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

360a LABEL APPLICATOR MAINTENANCE & SERVICE MANUAL

REVISION 360a-2c.1.0.031

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INTRODUCTION

The CTM Integration 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 essentially a self-contained module that may be mounted in almost any position to apply labels to the top, bottom, or sides of packages as they pass by on a production line.

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

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

You can also change the configuration (right-hand or left-hand) by simply moving the applicator nose from one side of the machine to the other. All the parts are interchangeable*. Everything you need is already included with each applicator nose to make the change using your existing module.
*** 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 dependant on product handling but the label stop at the peel edge will be within +/- 1/32 inch.

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

ELECTRICAL SUPPLY: 108 - 132 Volts, 5 Amps, 50 - 60 Hertz, Single-Phase
(There is a 90-240 volt drive available)

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

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

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

NOTE: THE 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.

READ THE INSTRUCTIONS CAREFULLY AND COMPLETELY. This manual includes all of the information needed to setup the applicator under normal operating conditions. The instructions include important safety precautions that must not be ignored.

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

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

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

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

DEFINITION OF MACHINE TERMS

AIR BLAST JETS:

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

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

AIR ASSIST TUBE:

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

APPLICATOR BLOW BOX NOSE:

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

APPLICATOR MERGE NOSE:

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

APPLICATOR TAMP NOSE:

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

BLOW BOX / VACUUM GRID:

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

DANCER ARM:

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

DRIVE ROLLER:

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

LABEL MANIFOLD:

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

LABEL PAD:

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

LABEL TENSION BRUSH ASSEMBLY:

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

NIP ROLLER:

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

PEEL EDGE:

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

PEEL EDGE LABEL TENSION SPRING:

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

REWIND MANDREL / SLIP CLUTCH:

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

SINKING OUTPUT CONFIGURATION:

The 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. Io(max) = 80 mA

SOURCING INPUT CONFIGURATION:

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

UNWIND ASSEMBLY:

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

UNWIND ROLL MANDREL:

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

VALVE BANK:

The valve bank will consist of single valve for a merge applicator with an imprinter, two valves for a blow box applicator, 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 plugs into the valve connector on the rear panel.

WEB PATH:

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

360a TOUCH SCREEN DISPLAY

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

TYPES OF KEYS


or


are “go to” keys and will move the operator to another screen.


This key is for setting something like an applicator type, jog or used as an alarm reset key. Color of keys will vary depending on application.

This key is for bringing the applicator on and offline. When offline, it will be as shown to the left but when the applicator is online, it will be green with red letters.

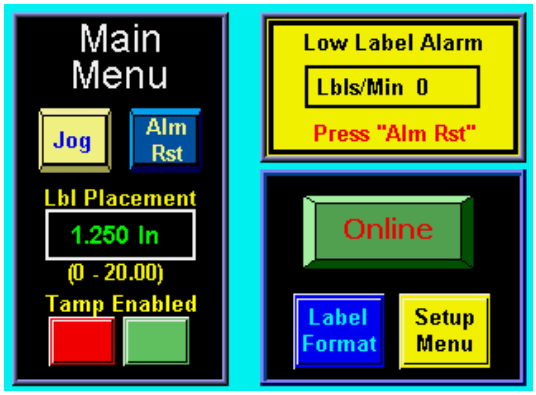

This block of keys usually turns something on or off. If the option is on, the lamp to the left of the keys will be green; otherwise it will be red.

This key will take you to the main menu even if you are in a setup screen.

ALARMS

There are two types of alarms generated in the 360a applicator:

Warning Alarm
Critical Alarm



Warning Alarm Status Box

Critical Alarm Screen

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

Critical alarms will stop the applicator (take it offline) and turn a red light on in the light stack (if provided). The alarm screen will cover the current screen explaining the alarm type. An alarm reset button appears at the bottom of the page to clear the alarm.

Warning Alarms

The following are 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 (upper 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 program 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.

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 centerline distance. If the application permits, increase the label C-C distance to correct the problem. In non-merge applicators try increasing the Web Speed value or decreasing the conveyor speed value. In tamp applicators reduce the tamp extend/retract times to the minimum. In air-blow applicators reduce the air blast time to the minimum and increase the pre-blast time if possible. In merge applications contact the factory concerning appropriate accel and decel values for your application.

DAT Label Placements Are Too Close – If the applicator type is Dual Action Tamp and the second label placement is low enough that the second label is not out on 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.

Conveyor Speed, Profile or OverSpeed % Too High Compared To MaxSpeed - This alarm occurs on Merge encoder-based applicators when the conveyor speed or the product of conveyor speed times the profile or overspeed % yields a speed greater than MaxSpeed. If possible, decrease the Conveyor speed or increase the applicator MaxSpeed value. In OverSpeed or Profiling applications try decreasing the Pre-Apply Speed % or WebRatio % values respectively.

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.

Profile or OverSpeed % Too High Compared To MaxSpeed – This alarm occurs in merge time-based applications when the Profiling or OverSpeed % times the web speed value yields a speed greater than MaxSpeed. If possible, decrease the Conveyor speed or increase the applicator MaxSpeed value. If possible, decrease the overspeed Pre-Apply Speed % or the profiling WebRatio % values.

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. In merge applications no label will be dispensed. Air-blow and tamp applicators wait for imprint dwell timeout before dispensing a label to the grid or pad.

Critical Alarms

The following are the critical alarms monitored by the applicator:

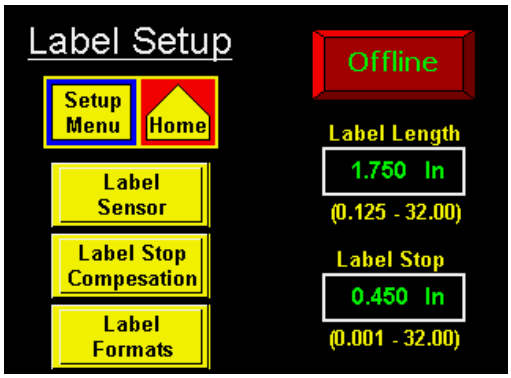
End Of Web – This alarm occurs when the end of web sensor detects a break in the web.

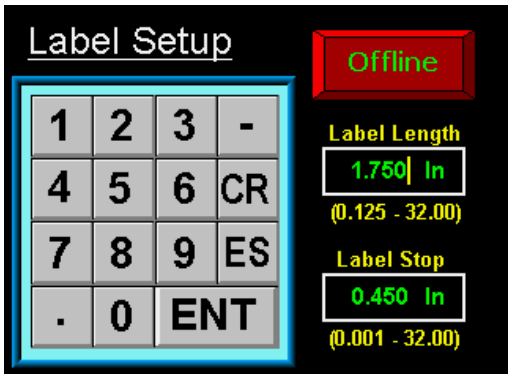
No Labels Found – This alarm occurs if the number of consecutive missing labels on the liner exceeds the missing label count value. If a No Labels Found alarm occurs when labels are present on the liner, re-teach the label sensor sensitivity settings.

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.

CHANGING VALUES

Values that may be changed are shown in boxes displaying the current value. In the example below, label length is shown to have a value of 1.75". To change this value, the operator will touch the screen in the label length field and a keypad will appear to the side of the variable being changed. The figure to the right shows what the display should look like after touching the variable field. You can see a cursor has moved over the rightmost digit. Also the numeric keypad has appeared to the left of the variable. As you touch numbers on the keypad, the variable is zeroed and the new value is input to the variable box. Pressing "ENT" will finish the process. Pressing "ES" will allow you to escape without changing the value and "CR" will clear the value you're changing. **Note: In most cases, an out-of-range value will not produce a warning message but the variable will return to the original value after pressing "ENT".**





PASSWORD

The setup area of the display is password protected. The standard 360a password is "1800". When you get to a password-protected area, a screen similar to the one to the left will appear.

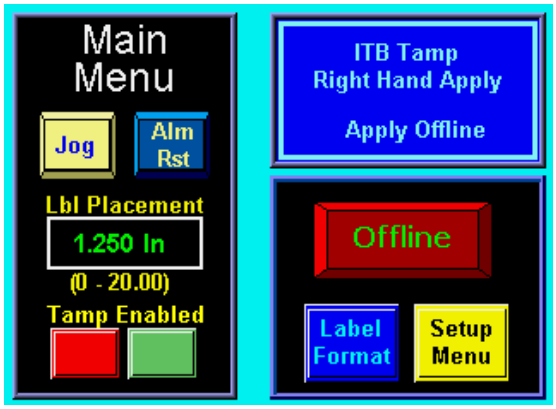
This screen notifies the operator that the area is password protected. Here the operator can chose to go back to the main menu or continue with password entry by touching within the box to the left to invoke the keypad

When you touch a number on the keypad, it will highlight. This is the only indication that a key was pressed since the password is not displayed. If you know you've entered a wrong number, press "C" to clear what you have and start again. "ENT" finishes the process.

If the wrong password was entered, the screen above appears. If the operator wants to try again, press the "Try Again" key. If you do not know the password, press the other key to go to the main menu.

MAIN MENU

The main menu is divided into three sections. The upper right corner of the display is a status window. The purpose of this box is to inform the operator of the status of the applicator. The display shown to the left appears immediately after going offline. If the applicator is online with no alarms, the status window will have a green background with the label rate displayed. If a warning alarm occurs, the background changes color and a message appears indicating the nature of the alarm. Specific warning alarms were discussed previously.

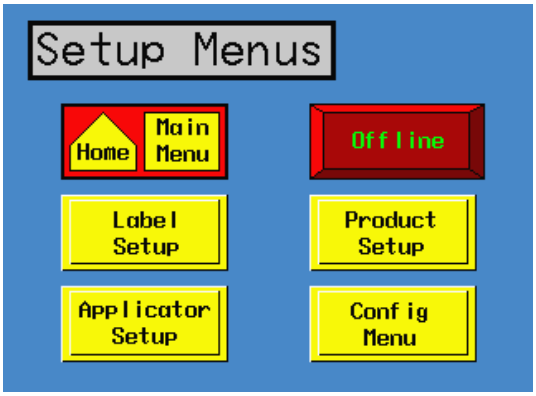


The left side of the screen will change based on applicator type. There will always be jog and alarm reset keys and access to label placement.

The lower right corner has buttons to place the applicator on and offline and keys to take you to the formats and setup menus. Placing the applicator online applies power to the drive motor and arms the applicator for labeling. The format key gives access to the operator to load a saved format. The operator cannot change or erase formats from here. The setup key takes the operator to a password-protected area to make changes to the operation of the applicator.

The display is equipped with a backlight saver function that automatically turns off the backlight after 60 minutes of inactivity. Pressing any part of the display will bring the display backlight on. Also, the applicator will initiate a backlight wake-up in response to any critical alarm condition. The later feature insures that the operator has a visual indication of a critical alarm condition in systems without a light-stack assembly.

SETUP MENUS

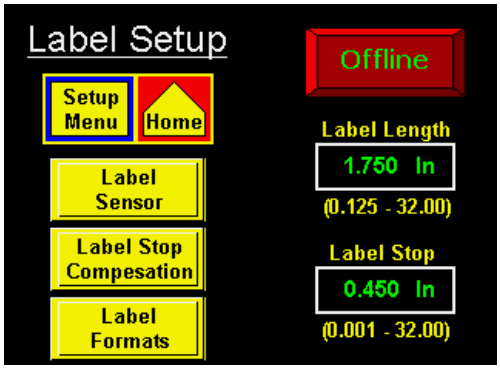


Because the setup menus are password-protected, pressing the setup key at the main menu will cause a password screen to appear. Entering the correct password will cause the setup menu to come up. From here the operator can go to the different setup sections. The operator can also bring the applicator online while he changes the setups. Once everything is set and he goes to exit, the applicator will save the new settings and go offline. The online key in the setup area is only for setting the applicator up.

Note: You must be offline to enter the configuration menu.

LABEL SETUP

The label setup menu is accessed from the setup menu by pressing the Label Setup key. The label setup section gives the operator access to variables on the applicator that pertain to the label.



The following items may be changed in this section:

- Label Stop
- Label Length
- Label Sensor Setup
- Label Stop Compensation
- Label Formats

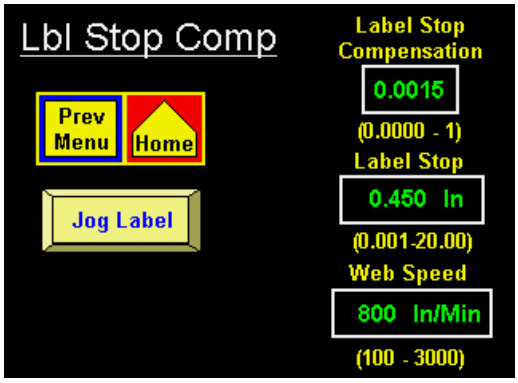
Label Length -The label length is defined as the feed length of the label plus the width of the gap between labels. Stated another way, it is the distance from the leading edge of one label to the leading edge of the next label. Since each application cycle moves the label length distance, it is important to enter the exact label length value. Allowed values are between 0.125-20".

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. Allowed values are between 0.03" and (label length – 0.06"). The label stop value may be changed while the applicator is running.

Label Stop Comp –Although very rare, we have found the label stop would vary with web speed when running certain types of labels. This seems to do more with narrow labels and the materials used to convert them. Label compensation is normally fixed but when label stop is moving with web speed, it was found making changes to it can make the label stop position better. Label stop compensation is a number that shortens the label stop value the higher the web speed. This corrects the problem of the label position creeping out the faster the web speed.

Note: This option is only for encoder-based merge applicators

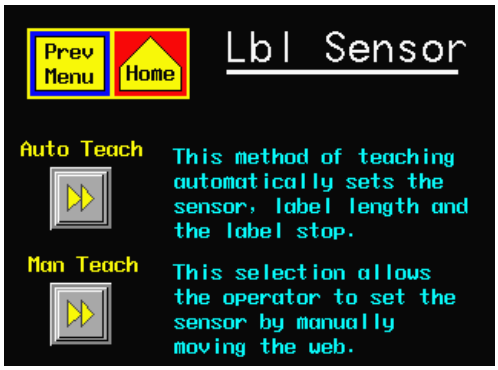
Label Stop Comp Setup
Before setting this up, make sure the label sensor, label length, label stop and max speed have all been setup. It is also important the encoder variables are correctly setup.

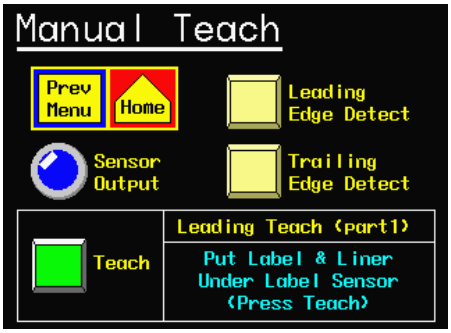


The default value for label stop comp is 0.0015. Set the web speed to the slowest speed the product will be traveling (let's say 500 in/min). Use the jog key on the display or the jog switch on the applicator to dispense a couple of labels. Take note of where the label stops. Now change the web speed 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 the compensation value will be less than 0.0015. If you can change web speeds and the label stop holds pretty well, you are finished. If needed, you can make adjustments to the label stop position so 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 Sensor -Pressing this key will bring up the label sensor menu. This is where the sensitivity of the label sensor is setup. The operator will have two choices:

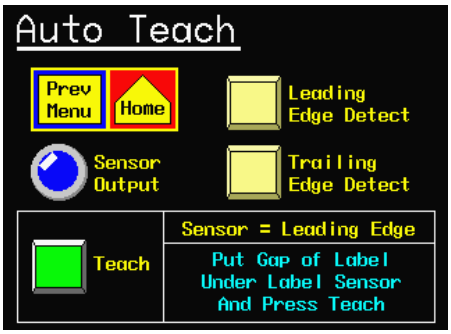
Auto Teach
Manual Teach





Manual Teach
In the manual teach mode, the operator will first choose whether they want to trigger on the leading or trailing edge of the label. The only reason for changing edges occurs when the label stop is either too small or too close to the label length. After selecting an edge detection mode, the display will provide operator instructions at the bottom of the screen. For example, if leading edge is selected, the display will prompt the user to move the label and liner under the label sensor and press the teach button on the screen. After a couple of seconds the user is prompted to move the liner under the sensor. Move the label stock by turning the drive roller to place the label gap under the sensor or remove a label. Again the operator will press the teach key. After a couple of seconds the process is finished. The operator can return to the label setup menu by pressing the "Prev Menu" key.

Auto Teach



The auto-teach function not only sets the label sensor sensitivity but also calculates the label length and label stop values. When the auto-teach function is selected, the operator is prompted to move the label gap under the sensor. Pressing the teach key causes the applicator to dispense 10 inches of labels while setting the label sensor sensitivity. A Bypass key is provided to skip the sensitivity setup for instances where the sensitivity is known to be correct or when a clear label sensor is installed. Following the sensitivity setup, the operator is prompted to move the label to the label stop position and press the teach key. Three labels are dispensed while calculating the label length and label stop values. If the multi-panel option was on, an extra screen appears instructing the operator to move a label to the peel edge to allow the controller to calculate the short feed distance. This will be discussed in more detail in the Applicator Setup section. **NOTE: The label sensor output lamp will be a light blue when the sensor is on. If the sensor is set to "Leading", the light will be on when the label is under the sensor. If "Trailing", the light will be on when the gap is under the sensor.**

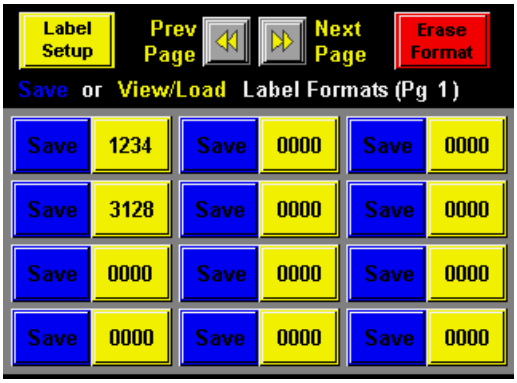
Label Formats

This section allows the operator to save and load configuration setups for different products and labels. This is useful if a customer is running several different products or labels over and over.
Note: The label format key at the main menu only allows the operator to only load formats.

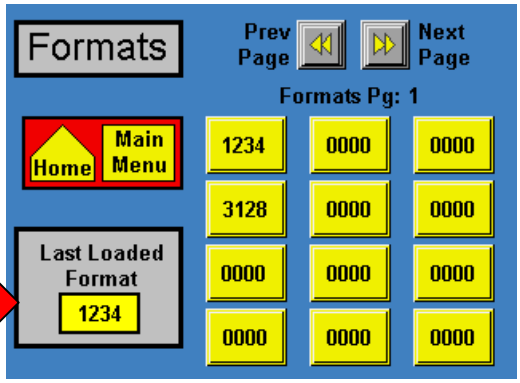
A format saves the following parameters:

Label Placement	Encoder Option
Label Length	Pulse Length
Label Stop	Compensation
Detector Lockout	Air Blast Time
Web Speed	Extended Air Assist
Slew Speed	Tamp Extend
Max Speed	Tamp Retract
Accel	Pre-Dispense
Decel	Options and Variables

Consult factory for a complete list of parameters saved.



Main Format Screen

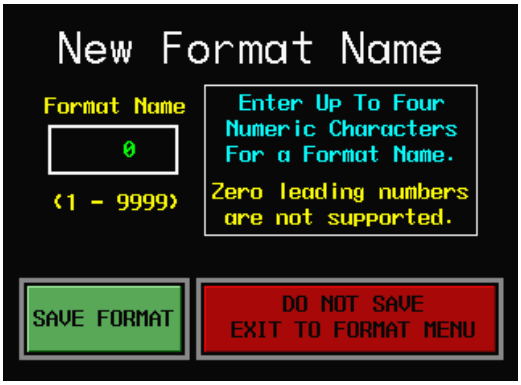


This screen show the last format loaded. If no formats had been loaded, the value in the box would be "0000".

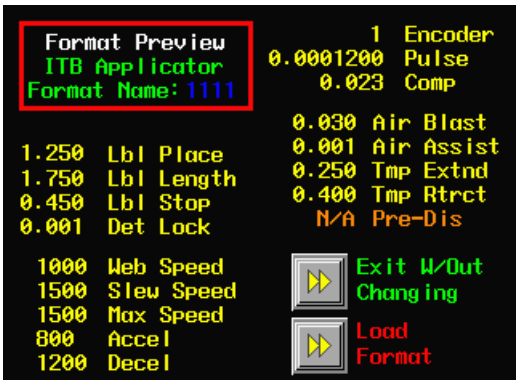
Main Menu Format Screen

Saving a Format

If the current setup in the applicator is performing correctly and you want to save it, press "Label Formats" in the Label Setup menu. When a "Save" key is pressed, the applicator will check to see if a format already exists in the location selected. If it does, the operator will be prompted whether or not to overwrite its contents with the new information. If the name is "0000", the operator will be asked to enter up to four digits for the format name. Pressing the green Save Format key, saves the format to the name shown in the Format Name box provided the name is not already used for another format. If it is, the system prompts the user to select a different name. Pressing the red exit key on the screen allows the operator to exit without saving the format.



Viewing/Loading a Format



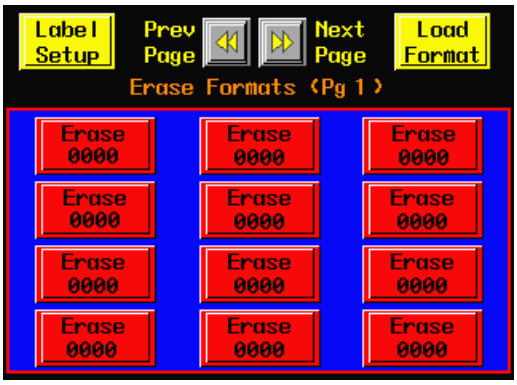
When the operator wants to view/load a format file, press the yellow portion of the key associated with the desired format name. If the number is "0000", no format was saved in that location. Selecting a "0000" format causes a screen to appear with a "No File Found" message.

Pressing the view/load key will not immediately load the format but will allow the operator to view the values within that format. After reviewing the values, the operator may press "Load Format" to load the format. If the wrong format was selected, press the "Exit W/Out Changing" key.

Deleting a Format

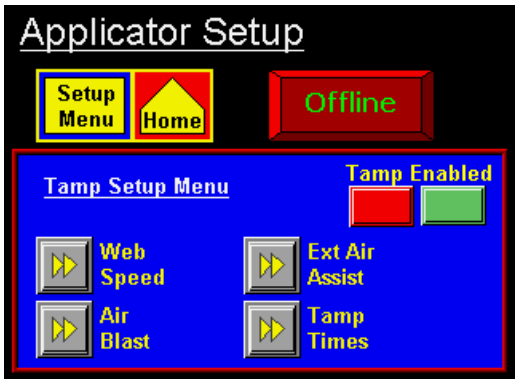
When the operator wants to delete a format that currently exists, press the Erase Format key in the upper right hand corner of the display. The screen to the right will appear. Pressing any of the boxes with a name will cause that format to be erased.

Note: There is no second step to this operation. Once you press the format box, the format will be erased.



APPLICATOR SETUP

The applicator setup menu is accessed from the setup menu by pressing the “Applicator Setup” key. The screen is split into upper and lower sections. The upper part does not change and allows the operator to return to the main or setup menus and place the applicator on or offline. The lower section of the screen changes based on the applicator type selected.



Depending on the applicator type, the operator has access to the following variables:
Tamp/Swing Extend and Retract Times
Air Blast Time
Extended Air Assist Time
Web Speed
Pre-Dispense
Label Profile Configuration
Multi-Panel Option
Over Speed

The following serves as an explanation for each section.

Air Blast -The air blast time is the interval of time that the air blast valve is turned on. Allowed values are .005 - 1 second.

Tamp Extend -The tamp extend time is the interval of time allotted for the slide to extend. After the timer has timed out, the air blast will occur and the tamp slide will return home. To keep labeling speeds up, this value should be as low as possible. Allowed values are between .01 - 5 sec.

Tamp Retract -The tamp retract time is the interval of time allotted for the tamp slide to return home before feeding another label. If this value is too small, a label will feed into the pad or manifold. Allowed values are between .01 - 5 seconds. **Note: In a tamp applicator, the tamp slide action may be disabled or enabled by pressing the “Tamp Enabled/Disabled” box.**

Extended Air Assist -The extended air assist time is the interval of time after the label feed until the air assist is turned off. It is used in blow box and tamp applicators to help hold the label in place on the vacuum pad prior to being blown onto the product. Allowed values are between .000 - 1 sec.

Web Speed -The “Web Speed” key allows the operator to enter the applicator web speed value. Allowed values are between 100 and 3000 ”/min with the upper limit depending on the Max Speed setting in the configuration menu. The specific limits are shown above the current web speed value. The web speed value may be changed while the applicator is running.

APPLICATOR SETUP (cont'd)

Pre-Dispense –This is the amount of time before the air blast turns-off that the applicator begins the label dispense. **This option applies only to air blow machines** and will speed-up the application rate. If the value is too high, the applicator will start dispensing a label into the air blast stream causing the label to fall off the pad. Ideally, the pre-dispense time allows the applicator to get past the label accel curve and place the label at the edge of the air stream when the air blast valve turns off.

Over Speed – The over-speed option allows a merge applicator to get up to web speed faster by dispensing the "Pre-Apply Feed" distance at the (Pre-Apply Speed % x Web Speed). In multi-label mode, this will help place the labels closer together. **Note: This option is only for a merge applicator.**

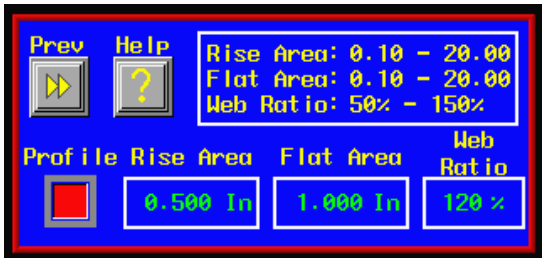
(Over Speed screen)

(Over Speed Help screen)

Note: The help screen will note options disabled when this option is turned on.

Label Profile -Profiling is a merge only option used to aide in labeling products that have a concave or convex surface. If the surface of the product is convex and the web ratio is less than 100%, the labeler will dispense a label at web speed during the "Rise Area" distance. After the rise area distance, the web speed changes to (web speed) x (web ratio) during the "flat area" distance. After traveling the combined rise plus flat distances, the labeler returns to web speed for the remainder of the move. The reason for this action is that convex products start out farther away from the peel edge than it will be by mid-product. The label is dispensed at normal speed at the beginning of the product. As the product surface moves closer, the label must slow down so that the labels do not wrinkle. As the product surface moves away, the label speeds-up. On concave products the label is dispensed at web speed initially. As the surface of the product moves away, the label is dispensed faster to force the label into the product (web ratio>100%). The label dispense speed is slowed as the product surface moves closer to the peel edge.

NOTE: 1) Label profiling is a function of the merge applicator only.
2) Label profiling is enabled when the "web ratio" is set to something different than "100%".
3) Max. speed for the labeler is setup in the configuration menu and will range from 100 to 3000 in/min. If the machine exceeds the max speed *"Conveyor Speed, Profile or OverSpeed % Too High Compared To MaxSpeed"* warning alarm will occur. The machine will not exceed this speed even if the web ratio is set to a higher number.



(Profile Screen)

(Profile Help Screen)

Note: The help screen will note options that are incompatible with the Profiling option.

APPLICATOR SETUP (cont'd)

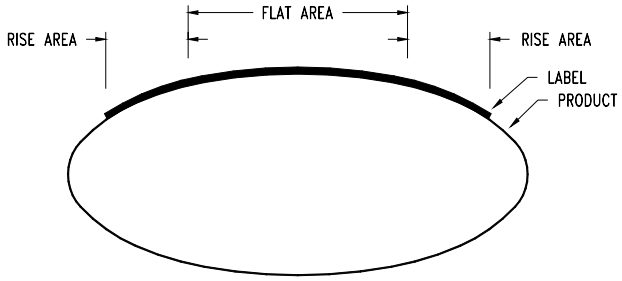
Profile Variables
Rise Area -This is the distance the label travels before changing to the mid-product labeling speed. Enter a value between 0.1 and 20. Applicator will be running at web speed during this distance.

Flat Area -This is the distance the label travels while at the mid-product labeling speed. Enter a value between .1 and 20. Applicator will be running at a percentage (web ratio) of web speed during this distance.

WebRatio -The web ratio is a scaling percentage applied to the web speed or conveyor speed value to either slow-down or speed-up the applicator during the profile flat area. This number will vary depending on product shape and is usually determined by trial and error. Enter a value between 50% and 150%.

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

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



2. Use these numbers when inputting values to the display.

3. When using this type of product, web ratio is set less than 100%. This will slow web speed during the flat area.

PROFILING SUMMARY

Condition	Product Shape
WEB RATIO < 100	Convex
WEB RATIO = 100	Flat Surface
WEB RATIO > 100	Concave

Web Ratio Setting (%)	Speed during 0" to rise distance	Speed during rise to flat distance	Speed during flat to label length distance
< 100	web speed	(web speed) (web ratio)	web speed
= 100	web speed	web speed	web speed
> 100	web speed	(web speed) (web ratio)	web speed

APPLICATOR SETUP (cont'd)

Rise Area And Flat Area Final Adjustment

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

1. With the applicator online, send several products down the conveyor and observe the labels that are applied.

2. If the leading edges of the labels were all applied at the same position on the products, go on to step #3.

   If the leading edges of the labels were placed at various positions on the products, the Rise Area Length is too short.

   Slightly increase the Rise Area Length and run some more products. Repeat until the leading edge label placement is consistent.

3. If the leading edges of the label were applied at the required position on the product, go on to step #4.

   If the leading edge of the label is applied at the incorrect position, adjust the "LABEL PLACEMENT", or re-position the product detector. Run some more products. Repeat until the leading edge of the label is applied at the required position on the product.

4. If there are no wrinkles or bubbles in the first half of the applied labels, go on to step #5.

   If a wrinkle or bubbles appear from the top to the bottom of the first half of the label, the rise area is too long.

   Slightly decrease the rise area and run some more products. Repeat until the wrinkle in the first half of the label is removed.

5. If there is no wrinkle in the center of the label, go on to step #7.

   If a wrinkle appears from the top to the bottom at the center of the label, either the Web Ratio is too high, or the Flat Area is too short.

   The Web Ratio will be adjusted first. Before adjusting, note the Web Ratio setting. Slightly decrease the Web Ratio and run some more products. Repeat until the wrinkle is removed. Go on to step #7.

6. Increase the Flat Area slightly and run some more products. Repeat until the wrinkle is removed.

7. If the labels are applied wrinkle free from lead edge to trail edge, go on to step #8.

   If small horizontal wrinkles appear on the trailing edge on the label, the Flat Area is too long.

   Slightly decrease the Flat Area and run some more products. Repeat until wrinkles are eliminated.

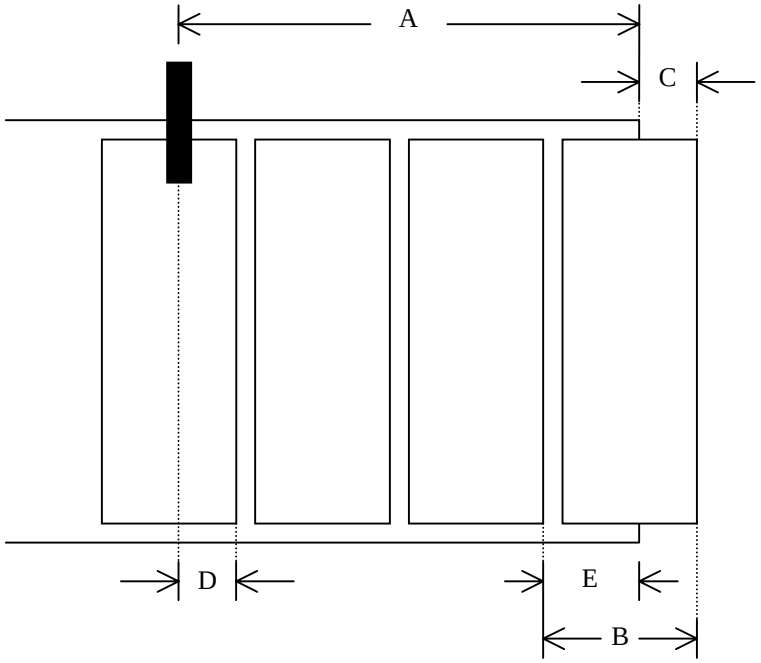
8. When the Web Ratio, Rise Area and the Flat Area are established, the setup is complete.

APPLICATOR SETUP (cont'd)

Multi-Panel Apply

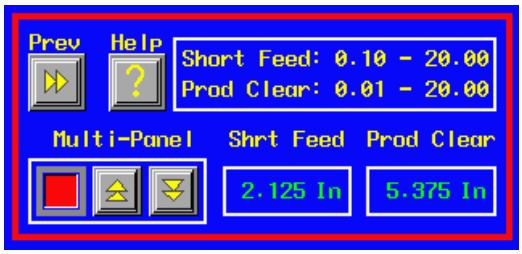
The Multi-Panel Apply option is used to merge a label onto two or three panels of a product. An example might include the leading, top, and bottom panels of a clamshell container. The applicator is initially setup so that the label is flagged out in front of the product but is still supported on the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

A: label sensor to peel edge distance
B: label length
C: label flag distance
D': label stop distance with C = 0 (not shown)
D: label stop distance
E: short feed distance



When the Multi-Panel option is turned on, the user is prompted to go to the Label Setup menu and perform a label sensor Auto Teach operation. The **Auto Teach** feature will calculate all of the dimensions shown above if the option is enabled prior to running auto teach. The operator may override these settings by measuring values B through E above and entering them via the display. **Note: Since the Multi-Panel Apply option is distance based, the encoder option must be purchased.**

APPLICATOR SETUP (cont'd)



(Multi-Panel Screen)

(Multi-Panel Help Screen)

Note: The help screen will note options disabled when this option is turned on.

Configuring Multi-Panel Apply With Auto Setup

1. Make sure the applicator is powered up and offline.
2. Perform the encoder setup procedure outlined in the Product Setup section.
3. Press "APPLICATOR SETUP" and select "MULTI-PANEL"
4. Toggle the option on.
5. Enter the distance after the label is dispensed to when the product clears the peel edge to the Product Clearance box. The distance should be approximately product length.
6. Go back to the main menu and press "LABEL SETUP" then "LABEL SENSOR"
7. Select "AUTO SETUP" and follow the screen prompts (see: AUTO TEACH on page 3-6).

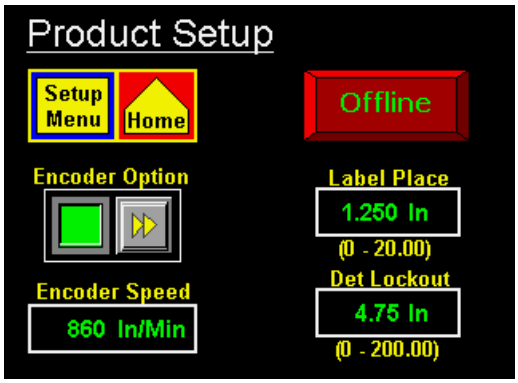
Configuring Multi-Panel Manually

1. Make sure the applicator is powered and offline.
2. Perform the encoder setup procedure outlined in the Product Setup section.
3. Using the hand wheel, position the label in the flagged out position.
4. Under "LABEL SETUP", enter the distance measured for dimension D shown above. **Note:** If the label sensor is set for trailing edge detection, add the label gap distance to dimension D.
5. While in "LABEL SETUP" enter the label length measured for dimension B.
6. Under "APPLICATOR SETUP", press the "MULTI-PANEL" button and turn the option on.
7. Set the Short Feed to the distance measured for dimension E.
8. Enter the distance after the label is dispensed to when the product clears the peel edge into the Product Clearance box. This distance should be less than or equal to the product length.

Note: During the last part of the dispense cycle (after the product clears the peel edge), the label is dispensed at slew speed. This is usually faster than the web speed and is set in the Configuration menu.

PRODUCT SETUP

The product setup menu is accessed from the setup menu by pressing the “Product Setup” key.



The following parameters may be changed or monitored in this section:
Label Placement(s)
Detector Lockout
Encoder Speed (monitor)
Encoder Option

Label Placement -The label placement box lets you change the label placement value. Label placement is the time or distance from the product detect sensor to where the label is dispensed onto the product. If the value entered is out-of-range, the previous value will be restored after the “ENT” key is pressed. The allowed values, in seconds if time based or in inches if encoder based, are shown below the label placement box. The label placement value may be changed while the applicator is running.

Note: This label placement parallels the main menu and is here so the operator can do their setups without exiting to the main menu.

Detector Lockout -The detector lockout function is used when more than one product detect signal is generated per product. If the encoder is on, detector lockout is in inches; if no encoder then it is in seconds. The lockout starts at the beginning of a labeling sequence and the applicator will ignore product detect signals until the lockout time or distance is finished. Allowed values are between .001 – 20 inches or seconds.

Encoder Speed -This box displays the conveyor velocity obtained from the encoder signal connected to the applicator encoder port. The value displayed is the number of (pulses/min from the encoder) x (the pulse length in inches/pulse).

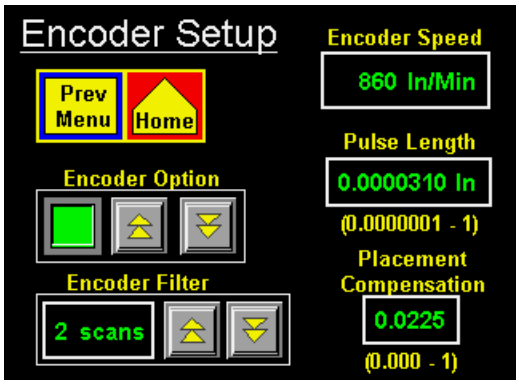
Encoder Option -The encoder option is useful when the product velocity varies during the application cycle. An example of such an application is a merge applicator on a forms table. With the encoder installed and enabled, the labeler adjusts the label dispense speed to insure accurate label placement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

The applicator has a differential quadrature incremental encoder interface with times four interpolation built into the controller board. The encoder connector located on the rear panel has 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.

The following parameters may be changed or monitored in this section:
Encoder Filter
Encoder Option On/Off
Encoder Speed (monitor)
Pulse Length
Compensation

PRODUCT SETUP (cont'd)

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 1 to 16 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/quieter application with more power in the merge applicator. In applications such as forms tables where the conveyor performs start/stop moves, a lower scan number is appropriate. In constant conveyor speed applications, a scan number closer to 8 may be more suitable. In all instances, the performance of the system should be verified under a variety of conditions.



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. When the encoder is on, label placement is in inches and not seconds.

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

Pulse Length = (Distance Product Moves / Rev) / ((Encoder Pulses / Rev) x 4)

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

Pulse length = 18.75" / (2500 x 4)
Pulse length = 18.75" / 10000
Pulse length = 0.001875 in/pulse

Compensation - Compensation is a number that functions within a formula to reduce the label placement value based on the encoder velocity. When products move faster on the conveyor, 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 0.022. 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 COMPENSATION**. If the labels move forward, **DECREASE COMPENSATION.** Whenever the rate compensation value is adjusted, re-run the product at slower and faster speeds to make sure that the labels are applied in the same position.

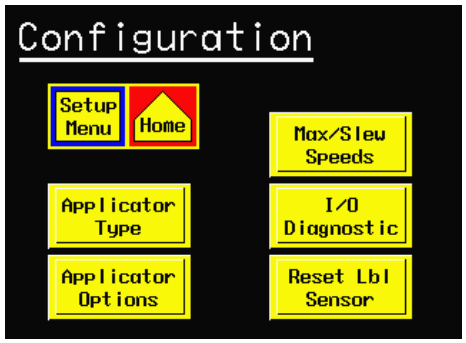
PRODUCT SETUP (cont'd)

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 RATE COMPENSATION**. If the labels move forward, **DECREASE RATE COMPENSATION.** Whenever the rate compensation value is adjusted, re-run the product at slower and faster speeds to make sure that the labels are applied in the same position.

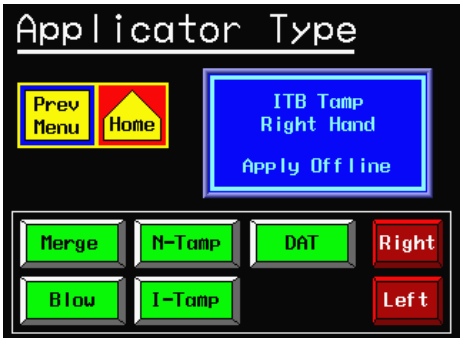
Notes: 1) Label placement units with the encoder option on are in inches, not seconds.
2) The encoder option will not be accurate with a normal tamp applicator.
3) It's important to make sure that the applicator is setup properly so labels are dispensed consistently.
4) If product speeds are too fast causing the compensated label placement to lag behind the current label placement, a warning will be given to raise the label placement value.

CONFIGURATION SETUP

The configuration setup menu is accessed from the setup menu by pressing the "Config Menu" key with the applicator offline.

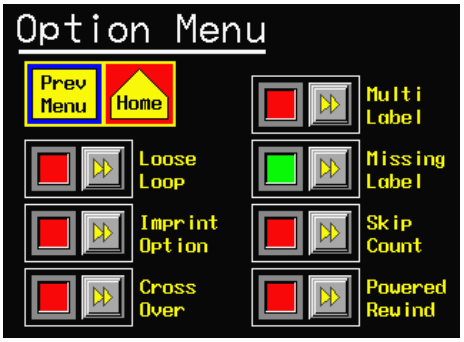


The configuration menu provides access to applicator: type setup, options, motion parameters, diagnostics, and the label sensor reset function. The applicator setup may be monitored or changed by accessing the various submenus.



Applicator Type -The applicator type function allows the operator to choose the type of label applicator (air blow, merge, tamp, or DAT) and whether it will be in a left-hand or right-hand configuration.

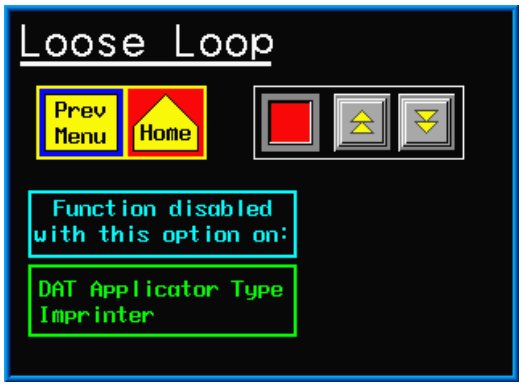
There is a status box on the right hand side of the screen that displays the current settings.



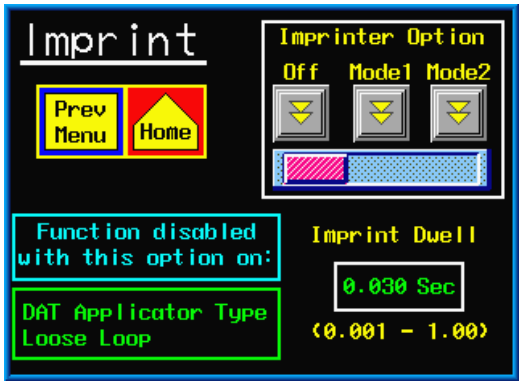
Applicator Options –It is here that an operator can look to see if an option is turned on or not. Pressing the key will take you into the option so you can toggle it on/off or set specific parameters pertaining to the option.

CONFIGURATION SETUP (cont'd)

APPLICATOR OPTIONS



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. As the labels exit the printer, they go around a dancer arm to maintain web tension. Three proximity switches monitor the dancer arm position. The loose loop dancer arm assembly should be free to travel from the 'loose' loop prox, past the 'tight' loop prox, up to the 'alarm' loop prox position. In the "at-rest" position, the lower 'loose' prox switch is active and the printer is off. When the dancer arm assembly reaches the 'tight' loop prox, the printer begins printing labels. If the upper 'alarm' prox switch is active, the applicator enters a tight loop alarm condition and a "TIGHT LOOP" message is displayed in the status box on the main menu. The applicator is inhibited from applying labels until the dancer arm returns to the lower 'loose' loop position. When properly set-up under normal operating conditions, the arm will <u>not</u> reach the 'alarm' prox position. **If the 'alarm' prox is active, the 360a applicator is dispensing faster than what the printer can print. To correct this issue, decrease the product rate or increase the printer speed.** Due to the variety of loop arrangements, the loose loop assembly is a factory-installed item.



Imprinter - 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. The dwell time in this case is how long the imprint valve is turned on. Mode 2 is used when the imprinter has it's own control. The dwell value is now the delay the applicator will wait before looking for the sequence complete signal from the imprinter. This delay should be close to matching 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 one upstream of the other. The upstream applicator is the "Primary" labeler while the downstream applicator is the "Secondary" labeler.

The crossover routine has changed after 360a-2c.0.031 program version. In the new crossover routine, the secondary still functions the same in that when it gets a signal from the primary to turn on or off, it will track the on or off distance and change active state. The primary now will wait for the next product detect signal after it stopped labeling to start the changeover sequence. The same is true of the secondary. If the conditions are set for a transfer to the primary, it will wait for an apply cycle before signaling the primary to start. This will insure the transitions occur in the same place every time. Also changed is the secondary will start labeling if the primary goes into a critical fault or goes offline and will continue labeling, even if the primary is brought back online.

CONFIGURATION SETUP (cont'd)

(APPLICATOR OPTIONS)

Primary To Secondary Example

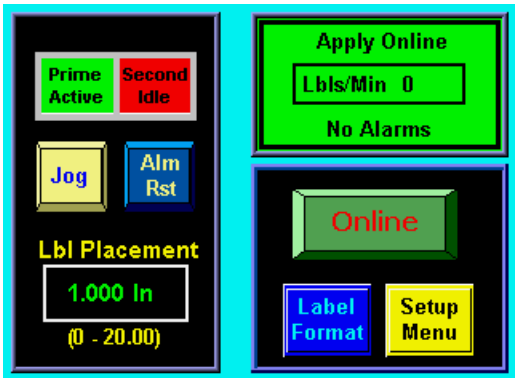
With the primary labeling and the secondary ready to label, if the operator either takes the primary offline or it goes into a critical alarm, the primary will stop labeling and waits for the next product detect signal. When the product detect input turns on, the primary sends a signal to the secondary to start the transfer sequence. When the product has traveled the "on distance", the secondary starts labeling. The operator can now correct the problem with the primary and bring it back online.

Secondary To Primary Example

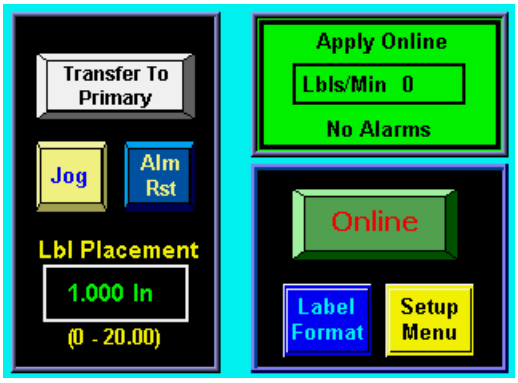
If the secondary is labeling when the primary is brought online, the primary will not automatically start labeling. In the new sequence, the secondary continues labeling until it is taken offline, critical or low label alarm occurs, or the transfer key is pressed. Taking the secondary offline or a critical alarm will cause products not to be labeled but if a low label alarm occurs or the transfer button 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 look for the next product detect signal to start labeling again When it gets the signal, the primary sends a signal to the secondary to start the off sequence. Doing this gives the secondary a consistent starting point for either transition sequence.

Main Menu Changes

When the crossover option is on, the left side of the main menu will change. Depending whether it is setup as the primary or the secondary, it will look similar to the screens below.



The primary has two lamps that show which applicator is labeling. The reason is if the line stops and both applicators were online, with this new setup, it would be impossible to know the active head without the lamps.

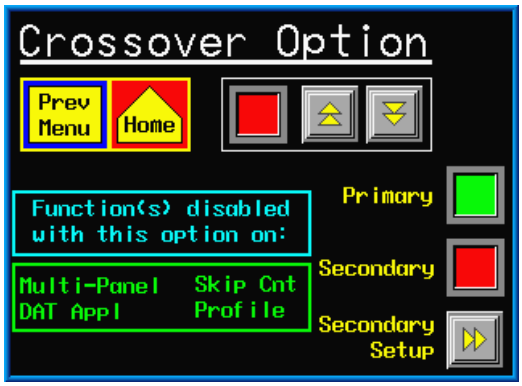


The secondary has a new button that if this applicator is active, you can transfer the labeling back to the primary with less chance of missing products. Pressing this button will start the primary labeling (if it is online) and after the off distance, the secondary stops.

CONFIGURATION SETUP (cont'd)

(APPLICATOR OPTIONS)

Crossover Setup



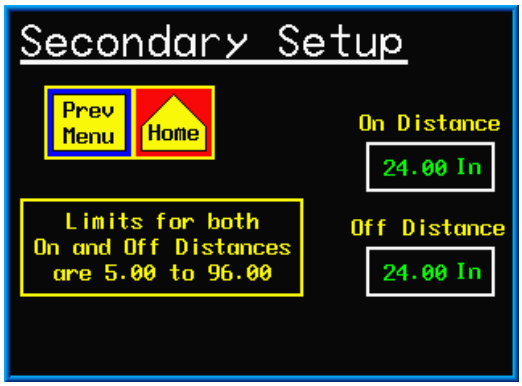
1) Turn on the encoder in the Product Setup menu.

2) Select the applicator to be either the primary or the secondary applicator. The green lamp indicates the current setup.

3) If the applicator is going to be the secondary, go to the secondary setup menu. Measure the distance between the two application points, subtract ½ inch and enter this as the "On and Off Distances".

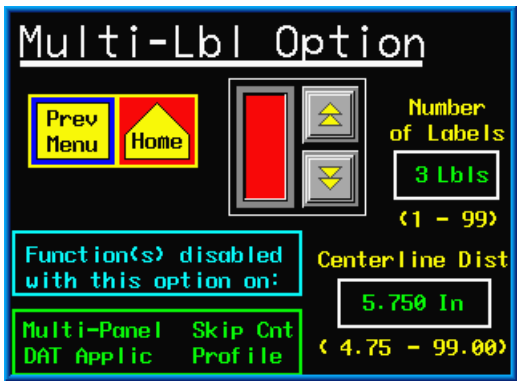
4) With the option turned off on both applicators, label some products to make sure the applicators are setup properly and label placement is correct. When finished, turn the option on in both applicators.

5) Bring both applicators online and begin labeling products. Take the primary offline. The secondary should label the first unlabeled product. If it started labeling too soon, increase the 'On Distance". If labeling started too late and a product was missed, decrease the "On distance".



6) With the secondary labeling and the primary online, press the transfer button on the secondary display. The primary should start labeling while the secondary continues to label products between the two heads. When the first labeled product from the primary reaches the secondary, the secondary should stop labeling. If the secondary continues to label, lower the "Off Distance" number. If it stopped too soon, increase the number.

Multi-Label – The applicator has the ability to apply multiple labels per product detect signal. The number of labels and the center-to-center distance between the labels are configured in the multiple label submenu. When the applicator is online and a product moves in front of it, the applicator receives a product detect signal from the sensor. The applicator will wait the label placement distance and apply a label. An internal counter is incremented and the applicator waits the centerline distance before applying another label. This sequence continues until the number of labels has been satisfied. If the label rate is faster than what the labeler can dispense, a warning will occur in the status box on the main menu.



1) To setup, go to the multi-label option menu and turn the option on.

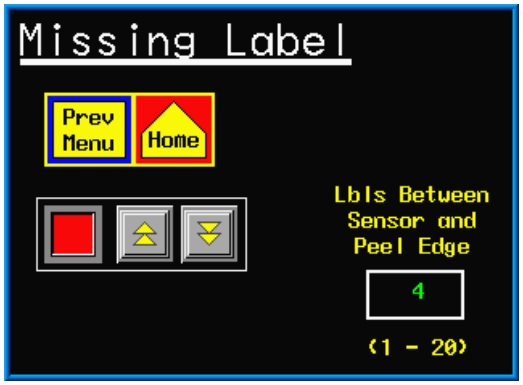
2) Next set the number of labels you want to apply to the product.

3) Set the centerline distance of the labels. If the encoder is turned on the units will be in inches, otherwise it will be in seconds.

CONFIGURATION SETUP (cont'd)

(APPLICATOR OPTIONS)

Missing Label – The applicator has the ability to track missing labels between the peel edge and the label sensor. When a missing label is detected on the label liner, the applicator will feed a new label to the peel edge at slew speed. After 3 missing labels in a row, a "no labels found" message will appear on the display.



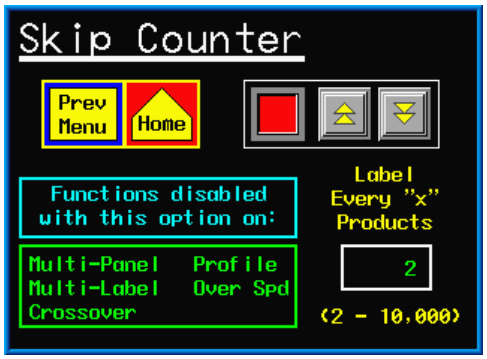
1) To setup this option, go to the missing label option menu and turn the option on.

2) Count the number of labels from the peel edge (include any that are hanging out past the edge) to the label sensor (count the one under the sensor) and enter that number into the Lbls Between Sensor and Peel Edge box.

Note: 1) If the applicator is taken offline with a missing label on the liner between the sensor and the peel edge, the applicator will quit tracking the blank spot. Unlike previous software versions, there is no alarm screen to notify the operator of this condition.

2) If the label length is changed, the missing label option does not turn off as in previous software versions. Therefore, the number of Labels Between Sensor and Peel Edge may be incorrect.

3) The number of missing labels in a row before an alarm occurs is adjustable. Refer to the special options section of the manual on page 3-18.

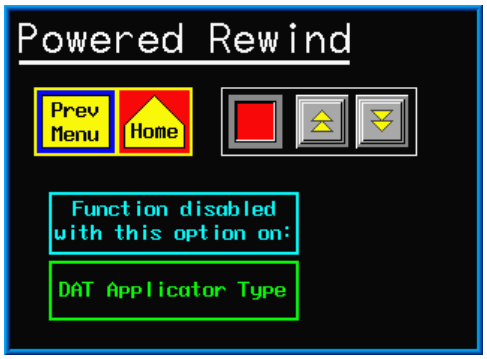


Skip Count –If desired, the applicator can be setup to label every "x" product. If turned on, the applicator will label the first product after going online and skip the next "x-1" products. For example the applicator is set to label every 3 products. Bring the applicator online and it will label the first product and skip the next two products. When the fourth product triggers the product detect sensor, it will be labeled.

To setup, toggle the option on and set the number of products you want to skip.

Powered Rewind –With this option on, the applicator will drive a motor attached to the waste rewind. This option is useful in higher speed applications or if a large rewind is needed to wind up more liner material.

This is a factory-installed option. Please consult factory for more information on this option.

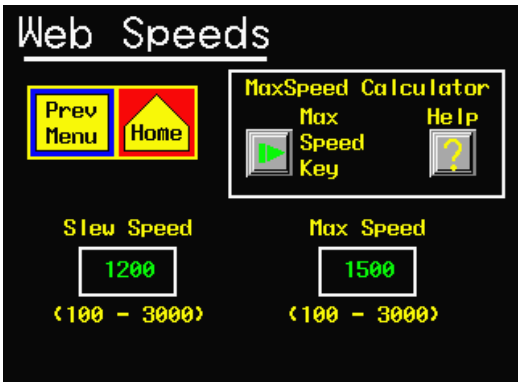


CONFIGURATION SETUP (cont'd)

Max And Slew Speeds -The web speeds menu allows access to the max and slew speed values for the applicator. Other motion parameters (such as accel and decel) are accessed thru the Special Options menu.

Slew Speed –This is the web speed value used to move a label to the peel edge during a missing label feed. It is also the web speed value used for the label flag distance during a multi-panel apply cycle.

Max Speed –This is the high speed limit of the applicator and can be adjusted from 100 to 3000 in/min.



Note: MaxSpeed Calculator only appears in merge encoder-based applications.

How to Determined the Max Speed Setting

In all instances, the Max Speed parameter sets the maximum operational speed for the applicator. In all applicators, except a merge with the encoder option on, the max speed value may be set at any value higher than the desired web speed up to the applicator's upper limit of 3000 in/min. The only reason for limiting it is to keep operators from setting the web speed to a higher value than what the applicator configuration will handle.

Note: Applicators running at speeds higher than 1500 in/min should have some type of powered rewind device installed. If the web speed is higher than 2100 in/min, a powered unwind should be used as well.

Merge Encoder Operation

Max speed becomes more important when the applicator is a merge and the encoder option is used. If the max speed is set too high the label dispense will be sluggish but if set too low the applicator will be stiff and unstable. In many cases the motor will lose enough power to stall during a label dispense. Therefore it will be important to read through the following and try to set the max speed close to optimum for best performance.

An encoder mounted to the product handling equipment determines the speed of the product and in a merge operation, the applicator dispense speed follows the product. This applicator will constantly vary its dispense speed by coming up with a percentage of max speed. In other word, if the max speed is at 1000 in/min and the encoder says the product is running 800 in/min, the applicator will run 80% of its max speed. If the encoder says it is running 1200 in/min the applicator will dispense a label at 120% of max speed. This percentage that is calculated also has an effect on the accel and decel values of the applicator. Without going into a lot of details that would only serve to confuse, a good rule of thumb is to set the max speed to 33% over the fastest speed the product handling equipment is going to run.

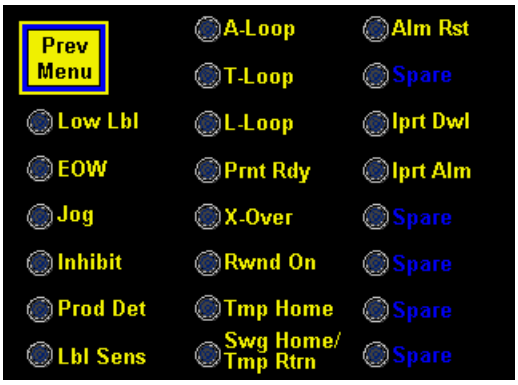
Example: Product speed = 1800 to 2100 in/min
Max Speed = 1.33 x Fastest Product Speed
Max Speed = 1.33 x 2100
Max Speed = 2800 in/min (approx)

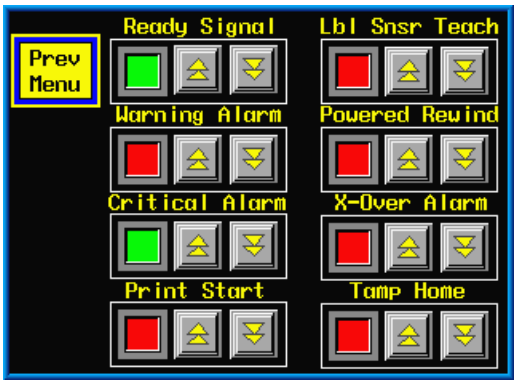
In the max web speed menu, if the applicator was configured as a merge and the encoder is on, a calculator will appear in the upper right hand corner. With the product handling running at the fastest speed, the operator can press this key and the applicator will calculate the optimum max speed value.

There are other areas where max speed may have to be adjusted and that is if Profiling or OverSpeed options are used. If max speed is exceeded in those circumstances, a warning message will occur in the status box. Increase the max speed until the warning goes away.

CONFIGURATION SETUP (cont'd)

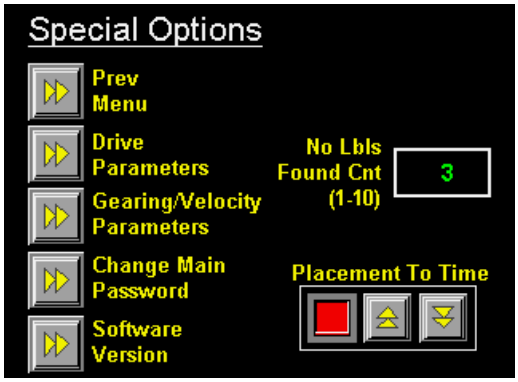
I/O Diagnostics –This section allows the operator to monitor inputs and to manually turn outputs on and off. This serves as a diagnostic tool for a technician.





Reset Label Sensor –This will reset the label sensor to its factory values and will update the applicator and sensor to the trailing edge detection mode. After a factory default, the operator must re-teach the label sensor in the "Label Setup" section.

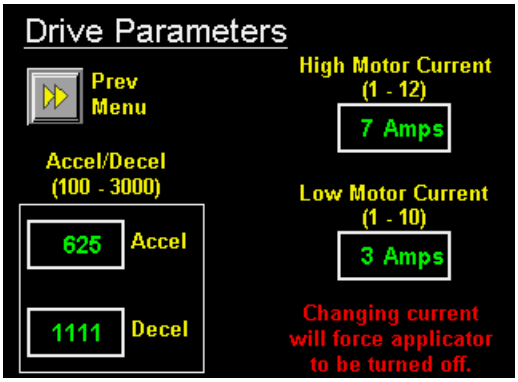
SPECIAL OPTION SECTION



This section is for: changing the motion parameters, changing the password, and the number of consecutive missing labels before a "No Labels Found" alarm. To access this section, touch the upper right hand corner of the display in the Configuration Menu. A password menu will appear. The special options password is different from any other password and is "5115".

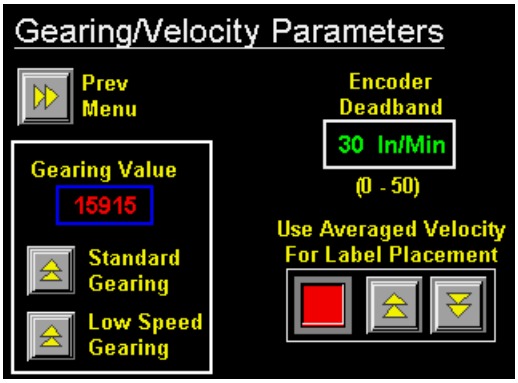
Drive Parameters - In this section, an operator can change the accel/decel rate of the motor and the maximum motor drive current setting

Accel/Decel -The larger the acceleration and deceleration values the faster the applicator will start and stop. This will increase labeling rates but web handling may become erratic. The maximum acceleration and deceleration rates that can be achieved depend on the available motor torque and the Motor Current setting. The inertia of the label roll and the system components, friction, and dancer arm spring tension are all factors in determining how much torque is required to operate at a given web speed and acceleration/deceleration rate. The factory should be consulted if you feel the default values need changed.



SPECIAL OPTION SECTION (cont'd)

Current – The high and low current setting can be changed here. The High Motor Current setting should be set at 7 amps for a standard motor. If more than 7 amps is required, contact the factory since it is likely that another problem exists that they can help diagnose. **The drive is able to supply non-standard motors with up to 12 amps of current.** Contact the factory for information concerning non-standard motors. The low current setting will rarely change. Consult factory before adjusting this value.



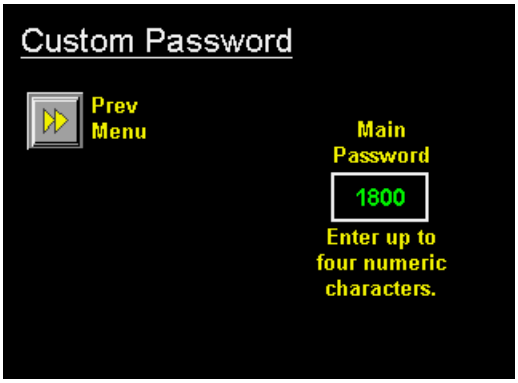
Gearing/Velocity Parameters – These are miscellaneous parameters that may be needed.

Gearing Value -The parameter sets the electro-mechanical gear ratio between the drive and the nip roll. It is set based on the actual gear ratio used in the machine and should not be modified.

Encoder Deadband – Some encoders at idle will send pulses to the applicator due to vibration at the encoder. This gives the operator the ability to set a value that if the velocity is equal to or less than, the applicator will ignore it.

Averaged Velocity –During label placement, the applicator uses raw velocity to calculate the compensated label placement. In some application, it may be best to use the velocity after the filter for this calculation.

Customer Password - Here an operator can setup their own password that applies to all password-protected areas except Special Options. The password from the factory is "1800" but the new password can be anything from 1 to 9999. If the password was changed and no one can remember what it is, the operator can touch the upper right hand corner of the power-up software screen. Select the Restore Password key from the Factory Default menu to reset the password to "1800".



Software Version - This screen tells the operator the software version and date for the program. If the program is custom, additional feature information is provided in a submenu.

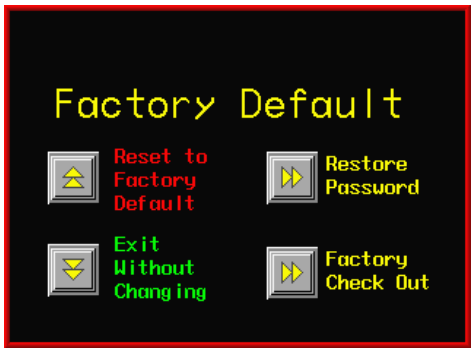
No Labels Found Count - This is the number of consecutive missing labels on the liner before a critical alarm occurs.

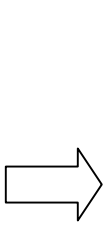
Placement To Time – This option only appears if the applicator type is a merge and the encoder is turned on. You will use this when labeling in a wrap station that is equipped with an encoder. This way the applicator will dispense its label at encoder speed but the start of the labeling sequence will not be dependant on the wrap belt position but instead will be time-based. This is good since the belt runs at a different speed than the conveyor, which is handling the product.

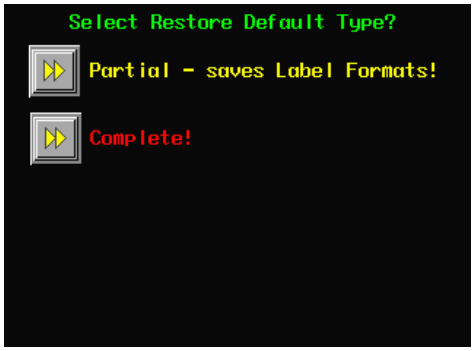
FACTORY DEFAULT

The ability to reset to factory defaults is useful when the applicator will not dispense labels due to a configuration problem. Resetting to factory defaults will bring all of the settings to something that works and adjustments can be made from there. It will also reset the label sensor to its factory default values. One of the first things an operator should do after resetting to default values is to teach the label sensor. The factory default screen can be accessed from the power-up software screen:

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



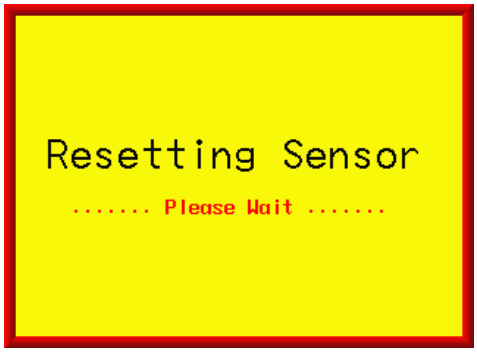




Choosing "**Reset To Factory Default"** values causes the Select Restore Default Type menu to appear as shown above. The Partial selection allows the operator to retain the saved label formats while the Complete selection deletes the Label Formats. When a selection is made, the Restoring Variables screen appears while the applicator loads the factory default values. After restoring the variables, the applicator resets the label sensor and proceeds to the applicator Main Menu.

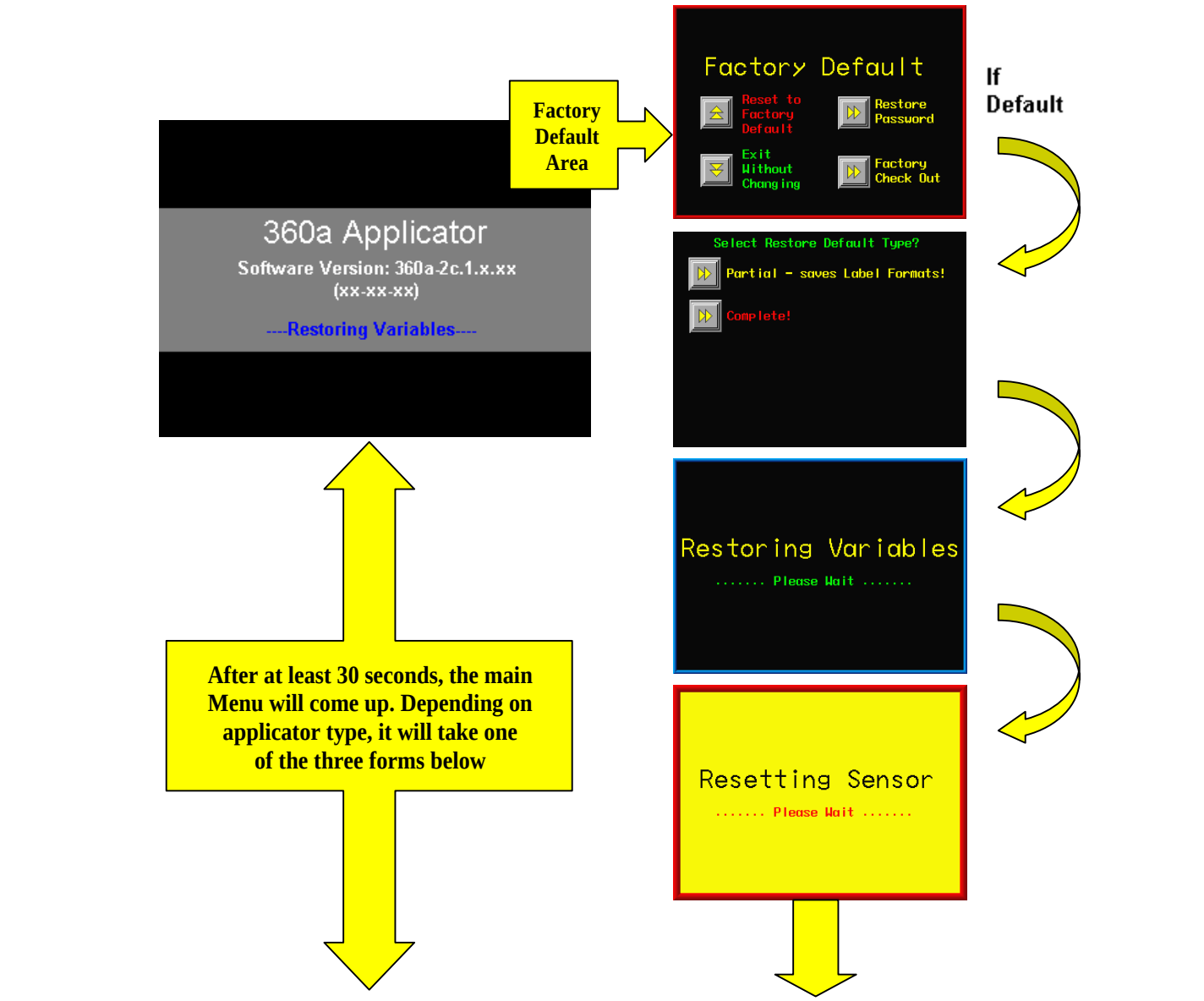
Pressing **"Exit Without Changing"** will take the operator to the main menu without performing a factory default.

If the password was changed and no one can remember what it is, select **"Restore Password"** to reset the password to the factory default value of "1800".



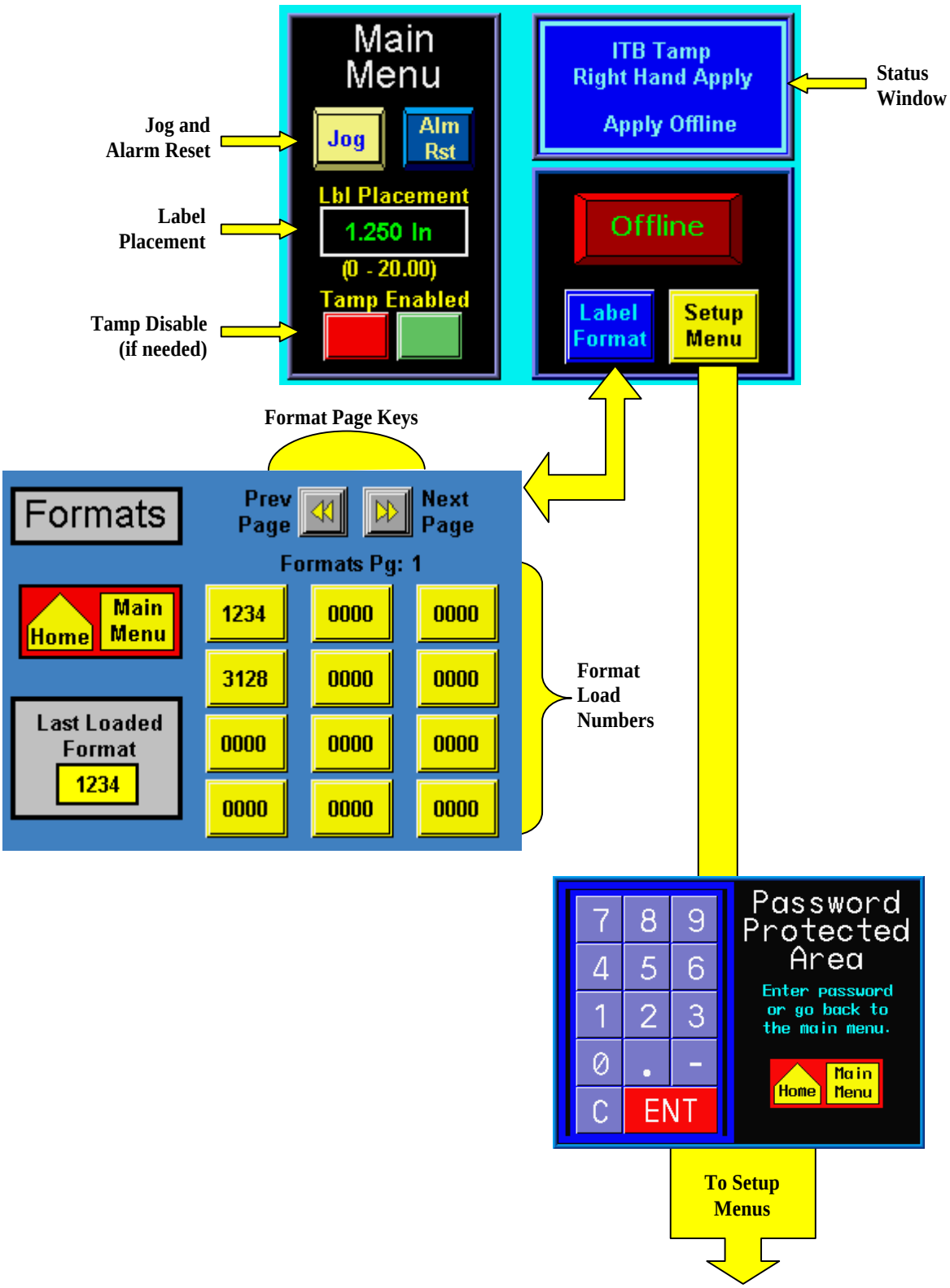
The **"Factory Check Out"** key allows factory personnel access to test routines that are normally not user accessible.

360a DISPLAY FLOW CHART

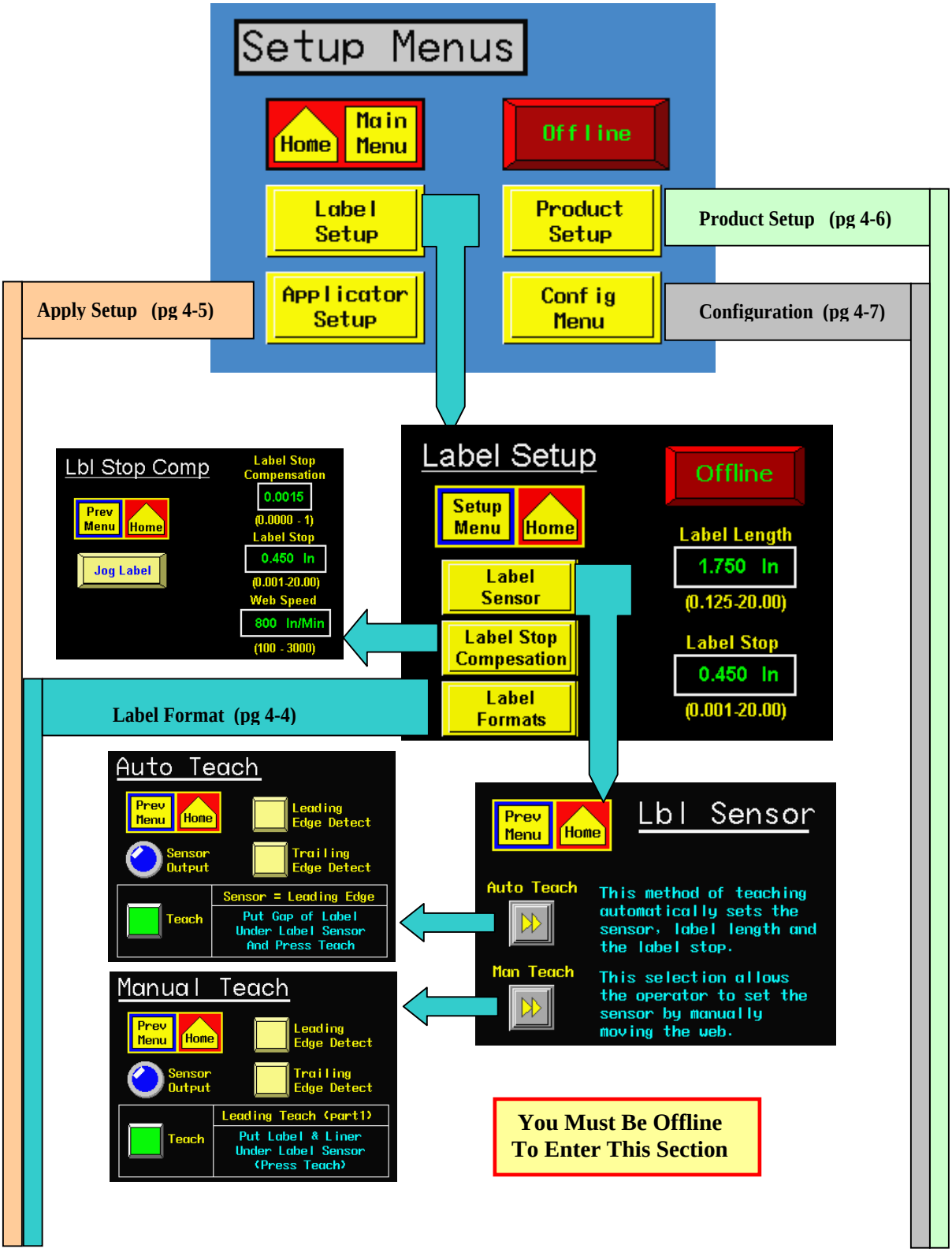


(Merge and Air Blow Applicators) (Normal and ITB Tamp Applicators) (DAT Applicators)

MAIN MENU


Main Menu
Jog
Alm Rst
Lbl Placement
1.250 In
(0 - 20.00)
Tamp Enabled
ITB Tamp
Right Hand Apply
Apply Offline
Offline
Label Format
Setup Menu
Status Window
Jog and Alarm Reset
Label Placement
Tamp Disable (if needed)
Format Page Keys
Formats
Prev Page
Next Page
Formats Pg: 1
Home
Main Menu
Last Loaded Format
1234
1234
0000
0000
3128
0000
0000
0000
0000
0000
0000
0000
0000
Format Load Numbers
7 8 9
4 5 6
1 2 3
0 . -
C ENT
Password Protected Area
Enter password or go back to the main menu.
Home
Main Menu
To Setup Menus

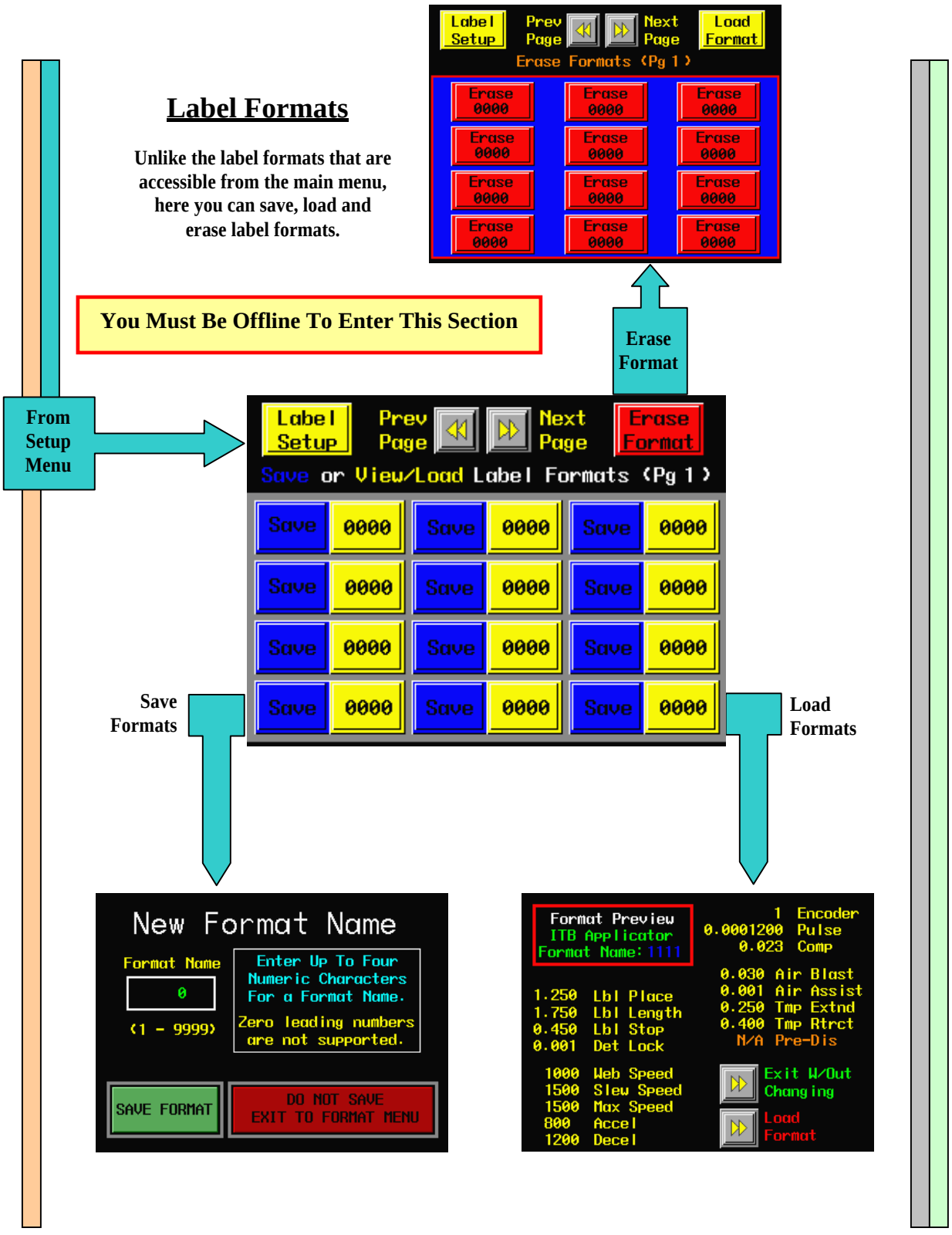
SETUP MENU


Setup Menus
Home
Main Menu
Offline
Label Setup
Product Setup
Applicator Setup
Config Menu
Product Setup (pg 4-6)
Apply Setup (pg 4-5)
Configuration (pg 4-7)
Lbl Stop Comp
Label Stop Compensation
0.0015
(0.0000 - 1)
Label Stop
0.450 In
(0.001-20.00)
Web Speed
800 In/Min
(100 - 3000)
Prev Menu
Home
Jog Label
Label Setup
Offline
Setup Menu
Home
Label Sensor
Label Stop Compesation
Label Formats
Label Length
1.750 In
(0.125-20.00)
Label Stop
0.450 In
(0.001-20.00)
Label Format (pg 4-4)
Auto Teach
Prev Menu
Home
Leading Edge Detect
Sensor Output
Trailing Edge Detect
Sensor = Leading Edge
Teach
Put Gap of Label Under Label Sensor And Press Teach
Lbl Sensor
Prev Menu
Home
Auto Teach
This method of teaching automatically sets the sensor, label length and the label stop.
Man Teach
This selection allows the operator to set the sensor by manually moving the web.
Manual Teach
Prev Menu
Home
Leading Edge Detect
Sensor Output
Trailing Edge Detect
Leading Teach (part1)
Teach
Put Label & Liner Under Label Sensor (Press Teach)
You Must Be Offline To Enter This Section

Label Formats

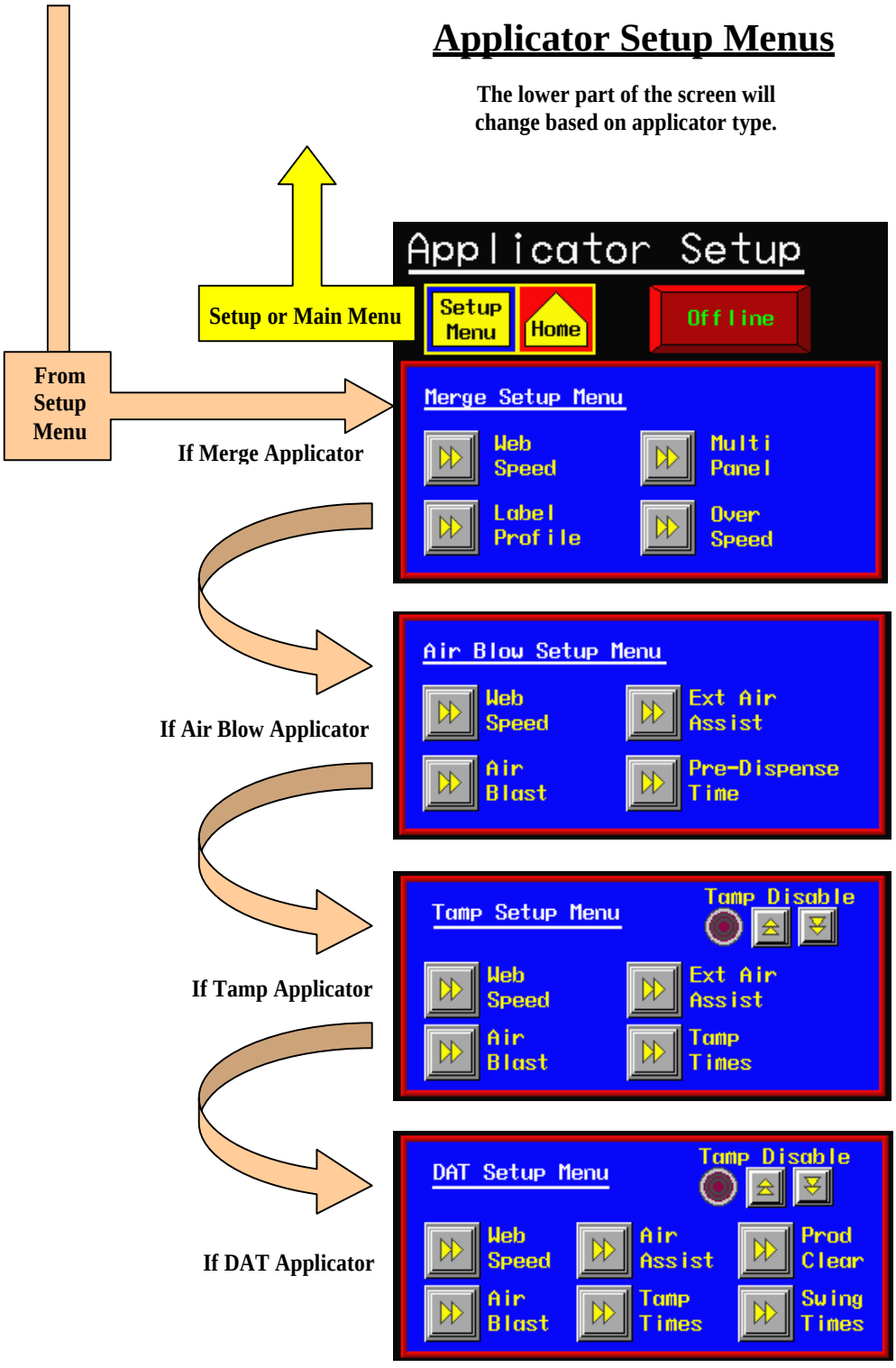
Unlike the label formats that are accessible from the main menu, here you can save, load and erase label formats.

You Must Be Offline To Enter This Section

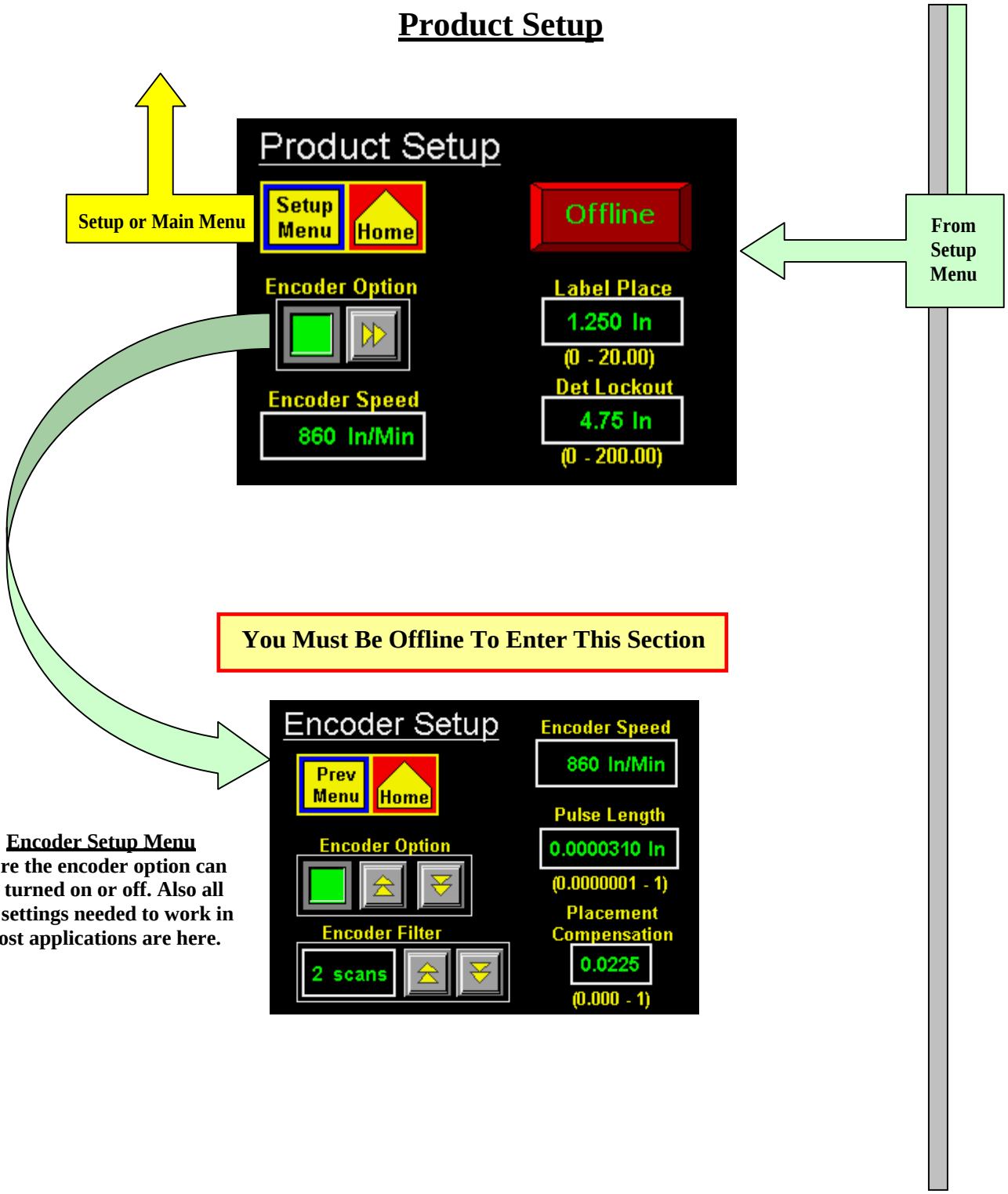


Applicator Setup Menus

The lower part of the screen will change based on applicator type.

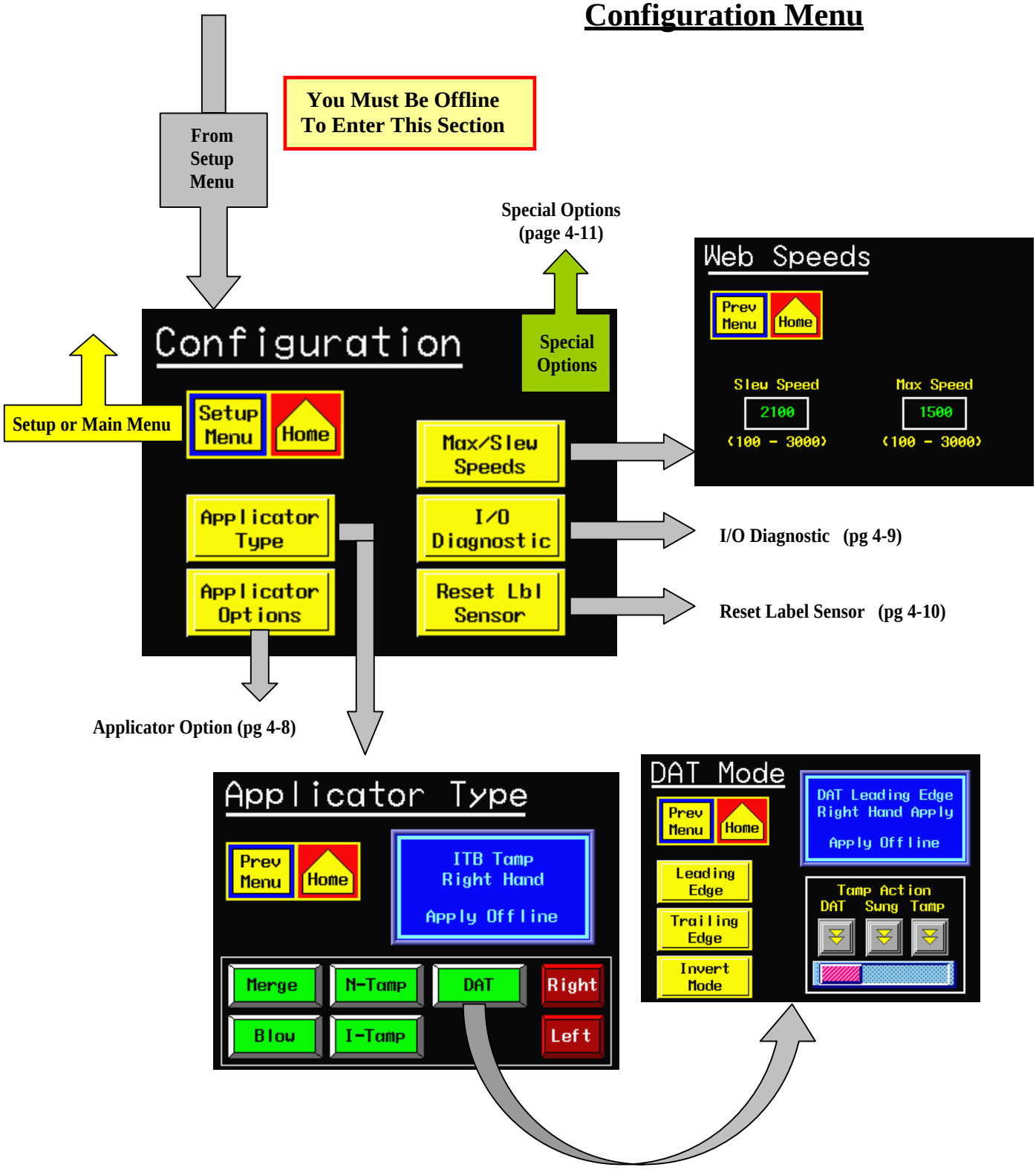


Product Setup

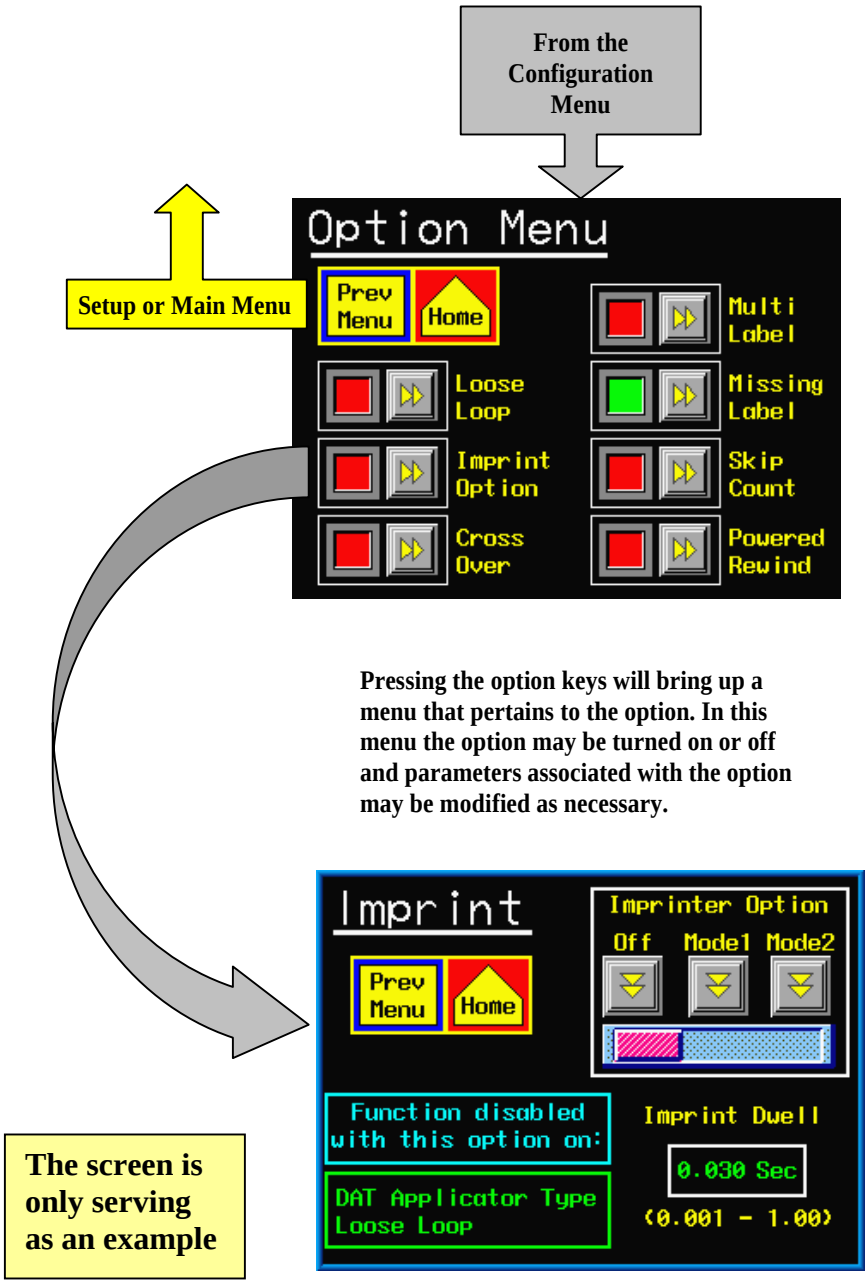


Encoder Setup Menu
Here the encoder option can be turned on or off. Also all the settings needed to work in most applications are here.

Configuration Menu



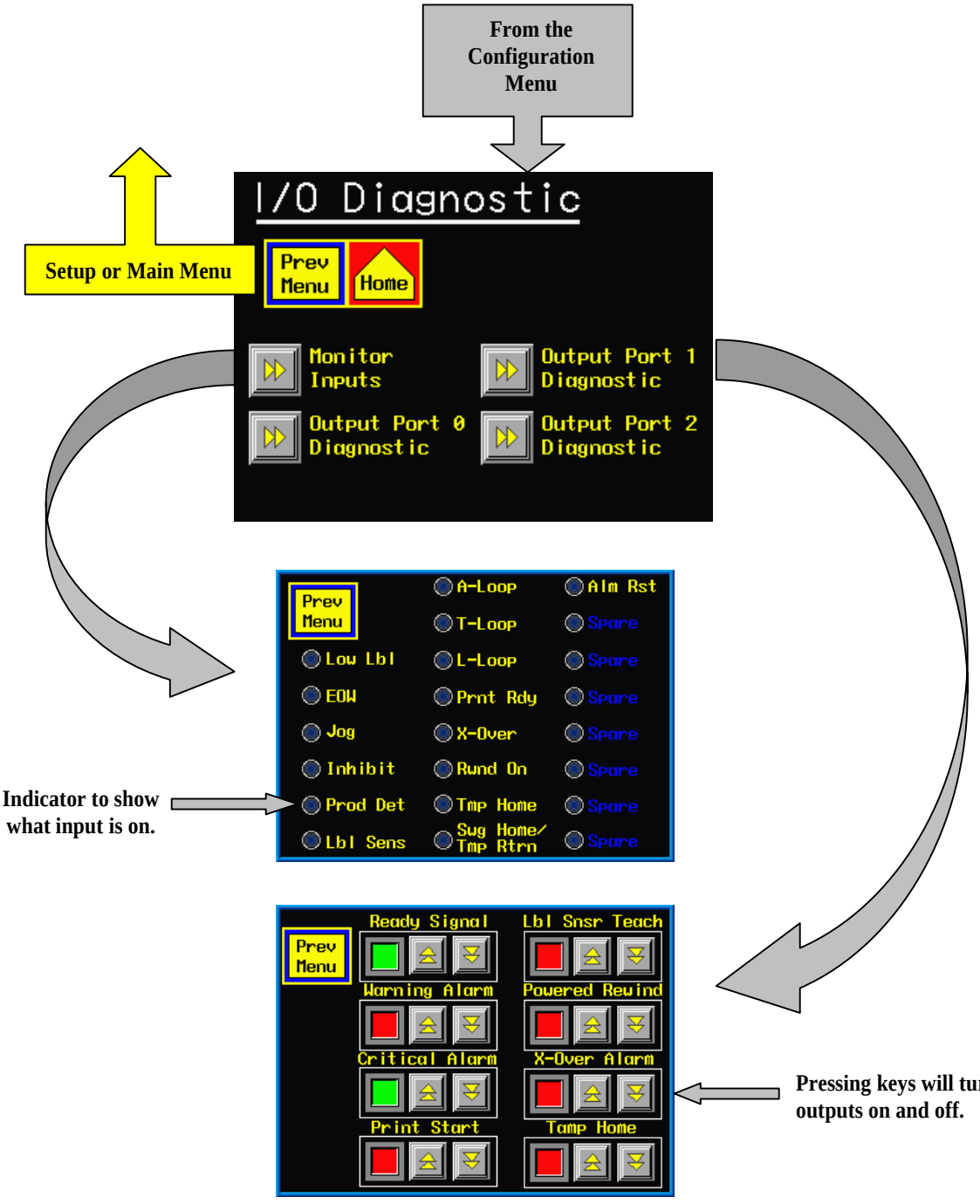
Applicator Options



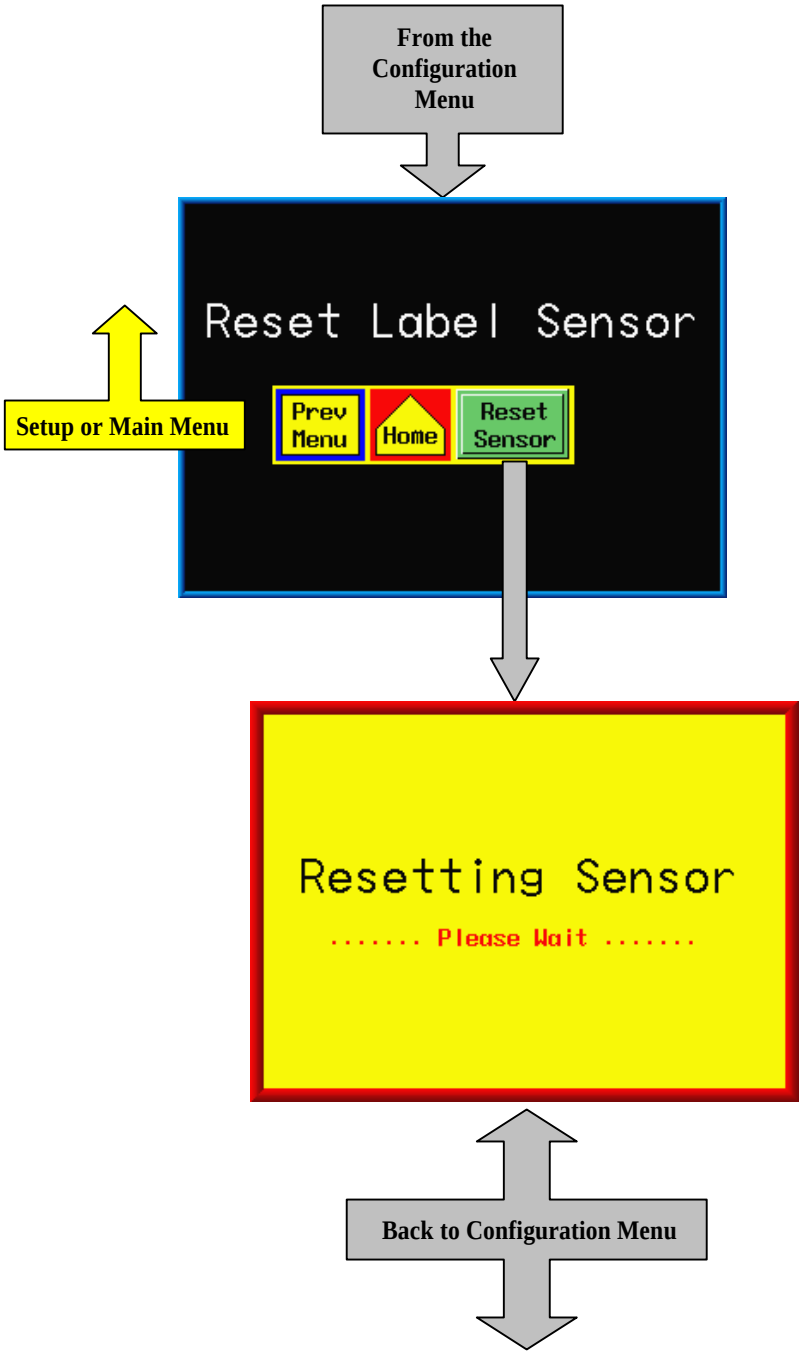
Pressing the option keys will bring up a menu that pertains to the option. In this menu the option may be turned on or off and parameters associated with the option may be modified as necessary.

The screen is only serving as an example

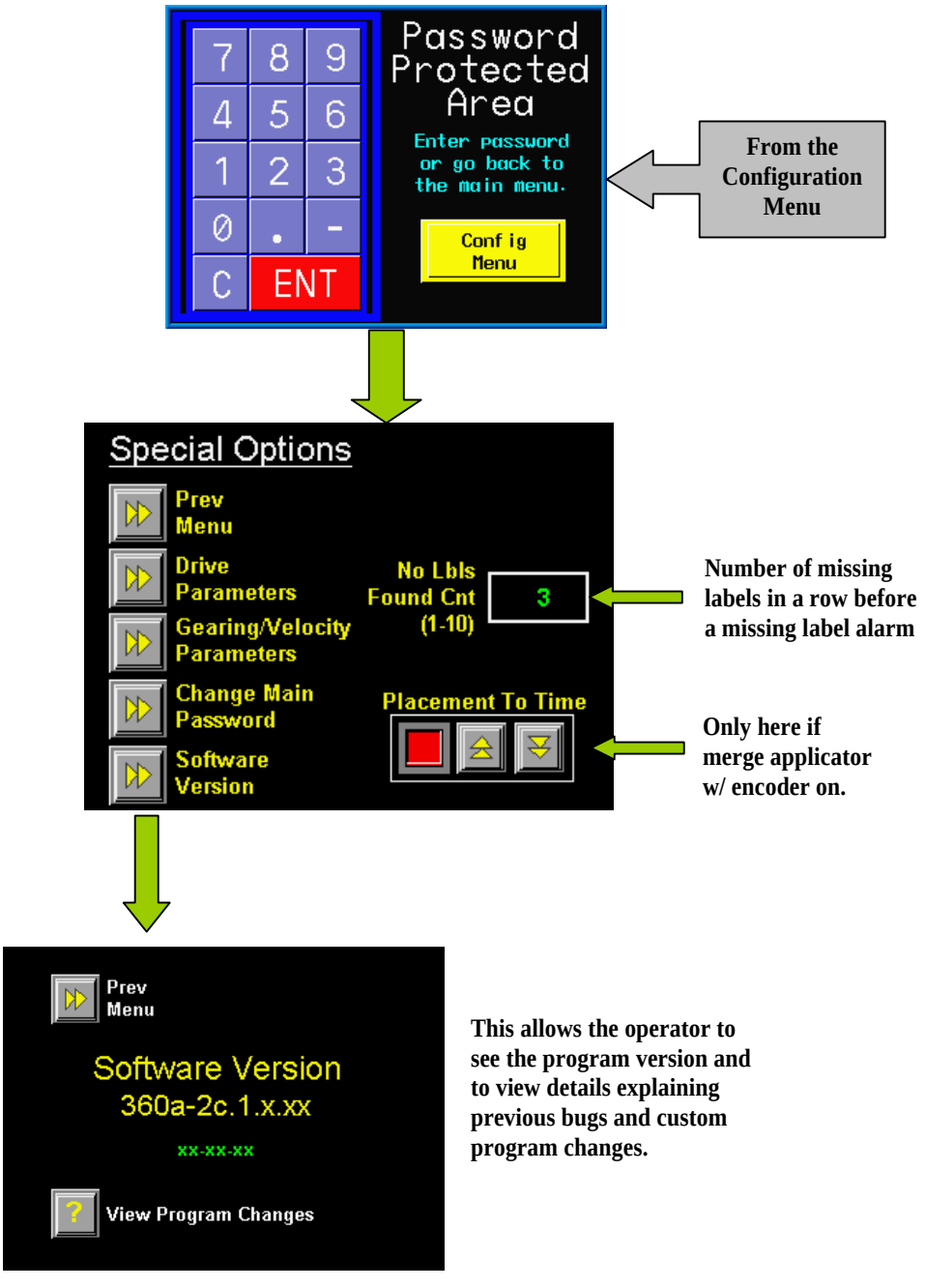
I/O Diagnostics

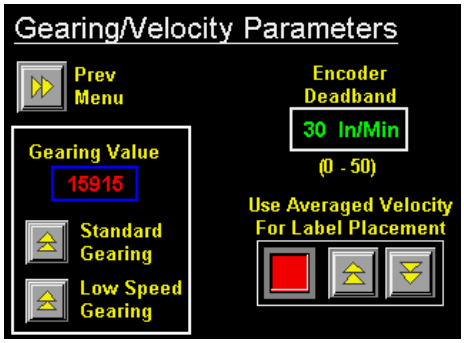


Resetting Label Sensor

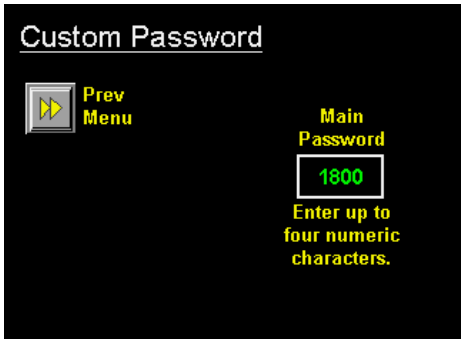


Special Options Menu



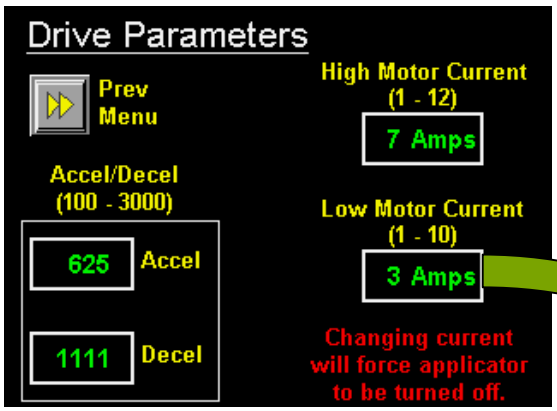


Before changing gearing, consult the factory. It is rare for the low speed gearing to be used and using the wrong gearing will affect the performance of the applicator.



The custom password screen allows the operator to change the password going into the setup area. The special option area password does not change.

Changing the Accel and Decel values will change the response of the applicator. The factory should be consulted if you feel it needs changed.



If either current value is changed

REAR PANEL

CONNECTORS

VALVE: When using a Tamp, Blow Box, or a Merge applicator with an imprinter, a valve bank is mounted to the side of the machine. This plug is used to power the valves and will drive up to 4 valves with the standard harness.

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

ALARM: This connector is for an alarm light. This connector will drive a three stack alarm light where a red light will flash on critical alarms, amber light flash for warning alarms and a green light will be steady on for when the applicator is ready to label.

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

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

EOW: This is where the end of web sensor plugs in.

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

I/O: This port is for integrating the applicator with end user controls or to tie options to the applicator.

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

360a SERIES

SETUP

PROCEDURES

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

JOB SETUP

NOTE: When reading through this section of the manual, refer to section 9 for web path diagrams.

THREADING LABELS

1. With the power off remove the outer unwind disk.

2. Make sure the inside of the inner disk is at least 1 1/4" away from the faceplate of the applicator.

3. Slide a roll of labels over the unwind hubs and push against the inner disk. Make sure the labels are face up as they unwind. Replace the outer disk and lock in place.

4. Remove approx. 3 ft of labels from the liner on the leading part of the roll of labels.

5. Thread labels through the machine referring to the web path diagram section that applies to your configuration.

   a. When going between the nip and drive rollers, turn the knob on top of the nip assembly to spread the two rollers.

   b. If the applicator is a blow box or tamp, make sure the web goes between the peel edge and the air assist tube.

6. Remove rewind pin, lay the label liner over the pin slot and replace pin.

7. Align guide collars with the unwind assembly.

8. Lower the nip roller so that it comes into contact with the drive roller.

9. Make sure the label tension brush is against the roller. This keeps the web tight between this point and the peel edge.

10. Re-locate the spring block assembly so that it is in the center of the label and is applying slight pressure to the top of the labels. This aids in the dispensing of labels off of the peel edge.

LABEL SENSOR SETUP

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

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 3-5 of the 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 for those instances where auto setup does not work. Refer to page 3-5 of the display section in this manual for instructions on how to setup the sensor.

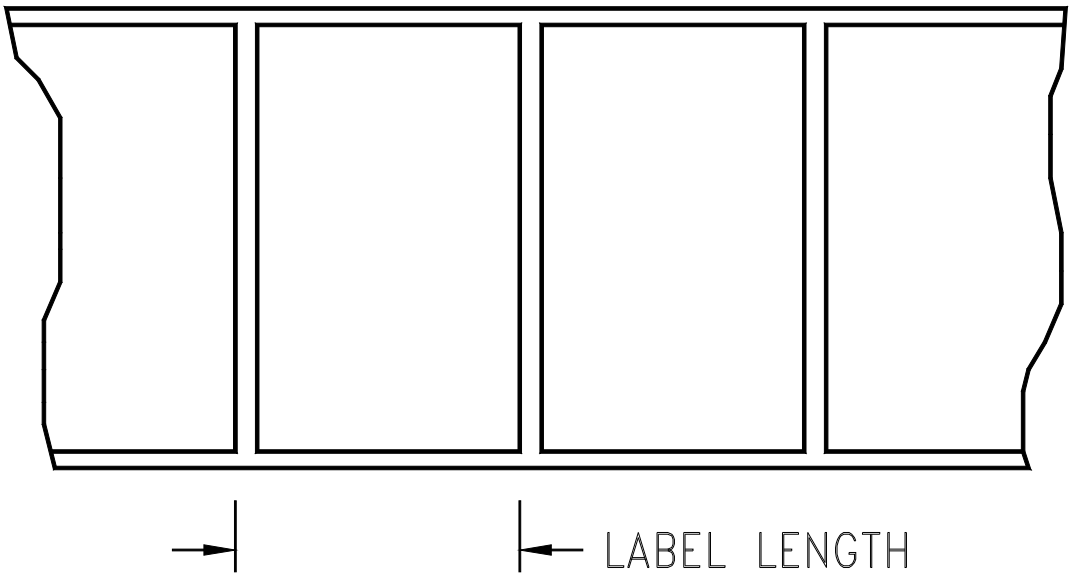
LABEL LENGTH SETUP

1. Measure the distance from the leading edge of one label to the leading edge of the next. This will be the "label length" value.

2. From the LABEL SETUP menu change the label length. You may refer to page 3-5 for more details on label length and to page 3-3 for changing variables.

3. Enter the length and press "ENTER". If a value of less than 0.125" or more than 20"is entered, the display will automatically restore the previous value.

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



LABEL STOP

1. The label stop value is the distance from the label edge to the label sensor. Allowed values are between 0.001" and (label length – 0.06").

NOTE: Any value less than .06 may cause the label stop to move when the web speed changes.

2. Press the "LABEL STOP" key from the "LABEL SETUP" menu. Enter a new value (you may refer to page 3-5 for more details on label stop and to page 3-3 for changing variables).

4. With the applicator online, jog a label out. If the label stop is not where you want it, go back into the "LABEL STOP" menu and enter a new value.

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

WEB SPEED

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

Web speed is under the applicator setup menu. You may review page 3-9 of this manual for more information on web speed.

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

SLEW SPEED

The slew speed value allows the applicator to speed-up the label dispense cycle in certain time critical applications. The slew speed menu is located in the configuration menu (page 3-17 and 3-21).

Note: In order to improve performance, the slew speed setting must be larger than the current web speed or encoder rate value.

LABEL STATIC TEST

It's important to know if the applicator can consistently place labels in the same place over and over on the product. Without knowing this, you will not know whether label placement problems that occur on the line are due to the machine or to the product being labeled. When the setup on the nose assembly (section 7) is finished, run through the following steps to verify your setup is complete.

TEST FOR TAMP OR AIR BLOW

1) Make sure the labels are consistently stopping in the same place on the label pad or grid. If this is OK go to step 7; if not, go to step 2.
2) Check label stop. One label should be completely dispensed off the liner while the next label should be 1/32" away from the peel edge. If this varies more than 1/32" with each cycle, reset the label sensor. If you still have the problem go to the troubleshooting section of the 360a manual and follow its suggestions. When this is corrected, go back and try the static test again. If this was OK, go to step 3.
3) Make sure the label pad surface is clean. If clean, go to step 4. If not, clean and re-try the static test again.
4) Make sure the vacuum is set right. If the label flutters when feeding across the pad, the vacuum is too high. If the label falls off or moves after the label has left the liner, the vacuum is too low. If the label feed looks smooth, go to the next step.
5) Work with the air pressure and the position of the air assist tube until the label feeds more consistently onto the pad. Re-try the static test. If the results are still not good enough, go to step 6. Otherwise go to 7.
6) Make sure you are working with good label stock. Try another roll of labels and see if you get the same results.
7) Check the distance from the label pad to the product. If the distance is too large, the labels may float too much. Try lowering the machine so the label pad just clears the product (within 1/8").
8) If the applicator type is a tamp or RVB, make sure the label pad is made for the label you're using? Exposed holes on the pad will reduce the available vacuum used to hold the label in place and results will be uncertain.
9) If the applicator type is an air blow, make the air tube pattern is correct. If the tubes are too heavy on one side, the label will not stack well.

TEST FOR MERGE

1) Apply one label to a product. Run the same product pass the applicator at the same speed and none of the variables in the applicator changed. If the two labels stack, you are finished.
2) 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.

MERGE APPLICATOR SETUP

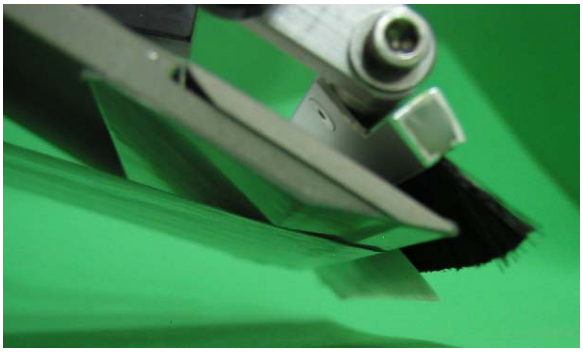
The merge applicator is used to apply labels to products moving on a conveyor. A label is fed onto the surface of the product at the same speed that the product is moving.

1. Under *Applicator Type* in the configuration section on the display, select "MERGE" 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.

2. Go through the general label setup procedure.

3. Position the peel edge so it's between 1/8" and 1/2" away from the product at approximately 20 degrees to the product surface.

4. Adjust the applicator brush so that it will lightly touch the product. It should be angled so that the label is supported as it is fed out. **NOTE: The applicator brush is used to aide in the tacking of the label to the product. It is not made to be a wipe down.**



5. Label stop can be set so that the label is flagged past the peel edge but must miss the passing product.

6. Web speed should be set to match the speed of the product.

7. Go to the product setup section of this manual to turn on any of the merge specific options (ie. profile, multi-panel, etc.) you need. You may next go to the applicator options and turn on any other options you will be using.

AIR BLOW APPLICATOR SETUP

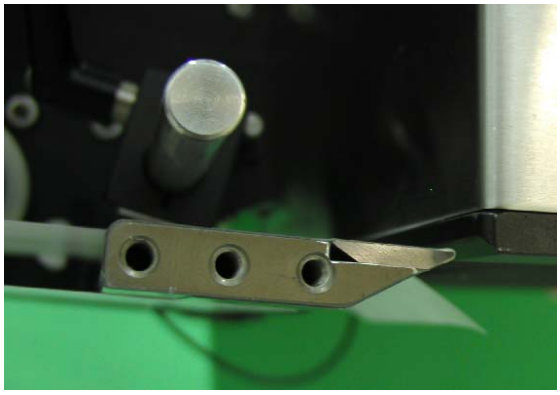
The air blow applicator is a versatile labeler in the sense that many different label sizes can be used without buying a new pad or manifold. Products can also be labeled at a stand still without contact. The blow box consists of two axial fans mounted in the top of the assembly that produce the vacuum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

1. Under *Applicator Type* in the configuration section of the display, select "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.

2. Place the applicator as close to the product as you can without hitting it.

3. Go through "general setup" procedure (i.e. label sensor, setup, web speed, etc.)

AIR BLOW PEEL EDGE ALIGNMENT



1. Turn power on to the applicator and make sure it's offline.

2. Advance the web using the drive roller and notice how the label feeds onto the grid. A normal paper label should deflect 5-10 degrees to the bottom surface of the label grid. A stiffer label should feed straight onto the grid.

3. To adjust the peel edge, loosen the two 1/4 S.H.C.S. screws on the peel edge faceplate and move the assembly to a position close to the grid. Allow enough room for the label and liner to pass between the peel edge and the grid.

4. Repeat step #2 to check label angle. Re-adjust if needed.

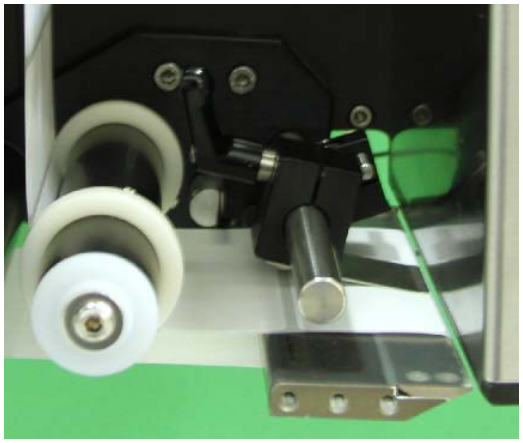
Note: The top of the peel edge should be slightly higher than the bottom surface of the label grid. If a label on the grid will slide back onto the peel edge, the peel edge is too low.

AIR BLOW LABEL STOP

1. With the applicator online, jog a couple of labels.

2. Label stop position should be 1/32” from the peel edge tip.

3. If needed, change the label stop value. (Refer to Label Stop setup in the display section or page 3-5)

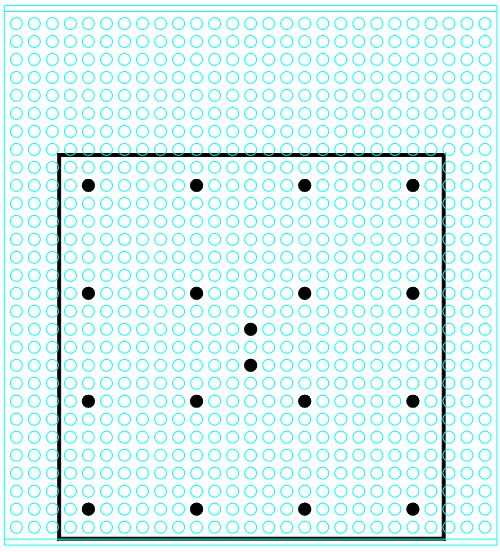


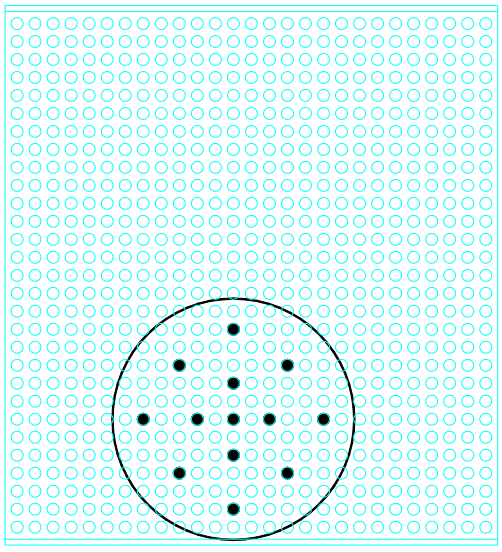
AIR BLOW GRID SETUP

1. With the power on and the applicator online, jog a label onto the grid and tape it in place.

2. Turn the power off and remove the blow box cover. Arrange the air jet tubes in a symmetrical pattern with most of the tubes in the center of the label. Insert any unused tubes in the storage block. **WARNING: Make sure the air jet tubes are not in the axial fan.**

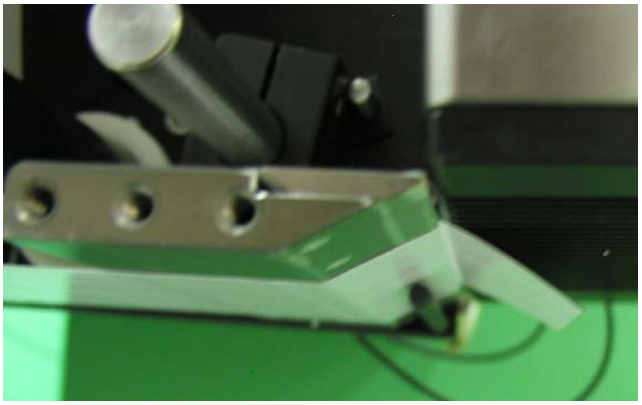
3. The blow box is equipped with two fans and a switch. With the switch in LOW position, only one fan will run. With the switch in the HIGH position, both fans run. Select the appropriate switch position to insure that enough vacuum is generated to hold the label in place.





AIR BLOW AIR ASSIST

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



1. Adjust the air assist tube so it's blowing into the center of the label. Ensure that the label feeds out against the grid properly.

2. The regulator for the air assist is on the valve bank and should be set between 10 and 15 PSI. This is a typical setting but it may be changed as needed.

3. If a longer air assist is needed to help position the label, press "APPLICATOR SETUP" on the display. Pick "EXT AIR ASSIST" and enter a value between .000-1 second.

AIR BLOW AIR BLAST

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

1. The regulator for the air blast should be set between 40-50 PSI. This is the typical setting but it may be changed as needed.

2. If the air blast time needs changed, press "APPLICATOR SETUP" on the display. Pick "AIR BLAST" and enter a value between .005-1 second.

TAMP APPLICATOR SETUP

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

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

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

DAT TAMP: The dual action tamp has a swing action to apply a label to the leading or trailing panel of the product and a tamp action to apply a label to a side panel of the product. The DAT applicator has three 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.

1. In the applicator type section of the display, select "N-TAMP" for normal tamp or "I-TAMP" for ITB tamp applicator. Selecting DAT will take you to another screen to pick the type of dual action you want. 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.

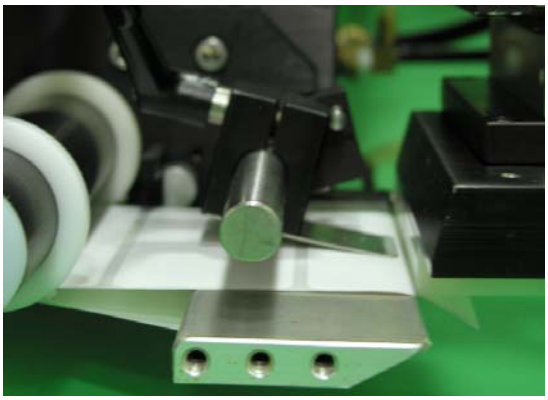
2. With the tamp slide extended make sure the label pad is approx. 1/8" from the product.

3. Go through "general setup" procedure (i.e. label sensor, web speed, etc.)

TAMP PEEL EDGE ALIGNMENT

1. Turn the power on, move the tamp assembly up and make sure the applicator is offline.

2. Advance the web using the drive roller. Stop when half of the label is off the peel edge tip. The label should be at an angle between 5 and 15 degrees from the label pad surface. The stiffer the label, the flatter the angle.



3. To adjust the peel edge, loosen the two 1/4 S.H.C.S. screws on the peel edge faceplate and move the assembly close to the tamp pad. Allow some clearance distance between the peel edge and tamp assembly. Repeat step #2 to check label angle. Re-adjust if needed.

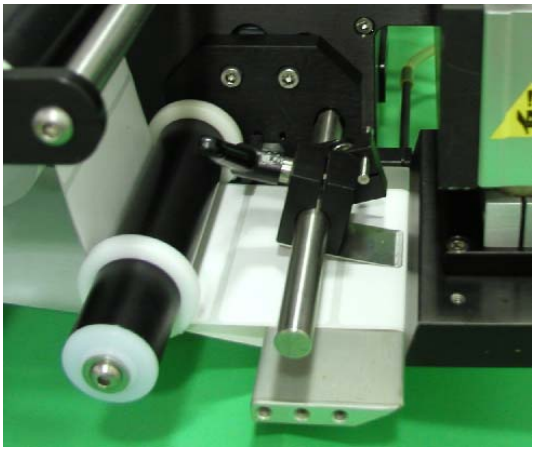
4. If OK go to label stop.

TAMP LABEL STOP

1. With the applicator online, jog a couple of labels.

2. Label stop position should be 1/32” from the peel edge tip.

3. If needed change the label stop value. (Refer to label stop setup in the general job setup)



TAMP VACUUM

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

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

TAMP AIR ASSIST

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

1. Adjust the air assist tube so it's blowing in the center of label. Ensure that the label feeds out against the label pad.

2. The regulator for the air assist is on the valve bank and should be set between 10 and 15 PSI. This is a typical setting but it may be changed as needed.

3. If a longer air assist is needed to help position the label, press "APPLICATOR SETUP" on the display. Pick "AIR ASSIST" and enter a value between .000-1 second.

TAMP AIR BLAST

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

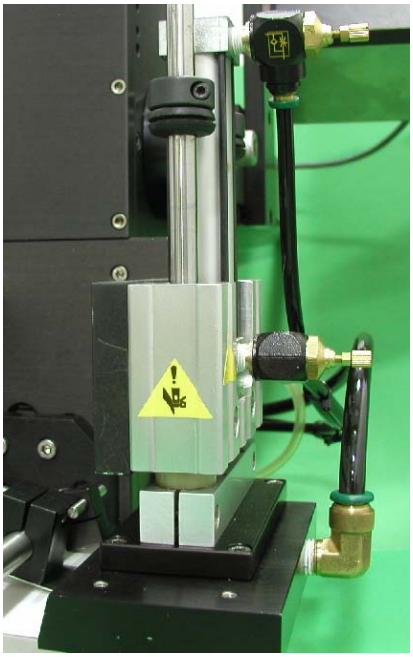
1. The regulator for the air blast is on the valve bank and should typically be set between 40-50 PSI.

2. To change the air blast time, press "APPLICATOR SETUP" on the display. Pick "AIR BLAST" and enter a value between .005 and 1 second.

3. A valid air blast entry will send you back to the label setup menu.

4. Press "HOME" to return to the main menu.

TAMP SLIDE



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

EXTEND TIME:

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

2. To change the extend time press "APPLICATOR SETUP" on the display. Pick "TAMP TIMES" and enter a value under "TAMP EXTD" between .01-5 seconds.

RETRACT TIME:

1. 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 times.

2. To change the retract time press "APPLICATOR SETUP" on the display. Pick "TAMP TIMES" and enter a value under "TAMP RTRCT" between .01-5 seconds.

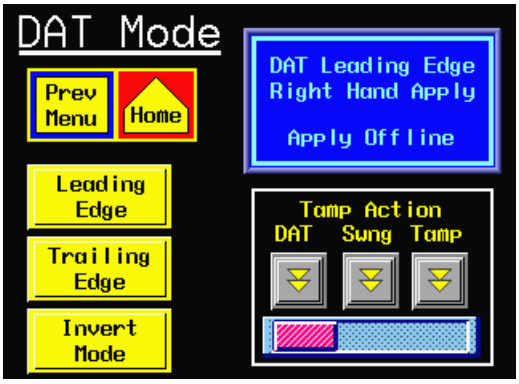
NOTE: If tamp switches are used, it is only necessary to set both tamp extend & retract times to a value higher than the time required. The tamp switches will override any excess time.

DUAL ACTION TAMP (DAT) SETUP

DAT: Leading Edge Sequence (Swing & Tamp)
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. 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 second label placement instance. The second label placement distance or time is started at the same time as the first label placement. When the second 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.
Note: If DAT: Trailing Edge (Tamp & Swing) is selected, the tamp action occurs first and the swing action applies a label to the back panel of the product.

DAT: Inverted Sequence (Inverted Swing & Inverted Tamp)
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 second label placement times or distance while it waits the first label placement time or distance. When the first 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 second 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.

Applicator Type
If Dual Action Tamp (DAT) is selected from the Applicator Type menu, the submenu shown at the right appears allowing the user to define the type of motion that occurs during each product application cycle. You should select leading, trailing or invert depending on the mode type you need. You then can chose the tamp action within it (dual, swing only or tamp only).



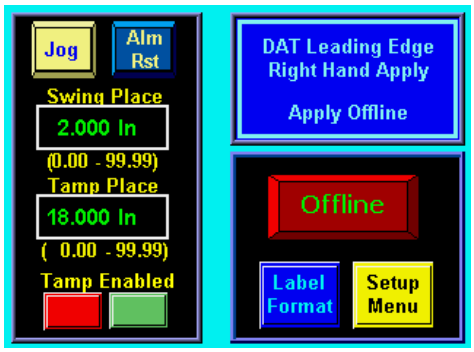
Note: With the applicator type set to DAT, jogging the applicator will cause the blow valve to turn on for the blow off time and a label feed. There is no tamp action

Applicator Options
The following options have been removed for the DAT applicator:

Loose Loop	Multi-Label
Imprinter	Powered Rewind

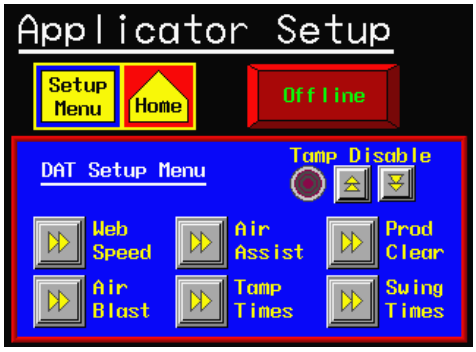
Label Placement

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 99 seconds or inches for the first and second label placement values respectively. A suggested lower range limit appears below the second label placement value. Its value varies depending on the 1st label placement, extend, and retract values setup on the applicator.



Applicator Setup

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 insure 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.



Note: If the encoder is enabled and the conveyor stops after a product detect signal is received, the applicator will wait for the encoder signal (conveyor) to resume before continuing with the label application cycle. This feature is provided for instances when some operation must be performed on the product at standstill. The operator may abort the cycle by pressing "jog" or going offline.

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 angle adjustments on this actuator were opened up at the factory. Making it level will involve moving the retract shock for the swing arm. Moving this up and down will move the pad accordingly. See the section on adjusting shock absorbers and flow controls.
3) Make sure the label is aligned with the pad so there is no over-hang. To adjust this, move the 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 P.S.I. 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.

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 P.S.I., the air blast at 40-60 P.S.I., and the vacuum pump at 20-40 P.S.I.
6) Air blast time is set through the display and should be set long enough to apply a label firmly to the product. Setting the time too high results in fewer labels/min. Start at 0.03 seconds. The air blast time applies to both the swing and tamp sequences.

Dual Action Tamp Shock Absorbers and Flow Controls

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

Both the linear and rotary actuators have shock absorbers 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 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 action while turning the knob out speeds it up.

NOTE: The slide extend stop will have to be adjusted. This adjustment is discussed in the "Extend and Retract Times" section of this insert

.

Label Static 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 machine 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 that the labels are consistently stopping in the same place on the label pad. If this is OK go to step 7; if not, go to step 2.
2) Check label stop. One label should be completely dispensed off the liner while the next label should be 1/32" away from the peel edge. If this varies more than 1/32" with each cycle, reset the label sensor. If you still have the problem go to the troubleshooting section of the 360a manual and follow its suggestions. When this is corrected, go back and try the static test again. If this was OK, go to step 3.
3) Make sure the label pad surface is clean. If clean, go to step 4. If not, clean and re-try the static test again.
4) Make sure the vacuum is set correctly. If the label flutters while feeding across the pad, the vacuum is too high. If the label falls off or moves after the label has left the liner, the vacuum is too low. If the label feed looks smooth, go to the next step.
5) Work with the air pressure and the position of the air assist tube until the label feeds more consistently onto the pad. Re-try the static test. If the results are still not good enough, go to step 6. Otherwise go to 7.
6) Make sure you are working with good label stock. Try another roll of labels and see if you get the same results.
7) Check the distance from the label pad to the product. If the distance is too large, the labels may float too much. Try lowering the machine so the label pad just clears the product (within 1/8").
8) Is the label pad made for the label you're using? Exposed holes on the pad will reduce the available vacuum used to hold the label in place and results will be uncertain.

Positioning the Applicator

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

NOTE: The following directions are for the DAT applicator. The single tamp action is not discussed but its setup may be interpreted from the following instructions.

With the air and power off to the applicator, rotate the swing arm to the extended position. Make sure the slide is fully retracted. Push the product down the conveyor within the guides and stop in front of the label pad. Move the applicator in or out and up or down to position the pad where the label should 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. Some minor changes may be required before applying labels but this will get the label close to the desired position.

Product Detect Sensor Position
Before going through this section, make sure the extend and retract times are properly setup.

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 #1 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 detector sensor upstream more. If it retracted too soon, move the sensor downstream. Ideally, the label will be blown onto the front of the product and retract without ever touching the product.

Now look at the position of the label on the side of the product. If it was applied too late, decrease the #2 label placement. If it was applied too early, increase the label placement. If the #2 label placement is too low compared to the cycle time for the first half of the labeling sequence, a warning will be displayed saying “Label Placement Is Too Low”.

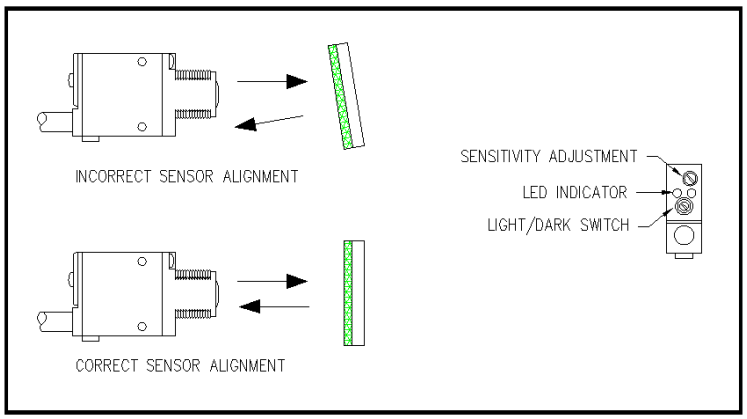
PRODUCT SETUP

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 insure products follow the same path along the conveyor.

STANDARD PRODUCT SENSOR SETUP (Banner SM312LV)

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

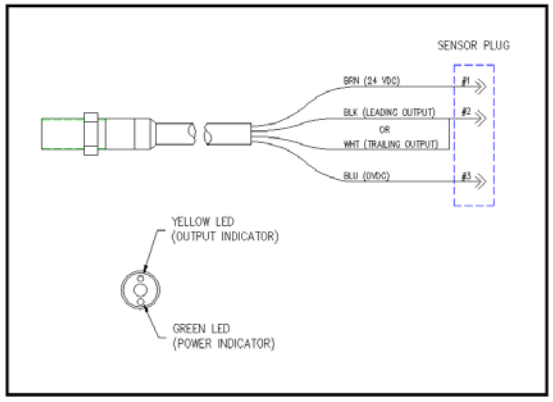


5- Place a product between the sensor and the reflector. The LED indicator should go out.
   a) On translucent products, the sensitivity may have to be reduced to avoid burn-through.
6- Replace back cover of sensor.
7- When mounting the sensor, position it slightly upstream of the applicator nose. It should be positioned to allow for fine adjustments of the label placement value. An excessive upstream position requires large placement values leading to slow label rates.

OPTIONAL PRODUCT SENSOR SETUP (Banner S18SN6FF50)

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

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



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 gives you the ability to adjust where the label is applied on the product.

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

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 the encoder is on, detector lockout is in inches; if no encoder then it is in seconds. The lockout starts at the beginning of a labeling sequence and the applicator will ignore 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. Refer to page 3-15 for more information.

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 insure good labeling performance. Also, the encoder changes the label placement units to inches a more easily measured parameter that is independent of product speed.

There is a good description on setting up an encoder in the display section of this manual. Refer to pages 3-15 thru 3-16.

Notes: **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.

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

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

ENCODER MOUNTING

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

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

NOTE: Since the encoder output signal is rotation direction sensitive, it may be necessary to reverse the A+ & A- wires going to TB21 and TB22 in the applicator.

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

360a SERIES

GENERAL

MAINTENANCE

PROCEDURES

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

MAINTENANCE

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

DAILY MAINTENANCE

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

WEEKLY MAINTENANCE

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

MONTHLY MAINTENANCE

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

SEMI-ANNUAL MAINTENANCE

1. Replace air filter and clean collection bowl.

2. Clean inside and outside of machine using an industrial vacuum cleaner.

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

3. Replace slip clutch disk. Clean both friction surfaces.

4. Check roller clutch on the rewind shaft for correct operation.

5. Examine pulleys for wear.

6. Perform the monthly maintenance section.

DANCER ARM ADJUSTMENT

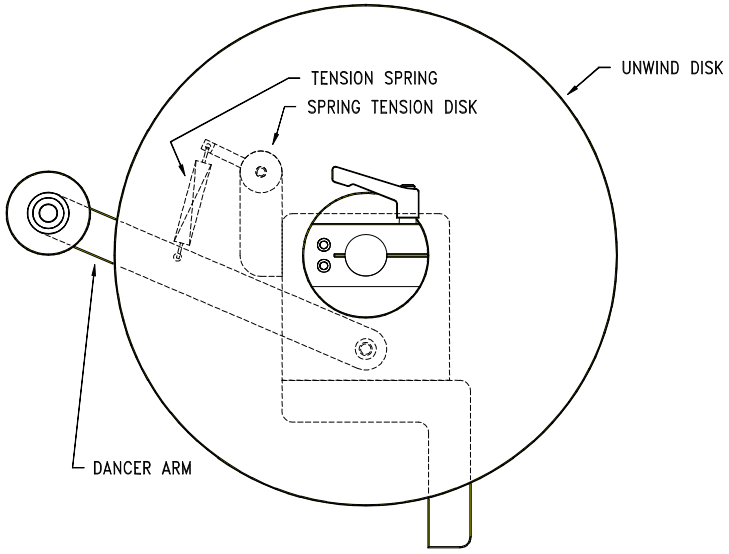
The dancer arm maintains tension on the label liner and operates the brake on the unwind mandrel when labels are dispensed. The spring holding the dancer arm should be adjusted so that there is enough braking force to keep the unwind mandrel from continuing to roll after a label feed yet still release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

1. Loosen the screw going to the spring tension disk.

2. Rotate disk to proper spring tension.

3. Re-tighten screw.

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



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

REWIND SLIP CLUTCH ADJUSTMENT

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

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

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

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

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

DRIVE BELT ADJUSTMENT

1. Remove all AC power and air to the machine.

2. Remove the lower stainless cover. Rotate the 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 belt edge.

5. Loosen the four (4) screws on the side of the motor mounting plate using a 5/32" Allen wrench.

6. Push the motor mount assembly upward and re-tighten mounting screws. Make sure the motor assembly is 90 degrees from the faceplate to insure proper angular alignment – *see note

7. Disengage nip roller and turn the drive roller. Make sure there is no severe catching as you turn the roller.

8. Check belt tension. With light finger pressure on one side of the belt, adjust the tension so that the belt deflects approximately 1/16" to 1/8".

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

9. Replace the two splice plates.

10. Replace the air lines interconnecting the two sides of the applicator.

11. Replace the stainless cover and tighten the mounting screws.

12. Re-connect the AC power and air.

Note: One method to verify angular alignment is to use 2 pcs. of ½" 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 above. Snug the 4 screws, remove banding strips, and finish tightening the 4 screws.

PROBLEM	POSSIBLE CAUSE	SOLUTION
WITH THE POWER SWITCH ON, NO COOLING FAN; NO DISPLAY	POWER CORD DEFECTIVE OR UNPLUGGED	INSPECT AND CORRECT
	AC FUSE BLOWN	DETERMINE CAUSE AND REPLACE FUSE
WITH THE POWER SWITCH ON, COOLING FAN ON; NO DISPLAY	DISPLAY CABLE NOT PLUGGED IN TO THE BACK OF THE APPLICATOR	RECONNECT CABLE
	LOSS OF 24 VDC	CALL A FACTORY REPRESENTATIVE
	DEFECTIVE CABLE	REPLACE CABLE
	DEFECTIVE DISPLAY BOARD	REPLACE DISPLAY BOARD
WITH THE POWER SWITCH ON, COOLING FAN ON; DISPLAY IS STUCK ON THE STARTUP SCREEN	MAKE SURE THE DRIVE IS RUNNING	CALL A FACTORY REPRESENTATIVE
LABEL LINER BREAKING	LABELS ARE THREADED INCORRECTLY	SEE THREADING DIAGRAM
	BAD ROLL OF LABELS	REPLACE LABEL ROLL
	SIDE NICKS IN LINER; HEAVY DIE CUT ON LINER	REPLACE LABEL ROLL
	ROLLER COLLARS ARE STRESSING THE LABEL STOCK	CHECK TO MAKE SURE GUIDE COLLARS LINE UP WITH UNWIND SHOULD HAVE 1/64" CLEARANCE BETWEEN LABEL STOCK AND COLLAR
	ADHESIVE BUILD-UP ON PEEL EDGE	CLEAN PEEL EDGE SURFACE
	PEEL BAR TENSION SPRING TOO TIGHT	RELEASE SPRING TENSION

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

PROBLEM	POSSIBLE CAUSE	SOLUTION
LABEL LINER NOT WINDING UP	REWIND SLIP CLUTCH NEEDS TENSIONING OR REPLACED	SEE SLIP CLUTCH ADJUSTMENT IN THE MAINTENANCE SECTION
	ONE-WAY CLUTCH BEARING NOT WORKING	REPLACE REWIND SHAFT ASSEMBLY
	BROKEN BELT	REPLACE BELT
LABELS ARE NOT HELD ON LABEL GRID OR LABEL PAD	**AIR BLOW** VACUUM FAN NOT WORKING	CHECK FOR BLOWN FUSE
		OBSTRUCTION IN FAN
		REPLACE FANS
	TAMP NOT ENOUGH VACUUM ON PAD	INSPECT FOR CLOGGED OR DEFECTIVE VENTURI
		VENTURI EXHAUST IS BLOCKED
		NEEDS MORE AIR PRESSURE
	BOTH AIR BLOW & TAMP PEEL EDGE OUT OF ADJUSTMENT	REFER TO PEEL EDGE ALIGNMENT IN THE LABELER SETUP SECTION (SECTION 7)

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

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 FAULT

The drive fault screen will list six 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.**

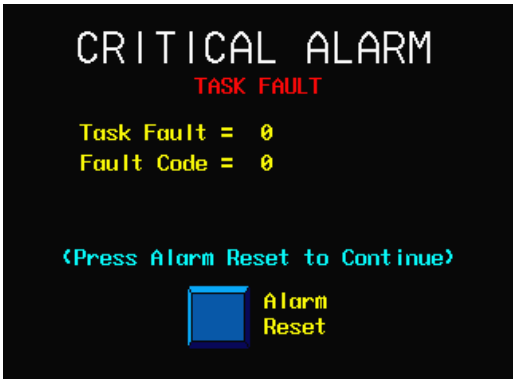
Max Speed – If the applicator exceeds the applicator maximum speed of 3000 "/min for any reason, a max speed fault is generated.

Motor Temp -This alarm turns on if the motor temperature exceeds the upper limit. The current motor does not support this feature.

Amp Temp - This alarm occurs when the drive amplifier temperature exceeds the upper limit. If this alarm occurs, clean the applicator air filter and insure 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.

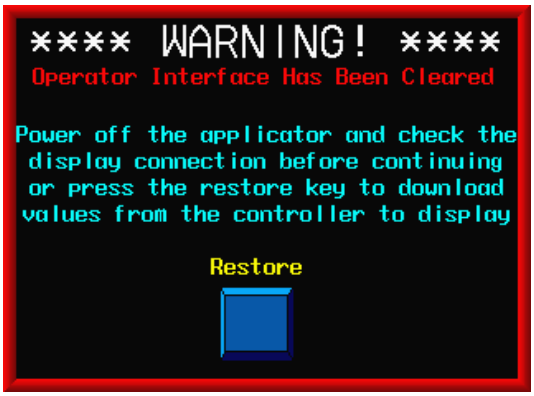
TASK FAULT

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 and Fault Code numbers shown on the screen.



CLEARED DISPLAY VARIABLES

At power up, the applicator controller sends all of 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 situation occurs when the display cable is loose or 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 not the display or vise versa.

ACCESSORIES

The following is only 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 heads 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 labeling head. 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 a labeling head with a 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 labeling head 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 screen and 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 style applicators that uses one or two 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 flash 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, 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 is used in high-speed applications and in cases where it is necessary to wind-up 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 360 come in 3" and 6" diameters. Please contact the factory for non-standard diameters.

ALARM LIGHT STACK
The 360a can handle up to 3 alarm lights:
Red - Critical Alarm (steady)
Amber - Warning Alarm (steady)
Green - Ready Signal (steady)
Light stacks may be purchased in one or three light configurations.

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 a clear label 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 body remains farther away. Consult the factory to match a solution to your requirements.

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-IN1112	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 POTENTIONMETER
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)

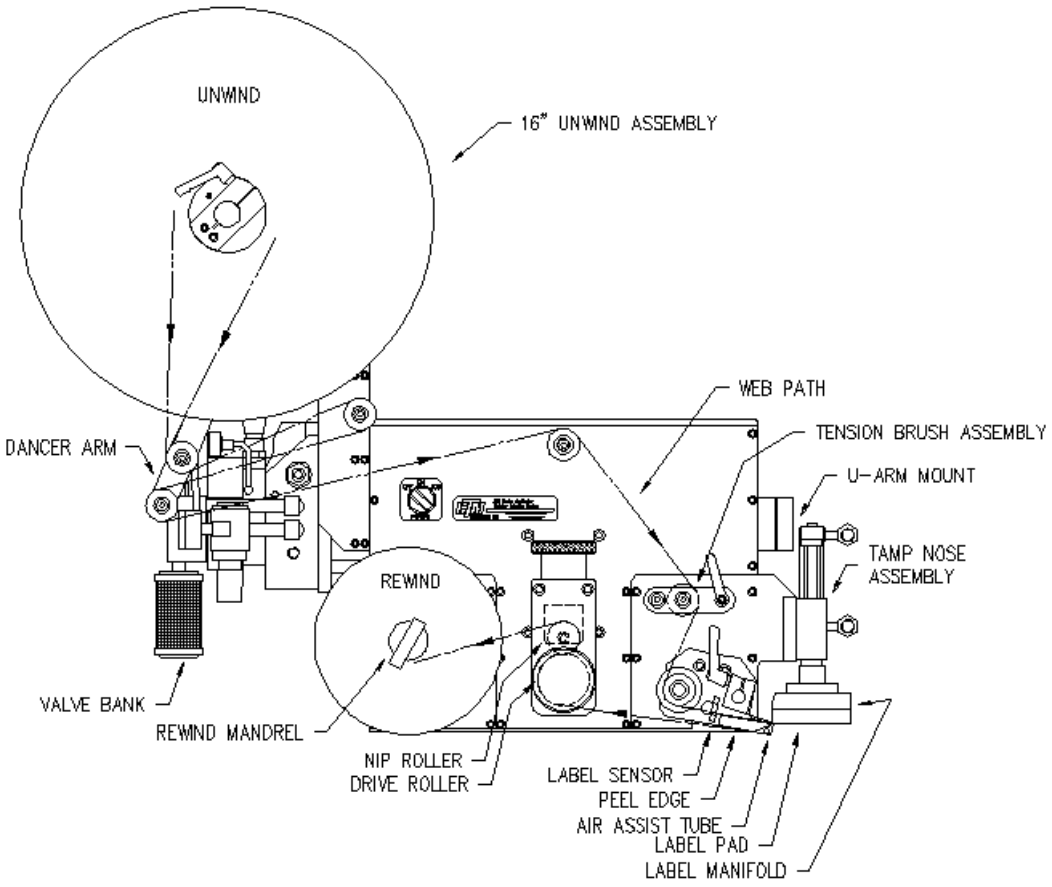
Part Number	Recommended Qty	Description
PE-LI2070	1	LAMP (FOR ALARM LIGHT)
PE-RE1001	1	RELAY (FOR ALARM LIGHT)

CHANGING TO OPPOSITE HAND DISPENSE

When performing an applicator changeover, the nose assembly, unwind assembly, rewind, and wiring are first changed to the opposite hand dispense. Then each component assembly is remounted on the opposite side of the applicator. The symmetry of the applicator main module and the individual parts facilitate the changeover process but it can be confusing if care is not exercised. The explanation and diagrams to follow will hopefully guide you through this process.

APPLICATOR CHANGEOVER

1) Remove the nose assembly (See: **NOSE ASSEMBLY REMOVAL**).
2) Change the applicator nose assembly to the opposite hand dispense (See: **NOSE ASSEMBLY CHANGEOVER**).
3) Remove the rewind assembly from the applicator (See: **REWIND REMOVAL).**
4) Change the rewind assembly to the opposite hand dispense (See: **REWIND CHANGEOVER**).
5) Change the wiring to the opposite side of the applicator (See: **WIRING CHANGEOVER**).
6) Change the unwind assembly to the opposite hand dispense.
7) If the applicator is a Tamp or Air Blow, move the valve assembly to the opposite side of the machine.
8) Install the rewind assembly on the opposite side of the machine (See: **REWIND INSTALLATION**).
9) Install the nose assembly on the opposite side of the machine (See: **NOSE ASSEMBLY INSTALLATION**).

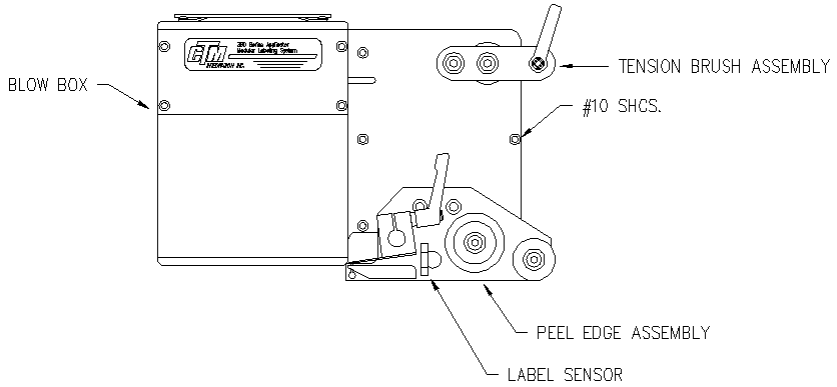


NOSE ASSEMBLY REMOVAL AND INSTALLATION INSTRUCTIONS

NOTE: DISCONNECT THE POWER CORD AND AIR SUPPLY FROM THE MACHINE BEFORE ATTEMPTING ANY OF THE FOLLOWING PROCEDURES. FAILURE TO FOLLOW THIS PRECAUTION COULD RESULT IN INJURIES FROM MOVING PARTS OR ELECTRICAL SHOCK!

BLOW BOX NOSE ASSEMBLY REMOVAL

1) Remove the stainless steel cover from the bottom of the applicator.
2) Remove the air tubes interconnecting the two sides of the applicator.
3) Disconnect the fiber optic cables from the label sensor mounted on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Gently remove the two fiber cables from the sensor.
4) Cut the tie wraps securing the fibers to the adhesive mounting pads and gently pull the fiber optic cable out of the wiring clamps and through the holes in the fiber optic mounting plate.
5) Unplug the blow box fan connector located on the underside of the electronic shelf.
6) Disconnect the hoses for the air assist tube and the air blast manifold at the applicator housing.
7) Remove the peel edge assembly to gain access to the #10 mounting screws.
8) Remove the six #10 mounting screws holding the nose assembly to the housing.



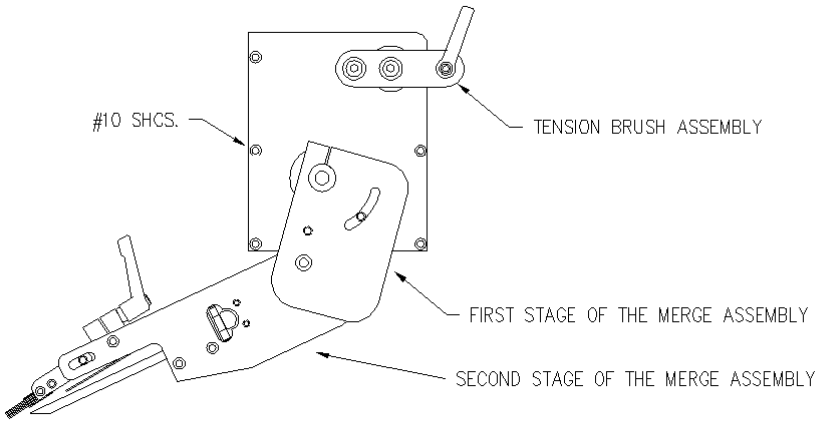
BLOW BOX NOSE ASSEMBLY INSTALLATION

1) Make sure that the peel edge assembly is removed from the blow box nose assembly.
2) Install the blow box nose assembly using the six #10 mounting screws making sure that the fan harness is tucked inside the applicator housing.
3) Plug the blow box fan harness into its connector on the underside of the electronic shelf.
4) Install the peel edge assembly using the two 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.

NOTE: DISCONNECT THE POWER CORD AND AIR SUPPLY FROM THE MACHINE BEFORE ATTEMPTING ANY OF THE FOLLOWING PROCEDURES. FAILURE TO FOLLOW THIS PRECAUTION COULD RESULT IN INJURIES FROM MOVING PARTS OR ELECTRICAL SHOCK!

MERGE NOSE ASSEMBLY REMOVAL

1) Remove the stainless steel cover on the bottom of the applicator.
2) Remove the air tubes interconnecting the two sides of the applicator.
3) Disconnect the fiber optic cables from the label sensor mounted on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Gently remove the two fiber cables from the sensor.
4) Cut the tie wraps securing the fibers to the adhesive mounting pads and gently pull the fiber optic cable out of the wiring clamps and through the holes in the mounting plate.
5) Remove the fiber optic mounting plate from the side of the applicator housing.
6) Rotate the first stage of the merge nose downward to gain access to the #10 mounting screws.
7) Remove the six #10 mounting screws holding the nose assembly to the housing.



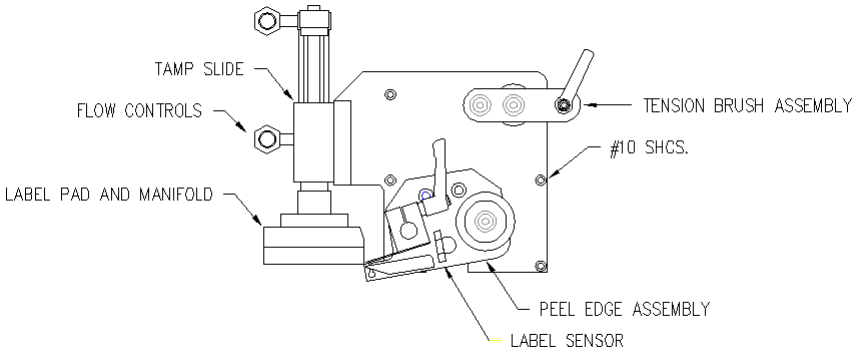
MERGE NOSE ASSEMBLY INSTALLATION

1) Rotate the first stage of the merge nose downward to gain access to the #10 mounting screws.
2) Install the merge nose assembly using the six #10 mounting screws.
3) Re-position the first stage of the merge nose.
4) Make sure the label sensor is installed in the peel edge. Run the optical fibers through the two holes in the mounting plate on the applicator housing.
5) Re-connect the fiber optic cable to the label sensor located on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Plug the emitter fiber (from the lower fork in the label sensor) into the out going arrow connection on the sensor housing and the detector (from the upper fork in the sensor) to the incoming arrow connection. Slide the cinching mechanism downward and close the top cover on the sensor housing.
6) Neatly tie wrap any excess fiber optic cable to the adhesive pads located near the fiber mounting plate. **Note: The excess fiber should be formed into a loop greater than 3" in diameter to avoid kinking the fiber.**
7) Install the air tubes interconnecting the two sides of the applicator.
8) Replace the stainless steel housing cover.

NOTE: DISCONNECT THE POWER CORD AND AIR SUPPLY FROM THE MACHINE BEFORE ATTEMPTING ANY OF THE FOLLOWING PROCEDURES. FAILURE TO FOLLOW THIS PRECAUTION COULD RESULT IN INJURIES FROM MOVING PARTS OR ELECTRICAL SHOCK!

TAMP NOSE ASSEMBLY REMOVAL

1) Remove the stainless steel cover from the bottom of the applicator.
2) Remove the air tubes interconnecting the two sides of the applicator.
3) Disconnect the fiber optic cables from the label sensor mounted on top of the power supply. Open the top cover on the sensor and slide the cinching mechanism located on the right side of the sensor housing upward. Gently remove the two fiber cables from the sensor.
4) Cut the tie wraps securing the fibers to the adhesive mounting pads. Pull the fiber optic cable out of the wiring clamps.
5) Disconnect the hoses for the tamp cylinder, air assist tube, and air blast at the applicator housing.
6) Remove the peel edge assembly to gain access to the #10 mounting screws.
7) Remove the six #10 mounting screws holding the nose assembly to the housing.



TAMP NOSE ASSEMBLY INSTALLATION

1) Make sure that the peel edge assembly is removed from the tamp nose assembly.
2) Install the tamp nose assembly using the six #10 mounting screws.
3) Install the peel edge assembly using the two 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.

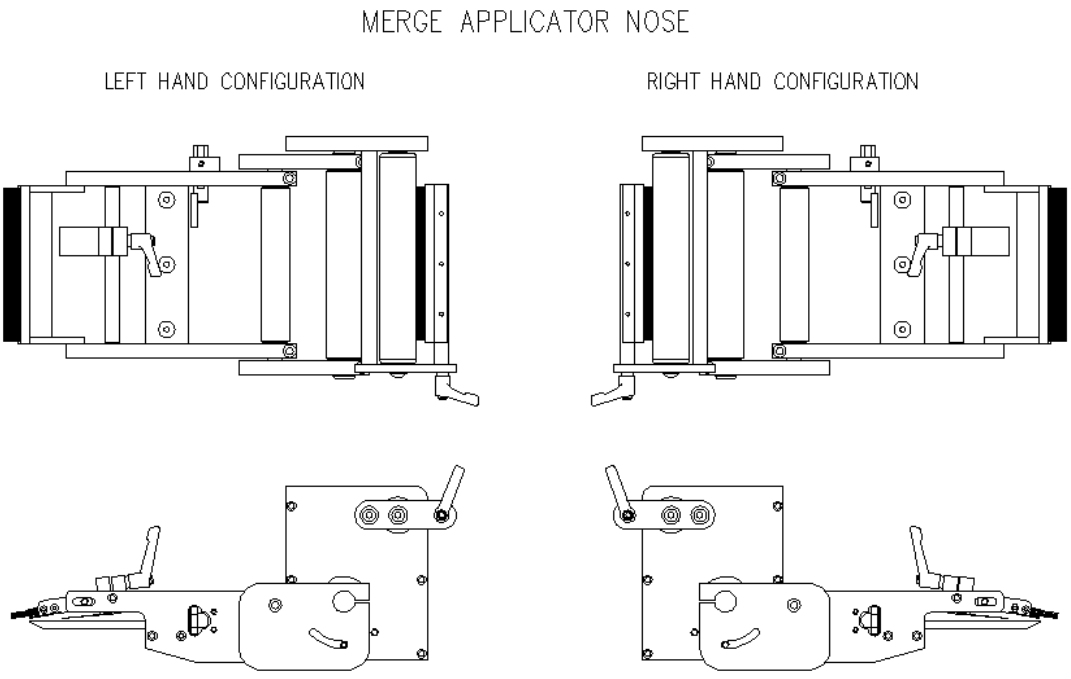
NOSE ASSEMBLY CHANGEOVER

When changing the nose assembly to the opposite hand dispense, all parts are first transferred to the opposite side of the mounting plate. Then the entire nose assembly is rotated 180 degrees and remounted to the opposite side of the applicator.

