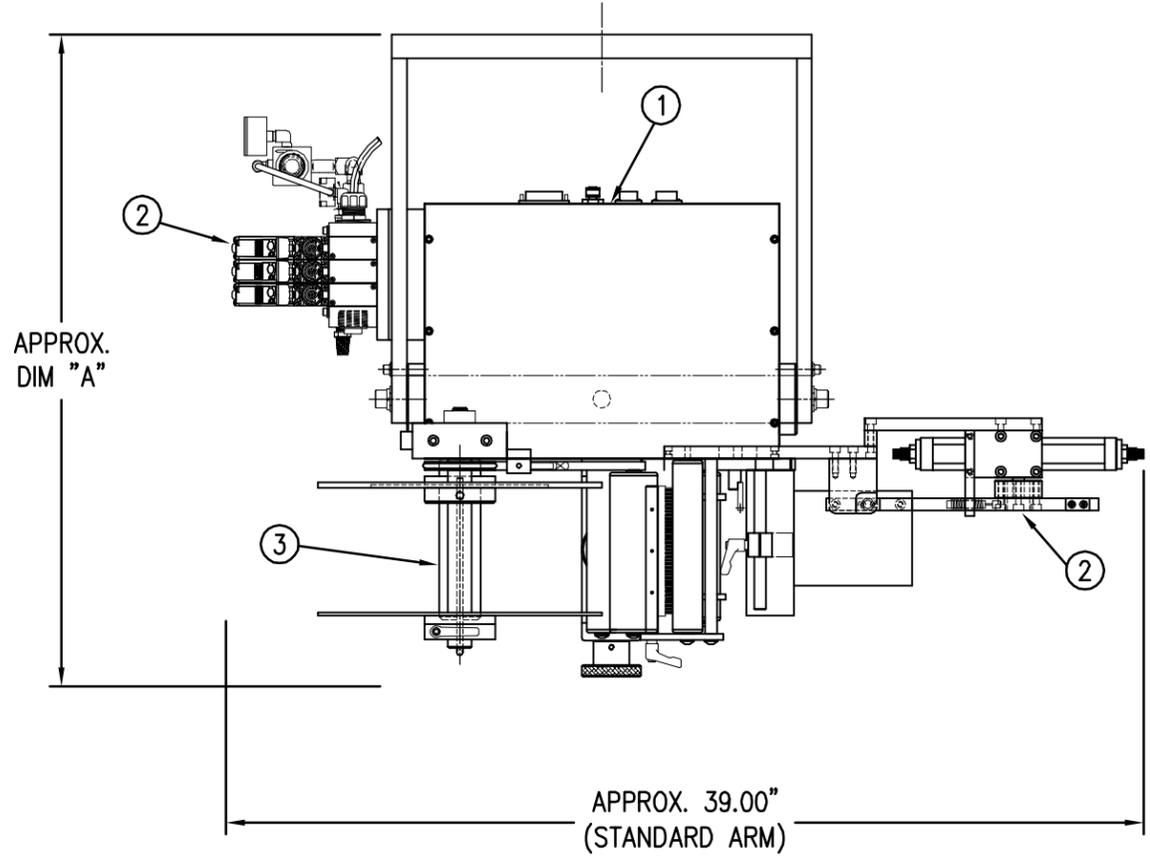
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0207	TAMP TRANSITION PLATE
②	1	ASS-200-X126	5/7.5/10 TENSION BRUSH ASSEMBLY
③	1	ASS-214-3102R/L-X	5/7.5/10 CLR. LABL. TAMP PEEL EDGE ASSY.
④	1	ASS-200-0431	LRD 6300 CLEAR LABEL SENSOR
	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: TAMP ASSEMBLY	TITLE: TAMP CLEAR LABEL PEEL EDGE ASSEMBLY w/ TRANSITION PLATE	Dept. Code 70
REV. 1	REV. DESCRIPTION UPDATED CLEAR LABEL SENSOR	REV. DATE 10/31/17	REV. BY: TDR	Scale: 1=3 Date: 06/14/97 DRAWN BY: BOB S.

F:\Engineering\Standard Parts\Applicator\360 SERIES\
360a\MOD\ASS-214-3101RL-X

PART NO.	DIM "A"
CTM-214-0110R/L-X-12X	27.50
CTM-214-2110R/L-X-12X	30.00



BILL OF MATERIAL

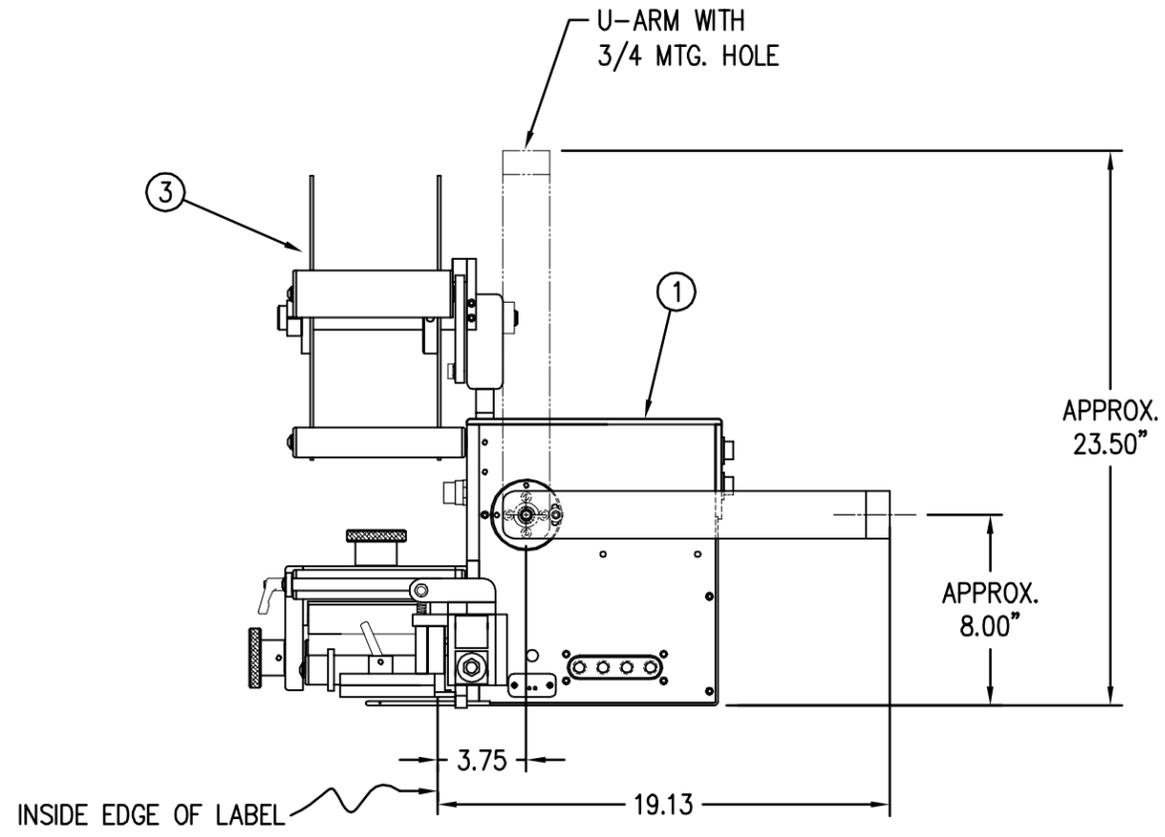
ASSEMBLY		CTM-214-X110RL-X-12X		SOLD
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5 WIDE; CORE UNIT	CTM-200A-0150L/R	S
②	1	5/7.5 IN-LINE SWING TAMP MODULE	MOD-214-X110R/L	S
③	1	5/7.5 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S
④	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S
	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S
⑤	1	FILM REWIND MANDREL	ASS-200-X137	S
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	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-

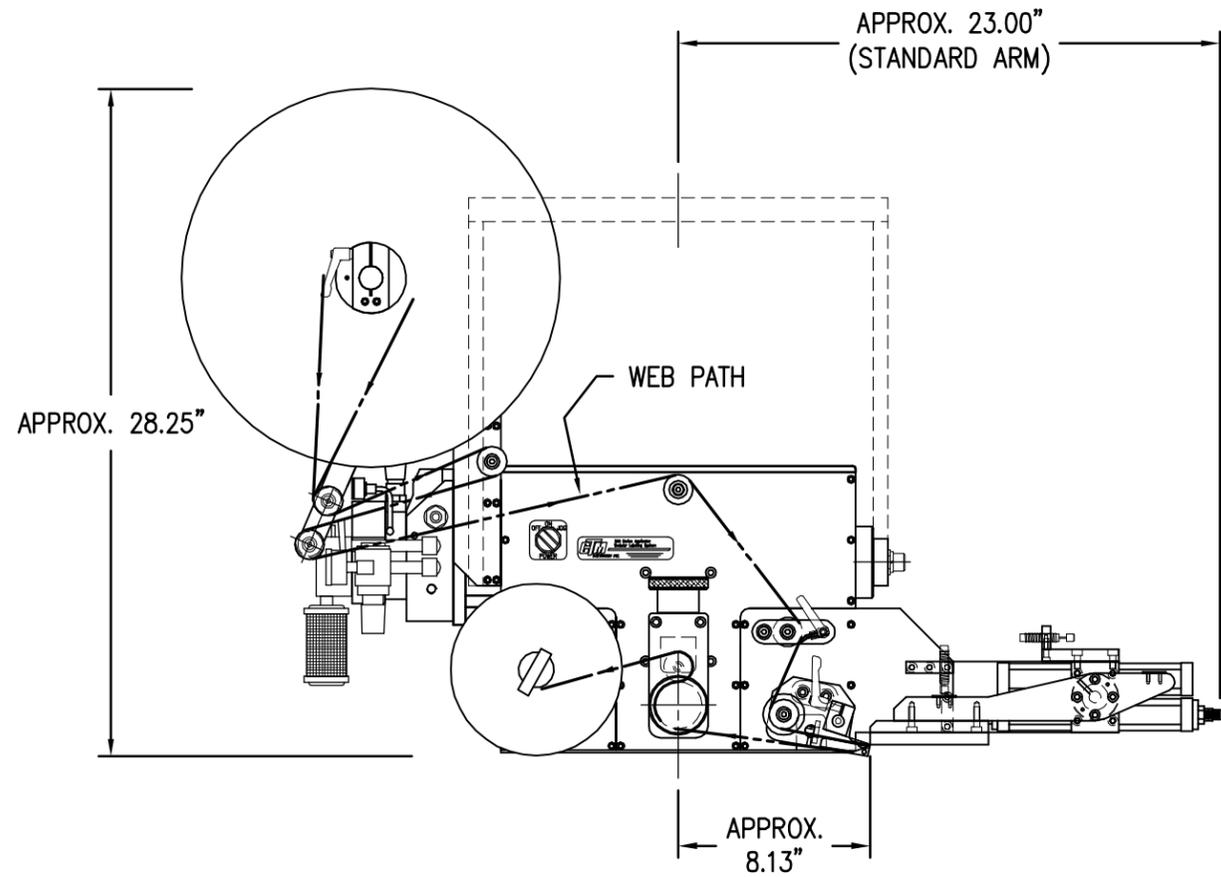
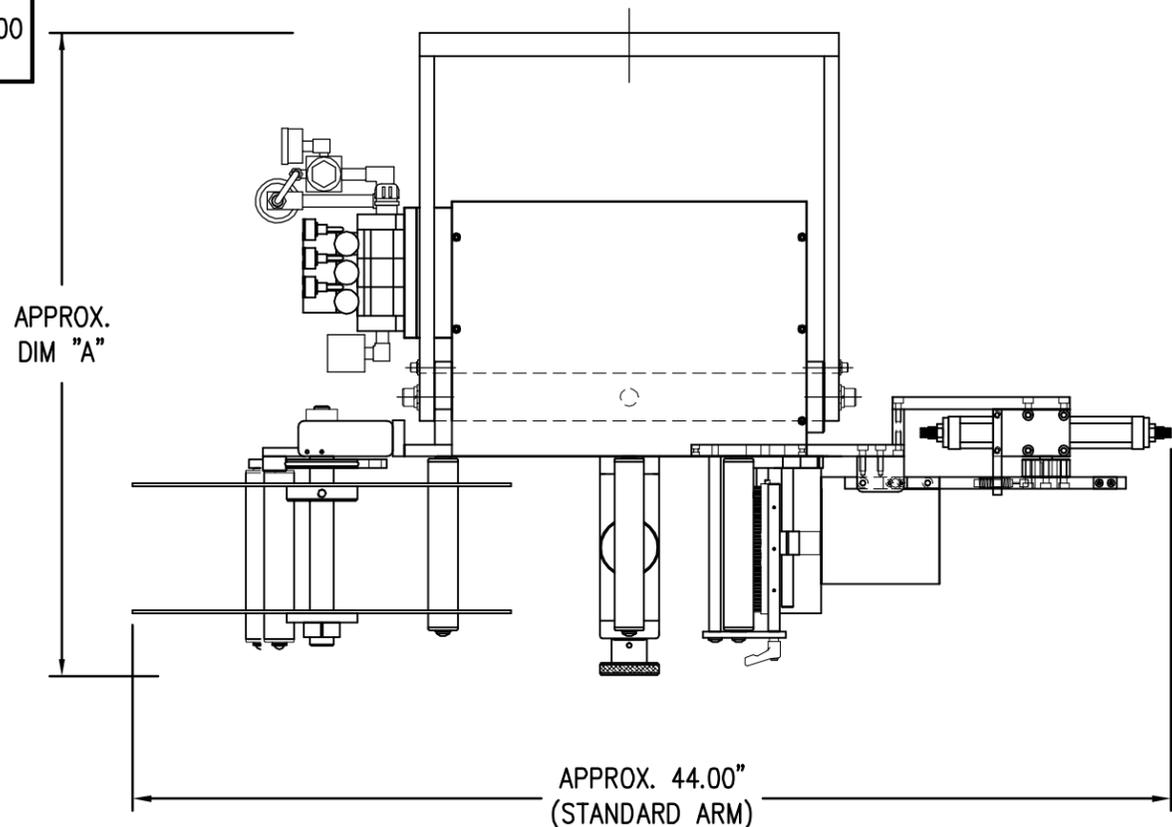
CTM-214-X110R/L-12X		
5" WIDE STD. SWG. ARM	-0110R/L-12	X
5" WIDE 2" OS SWG. ARM	-0110R/L-2-12	X
5" WIDE 4" OS SWG. ARM	-0110R/L-4-12	X
7.5" WIDE STD. SWG. ARM	-2110R/L-12	X
7.5" WIDE 2" OS SWG. ARM	-2110R/L-2-12	X
7.5" WIDE 4" OS SWG. ARM	-2110R/L-4-12	X

STANDARD REWIND S
 COLLAPSIBLE REWIND C
 FILM REWIND F



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 TITLE: 360 SERIES APPLICATOR: SWING TAMP ASSEMBLY
 REV. 2 UPDATED BOM USING CTM CORE #
 REV. DATE 07/09/15
 REV. BY KSM
 SCALE 1=8
 DATE 11/04/99
 DRAWN BY BOB S.
 PART: 5" / 7.5" WIDE: IN-LINE SWING TAMP w/ 12" UNWIND ASSEMBLY
 Dept. Code 70
 F:\Engineering\Standard Parts\Applcator\360\214\CTM-214-X110RL-X-12X

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
ASSEMBLY				CTM-214-X110RL-16X
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 SWING TAMP MODULE	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	.

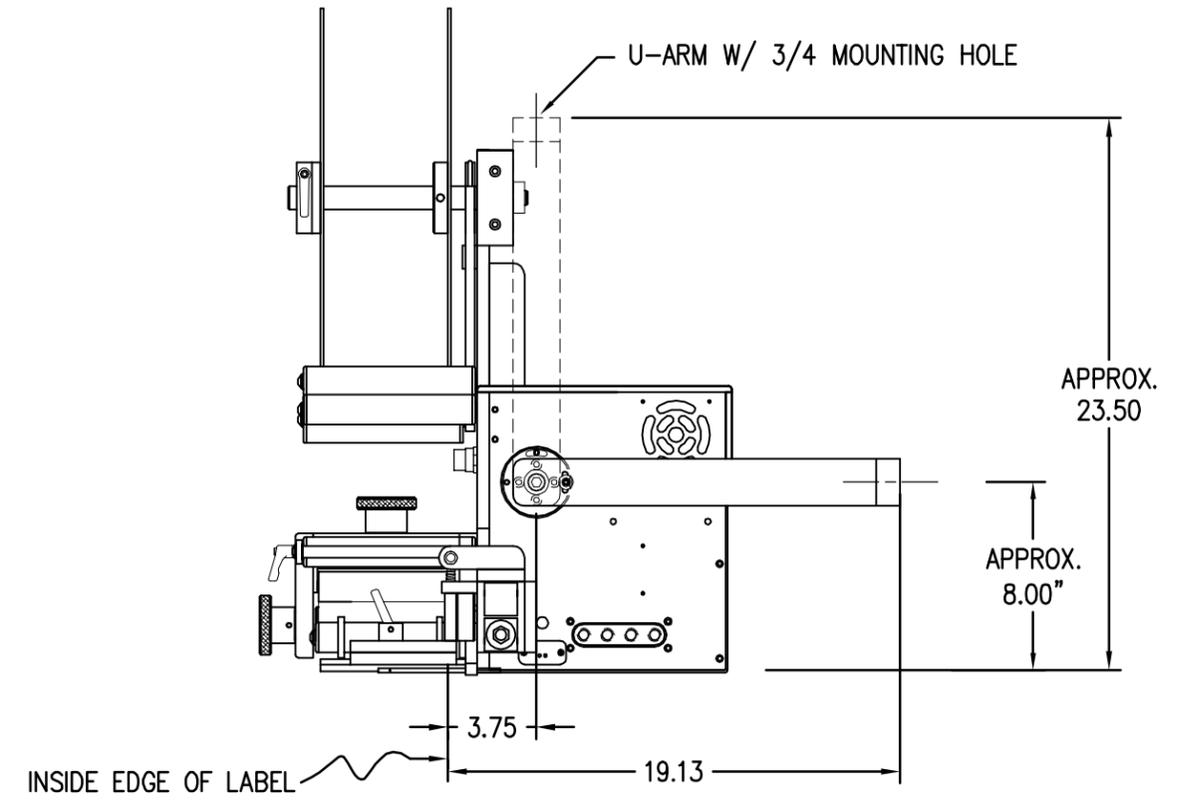
- ORDER THESE ITEMS SEPARATELY:**
- 1.) TAMP SLIDE
 - 2.) LABEL PAD
 - 3.) LABEL MANIFOLD
 - 4.) PRODUCT DETECT SENSOR

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

STANDARD REWIND S
 COLLAPSIBLE REWIND C
 FILM REWIND F

CTM-214-X110R/L-16X		
5" WIDE	-0110RL-16	X
7.5" WIDE	-2110RL-16	X

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-



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 TITLE: 360 SERIES APPLICATOR: SWING TAMP ASSEMBLY
 REV. 1 UPDATED BOM FOR NEW COLLAPSIBLE MANDREL
 REV. DATE 09/12/07
 REV. BY TDR
 SCALE 1=8
 DATE 11/04/99
 DRAWN BY BOB S.
 PART: 5/7.5/10 WIDE IN-LINE SWING TAMP w/ 16" UNWIND ASSEMBLY
 Dept. Code 70
 F:\Engineering\Standard Parts\Applcator\360\214\CTM-214-X110RL-16X

BILL OF MATERIAL

MOD-214-X110R/L-X

MOD-214-X110R/L-X

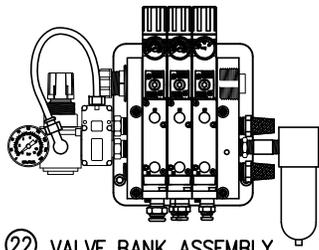
ASS-214-X110R/L-X

5" WIDE -0110R/L-X
7.5" WIDE -2110R/L-X

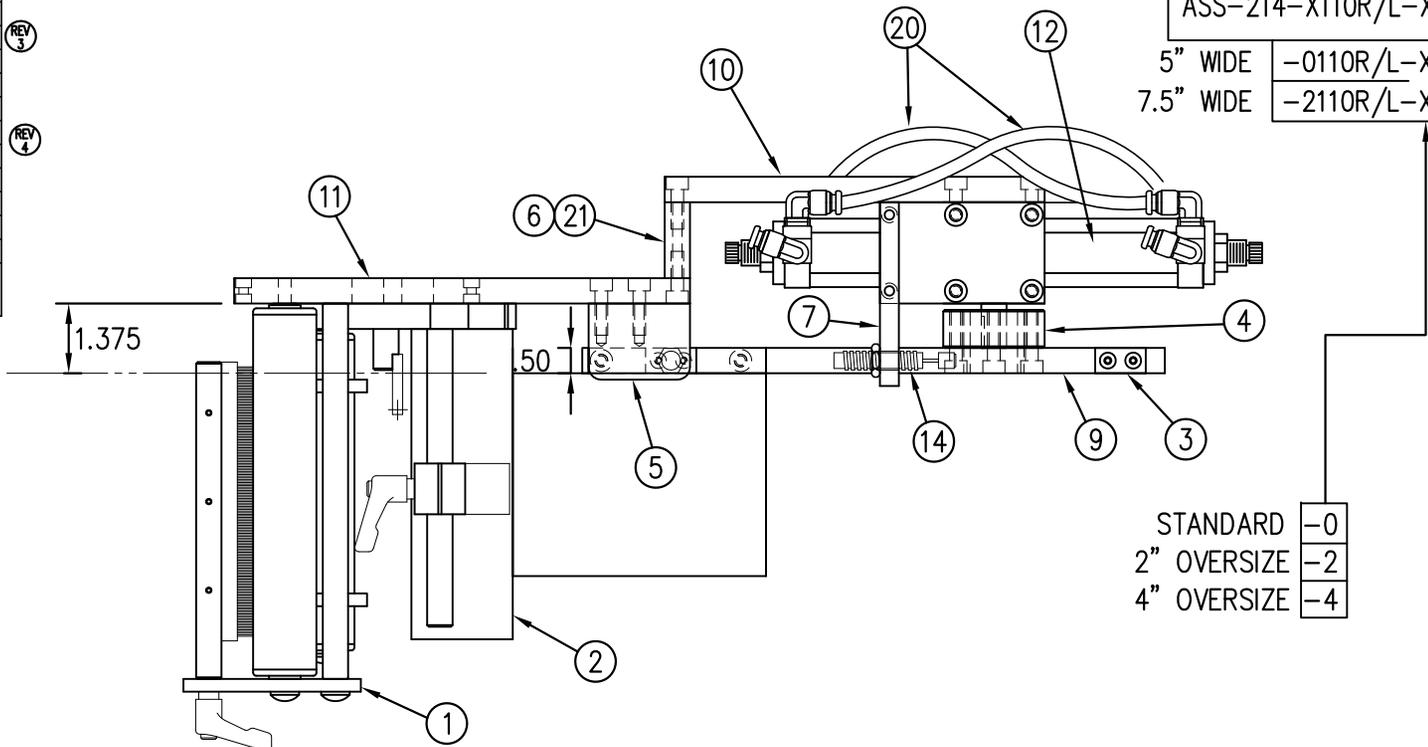
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-214-X110R/L-X	5/7.5 IN-LINE SWING TAMP ASSEMBLY
22	1	ASS-214-0105M	TAMP VALVE BANK ASSEMBLY (MAC)
	1	PM-AH1000	AIR ASSIST TUBING x 15" Lg.
	3	PM-PF1010	1/4 TUBE to 1/4 NPT MALE CONNECTOR
	1	PM-PF1020	3/8 TUBE to 1/4 NPT MALE CONNECTOR
	1	PM-PF1105	1/8 NPT FEMALE to 1/4 NPT MALE BUSHING
	1	PM-PF1169	1/4 TUBE TO 1/8 NPT MALE HOSE BARB ELBOW
	2	PM-PF1035	1/4" 90 DEG. ELBOW SWIVEL
	1	PM-PF1045	3/8 90 DEG. ELBOW SWIVEL
	1	PM-PT1070	1/4" OD SMC TUBING x 96" Lg.
	1	PM-PT1080	3/8" OD SMC TUBING x 84" Lg.

ORDER THESE ITEMS SEPARATELY:

1.) LABEL PAD 2.) LABEL MANIFOLD



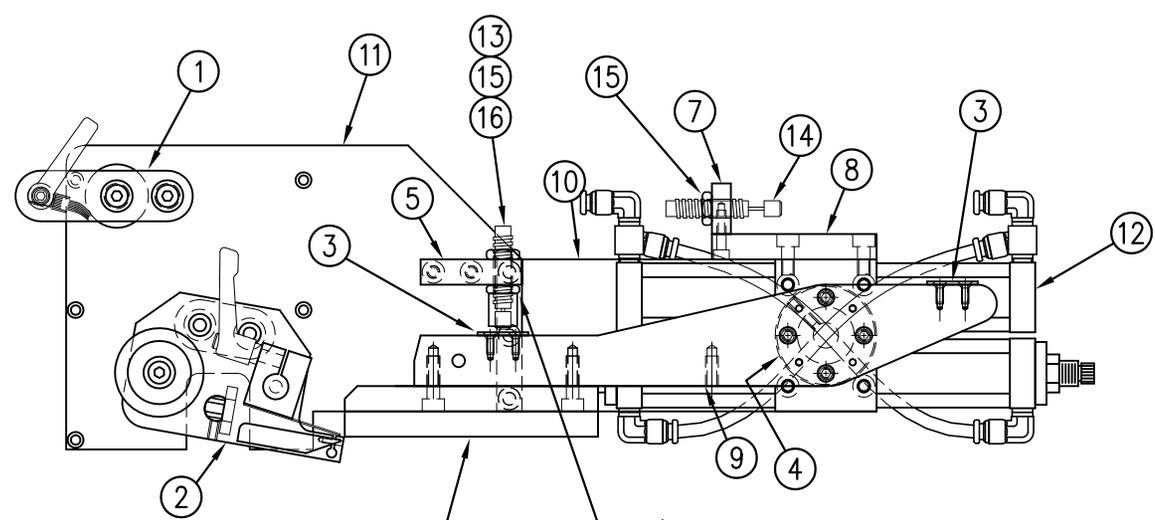
22 VALVE BANK ASSEMBLY



STANDARD -0
2" OVERSIZE -2
4" OVERSIZE -4

BILL OF MATERIAL

ASSEMBLY	QTY	ITEM DESCRIPTION	CTM PART NUMBER	SOLD
ASS-214-X110R/L-X				S
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-SAO990	.
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 SWIVEL	PM-PF1030	.
20	2	1/4" O.D. SMC TUBING x 7" LONG	PM-PT1070	.
21	4	3/16 φ 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. MTC. SHAFT	ASS-211-0108-2	S



LABEL PAD & MANIFOLD (JOB SPECIFIC)

3/8-32 NUT IS PART OF ITEM #13

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: TAMP	TITLE: IN-LINE SWING TAMP ASSEMBLY (ORIGINAL - not low profile)	Dept. Code 70
REV. 4	REV. DESCRIPTION ADDED VALVE BANK FITTINGS	REV. DATE 02/16/16	REV. BY: TDR	Scale: 1=3 Date: 11/04/99 DRAWN BY: BOB S.

F:\Engineering\Standard Parts\Appliator\360 SERIES\360a\MOD\MOD-214-X110RL-X

BILL OF MATERIAL

MOD-214-X110R/L-X-XX

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-214-X110R/L-X	SWING TAMP ASSEMBLY
	1	ASS-214-X110R/L-X-LP	LOW PROFILE SWING TAMP ASSEMBLY
③	1	ASS-214-0105M	TAMP VALVE BANK ASSEMBLY
	1	PM-AH1000	AIR ASSIST TUBING x 15" Lg.
	3	PM-PF1010	1/4" TUBE to 1/4" NPT MALE CONNECTOR
	1	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
	2	PM-PF1035	1/4" 90 DEG. ELBOW SWIVEL
	1	PM-PF1045	3/8" 90 DEG. ELBOW SWIVEL
	1	PM-PT1070	1/4" OD SMC TUBING x 96" Lg.
	1	PM-PT1080	3/8" OD SMC TUBING x 84" Lg.

ORDER THESE ITEMS SEPARATELY:
1.) LABEL PAD 2.) LABEL MANIFOLD

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

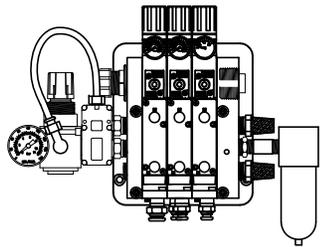
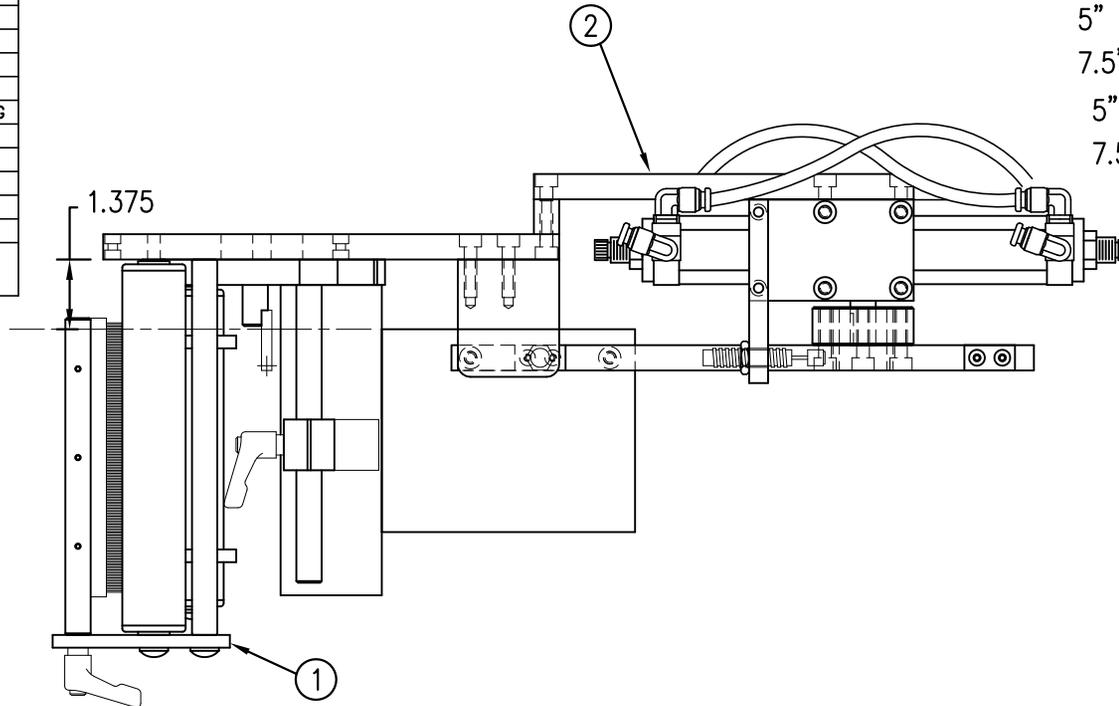
MOD-214-X110R/L-X-LP

ASS-214-X110R/L-X-LP

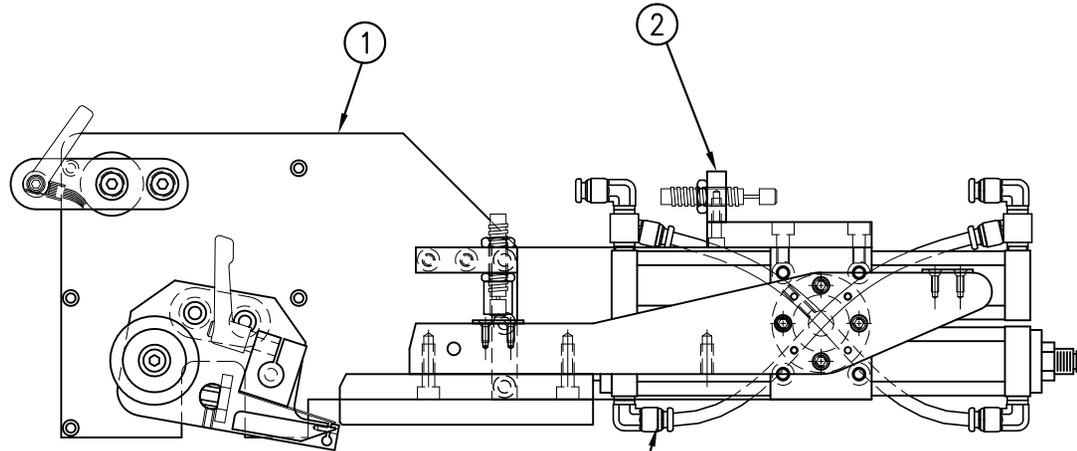
5" WIDE STD. -0110R/L-X
7.5" WIDE STD. -2110R/L-X
5" WIDE L.P. -0110R/L-X-LP
7.5" WIDE L.P. -2110R/L-X-LP

STANDARD -0
2" OVERSIZE -2
4" OVERSIZE -4

STANDARD
LOW PROFILE LP



③ VALVE BANK ASSEMBLY
SCALE: 2"=1'-0"



LABEL PAD & MANIFOLD (JOB SPECIFIC)

BILL OF MATERIAL

ASS-214-X110R/L-X-XX

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-214-X110AR/L	SWING TAMP MOUNTING ASSEMBLY
①	1	SAS-214-X110AR/L-LP	LOW PROFILE SWING TAMP MOUNTING ASSEMBLY
	1	SAS-214-0110BR/L-0	STANDARD SWING TAMP ASSEMBLY
	1	SAS-214-0110BR/L-2	2" OVERSIZE SWING TAMP ASSEMBLY
	1	SAS-214-0110BR/L-4	4" OVERSIZE SWING TAMP ASSEMBLY

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APPLICATOR SERIES: 360
APPLICATOR WIDTH(S): 5"/7.5"/10"
GROUP: TAMP ASSEMBLY

TITLE: 5"/7.5" WIDE STD / LOW PROFILE SWING TAMP ASSEMBLY

Dept. Code 70

REV. 0
REV. DESCRIPTION -

REV. DATE -

REV. BY: xxx

Scale: 1=4

Date: 12/8/15

DRAWN BY: BOB S.

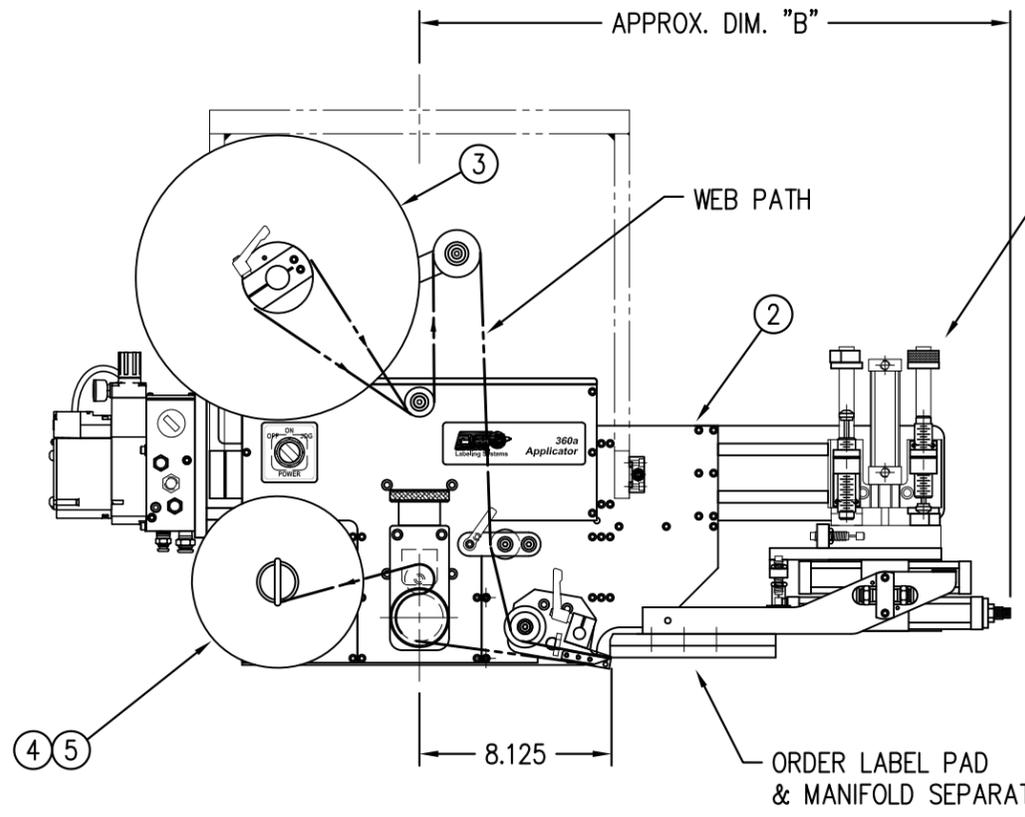
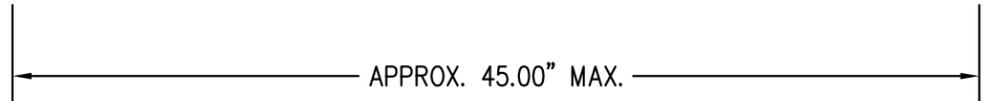
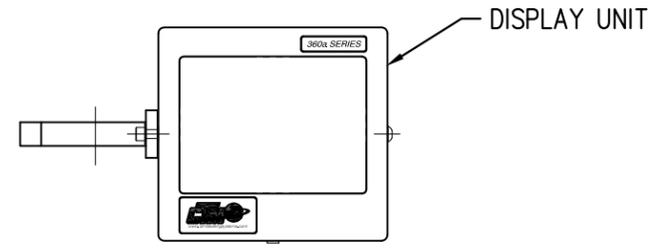
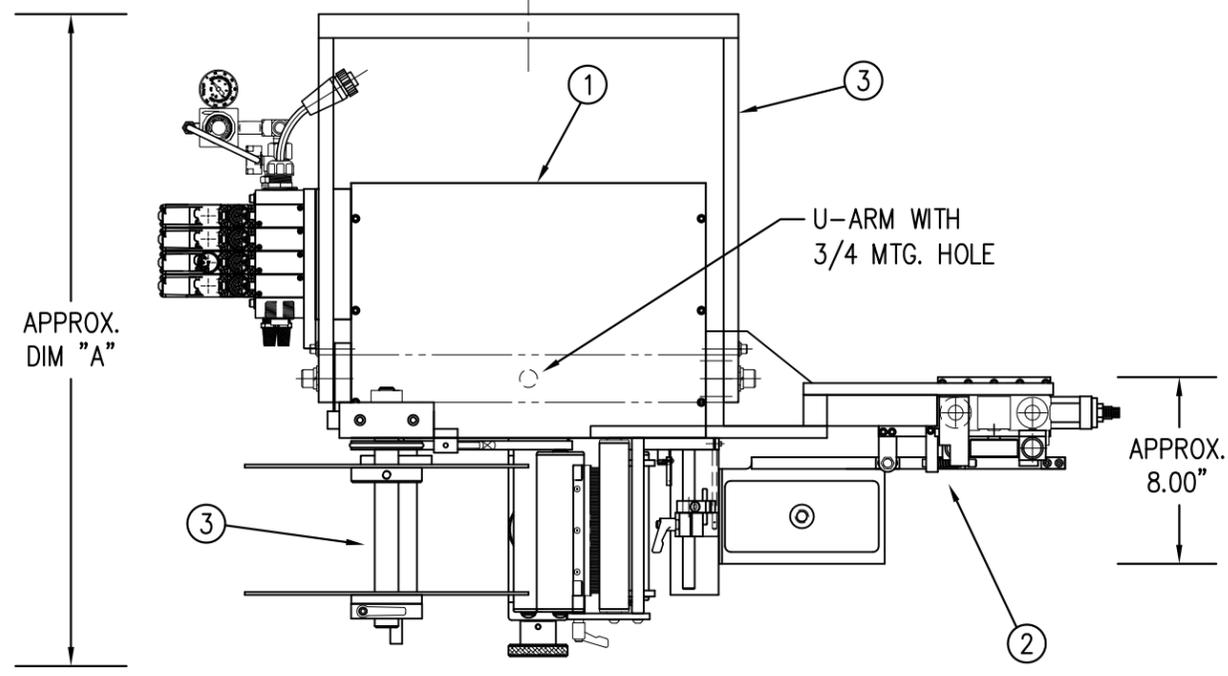
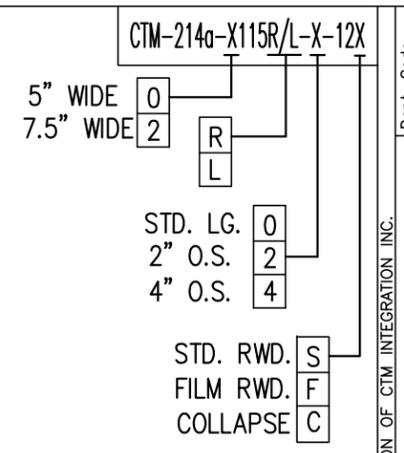
F:\Engineering\Standard Parts\Appliator\360 SERIES\360a\MOD\ASS-214-X110RL-X-LP

PART NO.	DIM "A"
CTM-214-0115R/L-X-12X	27.50
CTM-214-2115R/L-X-12X	30.00

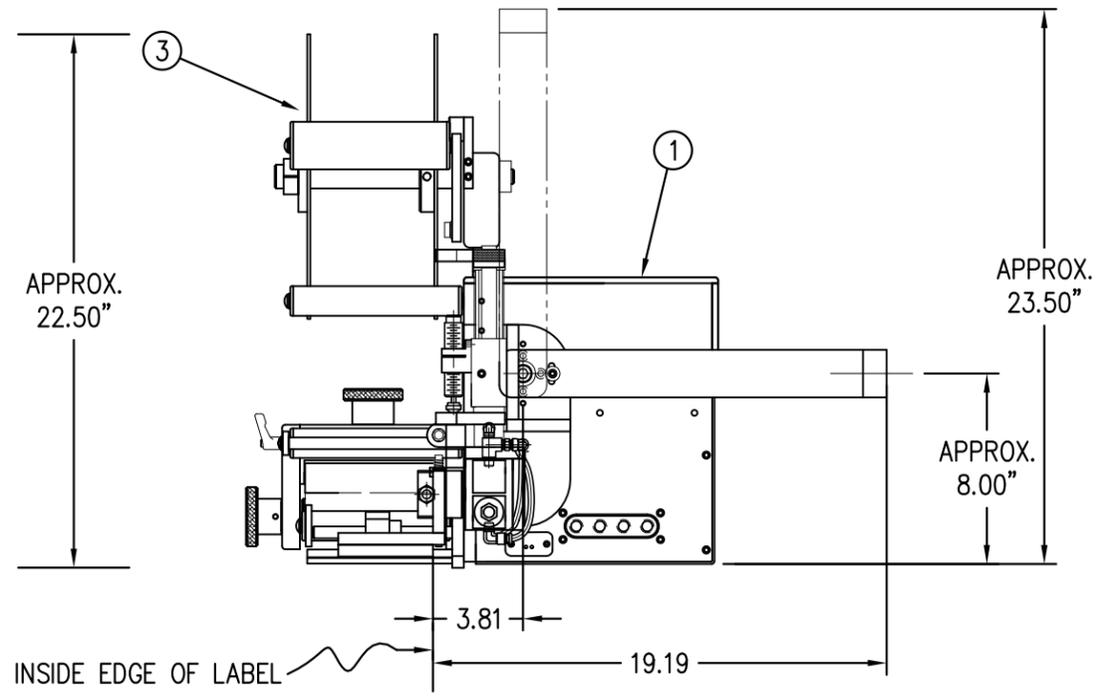
PART NO.	DIM "B"
CTM-214-X115R/L-0-12X	25.00
CTM-214-X115R/L-2-12X	27.00
CTM-214-X115R/L-4-12X	29.00

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

BILL OF MATERIAL			
CTM-214a-X115R/L-X-12S/F/C			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	360a CORE UNIT w/OPERATOR INTERFACE
②	1	MOD-214-X115R/L-X	5/7.5 IN-LINE DAT MODULE (NOT LOW PROFILE)
③	1	MOD-200-X121R/L	5/7.5 WIDE; 12" UNWIND w/ DISKS MODULE
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
⑤	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
1	ORDER SEPARATELY	TAMP SLIDE (STROKE LENGTH IS JOB SPECIFIC)	
1	ORDER SEPARATELY	PAD & MANIFOLD (LABEL IS JOB SPECIFIC)	
1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)	



SLIDE STROKE LENGTH IS JOB SPECIFIC
(ORDER SLIDE SEPARATELY)
3" STROKE: PM-AC1237
6" STROKE: PM-AC1239
8" STROKE: PM-AC1241



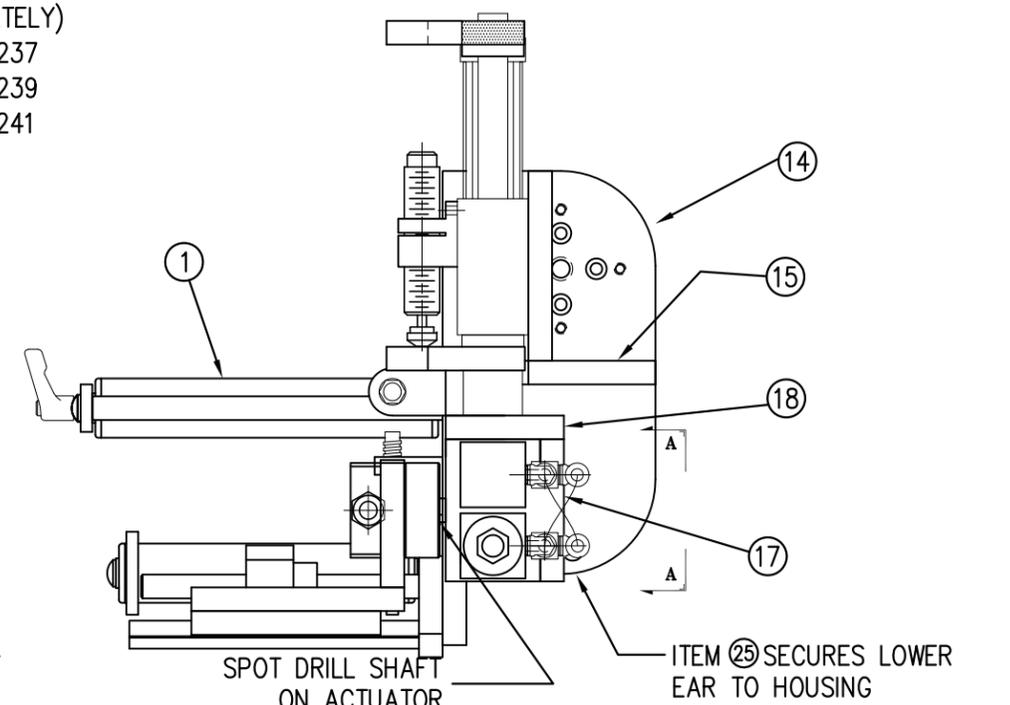
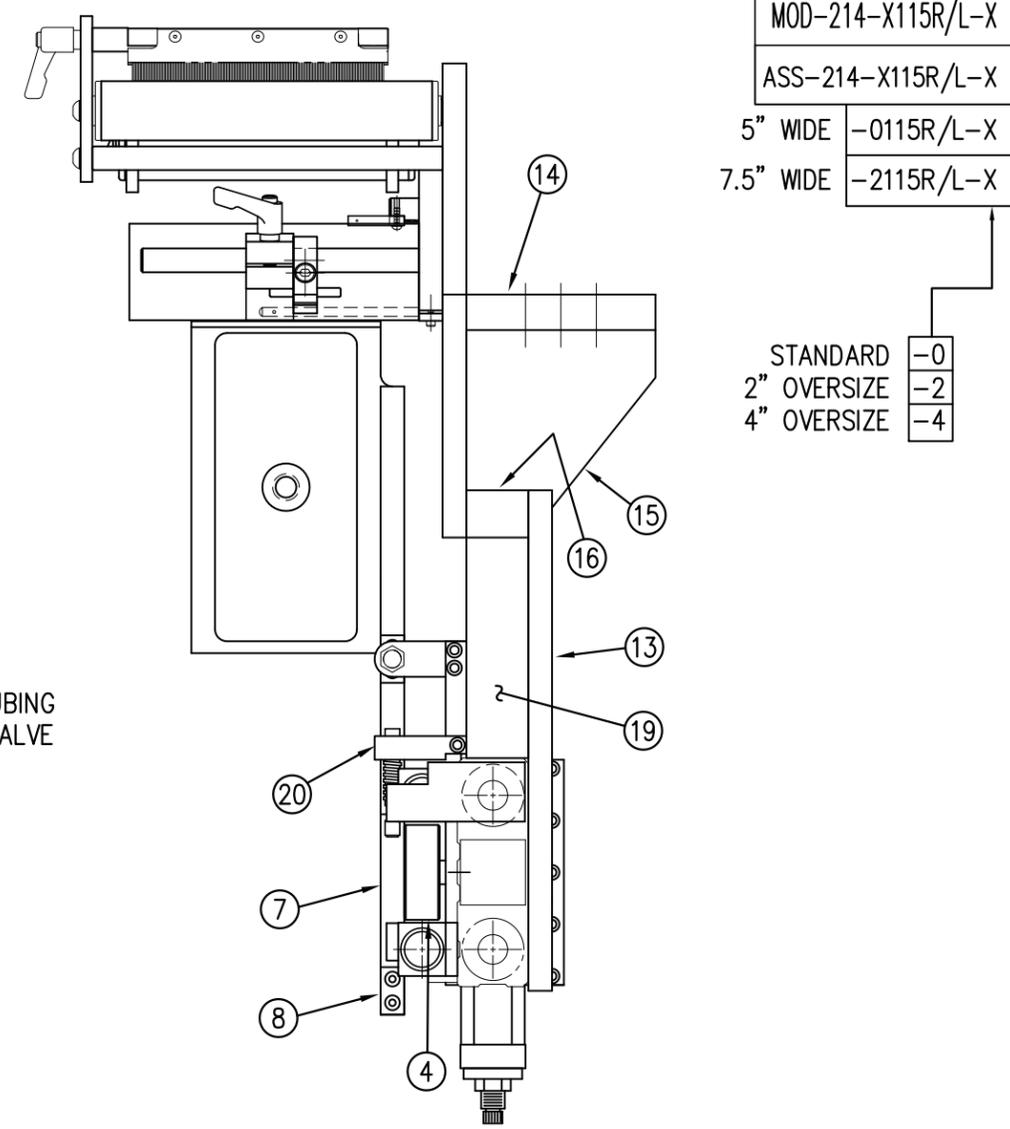
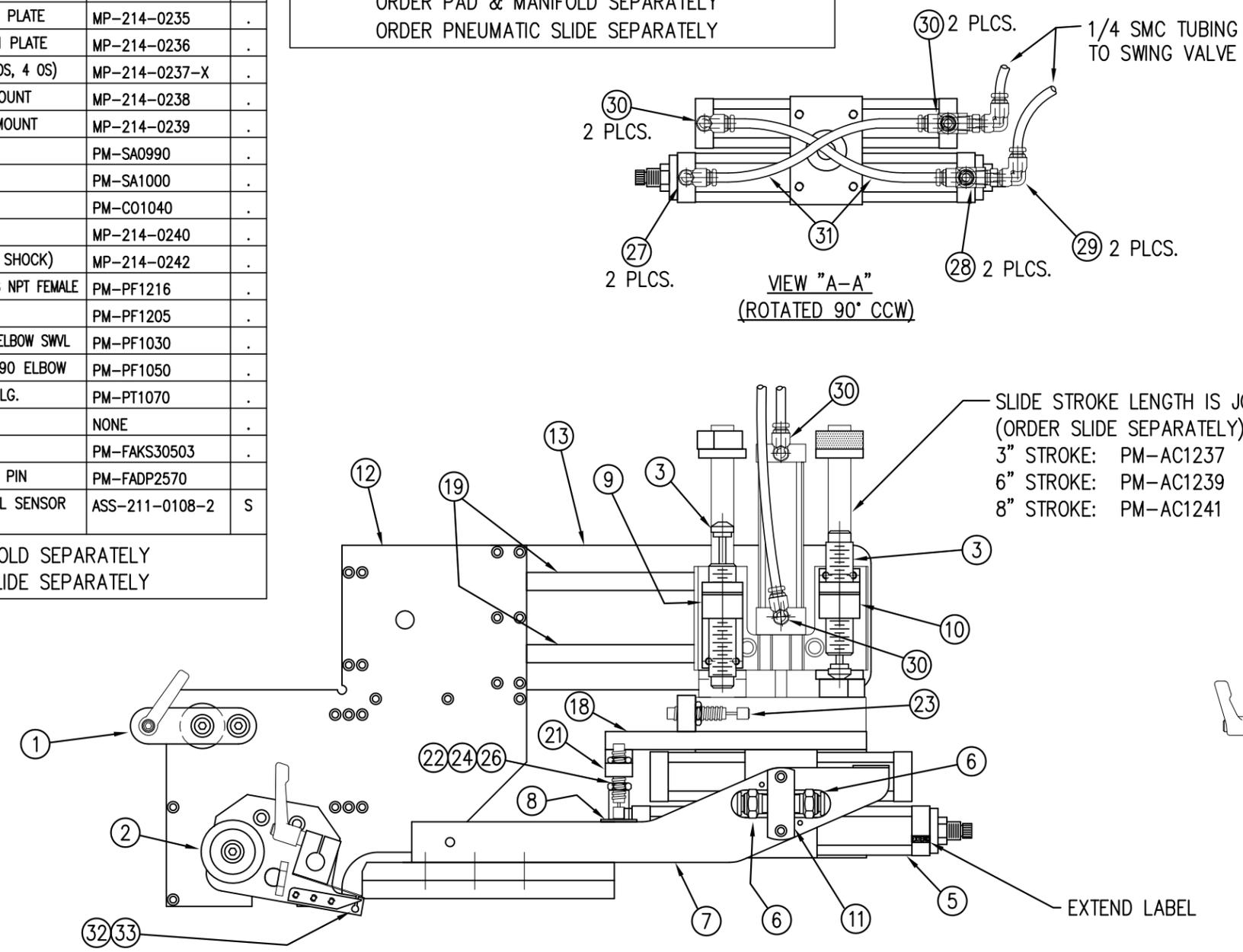
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.
 Dept. Code 70
 TITLE: 5/7.5 IN-LINE DAT w/ 12" UNWIND ASSEMBLY
 F:\Engineering\Standard Parts\Applcator\360\ CTM-214a-X115R/L-X-12X
 DRAWN BY: BOB S.
 Date: 11/04/99
 Scale: 1=8
 REV. DATE 10/16/07
 REV. BY: TDR
 REV. DESCRIPTION 1 ADDED COLLAPSIBLE MANDREL OPTION
 APPLICATOR SERIES: 360a
 APPLICATOR WIDTH(S): 5"/7.5"

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	ADAPTER, 1/8 NPT MALE to 1/8 NPT FEMALE	PM-PF1216	.
㉘	2	1/8 NPT STREET TEE	PM-PF1205	.
㉙	2	FTG, 1/4 TUBE x 1/8 NPT 90 ELBOW SWVL	PM-PF1030	.
㉚	6	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	1/8" X 5/8" Lg. KEY	PM-FAKS30503	.
	2	1/8" X 5/8" Lg. SS DOWEL PIN	PM-FADP2570	.
		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 IN-LINE DAT ASSEMBLY	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	.
㊲	1	1/8" X 5/8" Lg. KEY	PM-FAKS30503	.
㊳	2	1/8" X 5/8" Lg. SS DOWEL PIN	PM-FADP2570	.
	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



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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 GROUP: DAT
 TITLE: IN-LINE DAT NOSE ASSEMBLY
 REV. DATE: 09/03/20
 REV. BY: TDR
 SCALE: 1=4
 DATE: 03/27/03
 DRAWN BY: DKM
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\MOD\MOD-214-X115RL-X
 Dept. Code: 70

PEEL EDGE NOT SHOWN
IN THIS VIEW

MOUNTING FASTENERS
1/4-20 x 7/8 LG. SHCS
(4) PLACES

SLIDE STROKE LENGTH IS JOB SPECIFIC
(ORDER SLIDE SEPARATELY)
3" STROKE: PM-AC1237
6" STROKE: PM-AC1239
8" STROKE: PM-AC1241

1/4 SMC TUBING
TO TAMP VALVE

1/4 SMC TUBING
TO SWING VALVE

CONTINUED

BILL OF MATERIAL

ASSEMBLY		ASS-214-X116R/L-X		SOLD
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

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	
2" OVERSIZE	-2
4" OVERSIZE	-4

BILL OF MATERIAL

ASSEMBLY		ASS-214-X116R/L-X (CONTINUED)		SOLD
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	4	SHCS, 1/4-20 x 7/8" LG.	NONE	.
1	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

ASSEMBLY		MOD-214-X116R/L-X		SOLD
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	360 PERP 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

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 TITLE: 360 SERIES APPLICATOR: DAT ASSEMBLY
 REV. DATE: 08/29/05
 REV. BY: TDR
 SCALE: 1=4
 DATE: 03/08/03
 DRAWN BY: DKM
 PART: 5/7.5 WIDE; PERPENDICULAR DAT NOSE ASSEMBLY
 F:\Engineering\Standard Parts\Applcator\360\214\MOD-214-X116RL-X
 Dept. Code 70