1) Remove the peel edge assembly from the nose assembly mounting plate. On a merge applicator, note the position of the bronze washers between the mounting plate and the peel edge assembly.
2) Change the applicator peel edge assembly to the opposite hand dispense (See: "APPLICATOR" **PEEL EDGE CHANGEOVER**).
3) Re-mount the peel edge assembly to the opposite side of the nose assembly mounting plate. On a merge applicator, re-install the bronze washers between the peel edge assembly and the mounting plate.
4) If the applicator is an air blow, change the blow box grid/fan to the opposite hand dispense (See: **BLOW BOX GRID/FAN ASSEMBLY CHANGEOVER**).
4) If the applicator is a tamp, change the tamp assembly to the opposite hand dispense (See: **TAMP ASSEMBLY CHANGEOVER**).
5) Remove the tension brush assembly and reassemble on the opposite side of the nose mounting plate.

MERGE PEEL EDGE CHANGEOVER

1) Remove the label sensor from the peel edge and remount on the opposite side rail. The open end of the U-shaped sensor should face towards the inside.



BLOW BOX PEEL EDGE CHANGEOVER

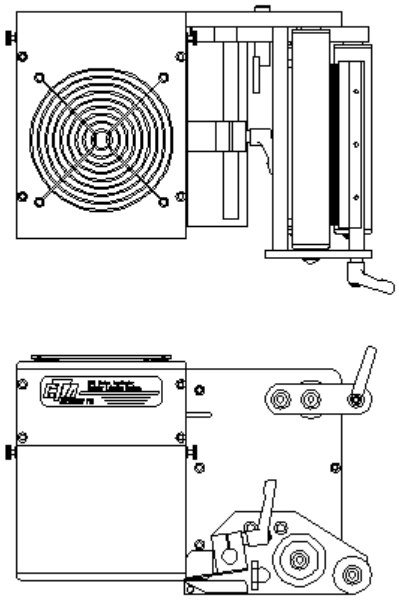
1) Remove the label sensor from the peel edge assembly and remount on the opposite side making sure that the fiber cables are threaded through from the opposite side. The open end of the U-shaped sensor should face towards the inside.
2) Remove the guide rollers and remount to the opposite side of the peel edge mounting plate.
3) Remove the peel edge and remount to the opposite side of the mounting plate using the tapped holes on the other end of the peel edge. Make sure the beveled edge is down and facing the same direction as it was originally.
4) Remove the label tension spring mounting bar and remount on the opposite side. The tension spring and the adjustment stop must be reversed on the mounting bar as well.
5) Remove the air assist tube and insert through the opposite side of the mounting plate and re-attach.

BLOW BOX GRID/FAN ASSEMBLY CHANGEOVER

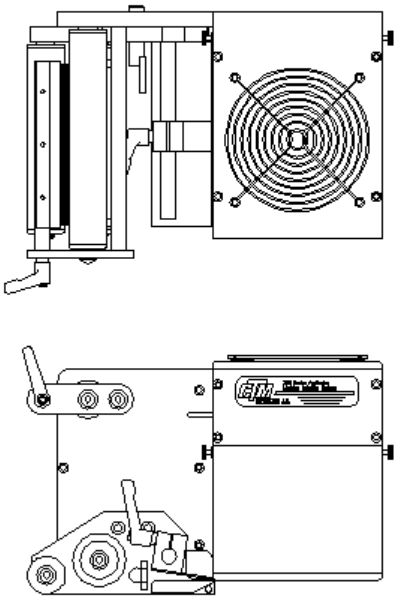
1) Remove the air blast fitting from the back of the nose assembly mounting plate and set aside.
2) Loosen the two knurled knobs on the back of the fan box and lock it in the upright position.
3) Remove the air blast manifold, label grid, and the air jet storage block. Remount on the opposite side of the nose assembly mounting plate.
4) Pull the fan wiring harness through the slotted opening in the nose mounting plate.
5) Remove the four screws holding the fan box hinge to the mounting plate and remount the fan box on the opposite side of the nose mounting plate.
6) Push the fan wiring harness through the slotted opening from the opposite side.
7) Re-install the air blast fitting in the nose assembly mounting plate.

BLOW BOX APPLICATOR NOSE

LEFT HAND CONFIGURATION



RIGHT HAND CONFIGURATION



TAMP PEEL EDGE CHANGEOVER

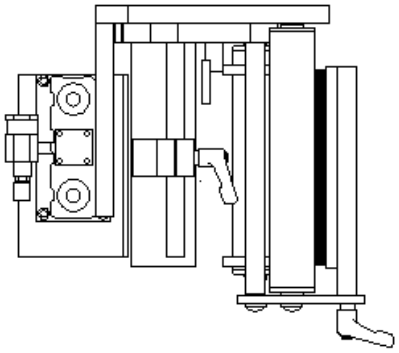
1) Remove the label sensor from the peel edge assembly and remount on the opposite side making sure that the fiber cables are threaded through the holes from the opposite side. The open end of the U-shaped sensor should face towards the inside.
2) Remove the guide rollers and remount to the opposite side of the peel edge mounting plate.
3) Remove the peel edge and remount to the opposite side of the mounting plate using the tapped holes on the other end of the peel edge. Make sure the beveled edge is down and facing the same direction as it was originally.
4) Remove the label tension spring mounting bar and remount on the opposite side. The tension spring and the adjustment stop must be reversed on the mounting bar as well.
5) Remove the air assist tube and insert through the opposite side of the mounting plate and re-attach.

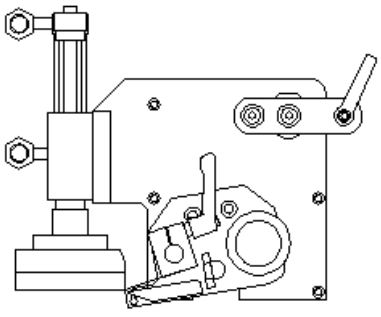
TAMP ASSEMBLY CHANGEOVER

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

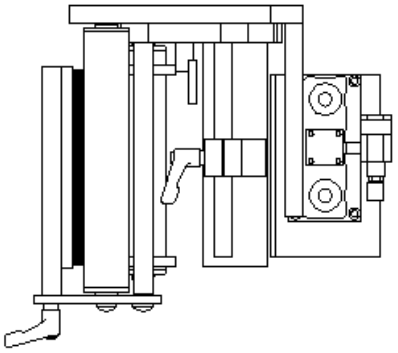
TAMP APPLICATOR NOSE

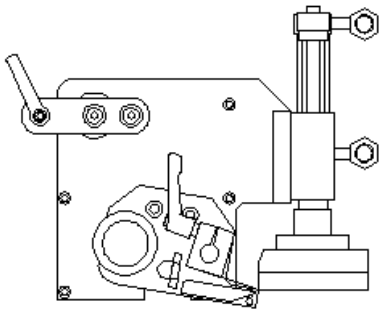
LEFT HAND CONFIGURATION





RIGHT HAND CONFIGURATION





REWIND REMOVAL

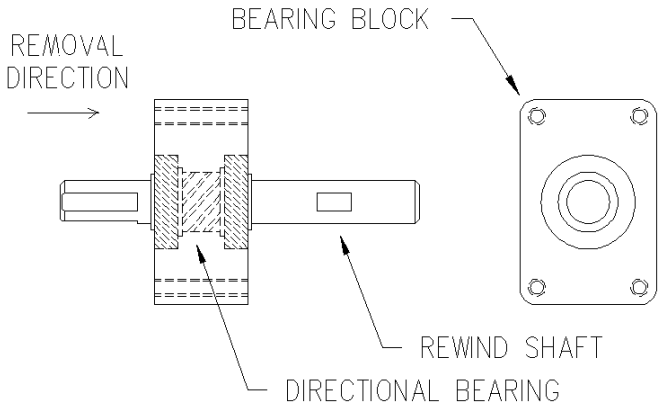
1) Remove the belt connecting the rewind clutch to the motor.
2) Remove the rewind mandrel from its drive shaft.
3) Remove the six #10 screws that hold the rewind mounting plate to the housing.

REWIND INSTALLATION

1) Attach the rewind mounting plate to the housing using the six #10 screws.
2) Install the rewind mandrel on the mandrel drive shaft.
3) Install the belt connecting the rewind clutch to the motor.

REWIND CHANGEOVER

1) Remove the bearing block that is mounted to the rewind transition plate.
2) Remove the pulley from the shaft making sure to note its position relative to the end of the shaft.
3) Remove the snap ring from the pulley side of the assembly and push the rewind shaft out through the mandrel side. **Note: The shaft diameter on the mandrel side is larger than it is on the pulley side. Do not attempt to force the shaft out through the pulley side!**
4) Re-install the shaft in the opposite side of the bearing block and replace the snap ring. **Note: The shaft can only rotate in one direction due to a directional bearing in the bearing block.**
5) Install the pulley on the shaft in the same position as it was previously.
6) Re-mount bearing block to the opposite side of the transition plate.

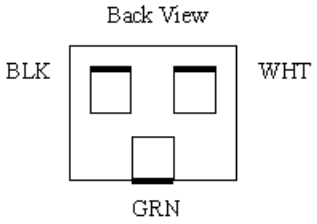


WIRING CHANGEOVER

1) Remove the tie wraps holding the AC power wiring and the label sensor fiber optic cable to the adhesive pads near the wiring entry points.
2) Remove the faston terminal connections at the fuse holder and the AC power entry module.
3) Cut the tie-wraps securing the blow box fan connector to the adhesive mounting pad and move the connector to the opposite side of the machine. Secure the connector in place with the open end towards the side frame.
4) Move wiring to the opposite side of the applicator and neatly tie wrap in place.
5) Swap the AC power entry module and the fuse holder with the fiber optic plate and the fuse holder plug.
6) Re-connect the terminals for the fuse holder and the AC power entry module (see drawing on the next page).

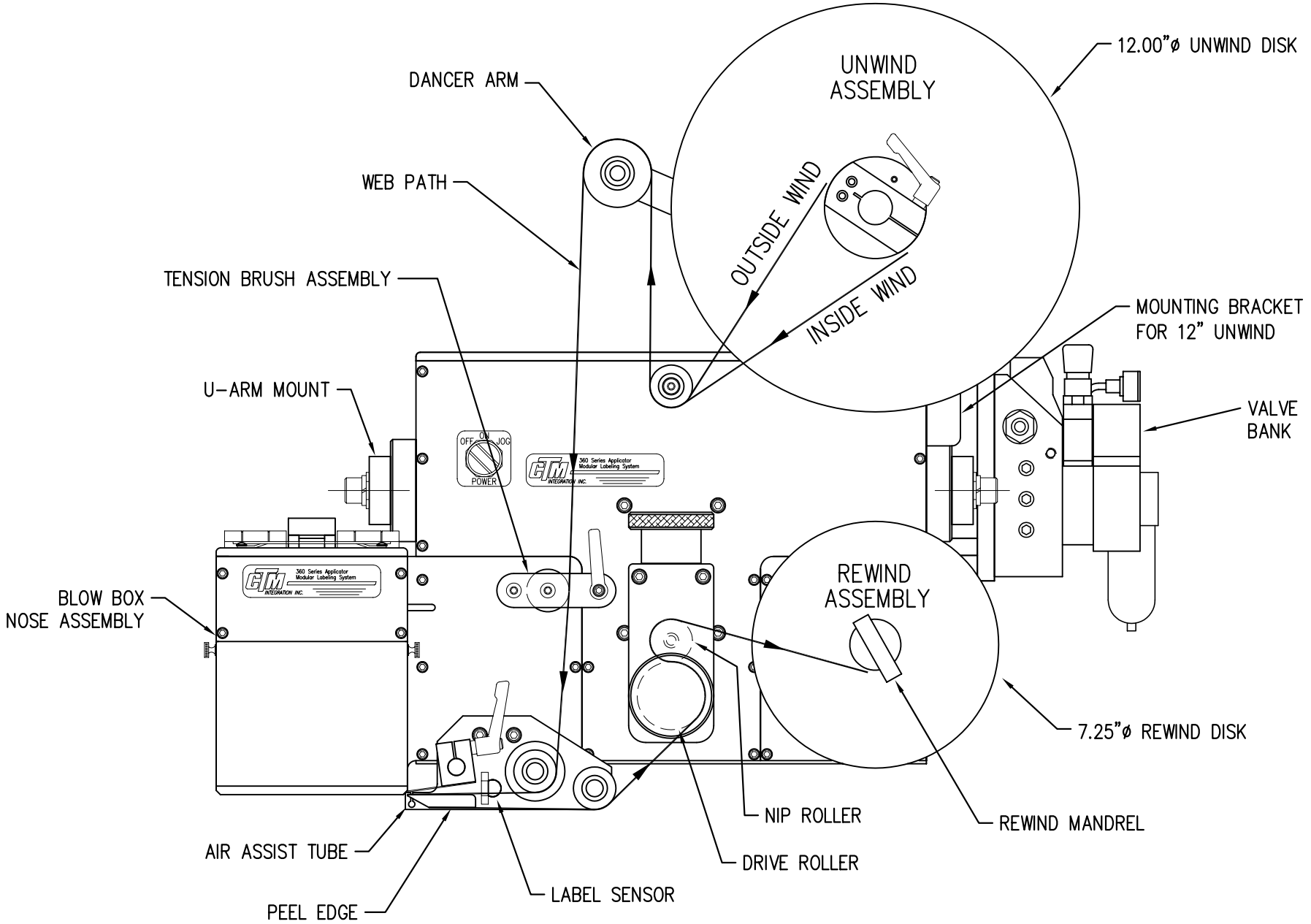
Note: All wiring comes from the factory long enough to be wired either left or right hand.

Power Entry Module Wiring



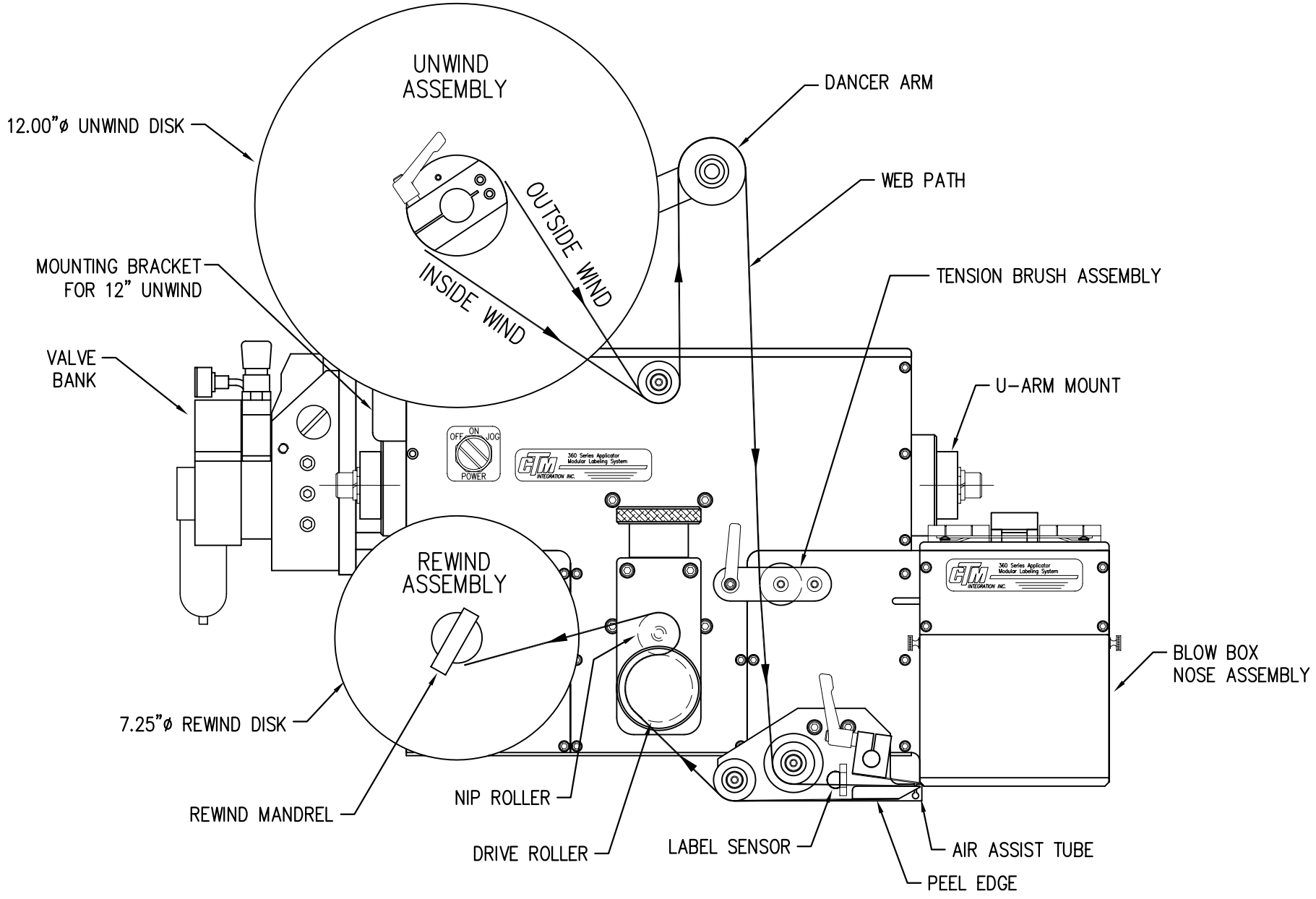
WEB PATH DIAGRAM

360 SERIES LEFT HAND AIR BLOW BOX APPLICATOR WITH 12" UNWIND



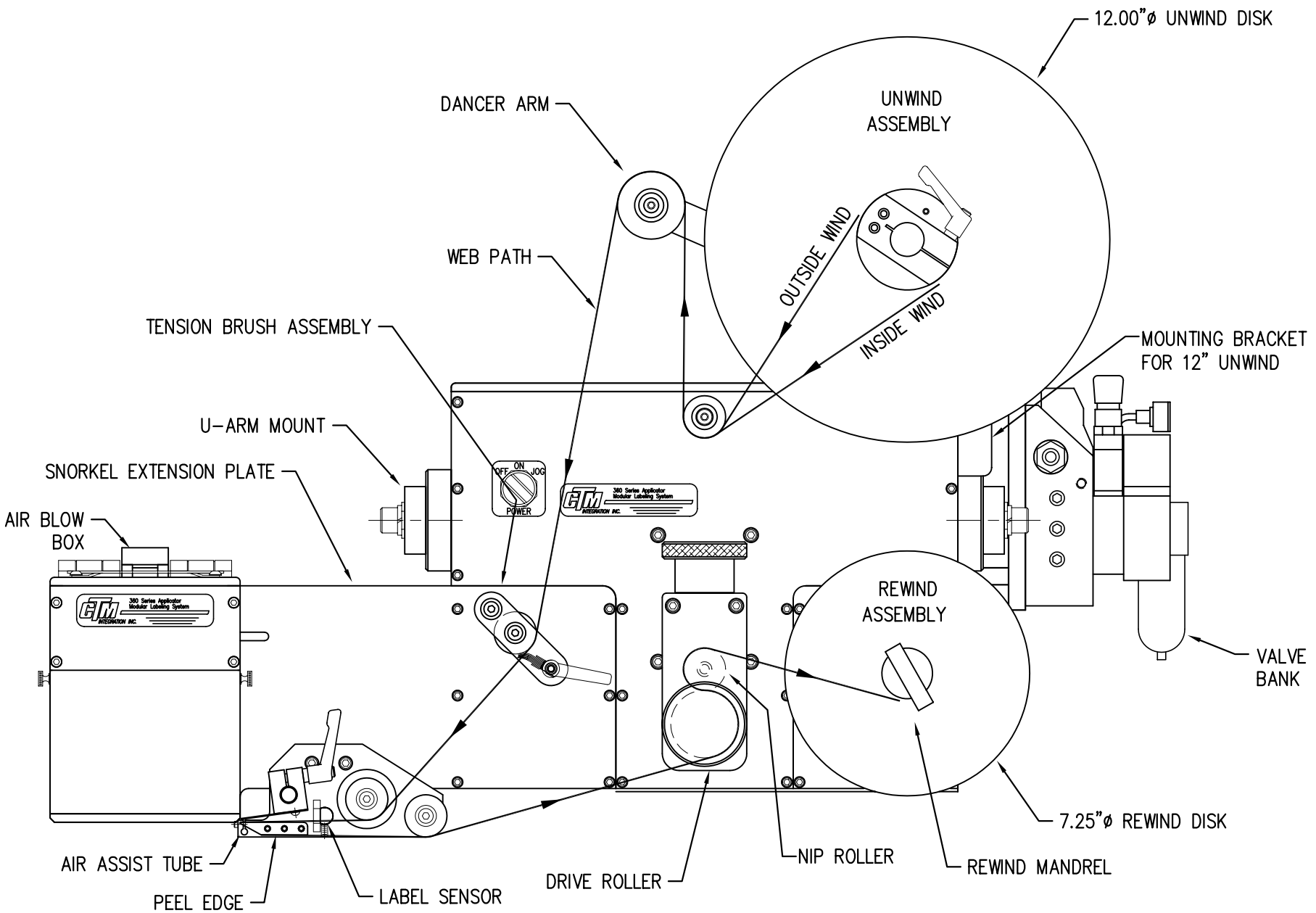
WEB PATH DIAGRAM

360 SERIES RIGHT HAND AIR BLOW BOX APPLICATOR WITH 12" UNWIND



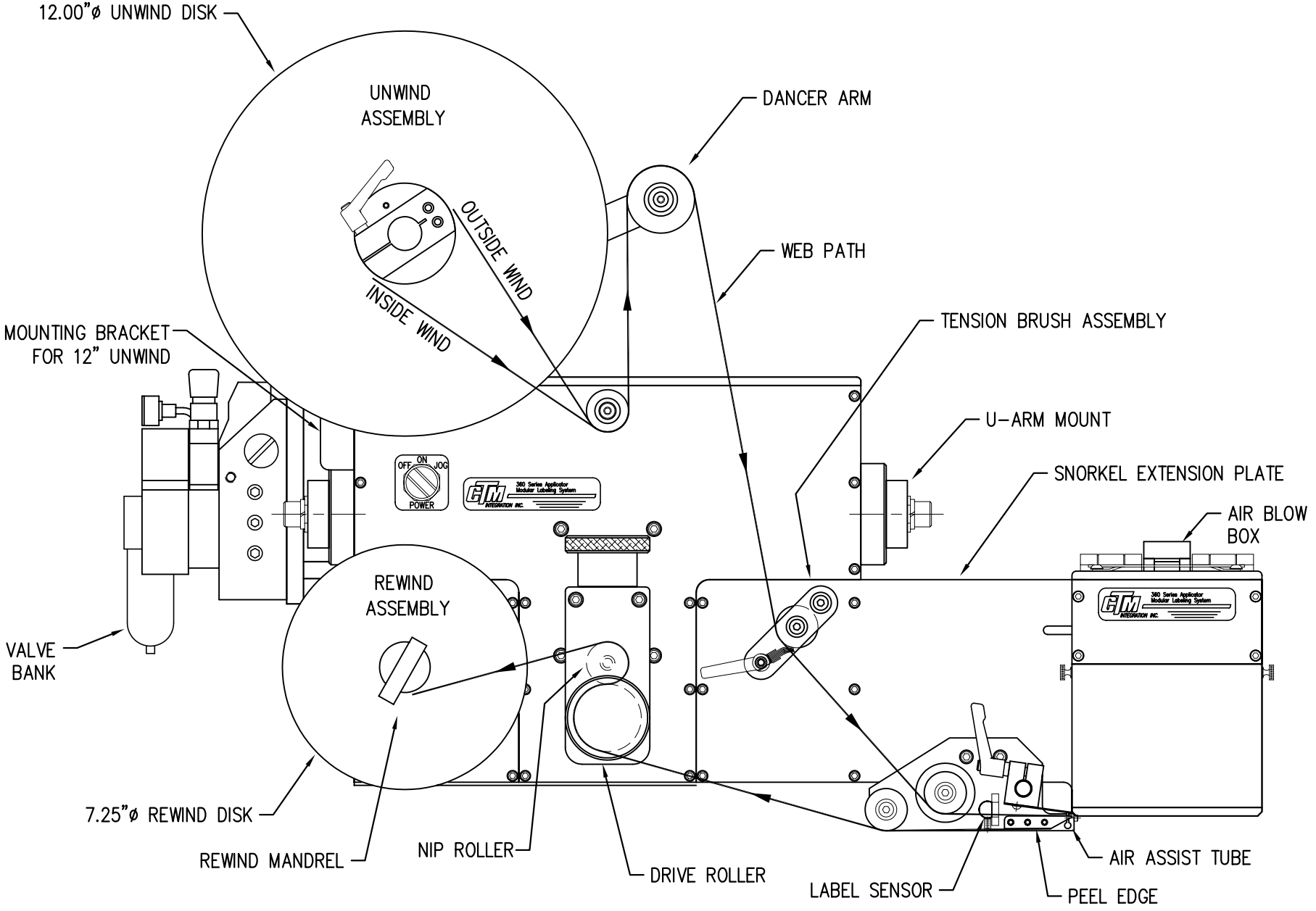
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR WITH 12" UNWIND



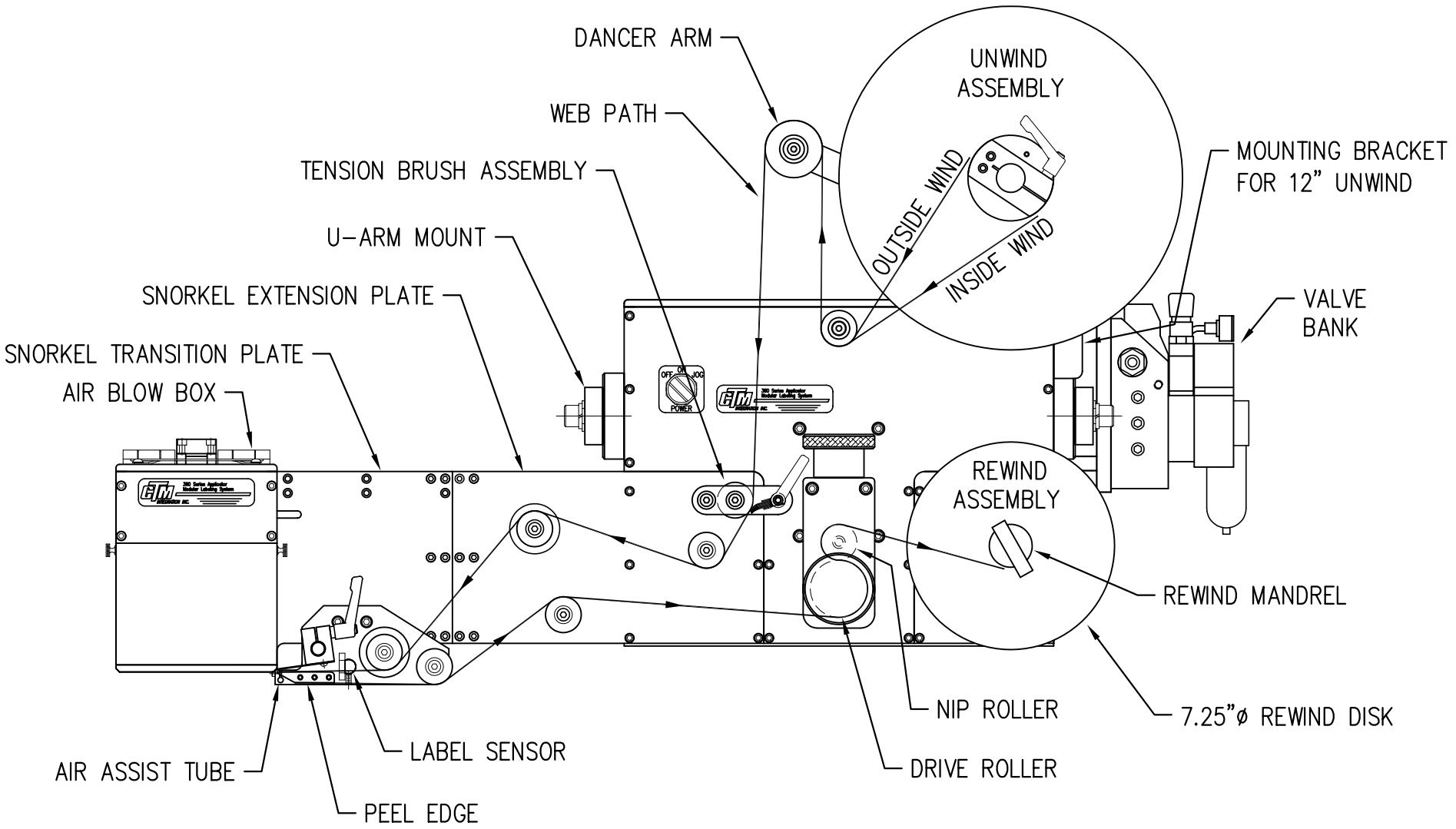
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR WITH 12" UNWIND



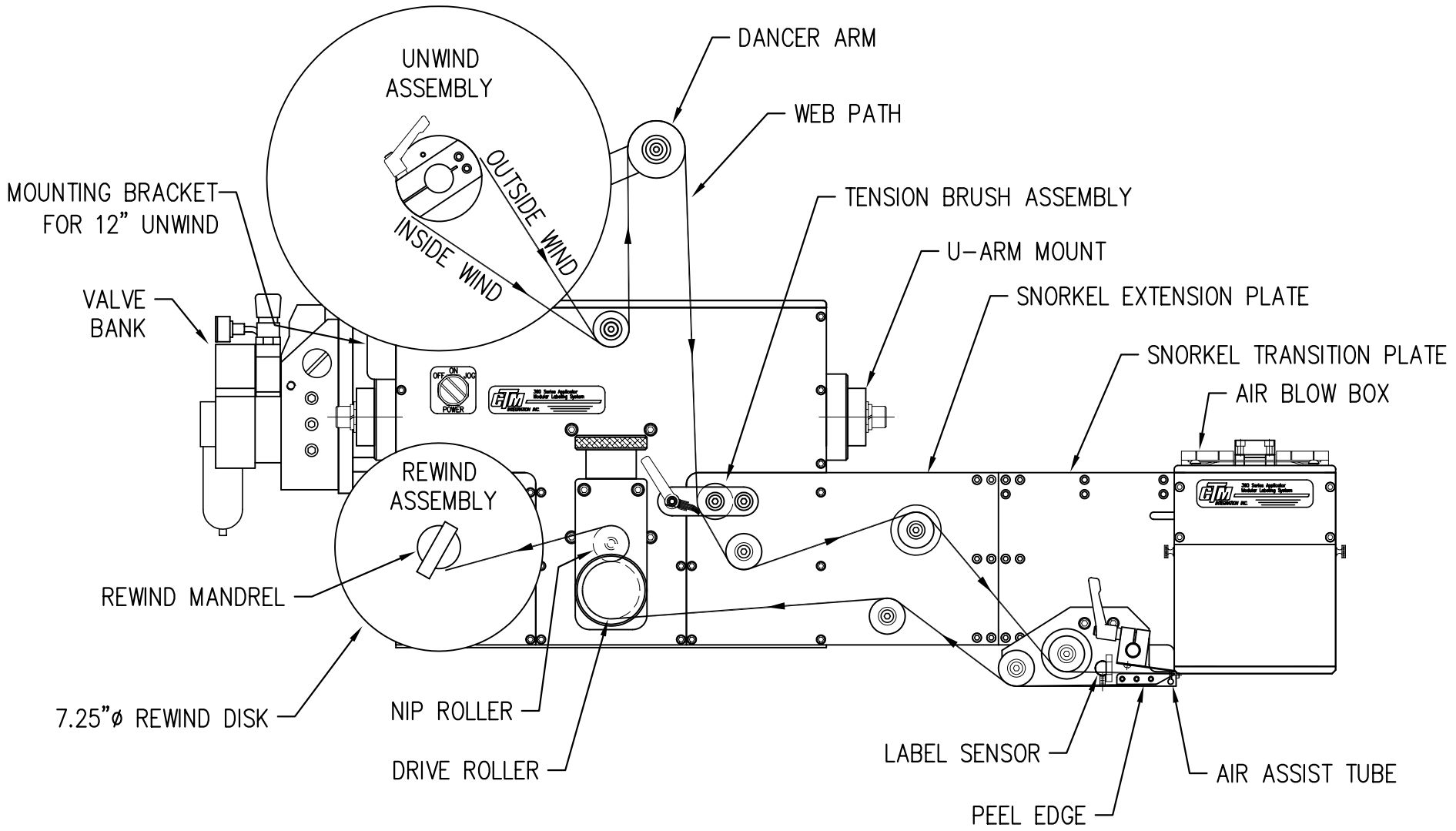
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 12" UNWIND



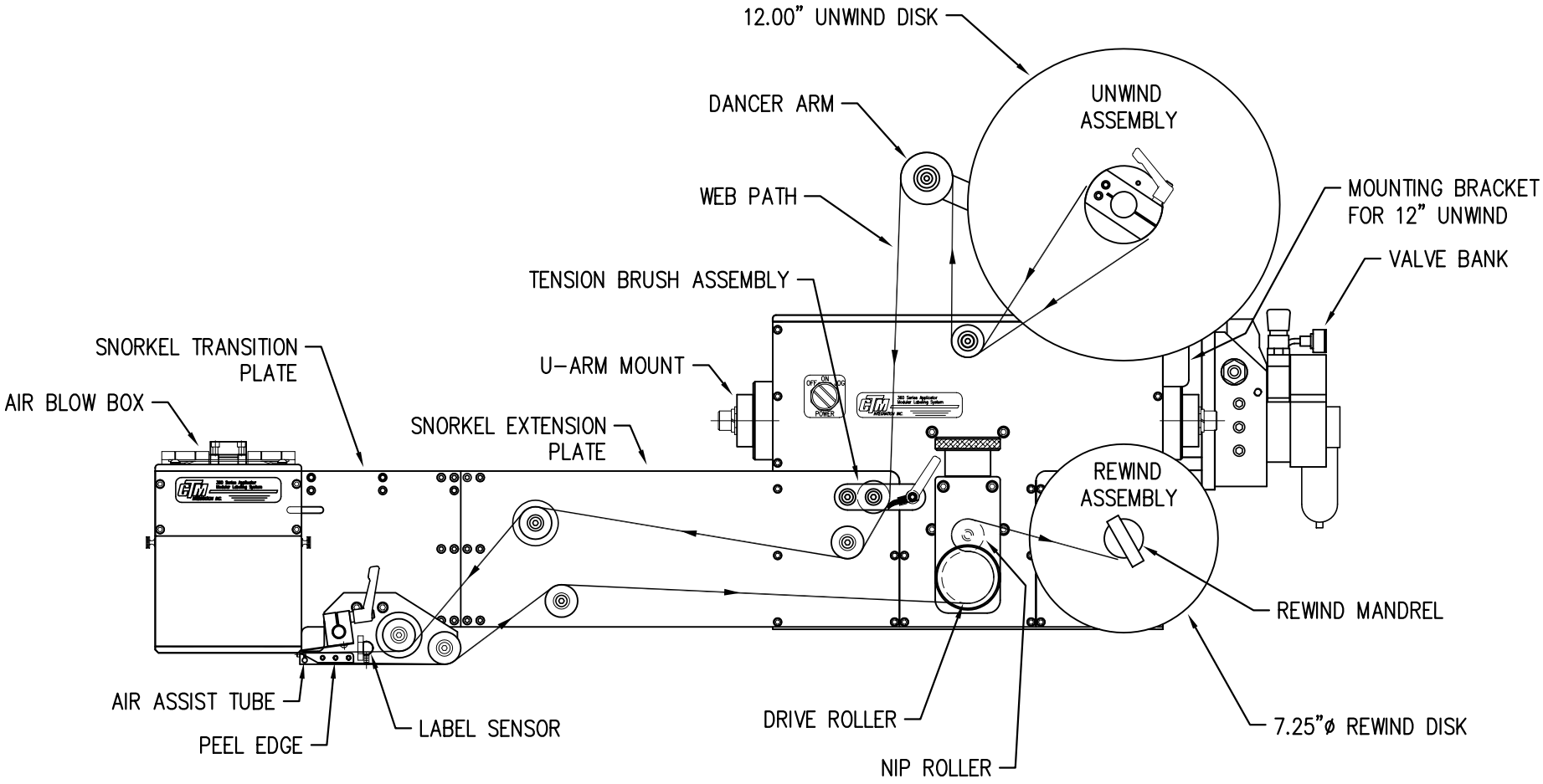
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 12" UNWIND



WEB PATH DIAGRAM

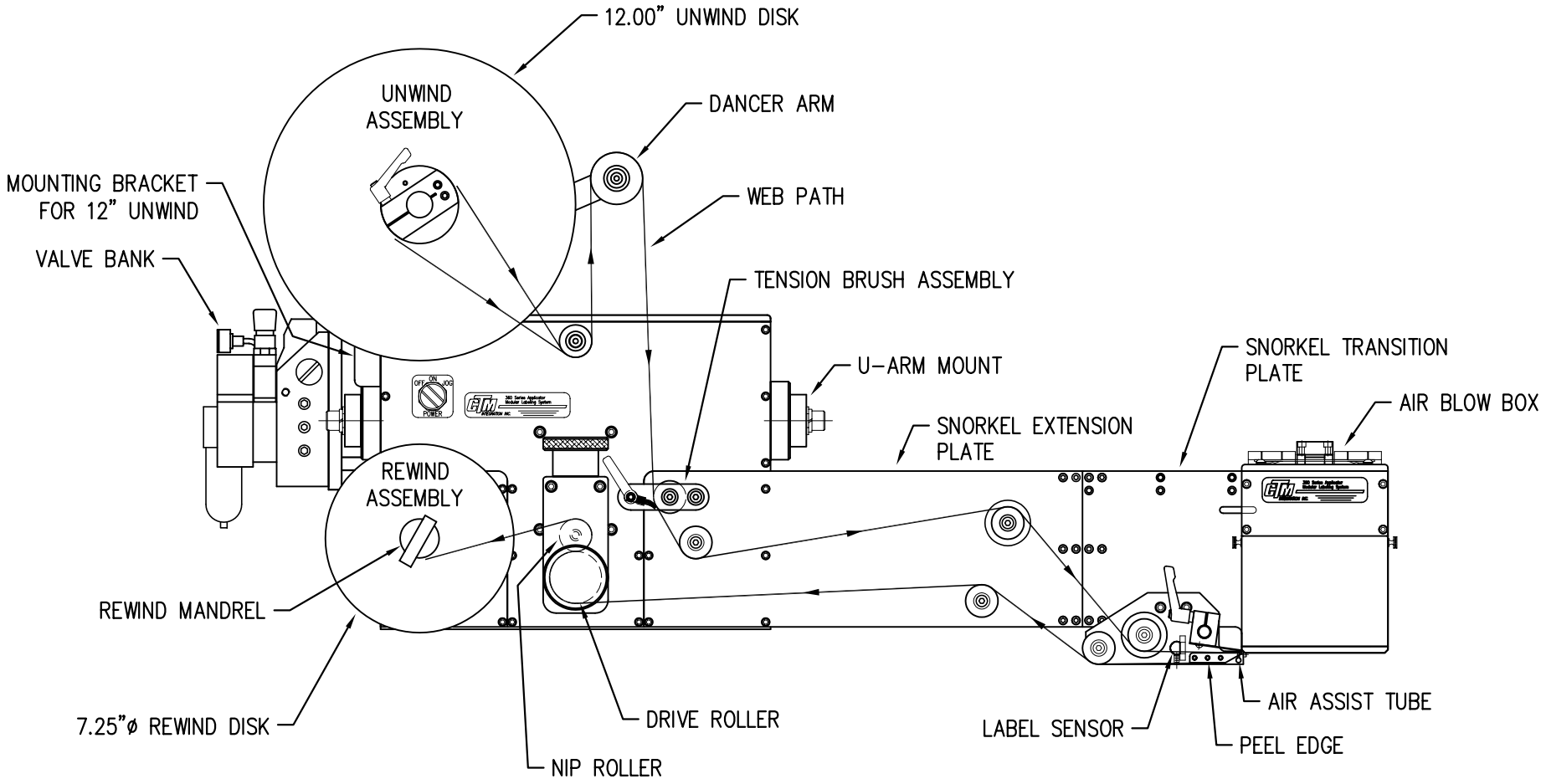
360 SERIES LEFT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 12" UNWIND



(NOTE: 18" EXTENDED SNORKEL SHOWN)

WEB PATH DIAGRAM

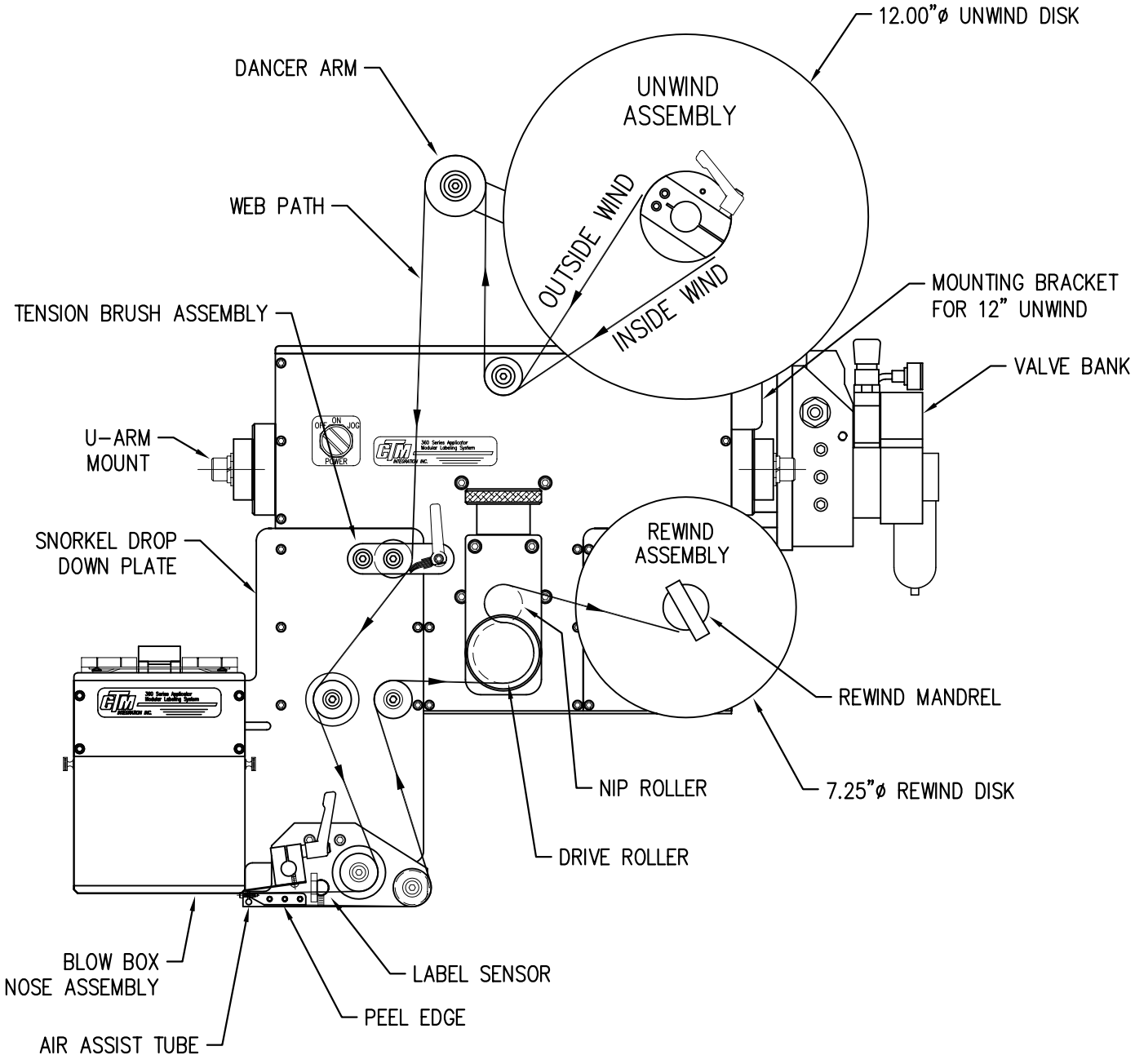
360 SERIES RIGHT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 12" UNWIND



(NOTE: 18" EXTENDED SNORKEL SHOWN)

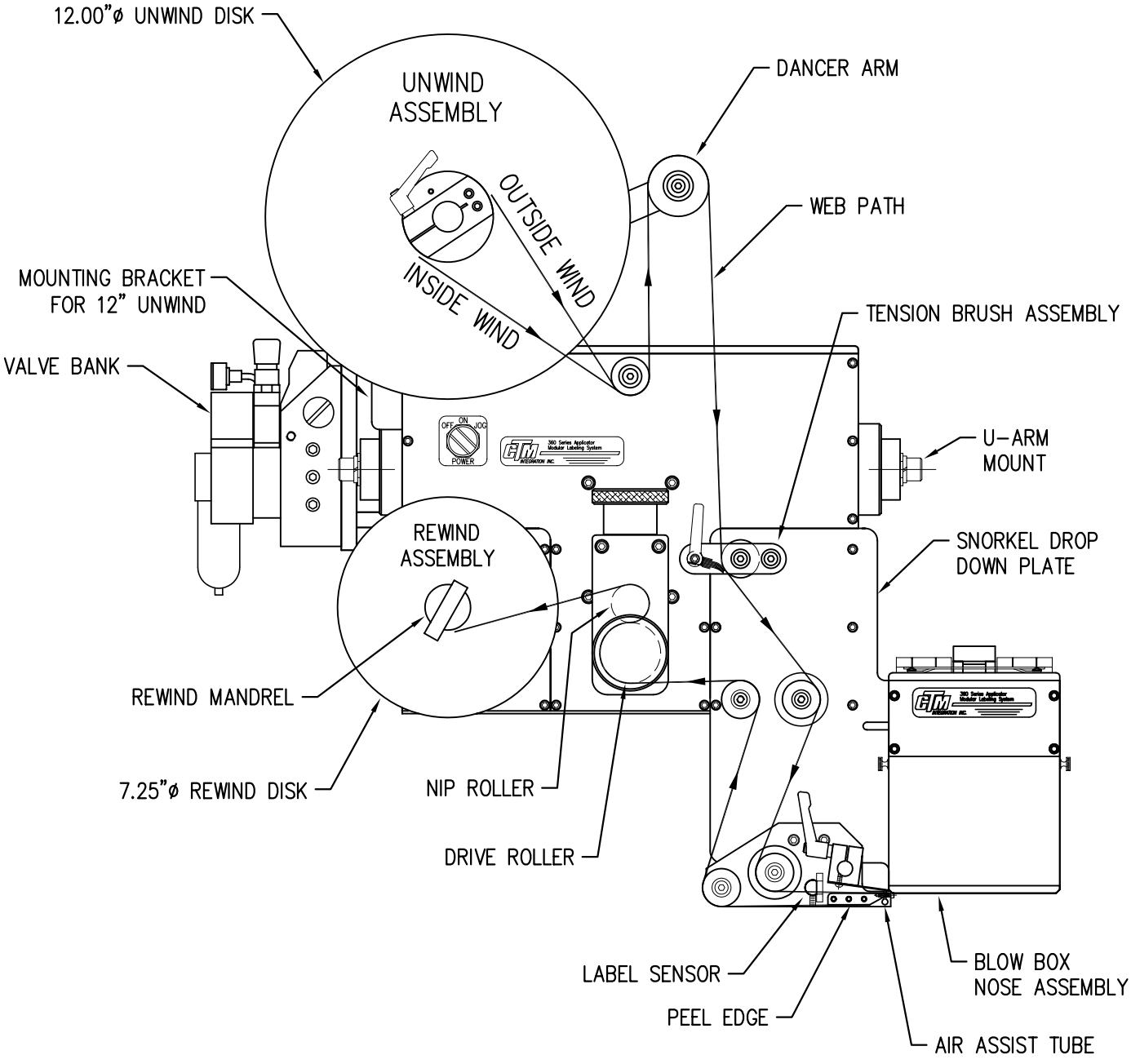
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR WITH 12" UNWIND



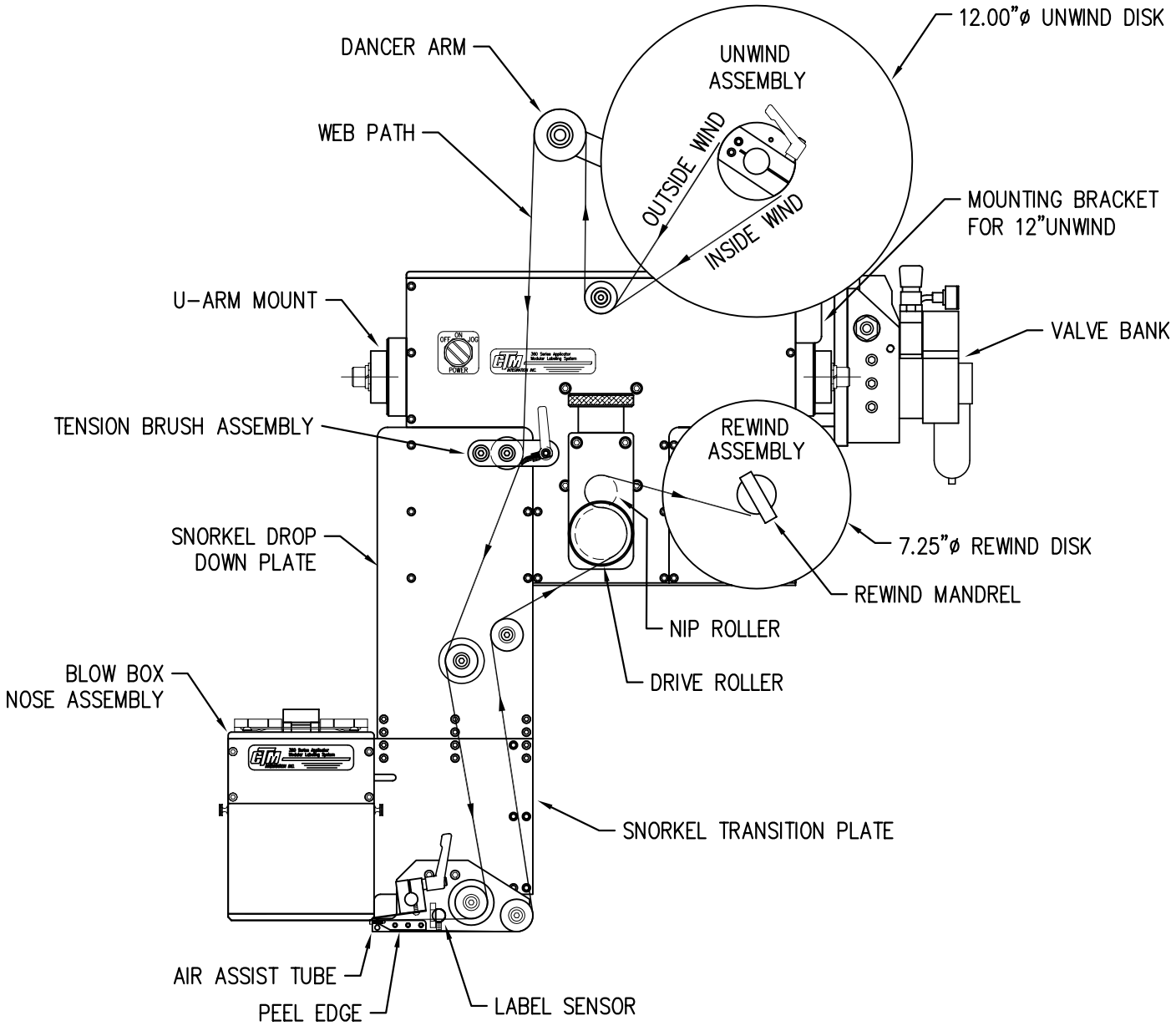
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR WITH 12" UNWIND



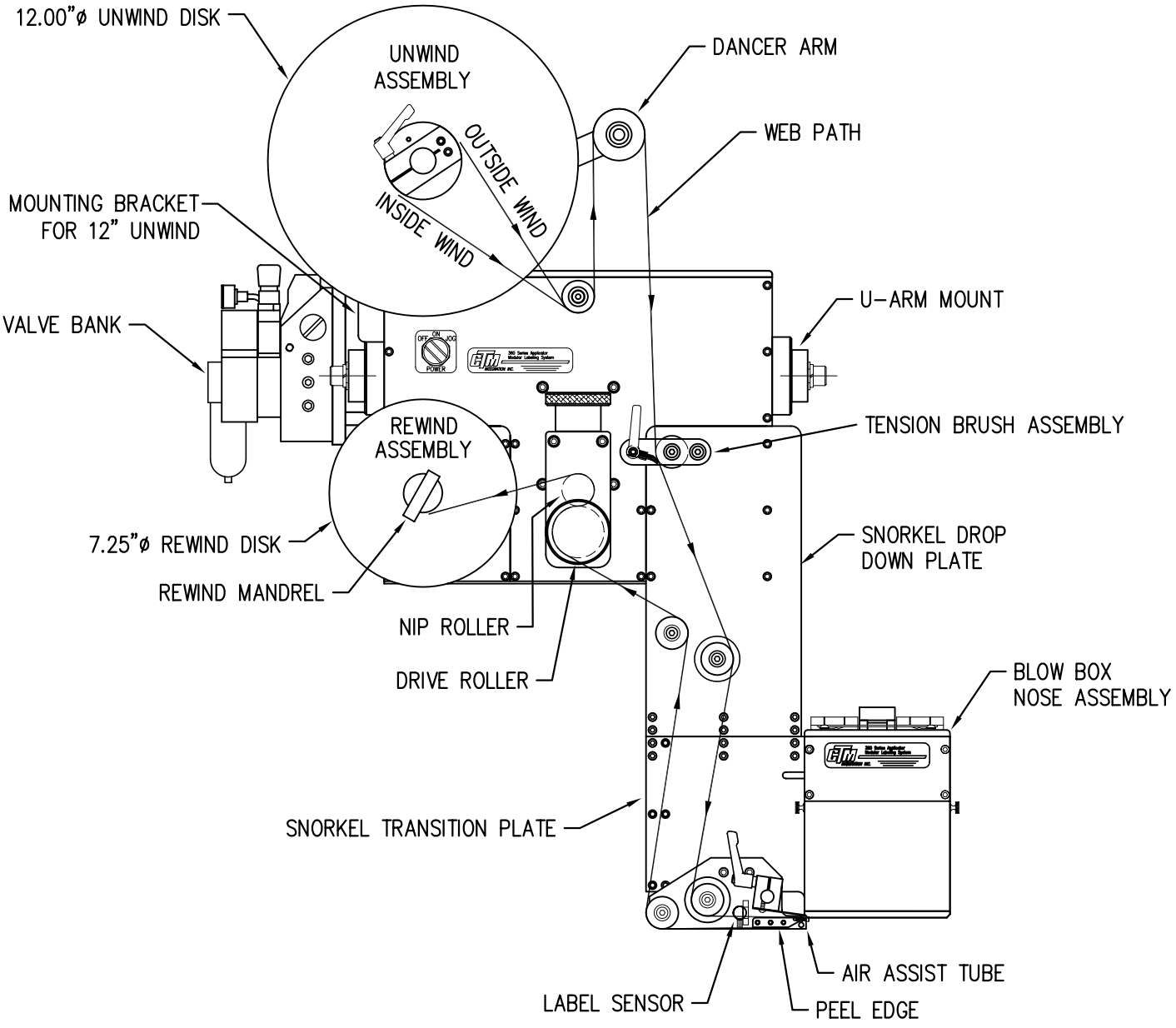
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR WITH 12" UNWIND



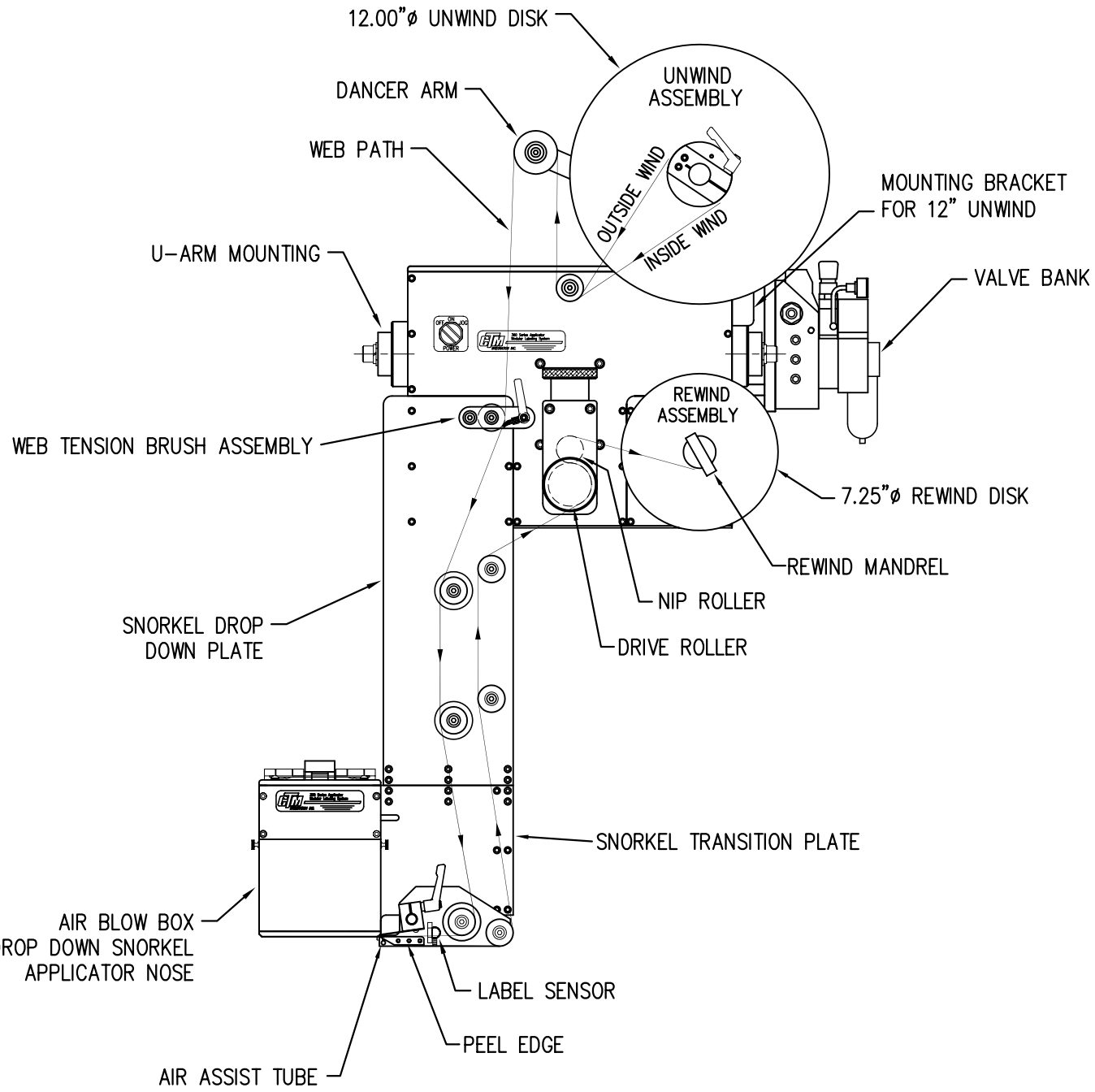
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR WITH 12" UNWIND



WEB PATH DIAGRAM

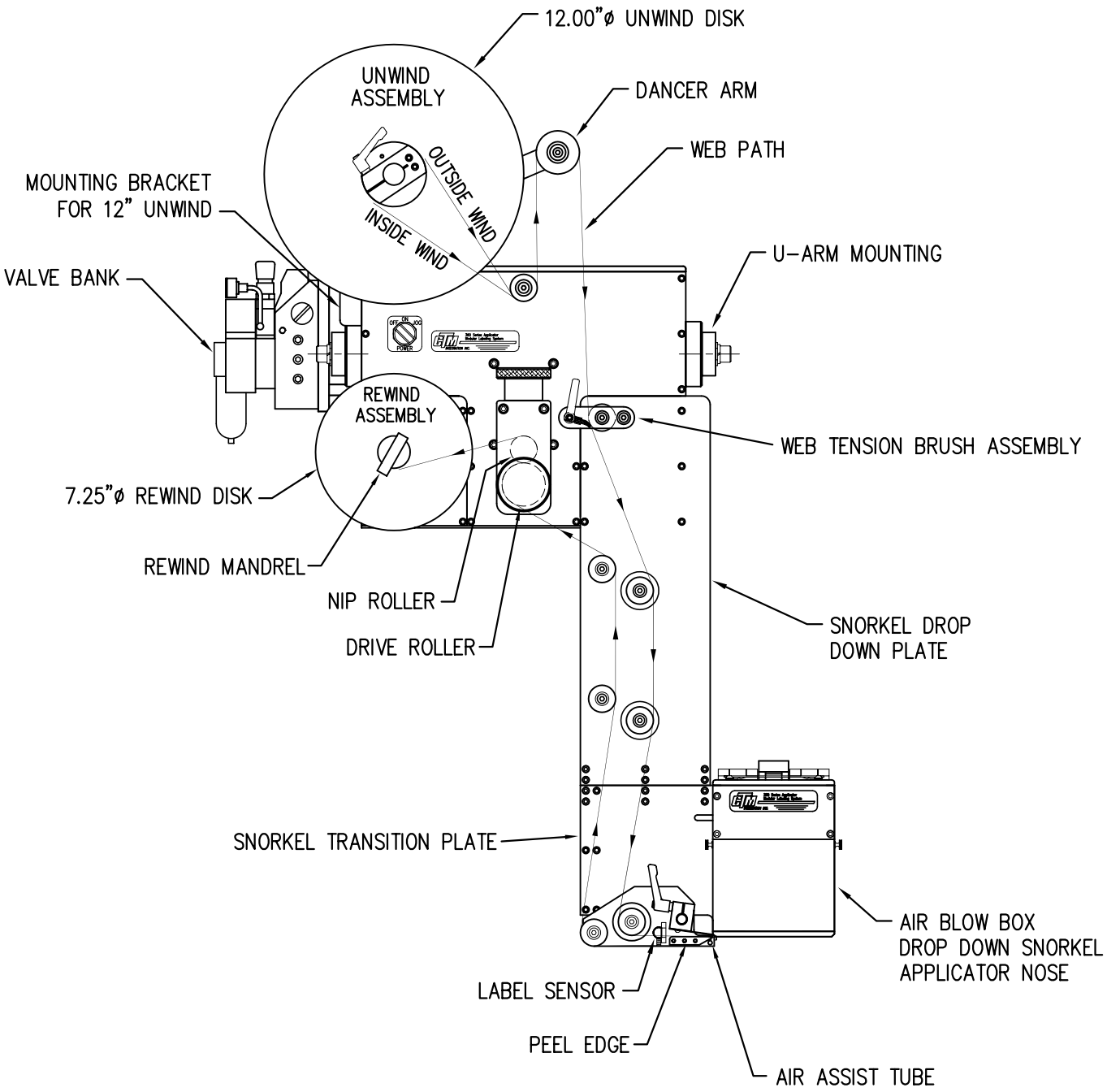
360 SERIES LEFT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 12" UNWIND



(NOTE: 18" DROP DOWN SHOWN)

WEB PATH DIAGRAM

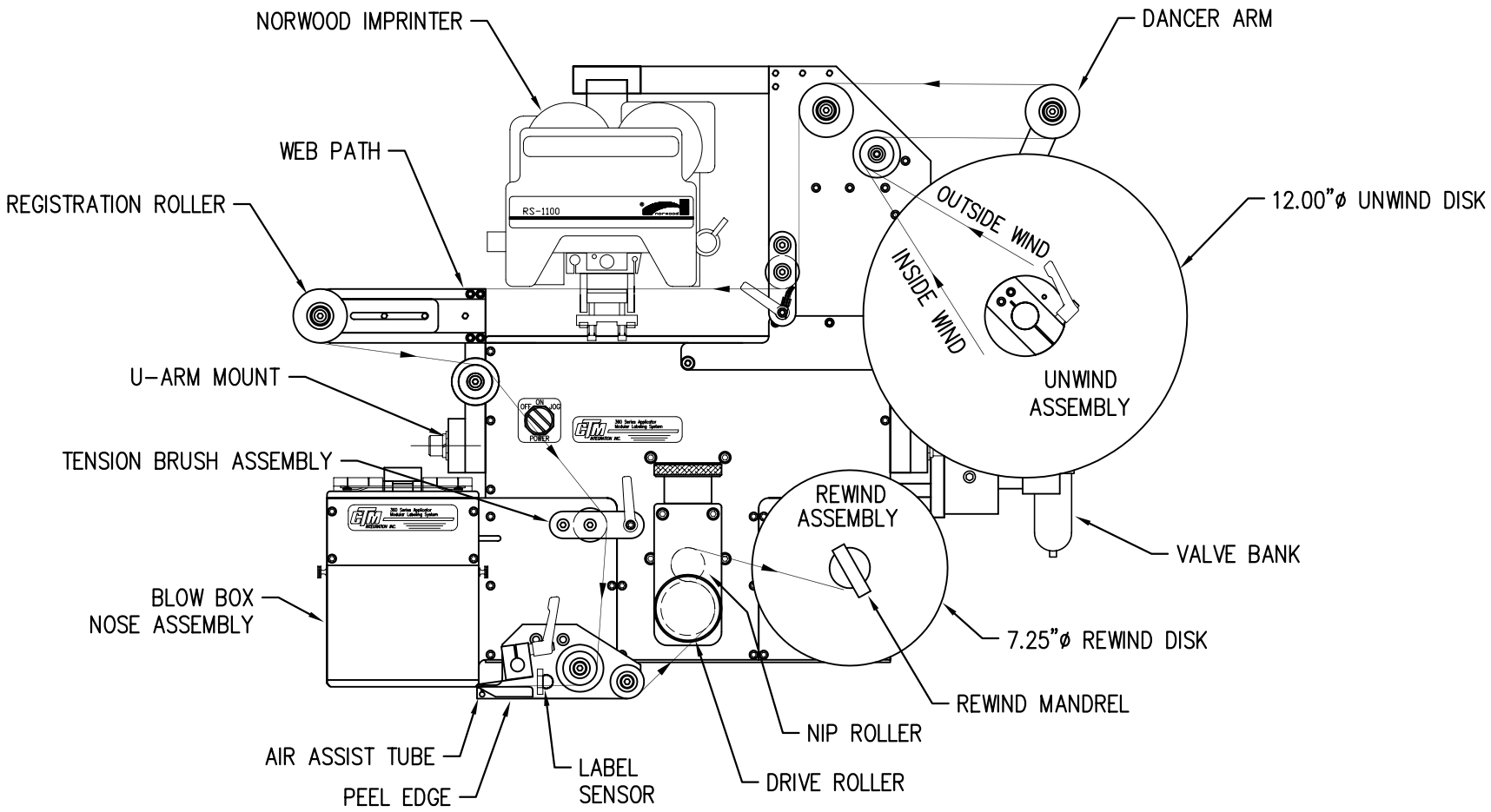
360 SERIES RIGHT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 12" UNWIND



(NOTE: 18" DROP DOWN SHOWN)

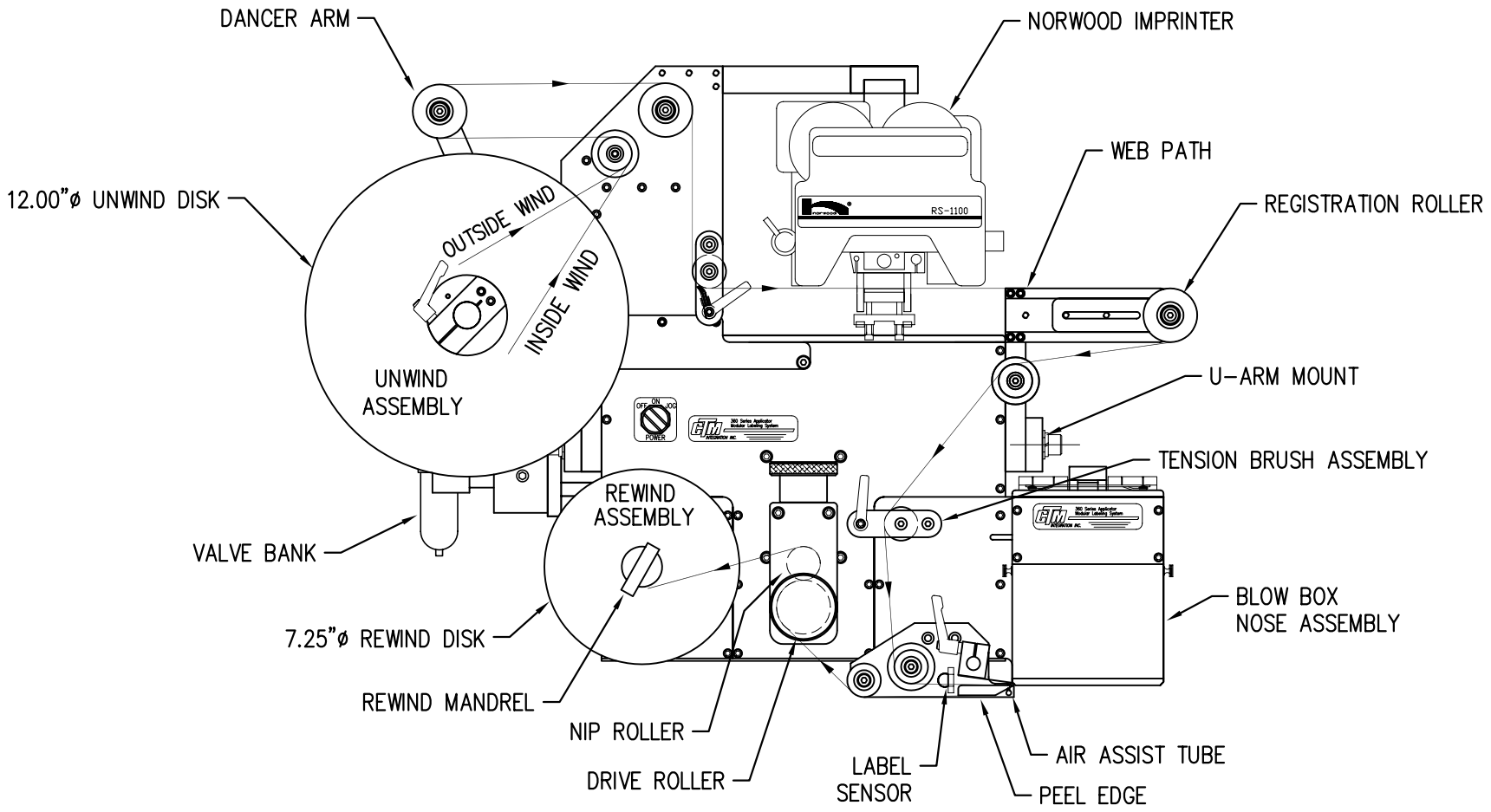
WEB PATH DIAGRAM

360 SERIES LEFT HAND AIR BLOW BOX APPLICATOR
WITH NORWOOD IMPRINTER



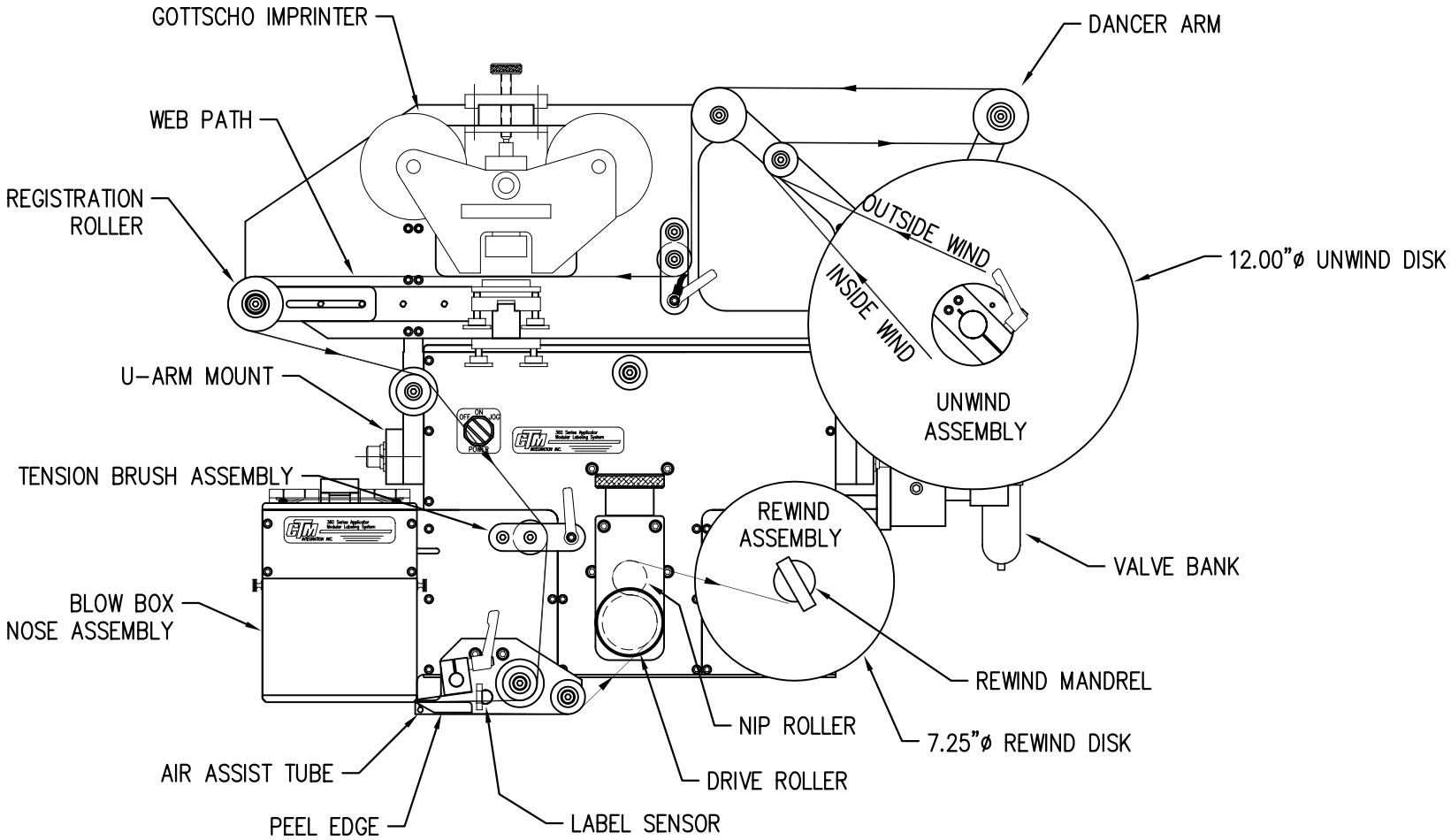
WEB PATH DIAGRAM

360 SERIES RIGHT HAND AIR BLOW BOX APPLICATOR
WITH NORWOOD IMPRINTER



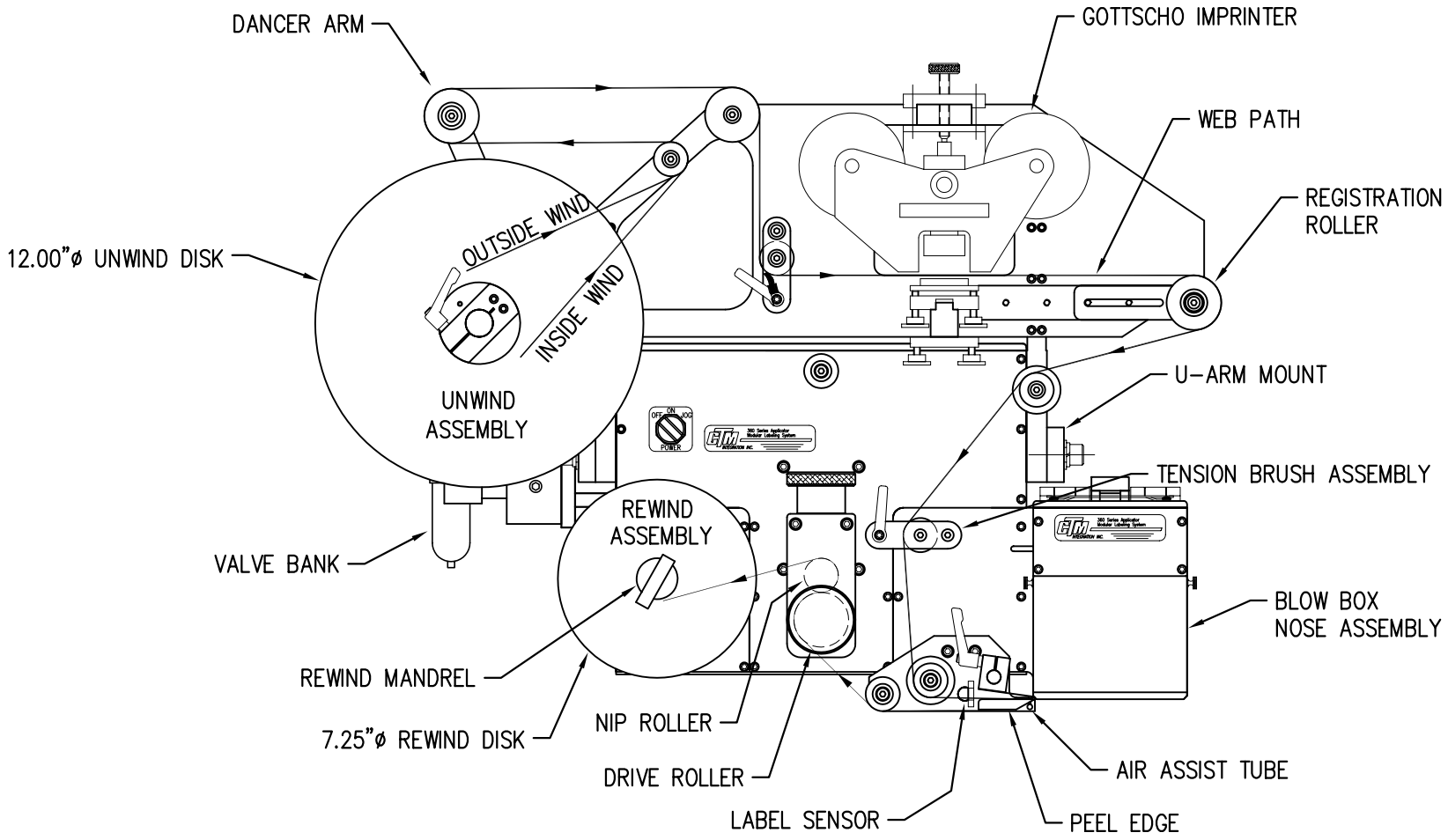
WEB PATH DIAGRAM

360 SERIES LEFT HAND AIR BLOW BOX APPLICATOR
WITH GOTTSCHO IMPRINTER



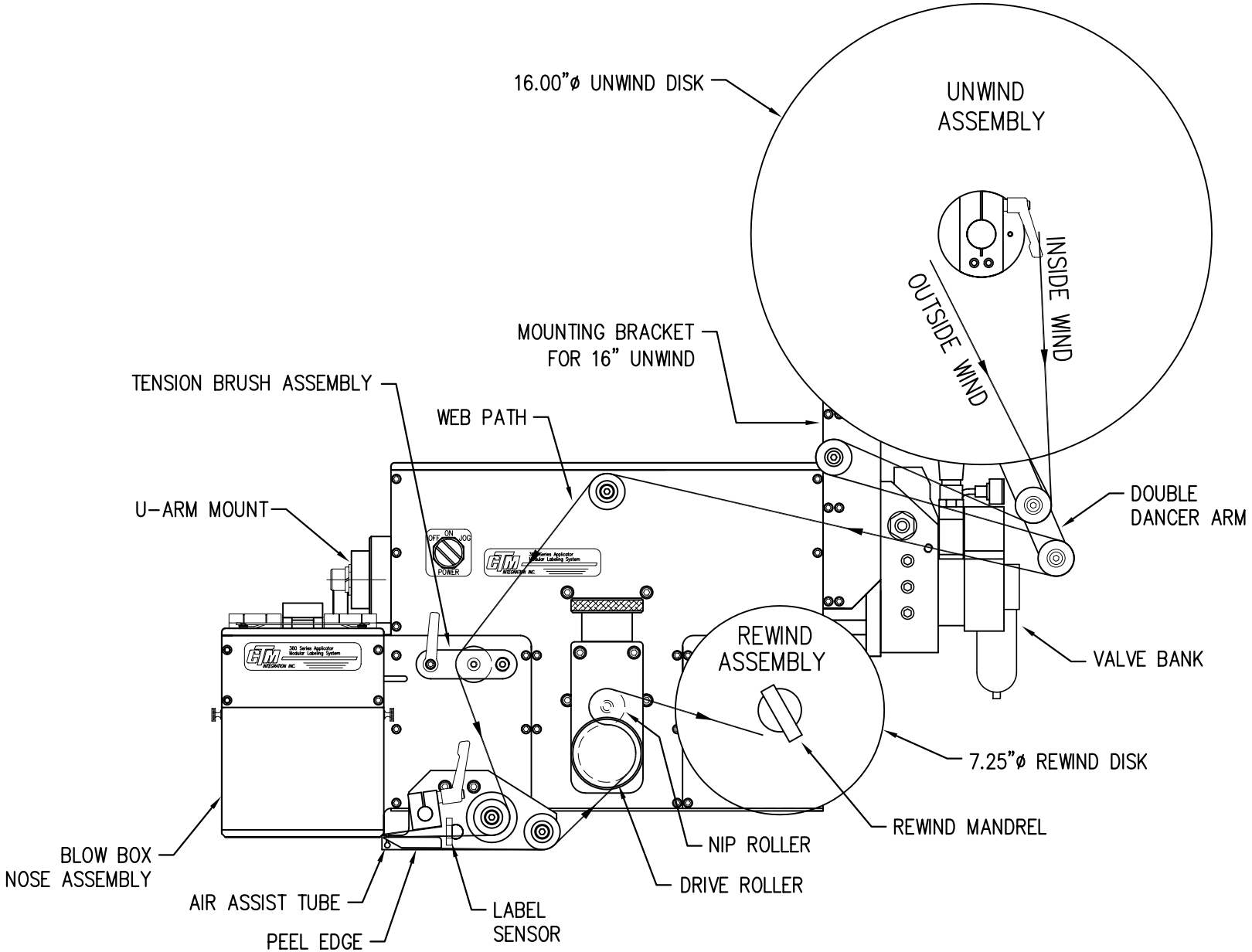
WEB PATH DIAGRAM

360 SERIES RIGHT HAND AIR BLOW BOX APPLICATOR
WITH GOTTSCHO IMPRINTER



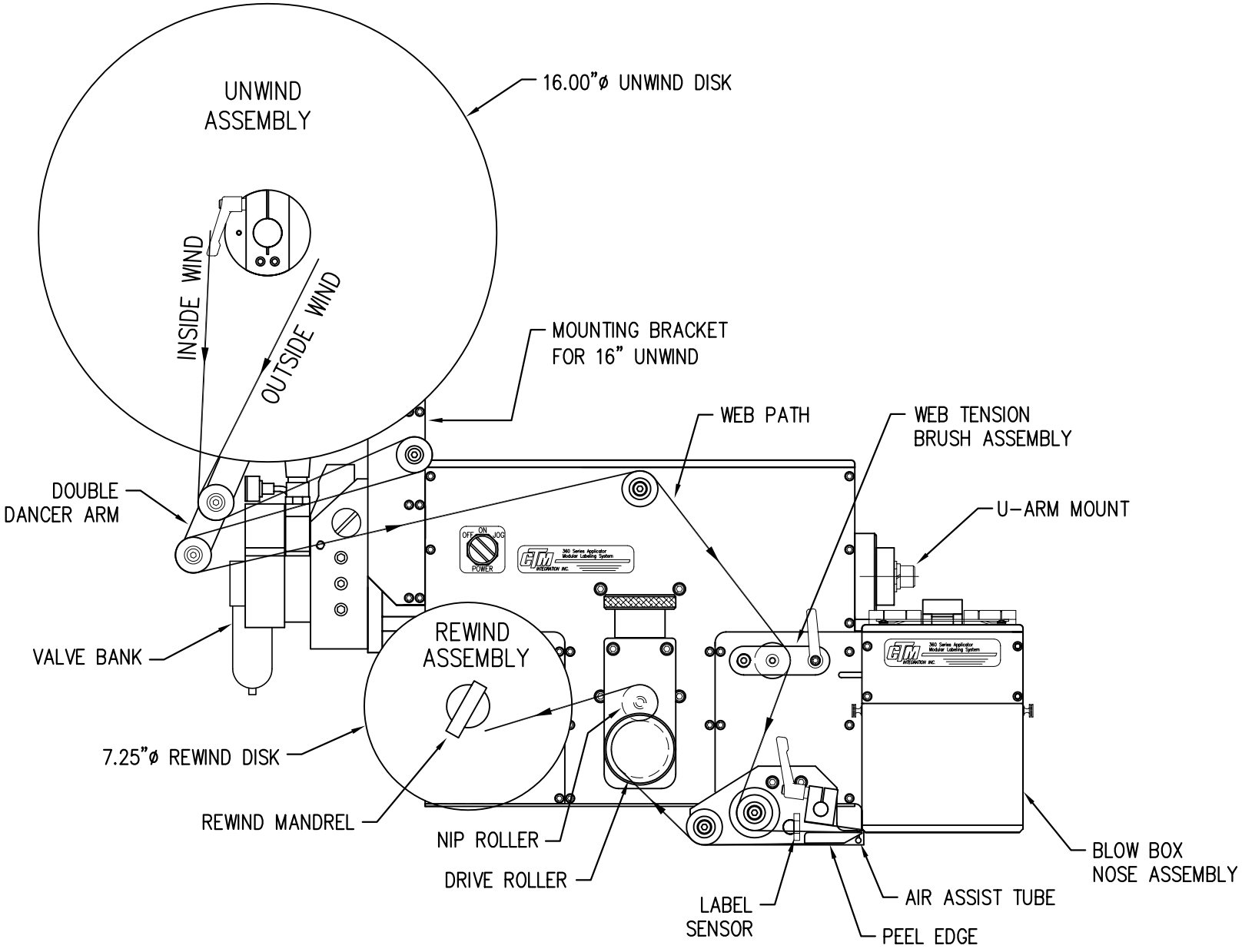
WEB PATH DIAGRAM

360 SERIES LEFT HAND AIR BLOW BOX APPLICATOR WITH 16" UNWIND



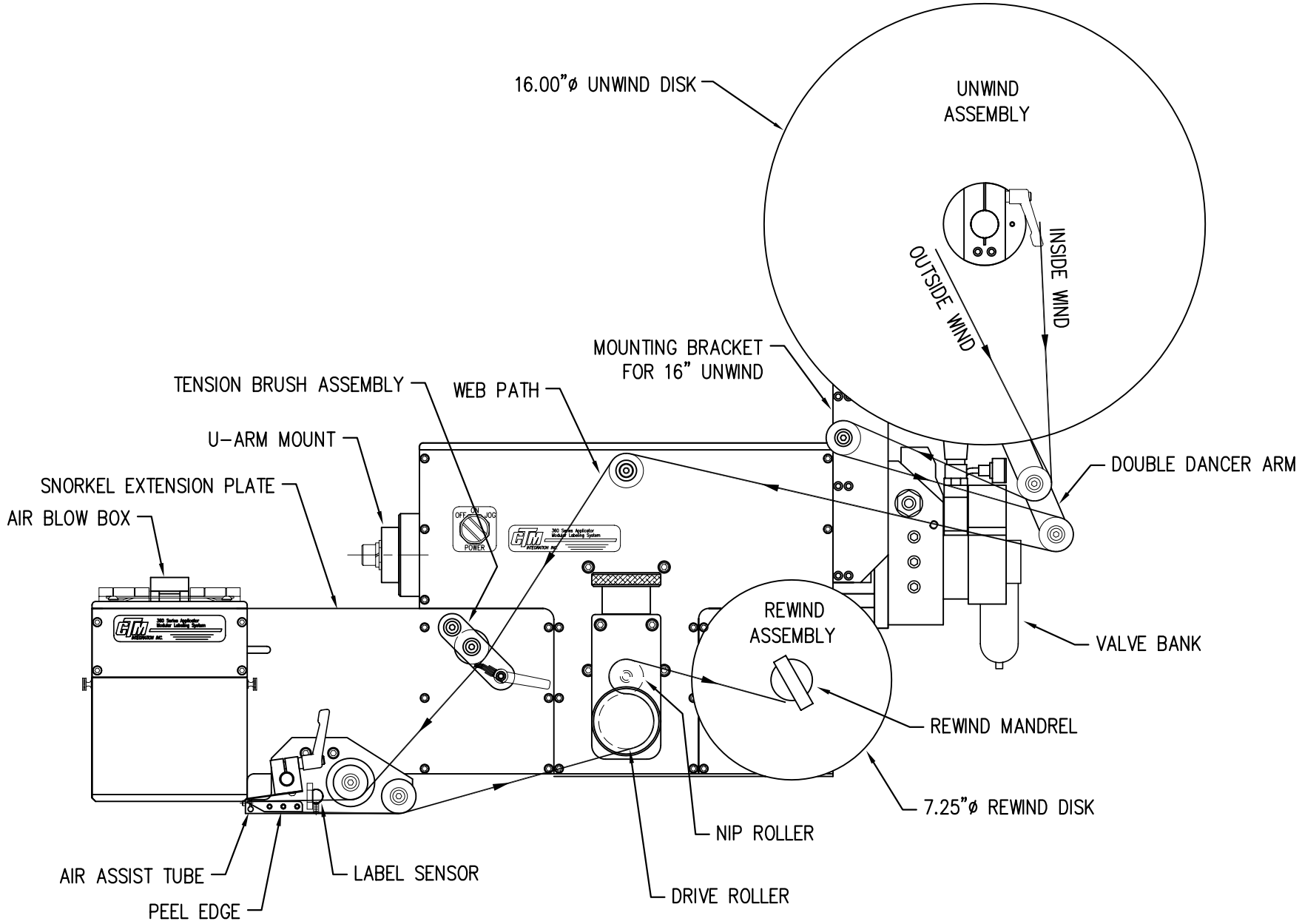
WEB PATH DIAGRAM

360 SERIES RIGHT HAND AIR BLOW BOX APPLICATOR WITH 16" UNWIND



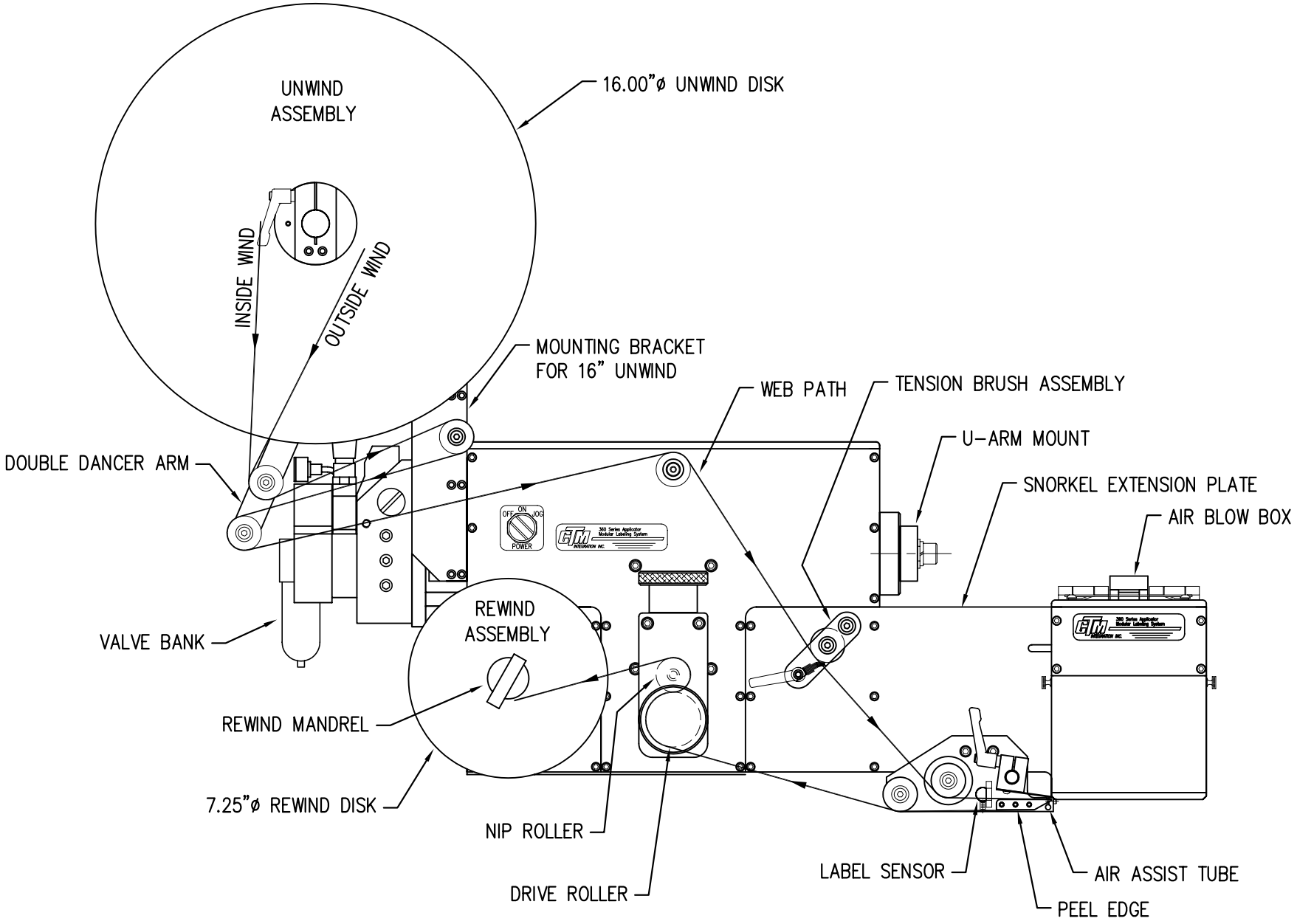
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND



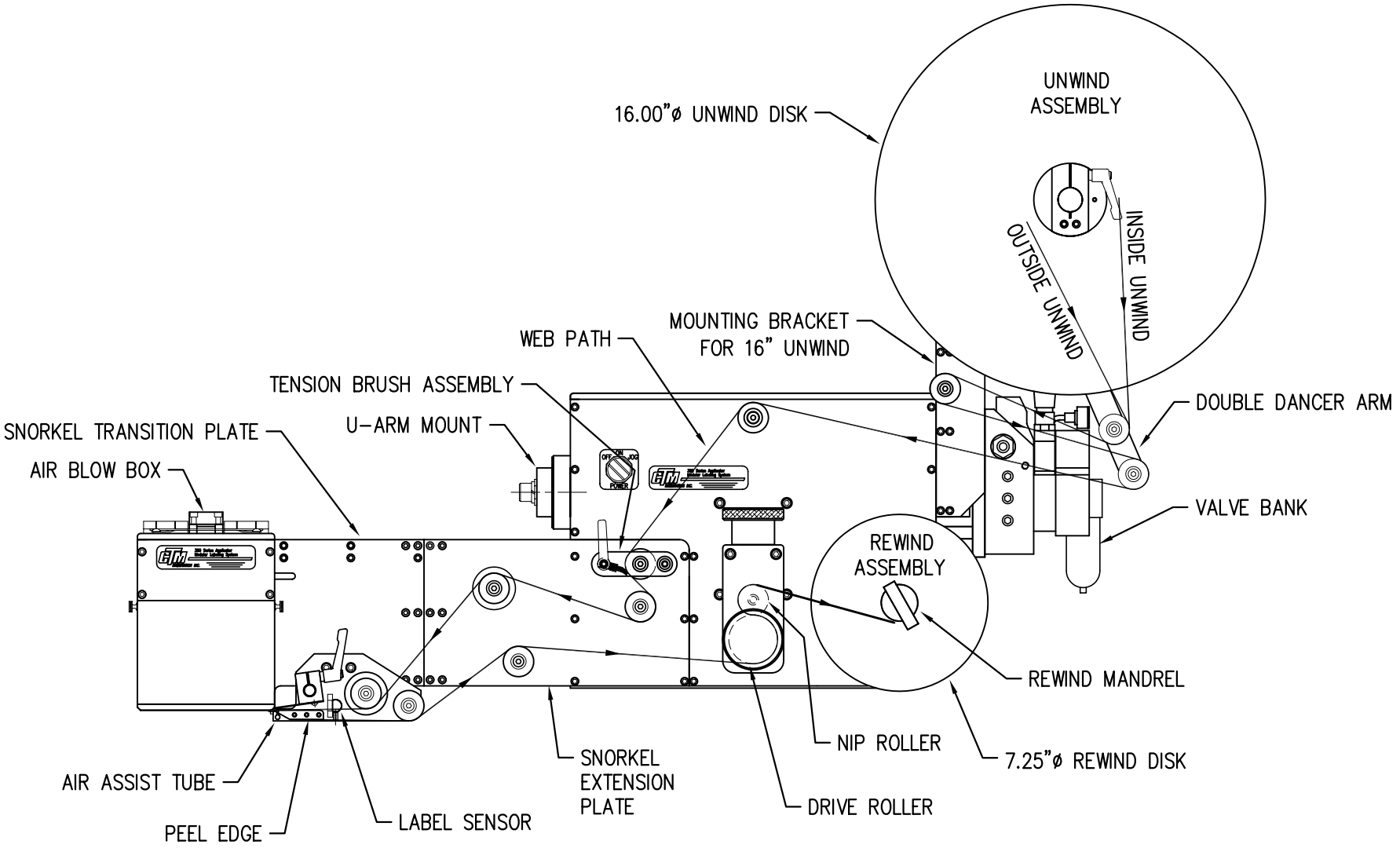
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND



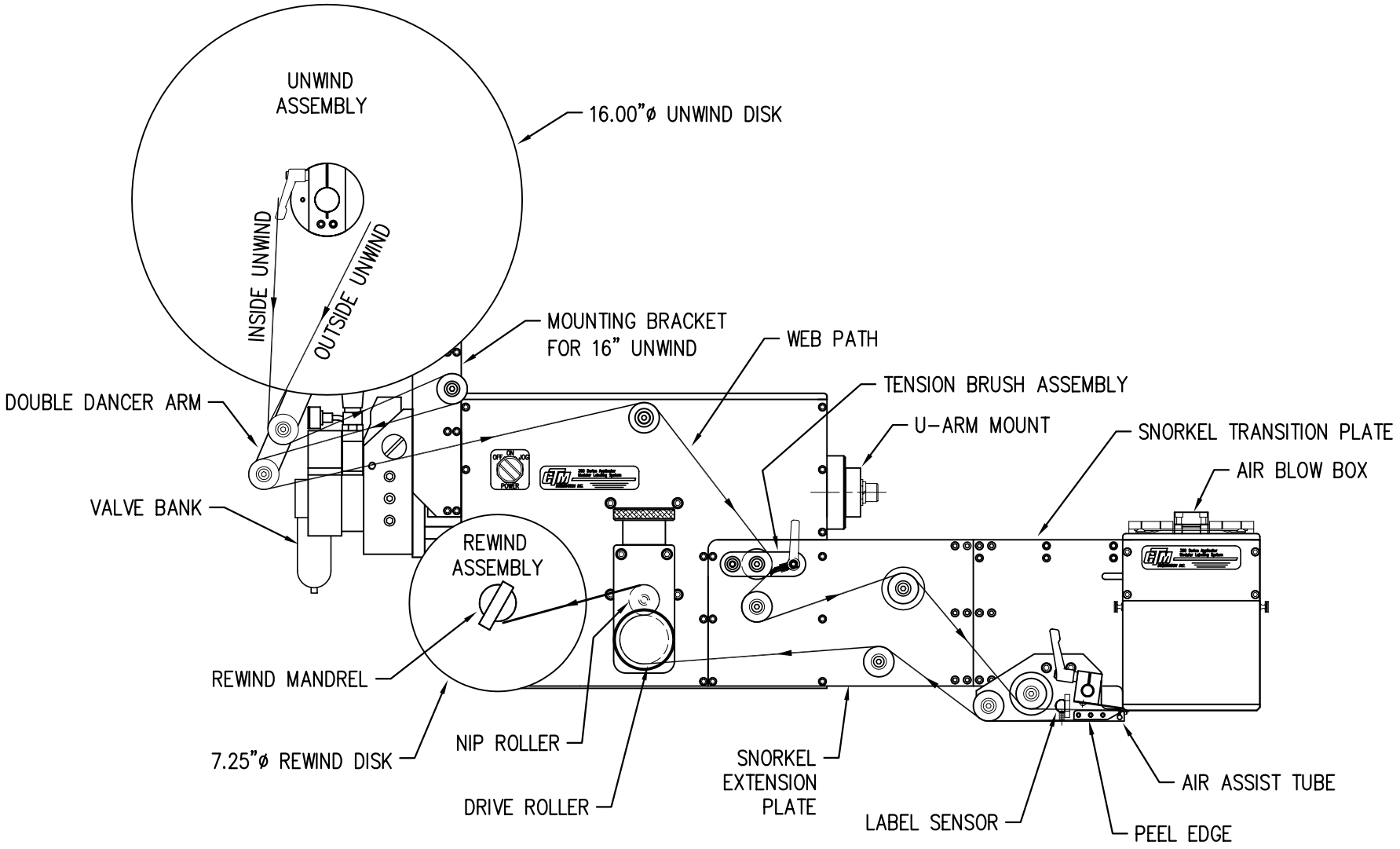
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND



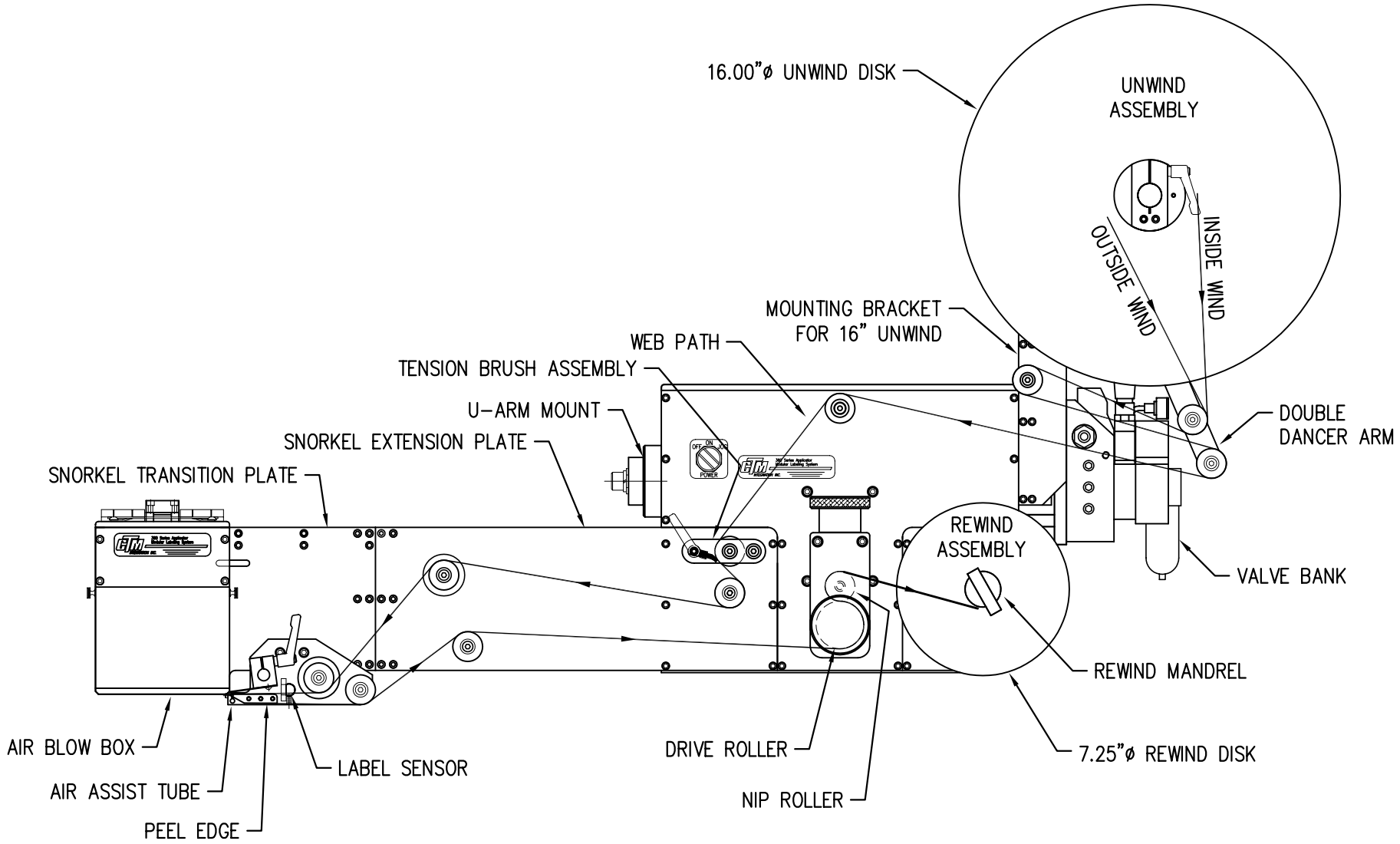
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND



WEB PATH DIAGRAM

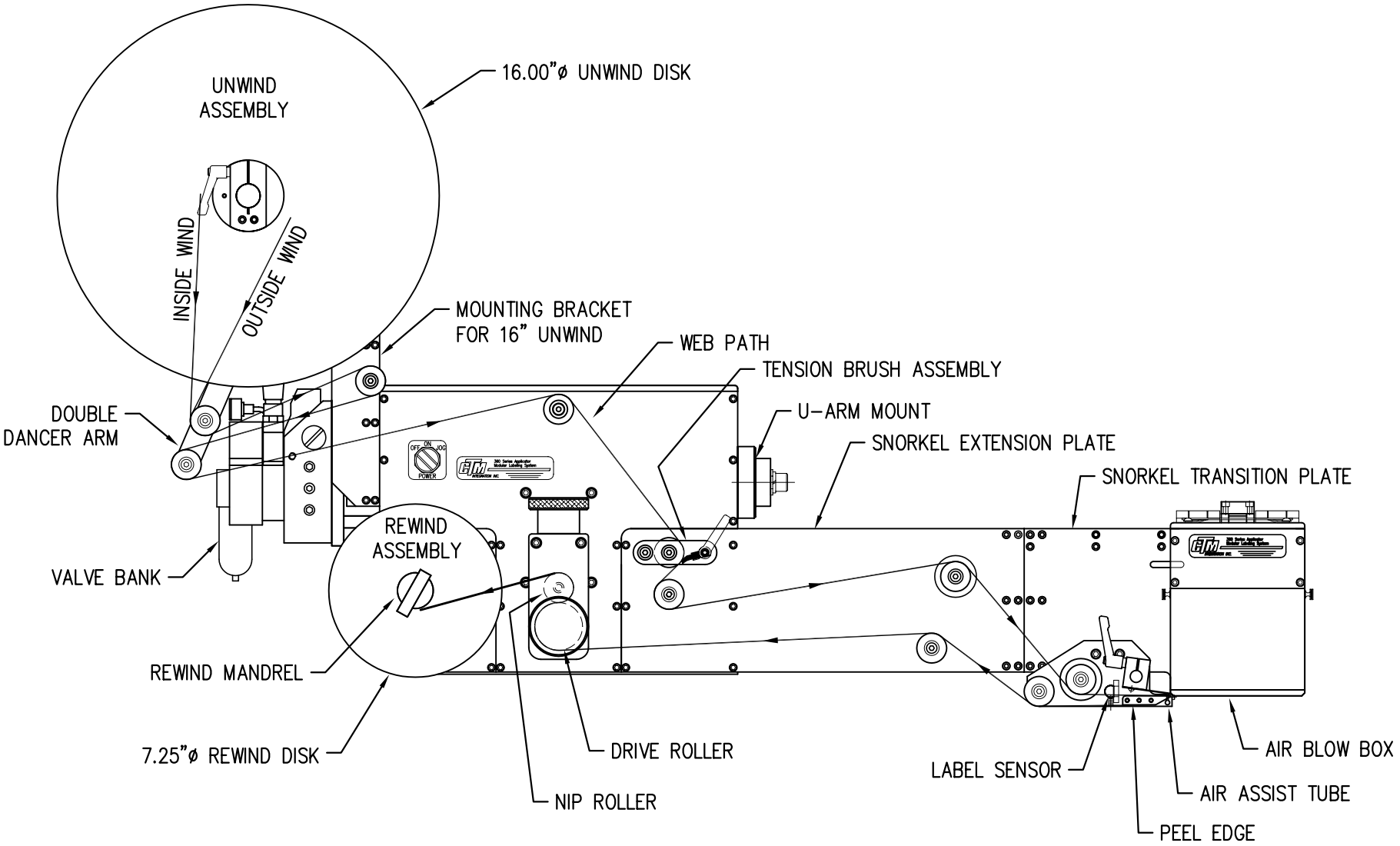
360 SERIES LEFT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND



(NOTE: 18" EXTENDED SNORKEL SHOWN)

WEB PATH DIAGRAM

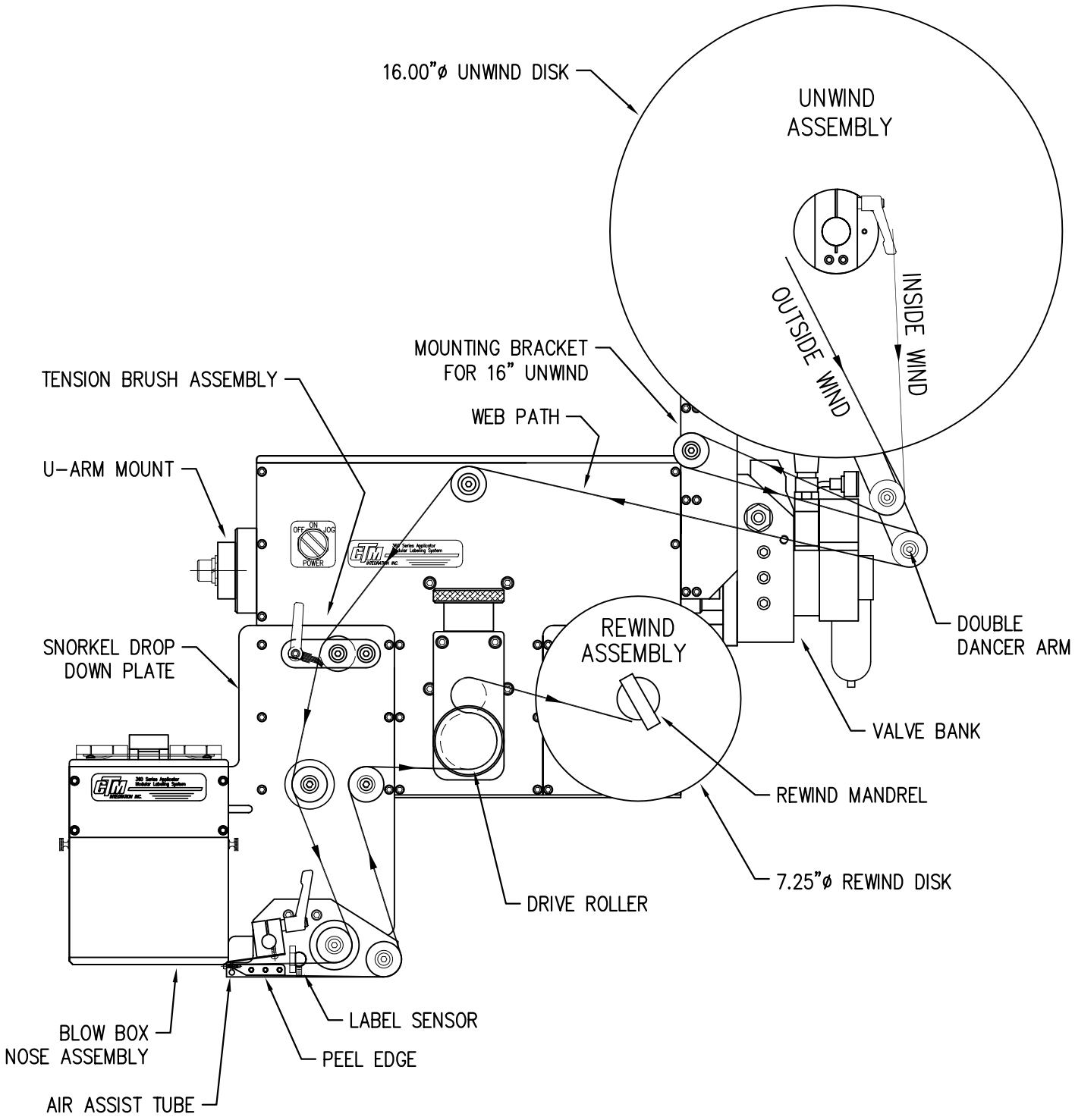
360 SERIES RIGHT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND



(NOTE: 18" EXTENDED SNORKEL SHOWN)

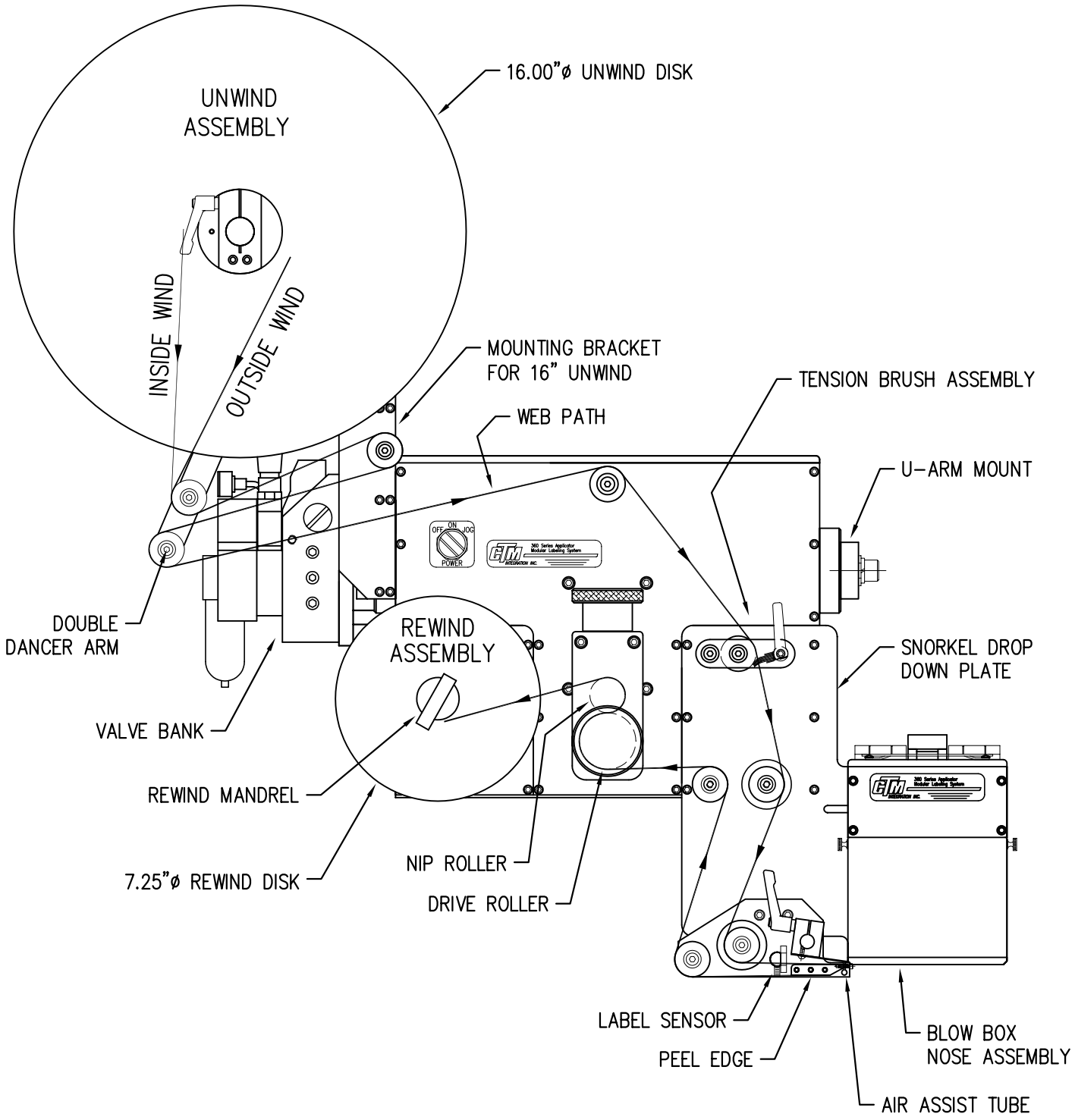
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND



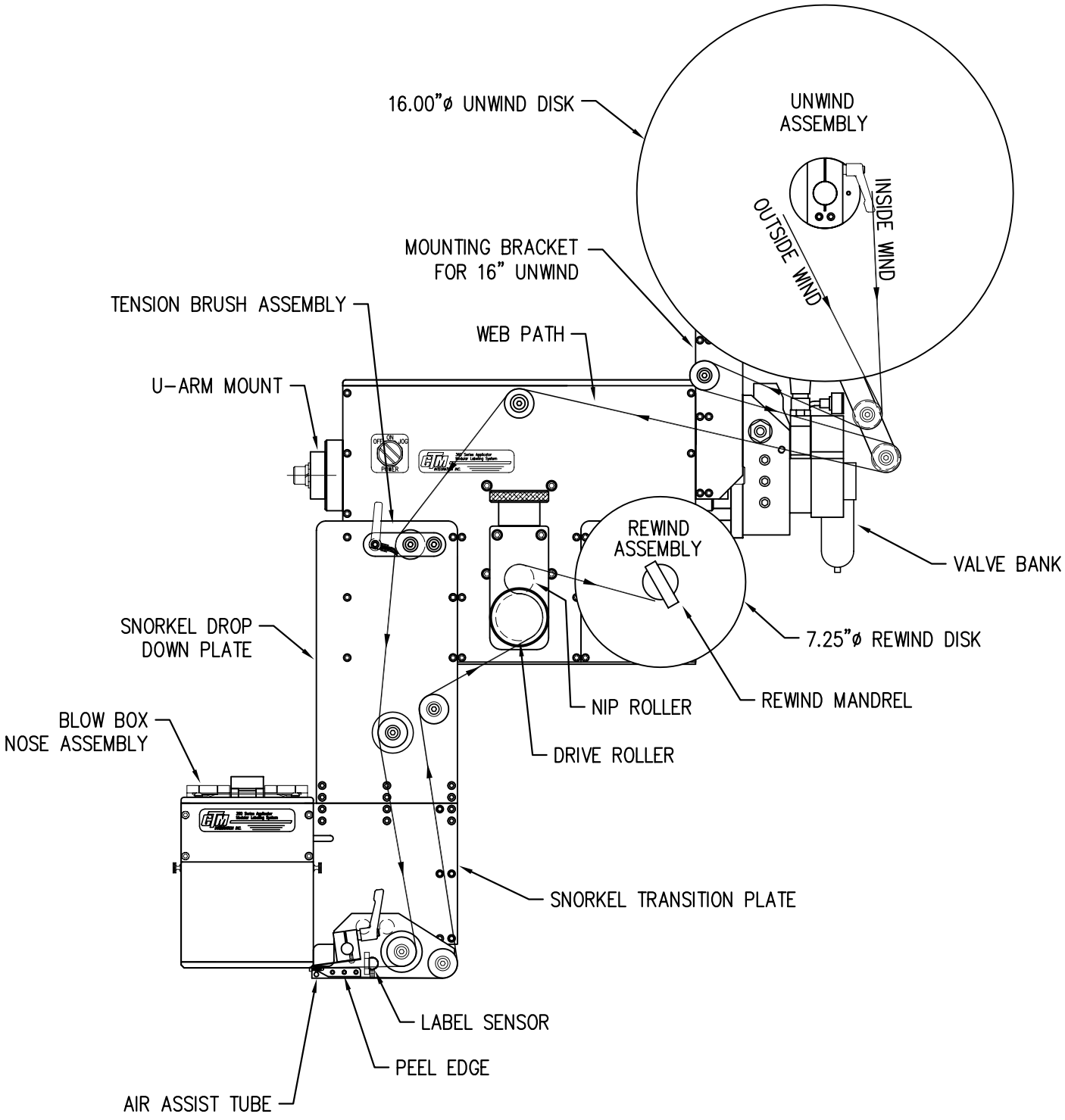
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND



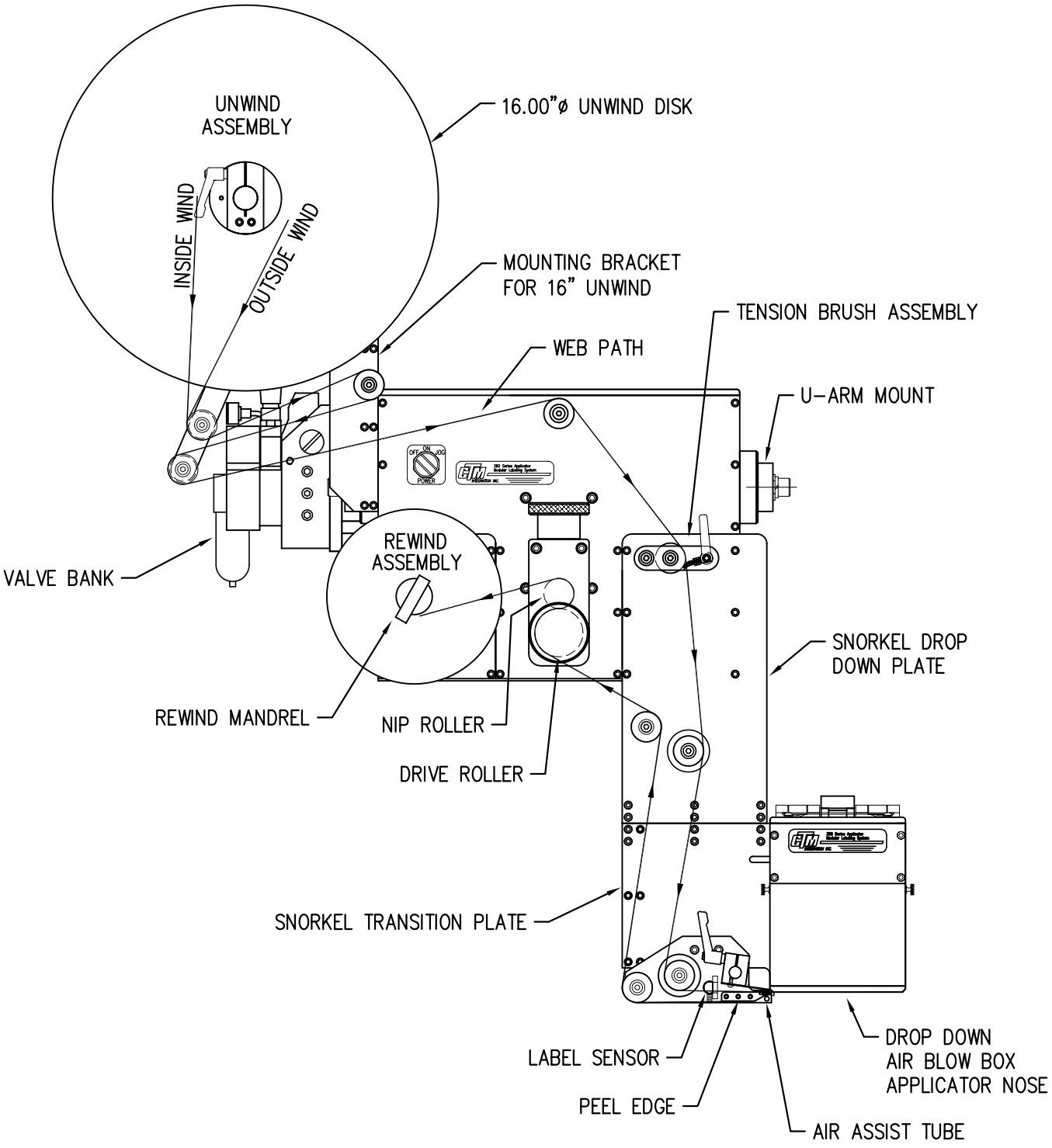
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND



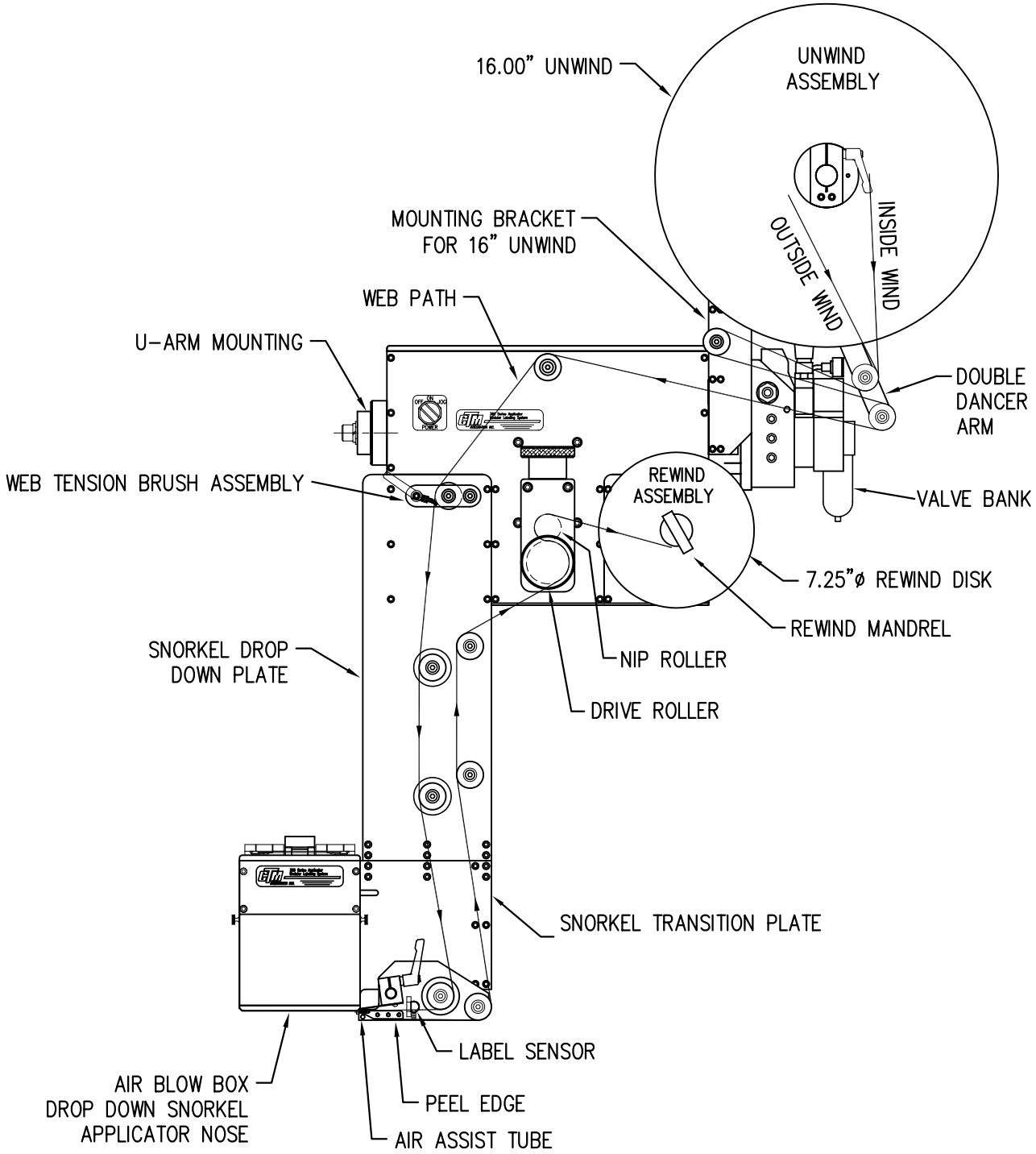
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND



WEB PATH DIAGRAM

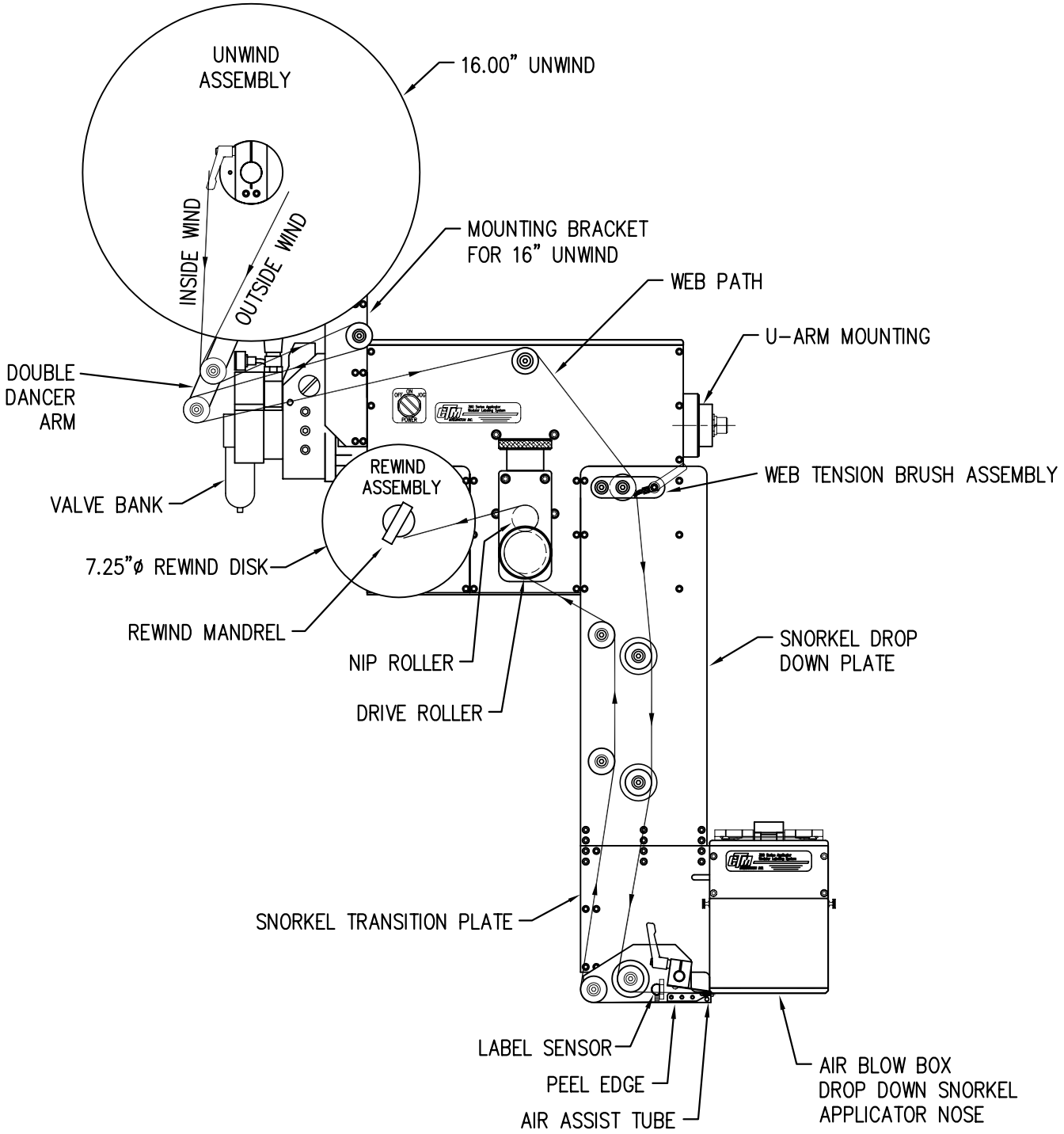
360 SERIES LEFT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND



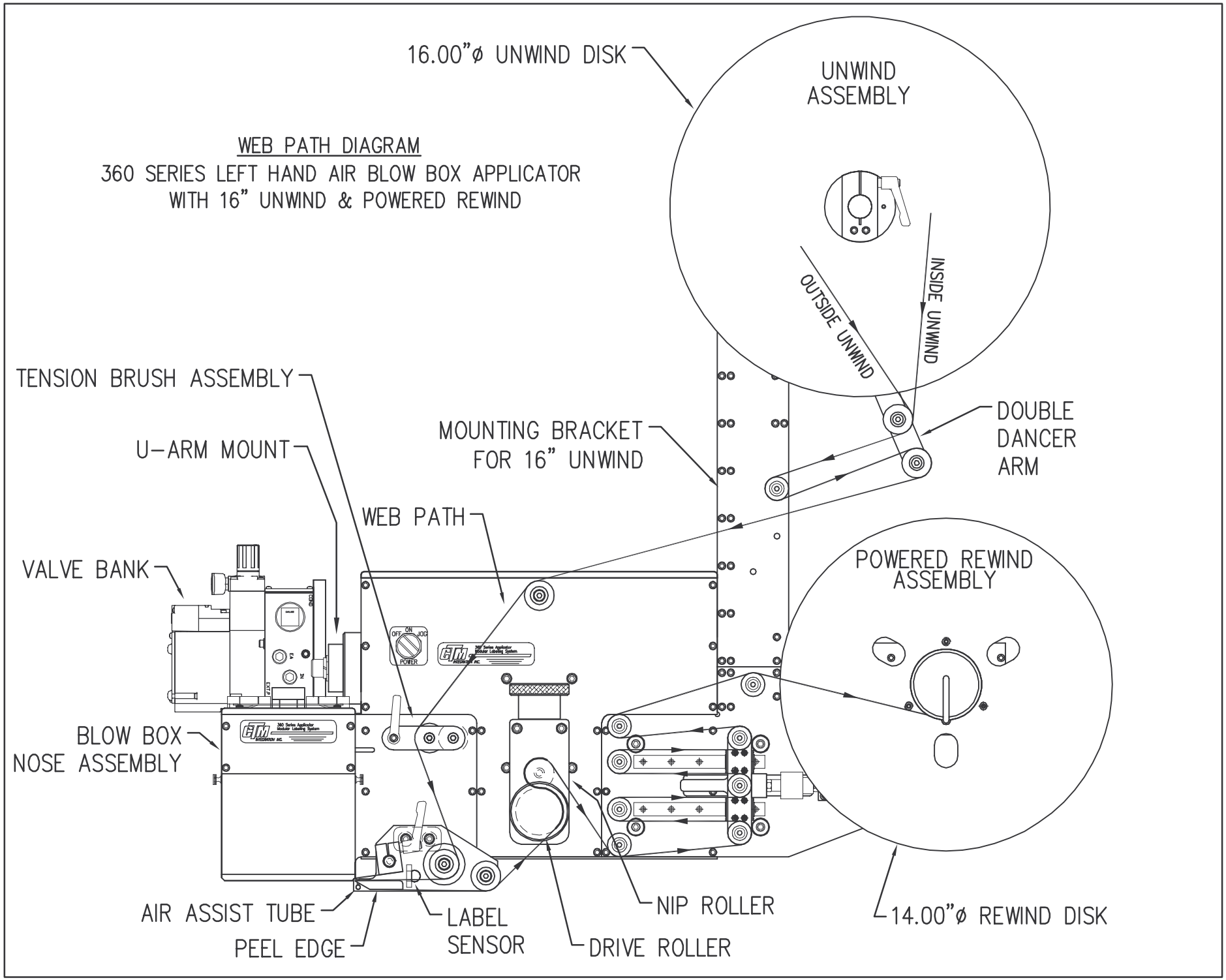
(NOTE: 18" DROP DOWN SHOWN)

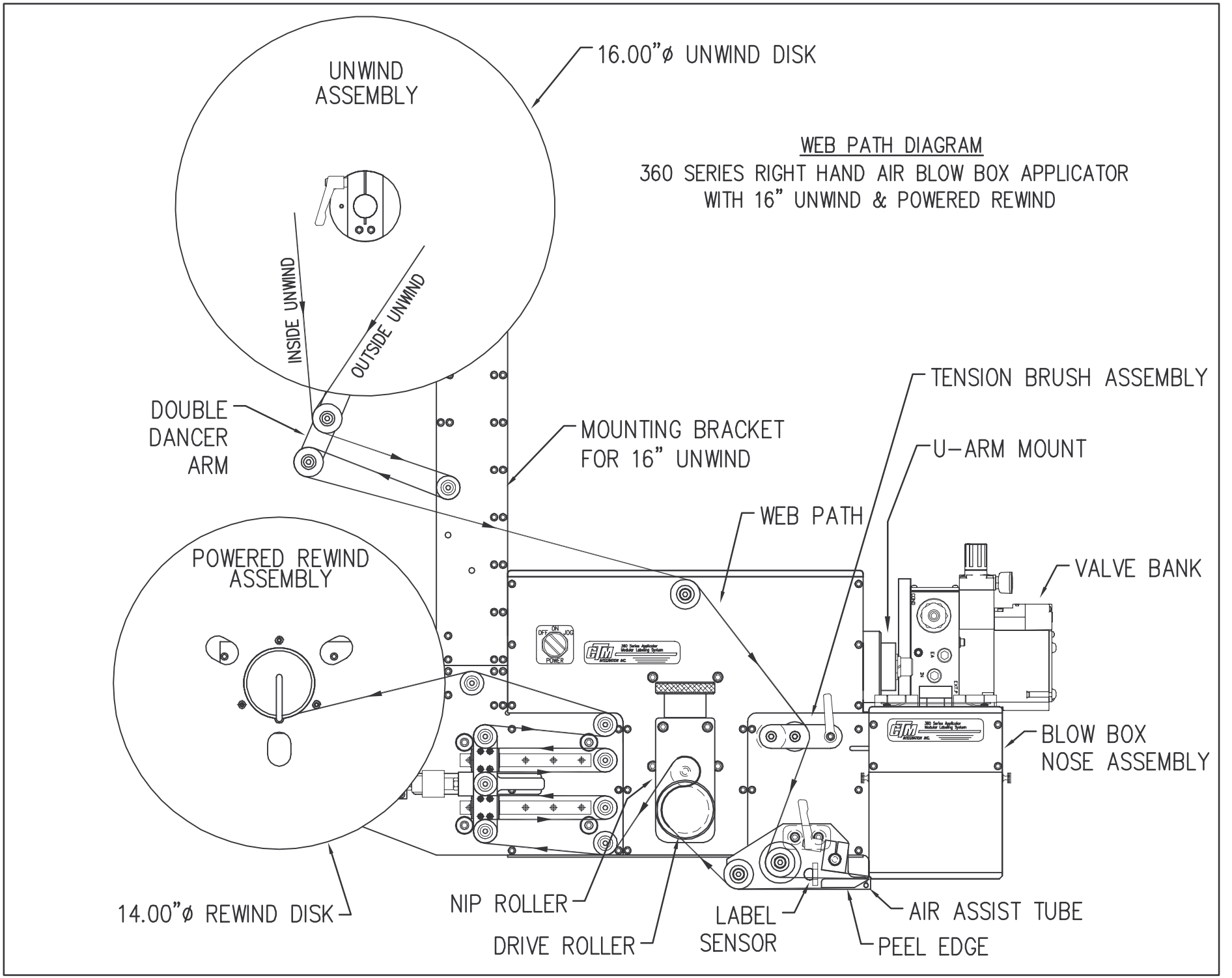
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND



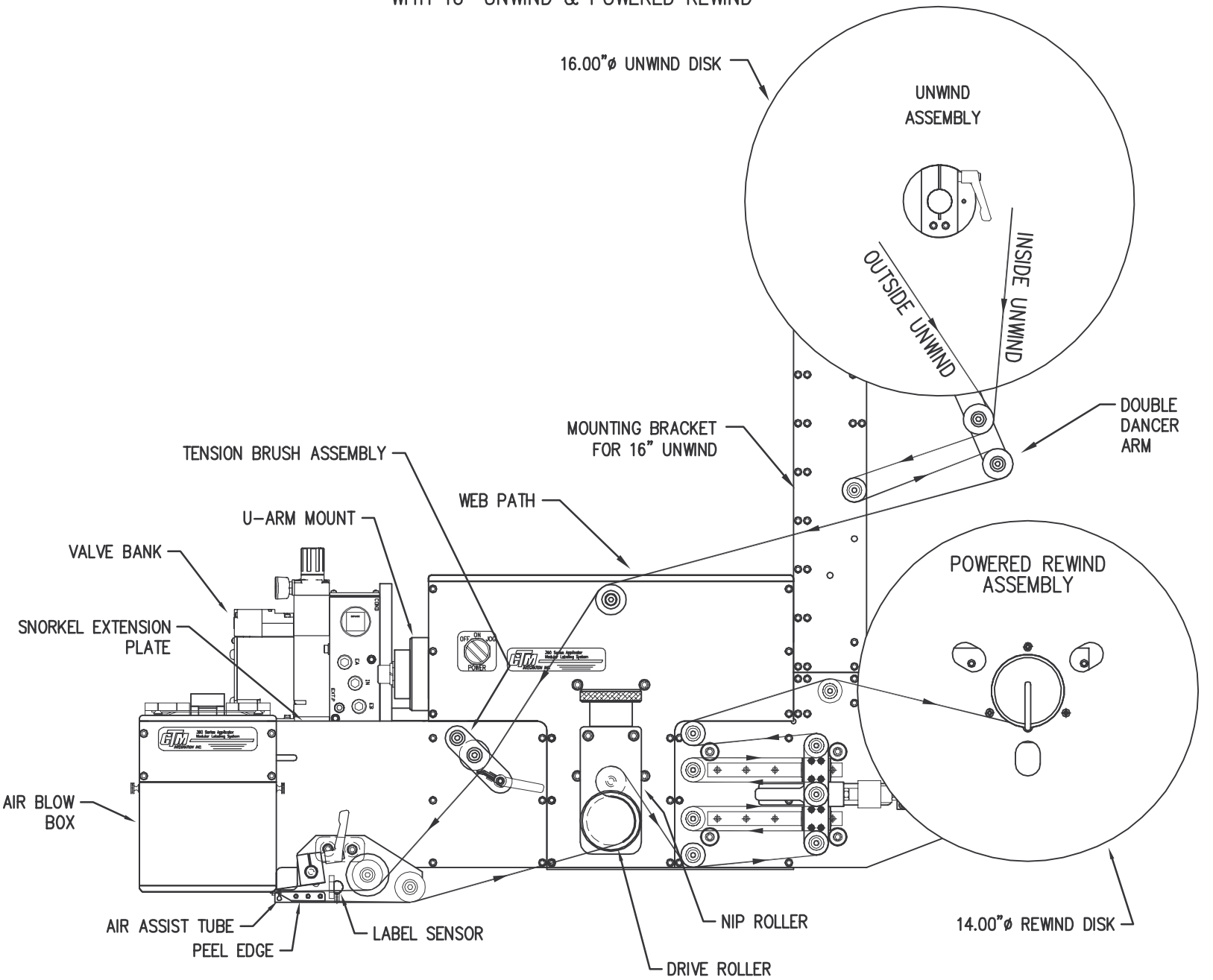
(NOTE: 18" DROP DOWN SHOWN)


16.00"ø UNWIND DISK
UNWIND ASSEMBLY
WEB PATH DIAGRAM
360 SERIES LEFT HAND AIR BLOW BOX APPLICATOR
WITH 16" UNWIND & POWERED REWIND
OUTSIDE UNWIND
INSIDE UNWIND
TENSION BRUSH ASSEMBLY
U-ARM MOUNT
MOUNTING BRACKET FOR 16" UNWIND
DOUBLE DANCER ARM
WEB PATH
VALVE BANK
POWERED REWIND ASSEMBLY
BLOW BOX NOSE ASSEMBLY
AIR ASSIST TUBE
PEEL EDGE
LABEL SENSOR
DRIVE ROLLER
NIP ROLLER
14.00"ø REWIND DISK


UNWIND ASSEMBLY
16.00"ø UNWIND DISK
WEB PATH DIAGRAM
360 SERIES RIGHT HAND AIR BLOW BOX APPLICATOR
WITH 16" UNWIND & POWERED REWIND
INSIDE UNWIND
OUTSIDE UNWIND
DOUBLE DANCER ARM
MOUNTING BRACKET FOR 16" UNWIND
TENSION BRUSH ASSEMBLY
U-ARM MOUNT
WEB PATH
VALVE BANK
POWERED REWIND ASSEMBLY
BLOW BOX NOSE ASSEMBLY
14.00"ø REWIND DISK
NIP ROLLER
DRIVE ROLLER
LABEL SENSOR
AIR ASSIST TUBE
PEEL EDGE

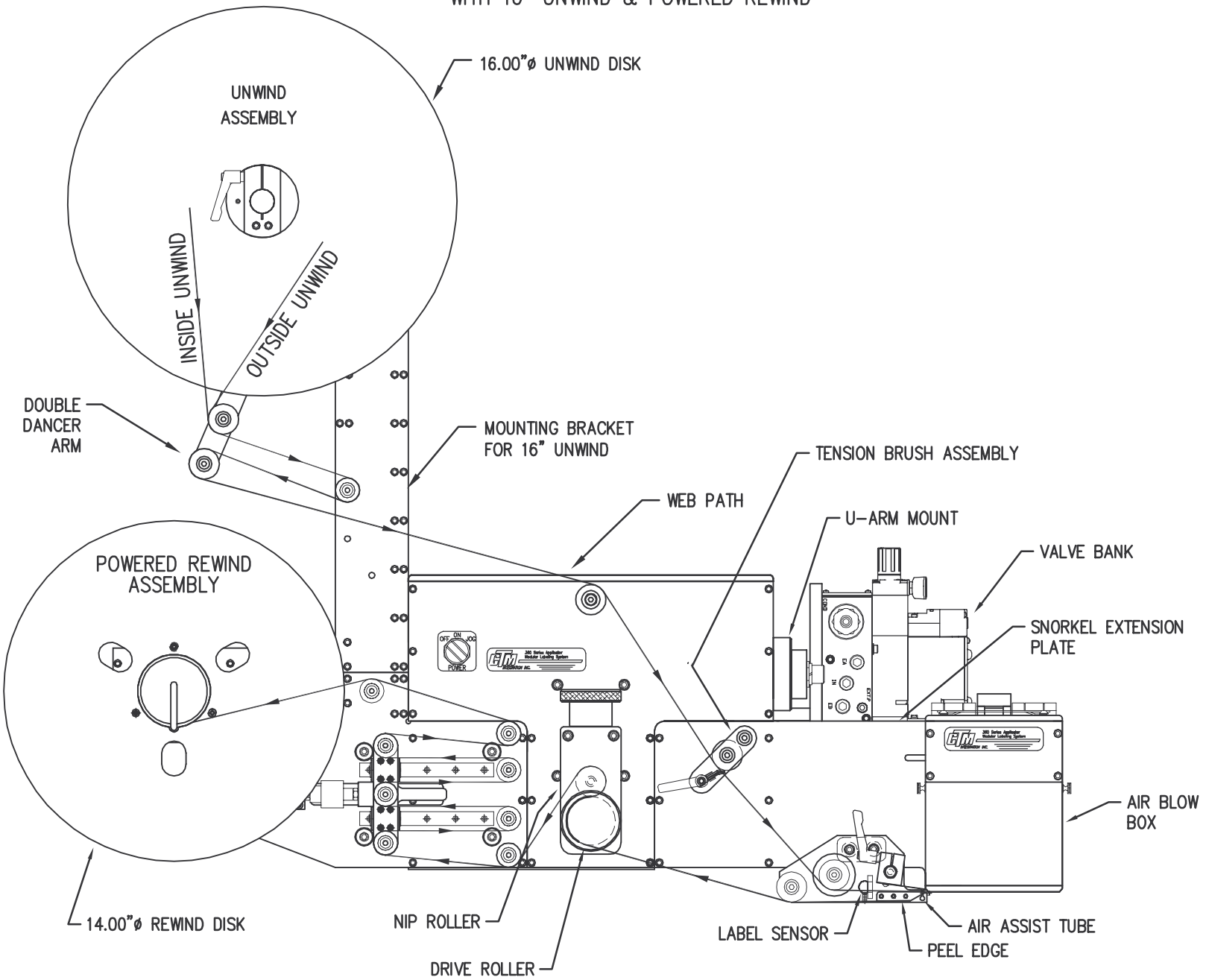
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



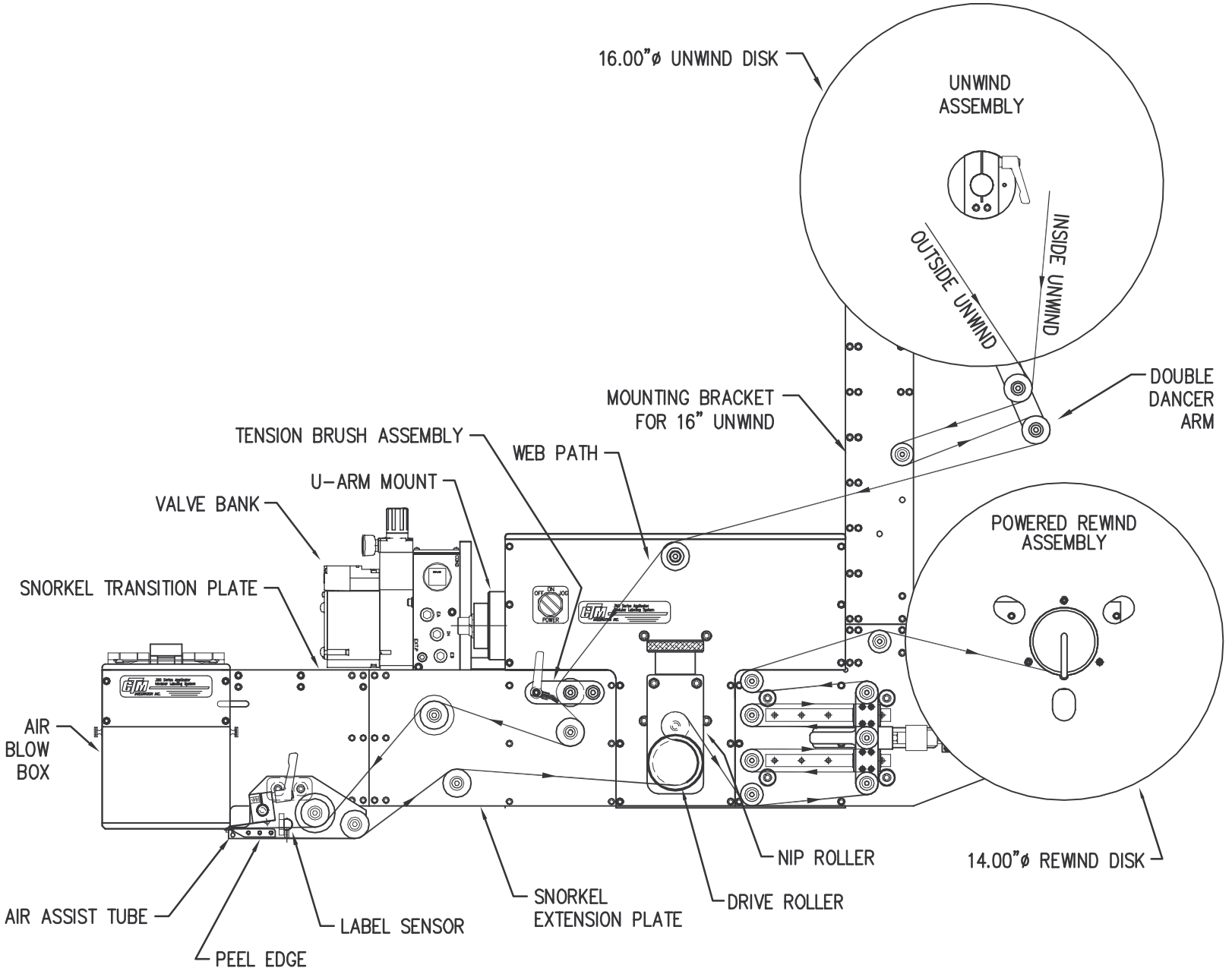
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



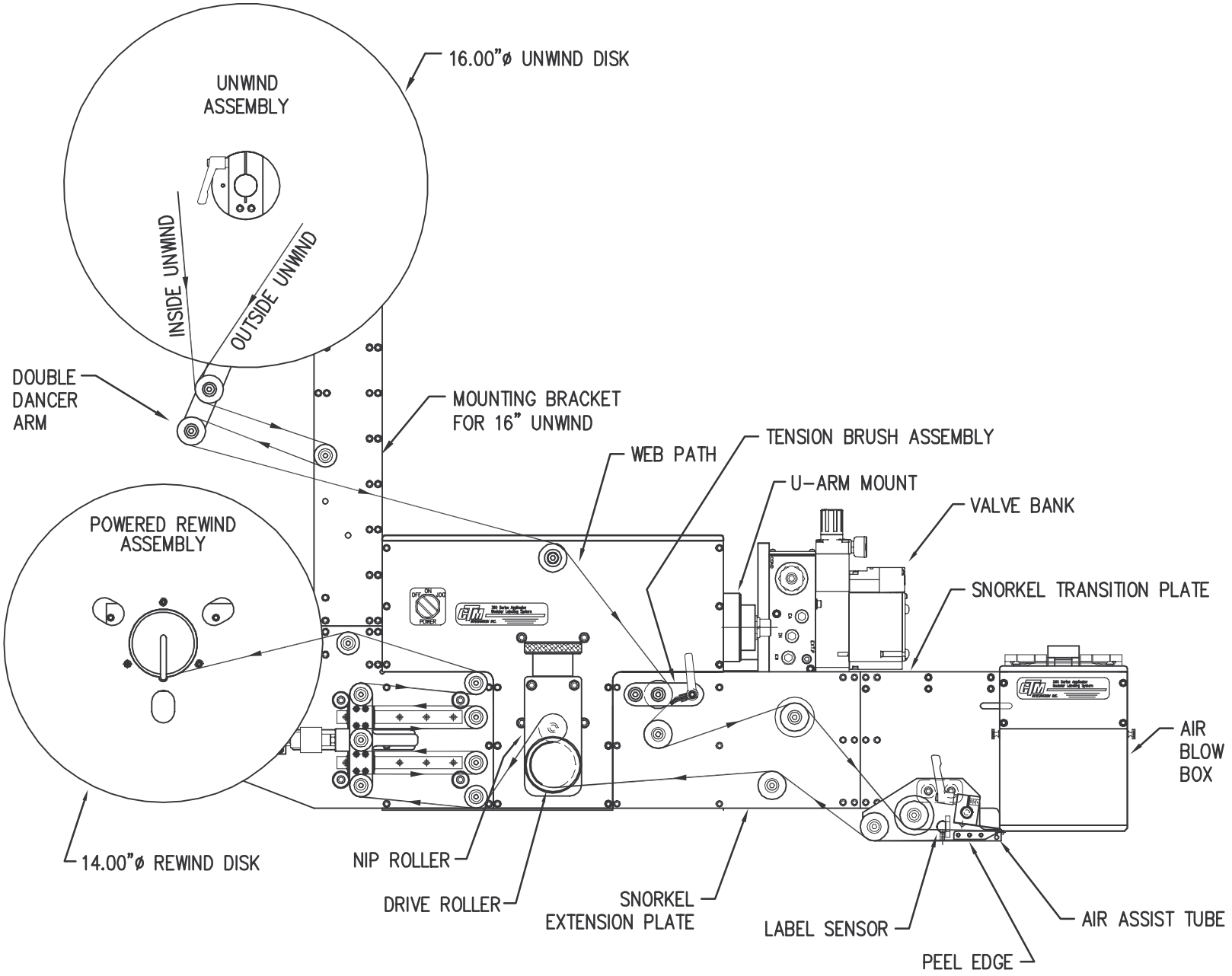
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



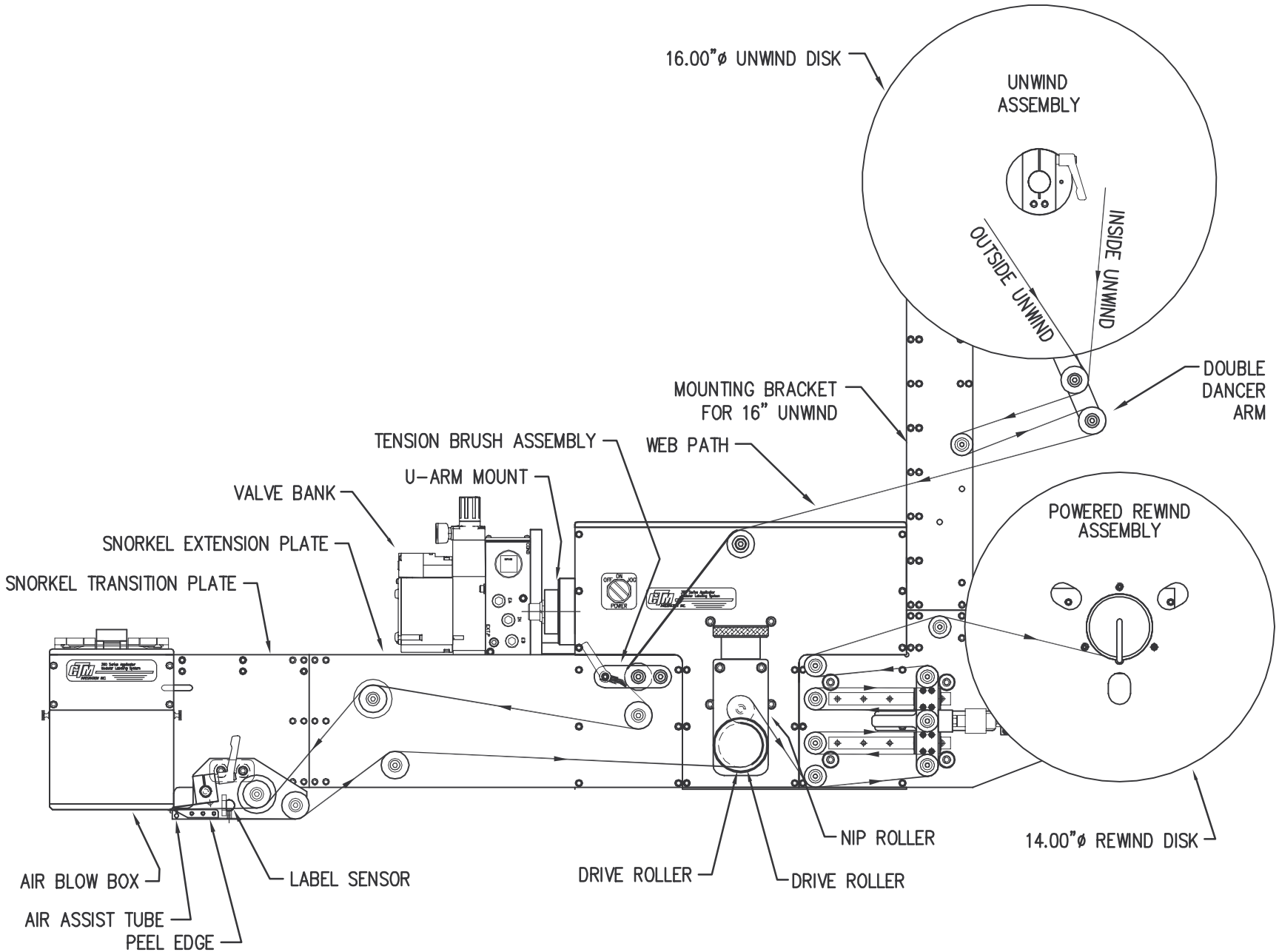
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



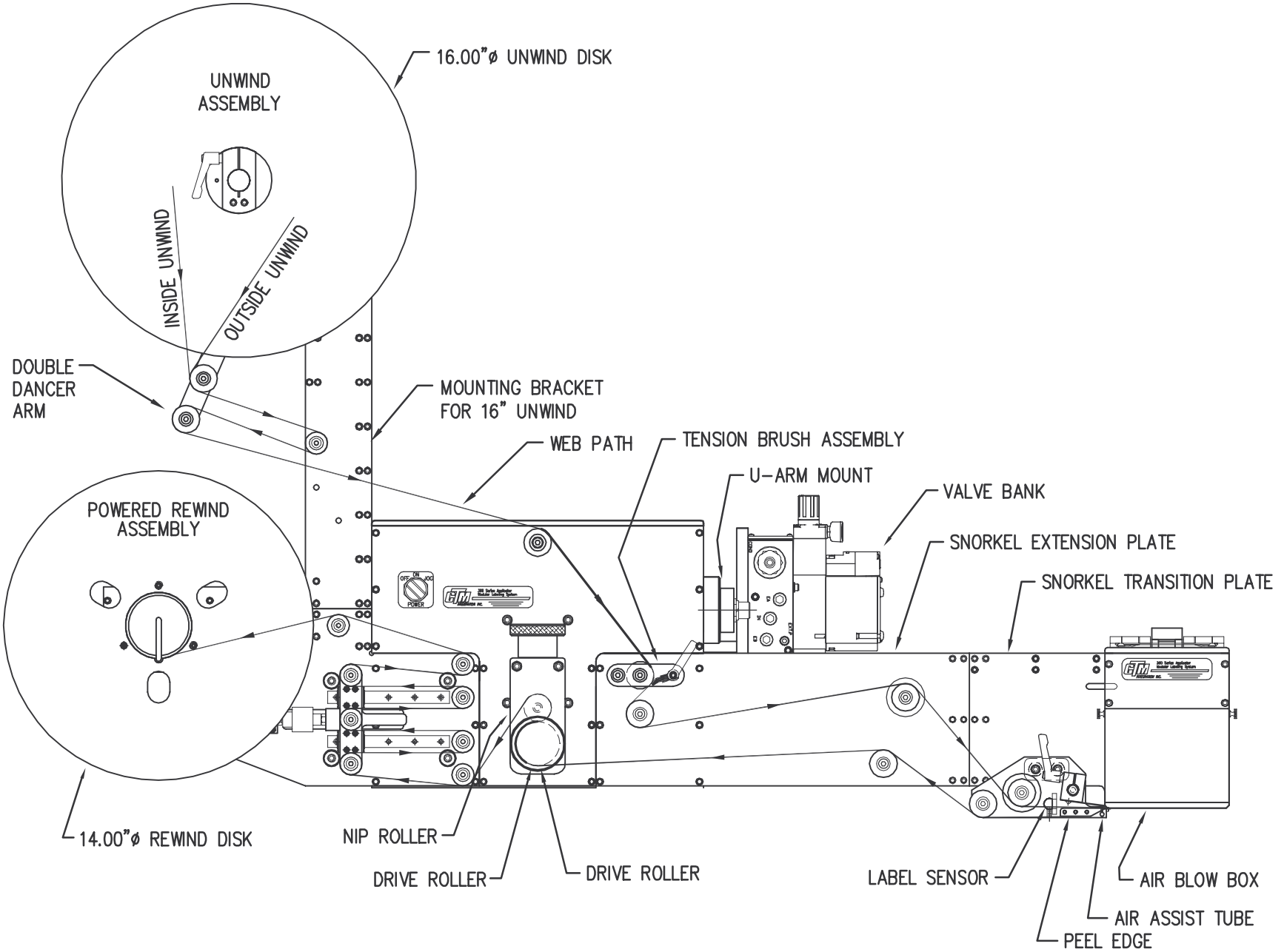
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



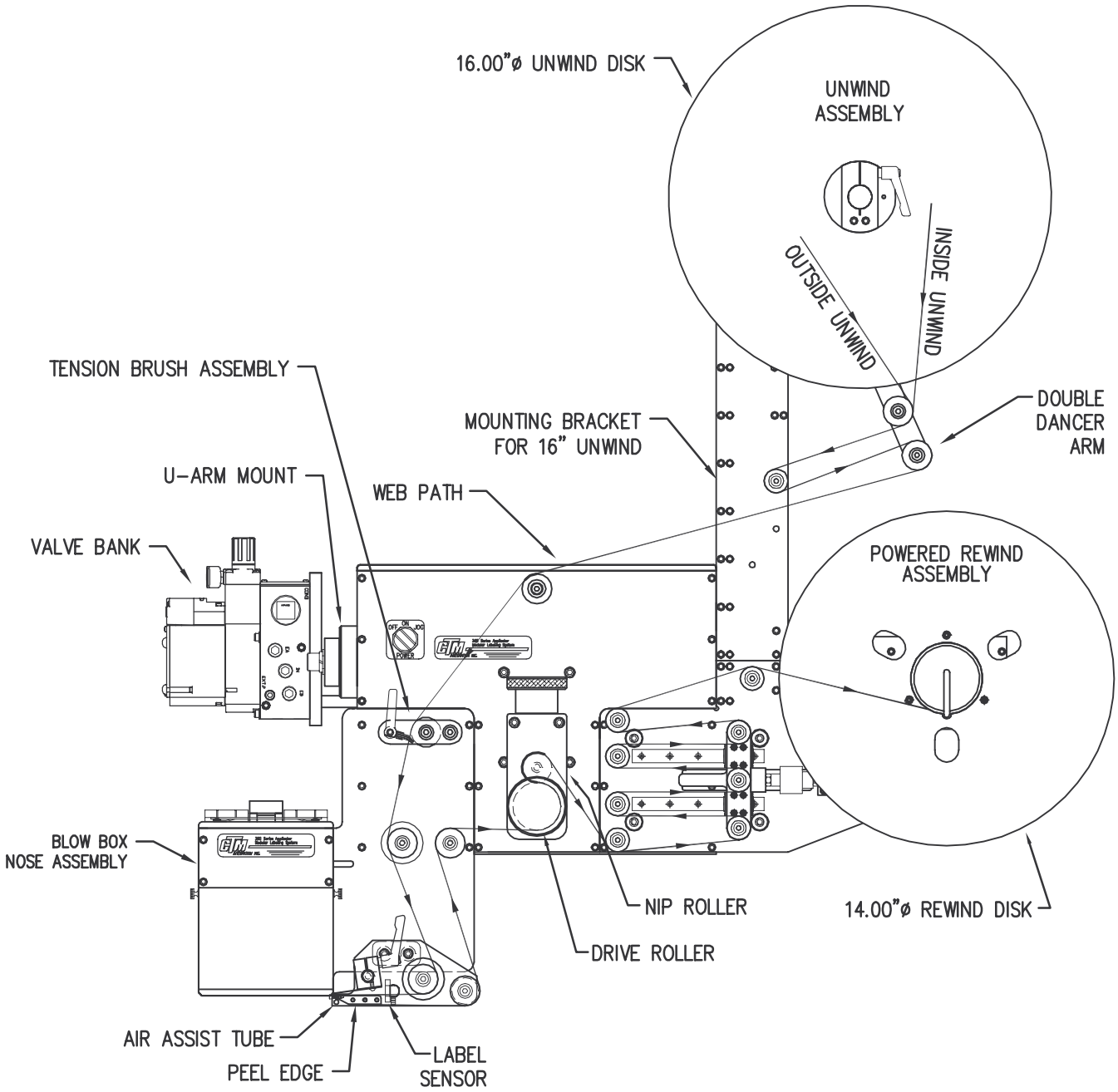
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