BILL OF MATERIAL

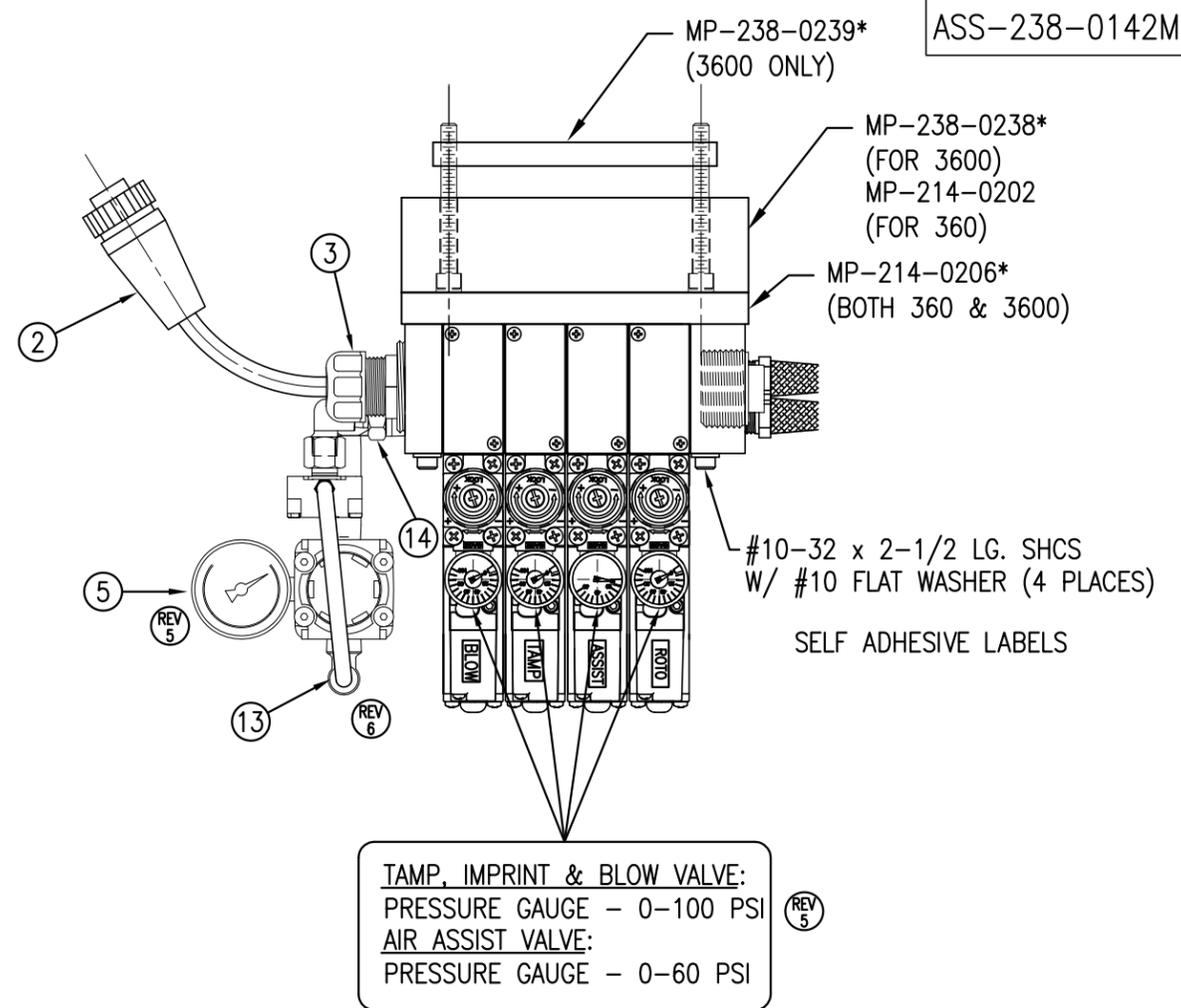
ASS-238-0142M

ASS-238-0142M

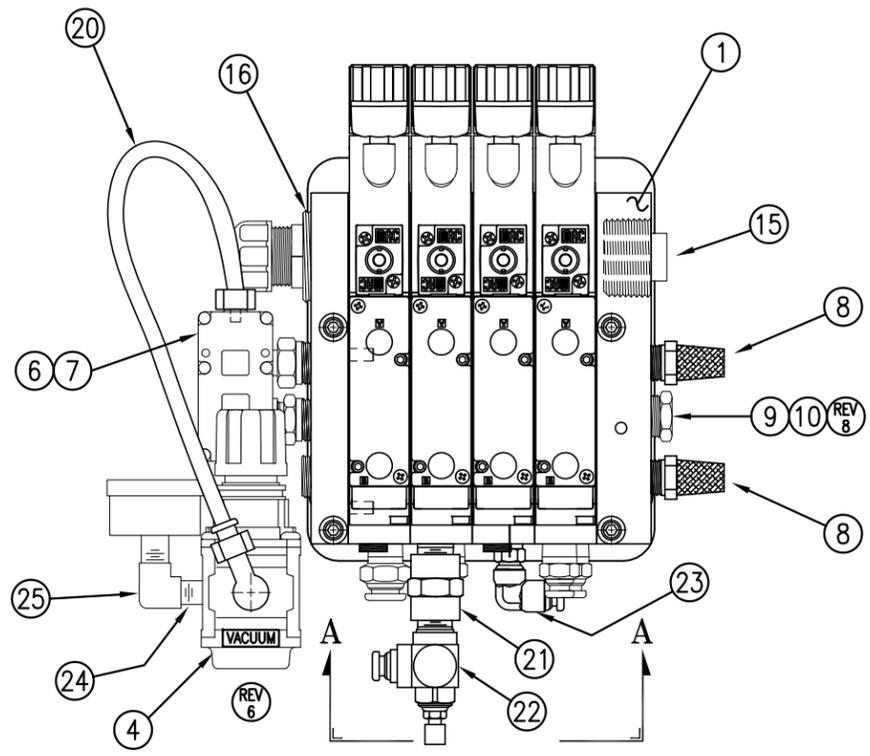
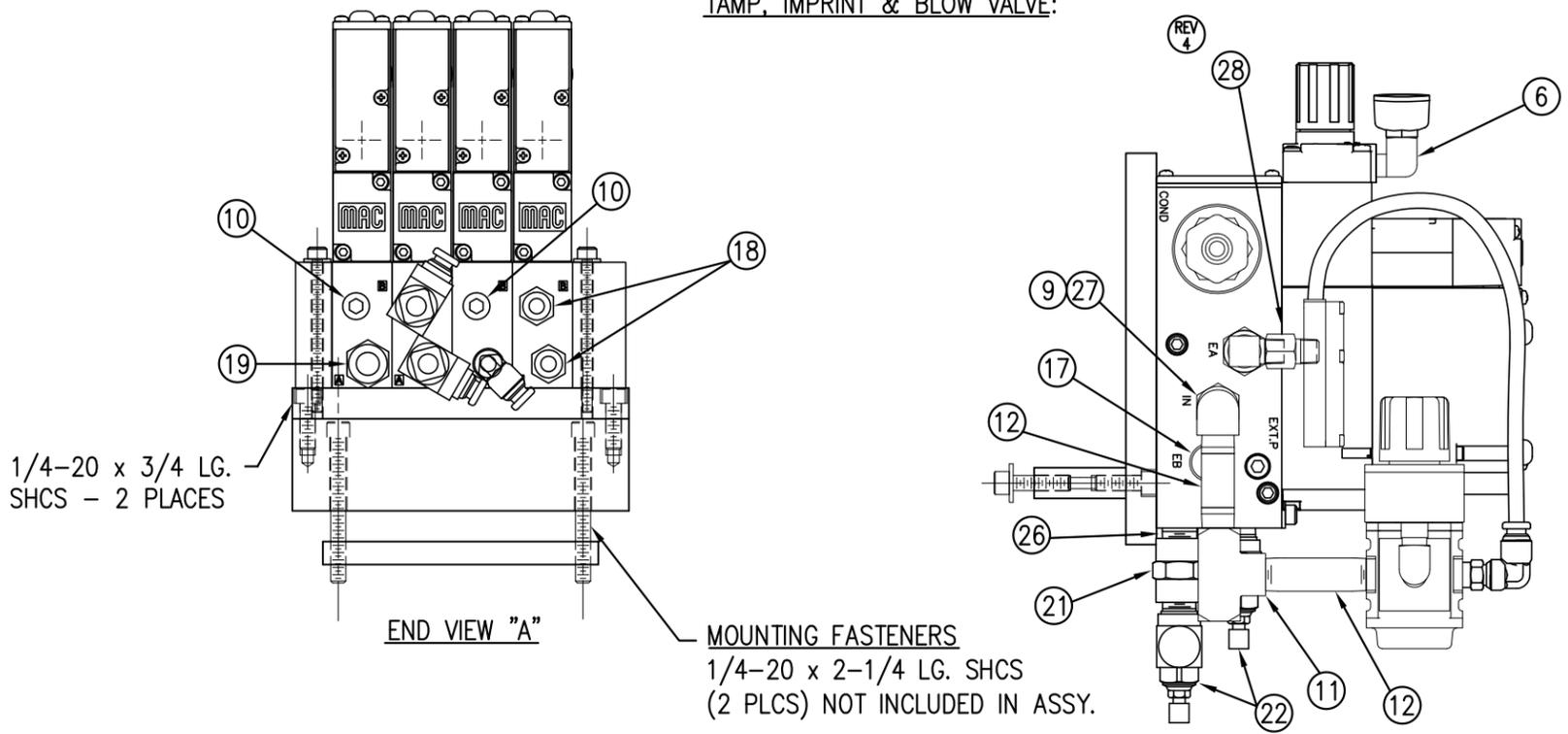
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	PM-VA2361M	4 STATION MAC VALVE BANK
②	1	ASS-200-0452M	VALVE CABLE
③	1	PE-C02000	CORD GRIP
④	1	PM-REG1500	REGULATOR (INCLUDES PM-VA2381)
⑤	-	PM-VA2381	0-60 PSI GAUGE (INCLUDED w/ PM-REG1500)
⑥	5	PM-PF1180	NPT 90° STREET ELBOW 1/8" FEMALE TO 1/8" MALE
⑦	1	PM-PUMP1010	VACUUM PUMP, 55 PSI FEED PRESSURE, MUFFLED EXHAUST
⑧	2	PM-MU1027	3/8" NPT MALE BRONZE EXHAUST MUFFLER
⑨	2	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	2	PM-PF1145	NIPPLE, 1/4" NPT X 2" LG.
⑬	1	PM-PF1055	FTG, 1/4 TUBE to 1/4 NPT 90° ELBOW
⑭	1	PM-PF1157	REDUCER, 3/8" NPT TO 1/8" NPT
⑮	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑯	1	PE-COND1084	STEEL REDUCER
⑰	1	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
⑱	2	PM-PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
⑲	1	PM-PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
⑳	11.0"	PM-PT1070	1/4" OD TUBING
㉑	1	PM-PF1085	FTG, 1/4 NPT COUPLING
㉒	2	PM-PF2070	FLOW CONTROL, 1/4 TUBE x 1/4 NPT
㉓	1	PM-PF1035	FTG, 1/4 TUBE to 1/4 NPT 90° SWVL.
㉔	1	PM-PF1120	1/8 NPT CLOSE NIPPLE (3/4" Lg.)
㉕	1	PM-PF1170	FTG, 1/8 NPT to 1/8 NPT 90° FEMALE ELB.
㉖	1	PM-PF1125	FTG, CLOSE NIPPLE, 1/4" NPT x 7/8" Lg.
㉗	1	PM-PF1185	FTG, 90° STREET ELBOW 1/4" NPT FEMALE TO 1/4" NPT MALE
㉘	1	PM-PF1216	ADAPTER, 1/8 NPT MALE/FEMALE
○	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
○	4	PM-FAW30265	#10 SS FLAT WASHER

* MOUNTING PLATES NOT INCLUDED IN ASSEMBLY

VALVE BANK SPARE PARTS:
 SOLENOID: #PM-VA2395M
 AIR ASSIST REGULATOR W/GAUGE: #PM-VA2396M
 BLOW/TAMP/IMPRINTER REGULATORS W/GAUGE: #PM-VA2397M
 AIR ASSIST REGULATOR GAUGE: #PM-VA2382M
 BLOW/TAMP/IMPRINTER REGULATOR GAUGES: #PM-VA2380M

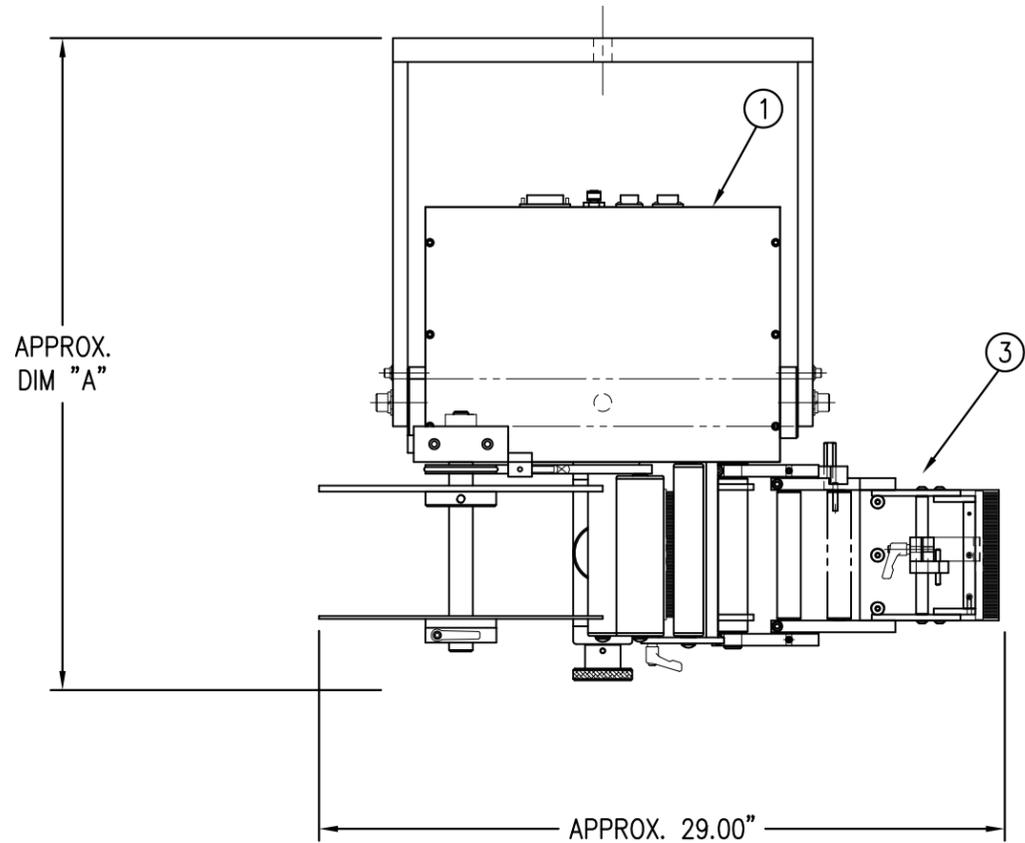


TAMP, IMPRINT & BLOW VALVE:

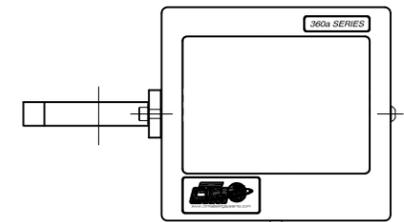
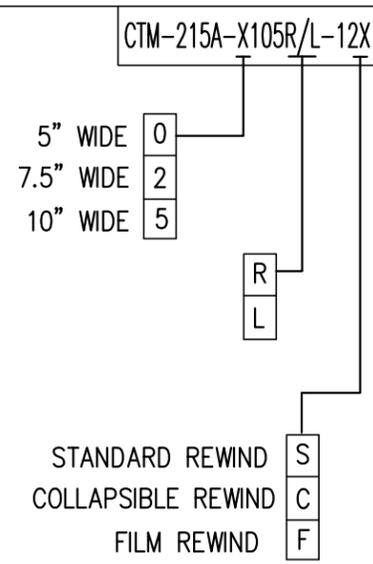


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 APPLICATOR SERIES: 3600
 APPLICATOR WIDTH(S): 7.5"
 GROUP: VALVE BANKS
 REV. DESCRIPTION: 8 REVISED ITEM 10 LOCATION
 REV. DATE: 06/02/20
 REV. BY: BNT
 SCALE: 1=3
 DATE: 04/09/07
 DRAWN BY: E. SANOR
 TITLE: DAT 4-STATION VALVE BANK ASSEMBLY
 F:\Engineering\Standard Parts\Applcator\3600 SERIES\3600a\ASS-238-0142M
 Dept. Code: 70

PART NO.	DIM "A"
CTM-215X-0105R/L-12X	27.50
CTM-215X-2105R/L-12X	30.00
CTM-215X-5105R/L-12X	32.50

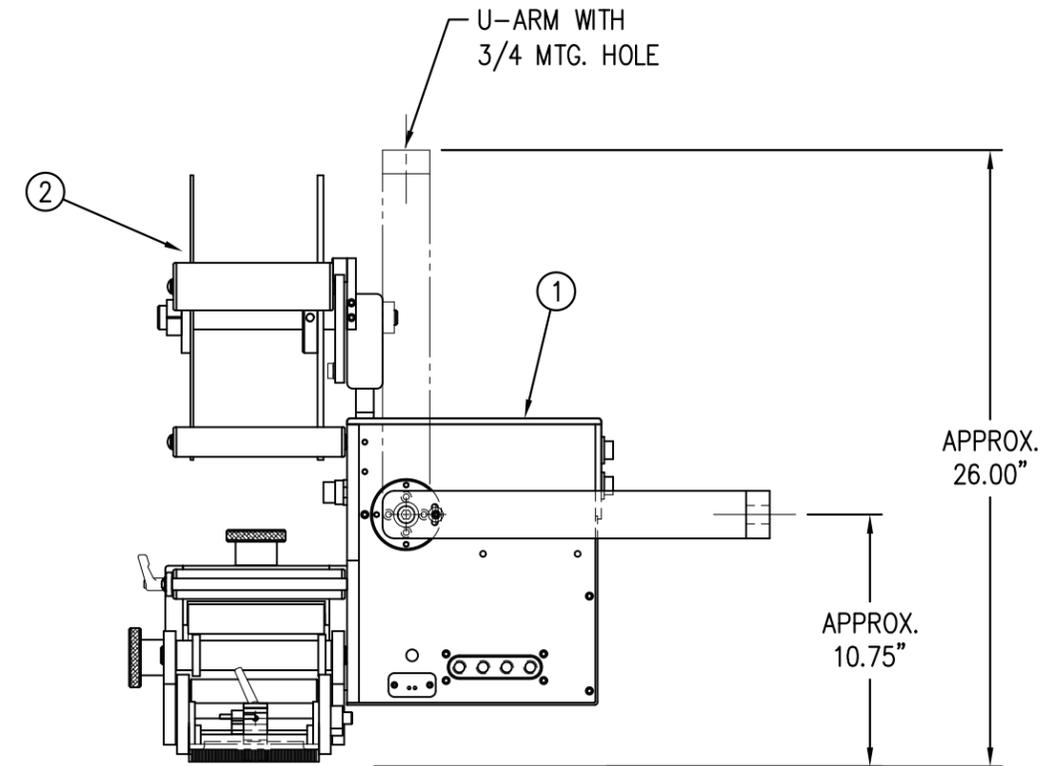
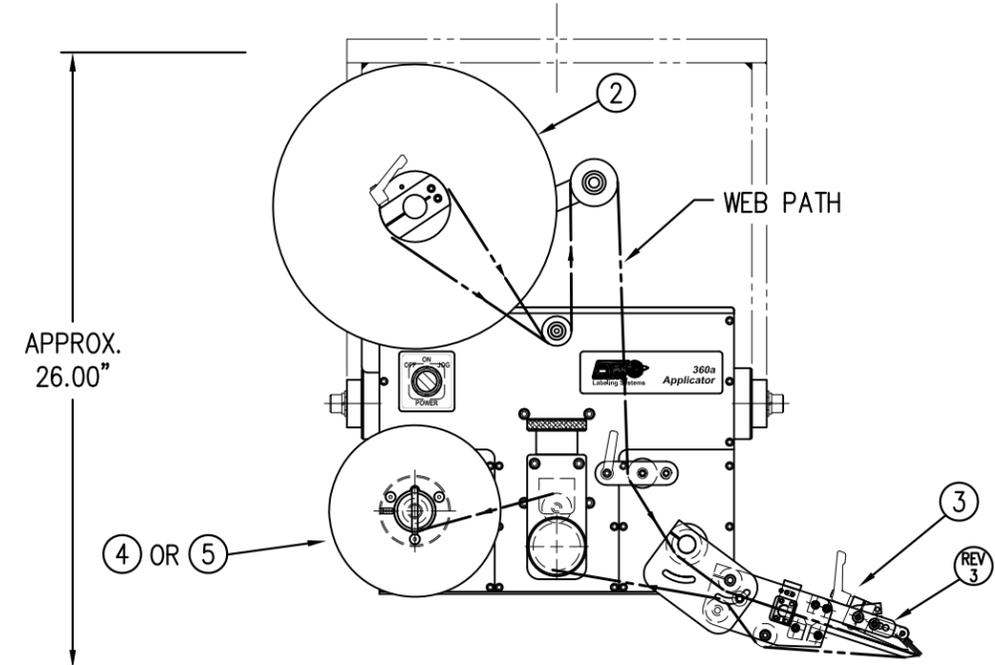


BILL OF MATERIAL			
CTM-215A-X105RL-12X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	5/7.5/10 WIDE 360a CORE UNIT
②	1	MOD-200-X121R/L	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.
③	1	MOD-215-X105R/L	5/7.5/10 MERGE NOSE MODULE
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
⑤	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)



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

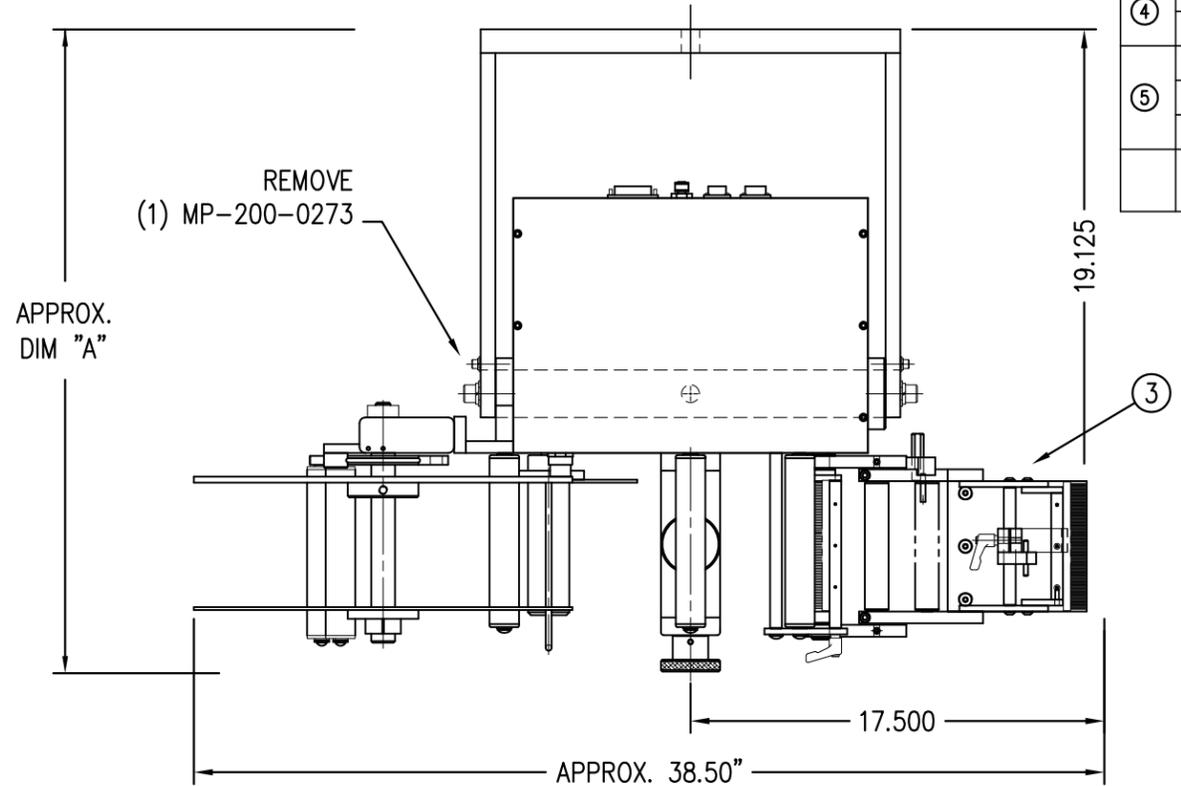
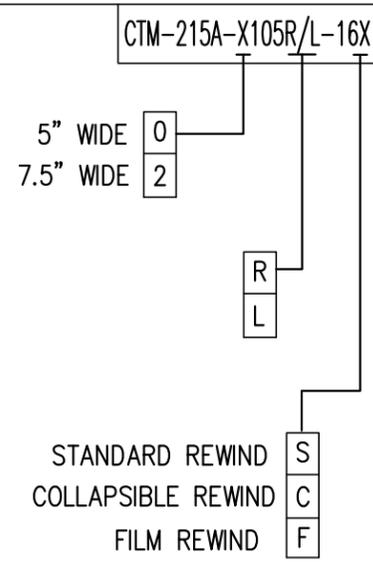
NOTE: UNWIND MTG. BRACKET FOR 5" & 7.5" WIDE APPLICATORS DIFFERS FROM 10" WIDE. FOR 10" WIDE MTG. BRACKET REFER TO DWG. MP-200-5216.



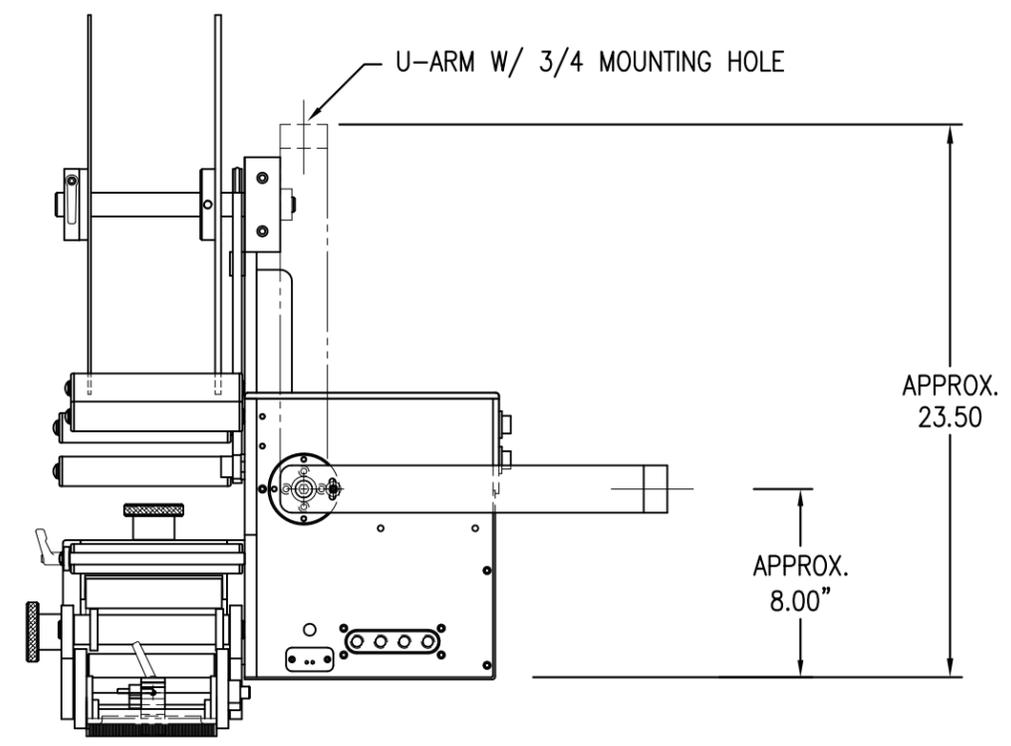
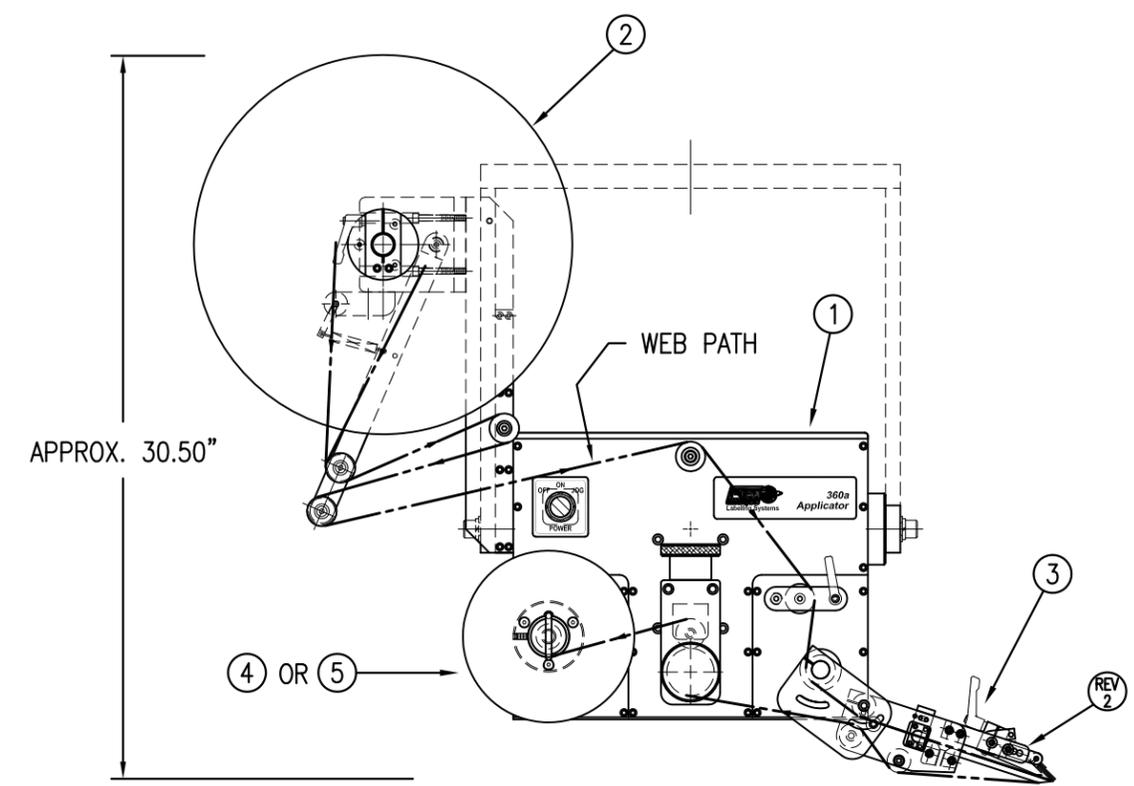
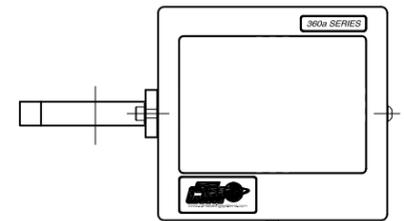
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"/10"
 REV. 3 REV. DESCRIPTION: REVISED TO SHOW NEW BRUSH EXTENSION MP-215-0220
 TITLE: MERGE w/12" UNWIND ASSEMBLY
 SCALE: 1=8
 DATE: 02/22/99
 DRAWN BY: BOB S.
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\CTM-215A-X105RL-12X

PART NO.	DIM "A"
CTM-215X-0105R/L-16X	27.50
CTM-215X-2105R/L-16X	30.00

BILL OF MATERIAL			
CTM-215A-X105RL-16X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	5/7.5 WIDE 360a CORE UNIT
②	1	MOD-200-3121R/L-X	5/7.5 WIDE; 16" UNWIND w/ DISKS MOD.
③	1	MOD-215-X105R/L	5/7.5 MERGE NOSE MODULE
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)

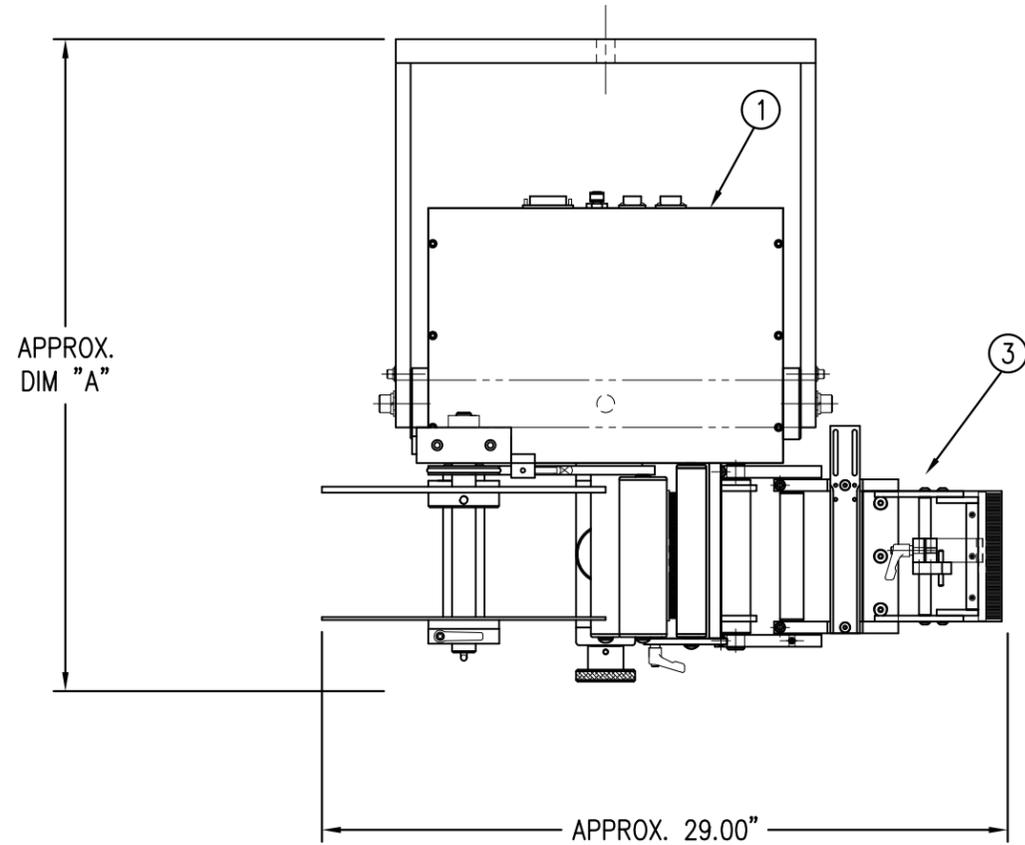


RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

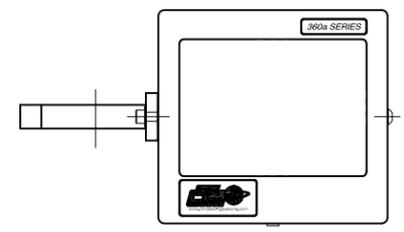
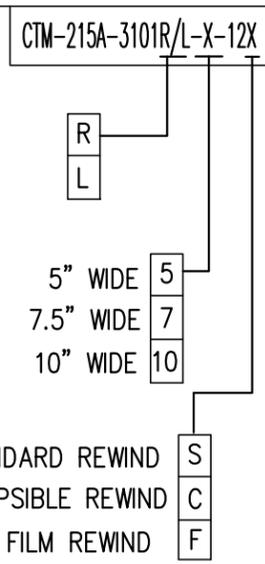


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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 REV. DESCRIPTION: 2 REVISED TO SHOW NEW BRUSH EXTENSION MP-215-0220
 TITLE: MERGE w/ 16" UNWIND ASSEMBLY
 REV. BY: BNT
 REV. DATE: 05/07/20
 SCALE: 1=8
 DATE: 12/15/17
 DRAWN BY: T. Rhodes
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Appliator\360 SERIES\CTM-215A-X105RL-16X

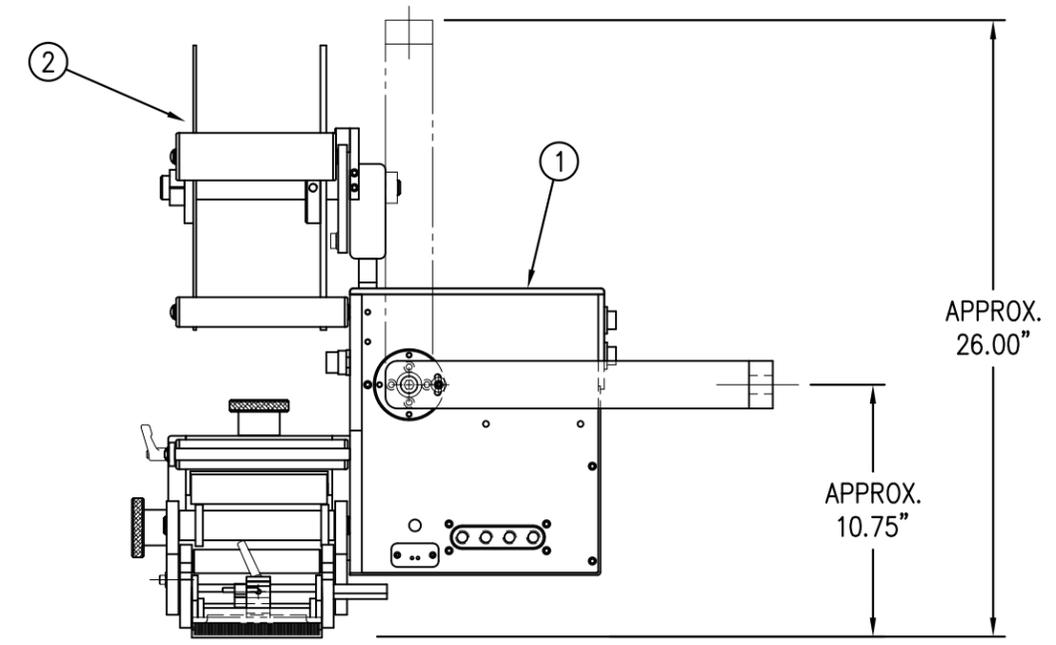
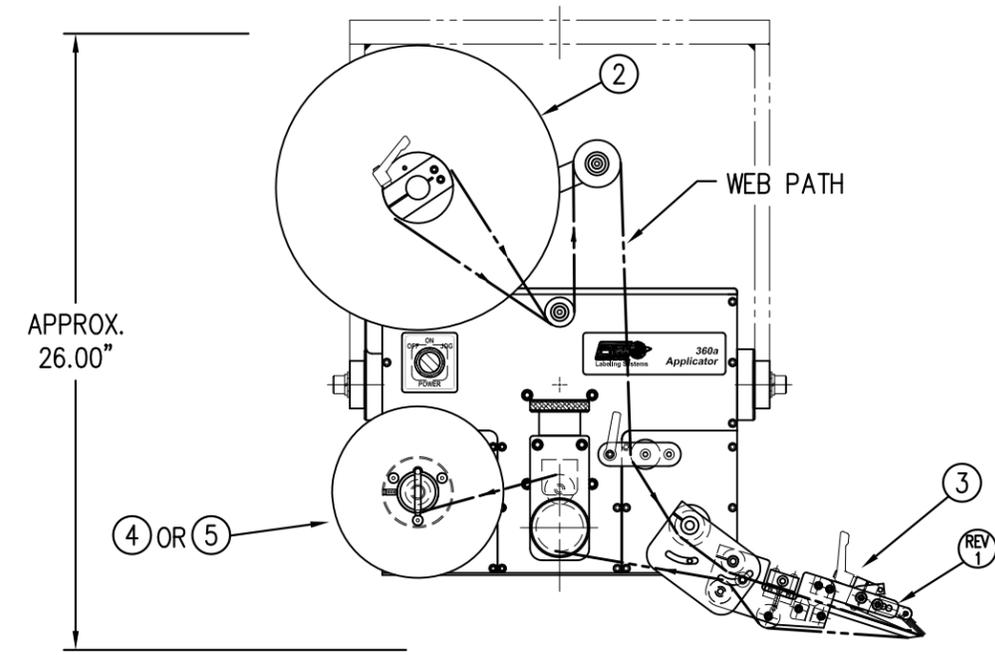
PART NO.	DIM "A"
CTM-215X-3101R/L-5-12X	27.50
CTM-215X-3101R/L-7-12X	30.00
CTM-215X-3101R/L-10-12X	32.50



BILL OF MATERIAL			
CTM-215A-3101RL-X-12X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	5/7.5/10 WIDE 360a CORE UNIT
②	1	MOD-200-X121R/L	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.
③	1	MOD-215-3101R/L-X	5/7.5/10 CLEAR LABEL MERGE NOSE MODULE
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)

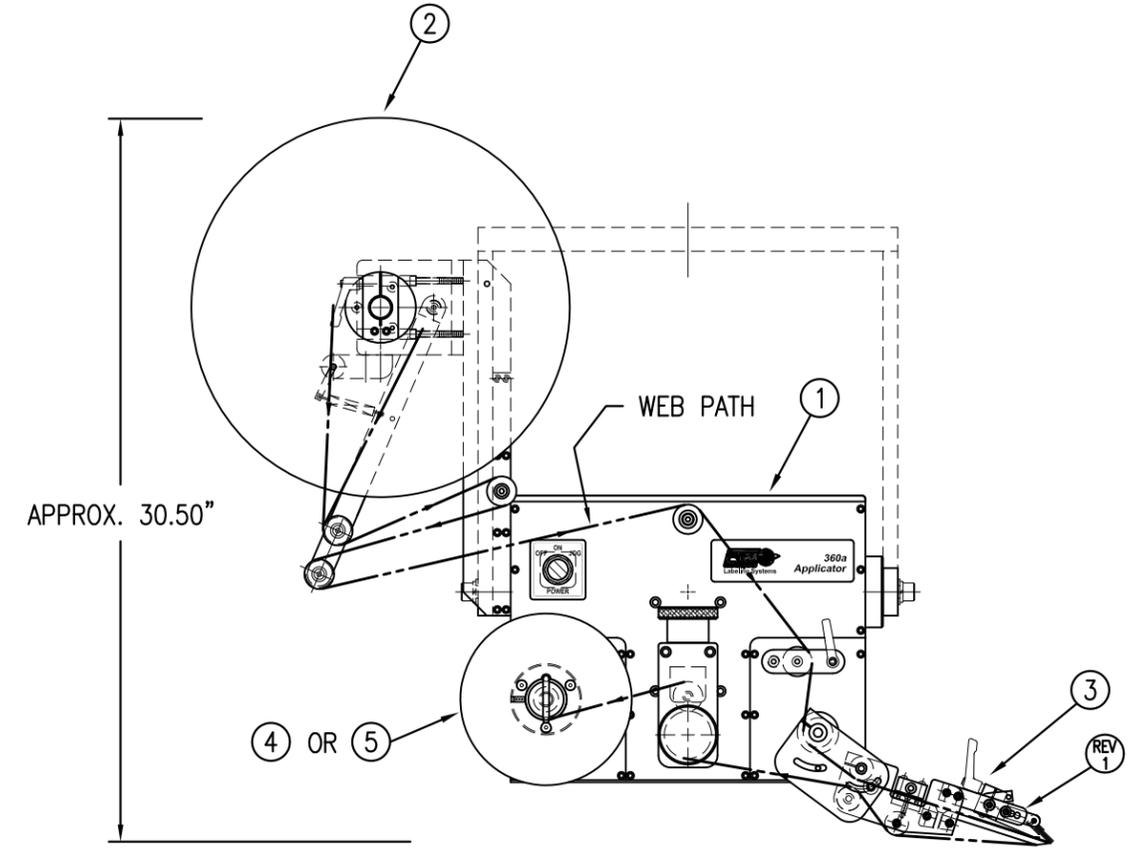
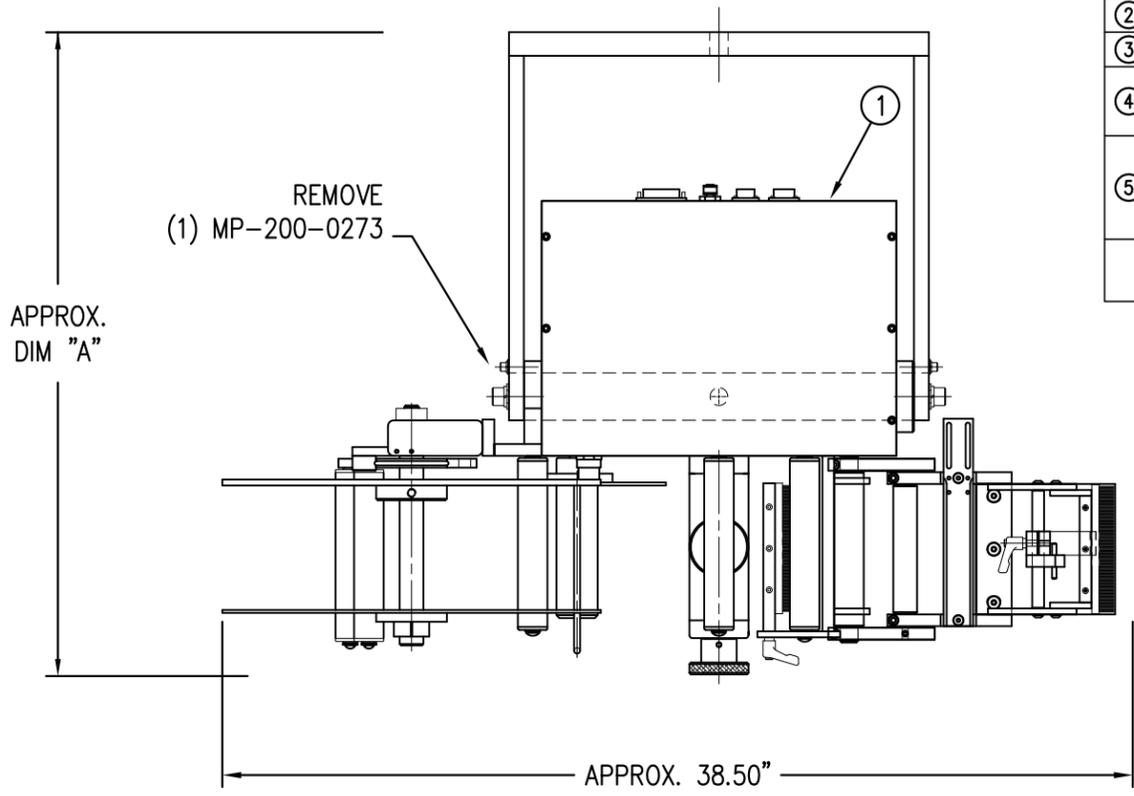


RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



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 TITLE: CLEAR LABEL MERGE w/12" UNWIND ASSEMBLY
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"/10"
 REV. 1 REV. DESCRIPTION: REVISED TO SHOW NEW BRUSH EXTENSION MP-215-0220
 REV. DATE: 05/07/20
 REV. BY: BNT
 SCALE: 1=8
 DATE: 12/15/17
 DRAWN BY: T. Rhodes
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\CTM-215A-3101RL-X-12X
 Dept. Code: 70

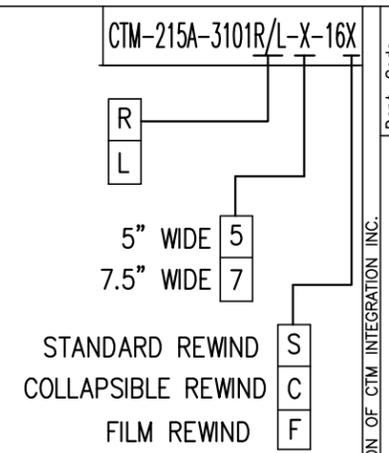
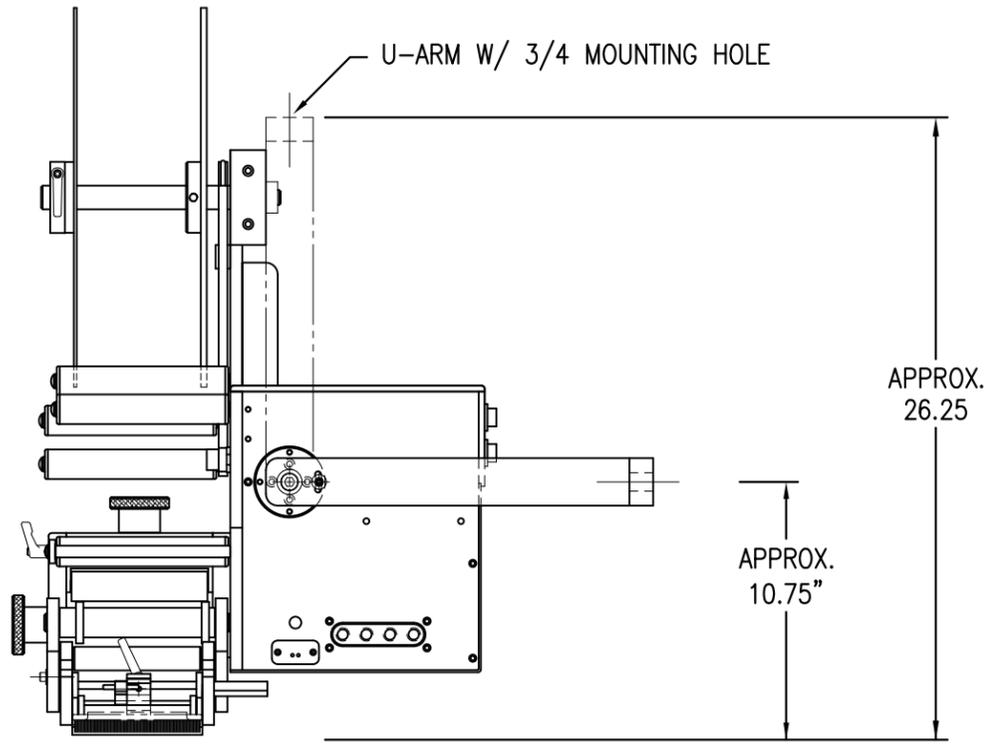
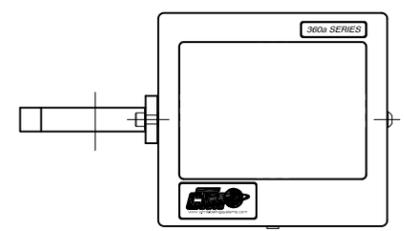
PART NO.	DIM "A"
CTM-215A-3101R/L-5-16X	27.50
CTM-215A-3101R/L-7-16X	30.00



BILL OF MATERIAL
CTM-215A-3101RL-X-16X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	5/7.5 WIDE 360a CORE UNIT
②	1	MOD-200-3121R/L-X	5/7.5 WIDE; 16" UNWIND w/ DISKS MOD.
③	1	MOD-215-3101R/L-X	5/7.5 WIDE; CLR. LABEL MERGE NOSE MOD.
④	1	ASS-200-X147	STANDARD REWIND MANDREL
	1	ASS-200-X137	FILM REWIND MANDREL
⑤	-1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-3140-X	COLLAPSIBLE MANDREL
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR (JOB SPECIFIC)

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



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APPLICATOR SERIES: 360
APPLICATOR WIDTH(S): 5"/7.5"/10"

REV. 1
REV. DESCRIPTION: REVISED TO SHOW NEW BRUSH EXTENSION MP-215-0220

REV. DATE: 05/07/20

REV. BY: BNT

SCALE: 1=8

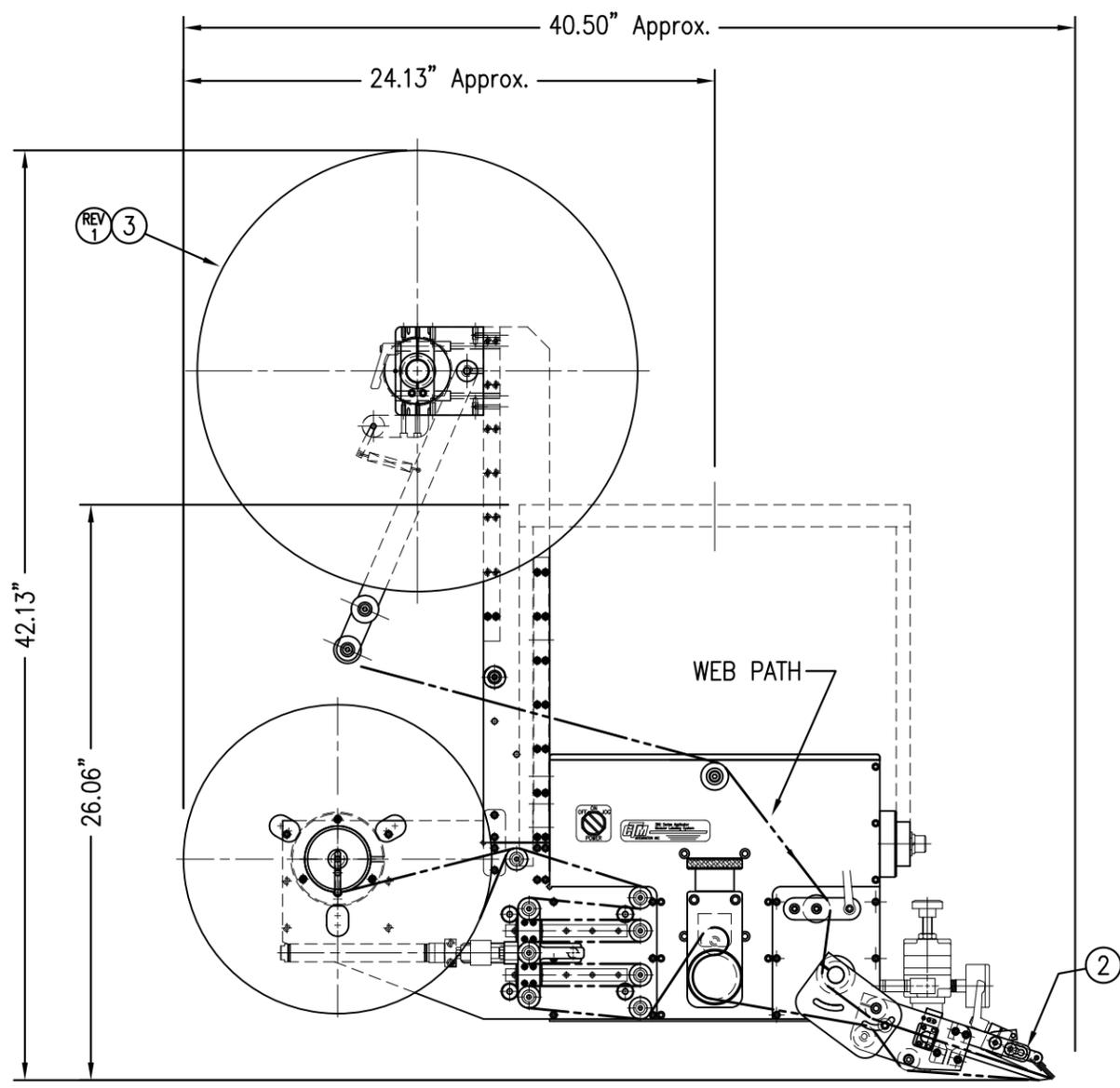
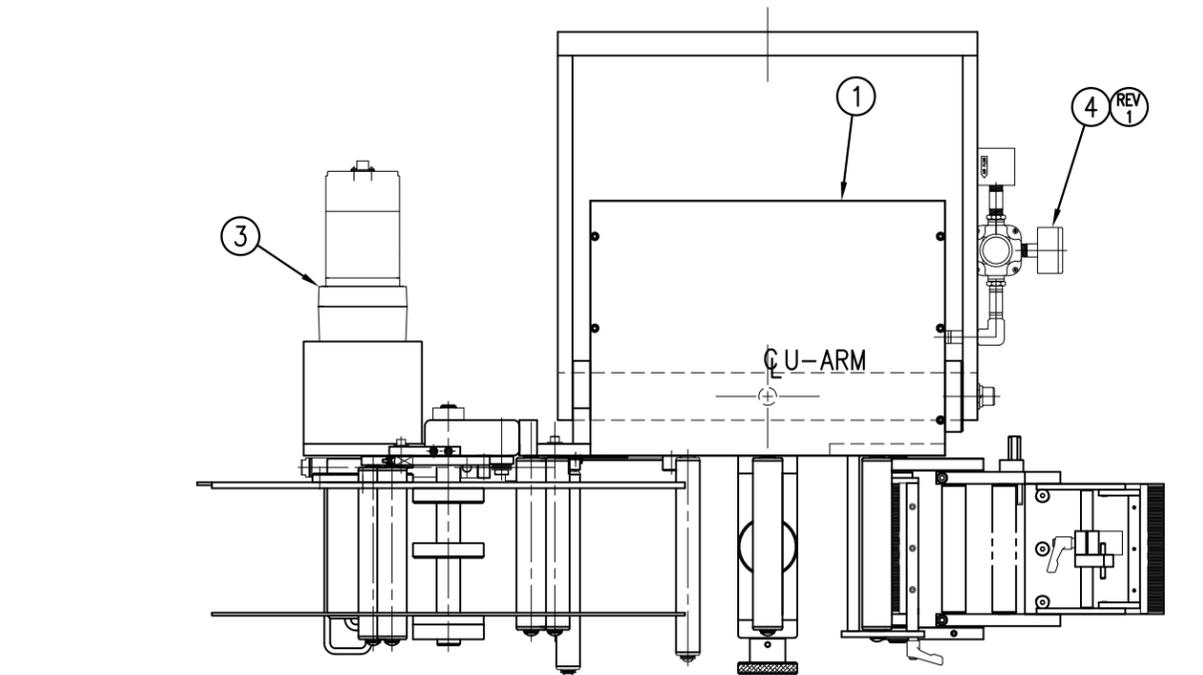
DATE: 08/30/99

DRAWN BY: BOB S.