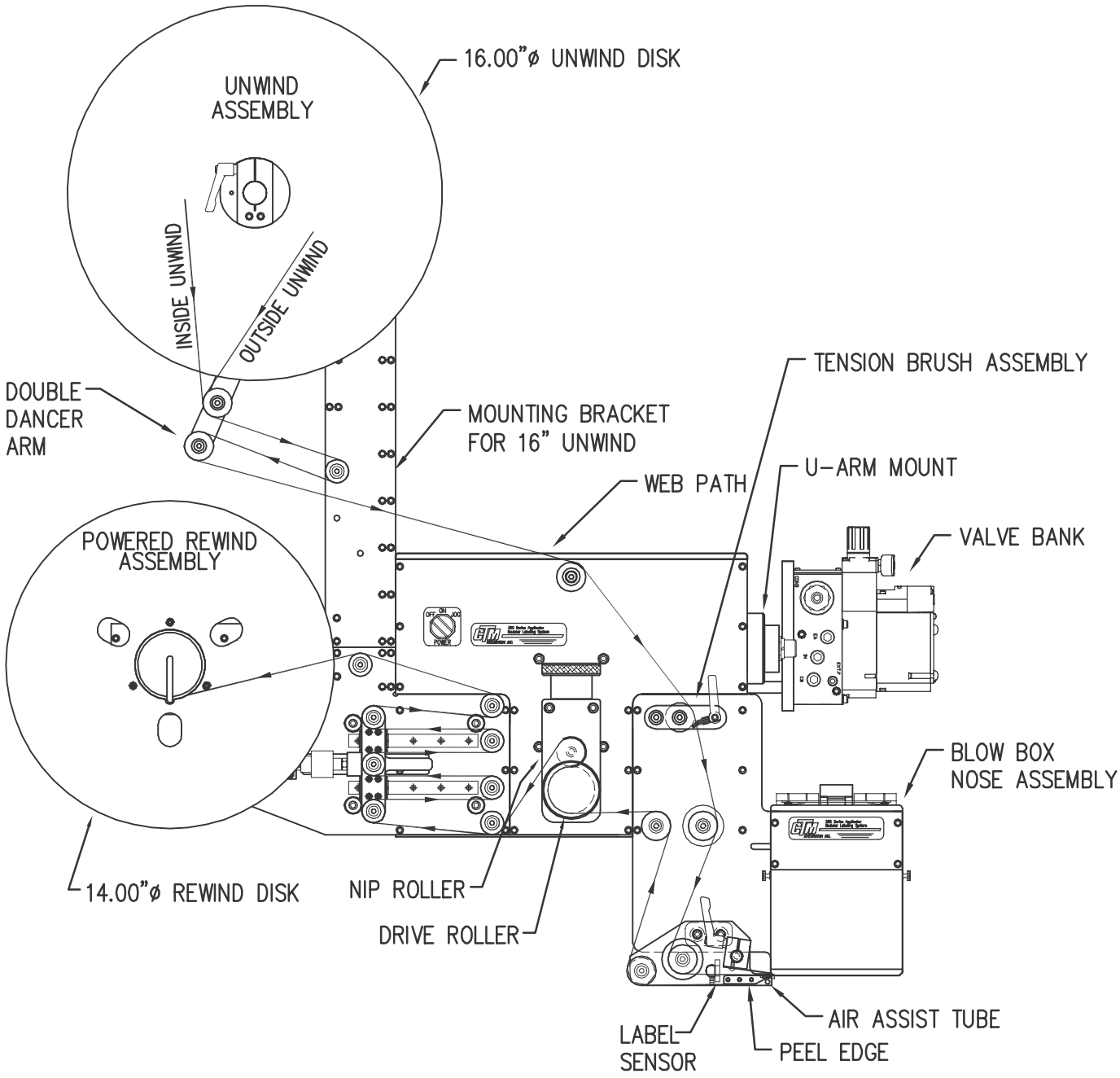
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



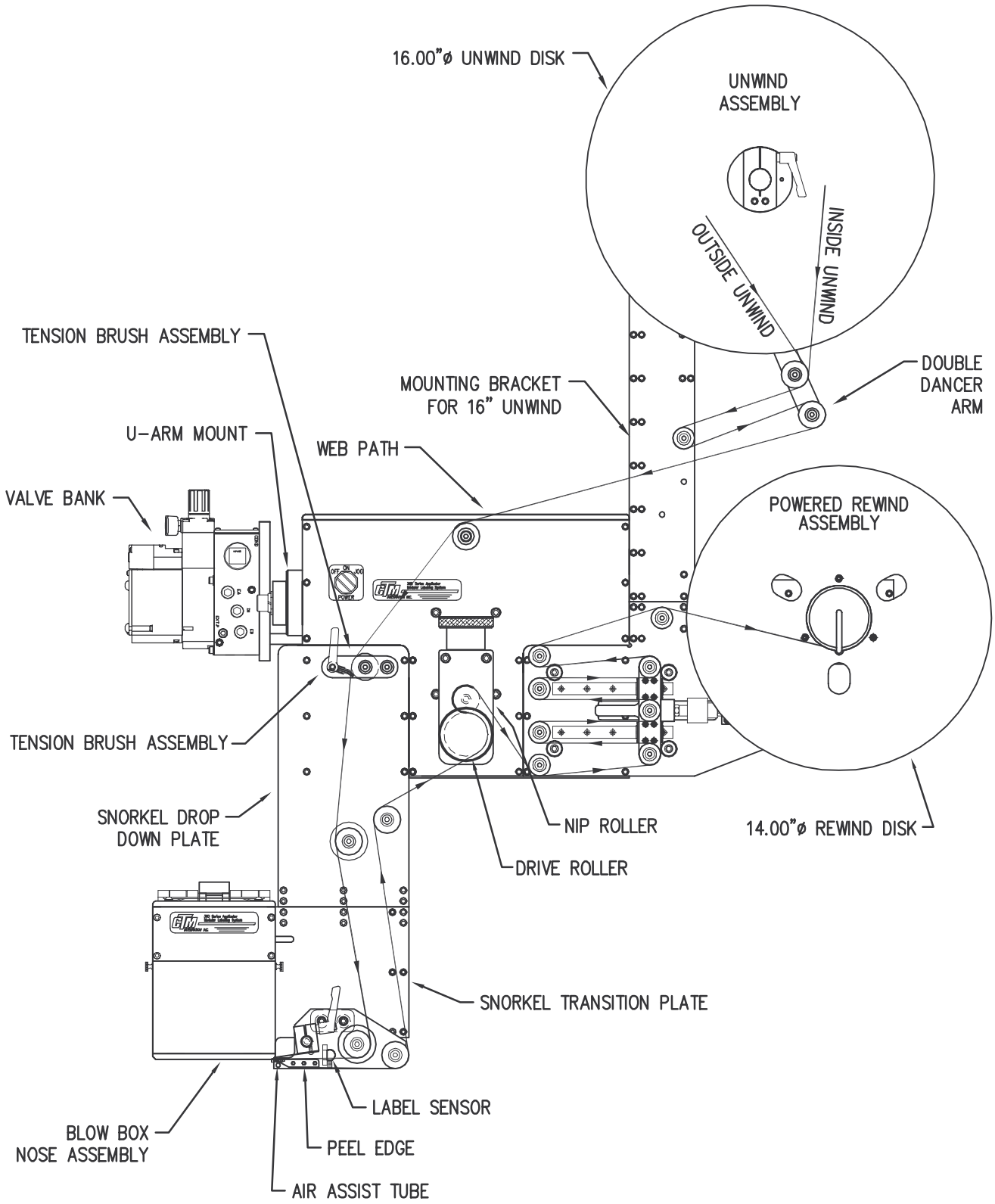
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



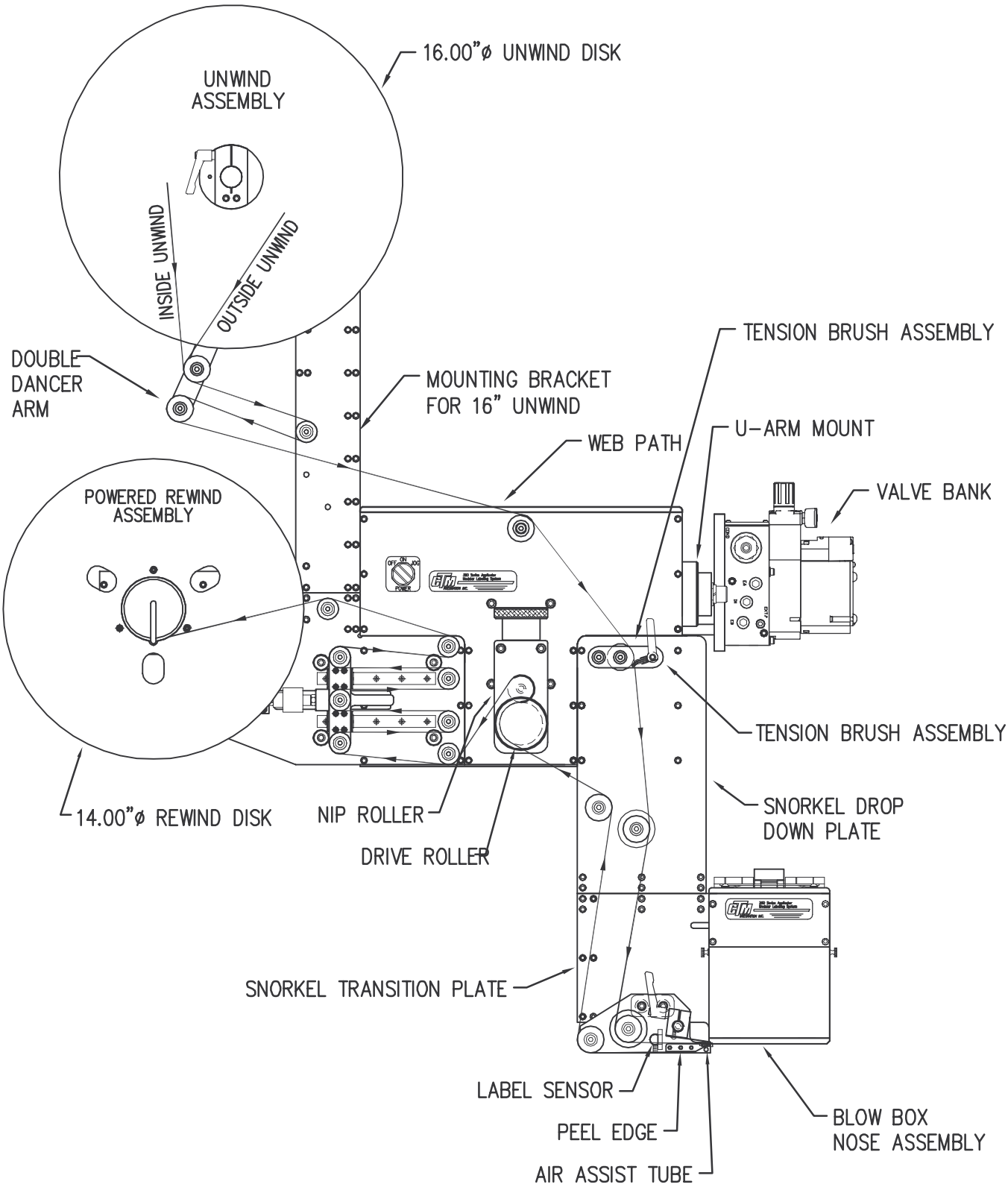
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



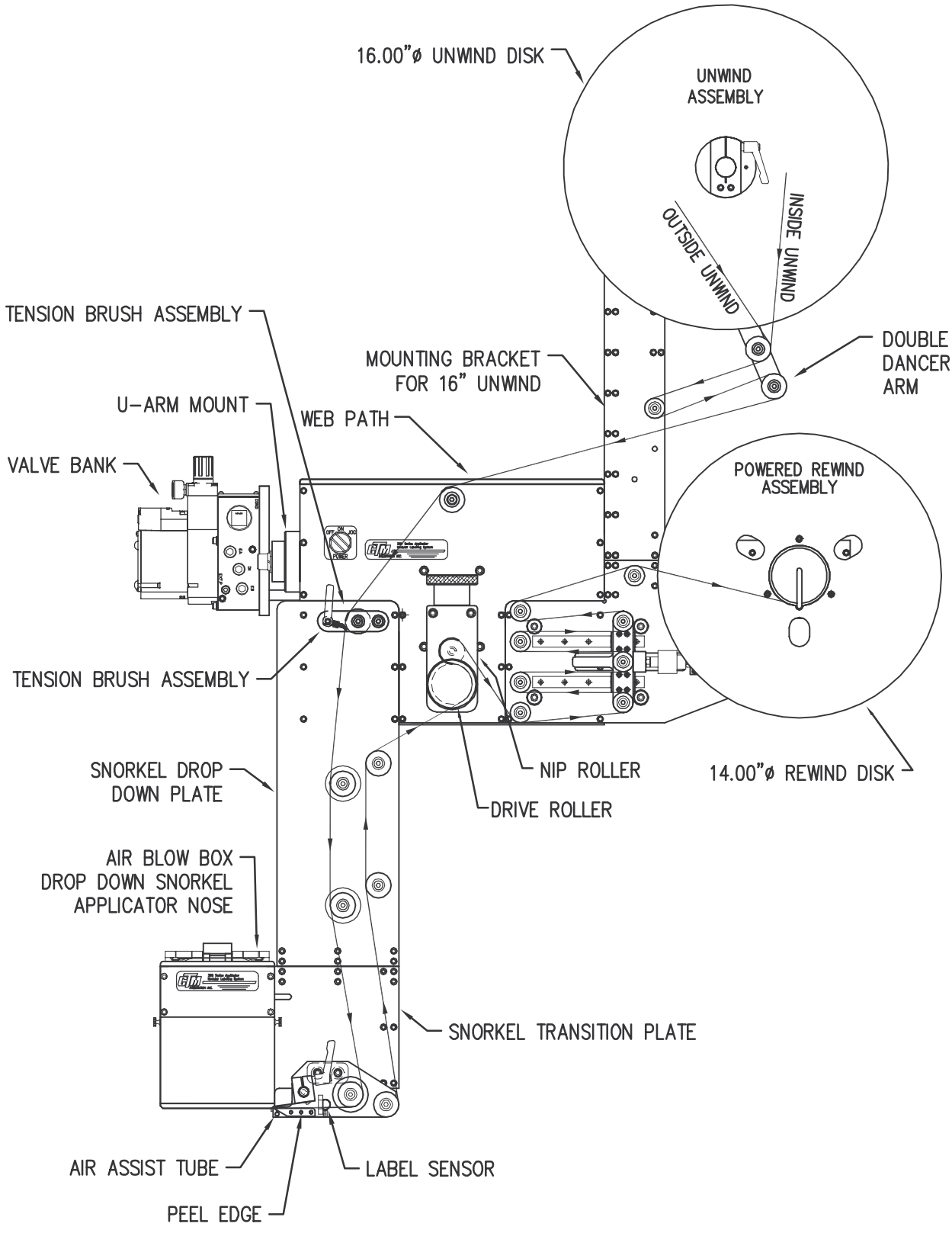
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR
WITH 16" UNWIND & POWERED REWIND



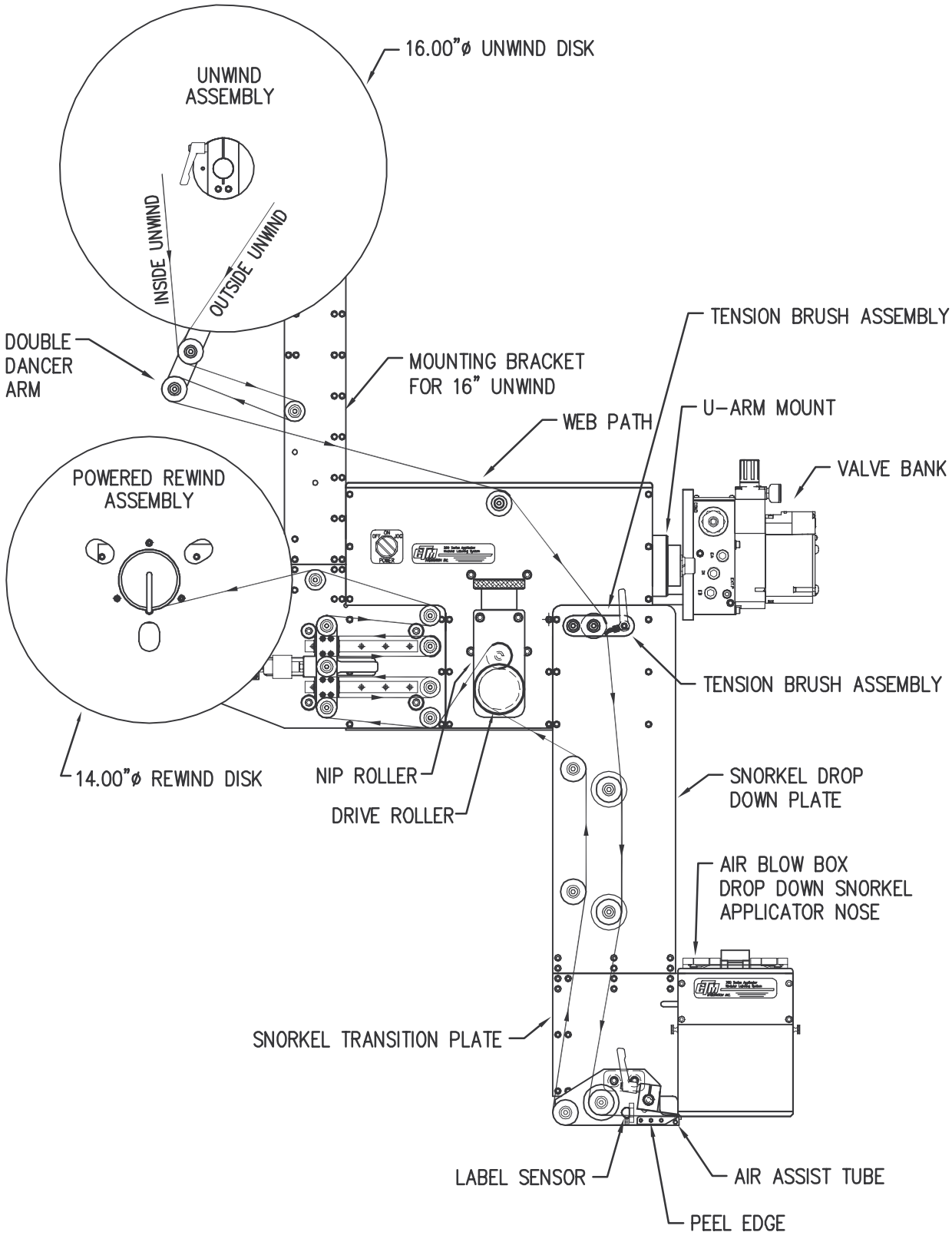
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



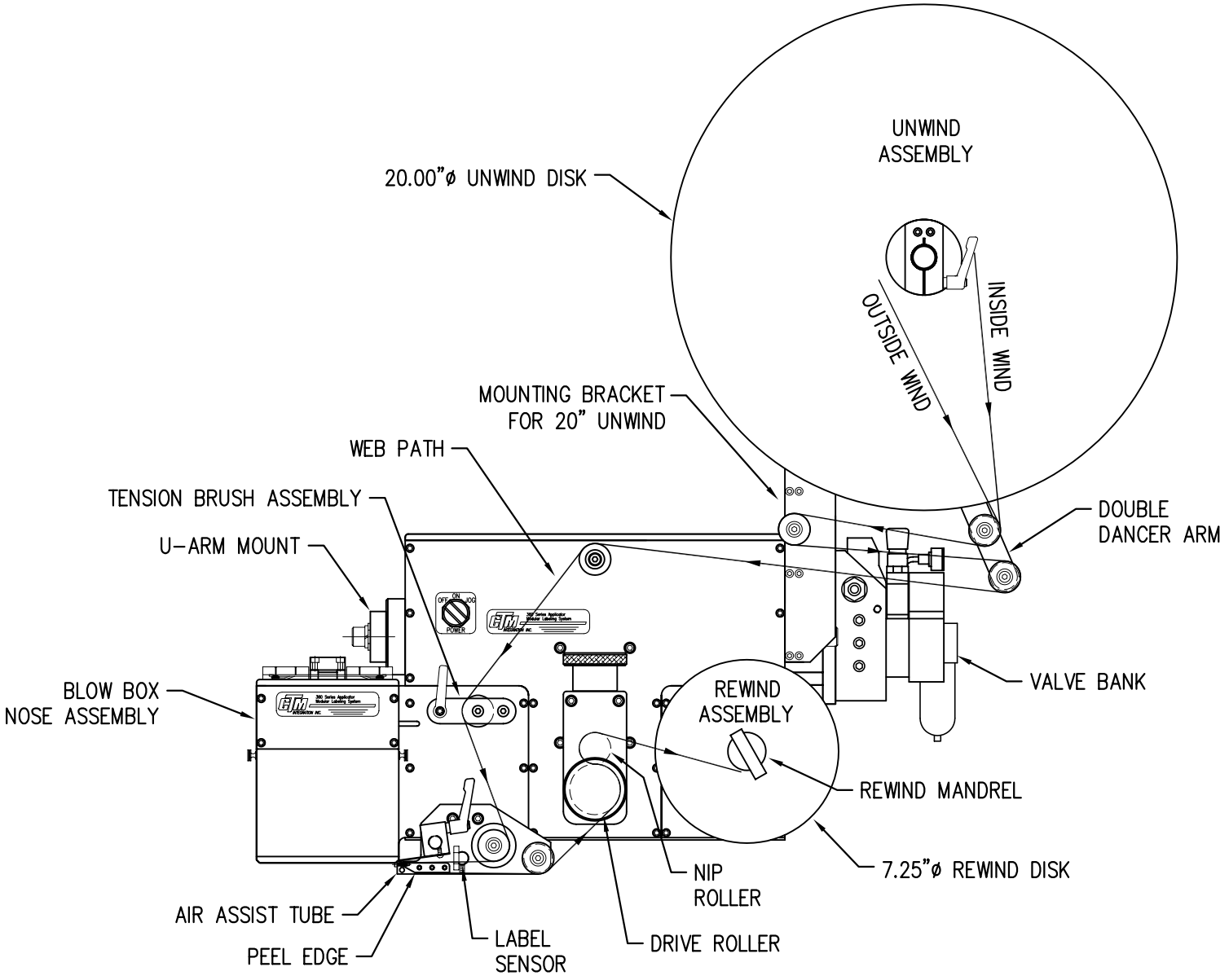
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 16" UNWIND & POWERED REWIND



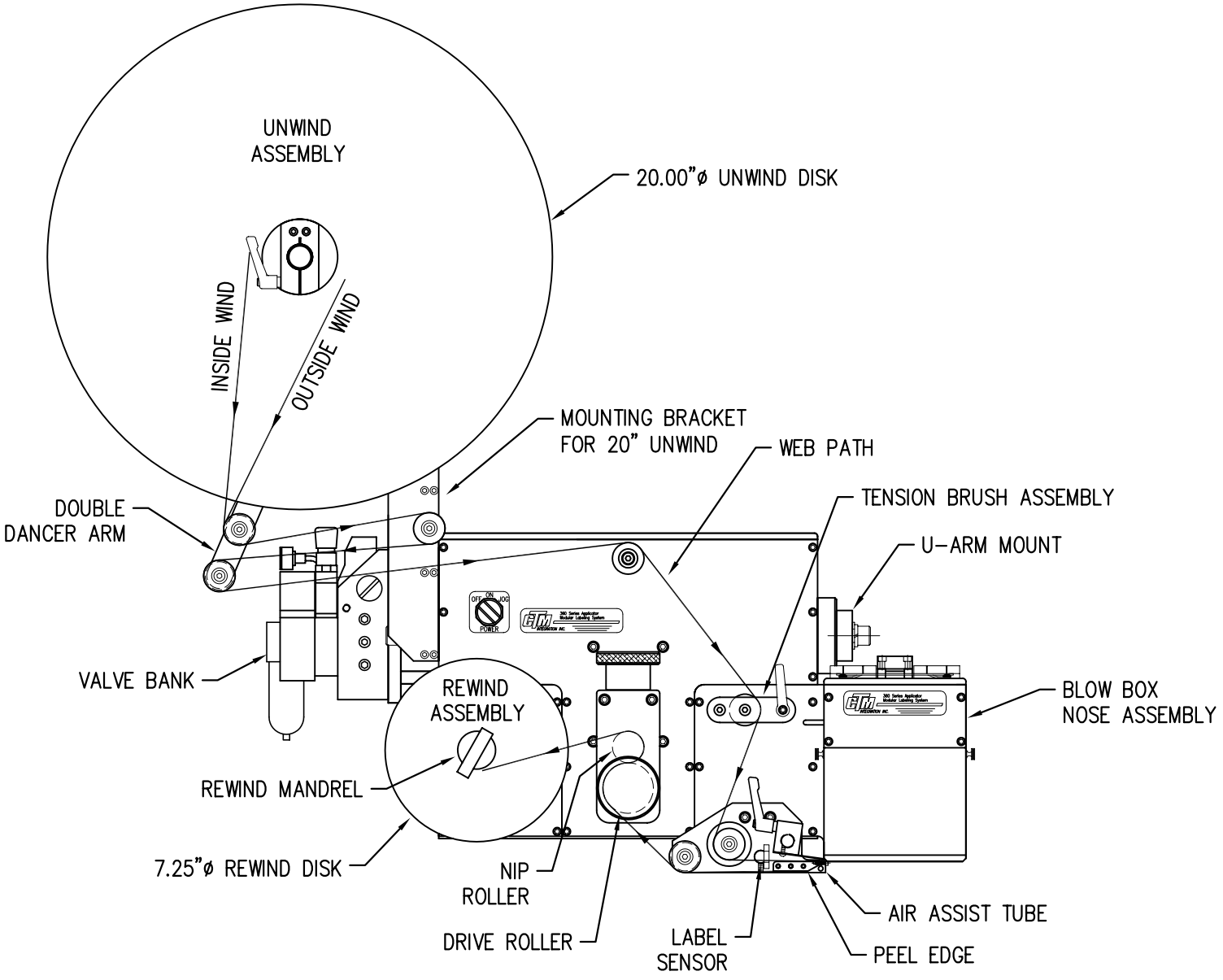
WEB PATH DIAGRAM

360 SERIES LEFT HAND AIR BLOW BOX APPLICATOR WITH 20" UNWIND



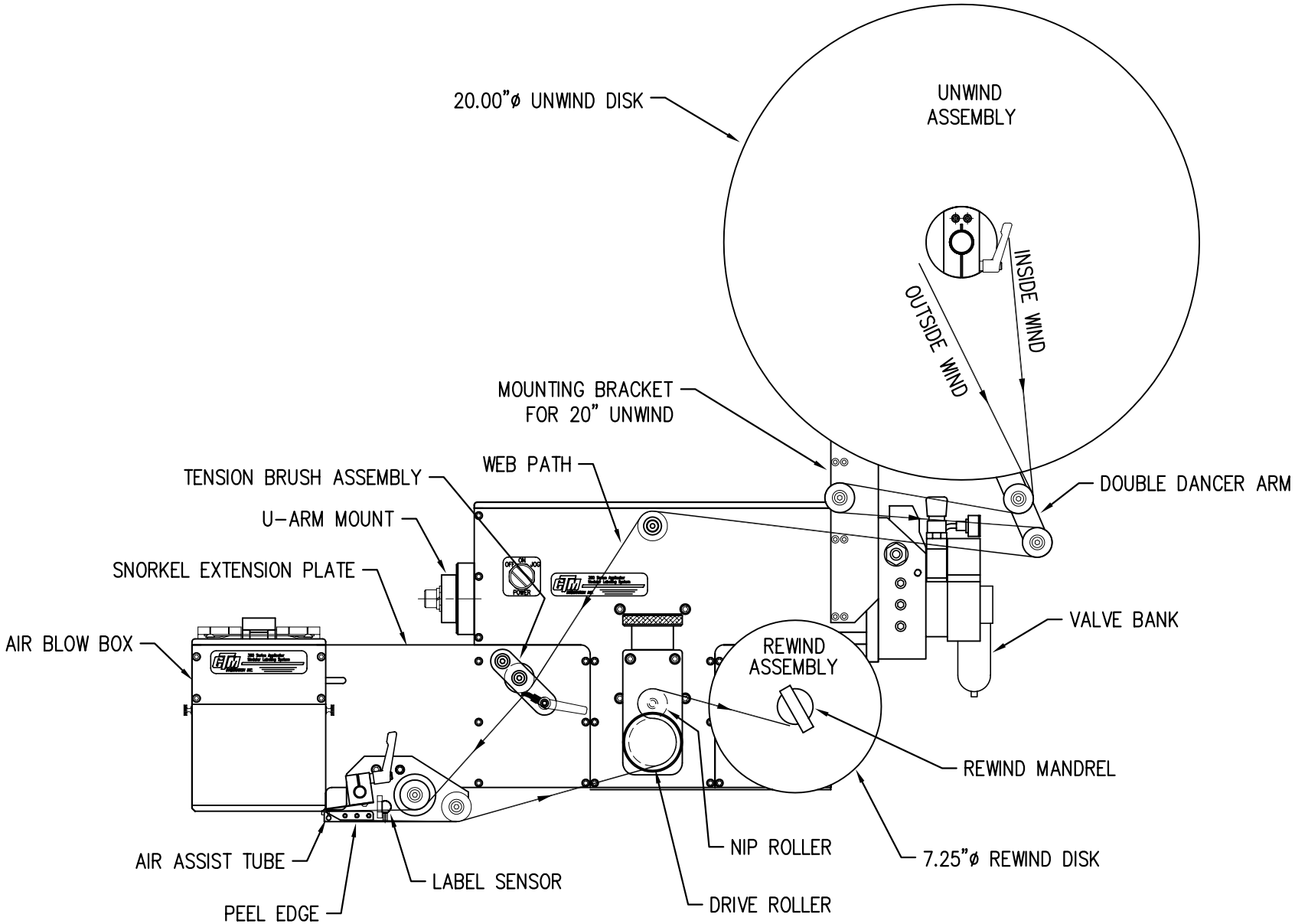
WEB PATH DIAGRAM

360 SERIES RIGHT HAND AIR BLOW BOX APPLICATOR WITH 20" UNWIND



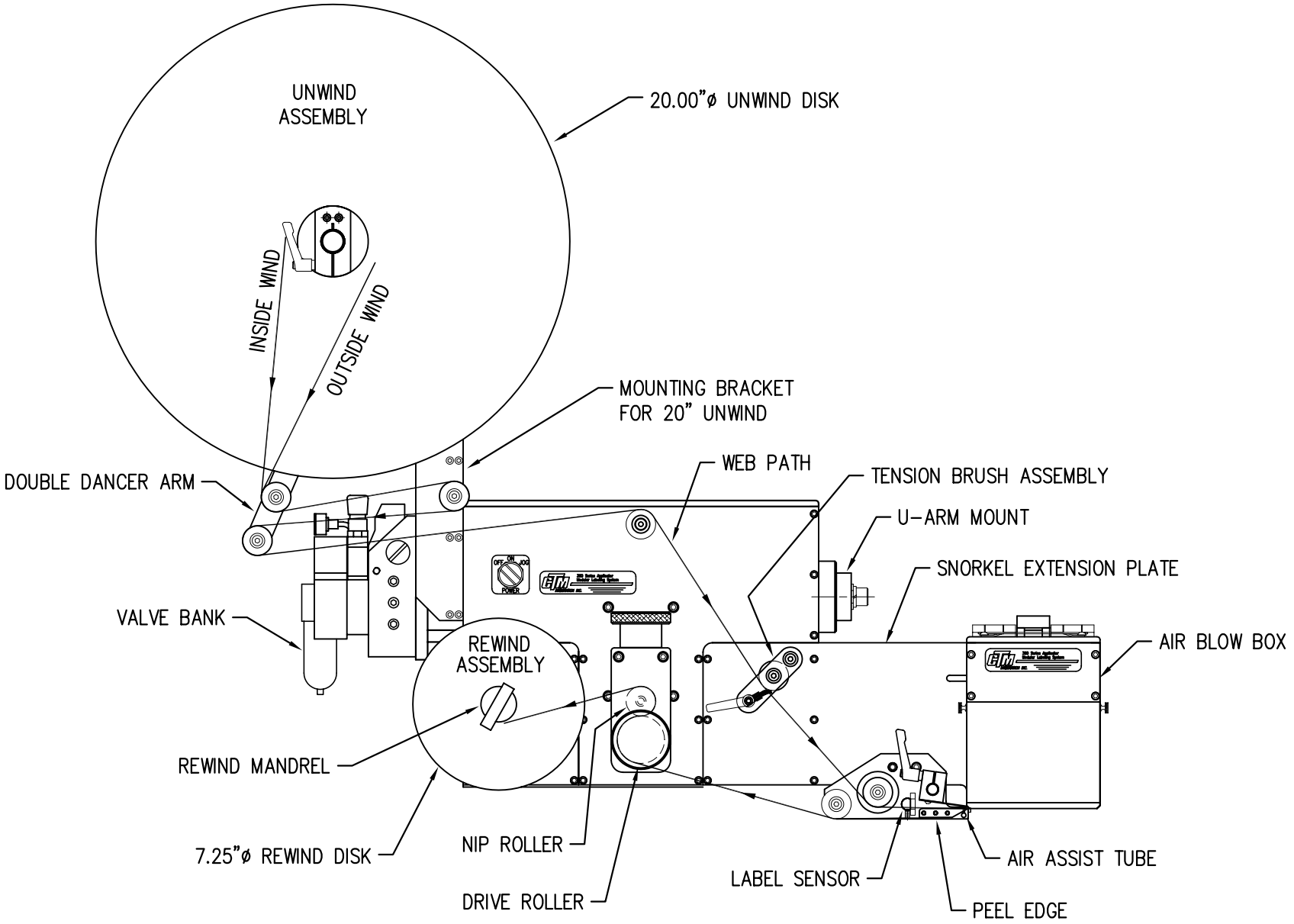
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND



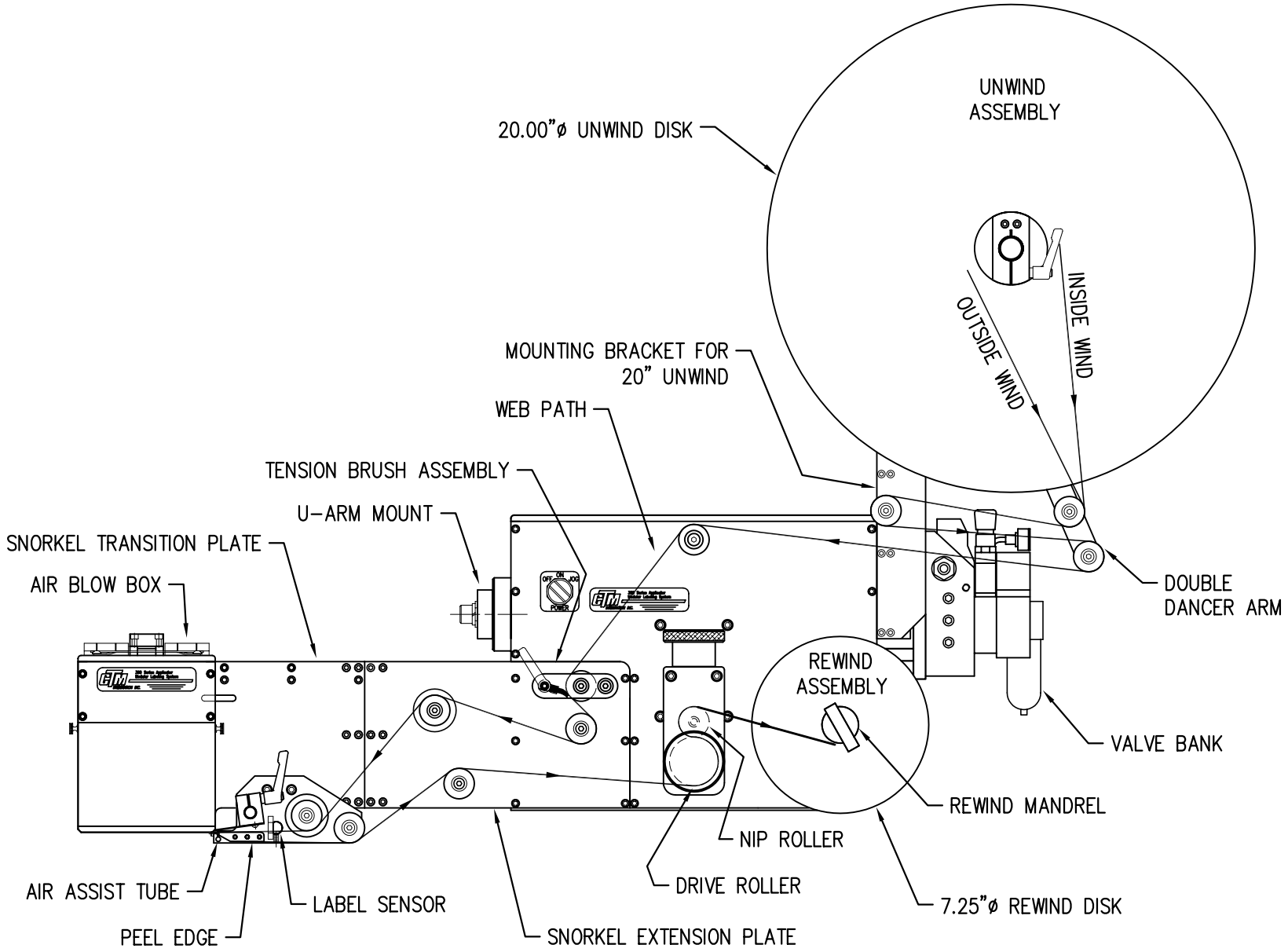
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND



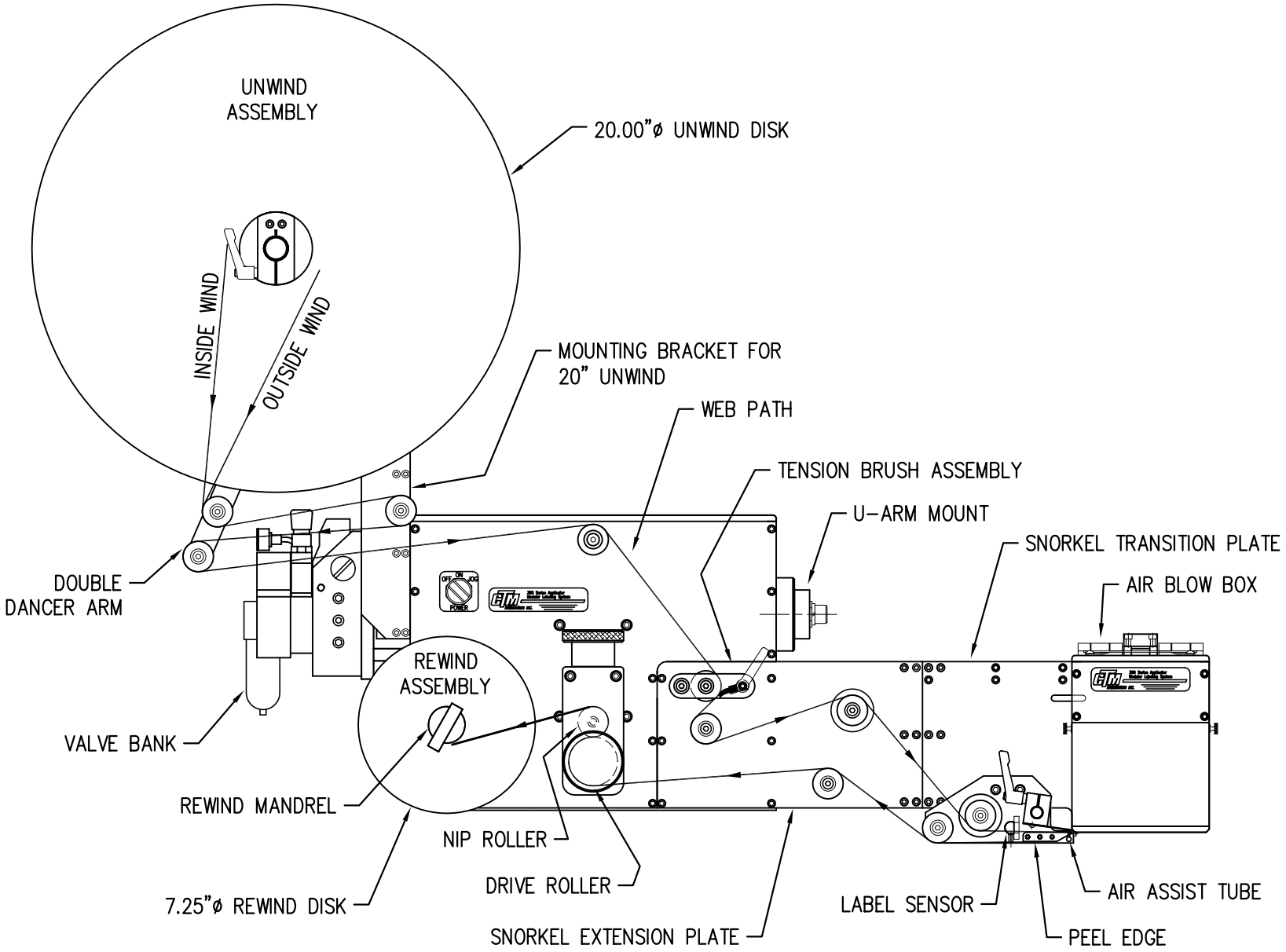
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND



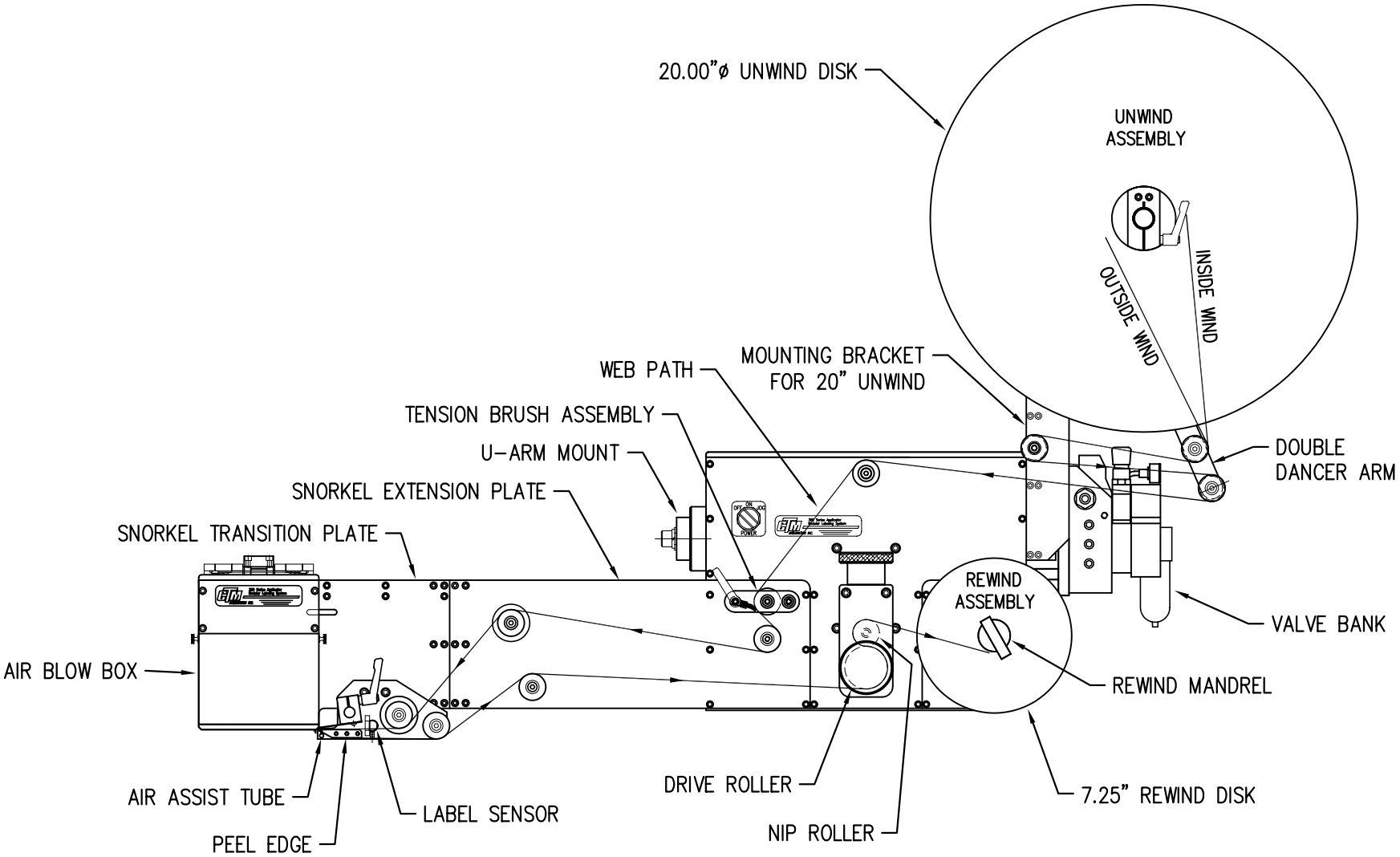
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND



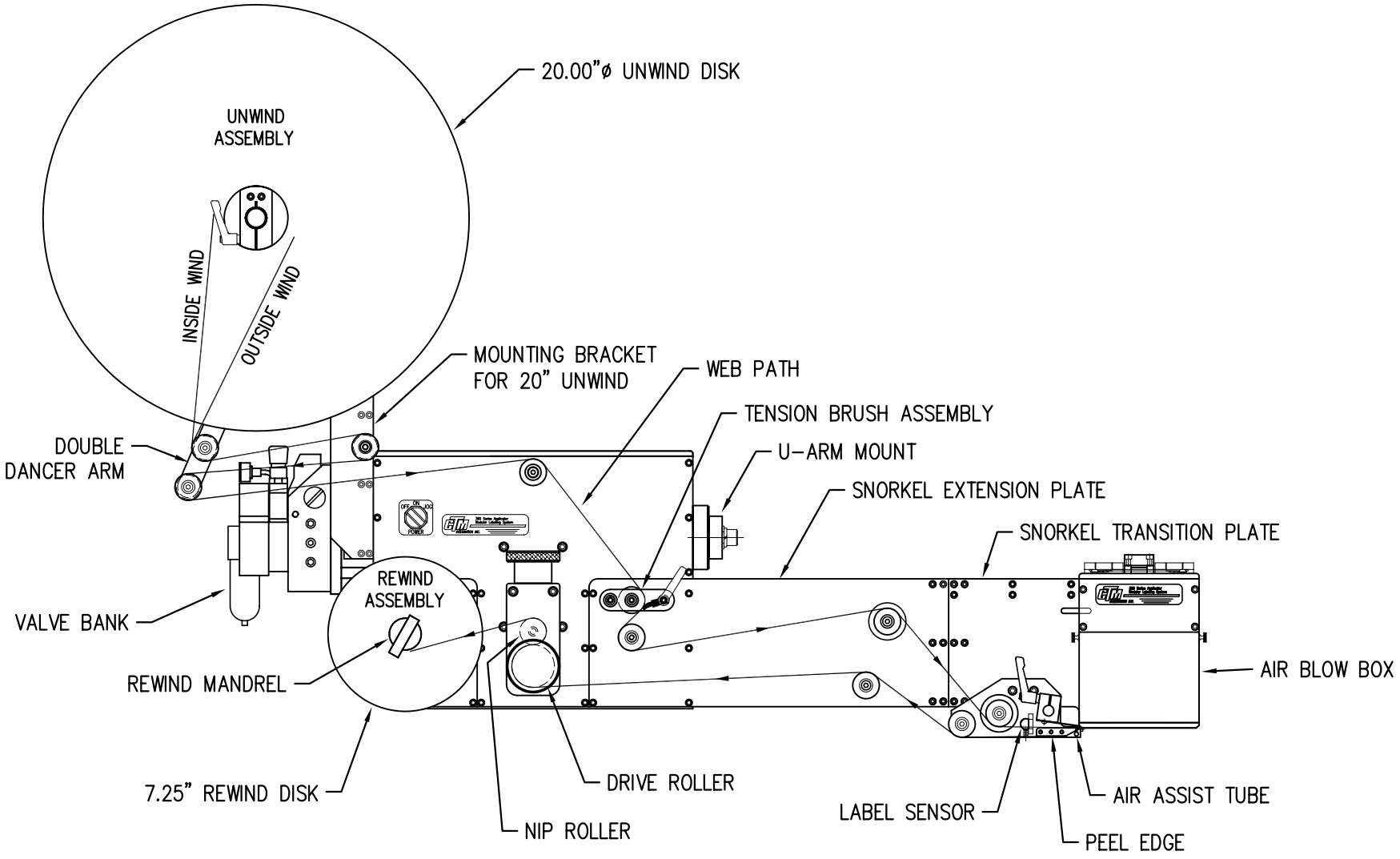
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND



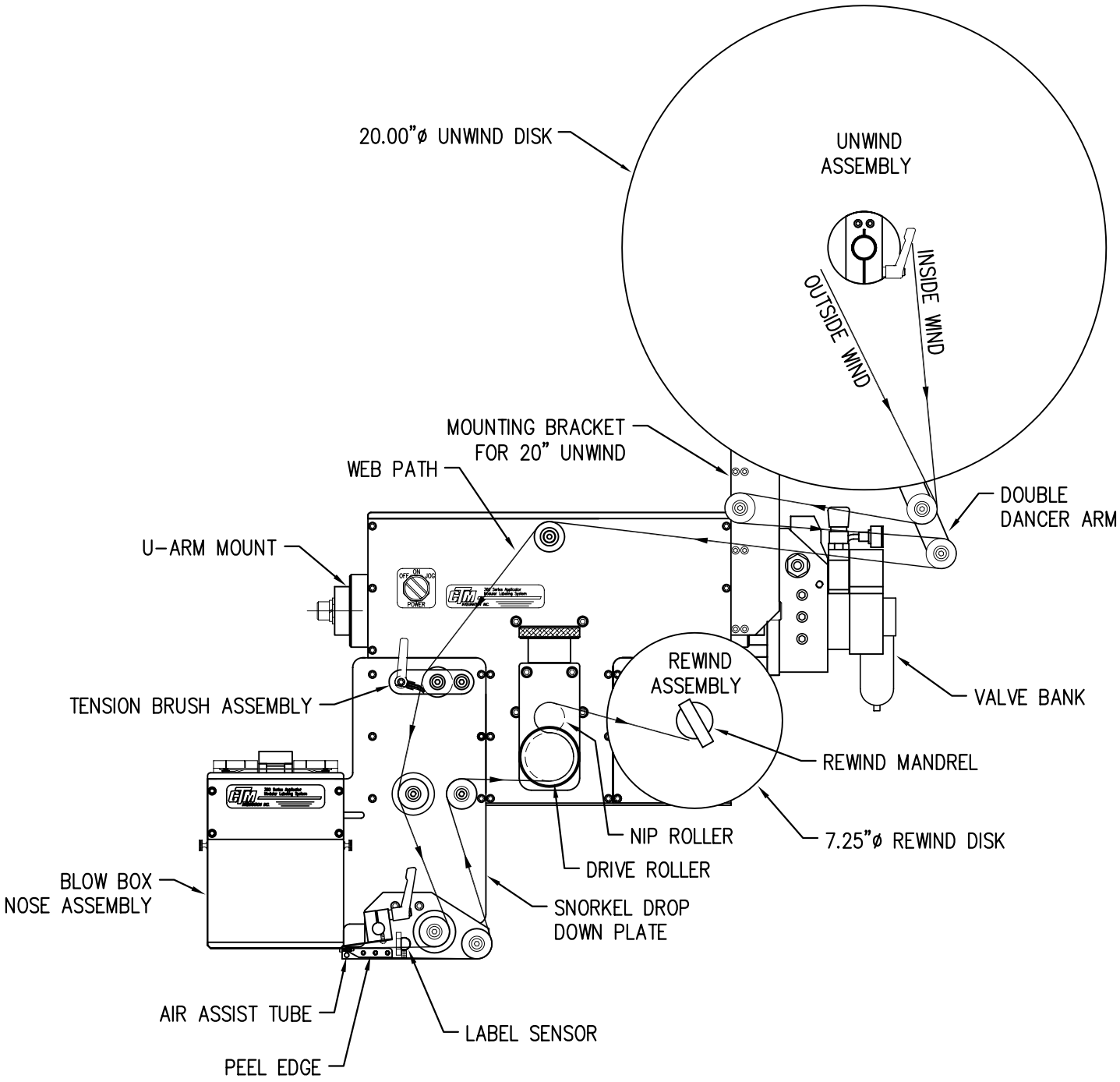
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND



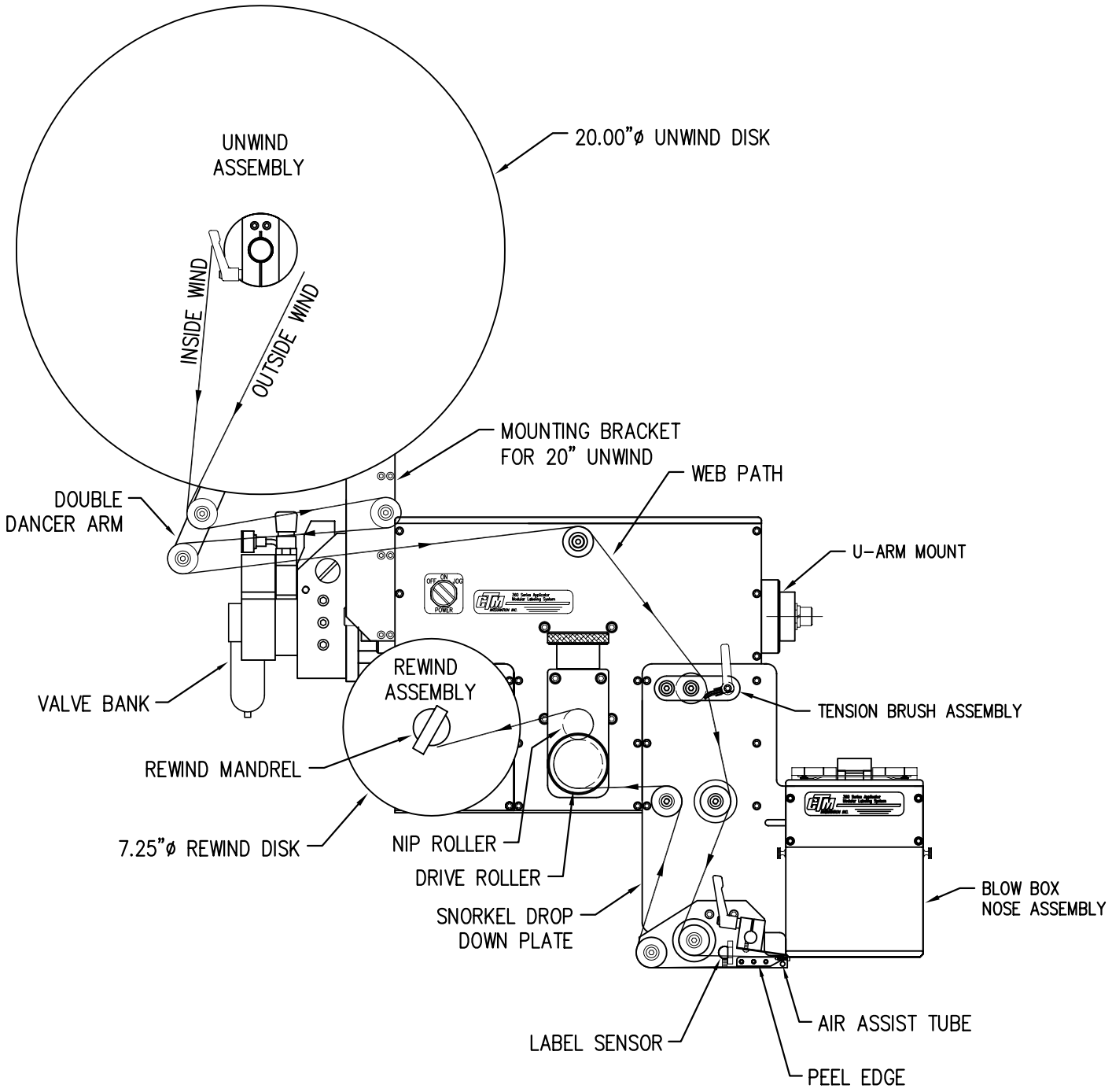
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR WITH 20" UNWIND



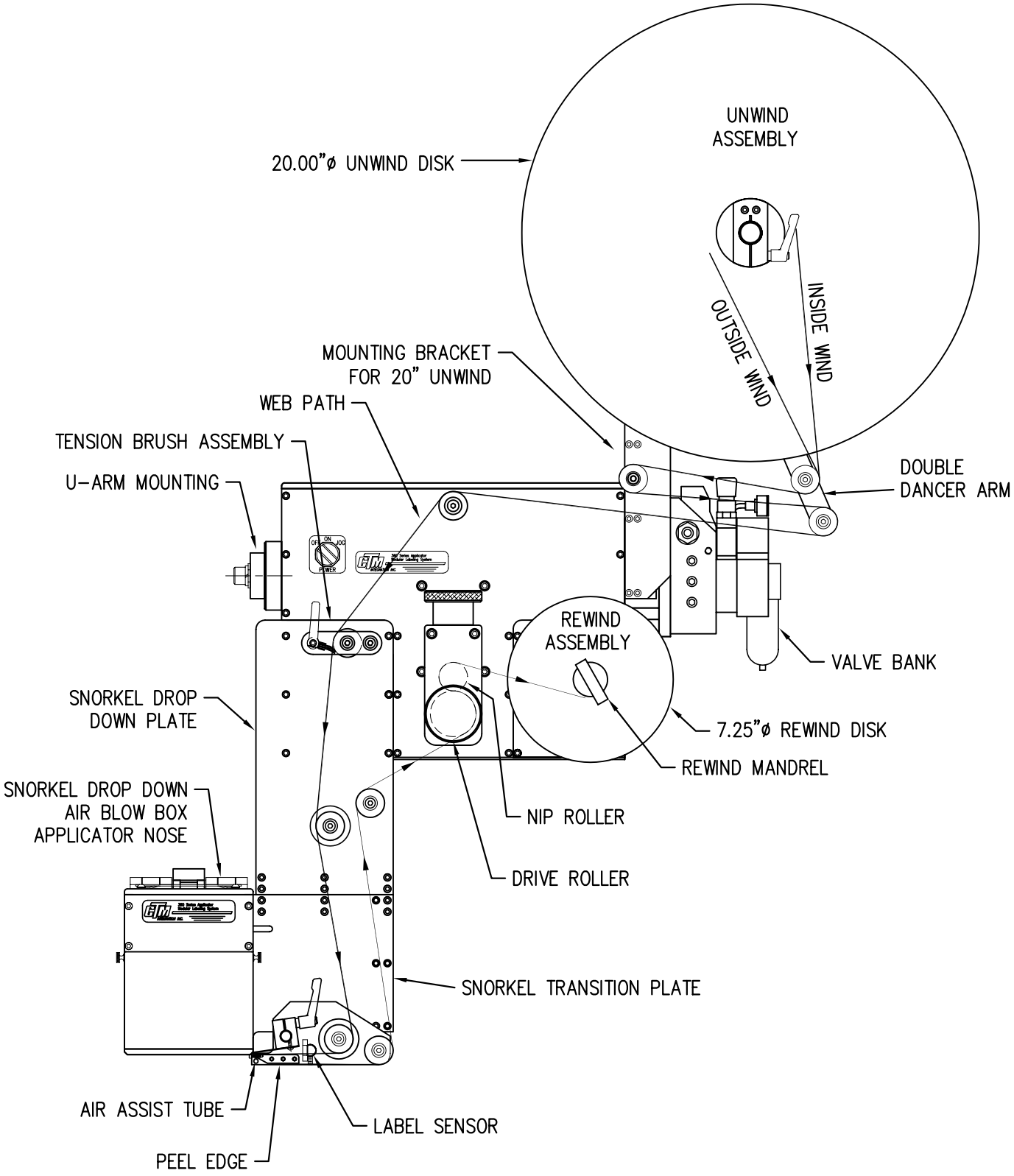
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR WITH 20" UNWIND



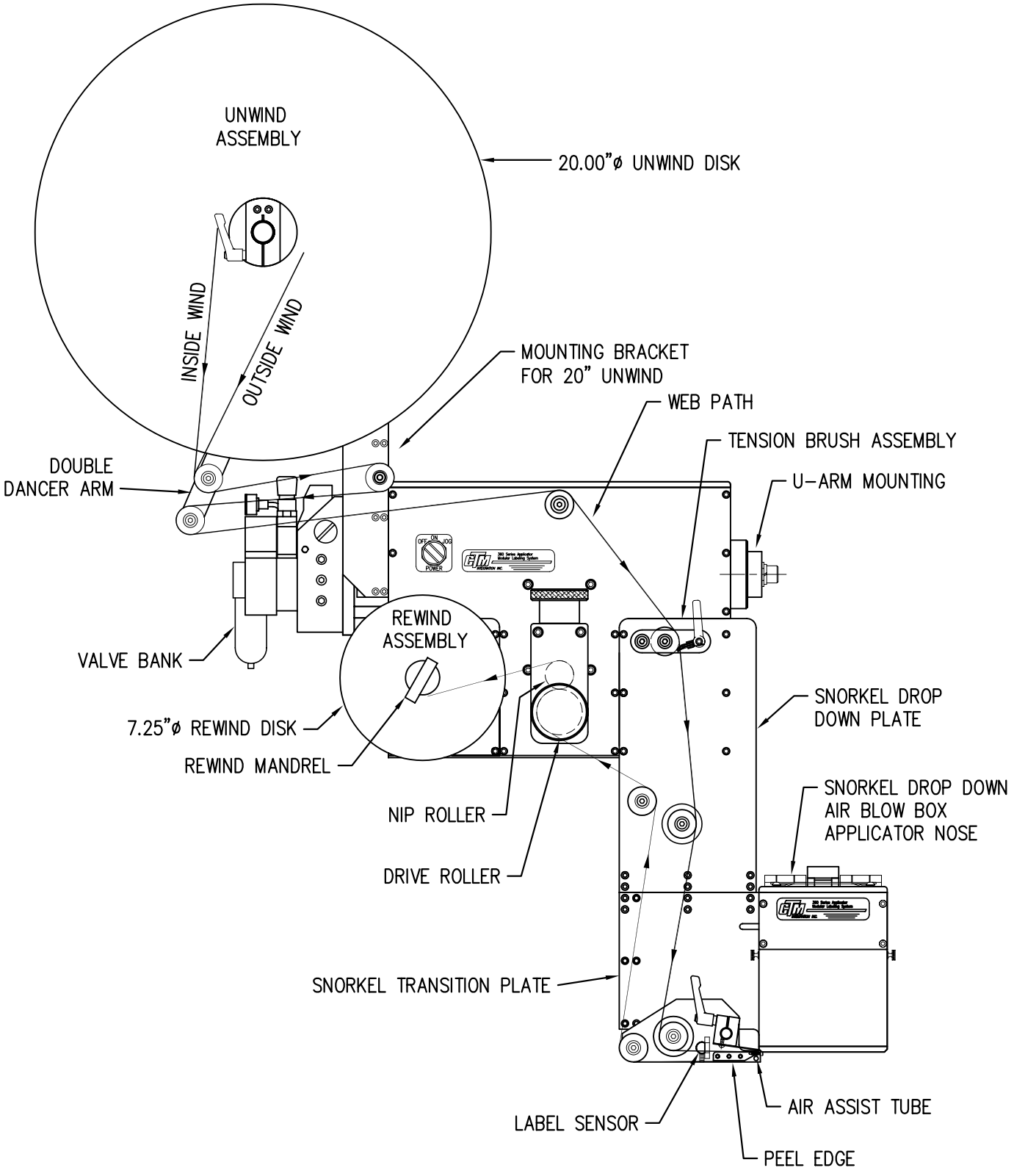
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR WITH 20" UNWIND



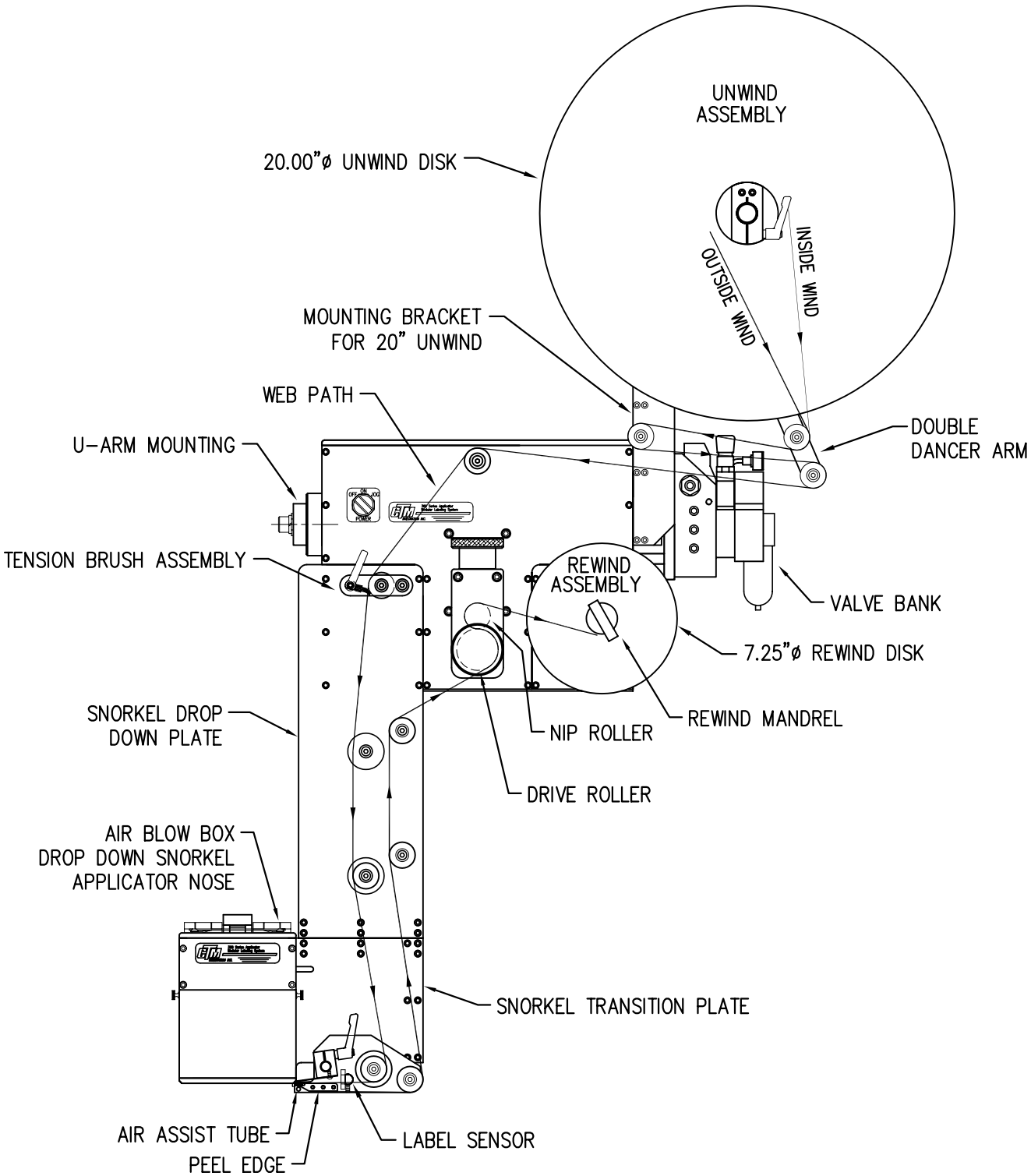
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR WITH 20" UNWIND



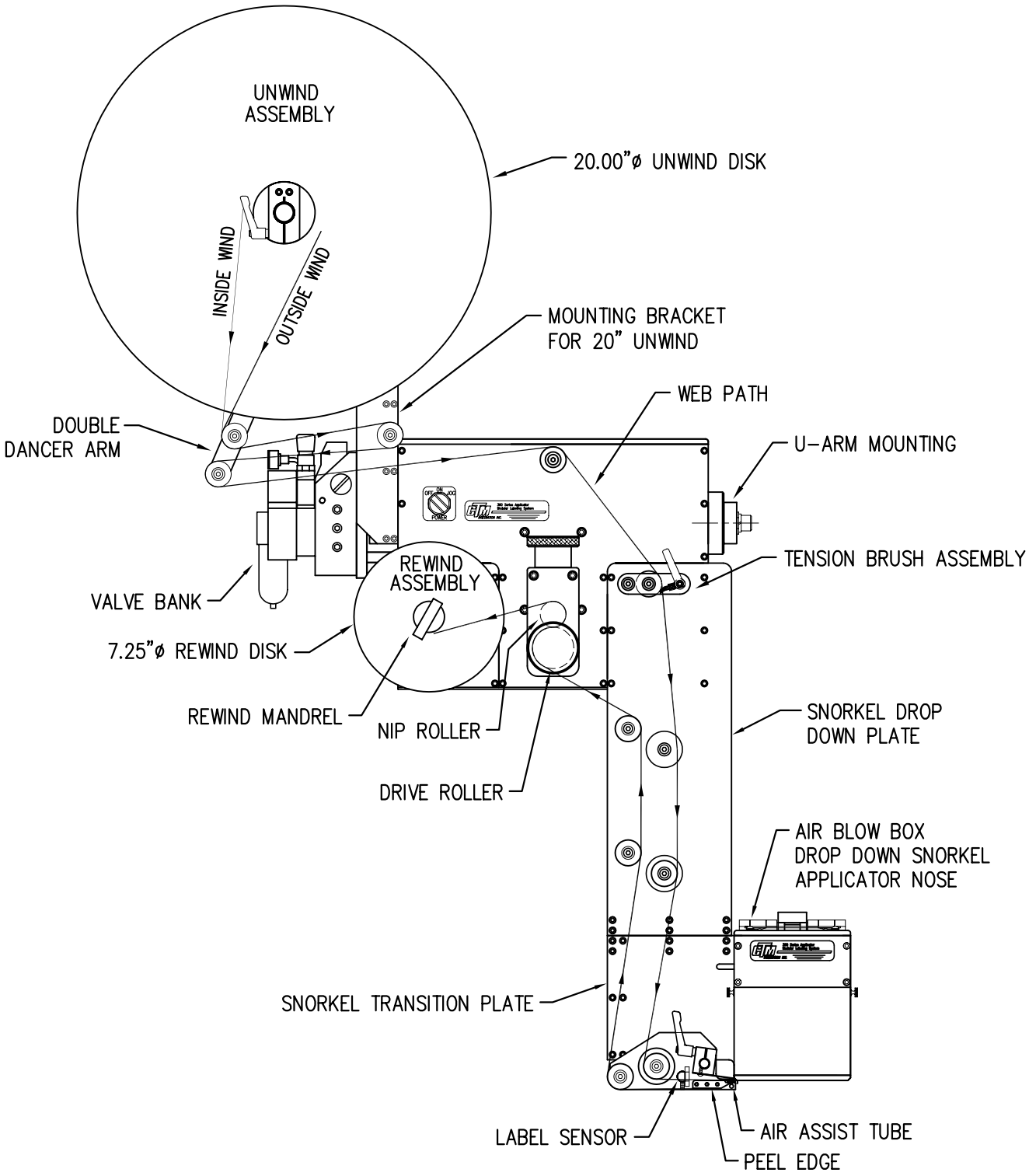
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 20" UNWIND



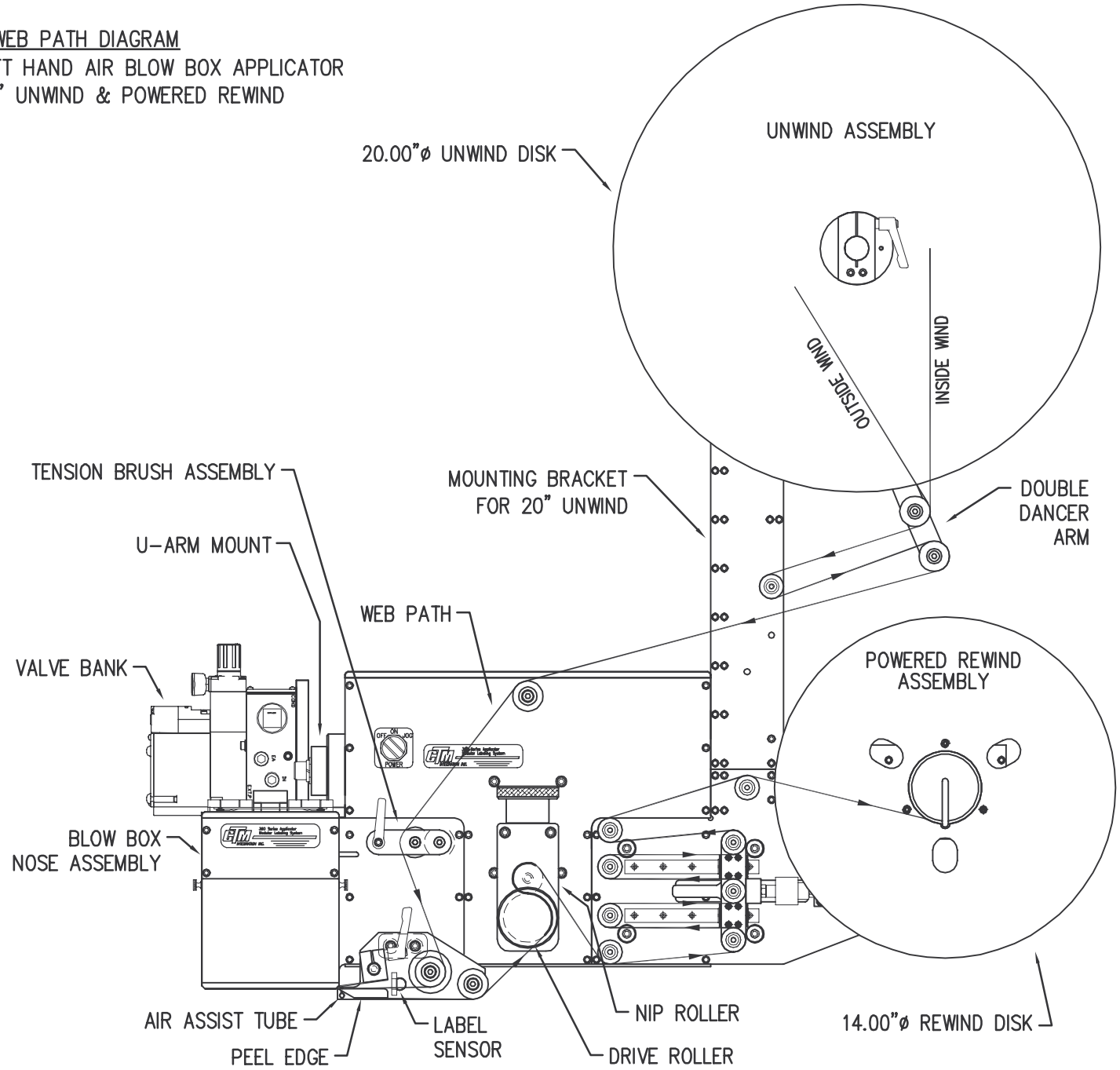
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 20" UNWIND



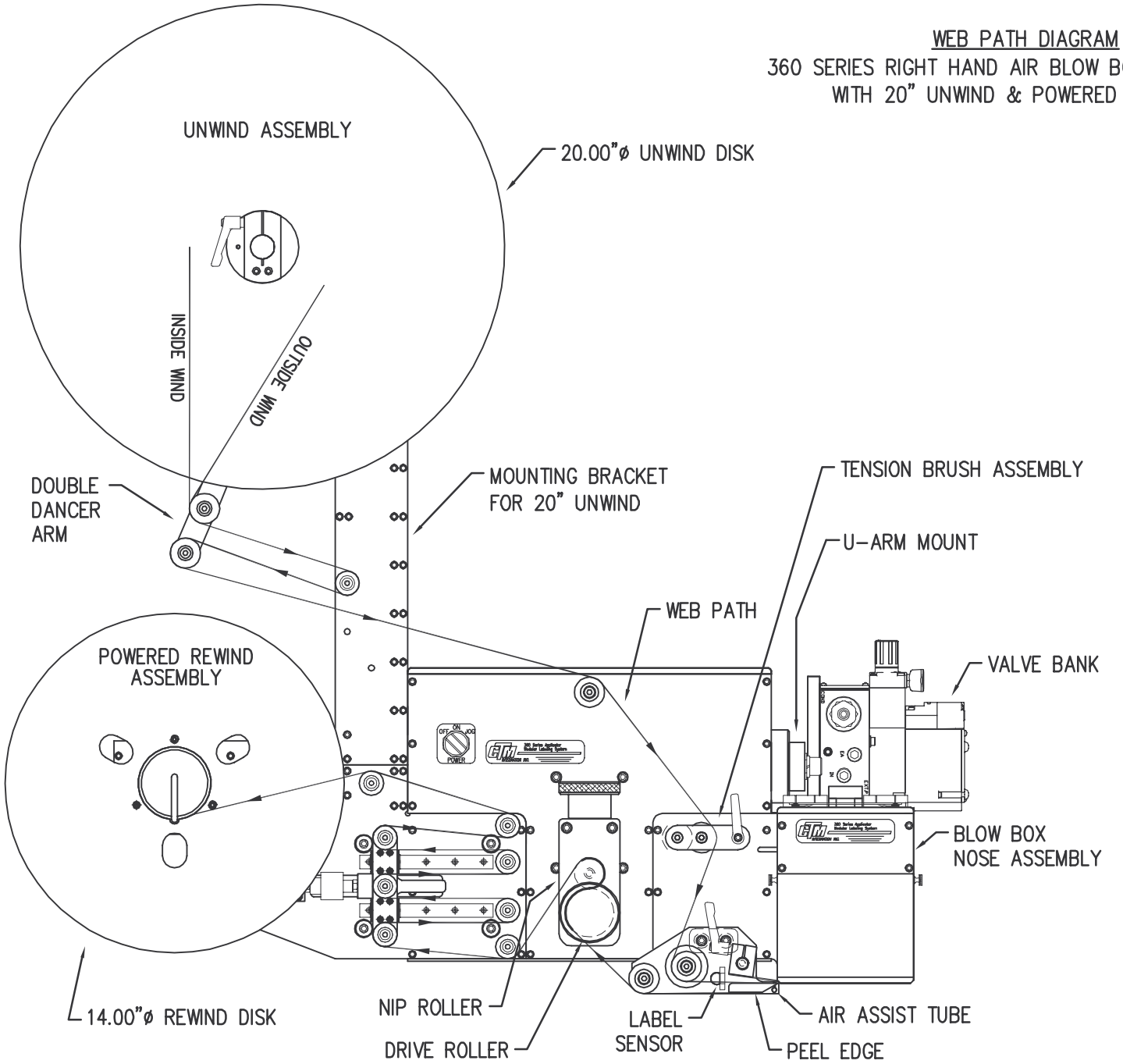
WEB PATH DIAGRAM

360 SERIES LEFT HAND AIR BLOW BOX APPLICATOR
WITH 20" UNWIND & POWERED REWIND



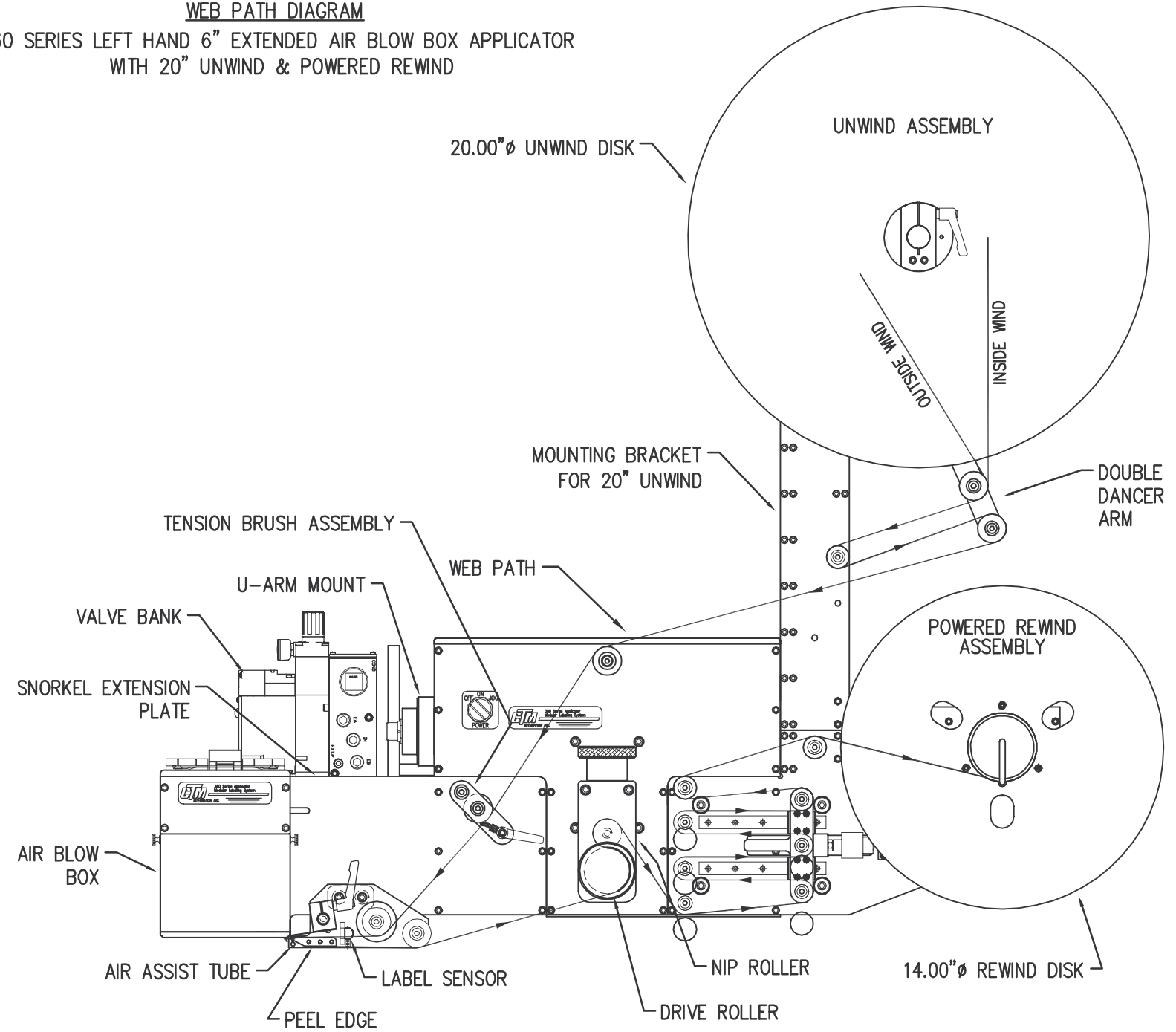
WEB PATH DIAGRAM

360 SERIES RIGHT HAND AIR BLOW BOX APPLICATOR
WITH 20" UNWIND & POWERED REWIND



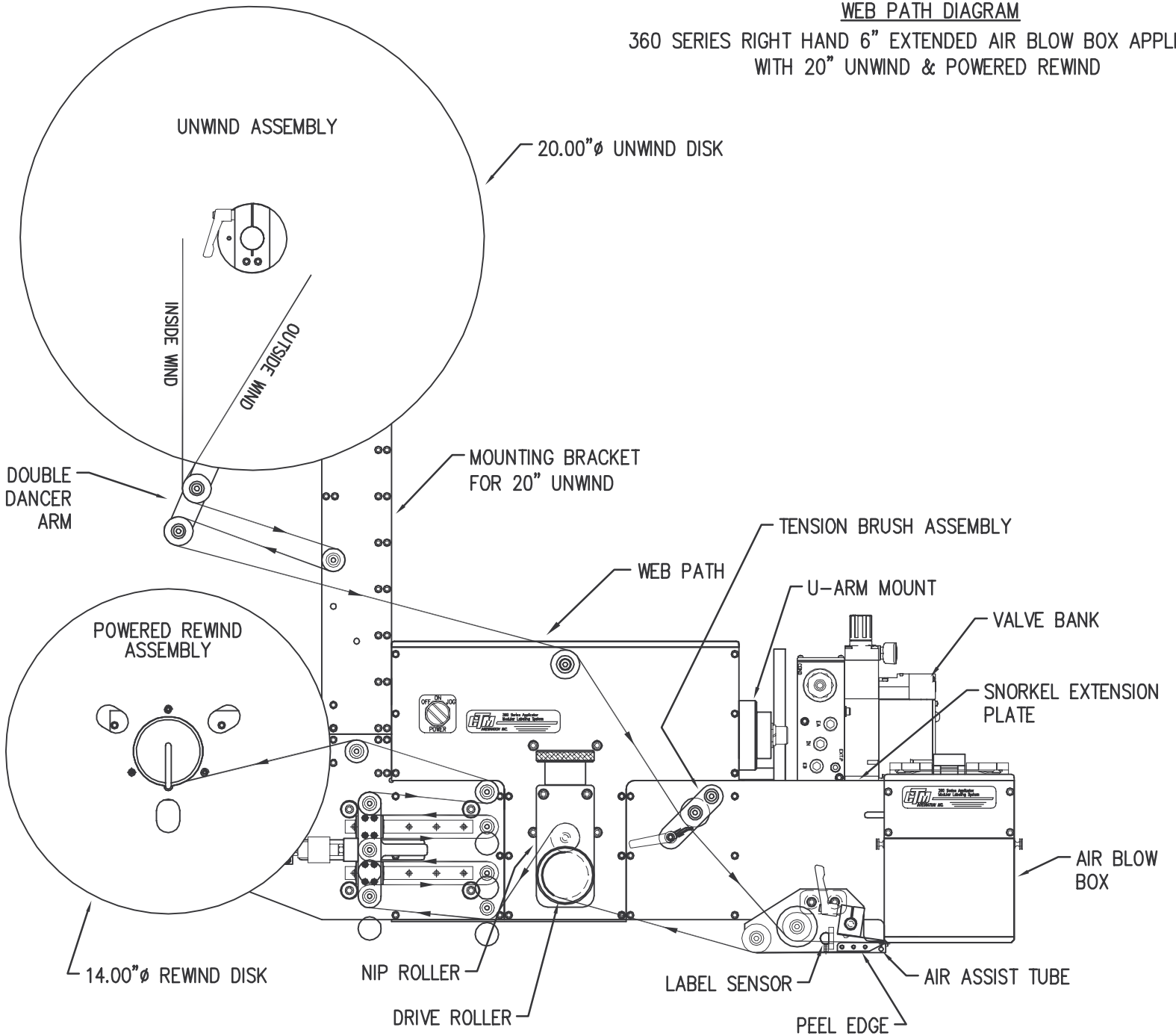
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR
WITH 20" UNWIND & POWERED REWIND



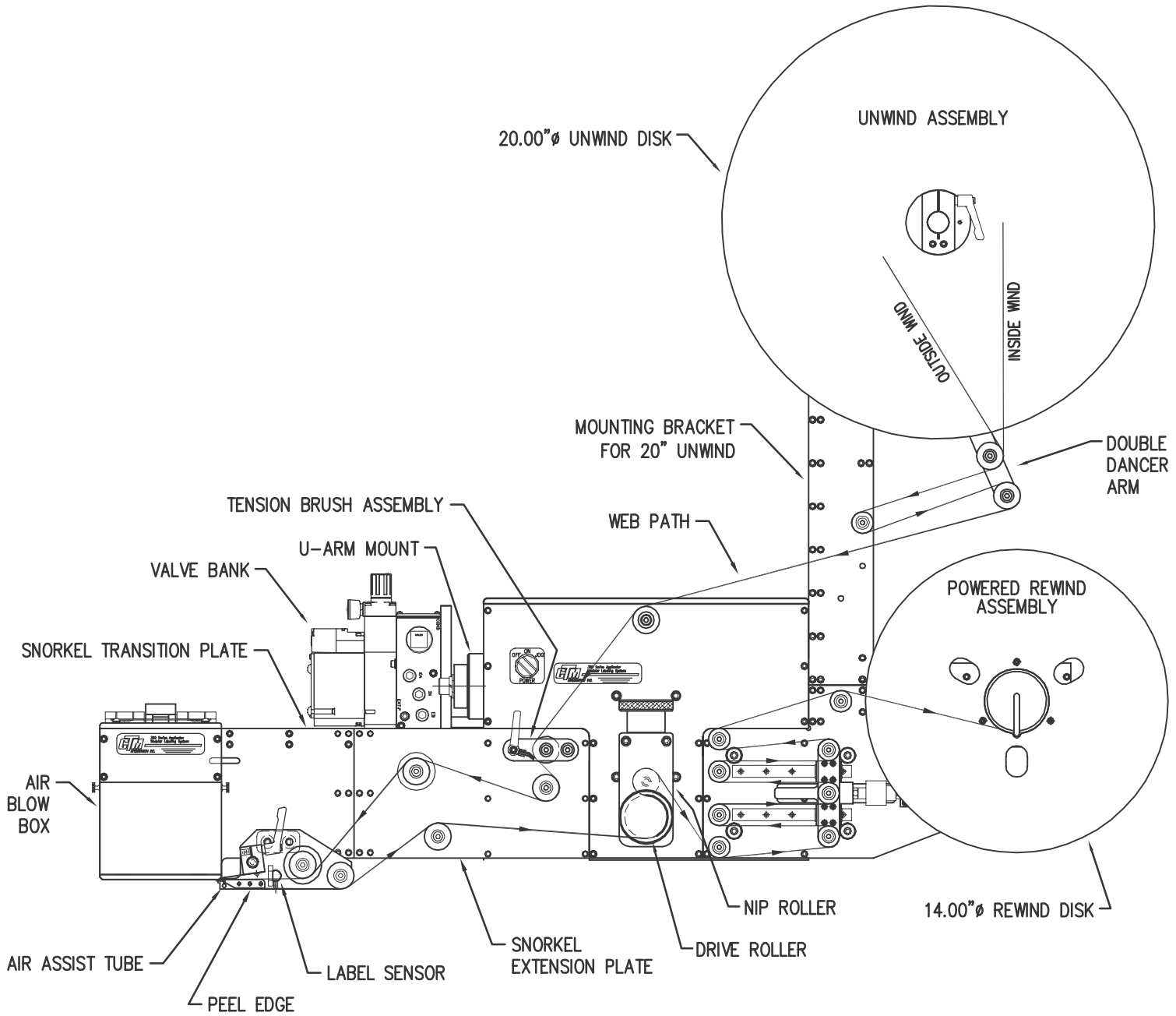
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" EXTENDED AIR BLOW BOX APPLICATOR
WITH 20" UNWIND & POWERED REWIND



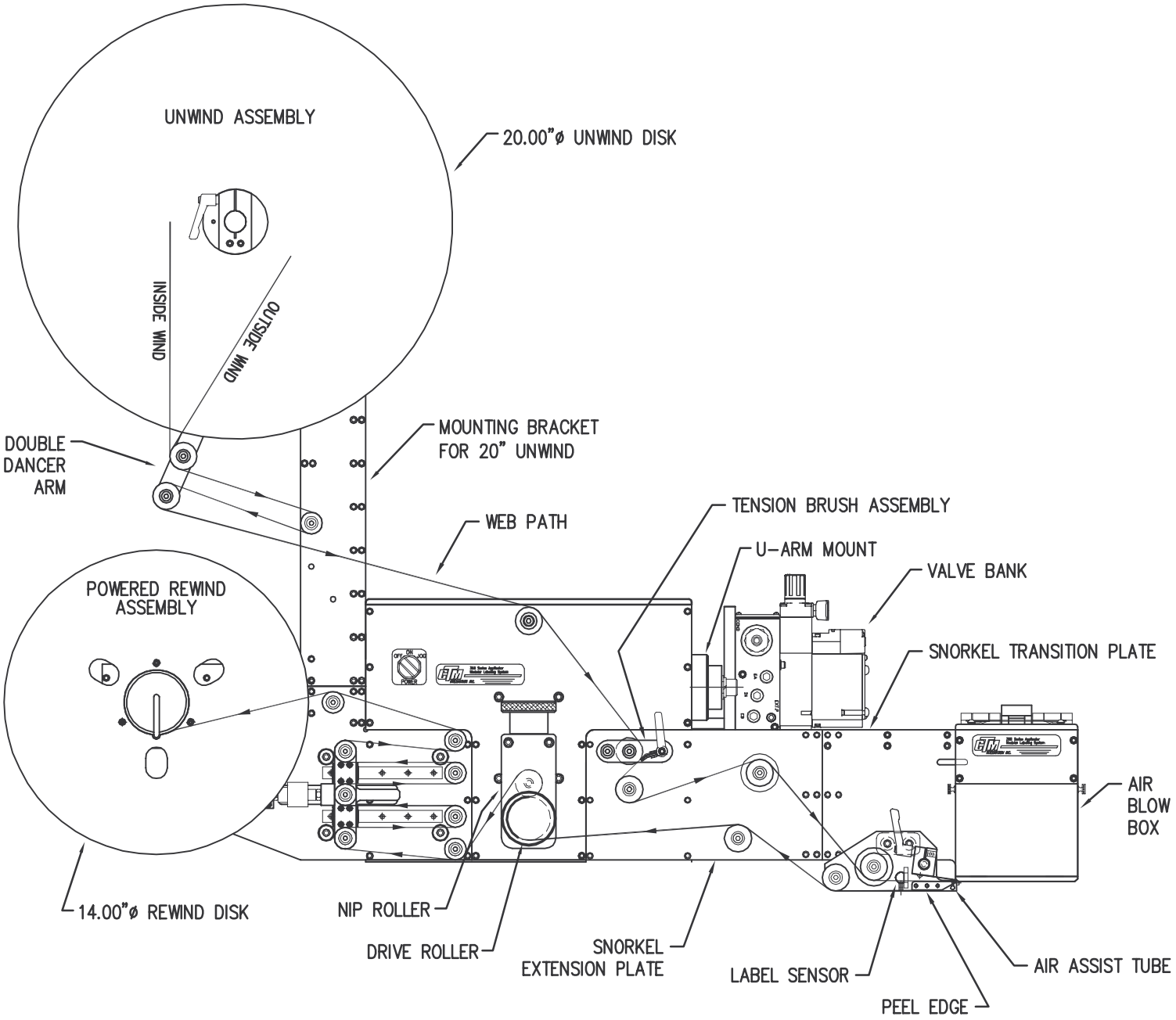
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND & POWERED REWIND



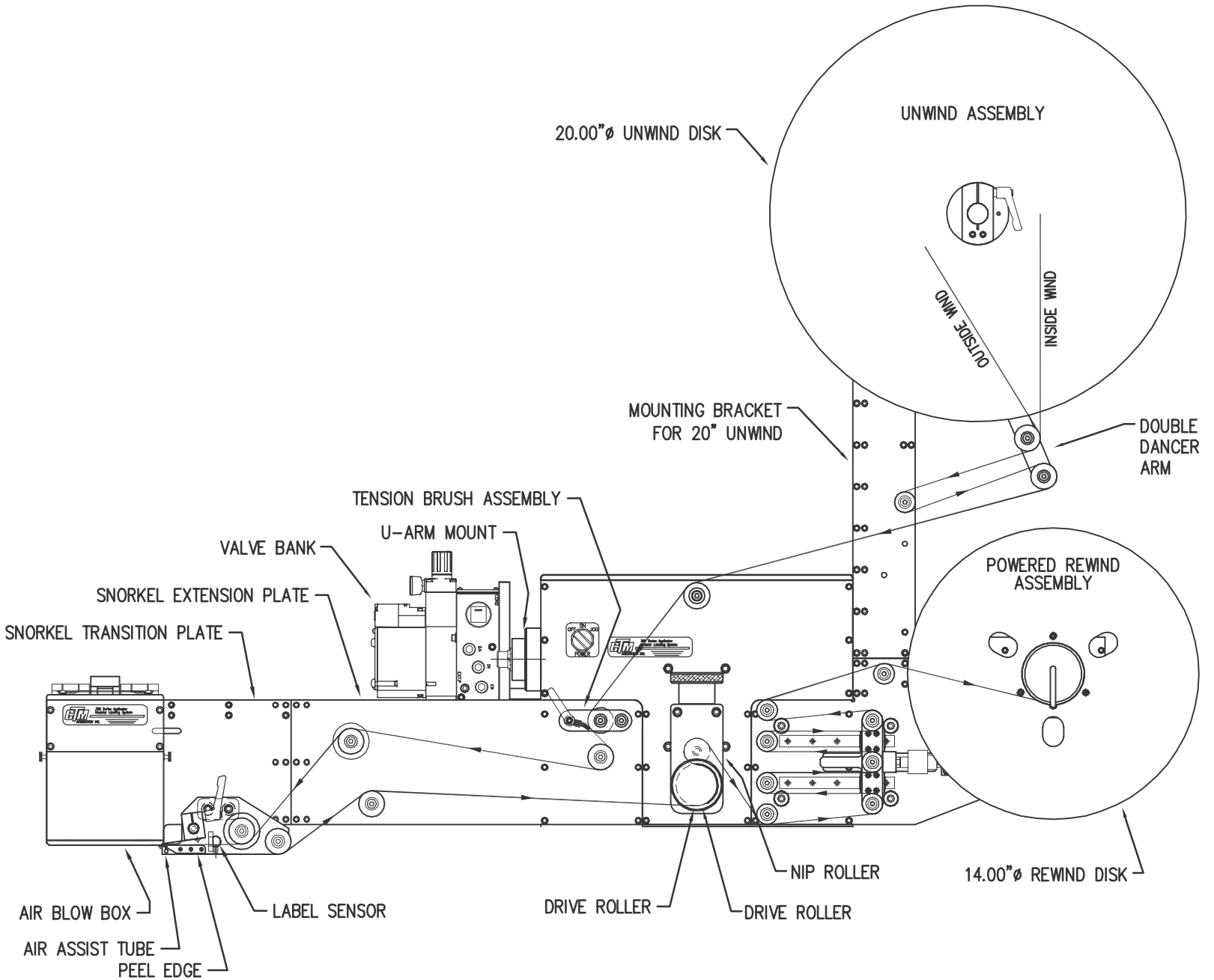
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND & POWERED REWIND



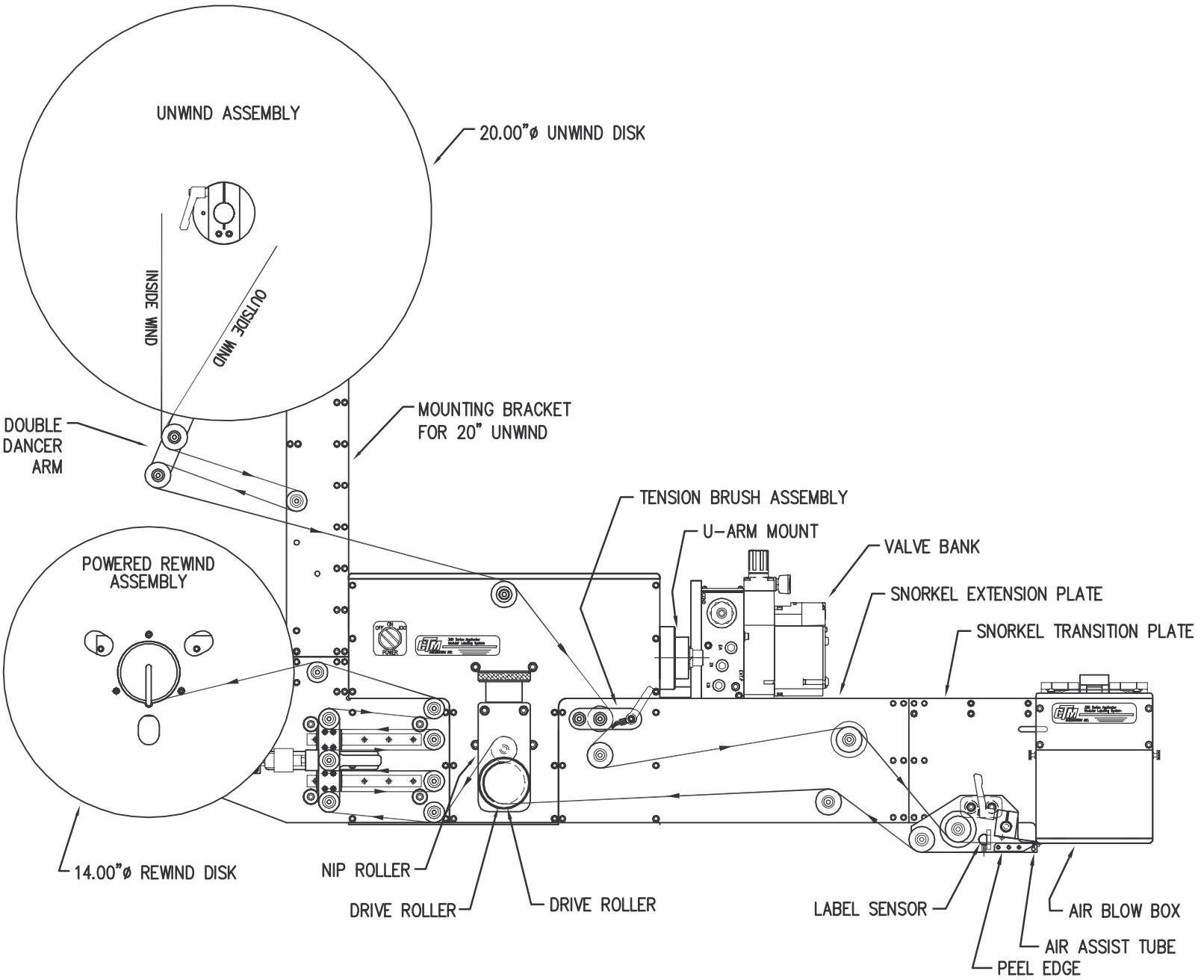
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND & POWERED REWIND



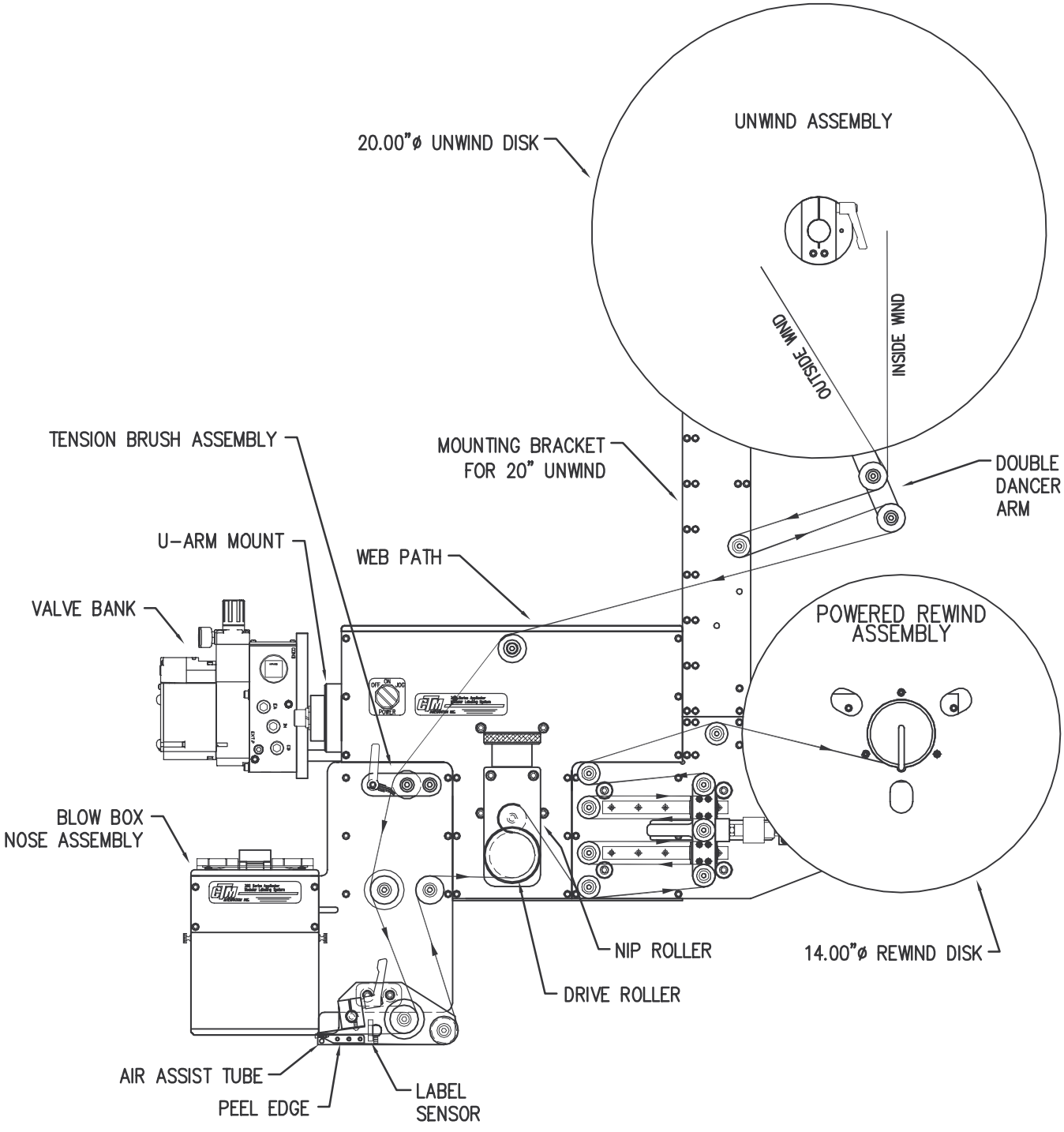
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" EXTENDED AIR BLOW BOX APPLICATOR WITH 20" UNWIND & POWERED REWIND



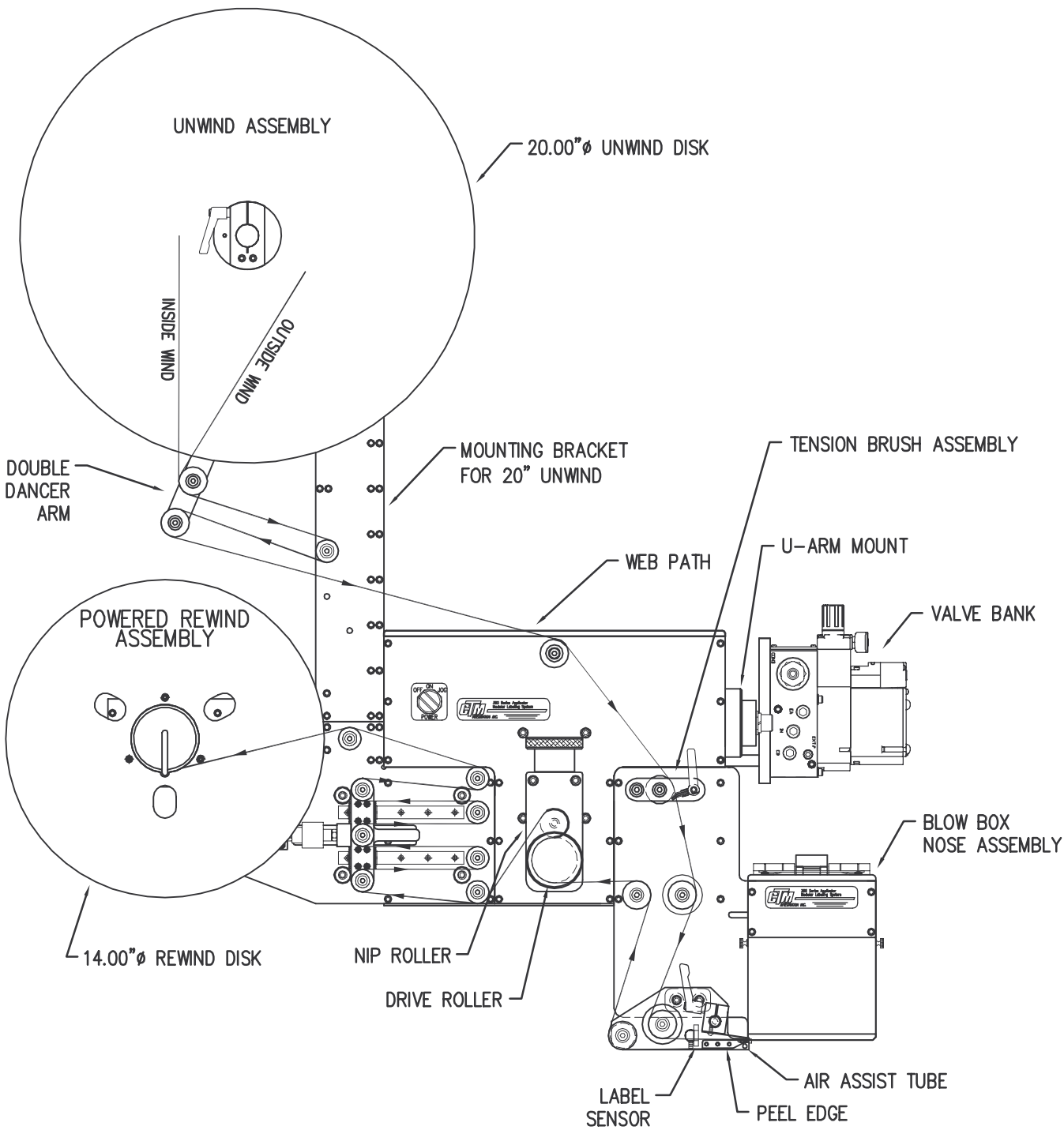
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR
WITH 20" UNWIND & POWERED REWIND



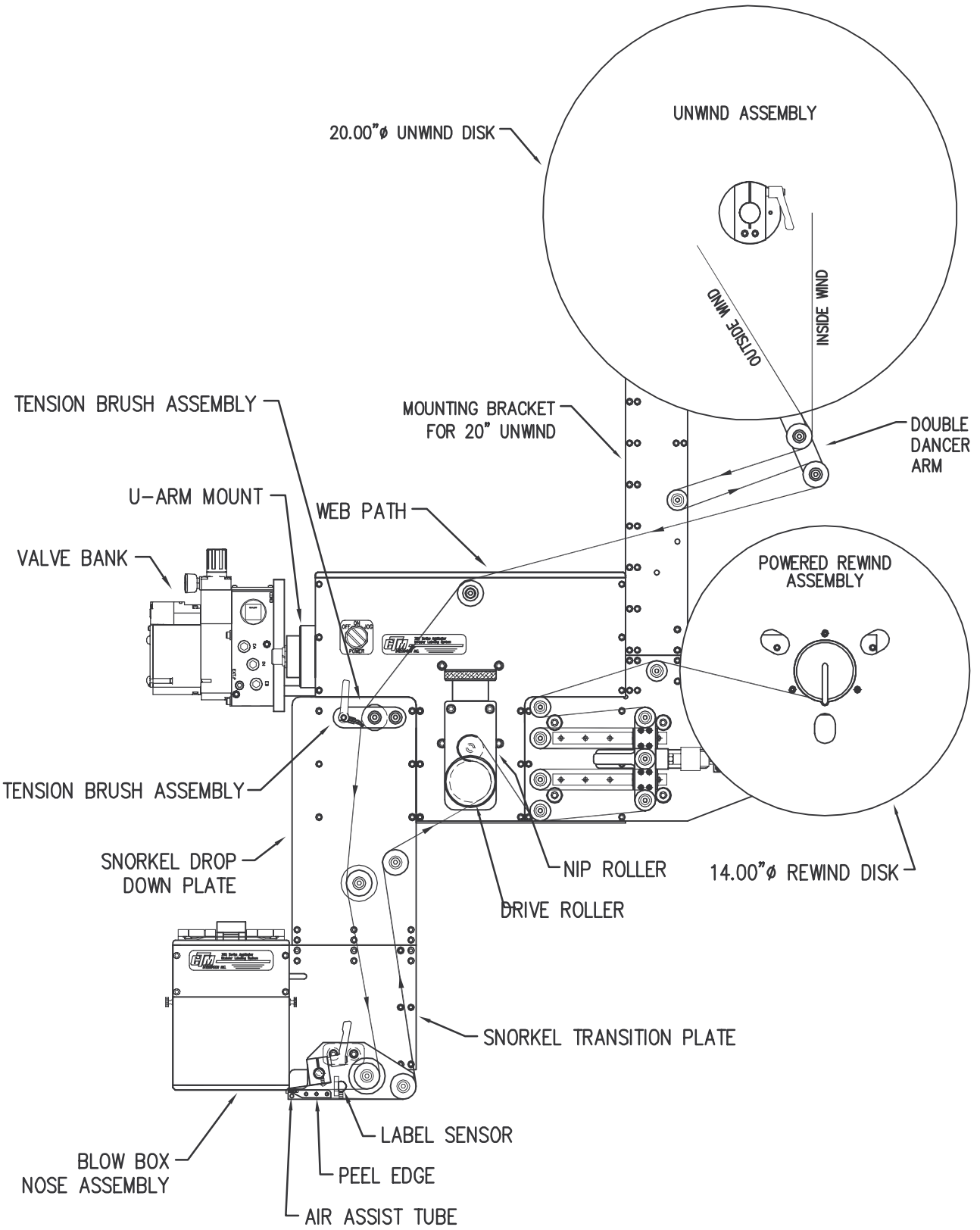
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN AIR BLOW BOX APPLICATOR
WITH 20" UNWIND & POWERED REWIND



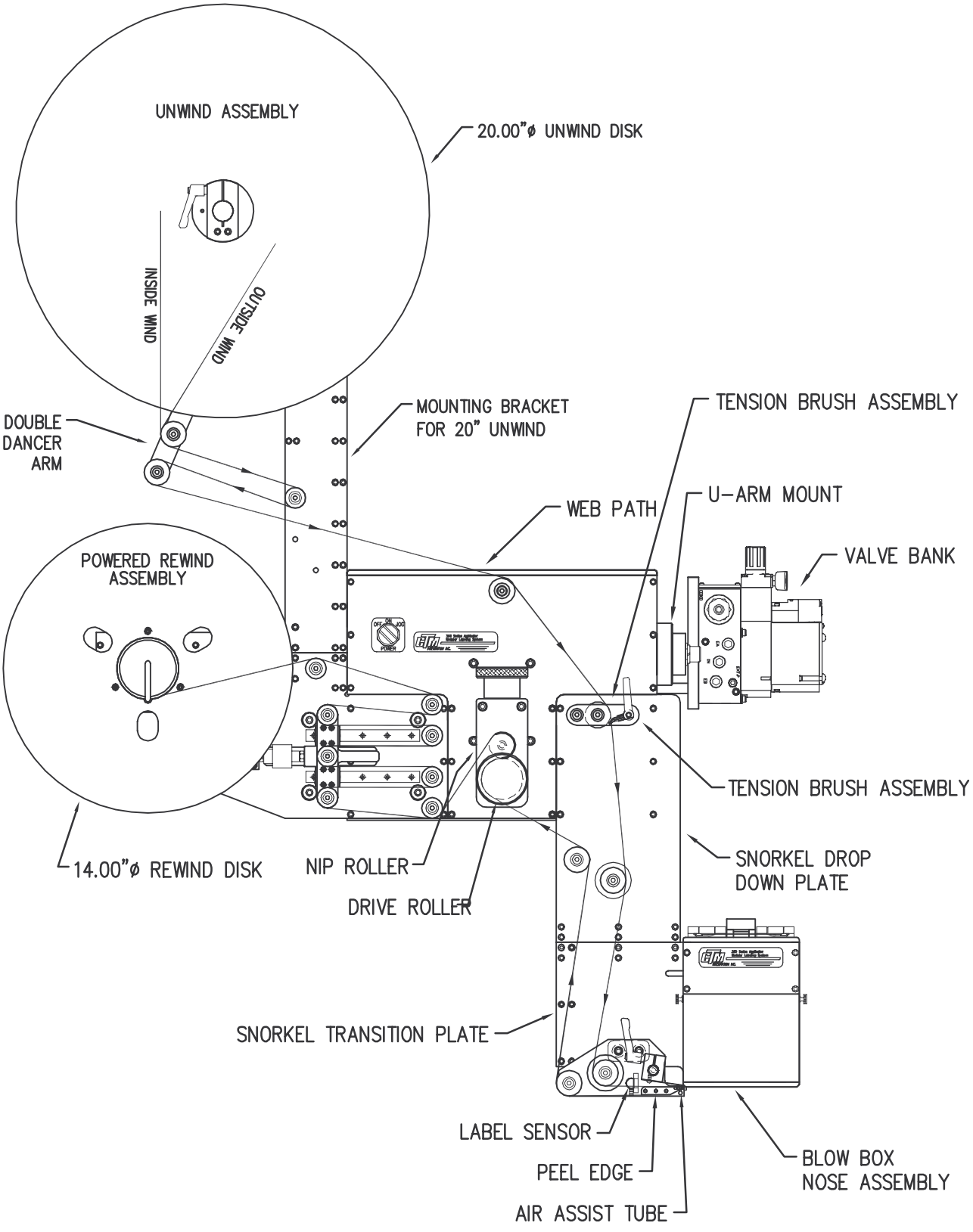
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR
WITH 20" UNWIND & POWERED REWIND



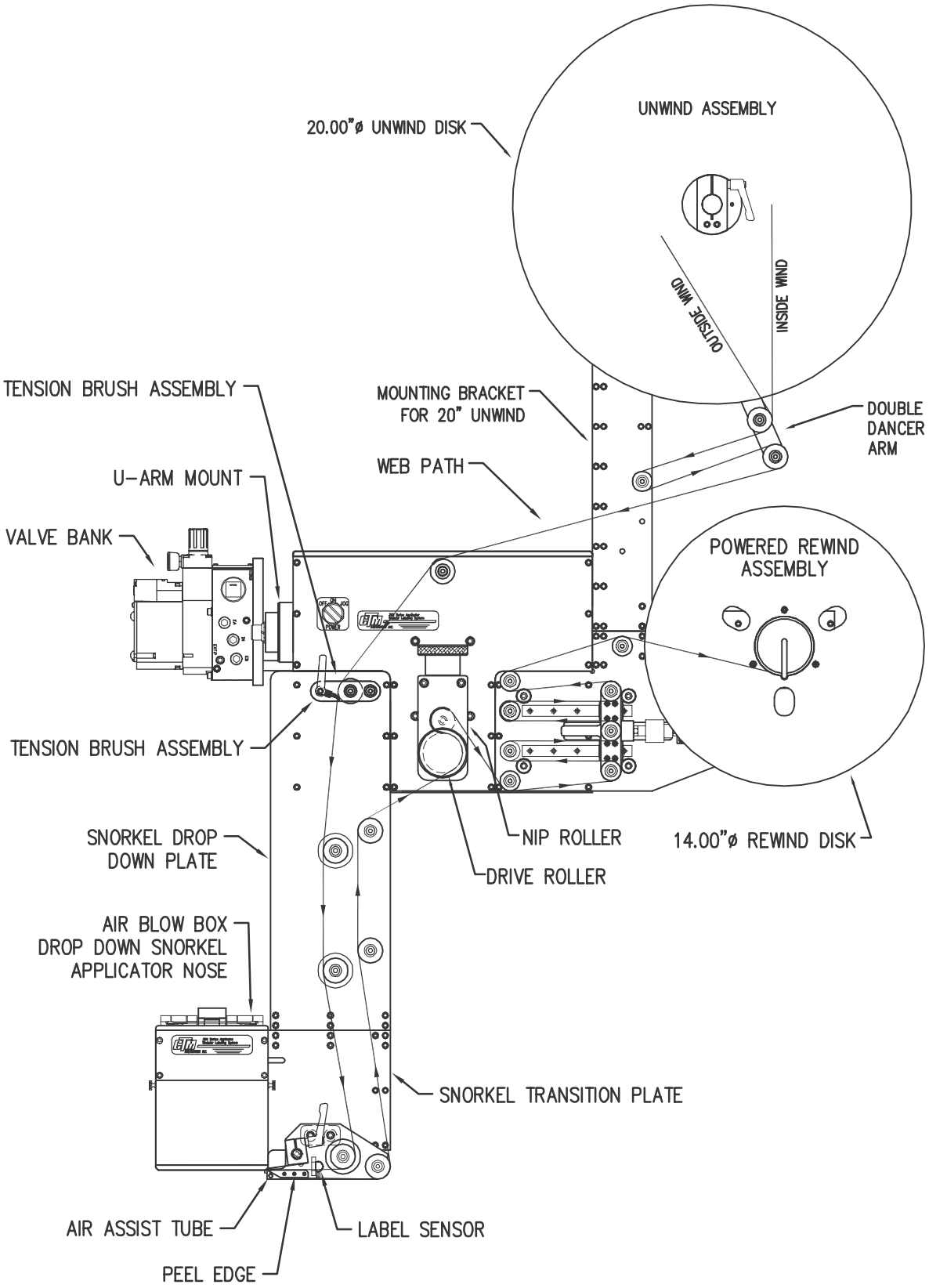
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN AIR BLOW BOX APPLICATOR
WITH 20" UNWIND & POWERED REWIND



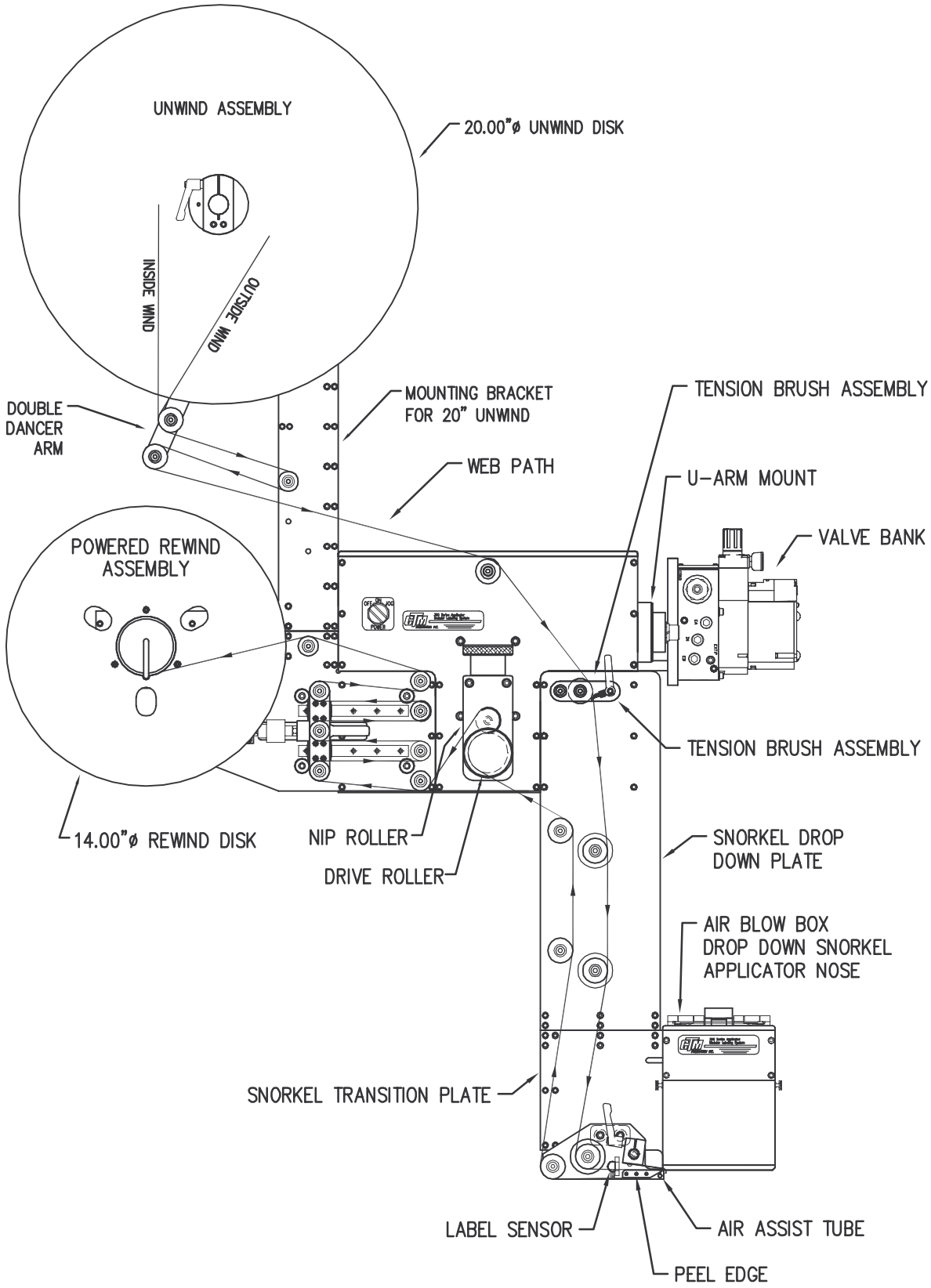
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 20" UNWIND & POWERED REWIND

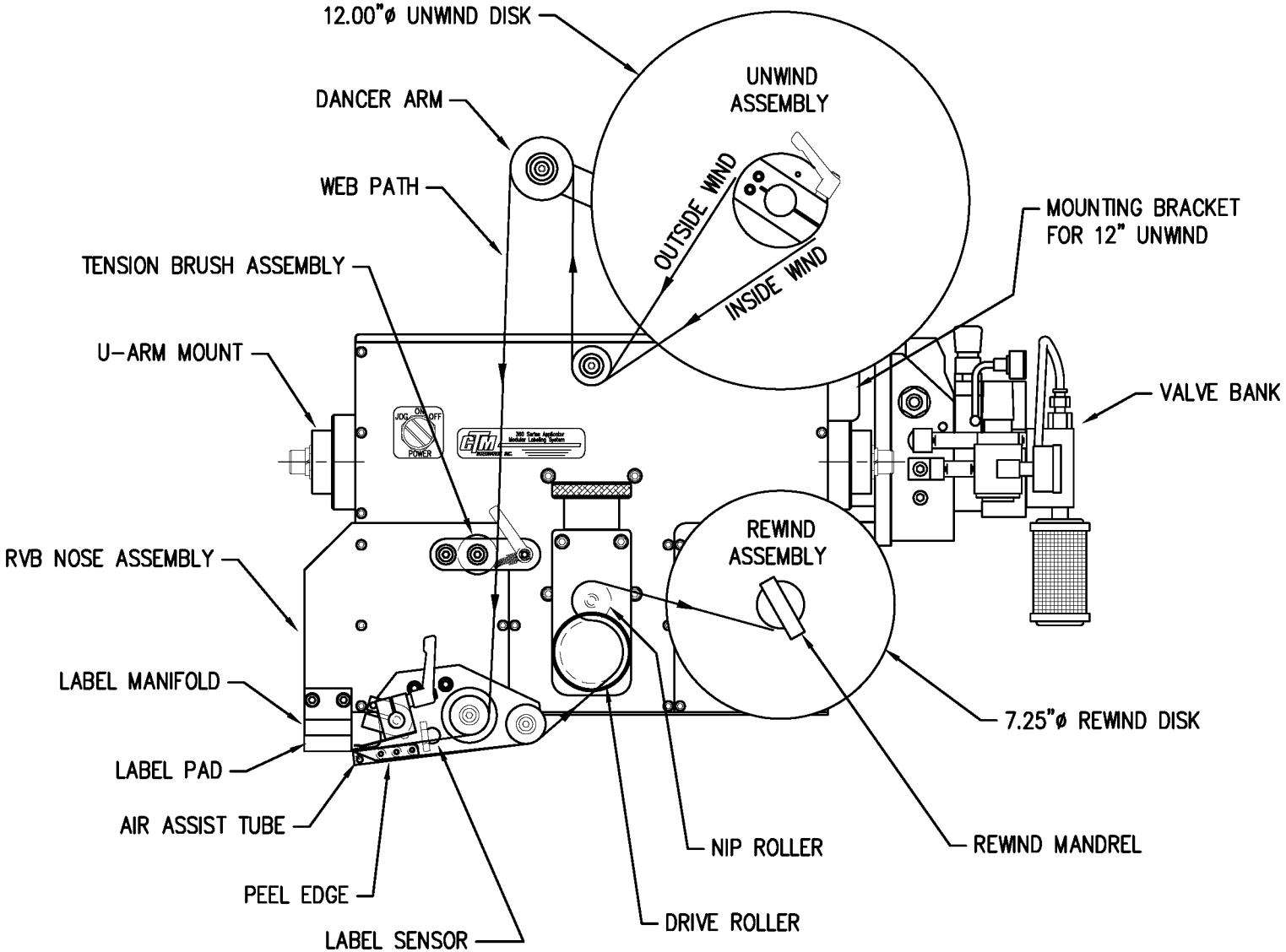


WEB PATH DIAGRAM

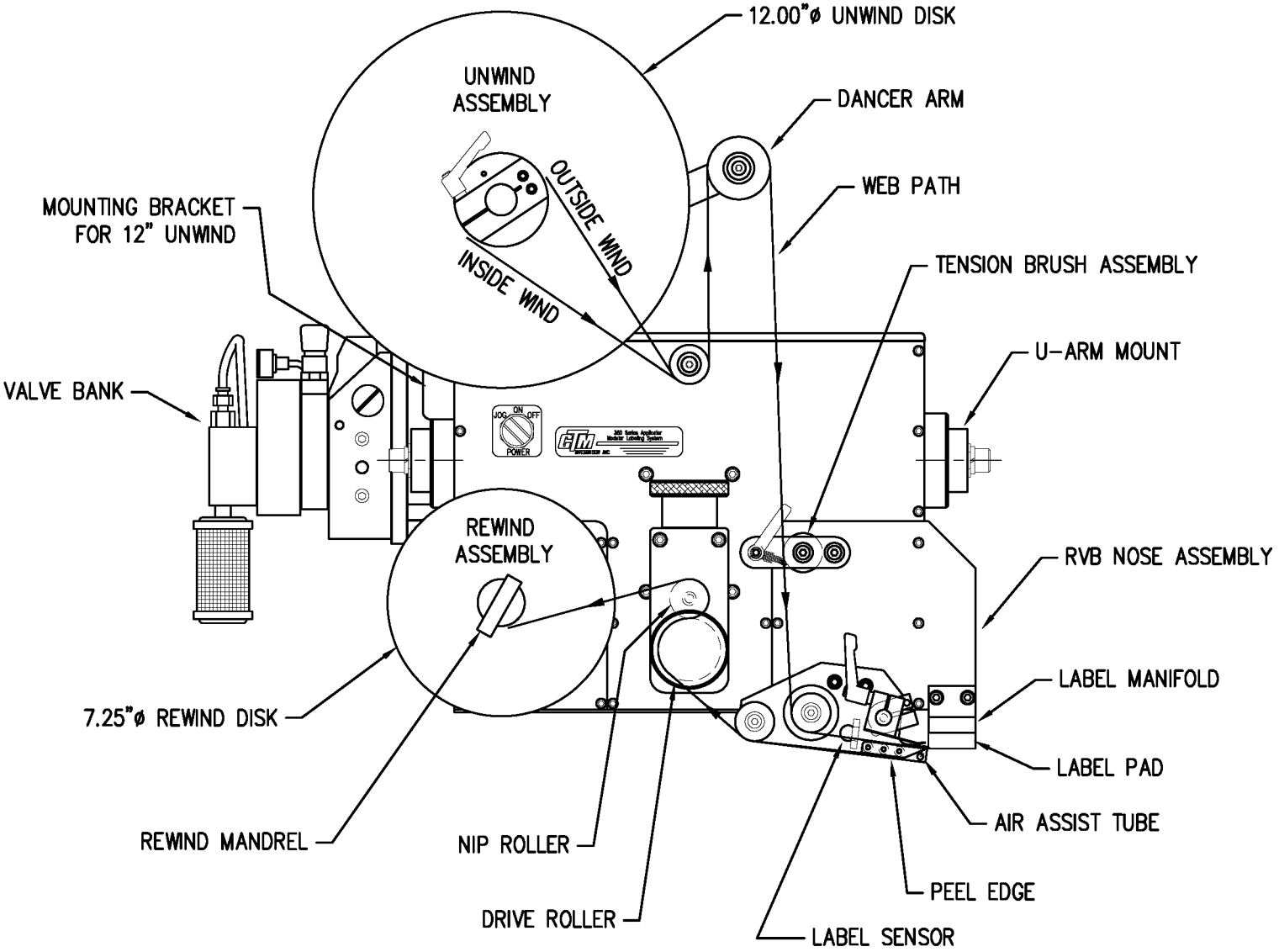
360 SERIES RIGHT HAND 18"/24" DROP DOWN AIR BLOW BOX APPLICATOR WITH 20" UNWIND & POWERED REWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND RVB APPLICATOR
WITH 12" UNWIND

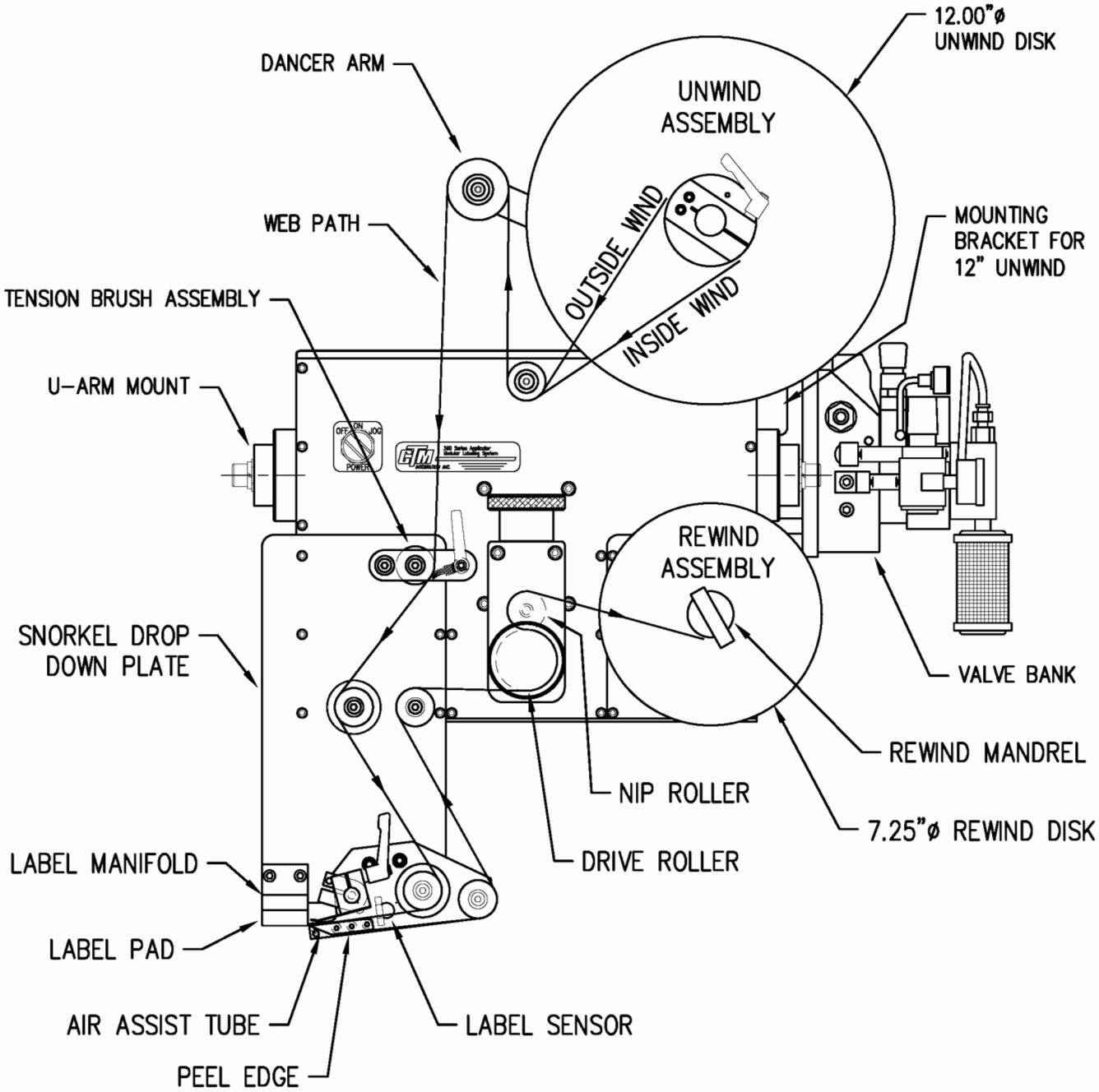


WEB PATH DIAGRAM
360 SERIES RIGHT HAND RVB APPLICATOR
WITH 12" UNWIND

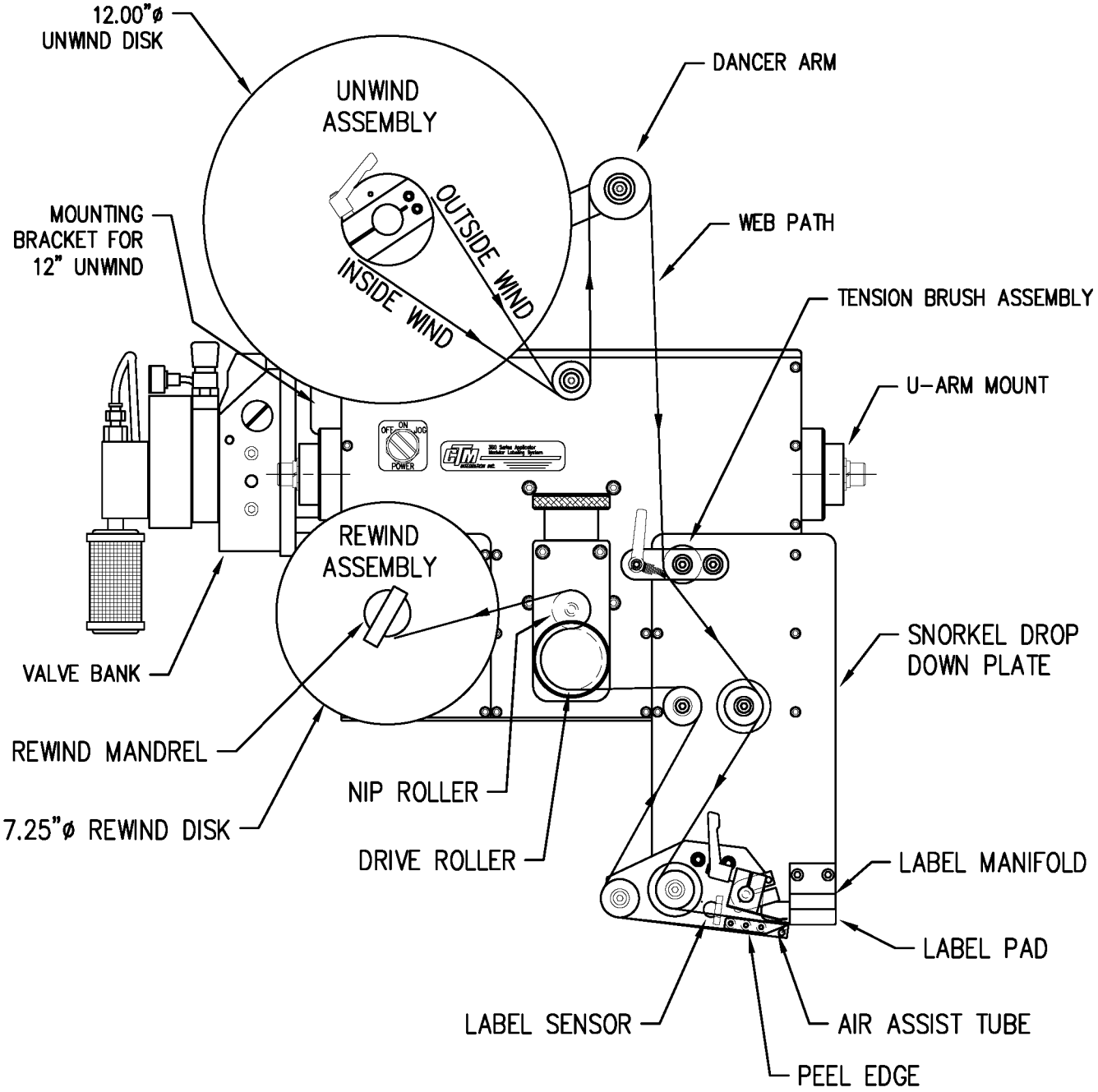


WEB PATH DIAGRAM

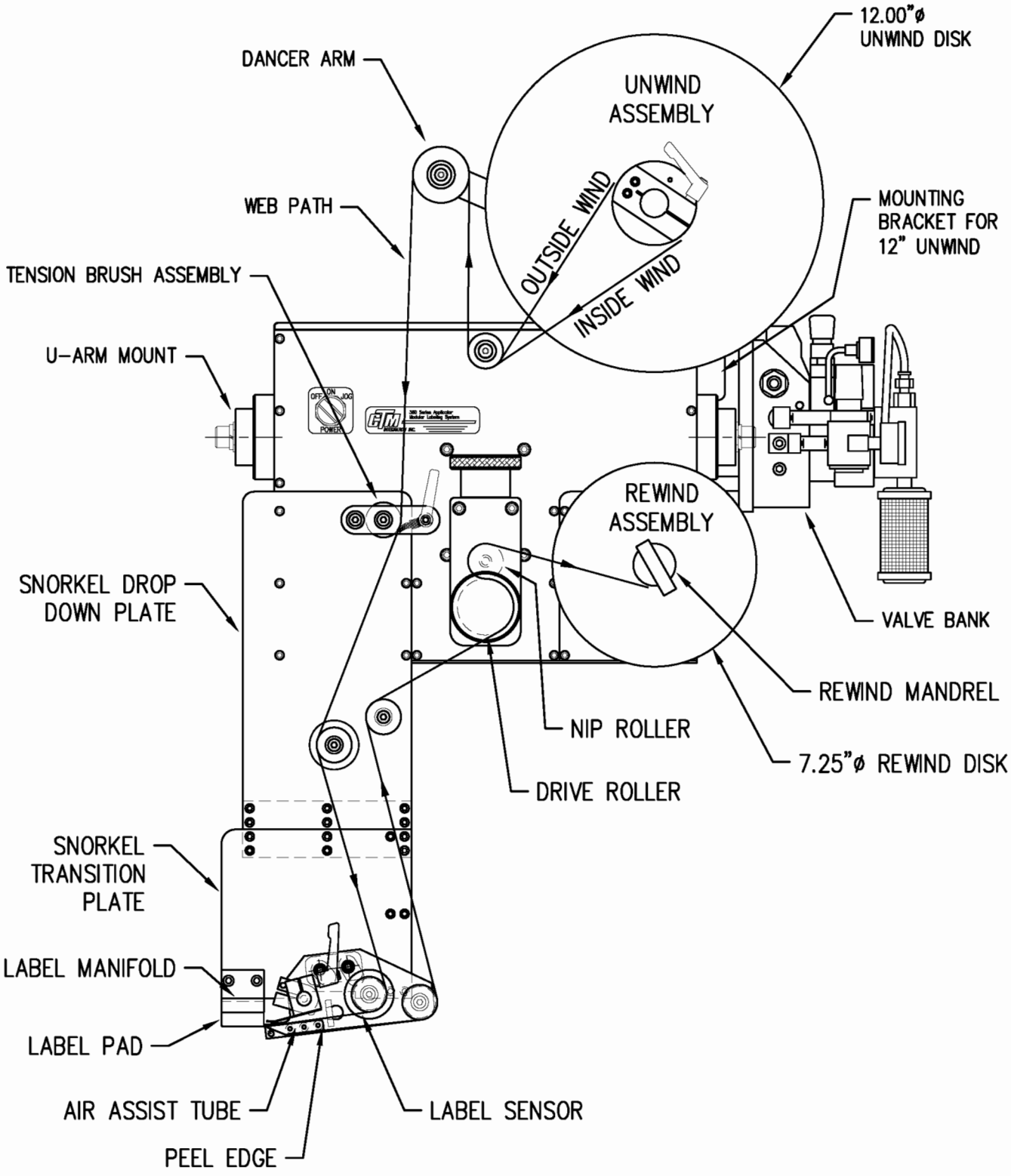
360 SERIES LEFT HAND 6" DROP DOWN RVB APPLICATOR
WITH 12" UNWIND



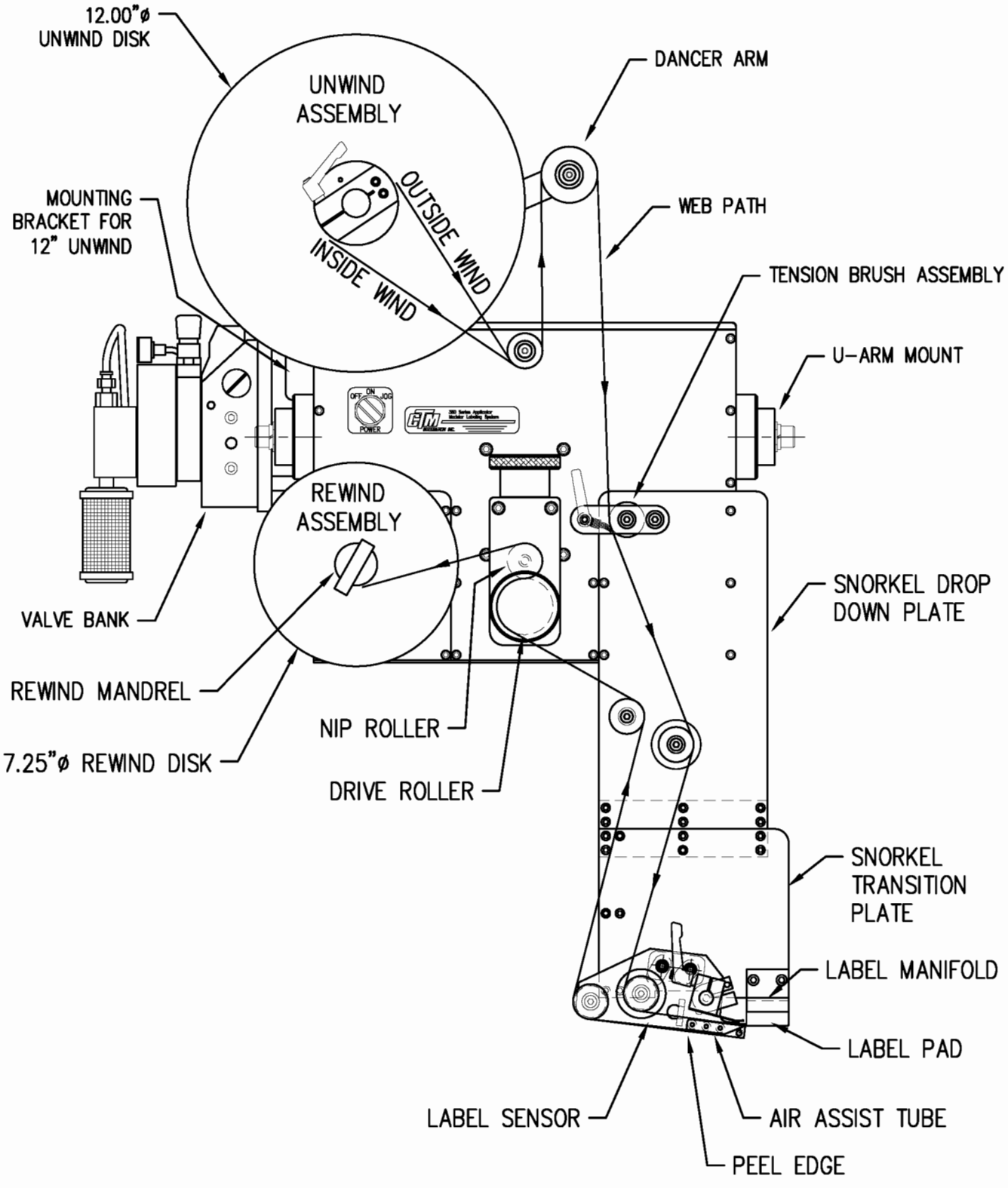
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 6" DROP DOWN RVB APPLICATOR WITH 12" UNWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" DROP DOWN RVB APPLICATOR WITH 12" UNWIND

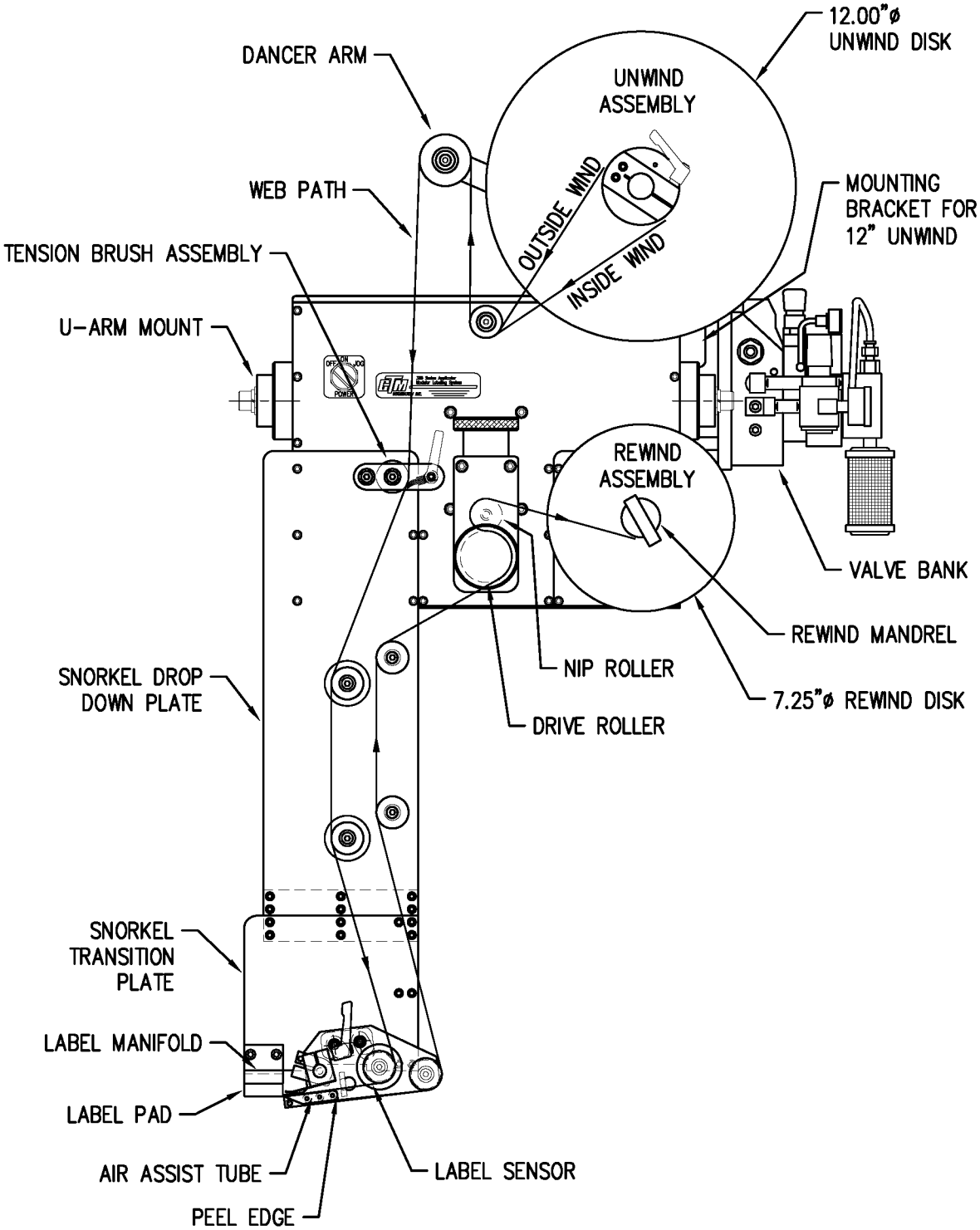


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" DROP DOWN RVB APPLICATOR WITH 12" UNWIND



WEB PATH DIAGRAM

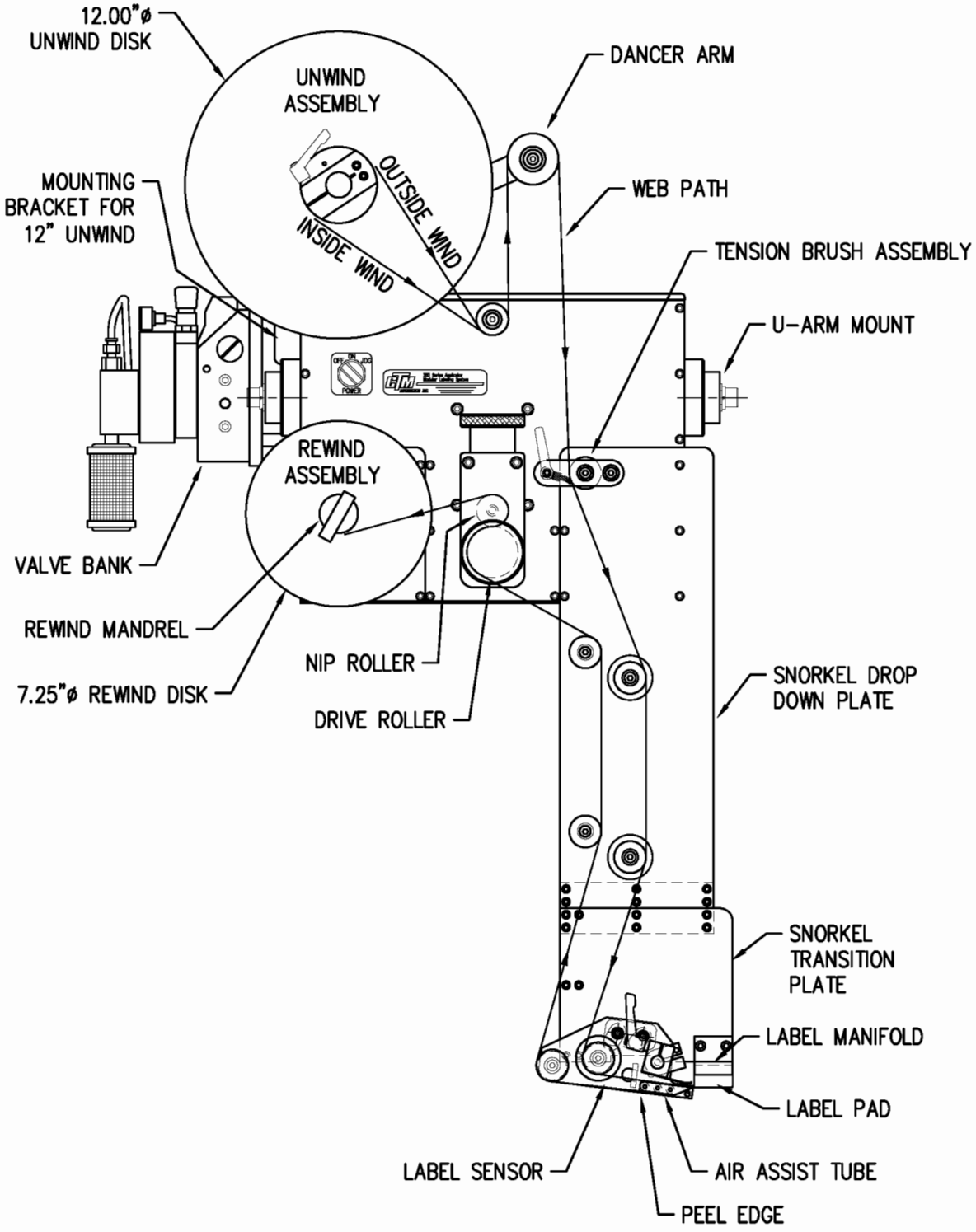
360 SERIES LEFT HAND 18"/24" DROP DOWN RVB APPLICATOR WITH 12" UNWIND



NOTE: 18" SNORKEL SHOWN

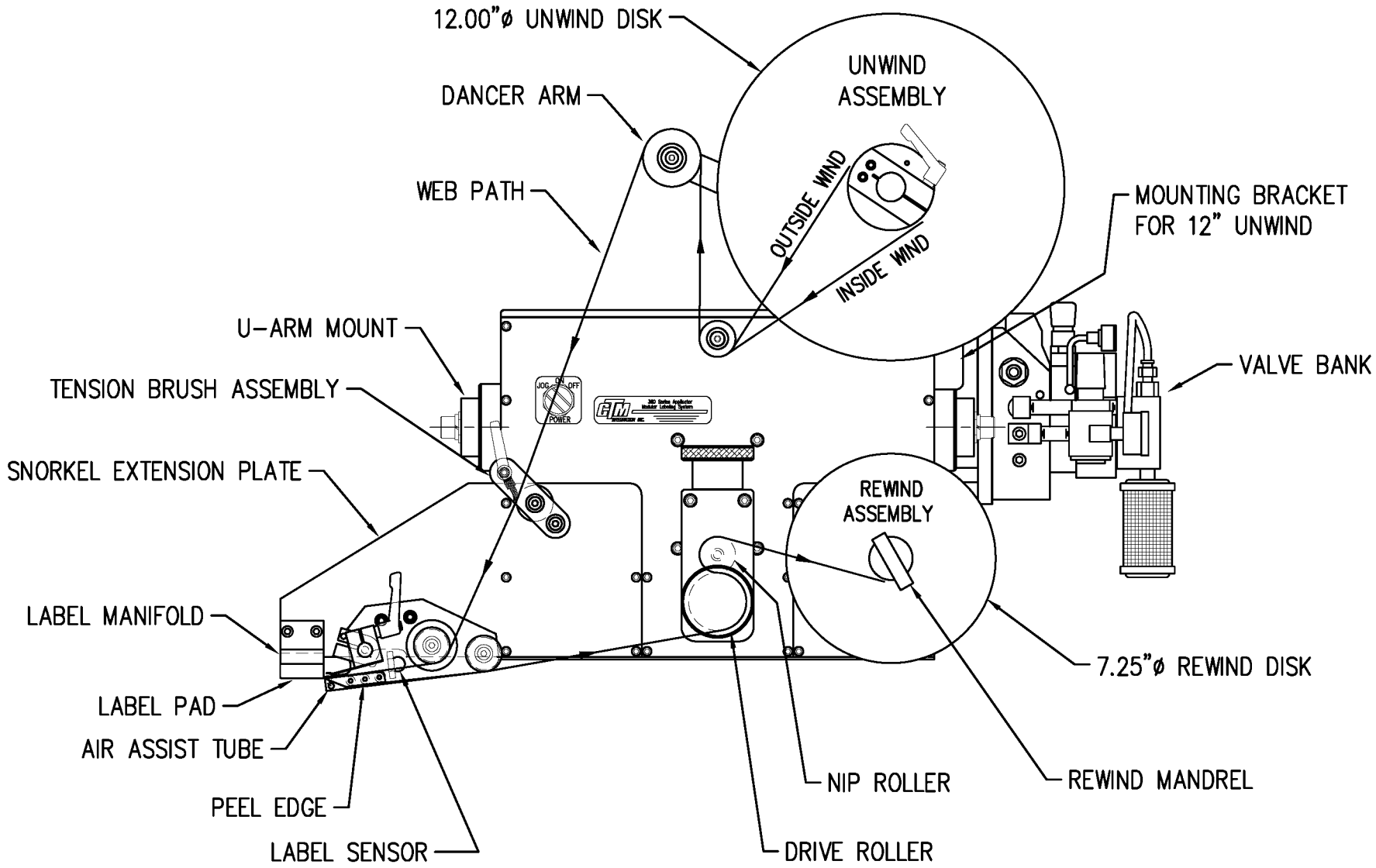
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" DROP DOWN RVB APPLICATOR WITH 12" UNWIND

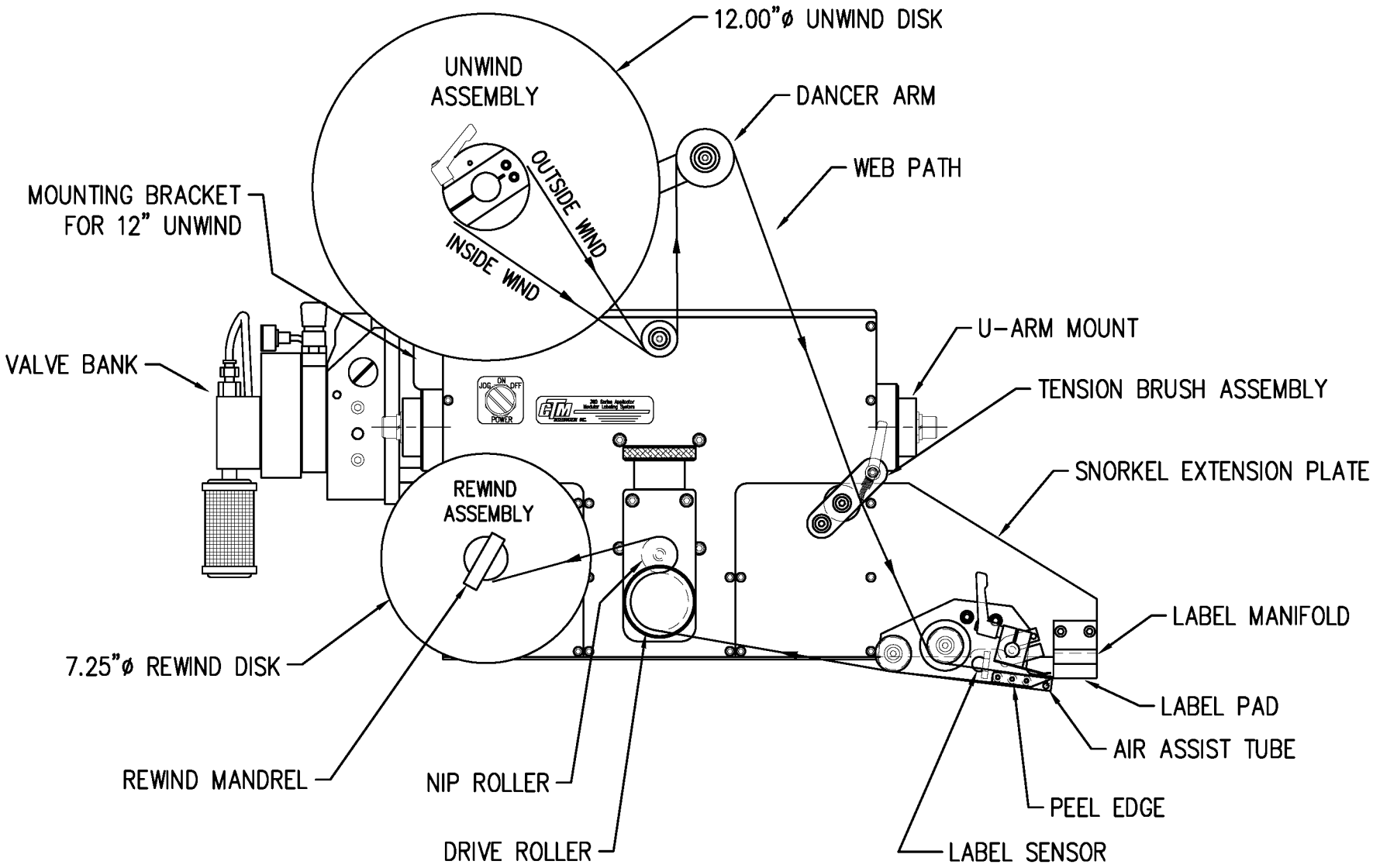


NOTE: 18" SNORKEL SHOWN

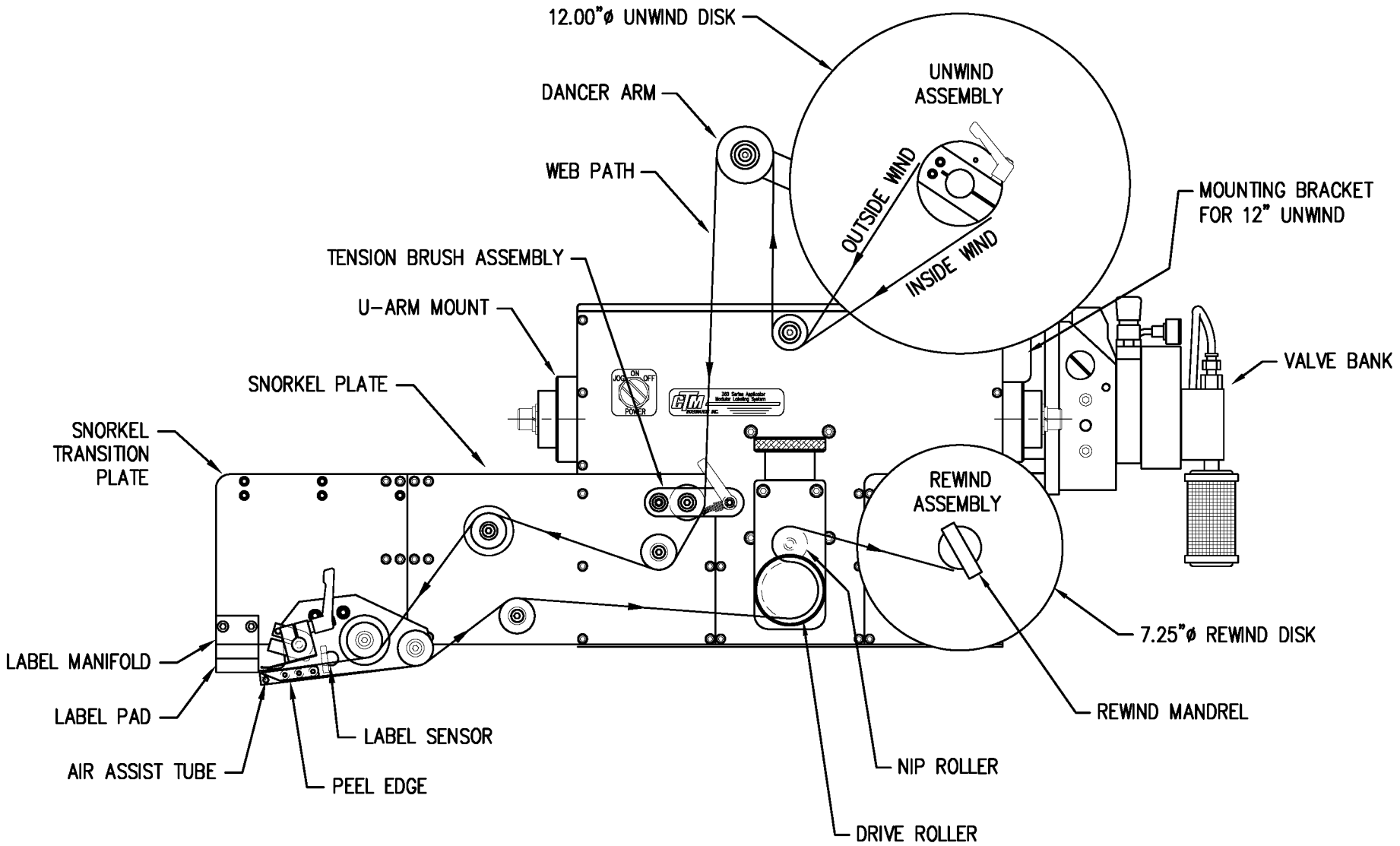
WEB PATH DIAGRAM
360 SERIES LEFT HAND 6" EXTENDED RVB APPLICATOR WITH 12" UNWIND



WEB PATH DIAGRAM
360 SERIES RIGHT HAND 6" EXTENDED RVB APPLICATOR WITH 12" UNWIND

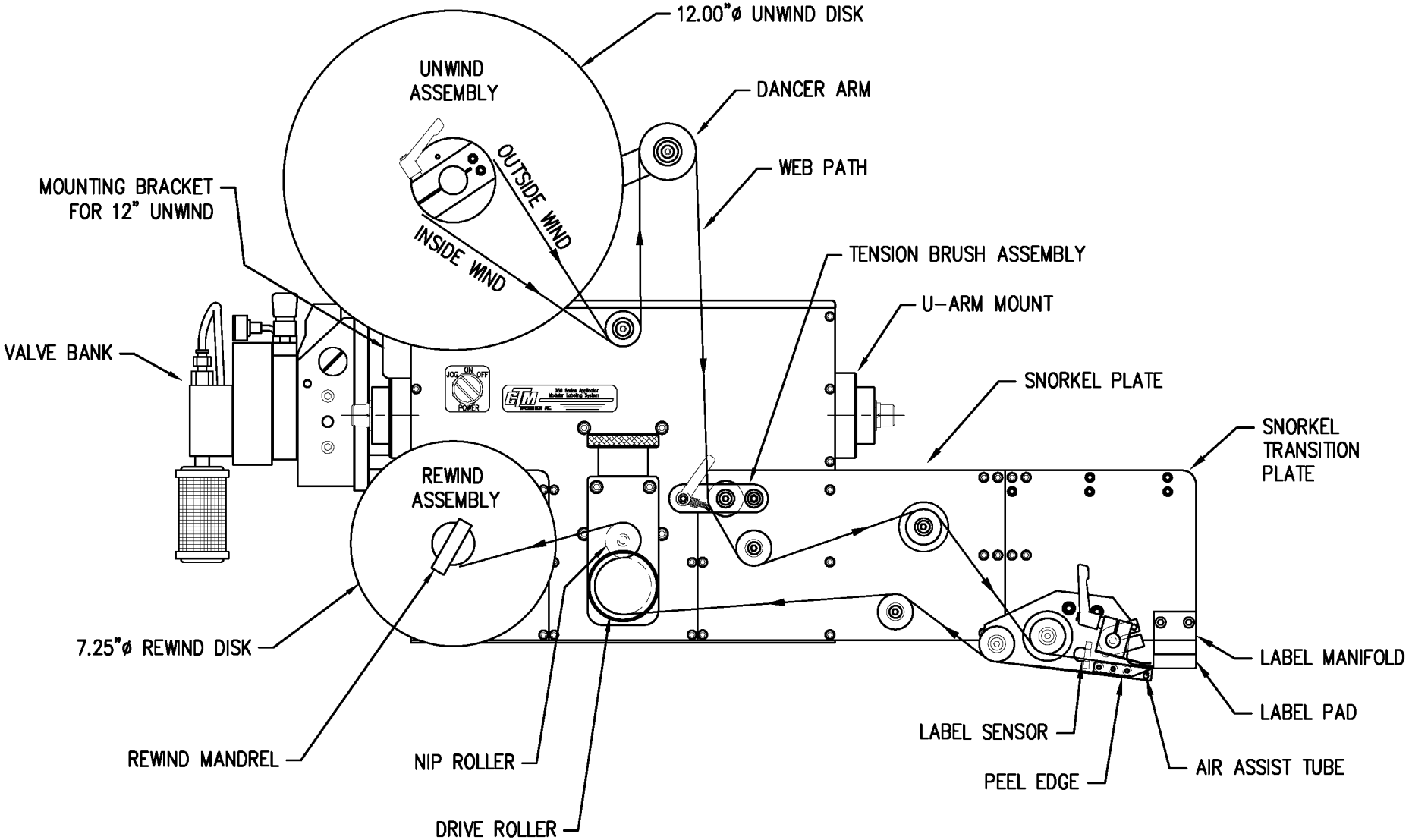


WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED RVB APPLICATOR WITH 12" UNWIND



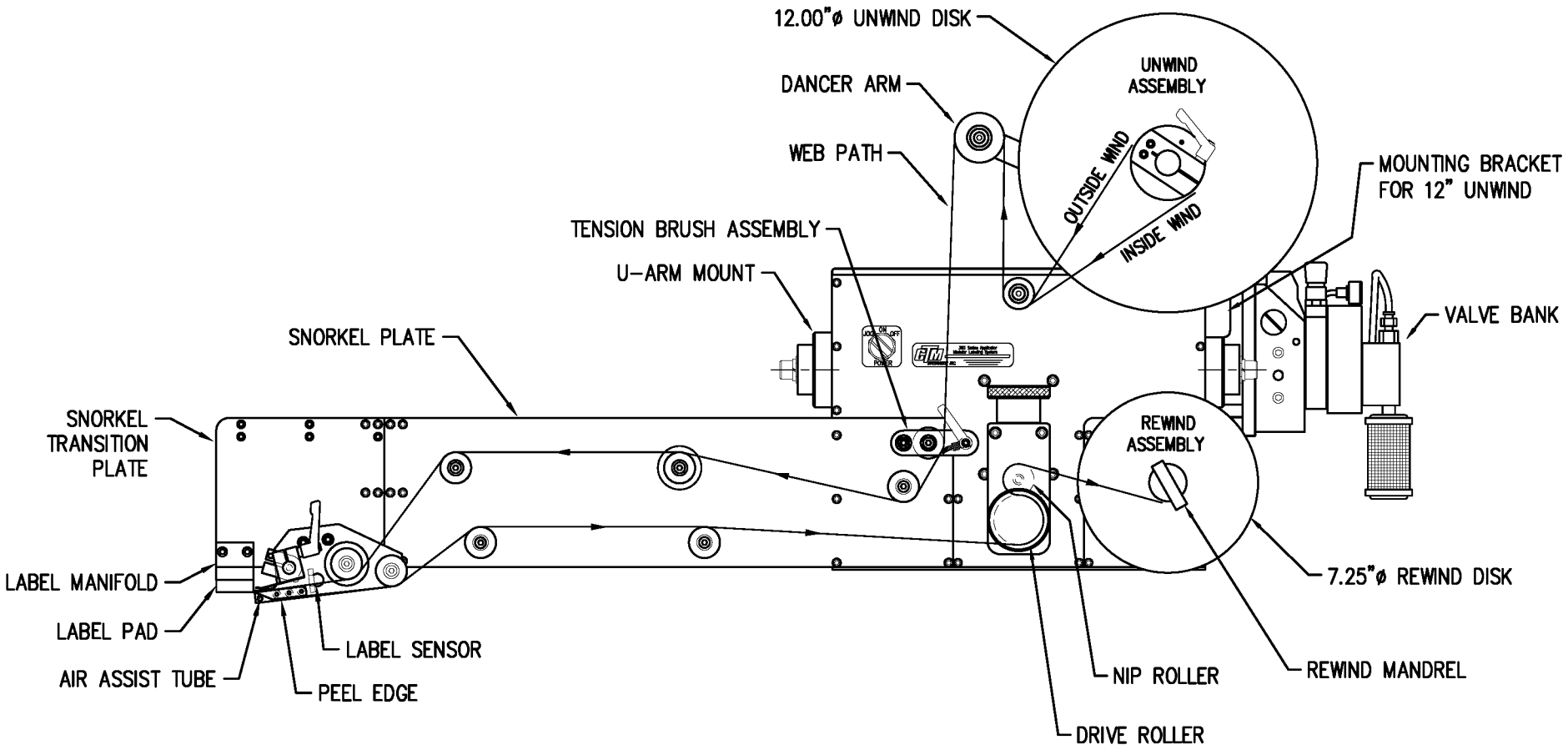
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED RVB APPLICATOR WITH 12" UNWIND



WEB PATH DIAGRAM

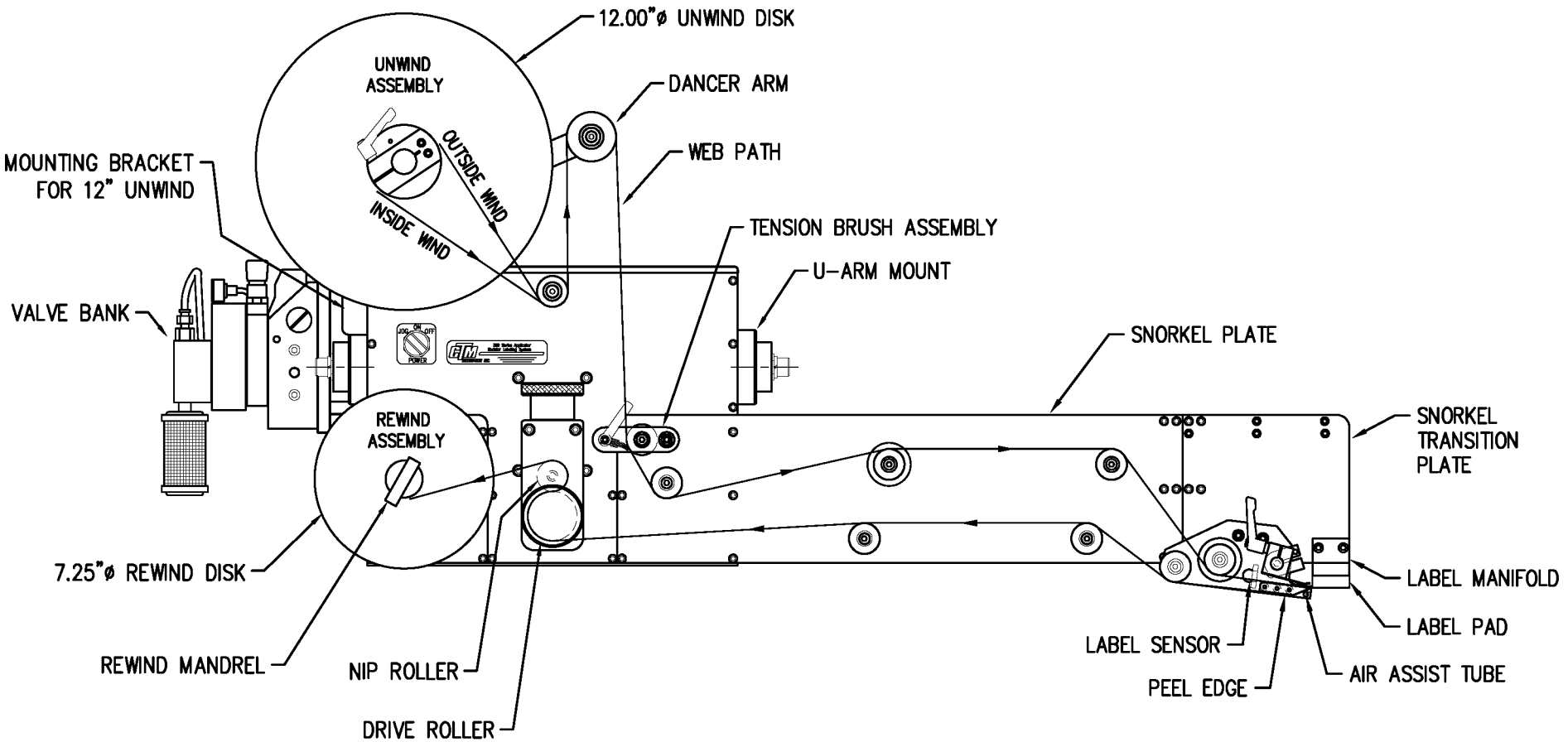
360 SERIES LEFT HAND 18"/24" EXTENDED RVB APPLICATOR WITH 12" UNWIND



NOTE: 18" SNORKEL SHOWN

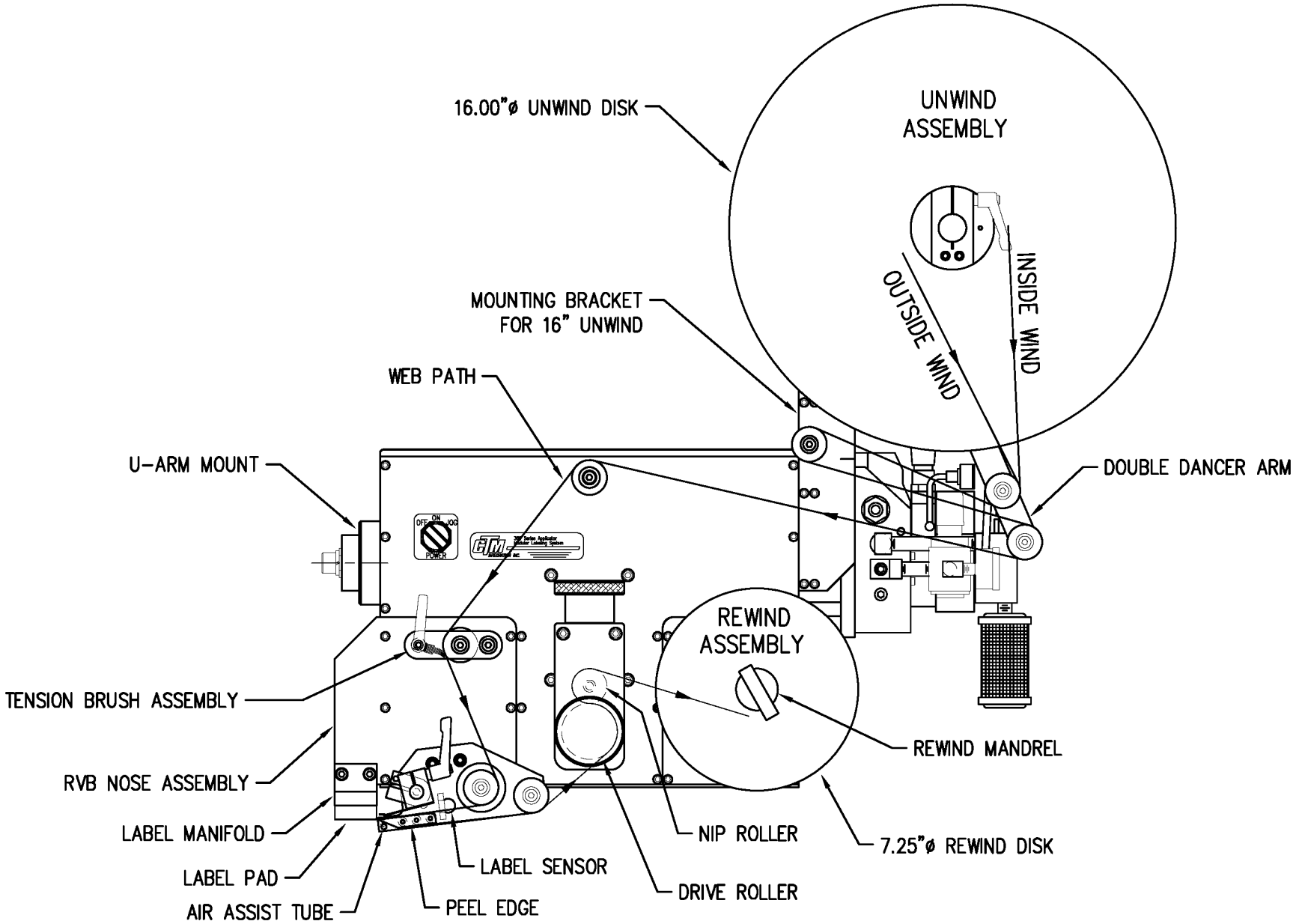
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" EXTENDED RVB APPLICATOR WITH 12" UNWIND

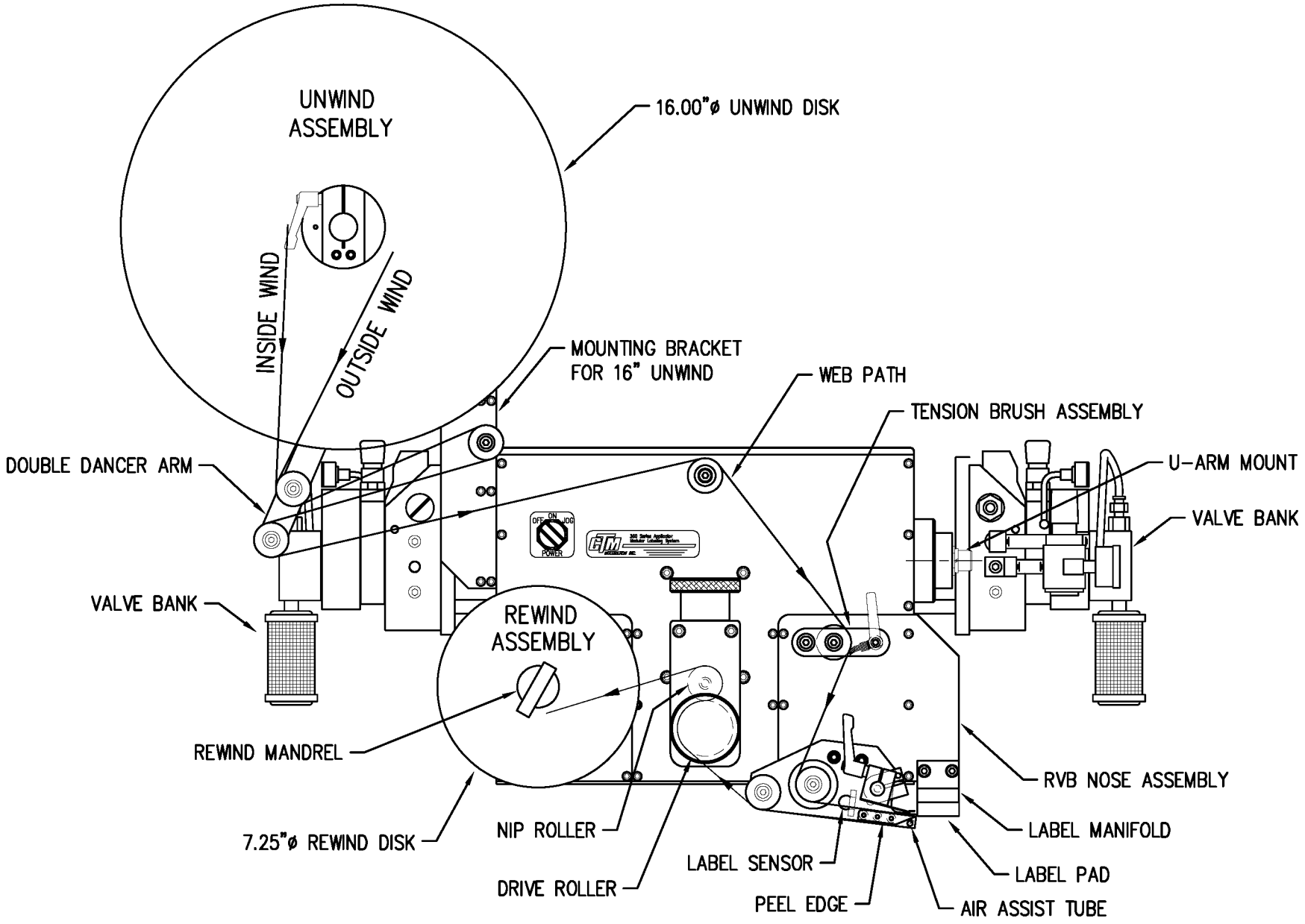


NOTE: 18" SNORKEL SHOWN

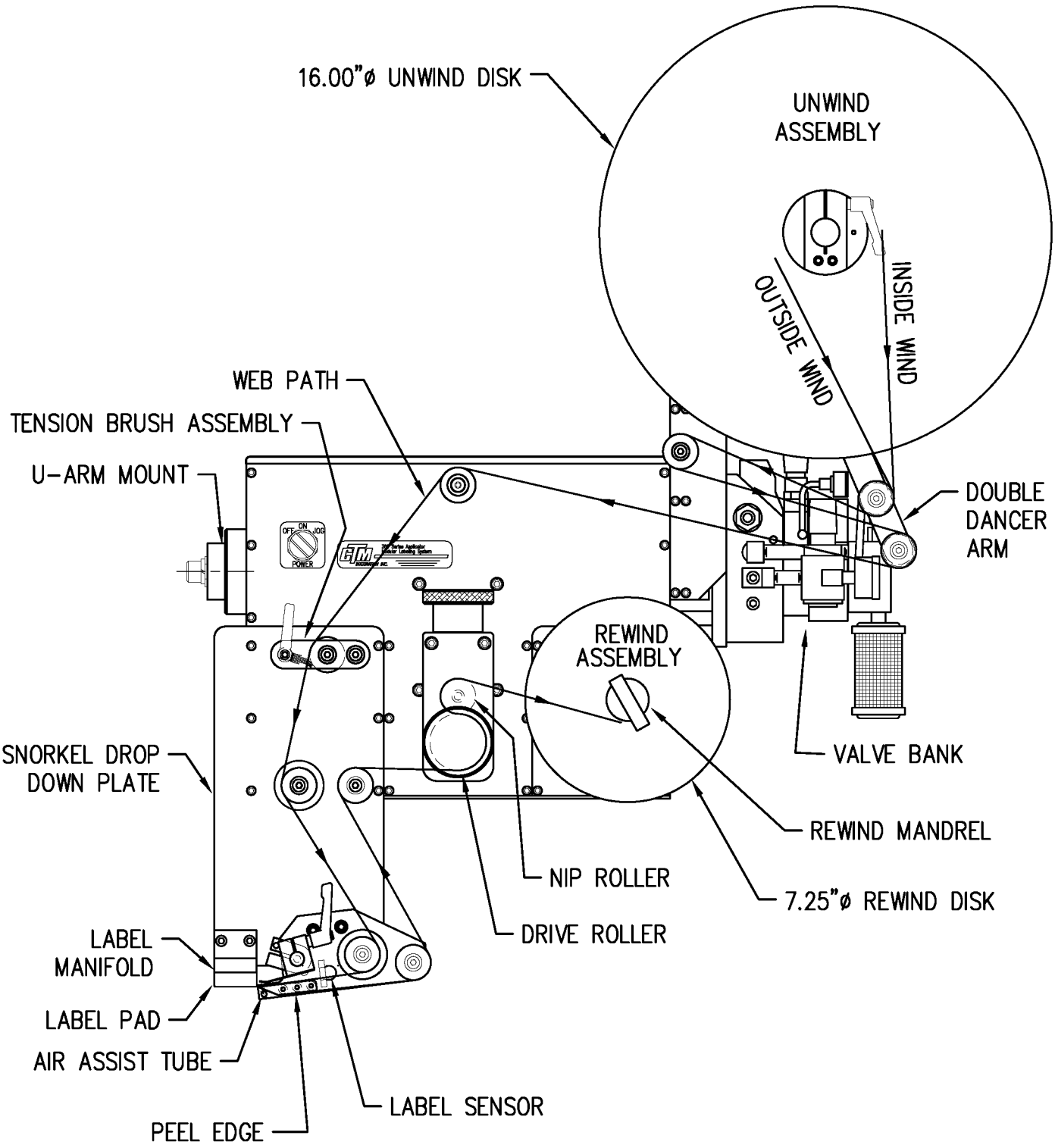
WEB PATH DIAGRAM
360 SERIES LEFT HAND RVB APPLICATOR
WITH 16" UNWIND



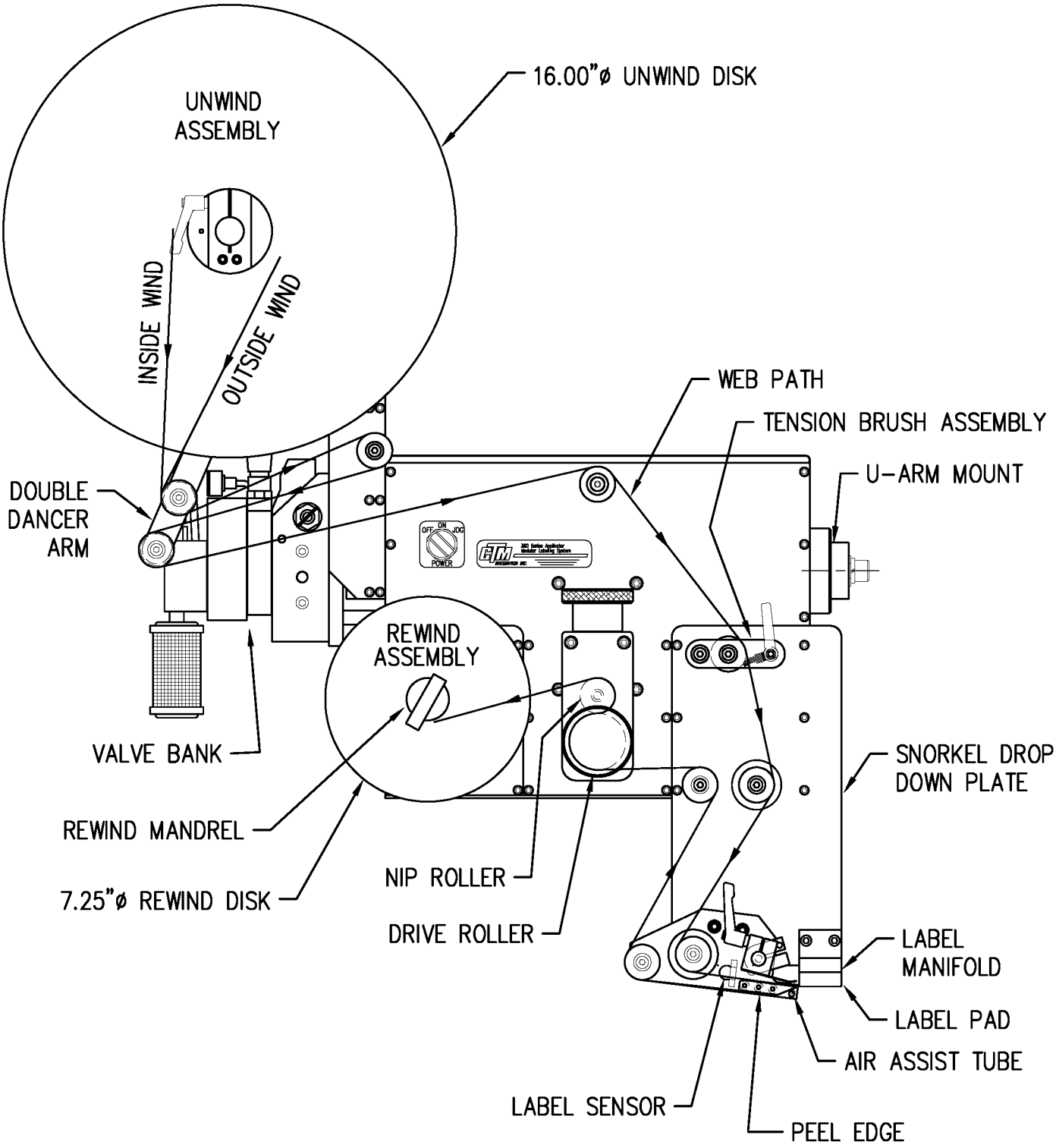
WEB PATH DIAGRAM
360 SERIES RIGHT HAND RVB APPLICATOR
WITH 16" UNWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 6" DROP DOWN RVB APPLICATOR WITH 16" UNWIND

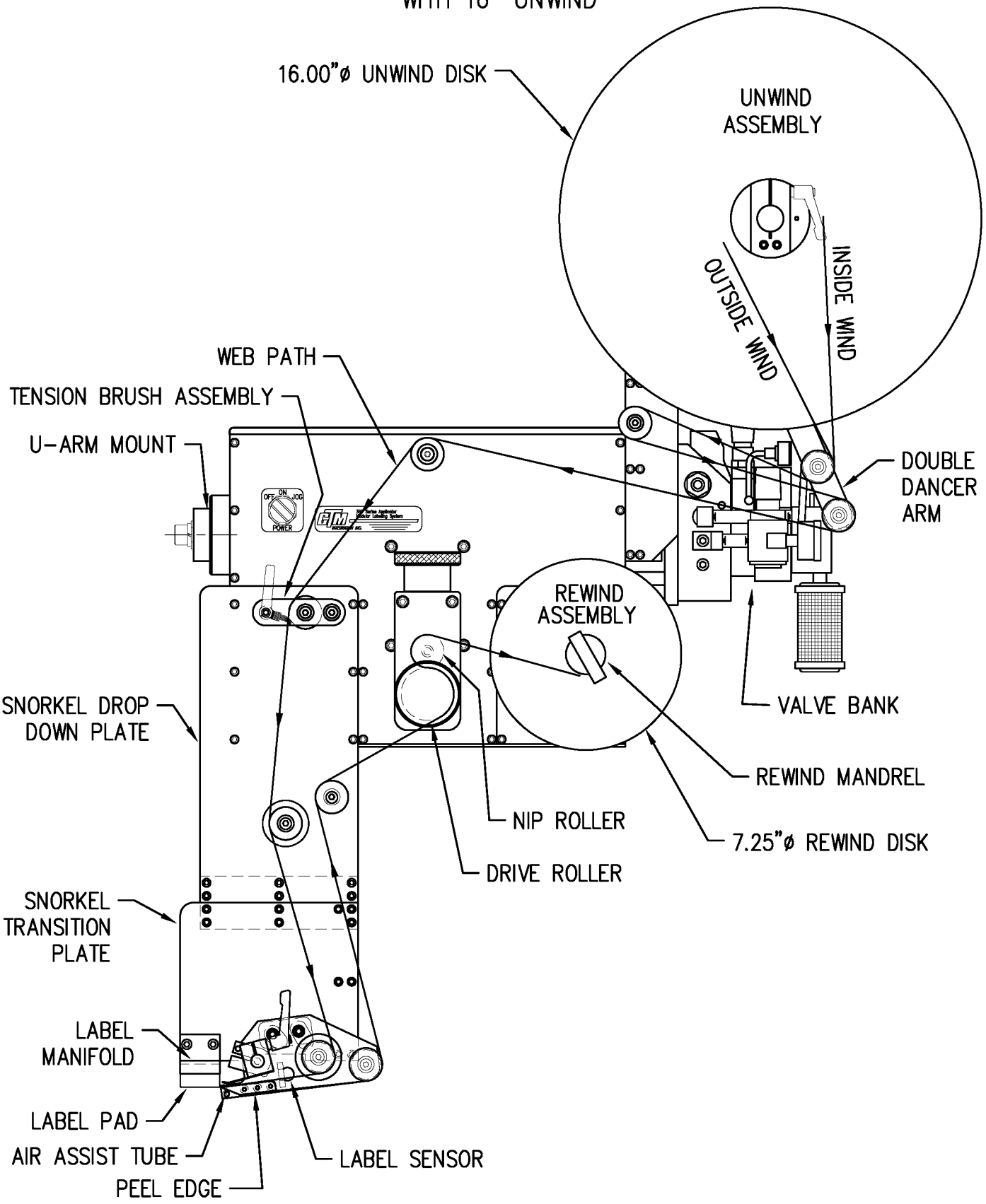


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 6" DROP DOWN RVB APPLICATOR WITH 16" UNWIND

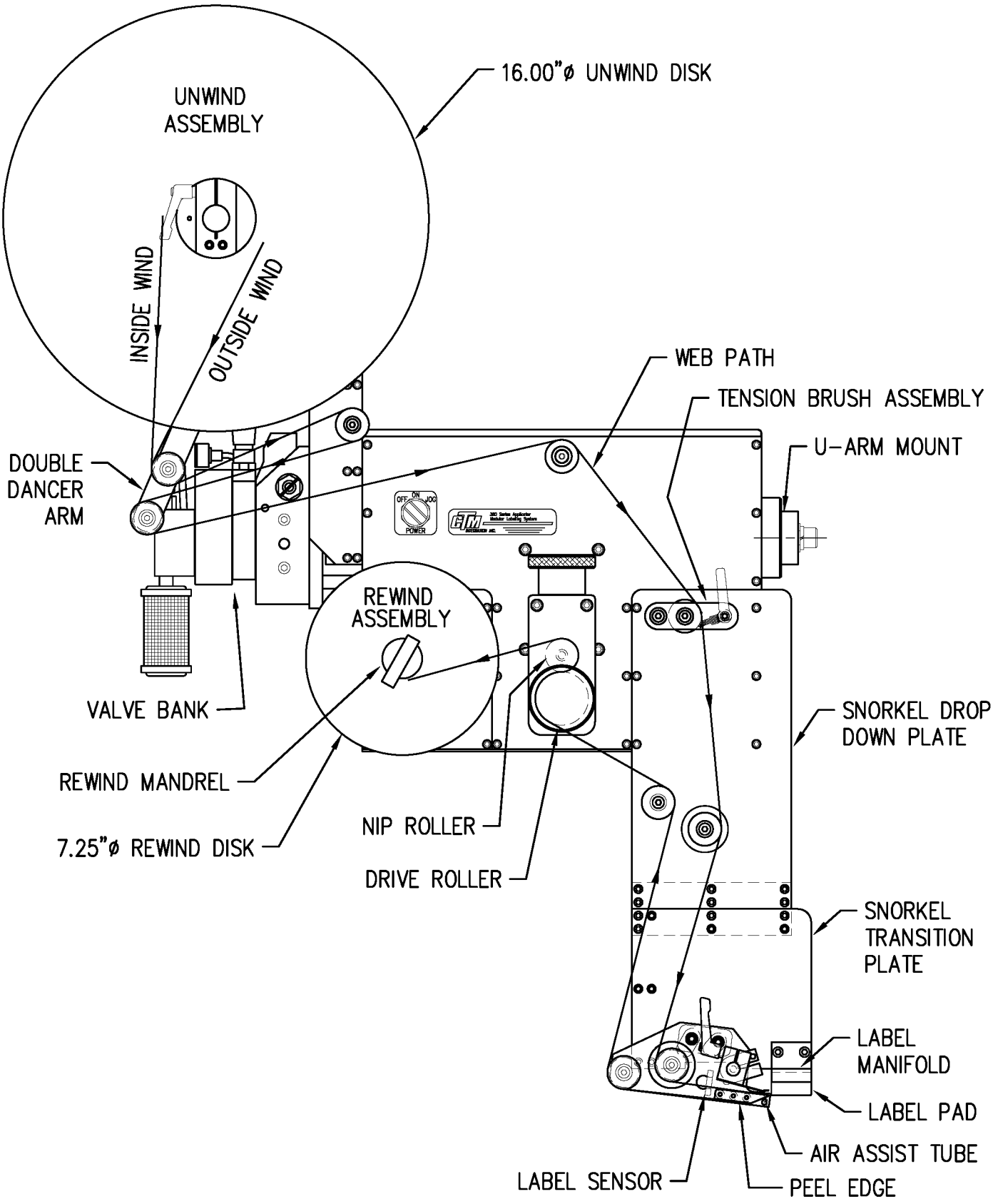


WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN RVB APPLICATOR WITH 16" UNWIND

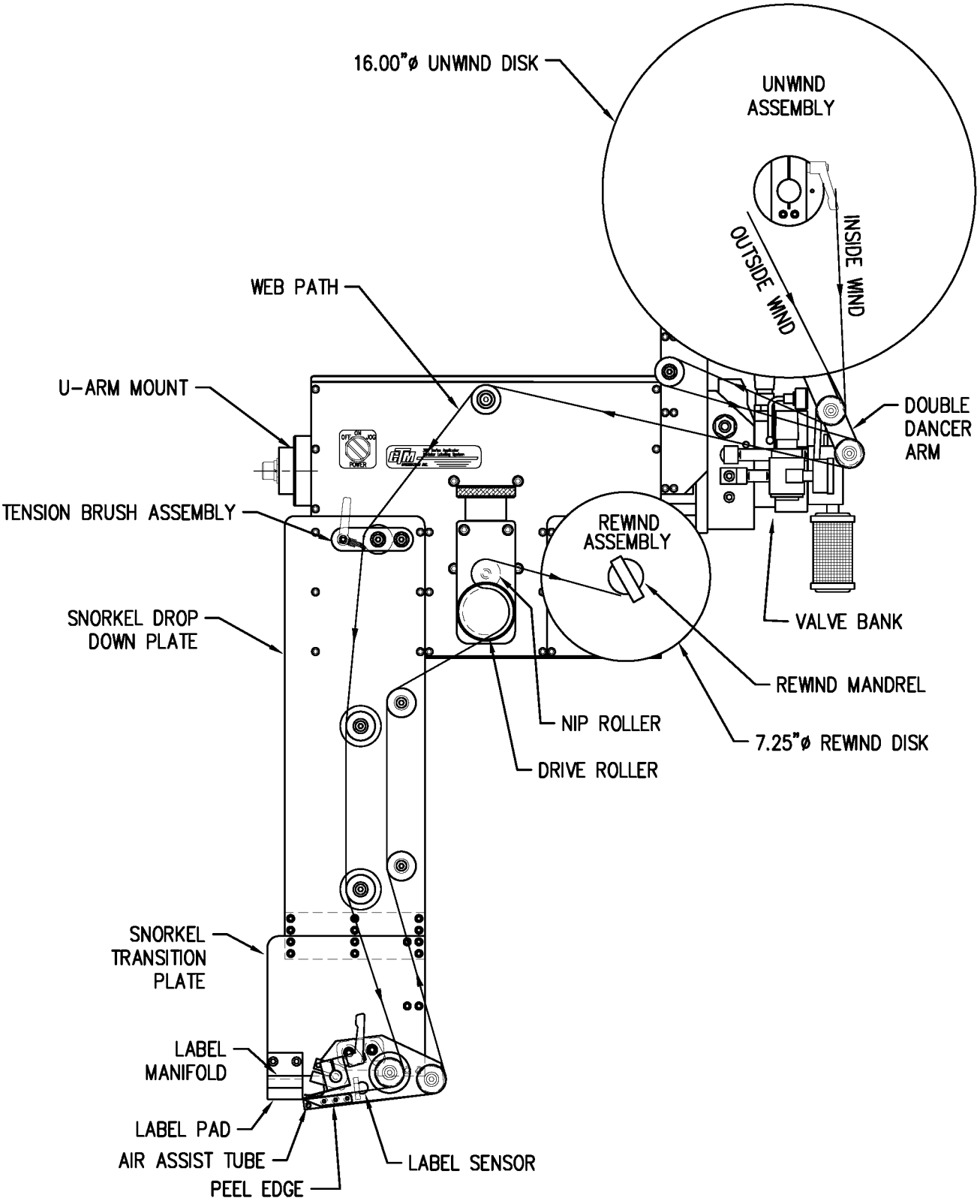


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" DROP DOWN RVB APPLICATOR WITH 16" UNWIND



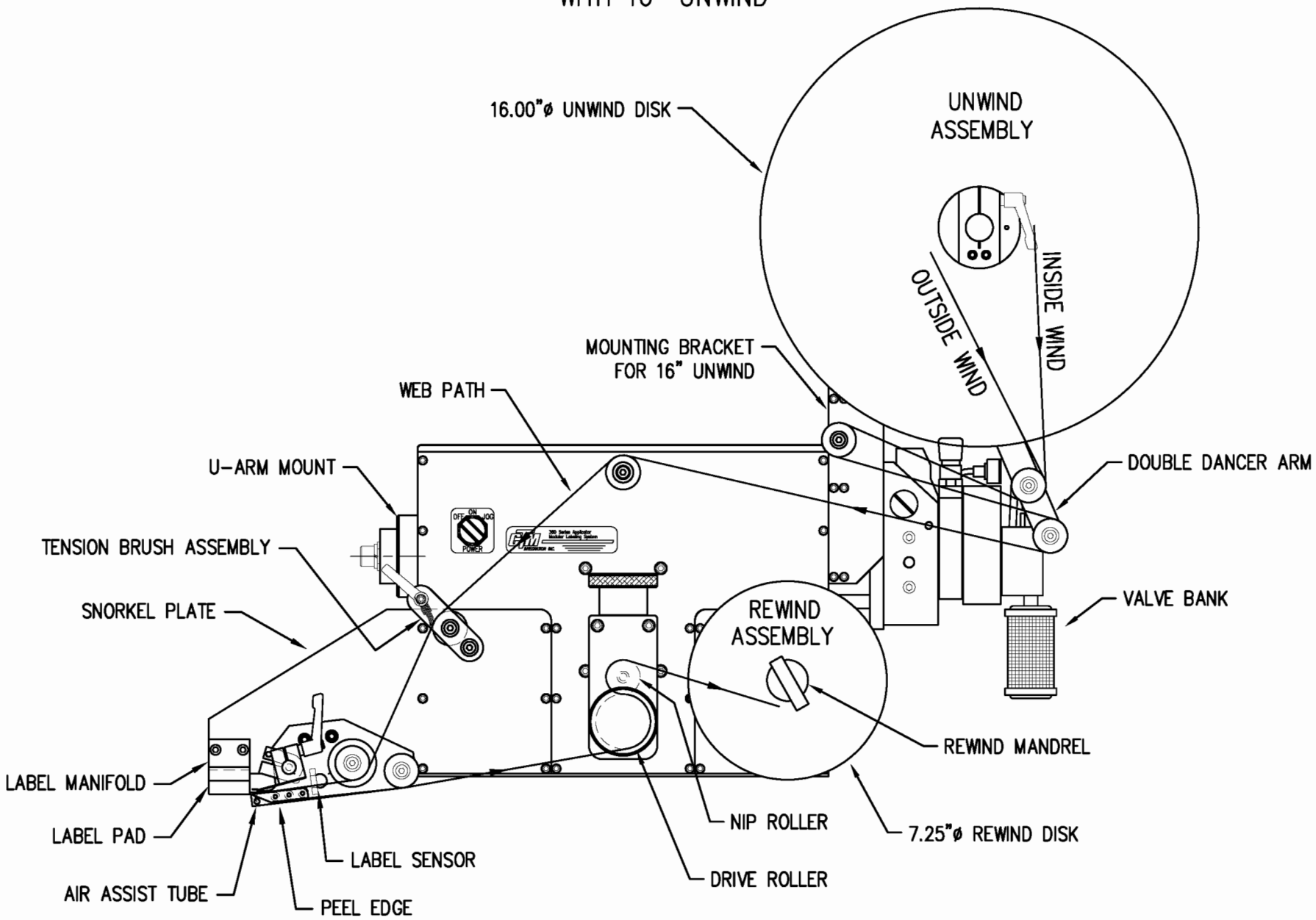
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN RVB APPLICATOR WITH 16" UNWIND



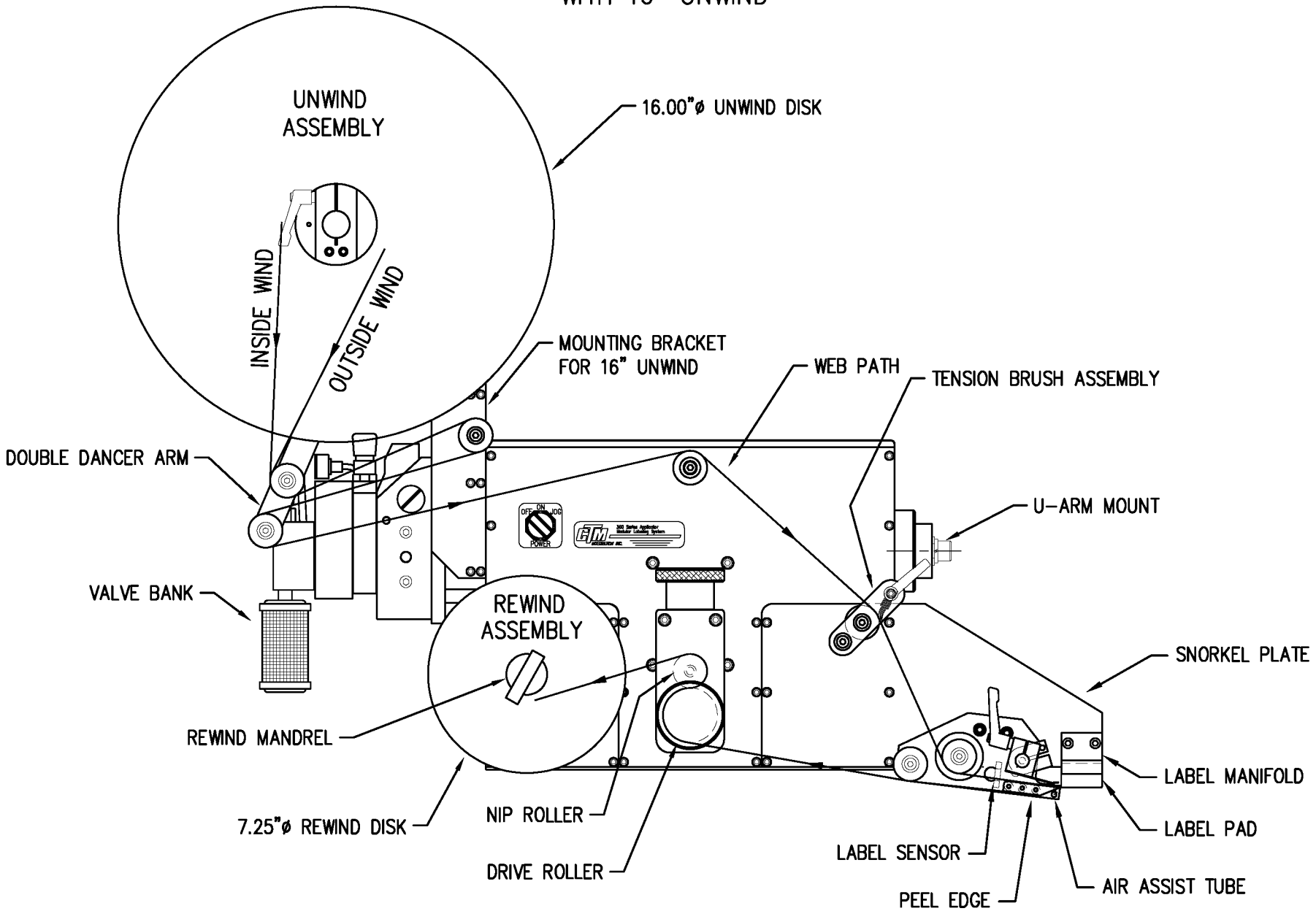
NOTE: 18" SNORKEL SHOWN

WEB PATH DIAGRAM
360 SERIES LEFT HAND 6" EXTENDED RVB APPLICATOR WITH 16" UNWIND

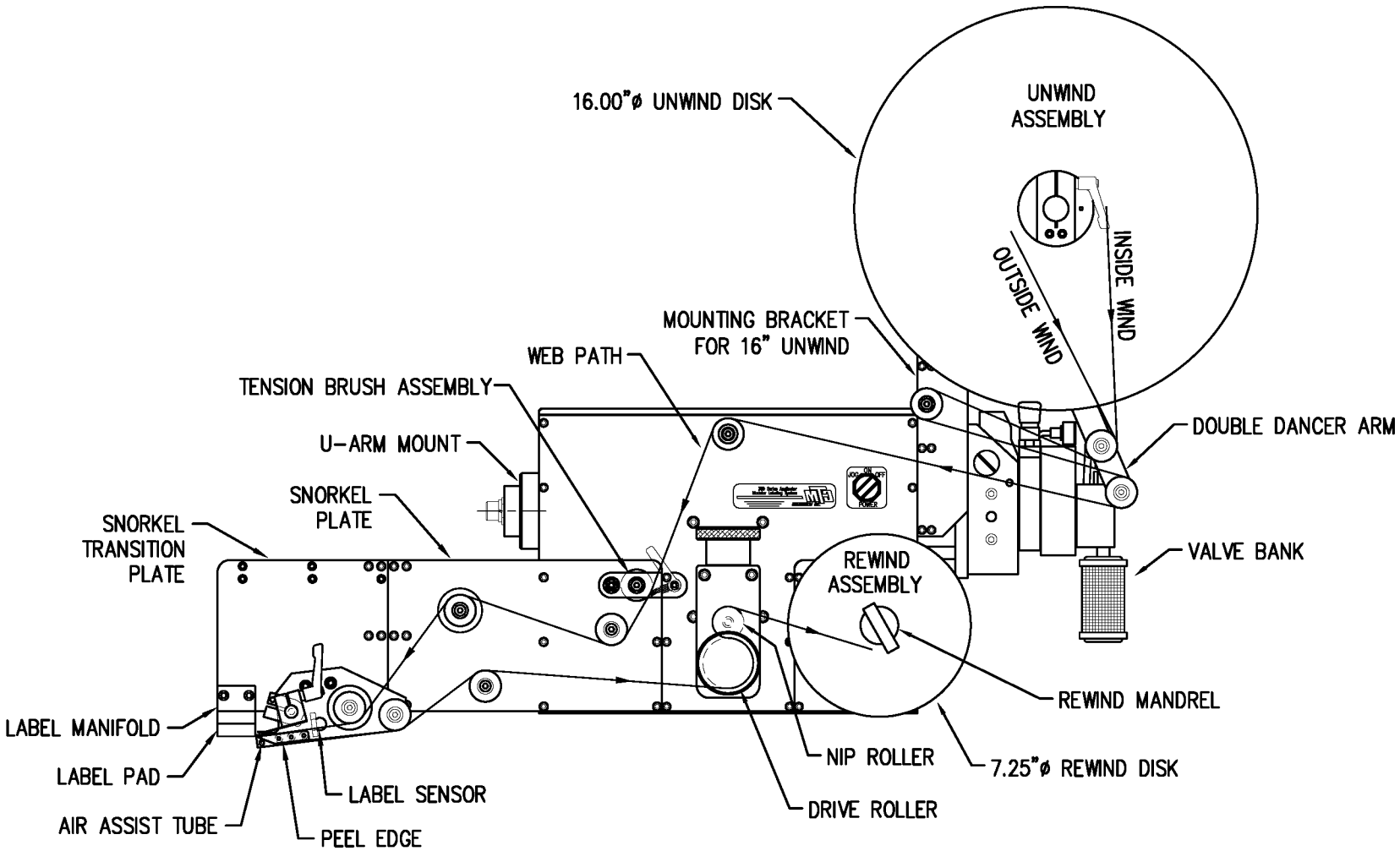


WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" EXTENDED RVB APPLICATOR WITH 16" UNWIND

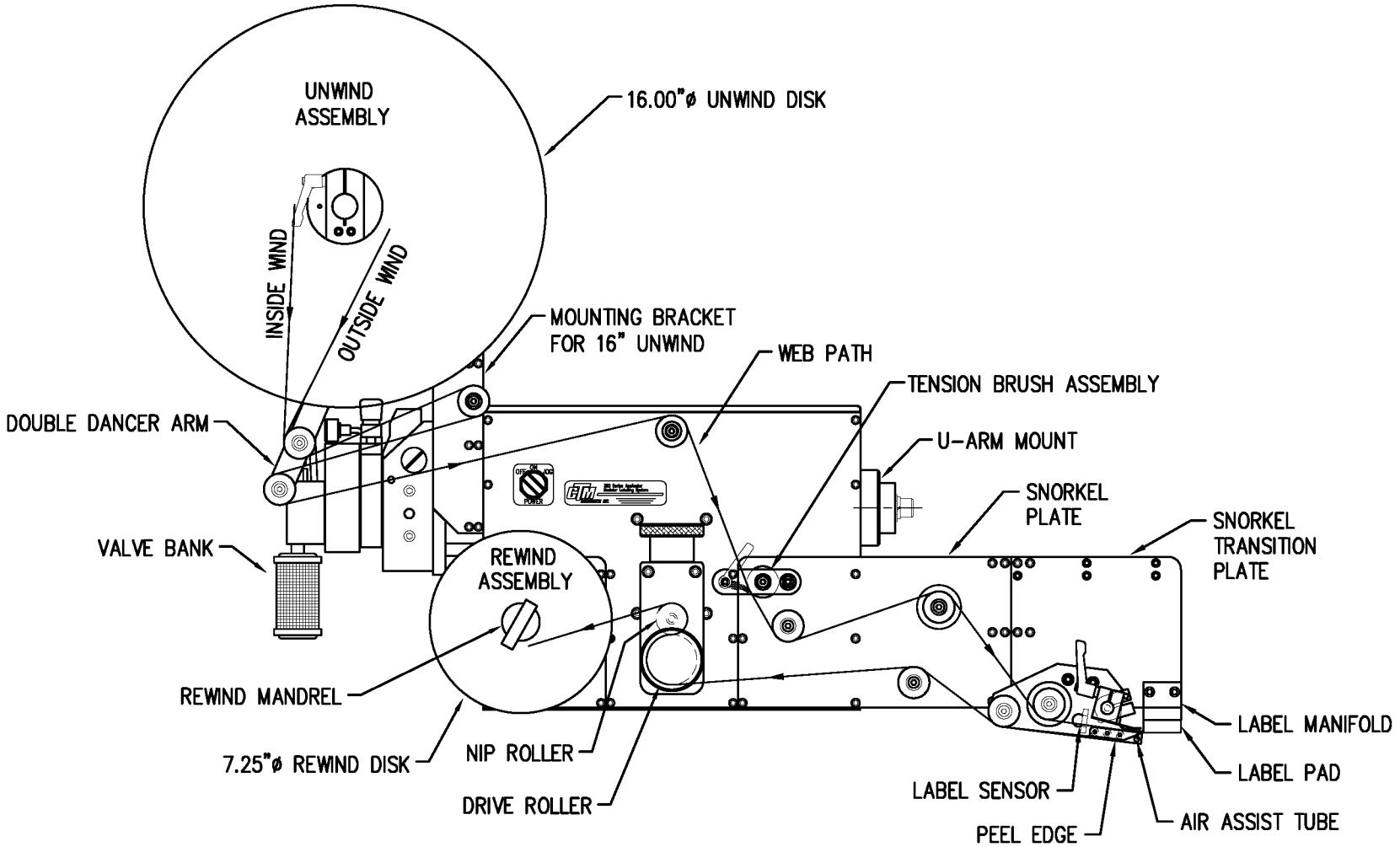


WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED RVB APPLICATOR WITH 16" UNWIND



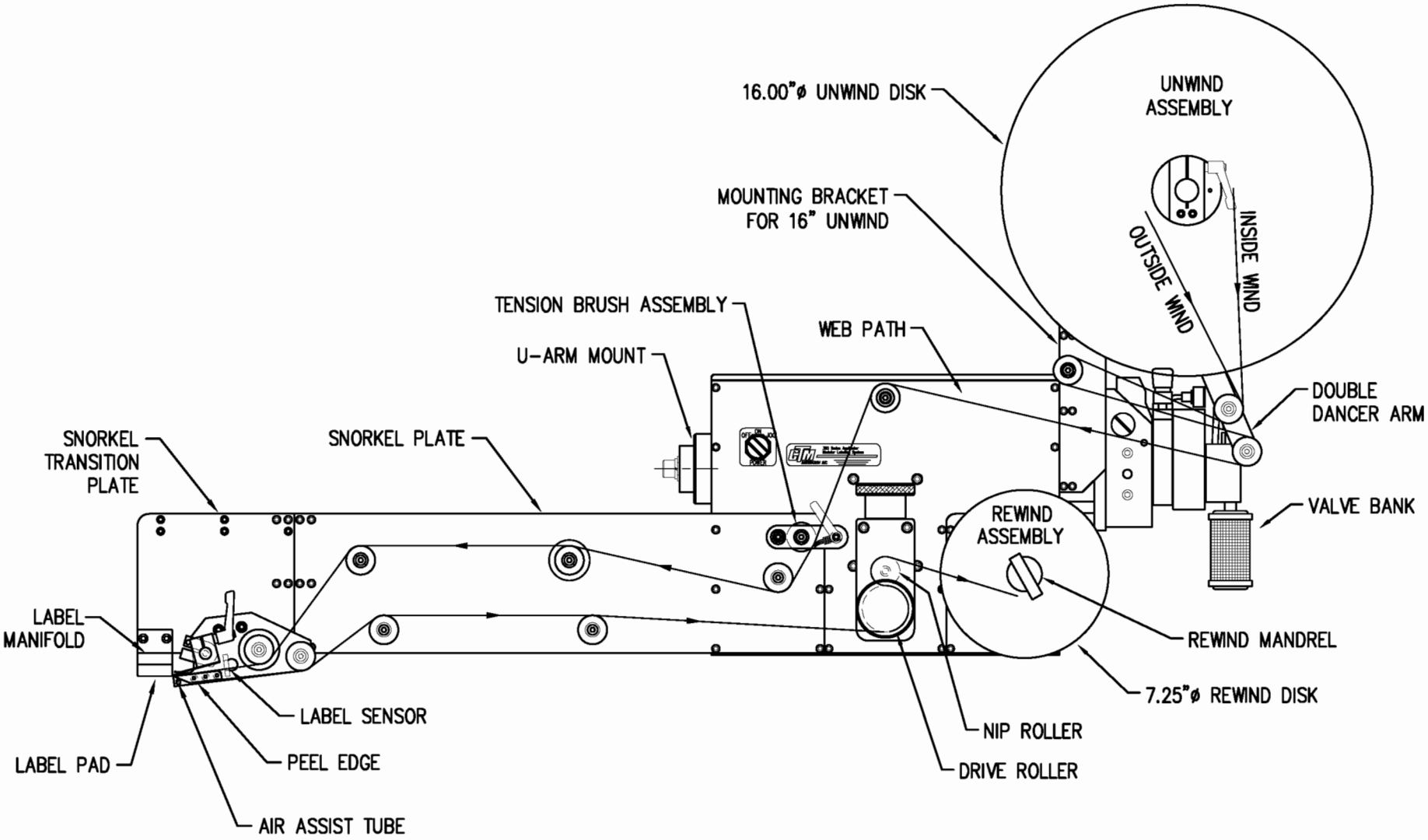
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED RVB APPLICATOR WITH 16" UNWIND



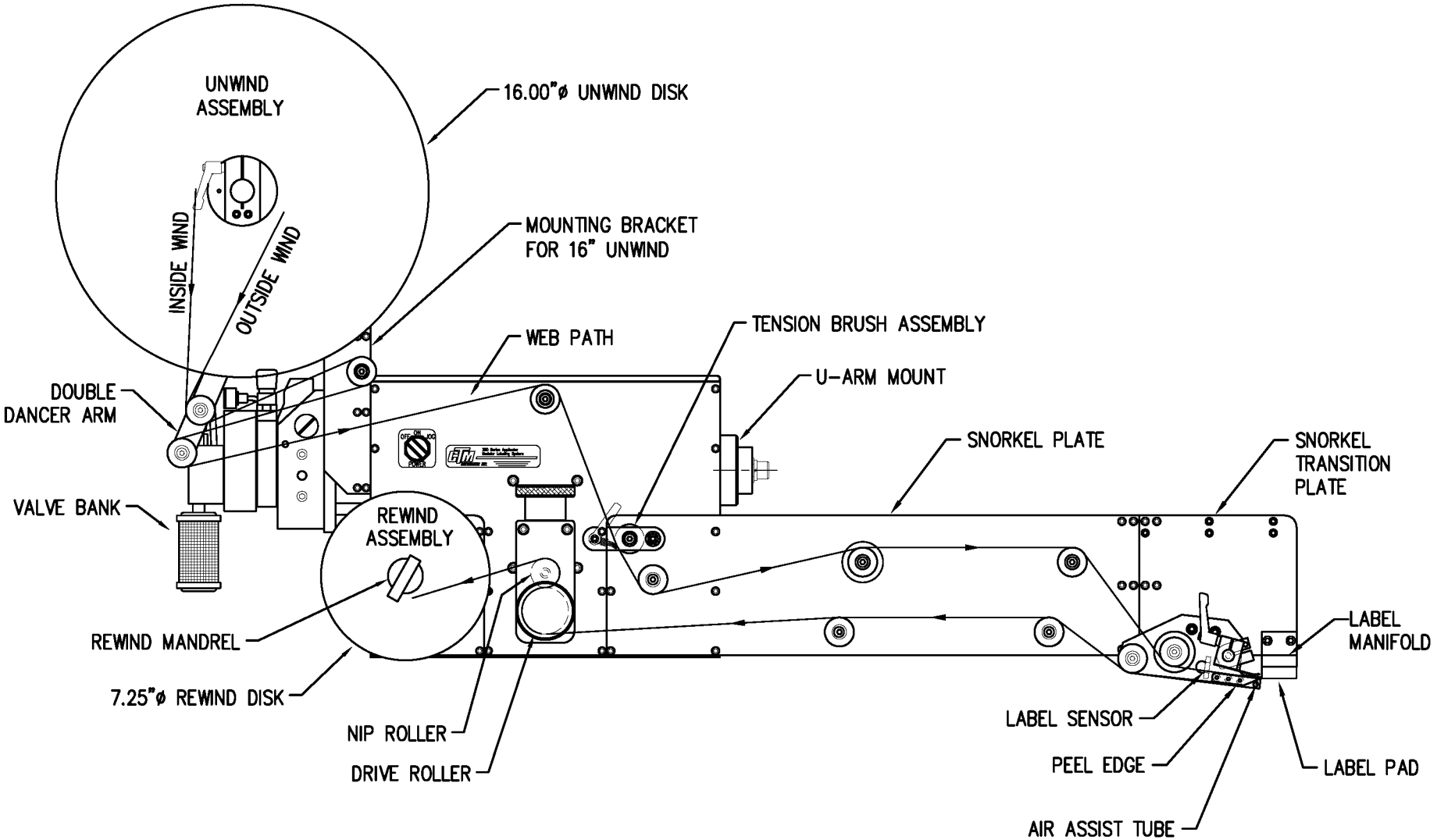
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18/24" EXTENDED RVB APPLICATOR WITH 16" UNWIND



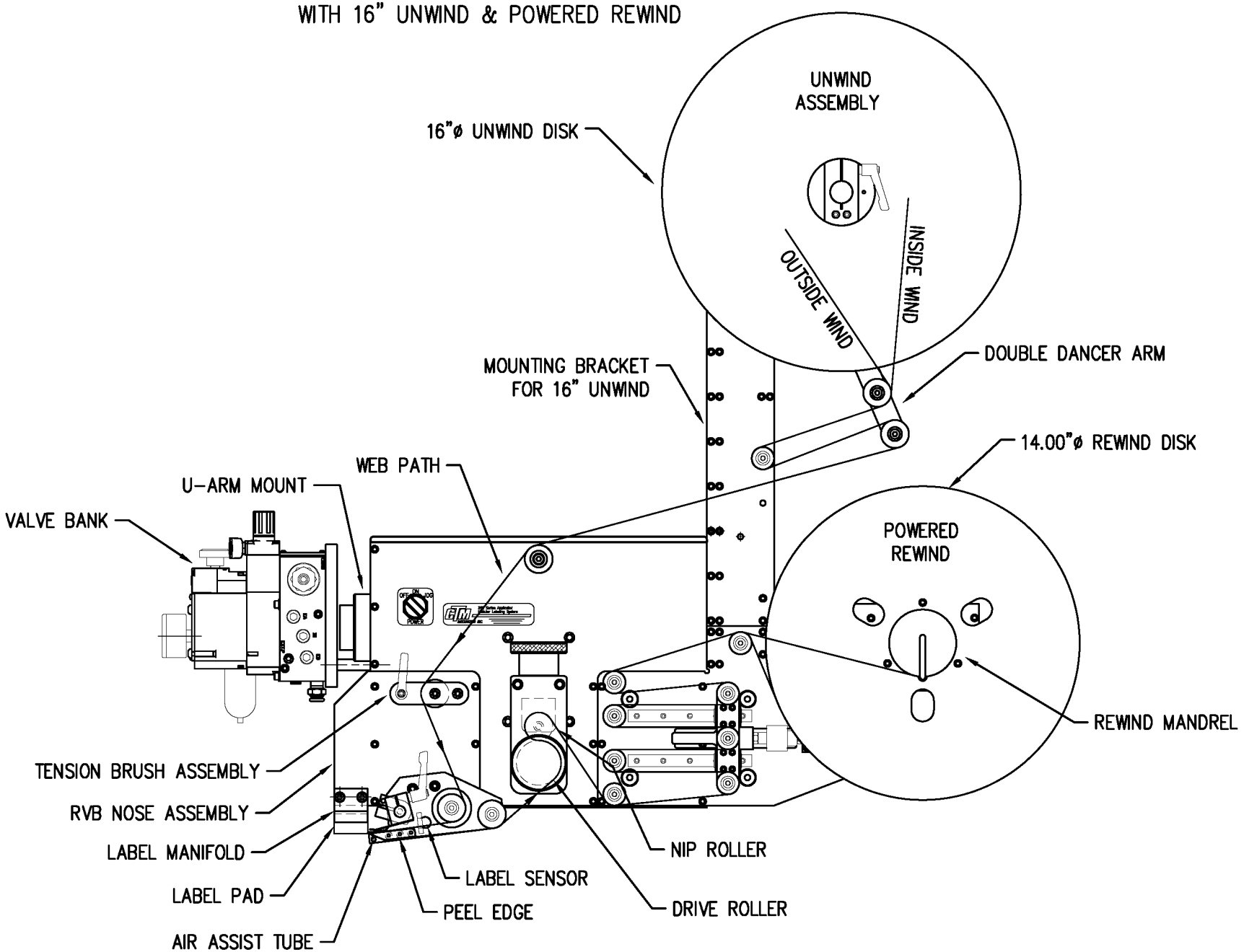
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18/24" EXTENDED RVB APPLICATOR WITH 16" UNWIND



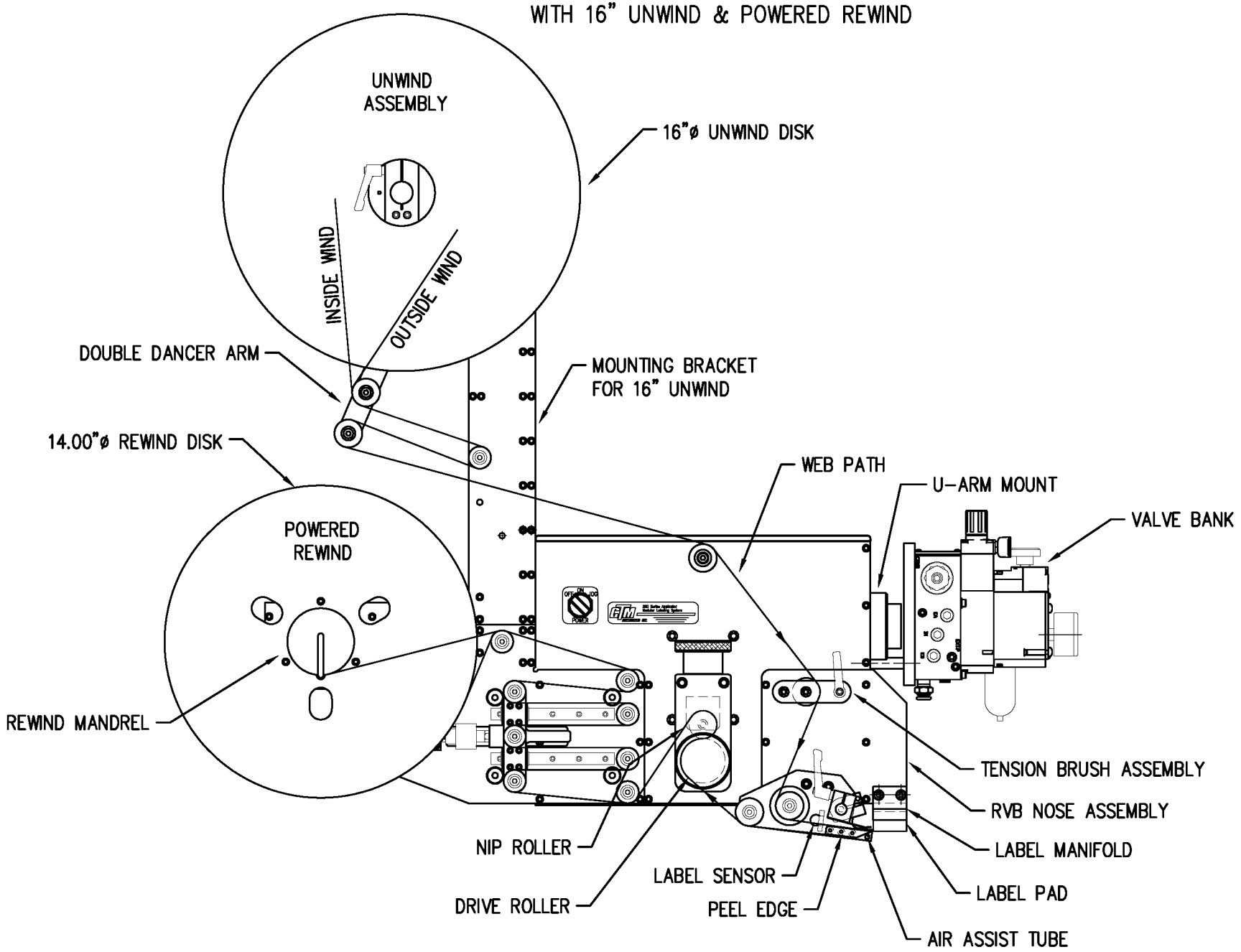
WEB PATH DIAGRAM

360 SERIES LEFT HAND RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



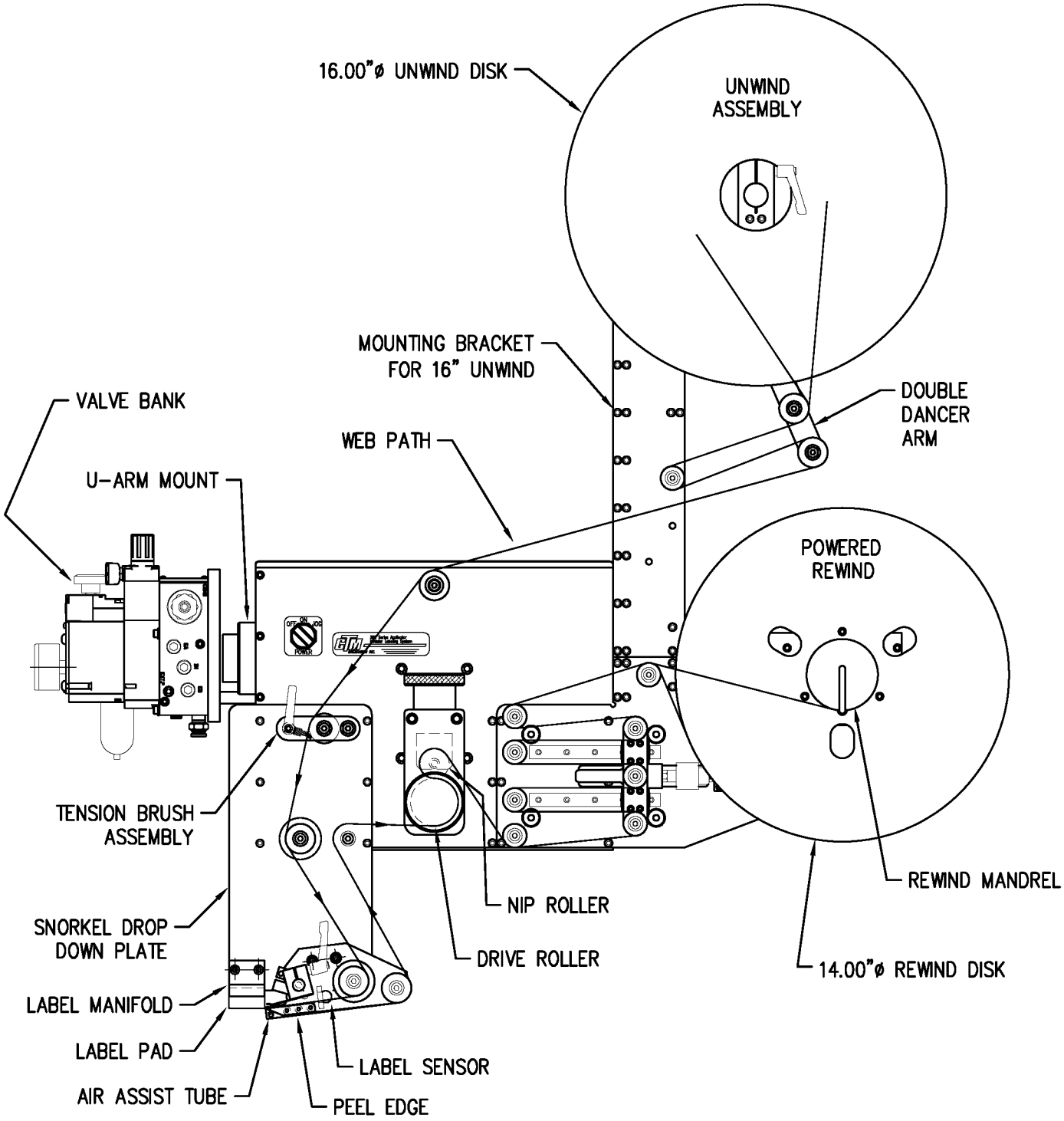
WEB PATH DIAGRAM

360 SERIES RIGHT HAND RVB APPLICATOR
WITH 16" UNWIND & POWERED REWIND



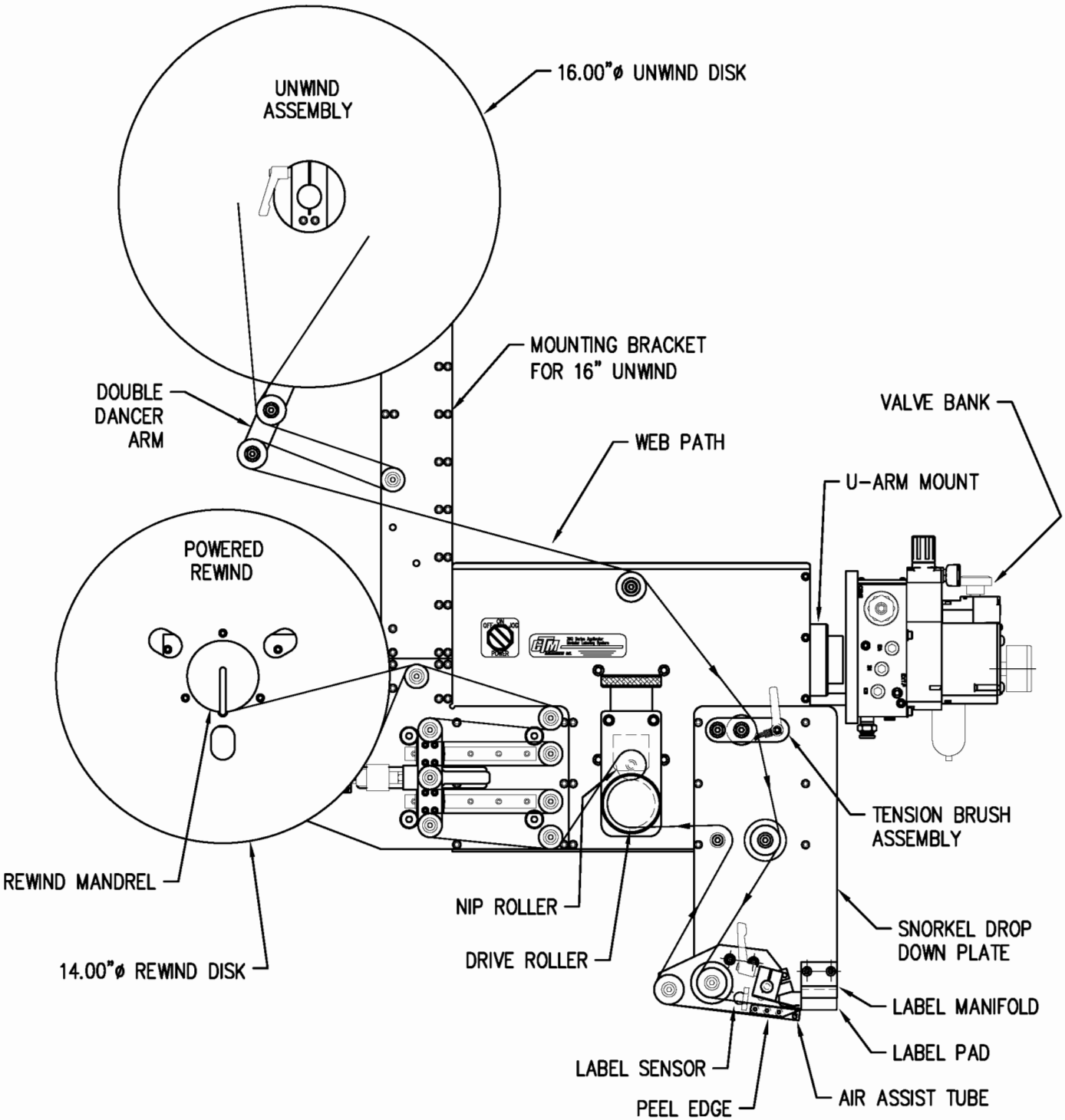
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



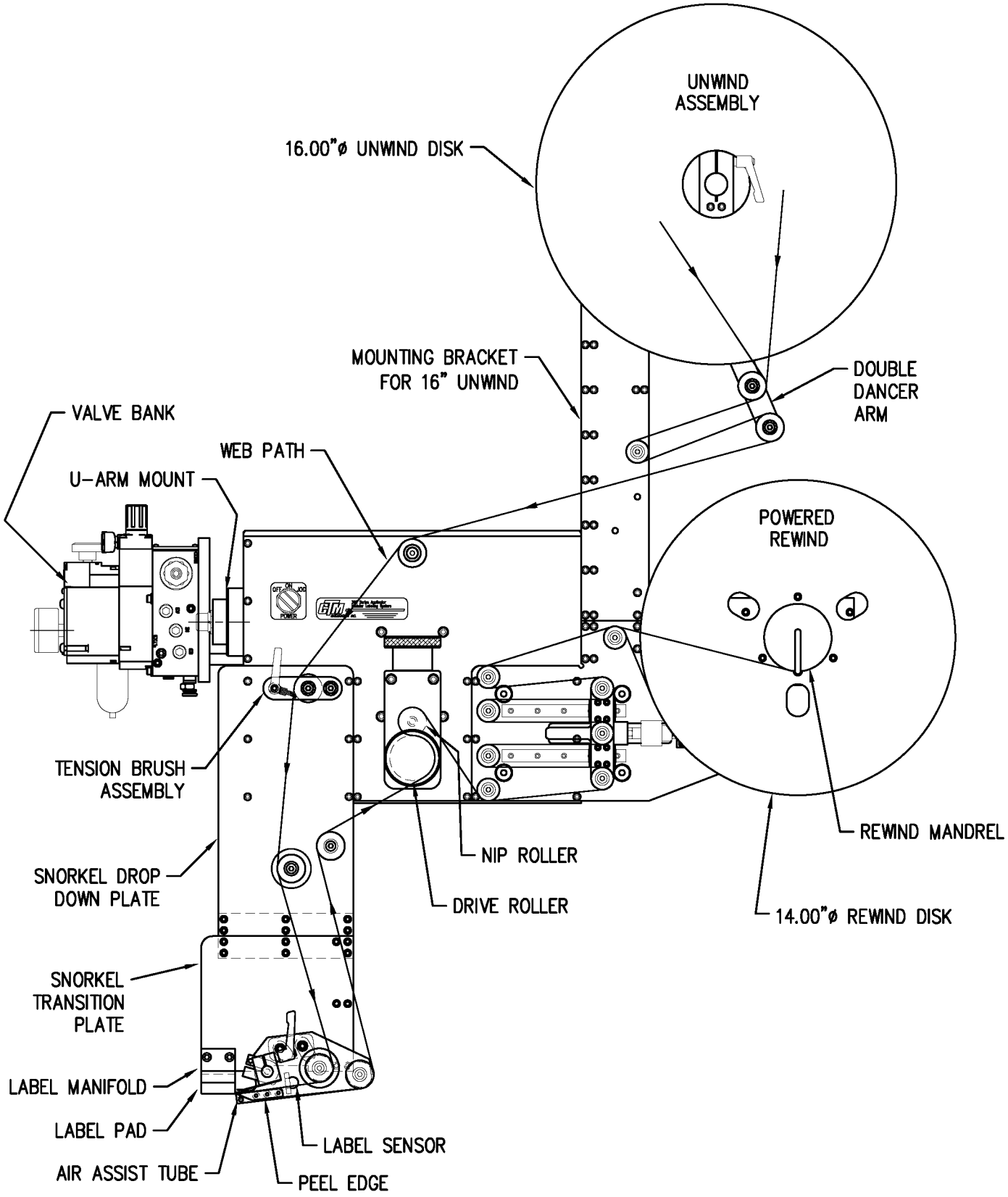
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



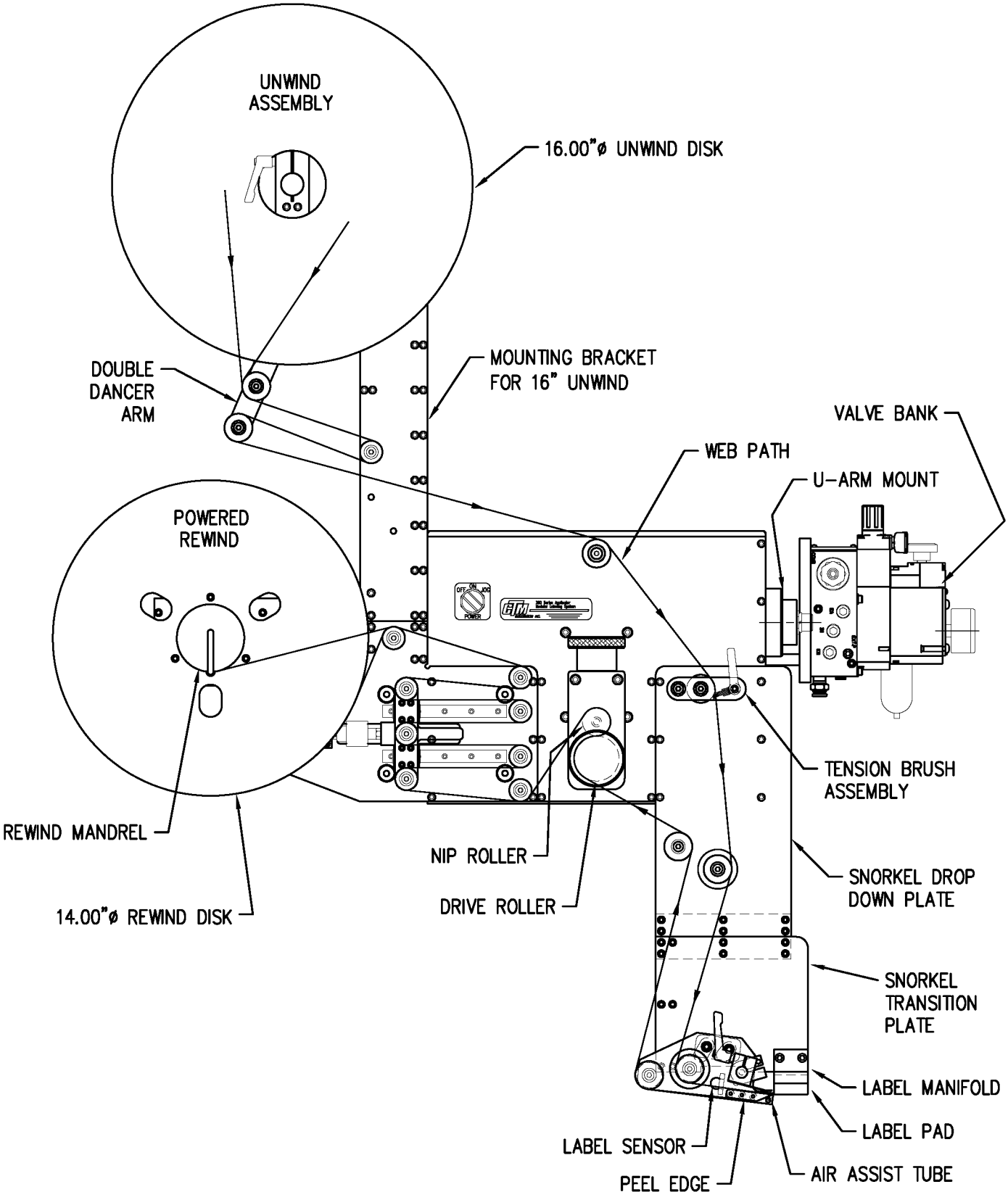
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



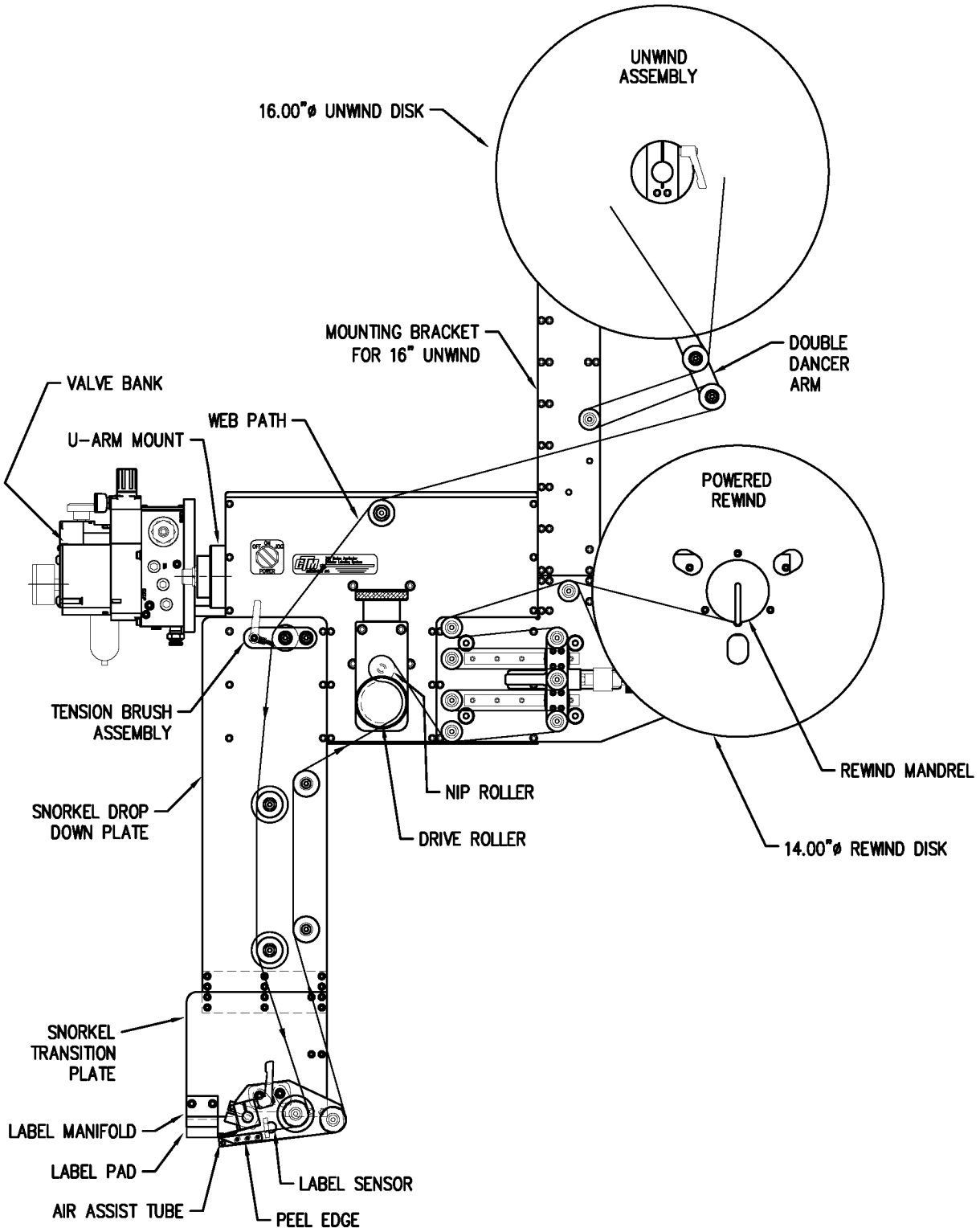
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



WEB PATH DIAGRAM

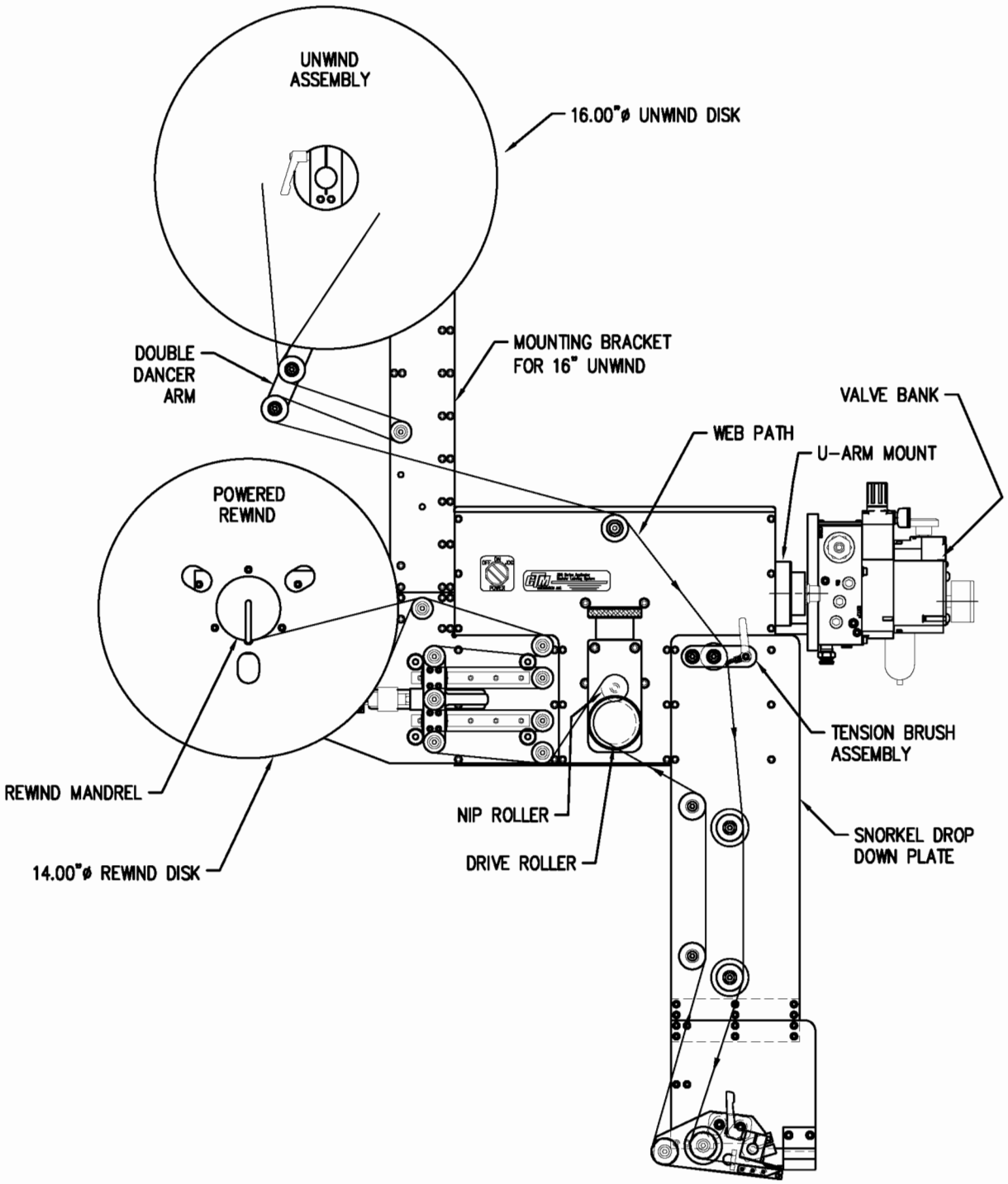
360 SERIES LEFT HAND 18"/24" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



NOTE: 18" SNORKEL SHOWN

WEB PATH DIAGRAM

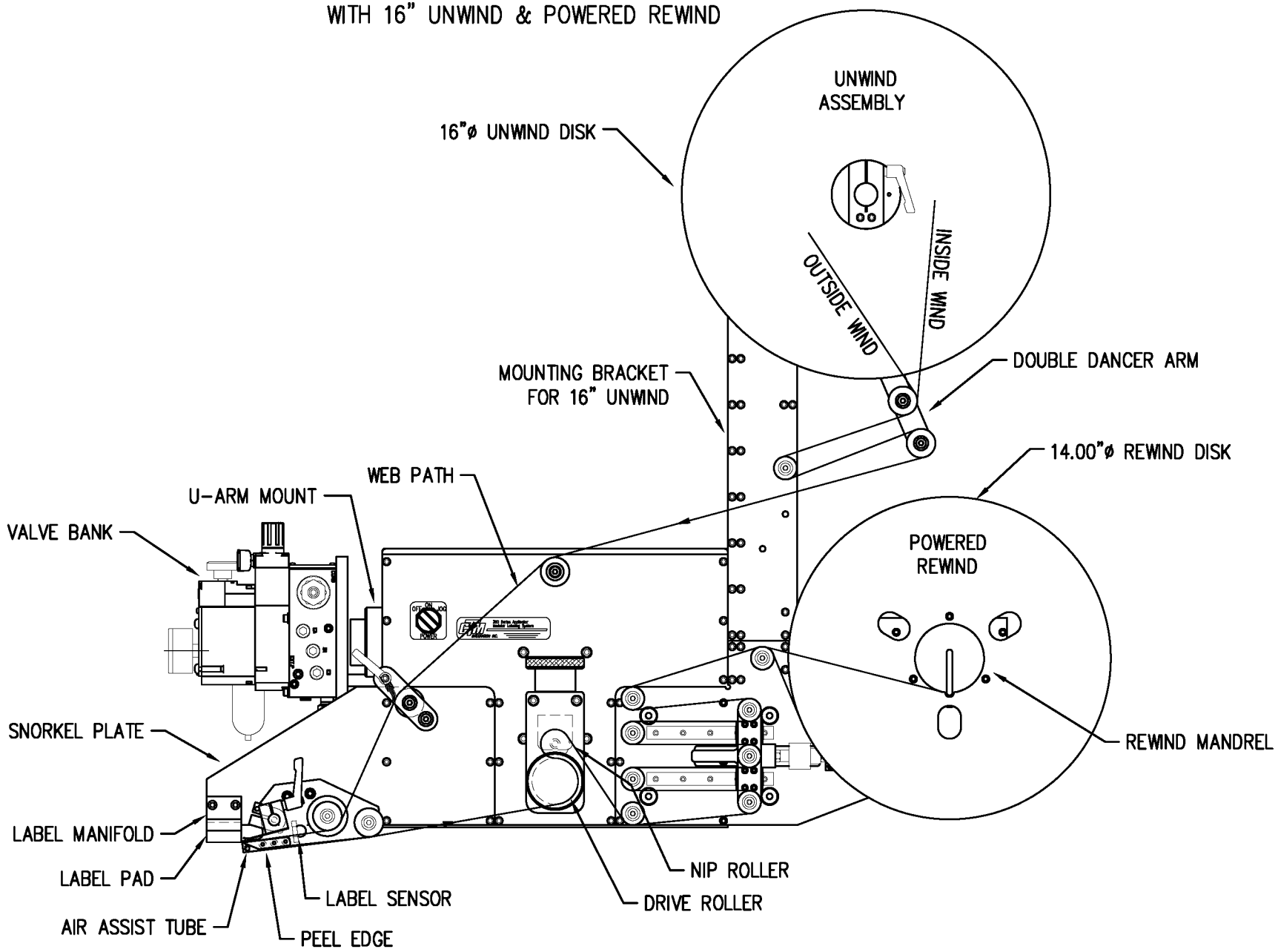
360 SERIES RIGHT HAND 18"/24" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



NOTE: 18" SNORKEL SHOWN

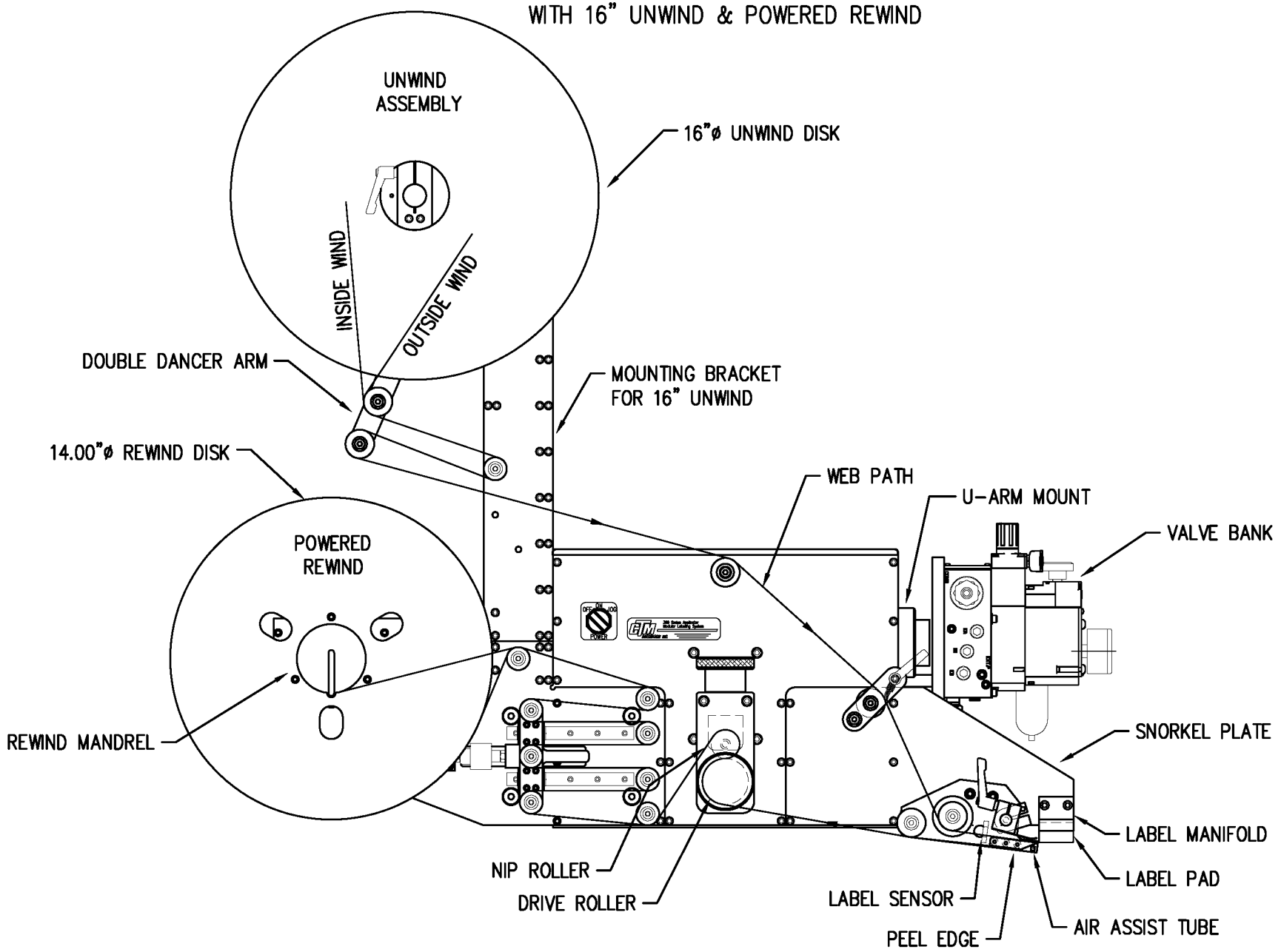
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" EXTENDED RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



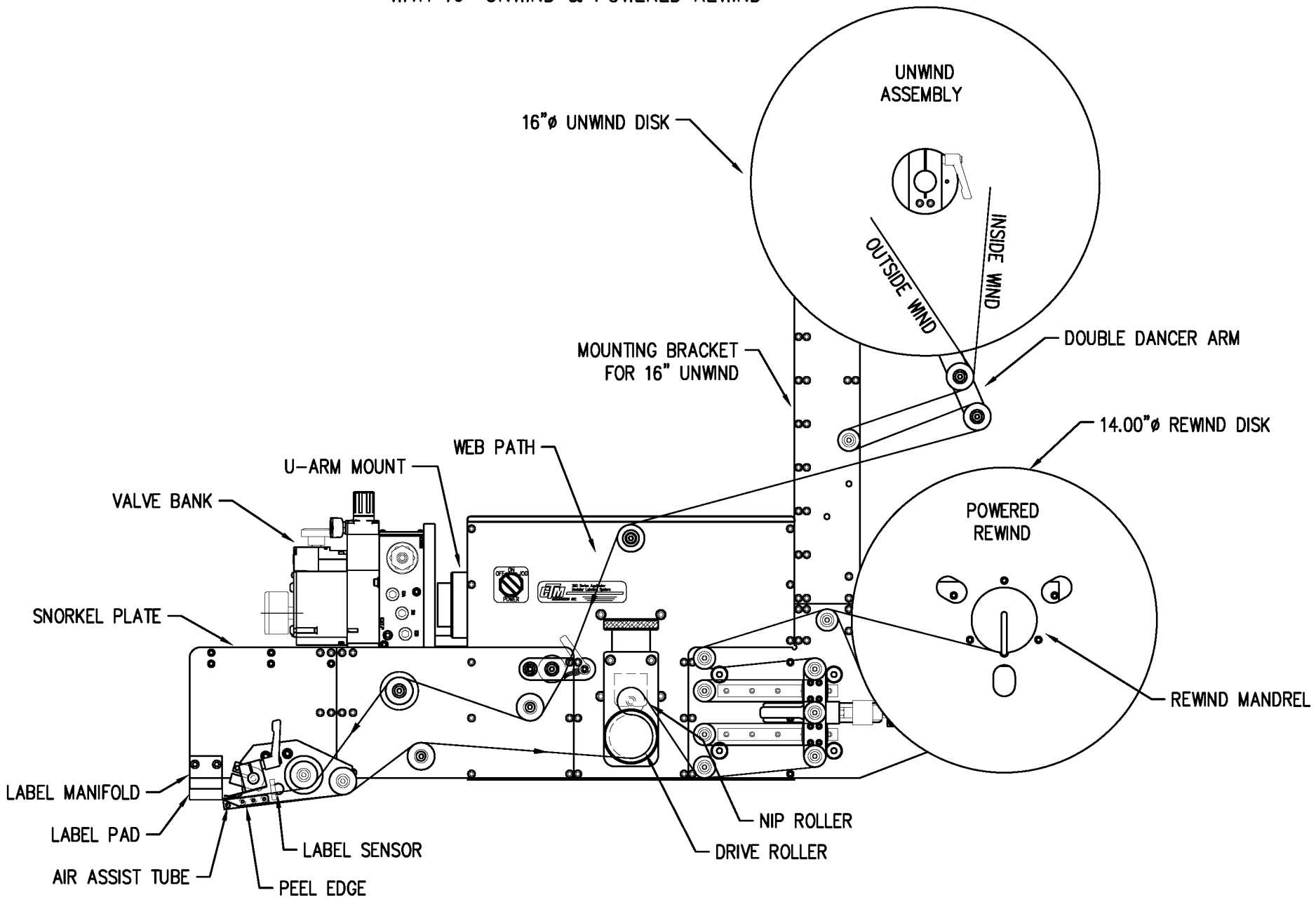
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" EXTENDED RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



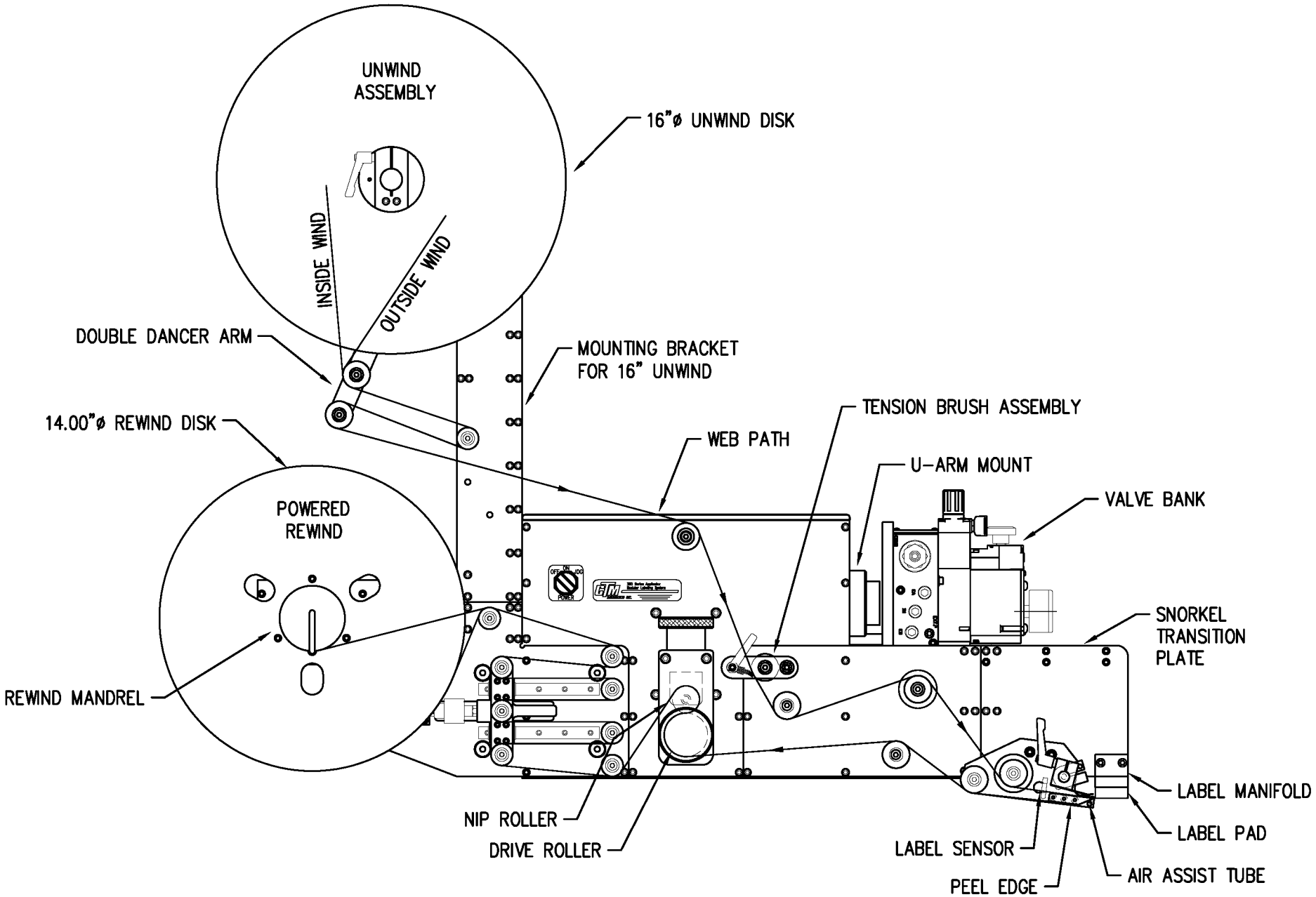
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" EXTENDED RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



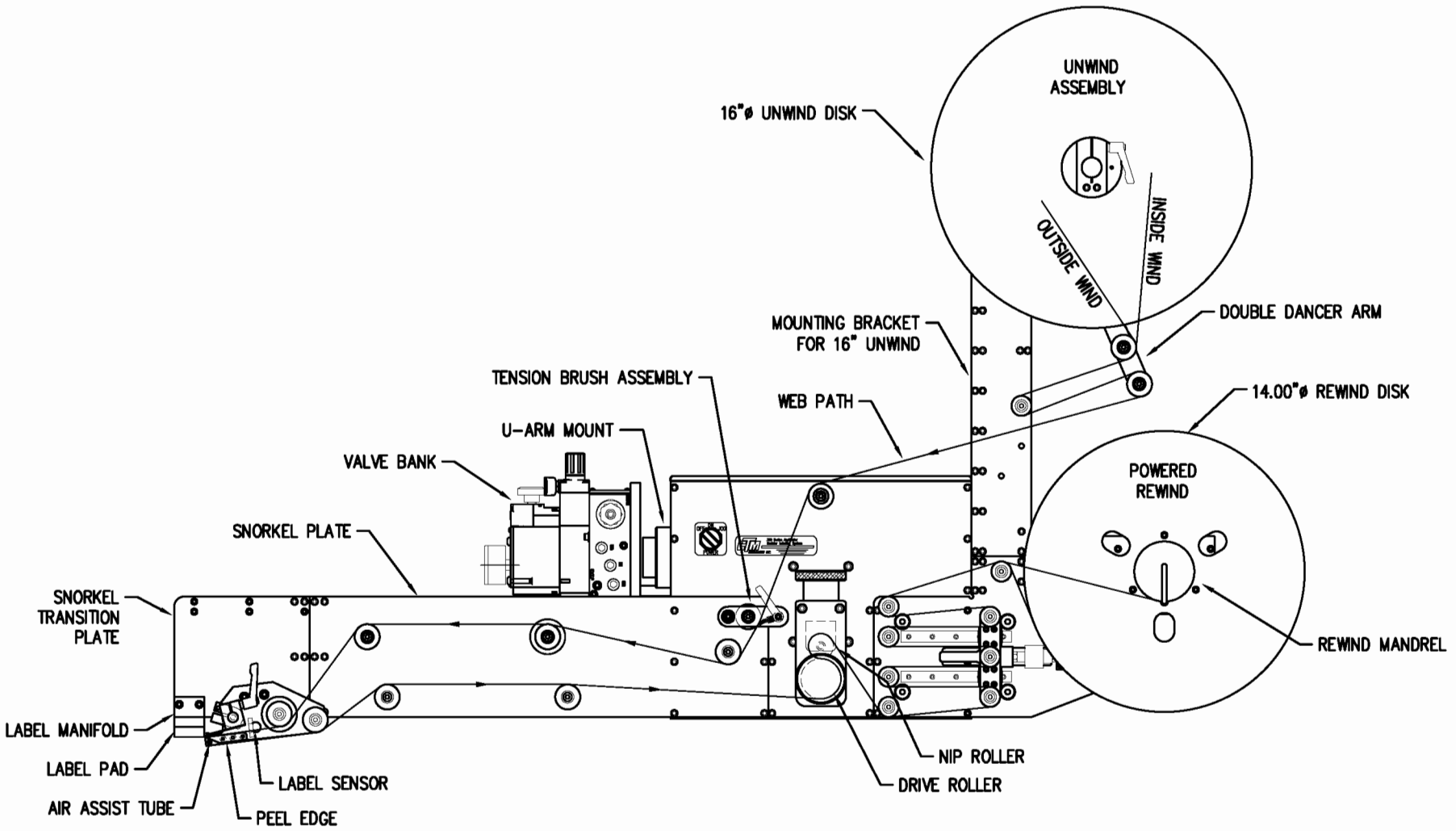
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



WEB PATH DIAGRAM

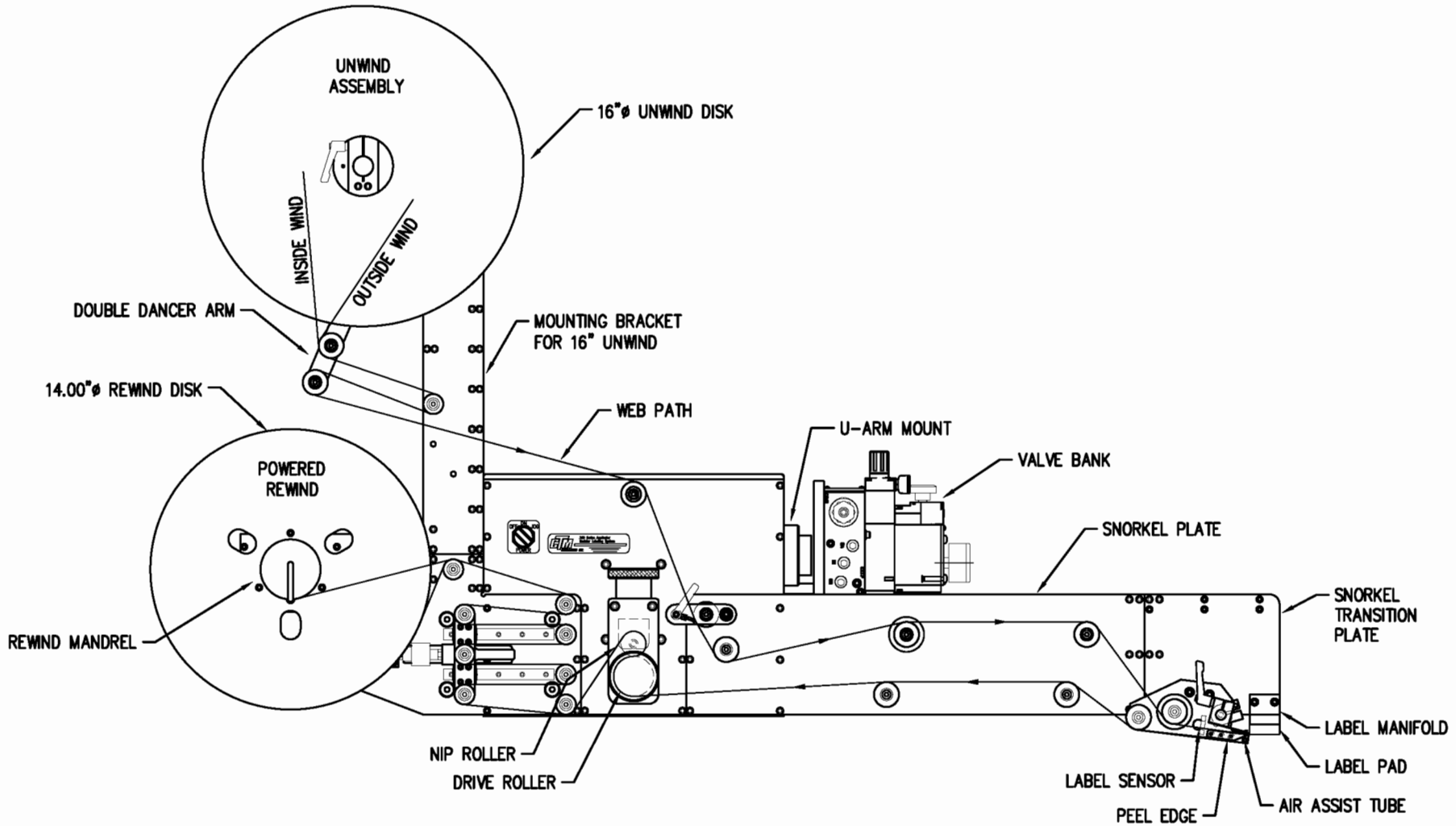
360 SERIES LEFT HAND 18/24" EXTENDED RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



NOTE: 18" SNORKEL SHOWN

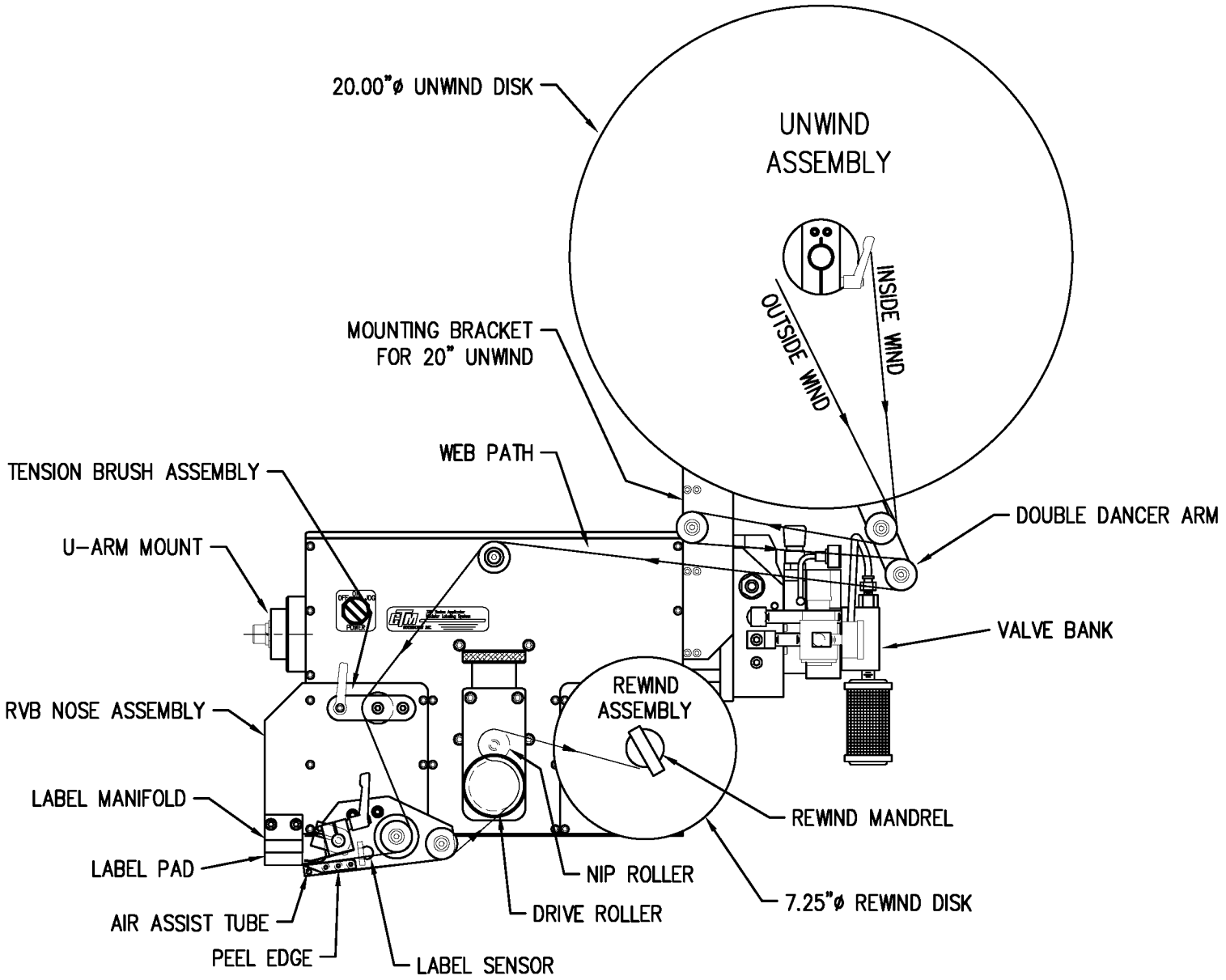
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18/24" EXTENDED RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND

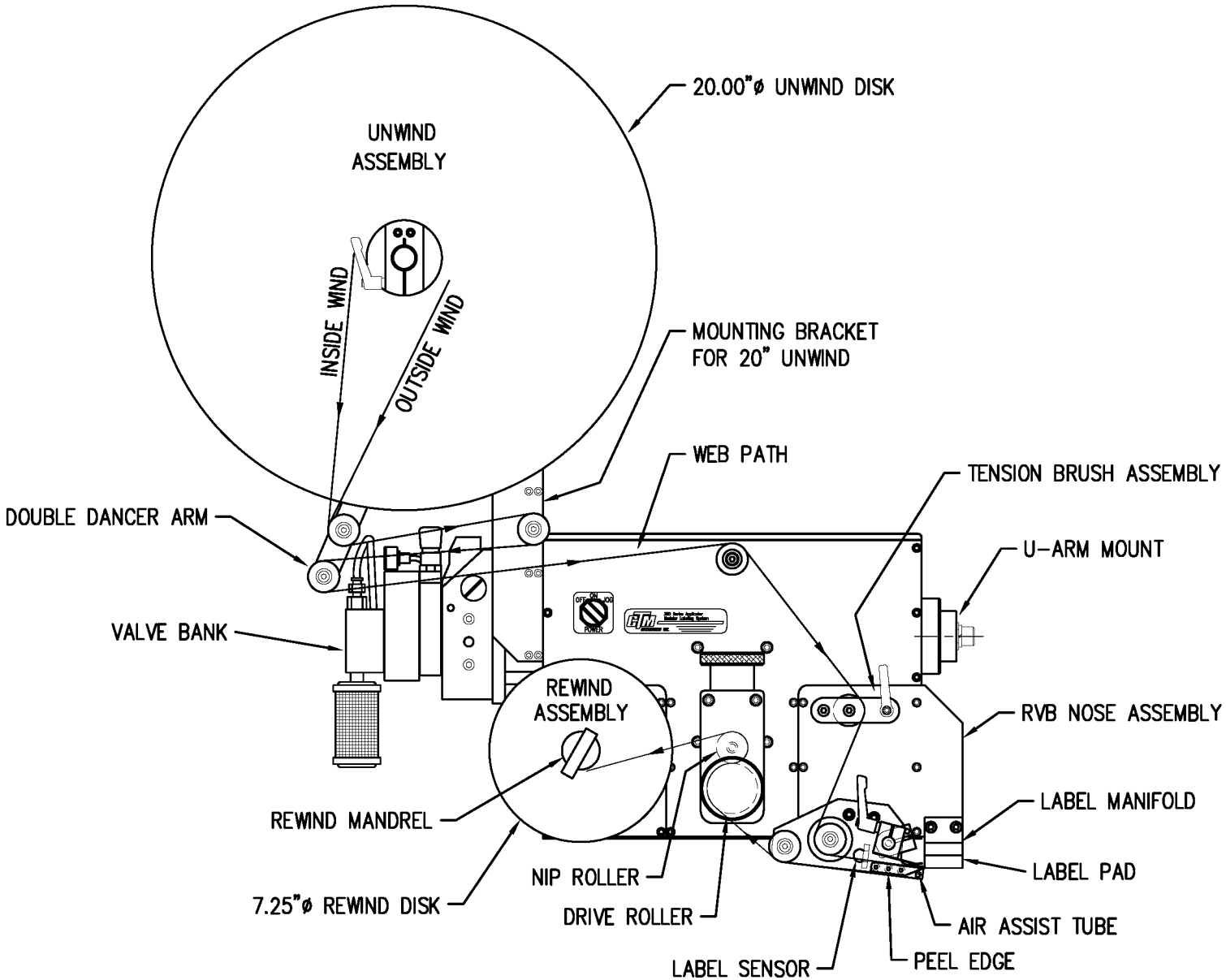


NOTE: 18" SNORKEL SHOWN

WEB PATH DIAGRAM
360 SERIES LEFT HAND RVB APPLICATOR
WITH 20" UNWIND

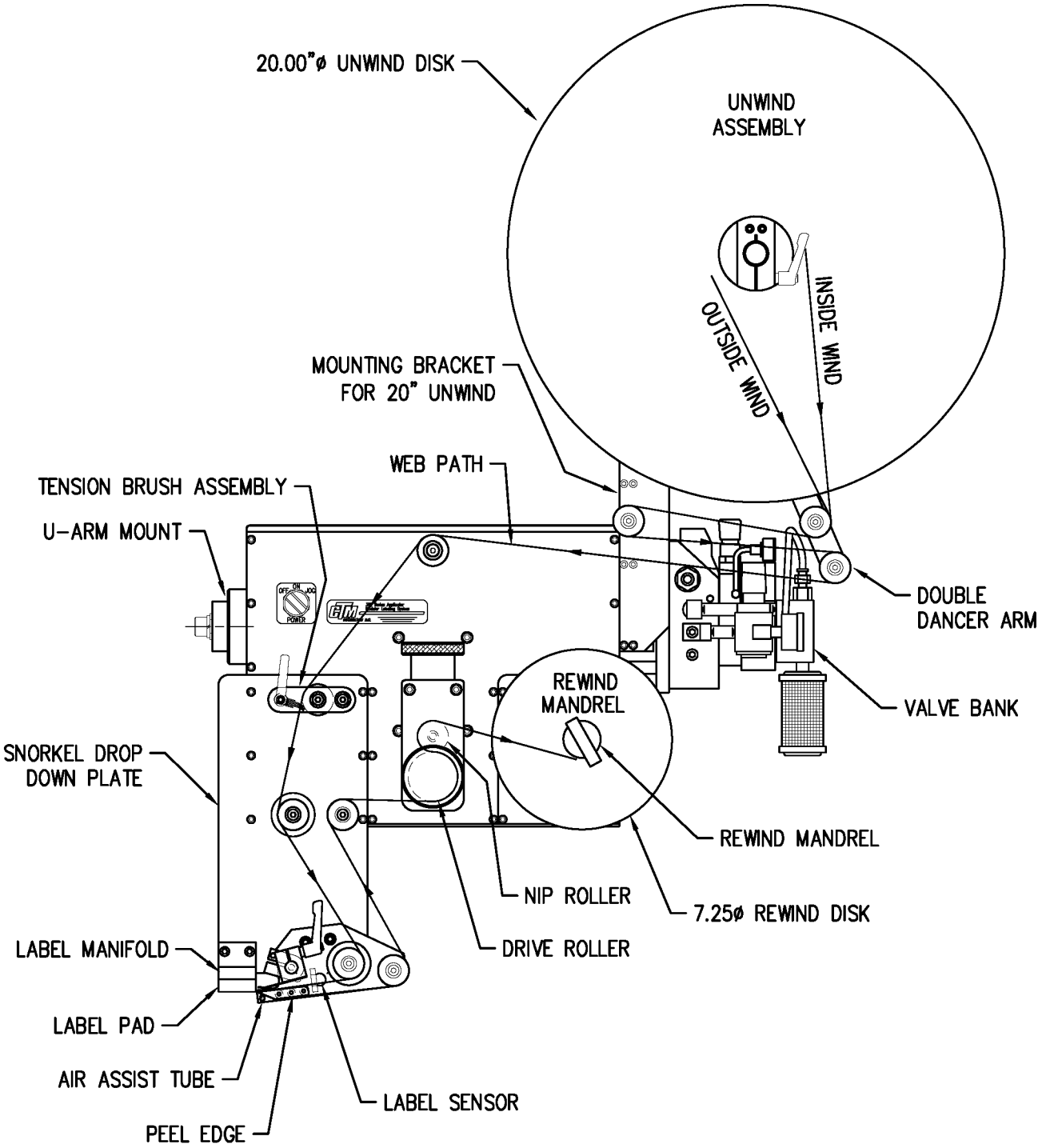


WEB PATH DIAGRAM
360 SERIES RIGHT HAND RVB APPLICATOR
WITH 20" UNWIND



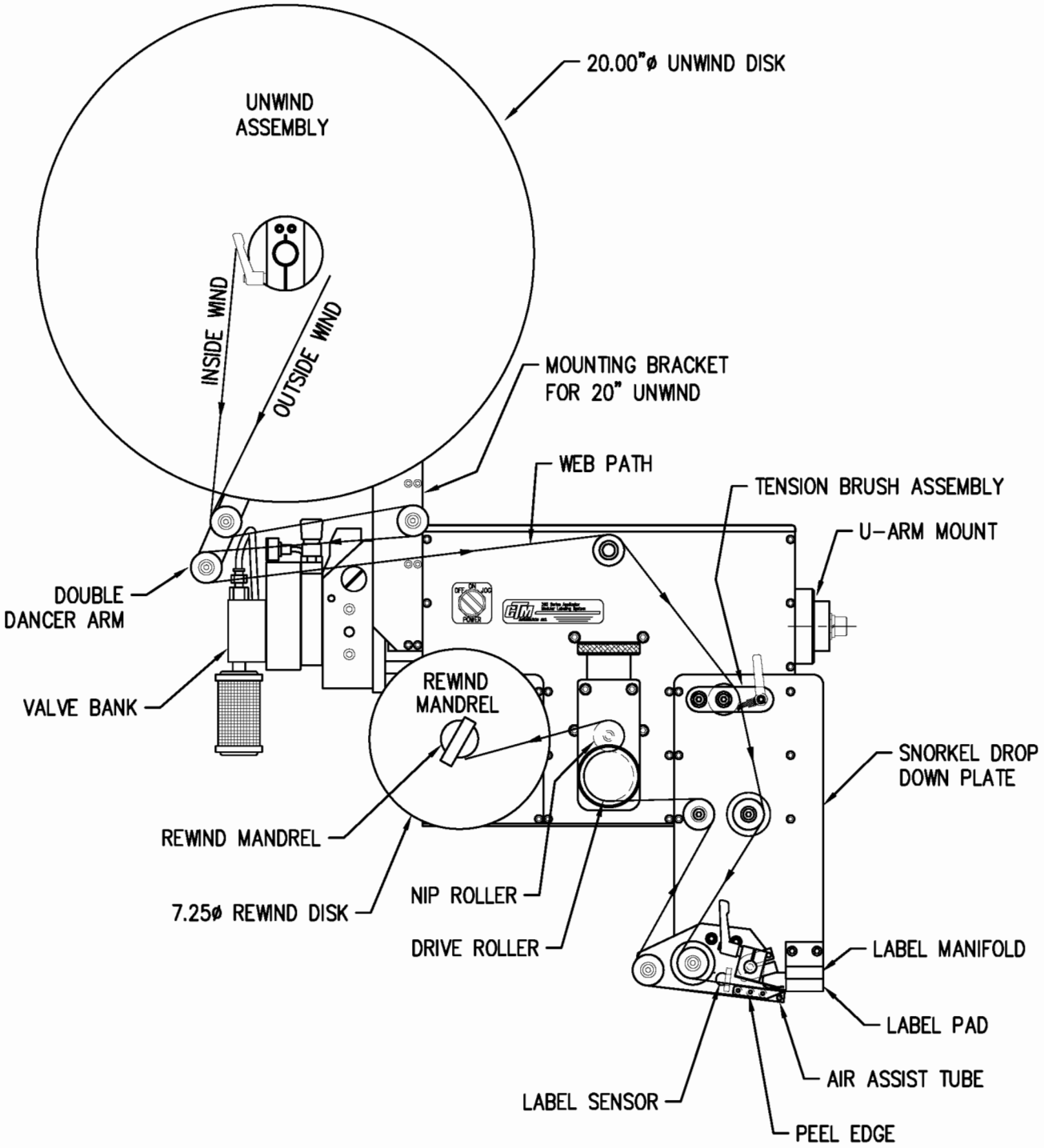
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



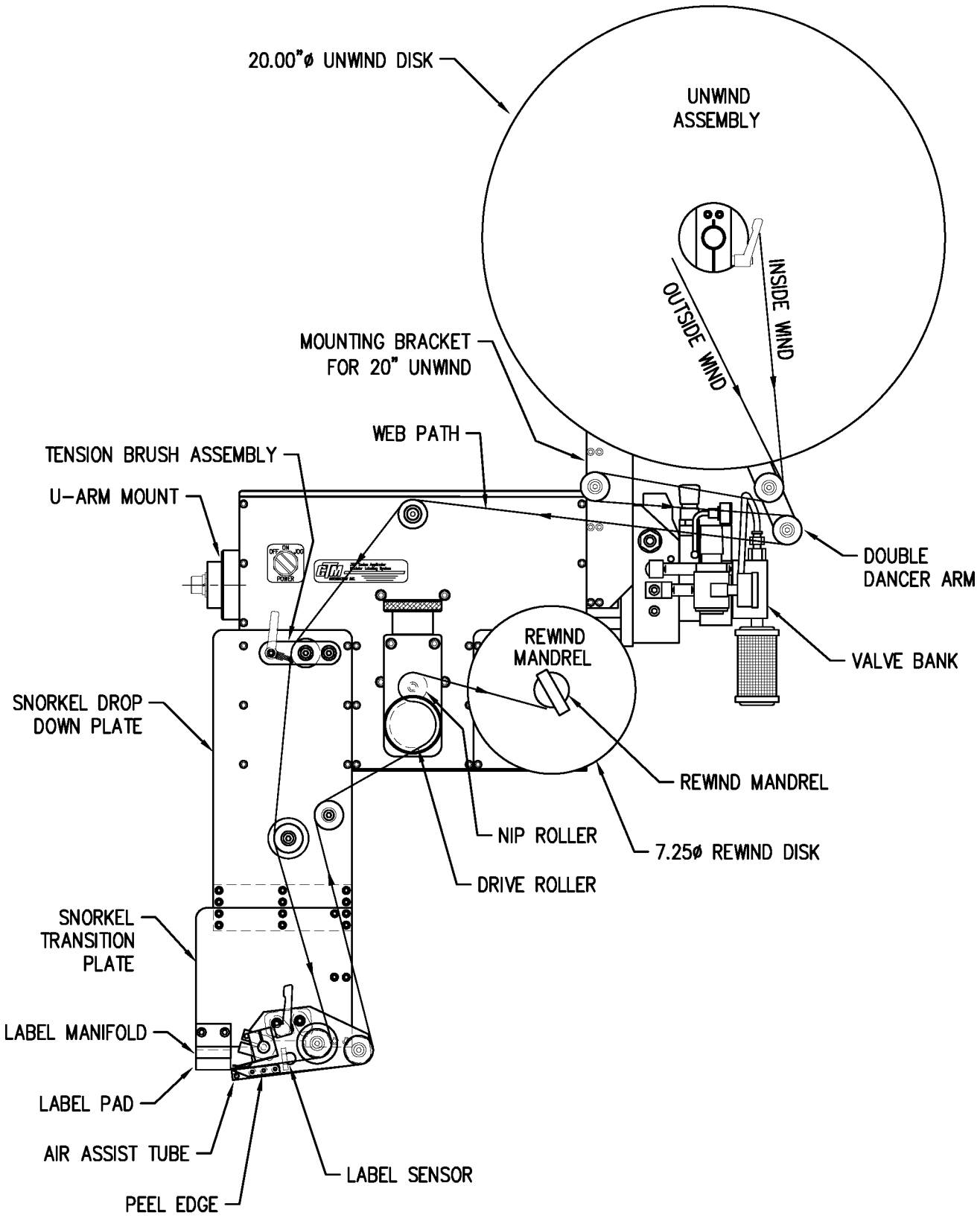
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



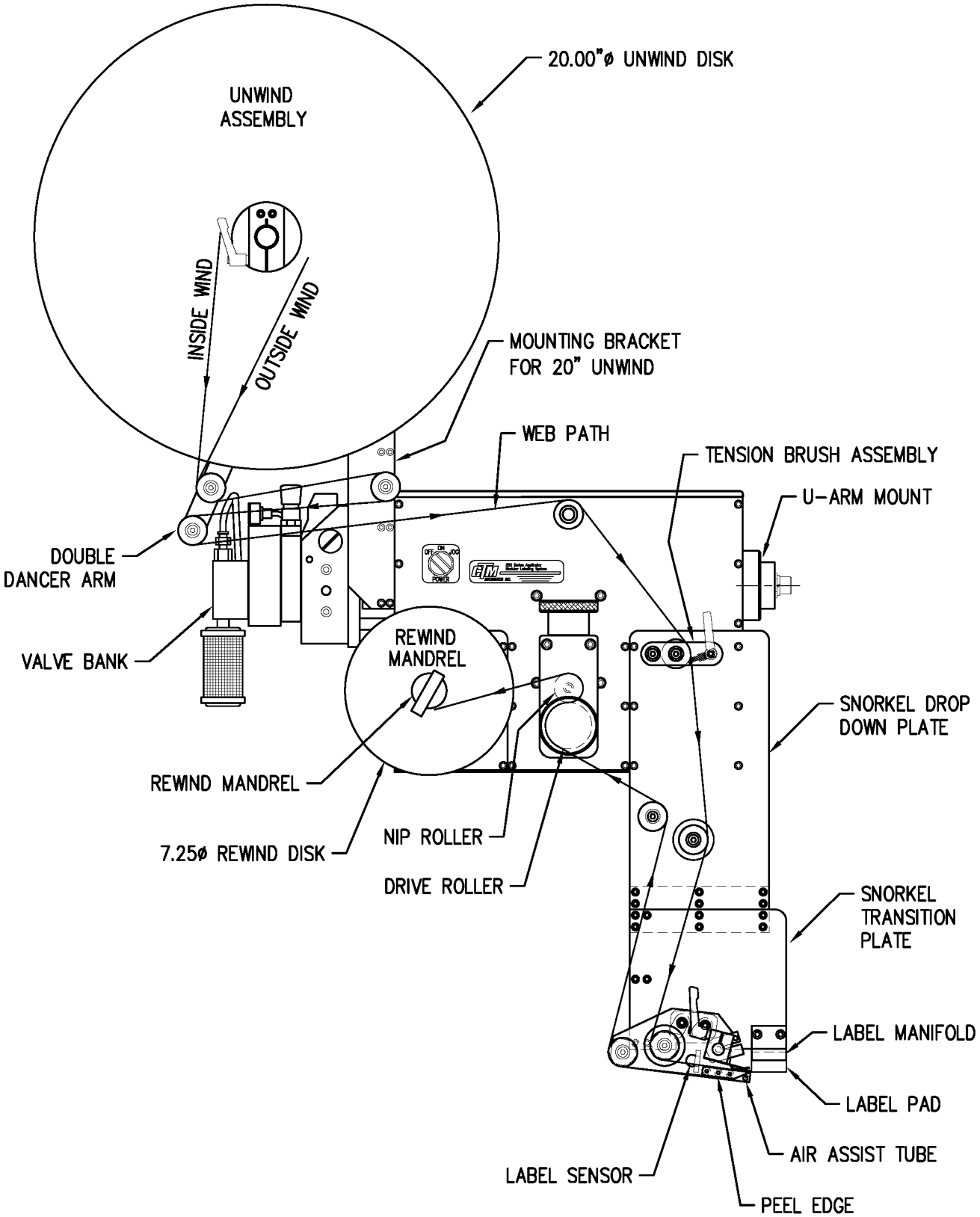
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



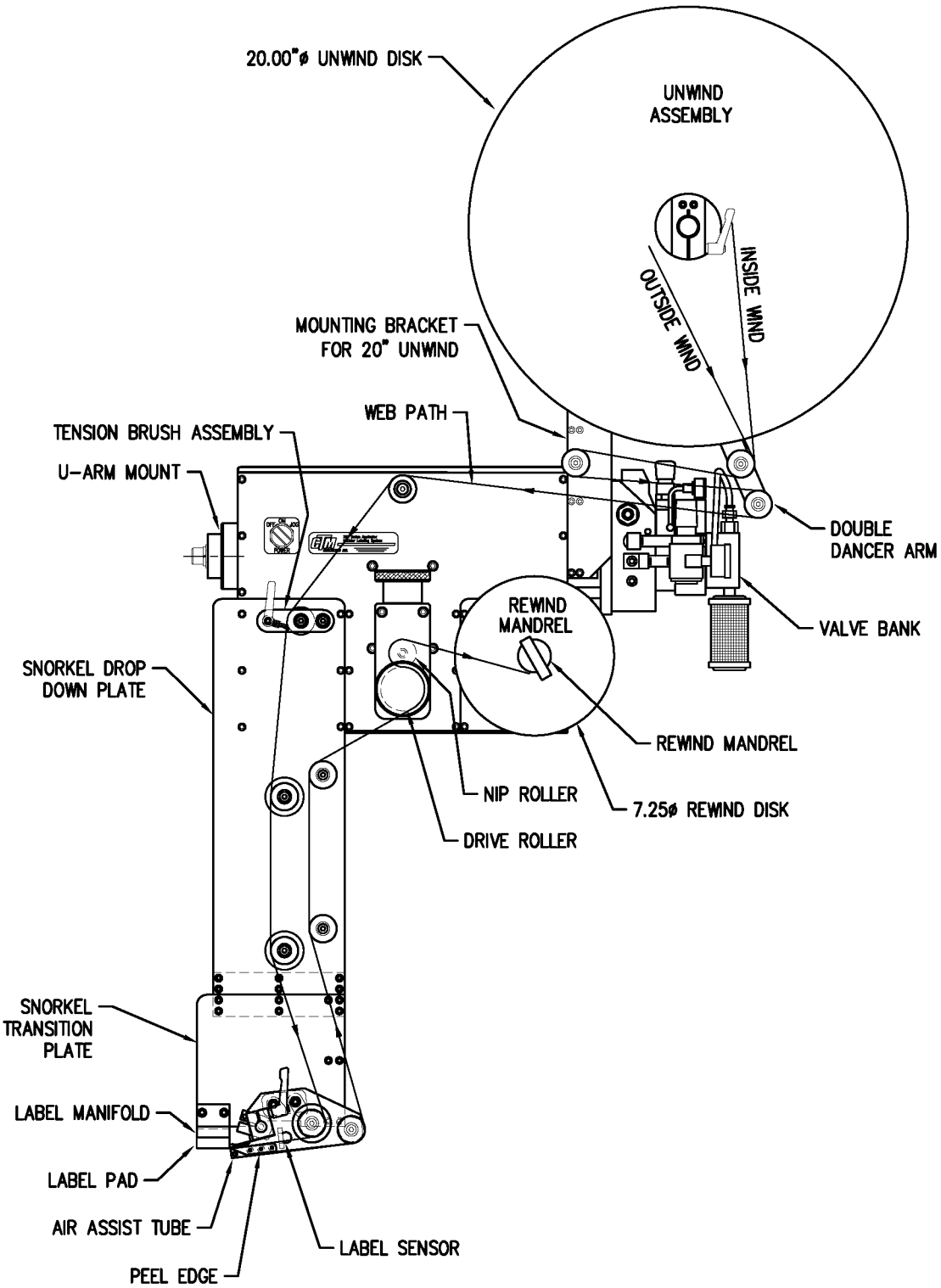
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



WEB PATH DIAGRAM

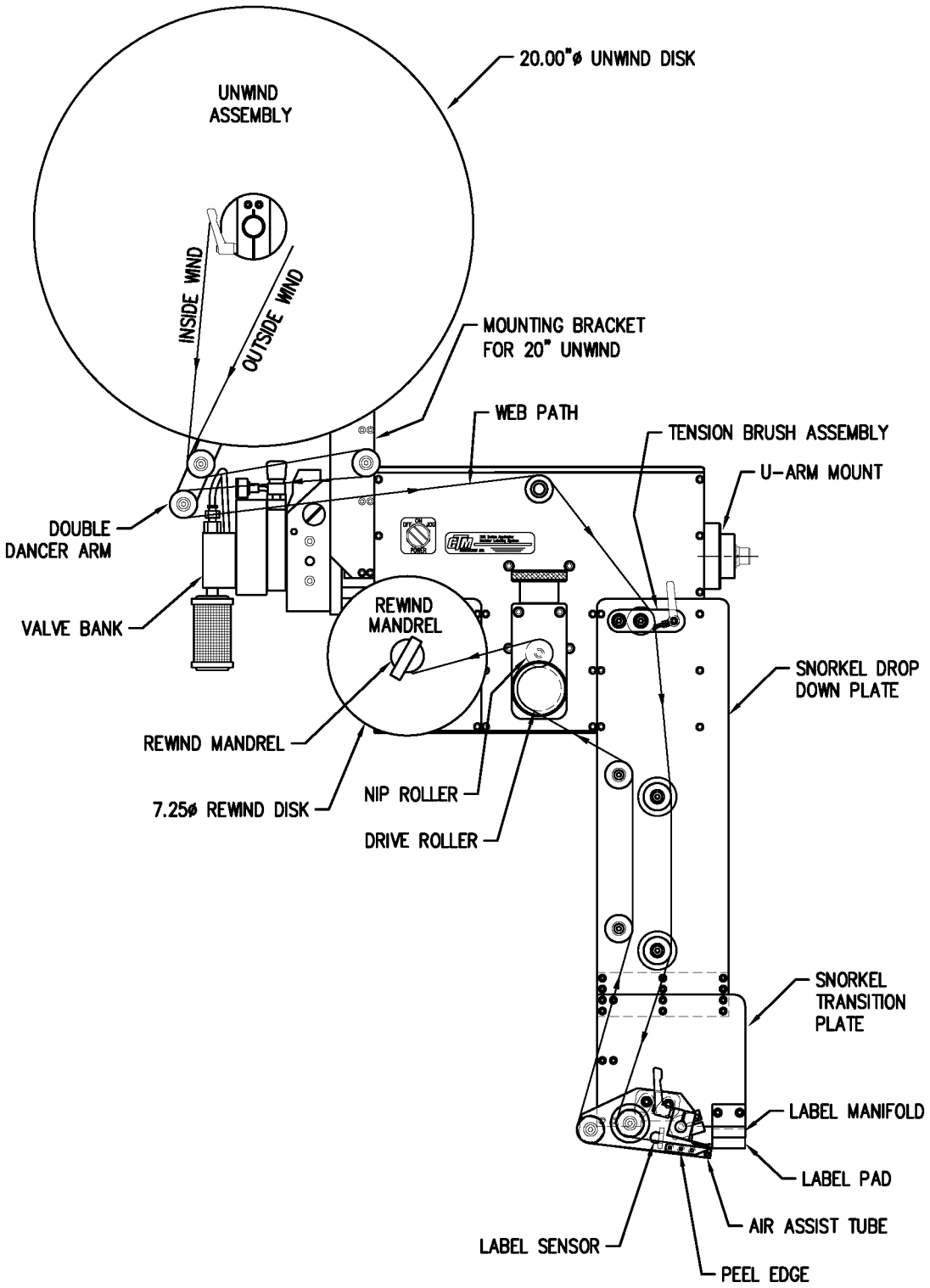
360 SERIES LEFT HAND 12" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND



NOTE: 18" SNORKEL SHOWN

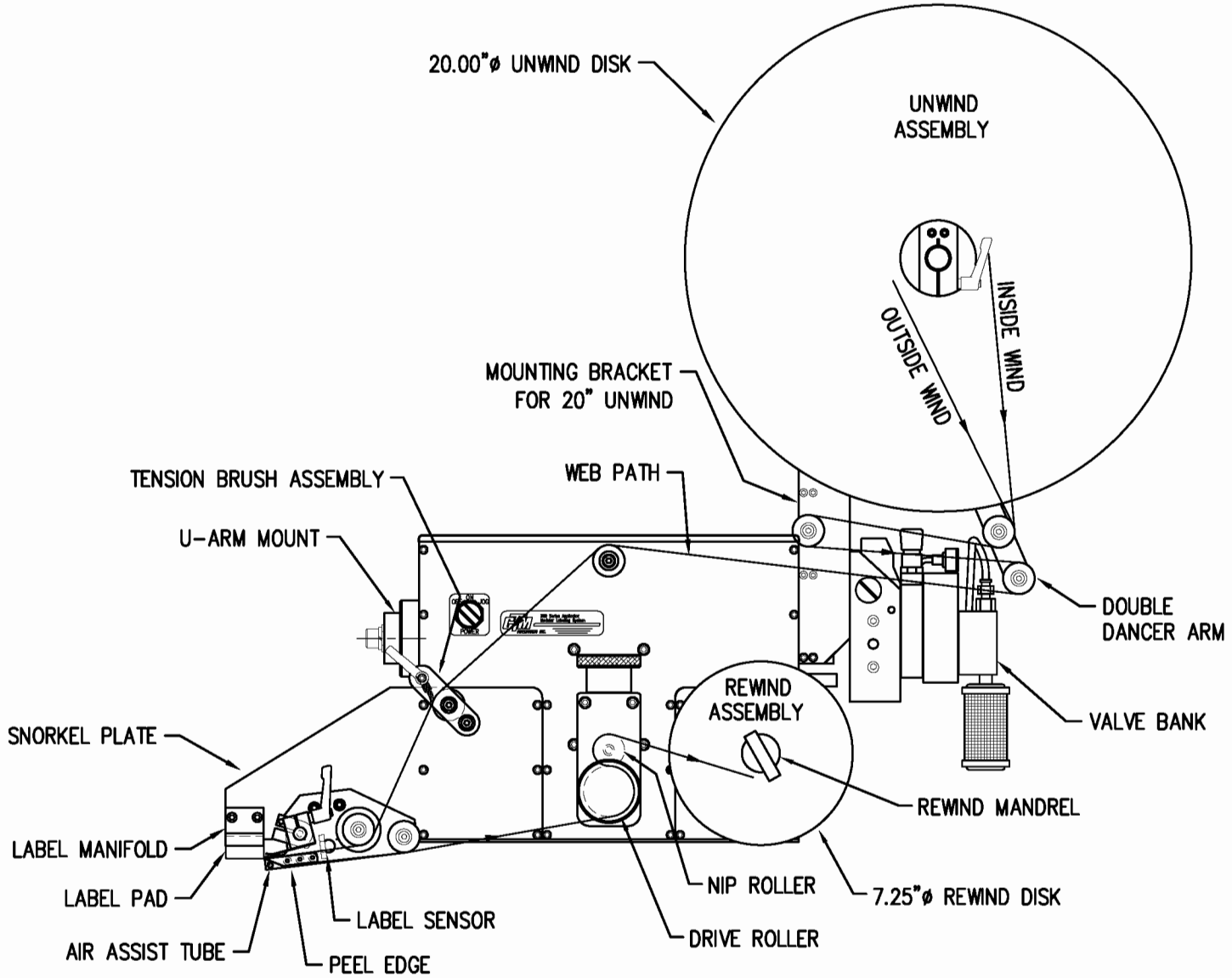
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN RVB APPLICATOR WITH 16" UNWIND & POWERED REWIND

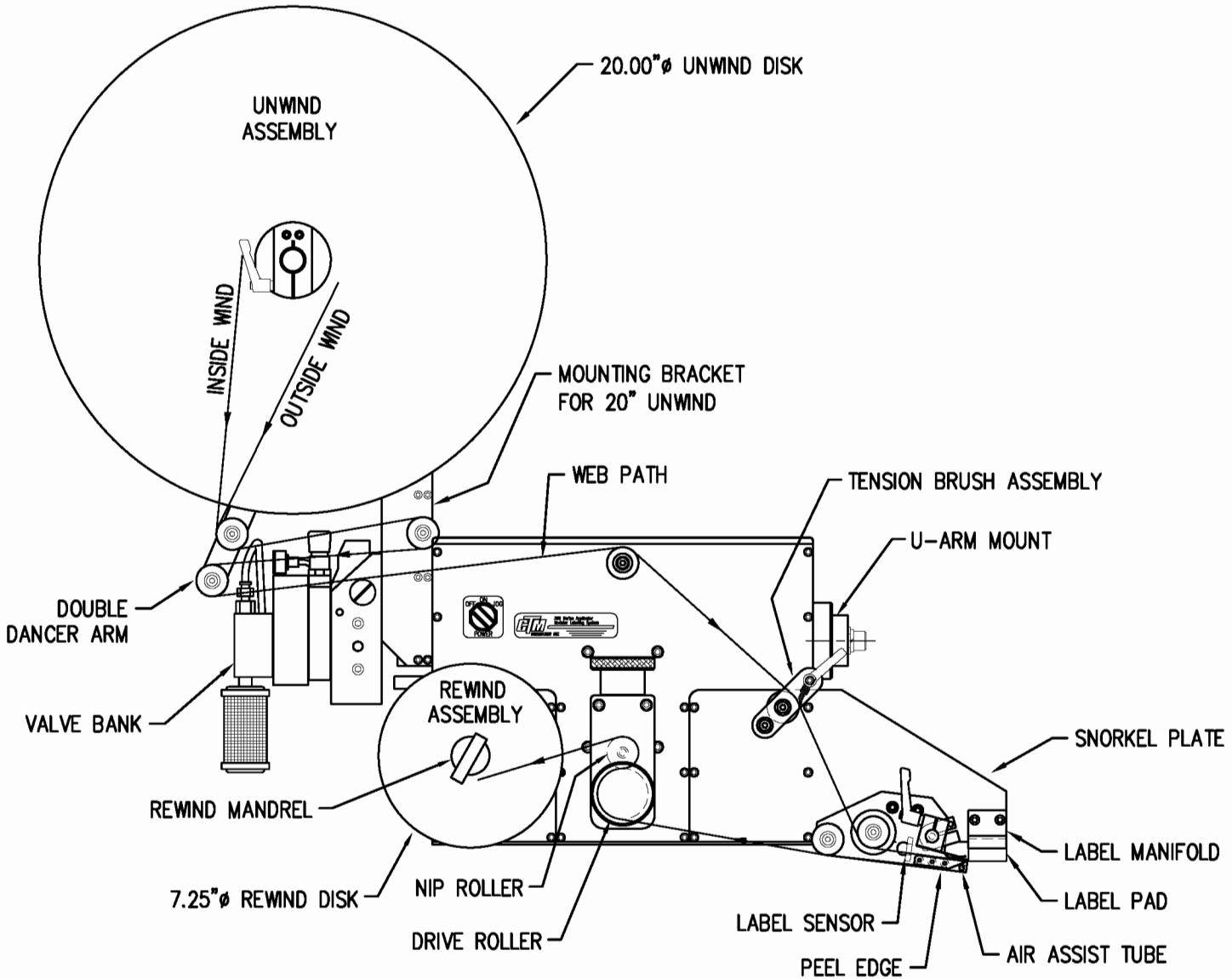


NOTE: 18" SNORKEL SHOWN

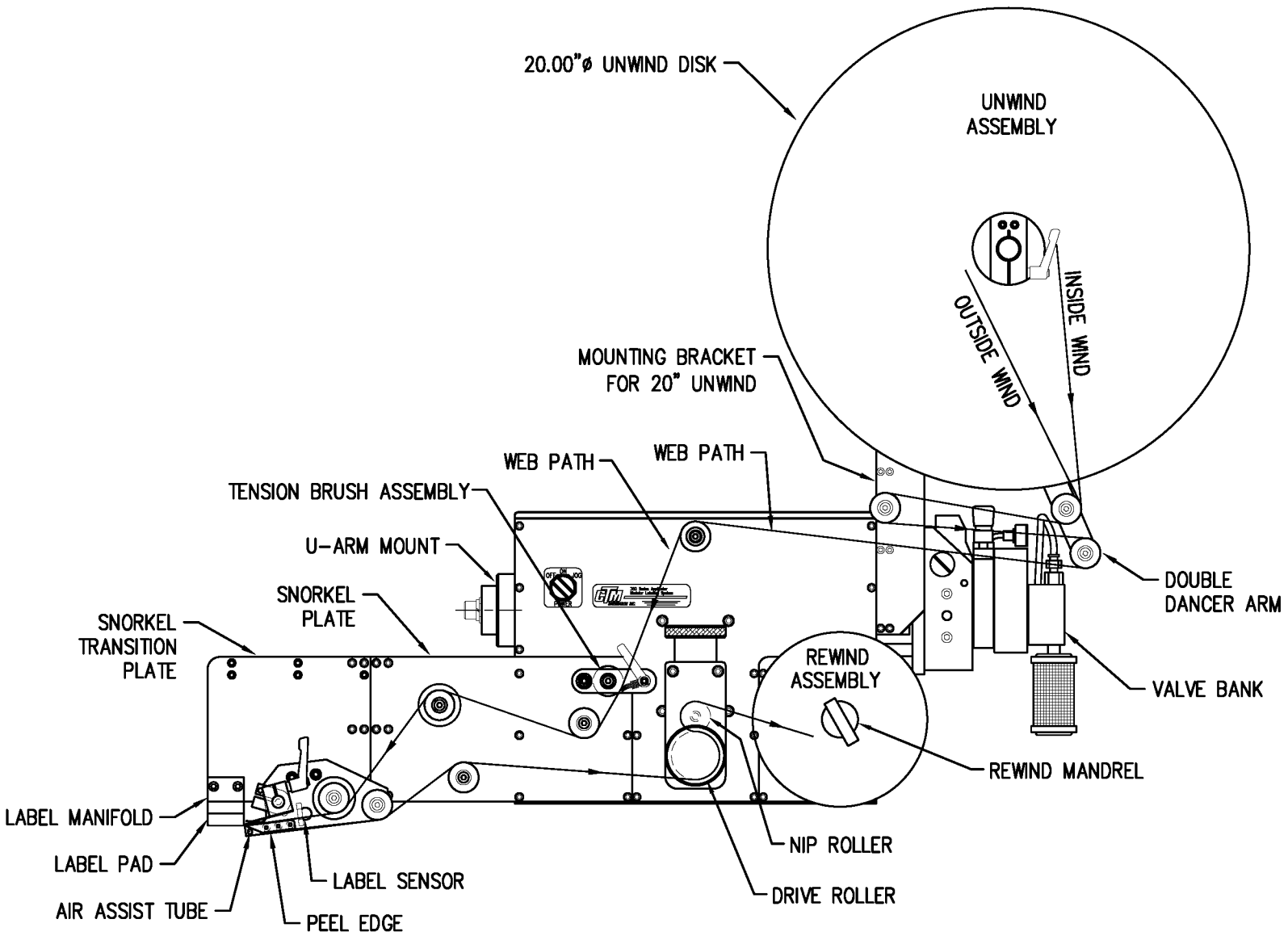
WEB PATH DIAGRAM
360 SERIES LEFT HAND 6" EXTENDED RVB APPLICATOR WITH 20" UNWIND



WEB PATH DIAGRAM
360 SERIES RIGHT HAND 6" EXTENDED RVB APPLICATOR WITH 20" UNWIND

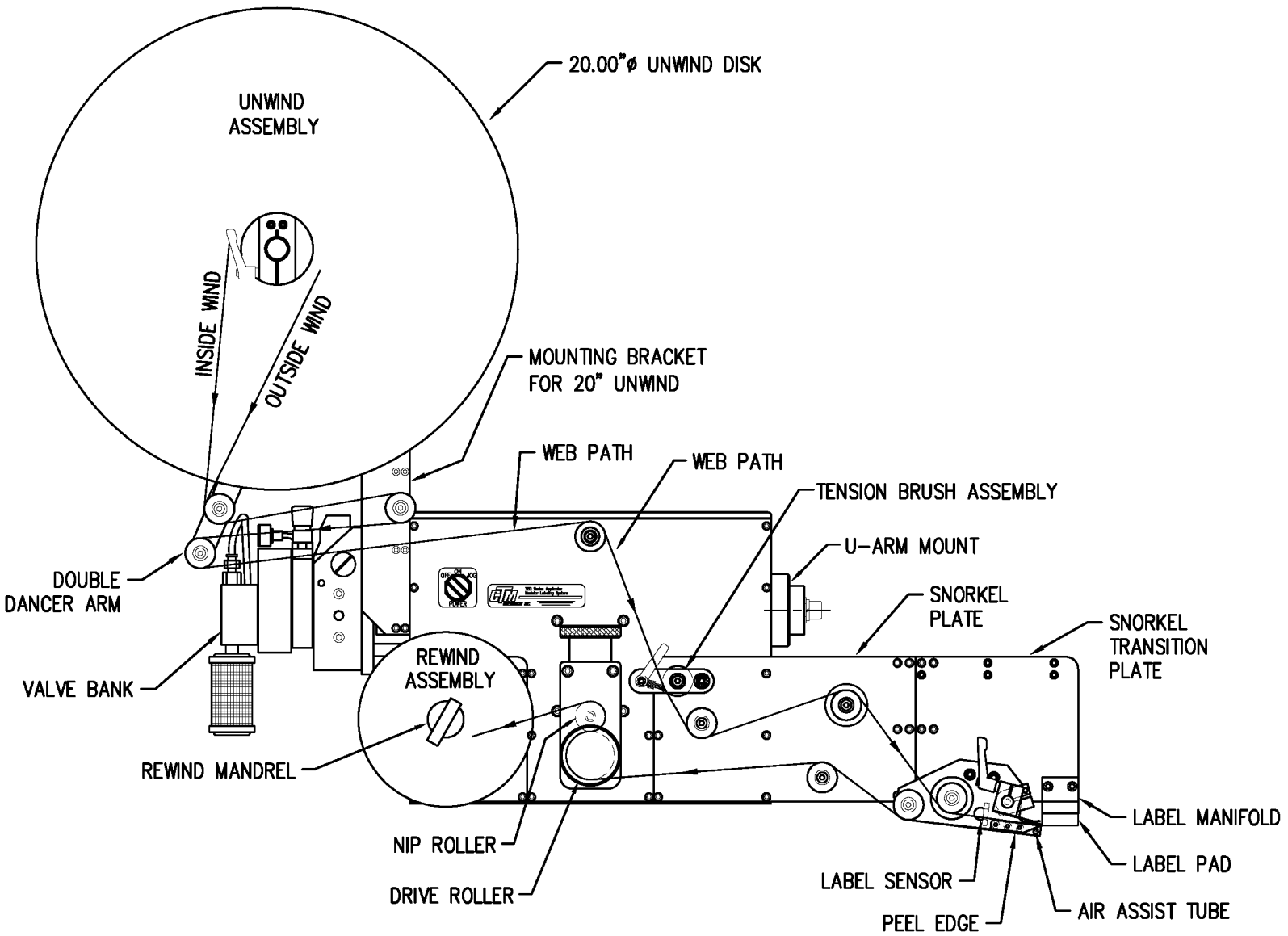


WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED RVB APPLICATOR WITH 20" UNWIND



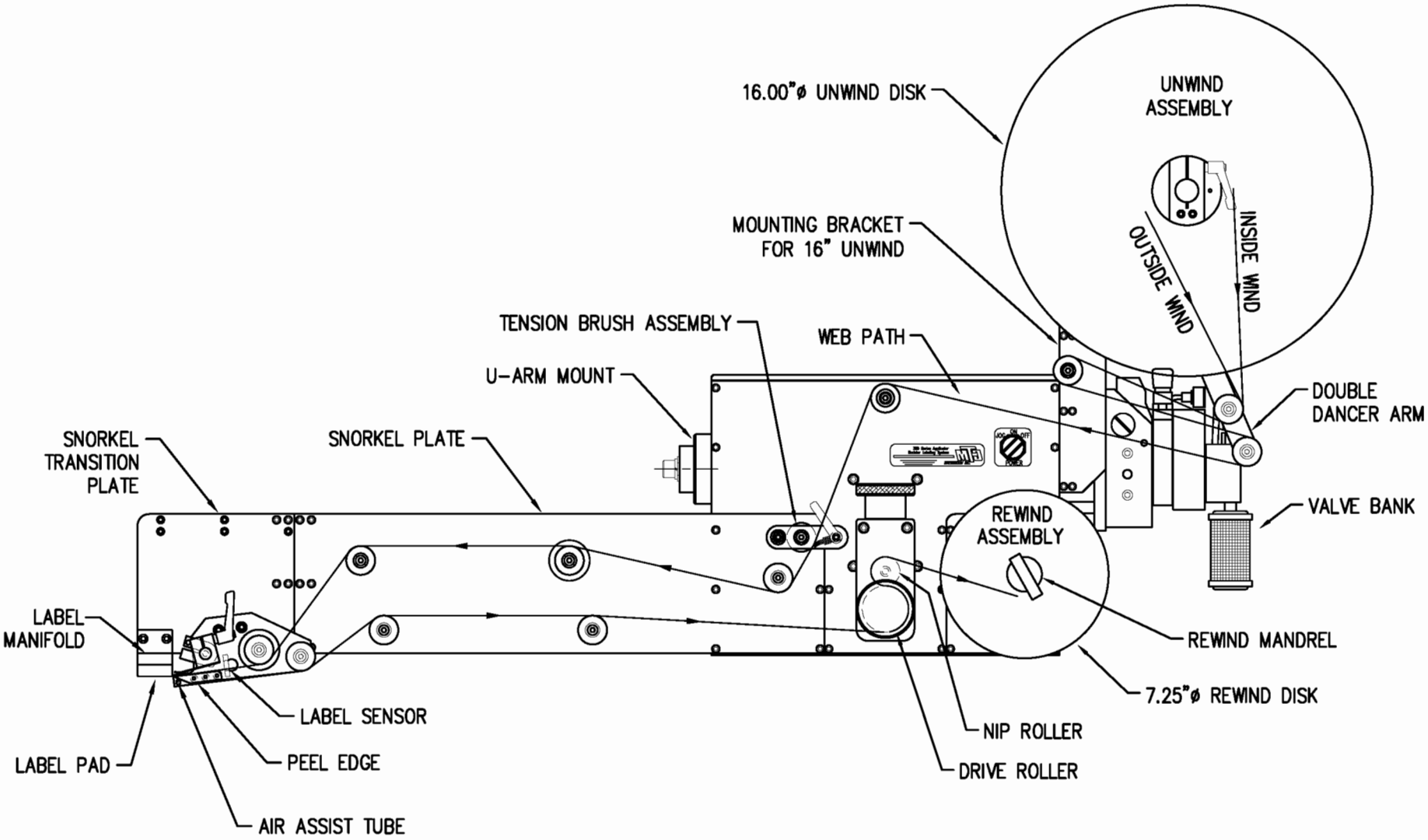
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED RVB APPLICATOR WITH 20" UNWIND