TITLE: CLEAR LABEL MERGE w/ 16" UNWIND ASSEMBLY

Dept. Code: 70

F:\Engineering\Standard Parts\Applcator\360 SERIES\CTM-215X-3101RL-X-16X



BILL OF MATERIAL			
CTM-215X-X105R/L-20PX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5.00" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5.00" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-215-X105R/L	5/7.5 WIDE RH/LH MERGE NOSE MODULE
③	1	MOD-200-3156R/L-X	5/7.5 WIDE, RH/LH, 20", Pwr Std. REWIND
	1	MOD-200-3159R/L-X	5/7.5 WIDE, RH/LH, 20", Pwr COLLAPSIBLE REWIND
④	1	ASS-200-3107	HI/LO REGULATOR Assy. (w/FILTER)
⑤	1	ASS-200-3161	360 ALARM LIGHT ASSEMBLY
	1	ASS-200A-3161	360A ALARM LIGHT ASSEMBLY
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3160 WITH ASS-200-3160A AND ADD LOCK COLLAR PM-C01025.
 REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)

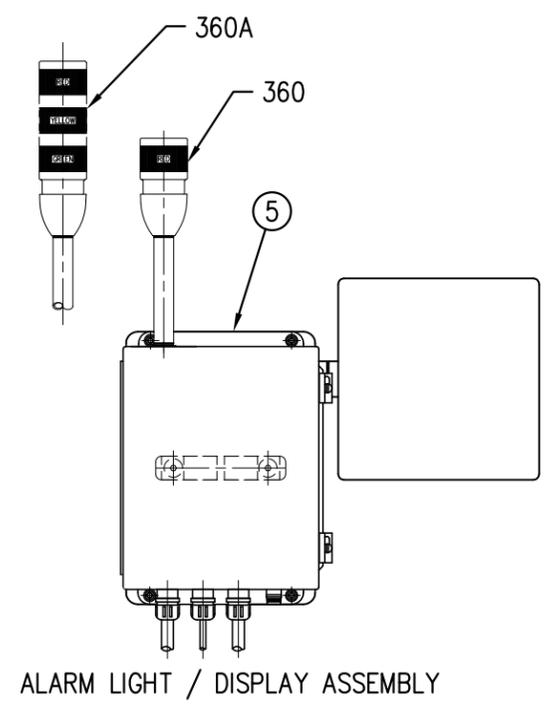
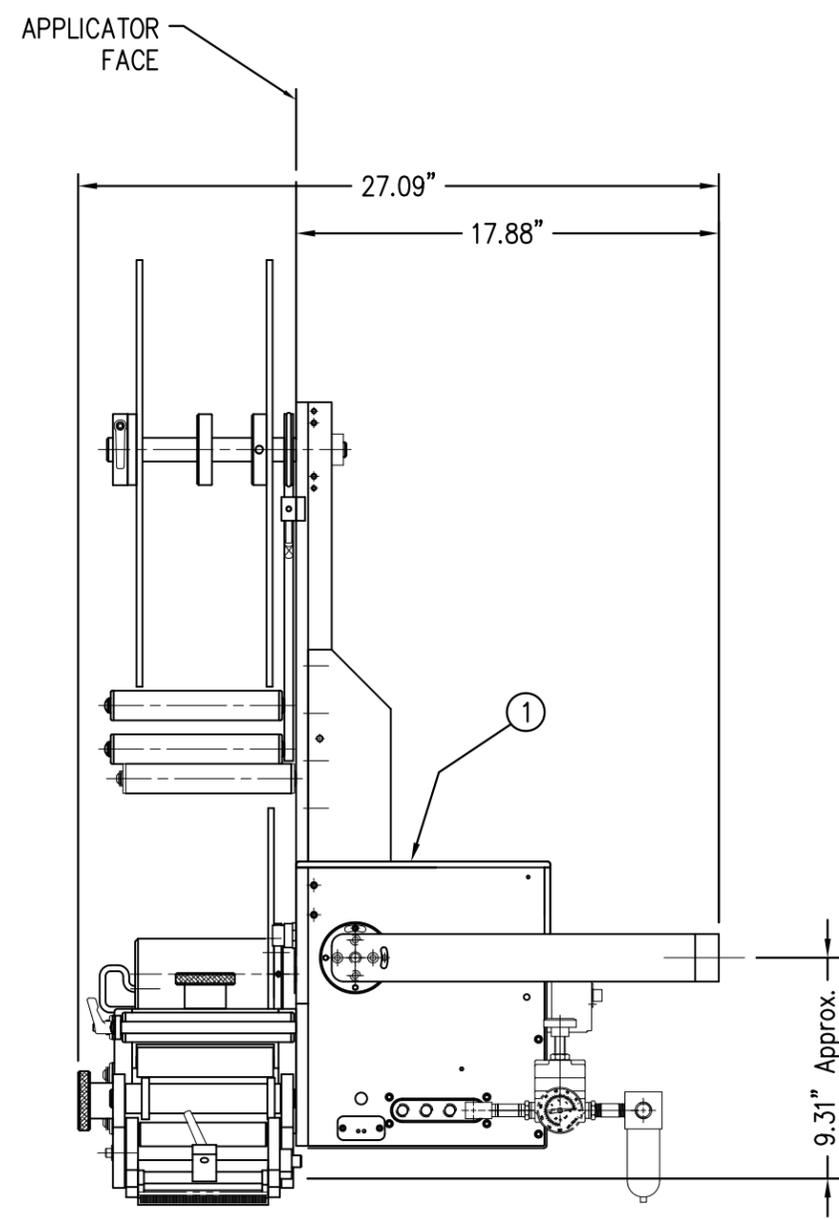
NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM

CTM-215X-X105R/L-20PX

5/7.5 R.H., STANDARD REWIND	-X105R-20PS
5/7.5 L.H., STANDARD REWIND	-X105L-20PS
5/7.5 R.H., COLLAPSIBLE REWIND	-X105R-20PC
5/7.5 L.H., COLLAPSIBLE REWIND	-X105L-20PC

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-

5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-



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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5/7.5
 REV. DESCRIPTION: 1 REPLACED MOD-200-3155R/L-5 WITH MOD-200-3156R/L-5
 REV. DATE: 03/03/08
 REV. BY: JLM
 SCALE: 1=8
 DATE: 11/19/98
 DRAWN BY: BOB S.
 TITLE: 5/7.5 WIDE: MERGE, 20" UNWIND w/POWERED REWINDS
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-215X-X105RL-20PX
 Dept. Code: 70

BILL OF MATERIAL

MOD-215-3101R/L-X

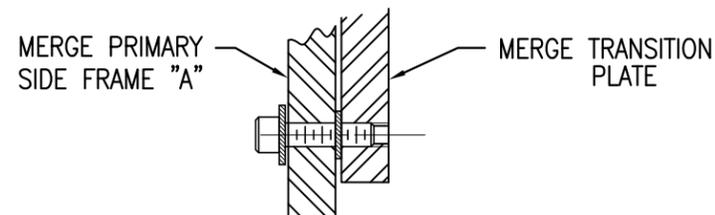
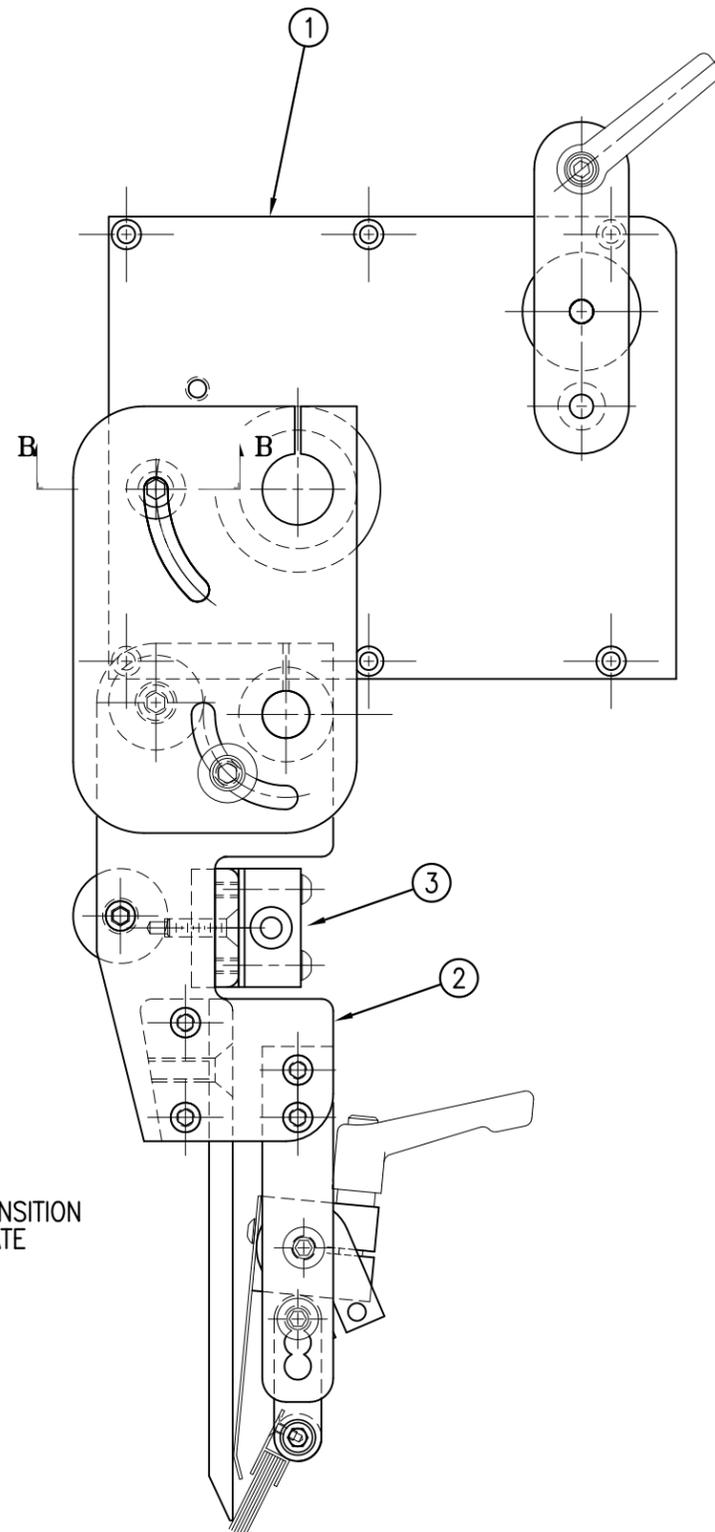
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-215-X105BR	MERGE NOSE MOUNTING ASSEMBLY RH
	1	SAS-215-X105BL	MERGE NOSE MOUNTING ASSEMBLY LH
②	1	SAS-215-3101R-X	MERGE CLEAR LABEL NOSE ASSEMBLY RH
	1	SAS-215-3101L-X	MERGE CLEAR LABEL NOSE ASSEMBLY LH
③	1	ASS-200-0431	LRD 6300 CLEAR LABEL SENSOR ASSY

RH & LH MODULES AVAILABLE
-RH MODULE SHOWN-

MOD-215-3101R/L-X

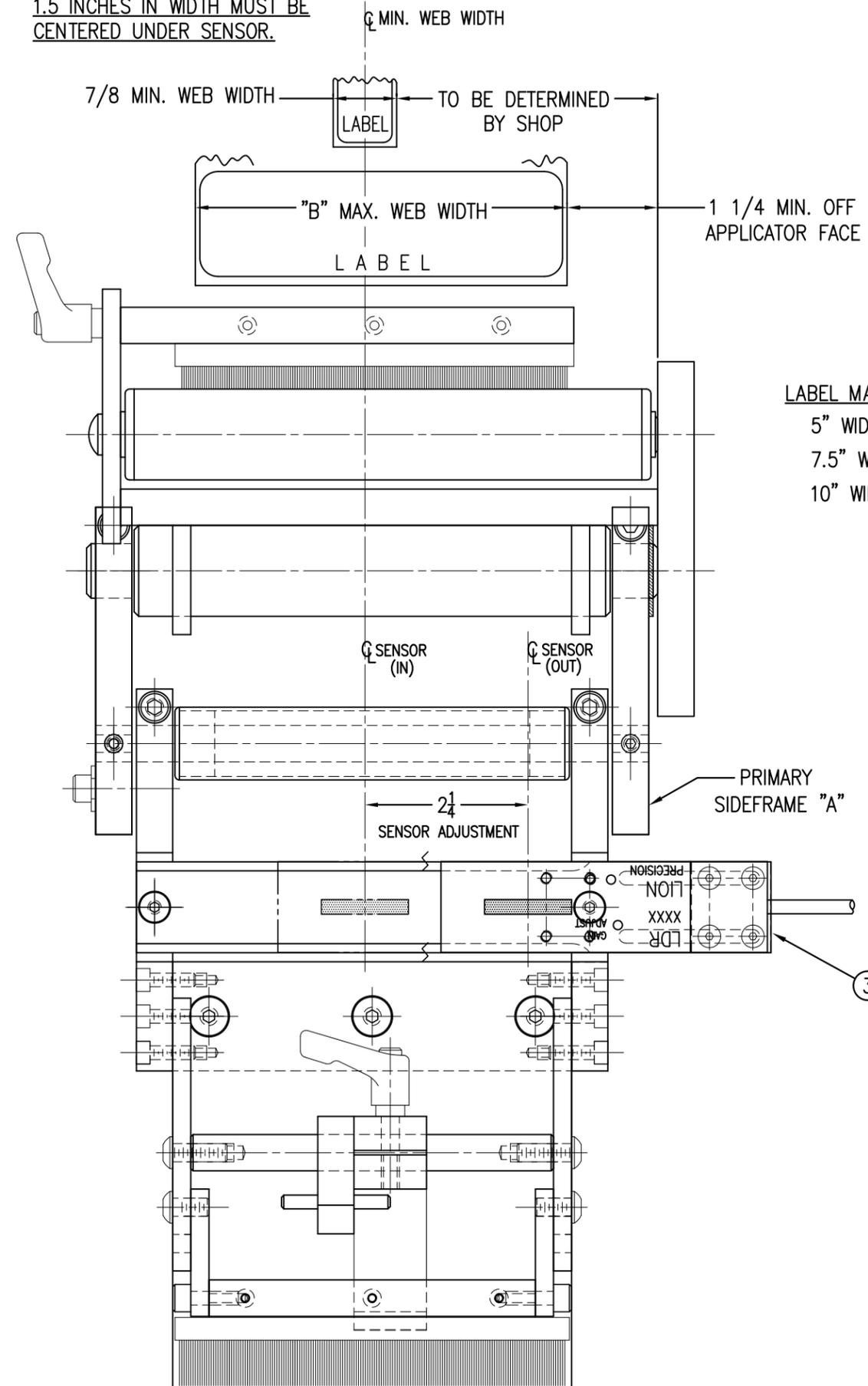
5" WIDE	-3101R/L-5
7.5" WIDE	-3101R/L-7
10" WIDE	-3101R/L-10

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"/10"
 GROUP: MERGE
 TITLE: CLEAR LABEL NOSE ASSEMBLY WITH TRANSITION PLATE
 REV. DATE: 06/23/20
 REV. BY: TDR
 SCALE: 1=2
 DATE: 02/11/00
 DRAWN BY: BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\MOD\MOD-215-3101RL-X
 Dept. Code 70



SECTION "B" ROTATED 90° CCW
(THRU PRIMARY SIDEFRAME "A")

LABELS MEASURING LESS THAN 1.5 INCHES IN WIDTH MUST BE CENTERED UNDER SENSOR.



LABEL MAX. WIDTH ("B" DIM.)

- 5" WIDE: "B" = 5-1/8"
- 7.5" WIDE: "B" = 7-5/8"
- 10" WIDE: "B" = 10-1/8"

BILL OF MATERIAL

MOD-215-X105R/L

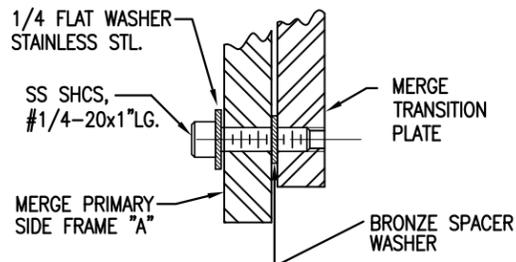
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-215-X105BR	MERGE NOSE MOUNTING ASSEMBLY - RH
	1	SAS-215-X105BL	MERGE NOSE MOUNTING ASSEMBLY - LH
②	1	SAS-215-X105AR	MERGE NOSE ASSEMBLY - RH
	1	SAS-215-X105AL	MERGE NOSE ASSEMBLY - LH
③	1	ASS-211-0108-2	FIBER OPTIC LABEL SENSOR ASSEMBLY with 2" MOUNTING ROD
	6	PM-FASH429075	SS SHCS, #10-32 x 5/8" LG.

BILL OF MATERIAL

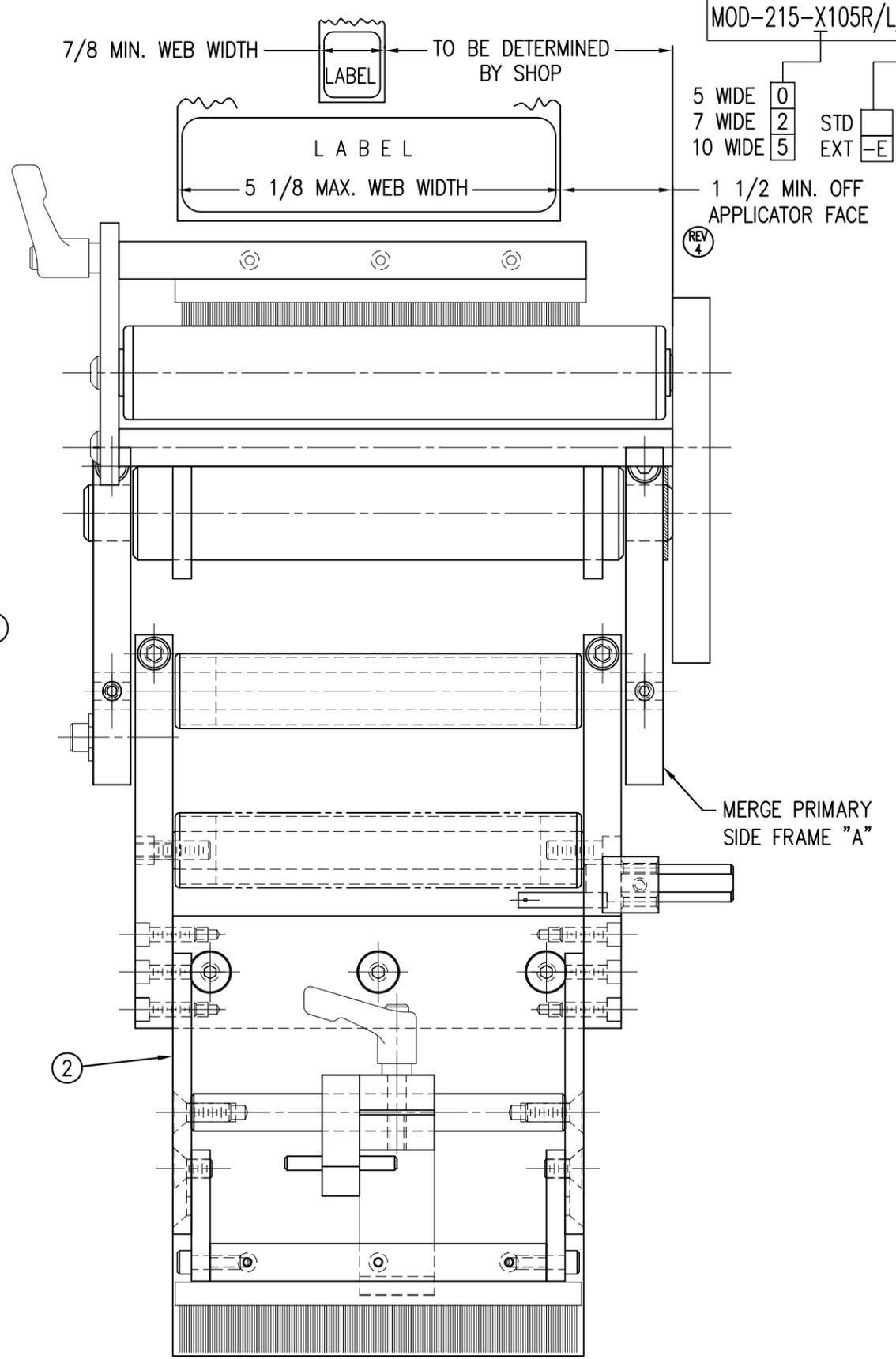
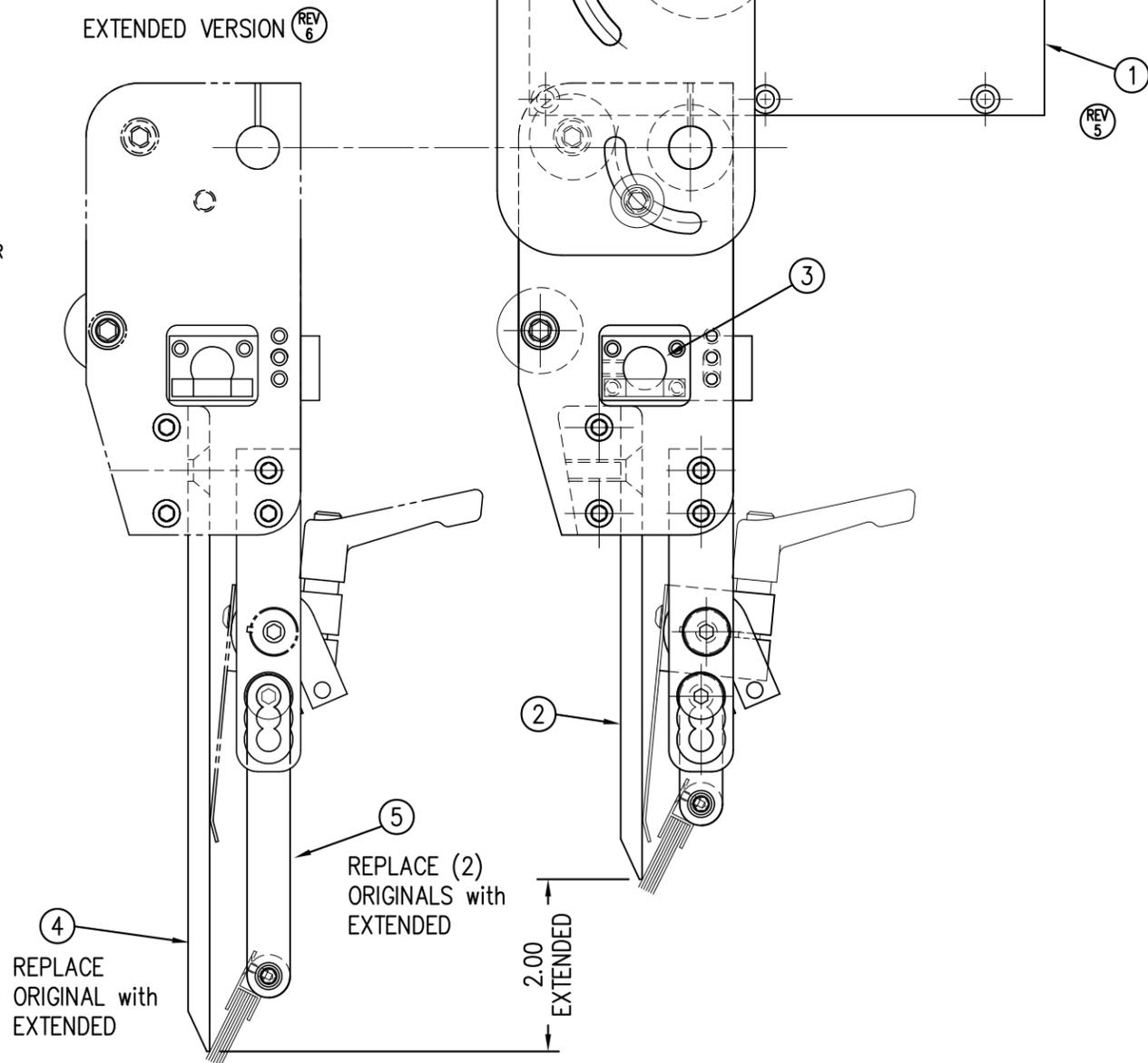
MOD-215-X105R/L-E

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	MOD-215-X105R/L	MERGE NOSE ASSEMBLY
④	-1	MP-215-X214	MERGE PEEL EDGE
	1	MP-215-X214E	MERGE EXTENDED PEEL EDGE
⑤	-2	MP-215-0218	MERGE BRUSH SUPPORT ARM
	2	MP-215-0218E	MERGE BRUSH SUPPORT ARM EXTENDED

RH & LH MODULES AVAILABLE
-RH MODULE SHOWN-



SECTION "B" ROTATED 90° CCW
(THRU PRIMARY SIDEFRAME "A")



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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5" / 7.5" / 10"
 GROUP: MERGE
 REV. DATE: 08/06/19
 REV. BY: TDR
 SCALE: 1=2
 DATE: 02/11/00
 DRAWN BY: BOB S.
 TITLE: STANDARD NOSE ASSEMBLY WITH TRANSITION PLATE
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\MOD-215-X105RLX
 Dept. Code: 70
 MOD-215-X105R/LX

BILL OF MATERIAL

ASS-215-X106R/L

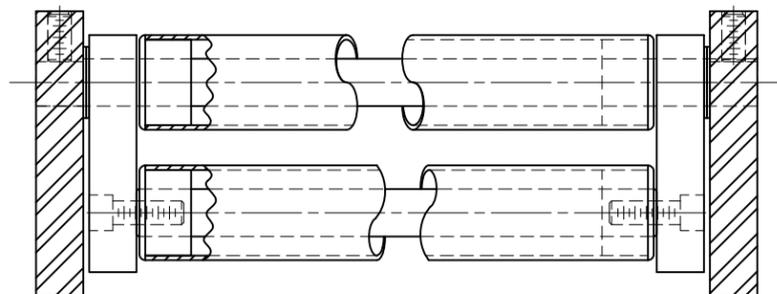
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-215-X115	MERGE PRIMARY ROLLER ASSEMBLY
②	1	MP-215-X209	5/7.5/10 PRIMARY ROLLER SHAFT
③	2	MP-211-0210	GUIDE COLLAR
④	1	PM-BEBT1028	BRONZE WASHER
⑤	1	SAS-215-X105AR/L	MERGE NOSE ASSEMBLY
⑥	1	ASS-211-0108-2	FIBER OPTIC LABEL SENSOR ASSEMBLY with 2" MOUNTING ROD
○	1	PM-BEBT1000	BRONZE WASHER

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

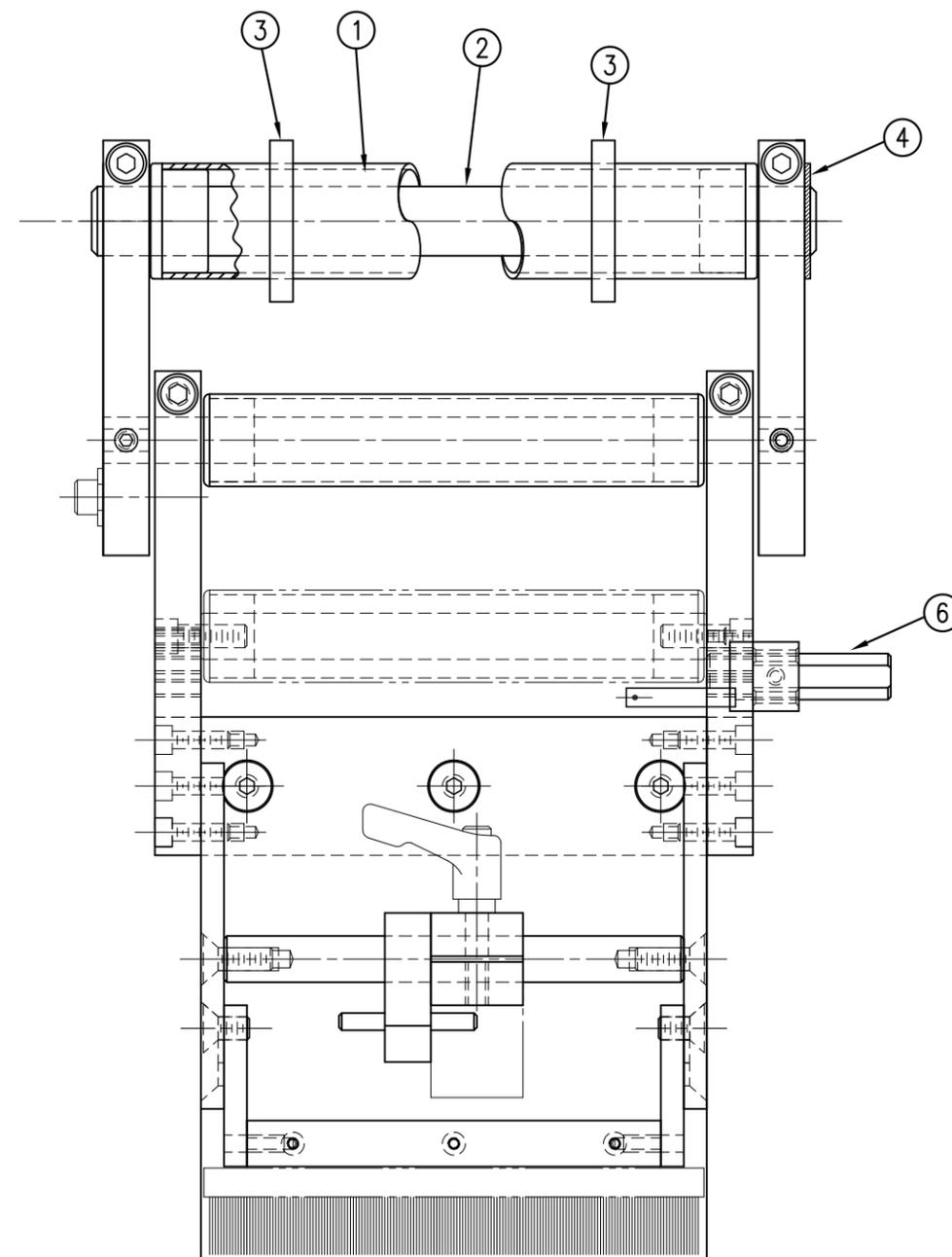
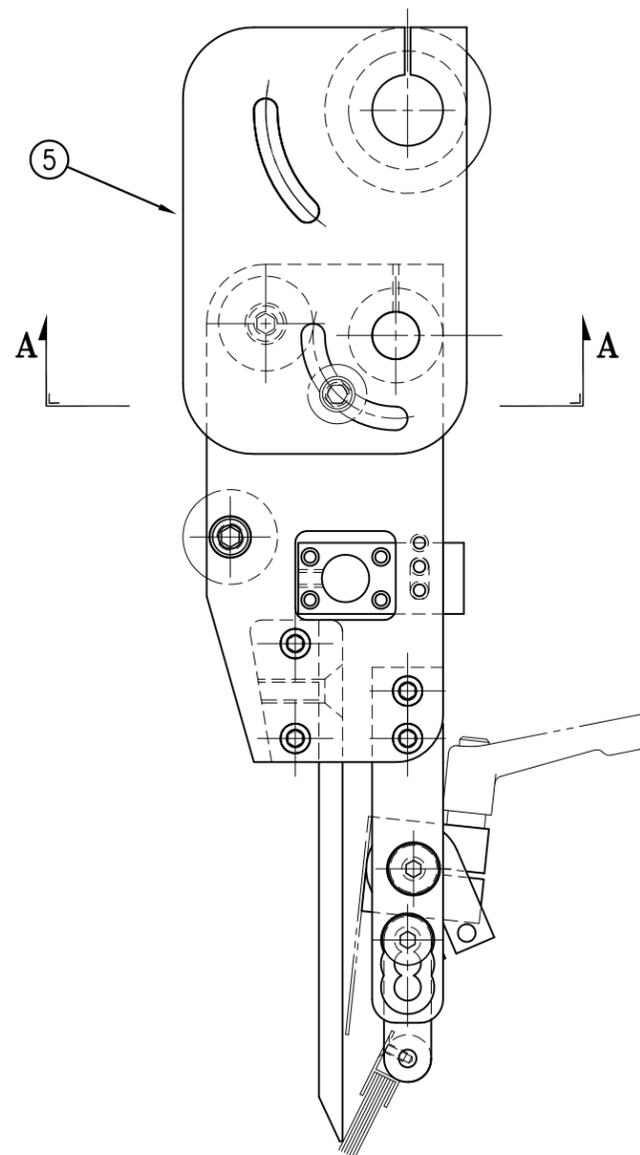
ASS-215-X106R/L

5" WIDE	-0106R/L
7.5" WIDE	-2106R/L
10" WIDE	-5106R/L

Dept. Code	70
F:\Engineering\Standard Parts\Applcator\360 SERIES\	
360a\ASS-215-X106R	
REV. DESCRIPTION	2 DOUBLE FEED ROLLER NOW STANDARD - REMOVED NOTE
REV. DATE	01/10/11
REV. BY	TDR
Scale	1=2
Date	02/11/00
DRAWN BY	BOB S.
TITLE	5/7.5/10 NOSE ASSEMBLY
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SECTION "A" - ROTATED 90° CCW
(SHOWING SECONDARY MERGE ROLLERS)



BILL OF MATERIAL

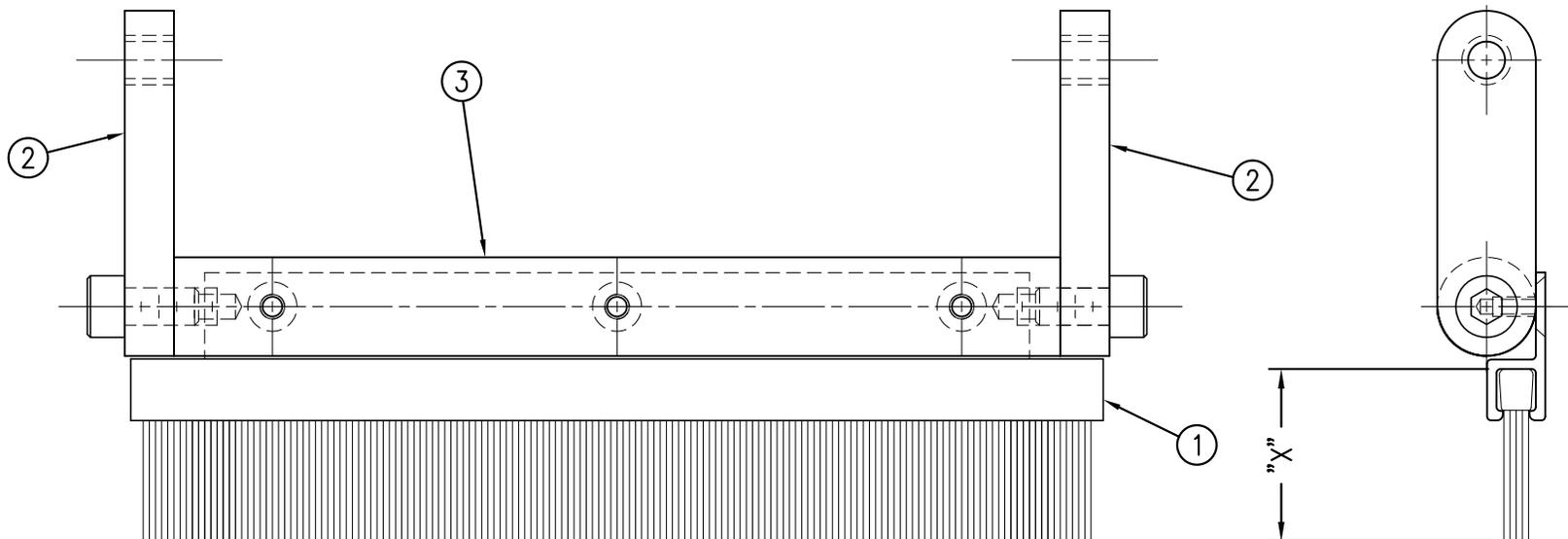
ASS-215-X107-X

ASS-215-X107-X

5" WIDE	-0107	-X
7.5" WIDE	-2107	-X
10" WIDE	-5107	-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-215-X110-X	5/7.5/10 TENSION BRUSH ASS'Y x "X" Lg.
②	2	MP-215-0218	BRUSH SUPPORT ARM
③	1	MP-215-X223	5/7.5/10 BRUSH HOLDER

"X"	BRUSH LENGTH
	7/8"
1.25	1-1/4"
2	2"
3	3"
4	4"



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: MERGE	TITLE: BRUSH WIPER ASSEMBLY for MERGE NOSE				Dept. Code 70
REV. 2	REV. DESCRIPTION REMOVED RUBBER TABULATION & ADDED BRUSH LG. TABULATION	REV. DATE 04/24/09	REV. BY: TDR	Scale: 1=1	Date: 02/11/00	DRAWN BY: BOB S.	F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\ASS\ASS-215-X107-X

BILL OF MATERIAL

ASS-215-X107F-X

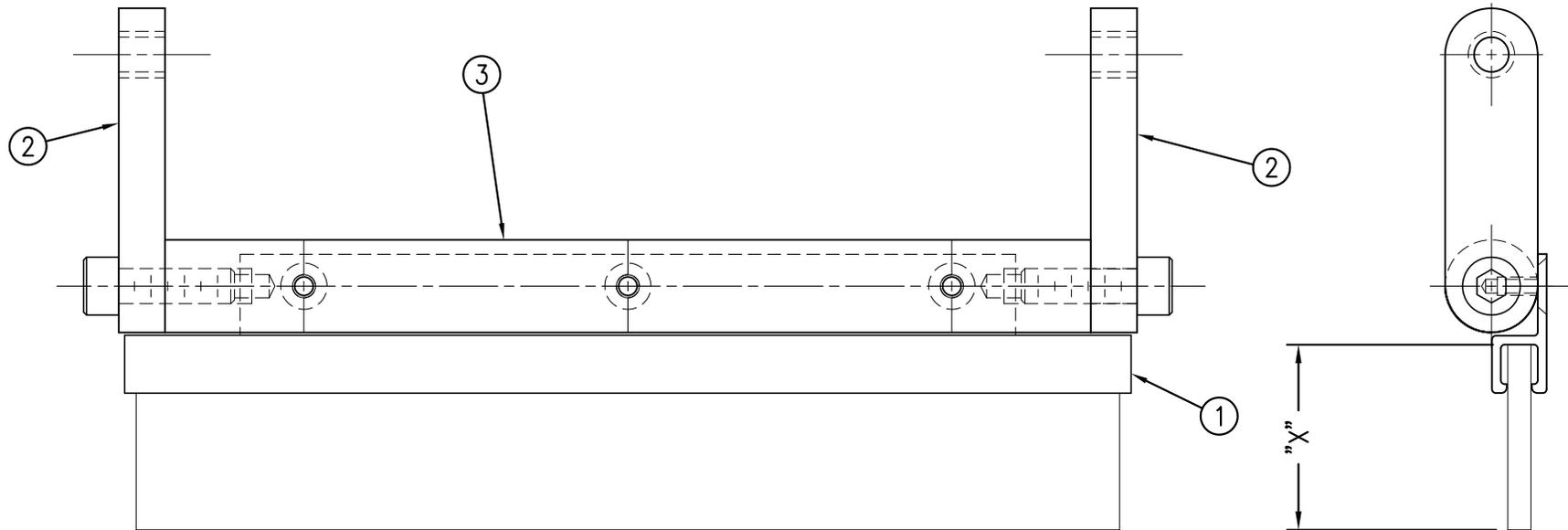
ASS-215-X107F-X

5" WIDE	-0107F	-X
7.5" WIDE	-2107F	-X
10" WIDE	-5107F	-X

FELT LENGTH

1"	2"	3"
----	----	----

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-215-X110F-X	5/7.5/10 FELT WIPER ASS'Y x "X" Lg.
②	2	MP-215-0218	WIPER SUPPORT ARM
③	1	MP-215-X223	5/7.5/10 WIPER HOLDER



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: MERGE	TITLE: FELT WIPER ASSEMBLY for MERGE NOSE				Dept. Code 70
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx	Scale: 1=1	Date: 04/27/09	DRAWN BY: Tracy Rhodes	F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\ASS\ASS-215-X107F-X

BILL OF MATERIAL

ASS-215-X107S-X

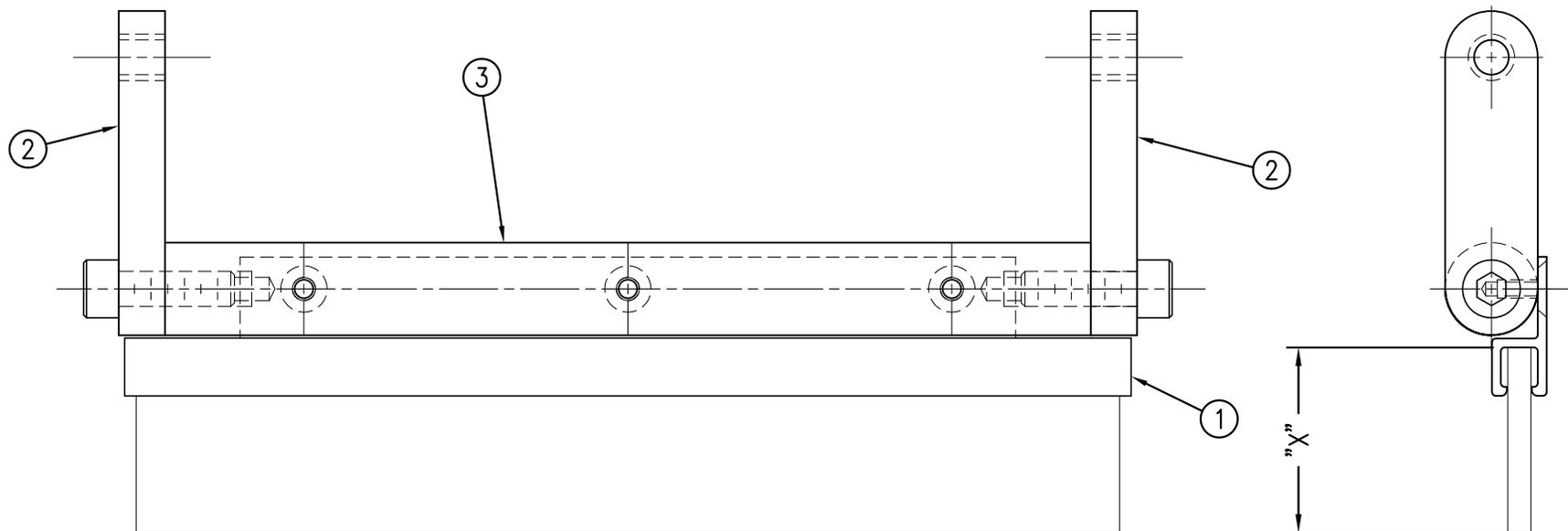
ASS-215-X107S-X

5" WIDE	-0107S	-X
7.5" WIDE	-2107S	-X
10" WIDE	-5107S	-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-215-X110S-X	5/7.5/10 SILICONE RUBBER WIPER ASS'Y x "X" Lg.
②	2	MP-215-0218	WIPER SUPPORT ARM
③	1	MP-215-X223	5/7.5/10 WIPER HOLDER

RUBBER LENGTH

1" 2" 3"



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: MERGE	TITLE: RUBBER WIPER ASSEMBLY for MERGE NOSE				Dept. Code 70
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx	Scale: 1=1	Date: 04/27/09	DRAWN BY: Tracy Rhodes	F:\Engineering\Standard Parts\Applicator\360 SERIES\ 360a\ASS\ASS-215-X107S-X

BILL OF MATERIAL

ASS-215-3102R/L-X

NOTE: ORDER LRD 6300 CLEAR LABEL SENSOR SEPARATELY
 CLEAR LABEL SENSOR (#LRD6300) ~ ASS-200-0431 (REV 3)

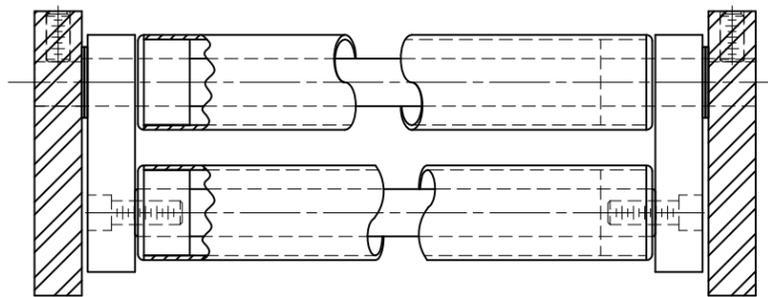
RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-

ASS-215-3102R/L-X

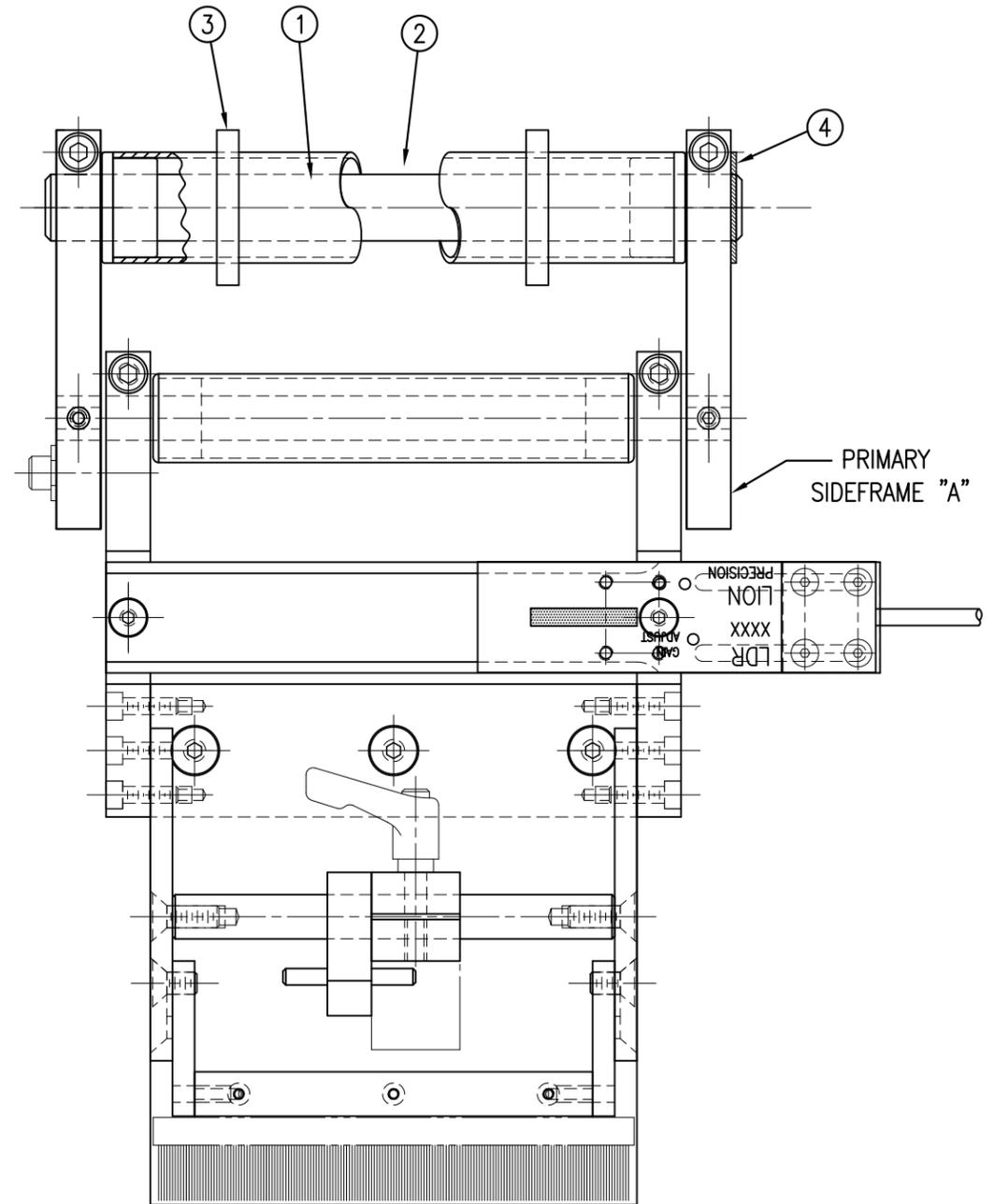
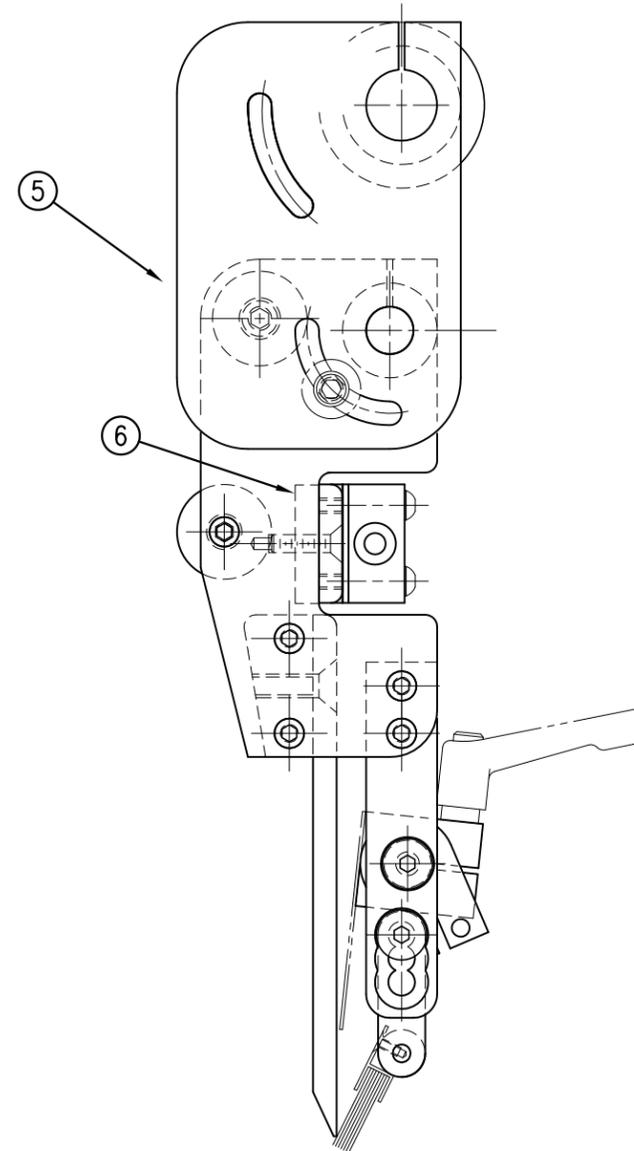
5" WIDE	-3102R/L-5
7.5" WIDE	-3102R/L-7
10" WIDE	-3102R/L-10

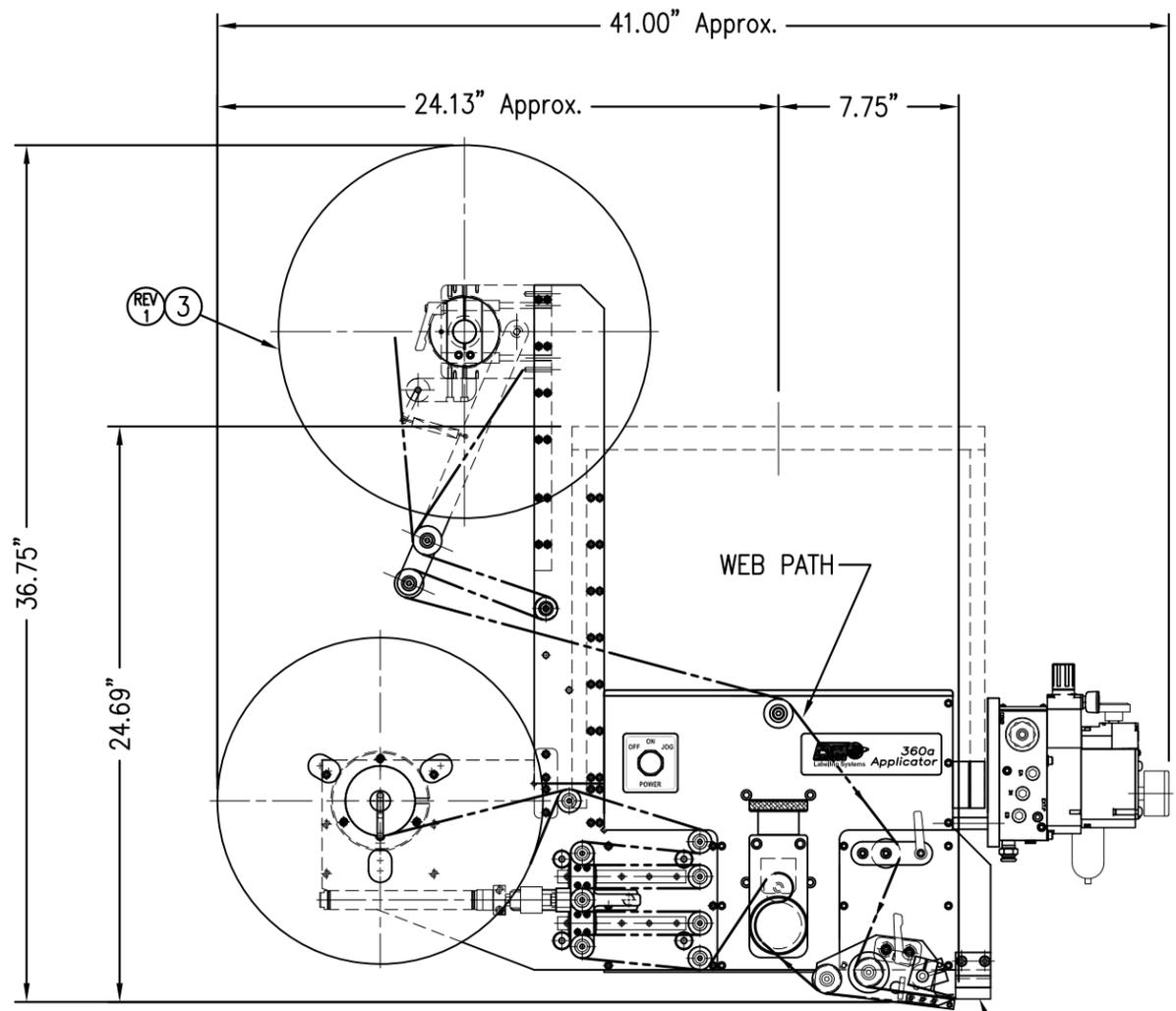
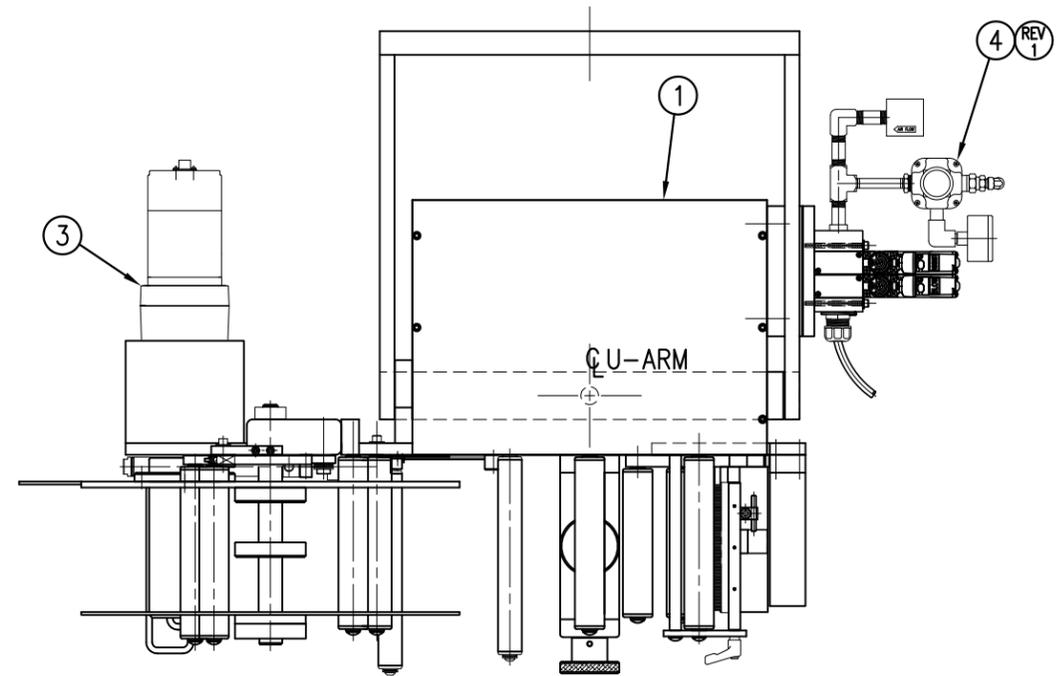
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.
 TITLE: 5/7.5/10 CLEAR LABEL NOSE ASSEMBLY
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"/10"
 GROUP: MERGE
 REV. DATE: 11/14/17
 REV. BY: TDR
 SCALE: 1=2
 DATE: 02/11/00
 DRAWN BY: BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-215-3102RL-X
 Dept. Code: 70

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-215-X115	5/7.5/10 PRIMARY ROLLER ASSEMBLY
②	1	MP-215-0209	PRIMARY ROLLER SHAFT
③	2	MP-211-0210	GUIDE COLLAR
④	1	PM-BEBT1028	BRONZE WASHER
⑤	1	SAS-215-3101R-X	RH MERGE CLEAR LABEL NOSE ASSEMBLY
	1	SAS-215-3101L-X	LH MERGE CLEAR LABEL NOSE ASSEMBLY
⑥	1	MP-214-3301	CLEAR LABEL SENSOR NUT PLATE



SECTION "A" - ROTATED 90° CW
 (SHOWING SECONDARY MERGE ROLLERS)





② INCLUDES VALVE BANK Assy.
ORDER PAD & MANIFOLD SEPARATELY

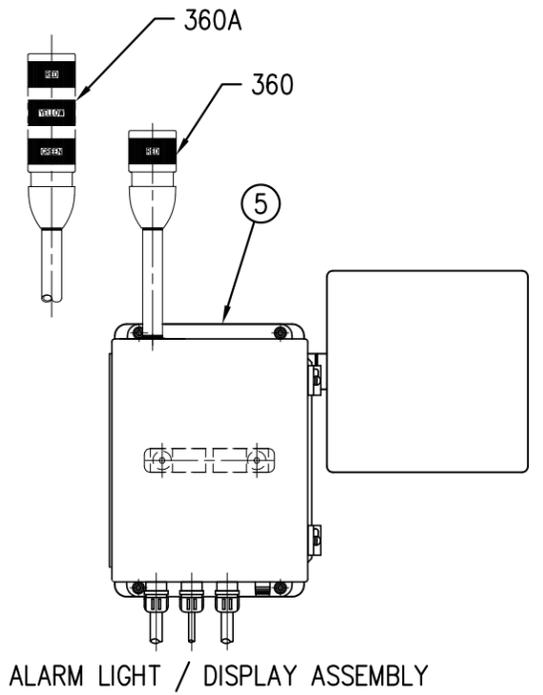
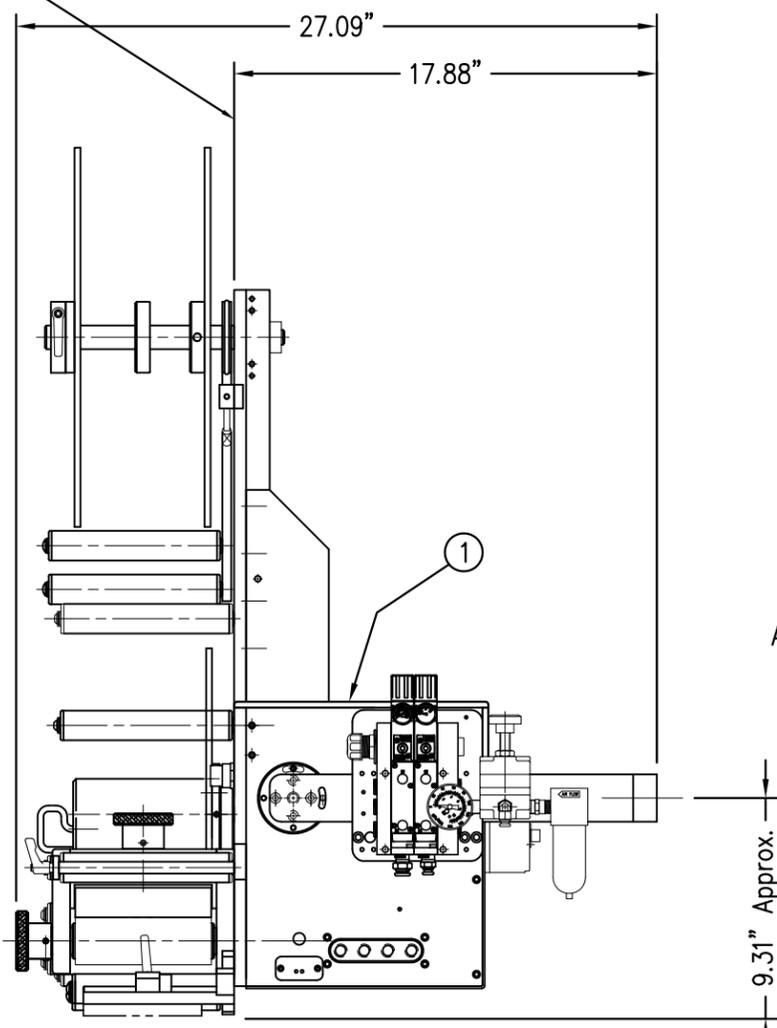
BILL OF MATERIAL			
CTM-211X-0111R/L-16PX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5.00" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5.00" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-211-0111R/L	5.00" WIDE RH/LH RVB NOSE MODULE
③	1	MOD-200-3157R/L-5	5.00" WIDE,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

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3132 WITH ASS-200-3132A AND ADD LOCK COLLAR PM-C01025.
REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)

NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM

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.