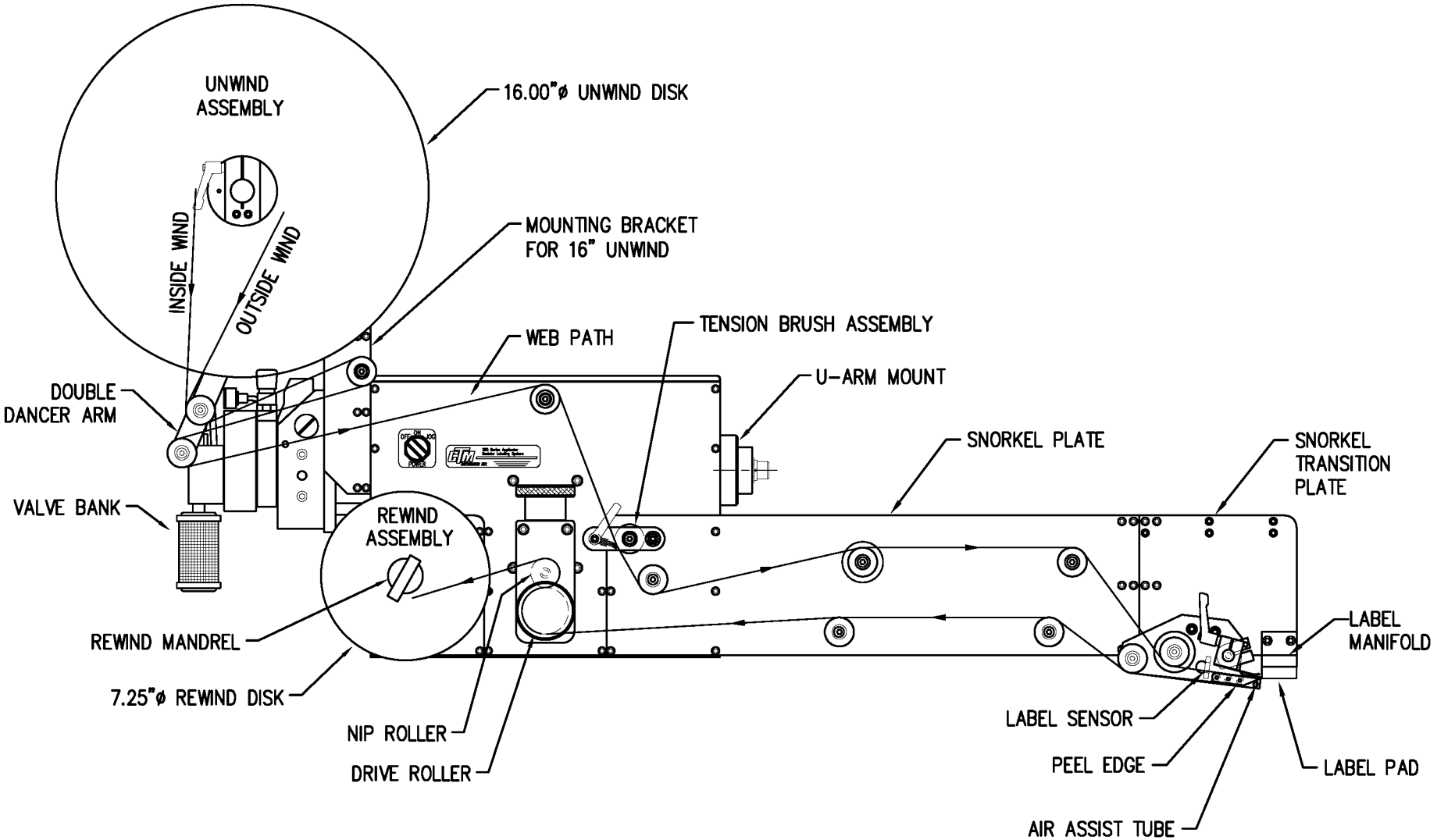
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18/24" EXTENDED RVB APPLICATOR WITH 20" UNWIND



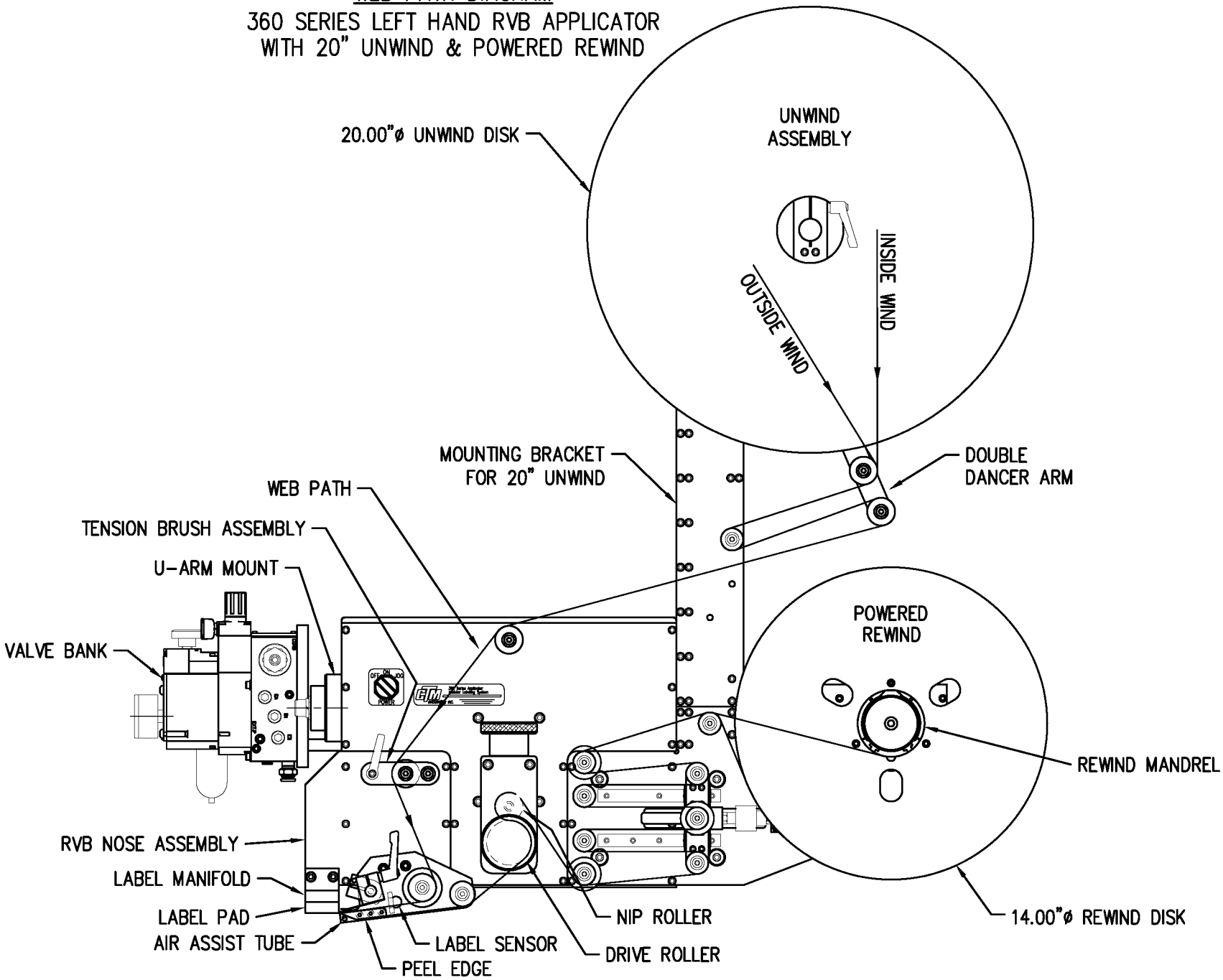
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18/24" EXTENDED RVB APPLICATOR WITH 20" UNWIND



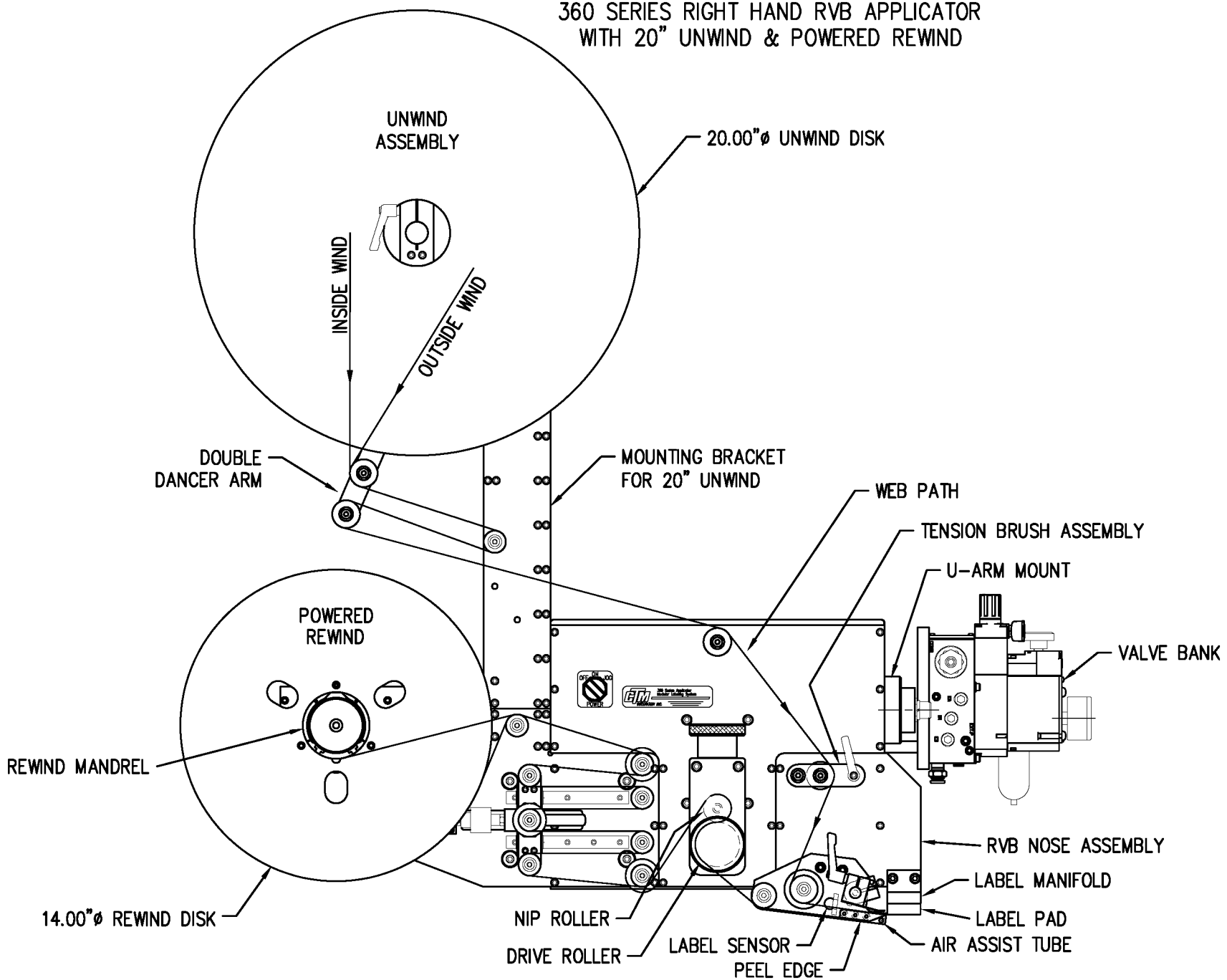
WEB PATH DIAGRAM

360 SERIES LEFT HAND RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



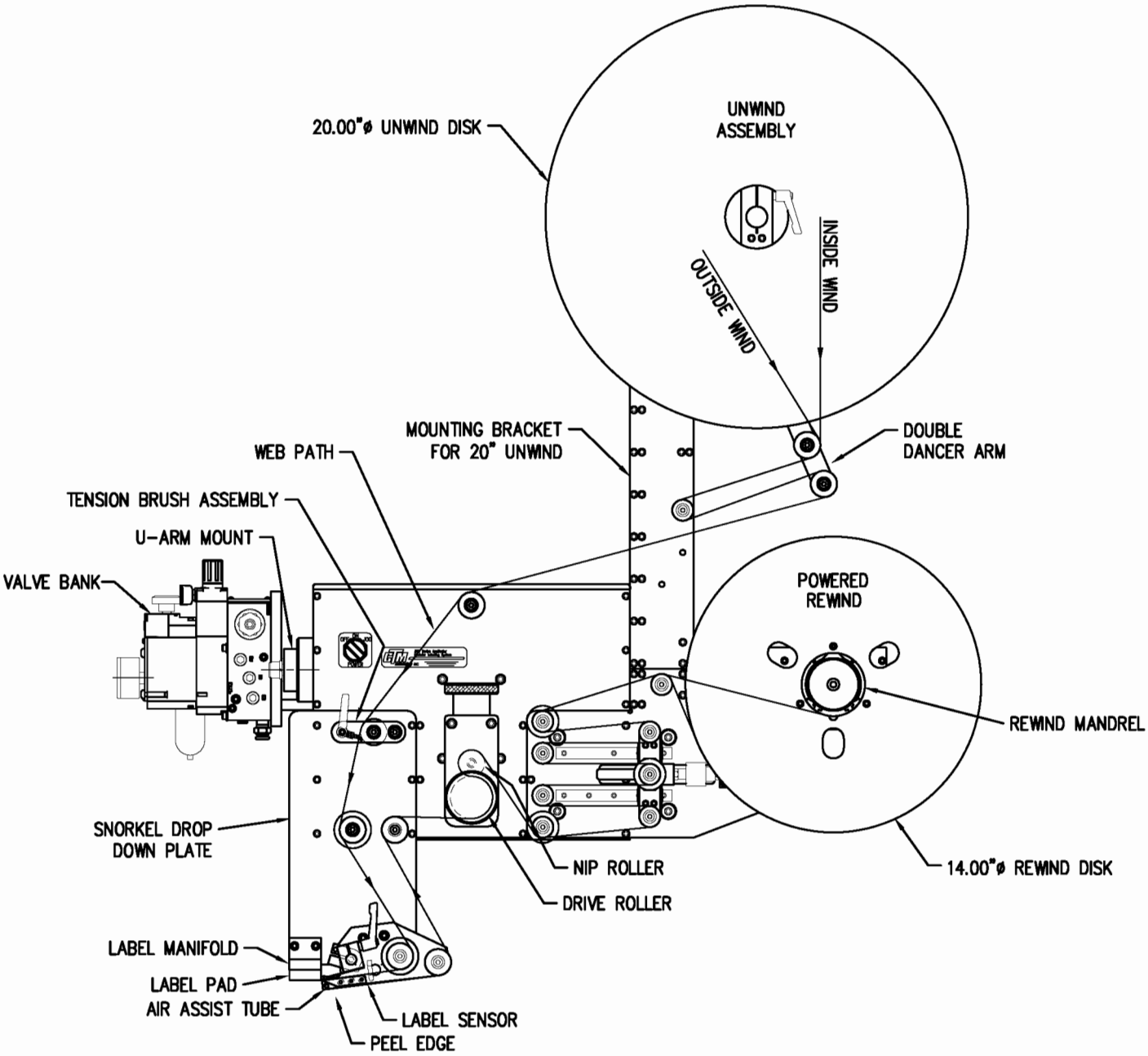
WEB PATH DIAGRAM

360 SERIES RIGHT HAND RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



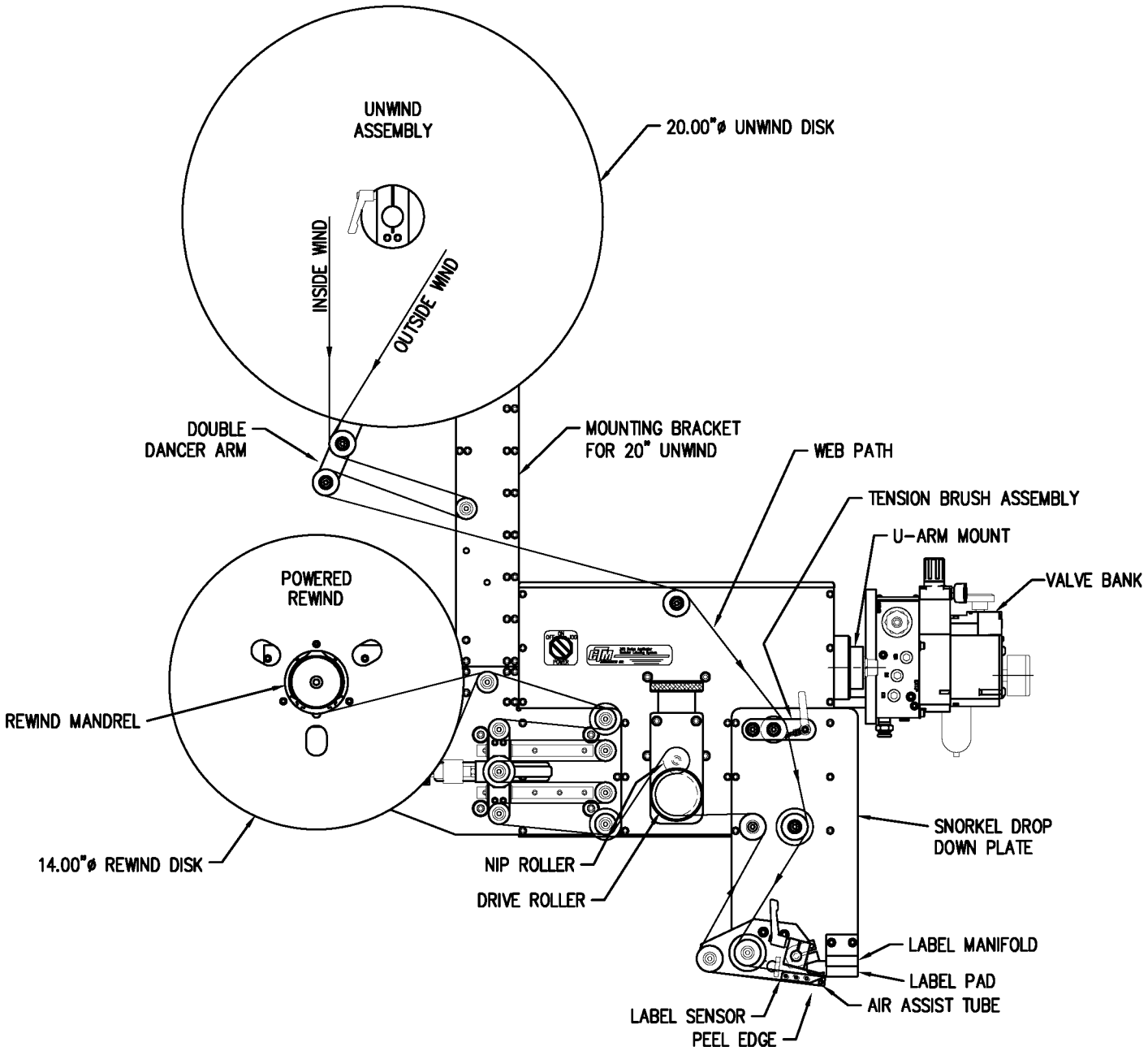
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



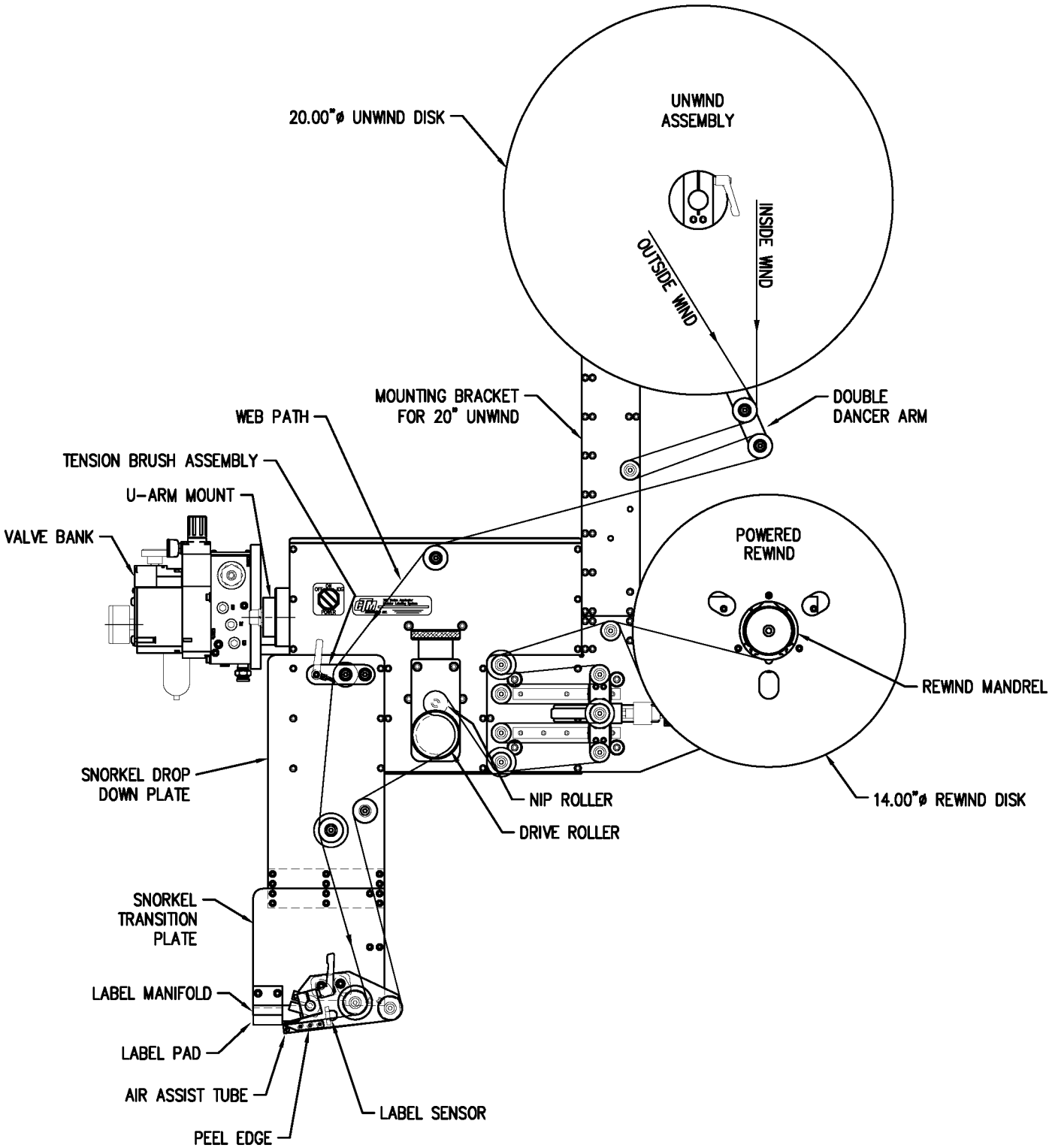
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



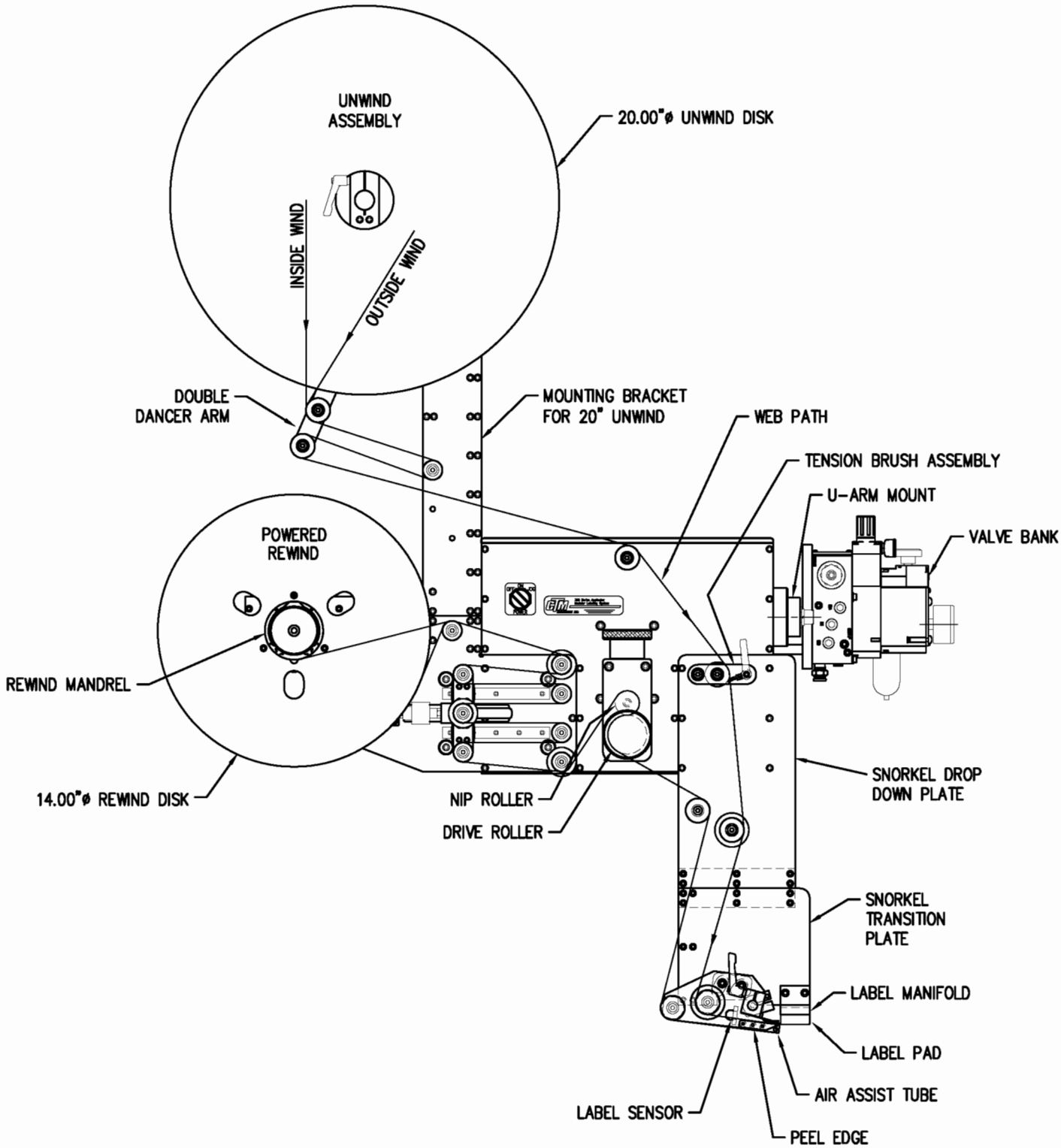
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



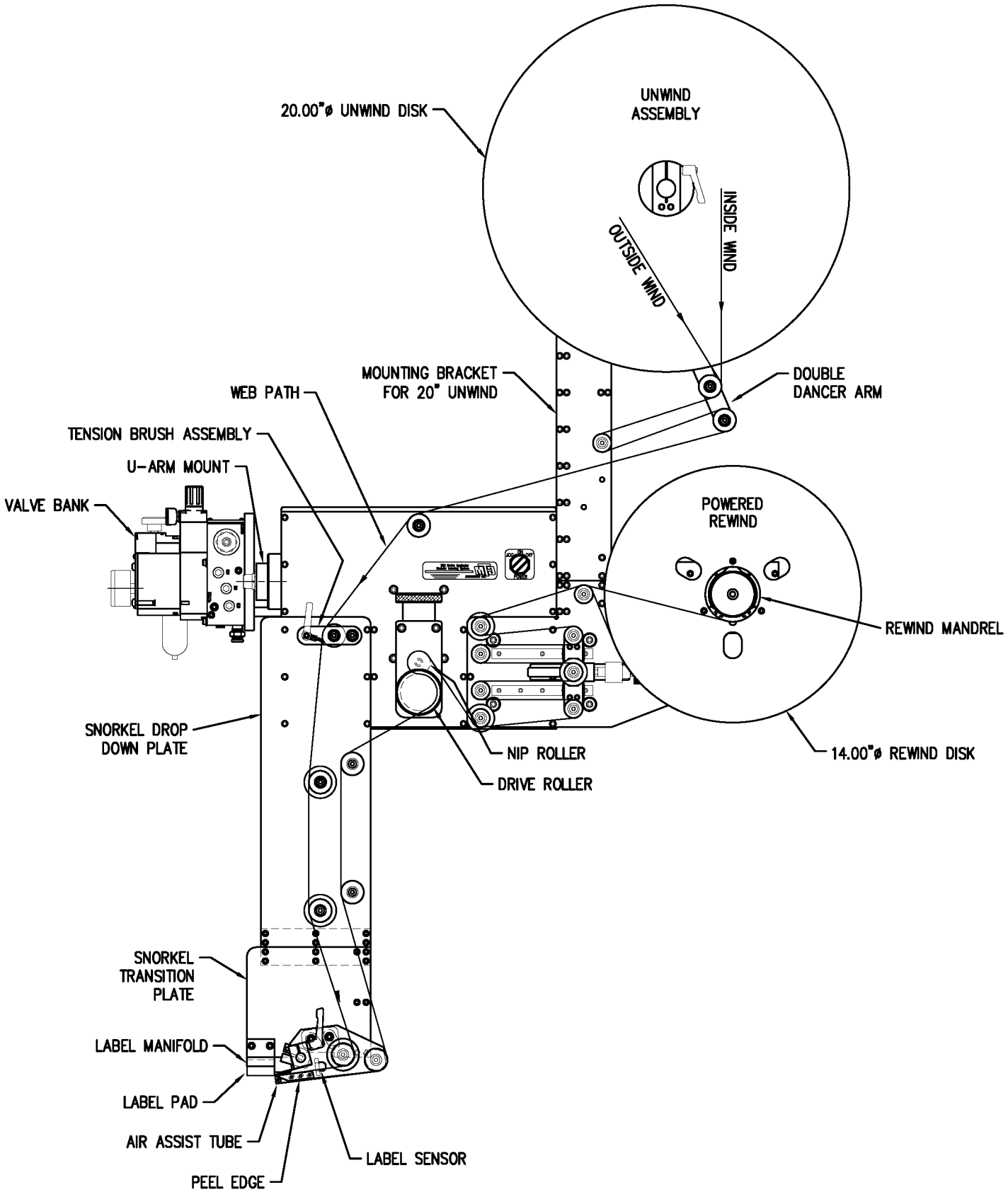
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



WEB PATH DIAGRAM

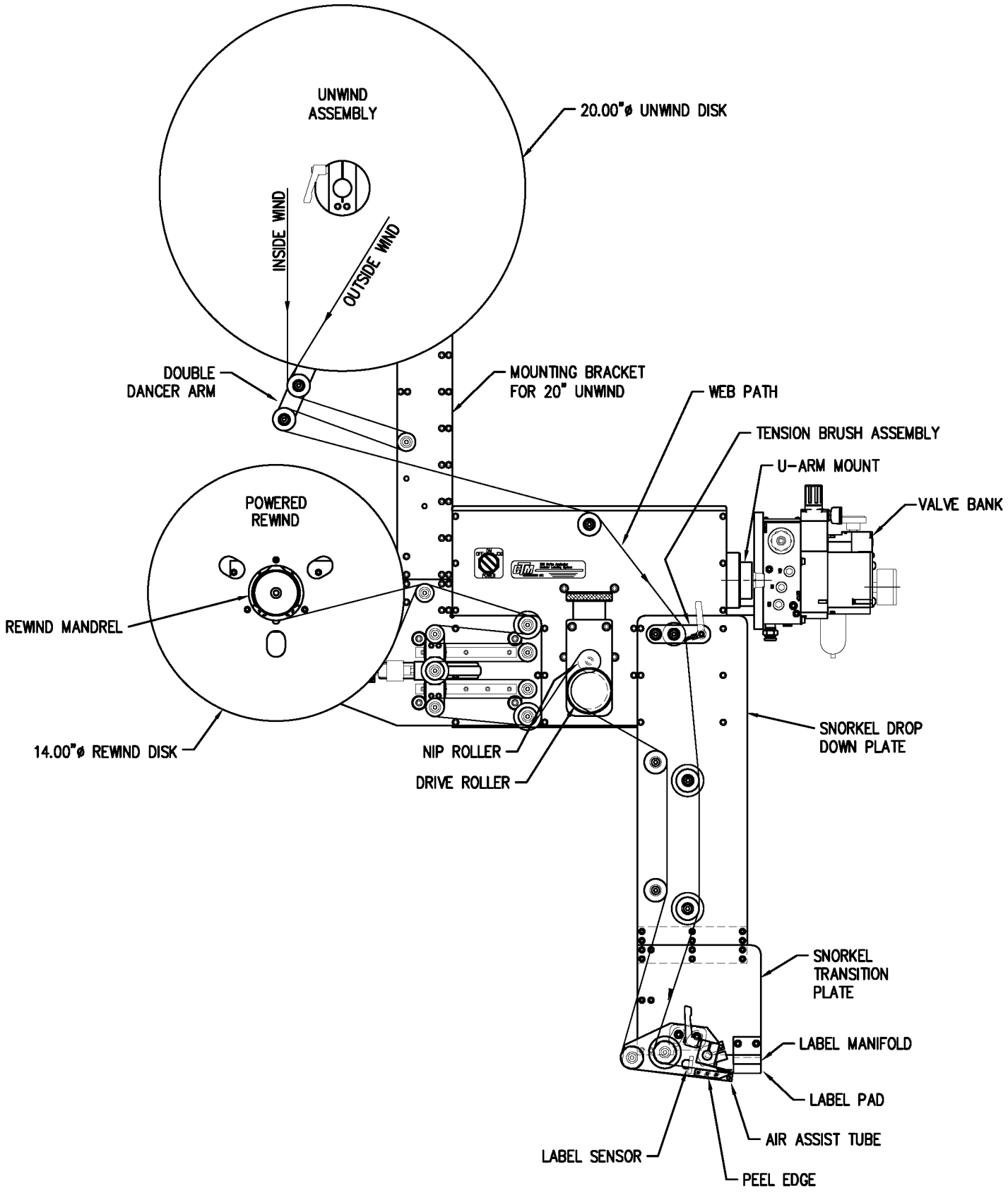
360 SERIES LEFT HAND 18"/24" DROP DOWN RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



NOTE: 18" SNORKEL SHOWN

WEB PATH DIAGRAM

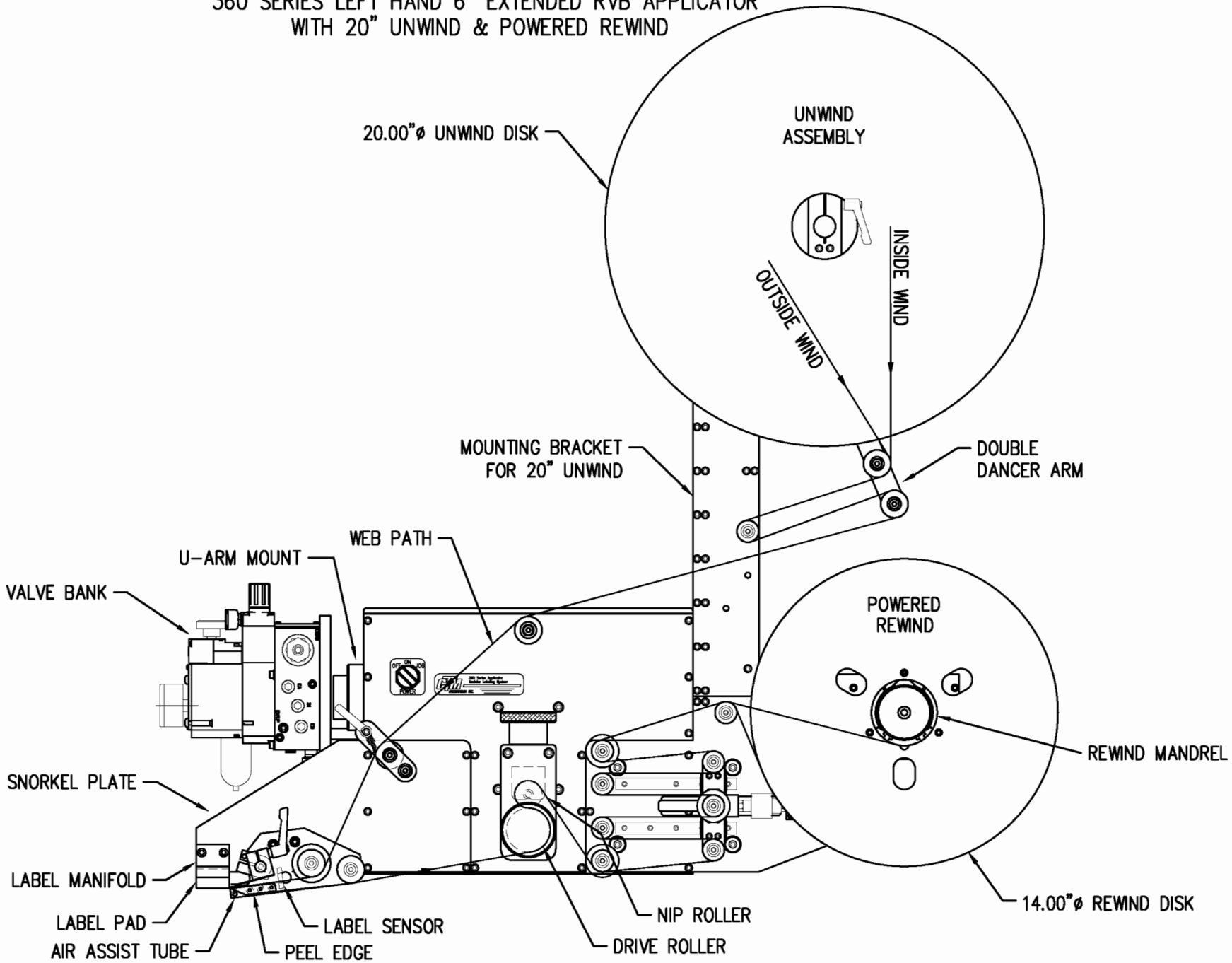
360 SERIES LEFT HAND 18"/24" DROP DOWN RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



NOTE: 18" SNORKEL SHOWN

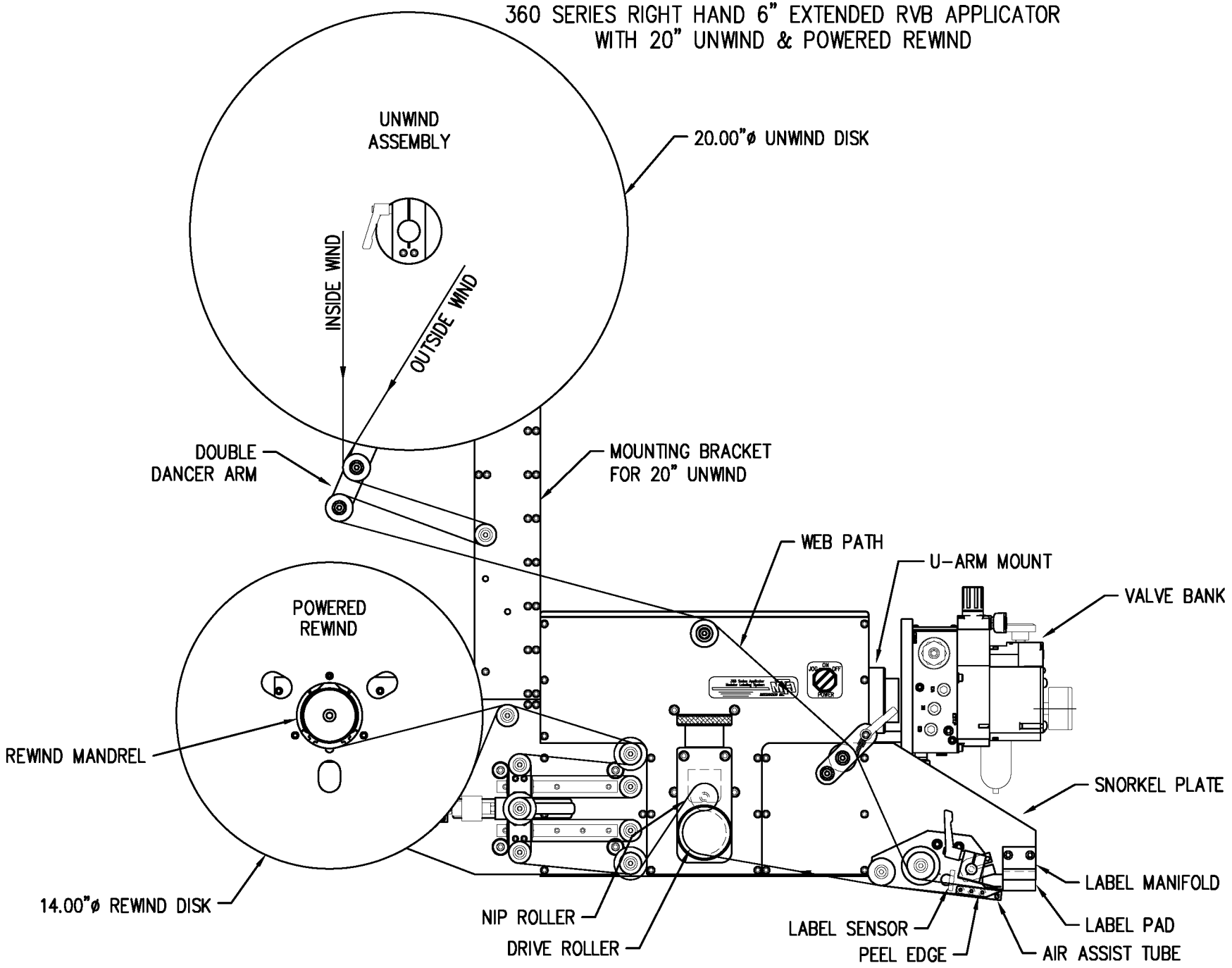
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" EXTENDED RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



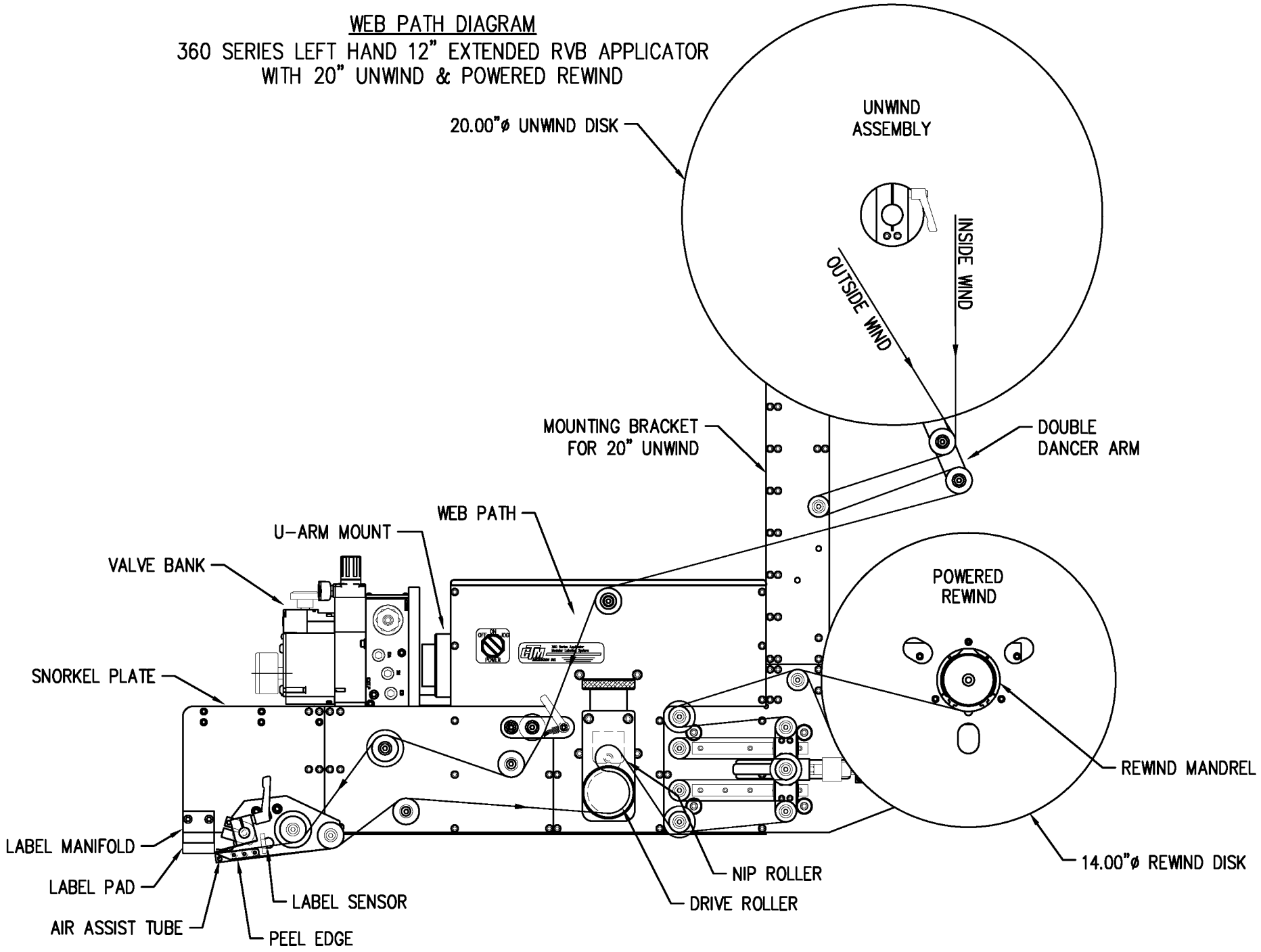
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" EXTENDED RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



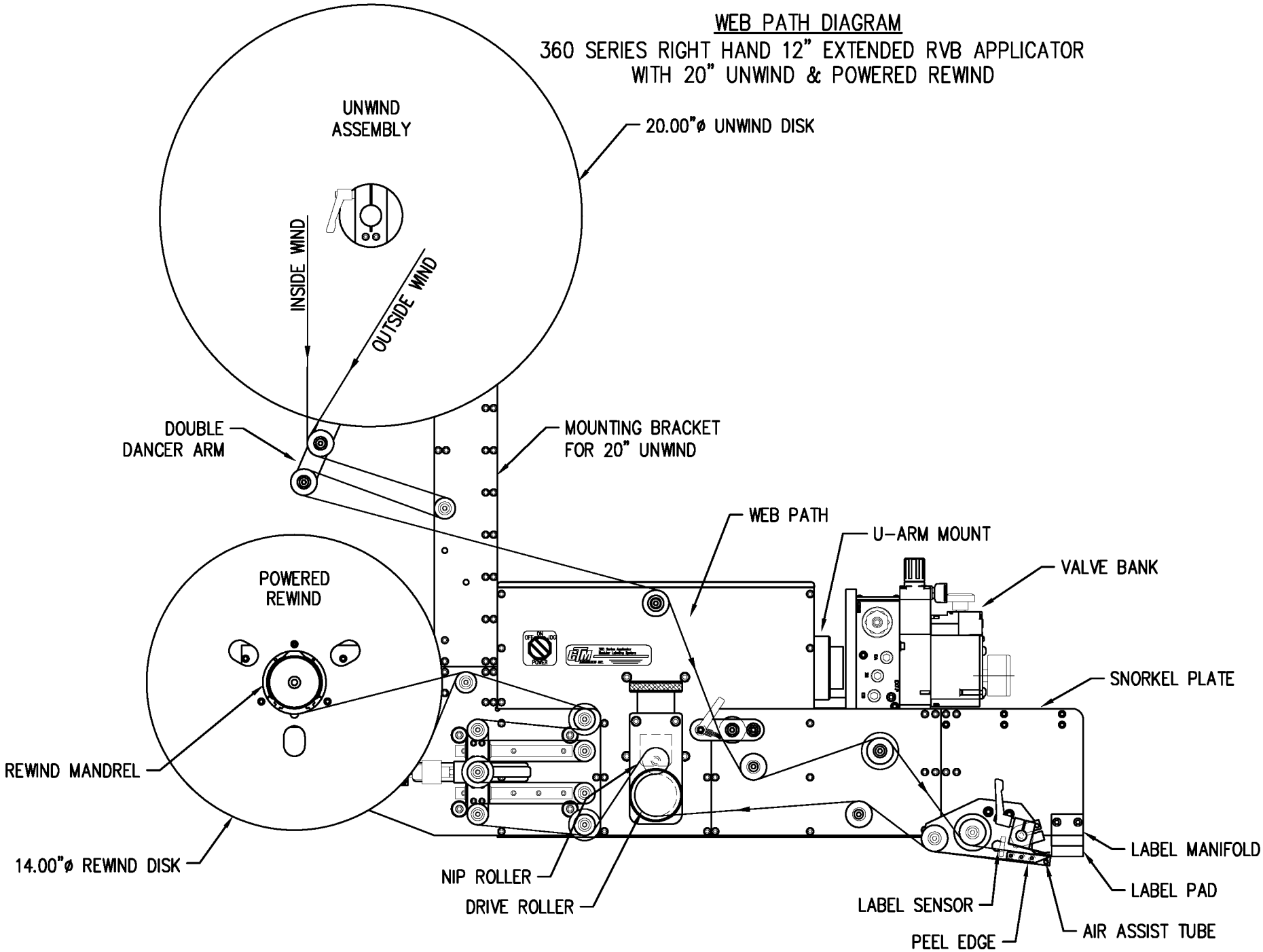
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" EXTENDED RVB APPLICATOR
WITH 20" UNWIND & POWERED REWIND



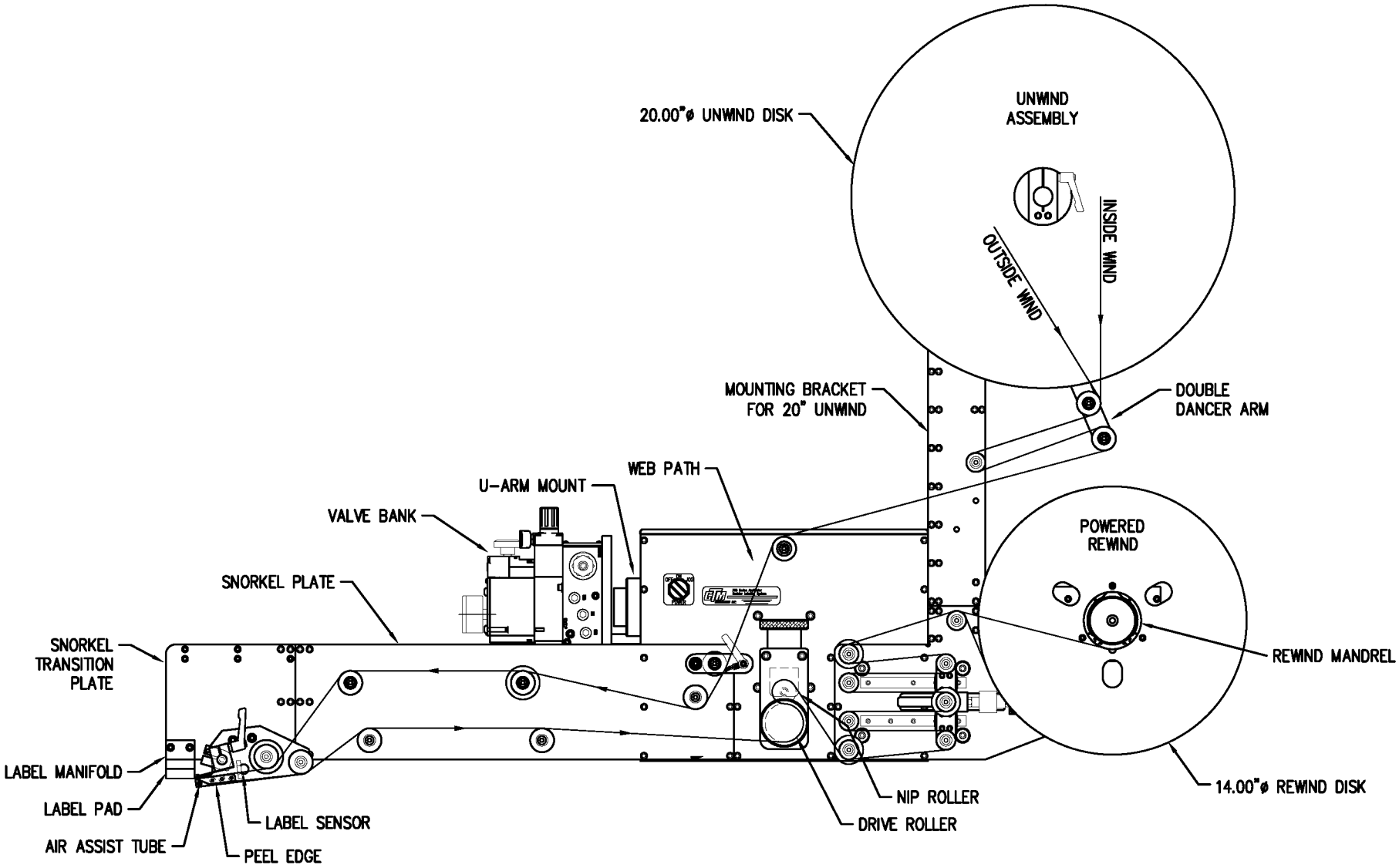
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



WEB PATH DIAGRAM

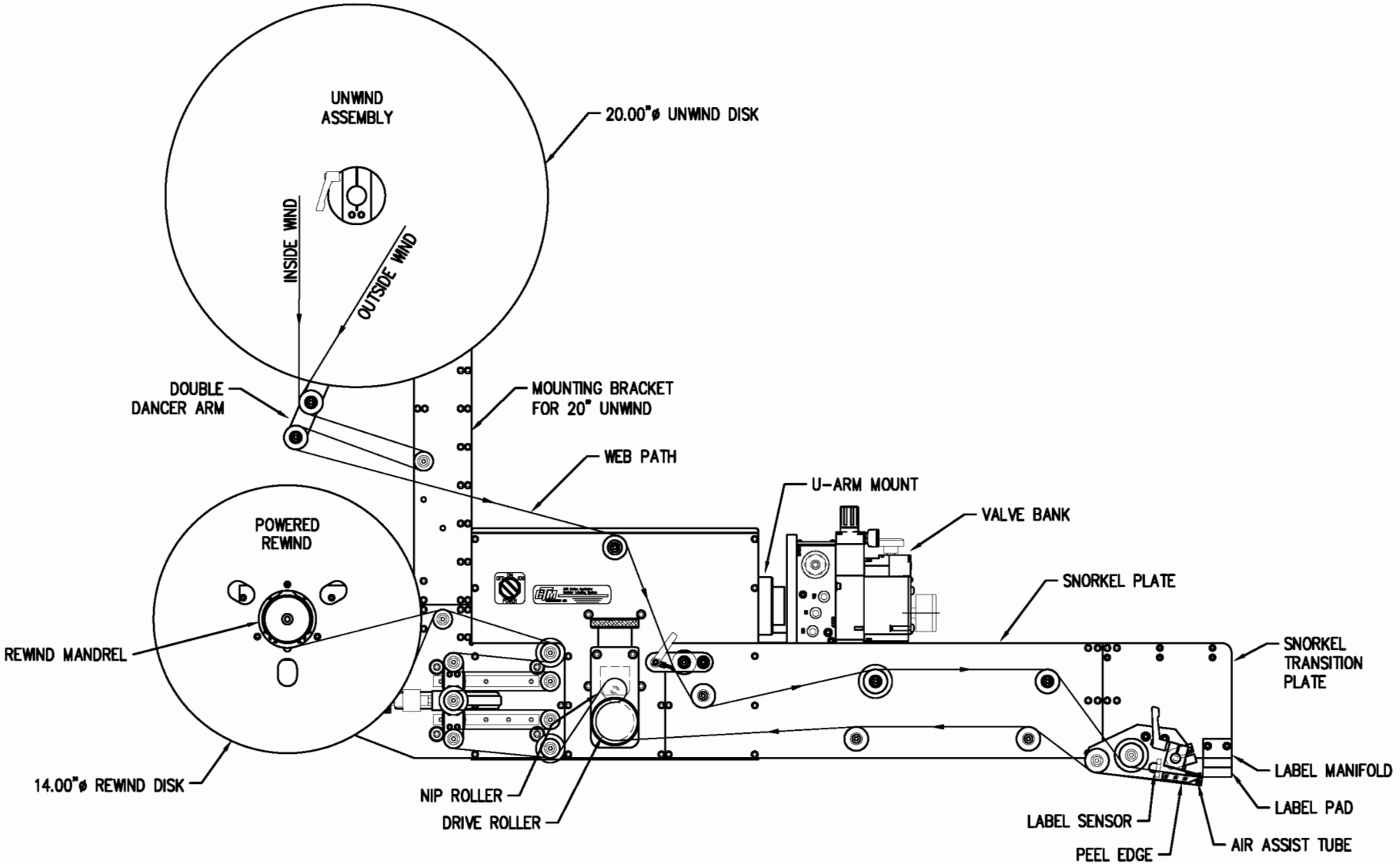
360 SERIES LEFT HAND 18/24" EXTENDED RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



NOTE: 18" SNORKEL SHOWN

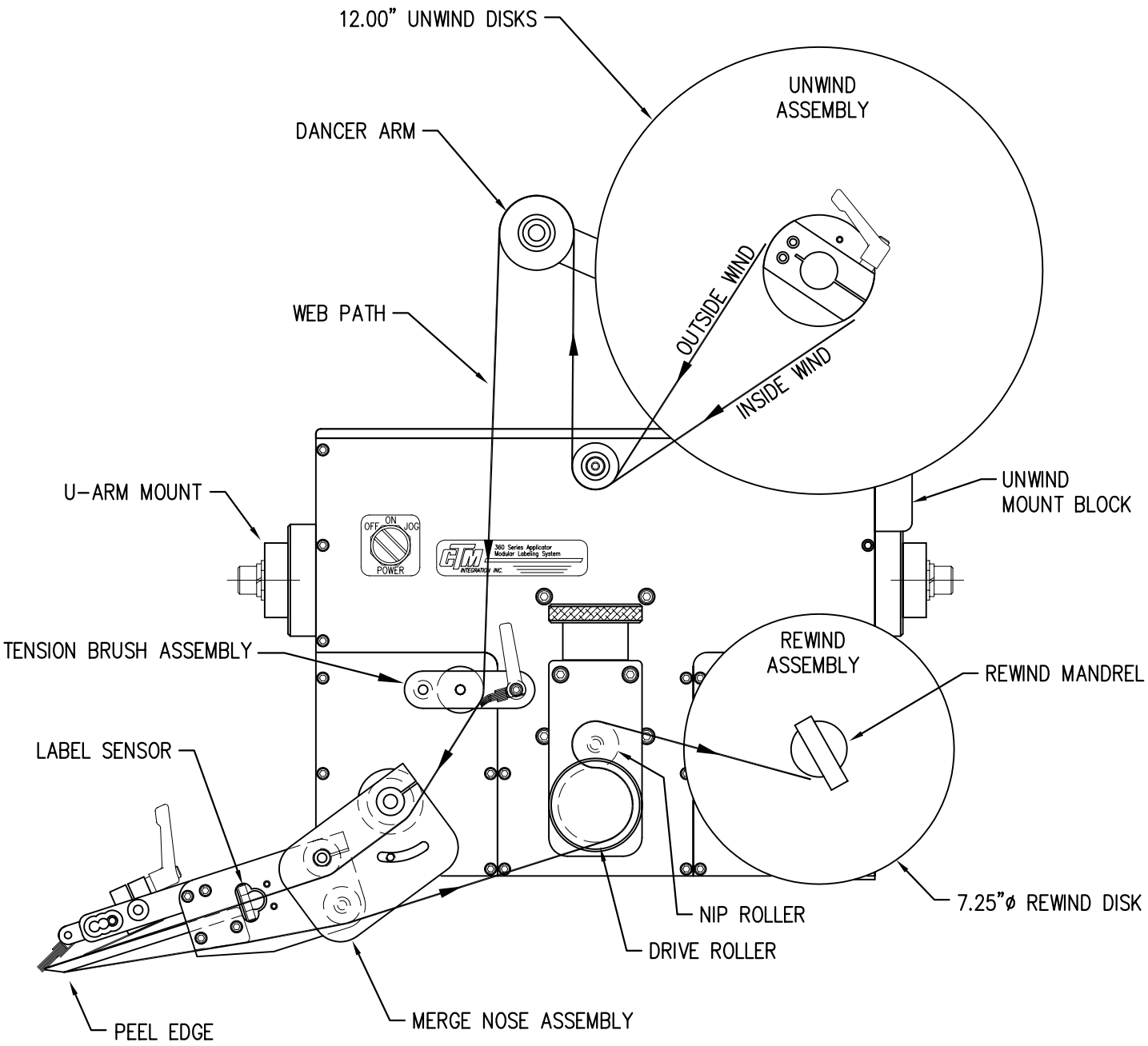
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18/24" EXTENDED RVB APPLICATOR WITH 20" UNWIND & POWERED REWIND



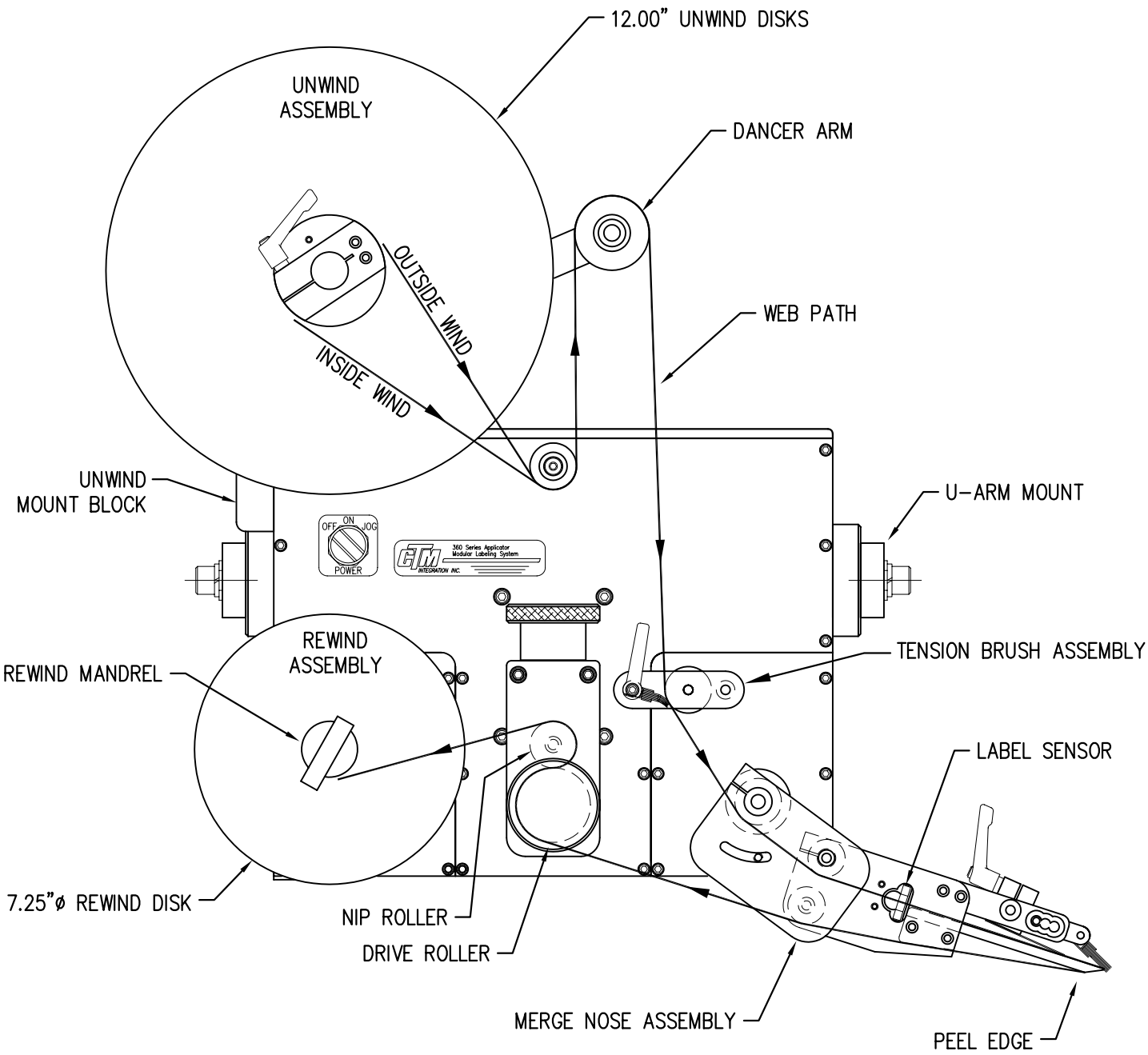
NOTE: 18" SNORKEL SHOWN

WEB PATH DIAGRAM
360 SERIES LEFT HAND MERGE APPLICATOR
WITH 12" UNWIND

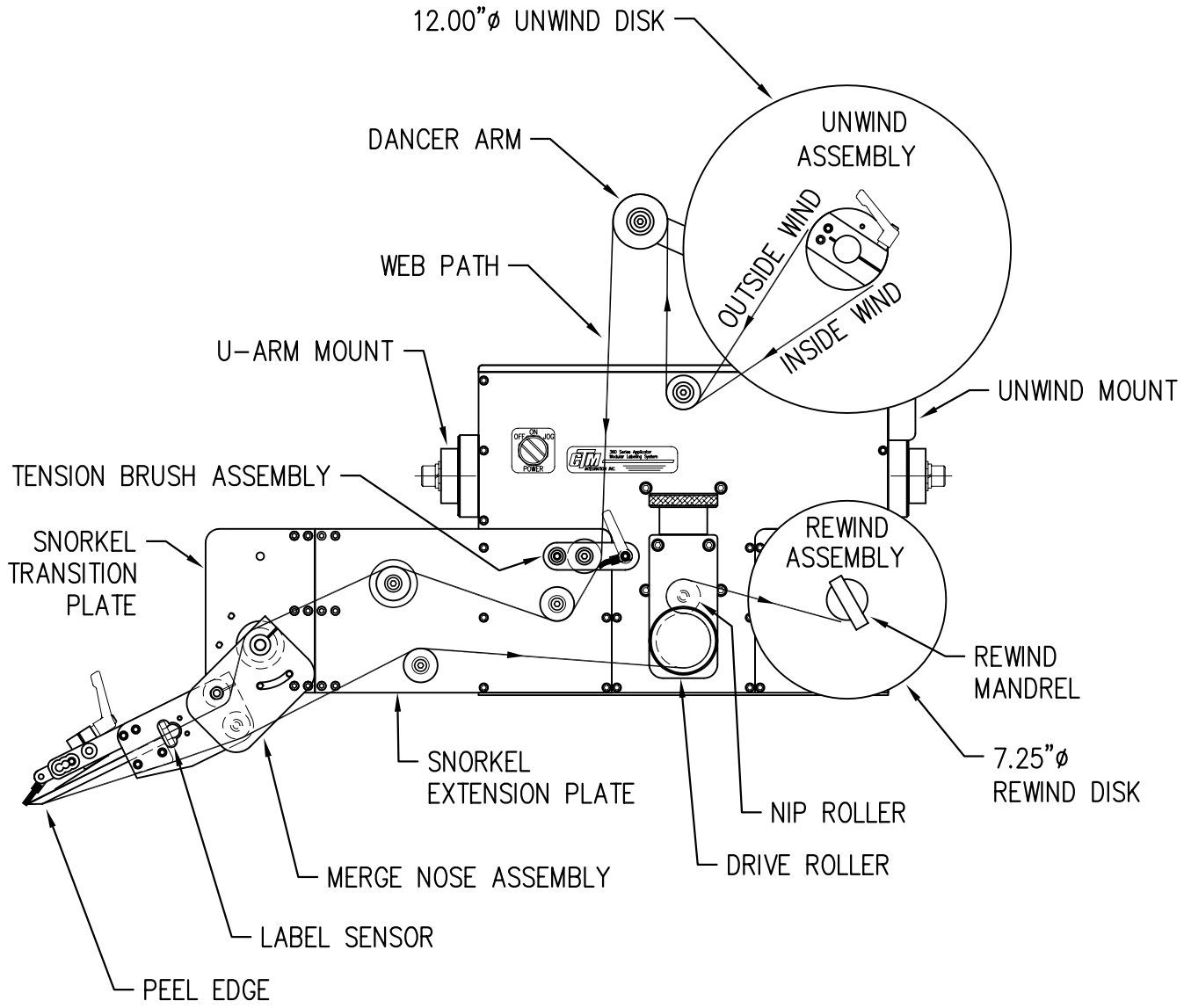


WEB PATH DIAGRAM

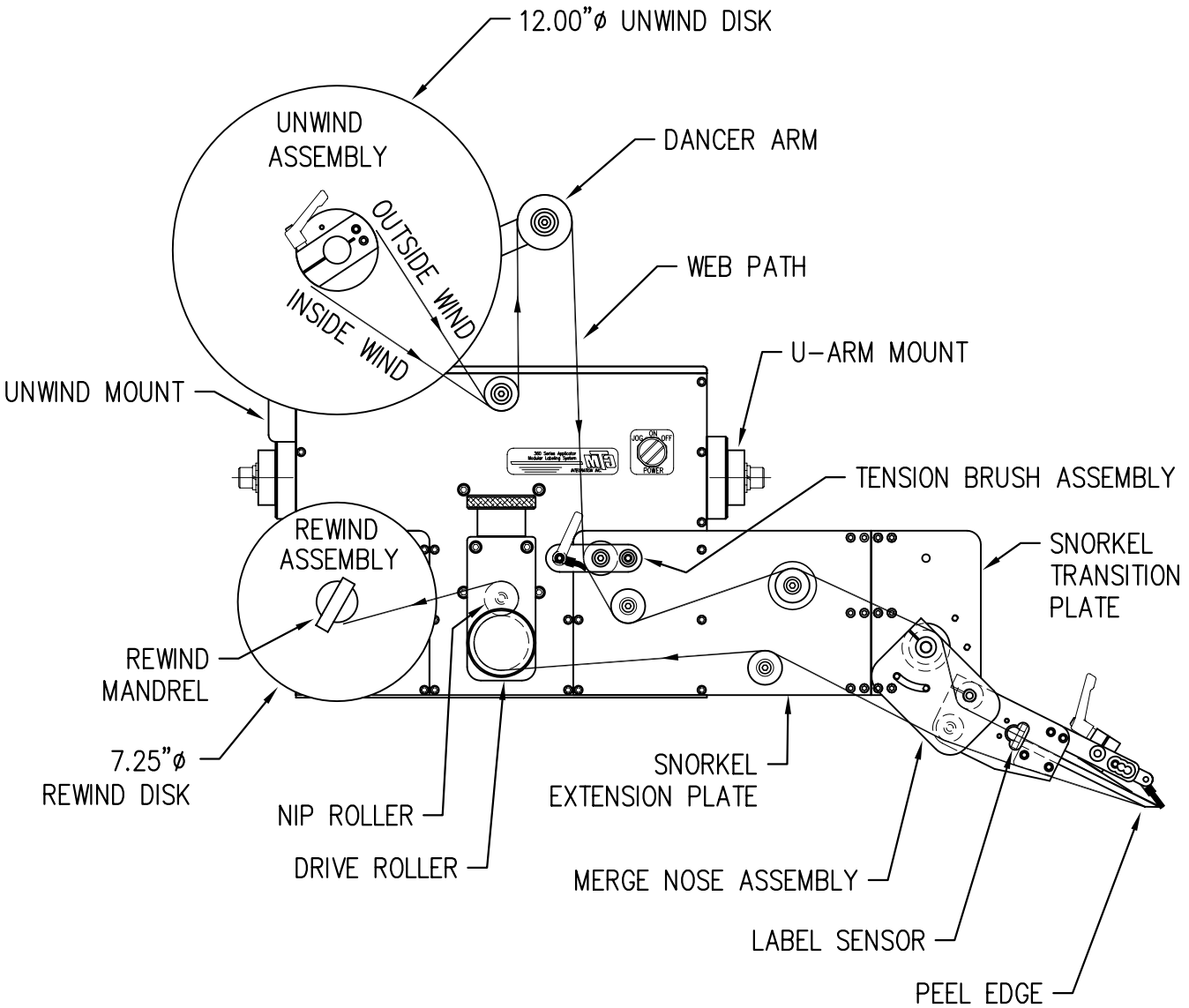
360 SERIES RIGHT HAND MERGE APPLICATOR
WITH 12" UNWIND



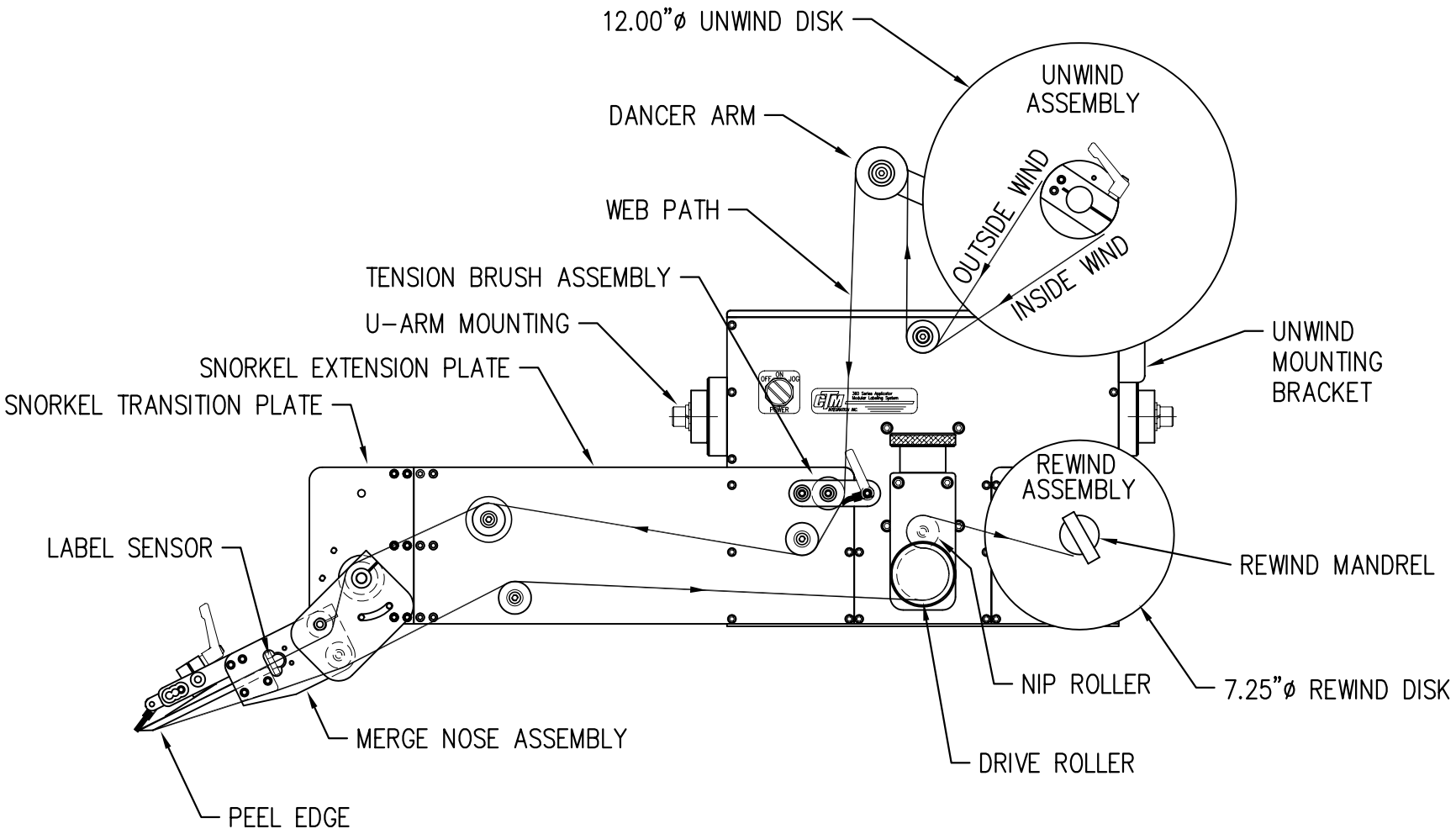
WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED MERGE APPLICATOR
WITH 12.00" UNWIND



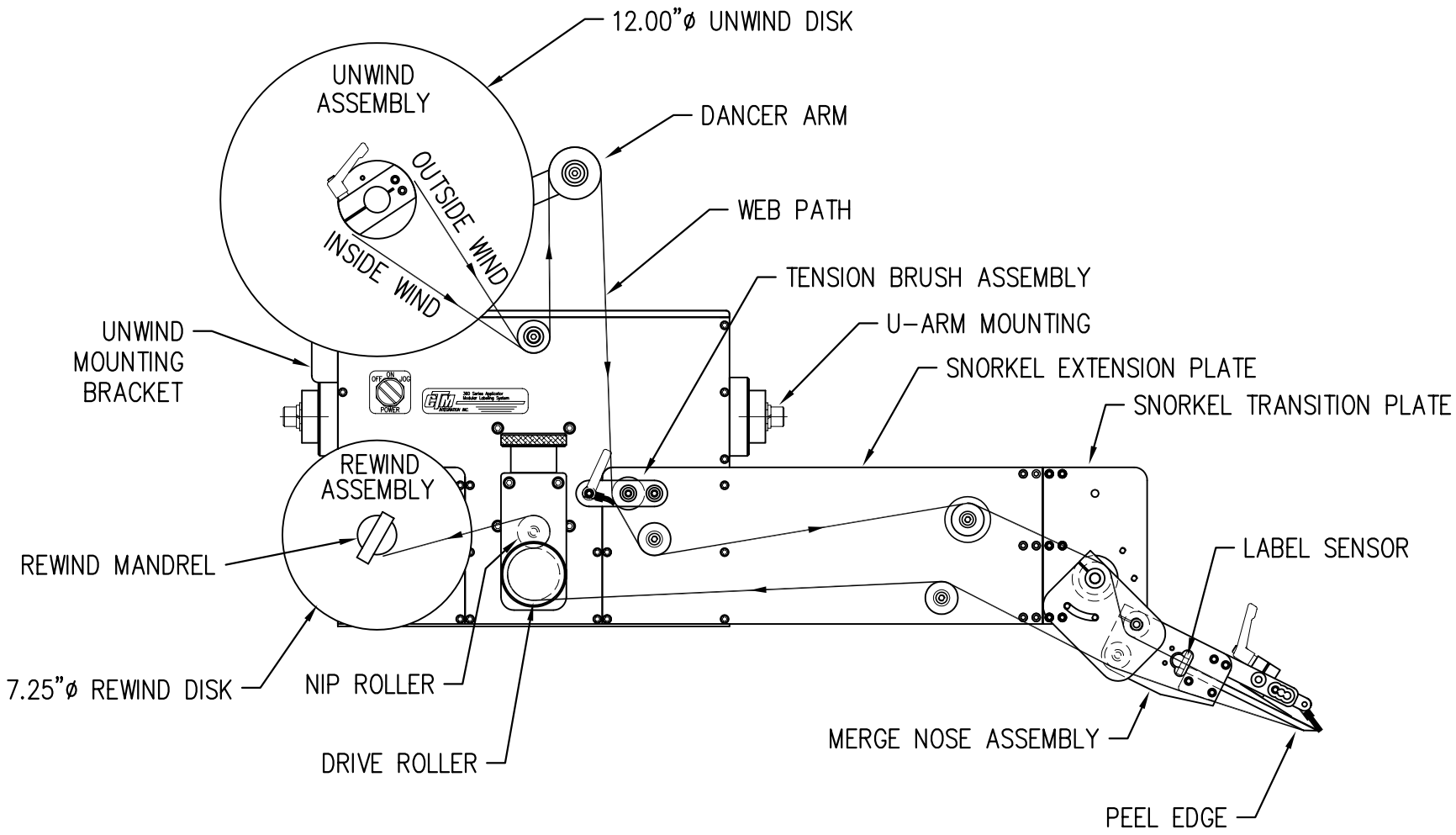
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" EXTENDED MERGE APPLICATOR WITH 12.00" UNWIND



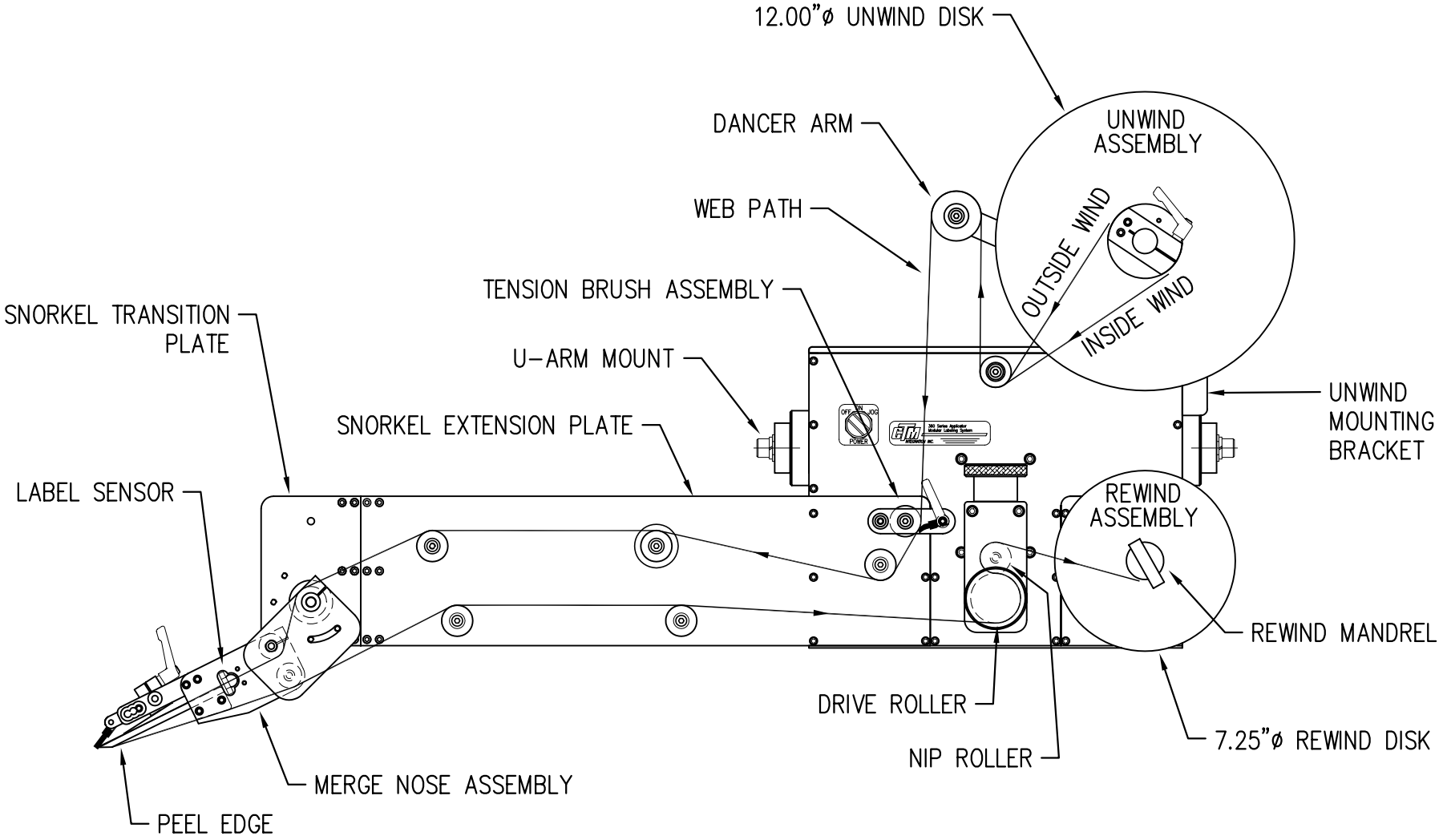
WEB PATH DIAGRAM
360 SERIES LEFT HAND 18" EXTENDED MERGE APPLICATOR WITH 12.00" UNWIND



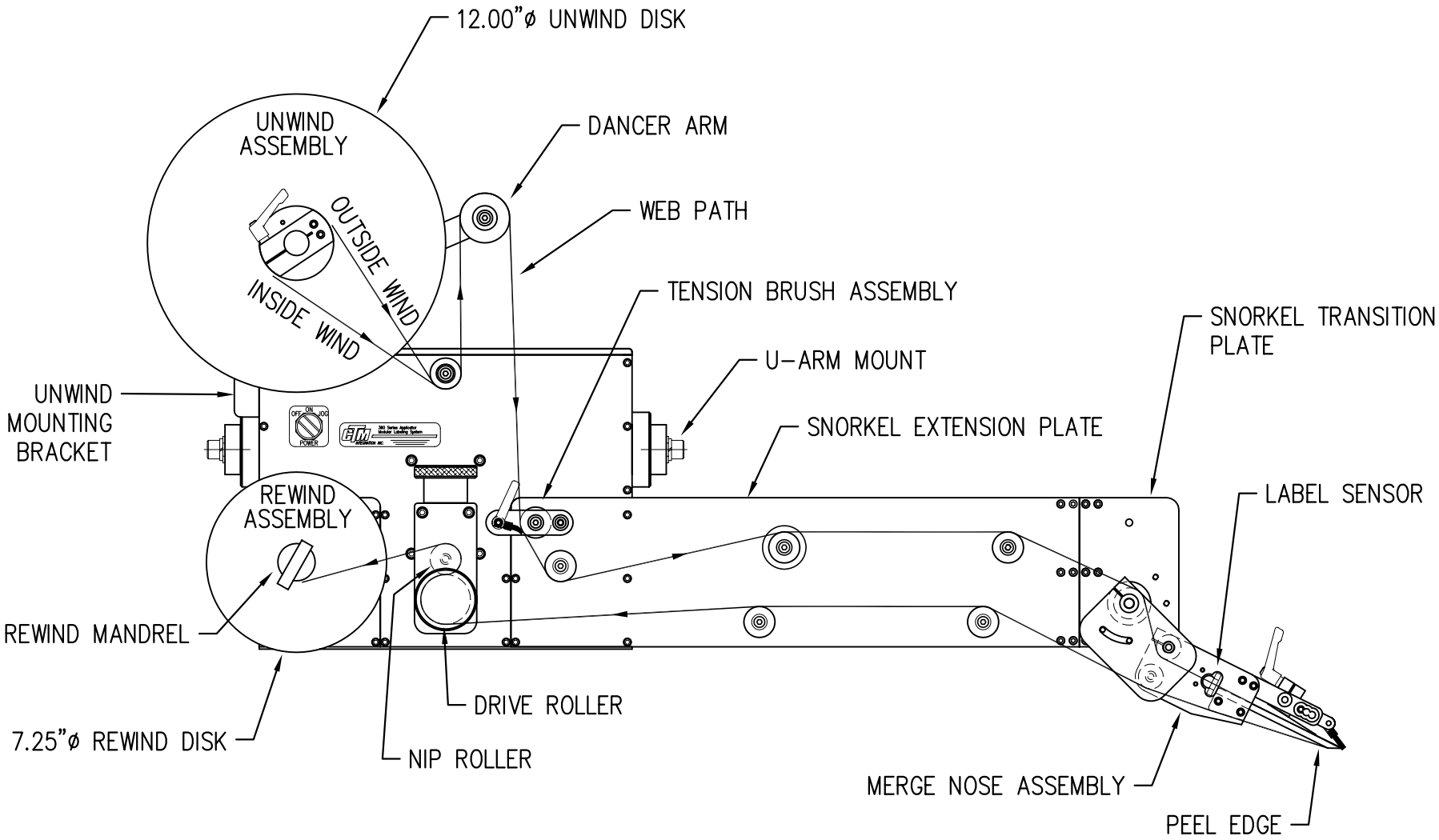
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18" EXTENDED MERGE APPLICATOR
WITH 12.00" UNWIND



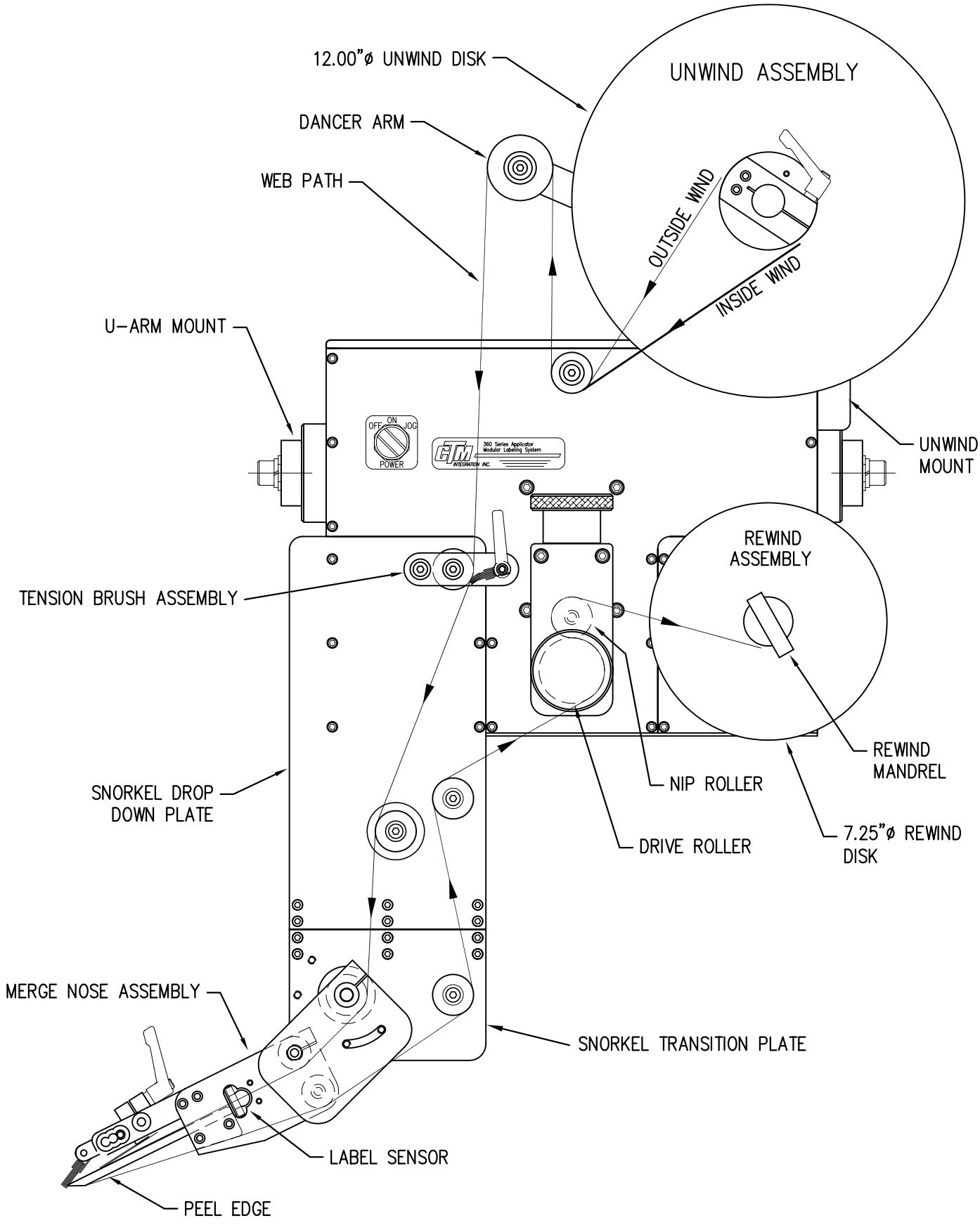
WEB PATH DIAGRAM
360 SERIES LEFT HAND 24" EXTENDED MERGE APPLICATOR
WITH 12.00" UNWIND



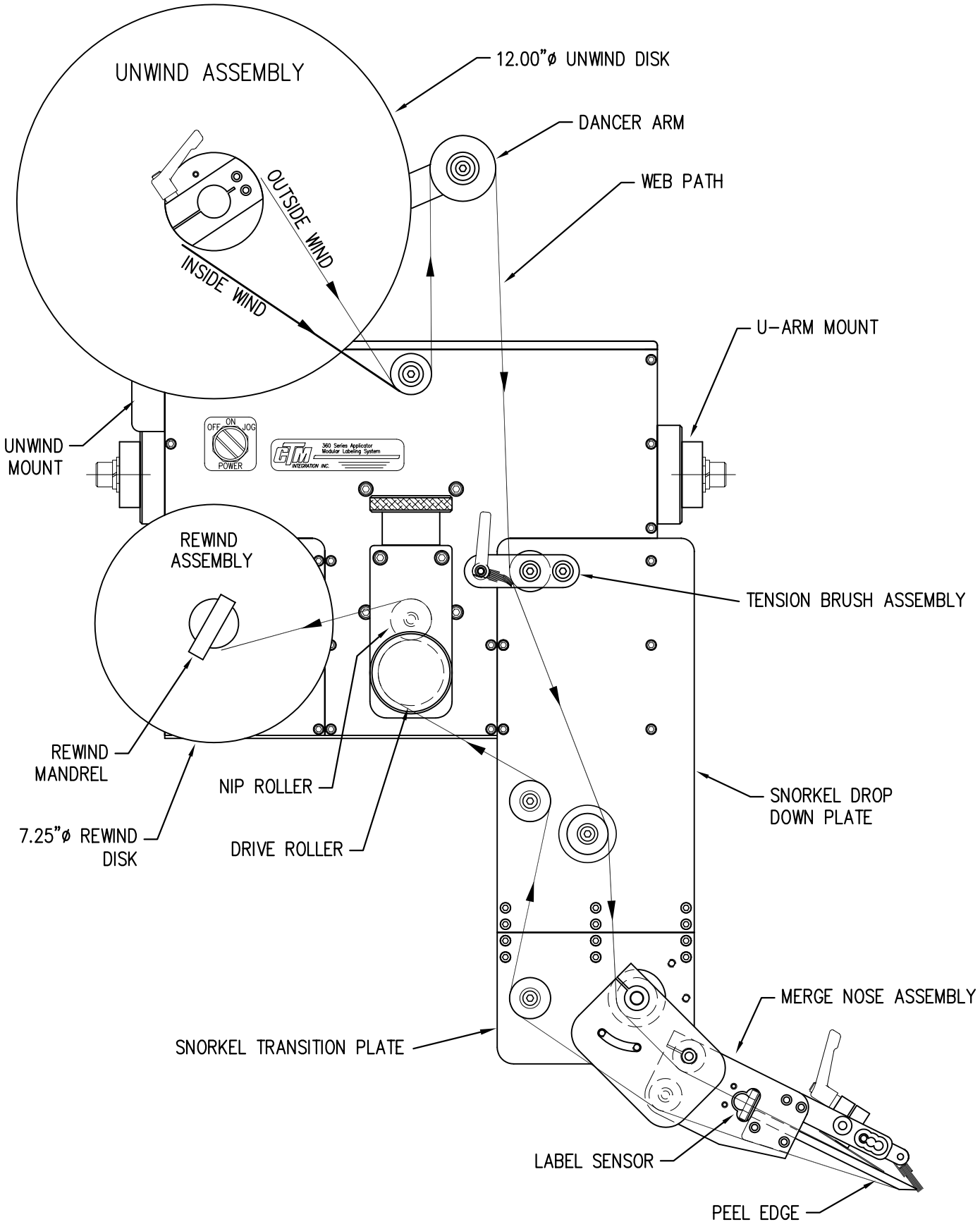
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 24" EXTENDED MERGE APPLICATOR
WITH 12.00" UNWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" DROP DOWN MERGE APPLICATOR WITH 12" UNWIND

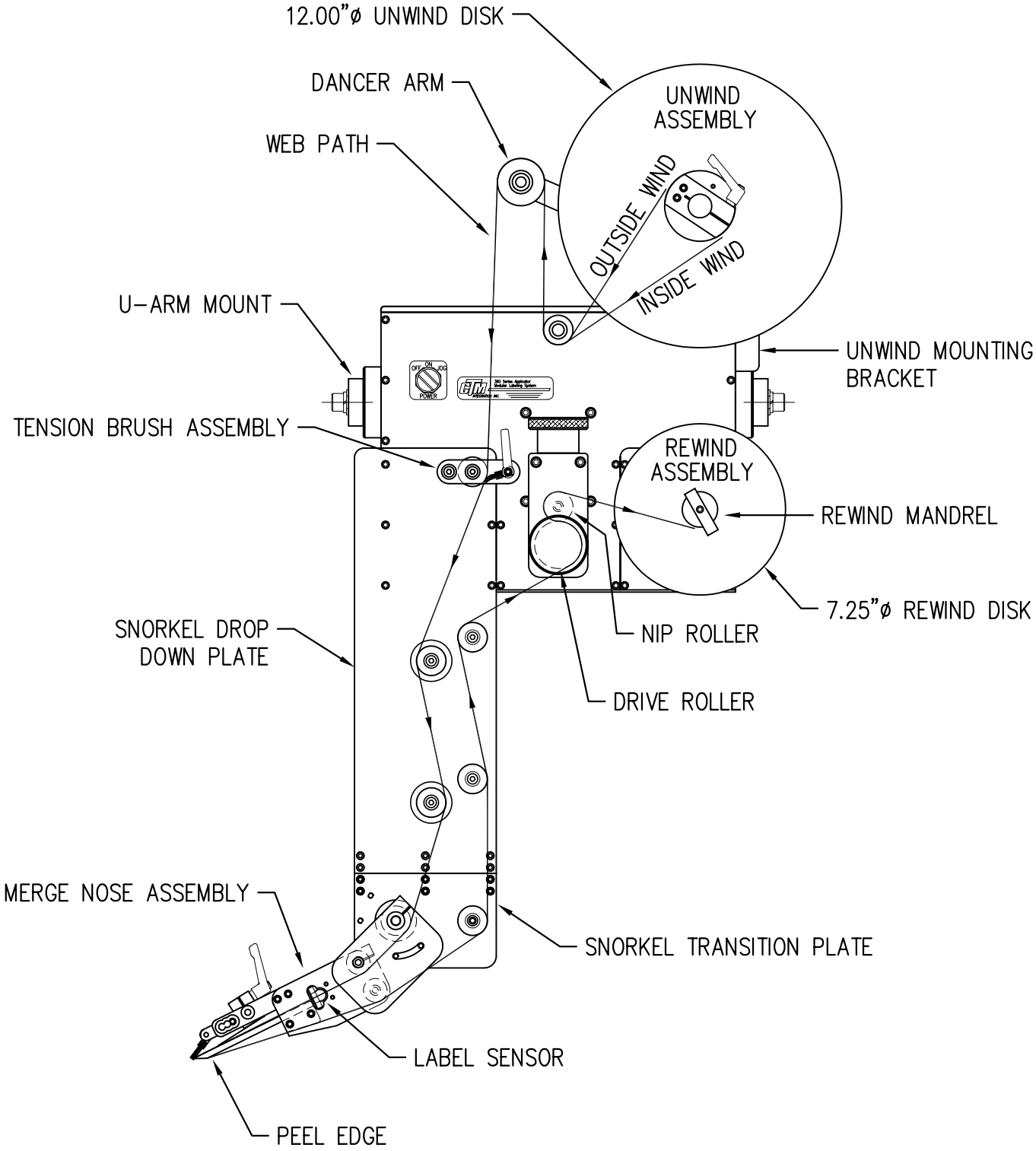


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" DROP DOWN MERGE APPLICATOR WITH 12" UNWIND



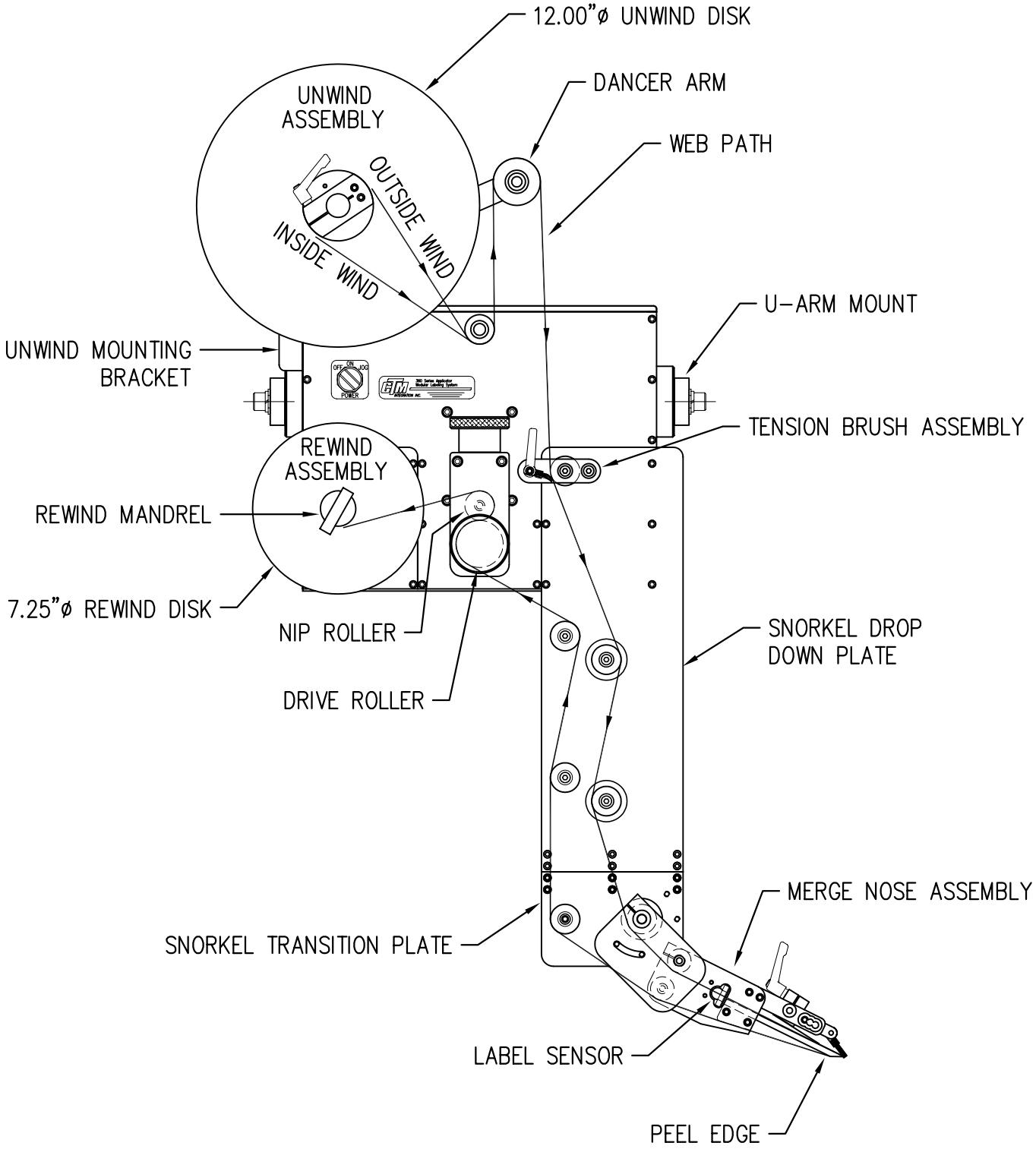
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 12.00" UNWIND

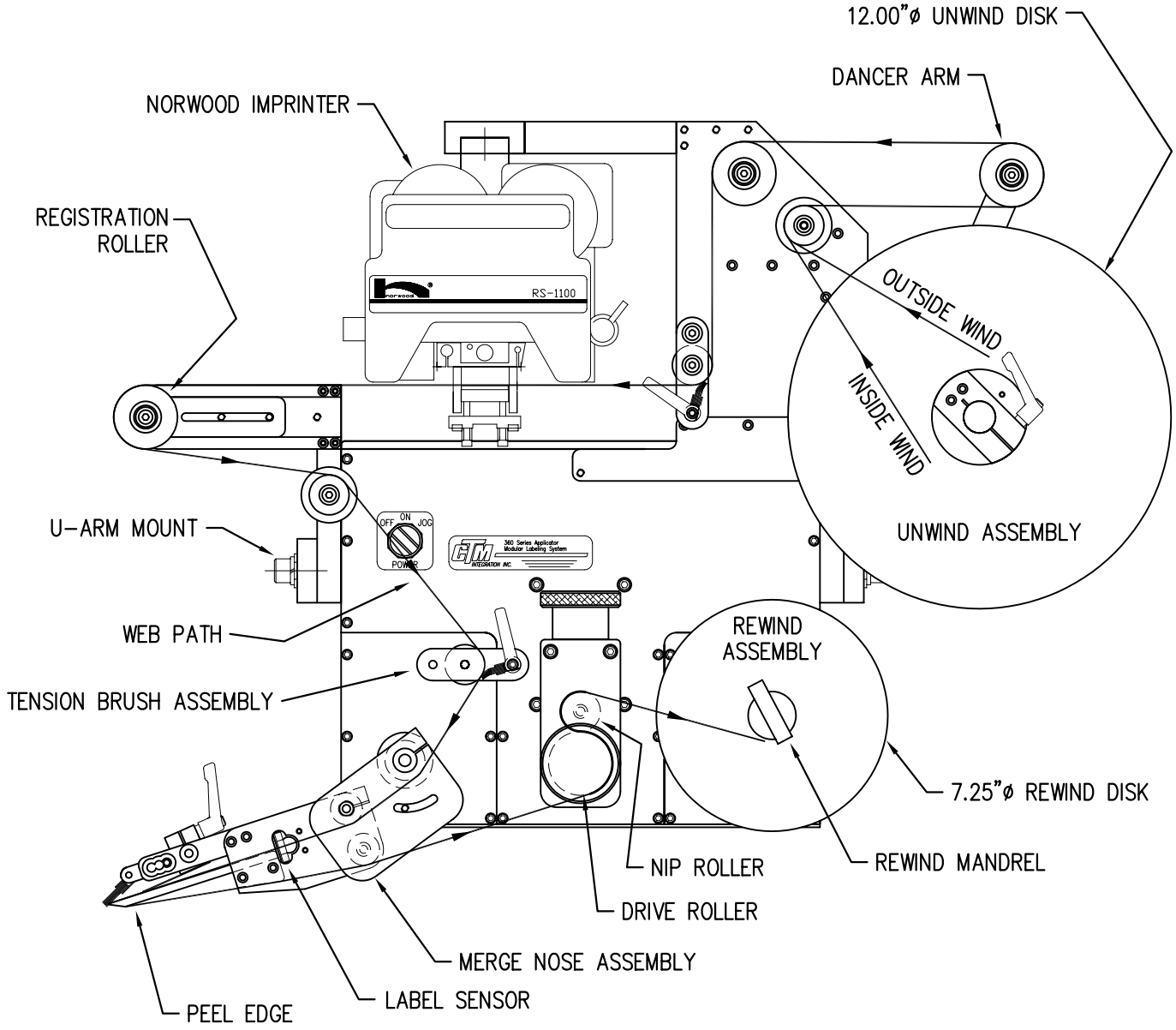


WEB PATH DIAGRAM

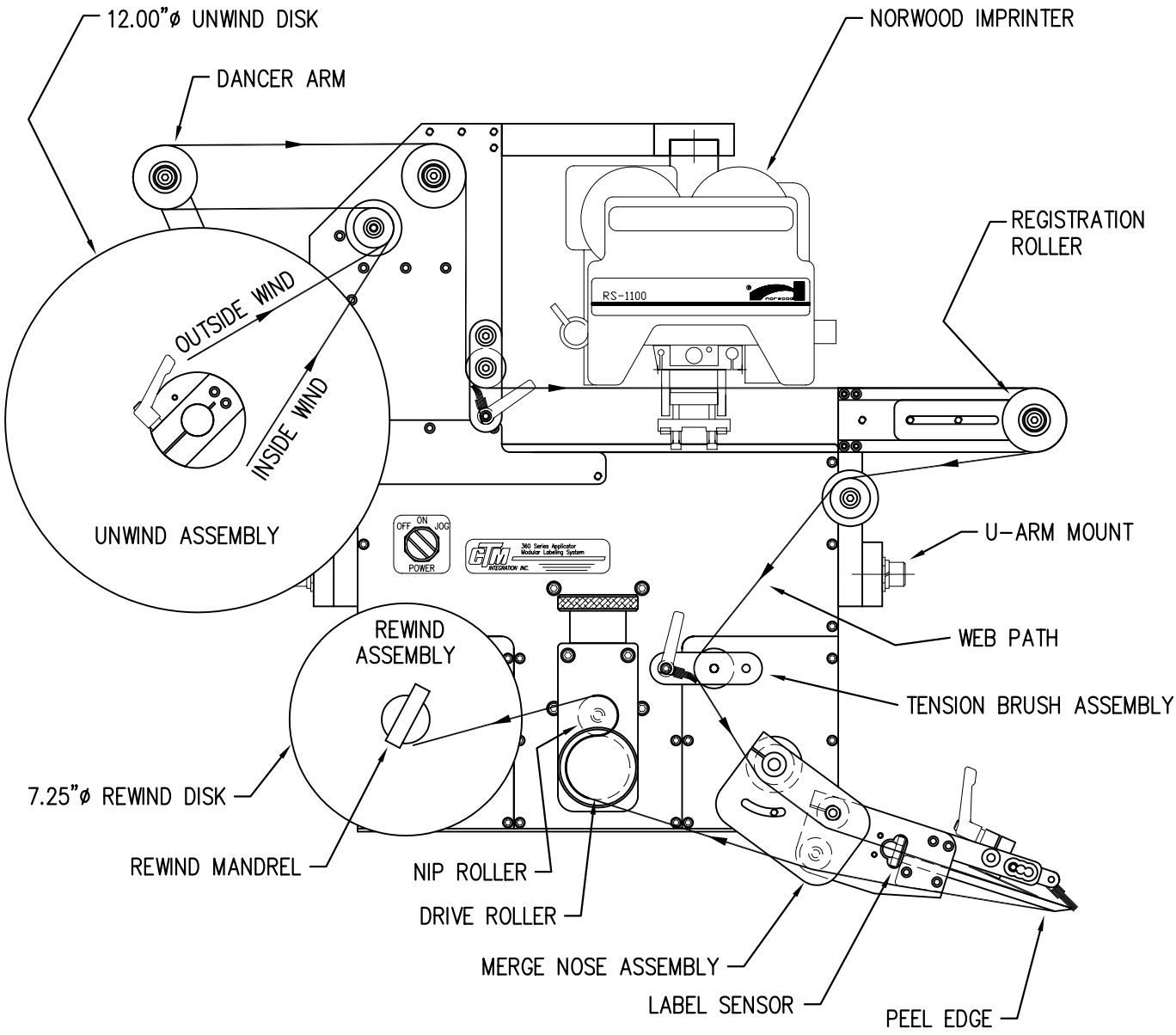
360 SERIES RIGHT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 12.00" UNWIND



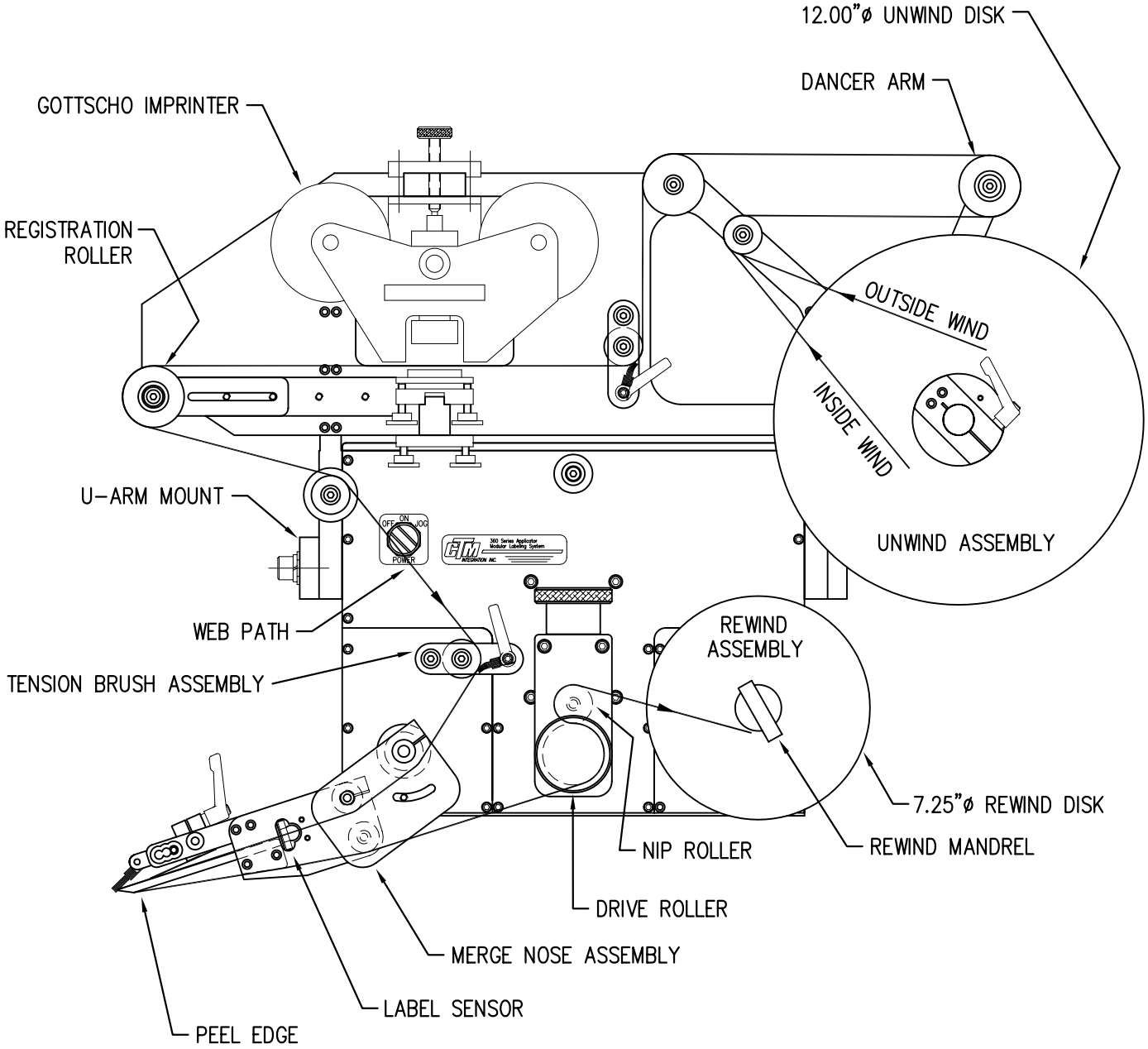
WEB PATH DIAGRAM
360 SERIES LEFT HAND MERGE APPLICATOR
WITH NORWOOD IMPRINTER



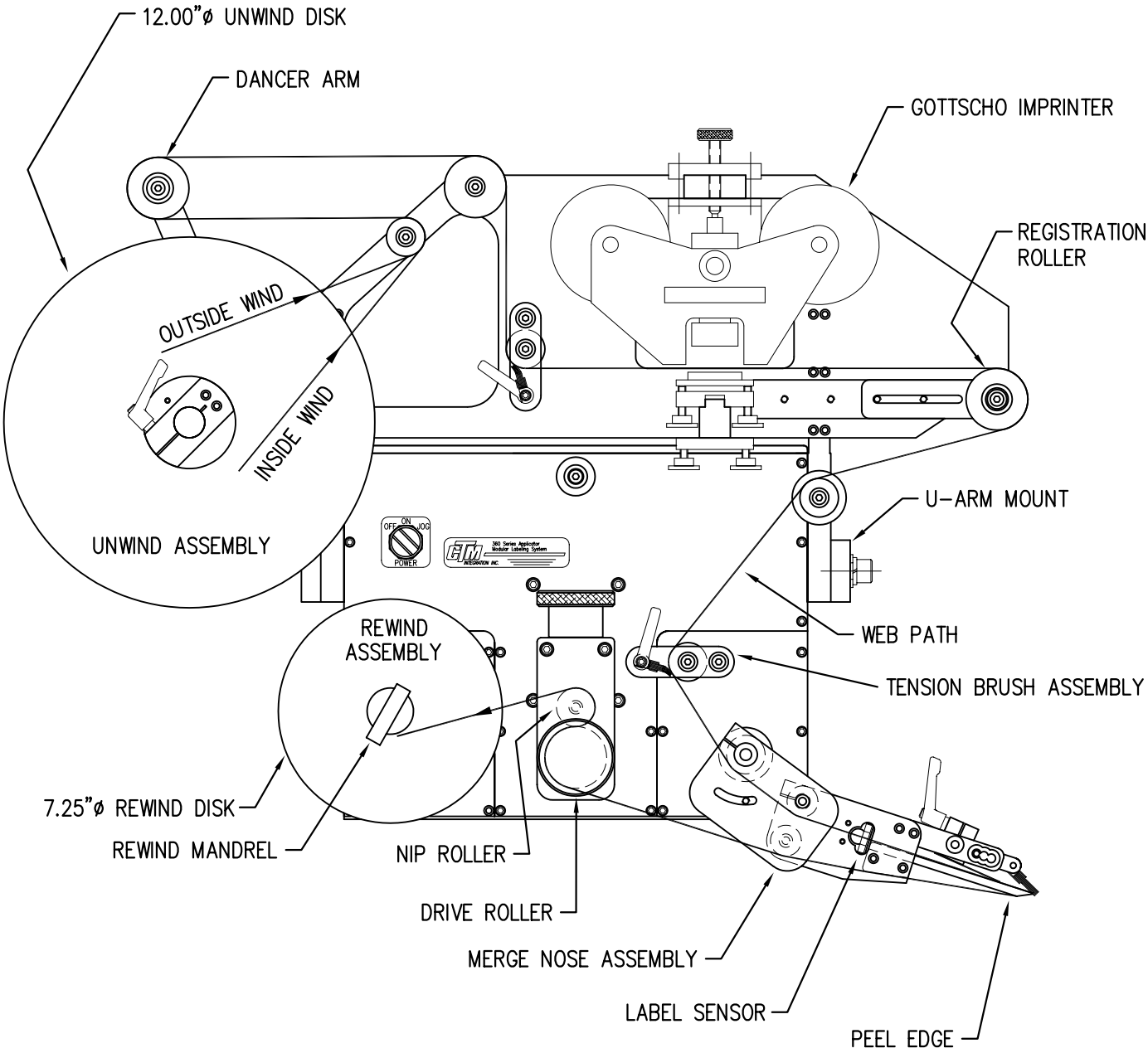
WEB PATH DIAGRAM
360 SERIES RIGHT HAND MERGE APPLICATOR
WITH NORWOOD IMPRINTER



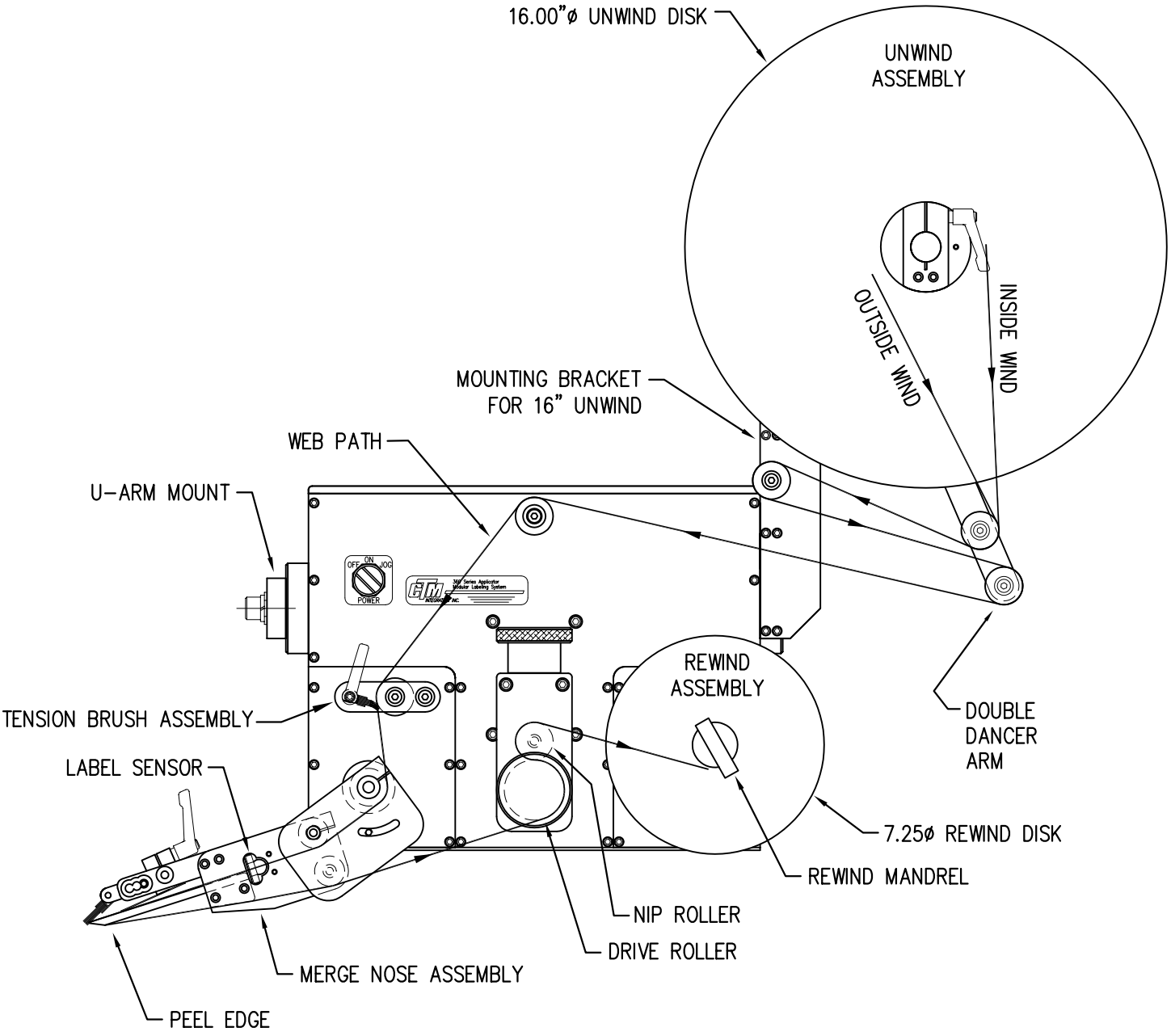
WEB PATH DIAGRAM
360 SERIES LEFT HAND MERGE APPLICATOR
WITH GOTTSCHO IMPRINTER



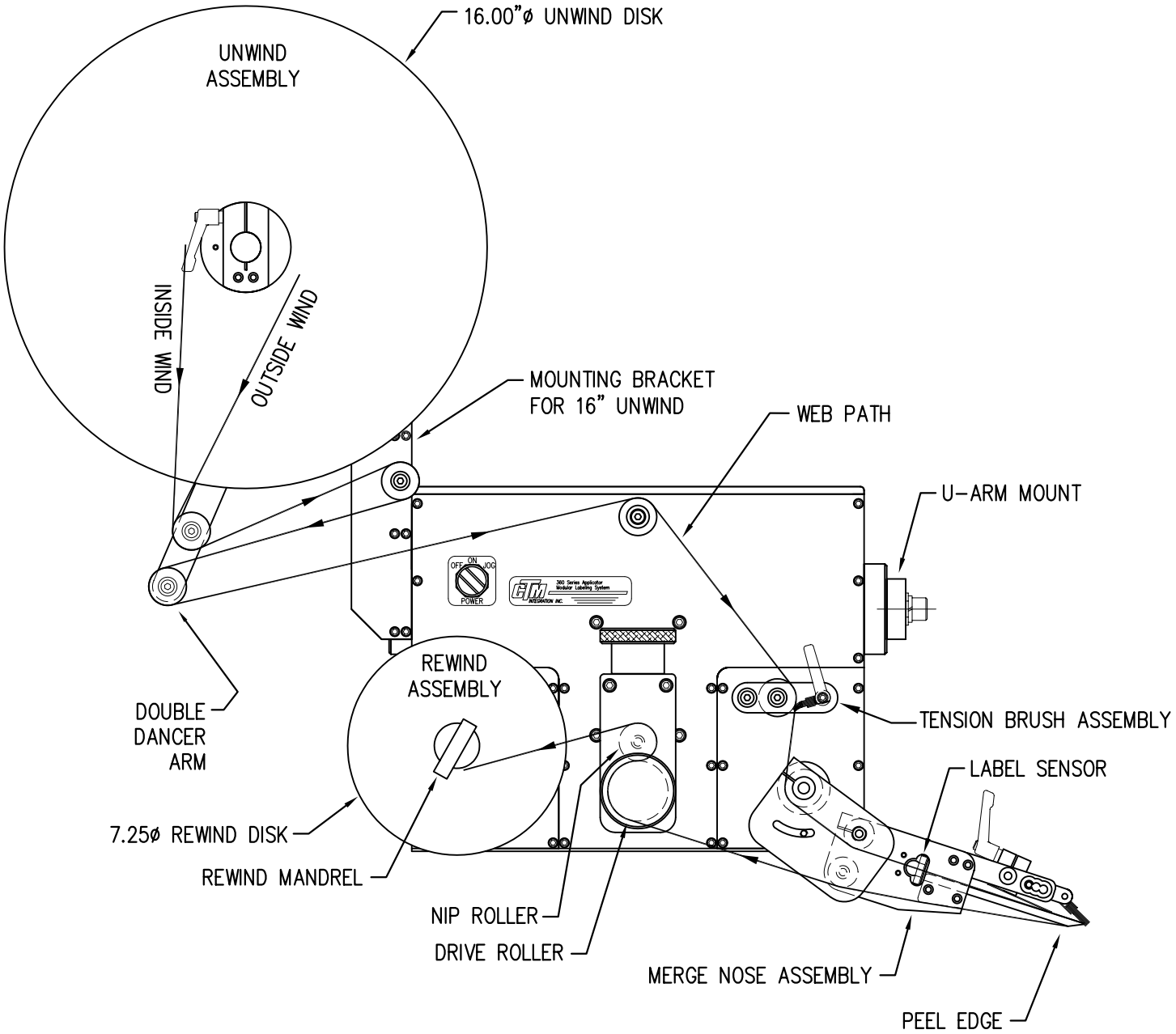
WEB PATH DIAGRAM
360 SERIES RIGHT HAND MERGE APPLICATOR
WITH GOTTSCHO IMPRINTER



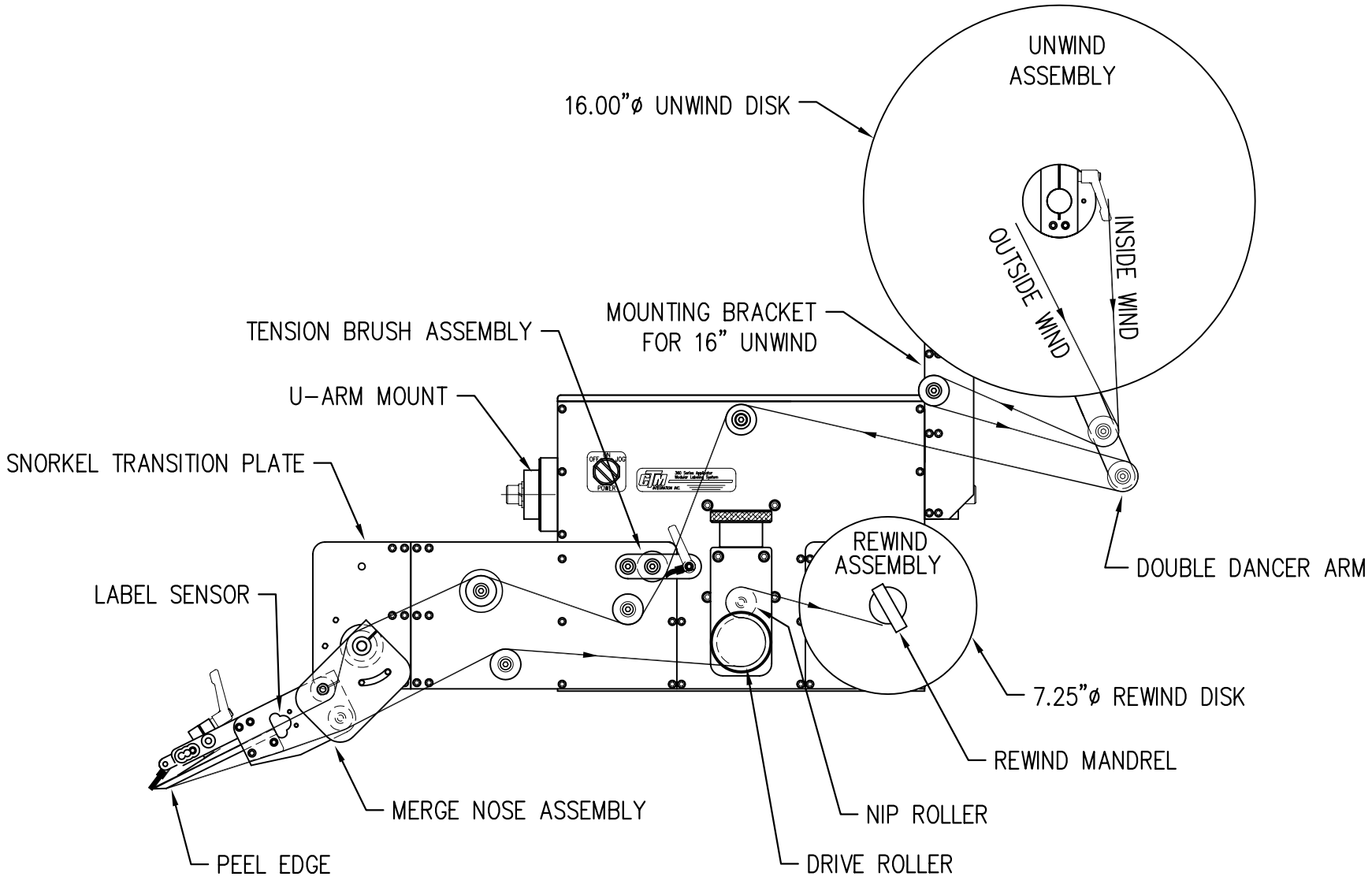
WEB PATH DIAGRAM
360 SERIES LEFT HAND MERGE APPLICATOR
WITH 16.00" UNWIND



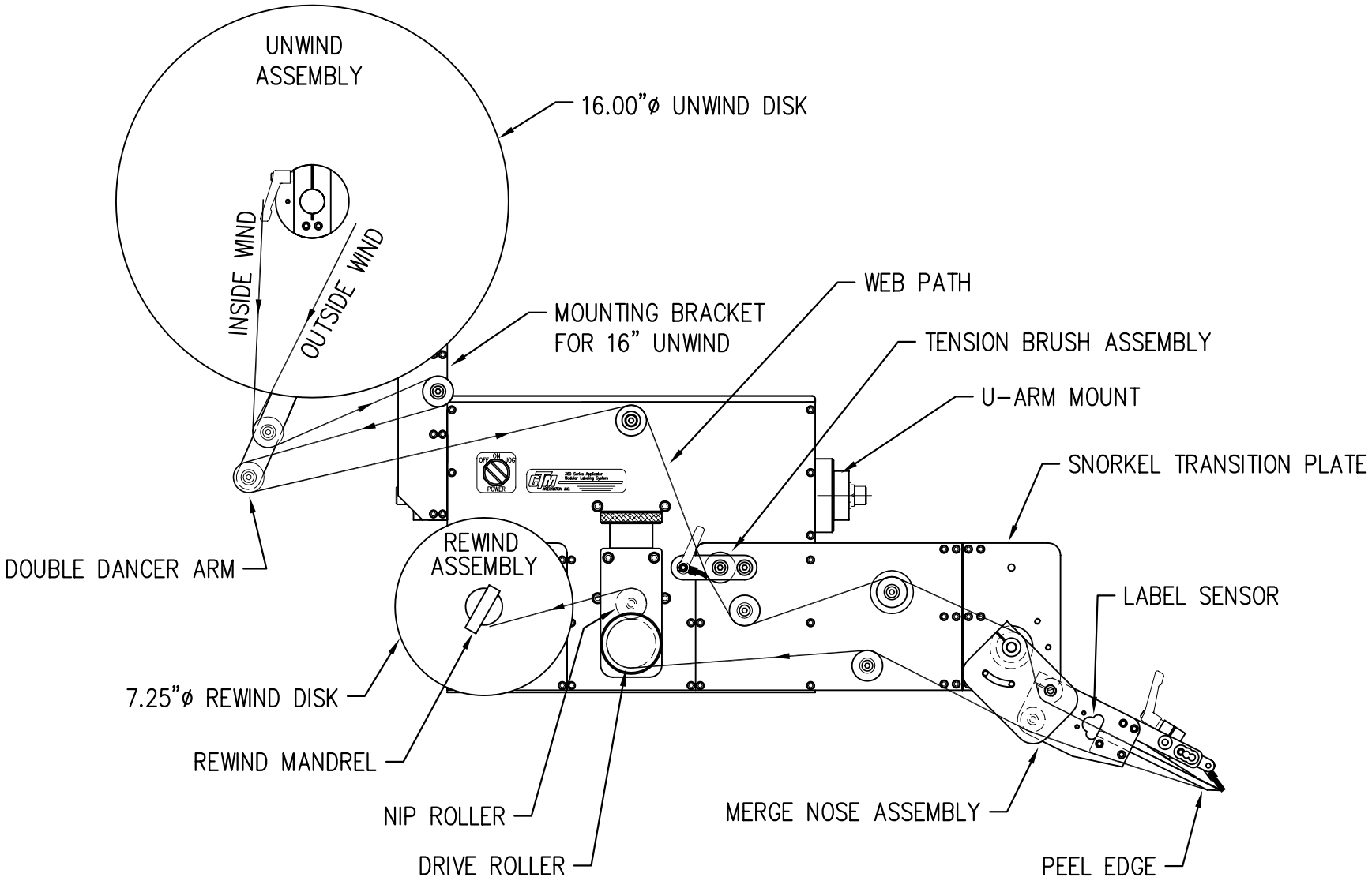
WEB PATH DIAGRAM
360 SERIES RIGHT HAND MERGE APPLICATOR
WITH 16.00" UNWIND



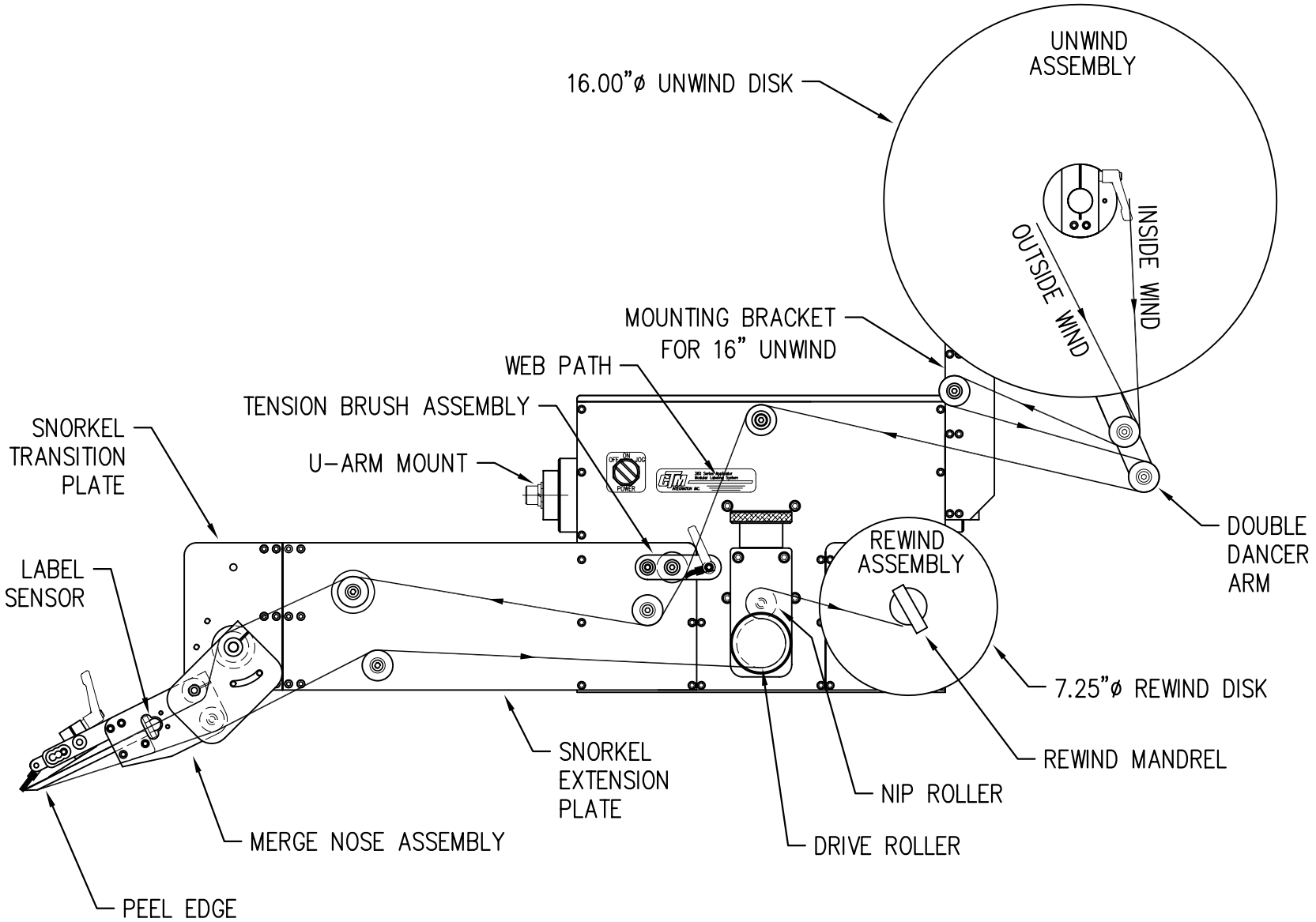
WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED MERGE APPLICATOR
WITH 16.00" UNWIND



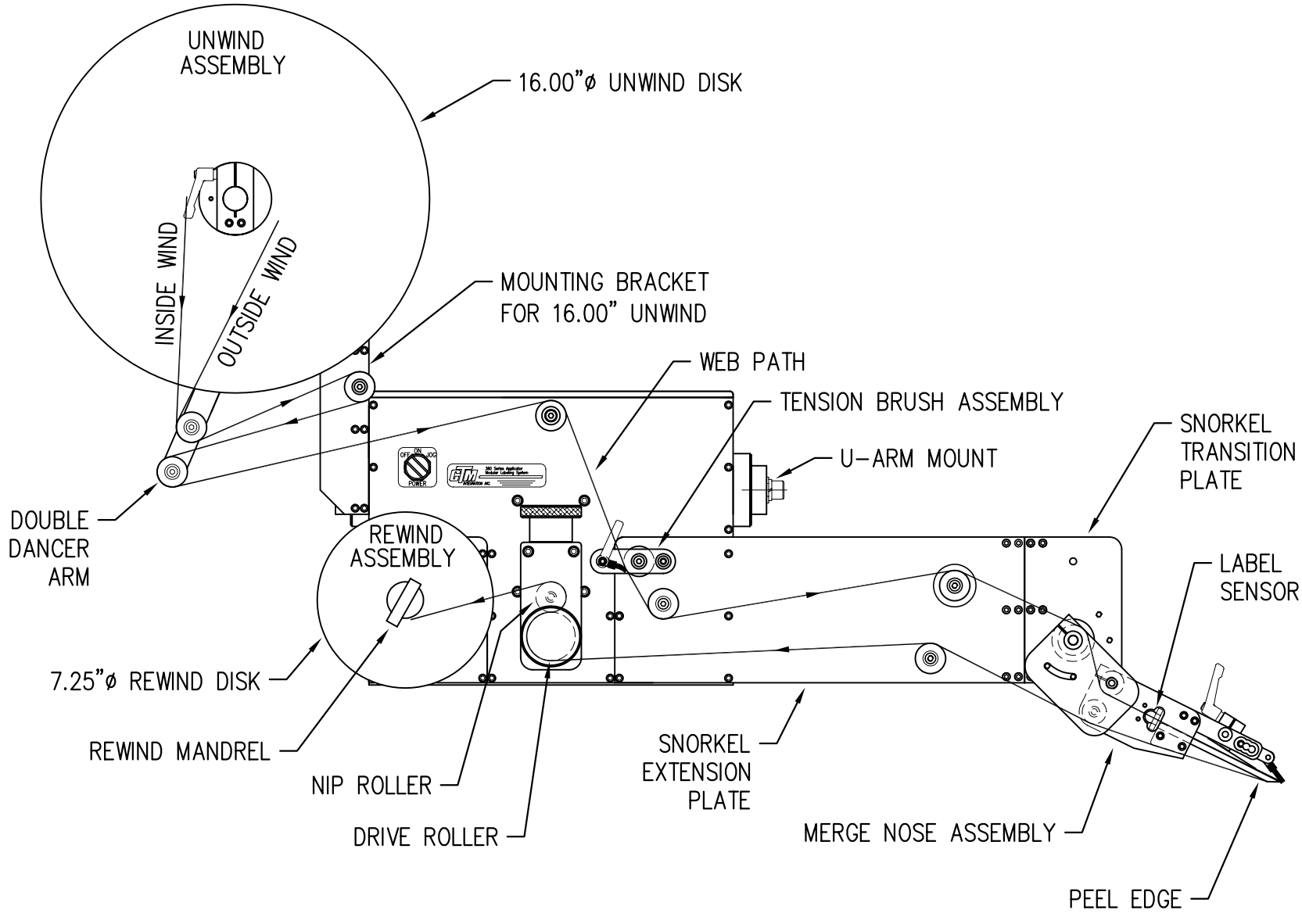
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" EXTENDED MERGE APPLICATOR WITH 16.00" UNWIND



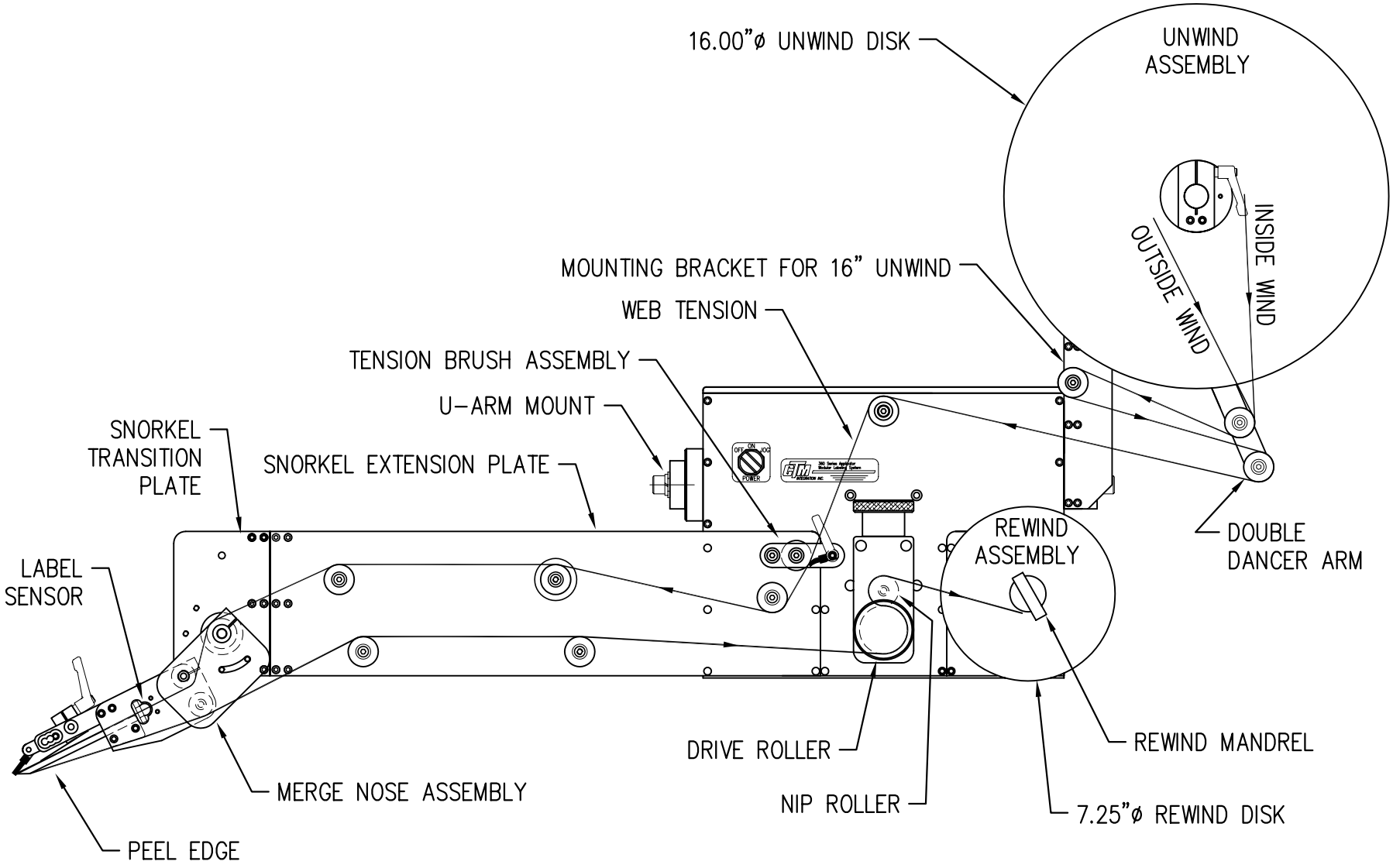
WEB PATH DIAGRAM
360 SERIES LEFT HAND 18" EXTENDED MERGE APPLICATOR WITH 16.00" UNWIND



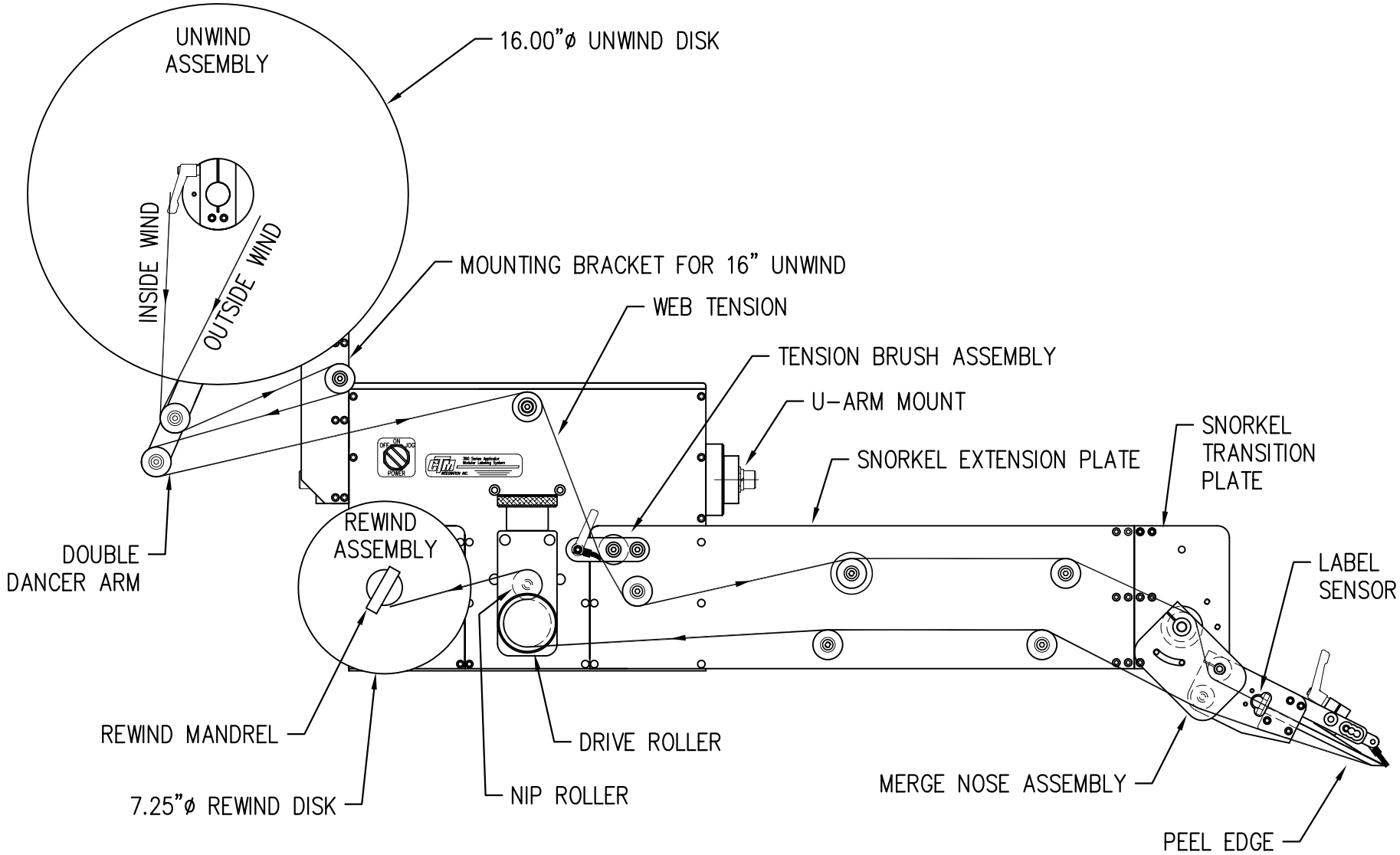
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18" EXTENDED MERGE APPLICATOR WITH 16.00" UNWIND



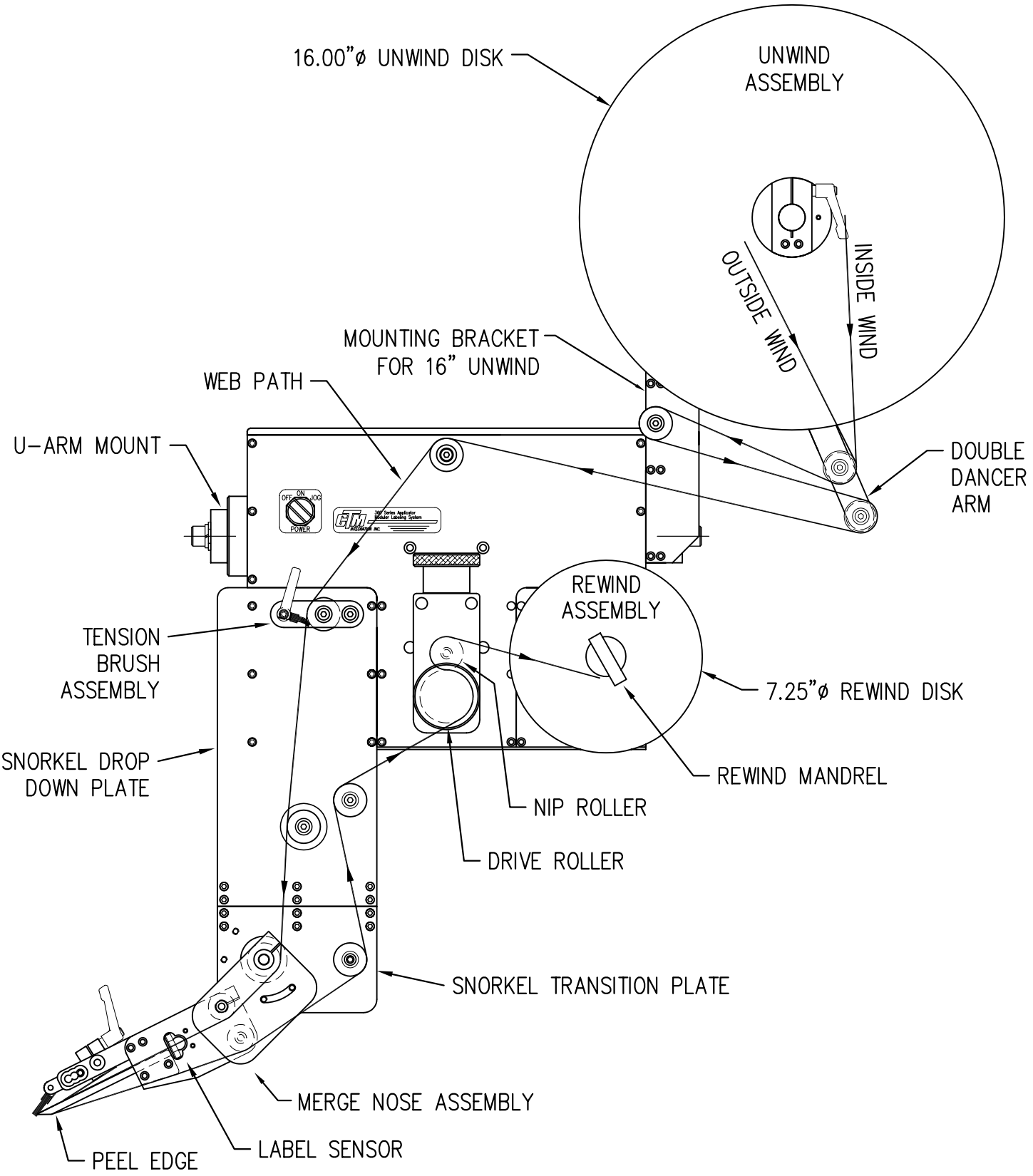
WEB PATH DIAGRAM
360 SERIES LEFT HAND 24" EXTENDED MERGE APPLICATOR
WITH 16.00" UNWIND



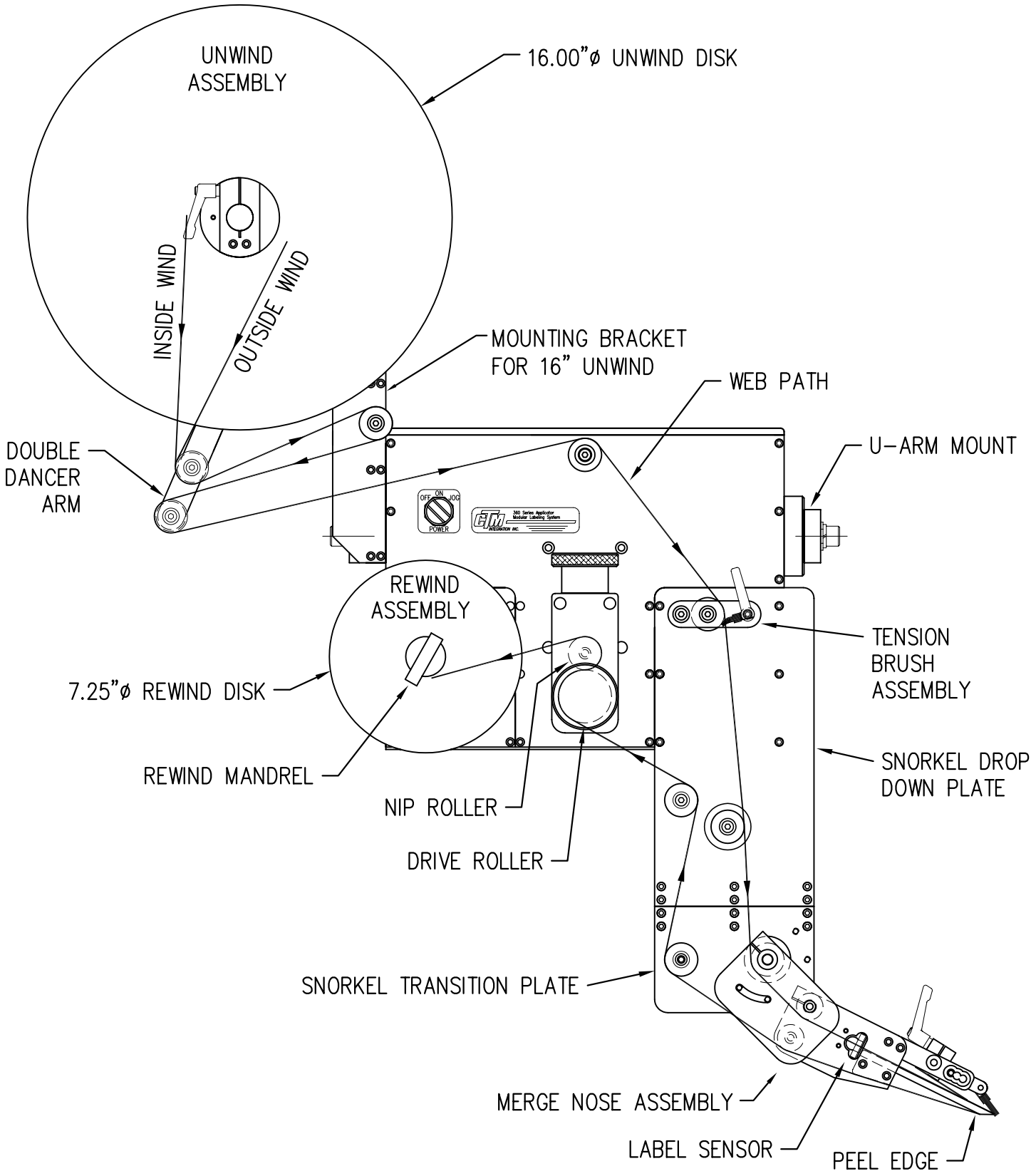
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 24" EXTENDED MERGE APPLICATOR WITH 16.00" UNWIND



WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" DROP DOWN MERGE APPLICATOR WITH 16.00" UNWIND

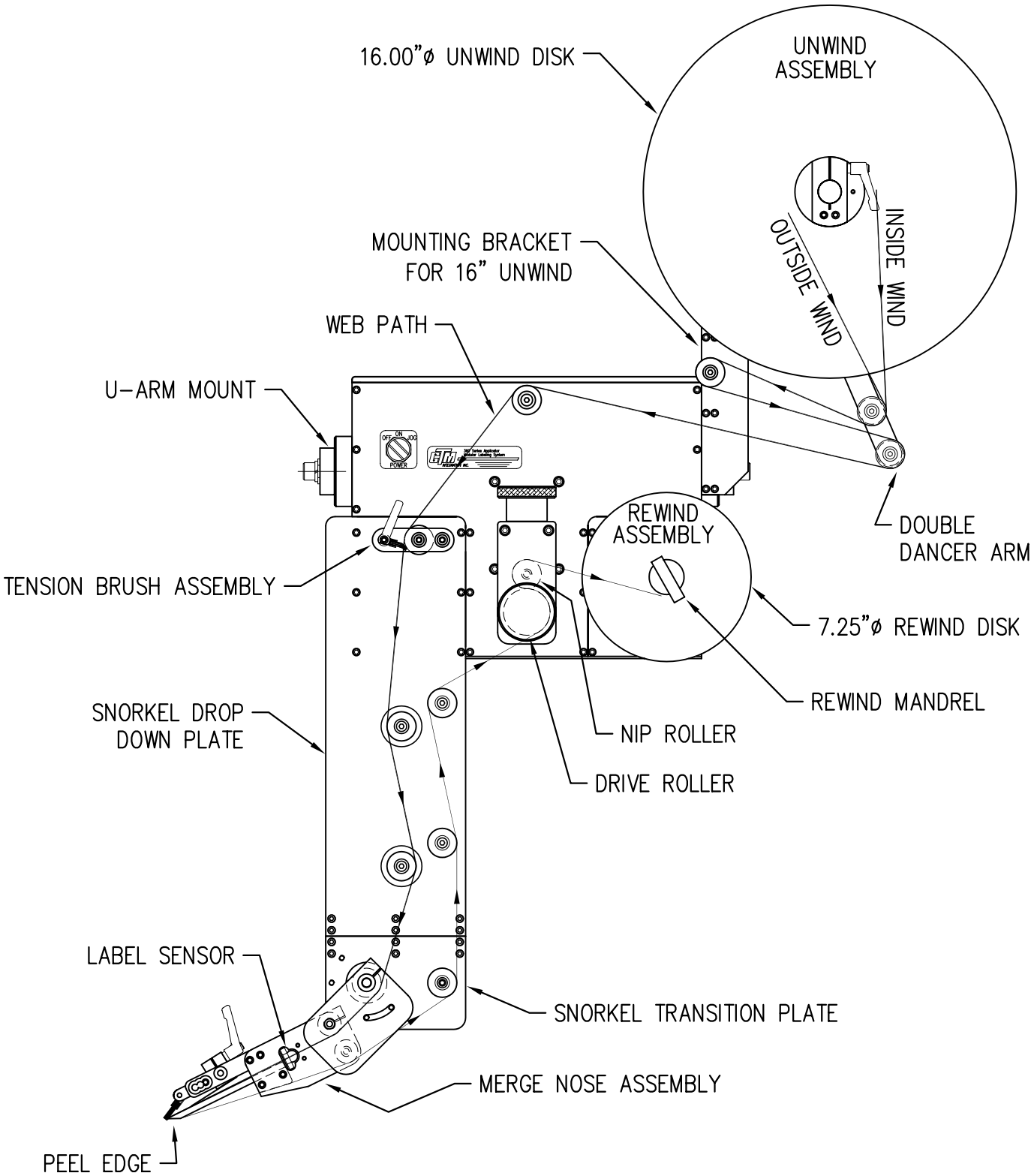


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" DROP DOWN MERGE APPLICATOR WITH 16.00" UNWIND



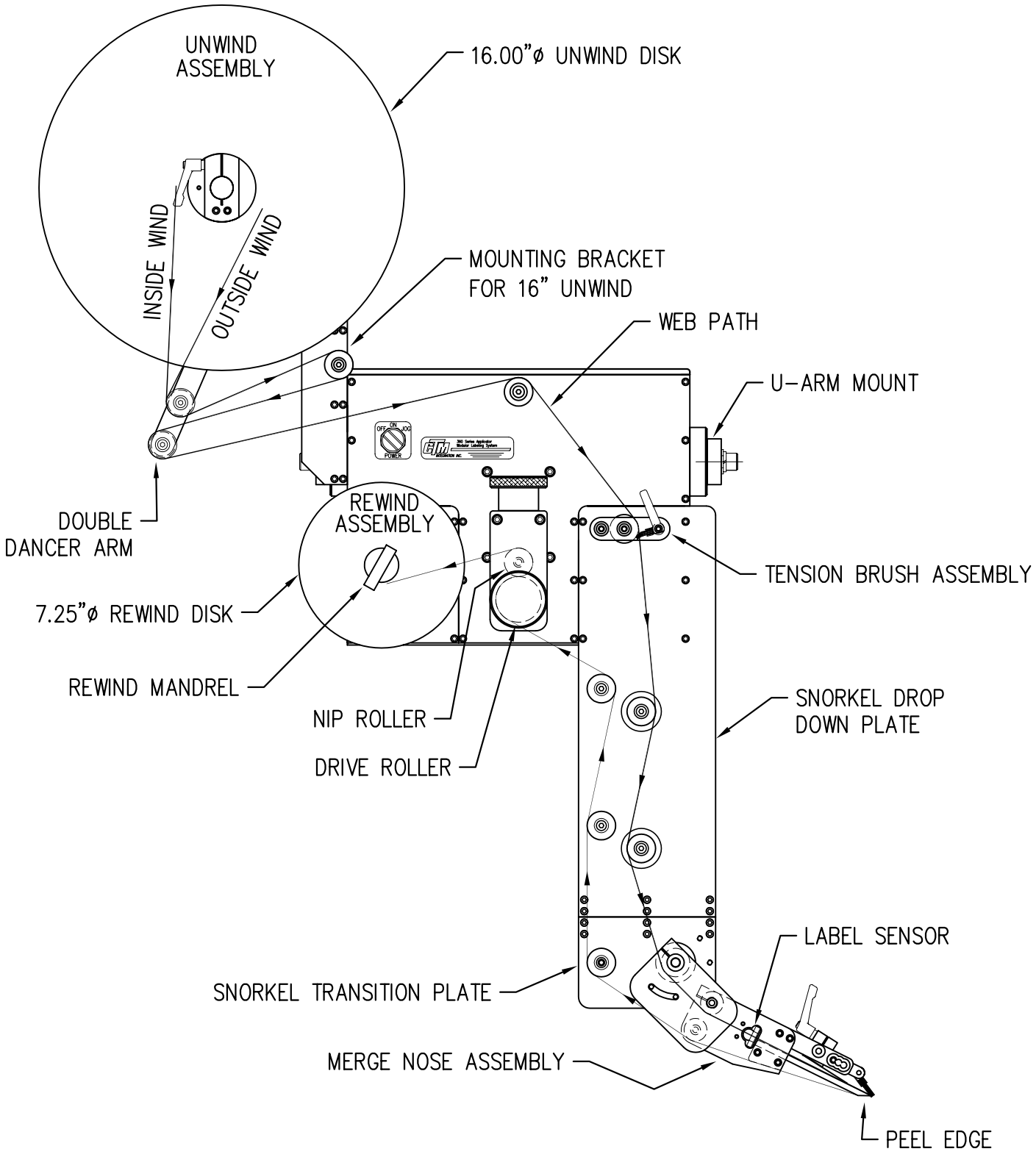
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 16.00" UNWIND