APPLICATOR FACE

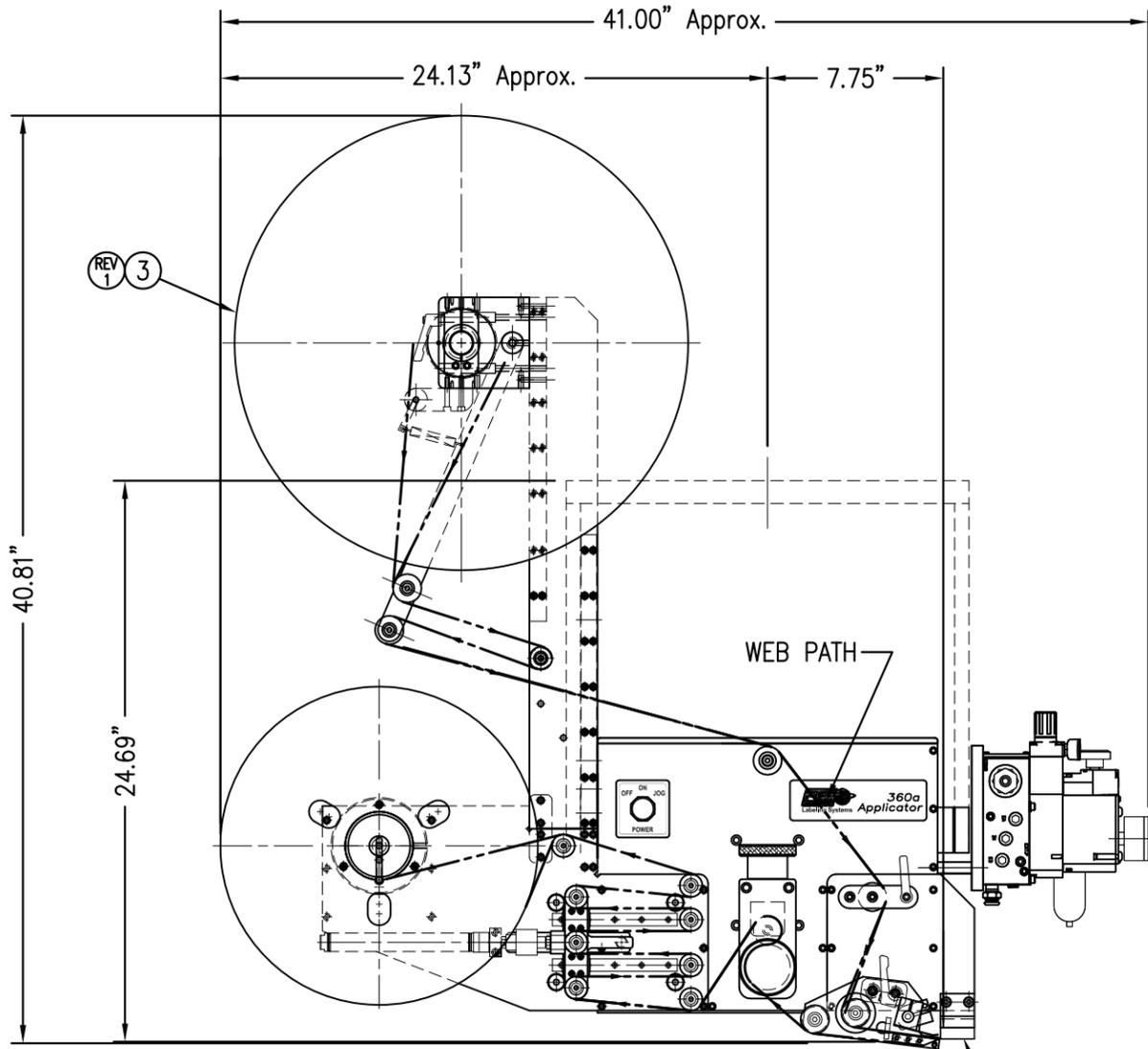
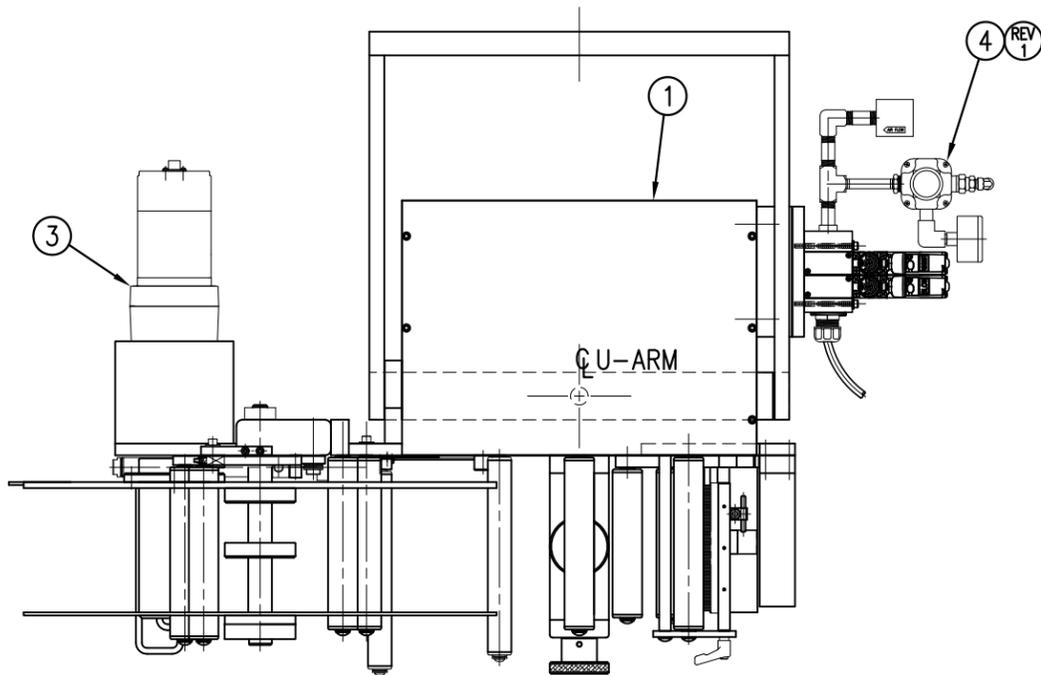


CTM-211X-0111R/L-16PX

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

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"
 TITLE: 5.00" WIDE: RVB, 16" UNWIND w/POWERED REWINDS
 REV. 1 REPLACED MOD-200-3155R/L-5 WITH MOD-200-3157R/L-5
 REV. BY: JLM
 REV. DATE: 02/26/08
 DRAWN BY: BOB S.
 DATE: 08/30/99
 SCALE: 1=8
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-211X-0111R/L-16PX



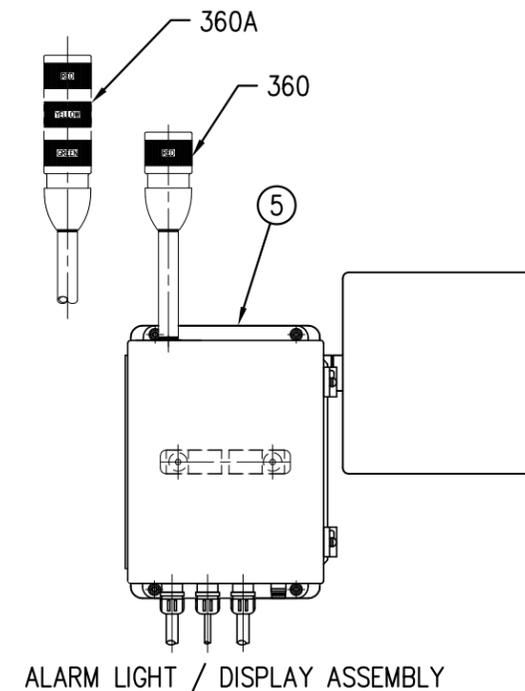
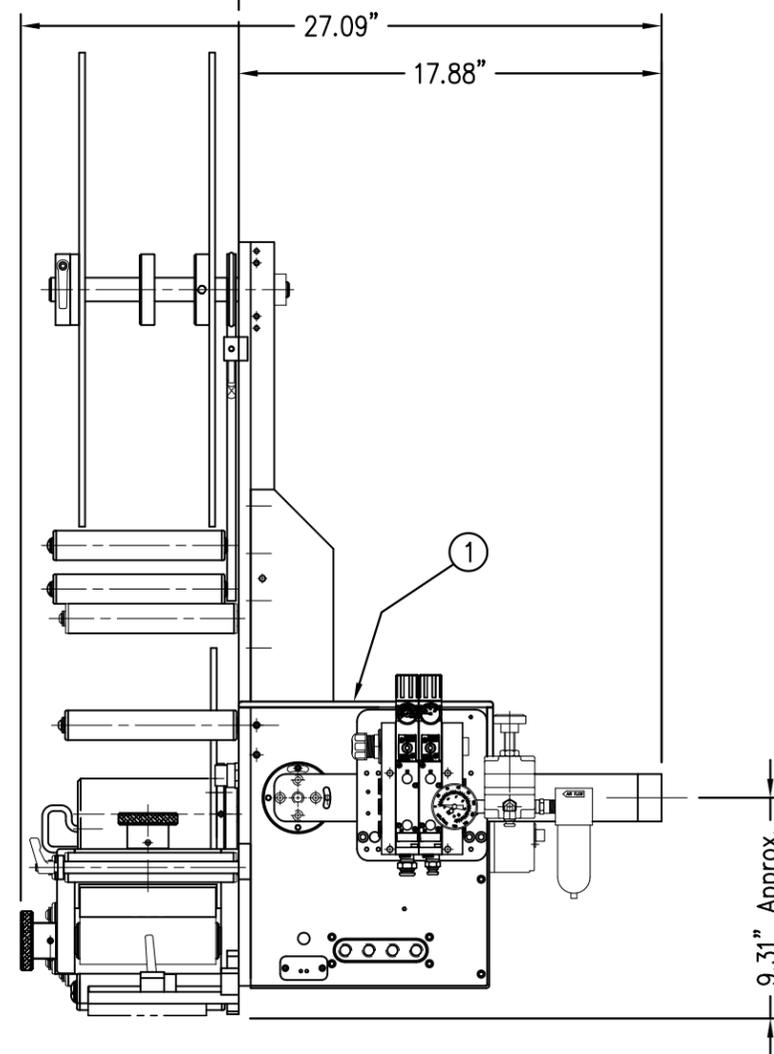
② INCLUDES VALVE BANK Assy.
ORDER PAD & MANIFOLD SEPARATELY

BILL OF MATERIAL			
CTM-211X-0111R/L-20PX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5.00" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5.00" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-211-0111R/L	5.00" WIDE RH/LH RVB NOSE MODULE
③	1	MOD-200-3156R/L-5	5.00" WIDE, RH/LH, 20", Pwr Std. REWIND
	1	MOD-200-3159R/L-5	5.00" WIDE, RH/LH, 20", Pwr COLLAPSIBLE REWIND
④	1	ASS-200-3106	HI/LO REGULATOR Assy,
⑤	1	ASS-200-3161	360 ALARM LIGHT ASSEMBLY
	1	ASS-200A-3161	360A ALARM LIGHT ASSEMBLY
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3160 WITH ASS-200-3160A AND ADD LOCK COLLAR PM-C01025.
REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)
NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM

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.

APPLICATOR
FACE



CTM-211X-0111R/L-20PX	
R.H., STANDARD REWIND	-0111R-20PS
L.H., STANDARD REWIND	-0111L-20PS
R.H., COLLAPSIBLE REWIND	-0111R-20PC
L.H., COLLAPSIBLE REWIND	-0111L-20PC

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"
 TITLE: 5.00" WIDE: RVB, 20" UNWIND w/POWERED REWINDS
 REV. 1 REPLACED MOD-200-3155R/L-5 WITH MOD-200-3157R/L-5
 REV. BY: JLM
 REV. DATE: 02/26/08
 DATE: 08/30/99
 SCALE: 1=8
 DRAWN BY: BOB S.
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-211X-0111R-20PX

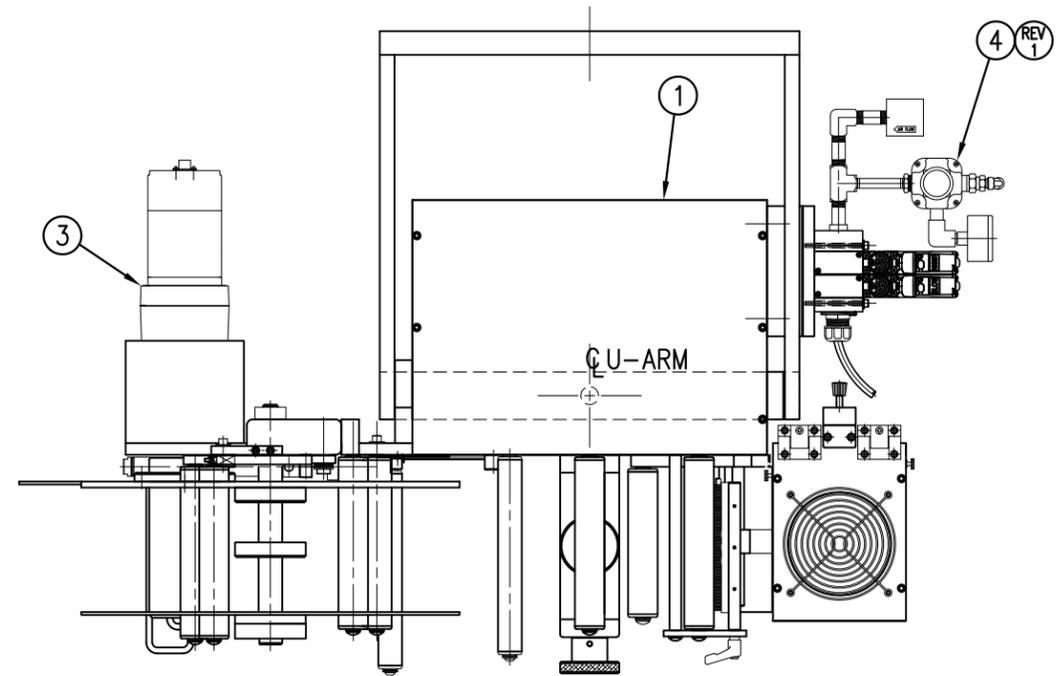
CTM-211X-X101R/L-16PX

BILL OF MATERIAL			
CTM-211X-X101R/L-16PX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5.00" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5.00" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-211-X101R/L	5/7.5 WIDE RH/LH AIR BLOW MODULE
③	1	MOD-200-3157R/L-X	5/7.5 WIDE, RH/LH, 16", Pwr Std. REWIND
	1	MOD-200-3158R/L-X	5/7.5 WIDE, RH/LH, 16", Pwr COLLAPSIBLE REWIND
④	1	ASS-200-3106	HI/LO REGULATOR Assy,
⑤	1	ASS-200-3161	360 ALARM LIGHT ASSEMBLY
	1	ASS-200A-3161	360A ALARM LIGHT ASSEMBLY
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE

5/7.5 R.H., STANDARD REWIND	-X101R-16PS
5/7.5 L.H., STANDARD REWIND	-X101L-16PS
5/7.5 R.H., COLLAPSIBLE REWIND	-X101R-16PC
5/7.5 L.H., COLLAPSIBLE REWIND	-X101L-16PC

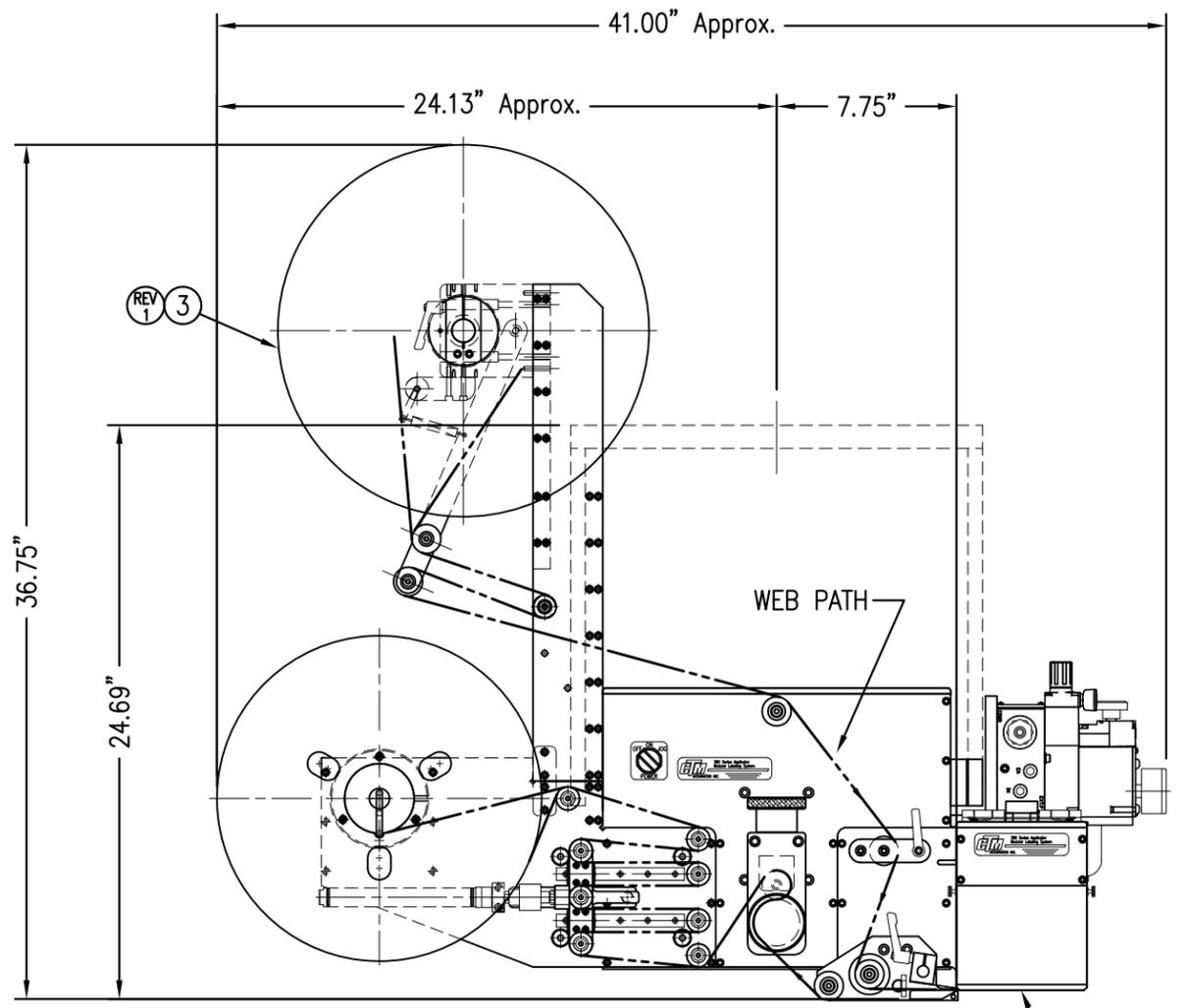
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

5.00" & 7.50" ASSEMBLIES AVAILABLE
-5.00" ASSEMBLY SHOWN-

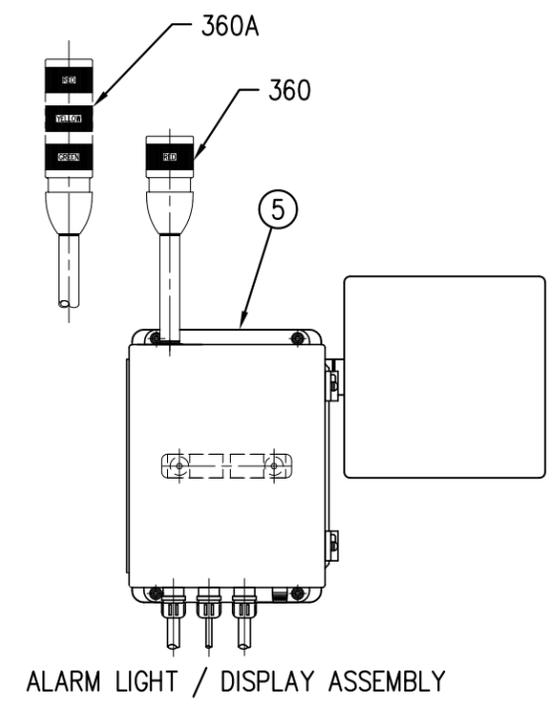
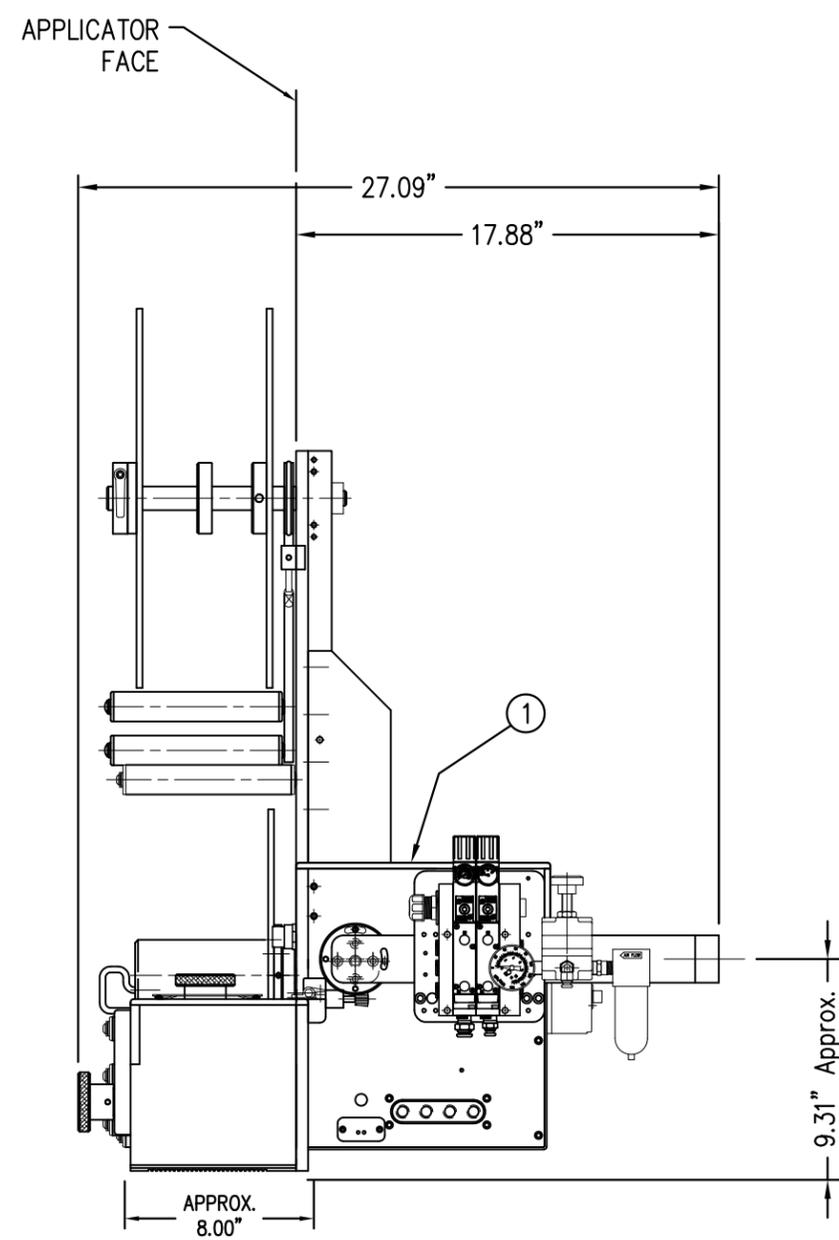


NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3132 WITH ASS-200-3132A AND ADD LOCK COLLAR PM-C01025.
REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)

NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM



② INCLUDES VALVE BANK ASS'Y.



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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5/7.5
 REV. 1 REPLACED MOD-200-3155R/L-5 WITH MOD-200-3157R/L-5
 REV. DATE: 02/26/08
 REV. BY: JLM
 SCALE: 1=8
 DATE: 08/30/99
 DRAWN BY: BOB S.
 TITLE: 5/7.5 WIDE, AIR BLOW BOX, 16" UNWIND w/POWERED REWINDS
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-211X-X101RL-16PX

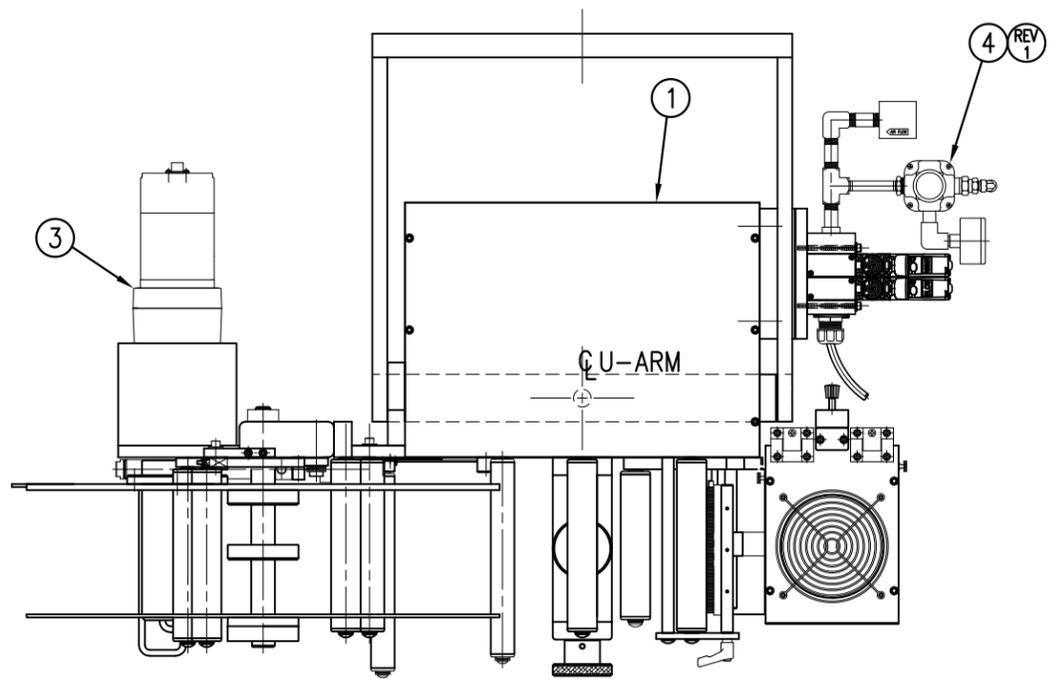
CTM-211X-X101R/L-20PXX

BILL OF MATERIAL			
CTM-211X-X101R/L-20PXX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5.00" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5.00" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-211-X101R/L	5/7.5 WIDE RH/LH AIR BLOW MODULE
③	1	MOD-200-3156R/L-X	5/7.5 WIDE, RH/LH, 20", Pwr Std. REWIND
	1	MOD-200-3159R/L-X	5/7.5 WIDE, RH/LH, 20", Pwr COLLAPSIBLE REWIND
④	1	ASS-200-3106	HI/LO REGULATOR Assy,
⑤	1	ASS-200-3161	360 ALARM LIGHT ASSEMBLY
	1	ASS-200A-3161	360A ALARM LIGHT ASSEMBLY
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE

5/7.5 R.H., STANDARD REWIND	-X101R-20PS
5/7.5 L.H., STANDARD REWIND	-X101L-20PS
5/7.5 R.H., COLLAPSIBLE REWIND	-X101R-20PC
5/7.5 L.H., COLLAPSIBLE REWIND	-X101L-20PC

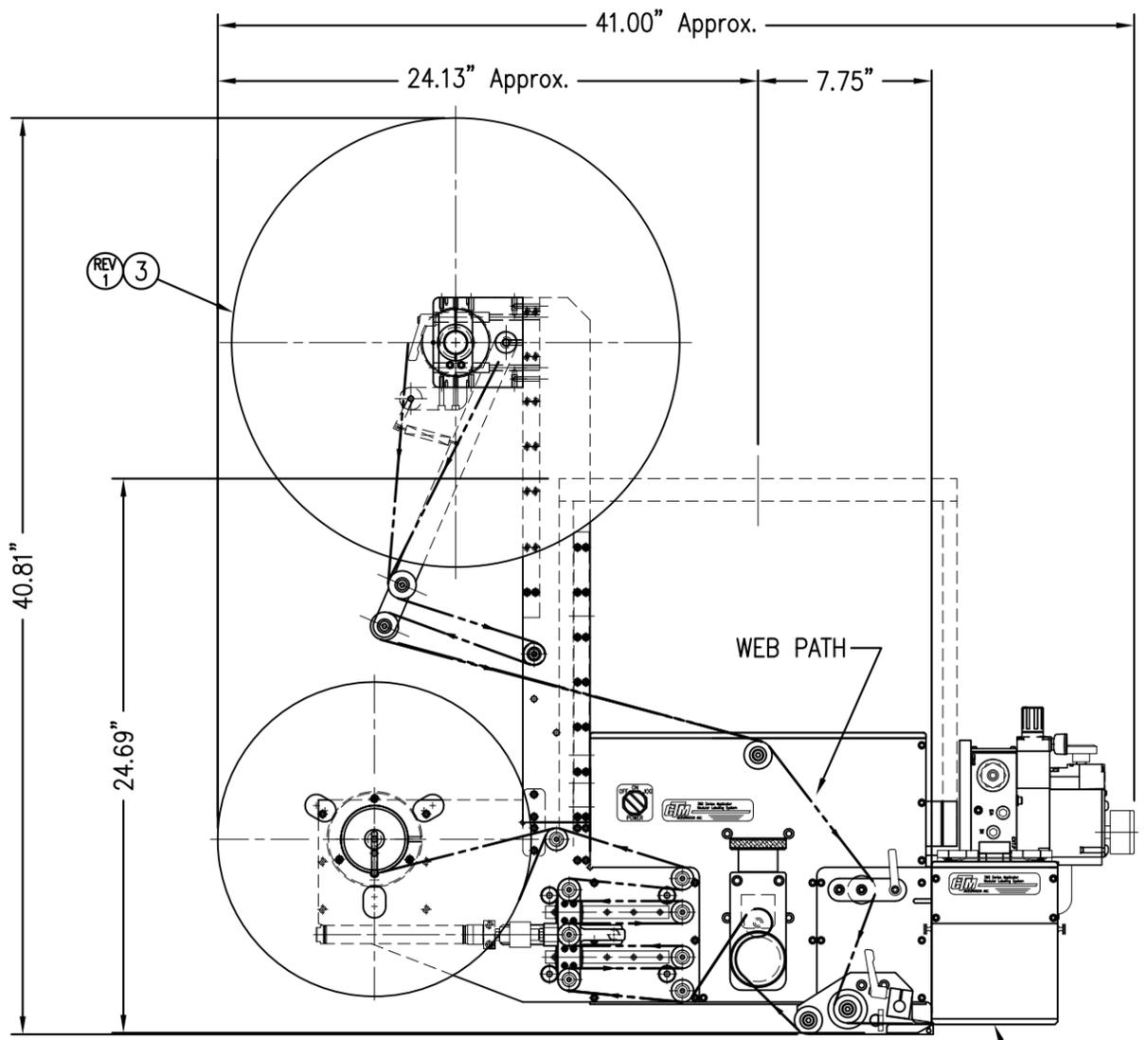
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

5.00" & 7.50" ASSEMBLIES AVAILABLE
-5.00" ASSEMBLY SHOWN-

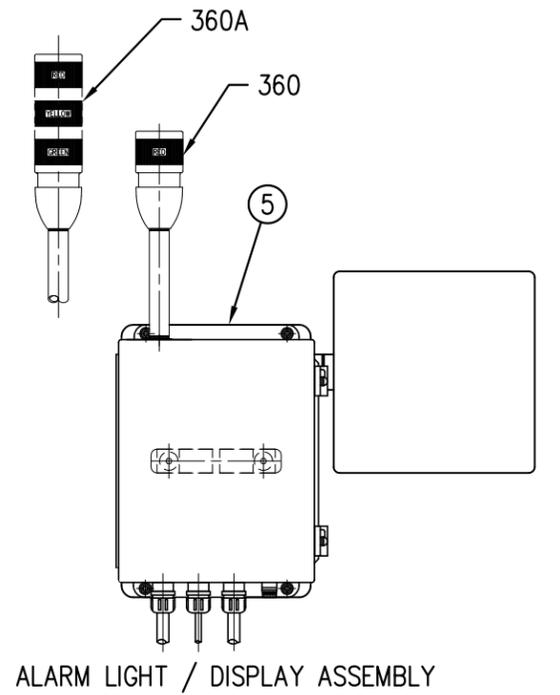
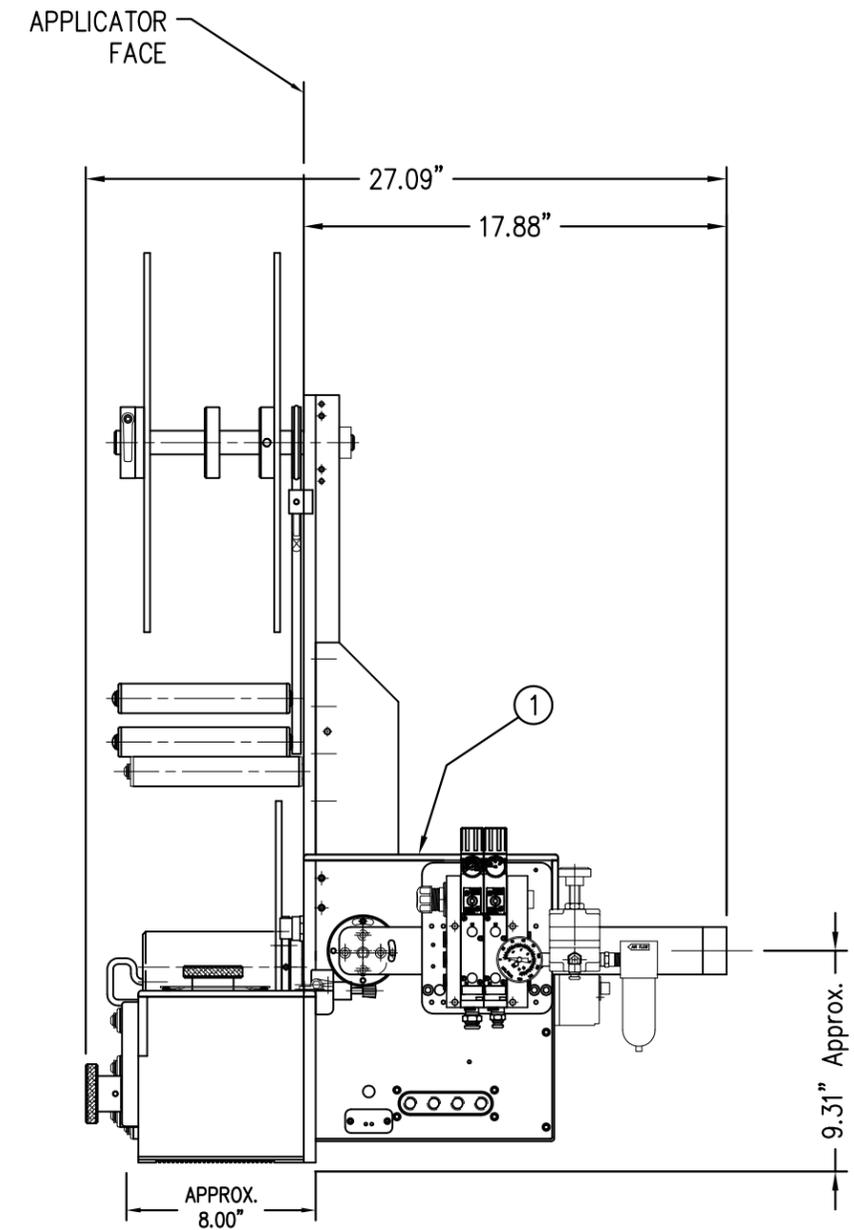


NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3160 WITH ASS-200-3160A AND ADD LOCK COLLAR PM-C01025.
REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)

NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM

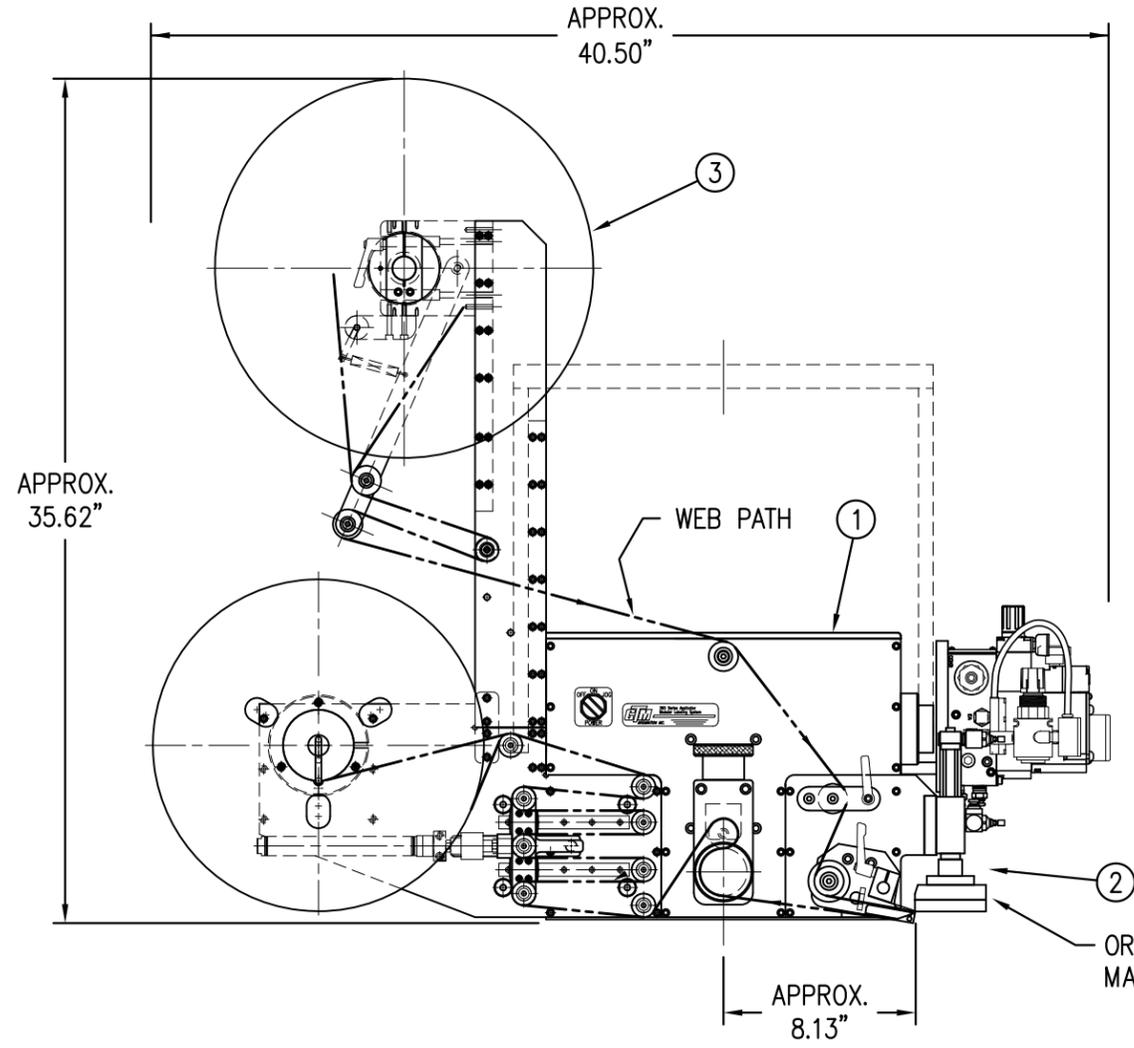
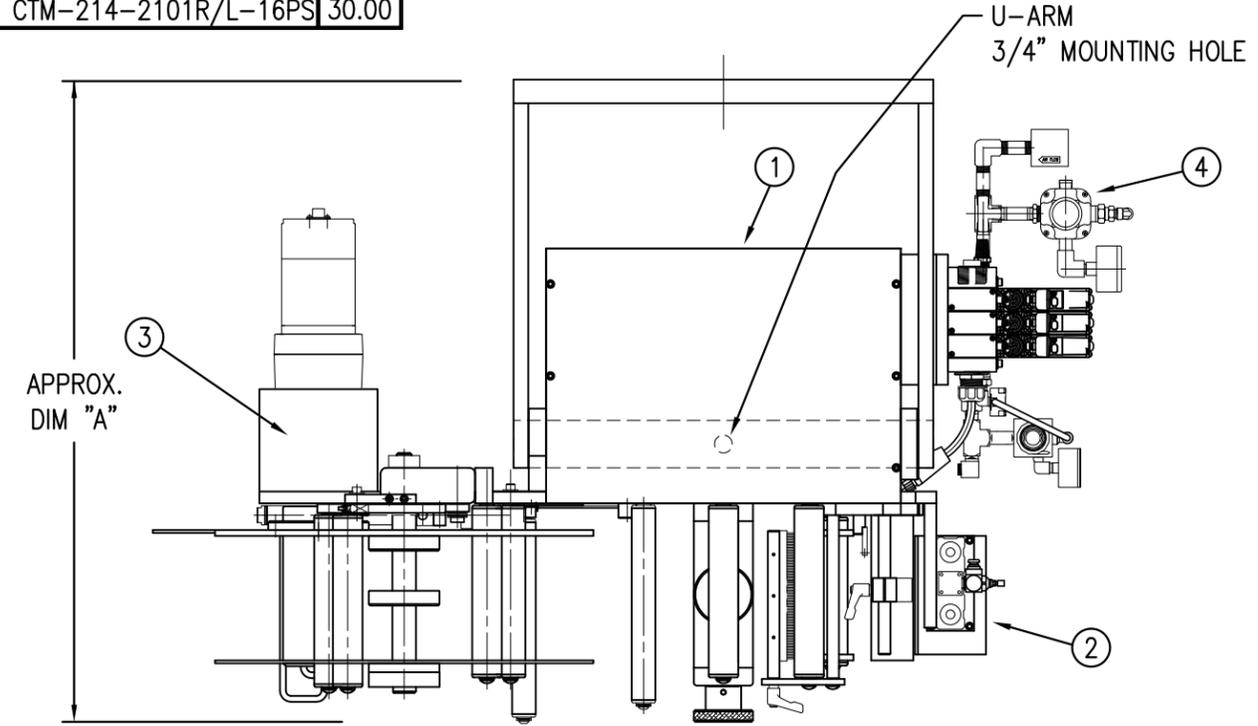


② INCLUDES VALVE BANK ASS'Y.

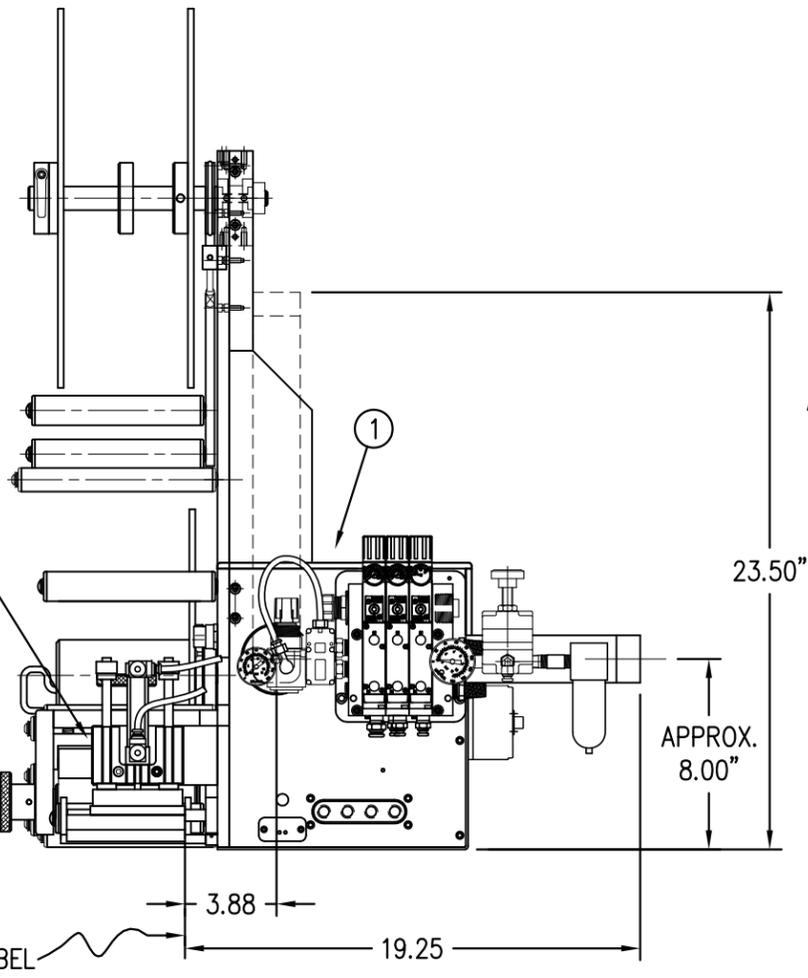


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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5/7.5
 TITLE: POWERED REWIND AIR BLOW APPLICATOR
 REV. DATE: 02/26/08
 REV. BY: JLM
 SCALE: 1=8
 DATE: 08/30/99
 DRAWN BY: BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-211X-X101RL-20PX
 Dept. Code: 70

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



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



BILL OF MATERIAL			
CTM-214X-X101R/L-16PX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5.00" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5.00" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-214-X101R/L	5/7.5 WIDE RH/LH TAMP MODULE
③	1	MOD-200-3157R/L-X	5/7.5 WIDE, RH/LH, 16", Pwr Std. REWIND
	1	MOD-200-3158R/L-X	5/7.5 WIDE, RH/LH, 16", Pwr COLLAPSIBLE REWIND
④	1	ASS-200-3106	HI/LO REGULATOR Assy,
⑤	1	ASS-200-3161	360 ALARM LIGHT ASSEMBLY
	1	ASS-200A-3161	360A ALARM LIGHT ASSEMBLY
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE

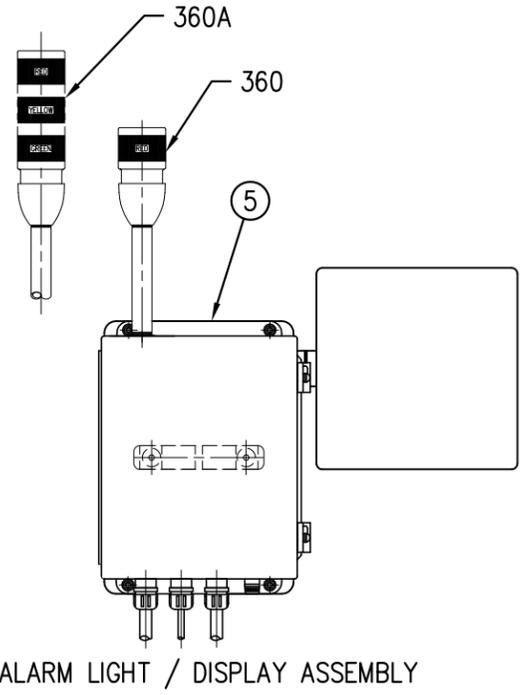
NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3132 WITH ASS-200-3132A AND ADD LOCK COLLAR PM-C01025.
 REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)

NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM

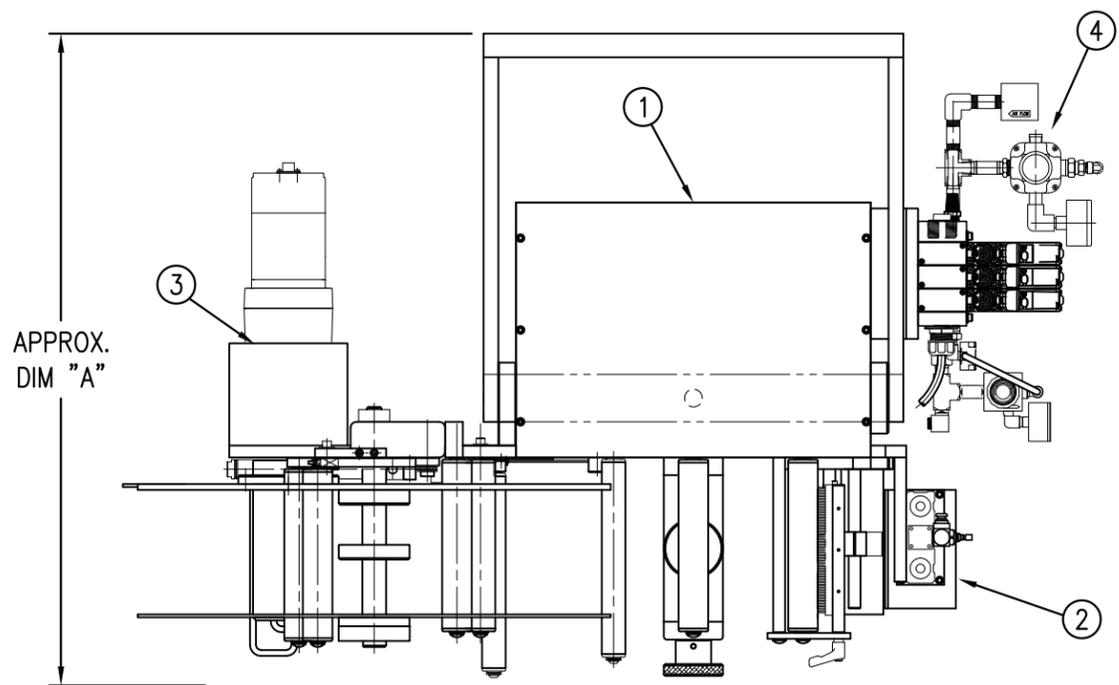
CTM-214X-X101R/L-16PX	
5/7.5 R.H., STANDARD REWIND	-X101R-16PS
5/7.5 L.H., STANDARD REWIND	-X101L-16PS
5/7.5 R.H., COLLAPSIBLE REWIND	-X101R-16PC
5/7.5 L.H., COLLAPSIBLE REWIND	-X101L-16PC

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-

5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-



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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5/7.5
 REV. DESCRIPTION: 1 REPLACED MOD-200-3155R/L-X with MOD-200-3157R/L-X
 REV. DATE: 02/13/13
 REV. BY: TDR
 SCALE: 1=8
 DATE: 02/13/13
 DRAWN BY: TDR
 TITLE: 5/7.5 WIDE, TAMP, 16" UNWIND w/POWERED REWINDS
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-214X-X101R-L-16PX



PART NO.	DIM "A"
CTM-214-0101R/L-20PS	27.50
CTM-214-2101R/L-20PS	30.00

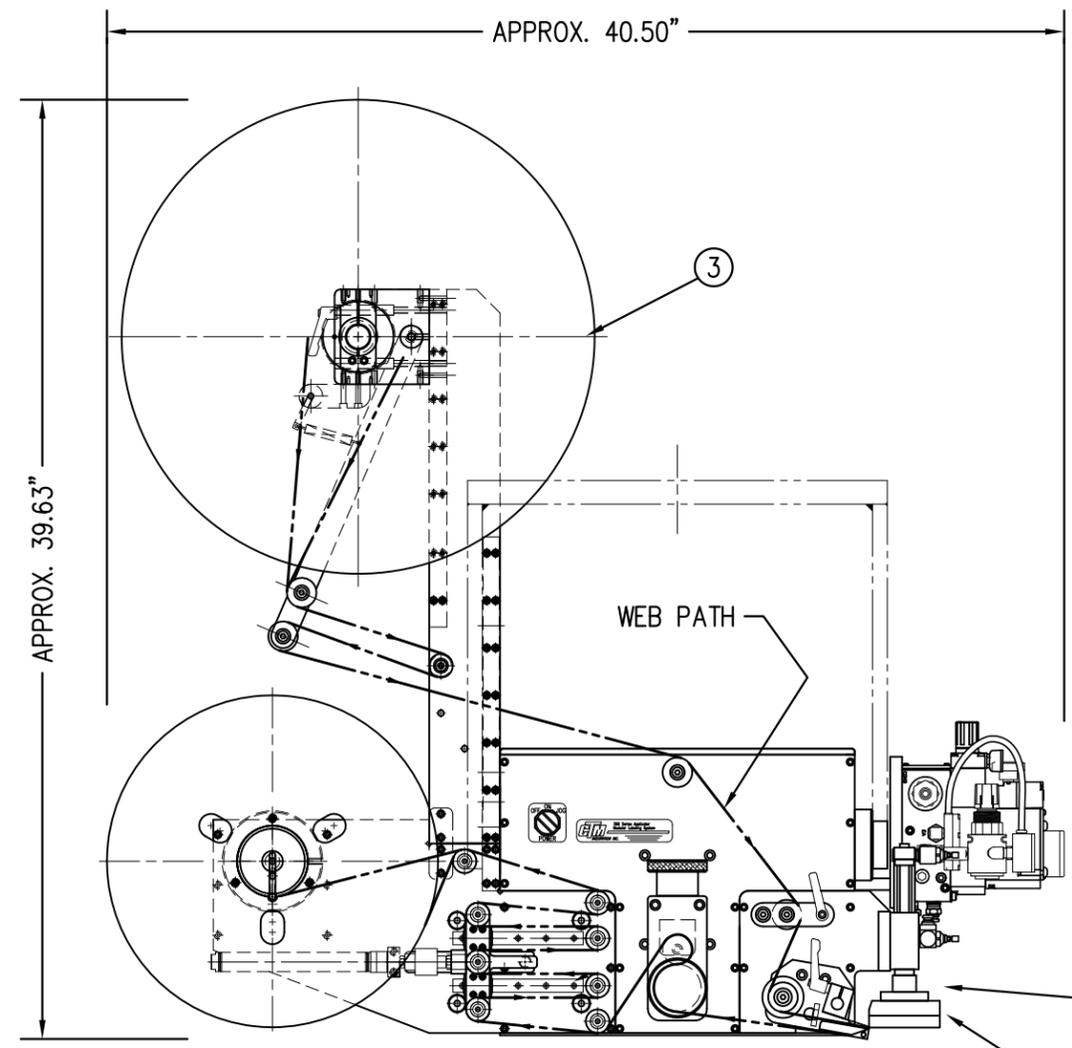
BILL OF MATERIAL			
CTM-214X-0101R/L-20PX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5"/7.5" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5"/7.5" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-214-X101R/L	5"/7.5" WIDE RH/LH TAMP NOSE MODULE
③	1	MOD-200-3156R/L-X	5"/7.5" WIDE, RH/LH, 20", Pwr Std. REWIND
	1	MOD-200-3159R/L-X	5"/7.5" WIDE, RH/LH, 20", Pwr COLLAPSIBLE REWIND
④	1	ASS-200-3106	HI/LO REGULATOR Assy,
	1	ASS-200-3161	360 ALARM LIGHT ASSEMBLY
⑤	1	ASS-200A-3161	360A ALARM LIGHT ASSEMBLY
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE

CTM-214X-X101R/L-20PX	
5/7.5 R.H., STANDARD REWIND	-X101R-20PS
5/7.5 L.H., STANDARD REWIND	-X101L-20PS
5/7.5 R.H., COLLAPSIBLE REWIND	-X101R-20PC
5/7.5 L.H., COLLAPSIBLE REWIND	-X101L-20PC

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-
 5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-

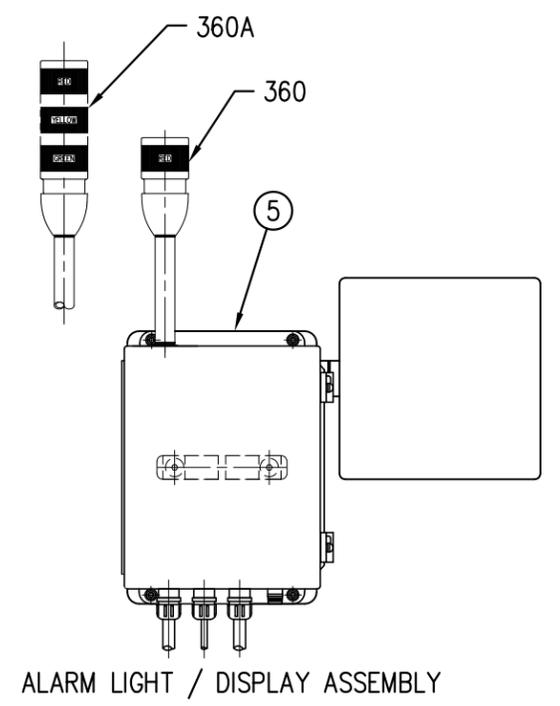
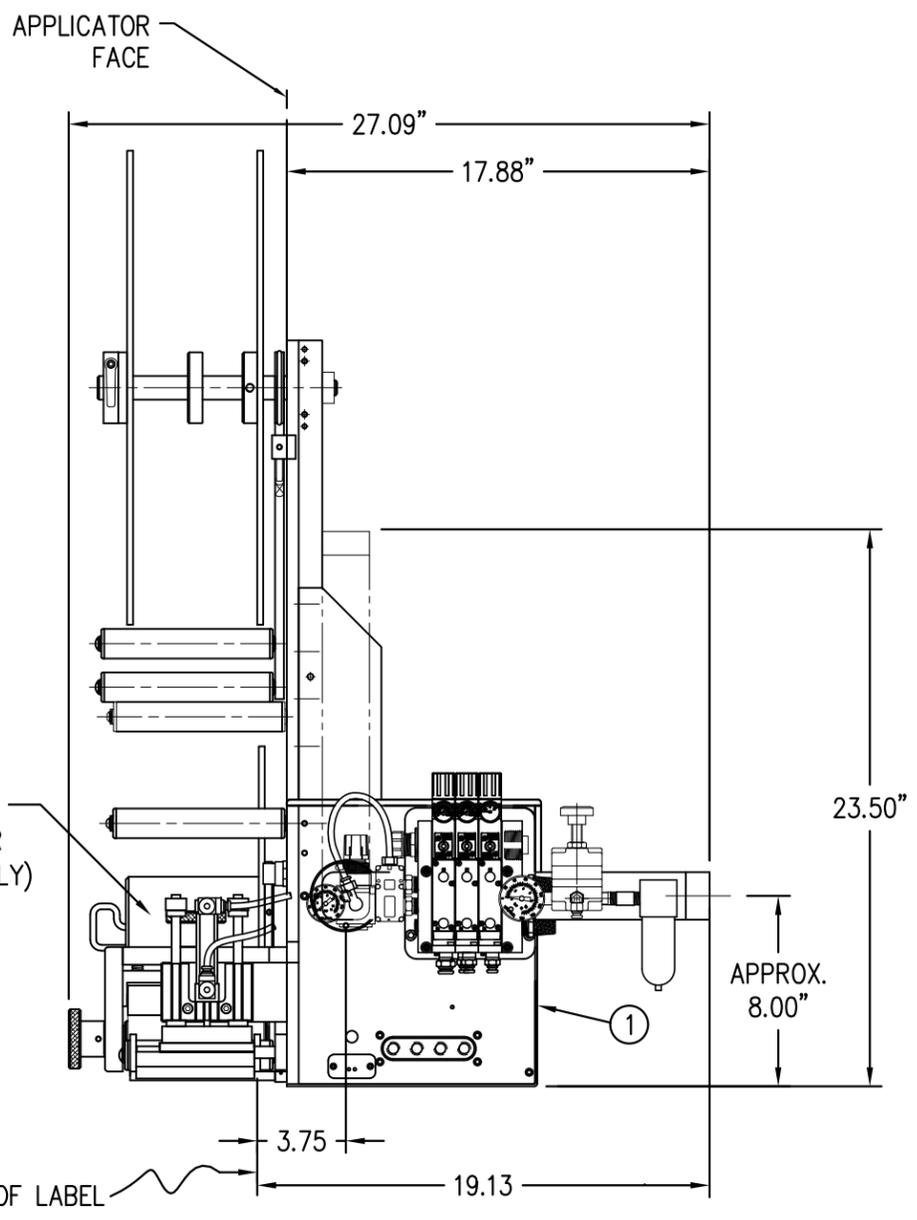
NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3132 WITH ASS-200-3132A AND ADD LOCK COLLAR PM-C01025.
 REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)

NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM

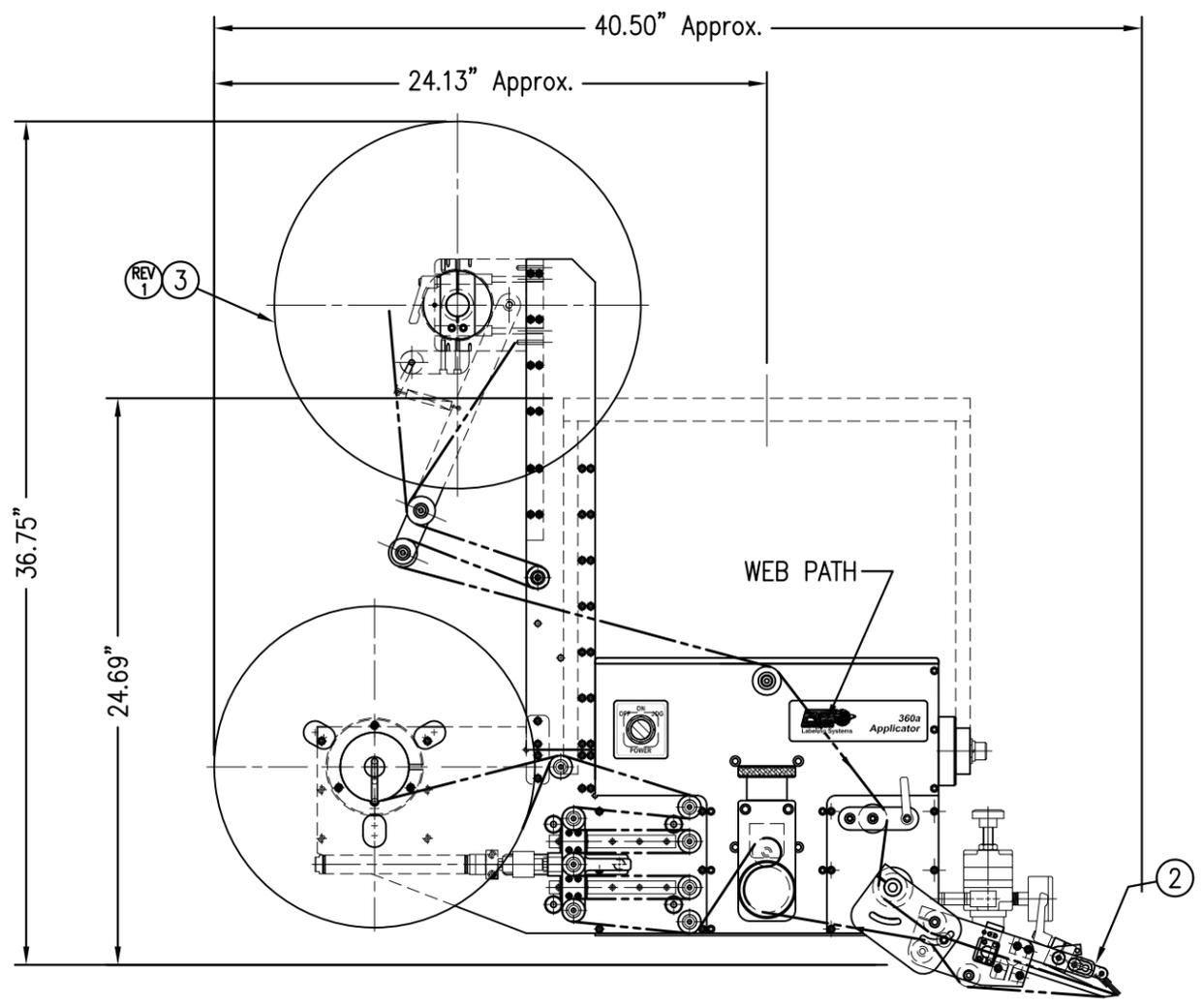
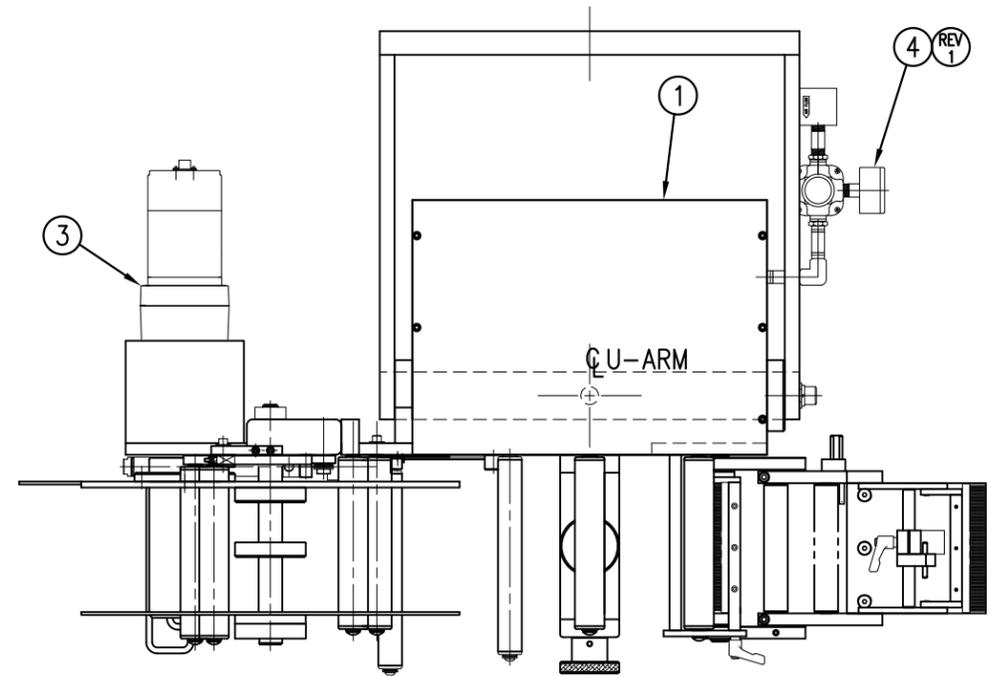


TAMP STROKE LENGTH IS JOB SPECIFIC (ORDER TAMP SLIDE SEPARATELY) ASS-214-0103R/L-X

ORDER PAD & MANIFOLD SEPARATELY



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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5/7.5"
 REV. 1
 REV. DESCRIPTION: REPLACED MOD-200-3155R/L-X with MOD-200-3157R/L-X
 REV. DATE: 02/13/13
 REV. BY: TDR
 SCALE: 1=8
 DATE: 02/13/13
 DRAWN BY: TDR
 TITLE: 5/7.5 WIDE, TAMP, 20" UNWIND w/POWERED REWINDS
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-214X-X101RL-20PX



BILL OF MATERIAL			
CTM-215X-X105R/L-16PX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5.00" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5.00" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-215-X105R/L	5/7.5 WIDE RH/LH MERGE NOSE MODULE
③	1	MOD-200-3157R/L-X	5/7.5 WIDE, RH/LH, 16", Pwr Std. REWIND
	1	MOD-200-3158R/L-X	5/7.5 WIDE, RH/LH, 16", Pwr COLLAPSIBLE REWIND
④	1	ASS-200-3107	HI/LO REGULATOR Assy. (w/FILTER)
⑤	1	ASS-200-3161	360 ALARM LIGHT ASSEMBLY
	1	ASS-200A-3161	360A ALARM LIGHT ASSEMBLY
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3132 WITH ASS-200-3132A AND ADD LOCK COLLAR PM-C01025.
 REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)

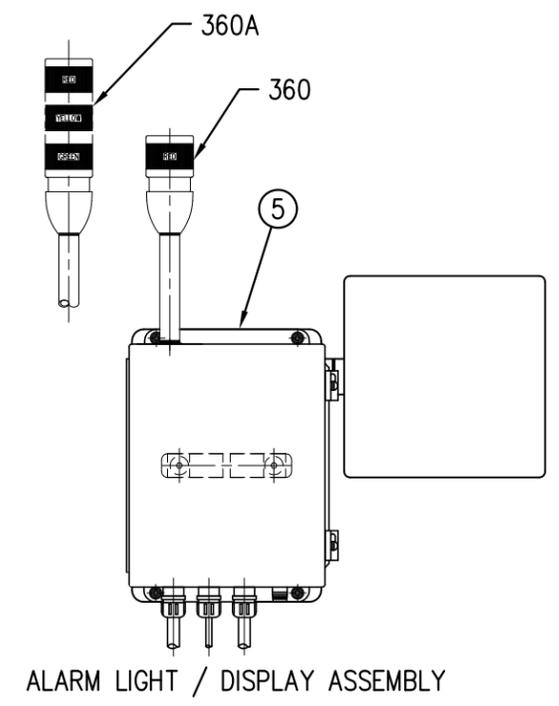
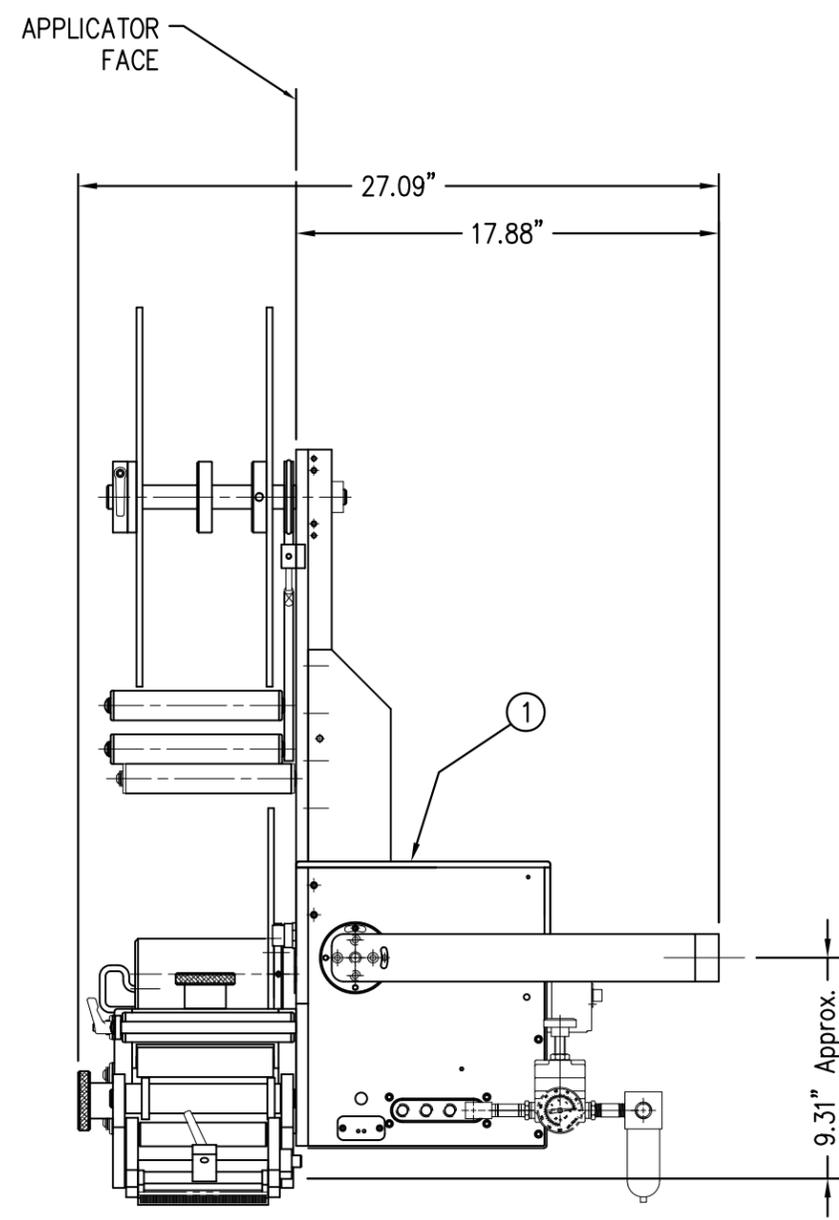
NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM

CTM-215X-X105R/L-16PX

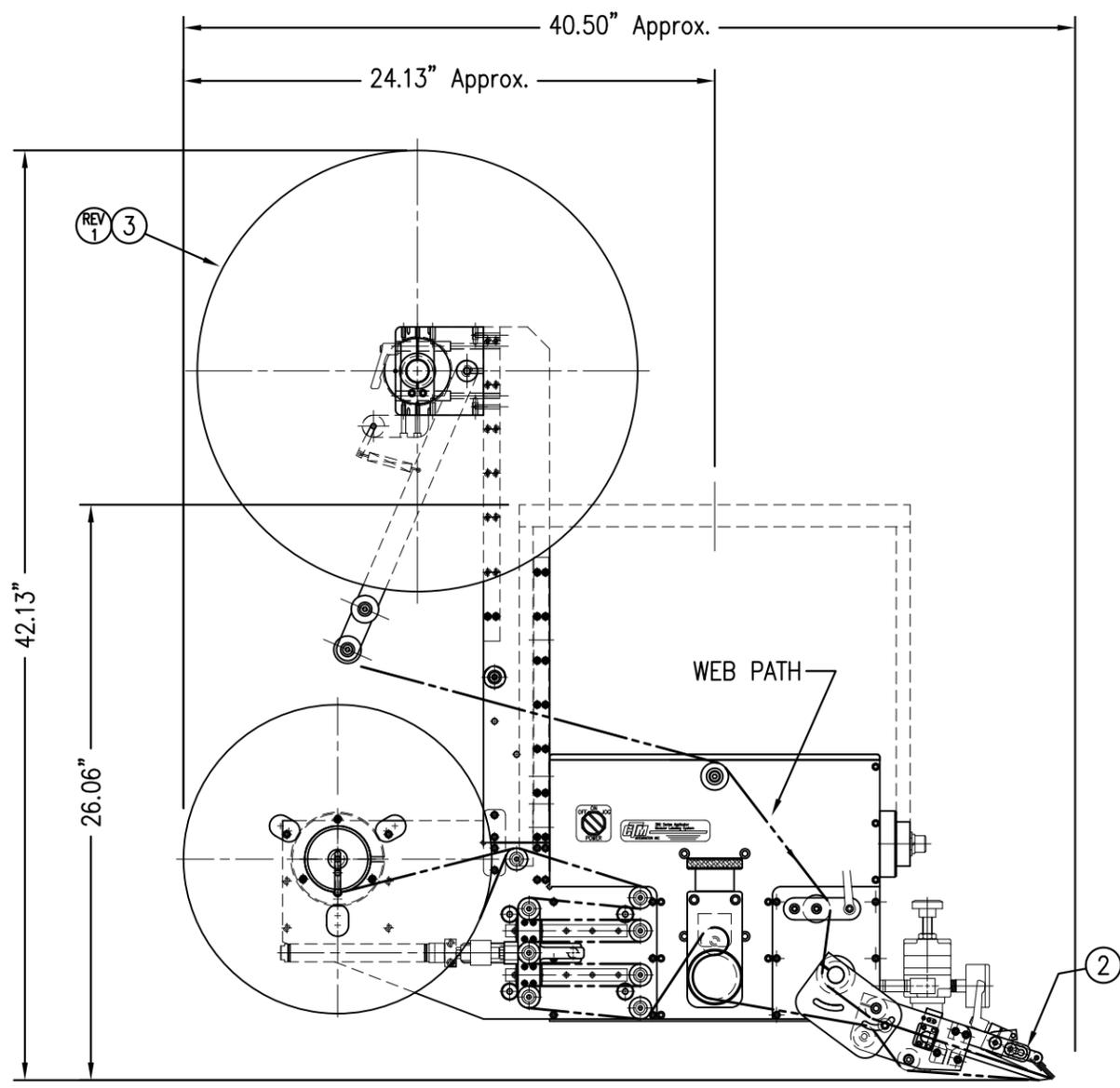
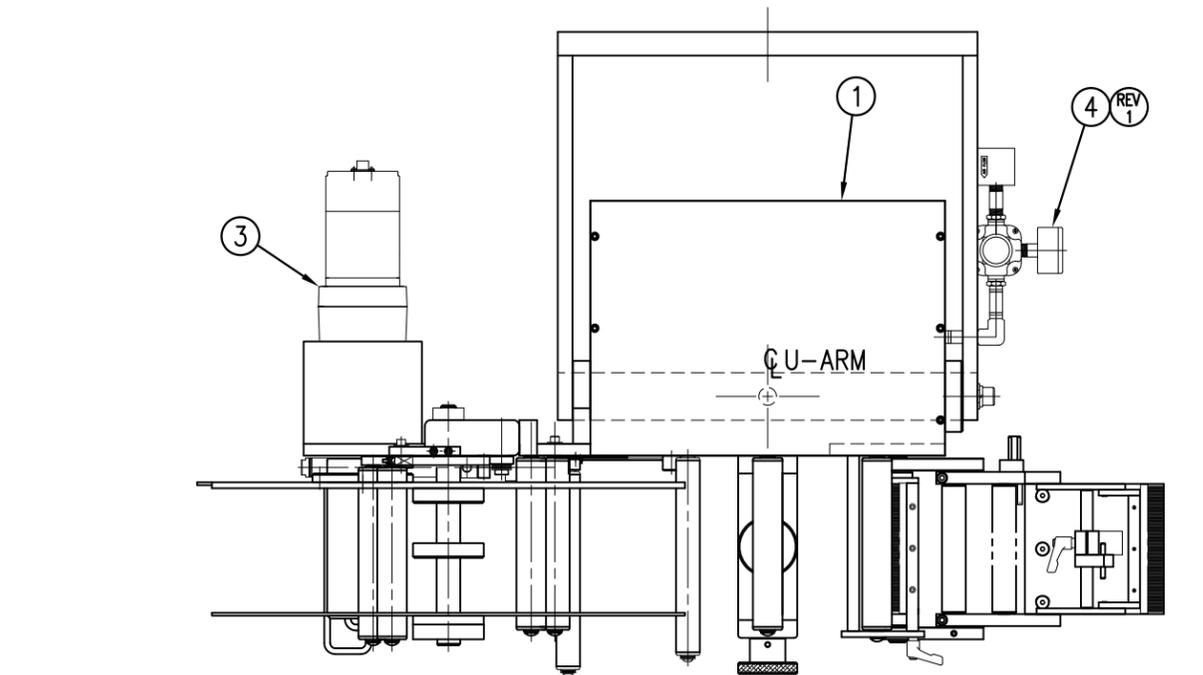
5/7.5 R.H., STANDARD REWIND	-X105R-16PS
5/7.5 L.H., STANDARD REWIND	-X105L-16PS
5/7.5 R.H., COLLAPSIBLE REWIND	-X105R-16PC
5/7.5 L.H., COLLAPSIBLE REWIND	-X105L-16PC

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-

5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-



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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5/7.5
 REV. DATE: 02/26/08
 REV. BY: JLM
 SCALE: 1=8
 DATE: 11/19/98
 DRAWN BY: BOB S.
 TITLE: 5/7.5 WIDE: MERGE, 16" UNWIND w/POWERED REWINDS
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-215X-X105R/L-16PX
 Dept. Code: 70



BILL OF MATERIAL			
CTM-215X-X105R/L-20PX			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200-0151R/L	5.00" WIDE, RH/LH, 360 Pwr REWIND CORE UNIT
	1	CTM-200A-0151R/L	5.00" WIDE, RH/LH, 360A Pwr REWIND CORE UNIT
②	1	MOD-215-X105R/L	5/7.5 WIDE RH/LH MERGE NOSE MODULE
③	1	MOD-200-3156R/L-X	5/7.5 WIDE, RH/LH, 20", Pwr Std. REWIND
	1	MOD-200-3159R/L-X	5/7.5 WIDE, RH/LH, 20", Pwr COLLAPSIBLE REWIND
④	1	ASS-200-3107	HI/LO REGULATOR Assy. (w/FILTER)
⑤	1	ASS-200-3161	360 ALARM LIGHT ASSEMBLY
	1	ASS-200A-3161	360A ALARM LIGHT ASSEMBLY
	1	ORDER SEPARATELY	PRODUCT DETECT SENSOR & CABLE

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3160 WITH ASS-200-3160A AND ADD LOCK COLLAR PM-C01025.
 REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A (STANDARD) OR REPLACE REWIND DISC ASS-200-3162C WITH ASS-200-3162CA (COLLAPSIBLE)

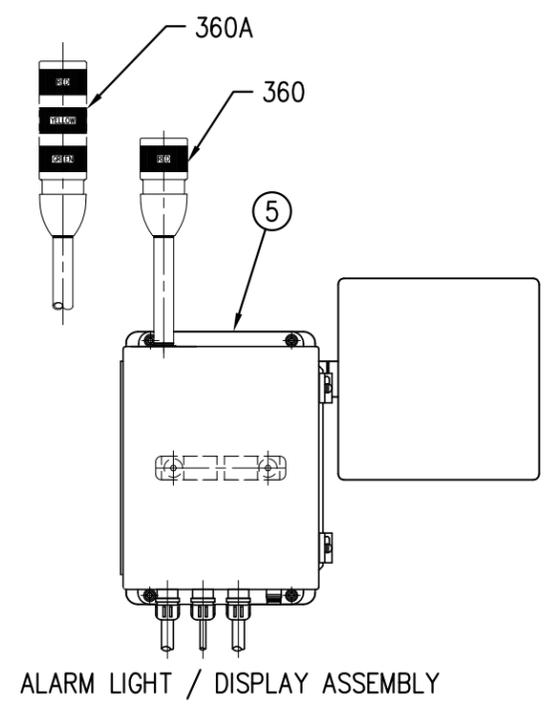
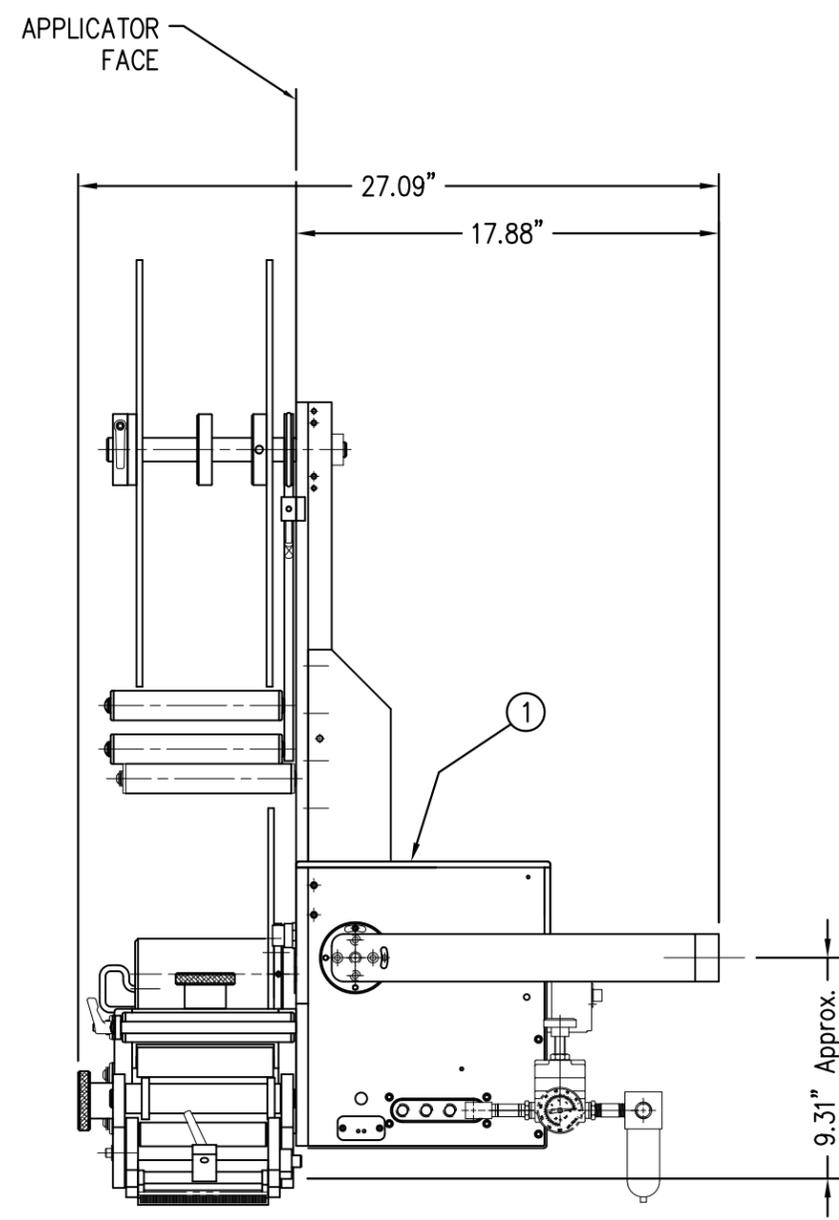
NOTE: FOR NOSE-UP / NOSE-DOWN ORIENTATION, ADD ASS-238-0165 TO U-ARM

CTM-215X-X105R/L-20PX

5/7.5 R.H., STANDARD REWIND	-X105R-20PS
5/7.5 L.H., STANDARD REWIND	-X105L-20PS
5/7.5 R.H., COLLAPSIBLE REWIND	-X105R-20PC
5/7.5 L.H., COLLAPSIBLE REWIND	-X105L-20PC

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-

5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-

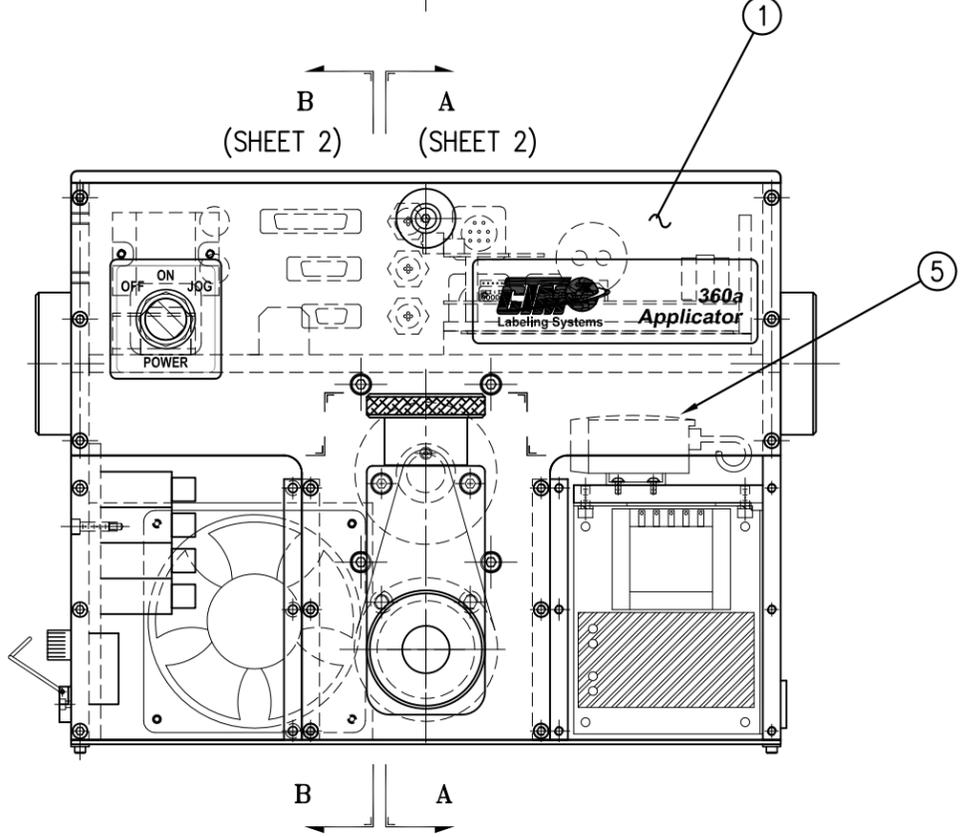
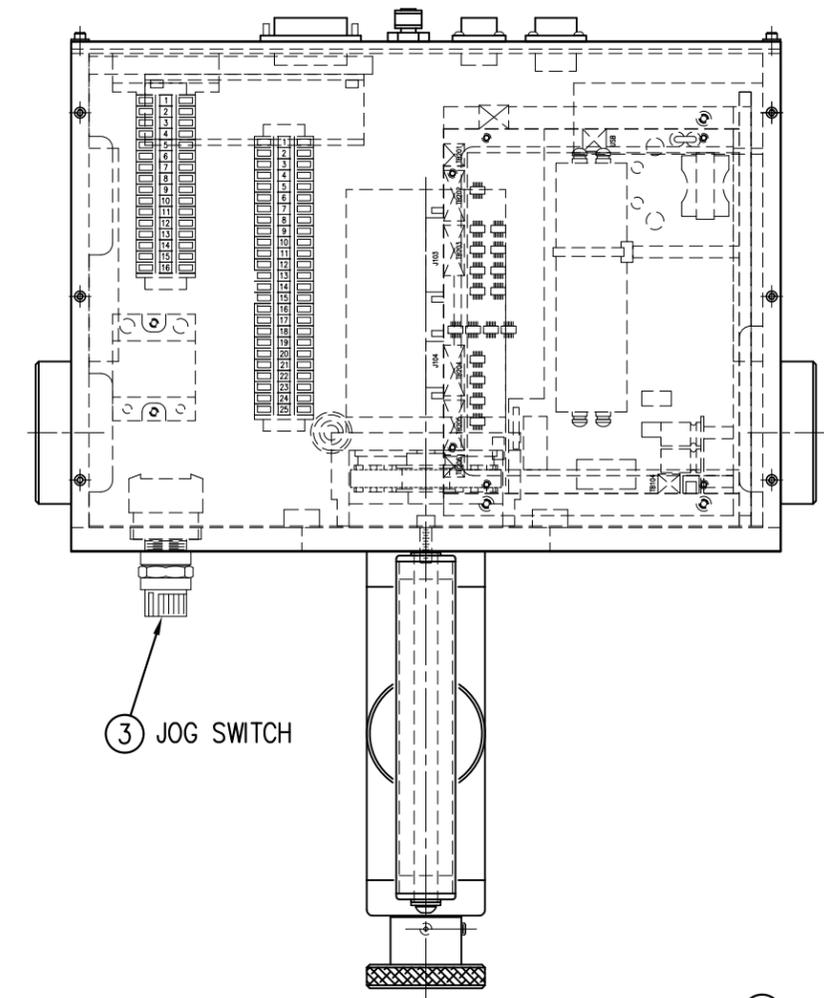
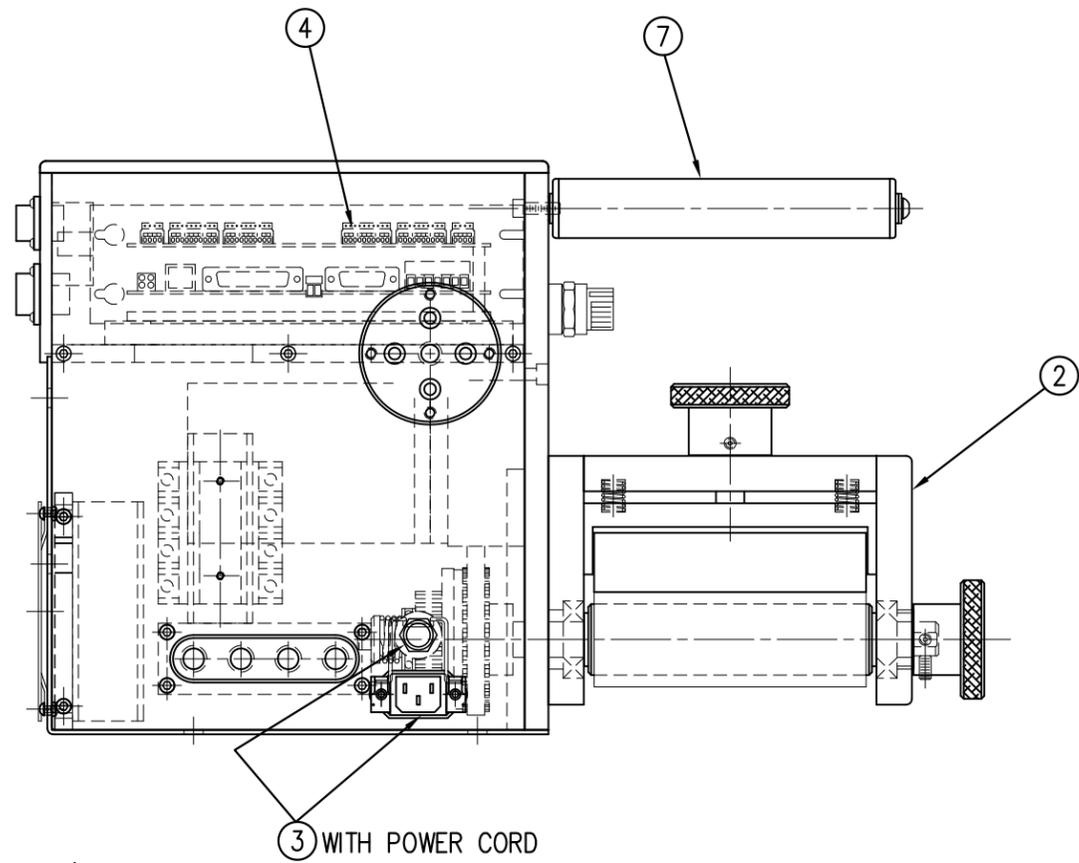


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 APPLICATOR WIDTH(S): 5/7.5
 TITLE: 5/7.5 WIDE: MERGE, 20" UNWIND w/POWERED REWINDS
 APPLICATOR SERIES: 360
 REV. DESCRIPTION: 1 REPLACED MOD-200-3155R/L-5 WITH MOD-200-3156R/L-5
 REV. DATE: 03/03/08
 REV. BY: JLM
 SCALE: 1=8
 DATE: 11/19/98
 DRAWN BY: BOB S.
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\CTM-215X-X105RL-20PX
 Dept. Code: 70

BILL OF MATERIAL				SOLD
ASS-200a-X151R/L				.
ASSEMBLY	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-200a-0124	.
④	1	ELECTRIC SHELF ASSEMBLY	ASS-200a-0123	.
⑤	1	BANNER LABEL SENSOR	ASS-200-0450	S
⑥	1	STEPPER MOTOR ASSEMBLY	ASS-200a-0453-HS	REV 2
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)

VIEW
PRINT



ASS-200a-X151R/L
5" WIDE -0151R/L
7.5" WIDE -2151R/L
10" WIDE -5151R/L

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APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"/10"

REV. DATE: 09/12/17
 REV. BY: TDR
 SCALE: 1=4
 DATE: 08/01/07
 DRAWN BY: TDR

TITLE: CORE UNIT FOR POWERED REWIND (Sht 1 of 2)

Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200a-X151R/Ls1

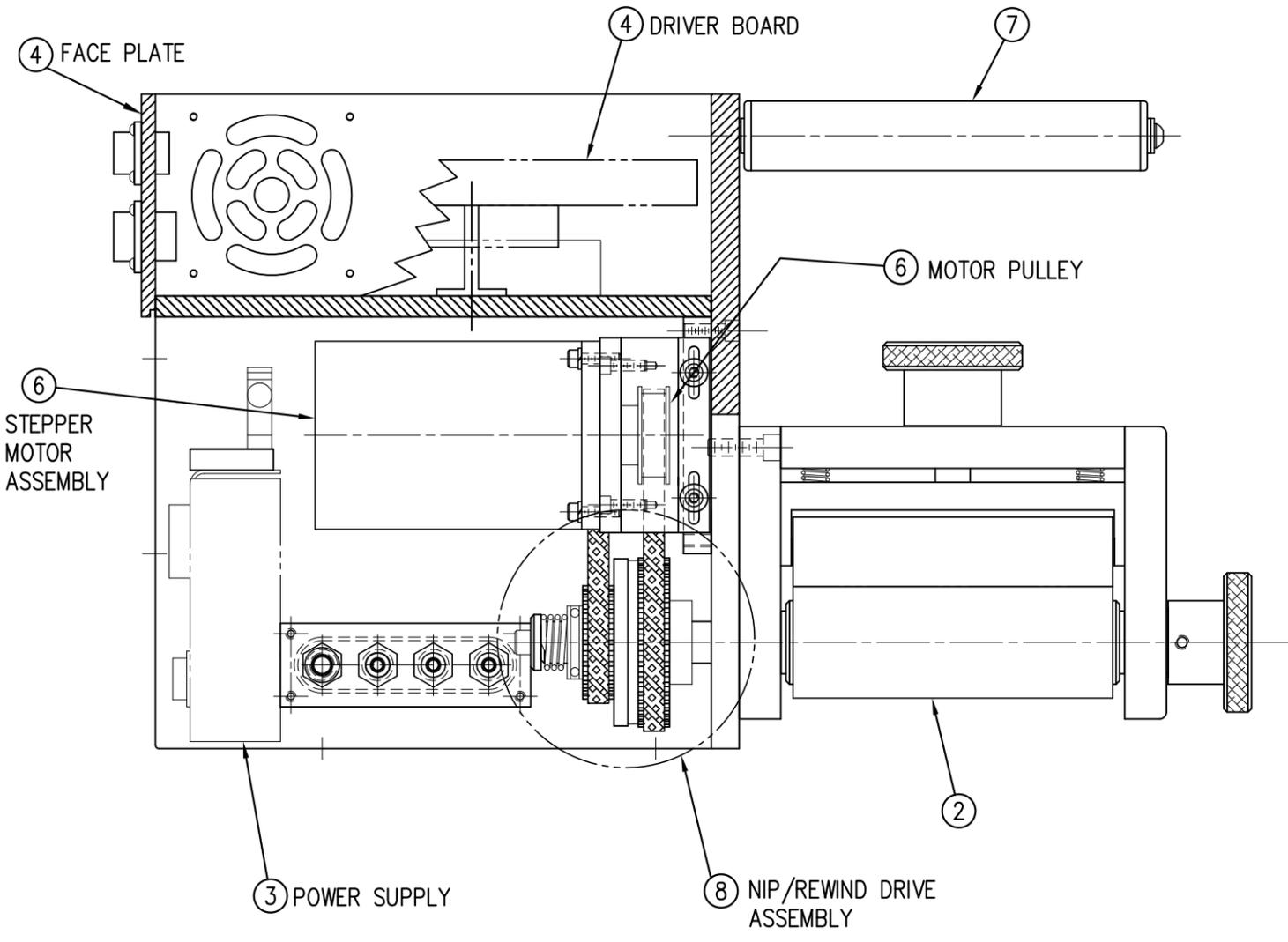
REV. DESCRIPTION: 3 UPDATED FACEPLATE

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

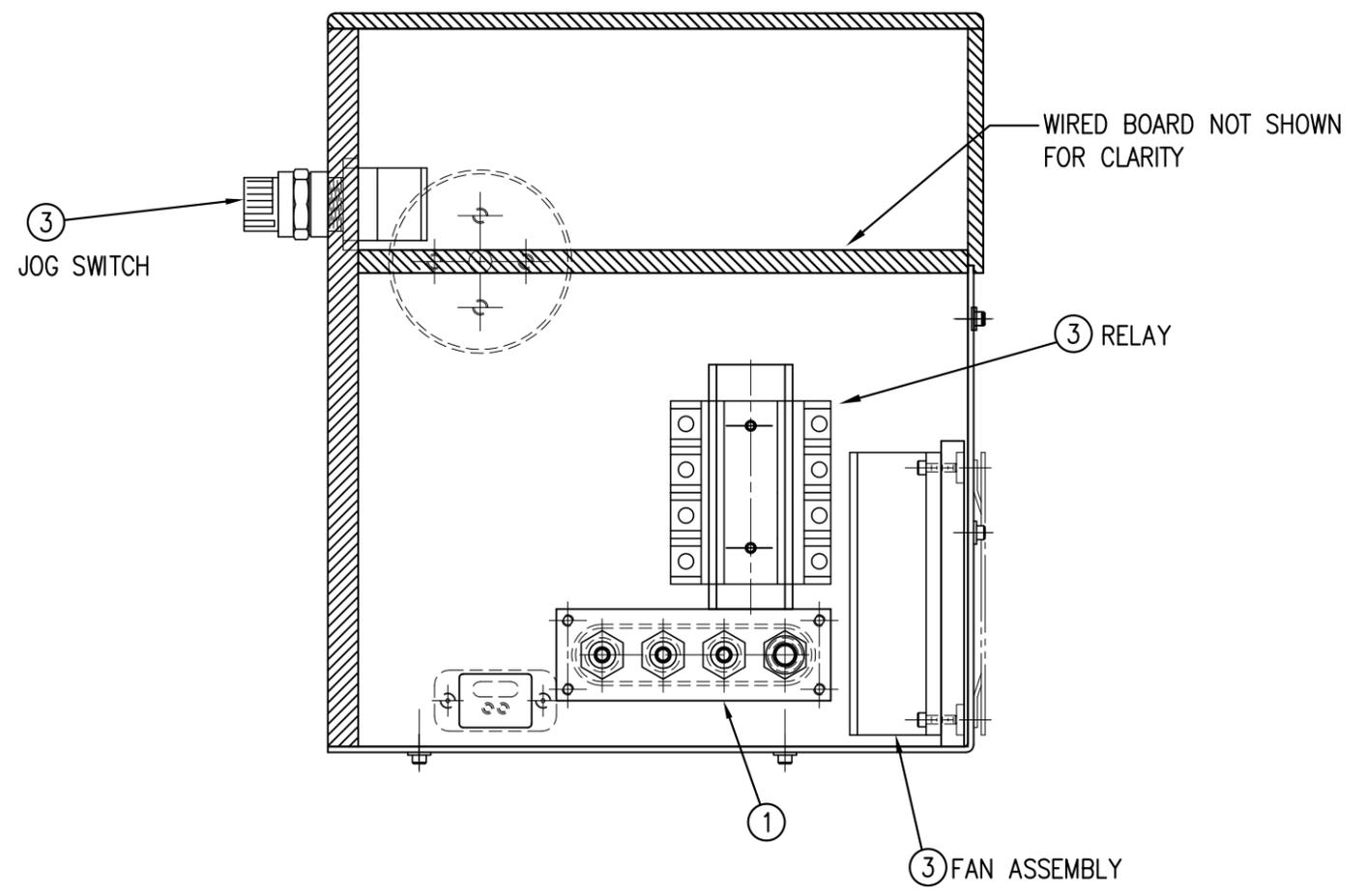
ASS-200a-X151R/L

5" WIDE	-0151R/L
7.5" WIDE	-2151R/L
10" WIDE	-5151R/L

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 TITLE: CORE UNIT FOR POWERED REWIND (Sht 2 of 2)
 APPLICATOR SERIES: 360 APPLICATOR WIDTH(S): 5"/7.5"/10" GROUP: HOUSING ASSEMBLY
 REV. 2 STEPPER MOTOR CALLOUT WAS ASS-200-0453
 REV. 1 DATE: 11/30/07
 REV. BY: TDR
 SCALE: 1=3
 DATE: 02/14/98
 DRAWN BY: BOB S./TDR
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200a-X151Rls2
 Dept. Code 70



SECTION "A-A"
(FROM SHEET 1)



SECTION "B-B"
(FROM SHEET 1)

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-200a-X151R/L (SHEET 1)

BILL OF MATERIAL

MOD-200-3156R/L-X

MOD-200-3156R/L-X

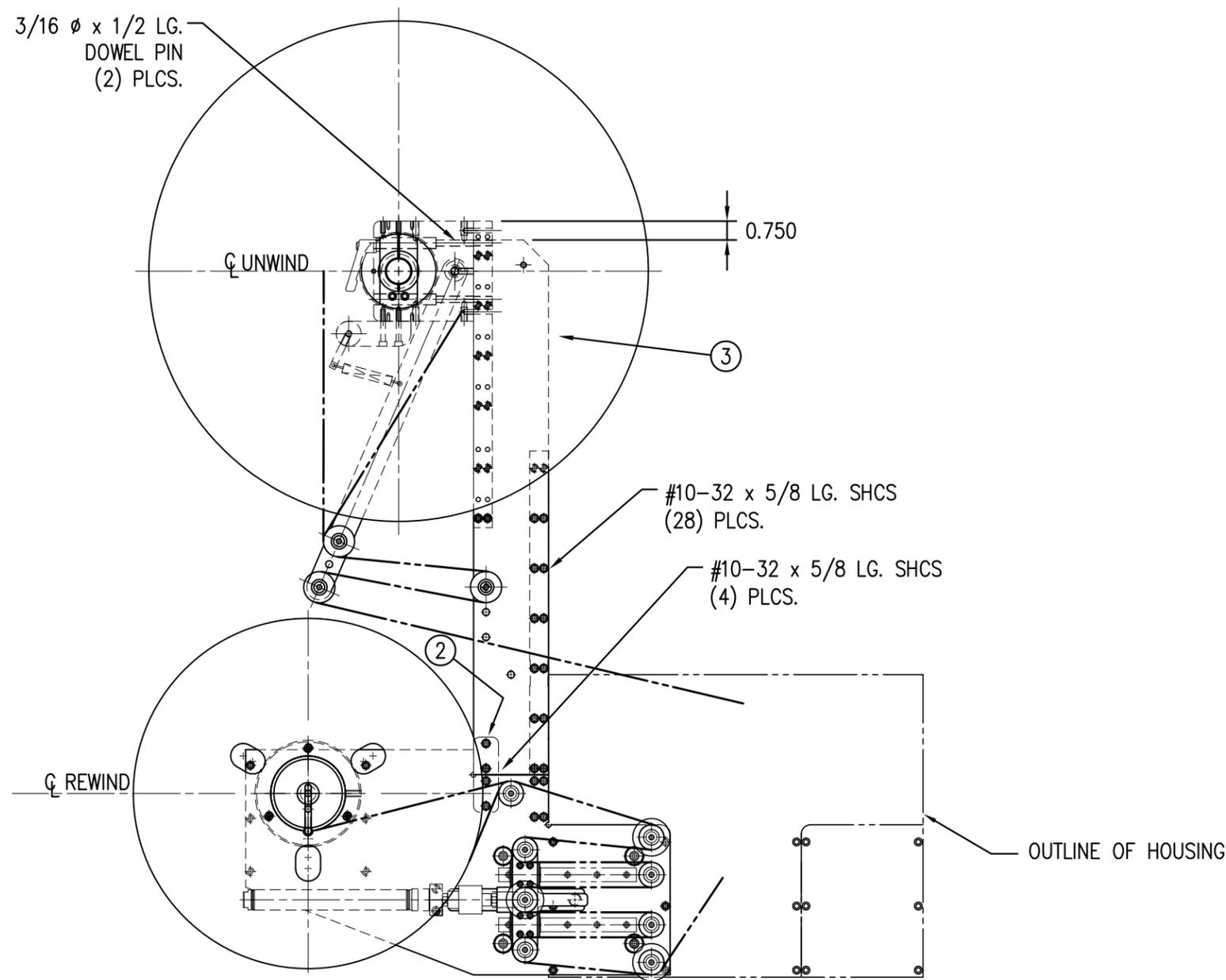
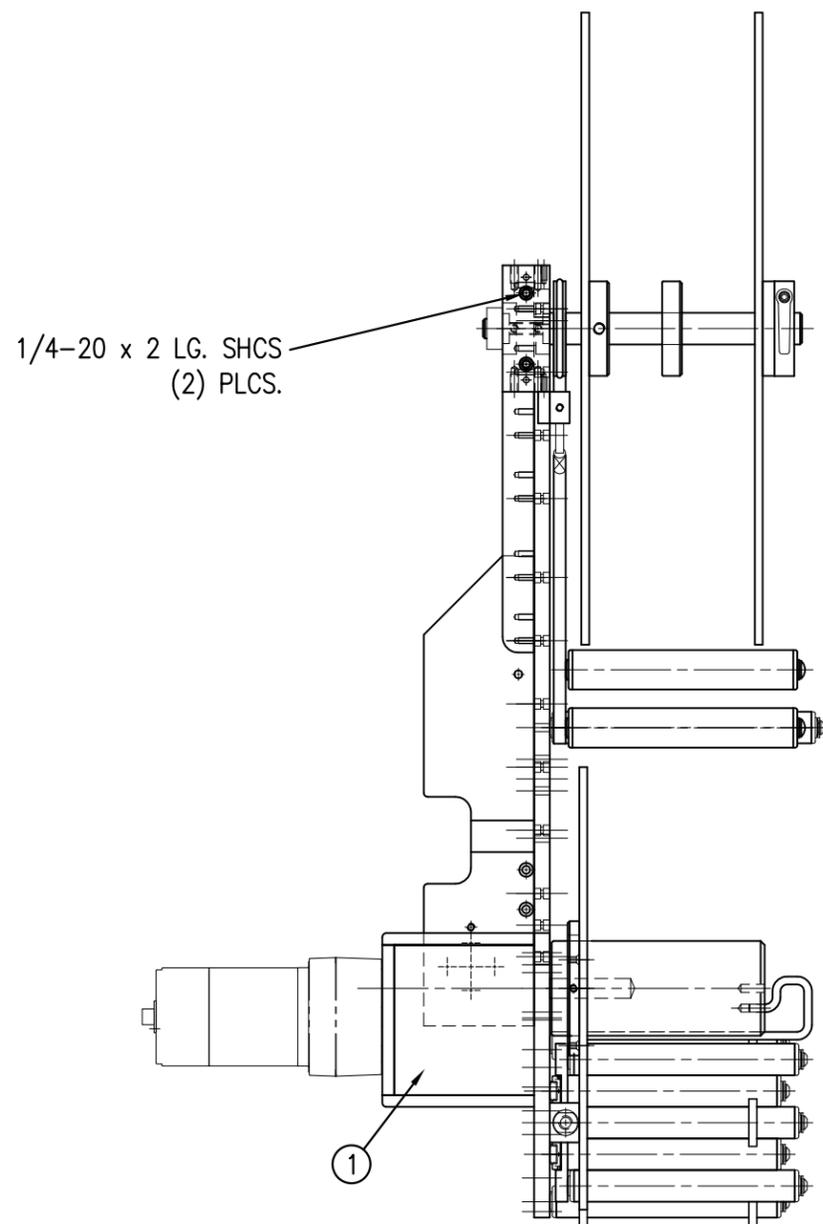
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-X155R/L	5/7.5" WIDE PWR'D REWIND, R/L. STD REWIND
②	1	MP-200-3305	SPLICE PLATE
③	1	ASS-200-3169R/L-X	20" UNWIND w/Pwr. REWIND, RH/LH, 5/7.5"
	32	PM-FASH429075	SHCS, #10-32 UNF x 5/8" LG.

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3160 WITH ASS-200-3160A & ADD LOCK COLLAR PM-C01025. REPLACE REWIND ASS-200-3162 WITH ASS-200-3162A

NOTE: POWERED REWIND REQUIRES A HI/LO PRESSURE REGULATOR
 ADD EITHER ASS-200-3106 (FOR APPLICATORS WITH VALVE BANKS)
 OR ASS-200-3107 (FOR APPLICATORS WITH OUT VALVE BANKS)
 TO THE CTM BOM ALONG WITH MOD-200X-3156R/L-X

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-
 5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-

5" WIDE, L.H.	-3156L-5
7.5" WIDE, L.H.	-3156L-7
5" WIDE, R.H.	-3156R-5
7.5" WIDE, R.H.	-3156R-7



BILL OF MATERIAL

MOD-200-3157R/L-X

MOD-200-3157R/L-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-X155R/L	5/7.5" WIDE PWR'D REWIND, R/L. STD REWIND
②	1	MP-200-3305	SPLICE PLATE
③	1	ASS-200-3170R/L-X	16" UNWIND w/Pwr. REWIND, RH/LH, 5/7.5"
	32	PM-FASH429075	SHCS, #10-32 UNF x 5/8" LG.

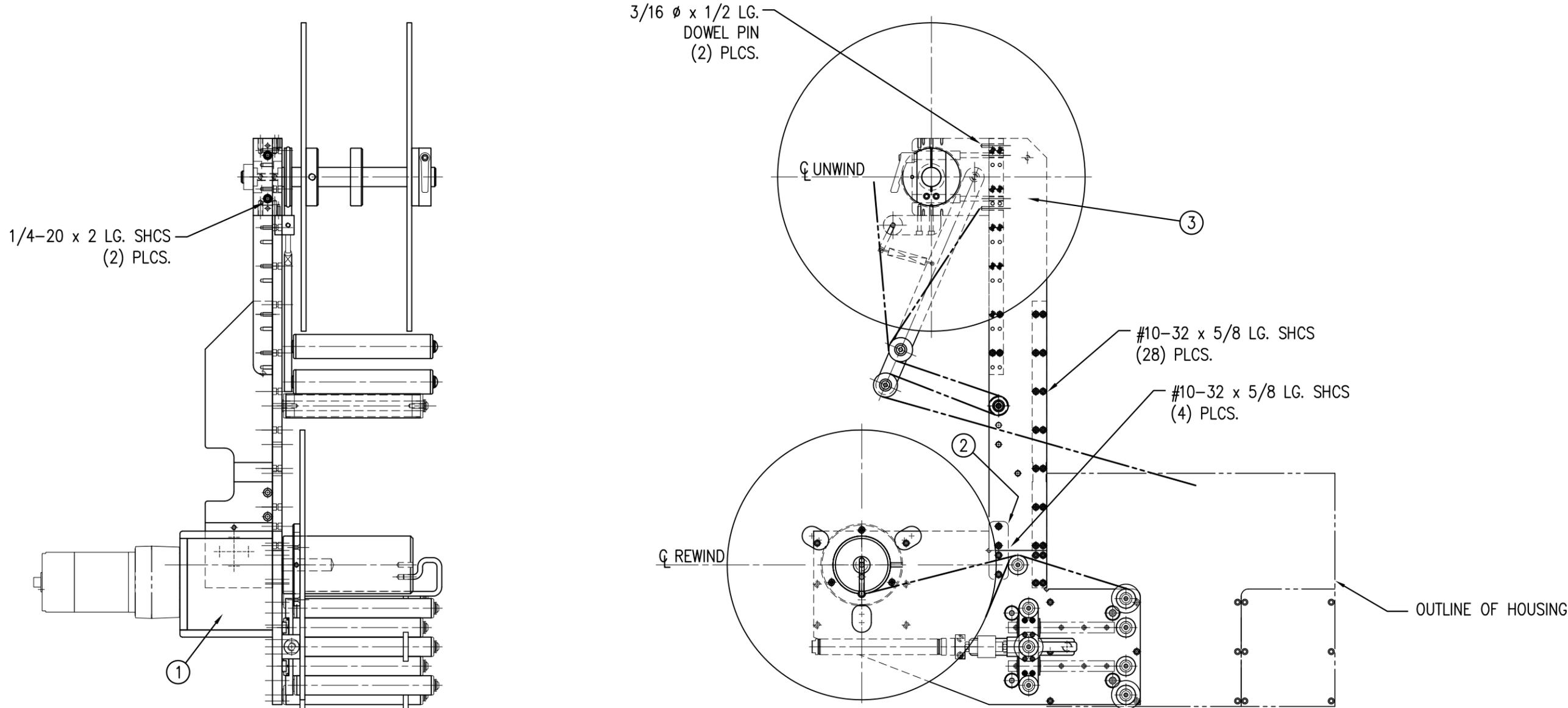
5" WIDE, L.H.	-3157L-5
7.5" WIDE, L.H.	-3157L-7
5" WIDE, R.H.	-3157R-5
7.5" WIDE, R.H.	-3157R-7

NOTE: POWERED REWIND REQUIRES A HI/LO PRESSURE REGULATOR
 ADD EITHER ASS-200-3106 (FOR APPLICATORS WITH VALVE BANKS)
 OR ASS-200-3107 (FOR APPLICATORS WITH OUT VALVE BANKS)
 TO THE CTM BOM ALONG WITH MOD-200-3157R/L-XX

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-
 5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-

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 TITLE: 16" NON-POWERED UNWIND w/ 14" POWERED REWIND
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 REV. DESCRIPTION: 4 UPDATED LAYOUT WITH NEW COMBO PARTS FOR 16/20
 REV. DATE: 01/31/20
 REV. BY: TDR
 SCALE: 1=6
 DATE: 02/26/08
 DRAWN BY: Jeffery Mendenhall
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\MOD\MOD-200-3157RL-X

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3132 WITH ASS-200-3132A & ADD LOCK COLLAR PM-C01025. REPLACE REWIND ASS-200-3162 WITH ASS-200-3162A



BILL OF MATERIAL

MOD-200-3158R/L-X

MOD-200-3158R/L-X

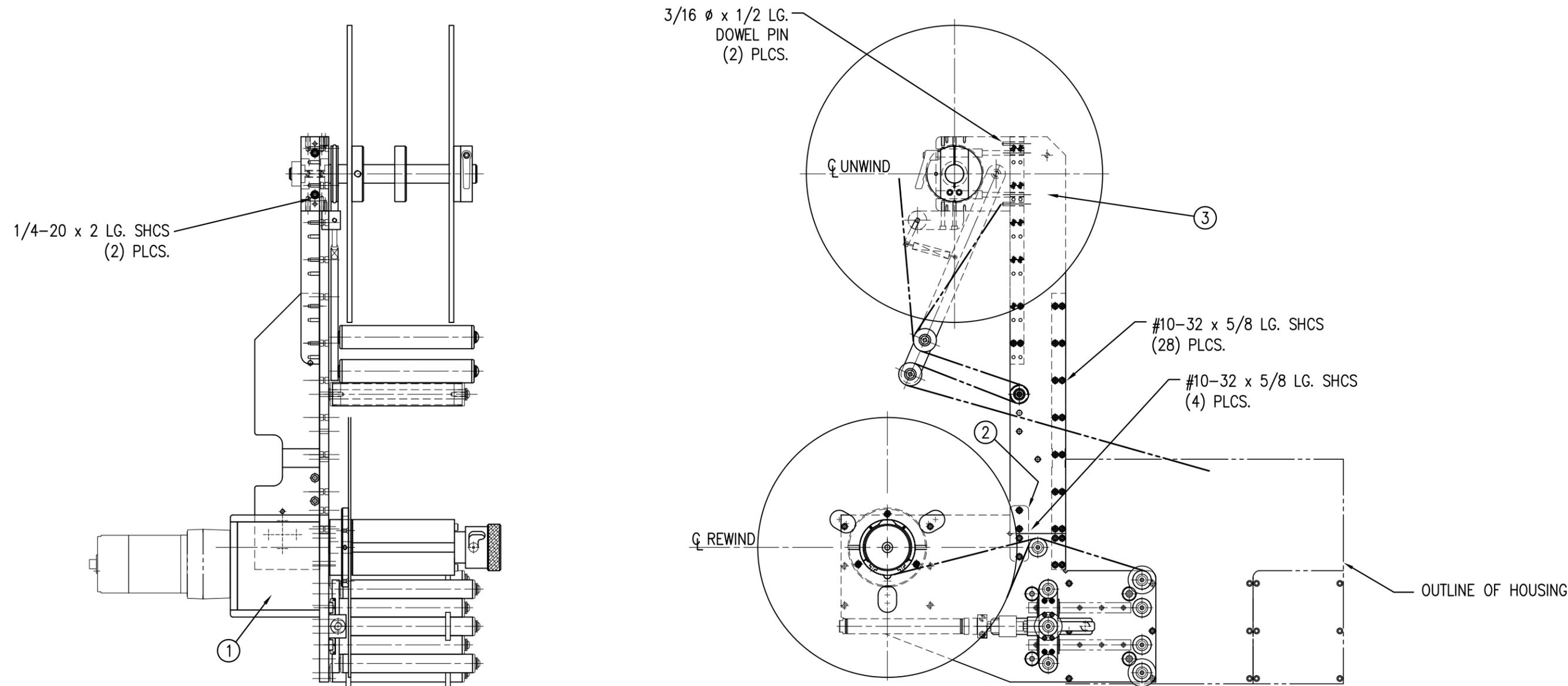
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-X158R/L	5/7.5 WIDE, PWR'D REWIND, R/L, COLLAPSIBLE REWIND
②	1	MP-200-3305	SPLICE PLATE
③	1	ASS-200-3170R/L-X	16" UNWIND w/Pwr. REWIND, RH/LH, 5/7.5"
	32	PM-FASH429075	SHCS, #10-32 UNF x 5/8" LG.