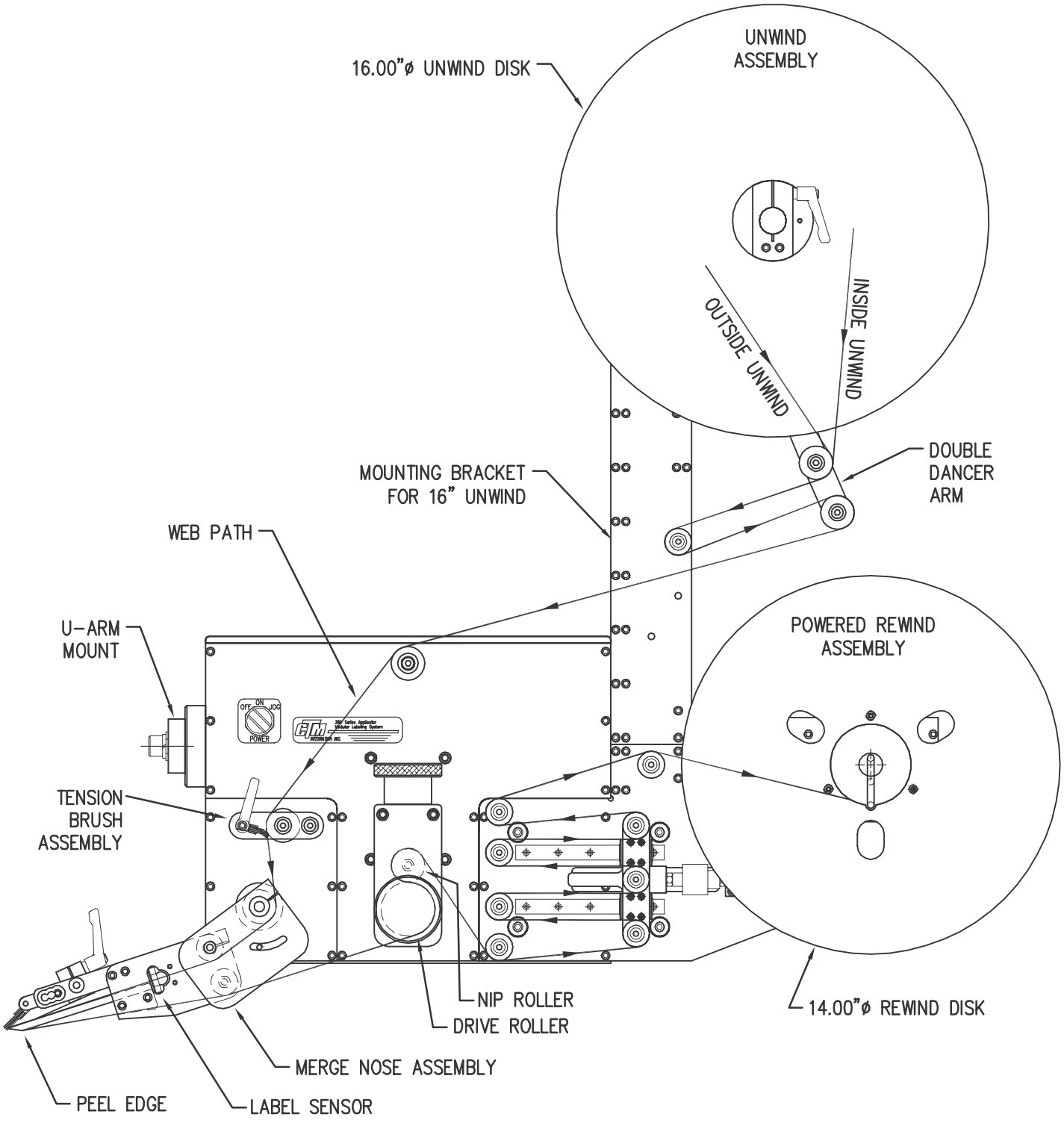


WEB PATH DIAGRAM

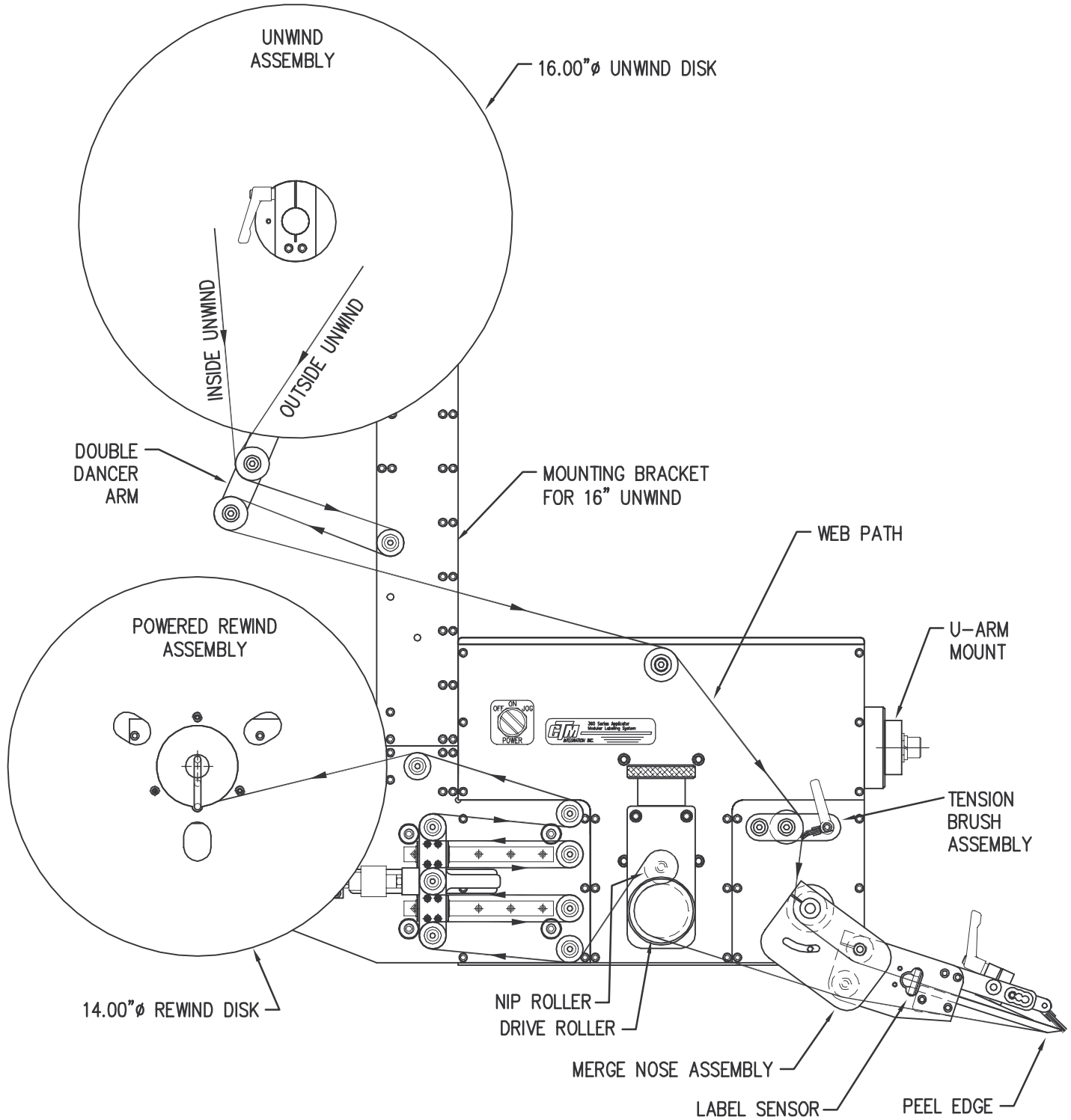
360 SERIES RIGHT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 16.00" UNWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND MERGE APPLICATOR
WITH 16.00" UNWIND & POWERED REWIND

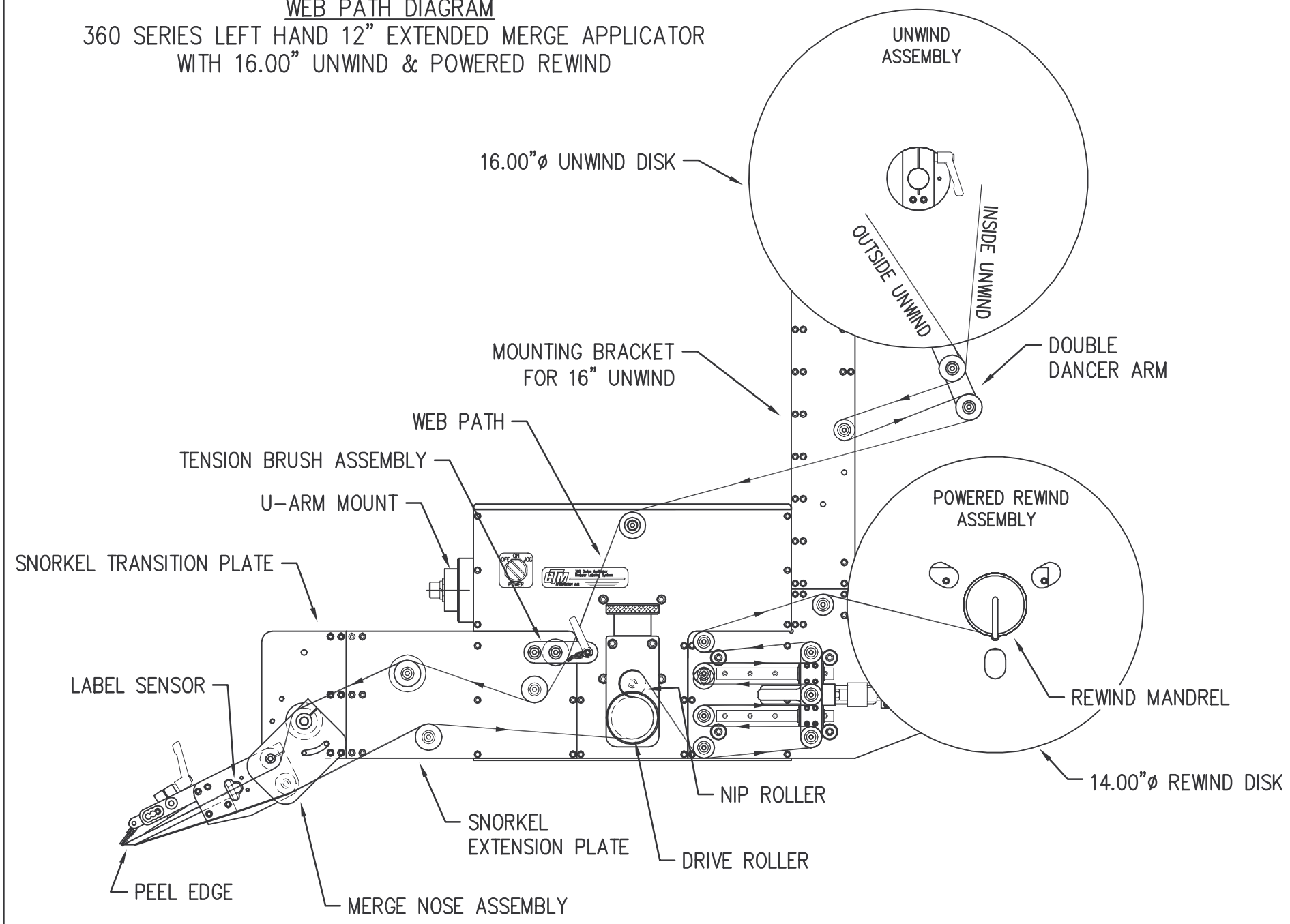


WEB PATH DIAGRAM
360 SERIES RIGHT HAND MERGE APPLICATOR
WITH 16.00" UNWIND & POWERED REWIND

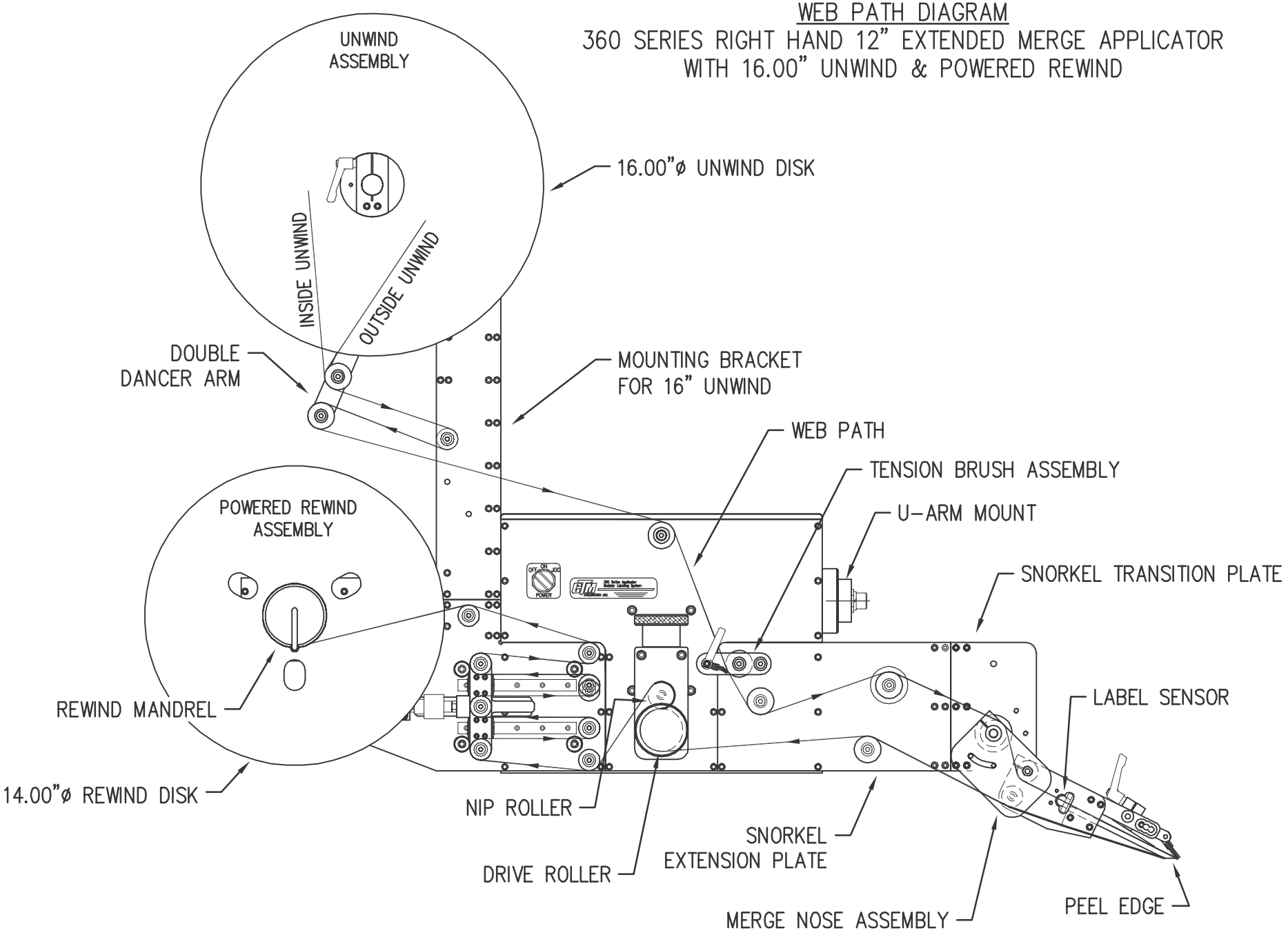


WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" EXTENDED MERGE APPLICATOR WITH 16.00" UNWIND & POWERED REWIND

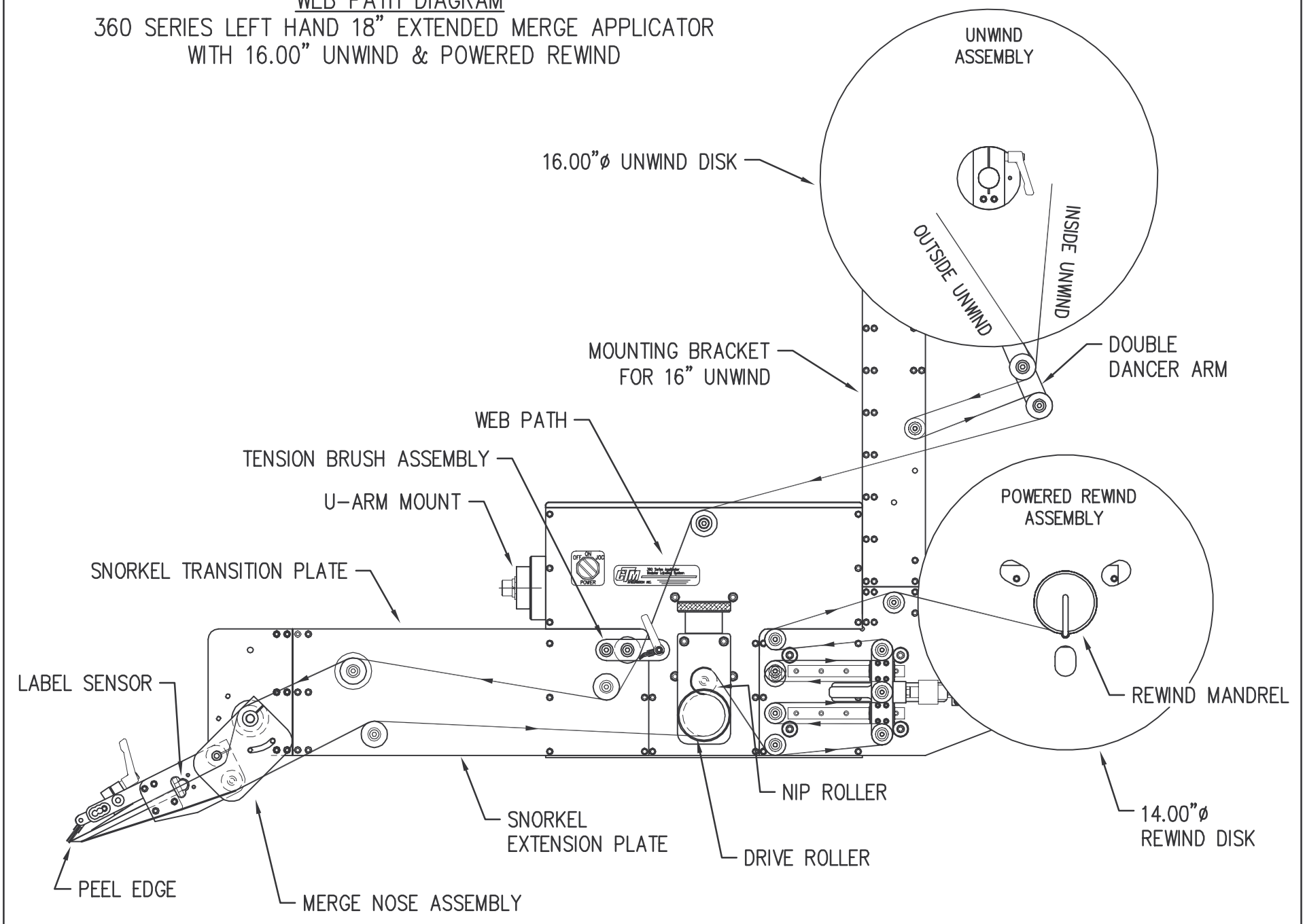


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" EXTENDED MERGE APPLICATOR
WITH 16.00" UNWIND & POWERED REWIND

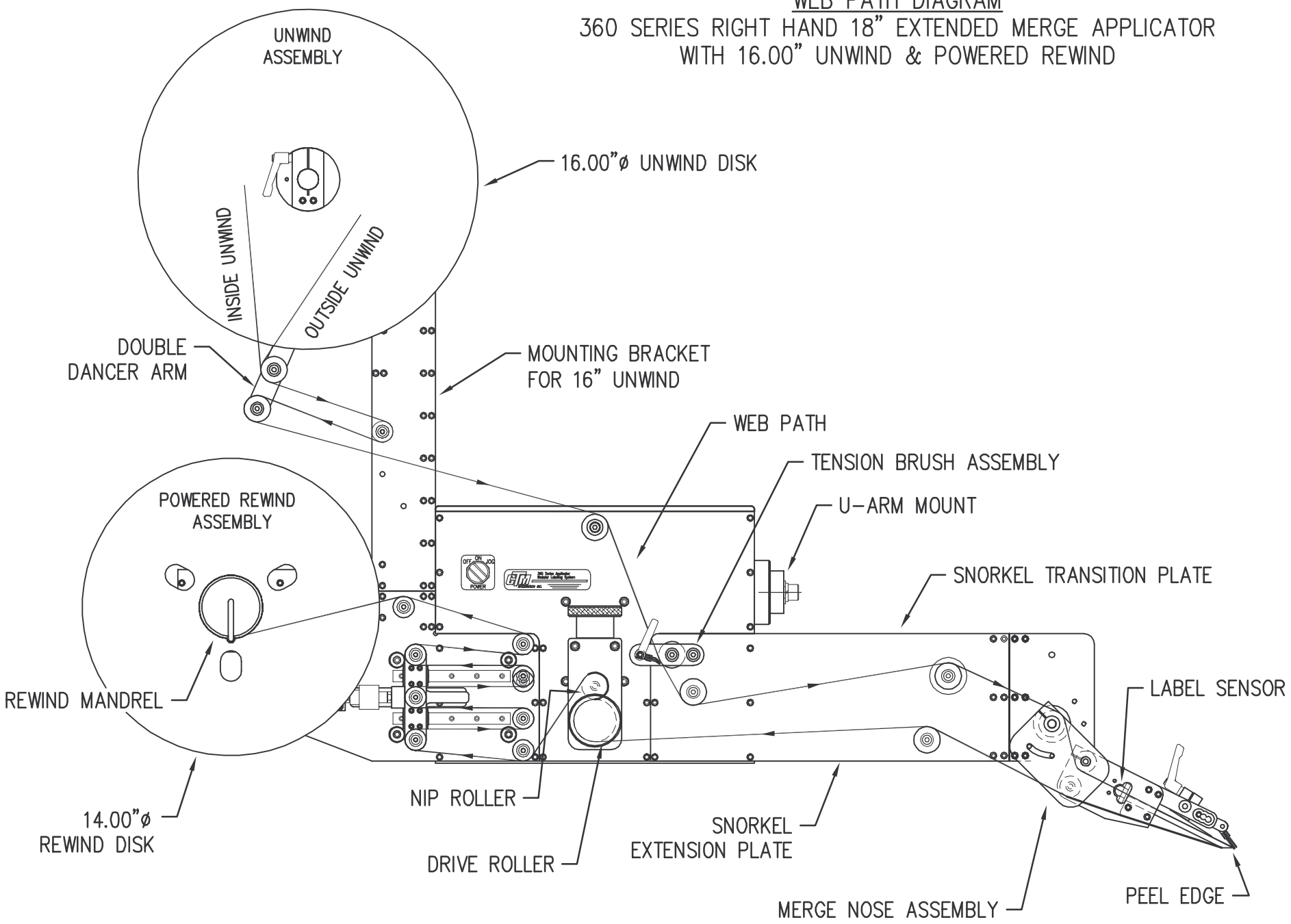


WEB PATH DIAGRAM

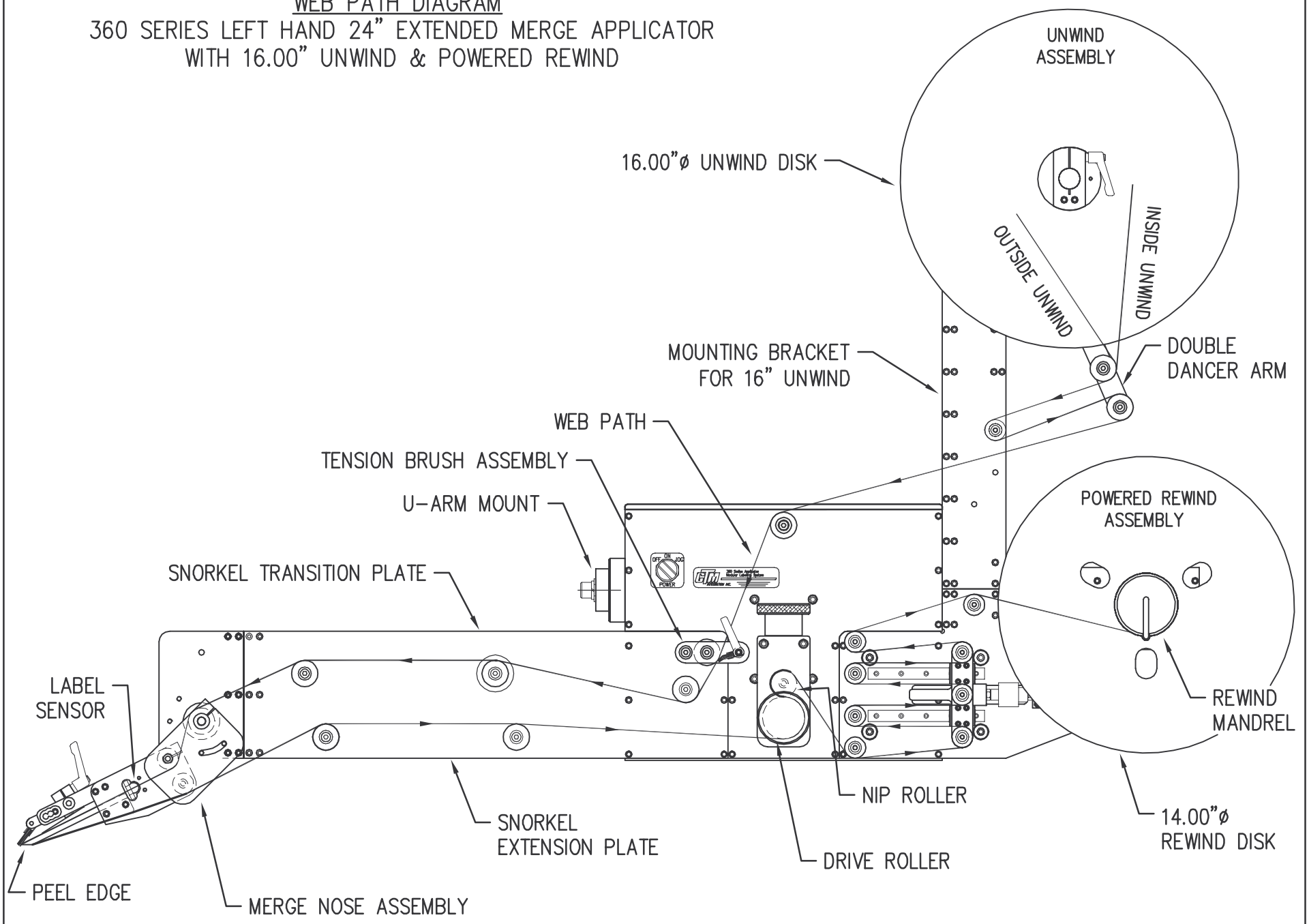
360 SERIES LEFT HAND 18" EXTENDED MERGE APPLICATOR
WITH 16.00" UNWIND & POWERED REWIND



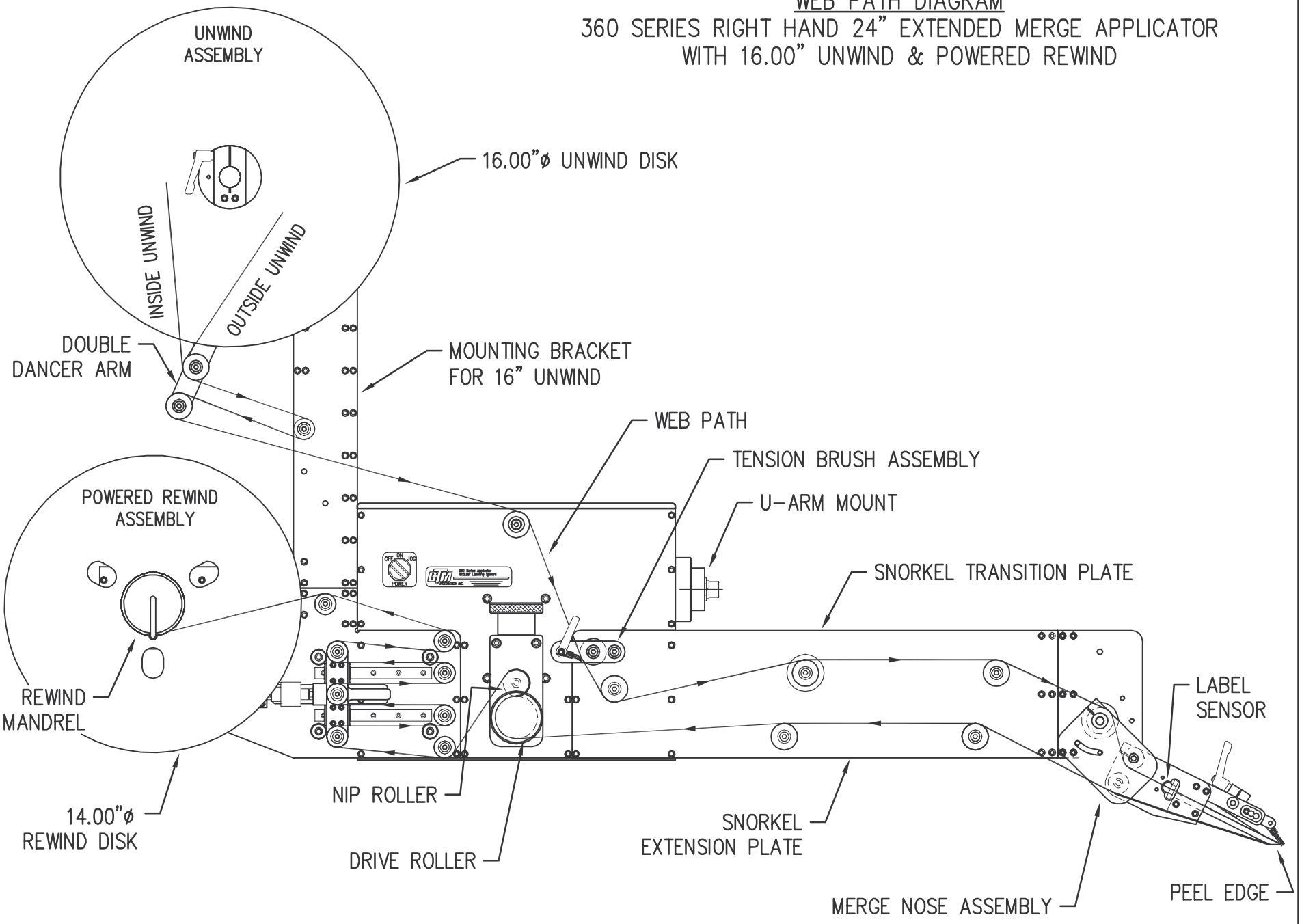
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18" EXTENDED MERGE APPLICATOR
WITH 16.00" UNWIND & POWERED REWIND



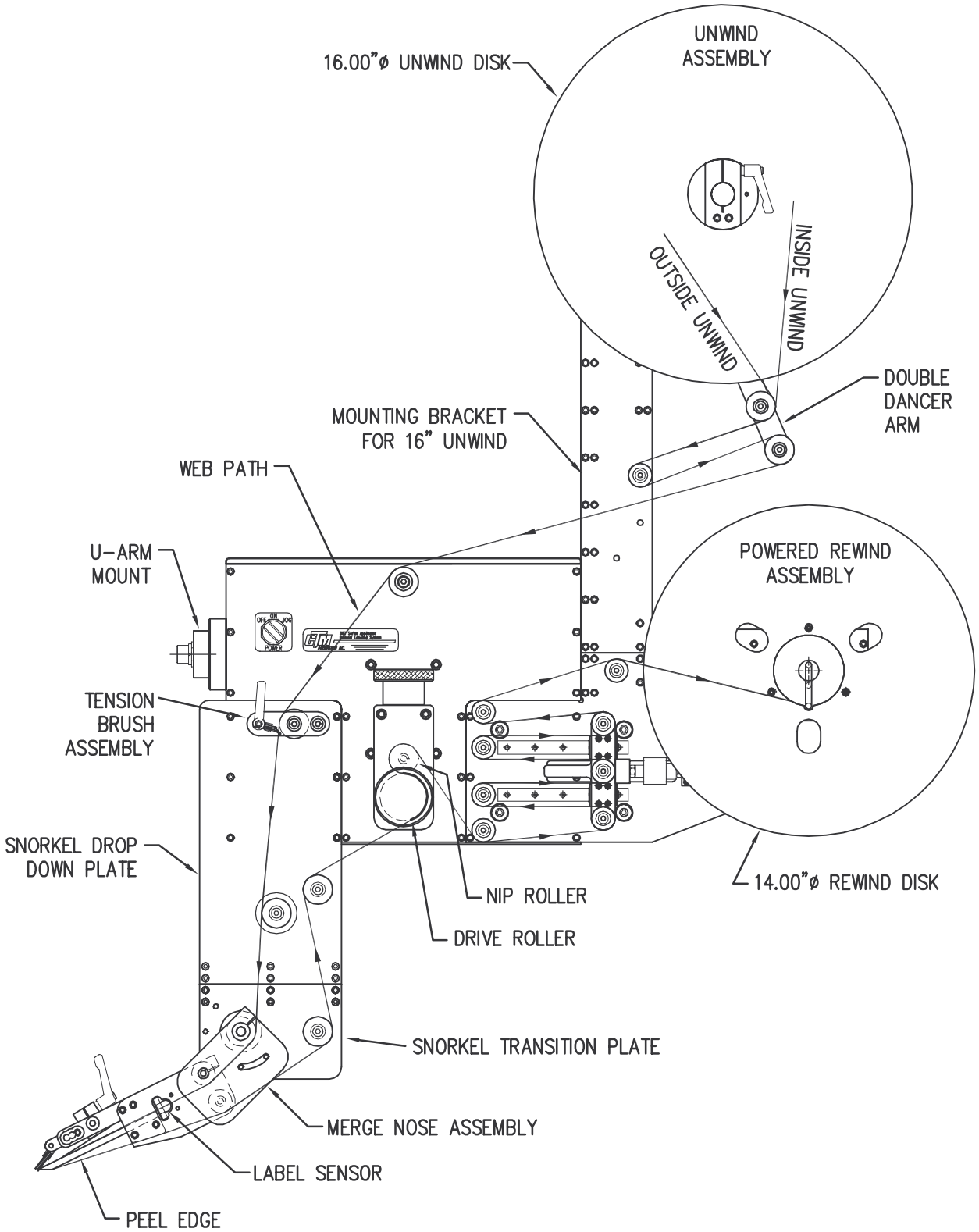
WEB PATH DIAGRAM
360 SERIES LEFT HAND 24" EXTENDED MERGE APPLICATOR
WITH 16.00" UNWIND & POWERED REWIND



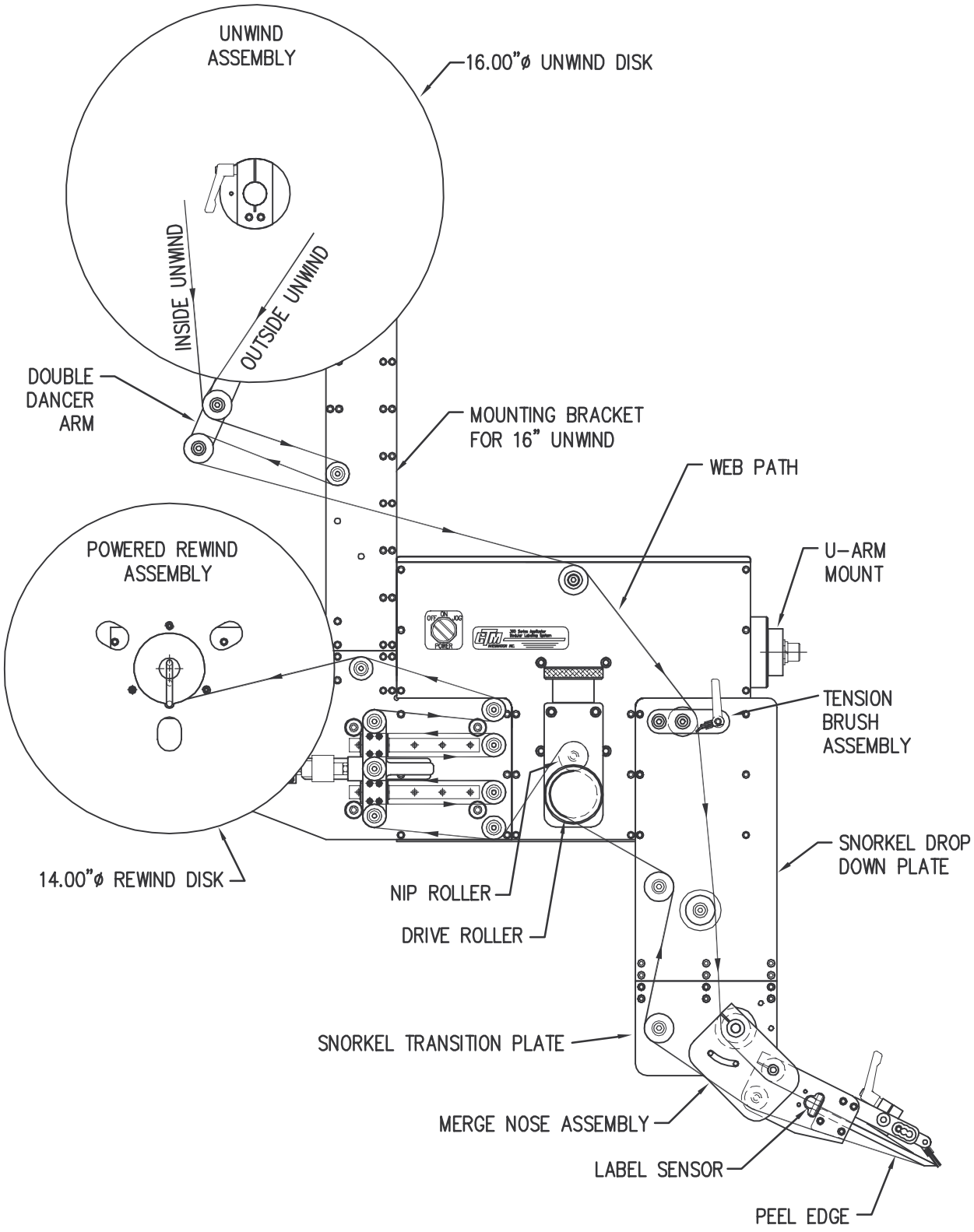
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 24" EXTENDED MERGE APPLICATOR WITH 16.00" UNWIND & POWERED REWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" DROP DOWN MERGE APPLICATOR
WITH 16.00" UNWIND & POWERED REWIND

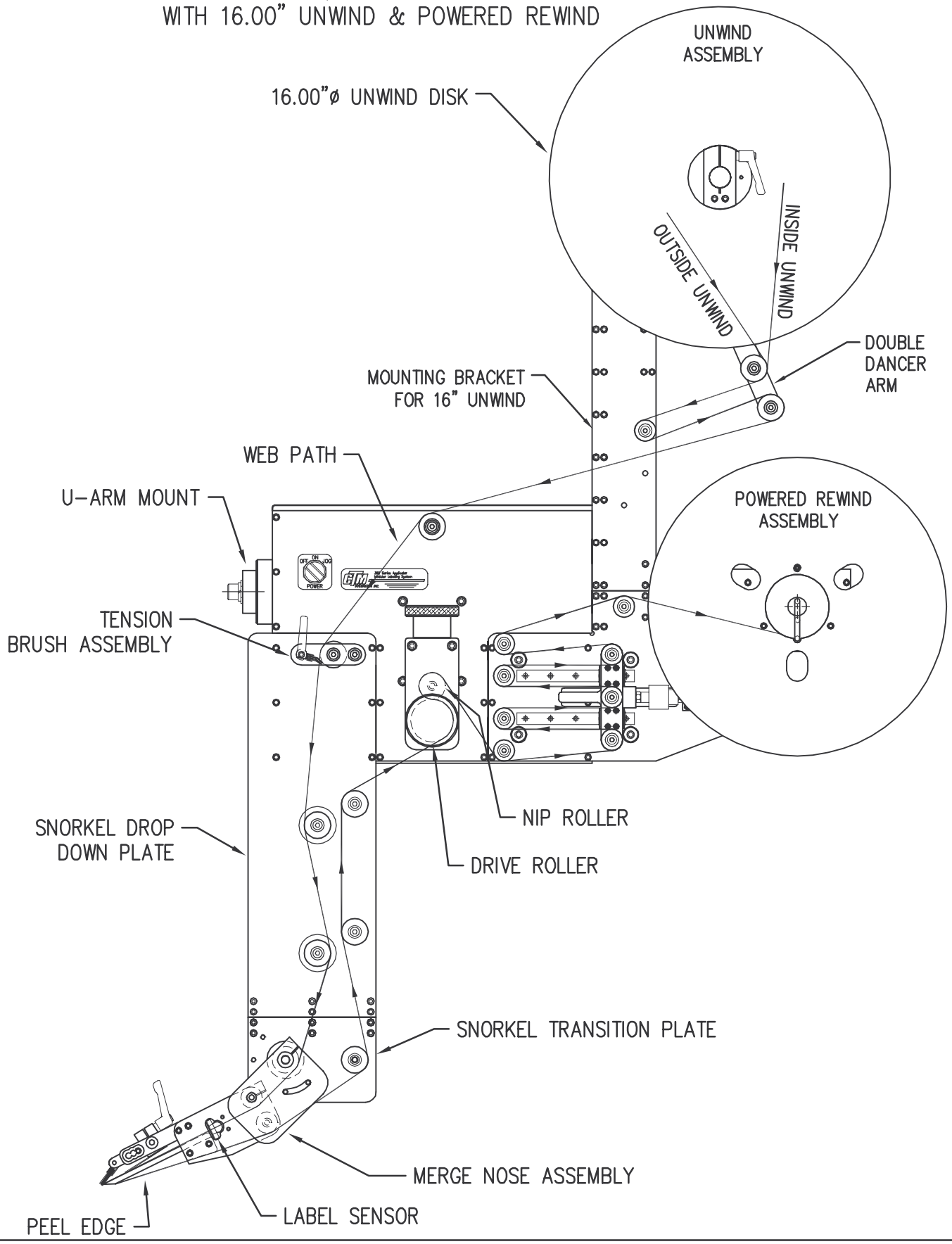


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" DROP DOWN MERGE APPLICATOR WITH 16.00" UNWIND & POWERED REWIND



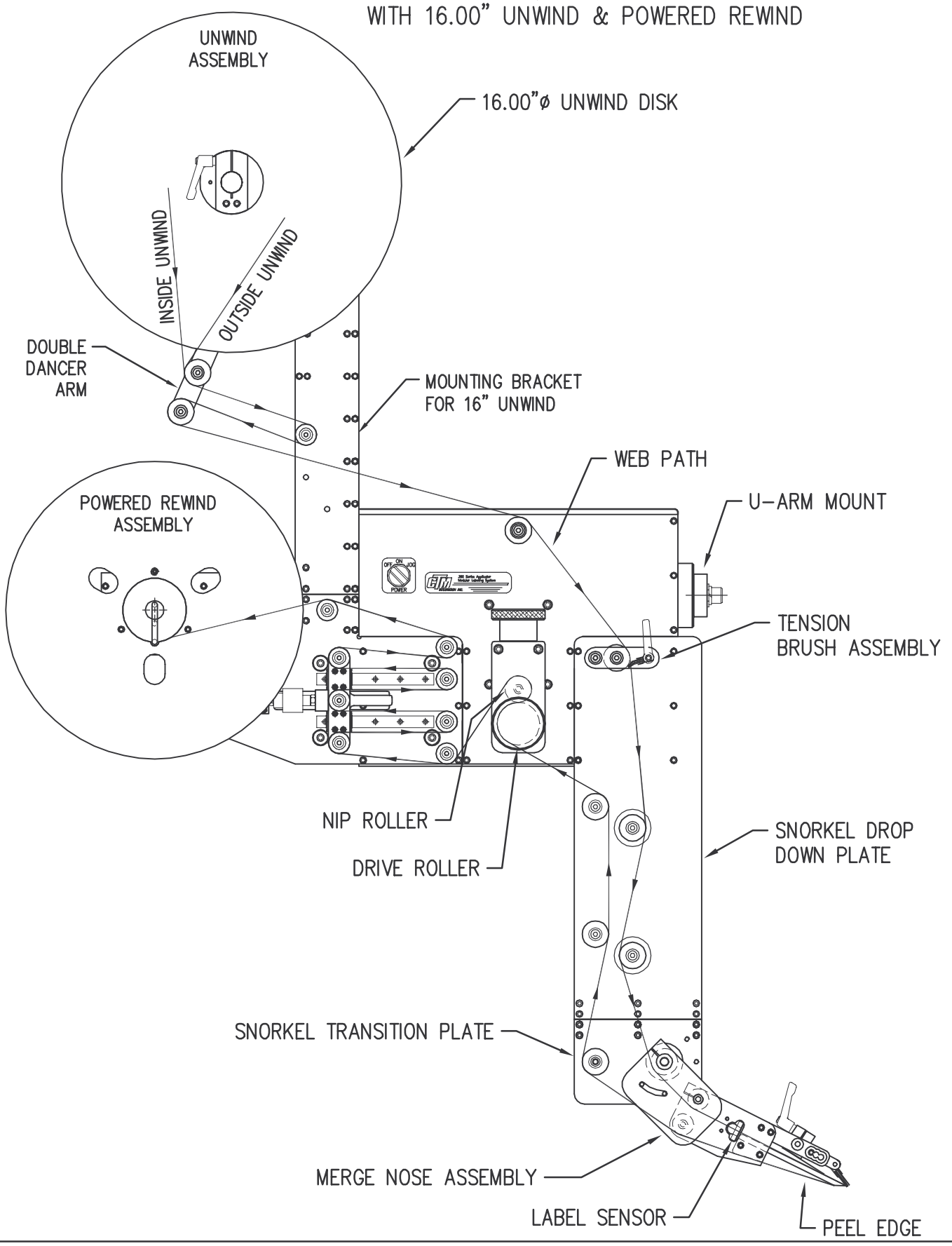
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 16.00" UNWIND & POWERED REWIND

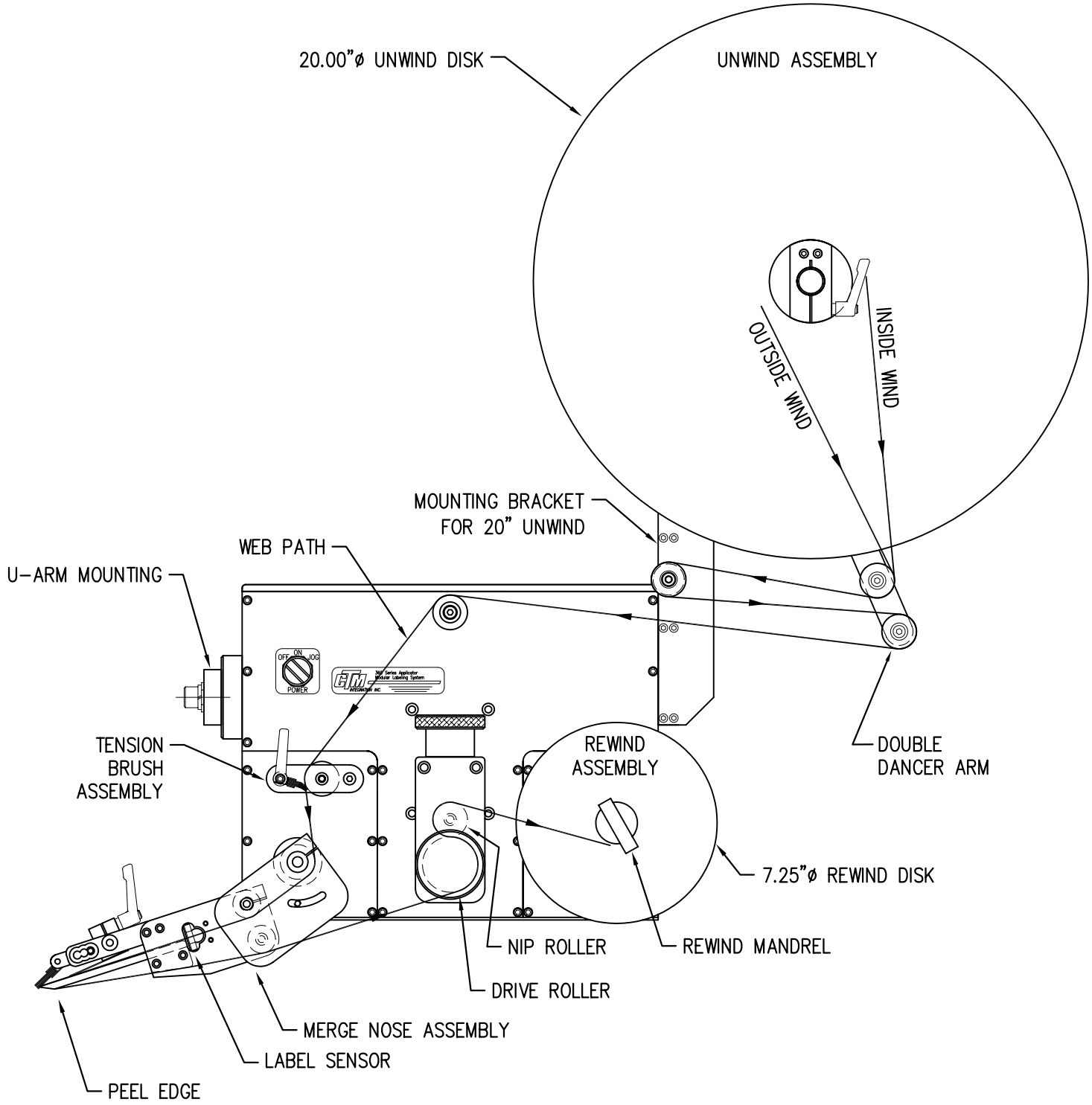


WEB PATH DIAGRAM

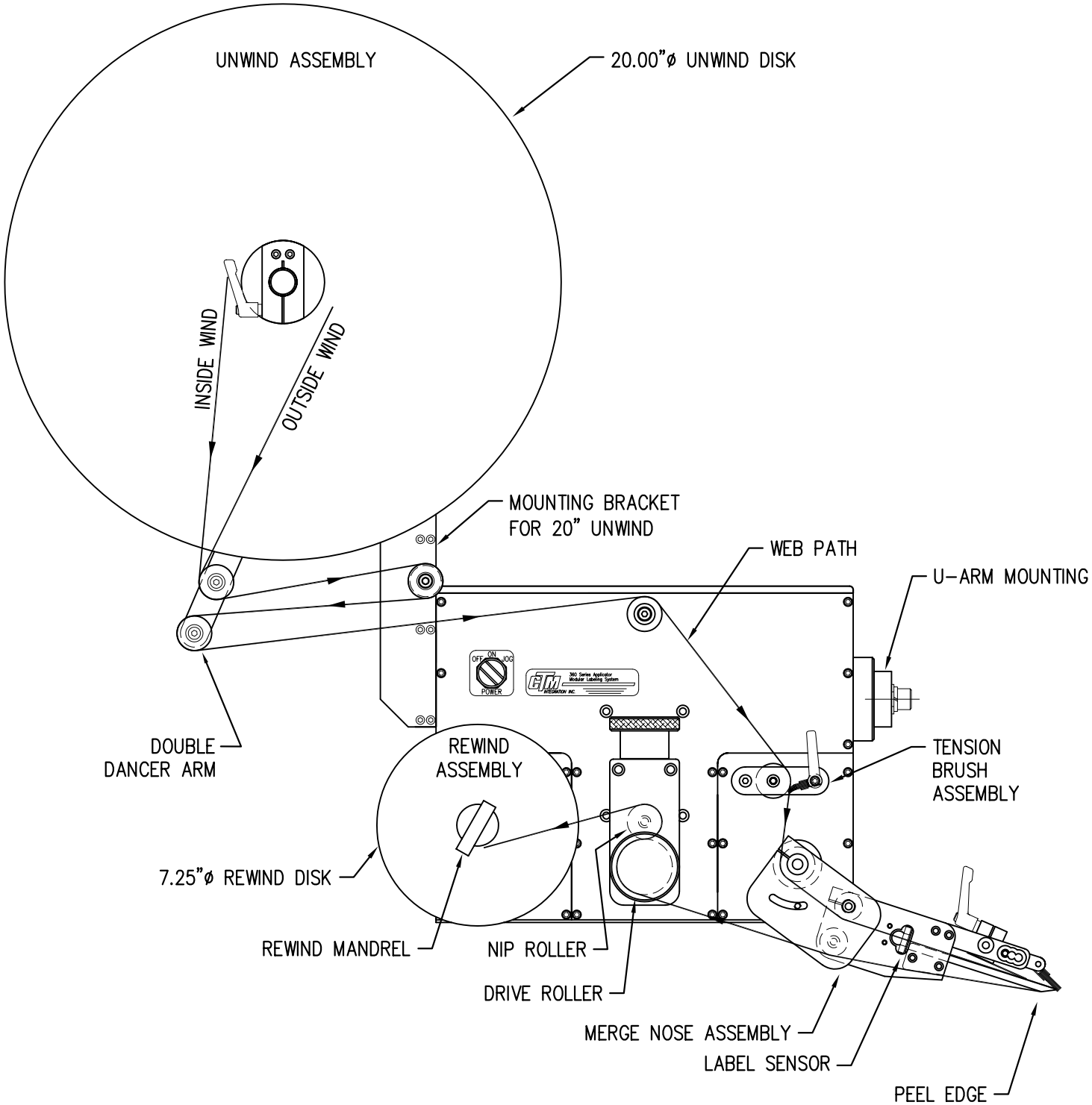
360 SERIES RIGHT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 16.00" UNWIND & POWERED REWIND



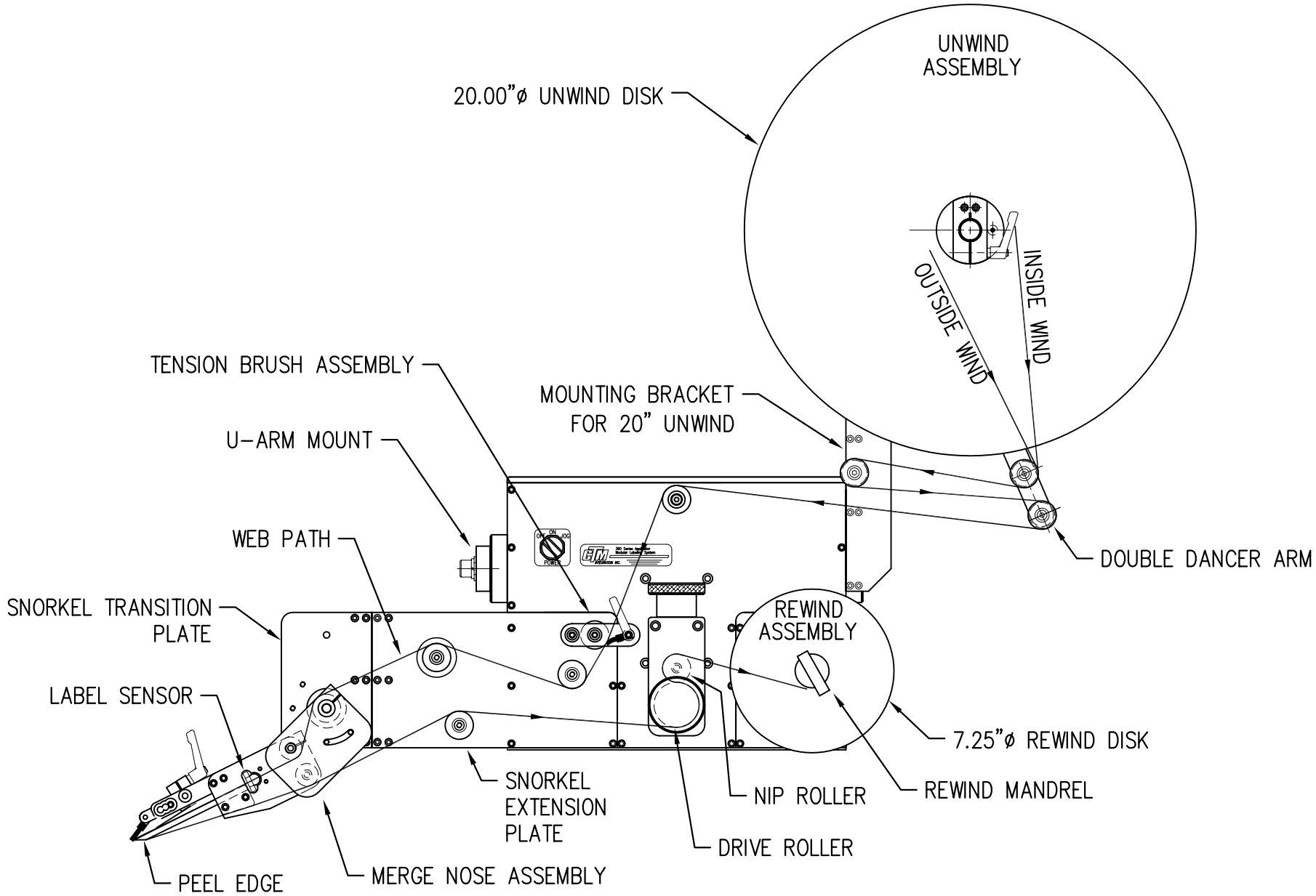
WEB PATH DIAGRAM
360 SERIES LEFT HAND MERGE APPLICATOR
WITH 20.00" UNWIND



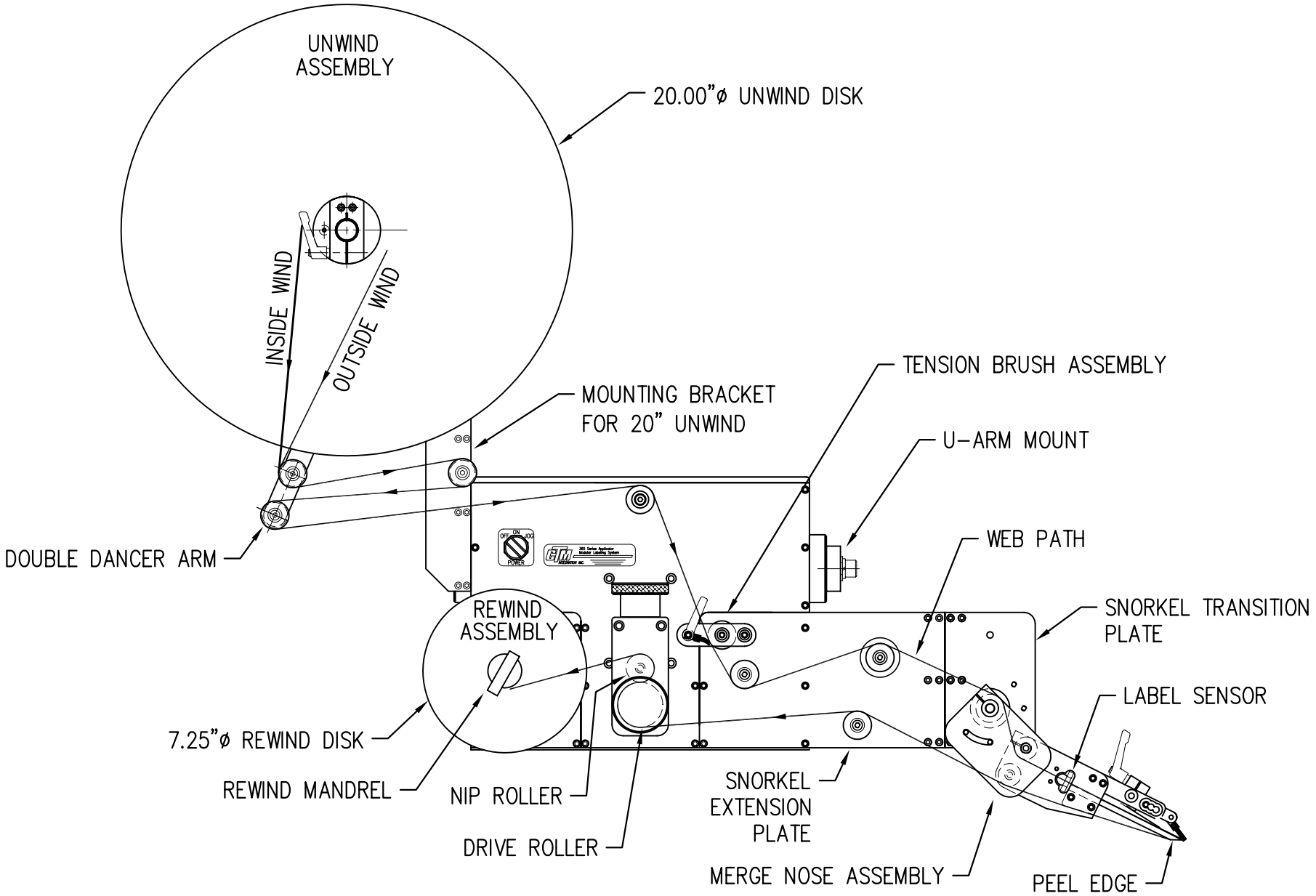
WEB PATH DIAGRAM
360 SERIES RIGHT HAND MERGE APPLICATOR
WITH 20.00" UNWIND



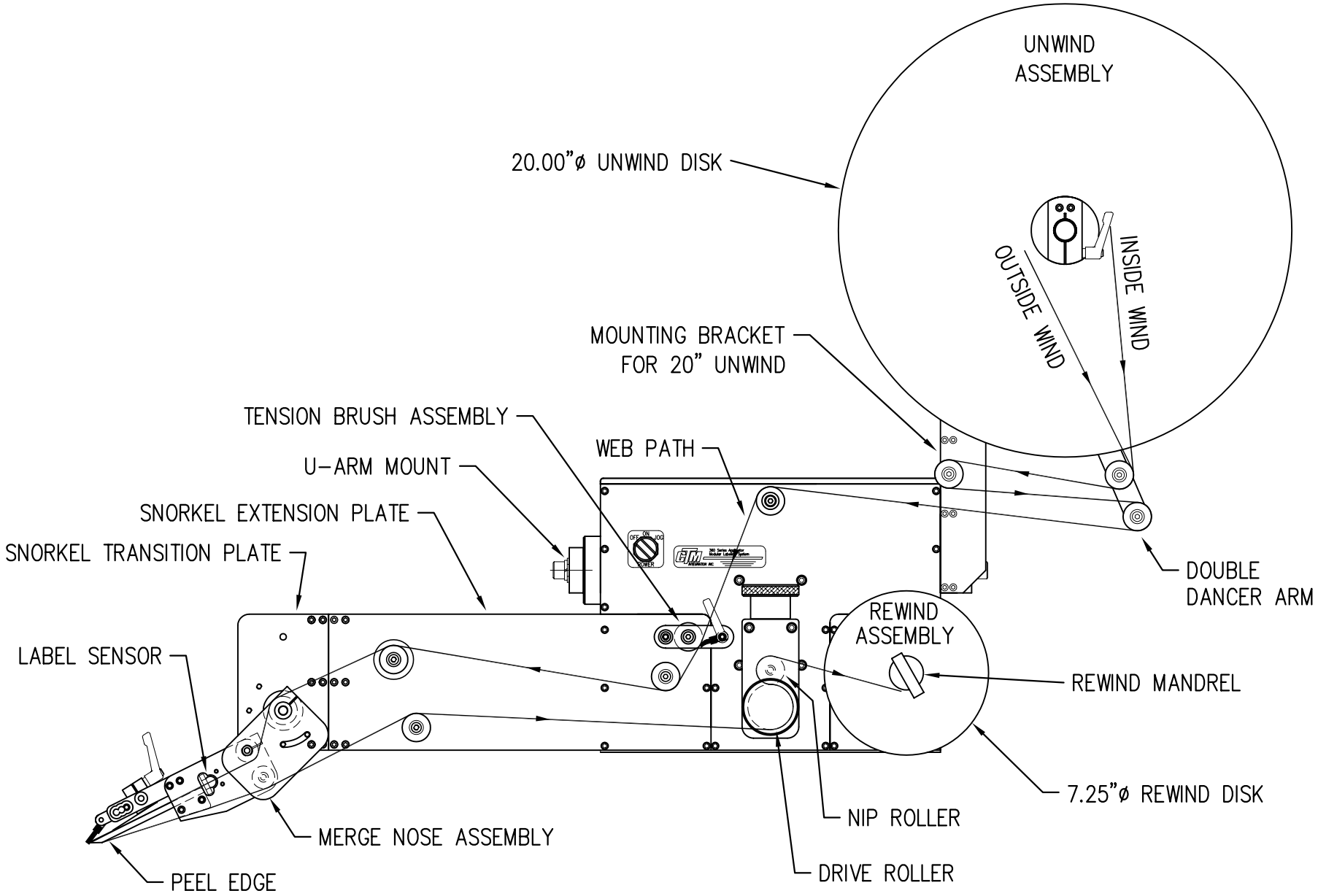
WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED MERGE APPLICATOR WITH 20.00" UNWIND



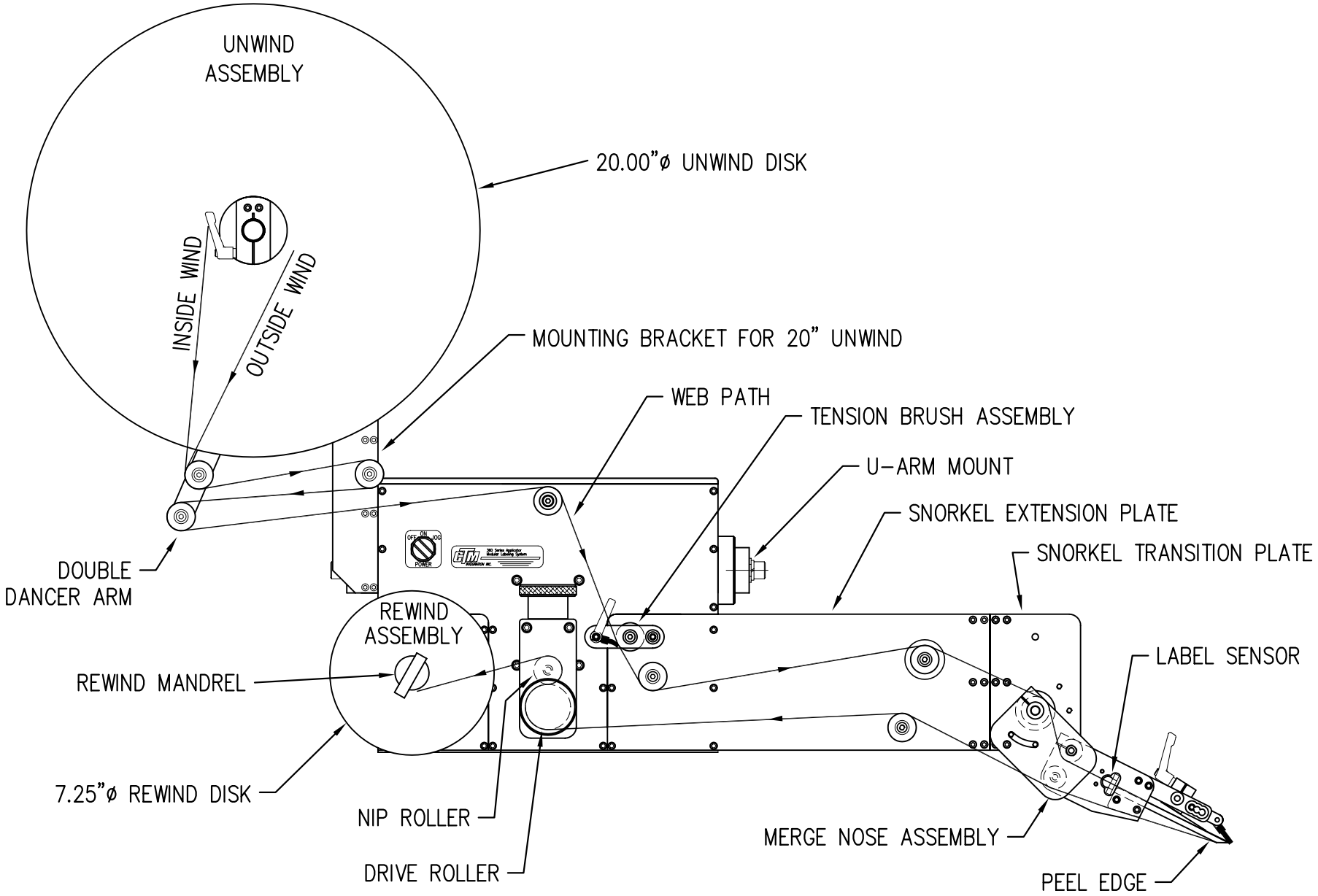
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" EXTENDED MERGE APPLICATOR WITH 20.00" UNWIND



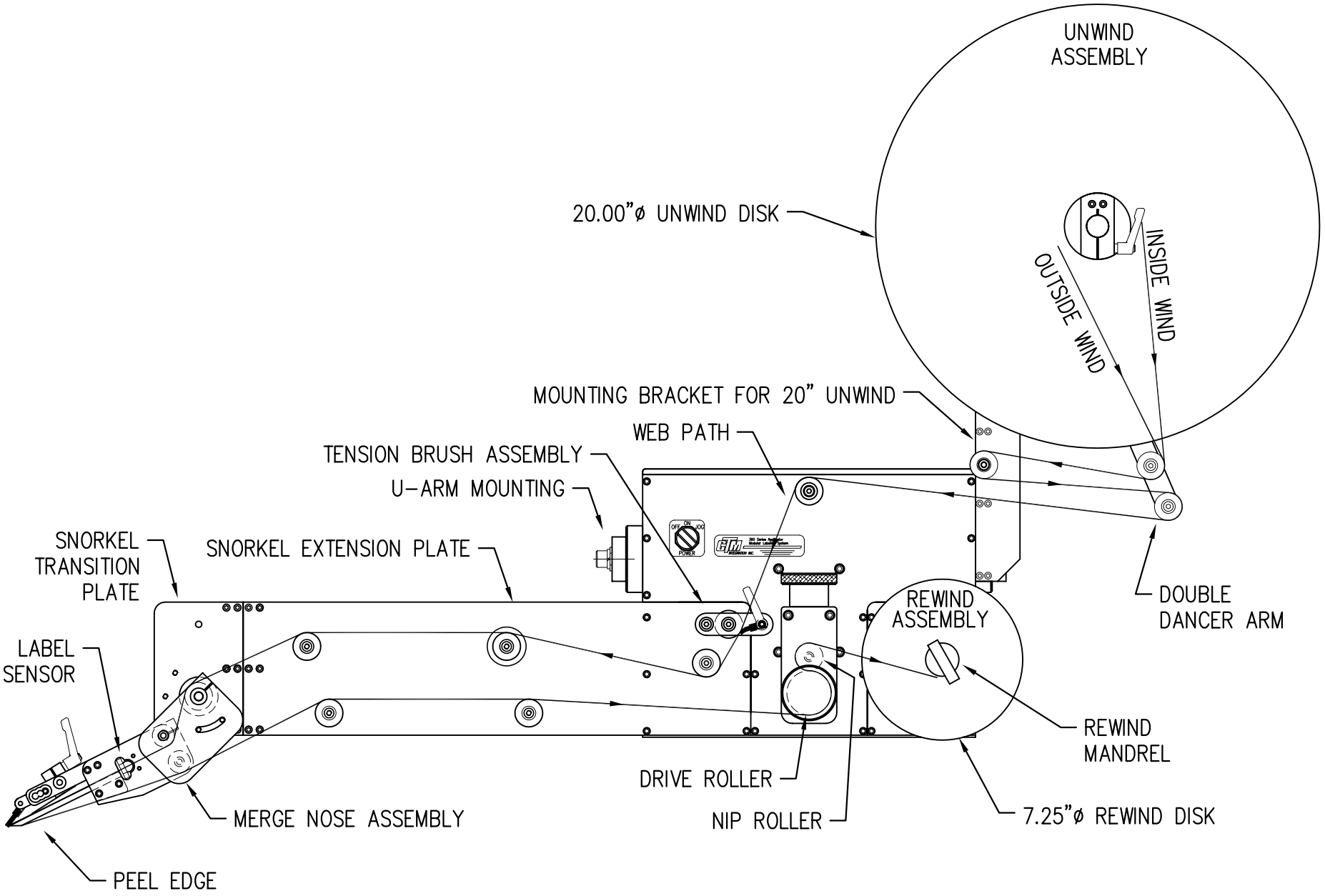
WEB PATH DIAGRAM
360 SERIES LEFT HAND 18" EXTENDED MERGE APPLICATOR WITH 20.00" UNWIND



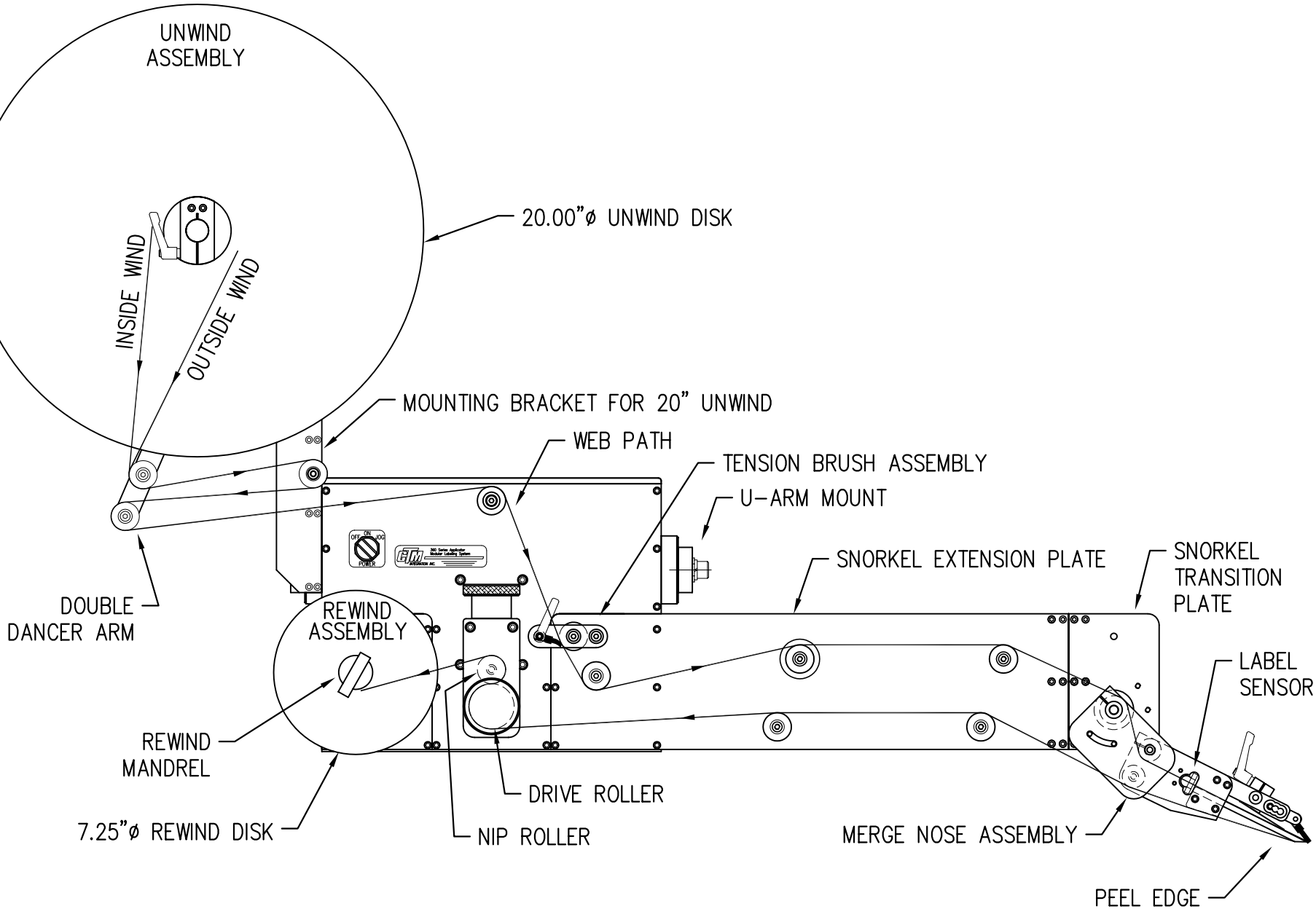
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18" EXTENDED MERGE APPLICATOR WITH 20.00" UNWIND



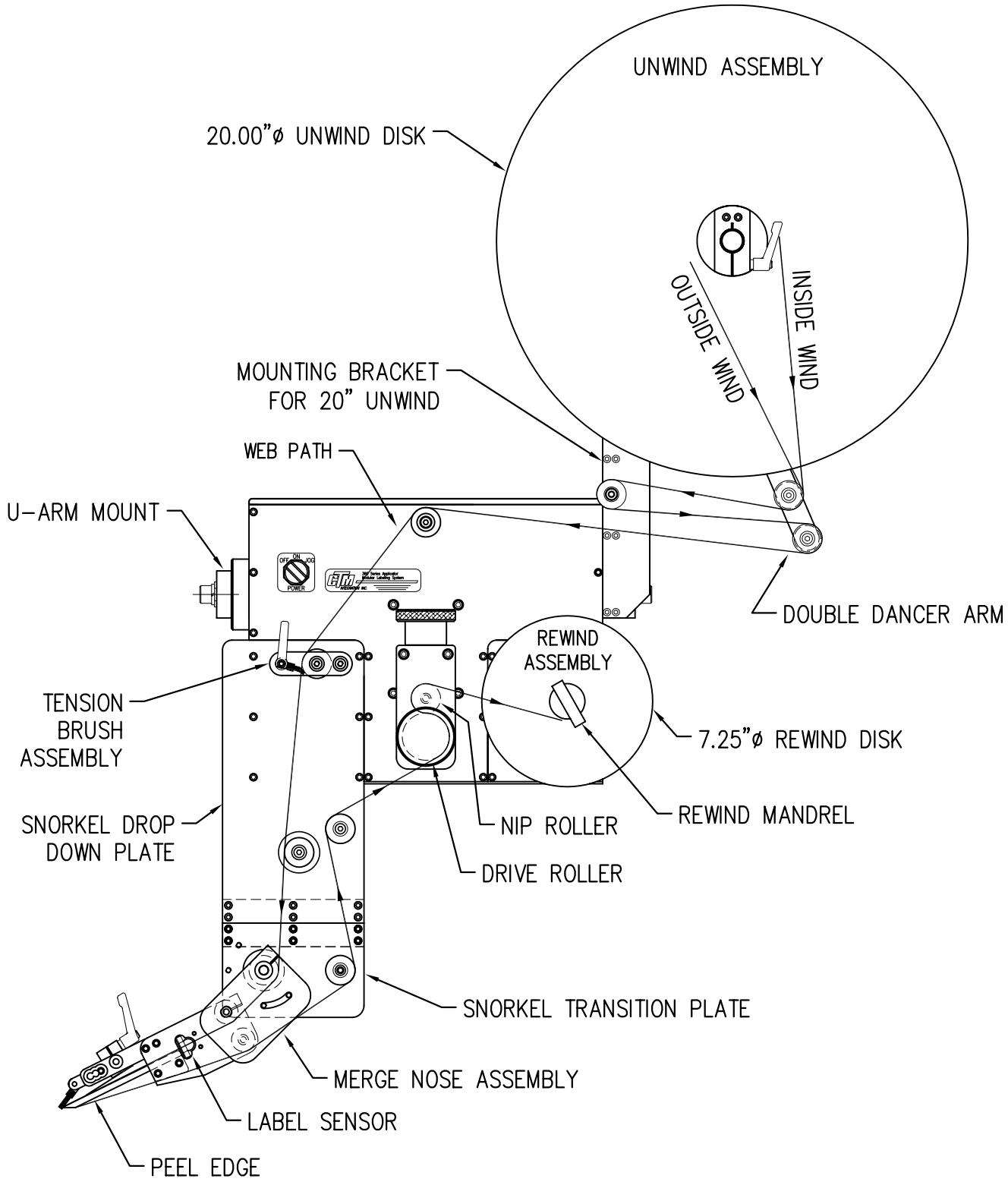
WEB PATH DIAGRAM
360 SERIES LEFT HAND 24" EXTENDED MERGE APPLICATOR WITH 20.00" UNWIND



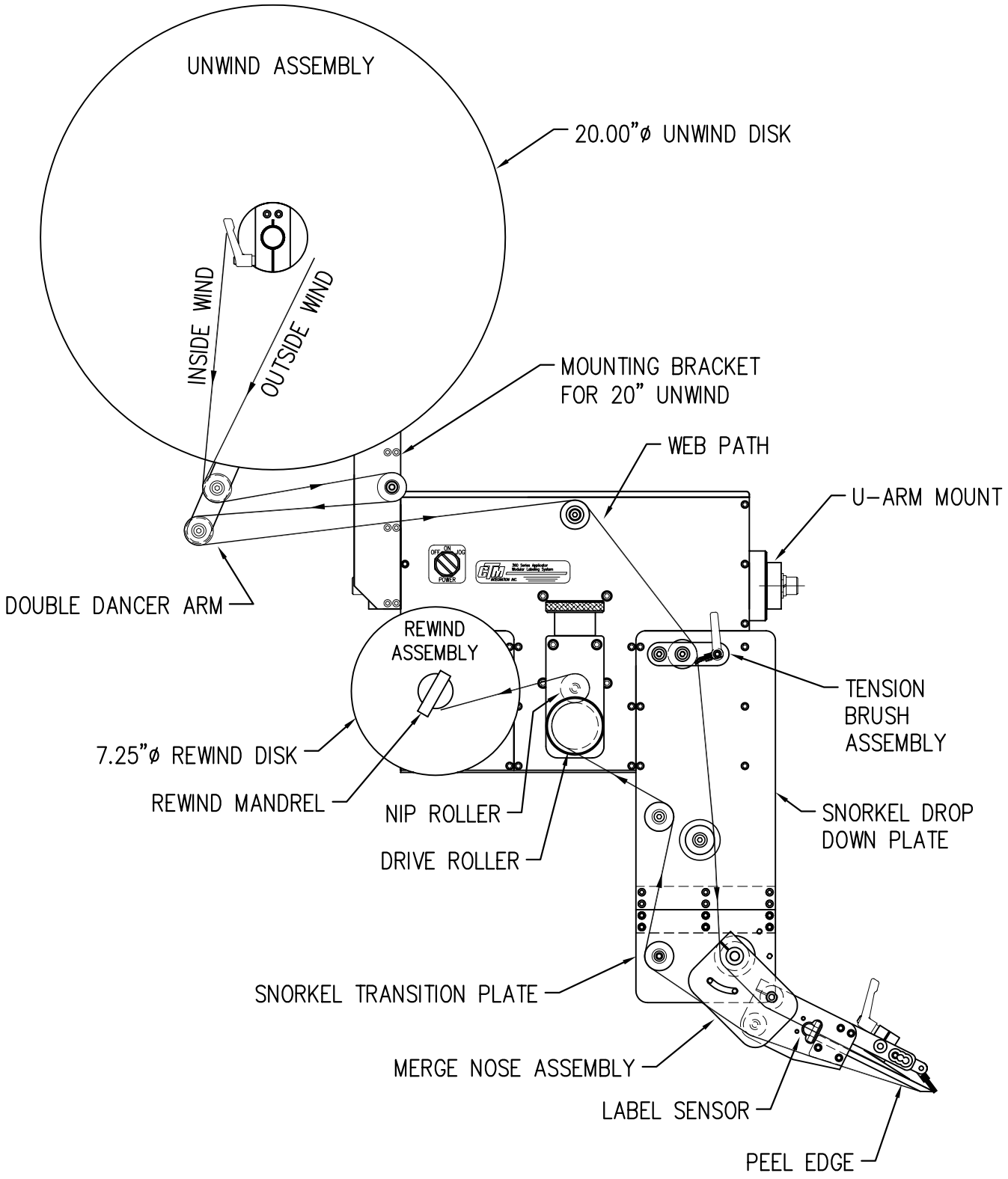
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 24" EXTENDED MERGE APPLICATOR
WITH 20.00" UNWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" DROP DOWN MERGE APPLICATOR WITH 20.00" UNWIND

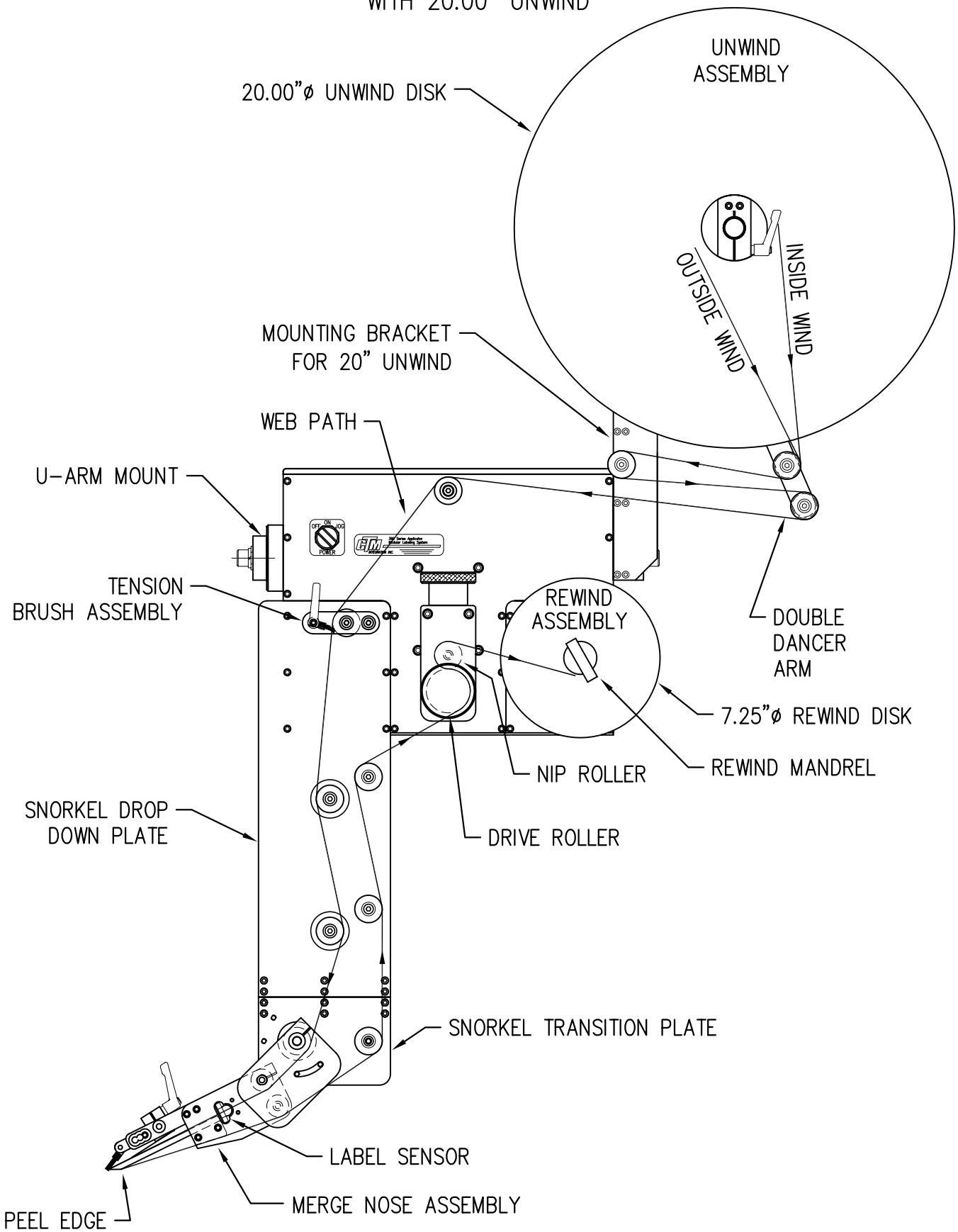


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" DROP DOWN MERGE APPLICATOR WITH 20.00" UNWIND



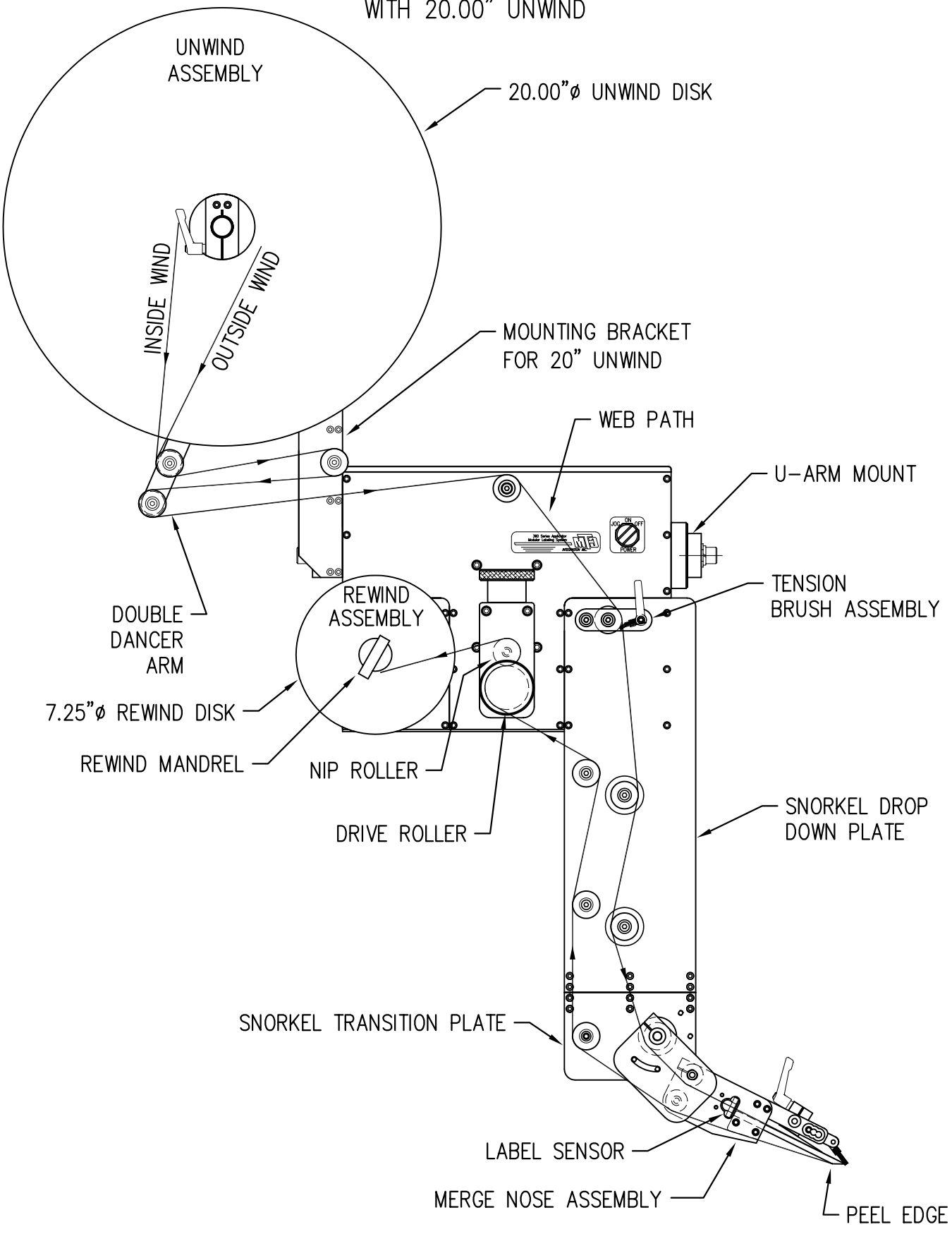
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 20.00" UNWIND

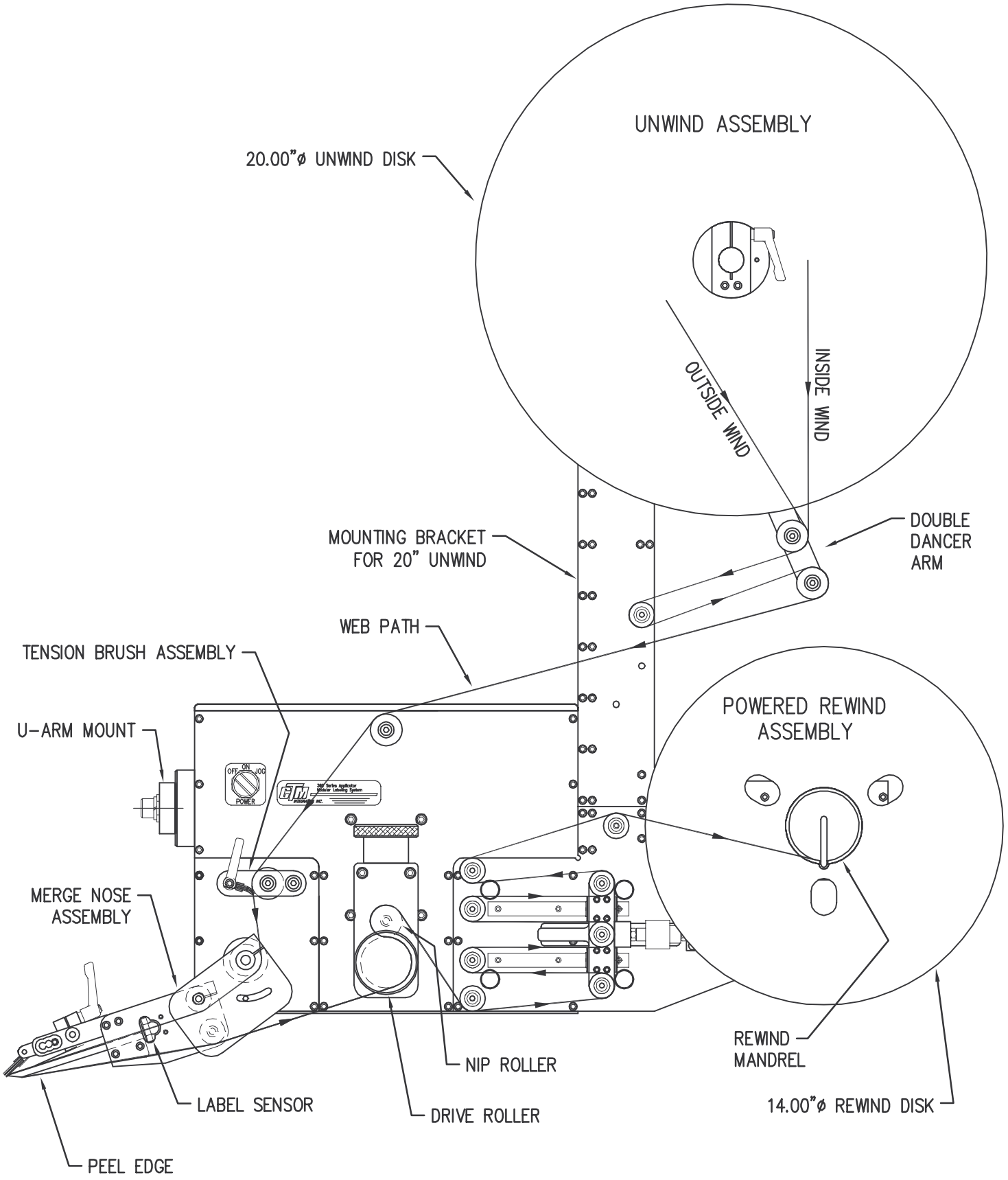


WEB PATH DIAGRAM

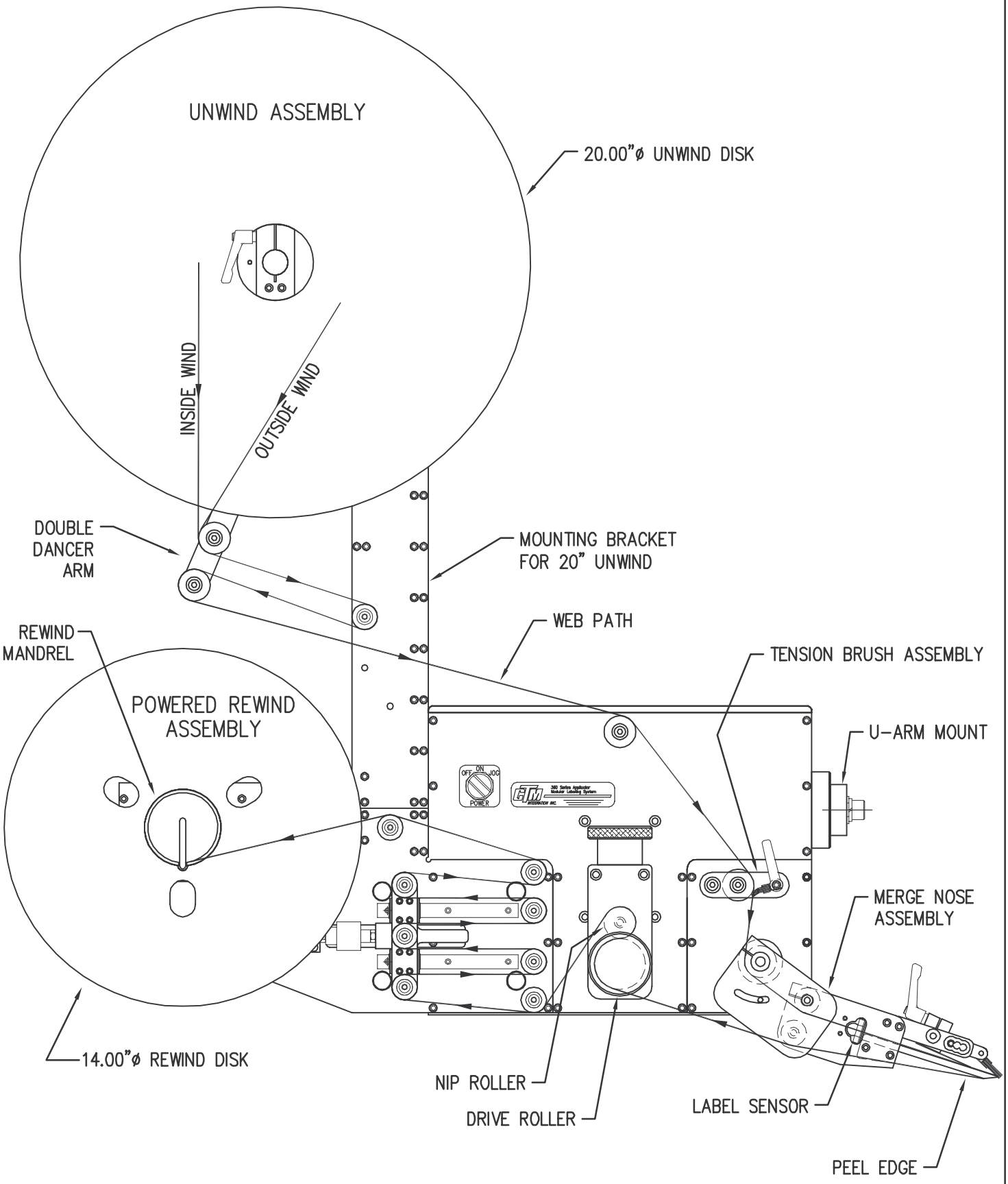
360 SERIES RIGHT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 20.00" UNWIND



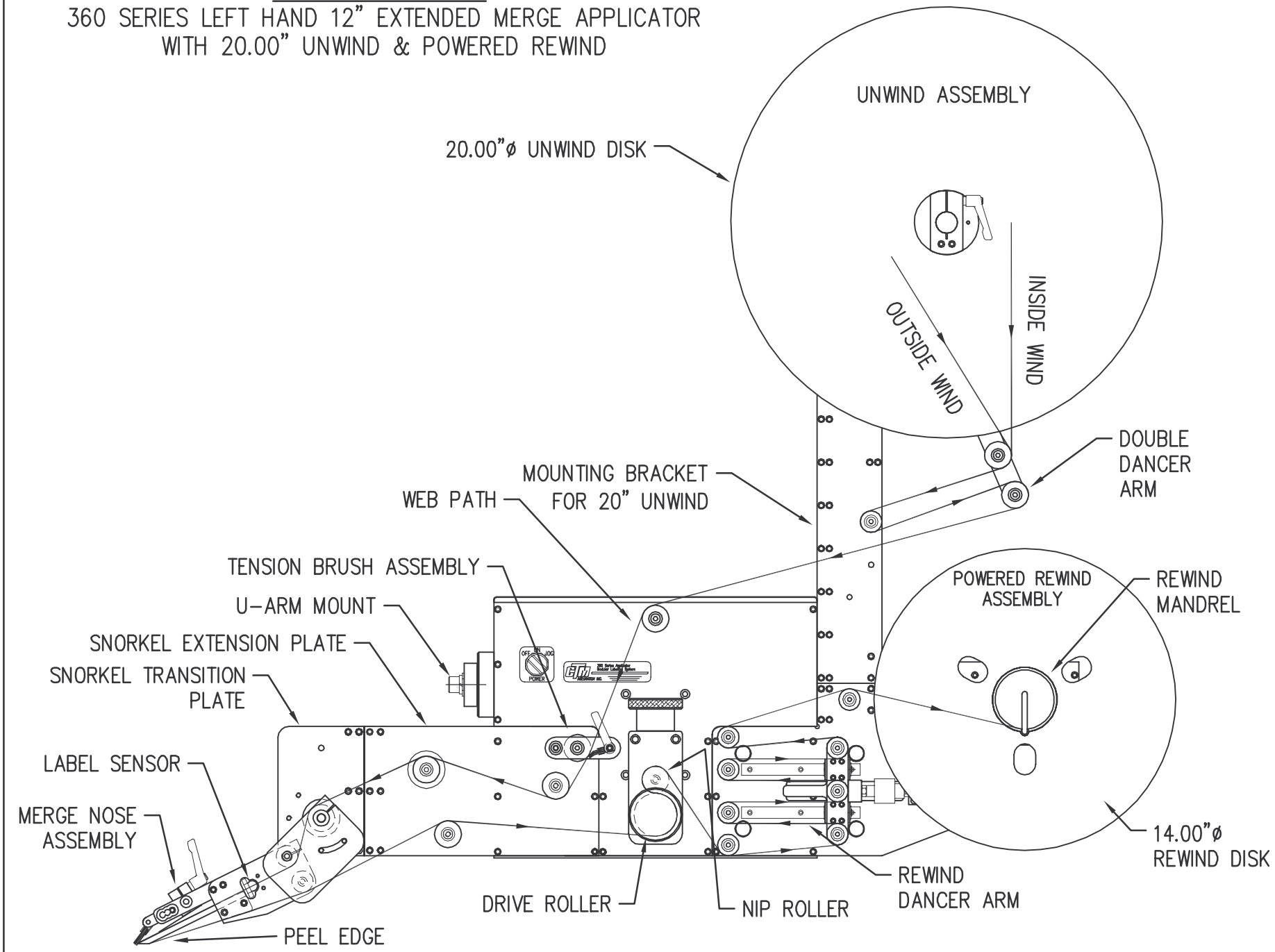
WEB PATH DIAGRAM
360 SERIES LEFT HAND MERGE APPLICATOR
WITH 20.00" UNWIND & POWERED REWIND



WEB PATH DIAGRAM
360 SERIES RIGHT HAND MERGE APPLICATOR
WITH 20.00" UNWIND & POWERED REWIND

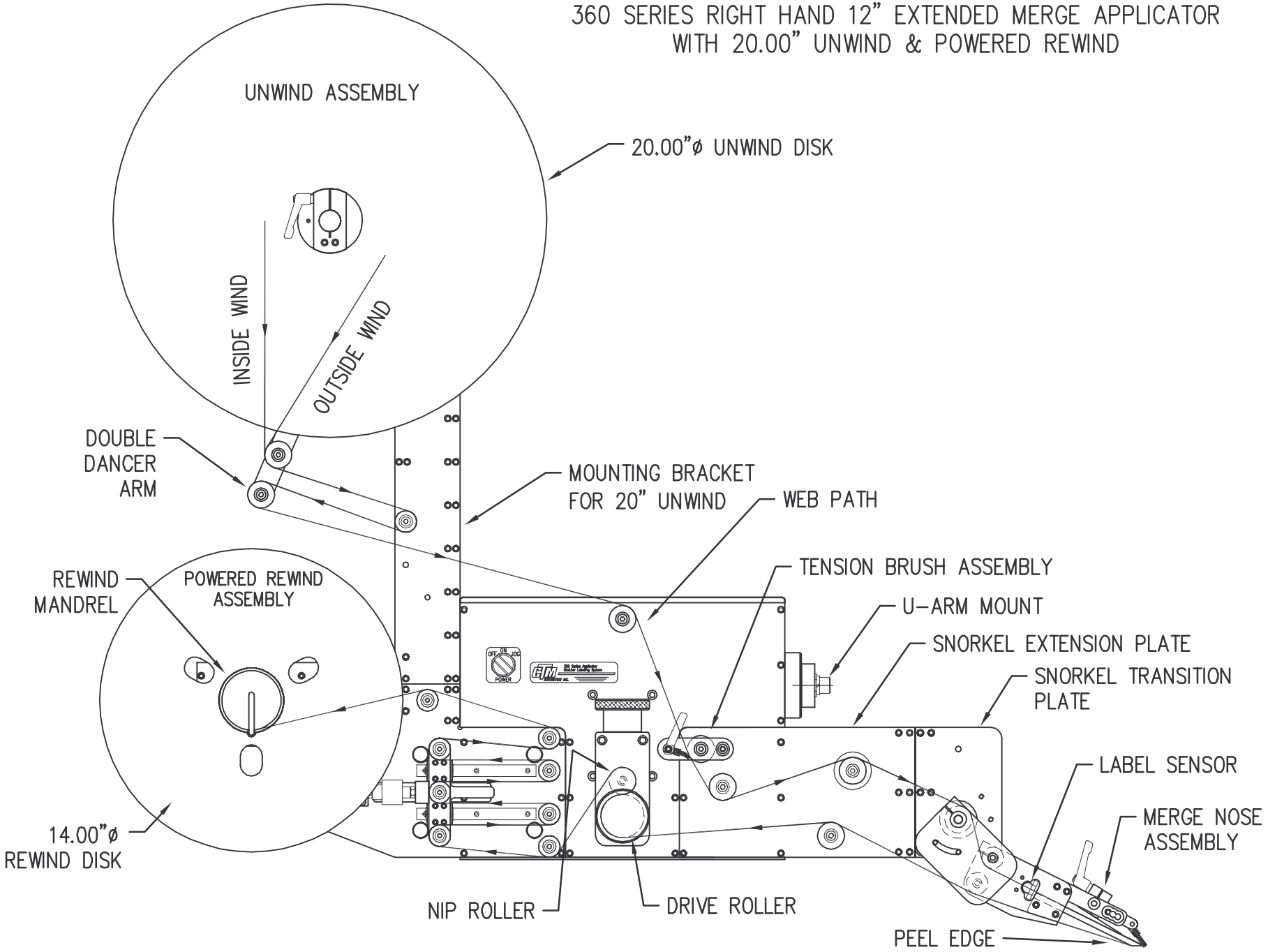


WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED MERGE APPLICATOR WITH 20.00" UNWIND & POWERED REWIND

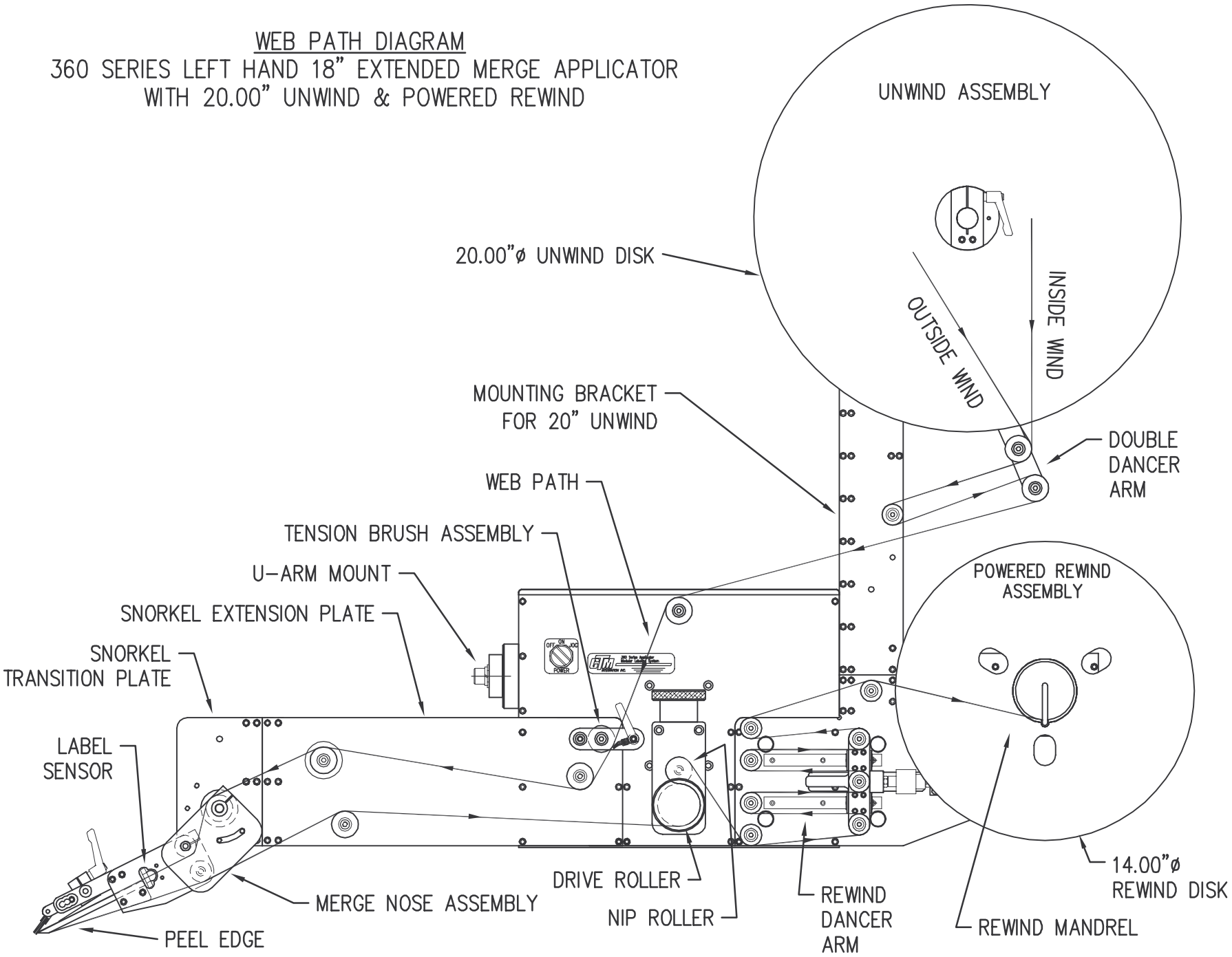


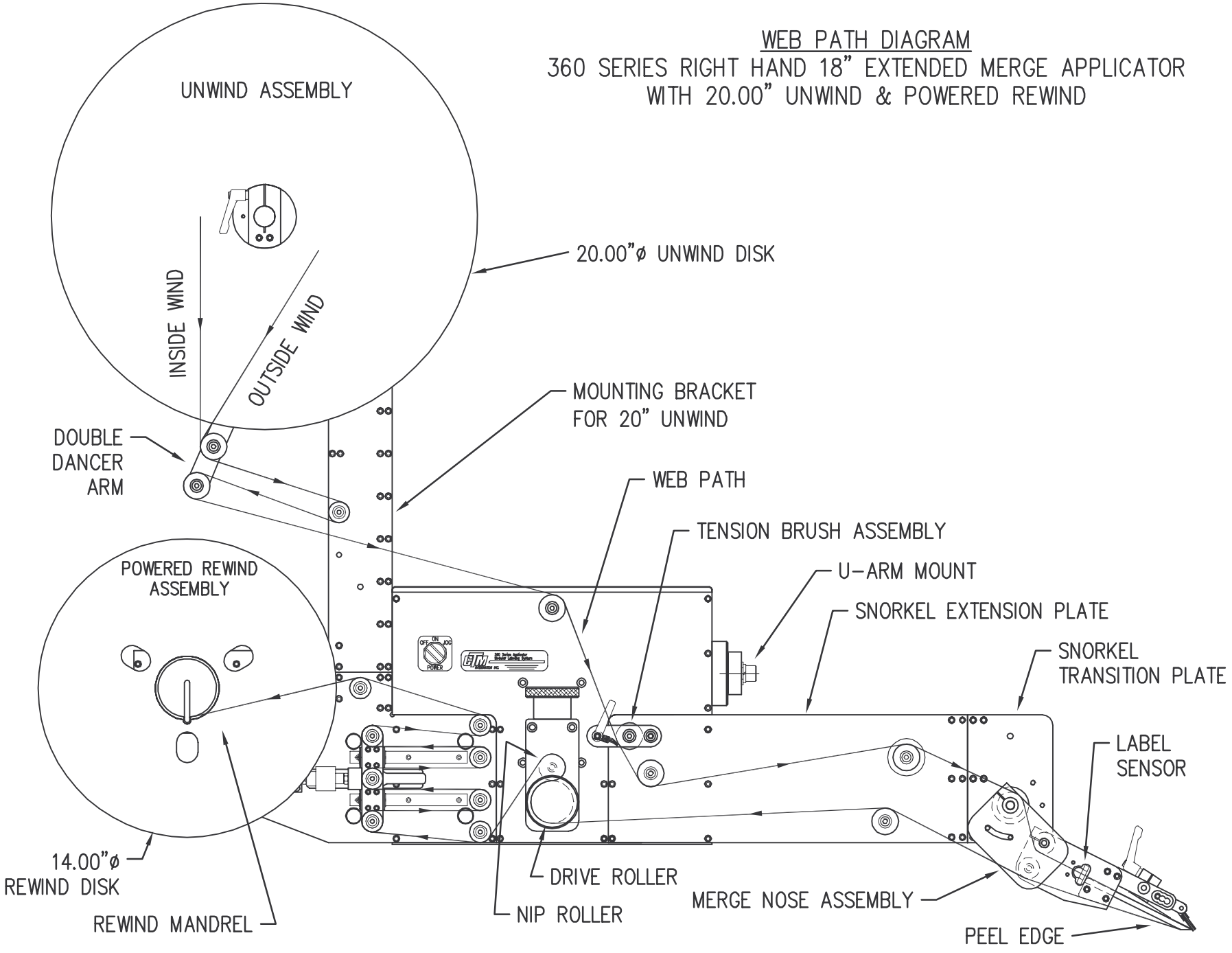
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" EXTENDED MERGE APPLICATOR WITH 20.00" UNWIND & POWERED REWIND

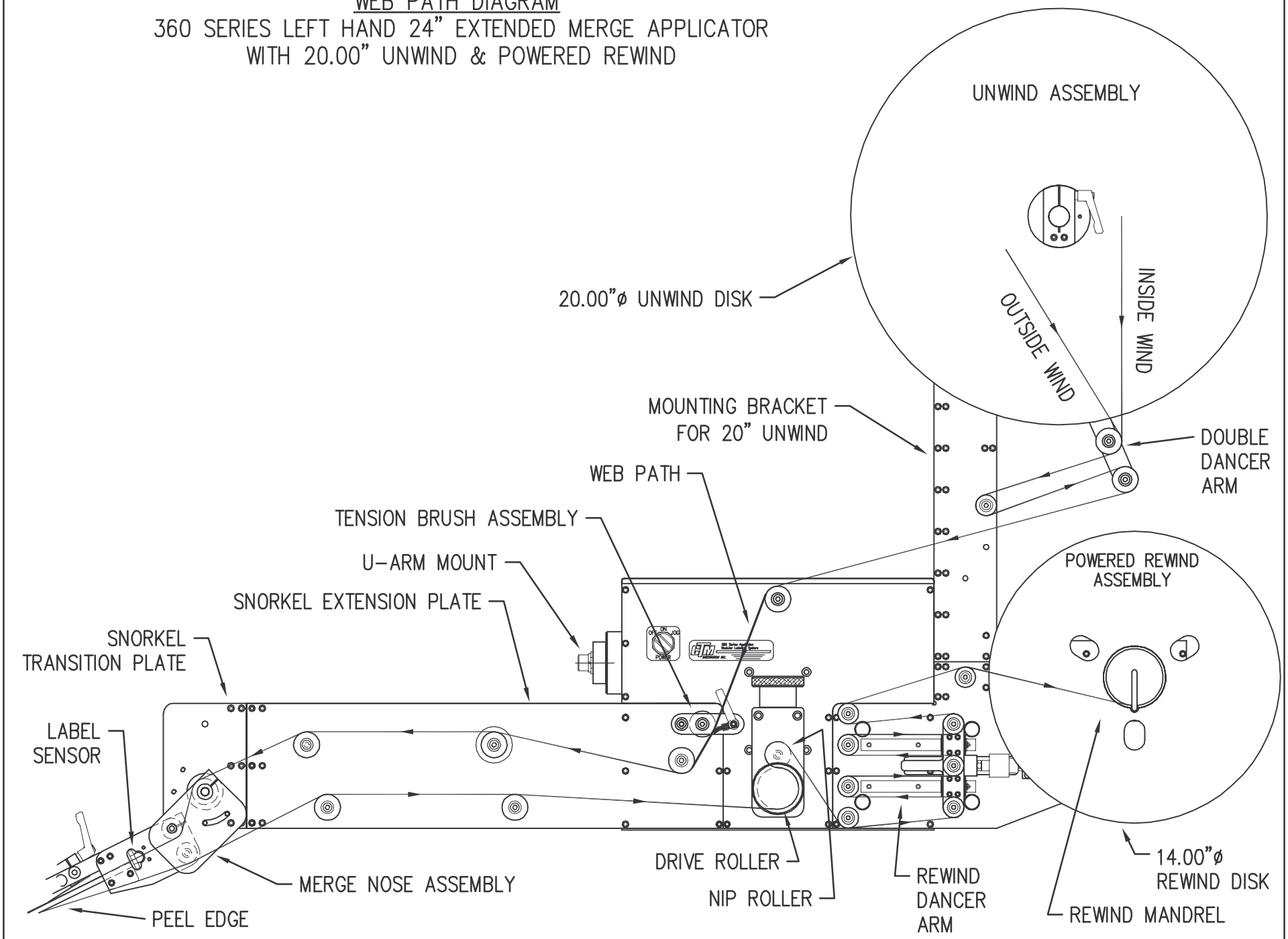


WEB PATH DIAGRAM
360 SERIES LEFT HAND 18" EXTENDED MERGE APPLICATOR WITH 20.00" UNWIND & POWERED REWIND

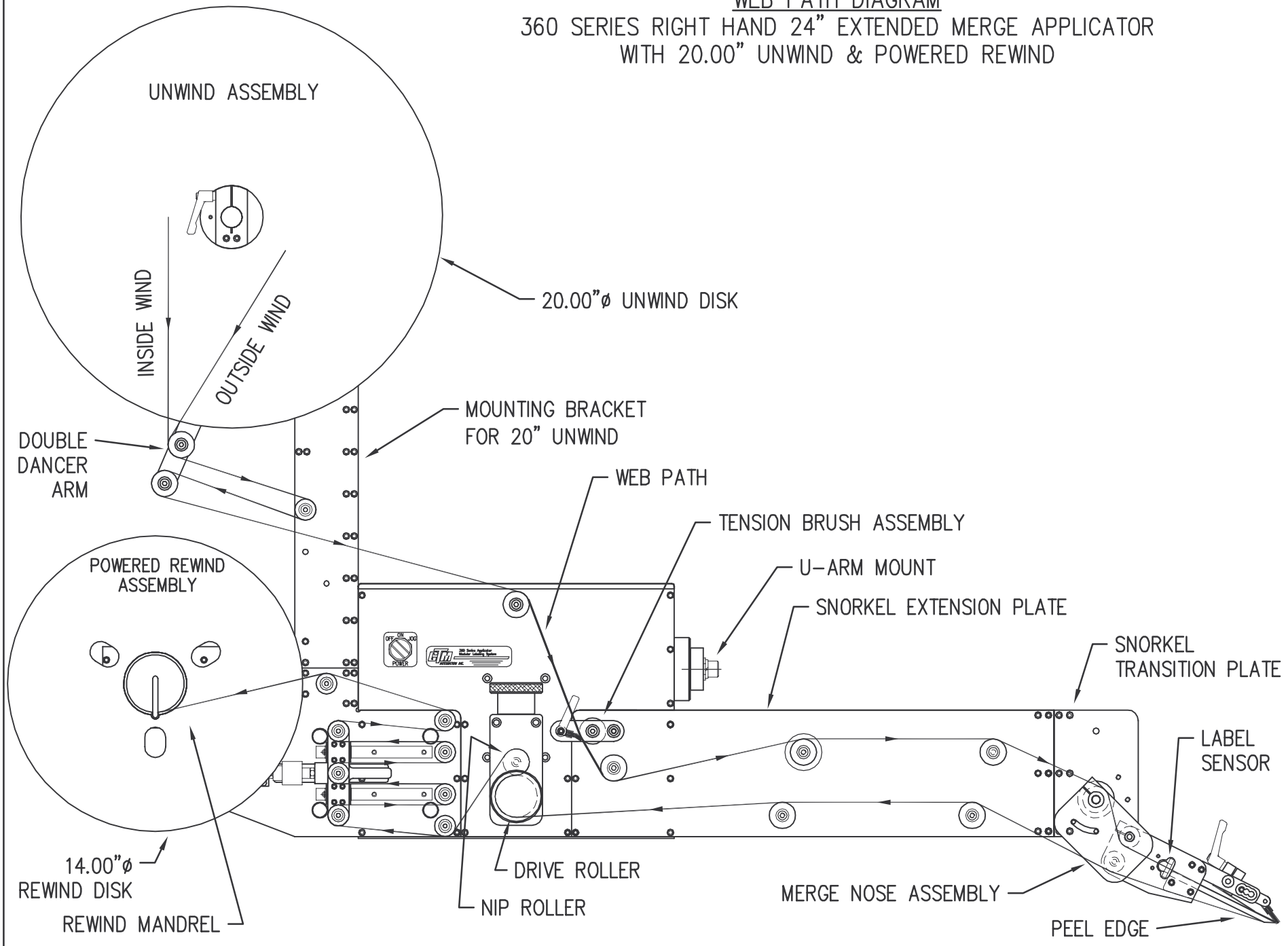



WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18" EXTENDED MERGE APPLICATOR
WITH 20.00" UNWIND & POWERED REWIND
UNWIND ASSEMBLY
INSIDE WIND
OUTSIDE WIND
20.00"ø UNWIND DISK
MOUNTING BRACKET
FOR 20" UNWIND
DOUBLE
DANCER
ARM
WEB PATH
TENSION BRUSH ASSEMBLY
U-ARM MOUNT
SNORKEL EXTENSION PLATE
SNORKEL
TRANSITION PLATE
POWERED REWIND
ASSEMBLY
LABEL
SENSOR
14.00"ø
REWIND DISK
REWIND MANDREL
DRIVE ROLLER
NIP ROLLER
MERGE NOSE ASSEMBLY
PEEL EDGE

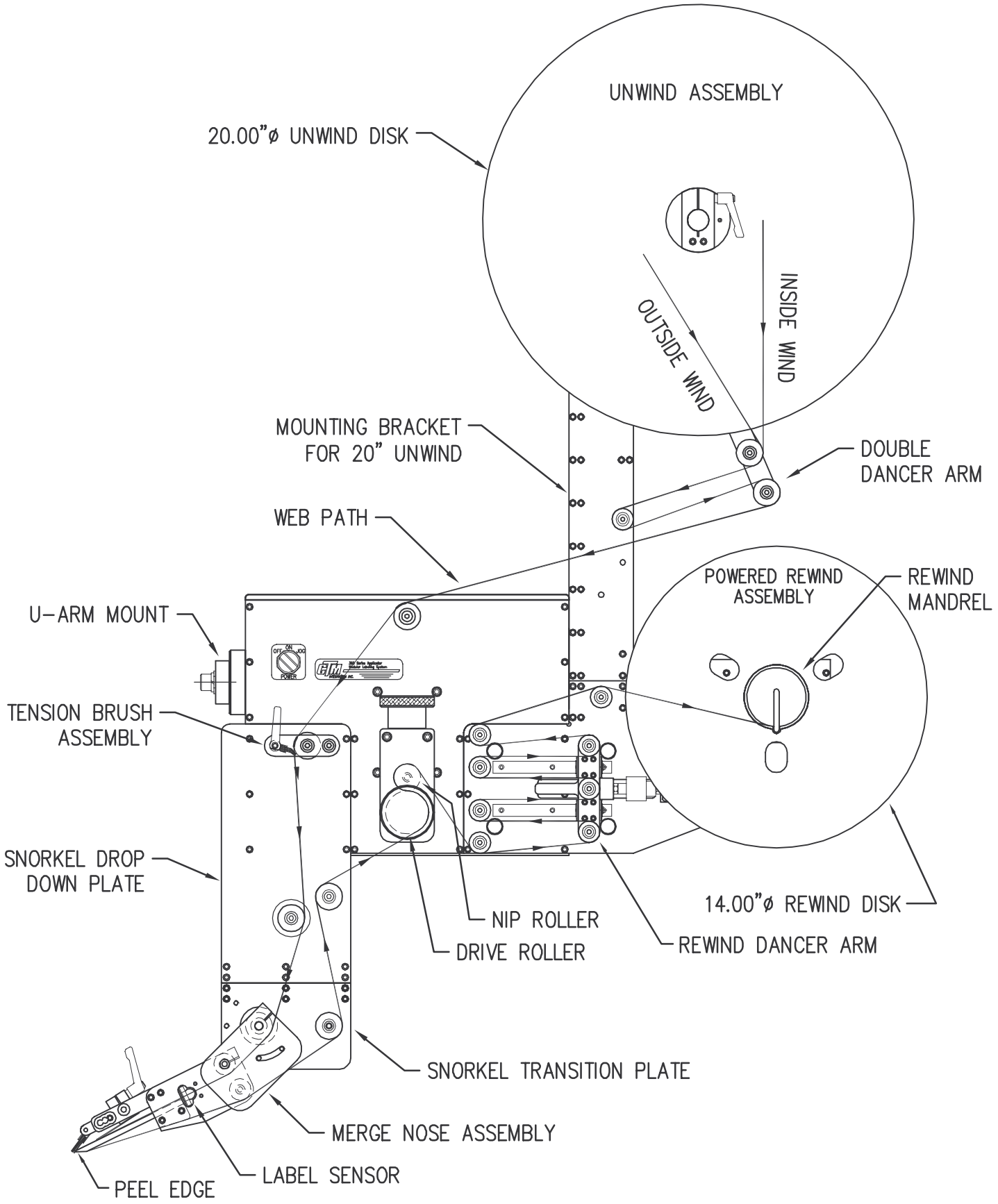
WEB PATH DIAGRAM
360 SERIES LEFT HAND 24" EXTENDED MERGE APPLICATOR
WITH 20.00" UNWIND & POWERED REWIND



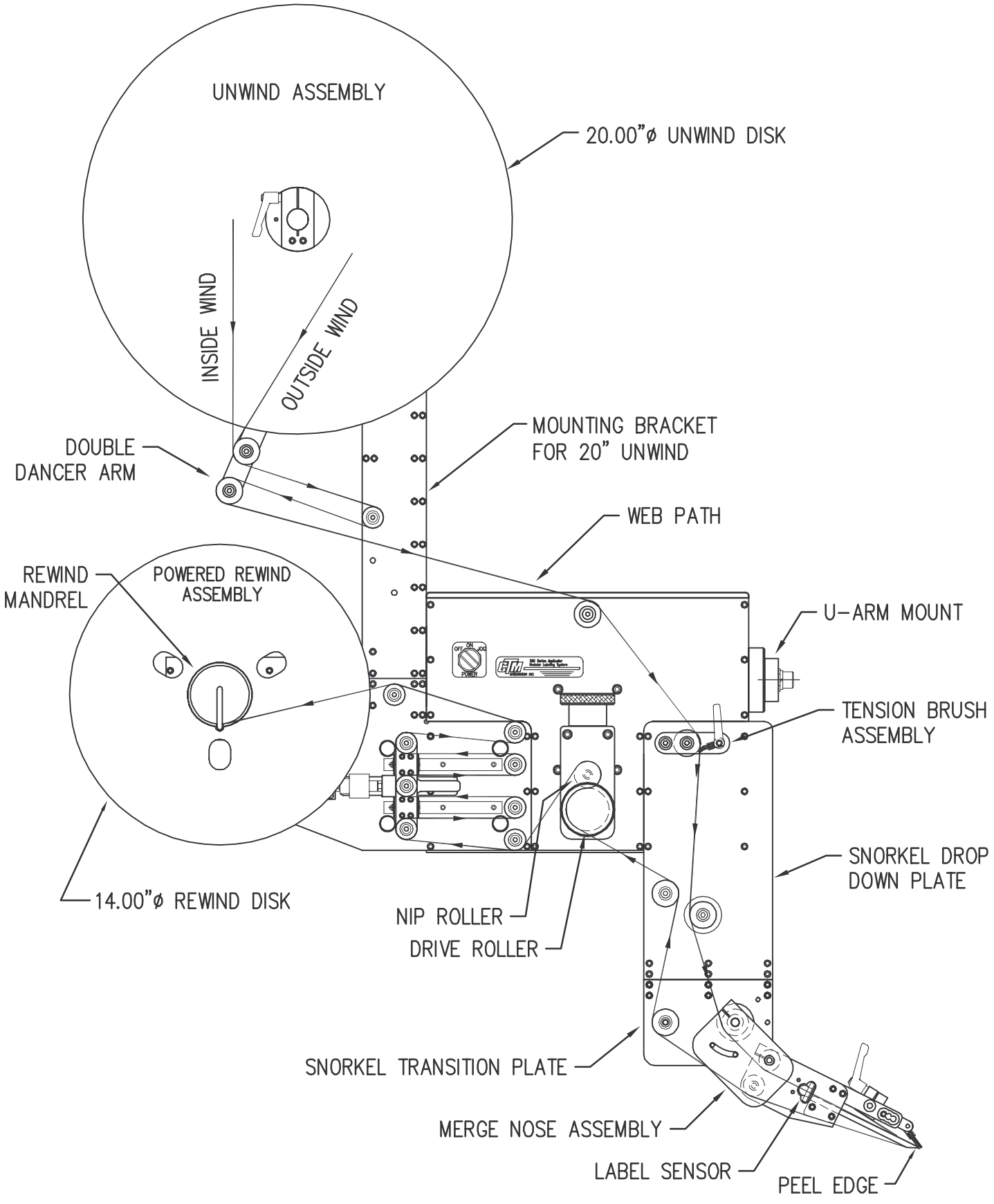
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 24" EXTENDED MERGE APPLICATOR
WITH 20.00" UNWIND & POWERED REWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" DROP DOWN MERGE APPLICATOR
WITH 20.00" UNWIND & POWERED REWIND

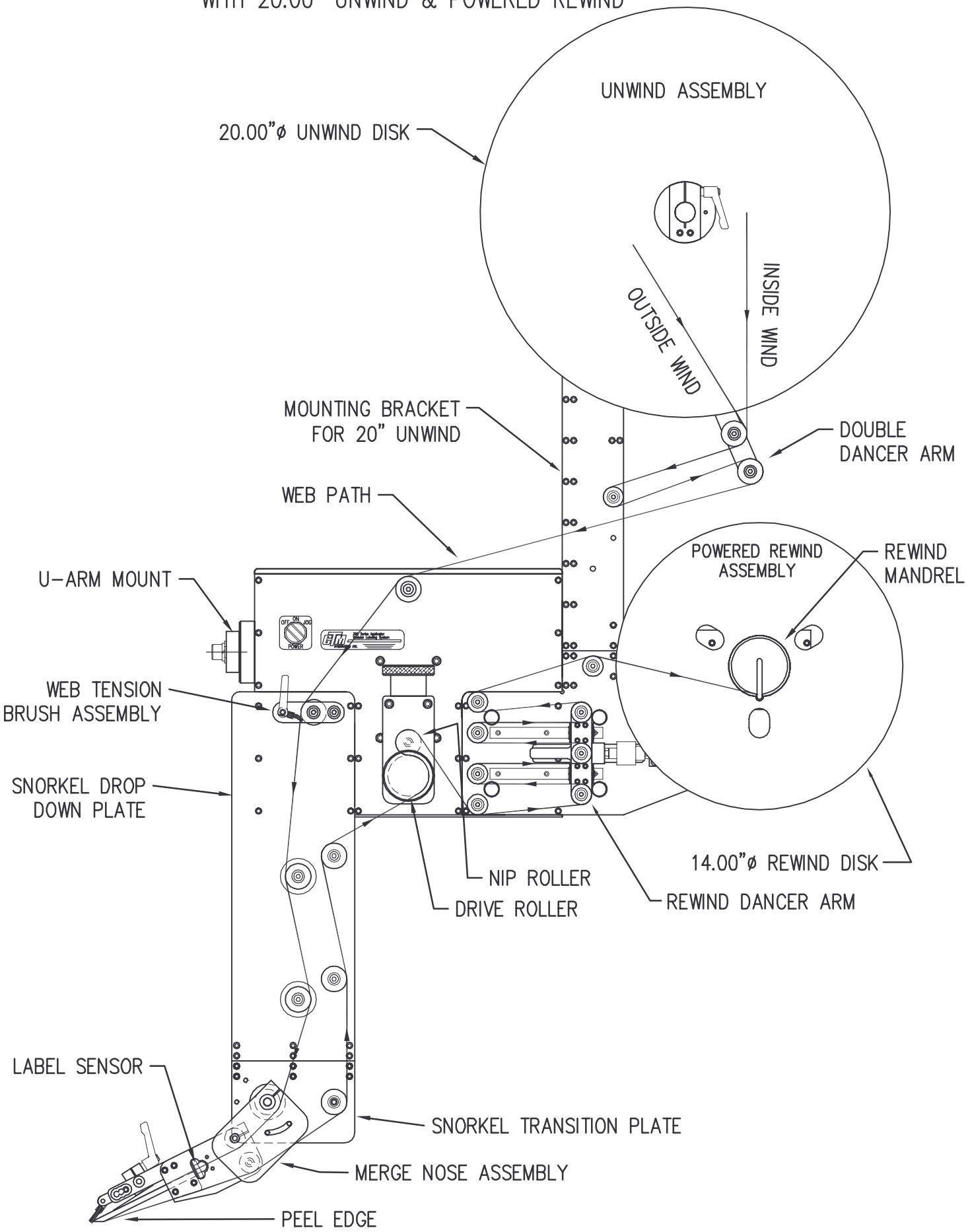


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" DROP DOWN MERGE APPLICATOR
WITH 20.00" UNWIND & POWERED REWIND

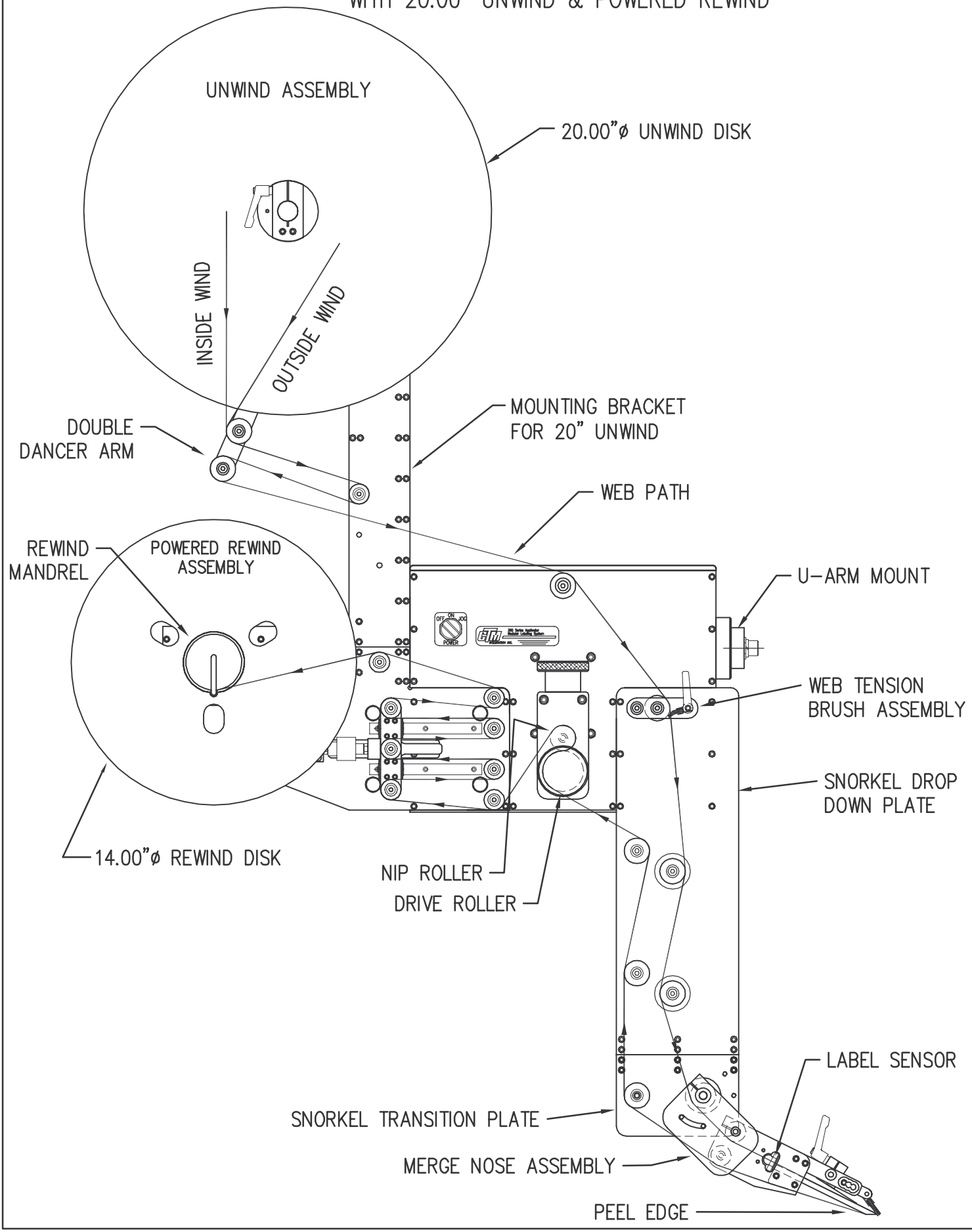


WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN MERGE APPLICATOR WITH 20.00" UNWIND & POWERED REWIND

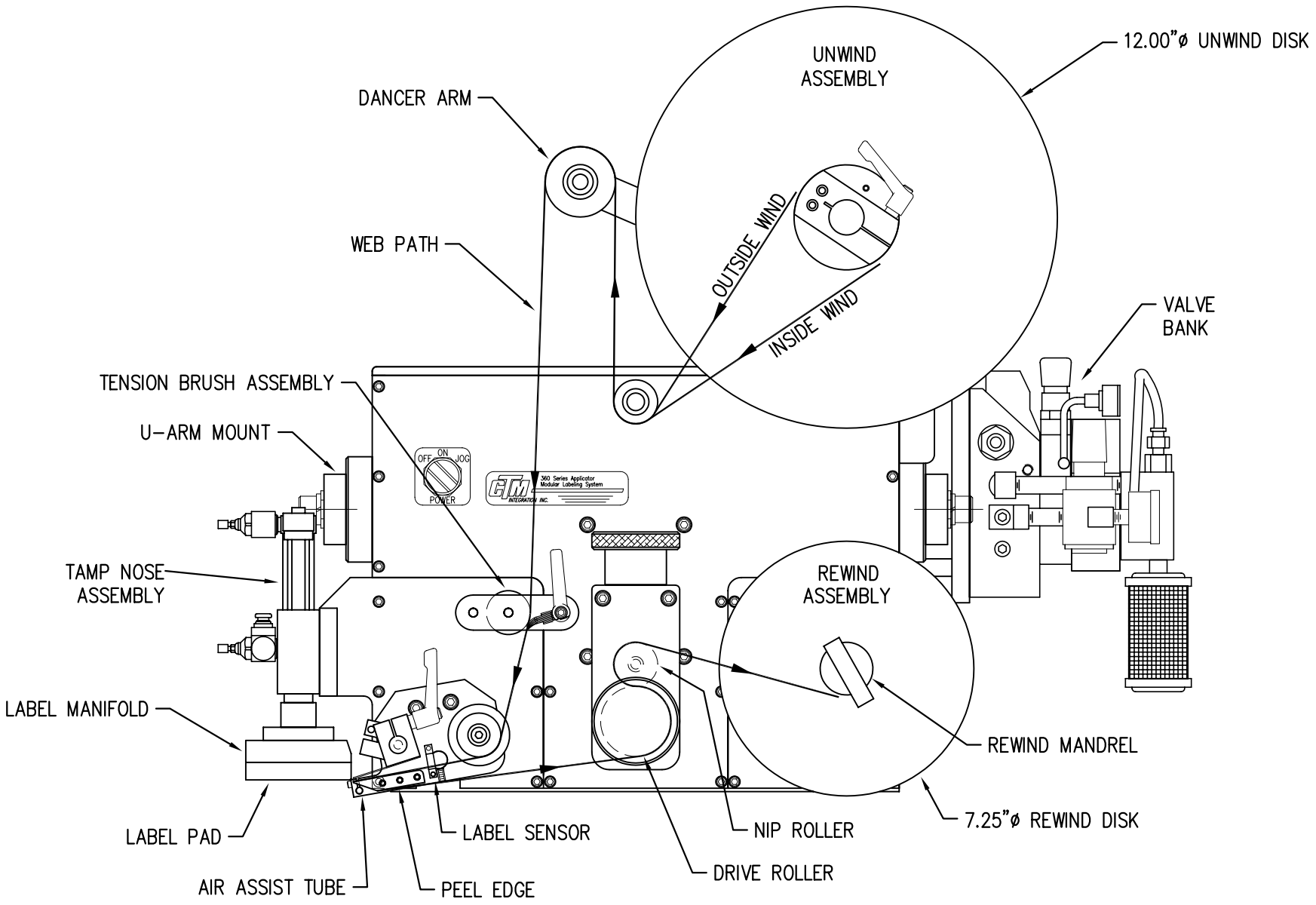


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18"/24" DROP DOWN MERGE APPLICATOR
WITH 20.00" UNWIND & POWERED REWIND



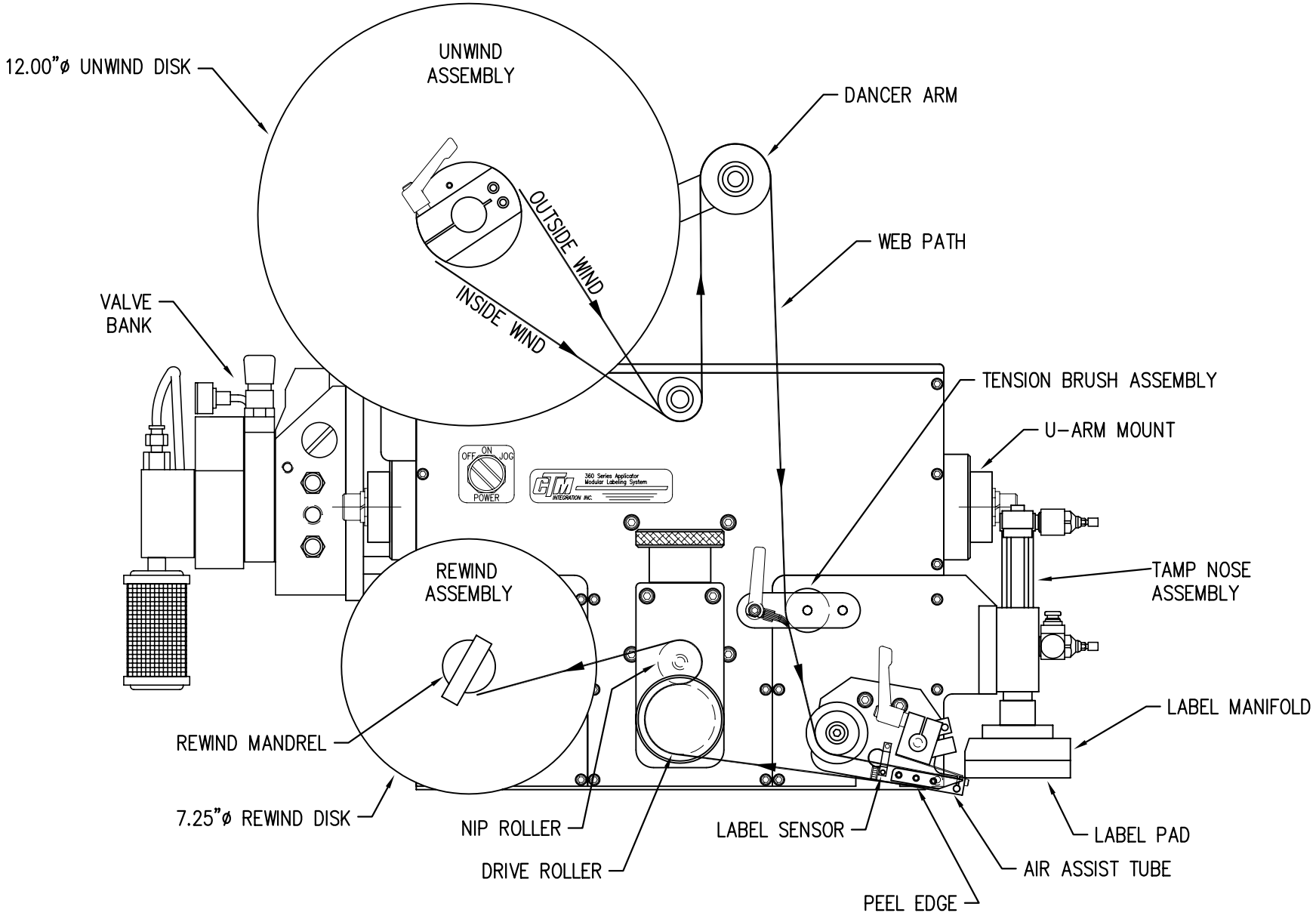
WEB PATH DIAGRAM

360 SERIES LEFT HAND TAMP APPLICATOR
WITH 12" UNWIND

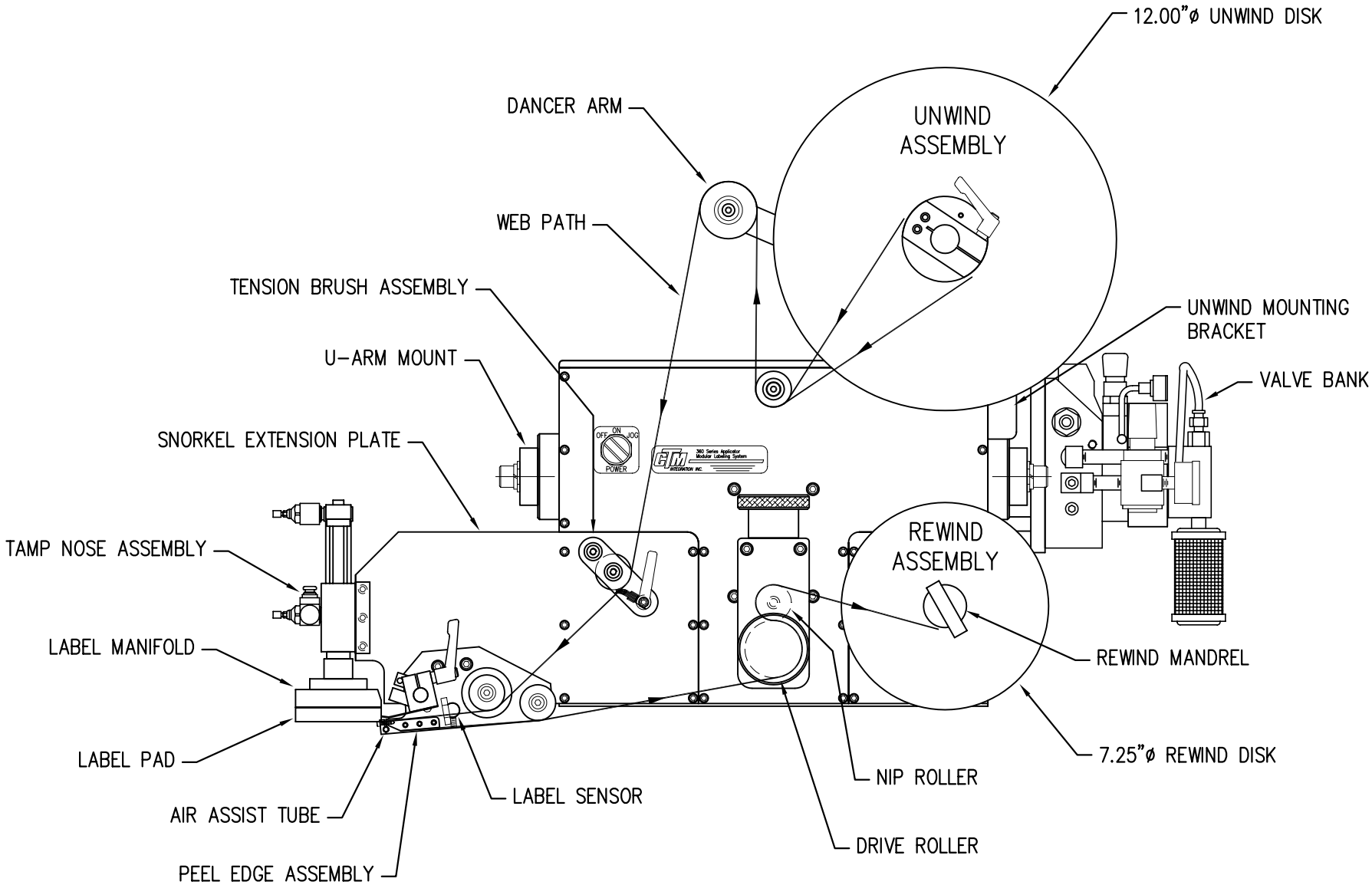


WEB PATH DIAGRAM

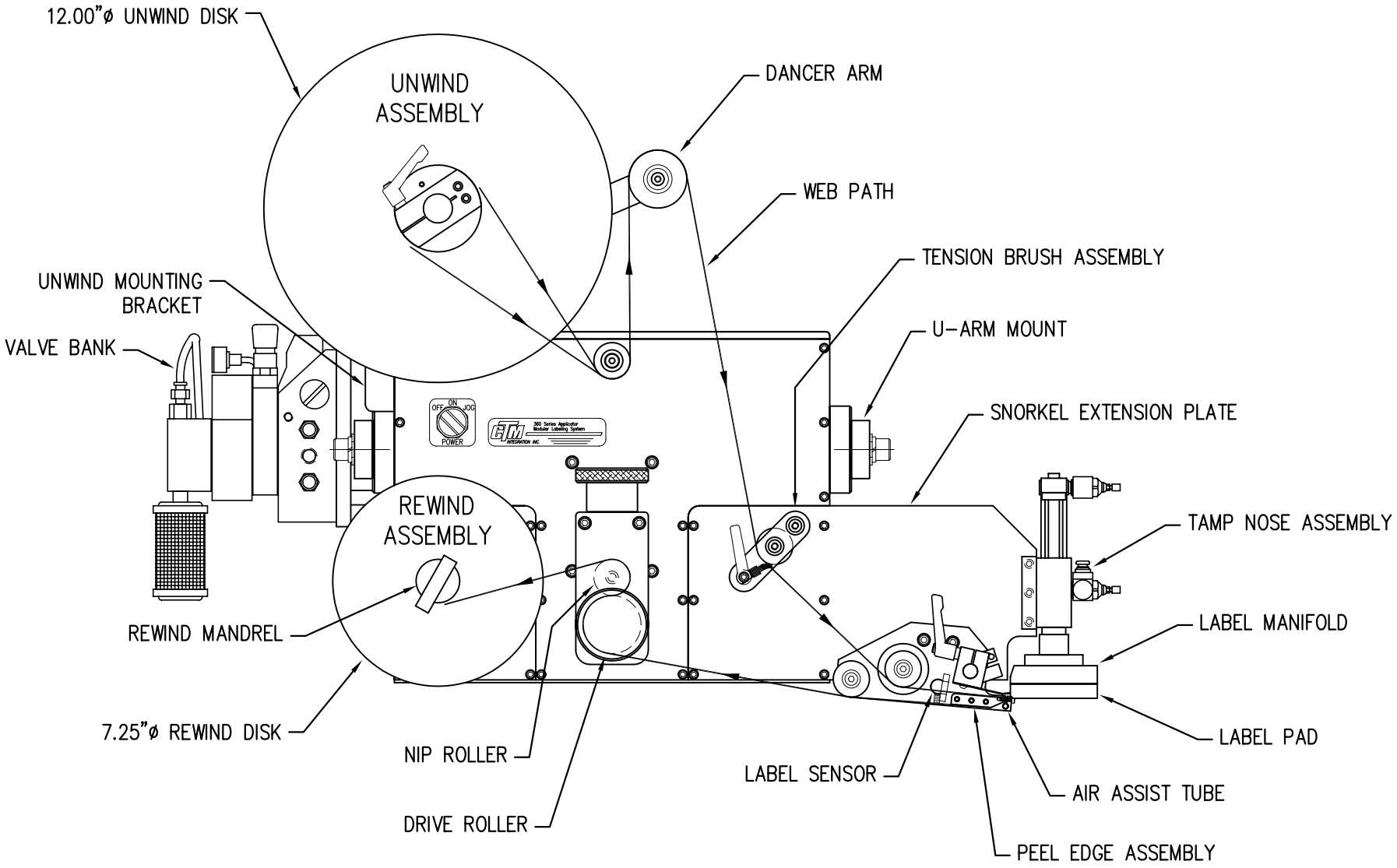
360 SERIES RIGHT HAND TAMP APPLICATOR
WITH 12" UNWIND



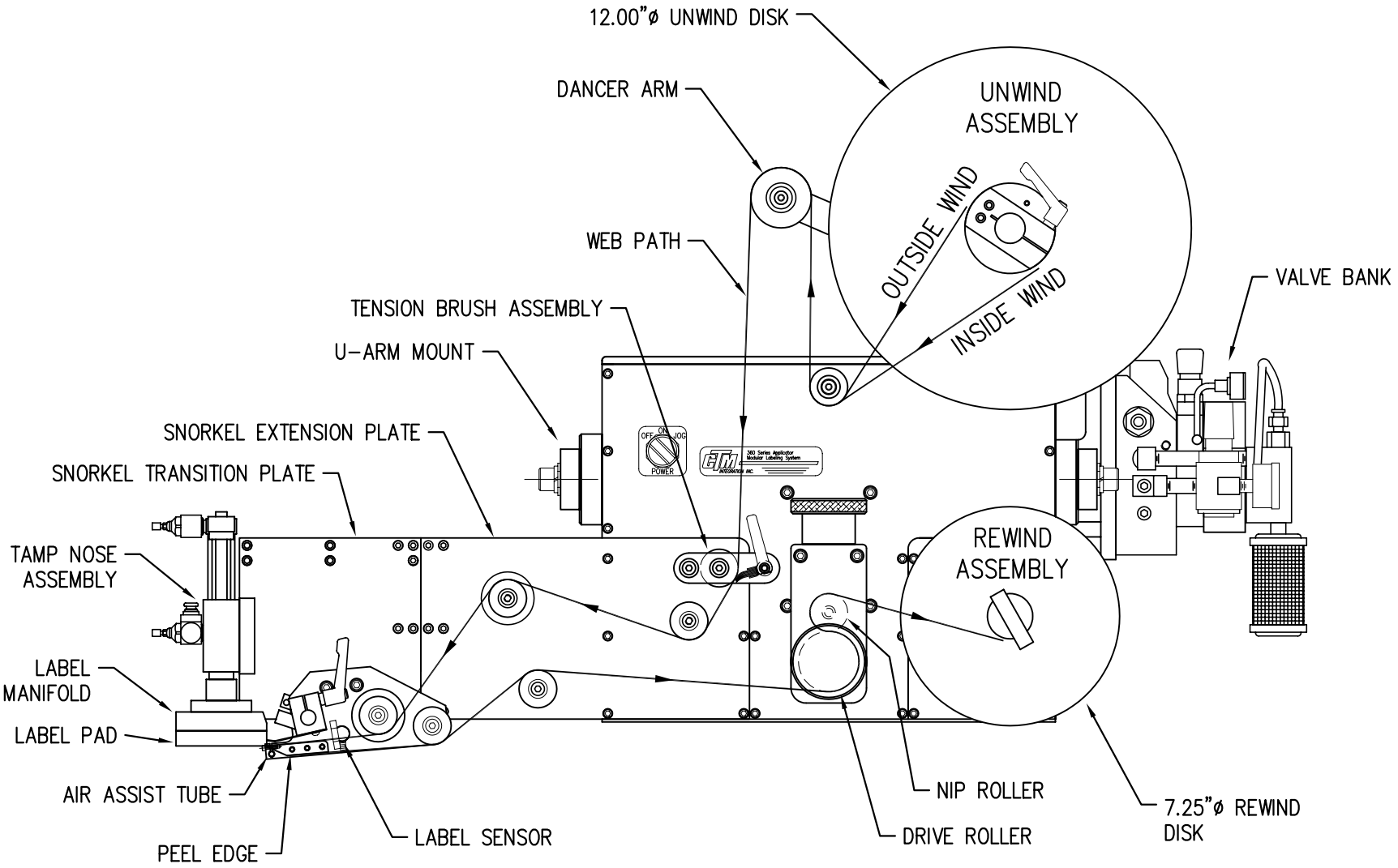
WEB PATH DIAGRAM
360 SERIES LEFT HAND 6" EXTENDED TAMP APPLICATOR WITH 12.00" UNWIND



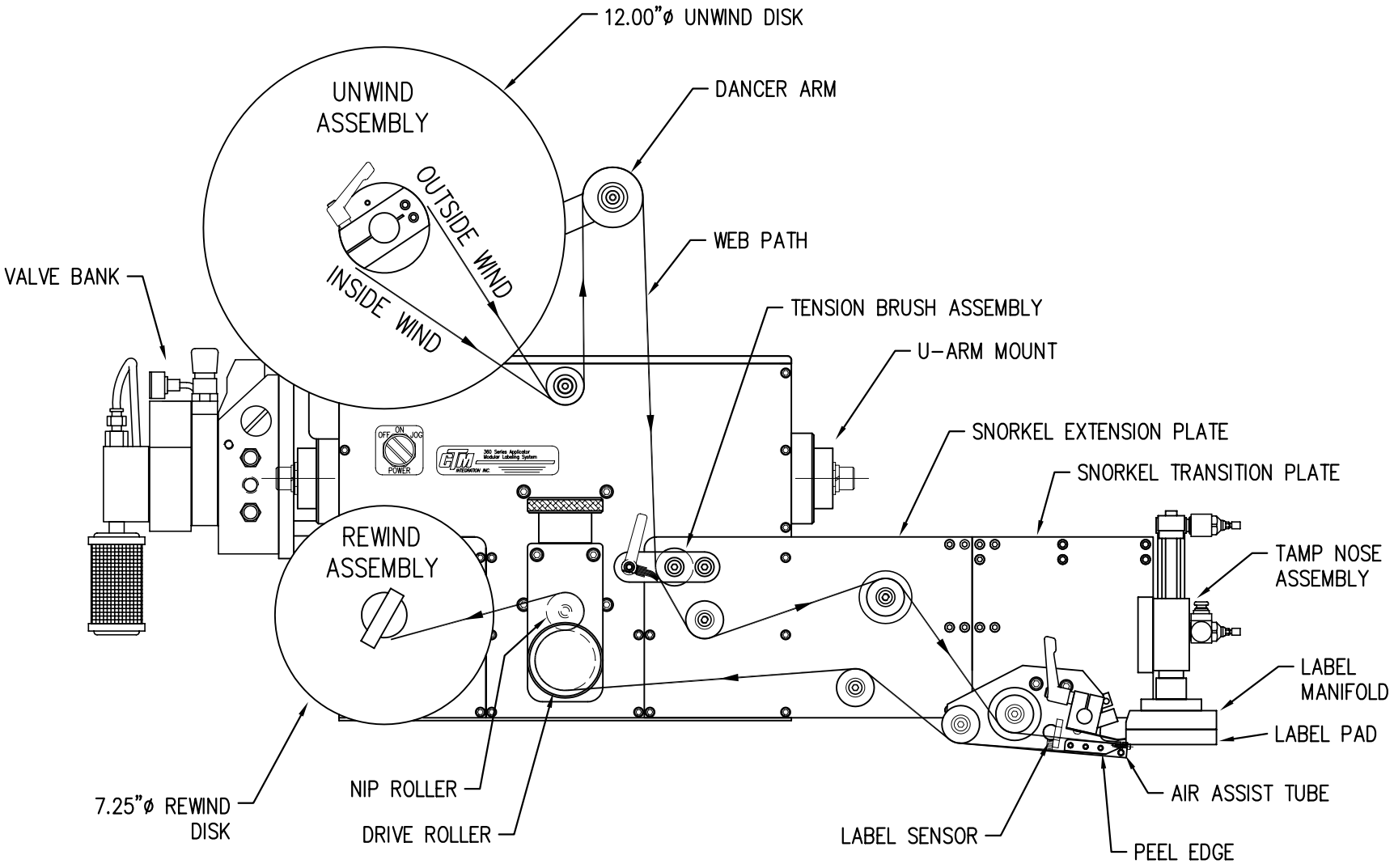
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 6" EXTENDED TAMP APPLICATOR WITH 12.00" UNWIND



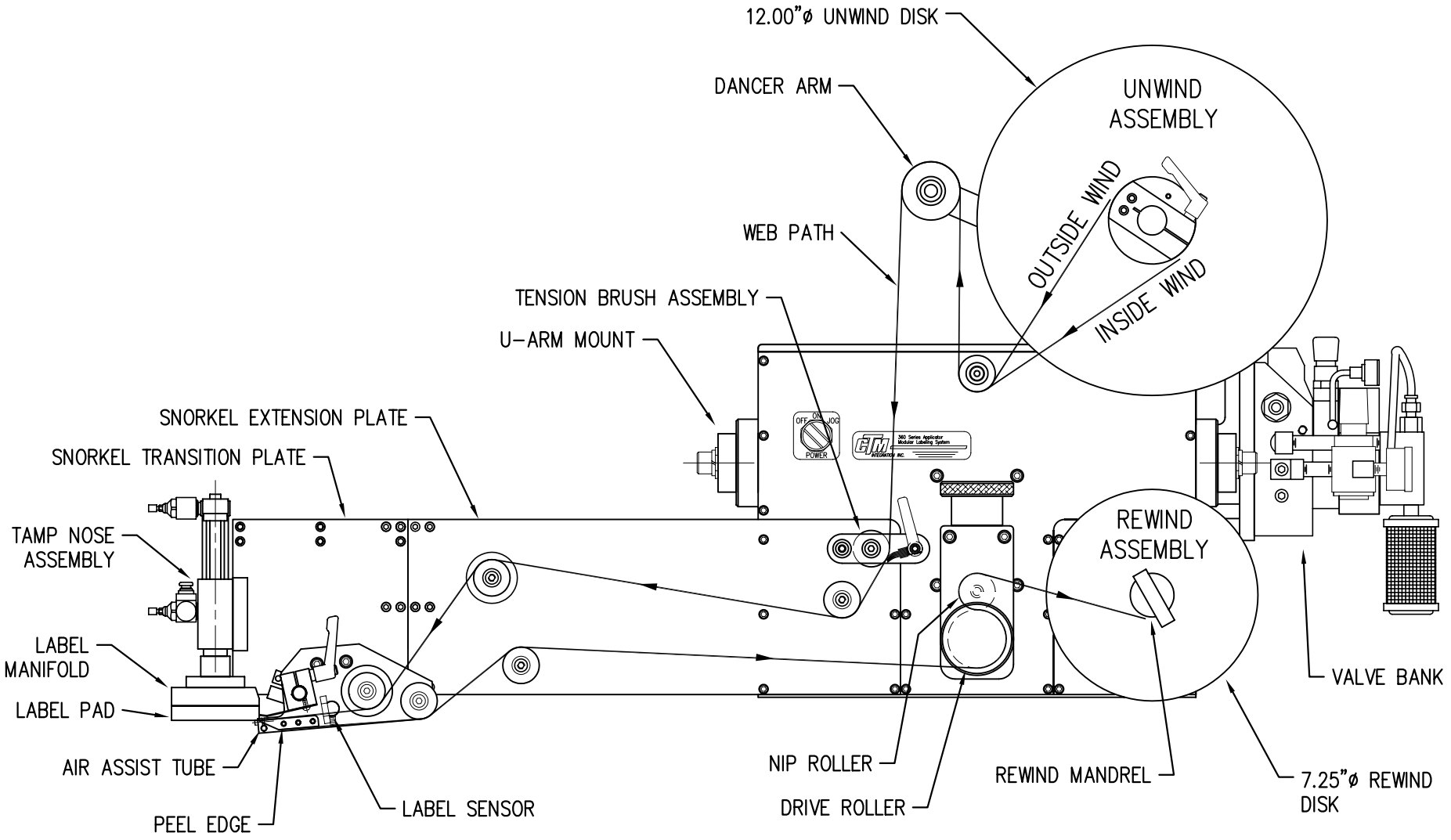
WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED TAMP APPLICATOR
WITH 12.00" UNWIND



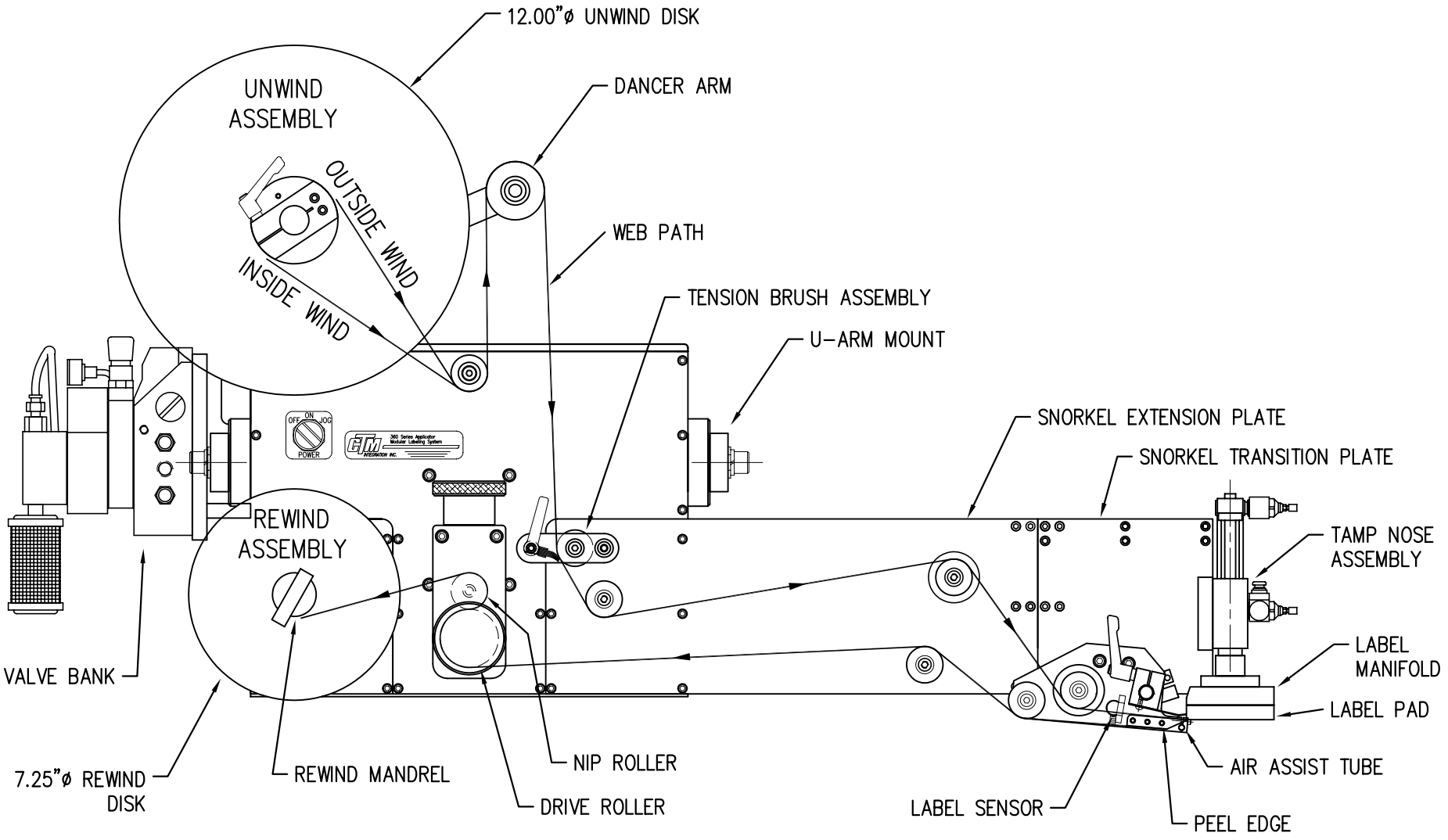
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" EXTENDED TAMP APPLICATOR WITH 12.00" UNWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 18"/24" EXTENDED TAMP APPLICATOR
WITH 12.00" UNWIND