5" WIDE, L.H.	-3158L-5
7.5" WIDE, L.H.	-3158L-7
5" WIDE, R.H.	-3158R-5
7.5" WIDE, R.H.	-3158R-7

NOTE: POWERED REWIND REQUIRES A HI/LO PRESSURE REGULATOR
 ADD EITHER ASS-200-3106 (FOR APPLICATORS WITH VALVE BANKS)
 OR ASS-200-3107 (FOR APPLICATORS WITH OUT VALVE BANKS)
 TO THE CTM BOM ALONG WITH MOD-200-3158R/L-XX

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-
 5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3132 WITH ASS-200-3132A & ADD LOCK COLLAR PM-C01025. REPLACE REWIND ASS-200-3162C WITH ASS-200-3162CA



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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 GROUP: POWERED REWIND
 TITLE: 16" NON-POWERED UNWIND w/ 14" COLLAPSIBLE POWERED REWIND
 REV. DATE: 01/31/20
 REV. BY: TDR
 SCALE: 1=6
 DATE: 02/26/08
 DRAWN BY: Jeffery Mendenhall
 PWRD RW MOD-200-3158RL-X

BILL OF MATERIAL

MOD-200-3159R/L-X

MOD-200-3159R/L-X

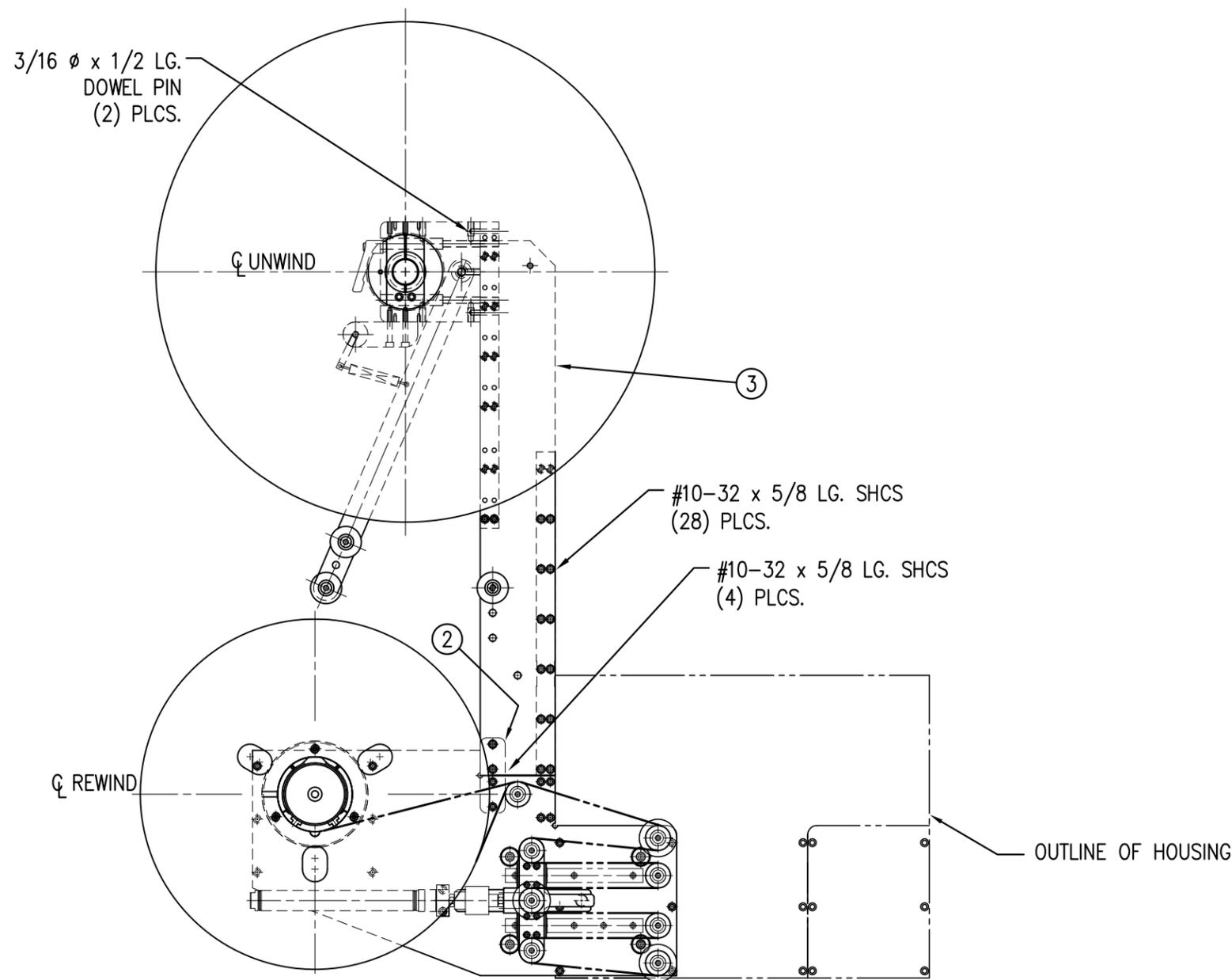
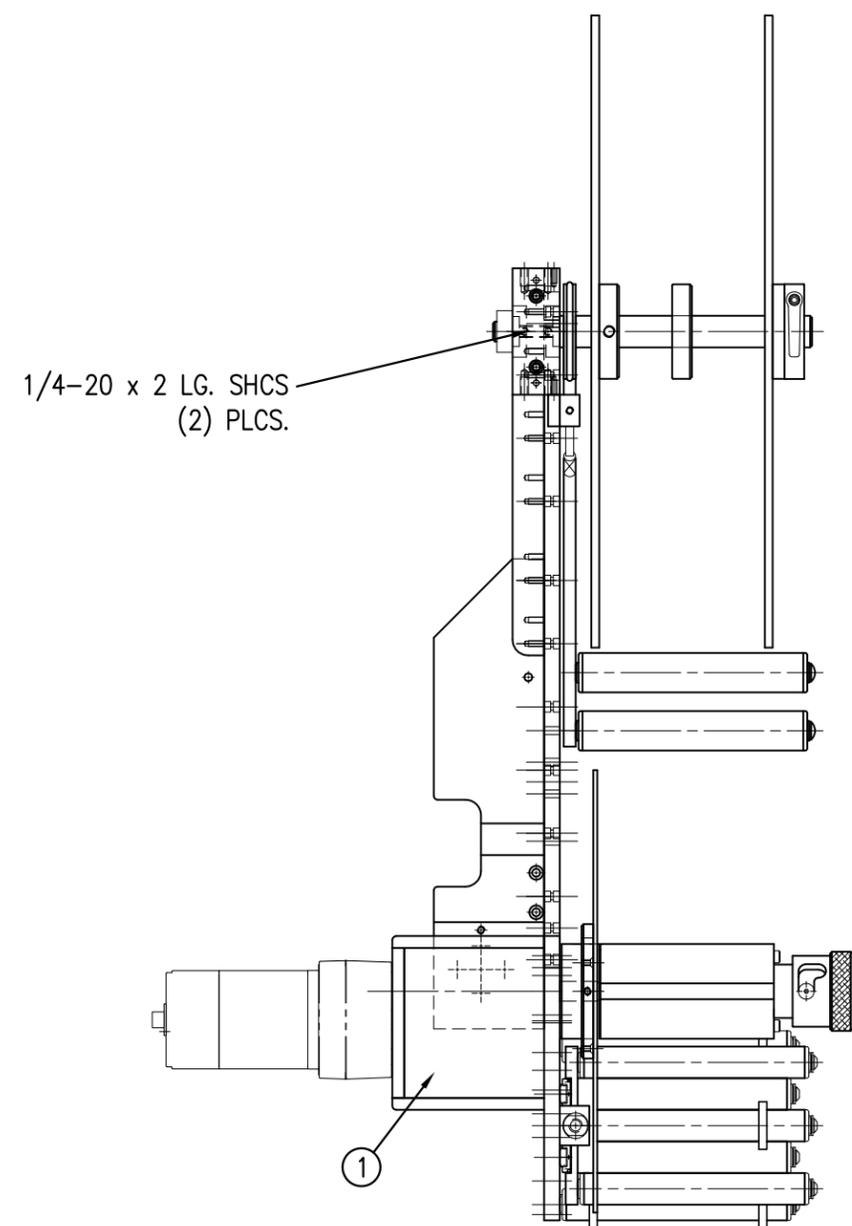
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-X158R/L	5/7.5 WIDE, PWR'D REWIND, R/L, COLLAPSIBLE REWIND
②	1	MP-200-3305	SPLICE PLATE
③	1	ASS-200-3169R/L-X	20" UNWIND w/Pwr. REWIND, RH/LH, 5/7.5"
	32	PM-FASH429075	SHCS, #10-32 UNF x 5/8" LG.

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISC ASS-200-3160 WITH ASS-200-3160A & ADD LOCK COLLAR PM-C01025. REPLACE REWIND ASS-200-3162C WITH ASS-200-3162CA

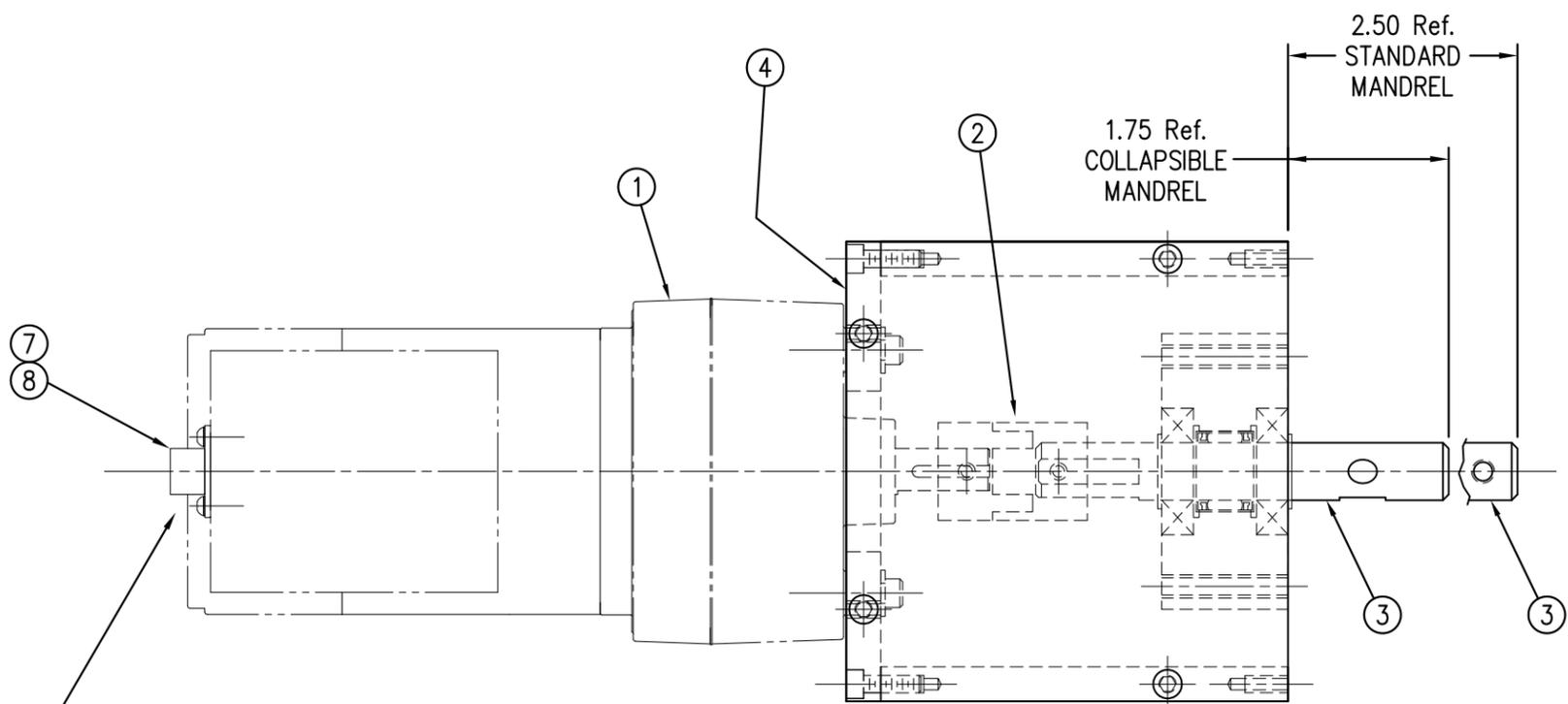
NOTE: POWERED REWIND REQUIRES A HI/LO PRESSURE REGULATOR
 ADD EITHER ASS-200-3106 (FOR APPLICATORS WITH VALVE BANKS)
 OR ASS-200-3107 (FOR APPLICATORS WITH OUT VALVE BANKS)
 TO THE CTM BOM ALONG WITH MOD-200X-3156R/L-X

RH & LH ASSEMBLIES AVAILABLE
 -RH ASSEMBLY SHOWN-
 5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-

5" WIDE, L.H.	-3159L-5
7.5" WIDE, L.H.	-3159L-7
5" WIDE, R.H.	-3159R-5
7.5" WIDE, R.H.	-3159R-7



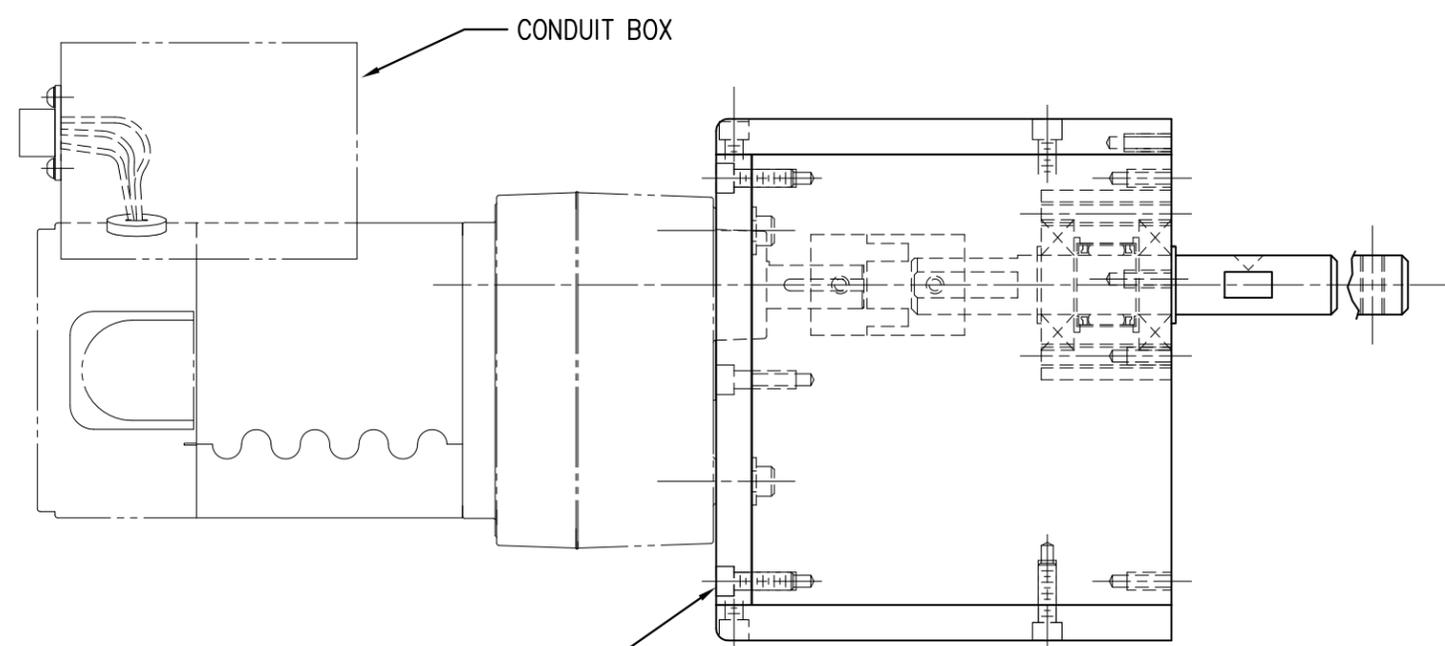
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 TITLE: 20" NON-POWERED UNWIND w/ 14" COLLAPSIBLE POWERED REWIND
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 REV. DATE: 01/31/20
 REV. BY: TDR
 SCALE: 1=6
 DATE: 02/29/08
 DRAWN BY: Jeffery Mendenhall
 PWRD RW MOD-200-3159RL-X
 Code 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\



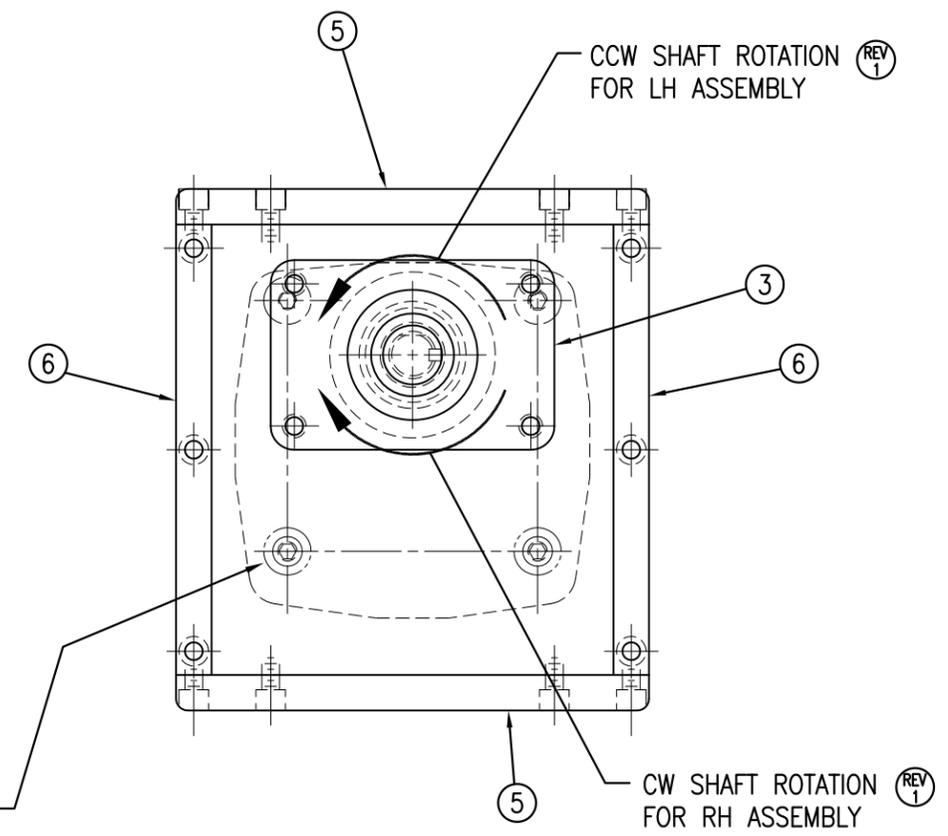
#4-40 x 3/8 LG. BHCS
w/ LOCK WASHER & NUT
(4) PLCS.

NOTE: FOR MOTOR WIRING INFORMATION
REFER TO CTM DWG NO. ASS-200-0403

#10-32 x 5/8 LG. SHCS
TOP PLATE - 4 PLACES
BOTTOM PLATE - 4 PLACES



#10-32 x 5/8 LG. SHCS
(6) PLCS.



#10-32 x 3/4 LG. SHCS
w/ FLAT WASHER (4) PLCS.

BILL OF MATERIAL

ASS-200-3157XR/L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-0465	LEESON GEAR MOTOR
②	1	-	L050 LOVEJOY COUPLING
		PM-CPL1015	4X176 COUPLING BODY
		PM-CPL1017	4X177 COUPLING BODY
		PM-CPL1000	1X409 SPIDER
			(complete with 2 set screws)
③	1	ASS-200-0128R/L	REWIND BEARING BLOCK Assy. (Std MANDREL)
	1	ASS-200-3166R/L	REWIND BEARING Bk., (COLLAPSIBLE MANDREL)
④	1	MP-200-3316	LEESON GEAR MOTOR
⑤	2	MP-200-3315	REWIND MOTOR TOP/BOTTOM PLATE
⑥	2	MP-200-3317	REWIND MOTOR BOX SIDE PLATE
⑦	3	PE-CON7051	PIN (#512-1150)
⑧	1	PE-CON2010	CONNECTOR (#512-1150)
	6	-	#10-32 UNF x 5/8" Lg. SHCS
	4	-	1/4"-20 UNC x 1.00" Lg. FHCS

ASS-200-3157RL-X

R.H., Std MANDREL -3157R
 L.H., Std MANDREL -3157L
 R.H., COLLAPSIBLE MANDREL -3157R-C
 L.H., COLLAPSIBLE MANDREL -3157L-C

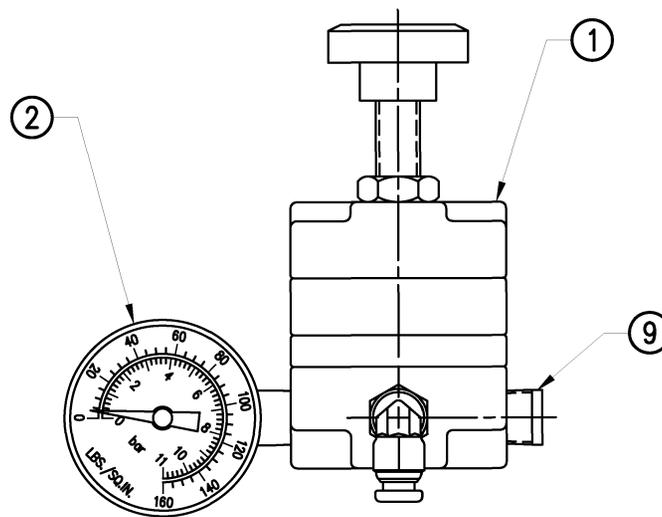
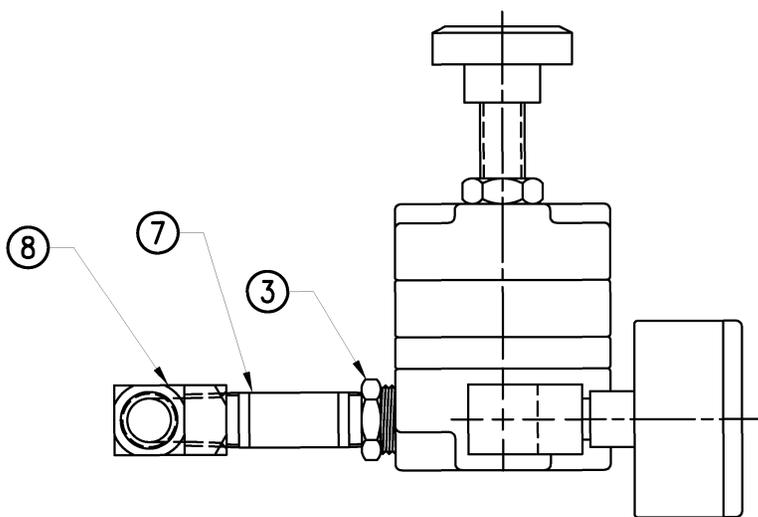
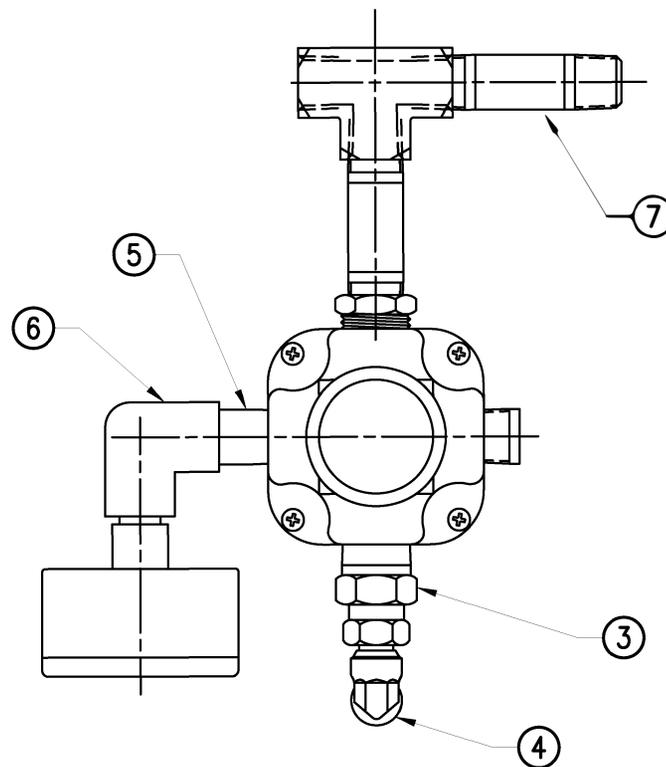
THIS DRAWING AND DESIGN IS THE PROPERTY OF CTM INTEGRATION INC. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF CTM INTEGRATION INC.
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"/10"
 REV. DESCRIPTION: 5 TABULATED FOR COLLAPSIBLE MANDREL (ADDED ASS-200-3166RL)
 REV. DATE: 02/28/08
 REV. BY: JLM
 SCALE: 1=2
 DATE: 12/20/06
 DRAWN BY: BOB S.
 TITLE: POWERED REWIND MOTOR ASSY. (Std & COLLAPSIBLE MANDREL)
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\360a\ASS-200-3157RL-X

BILL OF MATERIAL

SOLD

ASS-200-3106

ASSEMBLY		ASS-200-3106		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	HI / LO PRESSURE REGULATOR	PM-REG1535	.
②	1	HI / LO REGULATOR GAUGE	PM-VA2383	.
③	2	PIPE FITTING, BUSHING, 1/4 NPT Female TO 3/8 NPT Male	PM-PF1110	.
④	1	PIPE FITTING, 90° ELBOW SWIVEL, 1/4 TUBE TO 1/4 MALE NPTF	PM-PF1035	.
⑤	1	PIPE FITTING, CLOSE NIPPLE, 1/4 NPT x 7/8 Lg.	PM-PF1125	.
⑥	1	PIPE FITTING, 90° ELBOW, 1/4 NPT FEMALE TO 1/4 NPT FEMALE	PM-PF1175	.
⑦	2	PIPE FITTING, NIPPLE, 1/4 NPT x 2.00" Lg.	PM-PF1145	.
⑧	1	PIPE FITTING, BUSHING, 1/4 NPT Female 3 ENDS	PM-PF1200	.
⑨	1	PIPE FITTING, PLUG, 1/4 NPT	PM-FT1200	.



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APPLICATOR SERIES: 360 APPLICATOR WIDTH(S): 5"/7.5" GROUP: POWERED REWIND ASSEMBLY

TITLE: HI/LO REGULATOR ASSY (for EXISTING VALVE BANKS)

Dept. Code 70

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

REV. BY: XXX

Scale: 1=2

Date: 02/20/08

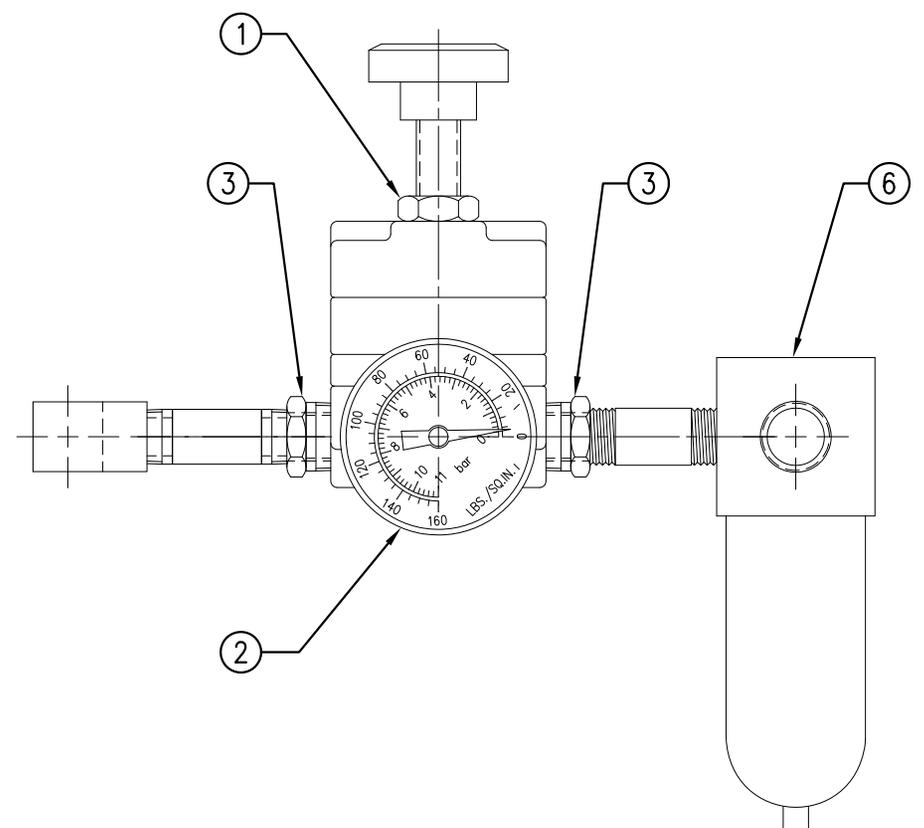
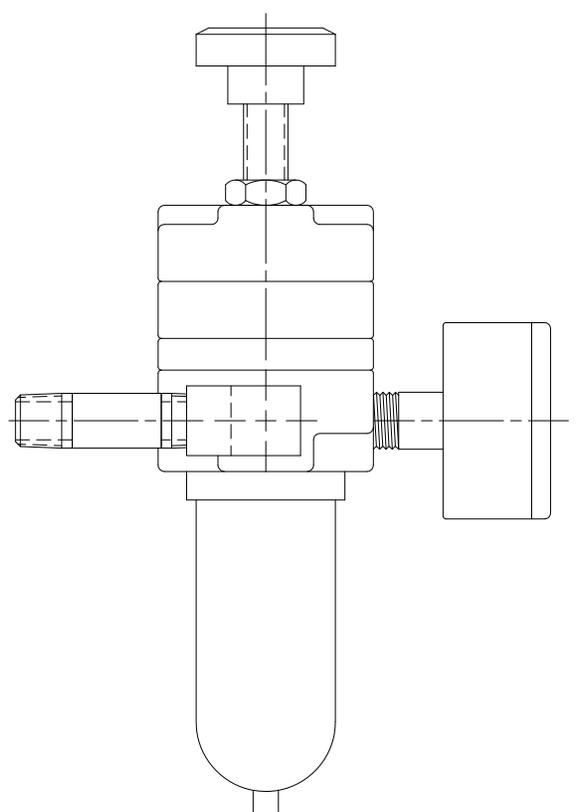
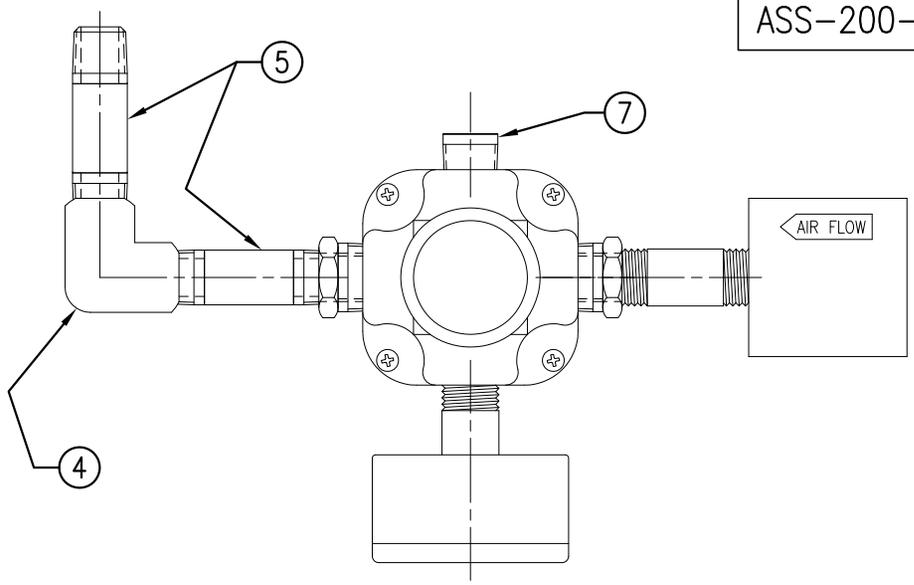
DRAWN BY: Jeffery Mendenhall

F:\Engineering\Standard Parts\Applicator\360 SERIES\ PWRD RW\ASS\ASS-200-3106

BILL OF MATERIAL

ASSEMBLY		ASS-200-3107		SOLD
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	HI / LO PRESSURE REGULATOR	PM-REG1535	.
②	1	HI / LO REGULATOR GAUGE	PM-VA2383	.
③	2	PIPE FITTING, BUSHING, 1/4 NPT Female TO 3/8 NPT Male	PM-PF1110	.
④	1	PIPE FITTING, 90° ELBOW, 1/4 NPT FEMALE TO 1/4 NPT FEMALE	PM-PF1175	.
⑤	2	PIPE FITTING, CLOSE NIPPLE, 1/4 NPT x 2.00" Lg.	PM-PF1145	.
⑥	1	FILTER ASSEMBLY	ASS-214-0106	.
⑦	1	1/4" SOCKET HEAD PLATED PLUG	PM-FT1200	.

ASS-200-3107



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: POWERED REWIND ASSEMBLY	TITLE: HI/LO REGULATOR ASSY (for APPS. w/o VALVE BANKS)			Dept. Code 70	
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx	Scale: 1=2	Date: 02/20/08	DRAWN BY: Jeffery Mendenhall	F:\Engineering\Standard Parts\Applicator\360 SERIES\ PWRD RW\ASS\ASS-200-3107

BILL OF MATERIAL

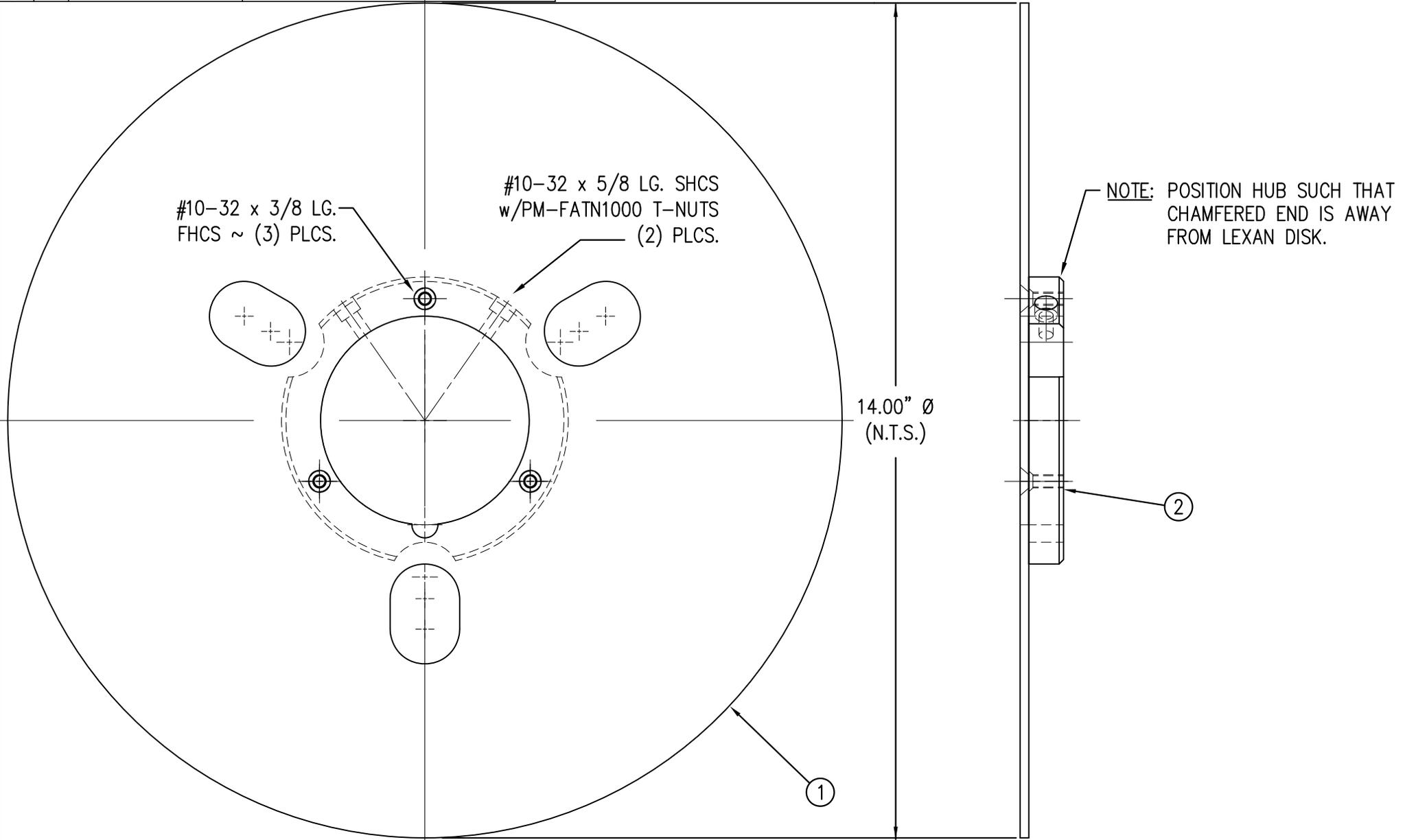
ASS-200-3162CX

ASS-200-3162CX

STANDARD -3162C

REELS-UP -3162CA

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200-3394	14.00" LEXAN REWIND DISK
	1	MP-200-3394A	14.00" ALUM. REWIND DISK
②	1	MP-200-3414	COLLAPSIBLE REWIND DISK HUB



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: POWERED REWIND ASSEMBLY	TITLE: 14" DISK ASSEMBLY FOR COLLAPSIBLE REWIND	Dept. Code 70
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx	Scale: 1=2
			Date: 02/27/08	DRAWN BY: Jeffery Mendenhall
				F:\Engineering\Standard Parts\Applicator\360 SERIES\ PWRD RW\ASS\ASS-200-3162CX

BILL OF MATERIAL

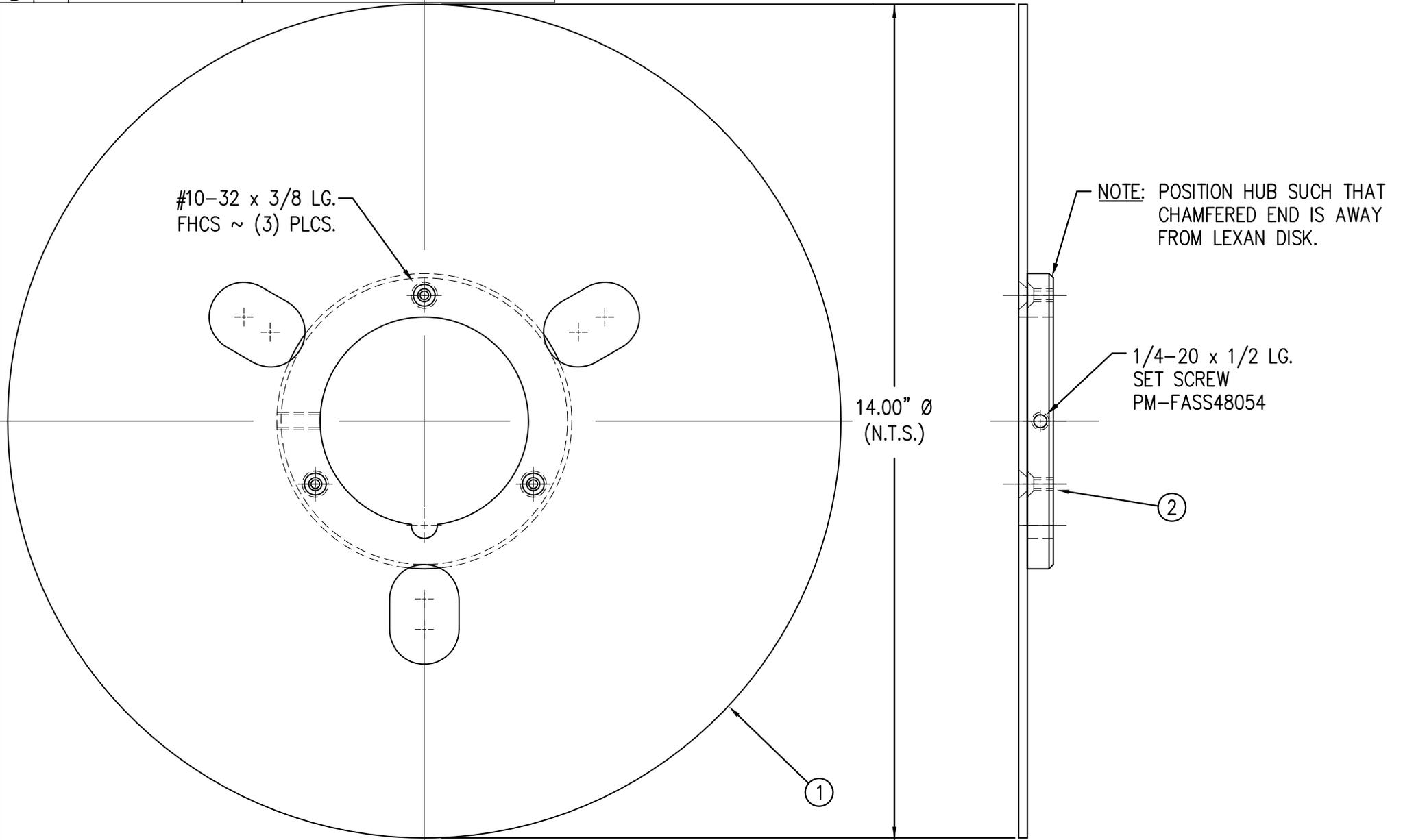
ASS-200-3162X

ASS-200-3162X

STANDARD -3162

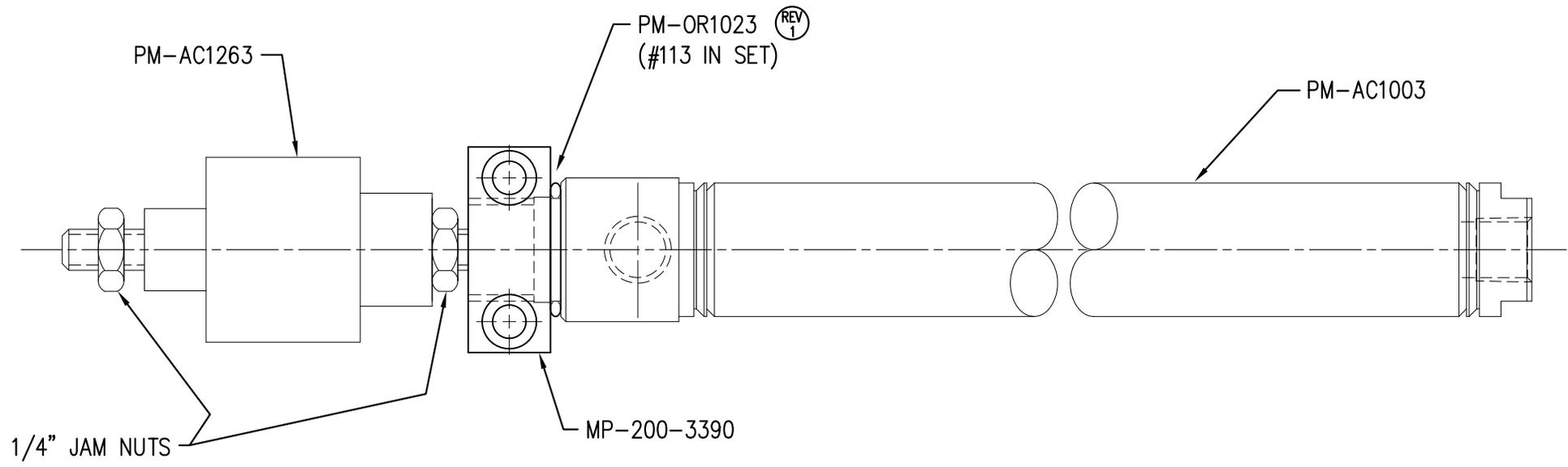
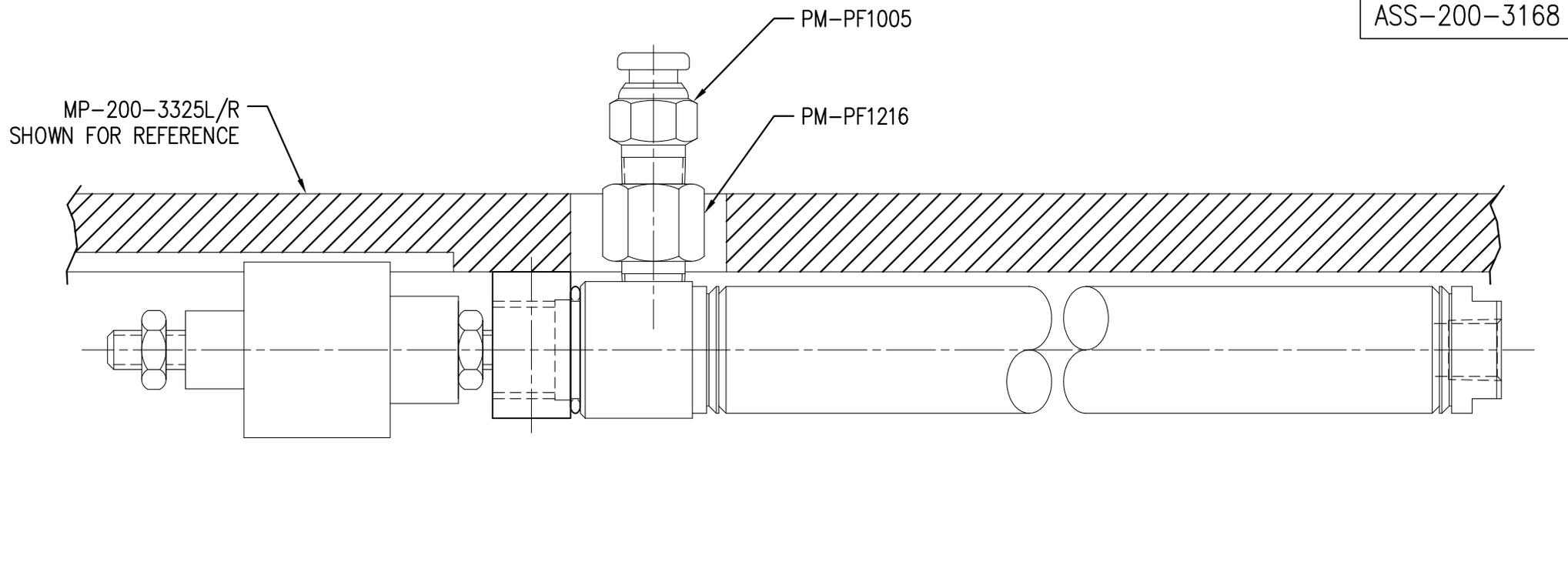
REELS-UP -3162A

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200-3394	14.00" LEXAN REWIND DISK
	1	MP-200-3394A	14.00" ALUM. REWIND DISK
②	1	MP-200-3395	REWIND DISK HUB



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: POWERED REWIND ASSEMBLY	TITLE: 14" DISK ASSEMBLY FOR STANDARD REWIND	Dept. Code 70
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx	Scale: 1=2
			Date: 02/27/08	DRAWN BY: Jeffery Mendenhall
				F:\Engineering\Standard Parts\Appliator\360 SERIES\ PWRD RW\ASS\ASS-200-3162X



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: POWERED REWIND ASSEMBLY	TITLE: CYLINDER MOUNTING ASSEMBLY	Dept. Code 70
REV. 1	REV. DESCRIPTION SWITCHED FROM SHIMS TO O-RING	REV. DATE 12/18/07	REV. BY: TDR	Scale: 1=1
			Date: 10/19/07	DRAWN BY: Jeffery Mendenhall
				F:\Engineering\Standard Parts\Appliator\360 SERIES\ PWRD RW\ASS\ASS-200-3168

BILL OF MATERIAL

ASS-200-3169R/L-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-3160	20" INSIDE UNWIND DISK ASSEMBLY
②	1	ASS-200-3159	20" OUTSIDE UNWIND DISK
③	1	MP-200-0267CS	UNWIND CORE SUPPORT SPACER
④	1	ASS-200-X135	5/7.5 WIDE TENSION ROLLER Assy. w/SHAFT
⑤	1	MP-200-3393	EXTENSION PLATE (for 16" & 20" UNWIND)
⑥	1	MP-200-3392	EXTENSION PLATE RIB
⑦	1	SAS-200-3164R/L-X	20" UNWIND CORE Assy, R/L, 5/7.5" WIDE

REV 2

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISK ASS-200-3160 WITH ASS-200-3160A & ADD LOCK COLLAR PM-C01025

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

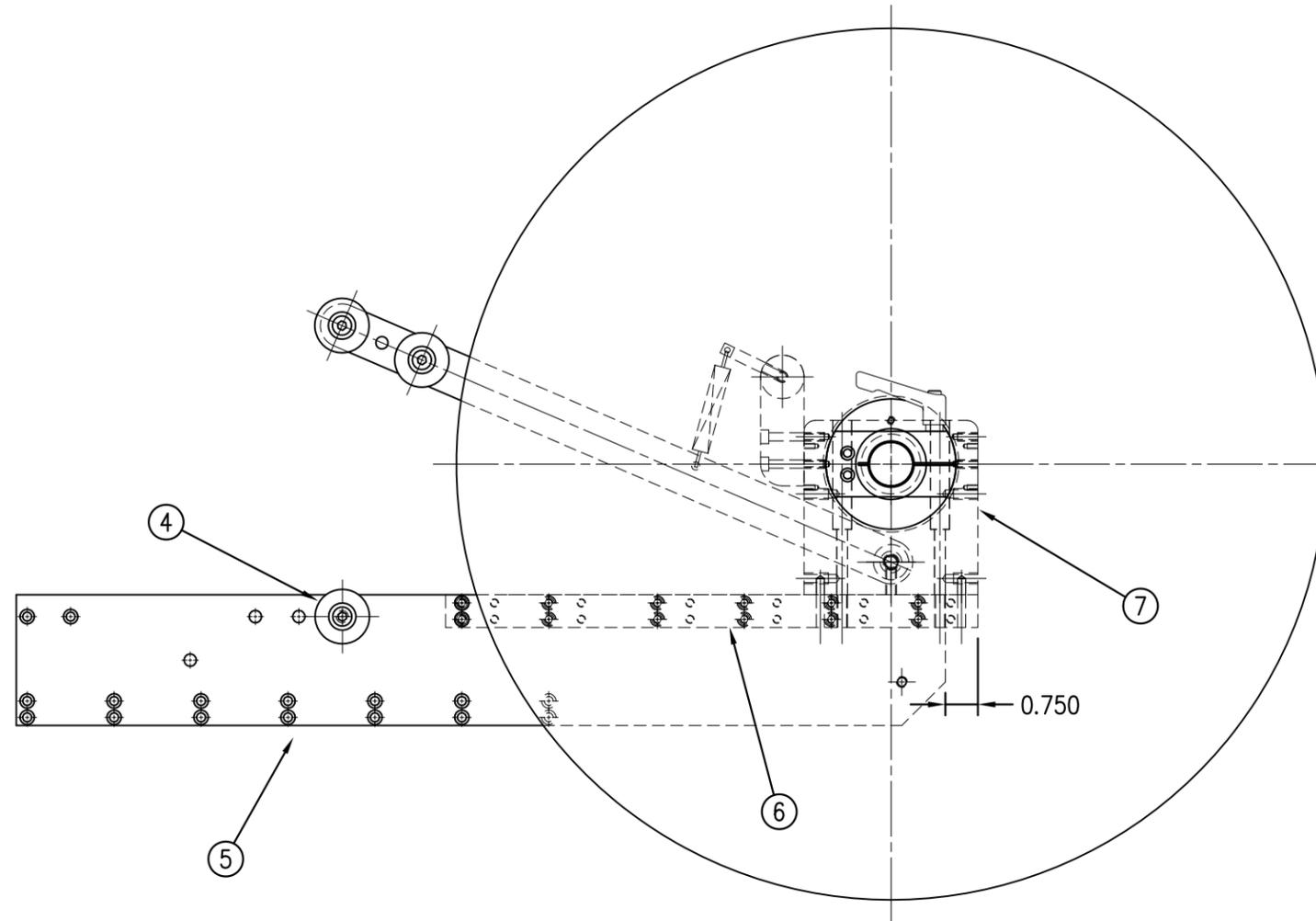
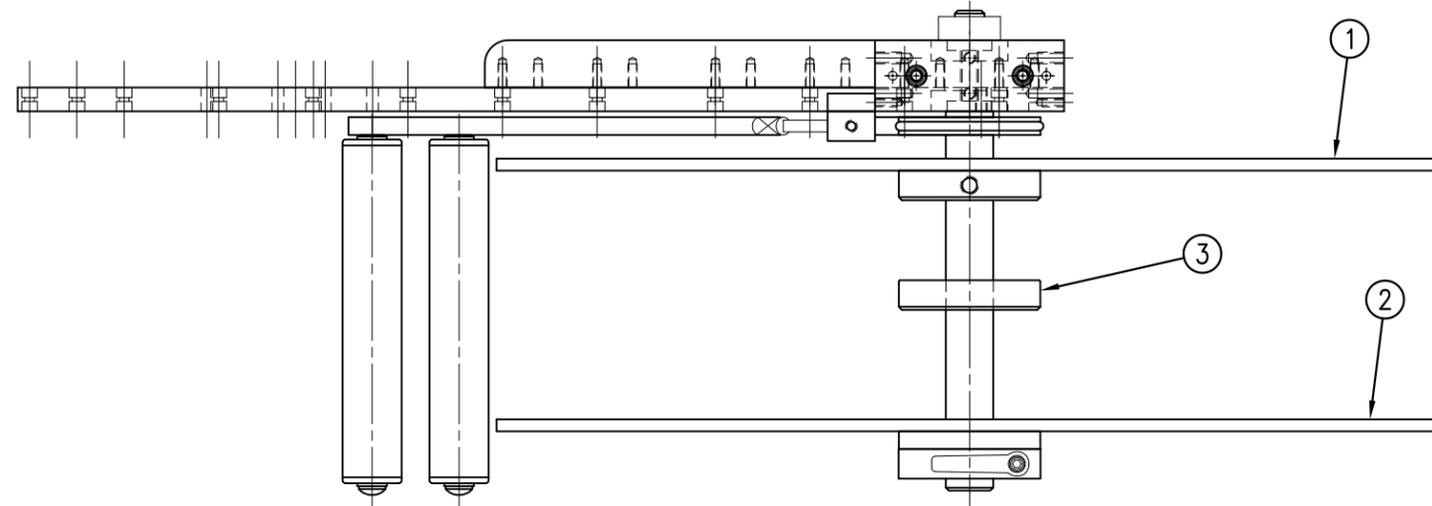
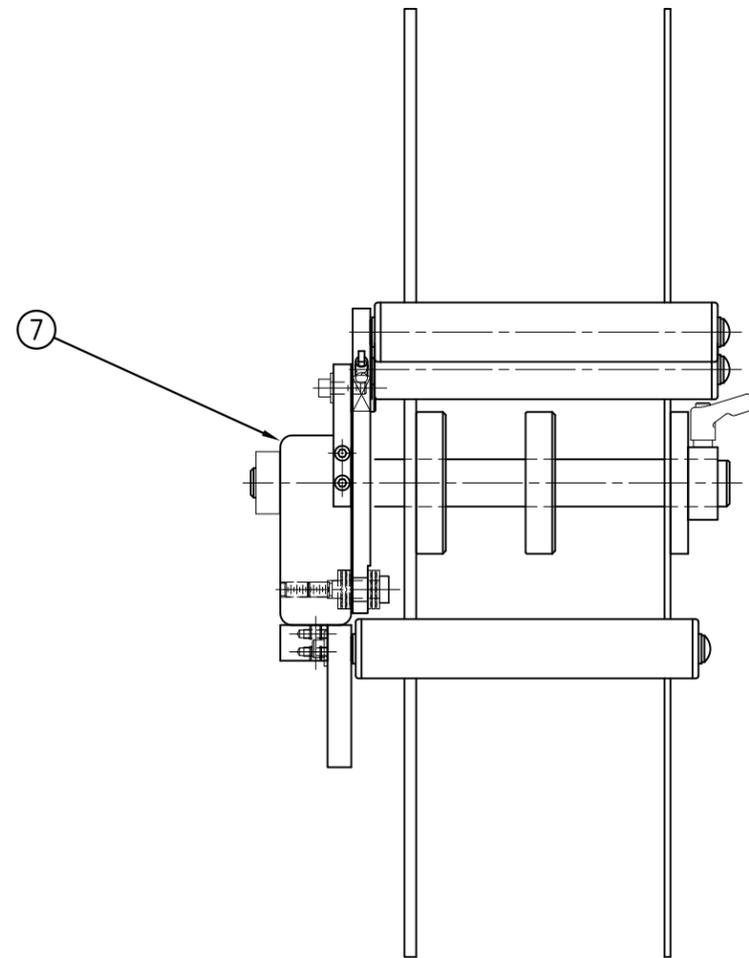
5.00" & 7.50" ASSEMBLIES AVAILABLE
-5.00" ASSEMBLY SHOWN-

ASS-200-3169R/L-X

5" WIDE, R/L -3169R/L-5

7.5" WIDE, R/L -3169R/L-7

Dept. Code 70
 TITLE: 20" NON-POWERED UNWIND w/ 14" POWERED REWIND ASSY
 Date: 02/27/08
 Scale: 1=4
 DRAWN BY: Jeffery Mendenhall
 F:\Engineering\Standard Parts\Appliator\360 SERIES\ PWRD RW\ASS-200-3169RL-X
 REV. DATE 01/30/20
 REV. BY: TDR
 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 GROUP: POWERED REWIND ASSEMBLY
 REV. DESCRIPTION 2 UPDATED PART Nos FOR ITEMS 5 & 6



BILL OF MATERIAL

ASS-200-3170R/L-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200-3132	16" INSIDE UNWIND DISK ASSEMBLY
②	1	ASS-200-2133	16" OUTSIDE UNWIND DISK
③	1	MP-200-0267CS	UNWIND CORE SUPPORT SPACER
④	1	ASS-200-X135	5/7.5 WIDE TENSION ROLLER Assy. w/SHAFT
⑤	1	MP-200-3393	EXTENSION PLATE (for 16" & 20" UNWIND)
⑥	1	MP-200-3392	EXTENSION PLATE RIB
⑦	1	SAS-200-3121AR/L-X	16" UNWIND CORE Assy, R/L, 5/7.5" WIDE

(REV 2)