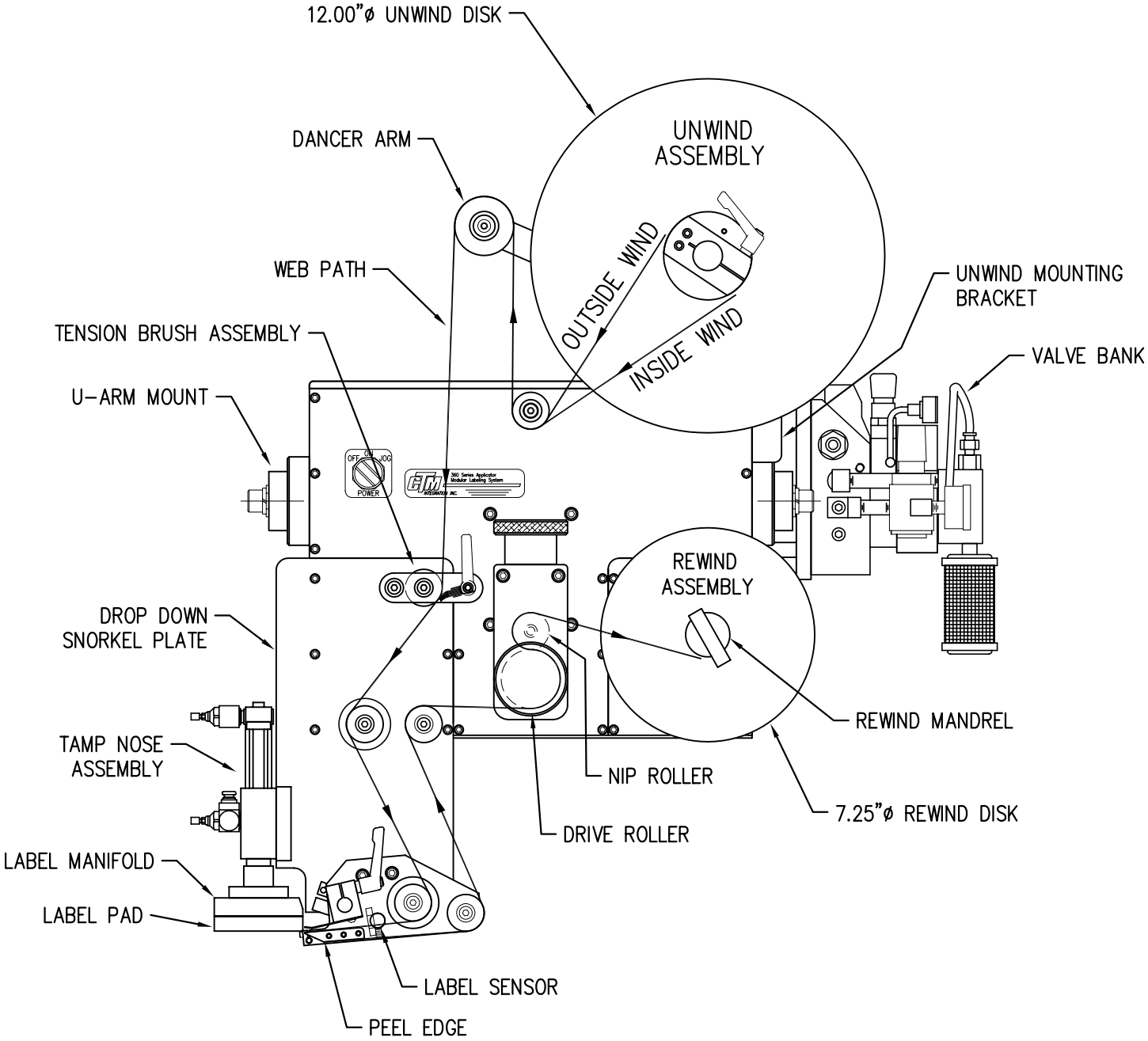


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18"/24" EXTENDED TAMP APPLICATOR
WITH 12.00" UNWIND



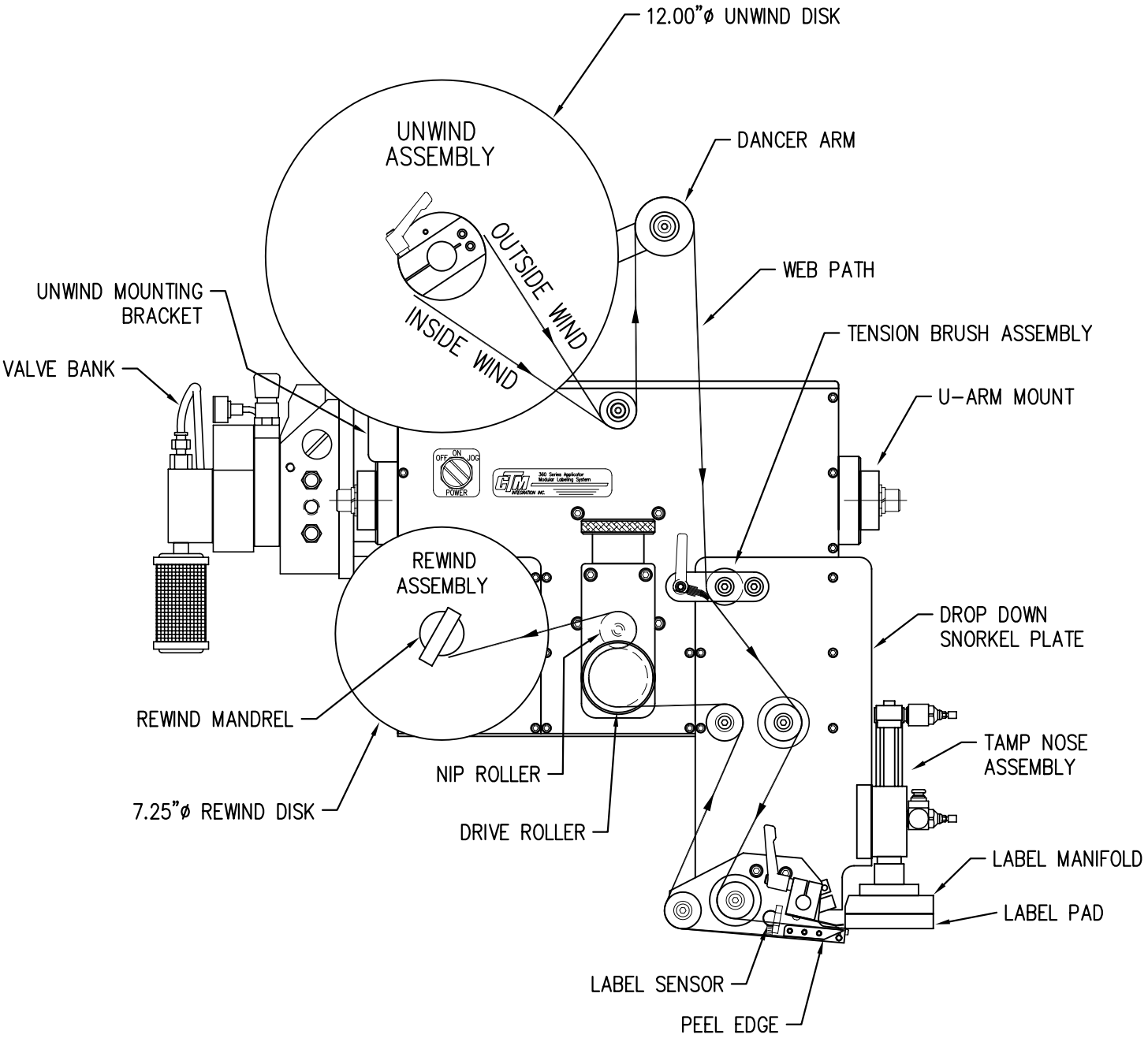
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN TAMP APPLICATOR WITH 12" UNWIND



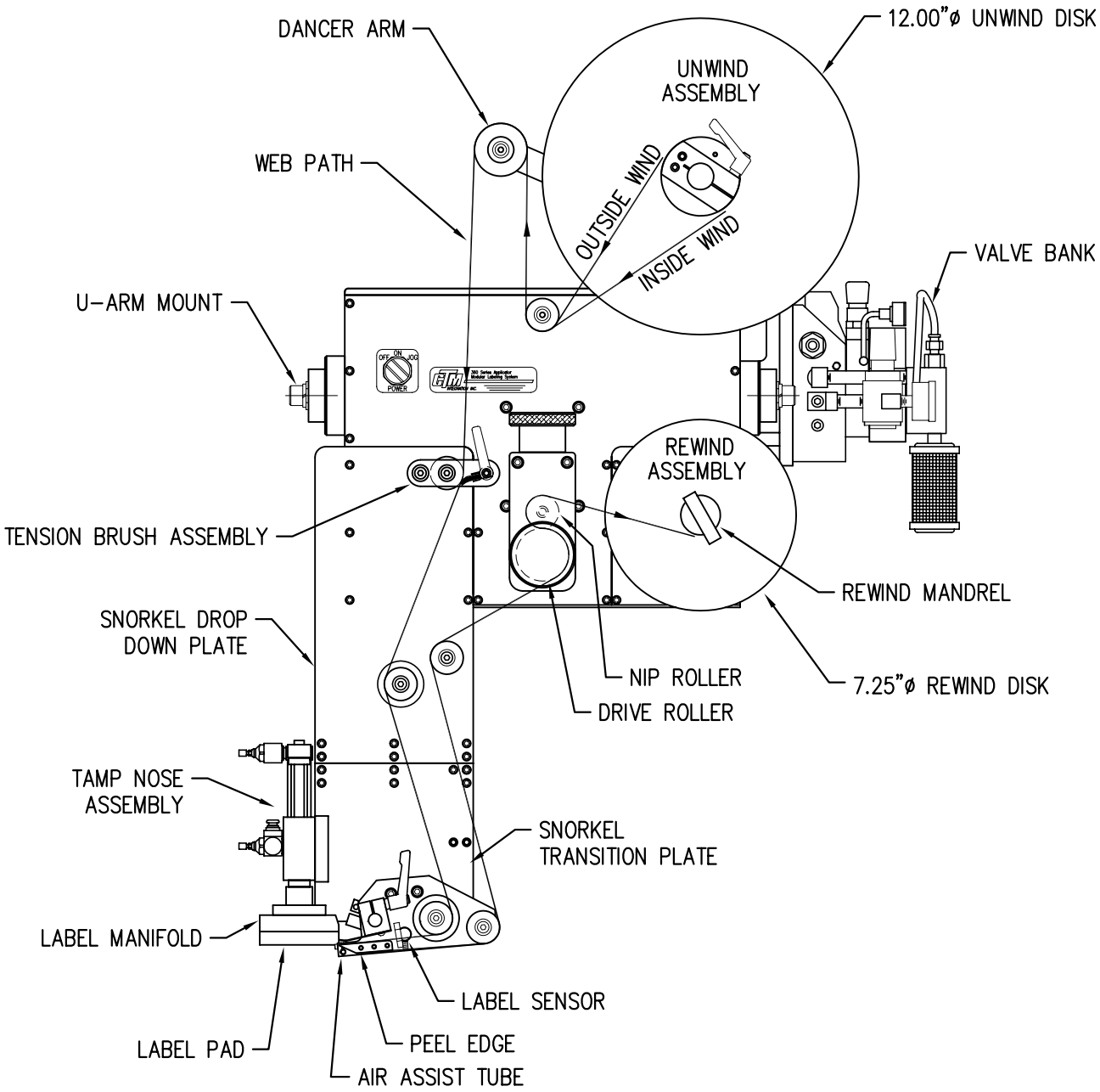
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN TAMP APPLICATOR WITH 12" UNWIND



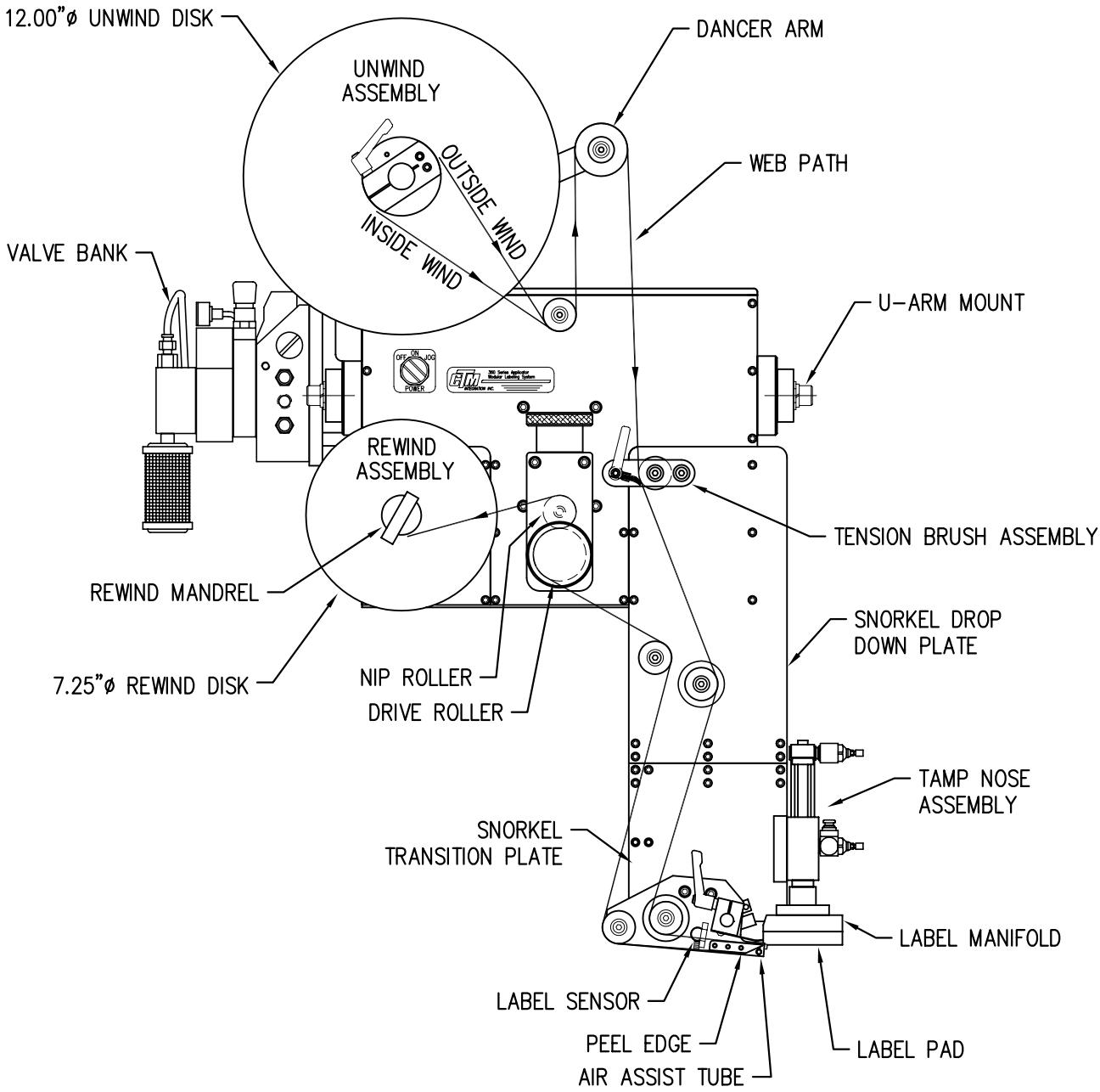
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN TAMP APPLICATOR WITH 12.00" UNWIND



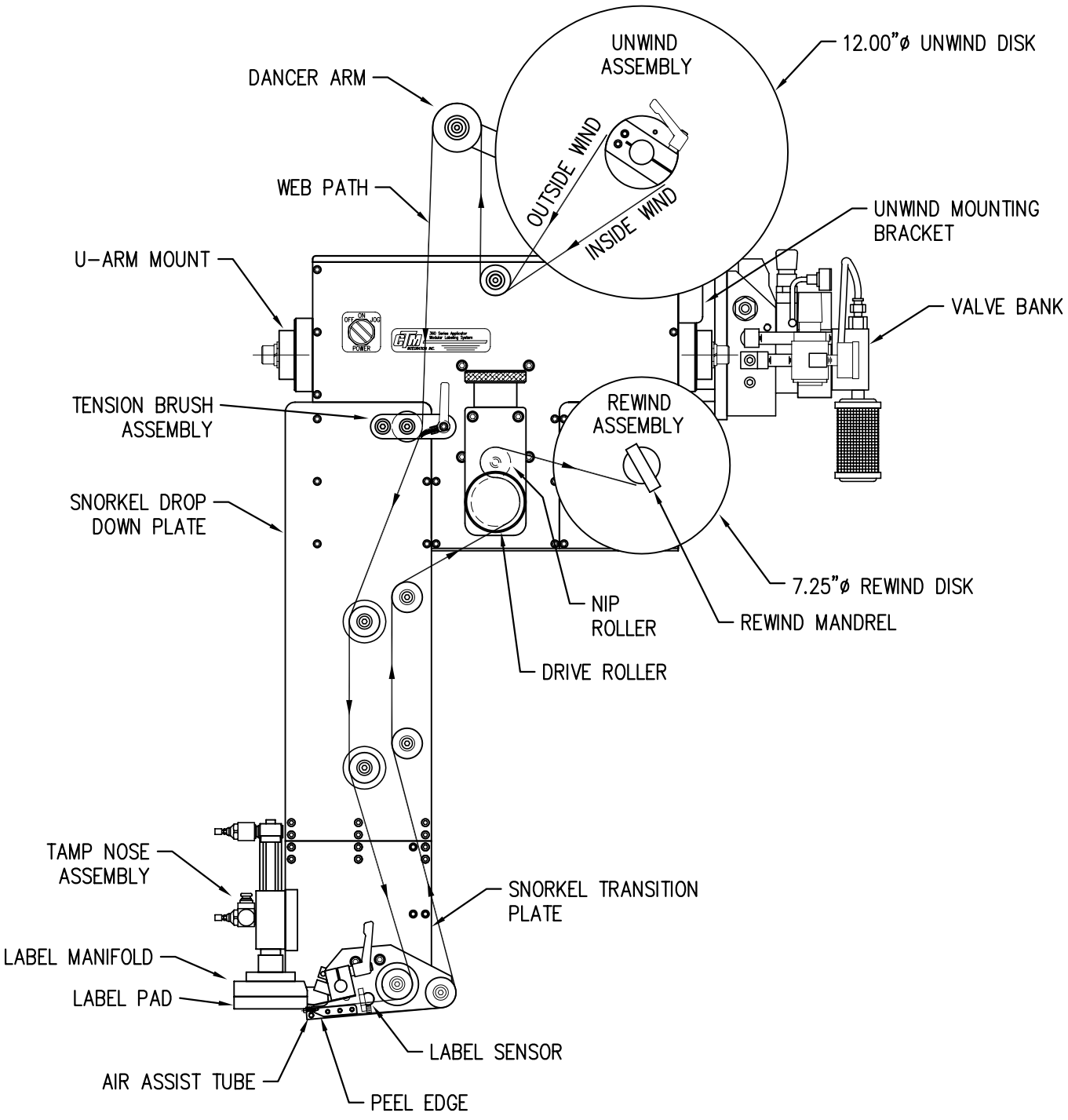
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN TAMP APPLICATOR WITH 12.00" UNWIND



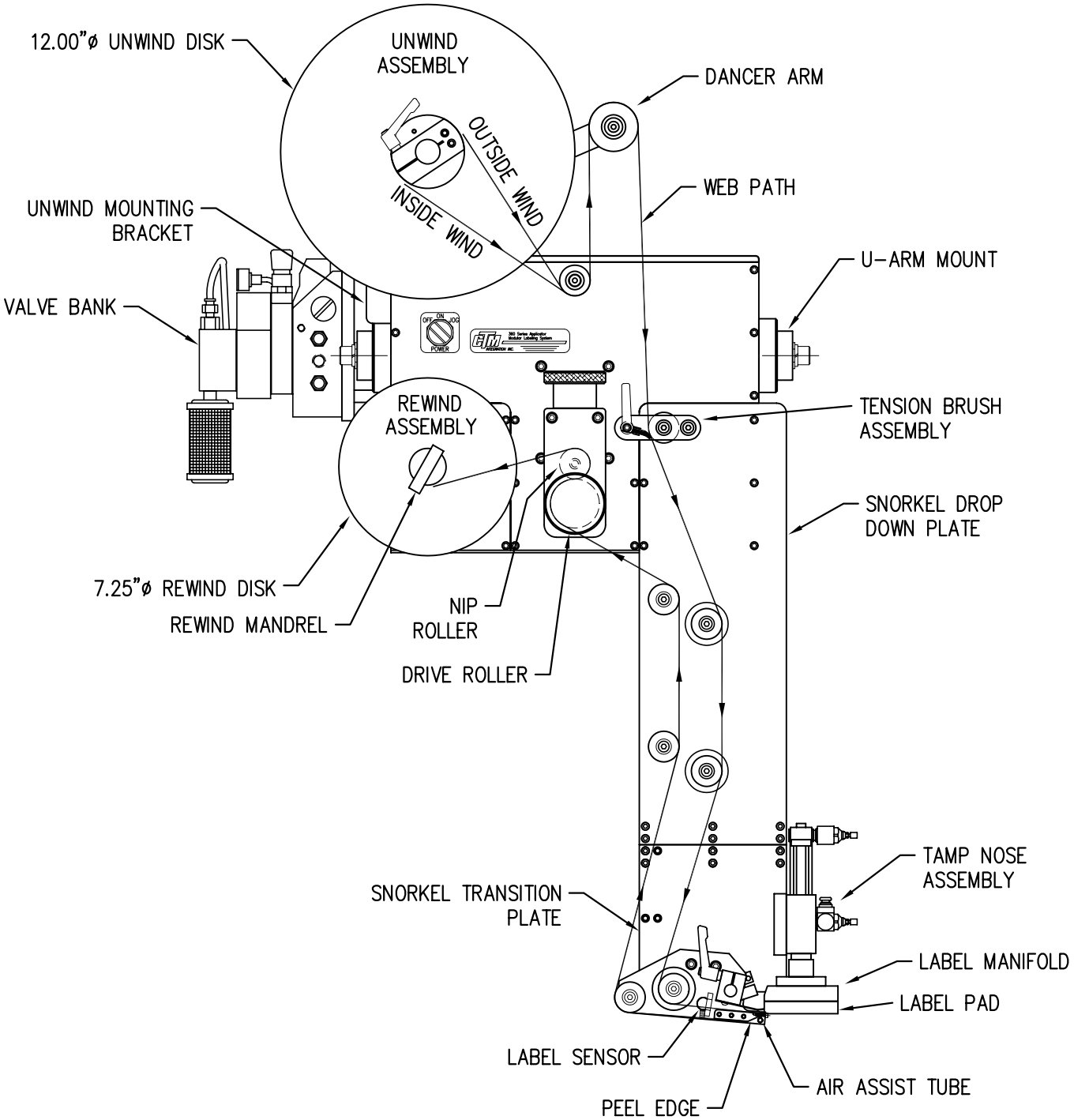
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN TAMP APPLICATOR WITH 12.00" UNWIND



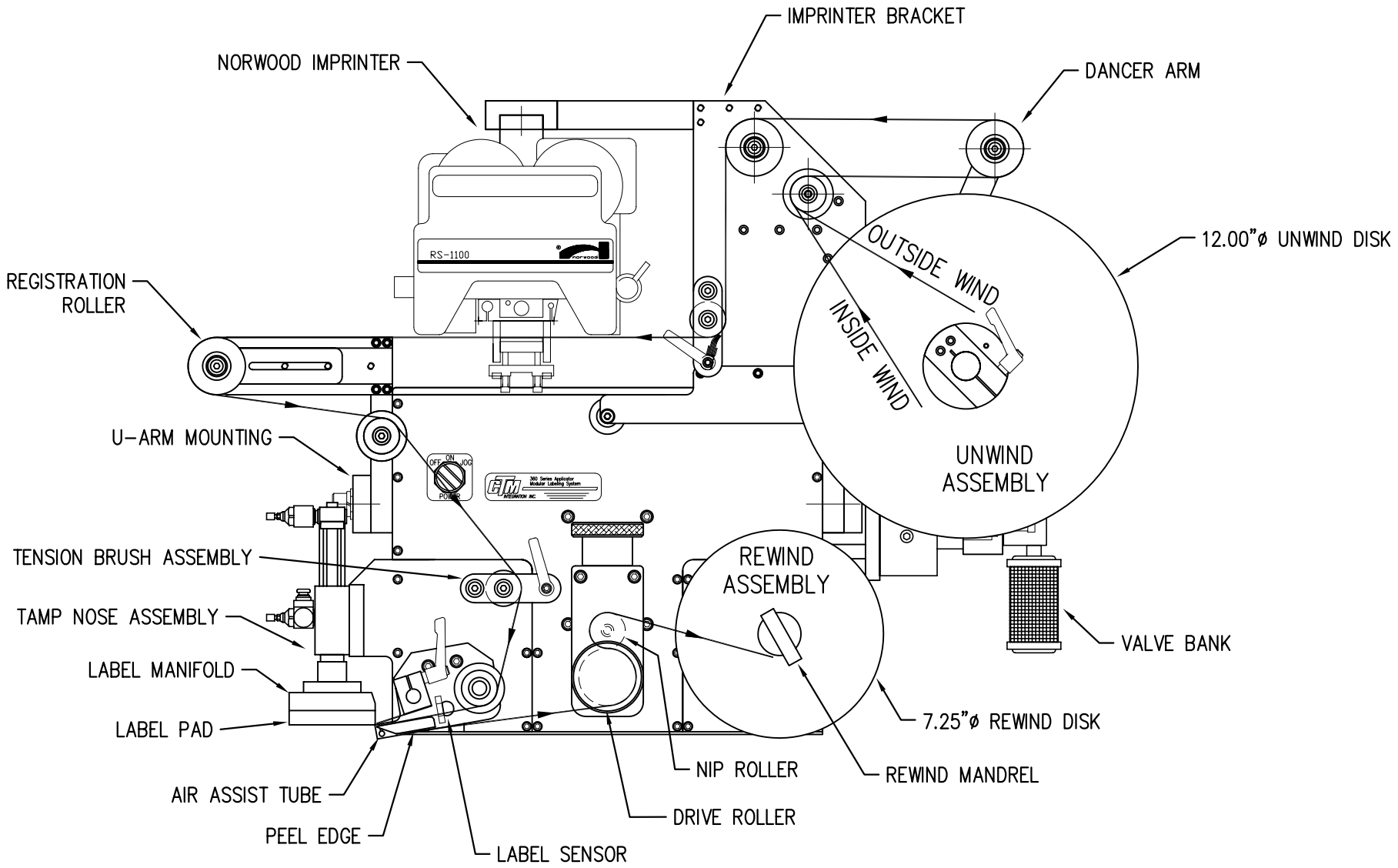
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" DROP DOWN TAMP APPLICATOR WITH 12.00" UNWIND



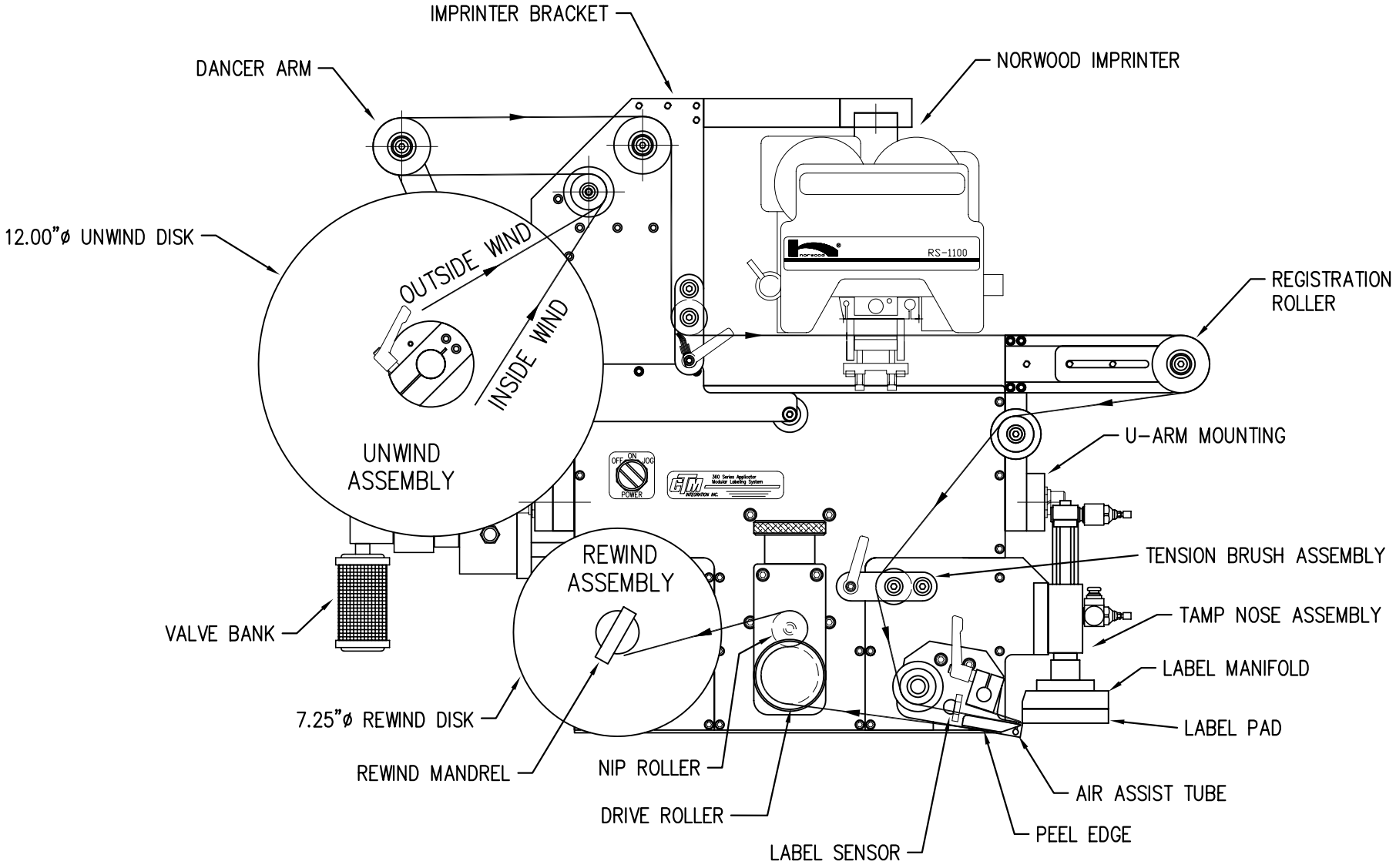
WEB PATH DIAGRAM

360 SERIES LEFT HAND TAMP APPLICATOR
WITH NORWOOD IMPRINTER



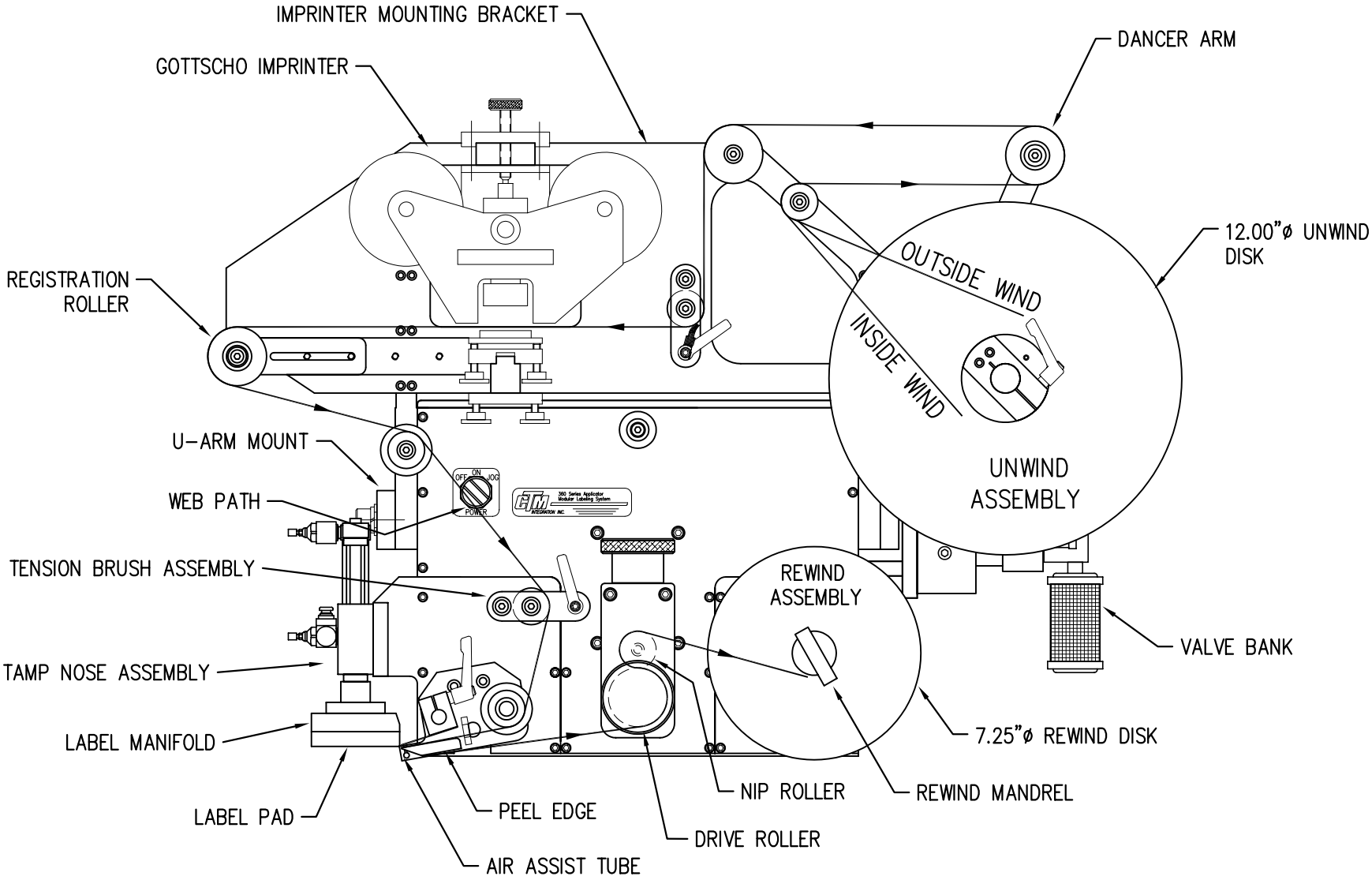
WEB PATH DIAGRAM

360 SERIES RIGHT HAND TAMP APPLICATOR
WITH NORWOOD IMPRINTER



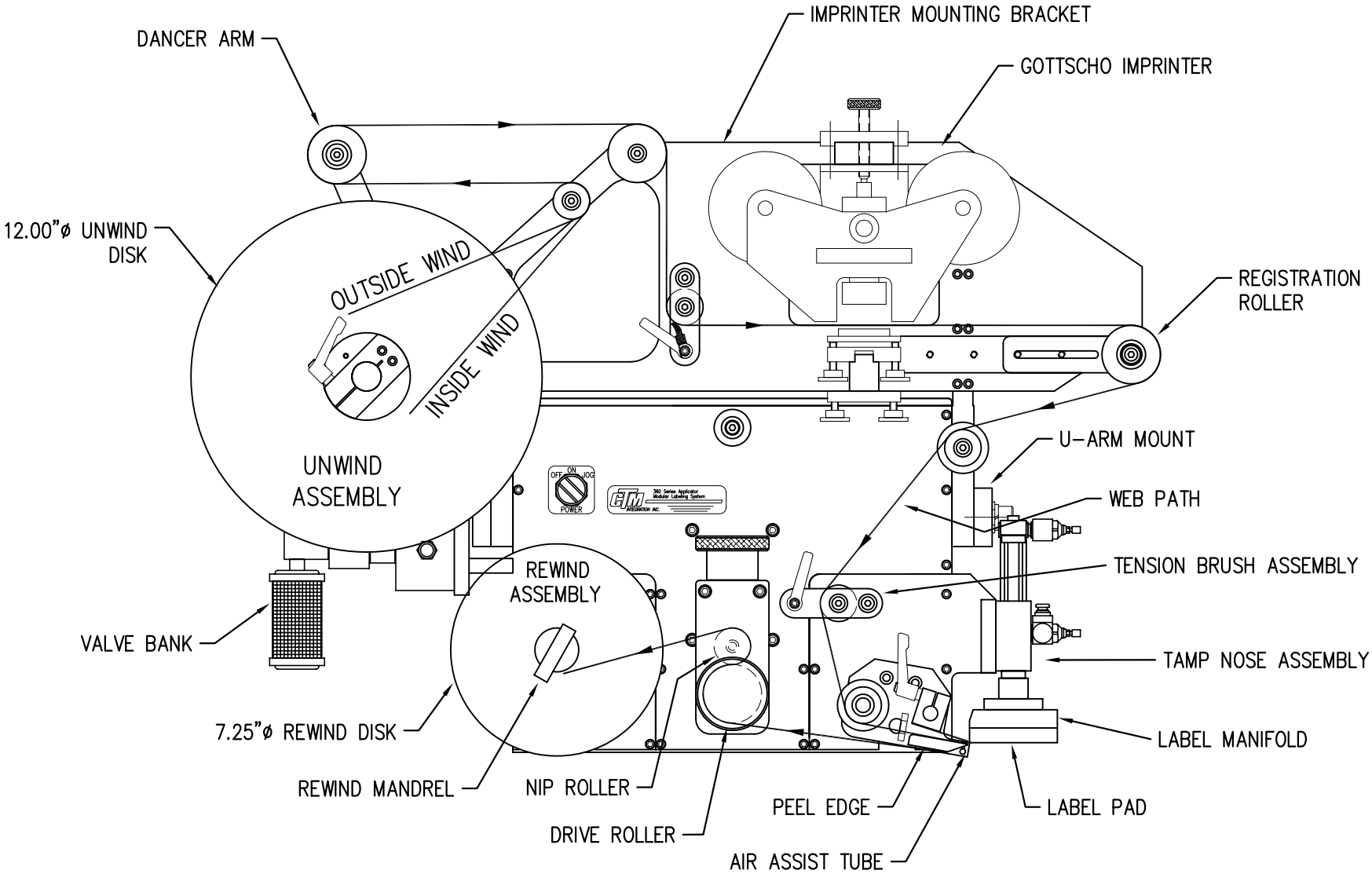
WEB PATH DIAGRAM

360 SERIES LEFT HAND TAMP APPLICATOR
WITH GOTTSCHO IMPRINTER

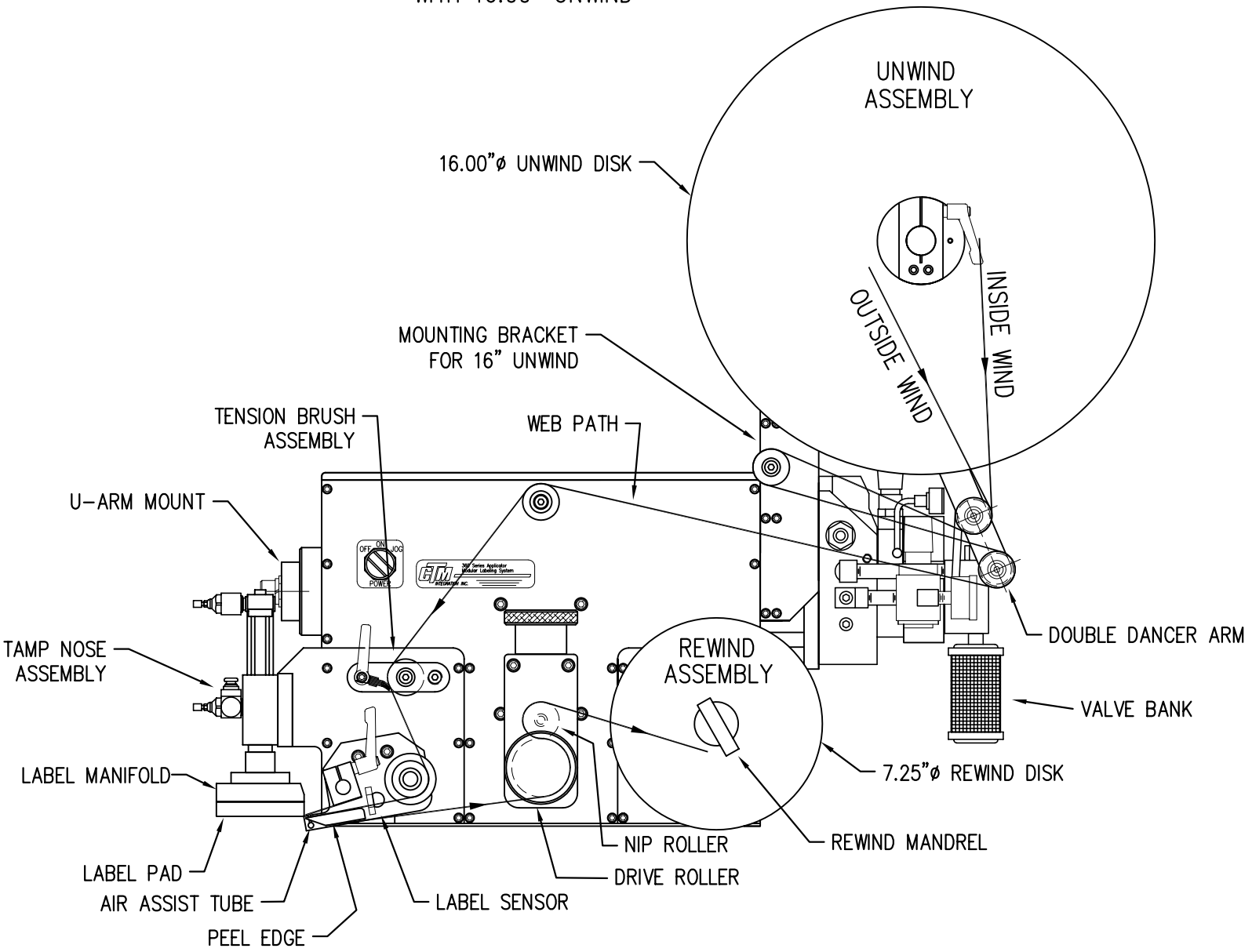


WEB PATH DIAGRAM

360 SERIES RIGHT HAND TAMP APPLICATOR
WITH GOTTSCHO IMPRINTER



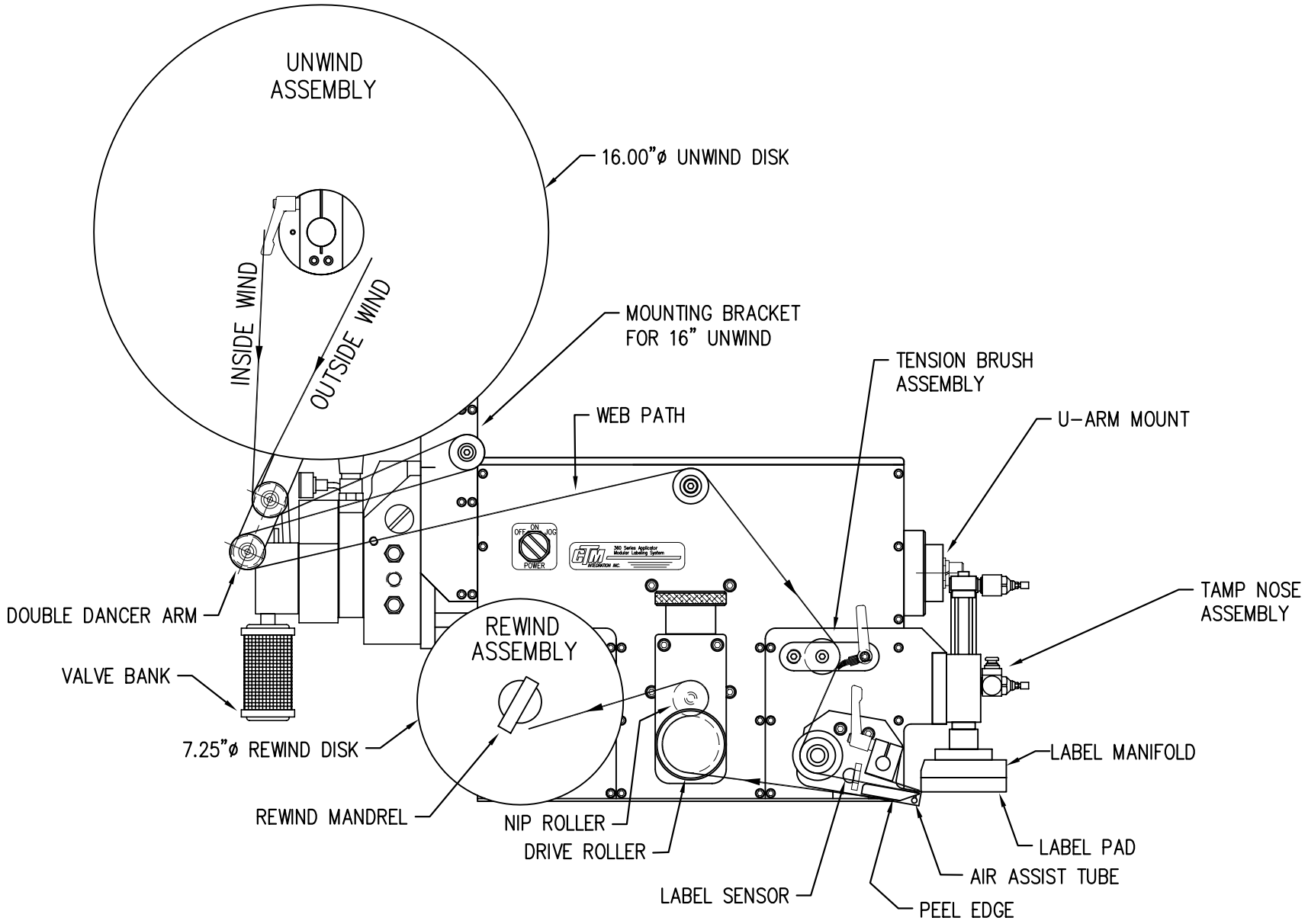
WEB PATH DIAGRAM
360 SERIES LEFT HAND TAMP APPLICATOR
WITH 16.00" UNWIND



X

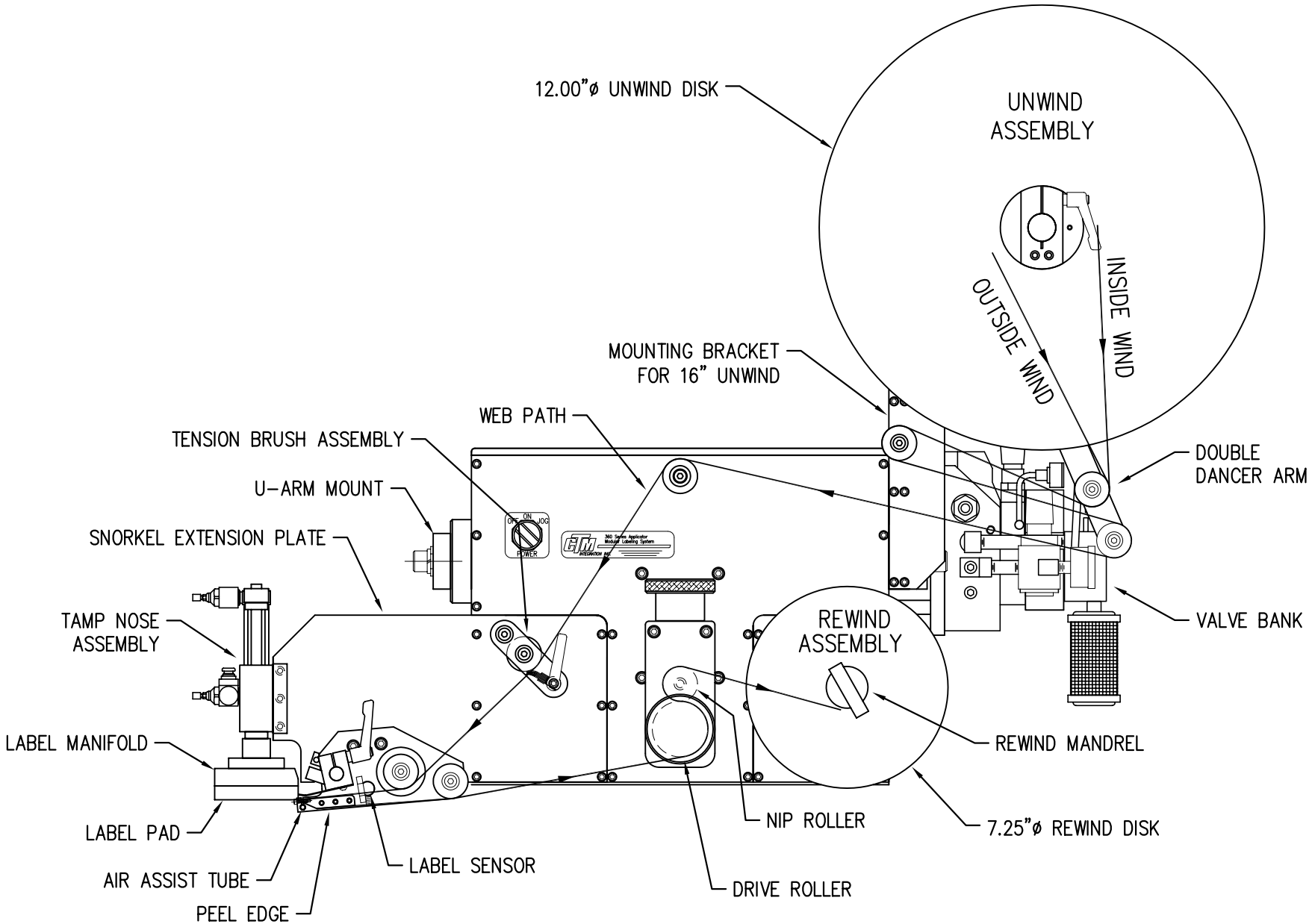
WEB PATH DIAGRAM

360 SERIES RIGHT HAND TAMP APPLICATOR WITH 16.00" UNWIND

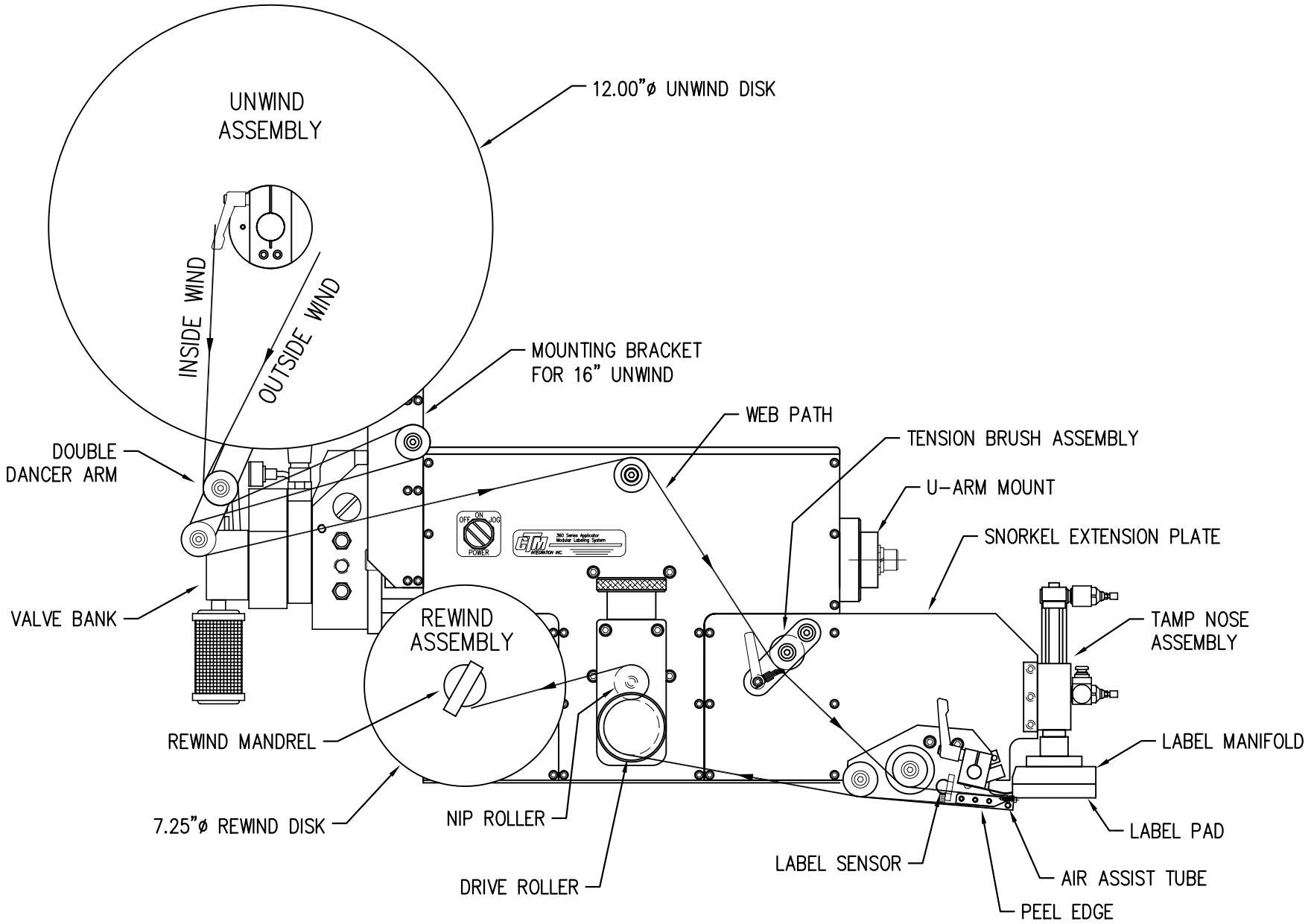


X

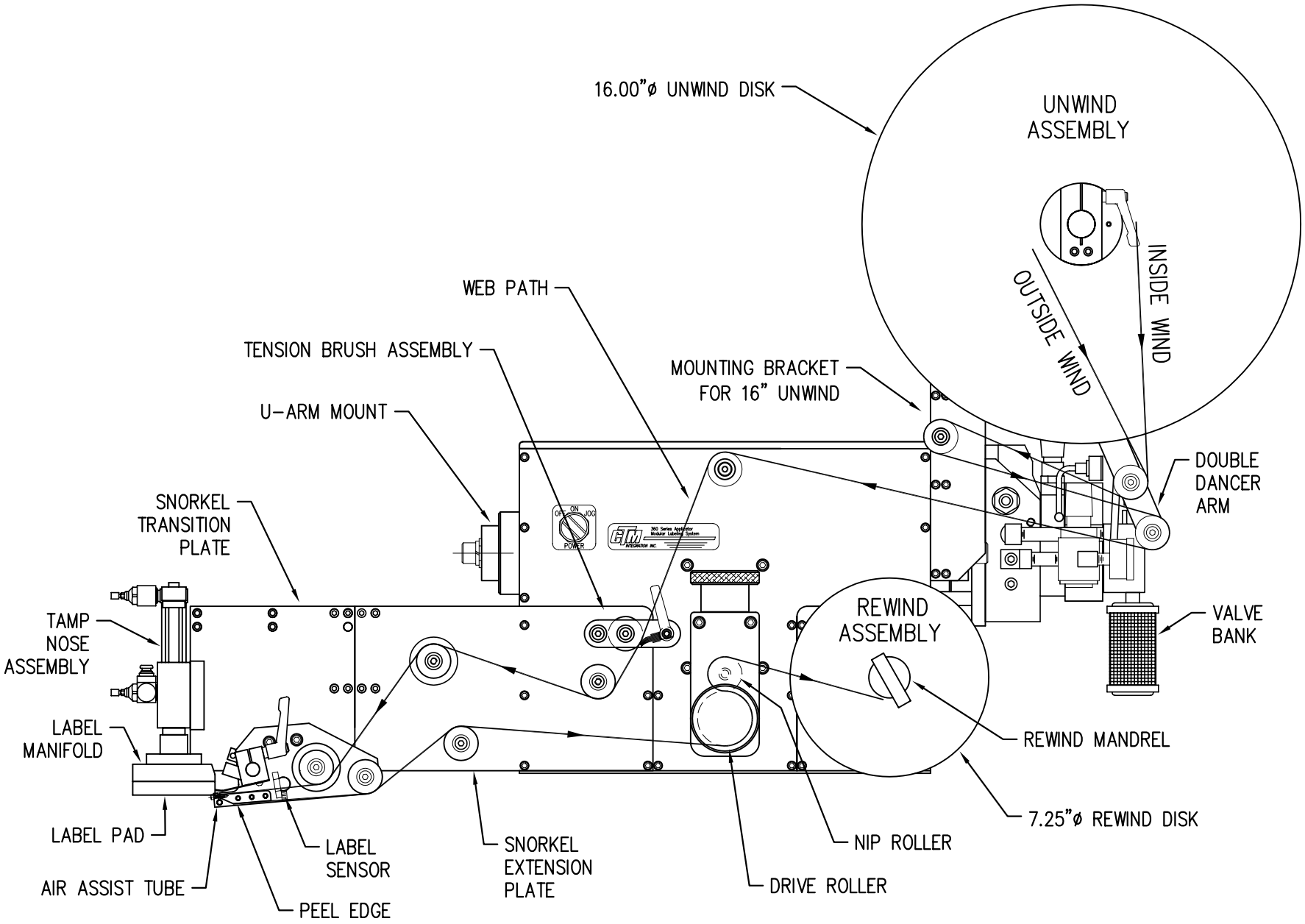
WEB PATH DIAGRAM
360 SERIES LEFT HAND 6" EXTENDED TAMP APPLICATOR WITH 16.00" UNWIND



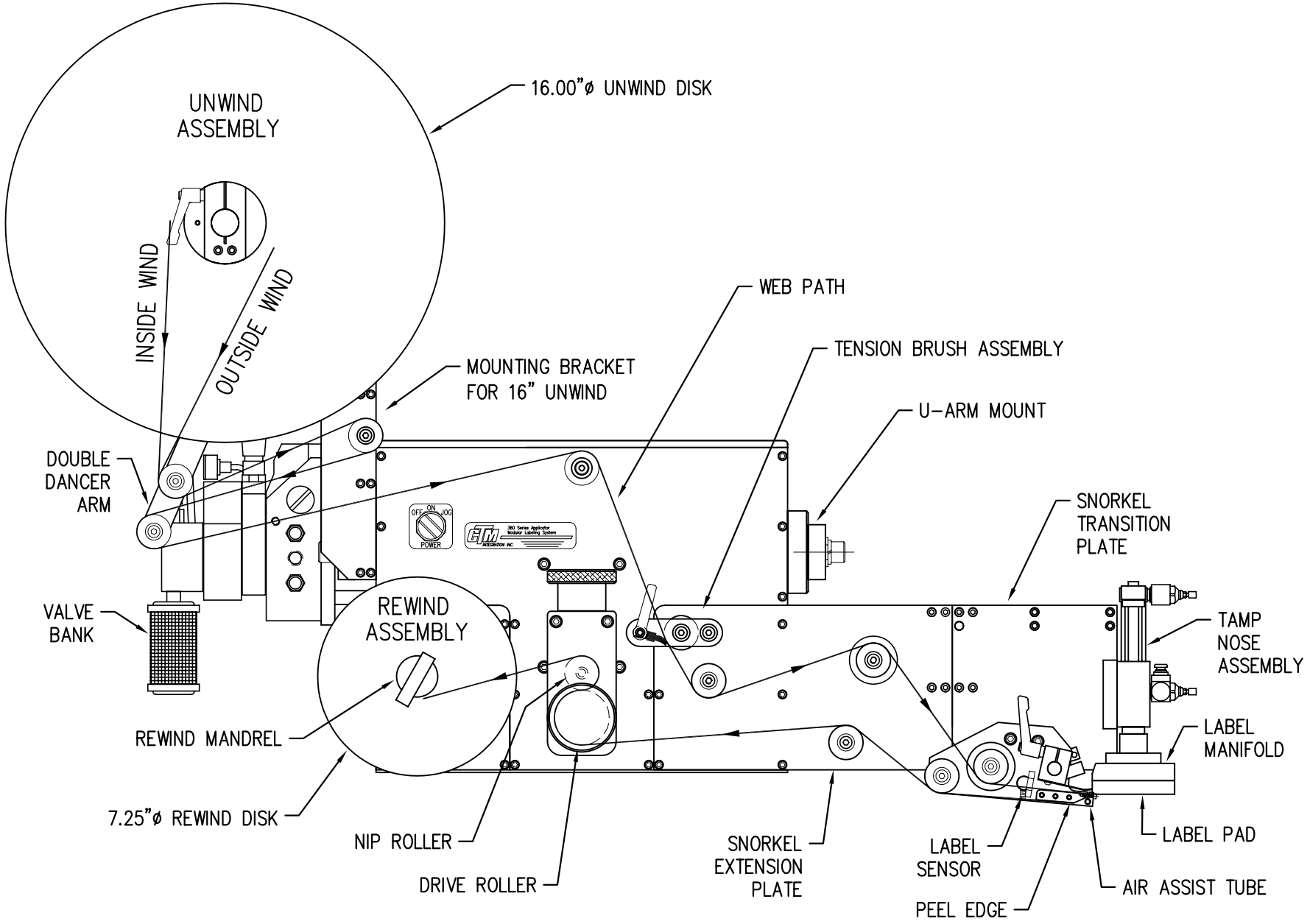
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 6" EXTENDED TAMP APPLICATOR WITH 16.00" UNWIND



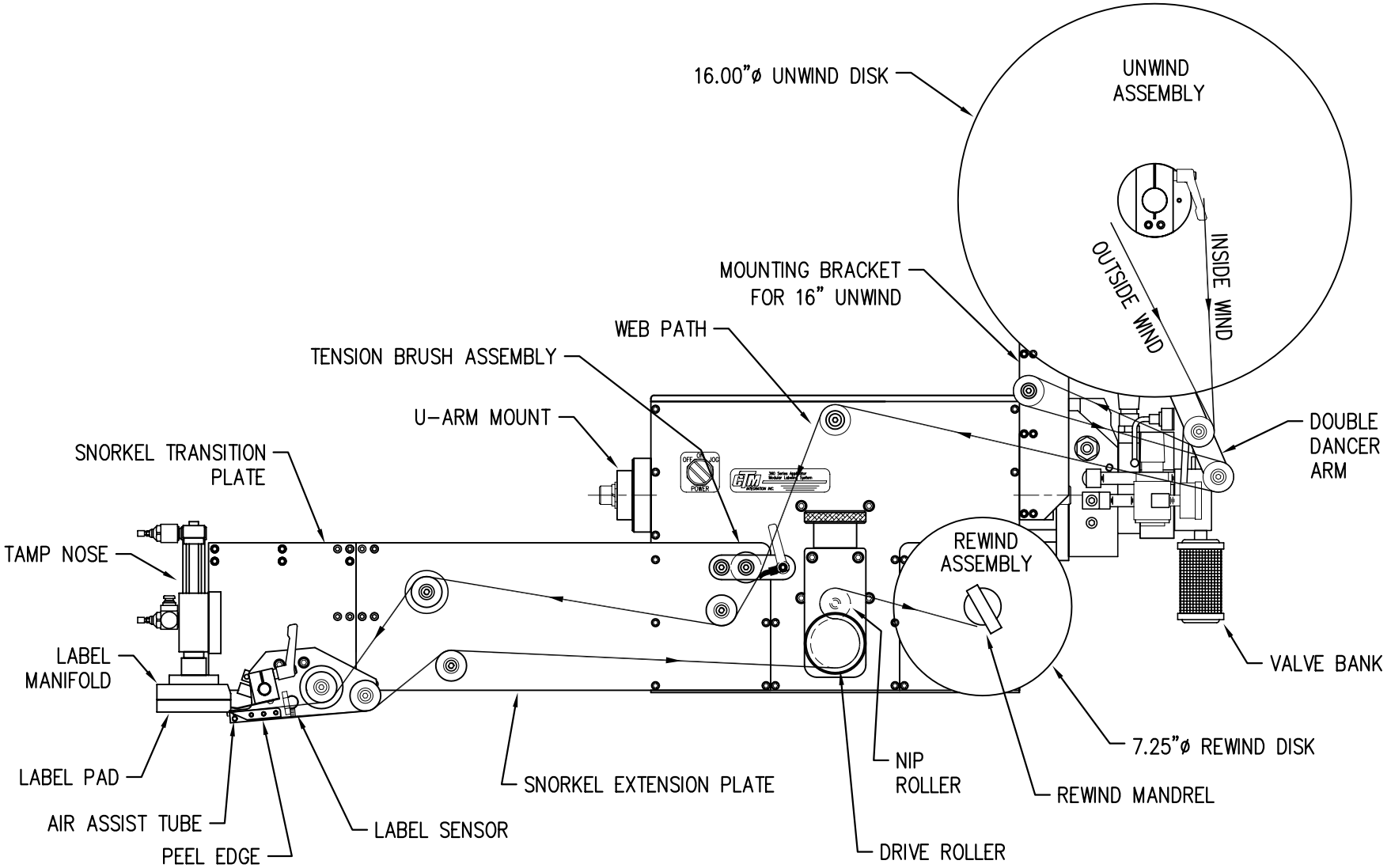
WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED TAMP APPLICATOR WITH 16.00" UNWIND



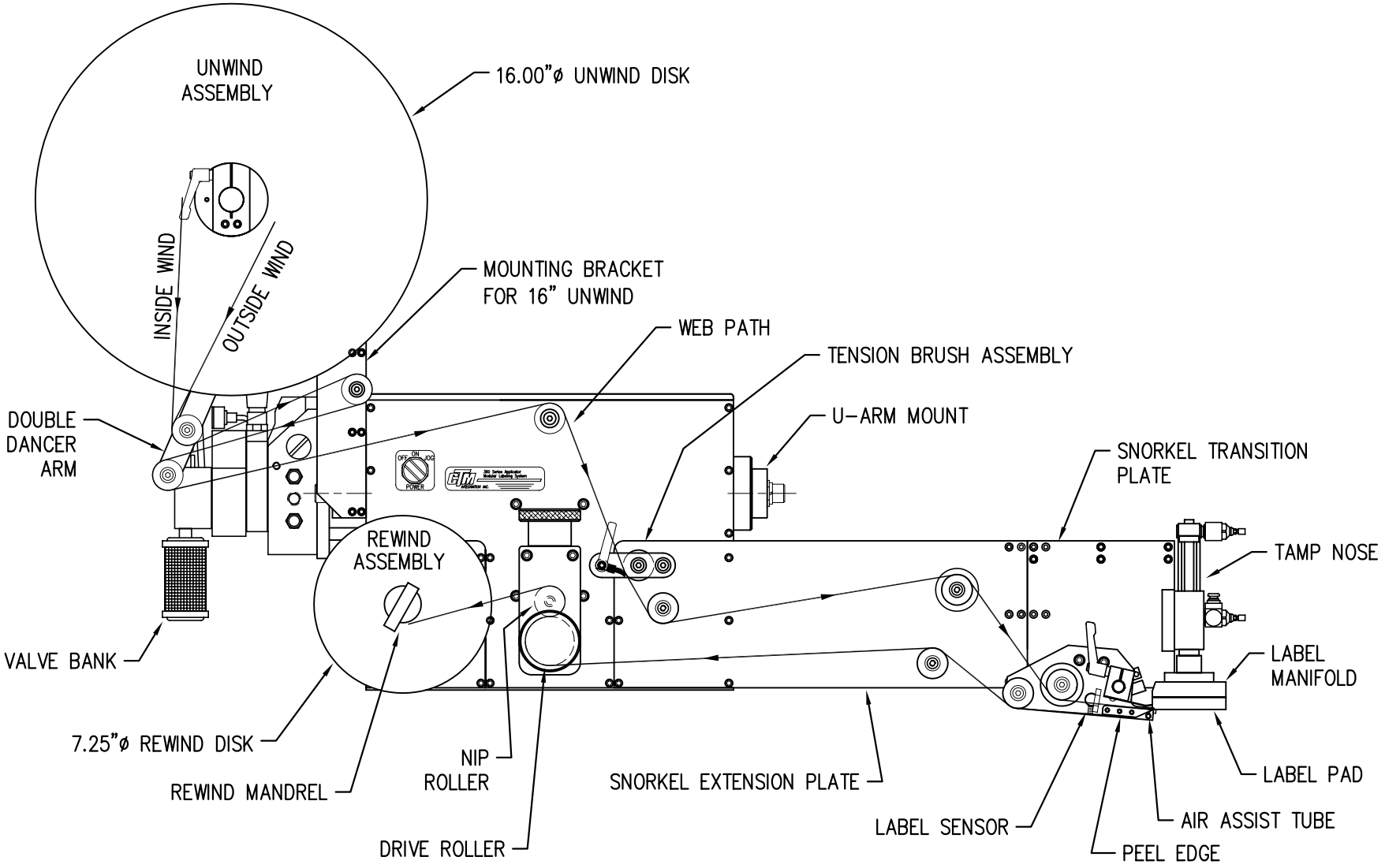
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" EXTENDED TAMP APPLICATOR WITH 16.00" UNWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 18"/24" EXTENDED TAMP APPLICATOR WITH 16.00" UNWIND

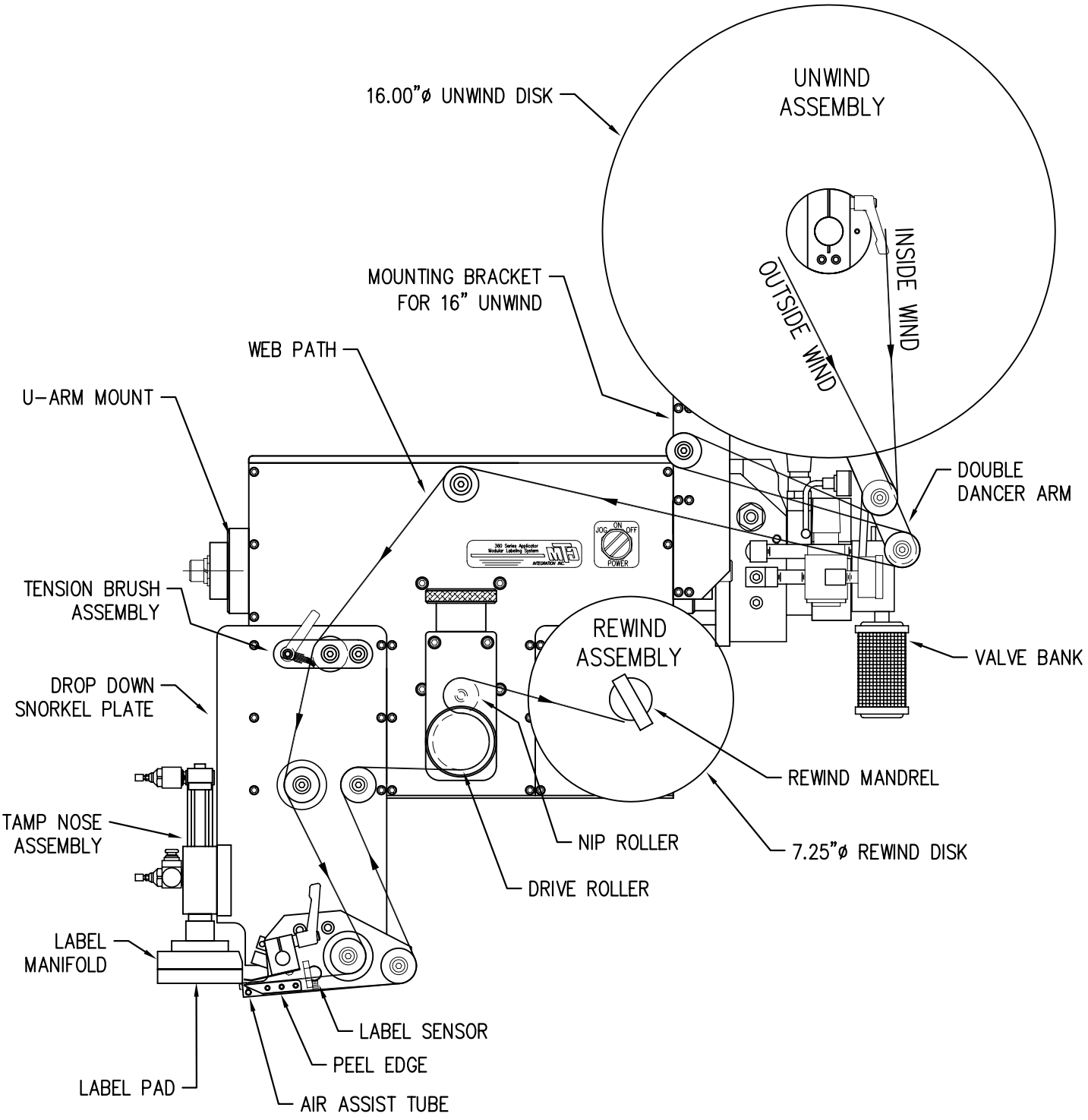


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18"/24" EXTENDED TAMP APPLICATOR
WITH 16.00" UNWIND



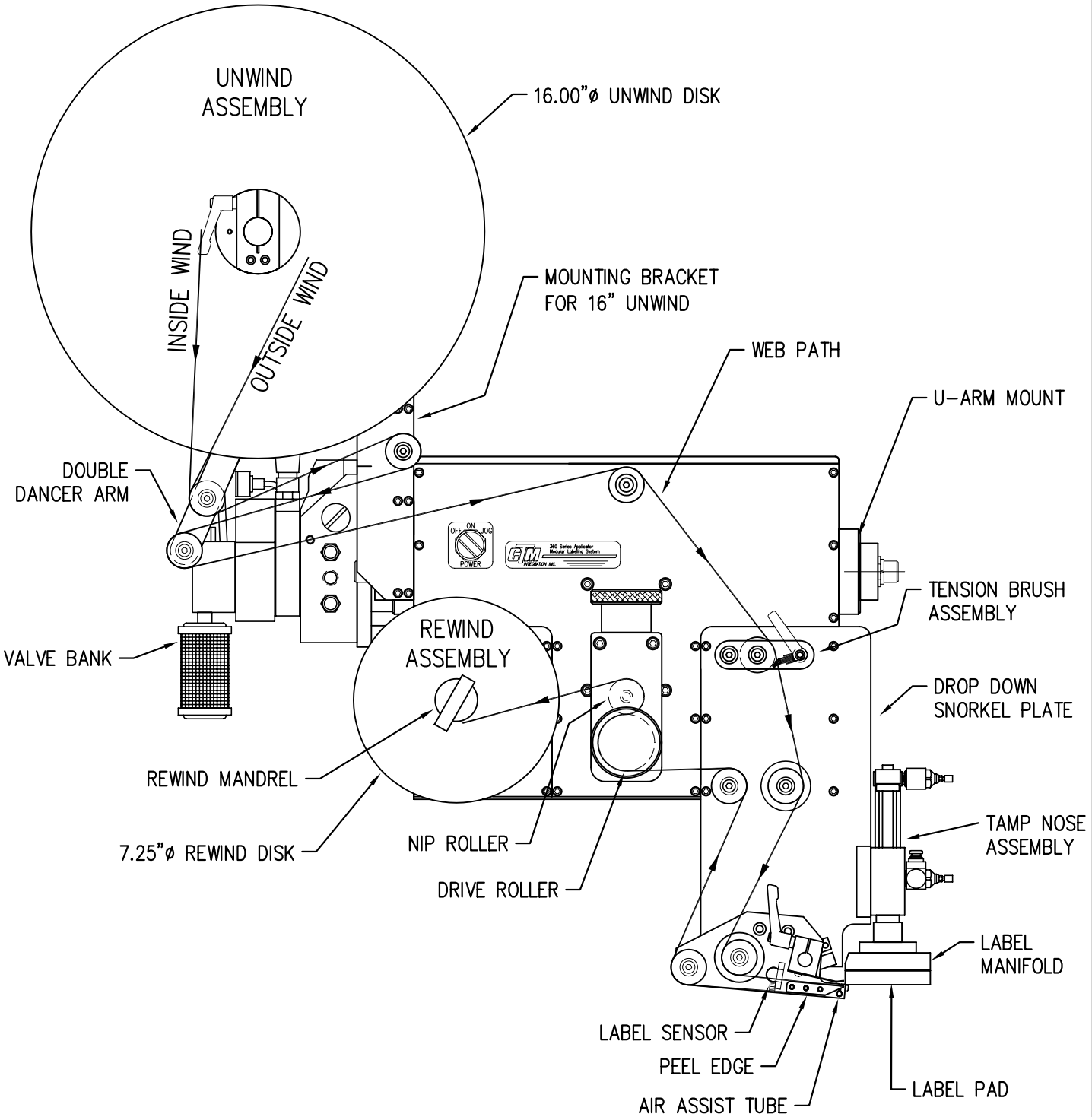
WEB PATH DIAGRAM

360 SERIES LEFT HAND 6" DROP DOWN TAMP APPLICATOR WITH 16" UNWIND



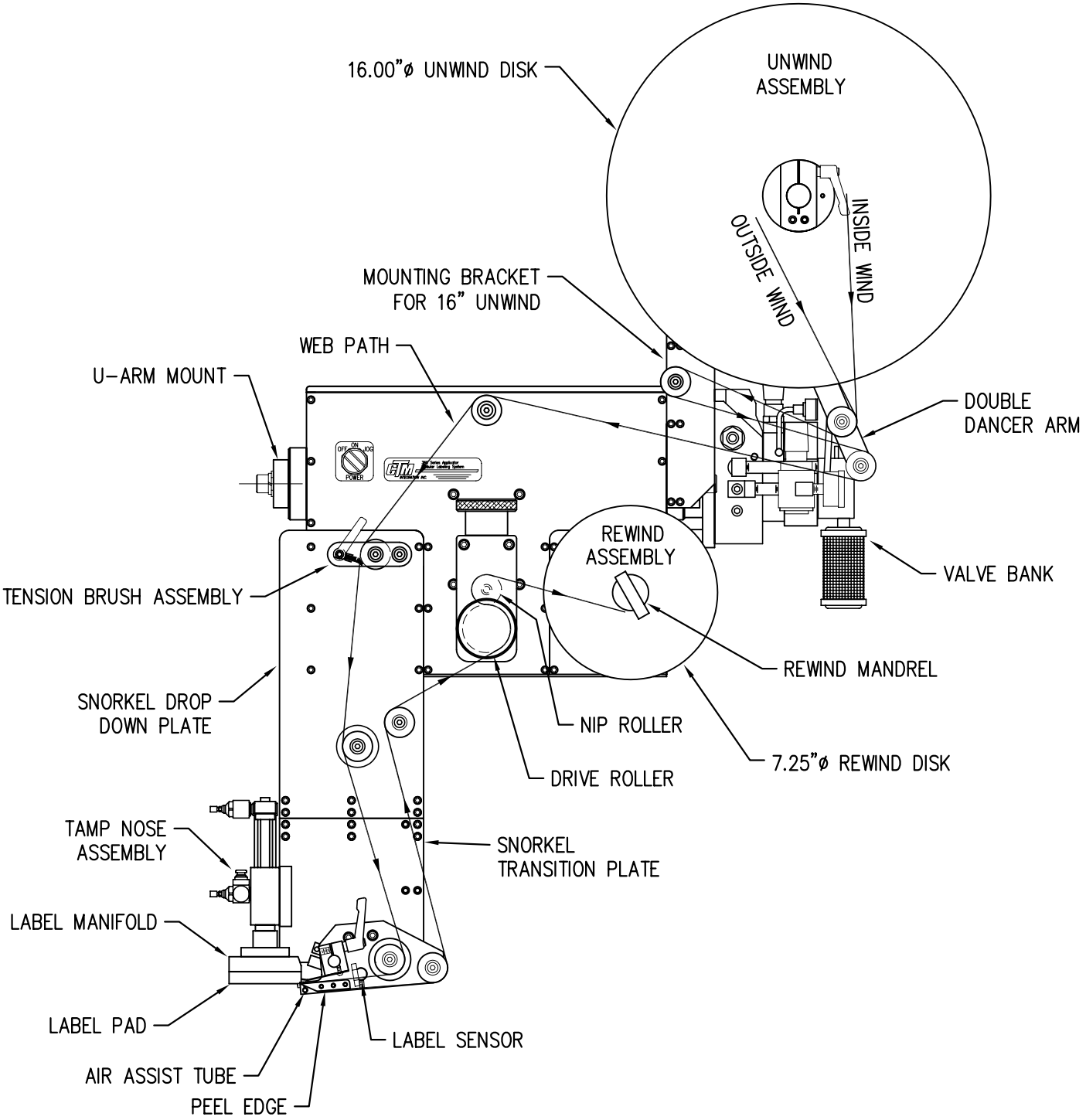
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 6" DROP DOWN TAMP APPLICATOR WITH 16" UNWIND



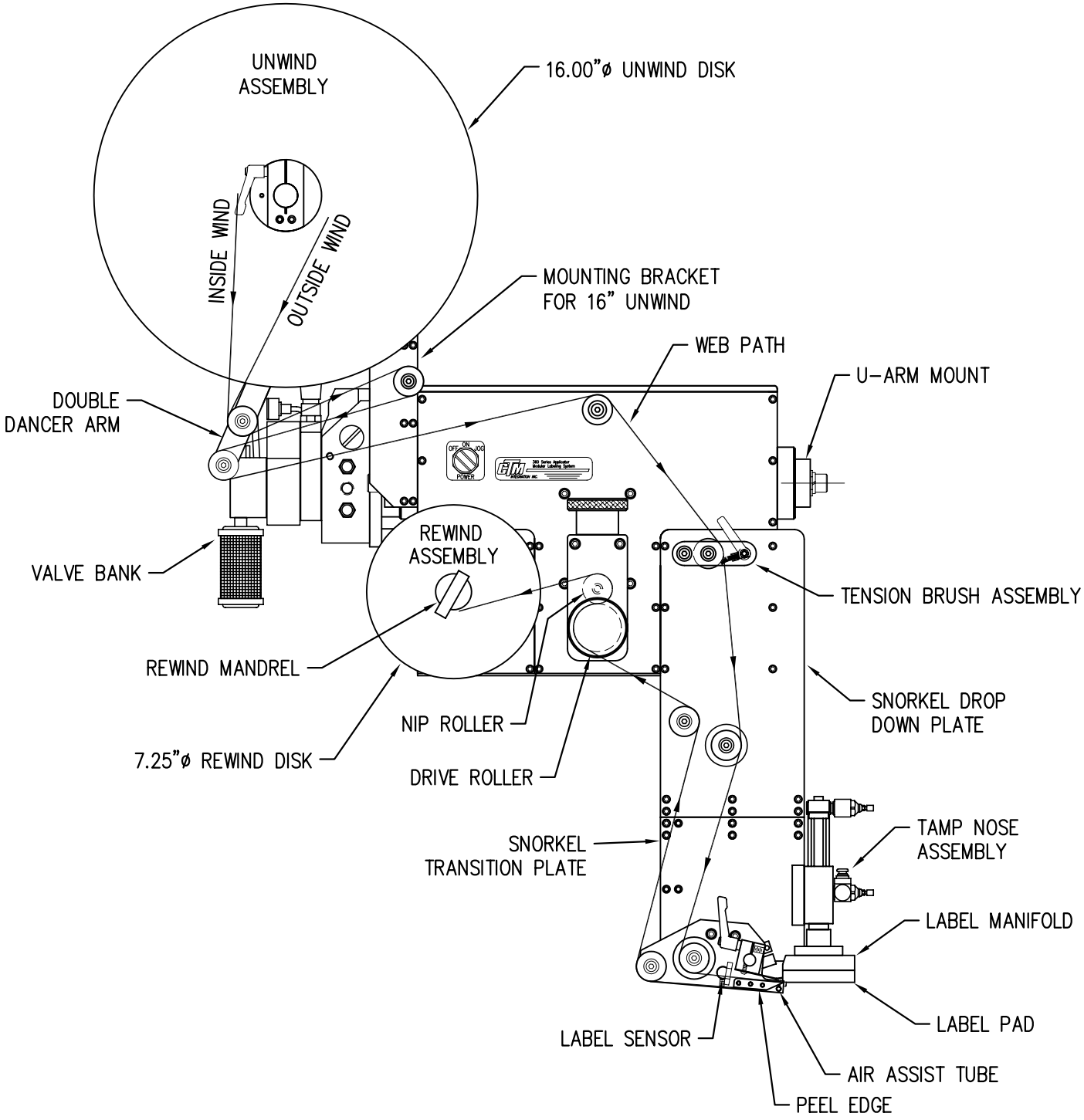
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN TAMP APPLICATOR WITH 16.00" UNWIND



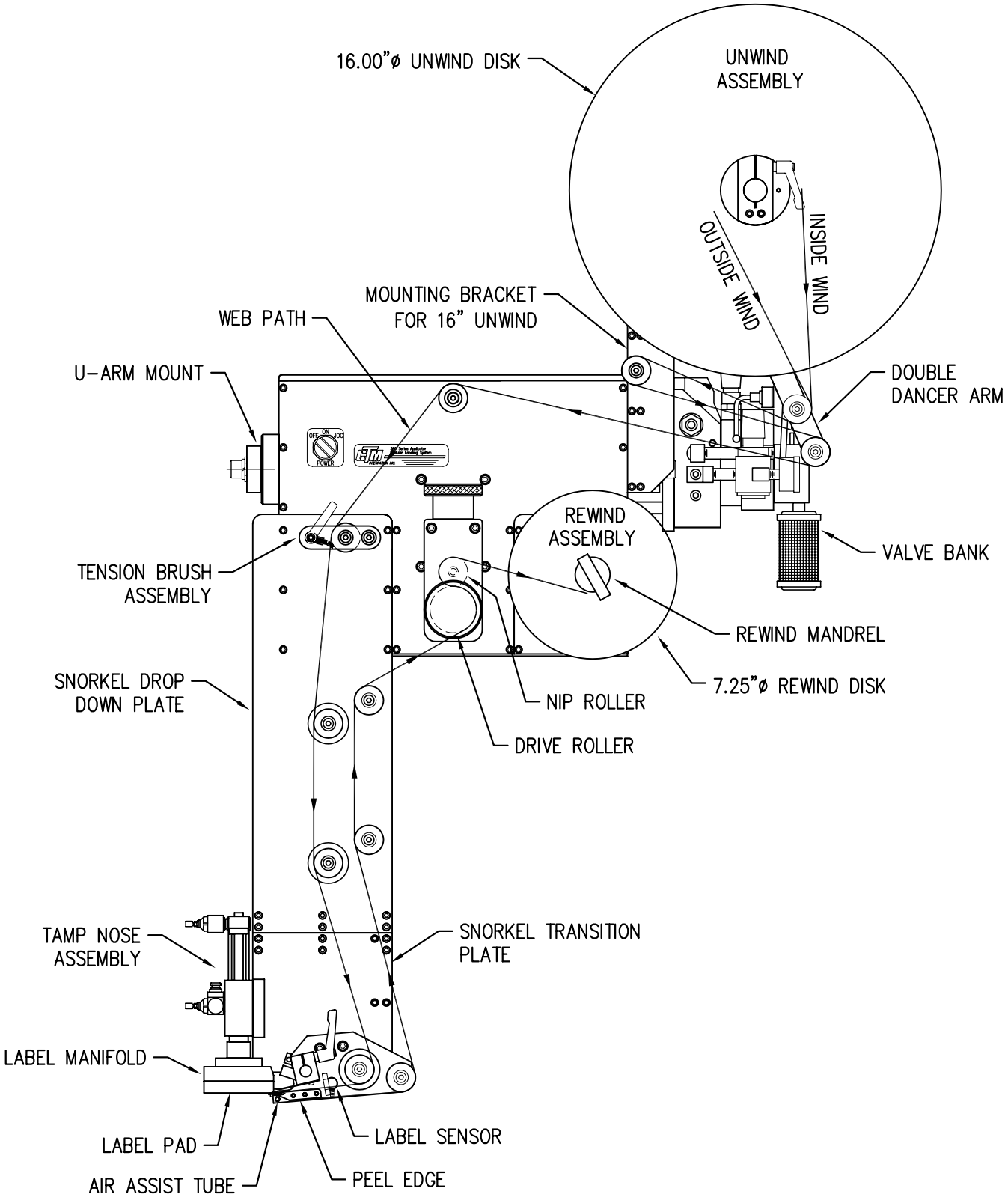
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN TAMP APPLICATOR WITH 16.00" UNWIND



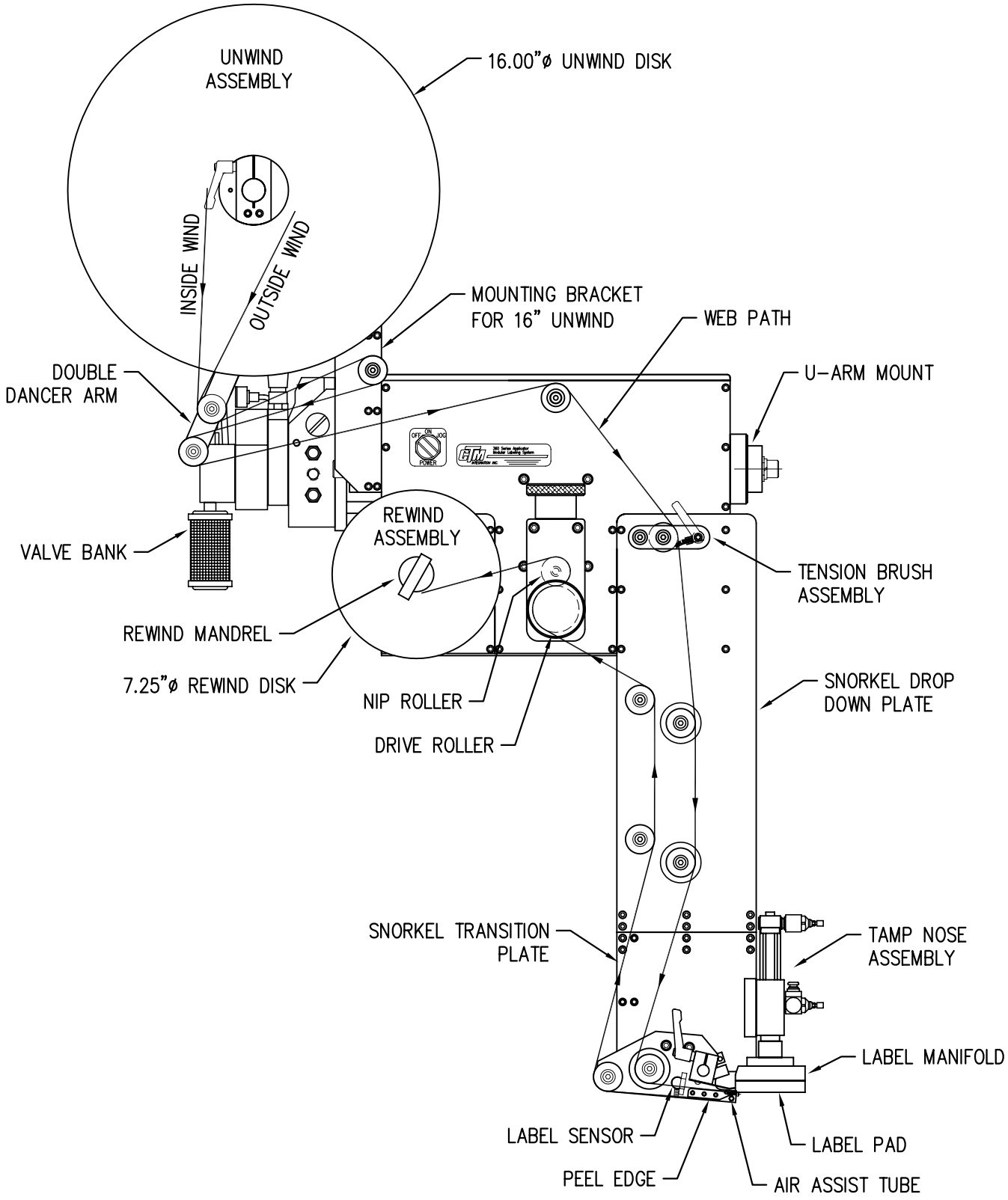
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN TAMP APPLICATOR WITH 16.00" UNWIND



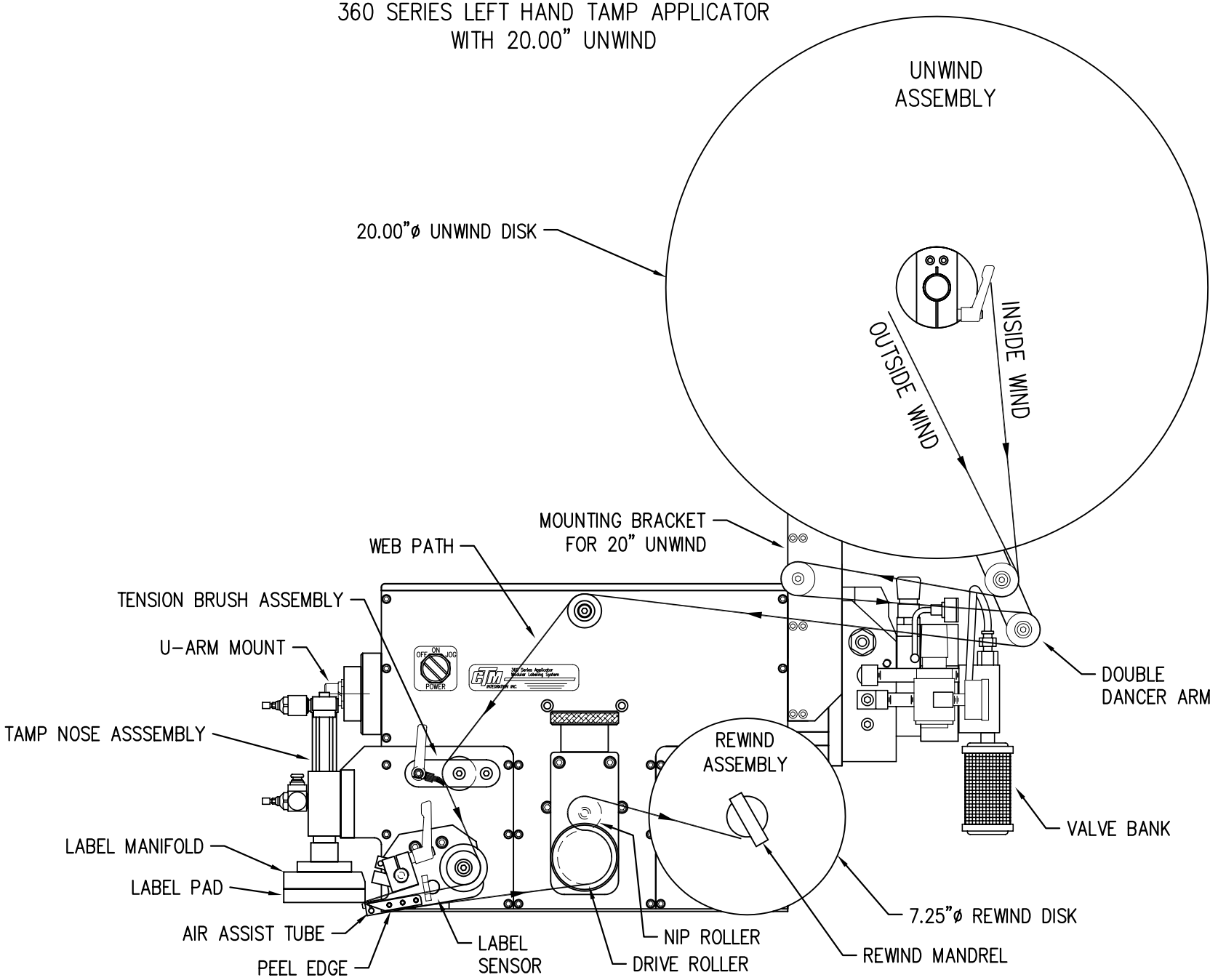
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" DROP DOWN TAMP APPLICATOR WITH 16.00" UNWIND



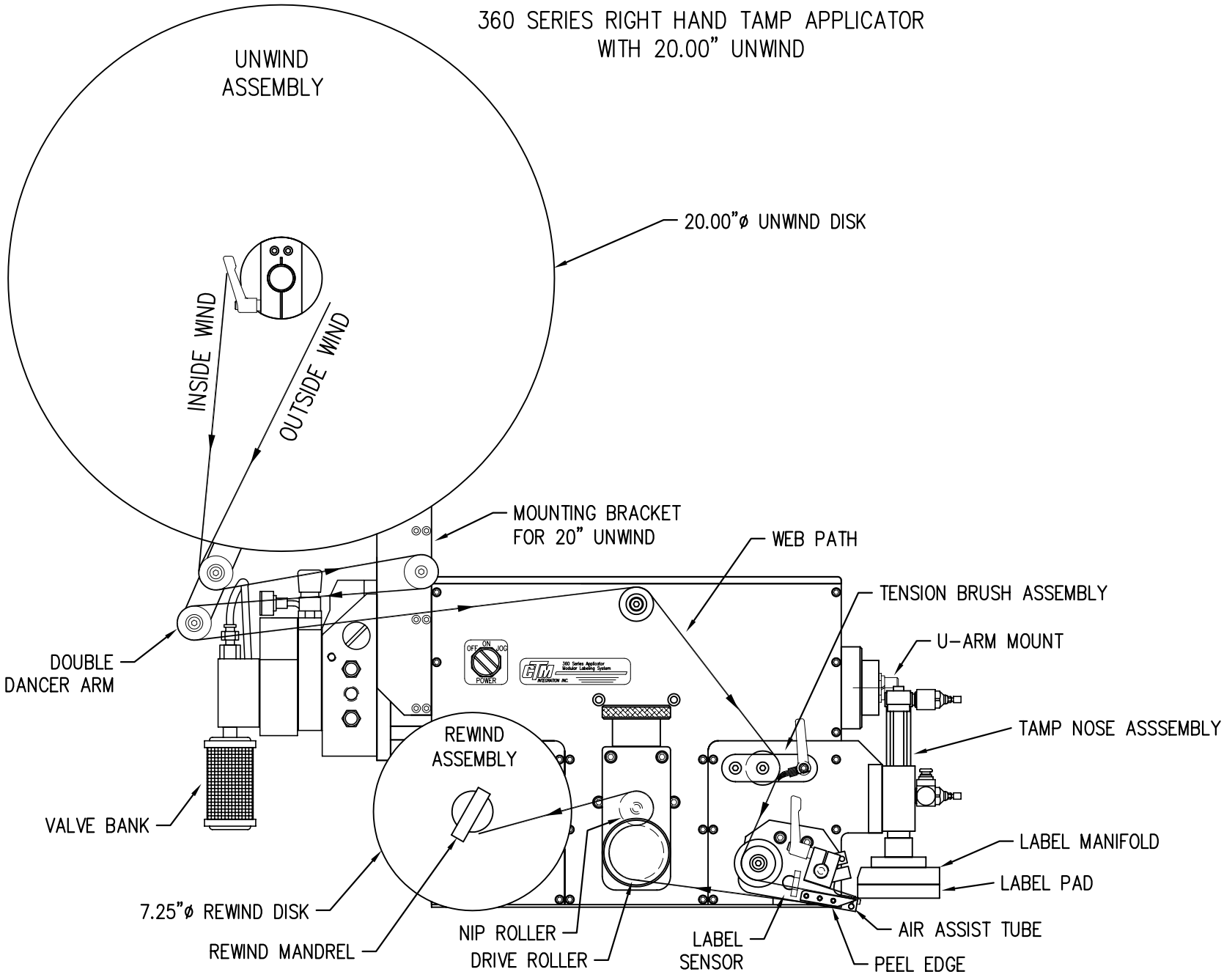
WEB PATH DIAGRAM

360 SERIES LEFT HAND TAMP APPLICATOR WITH 20.00" UNWIND

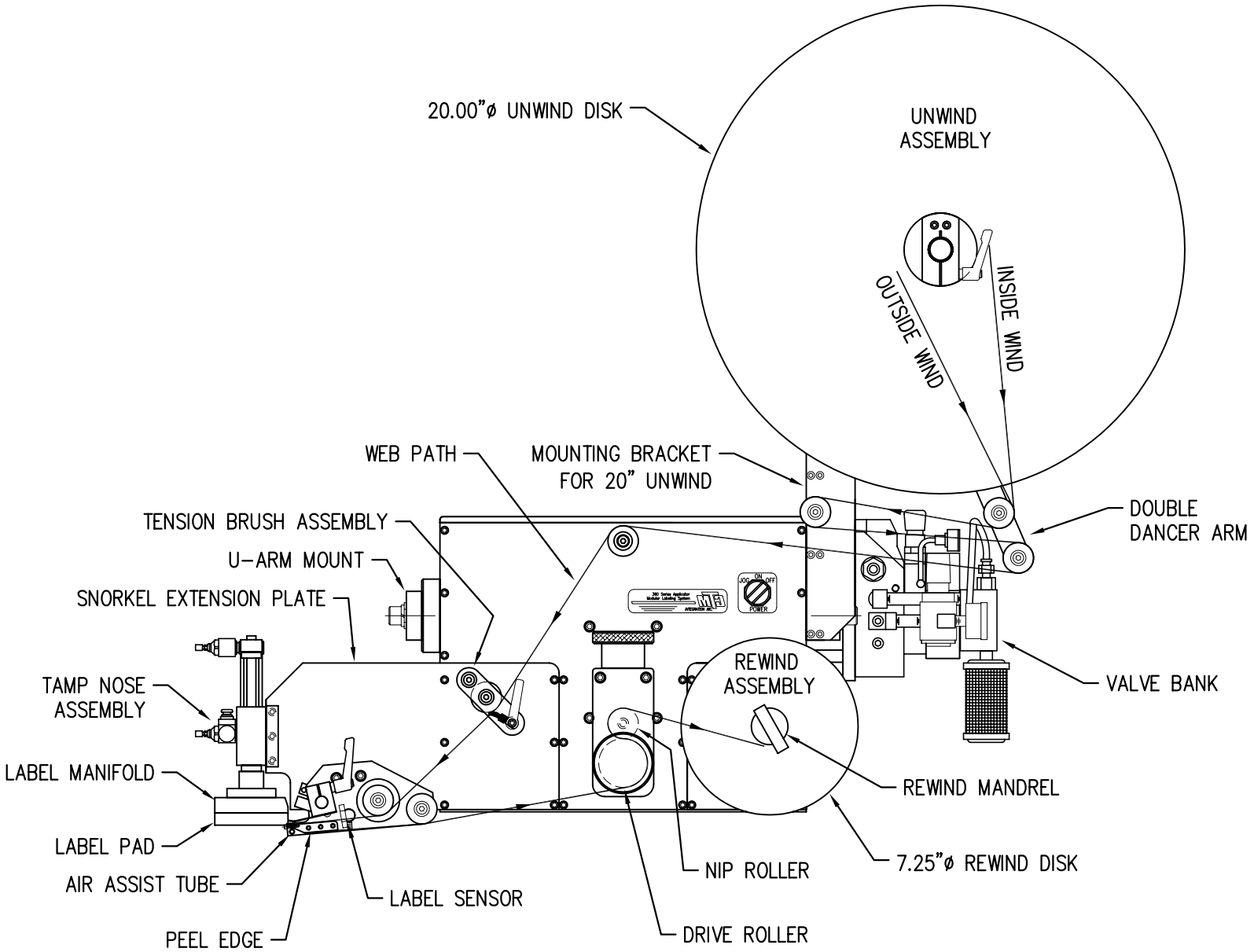


WEB PATH DIAGRAM

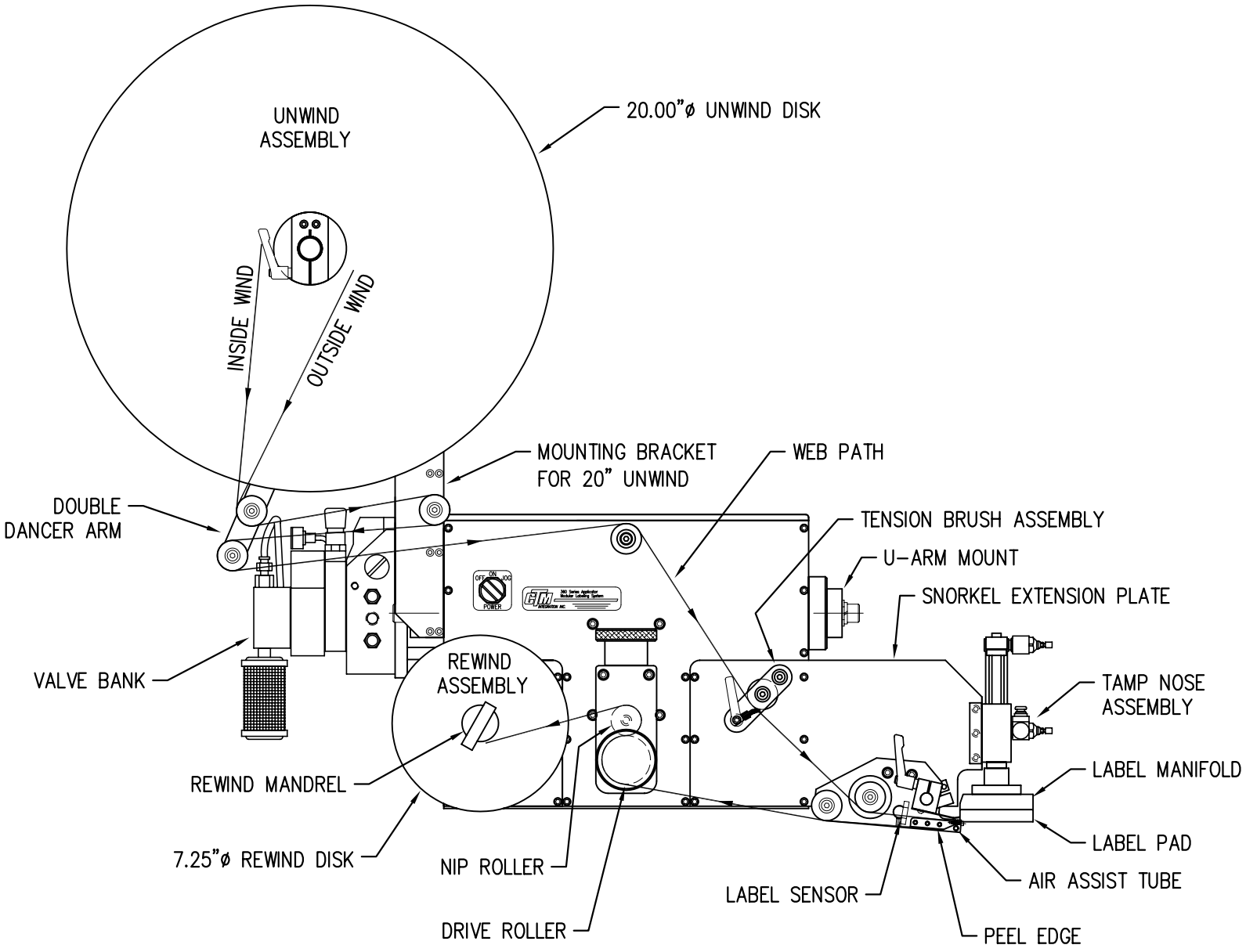
360 SERIES RIGHT HAND TAMP APPLICATOR WITH 20.00" UNWIND



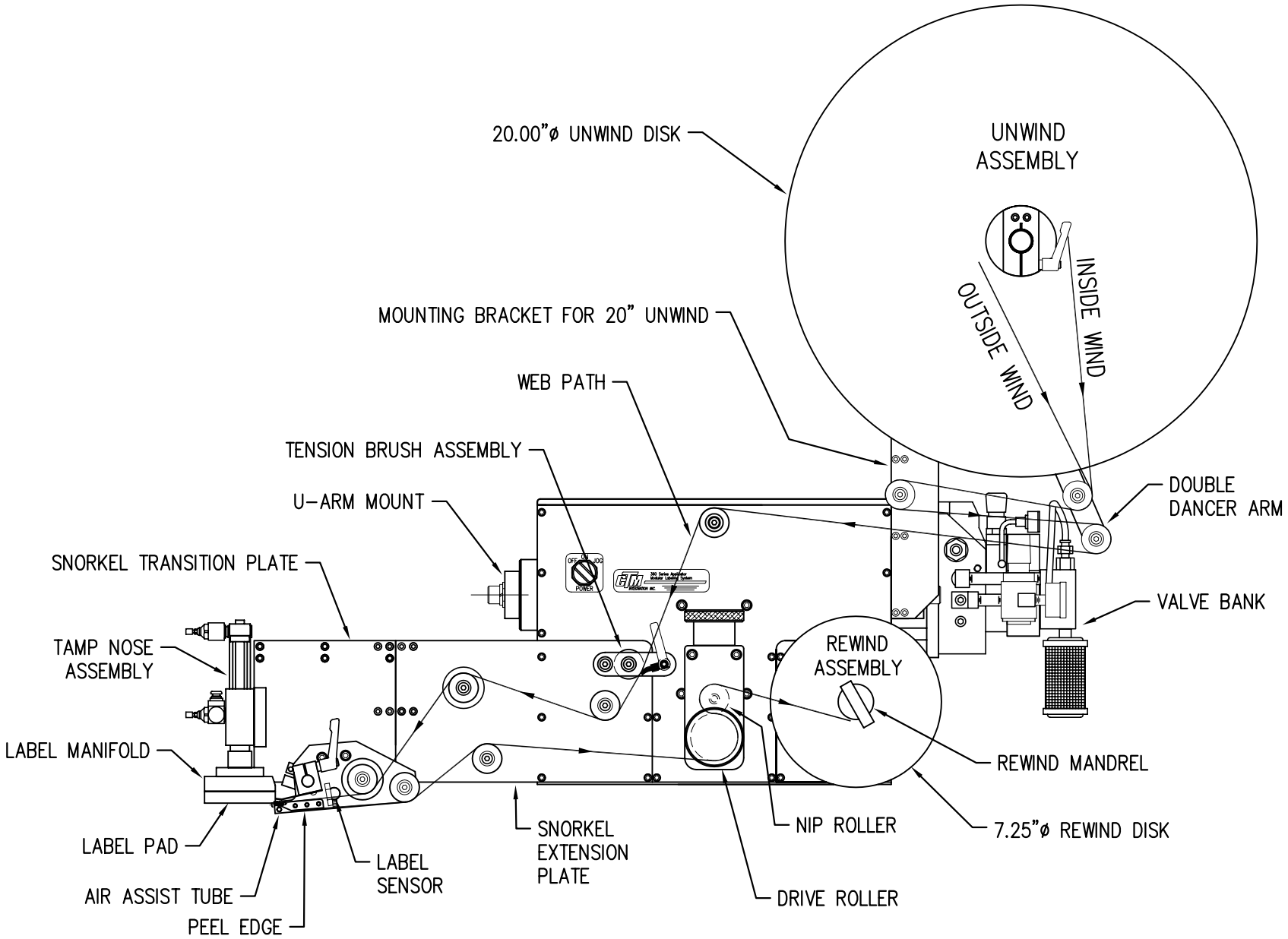
WEB PATH DIAGRAM
360 SERIES LEFT HAND 6" EXTENDED TAMP APPLICATOR WITH 20.00" UNWIND



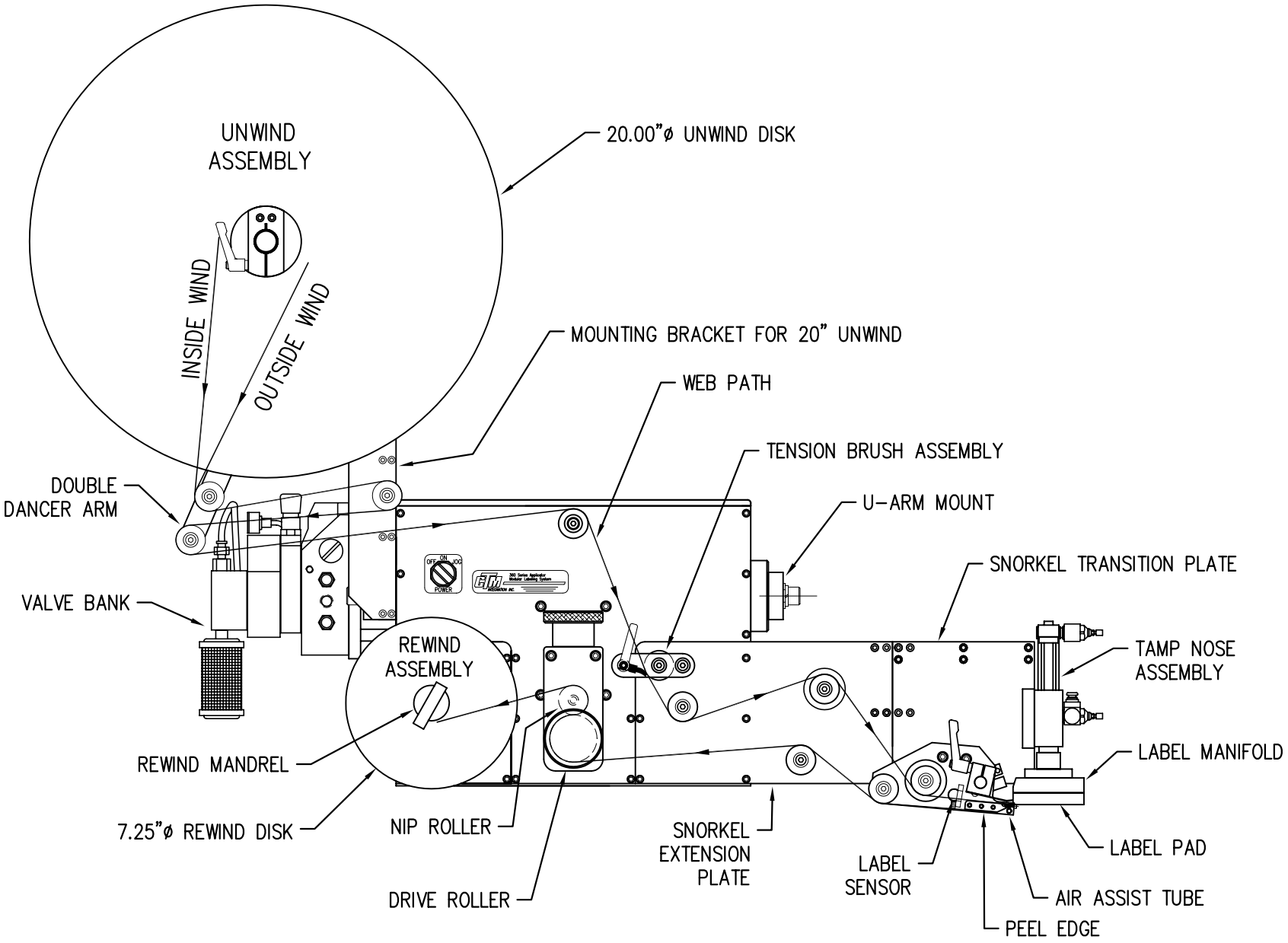
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 6" EXTENDED TAMP APPLICATOR WITH 20.00" UNWIND



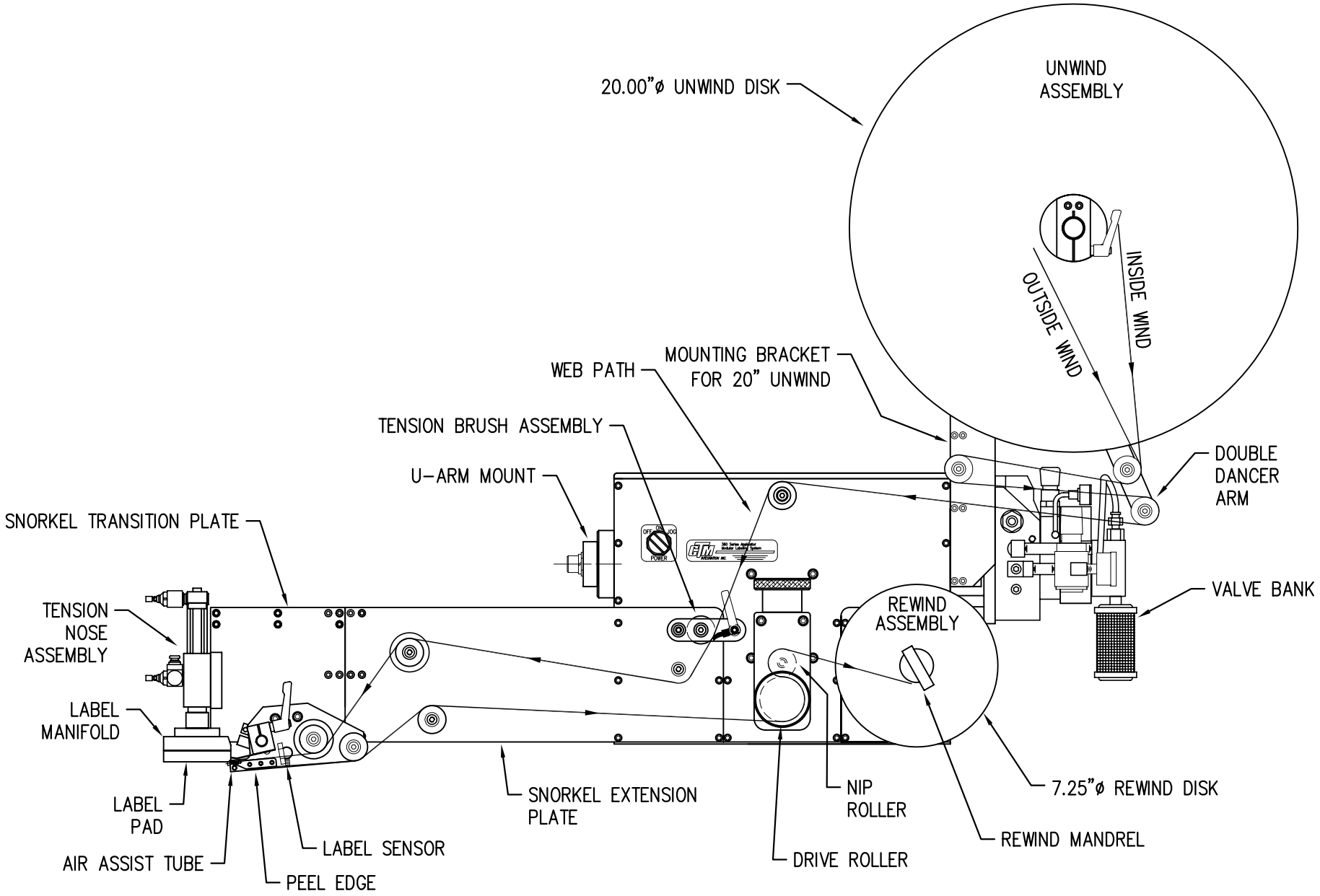
WEB PATH DIAGRAM
360 SERIES LEFT HAND 12" EXTENDED TAMP APPLICATOR WITH 20.00" UNWIND



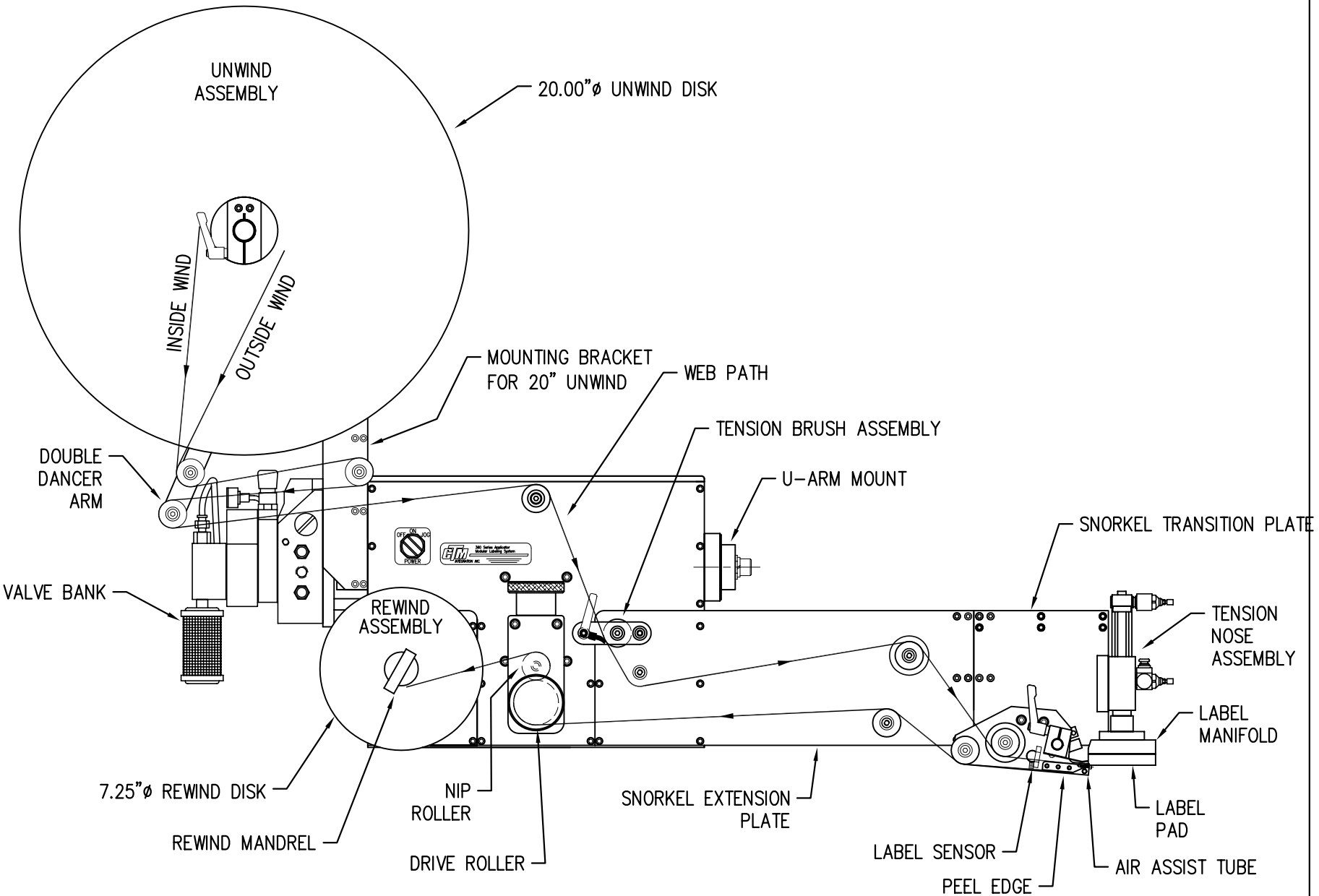
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 12" EXTENDED TAMP APPLICATOR WITH 20.00" UNWIND



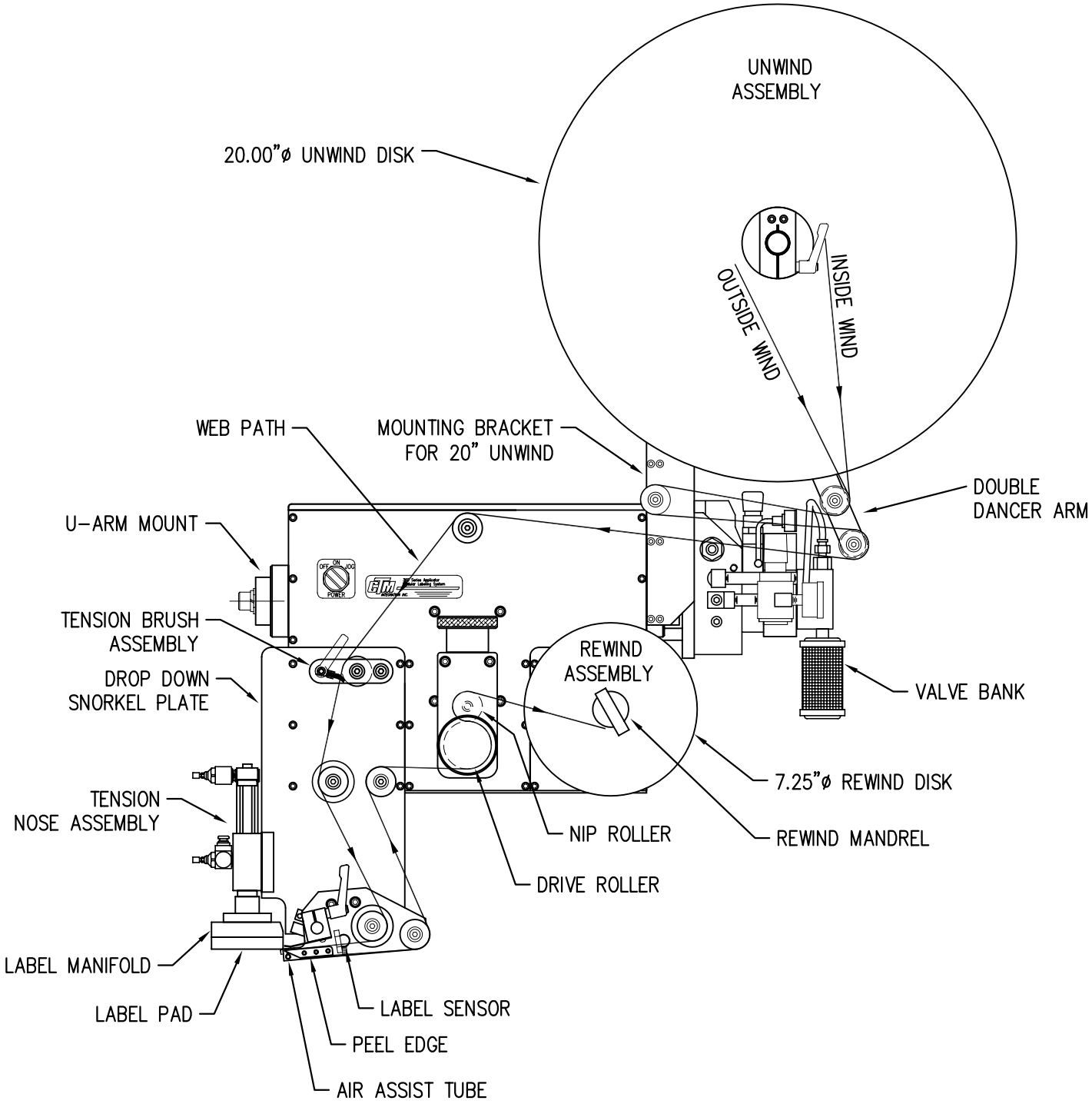
WEB PATH DIAGRAM
360 SERIES LEFT HAND 18"/24" EXTENDED TAMP APPLICATOR
WITH 20.00" UNWIND



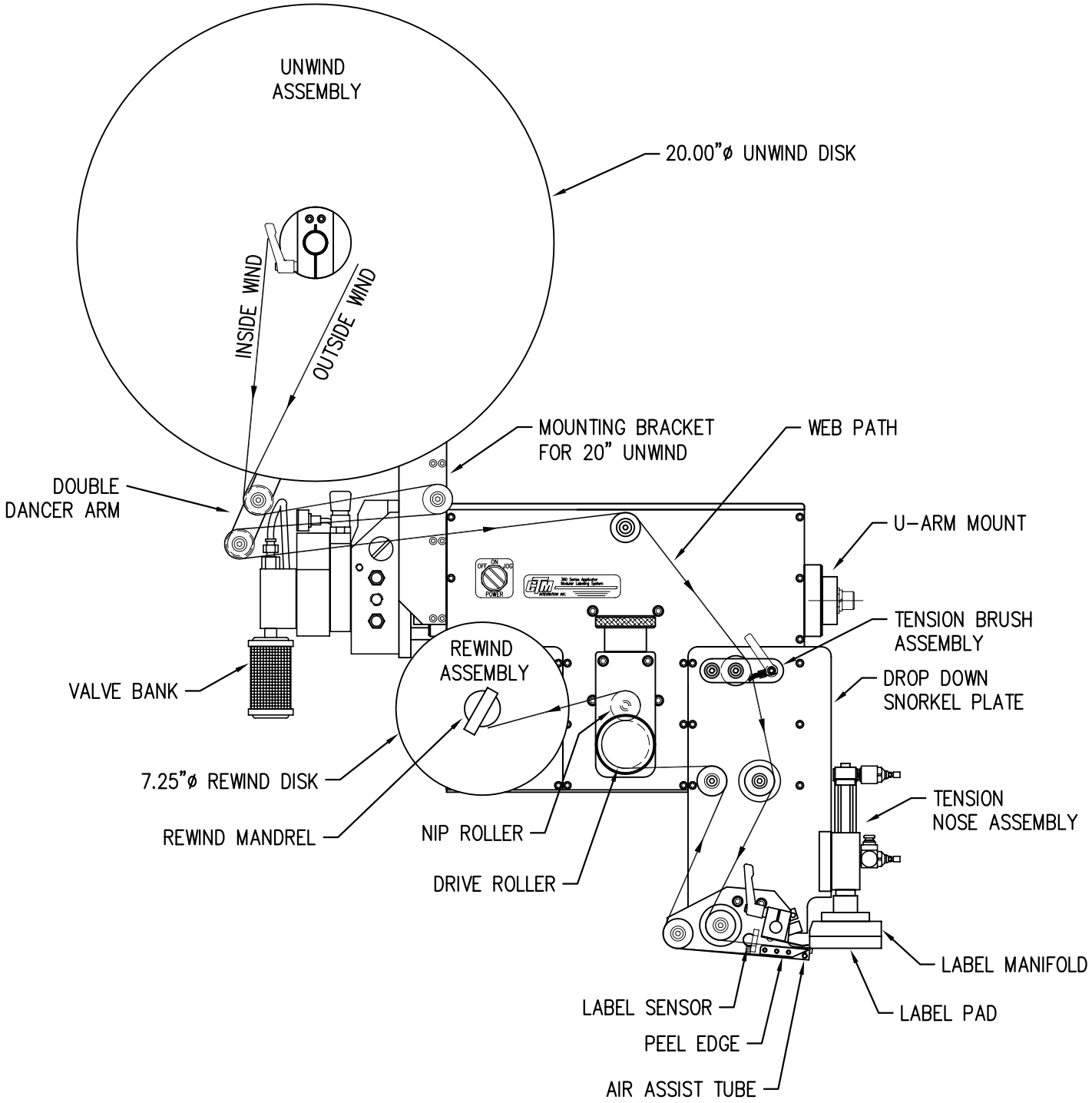
WEB PATH DIAGRAM
360 SERIES RIGHT HAND 18"/24" EXTENDED TAMP APPLICATOR
WITH 20.00" UNWIND



WEB PATH DIAGRAM
360 SERIES LEFT HAND 6" DROP DOWN TAMP APPLICATOR WITH 20.00" UNWIND

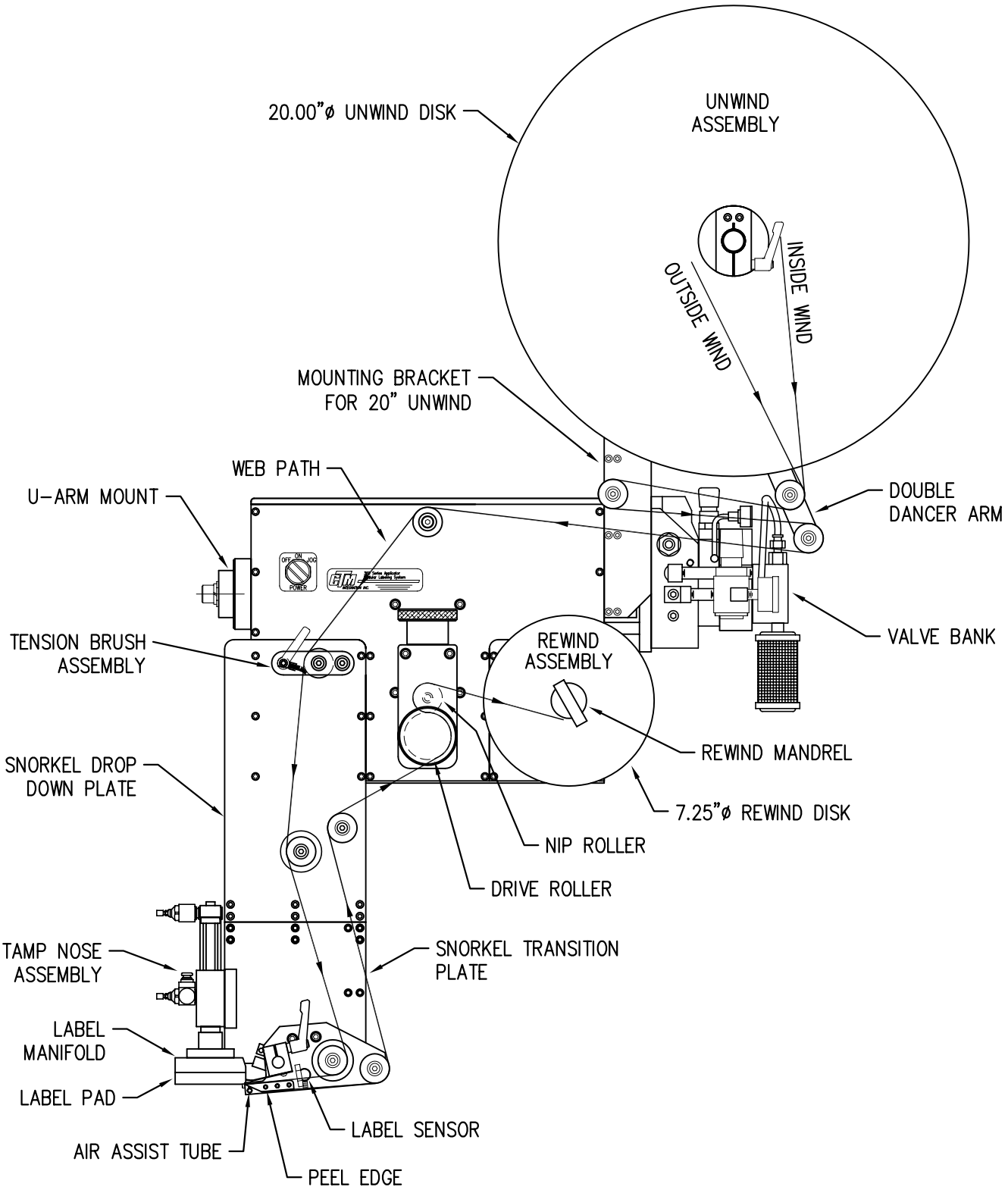


WEB PATH DIAGRAM
360 SERIES RIGHT HAND 6" DROP DOWN TAMP APPLICATOR WITH 20.00" UNWIND



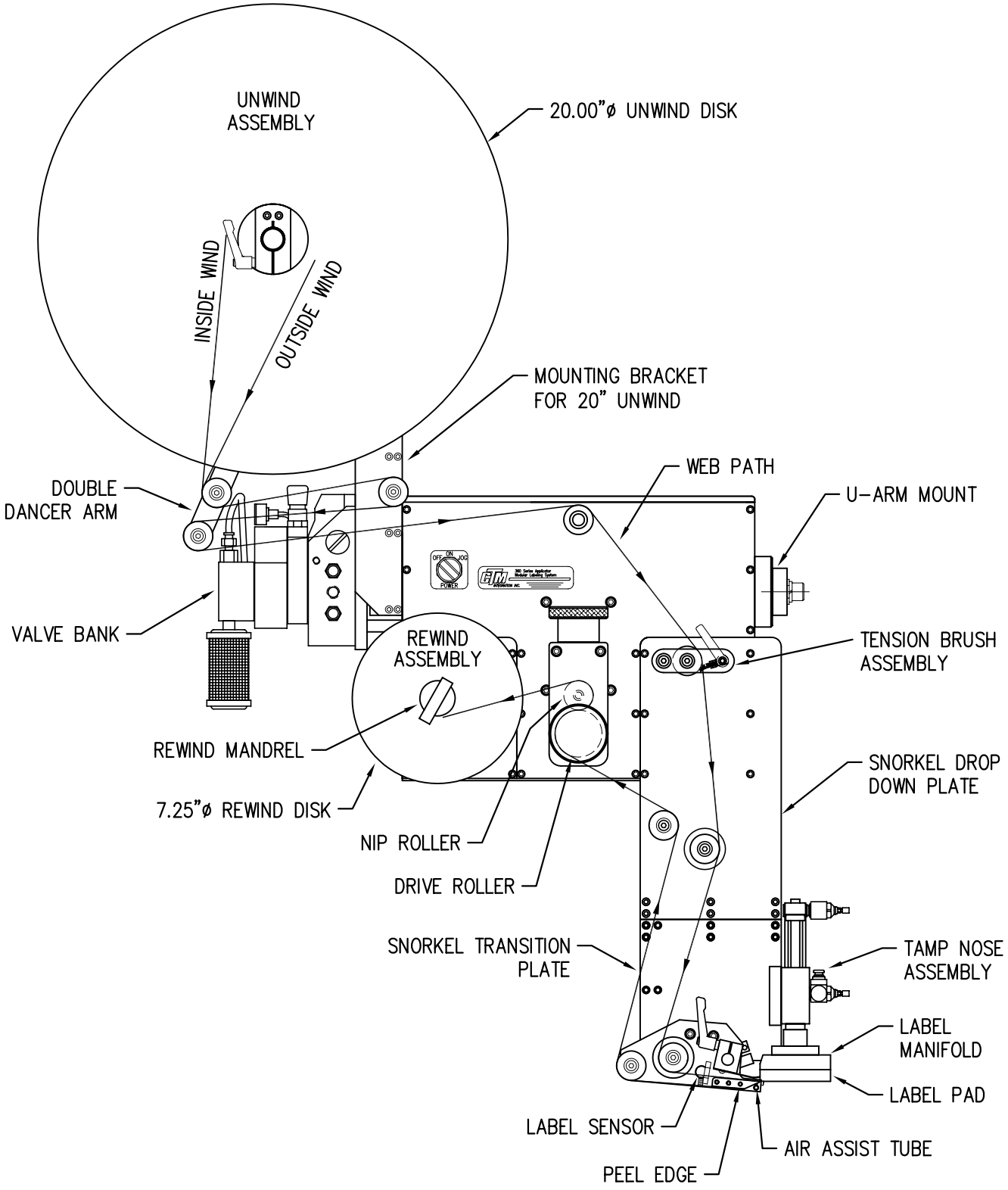
WEB PATH DIAGRAM

360 SERIES LEFT HAND 12" DROP DOWN TAMP APPLICATOR WITH 20.00" UNWIND



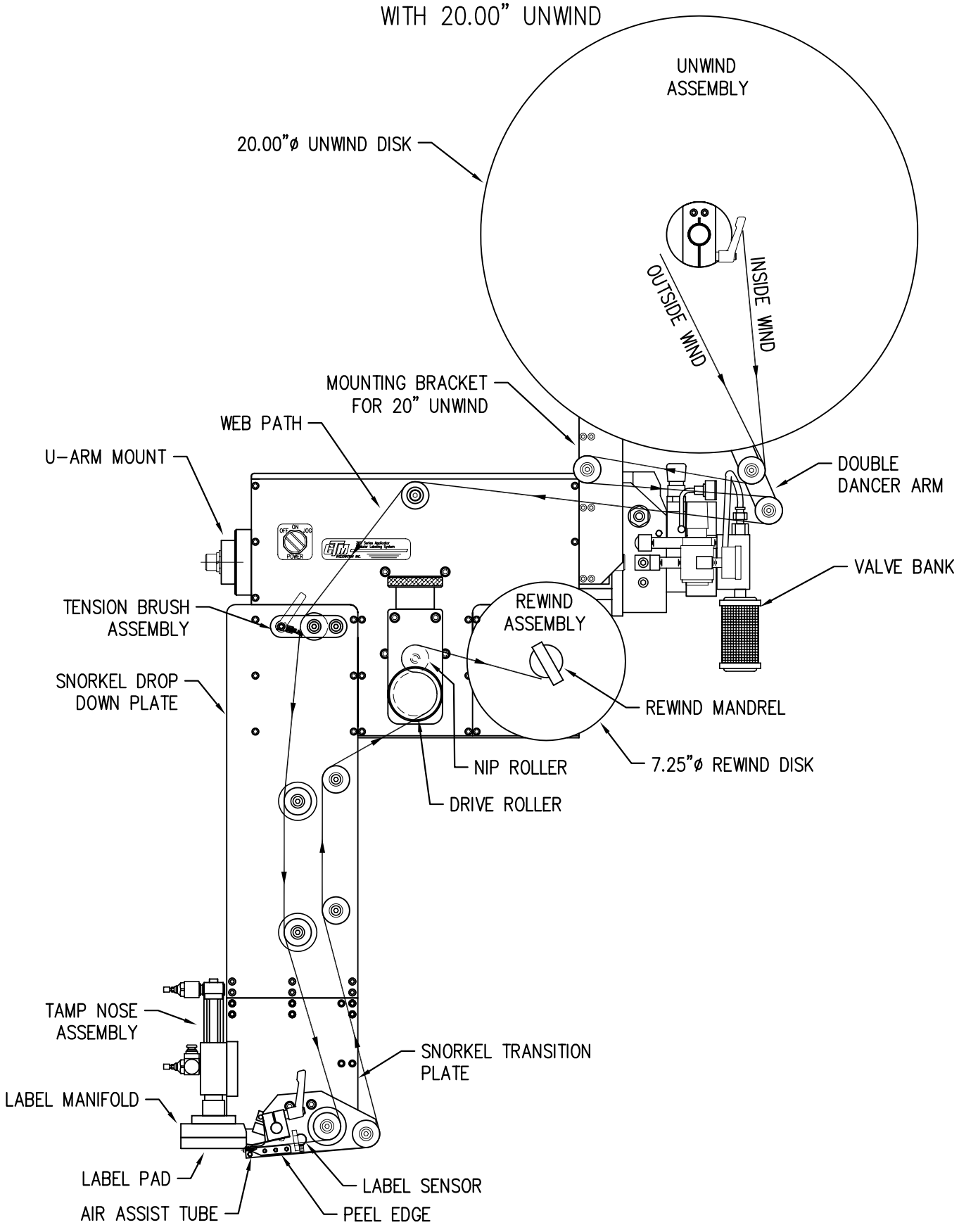
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 12" DROP DOWN TAMP APPLICATOR WITH 20.00" UNWIND



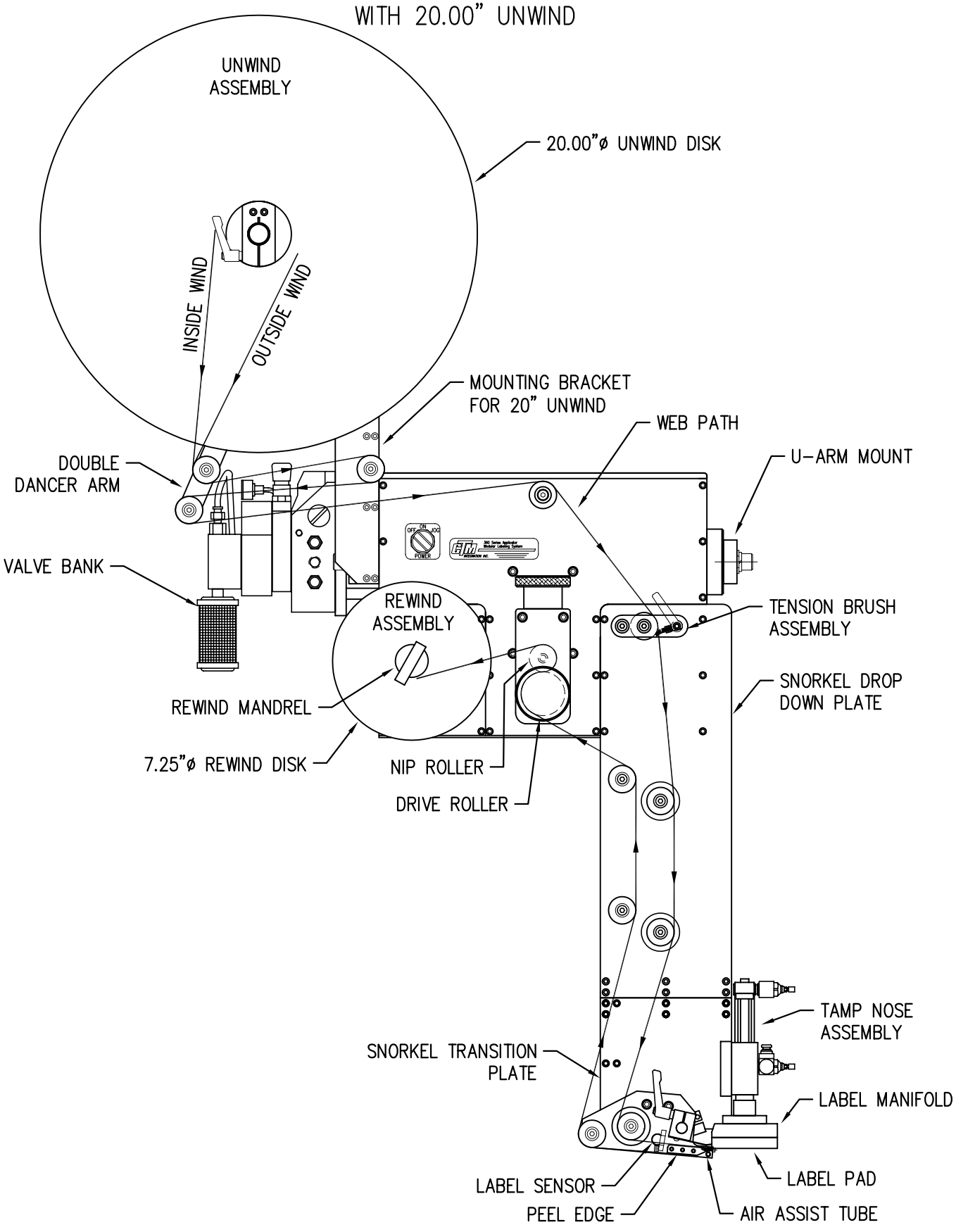
WEB PATH DIAGRAM

360 SERIES LEFT HAND 18"/24" DROP DOWN TAMP APPLICATOR WITH 20.00" UNWIND



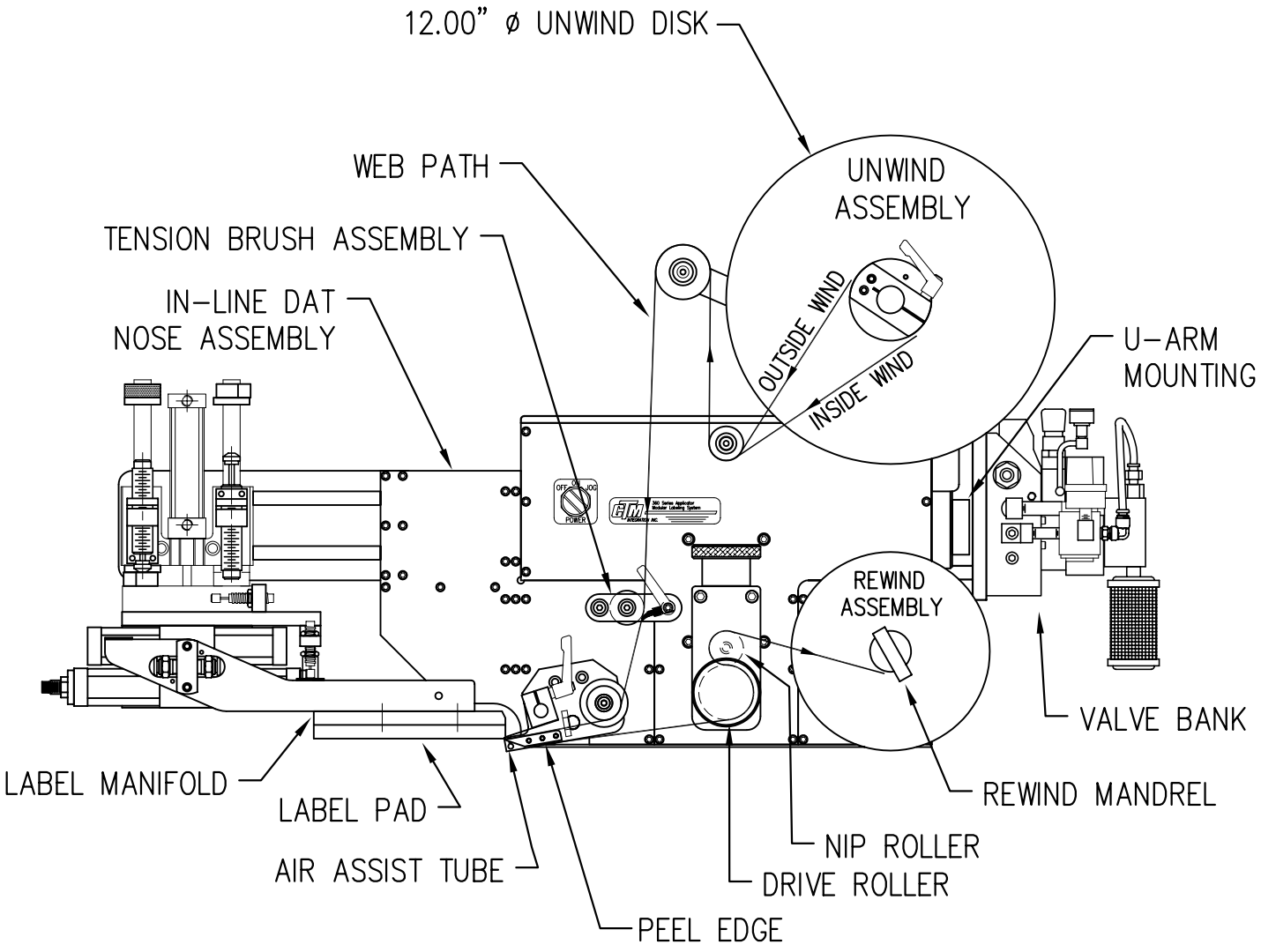
WEB PATH DIAGRAM

360 SERIES RIGHT HAND 18"/24" DROP DOWN TAMP APPLICATOR WITH 20.00" UNWIND



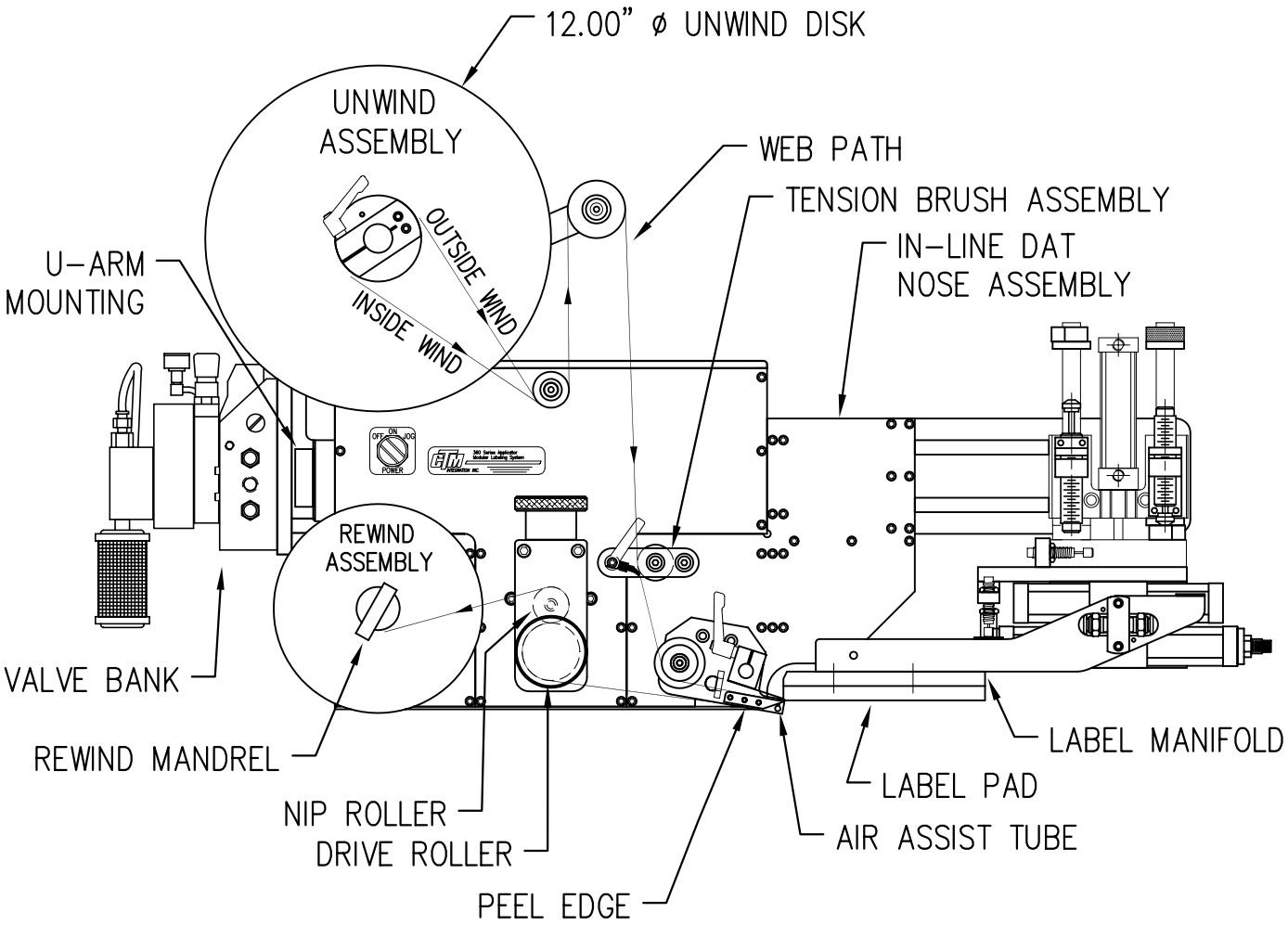
WEB PATH DIAGRAM

360 SERIES LEFT HAND IN-LINE DAT APPLICATOR WITH 12" UNWIND



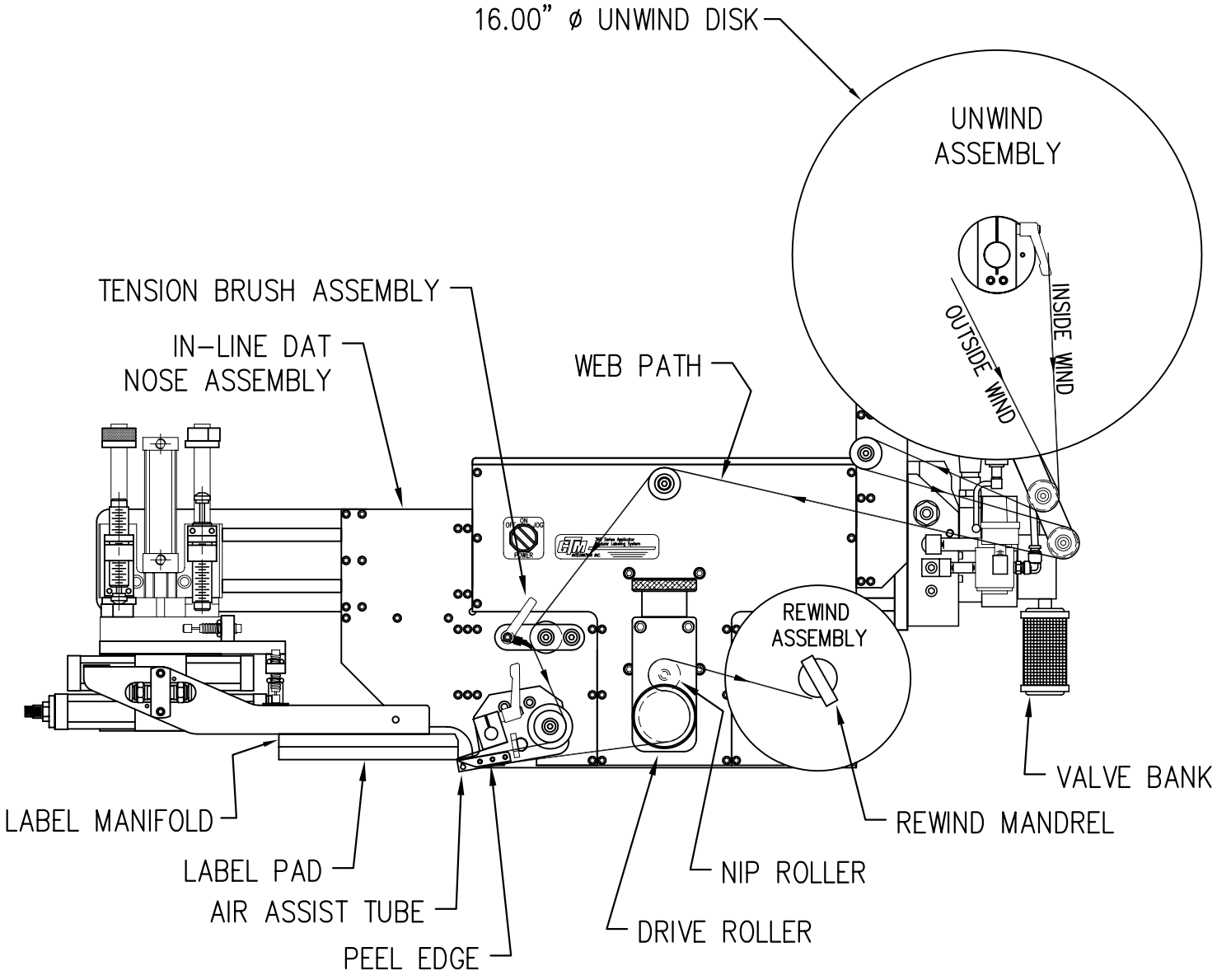
WEB PATH DIAGRAM

360 SERIES RIGHT HAND IN-LINE DAT APPLICATOR WITH 12" UNWIND



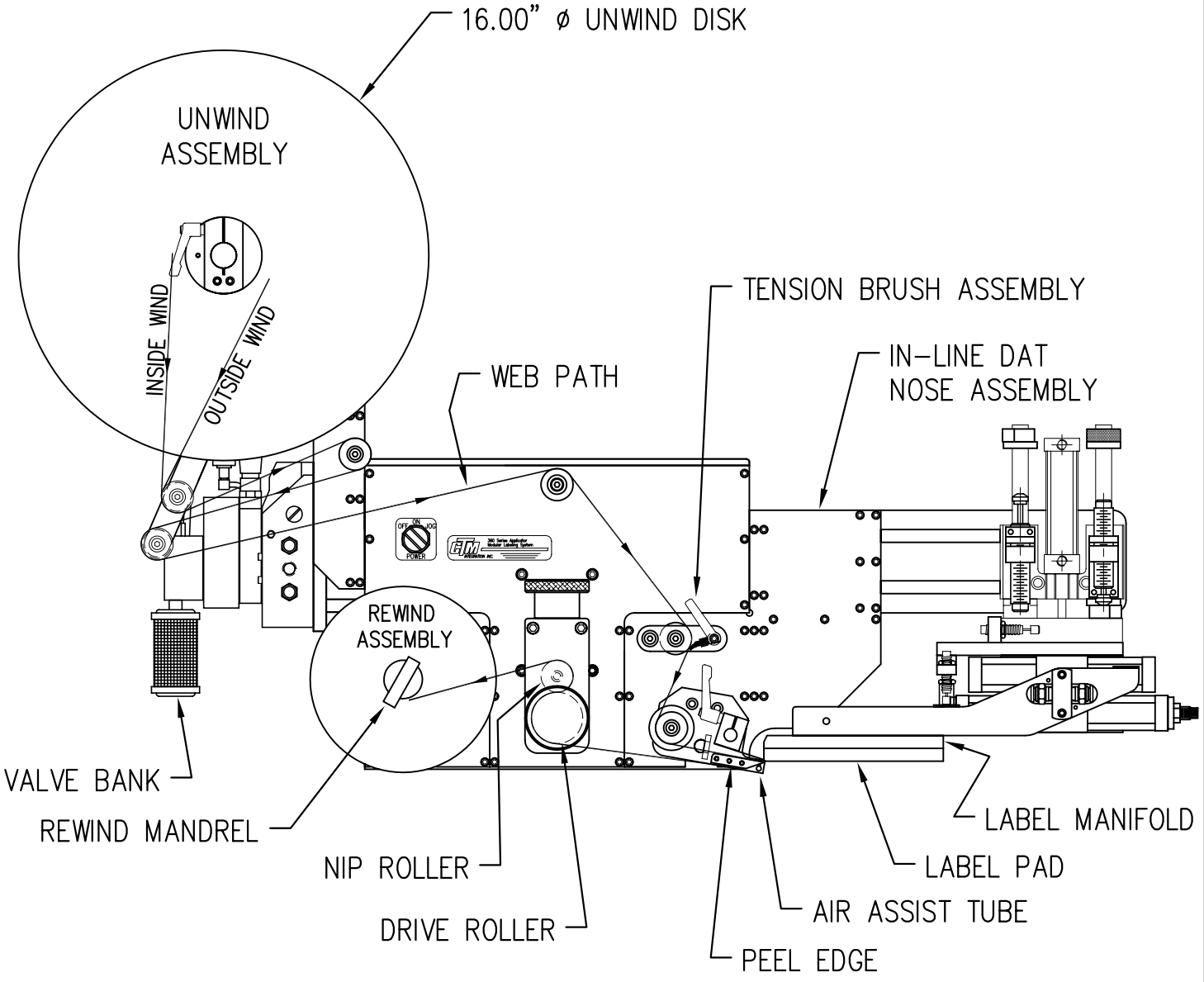
WEB PATH DIAGRAM

360 SERIES LEFT HAND IN-LINE DAT APPLICATOR WITH 16" UNWIND



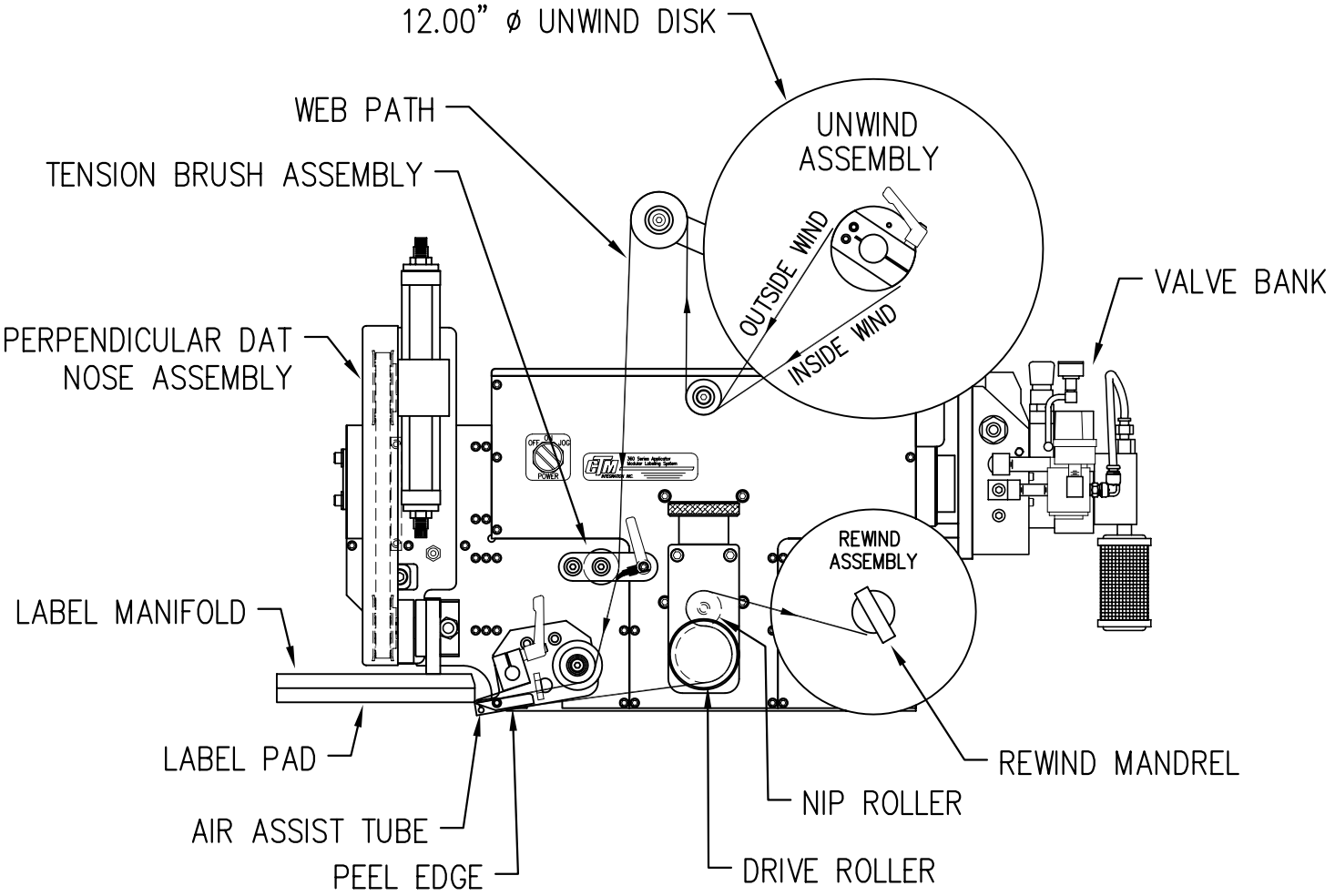
WEB PATH DIAGRAM

360 SERIES RIGHT HAND IN-LINE DAT APPLICATOR WITH 16" UNWIND



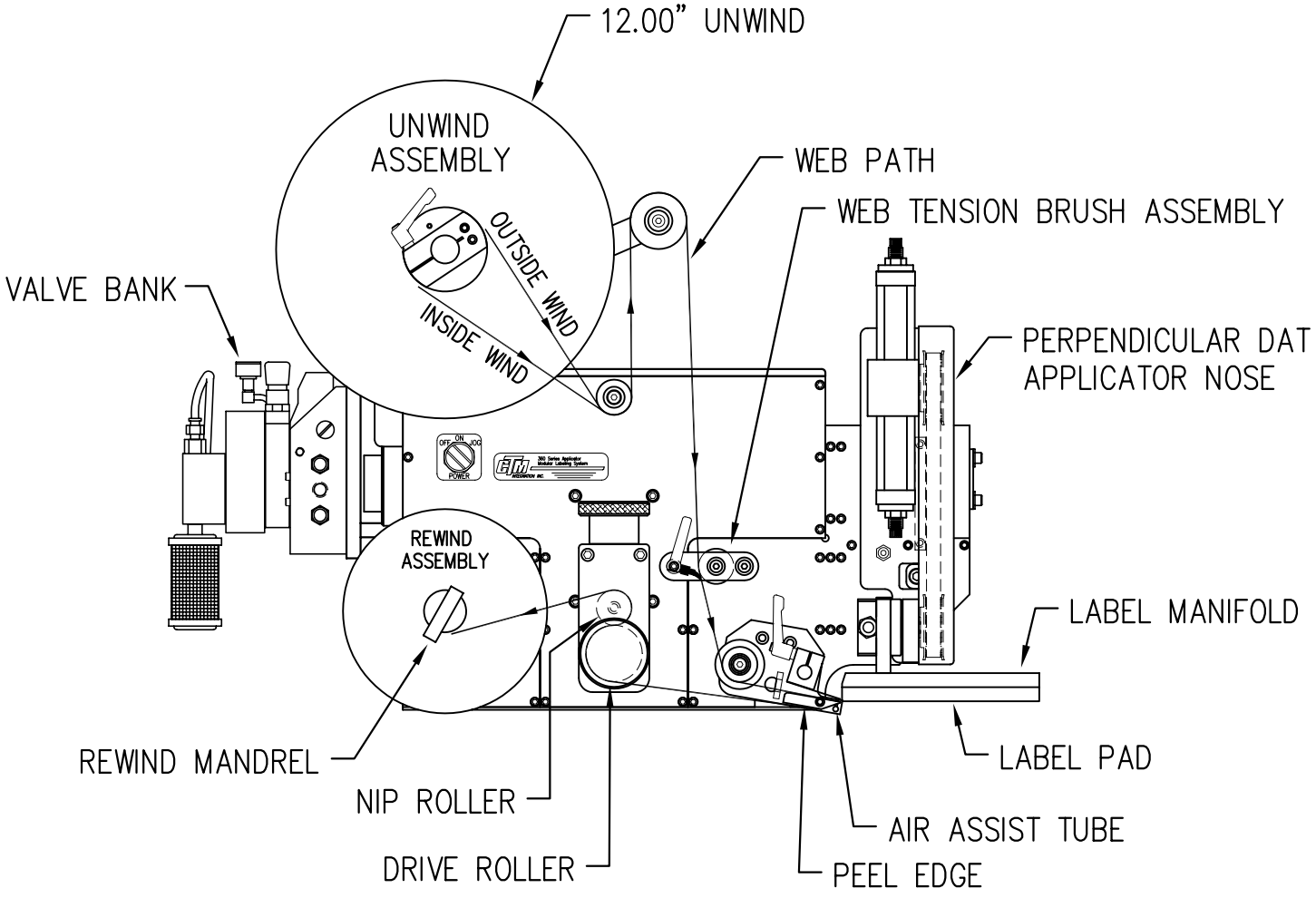
WEB PATH DIAGRAM

360 SERIES LEFT HAND PERPENDICULAR DAT APPLICATOR WITH 12" UNWIND



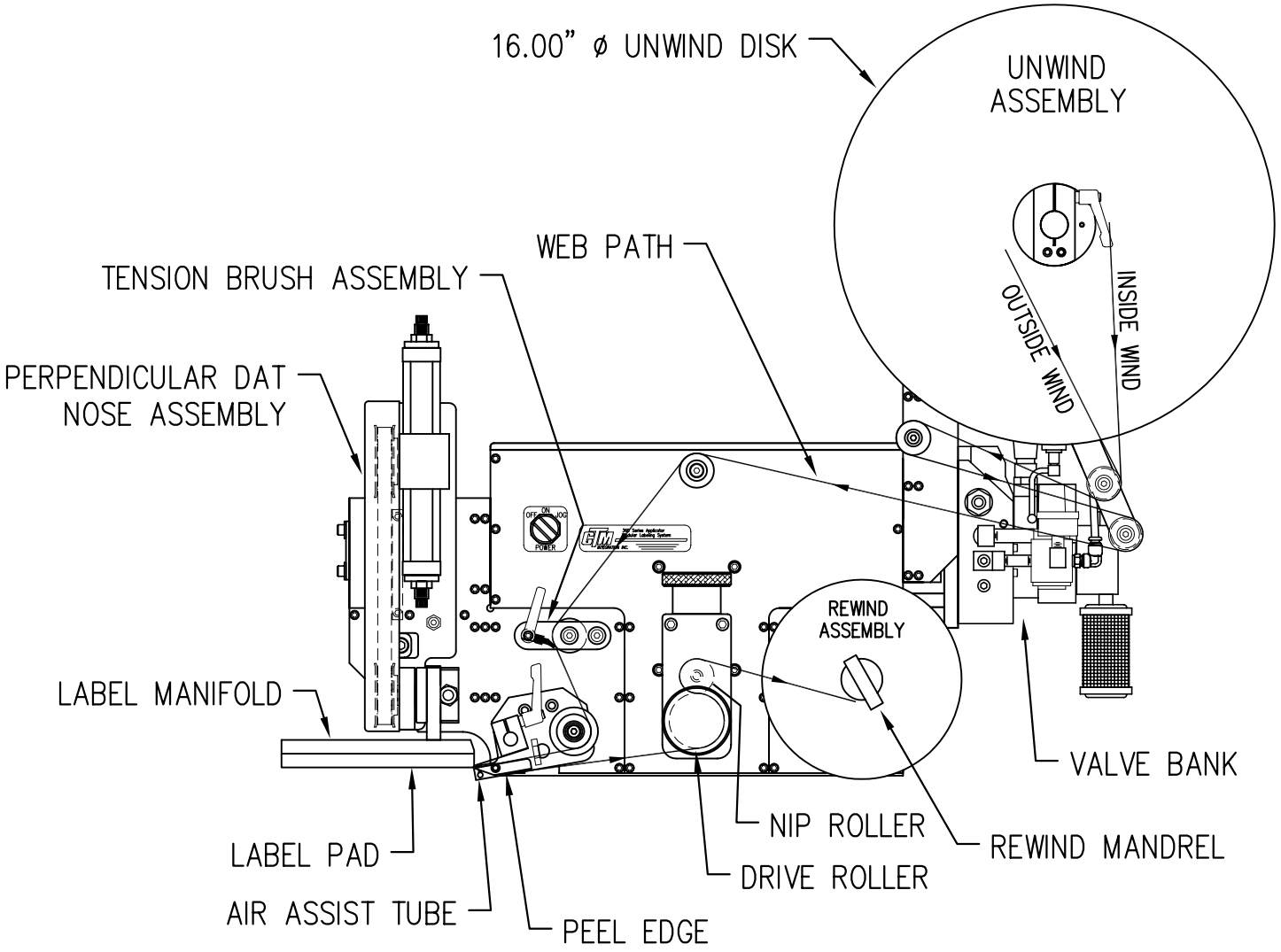
WEB PATH DIAGRAM

360 SERIES RIGHT HAND PERPENDICULAR DAT APPLICATOR WITH 12" UNWIND



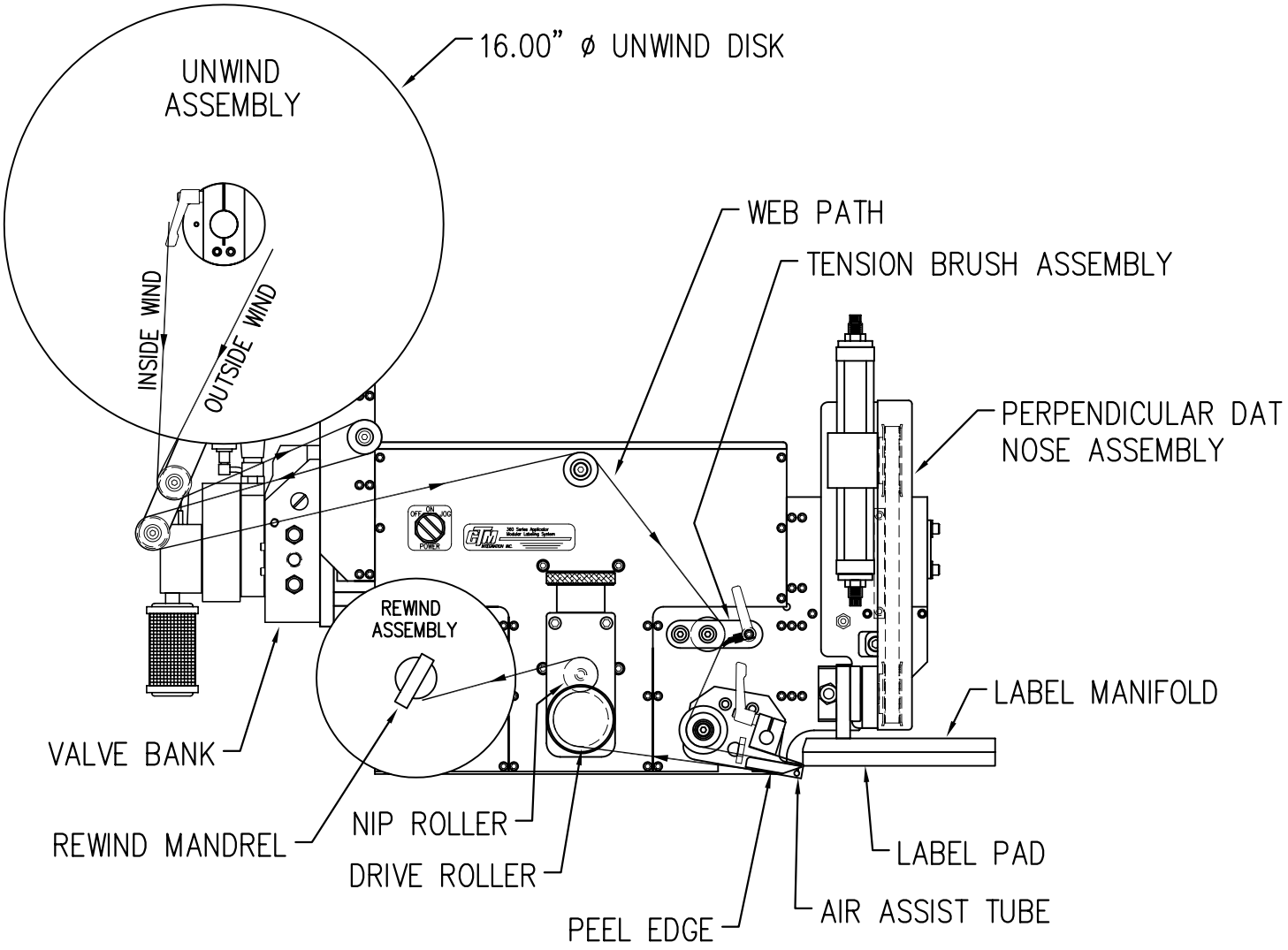
WEB PATH DIAGRAM

360 SERIES LEFT HAND PERPENDICULAR DAT APPLICATOR WITH 16" UNWIND



WEB PATH DIAGRAM

360 SERIES RIGHT HAND PERPENDICULAR DAT APPLICATOR WITH 16" UNWIND



360a SERIES

MECHANICAL

AND ELECTRICAL

DRAWINGS

BILL OF MATERIAL

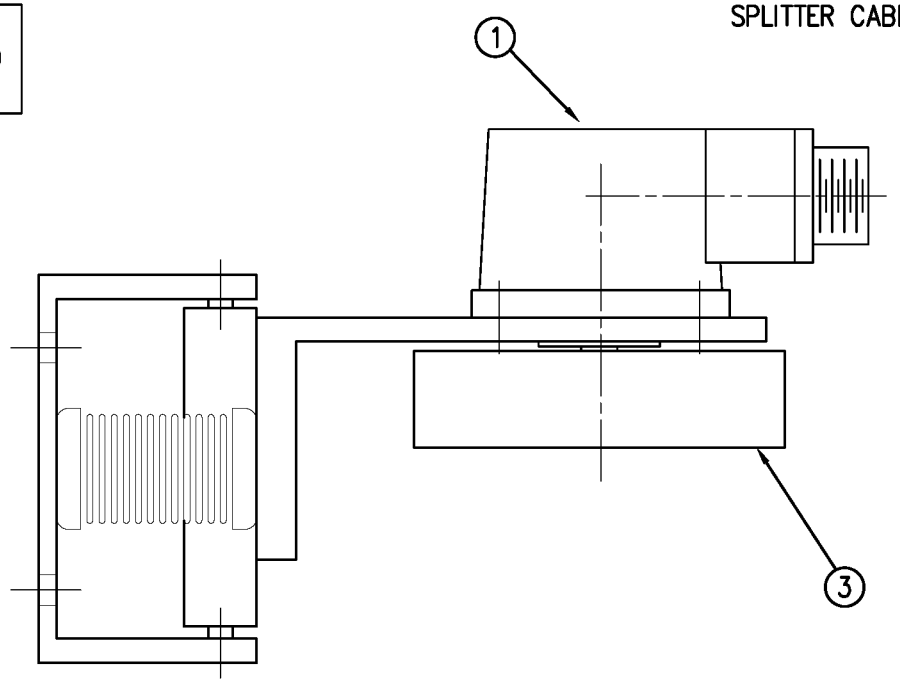
MOD-200-0467X-X

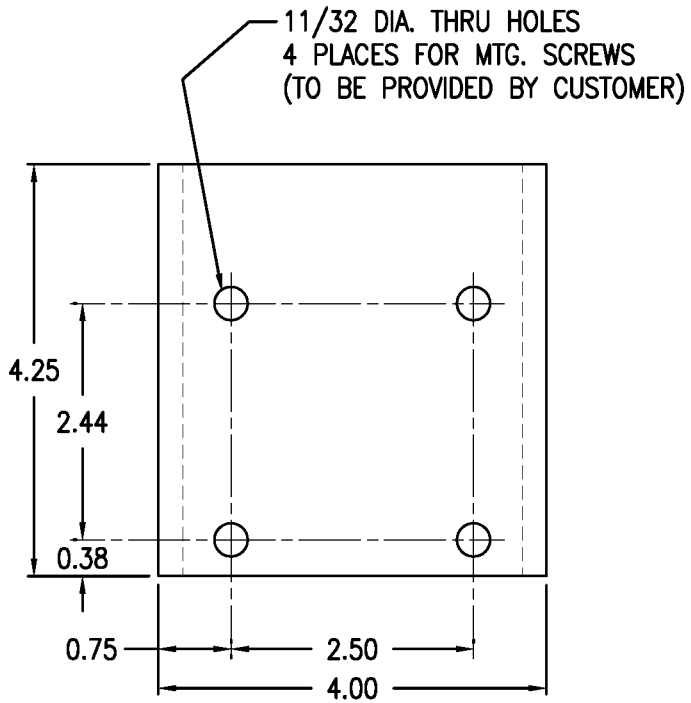
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	ASS-200-0467A-X	90 Deg. ENCODER (2500 pulses/rev) with SINGLE CABLE	FOR 360 & 360A
	1	ASS-200-0467B-X	90 Deg. ENCODER (2500 pulses/rev) with SPLITTER CABLE	
②	1	PE-GE2001	ENCODER MOUNT	
③	1	PE-MW1000	ENCODER WHEEL	