NOTE: FOR REELS-UP ORIENTATION, REPLACE UNWIND DISK ASS-200-3132 WITH ASS-200-3132A & ADD LOCK COLLAR PM-C01025

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

5.00" & 7.50" ASSEMBLIES AVAILABLE
-5.00" ASSEMBLY SHOWN-

ASS-200-3170R/L-X

5" WIDE, R/L -3170R/L-5

7.5" WIDE, R/L -3170R/L-7

Dept. Code 70

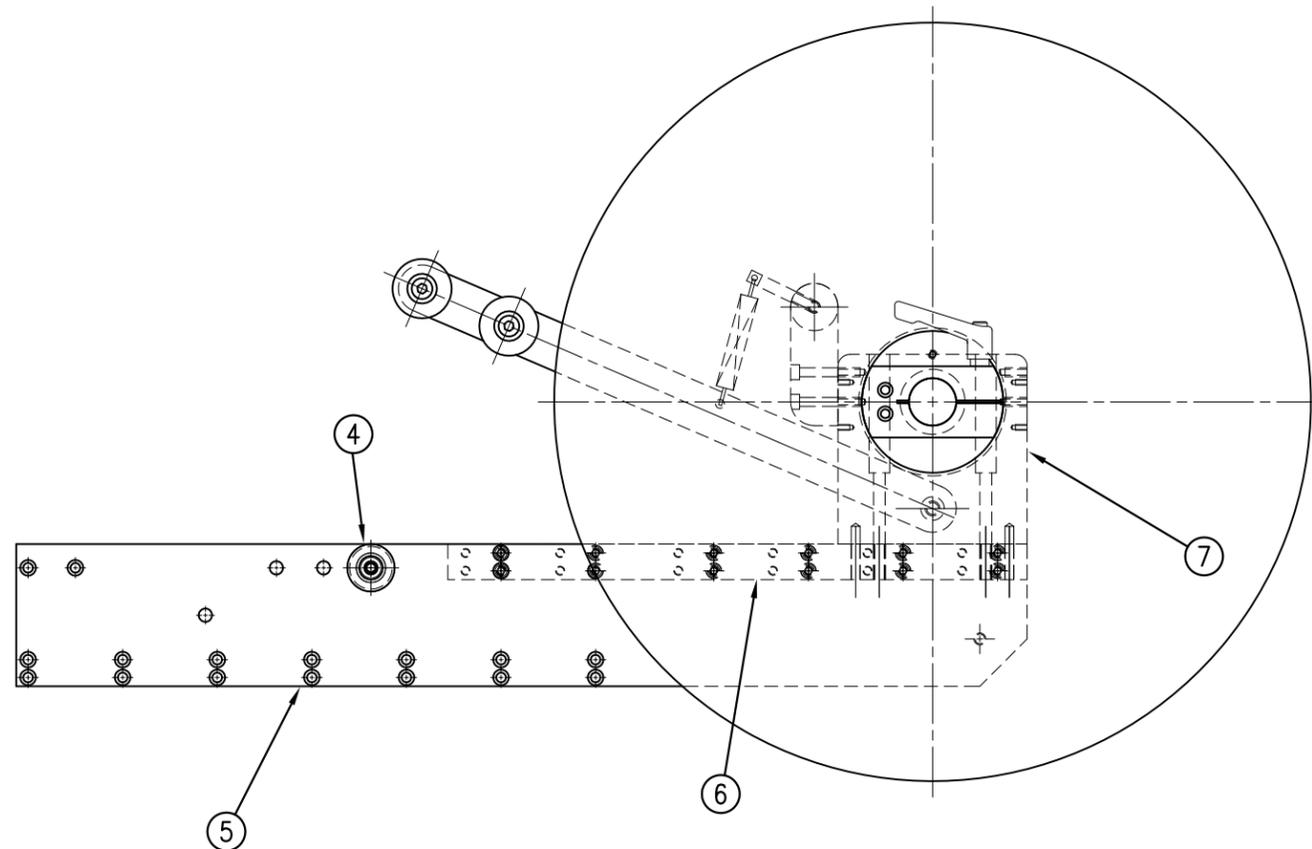
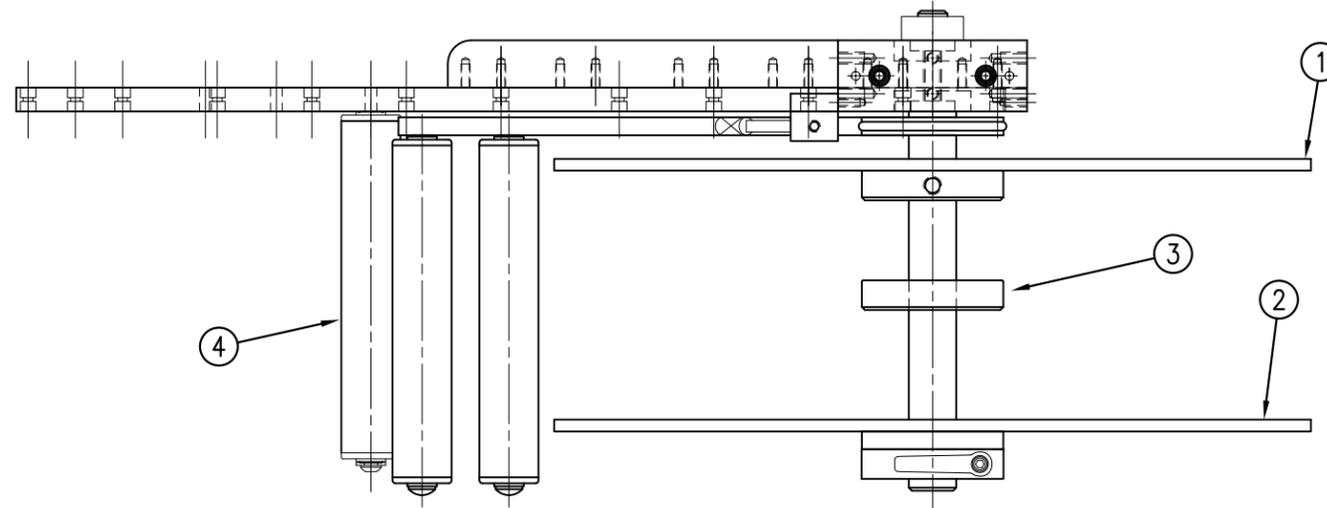
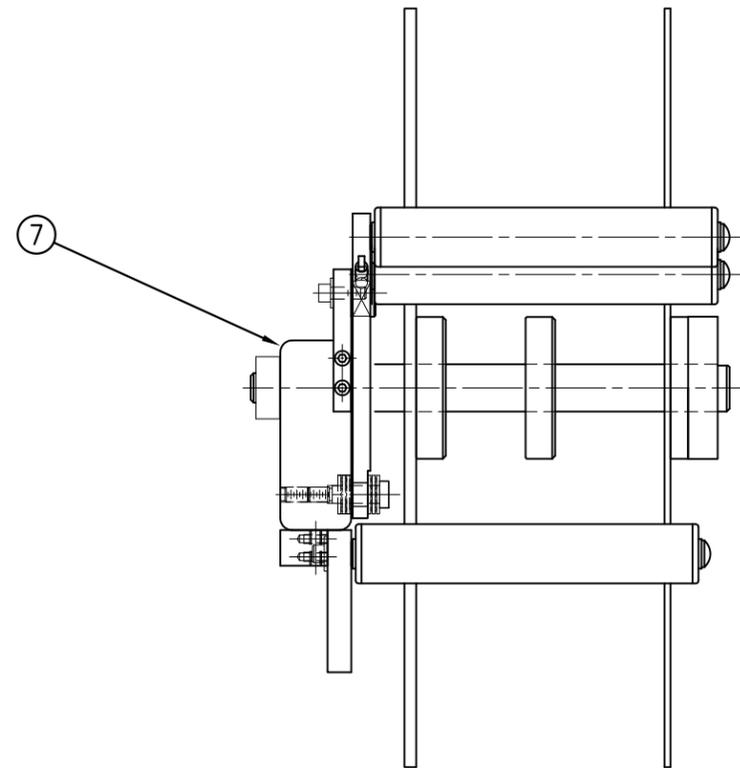
F:\Engineering\Standard Parts\Appliator\360 SERIES\ PWRD RW\ASS-200-3170RL-X

DATE: 02/27/08
DRAWN BY: Jeffrey Mendenhall

Scale: 1=4

REV. BY: TDR

REV. DATE: 01/30/20



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APPLICATOR SERIES: 360
APPLICATOR WIDTH(S): 5"/7.5"
GROUP: POWERED REWIND ASSEMBLY
TITLE: 16" NON-POWERED UNWIND w/ 14" POWERED REWIND ASSY
REV. DESCRIPTION: 2 UPDATED PART Nos FOR ITEMS 5 & 6

BILL OF MATERIAL

ASS-200-X150

ASS-200-X150

5" WIDE -0150

7.5" WIDE -2150

5" WIDE ANTI-STATIC -0150AS

7.5" WIDE ANTI-STATIC -2150AS

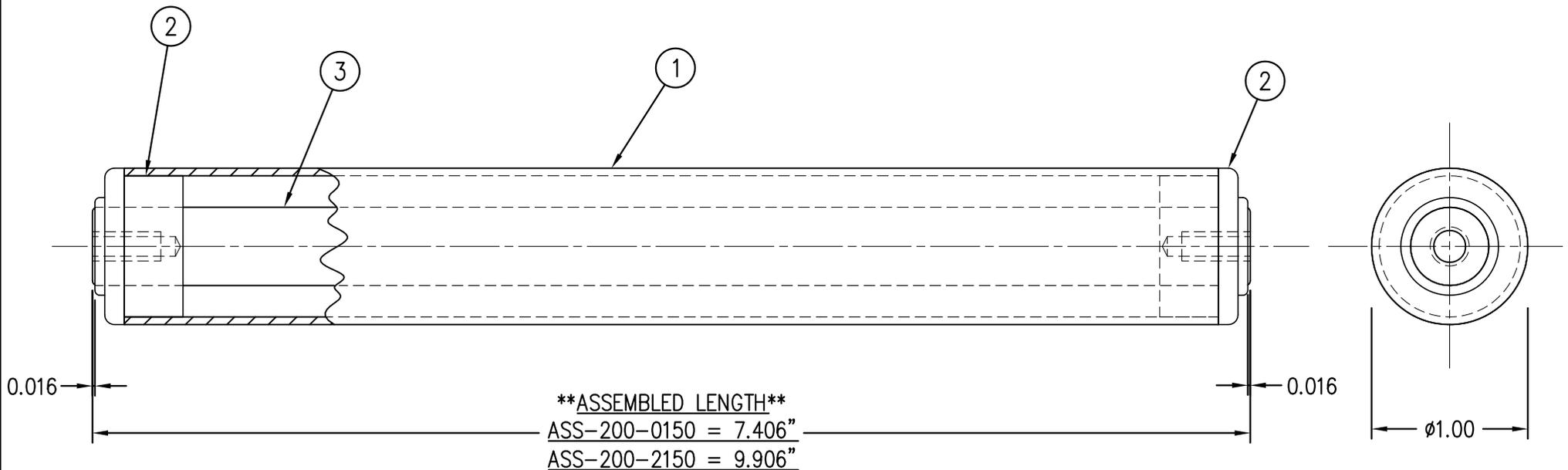
BILL OF MATERIAL

SAS-200-X150

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	SAS-200-X151	1" DIA. GUIDE ROLLER ASSEMBLY for 5"/7.5" POWERED REWIND
③	1	PF-200-X254	5"/7.5" TENSION NOSE SHAFT

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200-X336	5/7.5 WIDE, 1.00" DIA. ROLLER TUBE
②	2	MP-200-0295-1	1.00" DIA. ROLLER INSERT

① REV 1 NOTE: ADD "AS" SUFFIX TO PART NUMBERS FOR ANTISTATIC ROLLER INSERTS



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: POWERED REWIND ASSEMBLY	TITLE: 1.00" DIA. ROLLER ASSEMBLY	Dept. Code 70
REV. 2	REV. DESCRIPTION COMBINED ASS & SAS DRAWINGS, ADDED ANTI-STATIC TABULATIONS	REV. DATE 02/02/2016	REV. BY: ES	Scale: 1=1
			Date: 09/27/07	DRAWN BY: Jeffery Mendenhall
				F:\Engineering\Standard Parts\Applicator\360 SERIES\ PWRD RW\ASS\ASS-200-X150

BILL OF MATERIAL

ASS-200-X155X

ASS-200-X155X

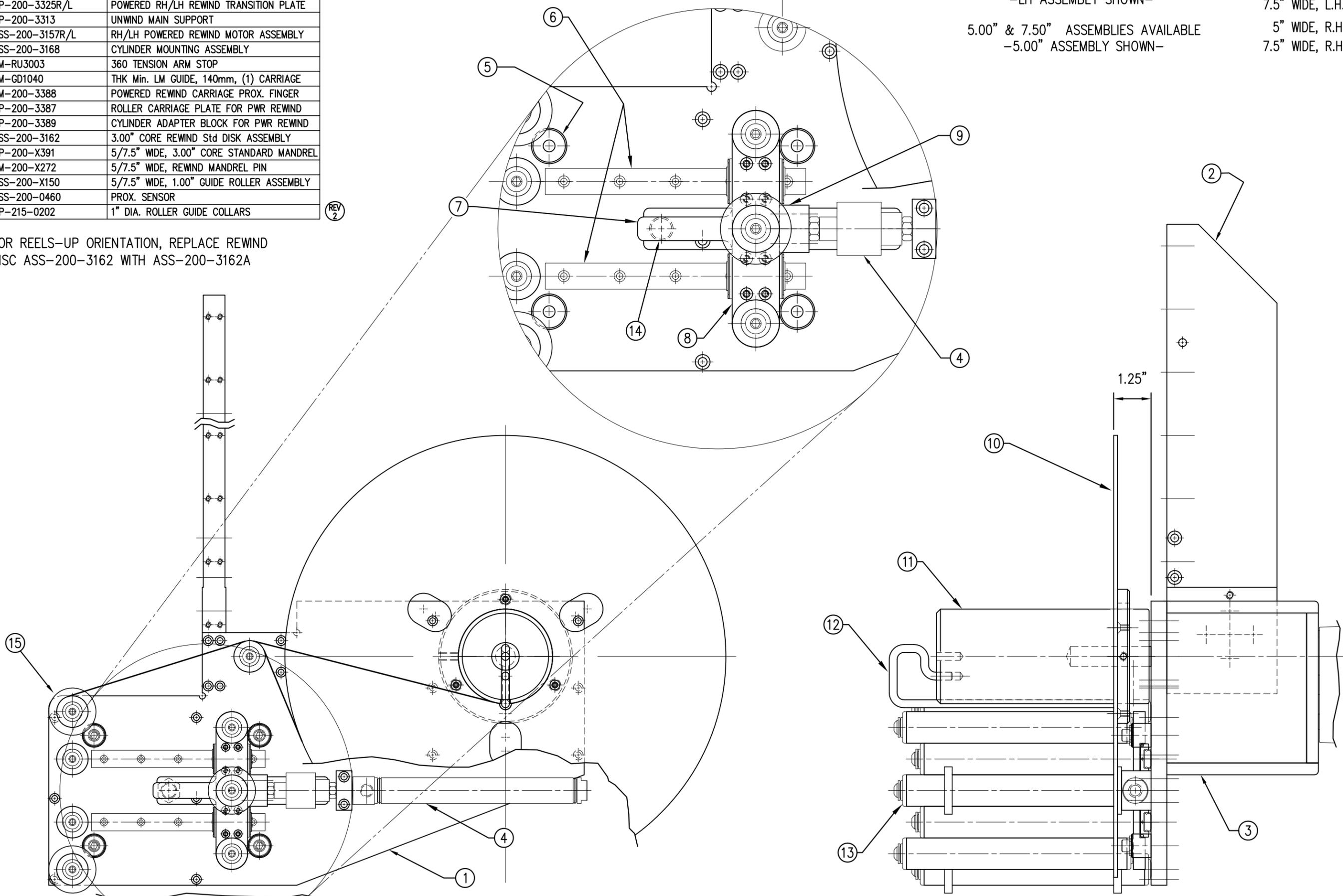
RH & LH ASSEMBLIES AVAILABLE
 -LH ASSEMBLY SHOWN-
 5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-

5" WIDE, L.H.	-0155L
7.5" WIDE, L.H.	-2155L
5" WIDE, R.H.	-0155R
7.5" WIDE, R.H.	-2155R

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 APPLICATOR SERIES: 360
 APPLICATOR WIDTH(S): 5"/7.5"
 REV. 2
 REV. DATE: 04/03/17
 REV. BY: TDR
 SCALE: 1=3
 DATE: 09/26/07
 DRAWN BY: Jeffrey Mendenhall
 TITLE: 14" POWERED REWIND ASSY w/ STD. REWIND MANDREL
 Dept. Code: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\ASS-200-X155X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200-3325R/L	POWERED RH/LH REWIND TRANSITION PLATE
②	1	MP-200-3313	UNWIND MAIN SUPPORT
③	1	ASS-200-3157R/L	RH/LH POWERED REWIND MOTOR ASSEMBLY
④	1	ASS-200-3168	CYLINDER MOUNTING ASSEMBLY
⑤	4	PM-RU3003	360 TENSION ARM STOP
⑥	2	PM-GD1040	THK Min. LM GUIDE, 140mm, (1) CARRIAGE
⑦	1	PM-200-3388	POWERED REWIND CARRIAGE PROX. FINGER
⑧	1	MP-200-3387	ROLLER CARRIAGE PLATE FOR PWR REWIND
⑨	1	MP-200-3389	CYLINDER ADAPTER BLOCK FOR PWR REWIND
⑩	1	ASS-200-3162	3.00" CORE REWIND Std DISK ASSEMBLY
⑪	1	MP-200-X391	5/7.5" WIDE, 3.00" CORE STANDARD MANDREL
⑫	1	PM-200-X272	5/7.5" WIDE, REWIND MANDREL PIN
⑬	8	ASS-200-X150	5/7.5" WIDE, 1.00" GUIDE ROLLER ASSEMBLY
⑭	1	ASS-200-0460	PROX. SENSOR
⑮	6	MP-215-0202	1" DIA. ROLLER GUIDE COLLARS

NOTE: FOR REELS-UP ORIENTATION, REPLACE REWIND DISC ASS-200-3162 WITH ASS-200-3162A

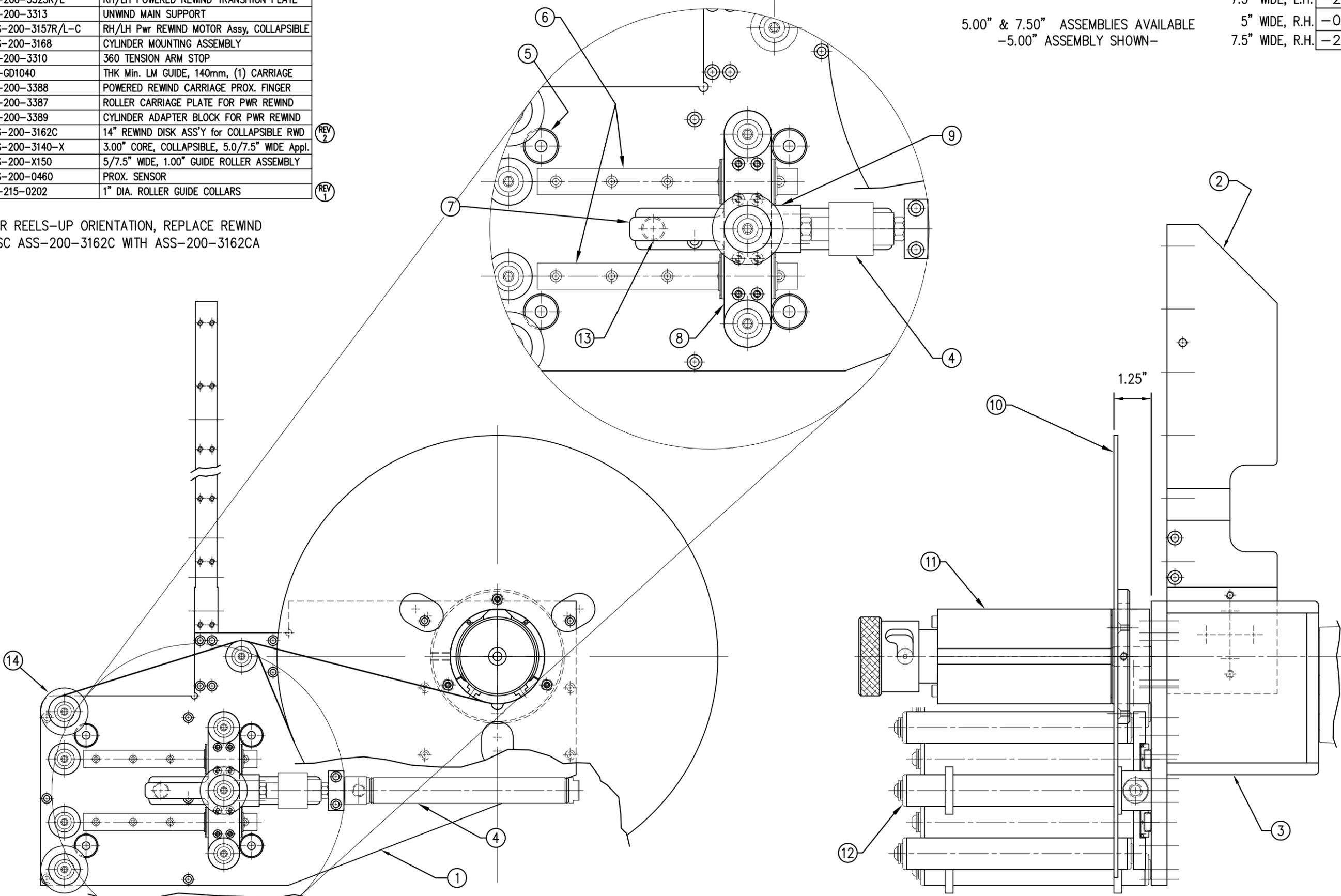


BILL OF MATERIAL

ASS-200-X158X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-200-3325R/L	RH/LH POWERED REWIND TRANSITION PLATE
②	1	MP-200-3313	UNWIND MAIN SUPPORT
③	1	ASS-200-3157R/L-C	RH/LH Pwr REWIND MOTOR Assy, COLLAPSIBLE
④	1	ASS-200-3168	CYLINDER MOUNTING ASSEMBLY
⑤	4	MP-200-3310	360 TENSION ARM STOP
⑥	2	PM-GD1040	THK Min. LM GUIDE, 140mm, (1) CARRIAGE
⑦	1	PM-200-3388	POWERED REWIND CARRIAGE PROX. FINGER
⑧	1	MP-200-3387	ROLLER CARRIAGE PLATE FOR PWR REWIND
⑨	1	MP-200-3389	CYLINDER ADAPTER BLOCK FOR PWR REWIND
⑩	1	ASS-200-3162C	14" REWIND DISK ASS'Y for COLLAPSIBLE RWD
⑪	1	ASS-200-3140-X	3.00" CORE, COLLAPSIBLE, 5.0/7.5" WIDE Appl.
⑫	8	ASS-200-X150	5/7.5" WIDE, 1.00" GUIDE ROLLER ASSEMBLY
⑬	1	ASS-200-0460	PROX. SENSOR
⑭	6	MP-215-0202	1" DIA. ROLLER GUIDE COLLARS

NOTE: FOR REELS-UP ORIENTATION, REPLACE REWIND DISK ASS-200-3162C WITH ASS-200-3162CA

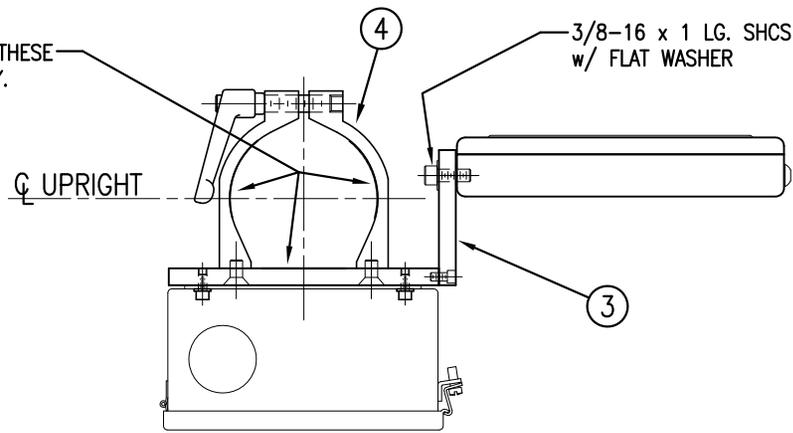


RH & LH ASSEMBLIES AVAILABLE
 -LH ASSEMBLY SHOWN-
 5.00" & 7.50" ASSEMBLIES AVAILABLE
 -5.00" ASSEMBLY SHOWN-

ASS-200-X158X	
5" WIDE, L.H.	-0158L
7.5" WIDE, L.H.	-2158L
5" WIDE, R.H.	-0158R
7.5" WIDE, R.H.	-2158R

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 APPLICATOR SERIES: 360
 APPLICATOR SERIES: 5"/7.5"
 REV. DESCRIPTION: 2 CORRECTED REWIND DISK ASS'Y DESCRIPTION
 REV. DATE: 04/08/20
 REV. BY: TDR
 SCALE: 1=3
 DATE: 09/26/07
 DRAWN BY: Jeffery Mendenhall
 TITLE: 14" POWERED REWIND ASSY w/ COLLAPSIBLE REWIND MANDREL
 DEPT. CODE: 70
 F:\Engineering\Standard Parts\Applcator\360 SERIES\ PWRD RW\ASS-200-X158X

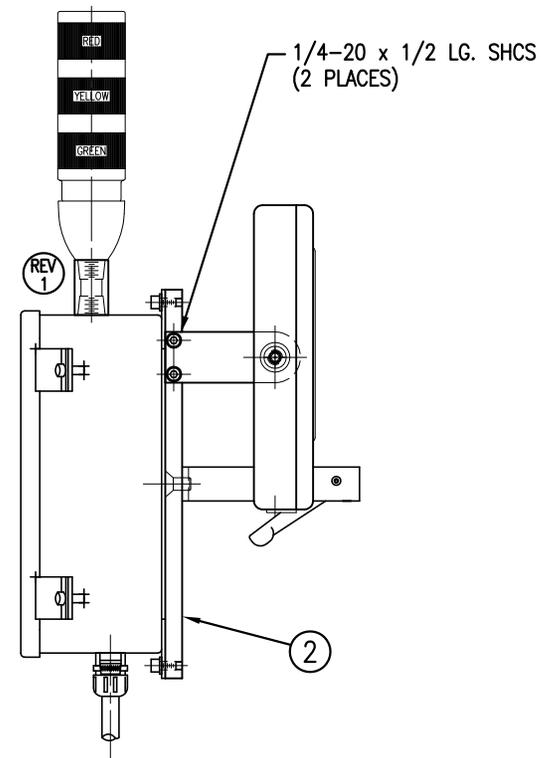
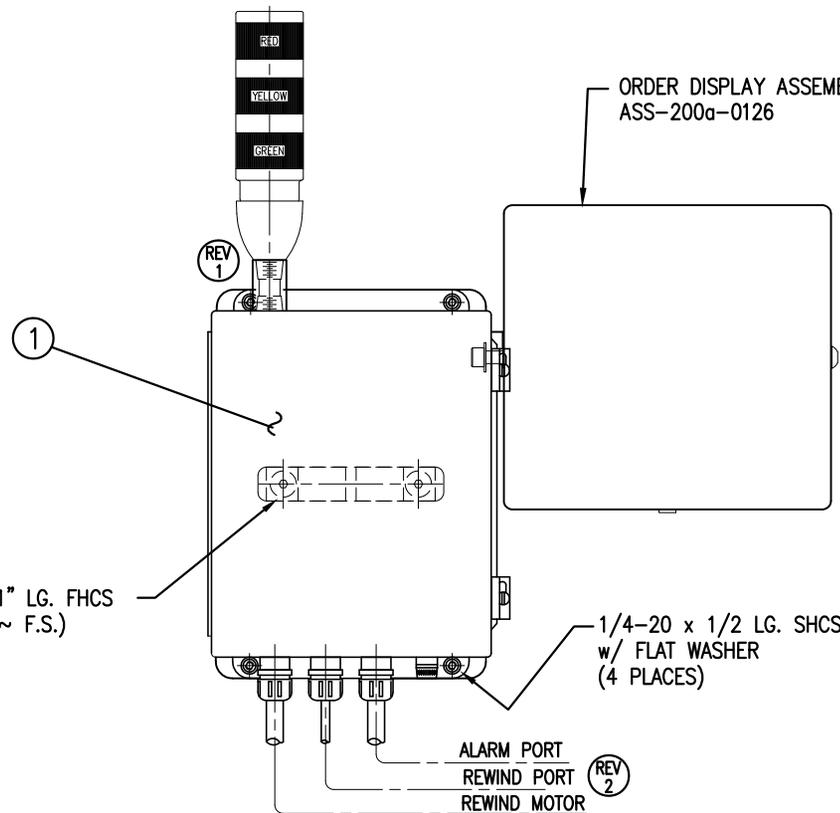
APPLY UHMW TAPE TO THESE SURFACES AT ASSEMBLY.



BILL OF MATERIAL

ASS-200a-3161

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-200a-3163	REWIND DRIVE/ALARM LIGHT ENCLOSURE
②	1	MP-200-3322	REWIND ENCLOSURE MOUNT PLATE
③	1	MP-200-3323	DISPLAY MOUNT
④	1	ASS-CL1000	UPRIGHT TUBE CLAMP ASSEMBLY
5	10"	PM-T1020	1" WIDE UHMW TAPE (CUT TO SUIT)



3/8-16 x 1" LG. FHCS
(2 PLACES ~ F.S.)

1/4-20 x 1/2 LG. SHCS
w/ FLAT WASHER
(4 PLACES)

ALARM PORT
REWIND PORT
REWIND MOTOR

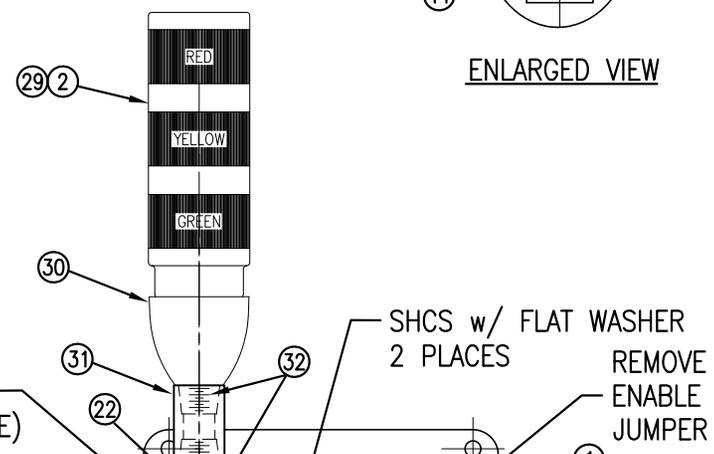
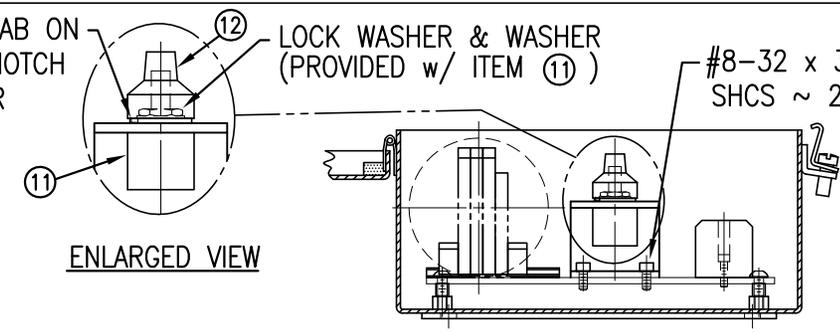
②

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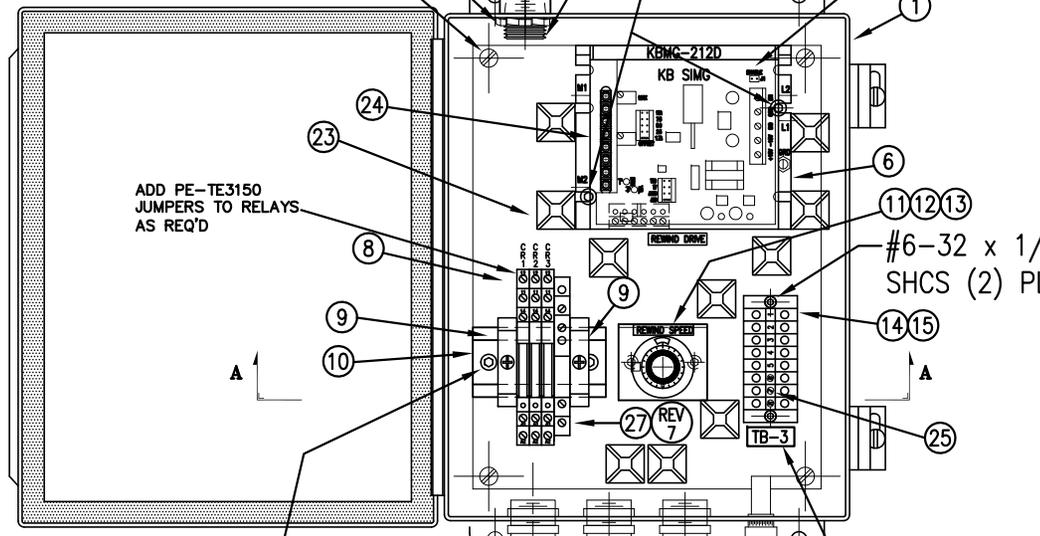
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: POWERED REWIND ASSEMBLY	TITLE: ENCLOSURE ASSEMBLY w/ LED LIGHT	Dept. Code 70
REV. 4	REV. DESCRIPTION UPDATED DWG TO SHOW NEW DISPLAY UNIT	REV. DATE 01/22/20	REV. BY: TDR	Scale: 1=6 Date: 04/13/07 DRAWN BY: DKM
			F:\Engineering\Standard Parts\Appliator\360 SERIES\ PWRD RW\ASS\ASS-200a-3161	

LINE UP TAB ON DIAL w/ NOTCH IN WASHER
 LOCK WASHER & WASHER (PROVIDED w/ ITEM 11)

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



SHCS w/ FLAT WASHER 2 PLACES
 REMOVE ENABLE JUMPER
 PANEL SCREWS (PROVIDED w/ENCLOSURE)



ADD PE-TE3150 JUMPERS TO RELAYS AS REQ'D

#6-32 x 1/2 Lg. SHCS (2) PLCS.

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

ADD LABEL

TO REWIND MOTOR
 TO REWIND MOTOR
 ALARM PORT
 ALARM PORT

BILL OF MATERIAL			
ASS-200A-3163			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	1	MP-EN2001	CONTINUOUS HINGE ENCLOSURE w/GRID KIT
2	1	PE-LI1088	GREEN, YELLOW, RED LIGHT
6	1	PE-MC1109	DRIVE MOTOR CONTROLLER
7	1	PE-238-0423	ALARM LIGHT STACK CORD
8	3	PE-RE1063	RELAY - ALARM LIGHT STACK
9	2	PE-RE1053	STOP CLIP
10	1	CP-200-0271	RELAY MOUNTING CHANNEL (CUT TO 2.75" Lg.)
11	1	PE-PO1030	5k SPEED POTENTIOMETER
12	1	PE-PO2010	SPEED POTENTIOMETER DIAL
13	1	MP-PO1000	POTENTIOMETER MOUNTING BRACKET
14	1	PE-TE6050	TERMINAL
15	1	PE-TE6051	TERMINAL NUMBERS
16	1	PE-FU5005	FUSE HOLDER
17	1	PE-FU2065	3 amp FUSE
18	1	PE-C03050	16/3 ELECTRICAL CORD 10 FT. LONG
20	2	PE-C02005	1/2" CORD GRIP (1/4" to 3/8")
21	1	PE-C02000	1/2" CORD GRIP (1/8" to 1/4")
22	4	PE-COND1005	LOCK NUT
23	10	PE-PA1079	STICKY PAD
24	1	PE-SI1050	SIGNAL ISOLATION BOARD
25	1	PE-TE3122	3-POLE INTERNAL JUMPER
26	1	ASS-200a-0489	POWERED REWIND MOTOR START CABLE
27	1	PE-RE1013	SOLID STATE RELAY
28	1	PE-EN5004	10" HIGH X 8" WIDE MOUNTING PANEL
29	1	PE-SE3046	STRAIGHT 5-PIN QD CONN. CABLE - 6 1/2 FT. LG.
30	1	PE-LI1080	STAND-OFF PIPE ADAPTER
31	1	PE-COND1165	1/2" RIGID GALVANIZED COUPLING
32	2	PE-COND1167	1/2" GALVANIZED CLOSE NIPPLE
33	1	PE-CON2009	ALARM PORT PLUG (4 POLE FEMALE)
34	1	PE-CC1040	ALARM PLUG CLAMP

REV 10
 REV 6
 REV 4
 REV 1
 REV 10

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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: POWERED REWIND ASSEMBLY	TITLE: REWIND DRIVE / LED ALARM LIGHT ENCLOSURE	Dept. Code 70
REV. 11	REV. DESCRIPTION REMOVED ITEM 19 (WAS 10' OF 8 CONDUCTOR CABLE) ADDED IT TO ASS-200a-0489	REV. DATE 03/16/2017	REV. BY: ES	Scale: 1=4
			Date: 04/13/07	DRAWN BY: DKM
				F:\Engineering\Standard Parts\Appliator\360 SERIES\ PWRD RW\ASS\ASS-200a-3163

GOOD FOR LABELS UP TO 8" IN FEED LENGTH

RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

CTM-211A-4143R/L-5-XX-X

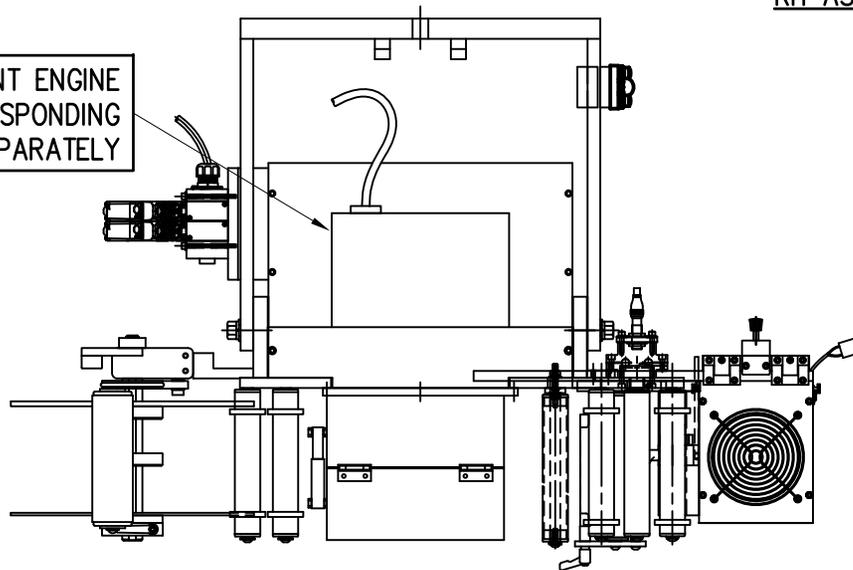
5" WIDE/12" UNWIND

CTM-211A-4143R/L-5-12X-X

5" WIDE/16" UNWIND

CTM-211A-4143R/L-5-16X-X

ORDER PRINT ENGINE
& CORRESPONDING
CABLE SEPARATELY

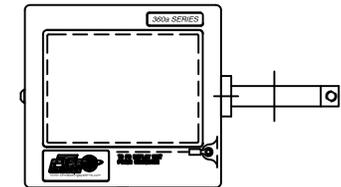


BILL OF MATERIAL			
CTM-211A-4143R/L-5-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-0150R/L	RH/LH; 5" WIDE 360A CORE UNIT
②	1	MOD-200-4143R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4143R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
③	1	ASS-200-0147	5" REWIND MANDREL
④	1	MOD-211-0125R/L	5" WIDE, 6" EXTENDED SNORKEL FOR AIR BLOW

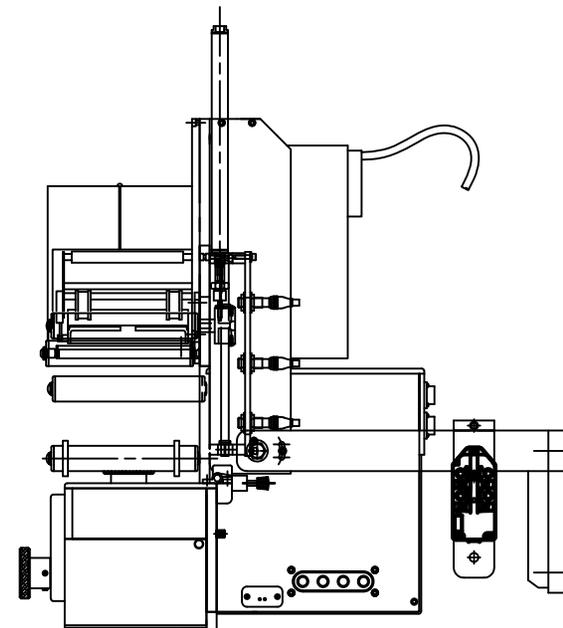
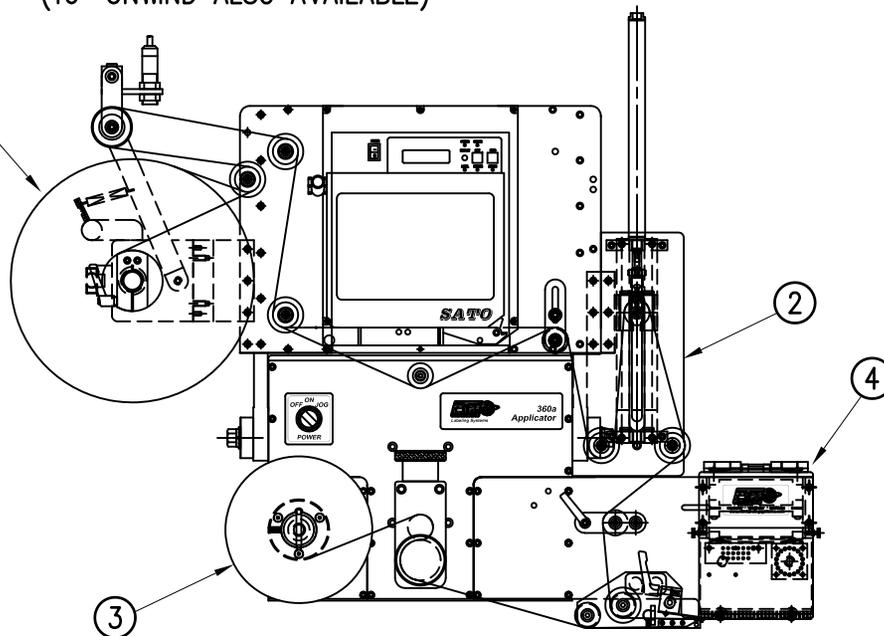
STANDARD REWIND S
COLLAPSIBLE REWIND C
FILM REWIND F

SATO -EX P.E. S
ZEBRA/DATAMAX P.E. Z

ORDER THE FOLLOWING SEPARATELY:
1.) PRINT ENGINE
2.) PRODUCT DETECT SENSOR



12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



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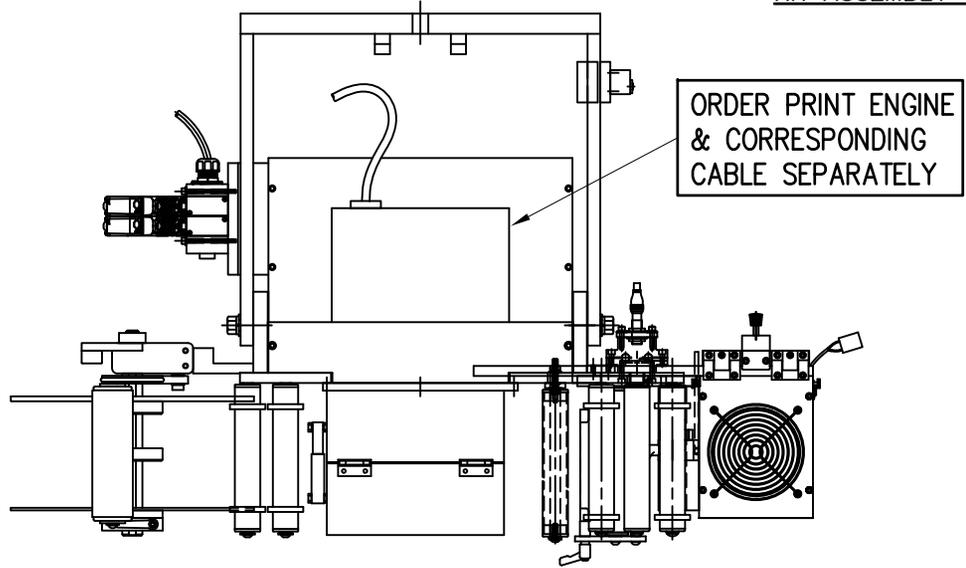
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360a AIR BLOW APPLICATOR w/INT. P.E. & SHORT LOOSE LOOP	Dept. Code 70	
REV. 1	REV. DESCRIPTION REVISED TO SHOW FRONT PLATE DECALS AND NEW J-BOX	REV. DATE 08/15/19	REV. BY: BNT	Scale: 1=10 Date: 07/12/16 DRAWN BY: TDR	F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-211A-4143R/L-5-XX-X

GOOD FOR LABELS UP TO 18" IN FEED LENGTH

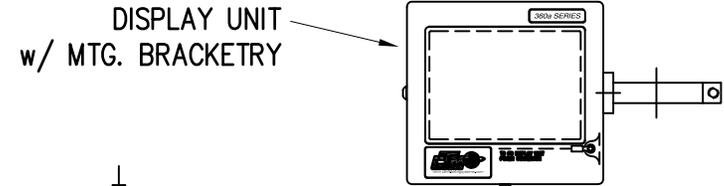
RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

5" WIDE/12" UNWIND
5" WIDE/16" UNWIND

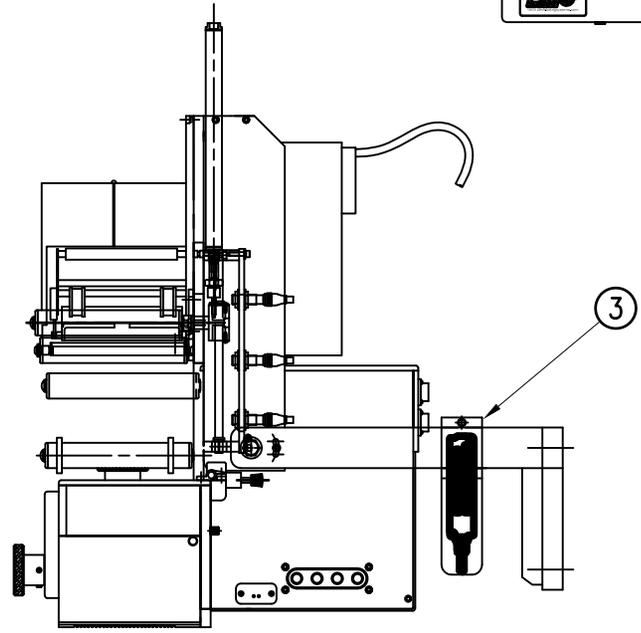
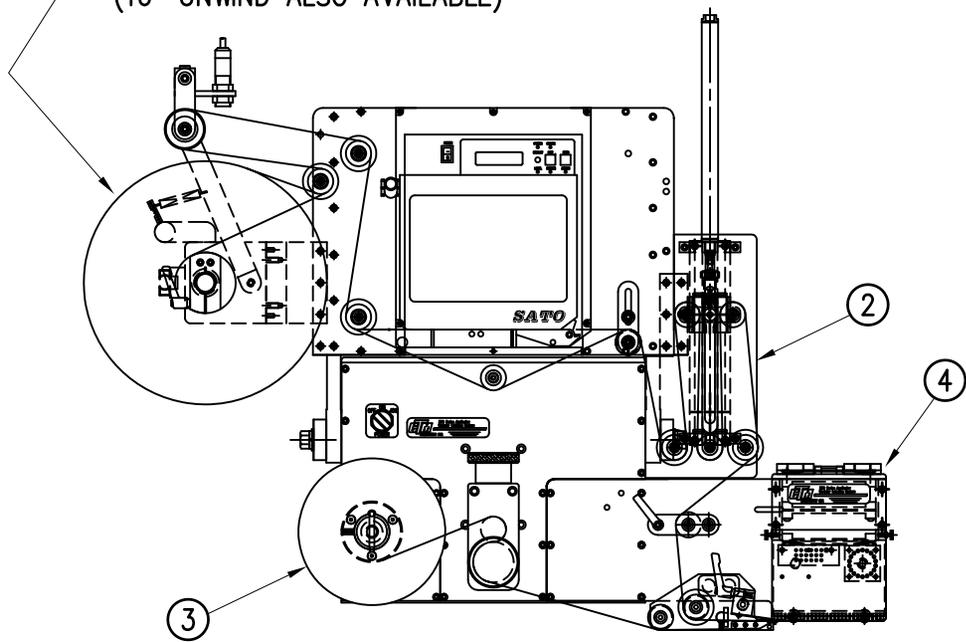
CTM-211A-4144R/L-5-X
CTM-211A-4144R/L-5-12
CTM-211A-4144R/L-5-16



BILL OF MATERIAL			
CTM-211A-4144R/L-5-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-0150R/L	RH/LH; 5" WIDE 360A CORE UNIT
②	1	MOD-200-4144R/L-5-12	RH/LH; 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4144R/L-5-16	RH/LH; 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
③	1	ASS-200-0147	5" REWIND MANDREL
④	1	MOD-211-0125R/L	5" WIDE, 6" EXTENDED SNORKEL FOR AIR BLOW



12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360a AIR BLOW APPLICATOR w/INT. P.E. & SHORT LOOSE LOOP	Dept. Code 70
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx	Scale: 1=10
			Date: 07/12/16	DRAWN BY: TDR
			F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-211A-4144RL-5-X	

GOOD FOR LABELS UP TO 8" IN FEED LENGTH

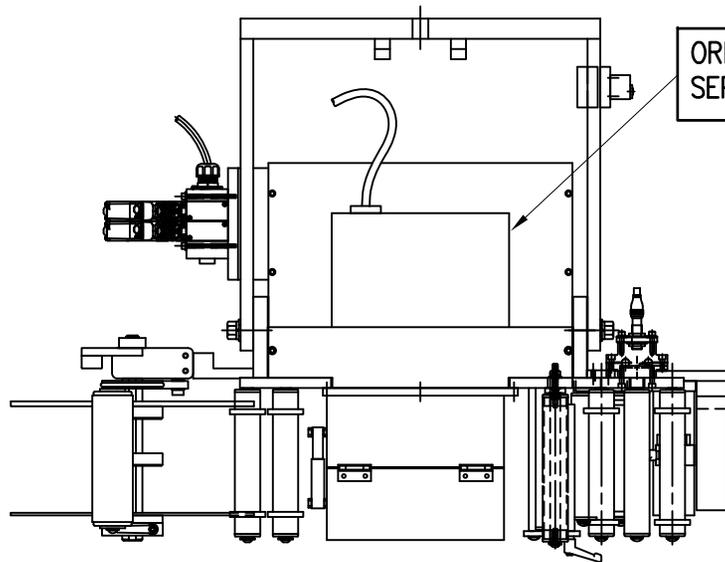
RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

CTM-211VA-4143R/L-5-XX-X

5" WIDE/12" UNWIND CTM-211VA-4143R/L-5-12X-X

5" WIDE/16" UNWIND CTM-211VA-4143R/L-5-16X-X

ORDER PRINT ENGINE
SEPARATELY



BILL OF MATERIAL			
CTM-211VA-4143R/L-5-XX-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-0150R/L	RH/LH 5" WIDE 360A CORE UNIT
②	1	MOD-200-4143R/L-5-12	RH/LH 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4143R/L-5-16	RH/LH 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
③	1	MOD-211-0134R/L	5" WIDE, 6" EXTENDED SNORKEL FOR RVB
	1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT (SHOWN)
④	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
	1	ASS-200-0147	5" W. STANDARD MANDREL (SHOWN)
⑤	1	ASS-200-0137	5" W. FILM REWIND MANDREL
	1	ASS-200-3140-5	5" W. COLLAPSIBLE MANDREL
⑥	1	ASS-200-0138	DISPLAY UNIT to UPRIGHT MOUNTING BRACKETRY
⑦	1	WAS-200-4247	HEAVY DUTY U-ARM
⑧	1	ASS-200A-0483	ZEBRA/DATAMAX to APPLICATOR CABLE
	1	ASS-200A-0485	SATO -EX to APPLICATOR CABLE

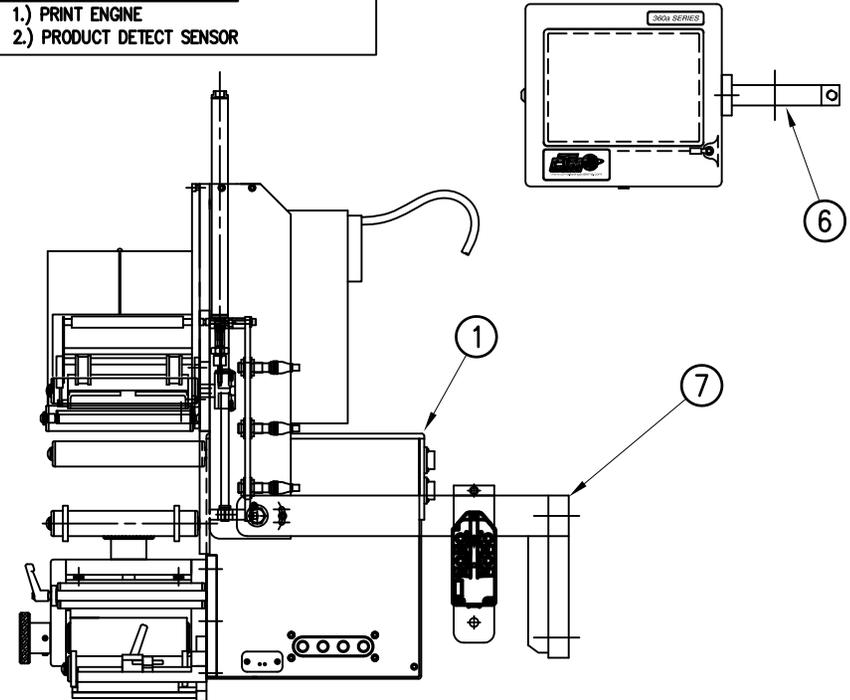
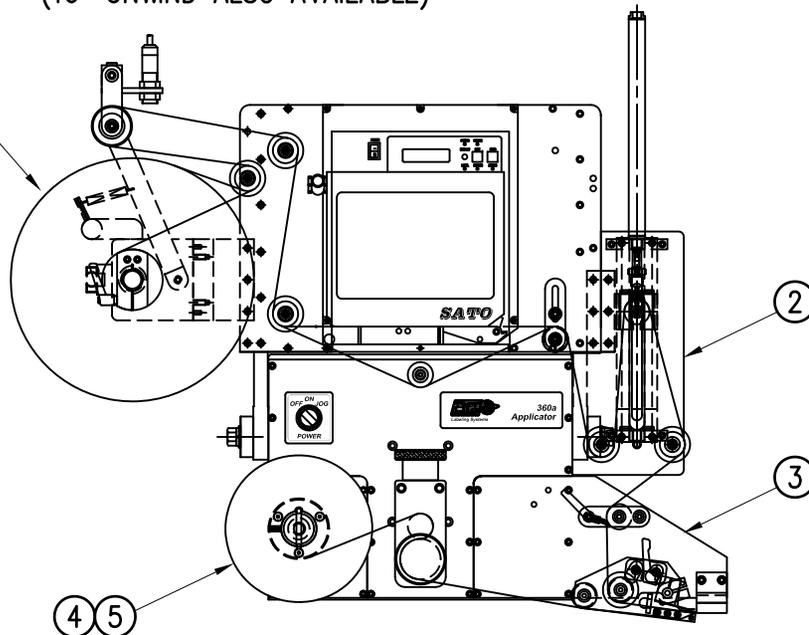
STANDARD REWIND S
COLLAPSIBLE REWIND C
FILM REWIND F

SATO -EX P.E. S
ZEBRA/DATAMAX P.E. Z

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

ORDER THE FOLLOWING SEPARATELY:
1.) PRINT ENGINE
2.) PRODUCT DETECT SENSOR

12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360a RVB APPLICATOR w/INT. P.E. & SHORT LOOSE LOOP	Dept. Code 70
REV. 2	REV. DESCRIPTION REVISED TO SHOW FRONT PLATE DECALS & NEW J-BOX	REV. DATE 08/14/19	REV. BY: BNT	Scale: 1=10
			Date: 07/12/16	DRAWN BY: TDR/TK
				F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-211VA-4143RL-5-XX-X

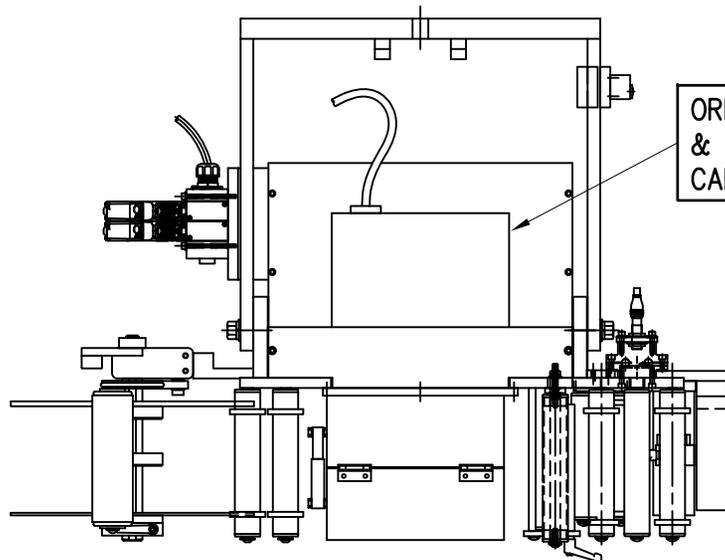
GOOD FOR LABELS UP TO 18" IN FEED LENGTH

RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

CTM-211VA-4144R/L-5-1XX-X

5" WIDE/12" UNWIND
5" WIDE/16" UNWIND
7.5" WIDE/12" UNWIND
7.5" WIDE/16" UNWIND

CTM-211VA-4144R/L-5-12X-X
CTM-211VA-4144R/L-5-16X-X
CTM-211VA-4144R/L-7-12X-X
CTM-211VA-4144R/L-7-16X-X



ORDER PRINT ENGINE
& CORRESPONDING
CABLE SEPARATELY

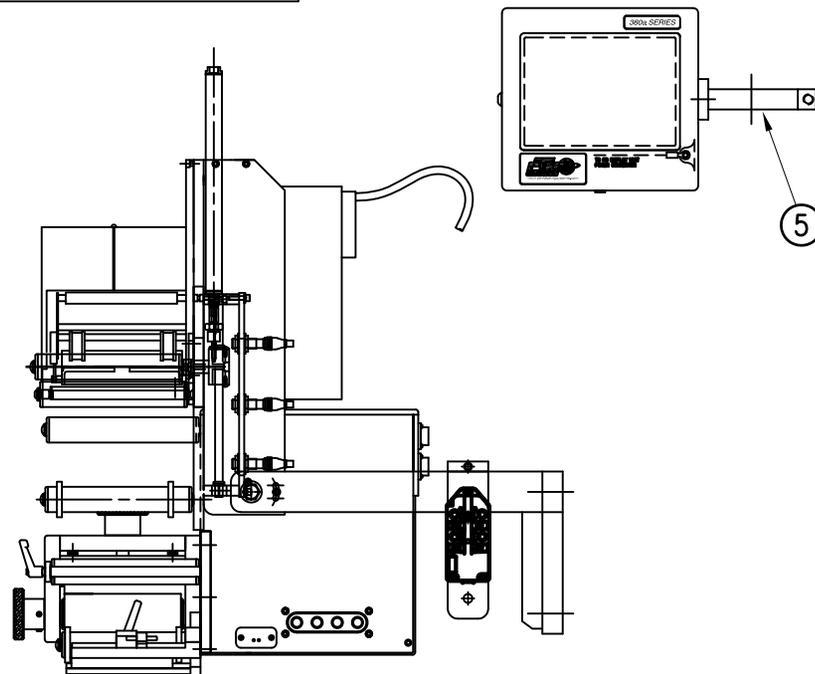
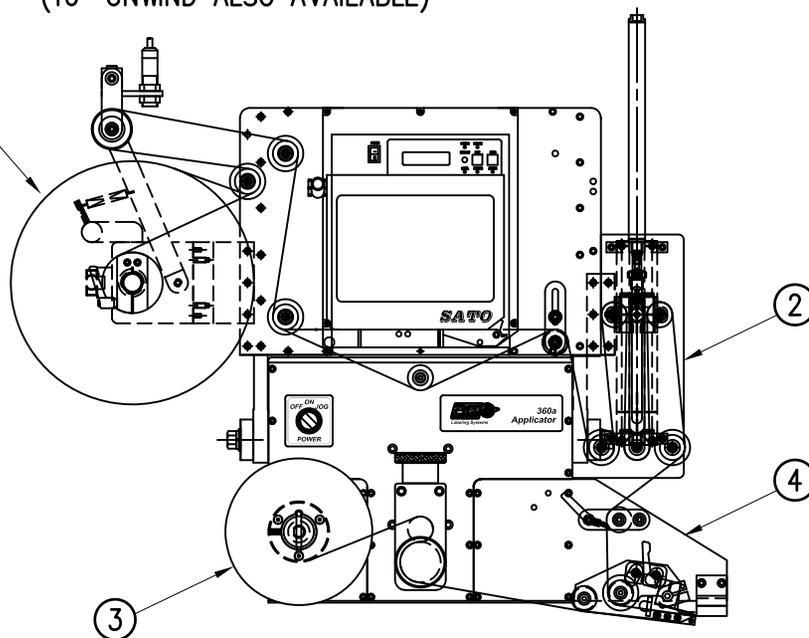
STANDARD REWIND S
COLLAPSIBLE REWIND C
FILM REWIND F

SATO -EX P.E. S
ZEBRA/DATAMAX P.E. Z

BILL OF MATERIAL		
CTM-211VA-4144R/L-X-X		
ITEM	QTY	CTM PART NUMBER
①	1	CTM-200A-X150R/L
		PART DESCRIPTION
		RH/LH; 5/7.5" WIDE 360A CORE UNIT
②	1	MOD-200-4144R/L-5-12
		RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4144R/L-5-16
		RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
③	1	ASS-200-X147
		5/7.5" REWIND MANDREL
④	1	MOD-211-0134R/L
		5" WIDE, 6" EXTENDED SNORKEL FOR RVB
⑤	1	ASS-200-0138
		DISPLAY UNIT to UPRIGHT MOUNTING BRACKETRY

ORDER THE FOLLOWING SEPARATELY:
1.) PRINT ENGINE
2.) PRODUCT DETECT SENSOR

12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360a RVB APPLICATOR w/INT. P.E. & SHORT LOOSE LOOP	Dept. Code 70
REV. 1	REV. DESCRIPTION REVISED TO SHOW FRONT PLATE DECALS & NEW J-BOX	REV. DATE 08/14/19	REV. BY: BNT	Scale: 1=10
			Date: 07/12/16	DRAWN BY: TDR
				F:\Engineering\Standard Parts\Appliator\360a\LOOSE LOOP\CTM-211VA-4144RL-5-1XX-X

GOOD FOR LABELS UP TO 8" IN FEED LENGTH

ORDER PRINT ENGINE SEPARATELY

RH & LH ASSEMBLIES AVAILABLE.

RH ASSEMBLY SHOWN.

5" WIDE/12" UNWIND

5" WIDE/16" UNWIND

7.5" WIDE/12" UNWIND

7.5" WIDE/16" UNWIND

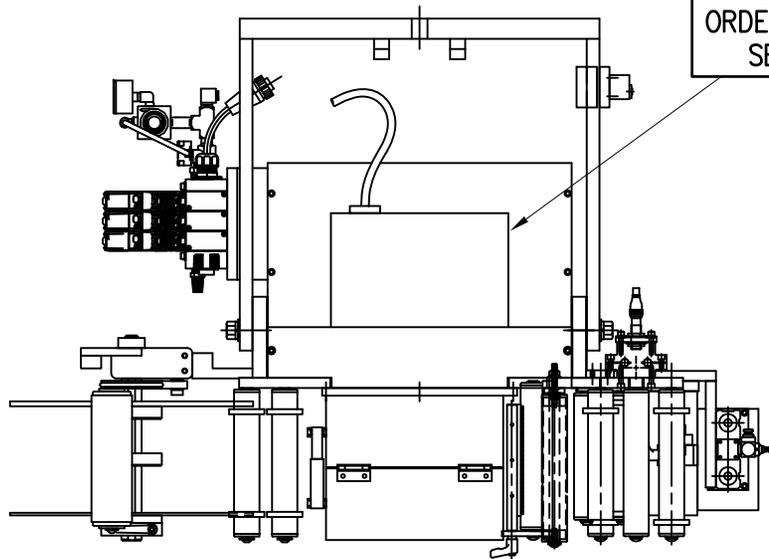
CTM-214A-4143R/L-X-X

CTM-214A-4143R/L-5-12X-X

CTM-214A-4143R/L-5-16X-X

CTM-214A-4143R/L-7-12X-X

CTM-214A-4143R/L-7-16X-X



BILL OF MATERIAL			
CTM-214A-4143R/L-X-XX-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	RH/LH; 5/7.5" WIDE 360A CORE UNIT
②	1	MOD-200-4143R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4143R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
③	1	MOD-200-4143R/L-7-12	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4143R/L-7-16	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
④	1	MOD-214-X124R/L	5/7.5" WIDE, 6" EXTENDED SNORKEL FOR TAMP
	1	ASS-200-X147	5/7.5" W. STANDARD MANDREL (SHOWN)
⑤	1	ASS-200-X137	5/7.5" W. FILM REWIND MANDREL
	-1	ASS-200-0145R/L	STANDARD / FILM REWIND ASSEMBLY
⑥	1	ASS-200-3167R/L	COLLAPSIBLE REWIND ASSEMBLY
	1	ASS-200-3140-X	5/7.5" W. COLLAPSIBLE MANDREL
⑦	-1	WAS-200-0247	STANDARD 360a U-ARM
	1	WAS-200-4247	HEAVY DUTY U-ARM
⑧	1	ASS-200A-0483	ZEBRA/DATAMAX to APPLICATOR CABLE
	1	ASS-200A-0485	SATO -EX to APPLICATOR CABLE

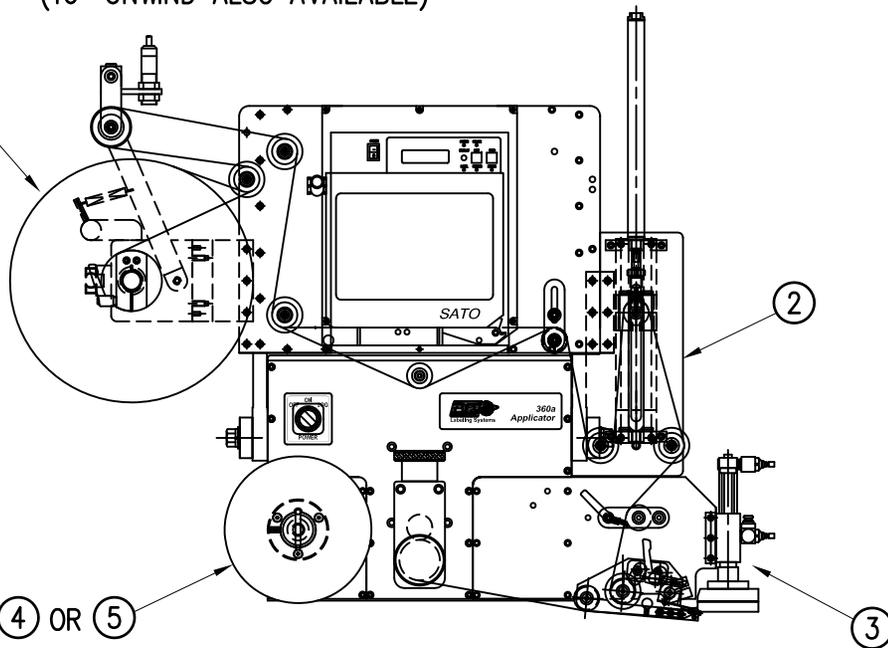
CHOOSE ONE

COLLAPSIBLE NEEDS ALL 3

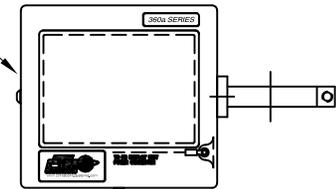
STANDARD REWIND S
COLLAPSIBLE REWIND C
FILM REWIND F

SATO -EX P.E. S
ZEBRA/DATAMAX P.E. Z

12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



DISPLAY UNIT w/
MTG. BRACKETRY



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360a TAMP APPLICATOR w/INT. P.E. & SHORT LOOSE LOOP	Dept. Code 70
REV. 2	REV. DESCRIPTION TABULATED FOR PRINT ENGINES	REV. DATE 10/16/18	REV. BY: TDR	Scale: 1=10 Date: 07/07/16 DRAWN BY: TDR
			F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-214A-4143RL-X-X	

GOOD FOR LABELS UP TO 18" IN FEED LENGTH

RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

CTM-214A-4144R/L-X-X

5" WIDE/12" UNWIND

CTM-214A-4144R/L-5-12

5" WIDE/16" UNWIND

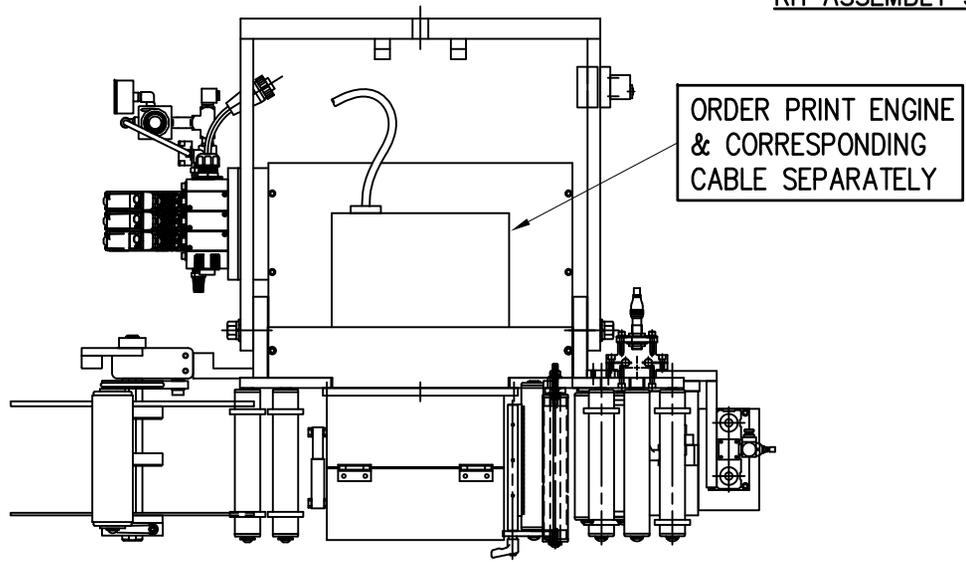
CTM-214A-4144R/L-5-16

7.5" WIDE/12" UNWIND

CTM-214A-4144R/L-7-12

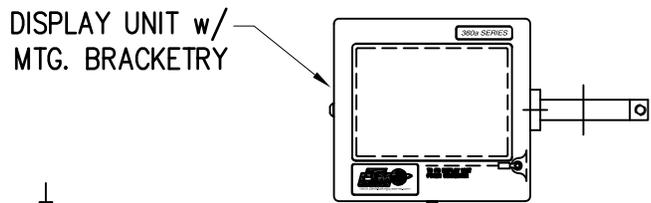
7.5" WIDE/16" UNWIND

CTM-214A-4144R/L-7-16

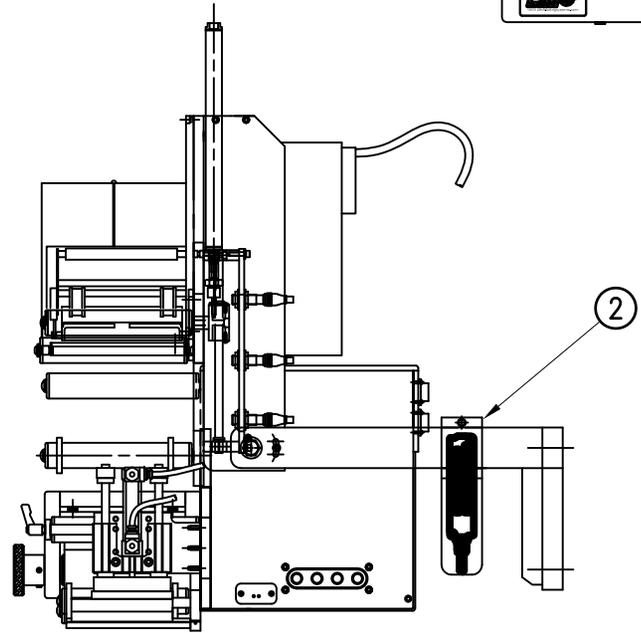
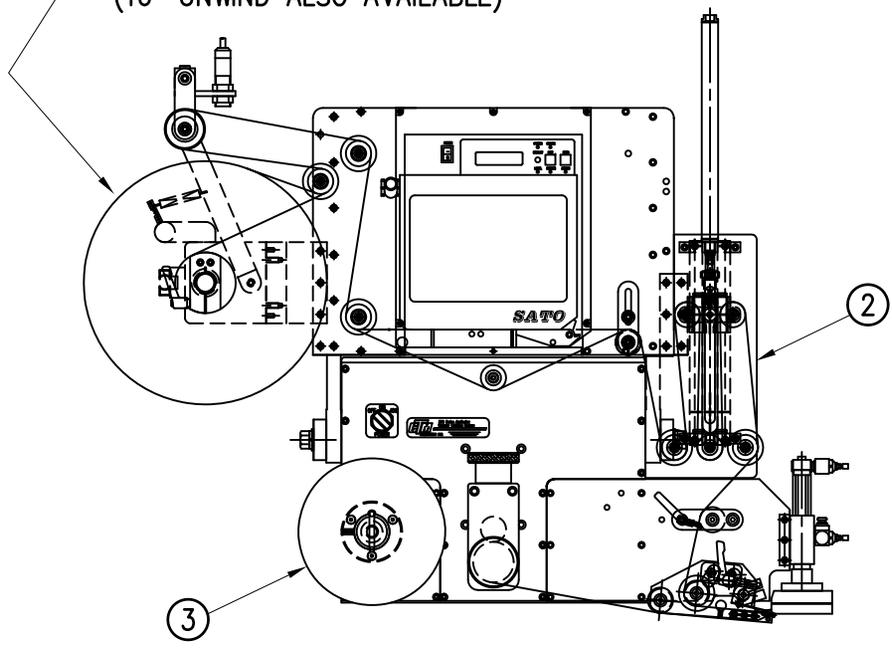


BILL OF MATERIAL
CTM-214A-4144R/L-X-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	RH/LH; 5/7.5" WIDE 360A CORE UNIT
②	1	MOD-200-4144R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4144R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-200-4144R/L-7-12	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4144R/L-7-16	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
③	1	ASS-200-X147	5/7.5" REWIND MANDREL
④	1	MOD-214-X124R/L	5/7.5" WIDE, 6" EXTENDED SNORKEL FOR TAMP



12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



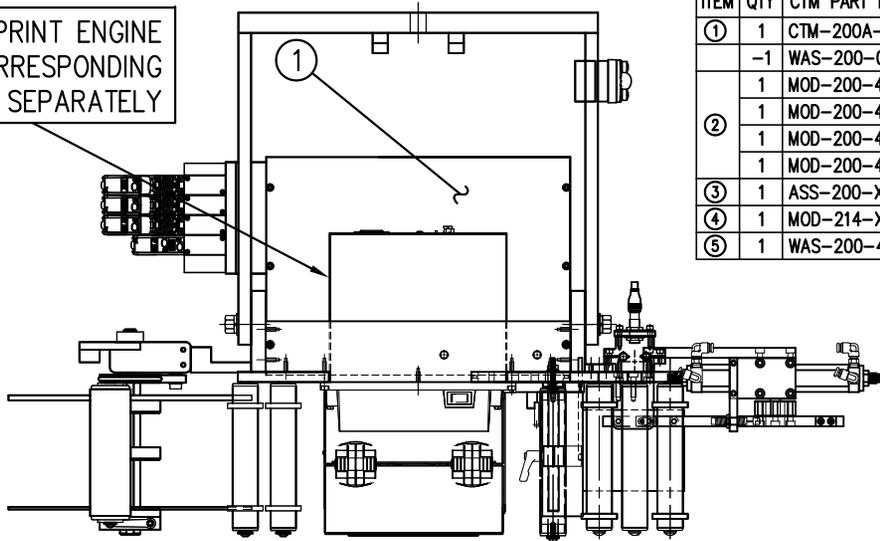
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APPLICATOR SERIES: 360 APPLICATOR WIDTH(S): 5"/7.5" GROUP: INTEGRATED SHORT LOOSE LOOP TITLE: RH/LH 360a TAMP APPLICATOR w/INT. P.E. & SHORT LOOSE LOOP Dept. Code 70

REV. 1 REV. DESCRIPTION: UPDATED SIDE VIEW REV. DATE: 09/12/18 REV. BY: TDR Scale: 1=10 Date: 07/12/16 DRAWN BY: TDR F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-214A-4144RL-X-X

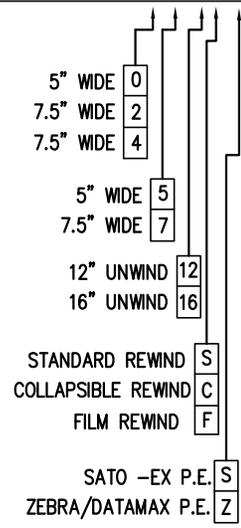
GOOD FOR LABELS UP TO 8" IN FEED LENGTH

ORDER PRINT ENGINE
& CORRESPONDING
CABLE SEPARATELY

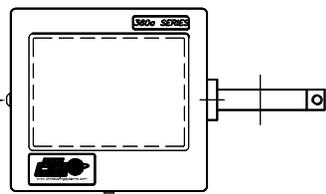


BILL OF MATERIAL			
CTM-214A-4145R/L-X-X-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	RH/LH; 5/7.5" WIDE 360A CORE UNIT
	-1	WAS-200-0247	REMOVE STANDARD U-ARM WELDMENT
②	1	MOD-200-4143R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4143R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-200-4143R/L-7-12	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4143R/L-7-16	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
③	1	ASS-200-X147	5/7.5" REWIND MANDREL
④	1	MOD-214-X111R/L-X	HI/LO PRESSURE CORNER WRAP MODULE
⑤	1	WAS-200-4247	HEAVY DUTY U-ARM WELDMENT

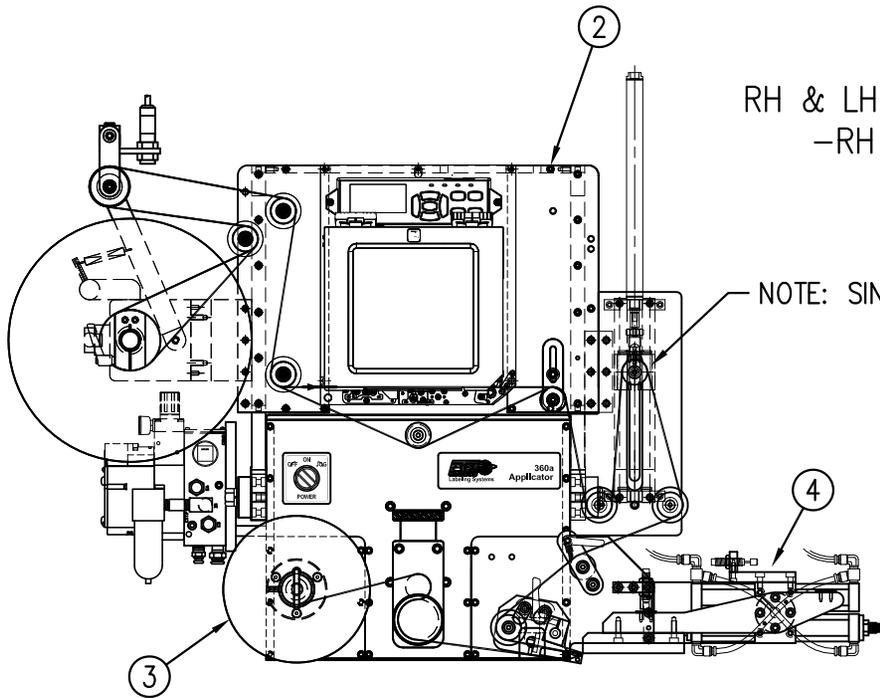
CTM-214A-4145R/L-X-X-1XX-X



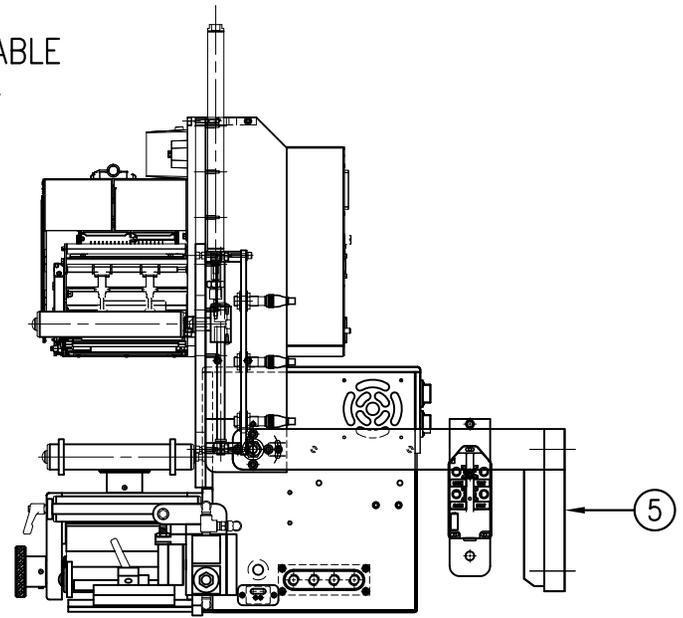
DISPLAY UNIT w/
MTG. BRACKETRY



RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



NOTE: SINGLE ROLLER CARRIAGE



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360a CORNER WRAP APPLICATOR w/INT. P.E. & SHORT LOOSE LOOP w/ SINGLE CARRIAGE ROLLER	Dept. Code 70
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx	Scale: 1=10
			Date: 02/28/2017	DRAWN BY: ES
			F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-214A-4145RL-X-X-X	

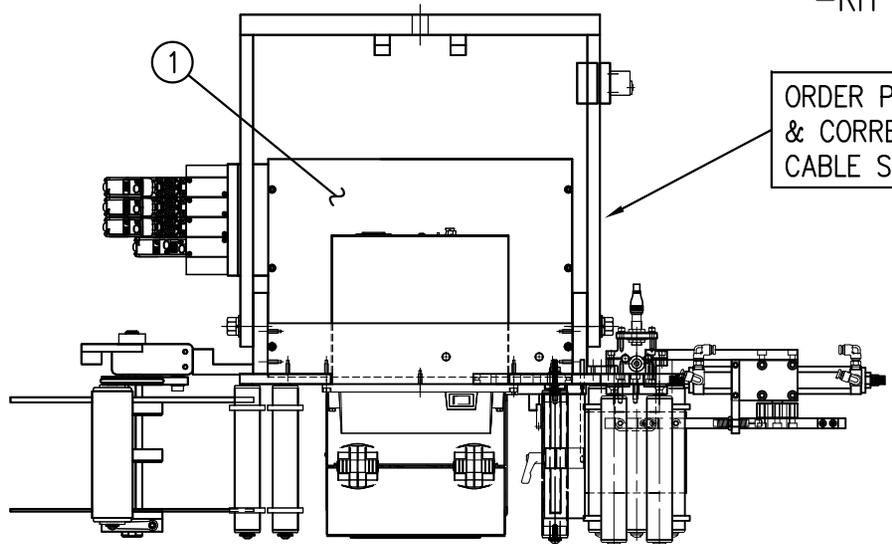
GOOD FOR LABELS UP TO 18" IN FEED LENGTH

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

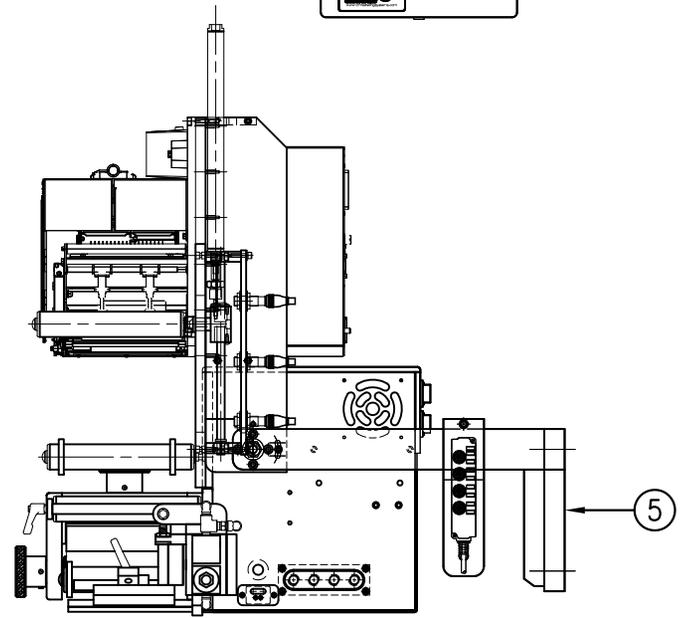
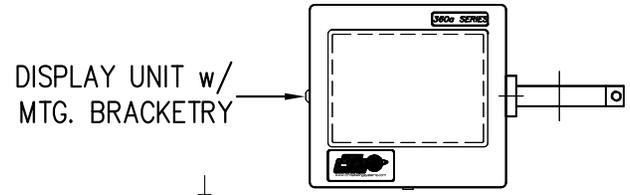
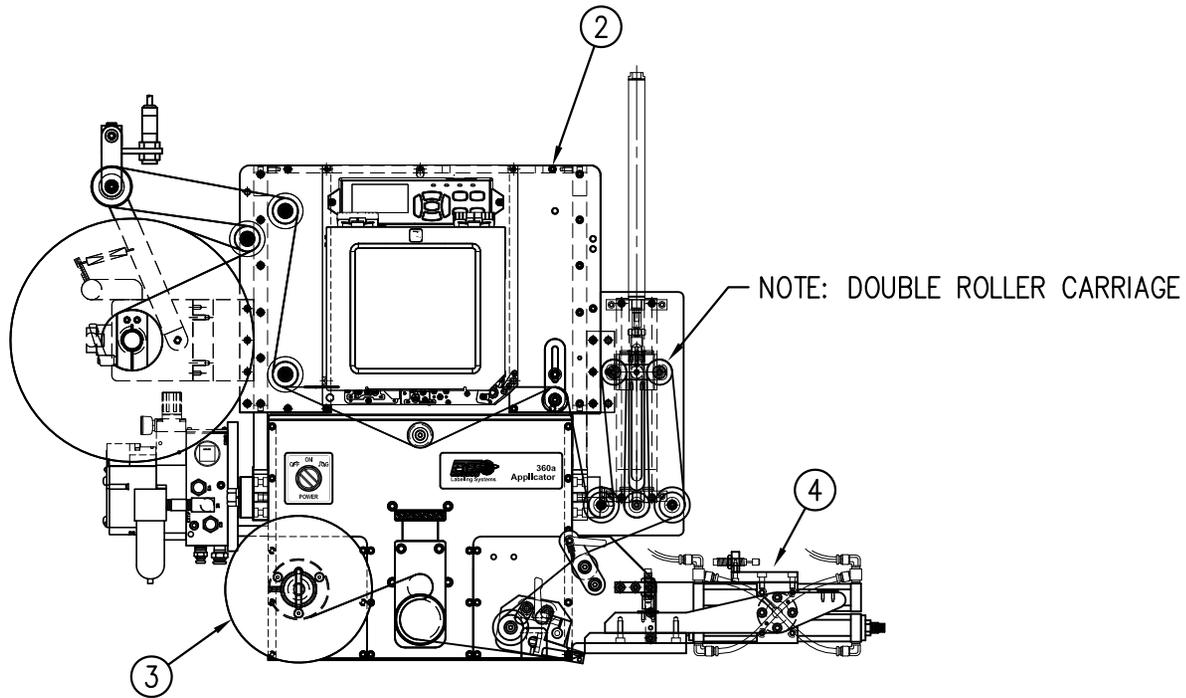
CTM-214A-4146R/L-X-X-X

SWING ARM LENGTH 0, 2 or 4
5" OR 7.5" WIDE
12"Ø OR 16"Ø UNWIND

ORDER PRINT ENGINE
& CORRESPONDING
CABLE SEPARATELY



BILL OF MATERIAL			
CTM-214A-4146R/L-X-X-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	RH/LH; 5/7.5" WIDE 360A CORE UNIT
	-1	WAS-200-0247	REMOVE STANDARD U-ARM WELDMENT
②	1	MOD-200-4144R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4144R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-200-4144R/L-7-12	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4144R/L-7-16	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
③	1	ASS-200-X147	5/7.5" REWIND MANDREL
④	1	MOD-214-X111R/L-X	HI/LO PRESSURE CORNER WRAP MODULE
⑤	1	WAS-200-4247	HEAVY DUTY U-ARM WELDMENT

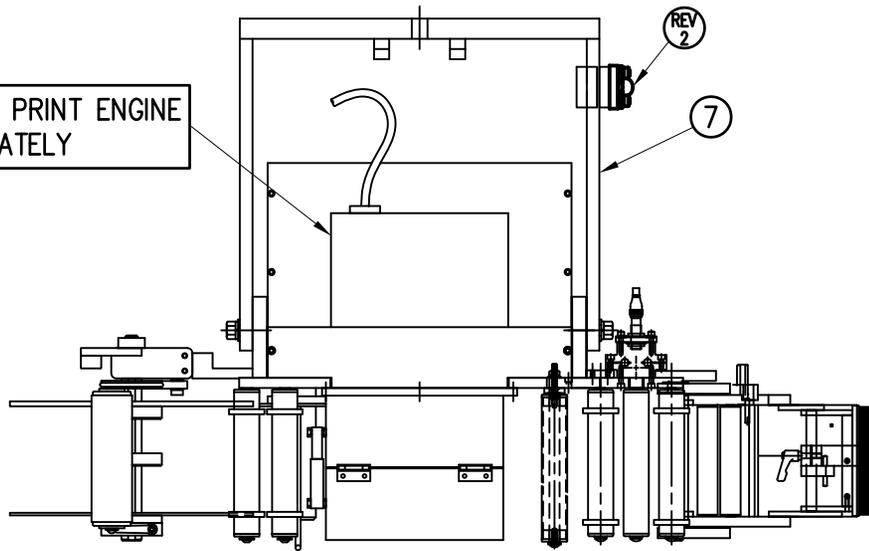


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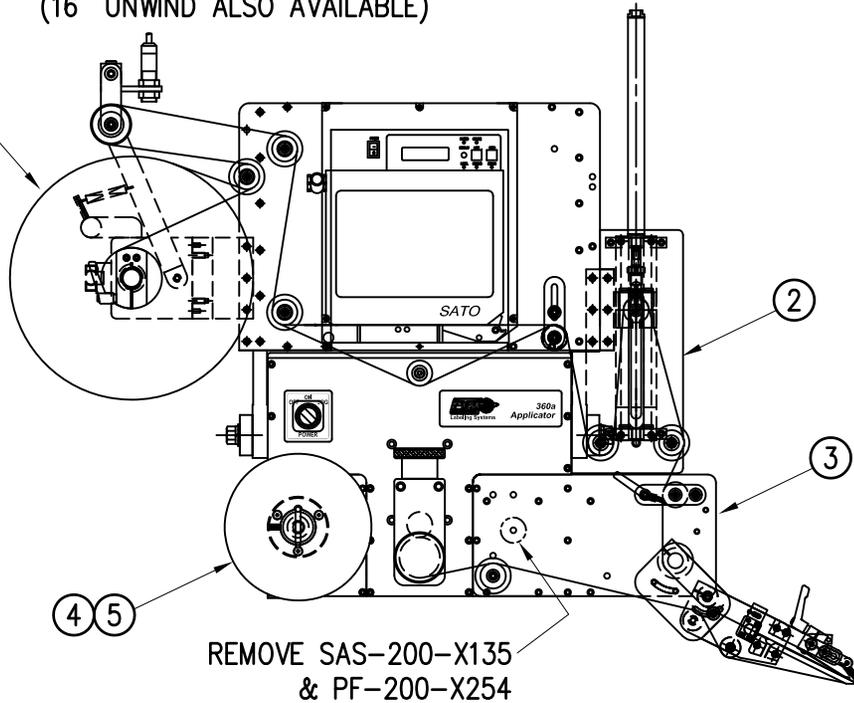
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360a CORNER WRAP APPLICATOR w/INT. P.E. & SHORT LOOSE LOOP w/ DOUBLE CARRIAGE ROLLER	Dept. Code 70
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. BY: xxx	Scale: 1=10 Date: 02/27/2017 DRAWN BY: ES
			F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-214A-4146RL-X-X-X	

GOOD FOR LABELS UP TO 8" IN FEED LENGTH

ORDER PRINT ENGINE SEPARATELY



12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

5" WIDE/12" UNWIND
5" WIDE/16" UNWIND
7.5" WIDE/12" UNWIND
7.5" WIDE/16" UNWIND

CTM-215A-4143R/L-X-XX-X

CTM-215A-4143R/L-5-12X-X
CTM-215A-4143R/L-5-16X-X
CTM-215A-4143R/L-7-12X-X
CTM-215A-4143R/L-7-16X-X

BILL OF MATERIAL

CTM-215A-4143R/L-X-XX-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	RH/LH; 5/7.5" WIDE 360A CORE UNIT
②	1	MOD-200-4143R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4143R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-200-4143R/L-7-12	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
③	1	MOD-200-4143R/L-7-16	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-215-X119R/L	5/7.5" WIDE, 6" EXTENDED SNORKEL FOR MERGE
④	1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT (SHOWN)
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
⑤	1	ASS-200-X147	5/7.5" W. STANDARD MANDREL (SHOWN)
	1	ASS-200-X137	5/7.5" W. FILM REWIND MANDREL
	1	ASS-200-3140-X	5/7.5" W. COLLAPSIBLE MANDREL
⑥	1	ASS-200-0138	DISPLAY UNIT to UPRIGHT MOUNTING BRACKETRY
⑦	1	WAS-200-4247	HEAVY DUTY U-ARM
⑧	1	ASS-200A-0483	ZEBRA/DATAMAX to APPLICATOR CABLE
	1	ASS-200A-0485	SATO -EX to APPLICATOR CABLE

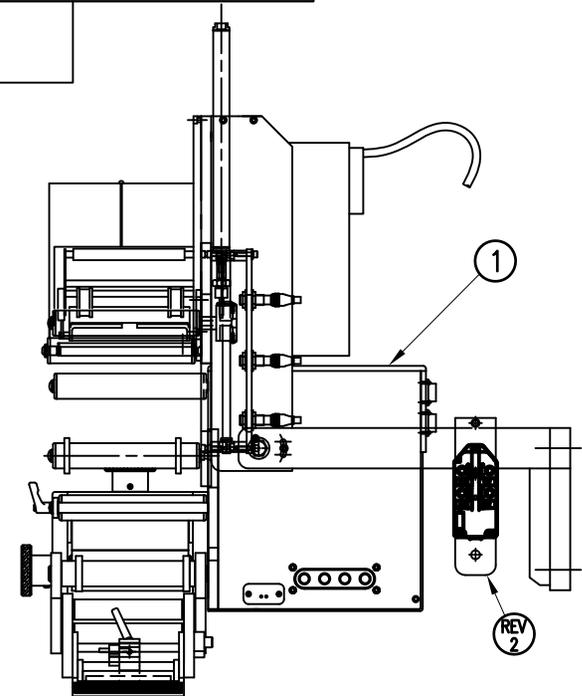
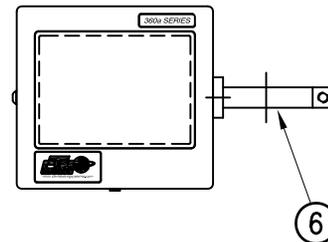
ORDER THE FOLLOWING SEPARATELY:

- 1.) PRINT ENGINE
- 2.) PRODUCT DETECT SENSOR

STANDARD REWIND S
COLLAPSIBLE REWIND C
FILM REWIND F

SATO -EX P.E. S
ZEBRA/DATAMAX P.E. Z

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



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APPLICATOR SERIES: 360
APPLICATOR WIDTH(S): 5"/7.5"
GROUP: INTEGRATED SHORT LOOSE LOOP

TITLE: RH/LH 360A MERGE APPLICATOR w/ INT. P.E. & SHORT LOOSE LOOP

Dept. Code 70

REV. 2
REV. DESCRIPTION
REVISED TO SHOW NEW J-BOX

REV. DATE
07/10/20

REV. BY: BNT
Scale: 1=10
Date: 07/11/16

DRAWN BY: TDR

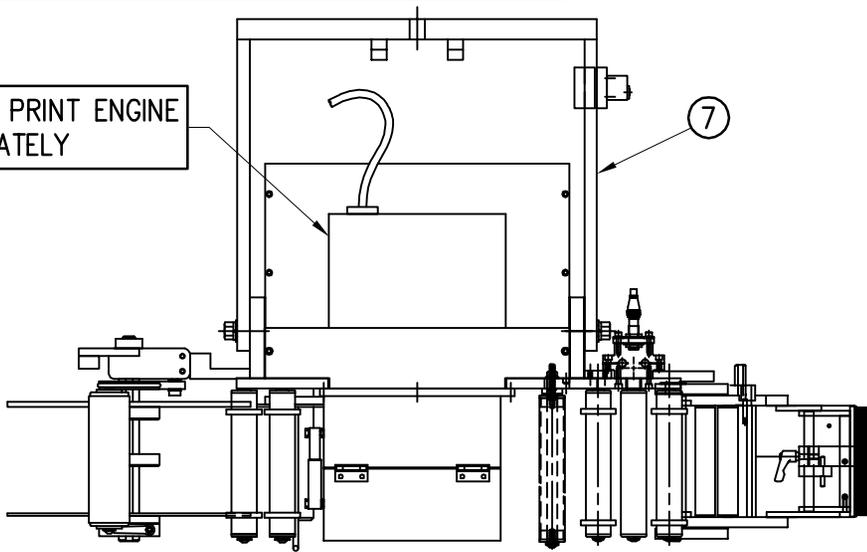
F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-215A-4143RL-X-XX-X

GOOD FOR LABELS UP TO 8" IN FEED LENGTH

RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

CTM-215A-4143R/L-X-XX-X

ORDER PRINT ENGINE SEPARATELY



- 5" WIDE/12" UNWIND CTM-215A-4143R/L-5-12X-X
- 5" WIDE/16" UNWIND CTM-215A-4143R/L-5-16X-X
- 7.5" WIDE/12" UNWIND CTM-215A-4143R/L-7-12X-X
- 7.5" WIDE/16" UNWIND CTM-215A-4143R/L-7-16X-X

BILL OF MATERIAL

CTM-215A-4143R/L-X-XX-X

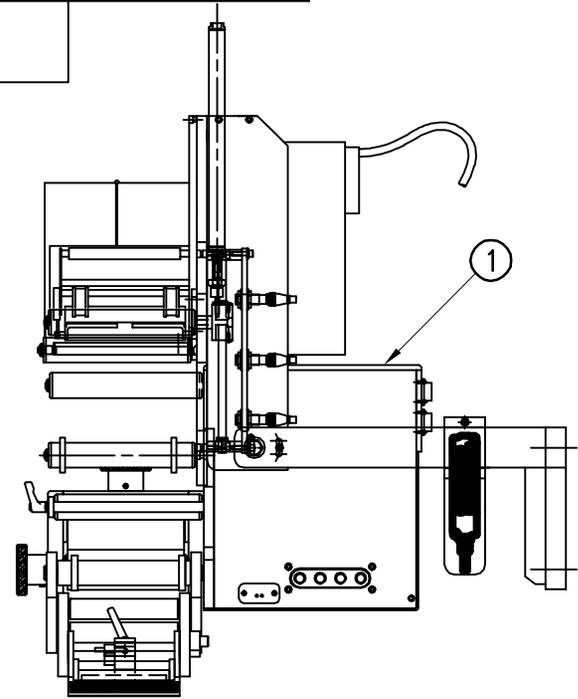
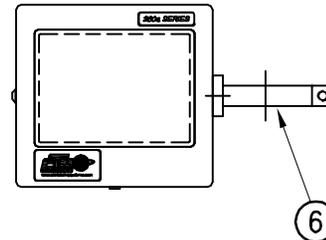
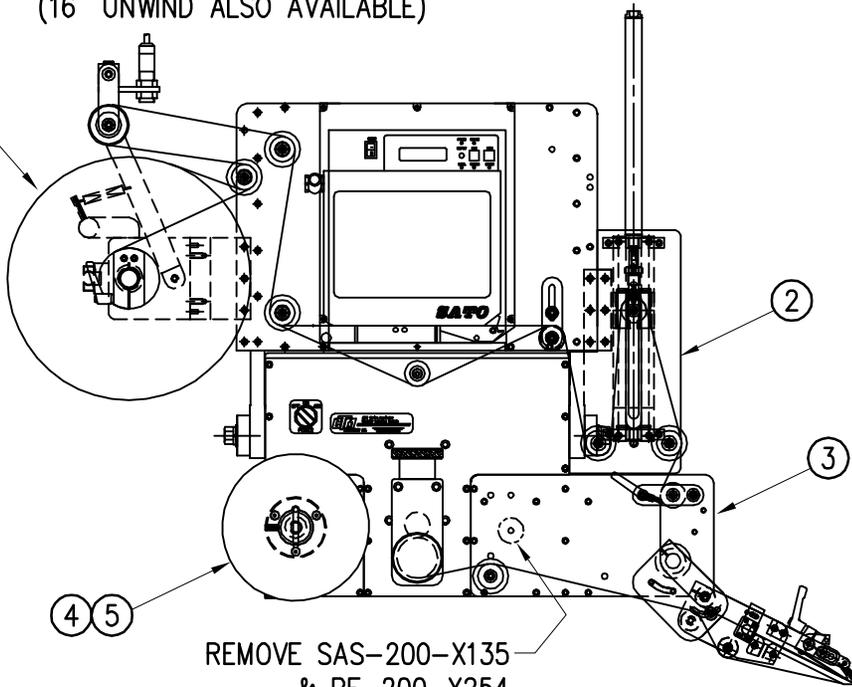
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	RH/LH; 5/7.5" WIDE 360A CORE UNIT
②	1	MOD-200-4143R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4143R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-200-4143R/L-7-12	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
③	1	MOD-200-4143R/L-7-16	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-215-X119R/L	5/7.5" WIDE, 6" EXTENDED SNORKEL FOR MERGE
④	1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT (SHOWN)
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
⑤	1	ASS-200-X147	5/7.5" W. STANDARD MANDREL (SHOWN)
	1	ASS-200-X137	5/7.5" W. FILM REWIND MANDREL
	1	ASS-200-3140-X	5/7.5" W. COLLAPSIBLE MANDREL
⑥	1	ASS-200-0138	DISPLAY UNIT to UPRIGHT MOUNTING BRACKETRY
⑦	1	WAS-200-4247	HEAVY DUTY U-ARM
⑧	1	ASS-200A-0483	ZEBRA/DATAMAX to APPLICATOR CABLE
	1	ASS-200A-0485	SATO -EX to APPLICATOR CABLE

- STANDARD REWIND S
- COLLAPSIBLE REWIND C
- FILM REWIND F
- SATO -EX P.E. S
- ZEBRA/DATAMAX P.E. Z

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

ORDER THE FOLLOWING SEPARATELY:
1.) PRINT ENGINE
2.) PRODUCT DETECT SENSOR

12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360A MERGE APPLICATOR w/ INT. P.E. & SHORT LOOSE LOOP	Dept. Code 70
REV. 1	REV. DESCRIPTION ADDED TABULATION FOR REWIND & PRINT ENGINE	REV. DATE 04/28/17	REV. BY: TK	Scale: 1=10 Date: 07/11/16 DRAWN BY: TDR

F:\Engineering\Standard Parts\Appliator\360a\LOOSE LOOP\CTM-215A-4143RL-X-XX-X

GOOD FOR LABELS UP TO 18" IN FEED LENGTH

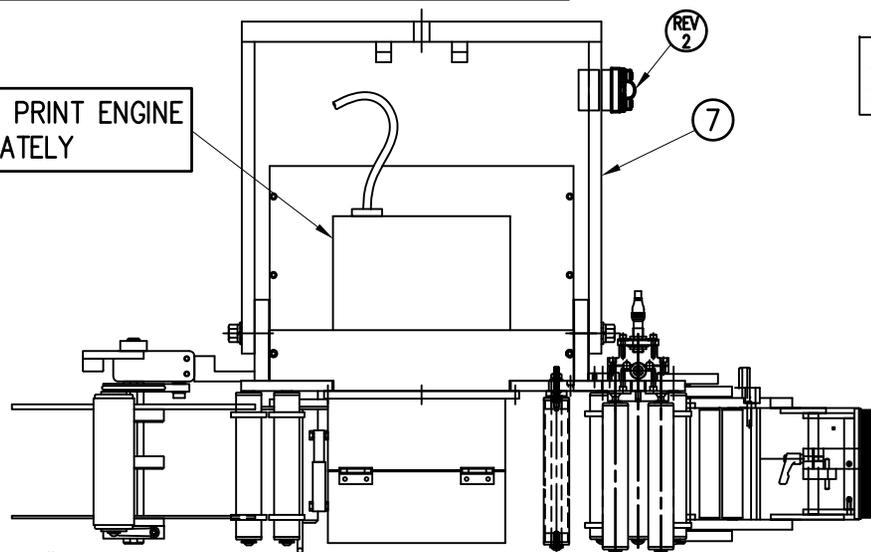
RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

CTM-215A-4144R/L-X-XX-X

ORDER PRINT ENGINE SEPARATELY

ADD U-ARM EXTENDERS FOR REELS UP TO 18" IN FEED LENGTH (MP-200A-0279R & MP-200A-0279L)

- 5" WIDE/12" UNWIND CTM-215A-4144R/L-5-12X-X
- 5" WIDE/16" UNWIND CTM-215A-4144R/L-5-16X-X
- 7.5" WIDE/12" UNWIND CTM-215A-4144R/L-7-12X-X
- 7.5" WIDE/16" UNWIND CTM-215A-4144R/L-7-16X-X

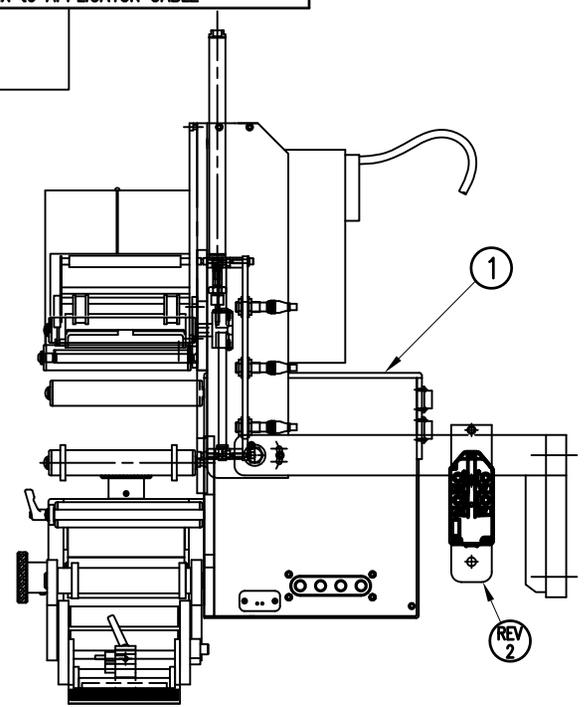
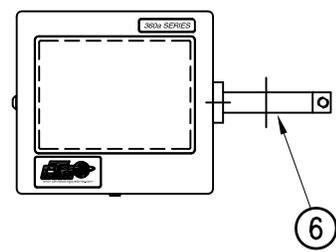
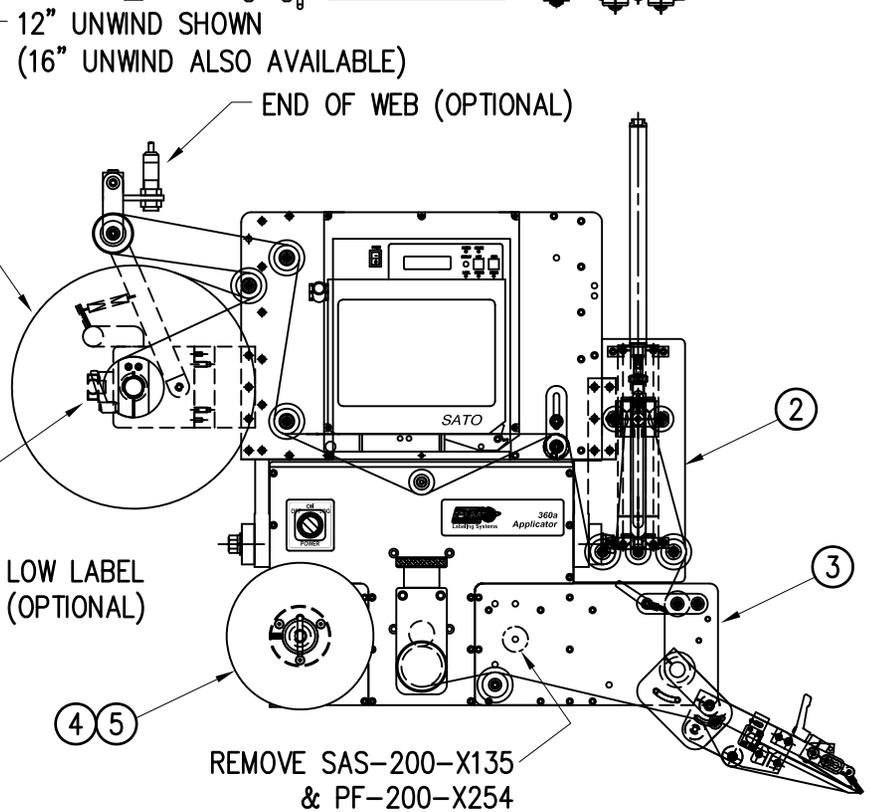


BILL OF MATERIAL			
CTM-215A-4144R/L-X-XX-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	RH/LH; 5/7.5" WIDE 360A CORE UNIT
②	1	MOD-200-4144R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4144R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-200-4144R/L-7-12	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
③	1	MOD-200-4144R/L-7-16	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-215-X119R/L	5/7.5" WIDE, 6" EXTENDED SNORKEL FOR MERGE
④	1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT (SHOWN)
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
⑤	1	ASS-200-X147	5/7.5" W. STANDARD MANDREL (SHOWN)
	1	ASS-200-X137	5/7.5" W. FILM REWIND MANDREL
⑥	1	ASS-200-3140-X	5/7.5" W. COLLAPSIBLE MANDREL
	1	ASS-200-0138	DISPLAY UNIT to UPRIGHT MOUNTING BRACKETRY
⑦	1	WAS-200-4247	HEAVY DUTY U-ARM
⑧	1	ASS-200A-0483	ZEBRA/DATAMAX to APPLICATOR CABLE
	1	ASS-200A-0485	SATO -EX to APPLICATOR CABLE

- STANDARD REWIND S
- COLLAPSIBLE REWIND C
- FILM REWIND F
- SATO -EX P.E. S
- ZEBRA/DATAMAX P.E. Z

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

ORDER THE FOLLOWING SEPARATELY:
1.) PRINT ENGINE
2.) PRODUCT DETECT SENSOR



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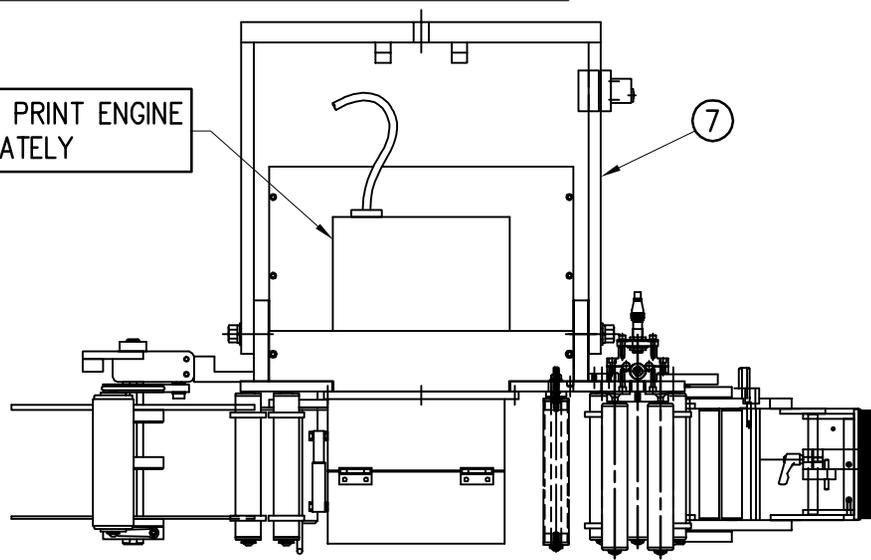
APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360A MERGE APPLICATOR w/ INT. P.E. & SHORT LOOSE LOOP	Dept. Code 70
REV. 2	REV. DESCRIPTION REVISED TO SHOW NEW J-BOX	REV. DATE 07/10/20	REV. BY: BNT	Scale: 1=10
			Date: 07/11/16	DRAWN BY: TDR
				F:\Engineering\Standard Parts\Applicator\360a\LOOSE LOOP\CTM-215A-4144RL-X-XX-X

GOOD FOR LABELS UP TO 18" IN FEED LENGTH

RH & LH ASSEMBLIES AVAILABLE.
RH ASSEMBLY SHOWN.

CTM-215A-4144R/L-X-XX-X

ORDER PRINT ENGINE SEPARATELY



- 5" WIDE/12" UNWIND CTM-215A-4144R/L-5-12X-X
- 5" WIDE/16" UNWIND CTM-215A-4144R/L-5-16X-X
- 7.5" WIDE/12" UNWIND CTM-215A-4144R/L-7-12X-X
- 7.5" WIDE/16" UNWIND CTM-215A-4144R/L-7-16X-X

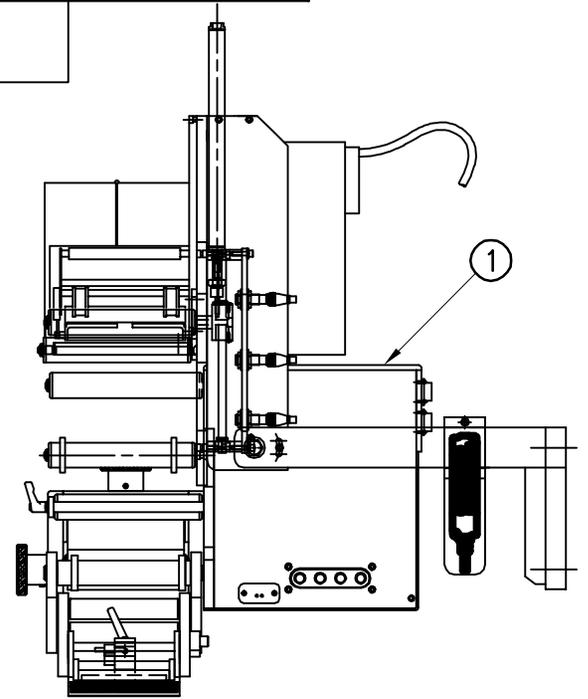
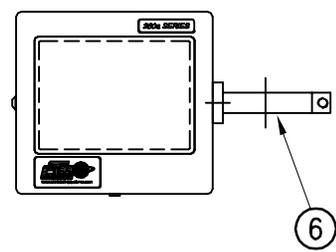
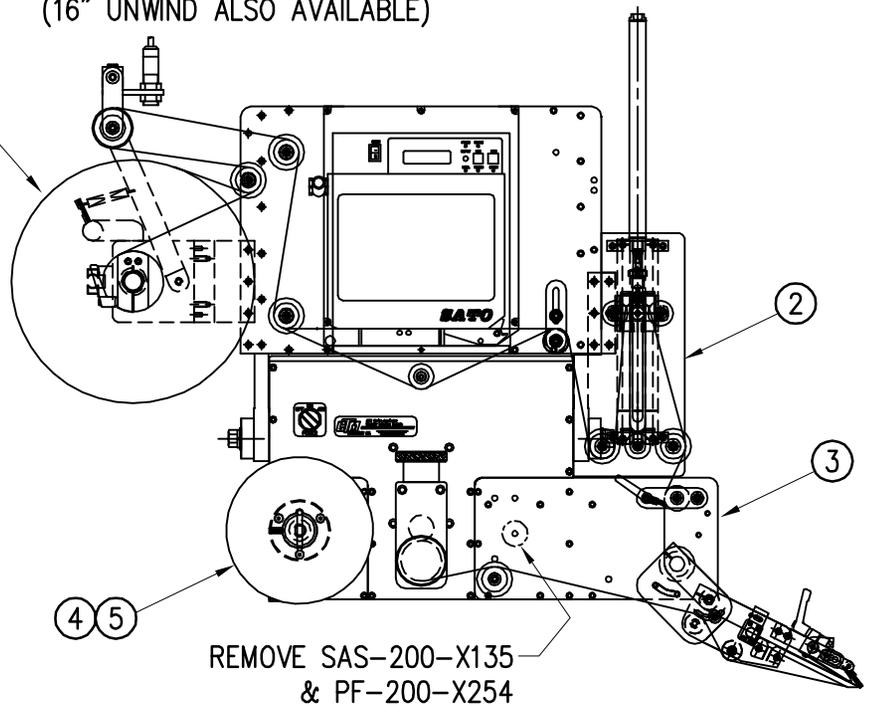
BILL OF MATERIAL			
CTM-215A-4144R/L-X-XX-X			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	CTM-200A-X150R/L	RH/LH; 5/7.5" WIDE 360A CORE UNIT
②	1	MOD-200-4144R/L-5-12	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
	1	MOD-200-4144R/L-5-16	RH/LH, 5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-200-4144R/L-7-12	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 12" UNWIND
③	1	MOD-200-4144R/L-7-16	RH/LH, 7.5" W. LOOSE LOOP w/ INT. P.E. & 16" UNWIND
	1	MOD-215-X119R/L	5/7.5" WIDE, 6" EXTENDED SNORKEL FOR MERGE
④	1	ASS-200-0145R/L	STD REWIND BLOCK & SHAFT (SHOWN)
	1	ASS-200-3167R/L	COLLAPSIBLE REWIND BLOCK & SHAFT
⑤	1	ASS-200-X147	5/7.5" W. STANDARD MANDREL (SHOWN)
	1	ASS-200-X137	5/7.5" W. FILM REWIND MANDREL
	1	ASS-200-3140-X	5/7.5" W. COLLAPSIBLE MANDREL
⑥	1	ASS-200-0138	DISPLAY UNIT to UPRIGHT MOUNTING BRACKETRY
⑦	1	WAS-200-4247	HEAVY DUTY U-ARM
⑧	1	ASS-200A-0483	ZEBRA/DATAMAX to APPLICATOR CABLE
	1	ASS-200A-0485	SATO -EX to APPLICATOR CABLE

- STANDARD REWIND S
- COLLAPSIBLE REWIND C
- FILM REWIND F
- SATO -EX P.E. S
- ZEBRA/DATAMAX P.E. Z

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

ORDER THE FOLLOWING SEPARATELY:
1.) PRINT ENGINE
2.) PRODUCT DETECT SENSOR

12" UNWIND SHOWN
(16" UNWIND ALSO AVAILABLE)



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"	GROUP: INTEGRATED SHORT LOOSE LOOP	TITLE: RH/LH 360A MERGE APPLICATOR w/ INT. P.E. & SHORT LOOSE LOOP	Dept. Code 70
REV. 1	REV. DESCRIPTION ADDED TABULATION FOR REWIND & PRINT ENGINE	REV. DATE 04/28/17	REV. BY: TK	Scale: 1=10 Date: 07/11/16 DRAWN BY: TDR

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