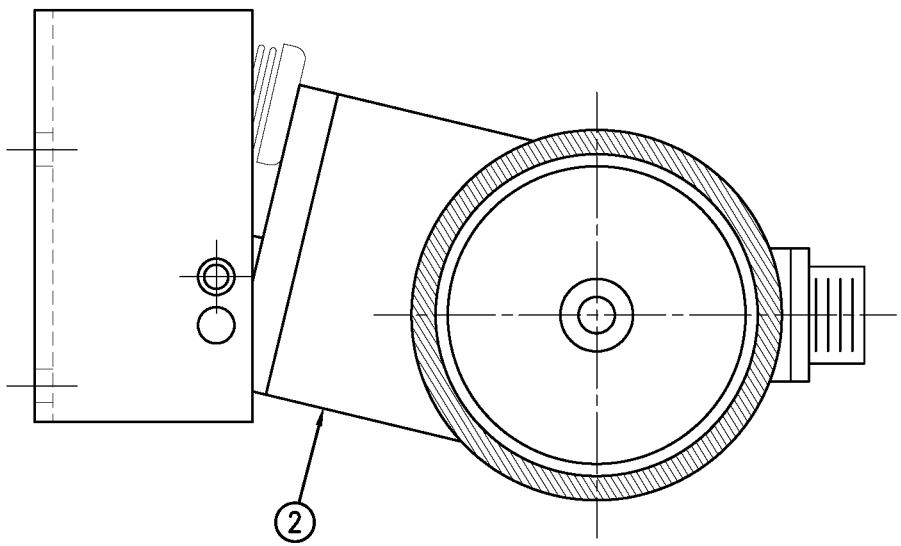
MOD-200-0467X-X

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

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







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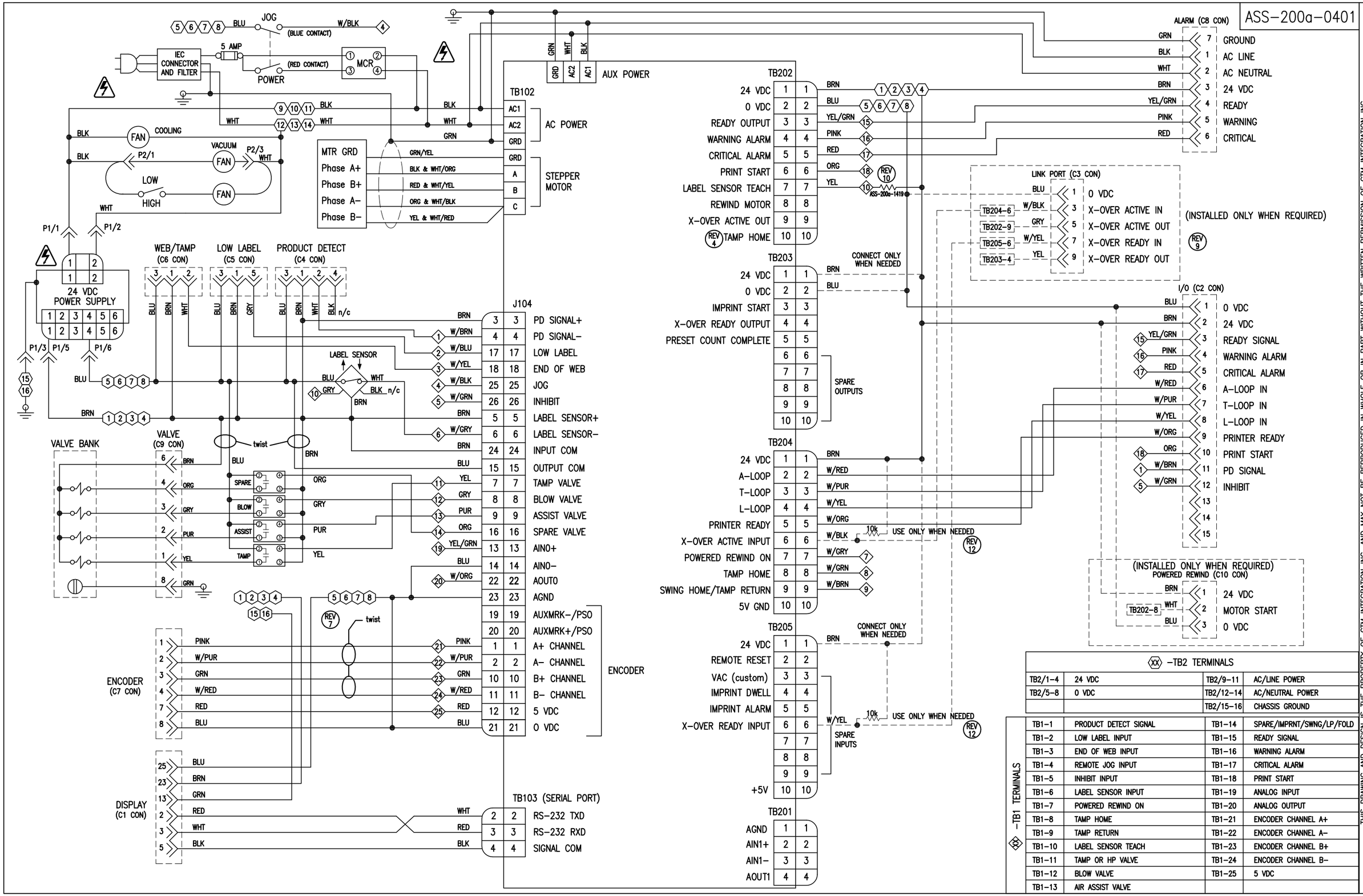
TITLE:	PART:	Dept. Code
360 SERIES APPLICATOR: ELECTRICAL	90 DEG. ENCODER, MOUNT, AND CABLE	70

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

ASS-200a-0401



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

XX -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	TB1–25	5 VDC
TB1–13	AIR ASSIST VALVE		

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Dept. Code 70

PART: WIRING FOR 360A APPLICATOR (AEROTECH DRIVE)

F:\Engineering\Standard Parts\Applicator\360\ASS-200a-0401

DRAWN BY: DKM | Date: 01/16/07 | Scale: 1=2

REV. BY: BMW | REV. DATE 04-04-12

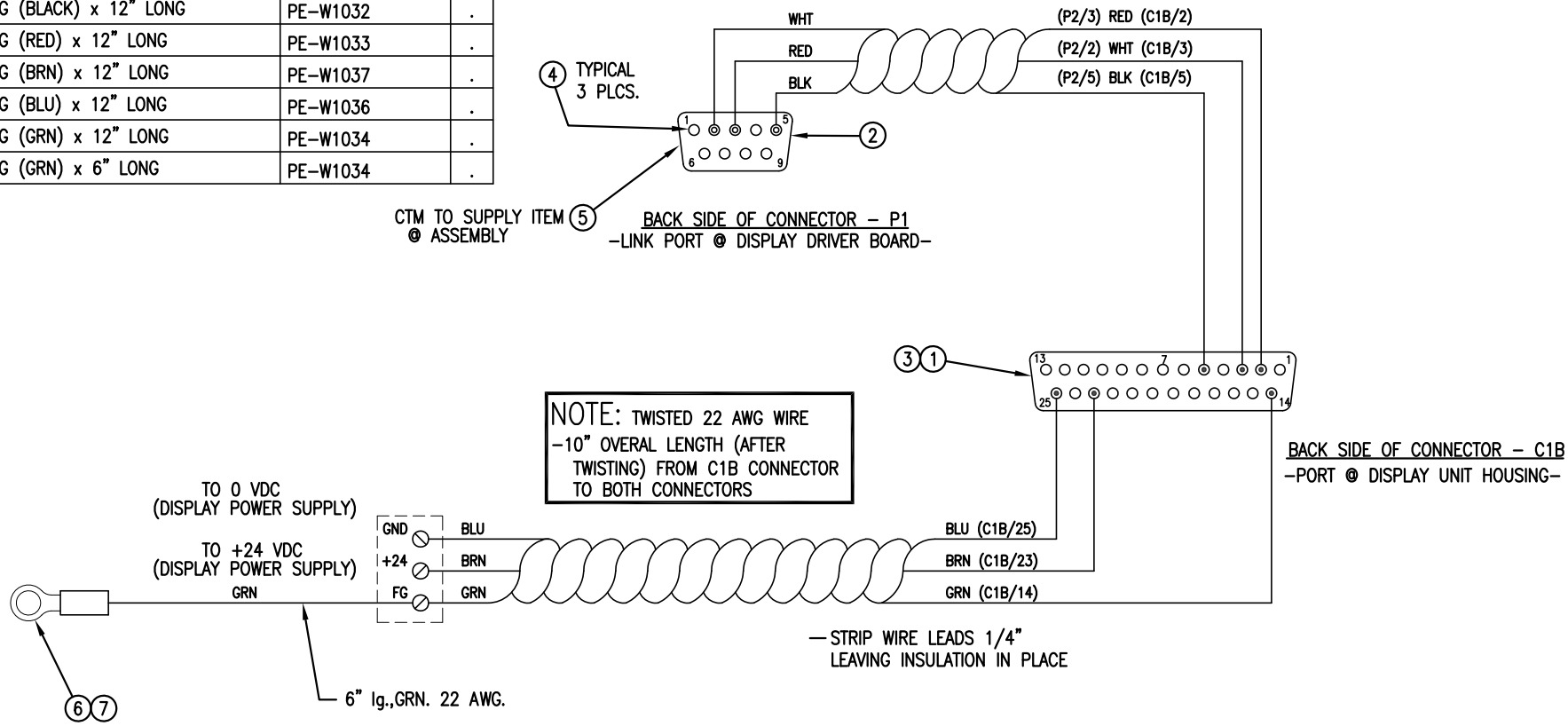
REV. DESCRIPTION

TITLE: 360-A SERIES APPLICATOR: ELECTRICAL

REV. 12 | ADDED PULL-UP RESISTORS TO X-OVER INPUTS TB204-6 & TB205-6

ASS-200a-0420

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200a-0420		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	MALE (PLUG) CONNECTOR ~ 25 PIN	PE-CON2058	.
②	1	FEMALE (SOCKET) CONNECTOR ~ 9 PIN	PE-CON2040	.
③	6	MALE PIN	PE-CON7055	.
④	3	FEMALE/SOCKET (DRIVER BD. SIDE)	PE-CON7057	.
⑤	2	MALE SCREW RETAINERS	PE-CON2002	.
⑥	1	STUD RING TERMINAL, 1/4", 16-22 AWG	PE-WC1054	.
⑦	2	LOCK WASHER, 1/4 EXTERNAL-TOOTH STN.STL.	PM-FAW30685	.
	1	22 AWG (WHITE) x 12" LONG	PE-W1031	.
	1	22 AWG (BLACK) x 12" LONG	PE-W1032	.
	1	22 AWG (RED) x 12" LONG	PE-W1033	.
	1	22 AWG (BRN) x 12" LONG	PE-W1037	.
	1	22 AWG (BLU) x 12" LONG	PE-W1036	.
	1	22 AWG (GRN) x 12" LONG	PE-W1034	.
	1	22 AWG (GRN) x 6" LONG	PE-W1034	.



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TITLE: 360a SERIES APPLICATOR: ELECTRICAL	PART: DISPLAY UNIT WIRE HARNESS DRIVER BOARD TO PORT	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360 200a\ASS-200a-0420
3	Harness change for MHI5056N Display	12-15-09	dkm	1=2	01-04-07	dkm	

BILL OF MATERIAL

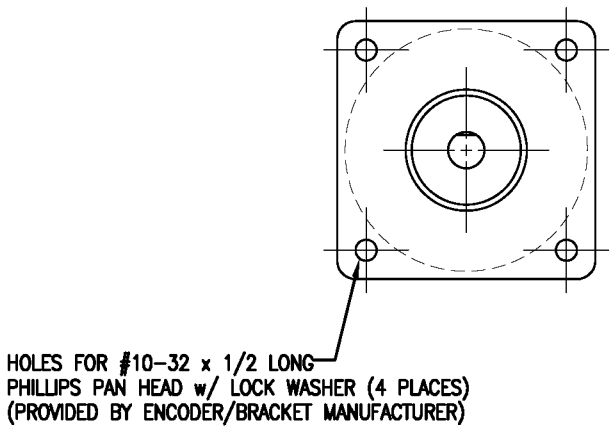
ASS-200-0467X-X

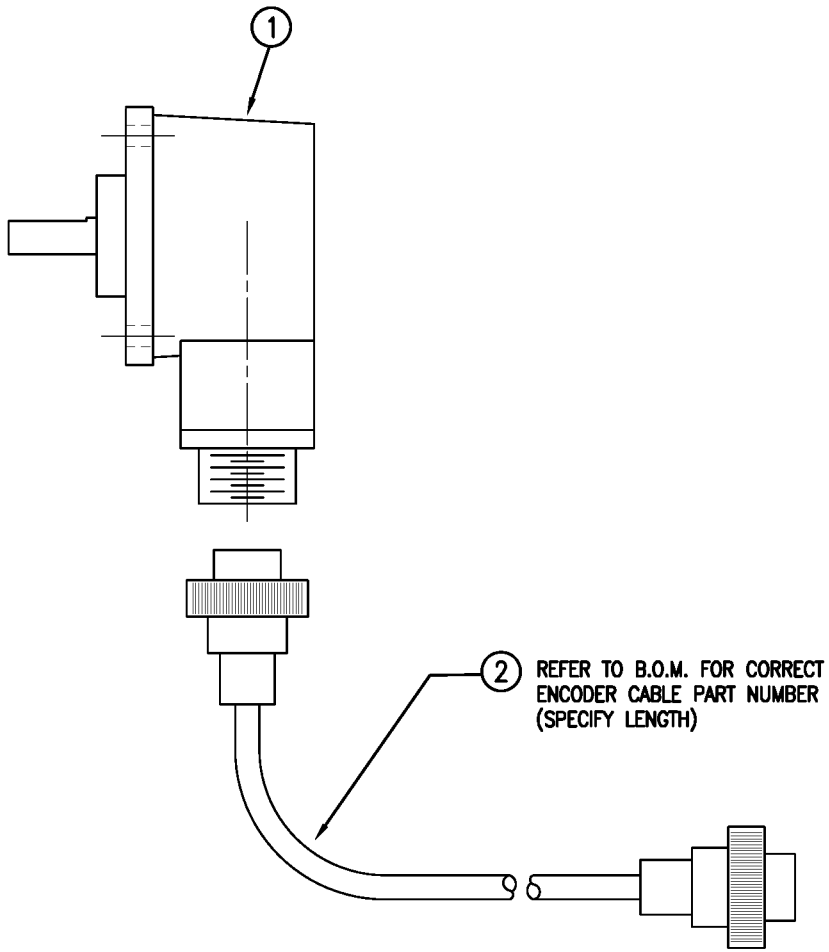
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	PE-GE2105	90 DEG. PULSE ENCODER (2500 pulses/rev)
②	1	PE-200-0406-X	ENCODER CABLE - SINGLE
	1	PE-200-0429-X	ENCODER CABLE - SPLITTER

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





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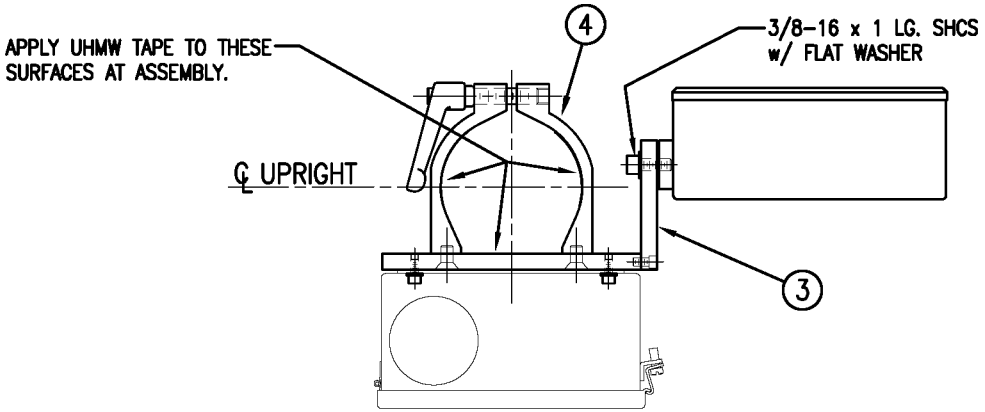
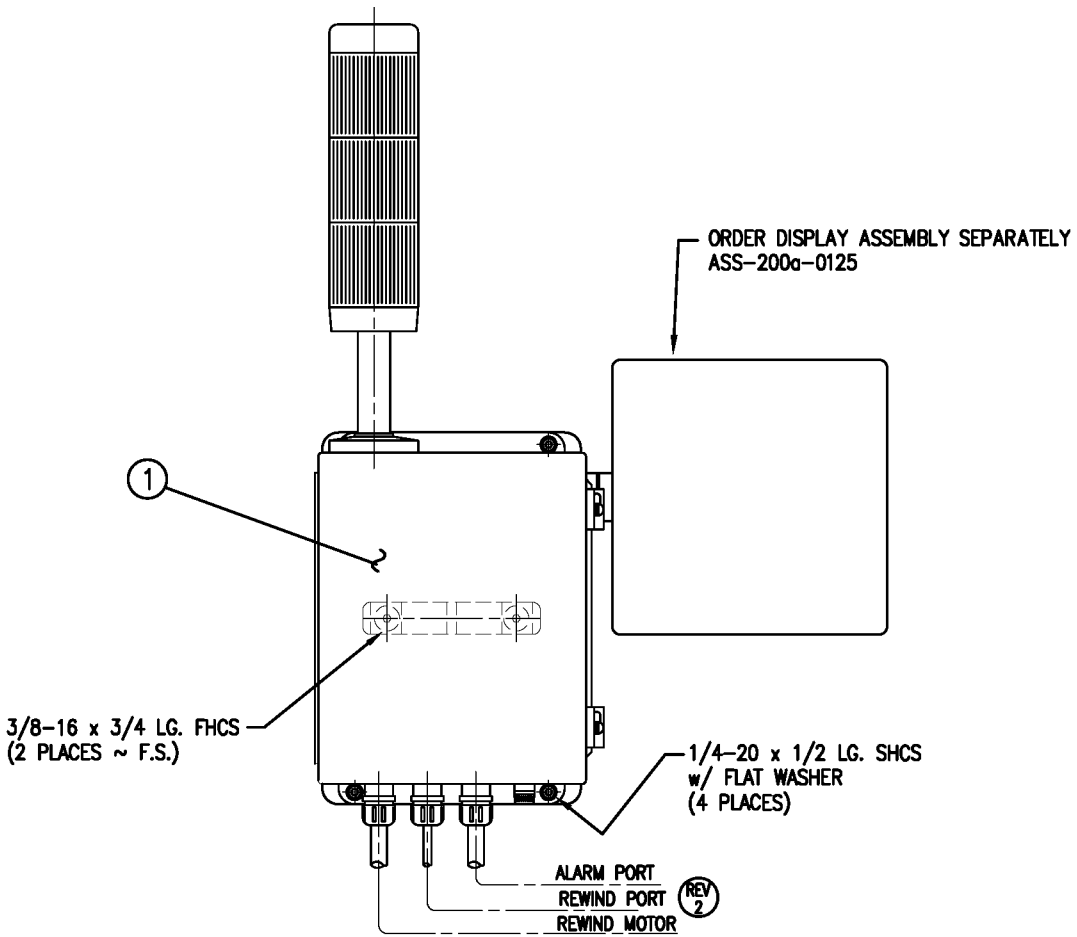
TITLE:	PART:	Dept. Code
360 SERIES APPLICATOR: ELECTRICAL	90 DEGREE ENCODER WITH CABLE	70

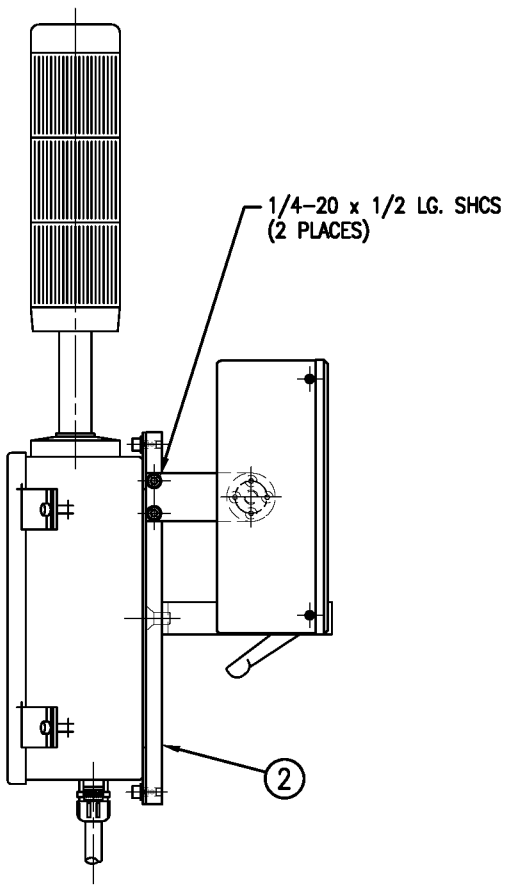
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
0	NEW DRAWING	05/29/03	TDR	1=2	11/19/01	BOB S.	200\ASS-200-0467X-X

ASS-200a-3161

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







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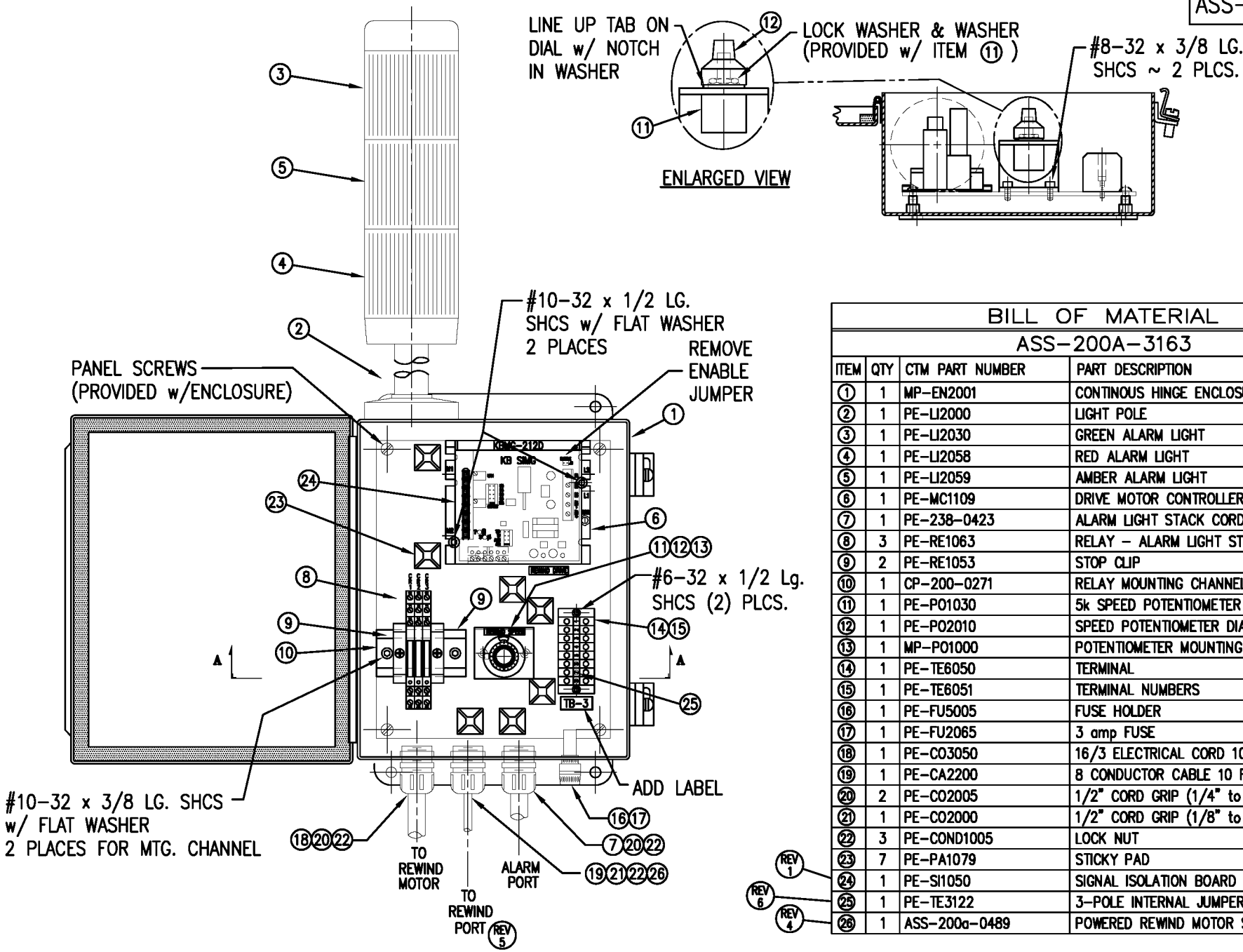
TITLE: 360a SERIES APPLICATOR: 16" & 20" UNWIND w/ POWERED REWIND	PART: ENCLOSURE ASSEMBLY	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360 200\ASS-200a-3161
2	CHANGED MOTOR START CABLE NOTE FROM "I/O PORT" TO REWIND PORT	04-22-08	ES	1=6	04/13/07	dkm	

ASS-200a-3163



BILL OF MATERIAL

ASS-200A-3163

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
1	1	MP-EN2001	CONTINOUS HINGE ENCLOSURE w/GRID KIT
2	1	PE-LI2000	LIGHT POLE
3	1	PE-LI2030	GREEN ALARM LIGHT
4	1	PE-LI2058	RED ALARM LIGHT
5	1	PE-LI2059	AMBER ALARM 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-CO3050	16/3 ELECTRICAL CORD 10 FT. LONG
19	1	PE-CA2200	8 CONDUCTOR CABLE 10 FT LONG
20	2	PE-CO2005	1/2" CORD GRIP (1/4" to 3/8")
21	1	PE-CO2000	1/2" CORD GRIP (1/8" to 1/4")
22	3	PE-COND1005	LOCK NUT
23	7	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

REV 1, REV 6, REV 4

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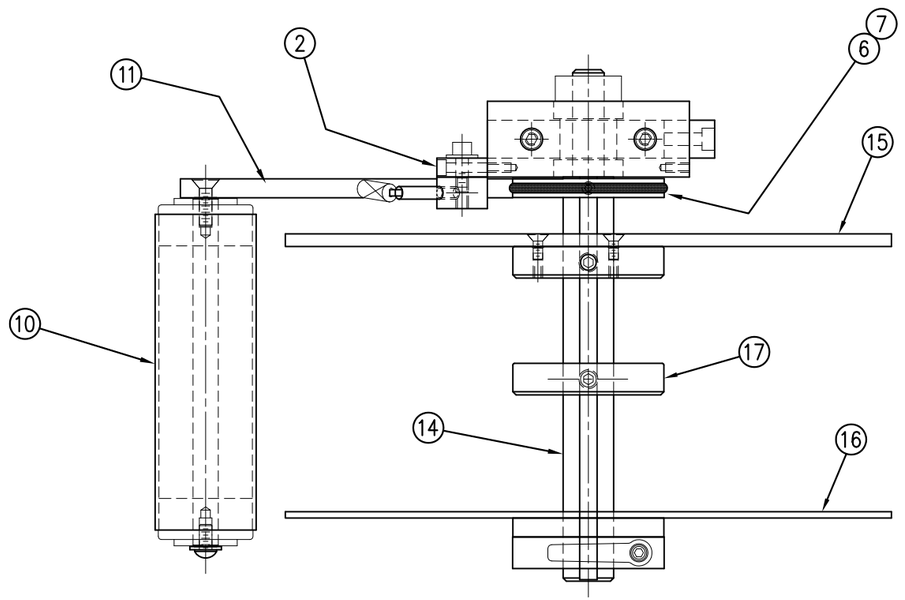
TITLE:	PART:	Dept. Code
360a SERIES APPLICATOR: 16" & 20" UNWIND w/ POWERED REWIND	REWIND DRIVE/ALARM LIGHT ENCLOSURE	70

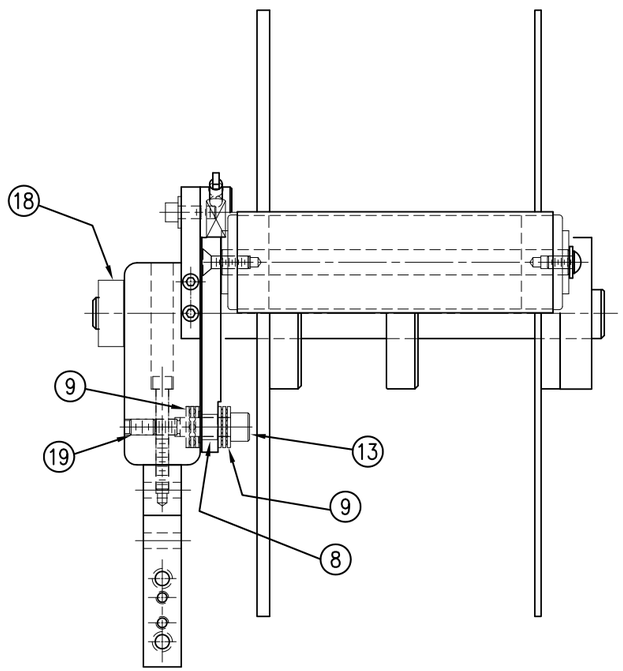
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
6	ADDED 3-POLE INTERNAL JUMPER	04-22-08	ES	1=4	04/13/07	dkm	200\ASS-200a-3163

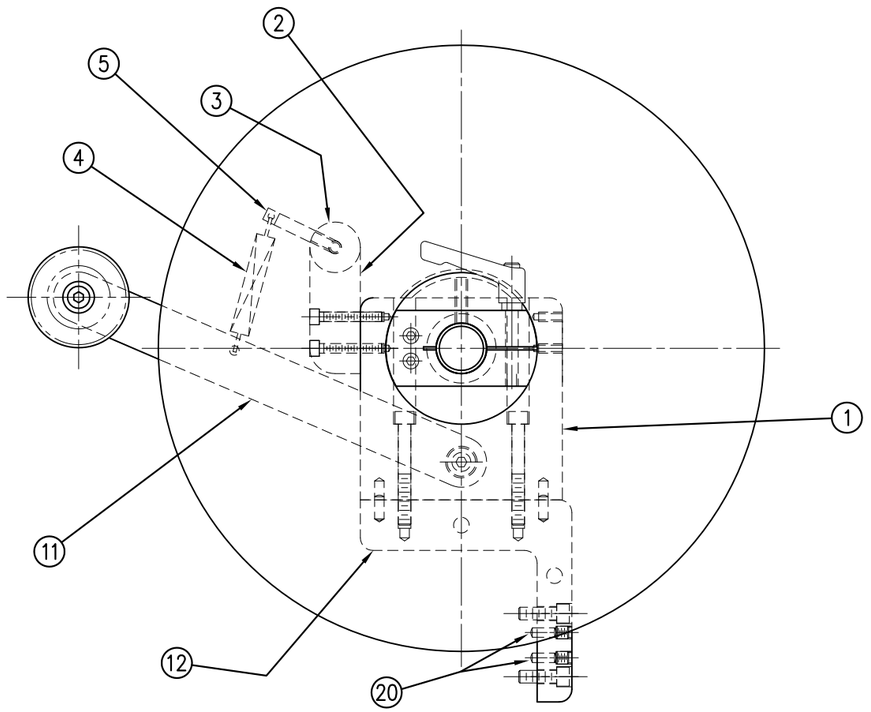
BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-200-X121L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	UNWIND BEARING BLOCK ASSEMBLY	ASS-200-0134	S
②	1	SPRING MOUNTING BRACKET	MP-200-0203	.
③	1	SPRING TENSION BLOCK	MP-200-0201	.
④	1	TENSION SPRING	PM-FASP30437	S
⑤	1	SPRING ANCHOR	PM-FASP30500	.
⑥	1	BRAKE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

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

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







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

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TITLE: 360 SERIES APPLICATOR: UNWIND ASSEMBLY

PART: 5/7.5/10 WIDE/LH/UNWIND ASS'Y w/12" DIA. UNWIND DISKS

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
5	ADDED DOWEL PINS TO B.O.M. (ITEM #20)	11/18/05	TDR

Scale:	Date:	DRAWN BY:
1=3	06/02/98	BOB S.

Dept. Code 70

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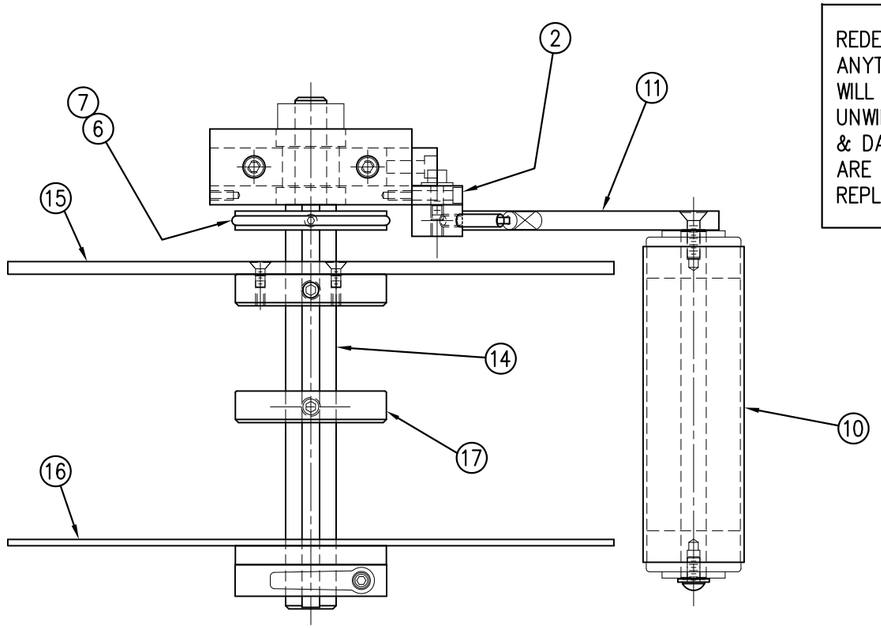


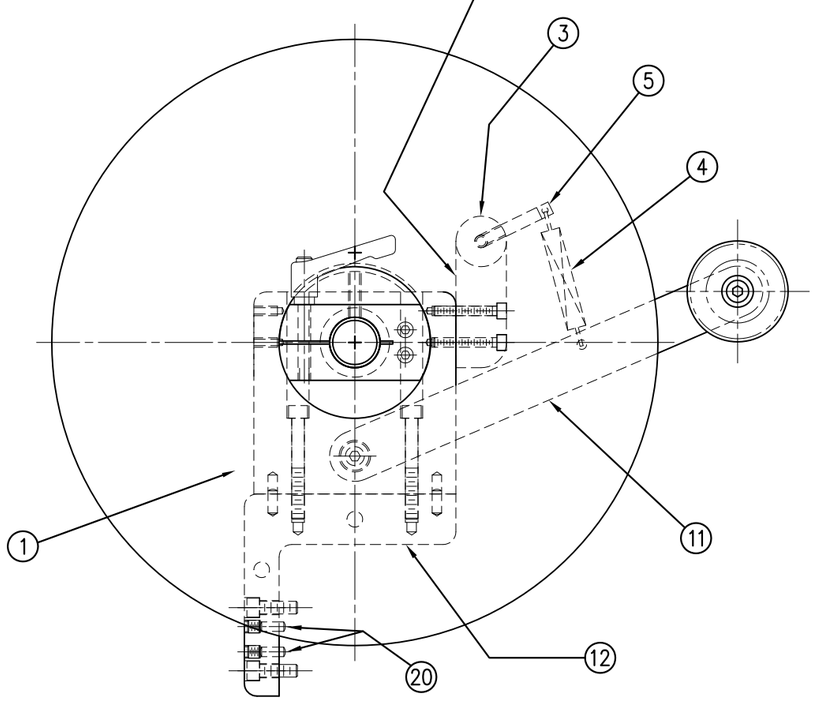
REDESIGNED DANCER ARM MOUNTING
ANYTHING SOLD BEFORE 11/01/04
WILL BE THE OLD STYLE.
UNWIND BLOCK IN ASS-200-0134
& DANCER ARM MP-200-0202
ARE NEW DESIGNS AND THRUST BEARINGS
REPLACE BRONZE WASHERS.

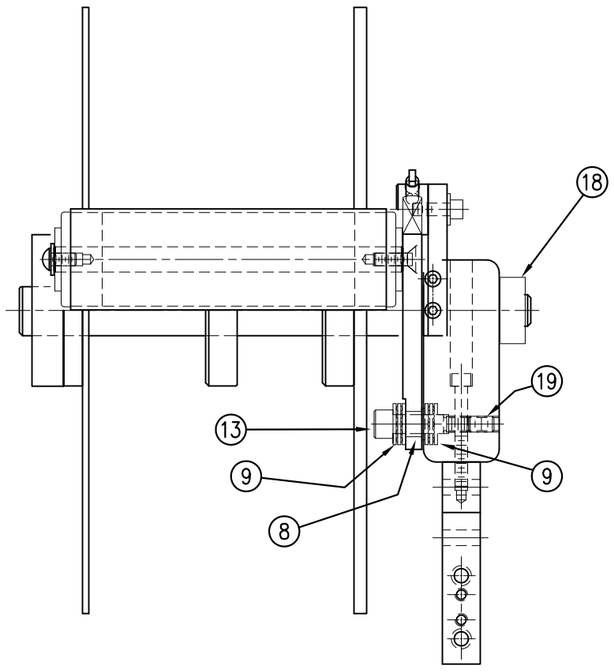
BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-200-X121R		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	UNWIND BEARING BLOCK ASSEMBLY	ASS-200-0134	S
②	1	SPRING MOUNTING BRACKET	MP-200-0203	.
③	1	SPRING TENSION BLOCK	MP-200-0201	.
④	1	TENSION SPRING	PM-FASP30437	S
⑤	1	SPRING ANCHOR	MP-FASP30500	.
⑥	1	BRAKE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

MOD-200-X121R

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

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





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PART: 5/7.5/10 WIDE/RH/ UNWIND ASS'Y w/12" UNWIND DISKS

Dept. Code 70

F:\Engineering\Standard Parts\Applicator360 200\MOD-200-X121R

DRAWN BY: BOB S.

Date: 06/02/98

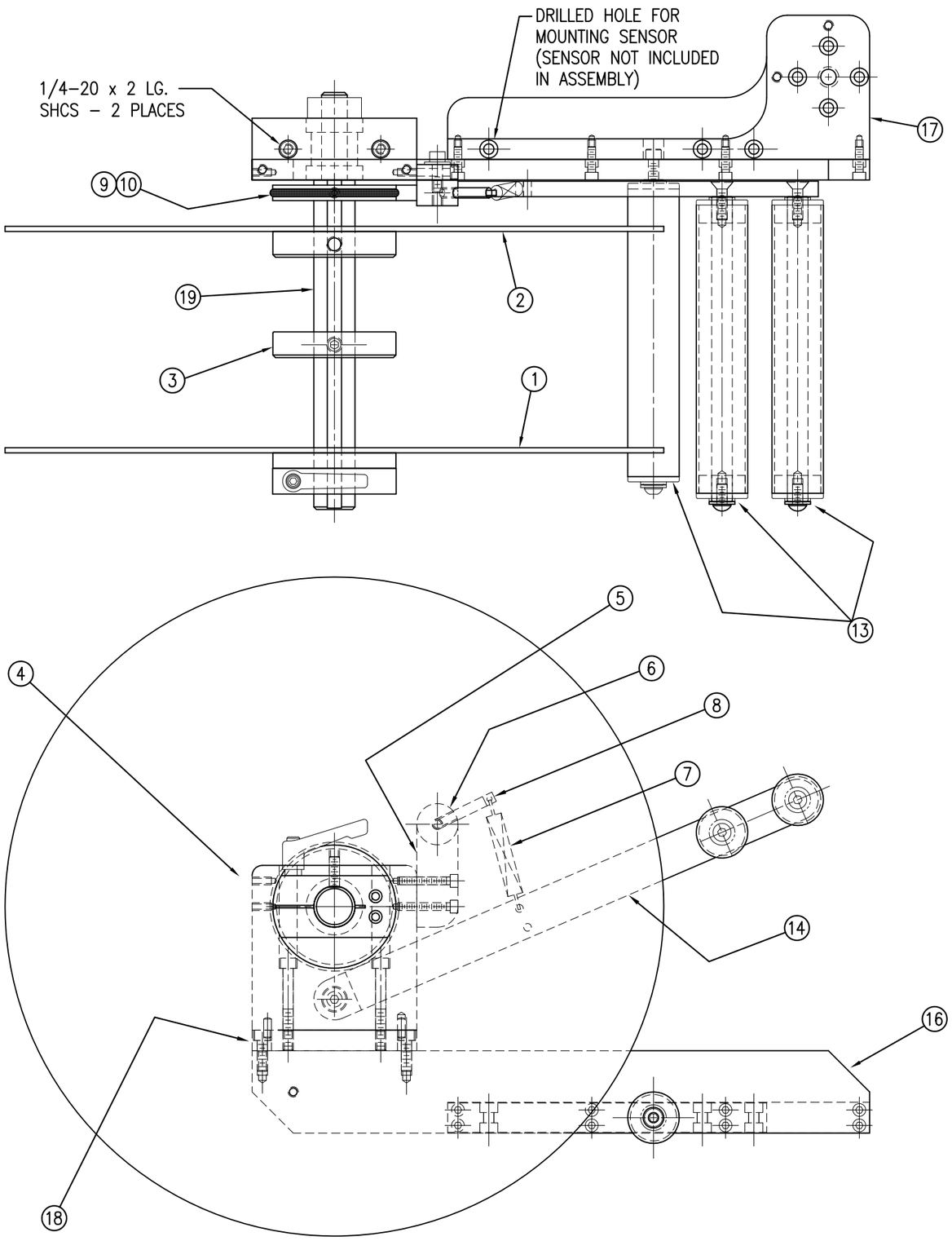
Scale: 1=3

REV. BY: TDR

REV. DATE 11/18/05

TITLE: 360 SERIES APPLICATOR: UNWIND ASSEMBLY

REV.	REV. DESCRIPTION
5	ADDED DOWEL PINS TO B.O.M. (ITEM #20)



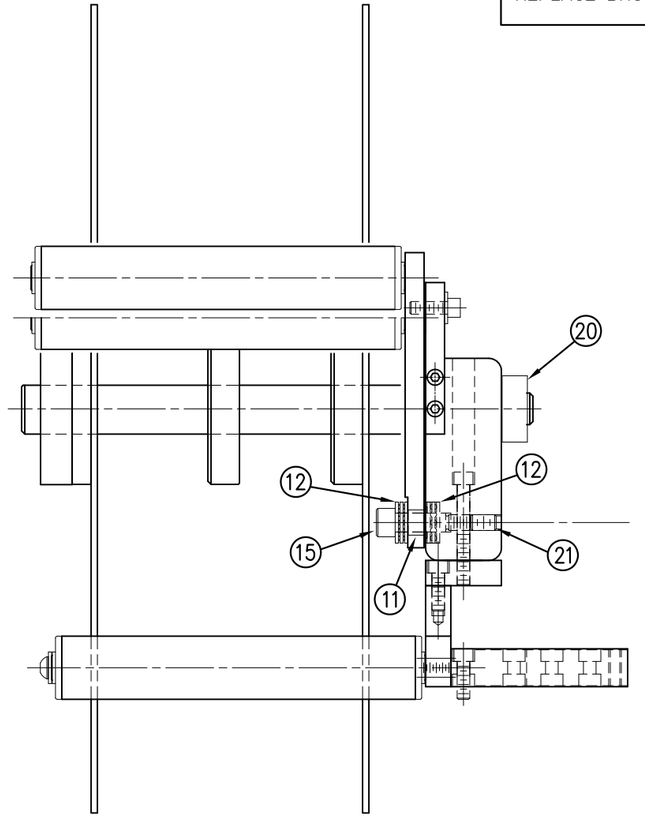
BILL OF MATERIAL				SOLD
ASSEMBLY		MOD–200–3121L–X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	16" OUTSIDE UNWIND DISK ASS'Y.	ASS–200–3133	S
②	1	16" INSIDE UNWIND DISK ASS'Y.	ASS–200–3132	S
③	1	UNWIND CORE SUPPORT SPACER	MP–200–0267CS	.
④	1	UNWIND BEARING BLOCK ASSEMBLY	ASS–200–0134	S
⑤	1	SPRING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

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

MOD–200–3121L–X
–3121L–5
–3121L–7

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

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



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TITLE: 360 SERIES APPLICATOR: UNWIND ASSEMBLY

PART: 5/7.5 WIDE/LH/16" UNWIND MODULE

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
2	TENSION SPRING WAS PM–FASP30437	10/27/06	TDR

Scale: 1=3 | Date: 03/22/99 | DRAWN BY: BOB S.

F:\Engineering\Standard Parts\Applicator\360
200\MOD–200–3121L–X

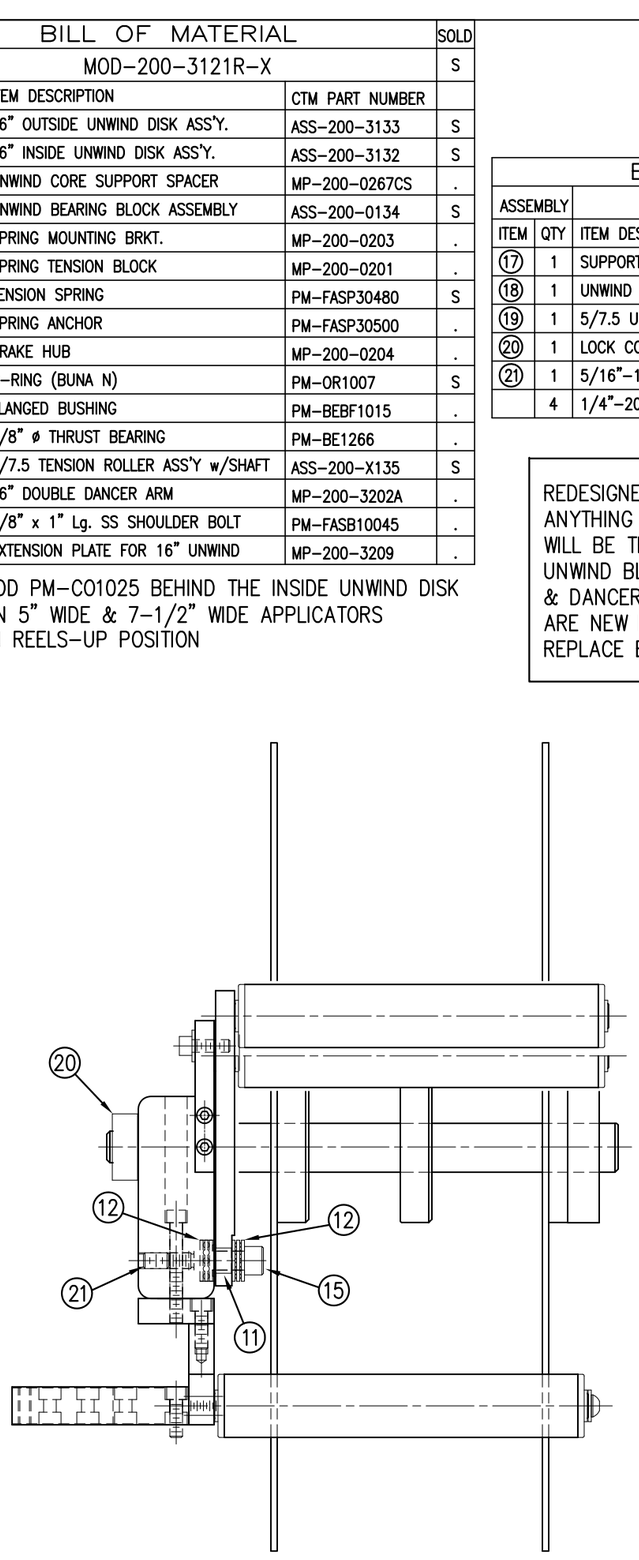
Dept. Code 70

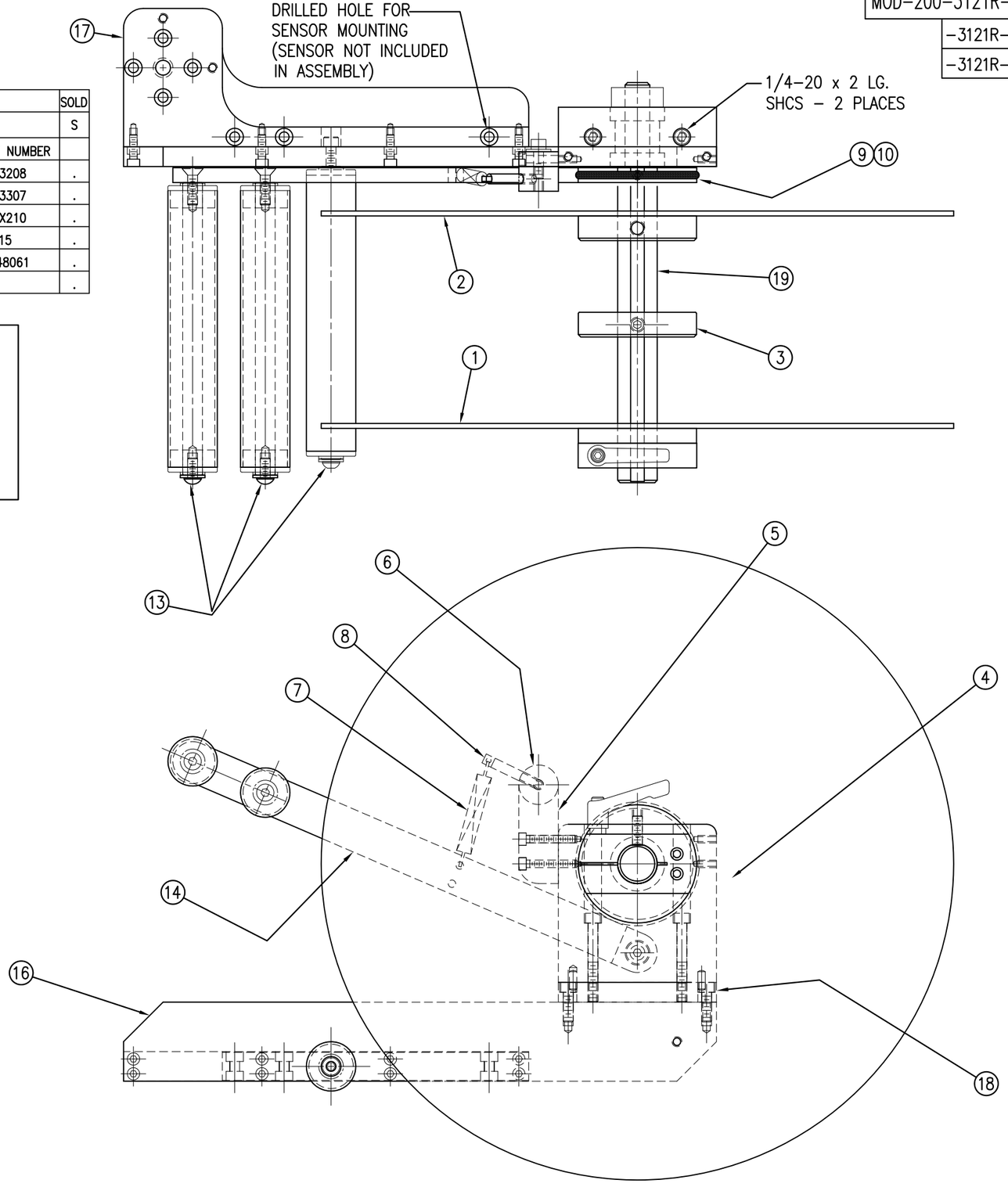
BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-200-3121R-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	16" OUTSIDE UNWIND DISK ASS'Y.	ASS-200-3133	S
②	1	16" INSIDE UNWIND DISK ASS'Y.	ASS-200-3132	S
③	1	UNWIND CORE SUPPORT SPACER	MP-200-0267CS	.
④	1	UNWIND BEARING BLOCK ASSEMBLY	ASS-200-0134	S
⑤	1	SPRING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

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

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

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





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

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TITLE: 360 SERIES APPLICATOR: UNWIND ASSEMBLY: OPTIONS

PART: 5/7.5 WIDE/RH/16" UNWIND MODULE

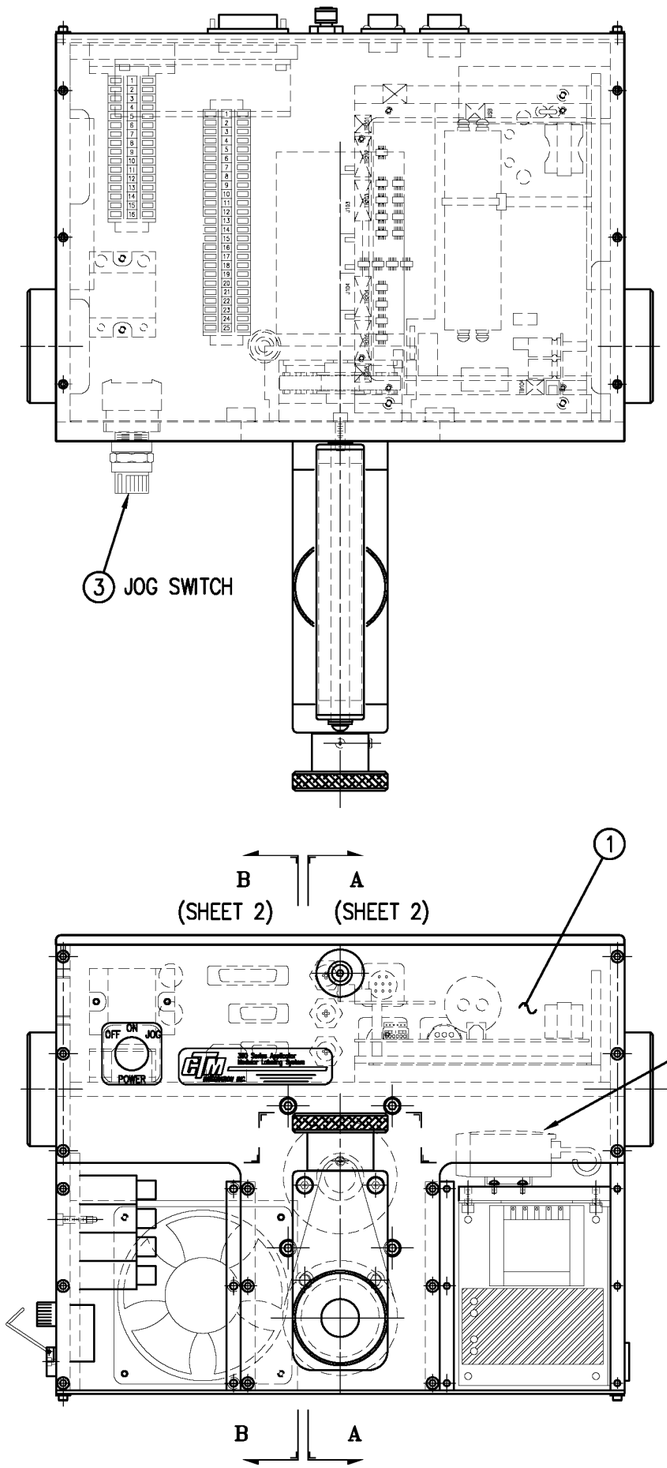
Dept. Code 70

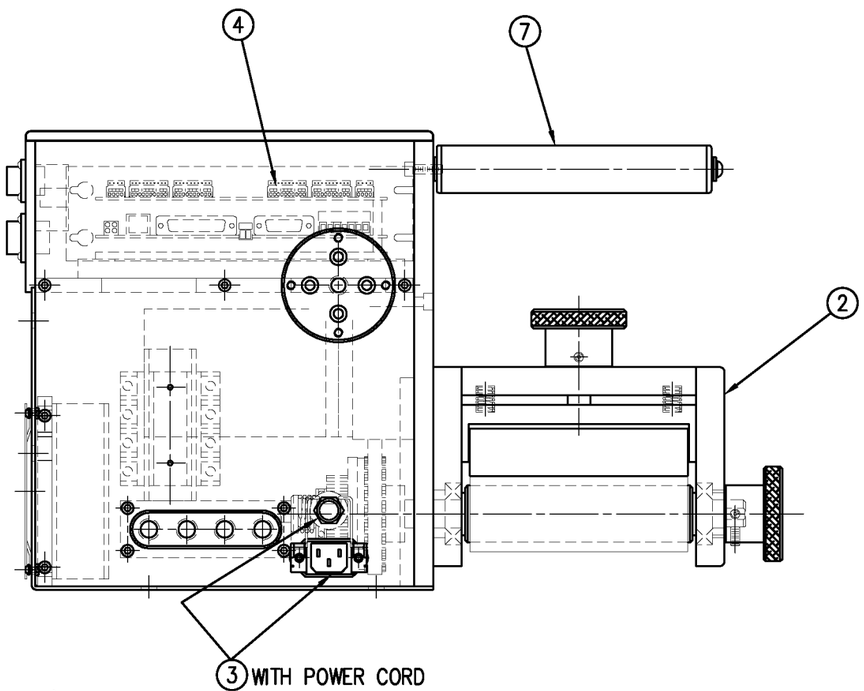
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:
2	TENSION SPRING WAS PM-FASP30437	10/27/06	TDR	1=3	03/22/99	BOB S.

F:\Engineering\Standard Parts\Applicator\360 200\MOD-200-3121R-X

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200a-X150R/L		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	APPLICATOR HOUSING ASSEMBLY	ASS-200-0122R/L	.
②	1	NIP DRIVE ASSEMBLY	ASS-200-X129	S
③	1	HOUSING COMPONENTS LAYOUT	ASS-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)





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

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PART: CORE UNIT for STD. REWIND (Sht 1 of 2)

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 200a\ASS-200a-X150RLs1

TITLE: 360a SERIES APPLICATOR: HOUSING ASSEMBLY

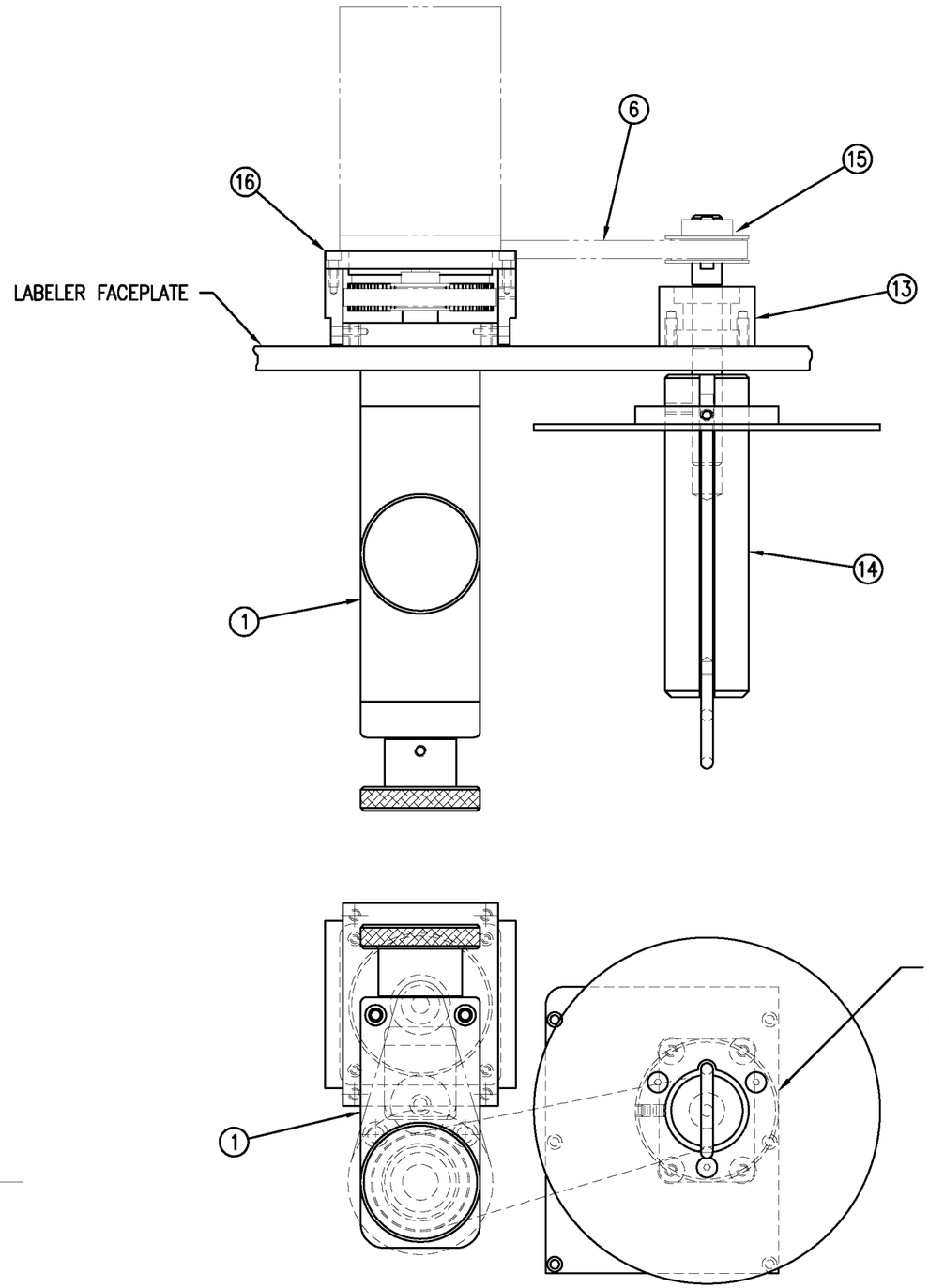
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
1	NEW DRAWING CREATED FROM ASS-200-X150RLs1	08/02/07	TDR

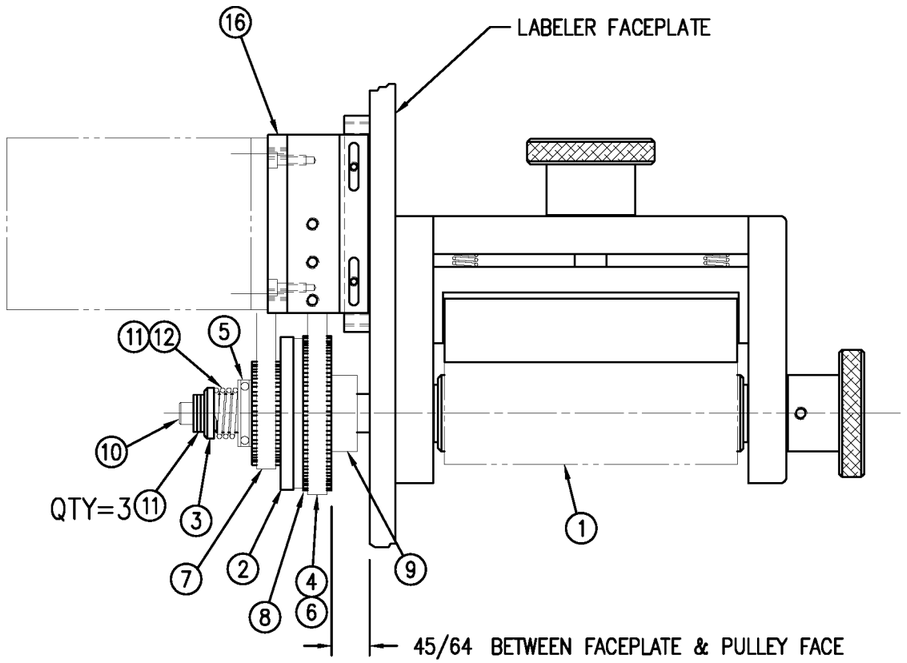
Scale:	Date:	DRAWN BY:
1=4	08/01/07	BOB S./TDR

BILL OF MATERIAL

ASS-200-X120R/L

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS-200-X142	NIP DRIVE w/REWIND & MOTOR PULLEYS – consisting of the following parts –
①		(1) ASS-200-X129	NIP ROLL DRIVE ASSEMBLY
②		(1) ASS-200-0143	SLIP CLUTCH ASSEMBLY
③		(1) MP-200-0229	CLUTCH SPRING KEEPER
④		(1) MP-200-0233	DRIVE PULLEY
⑤		(1) PM-BE1232	3/4" THRUST BEARING ASSEMBLY
⑥		(1) PM-BELT1018	TIMING BELT
⑦		(1) PM-BELT1023	TIMING BELT
⑧		(1) PM-CL1010	3" LEATHER CLUTCH PAD
⑨		(1) PM-CO1020	3/4" ID LOCK COLLAR – SS
⑩		(1) PM-FASH430080	SHCS, 1/4-20 x 1.00 LG. SS
⑪		(1) PM-FASP30540	COMPRESSION SPRING
⑫		(10) PM-FAW30275	FLAT WASHER – 1/4 NOM. – SS
	1	ASS-200-X140R/L	RWD. MANDREL w/BLOCK, SHAFT & PULLEY – consisting of the following parts –
⑬		(1) ASS-200-0128R/L	REWIND BEARING BLOCK ASSEMBLY
⑭		(1) ASS-200-X147	STANDARD REWIND MANDREL
⑮		(1) MP-200-0231	REWIND PULLEY
⑯	1	ASS-200-0453	MOTOR ASSEMBLY





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

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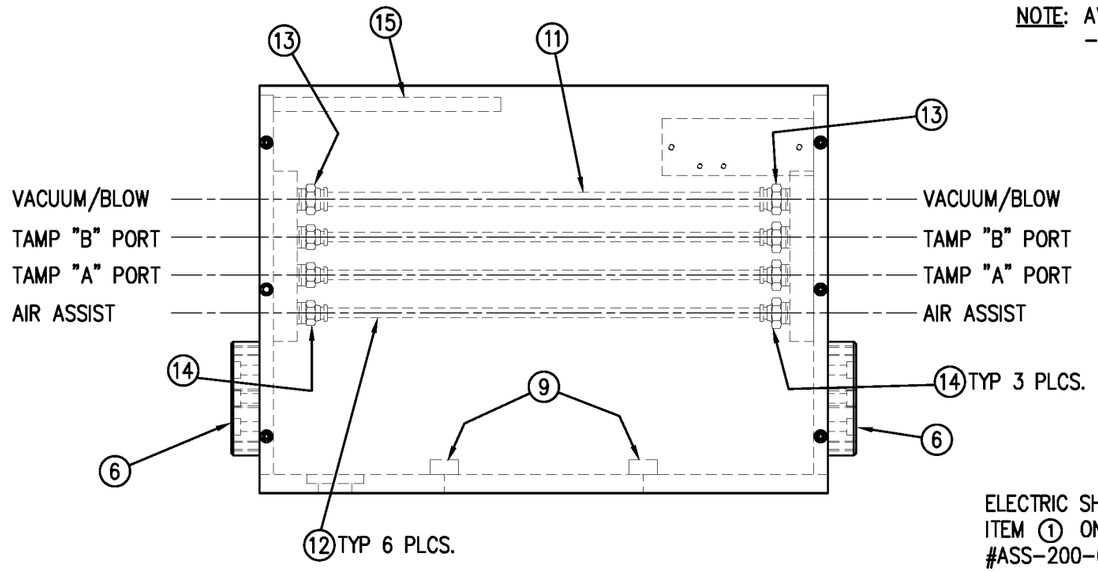
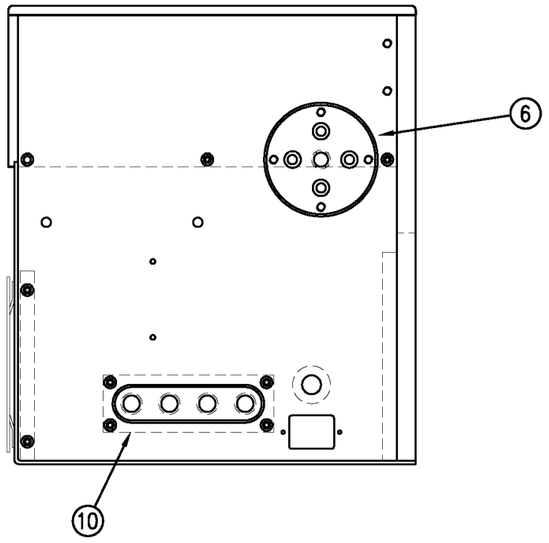
TITLE:	LABEL NIP / REWIND ASSEMBLY
APPLICATOR SERIES:	360
APPLICATOR WIDTH(S):	5"/7.5"/10"
GROUP:	HOUSING
REV.	3
REV. DESCRIPTION	UPDATED DWG., CHG'D PART/ITEM #'s
REV. BY:	TK
REV. DATE	10-12-04
Scale:	1=3
Date:	06/02/98
DRAWN BY:	BOB S.
Dept. Code	70
F:\Engineering\Standard Parts\Applicator\360\	HOUSING\ASS-200-X120RL

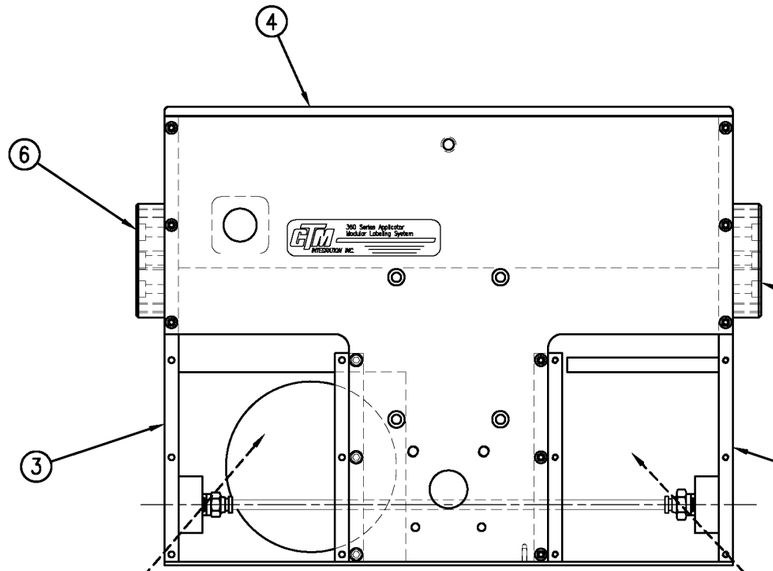
BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200-0122R/L		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	T-PLATE	MP-200-0260	.
②	1	HOUSING RIGHT SIDE FRAME	MP-200-0258	.
③	1	HOUSING LEFT SIDE FRAME	MP-200-0259	.
④	1	ELECTRICAL TOP COVER	MP-200-0246	.
⑤	1	HOUSING COVER ASSEMBLY	ASS-200-0141	.
⑥	2	U-ARM MOUNT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

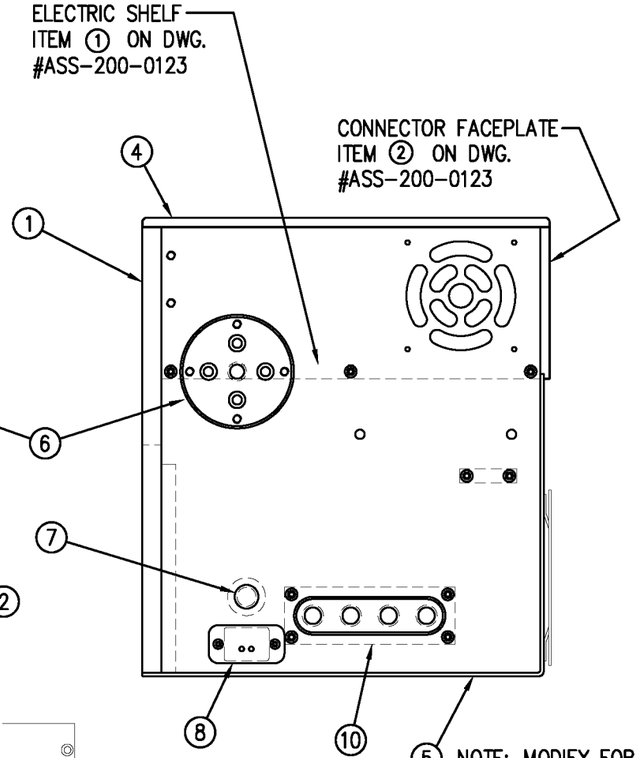
NOTE: AVAILABLE IN RH & LH ORIENTATIONS
– RIGHT HAND ASSEMBLY SHOWN –

ASS-200-0122R/L









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)

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TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY

PART: APPLICATOR HOUSING ASSEMBLY

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 200\ASS-200-0122RL

Scale: 1=4 | Date: 06/19/97 | DRAWN BY: BOB S.

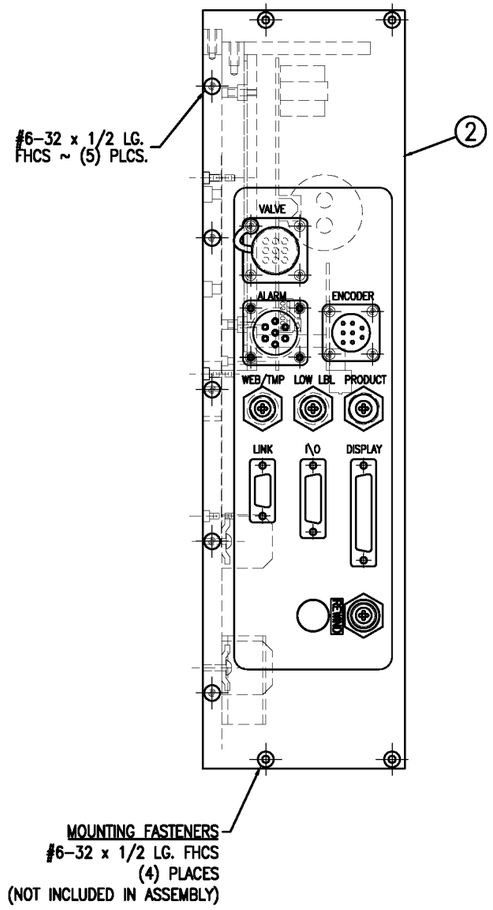
REV. 3 | REV. DESCRIPTION: ADDED MODIFICATION NOTE FOR HOUSING COVER | REV. DATE: 01/31/06 | REV. BY: TDR

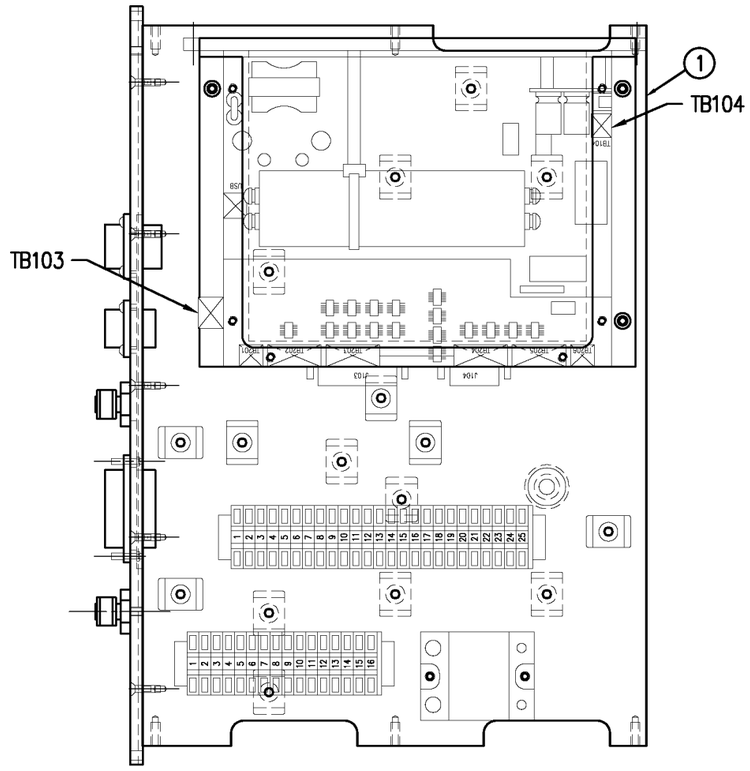
BILL OF MATERIAL

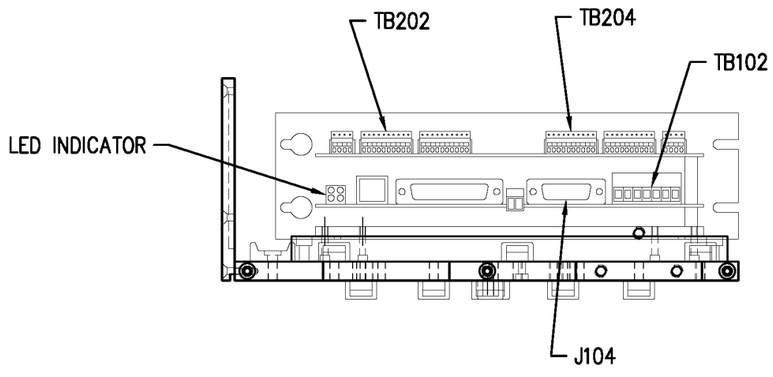
ASS-200a-0123-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	SAS-200a-0123b	ELECTRIC SHELF
②	1	SAS-200a-0123a-X	CONNECTOR FACE PLATE

	ASS-200a-0123-X
STANDARD REWIND	ASS-200a-0123-S
POWERED REWIND	ASS-200a-0123-P







SIDE VIEW
TERMINAL STRIPS AND MCR
OMITTED FOR CLARITY

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

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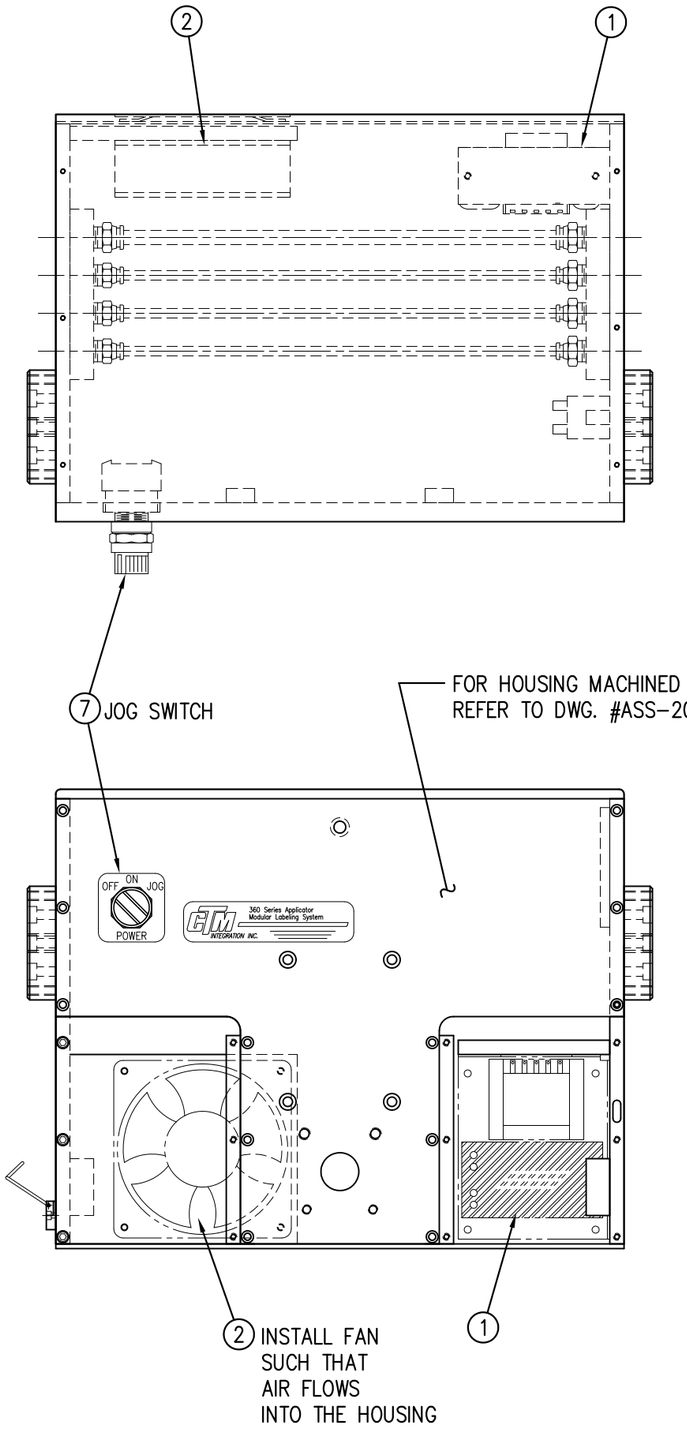
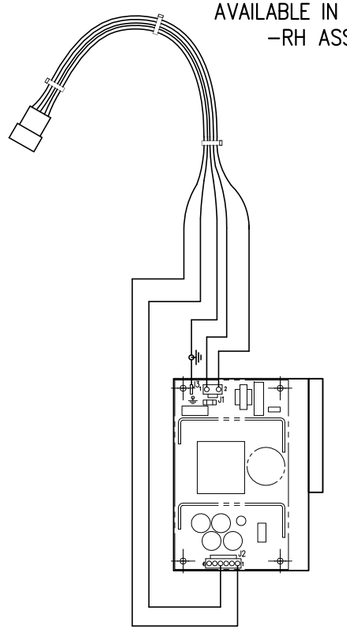
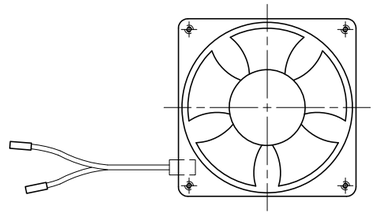
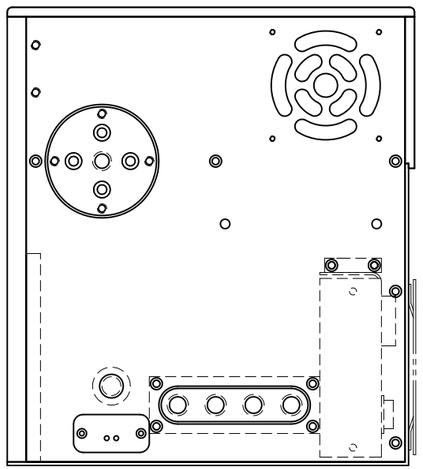
TITLE: 360a SERIES APPLICATOR: HOUSING ASSEMBLY			Dept. Code 70
PART: WIRED BOARD ASSEMBLY FOR STANDARD & POWEED REWIND TYPE APPLICATORS			F:\Engineering\Standard Parts\Applicator\360 200a\ASS-200a-0123-X
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
0	NEW DRAWING DUE TO POWERED REWIND CHANGES	05-10-08	ES
Scale: 1=3	Date: 05-10-08	DRAWN BY: E. SANOR	

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200a-0124		.
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-200-0445	.
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-CO1020	S
⑨	1	POWER CORD CLIP ASSEMBLY	ASS-200-0148	S









ASS-200a-0124

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TITLE: 360a SERIES APPLICATOR: HOUSING ASSEMBLY

PART: APPLICATOR HOUSING COMPONENT LAYOUT

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
2	NEW POWER SUPPLY	04/13/10	TDR

Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
1=4	02/14/98	BOB S./TDR	200\ASS-200a-0124

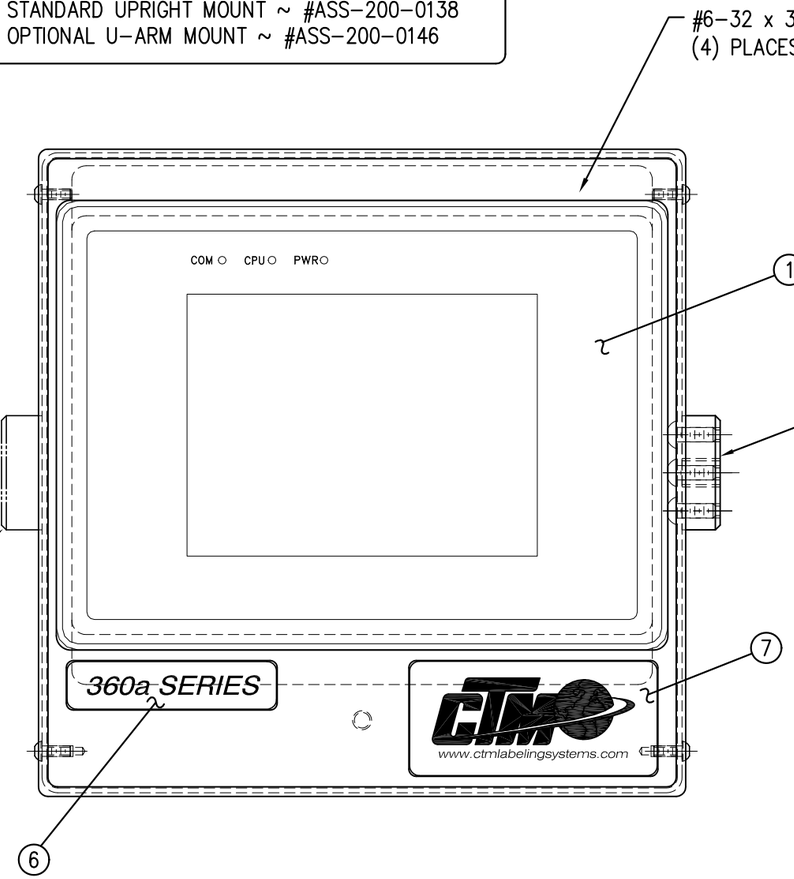
Dept. Code 70

ASS-200a-0125

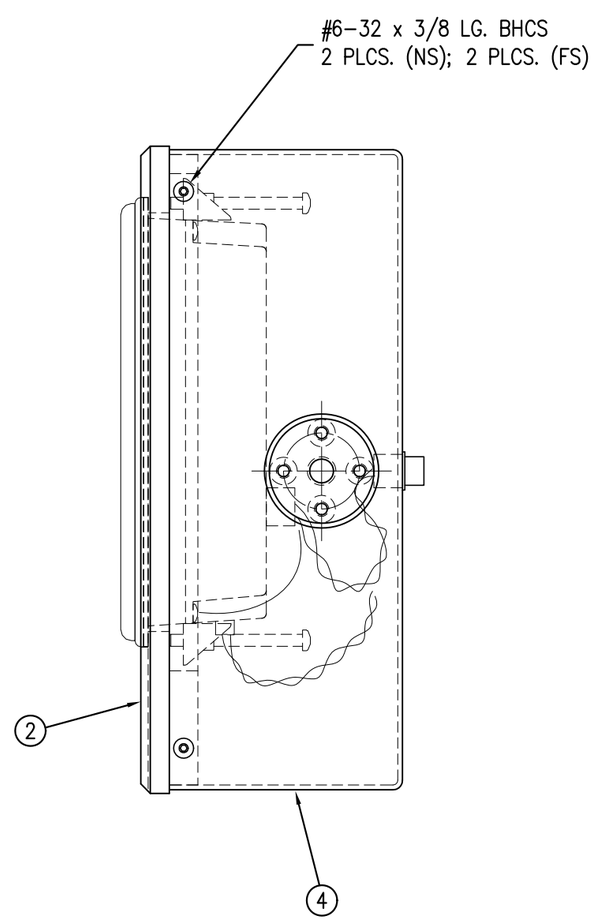
BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200a-0125		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	MAPLE DISPLAY INTERFACE (TOUCH SCREEN)	MP-IN1112	.
②	1	MAPLE DISPLAY FRONT PLATE	MP-200A-0265	.
③	1	DISPLAY MOUNTING DISK	MP-200-0262	.
④	1	DISPLAY BACK COVER	PM-200-0264	.
⑤	2	JACK SCREW, L.W., F.W., NUT	PE-S01028	.
⑥	1	360a SERIES LABEL	PM-LB1022	.
⑦	1	CTM LABEL	PM-LB1020	.
	1	SS SHCS, 3/8"-16 x 1" LG.	PM-FASH430194	.
	1	SS FLAT WASHER, 3/8" NOM.	PM-FAW30285	.
	2	JACK SCREW, NUT & WASHER	PE-S01028	.
	4	#6-32 x 1/4 SS PHILIPS PAN HEAD	PM-FAPH10150	.
	4	#10-32 x 1/2 SS BHCS	PM-FABH35455	.
⑧	1	DISPLAY UNIT WIRE HARNESS	ASS-200A-0420	.

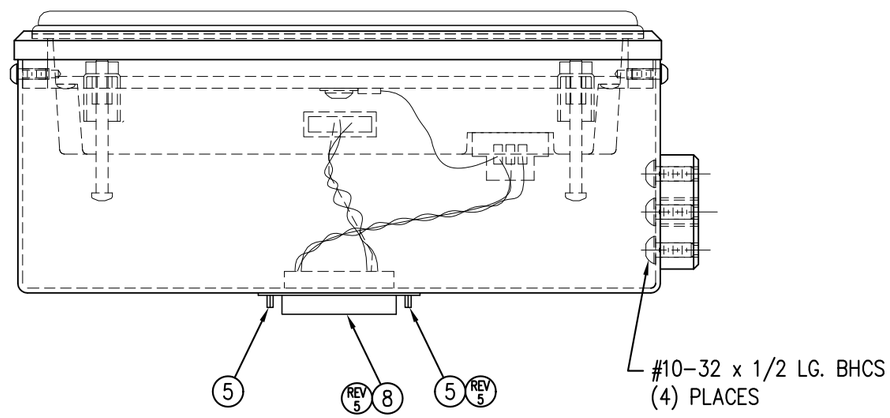
MOUNTING BRACKET NOT INCLUDED IN ASSEMBLY:

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



DISPLAY ASSEMBLY CAN ALSO BE MOUNTED FROM THIS SIDE BY REMOVING (4) #6-32 x 3/8 BHCS & THEN ROTATING DISPLAY COVER (ITEM ④) WITH ATTACHED ITEM ③ & ⑤ 180 DEGREES. THEN SECURE BACK COVER TO DISPLAY FRONT PLATE USING #6 BHCS REMOVED PREVIOUSLY.





TOUCHSCREEN INTERFACE NOTE

SEE ASS-200a-0420 FOR MP-IN1112 (5056N) DISPLAY
SEE ASS-200a-1416 FOR MP-IN1110 (520T) DISPLAY

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TITLE: 360a SERIES APPLICATOR: HOUSING ASSEMBLY

PART: MAPLE DISPLAY UNIT ASSEMBLY

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 200a\ASS-200a-0125

DRAWN BY: E. SANOR

Date: 02/27/07

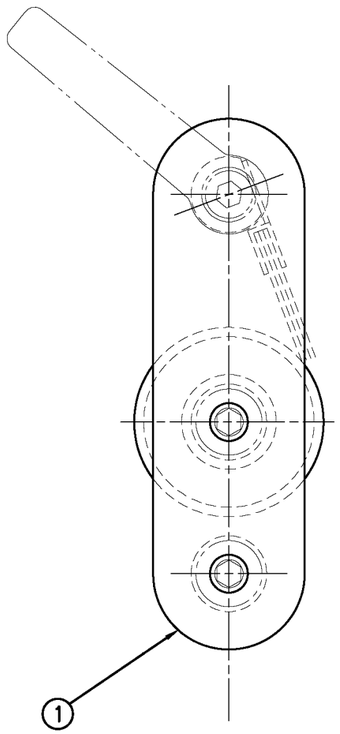
Scale: 1=2

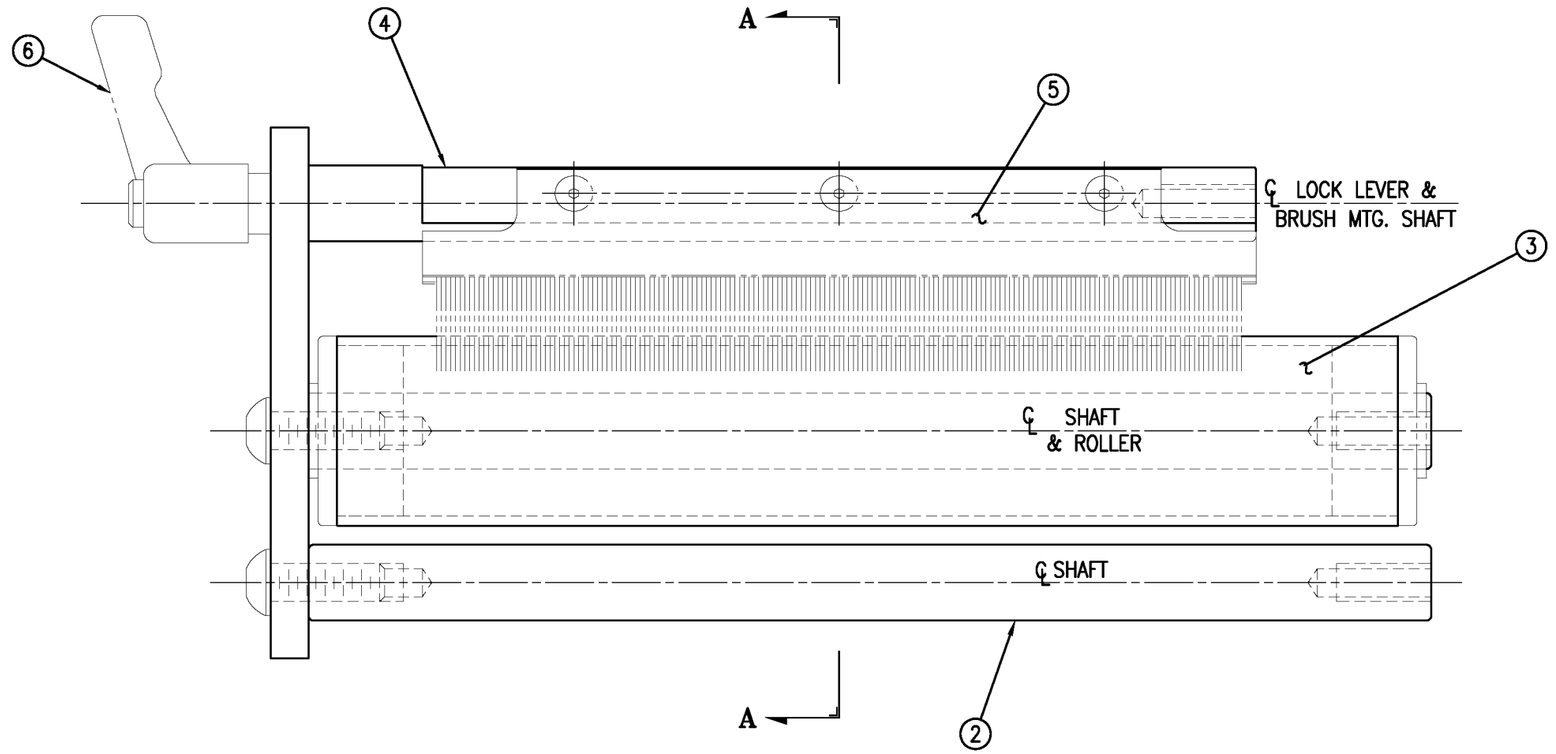
REV. BY: BMW

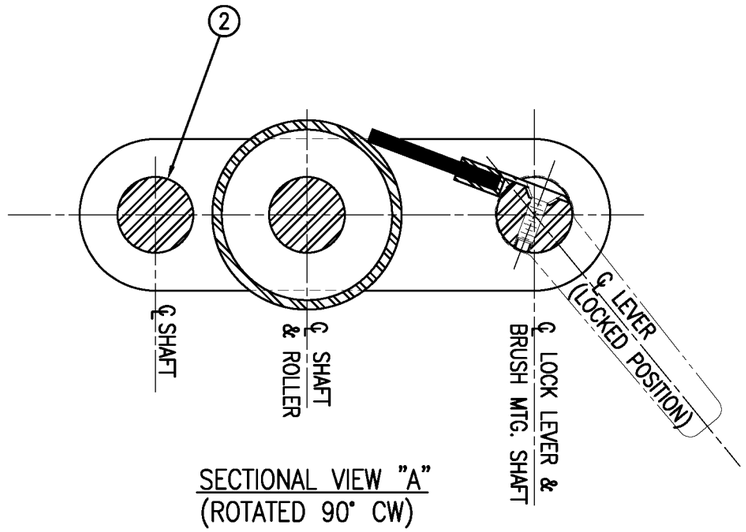
REV. DATE 06/26/12

REV.	REV. DESCRIPTION
5	ADD PE-S01028 IN PLACE OF ASS-200A-1416, ADD ASS-200A-0420

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







SECTIONAL VIEW "A"
(ROTATED 90° CW)

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

REV 1

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TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY

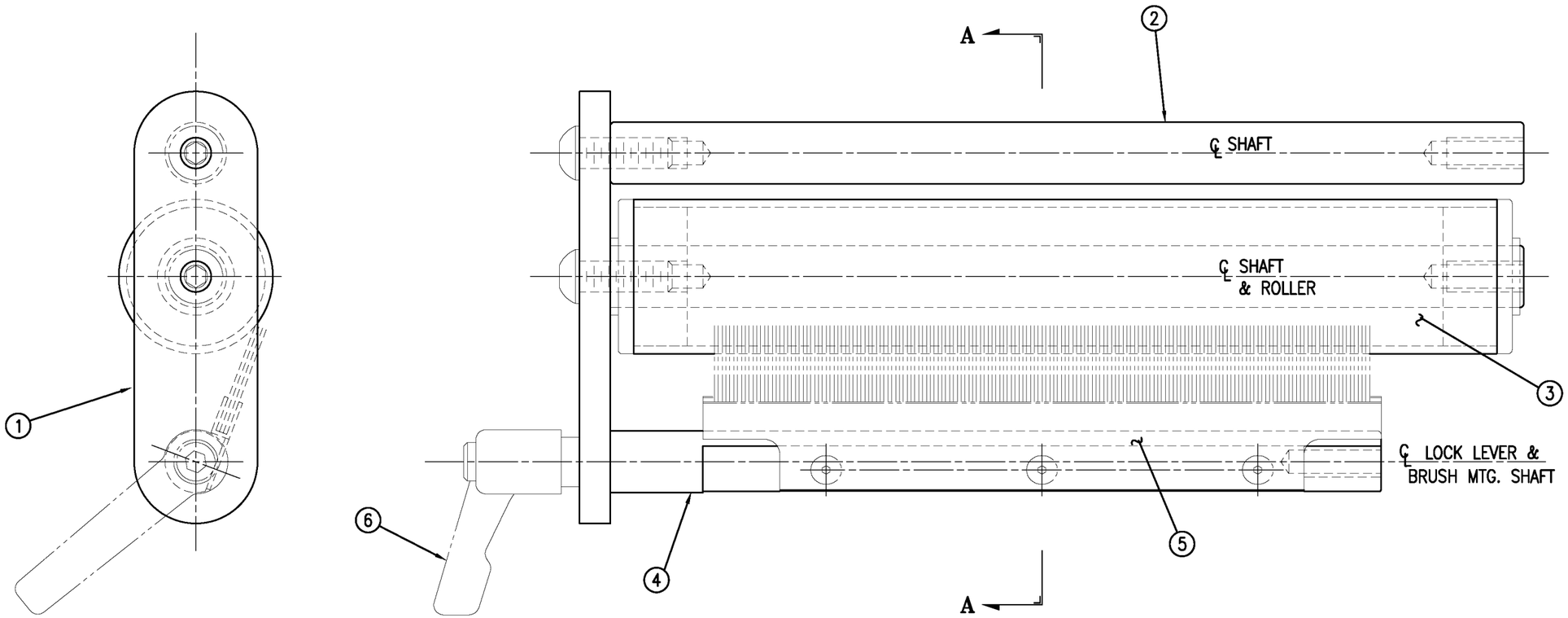
PART: TENSION BRUSH LH ASSEMBLY

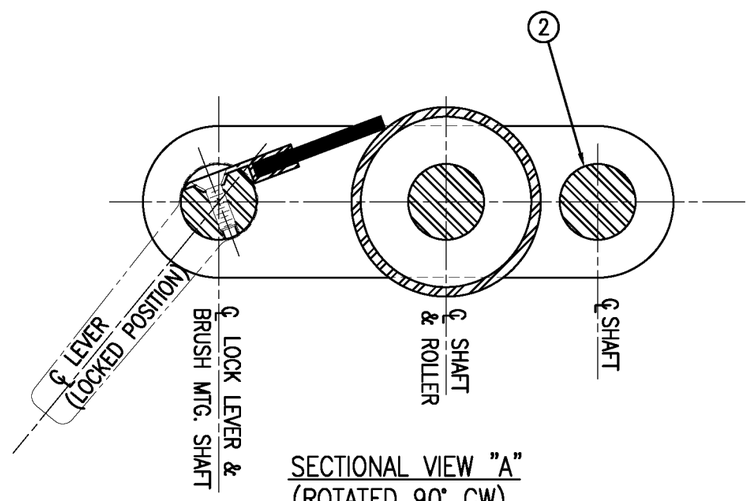
Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 200\ASS-200-X126L

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:
1	BHCS WAS LHCS	8/8/05	JAM	1=1	06/02/98	BOB S.

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





SECTIONAL VIEW "A"
(ROTATED 90° CW)

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

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PART: TENSION BRUSH RH ASSEMBLY

Dept. Code 70

TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY

Scale: 1=1 | Date: 06/02/98 | DRAWN BY: BOB S.

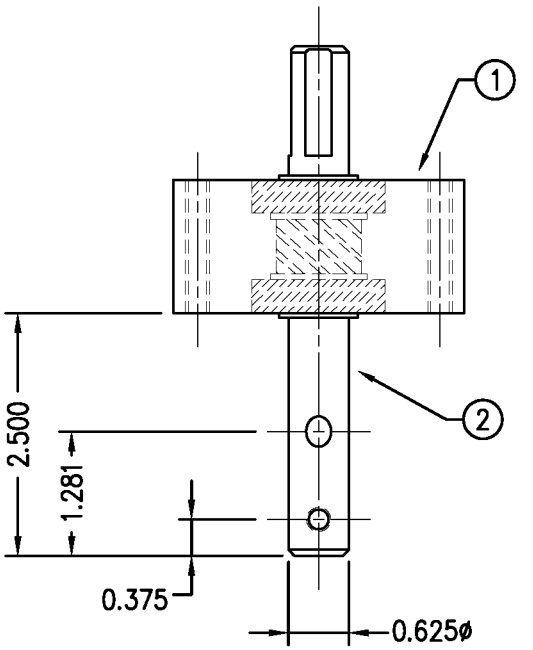
F:\Engineering\Standard Parts\Applicator\360 200\ASS-200-X126R

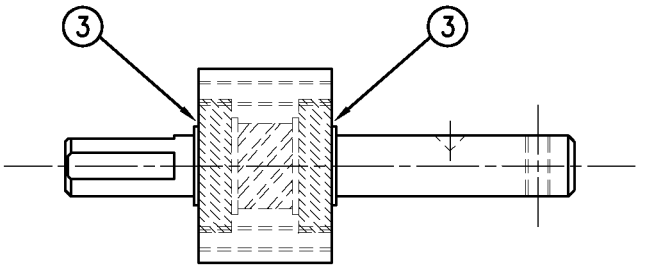
REV. BY: JAM | REV. DATE 8/8/05

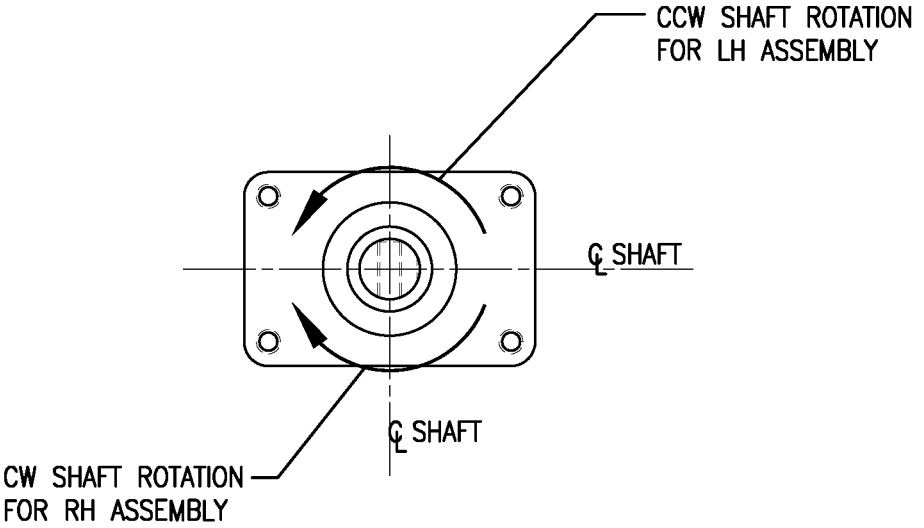
REV. 1 | REV. DESCRIPTION BHCS WAS LHCS

ASS-200-0128R/L

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







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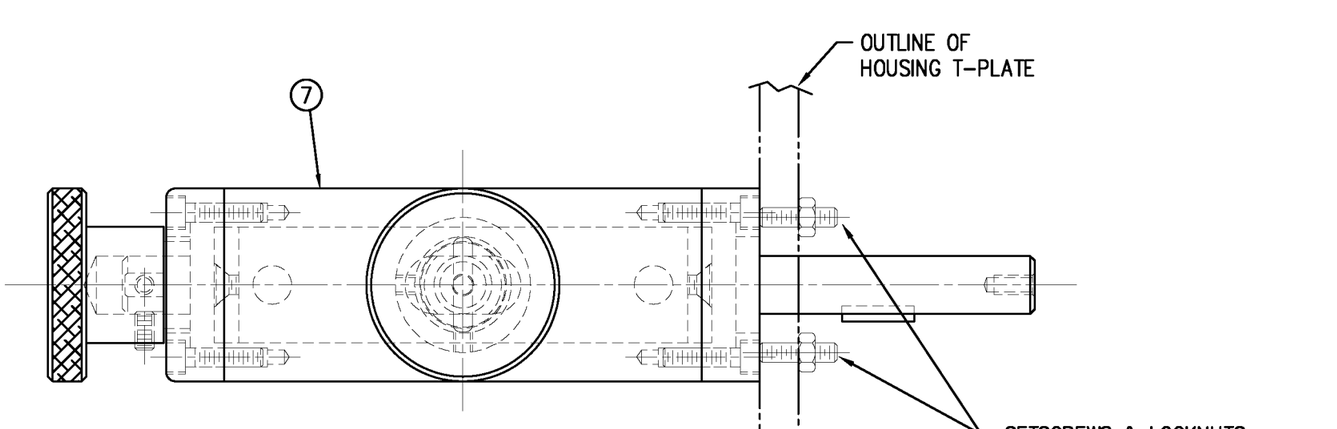
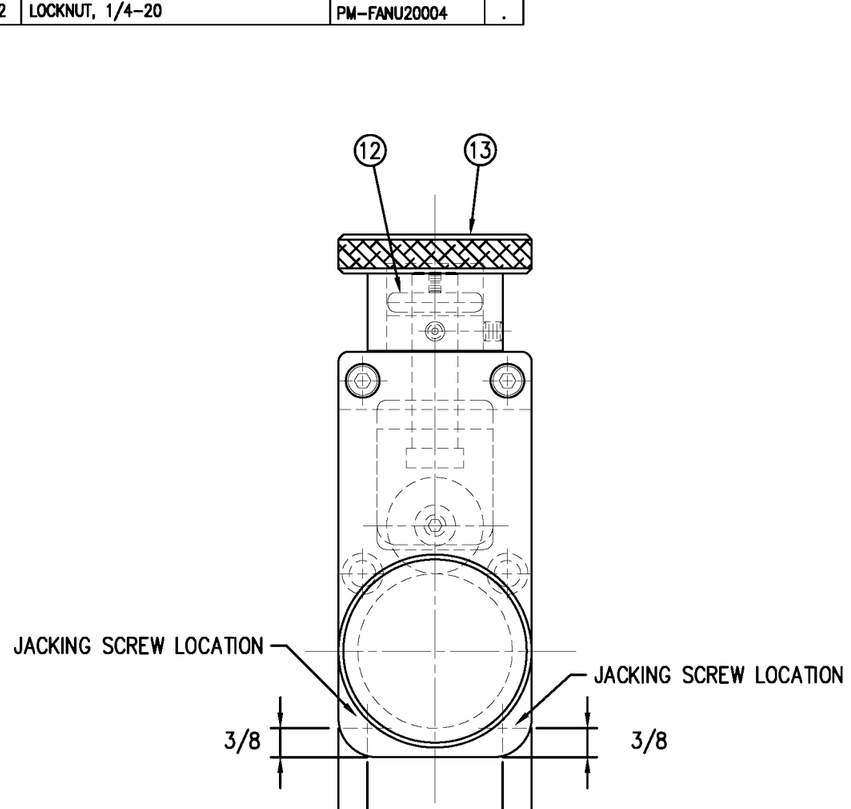
TITLE: 360 SERIES APPLICATOR: REWIND ASSEMBLY	PART: REWIND BEARING BLOCK ASSEMBLY	Dept. Code 70

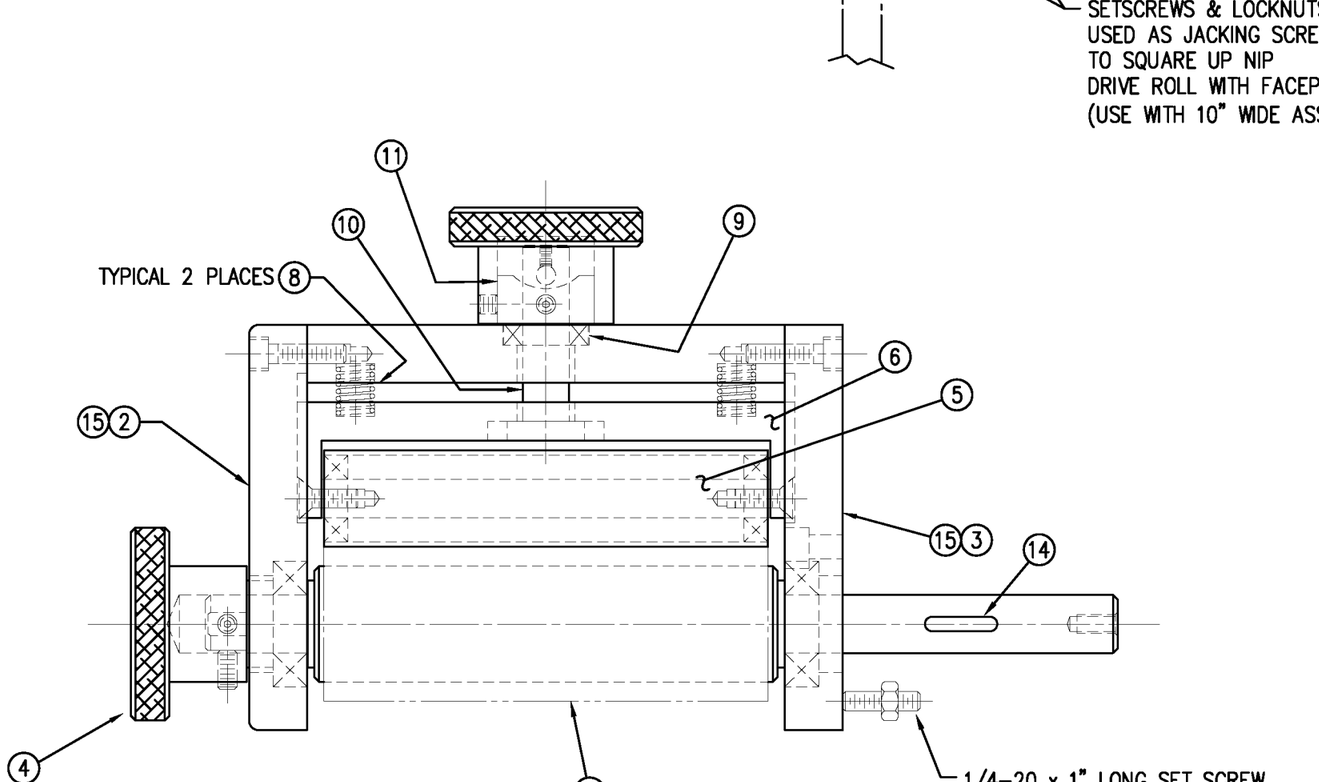
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360 200\ASS-200-0128RL
0	NEW TITLEBLOCK	02/05/03	TDR	1=2	02/21/98	BOB S.	

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

ASS-200-X129	
5" WIDE	-0129
7.5" WIDE	-2129
10" WIDE	-5129







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Dept. Code 70

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

TITLE: 360 SERIES APPLICATOR: HOUSING ASSEMBLY

F:\Engineering\Standard Parts\Applicator\360

DRAWN BY:

Date:

Scale:

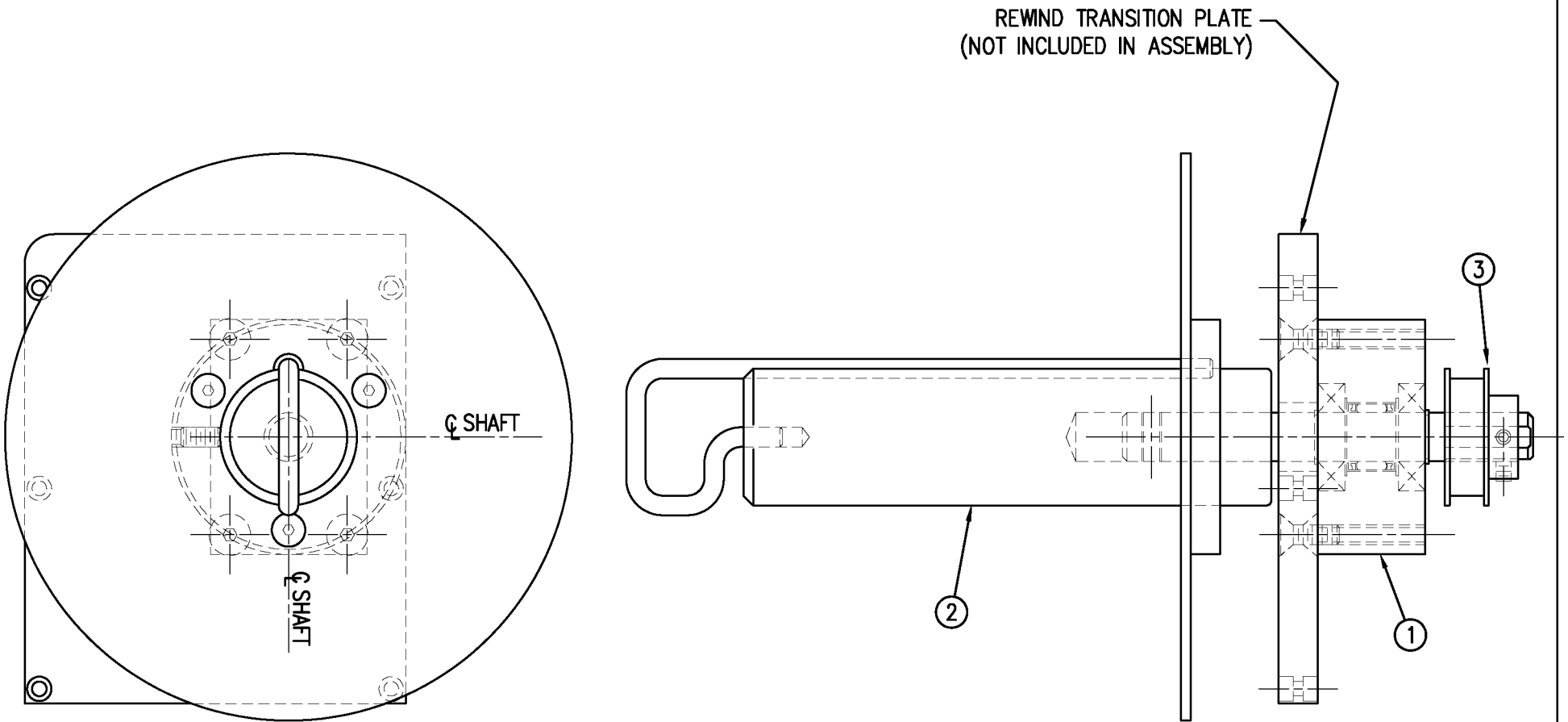
REV.	REV. DESCRIPTION	REV. BY:	REV. DATE

BILL OF MATERIAL

ASS-200-X140R/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

ASS-200-X140R/L	
5" WIDE	-0140R/L
7.5" WIDE	-2140R/L
10" WIDE	-5140R/L



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APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:	TITLE:	Dept. Code
360	5"/7.5"/10"	REWIND	REWIND MANDREL ASSEMBLY w/ BLOCK, SHAFT & PULLEY	70

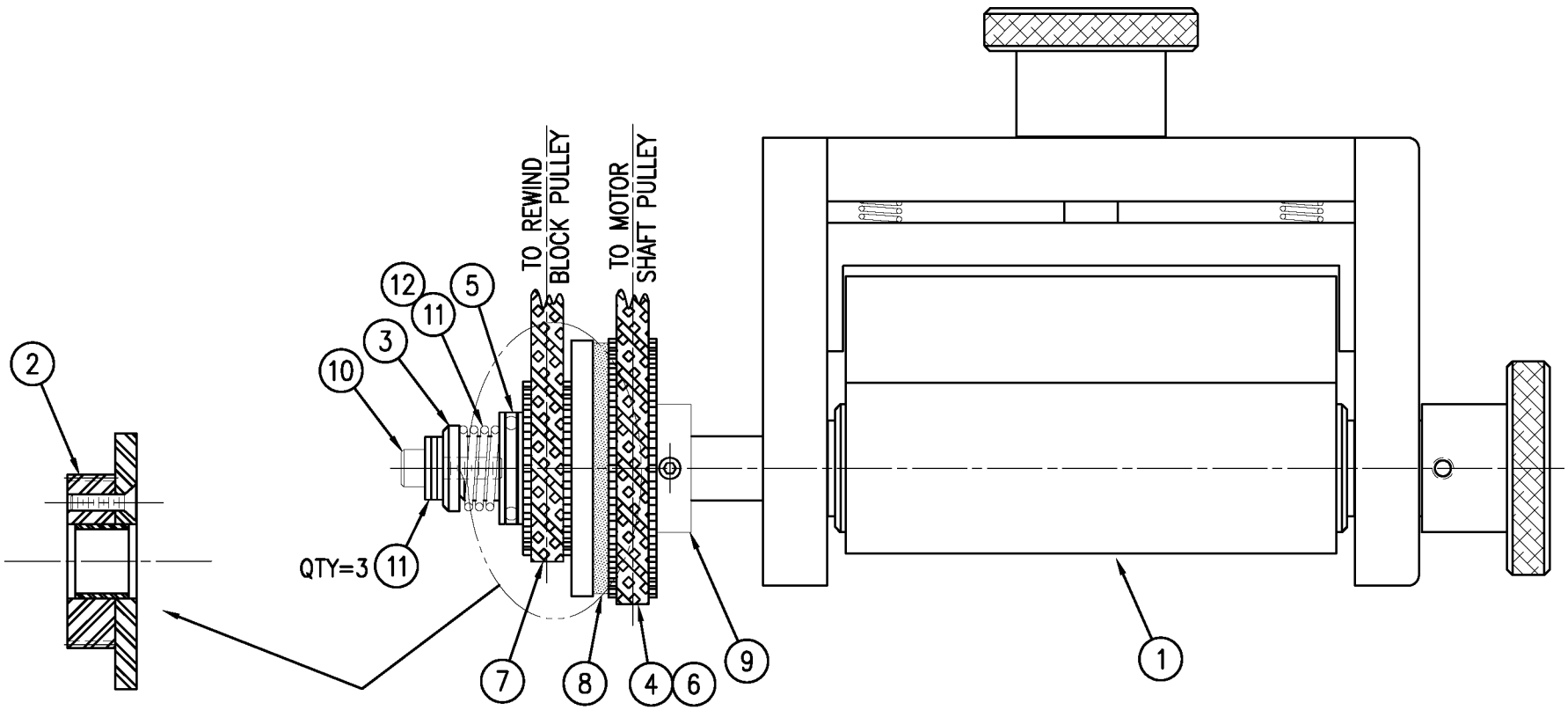
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360\
1	UPDATED B.O.M.	12/06/05	TDR	1=2	01/18/02	TDR	Unwind-Rewind\ASS-200-X140RL

BILL OF MATERIAL

ASS-200-X142

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

ASS-200-X142	
5" WIDE	-0142
7.5" WIDE	-2142
10" WIDE	-5142



SECTIONAL VIEW OF
SLIP CLUTCH ASSEMBLY

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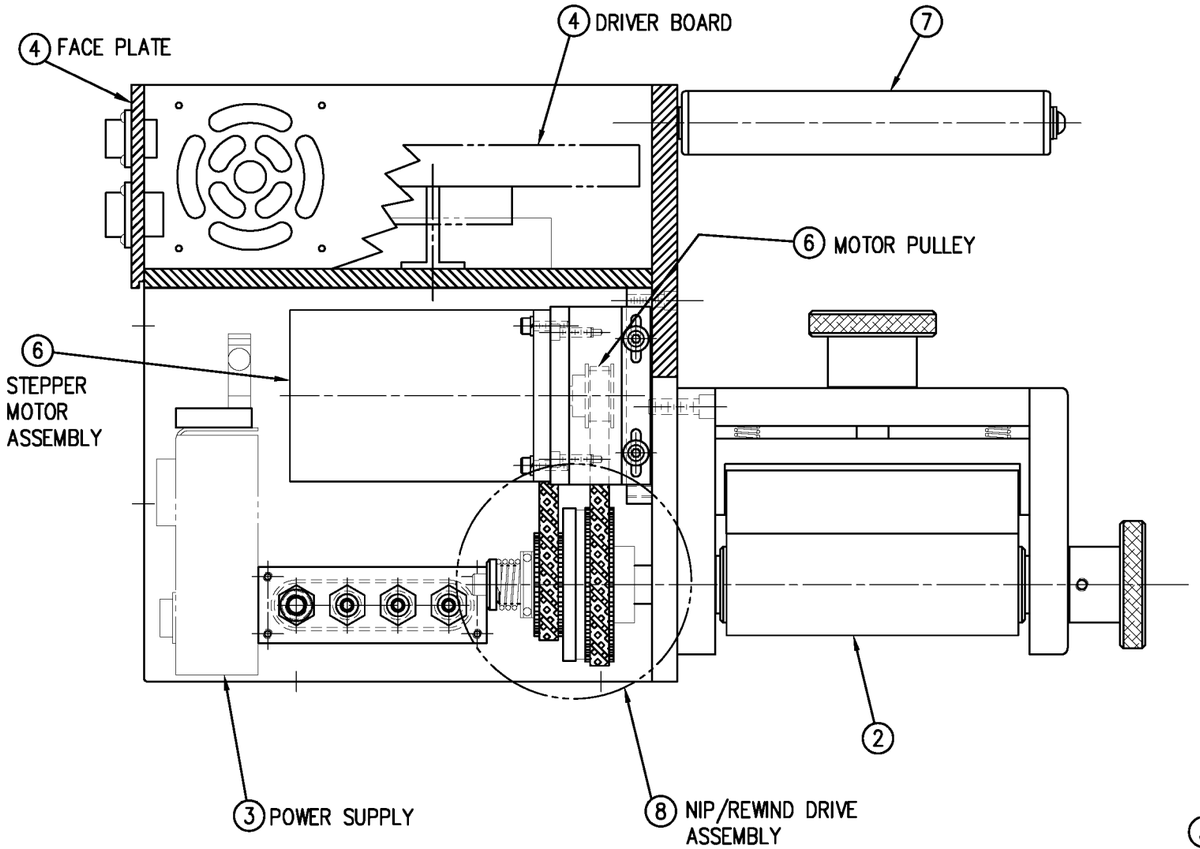
APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:	TITLE:	Dept. Code
360 SERIES	5"/7.5"/10"	NIP DRIVE	NIP DRIVE REWIND PULLEY & MOTOR PULLEY ASSEMBLY	70

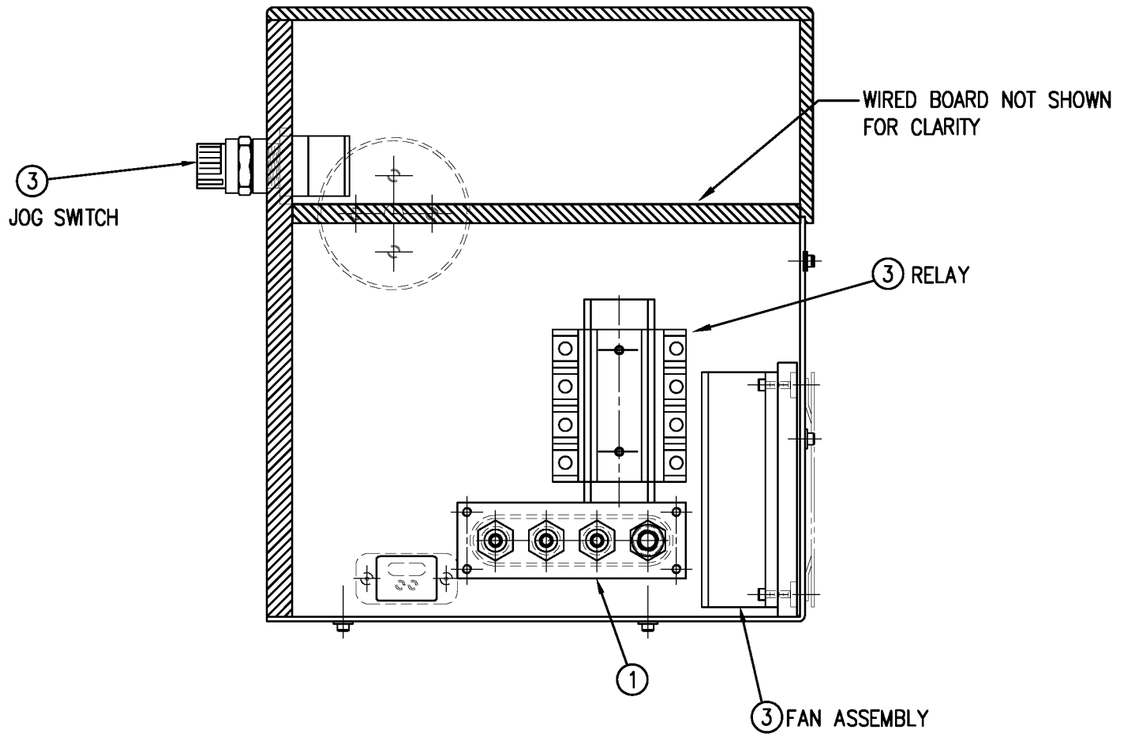
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360\Core Unit
2	ADDED ASS-200-X129 TO BOM & TABULATED FOR 5/7.5/10	02/19/09	TDR	1=2	06/02/98	BOB S.	NIP DRIVE\ASS-200-X142

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

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



SECTION "A-A"
(FROM SHEET 1)



SECTION "B-B"
(FROM SHEET 1)

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

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TITLE: 360a SERIES APPLICATOR: HOUSING ASSEMBLY

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

Dept. Code 70

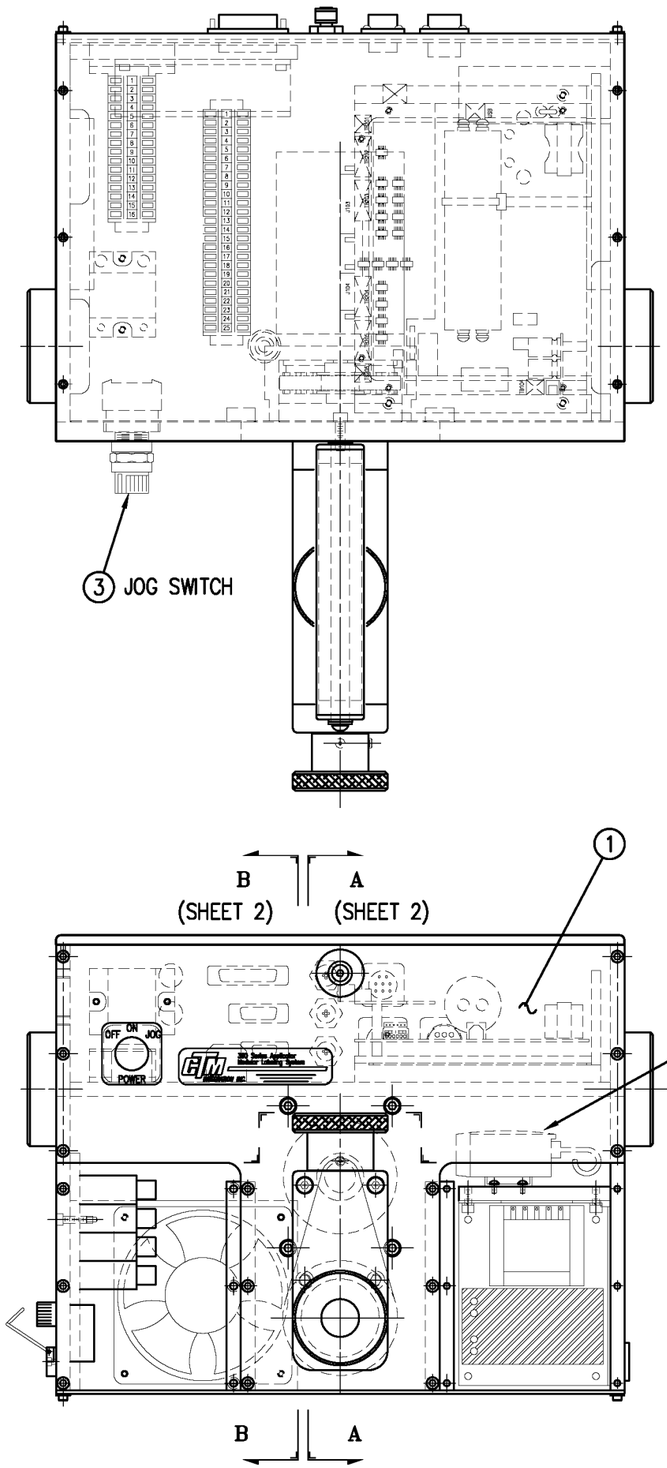
F:\Engineering\Standard Parts\Applicator\360 200a\ASS-200a-X150RLs2

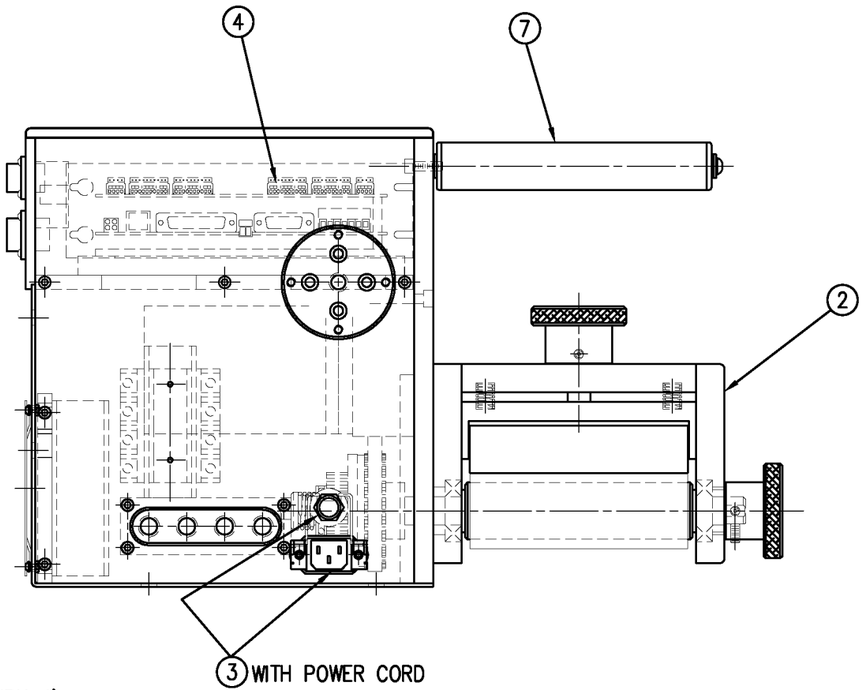
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
1	NEW DRAWING CREATED FROM ASS-200-X150RLs2	08/02/07	TDR

Scale: 1=3 | Date: 02/14/98 | DRAWN BY: BOB S./TDR

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200a-X151R/L		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
1	1	APPLICATOR HOUSING ASSEMBLY	ASS-200-0122R/L	.
2	1	NIP DRIVE ASSEMBLY	ASS-200-X129	S
3	1	HOUSING COMPONENTS LAYOUT	ASS-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)





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

ASS-200a-X151R/L	
5" WIDE	-0150R/L
7.5" WIDE	-2150R/L
10" WIDE	-5150R/L

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PART: CORE UNIT for POWERED REWIND (Sht 1 of 2)

Dept. Code 70

TITLE: 360a SERIES APPLICATOR: HOUSING ASSEMBLY

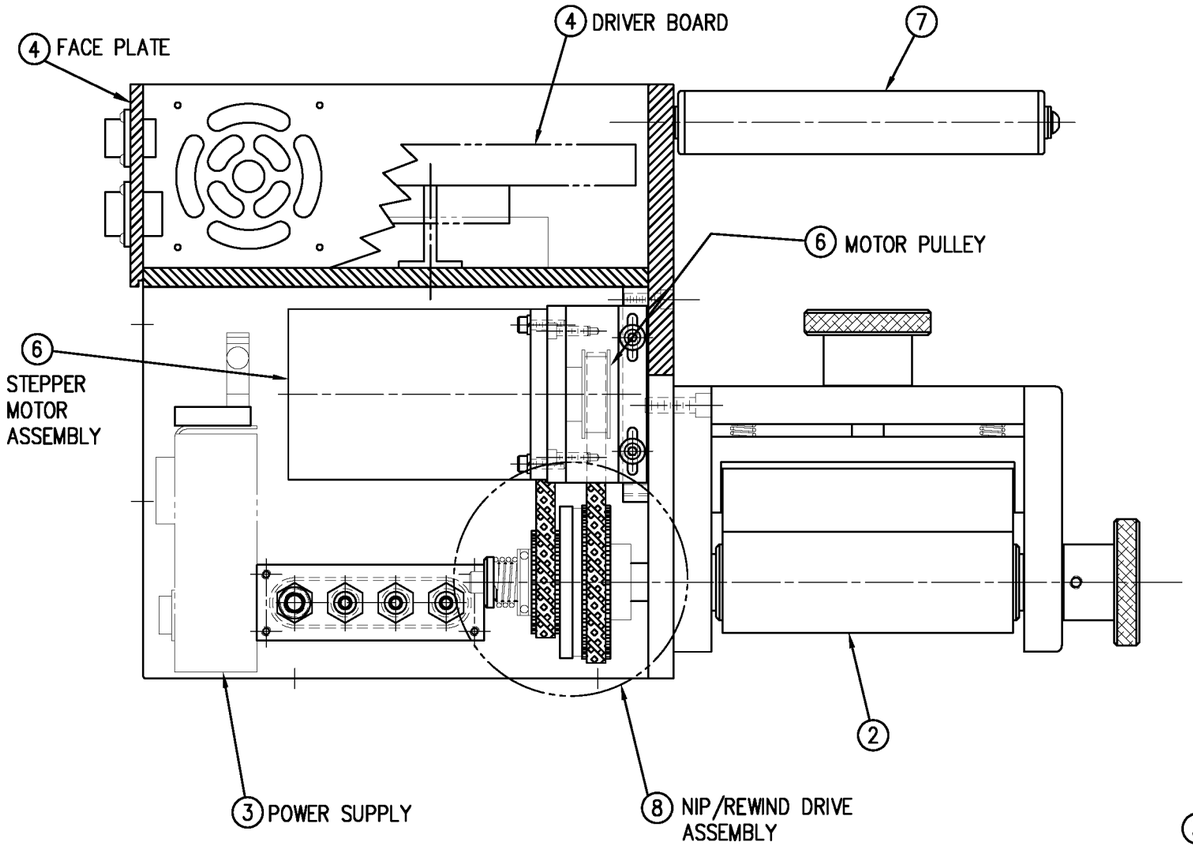
F:\Engineering\Standard Parts\Applicator\360 200a\ASS-200a-X151RLs1

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
2	STEPPER MOTOR CALLOUT WAS ASS-200-0453	11/30/07	TDR

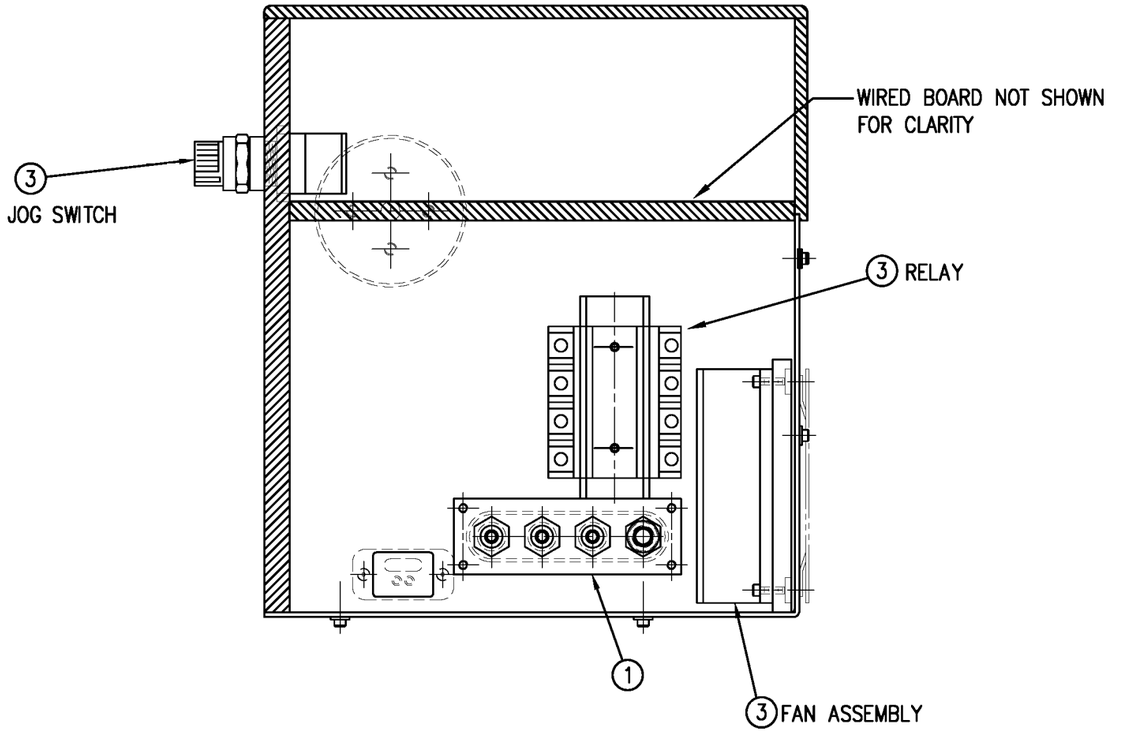
REV. BY:	Scale:	Date:	DRAWN BY:
TDR	1=4	08/01/07	BOB S./TDR

ASS-200a-X151R/L	
5" WIDE	-0150R/L
7.5" WIDE	-2150R/L
10" WIDE	-5150R/L

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



SECTION "A–A"
(FROM SHEET 1)



SECTION "B–B"
(FROM SHEET 1)

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

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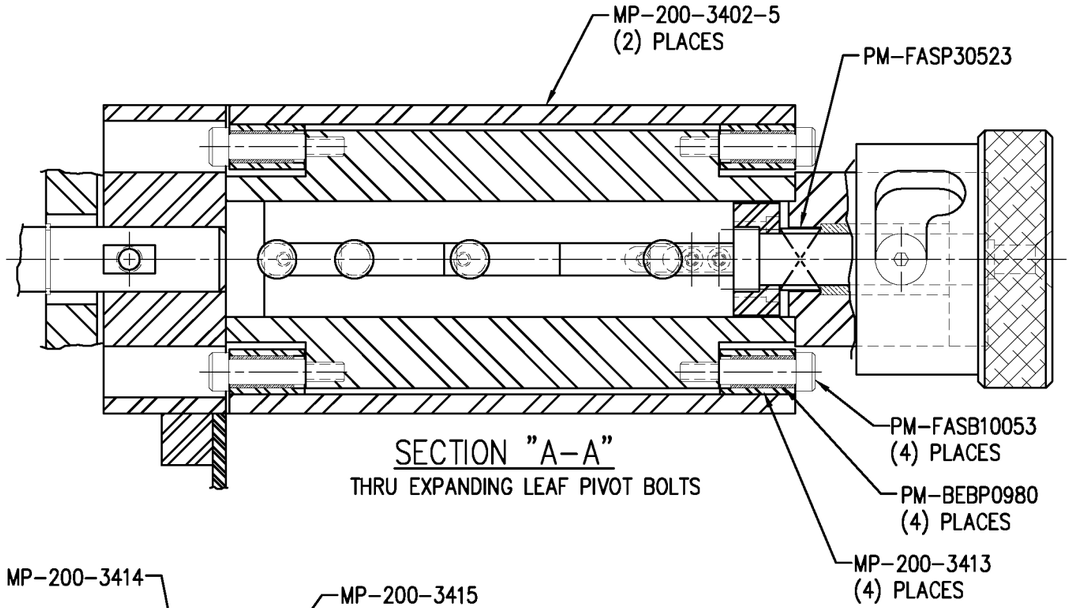
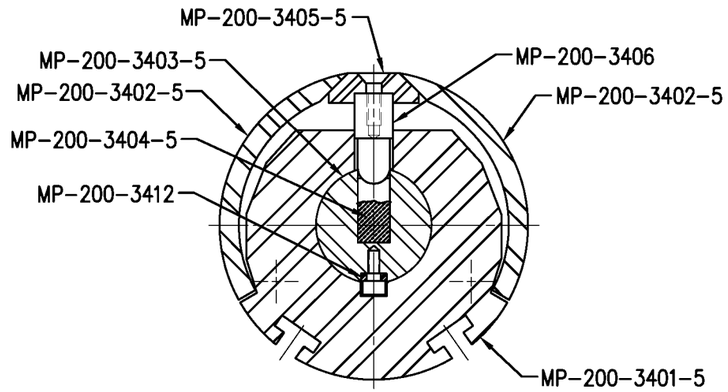
TITLE: 360a SERIES APPLICATOR: HOUSING ASSEMBLY					
PART: CORE UNIT for POWERED REWIND (Sht 2 of 2)		Scale: 1=3	Date: 02/14/98	DRAWN BY: BOB S./TDR	F:\Engineering\Standard Parts\Applicator\360 200a\ASS-200a-X151RLs2
REV.	REV. DESCRIPTION	REV. BY:	REV. DATE		Dept. Code 70
2	STEPPER MOTOR CALLOUT WAS ASS-200-0453	TDR	11/30/07		

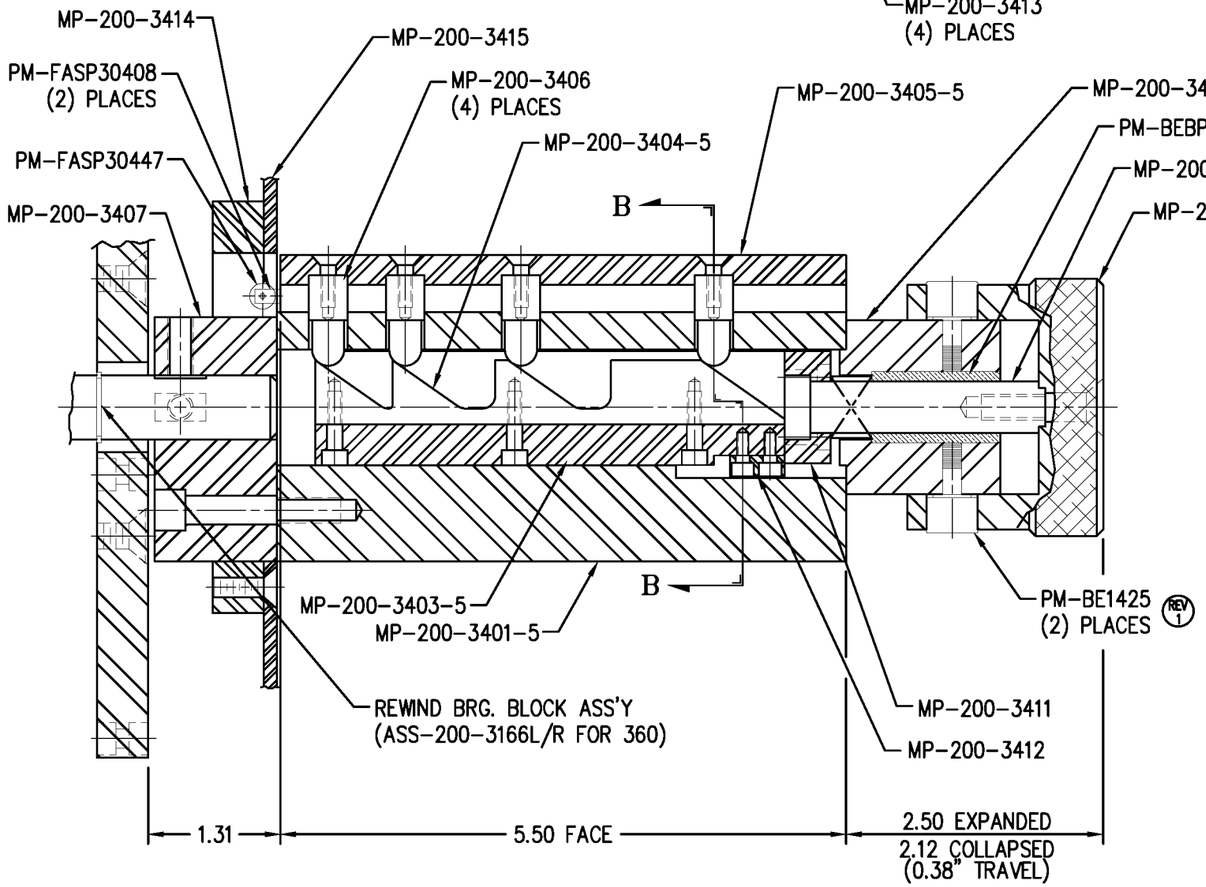
ASS-200-3140-5

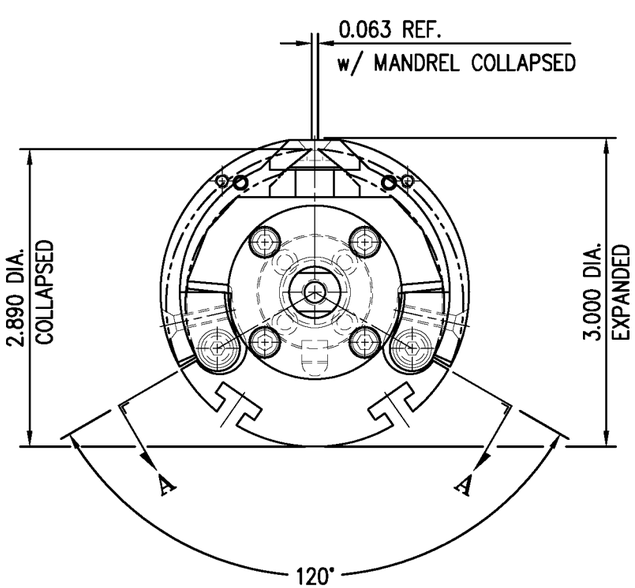


SECTION "A-A"
THRU EXPANDING LEAF PIVOT BOLTS

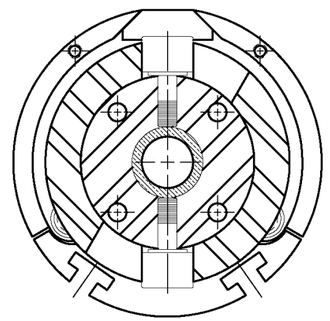


SECTION "B-B"
THRU EXPANSION PIN & WEDGE





END VIEW
WITH MANDREL EXPANDED AND w/
ACTUATOR CAP & CAMROLS REMOVED



SECTION THRU CAMROLS
REV 1

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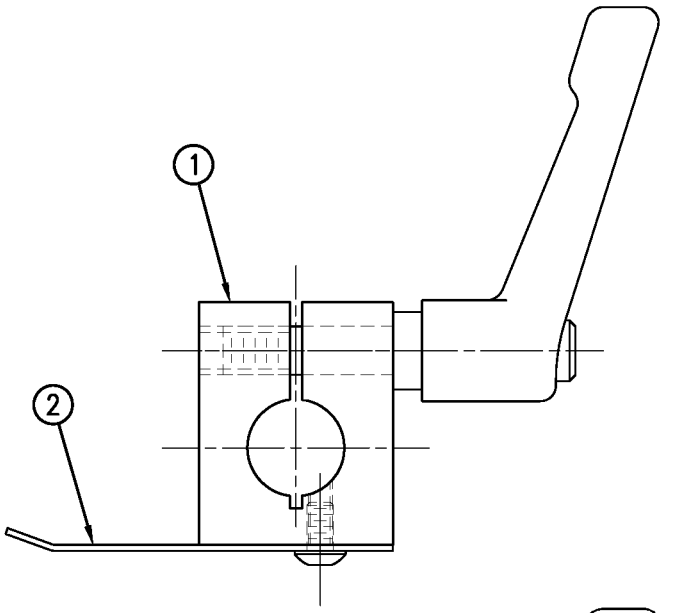
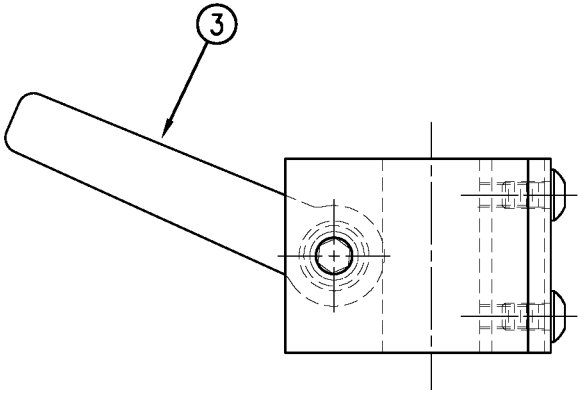
APPLICATOR SERIES: 360 SERIES	APPLICATOR SERIES: 5" WIDE	GROUP: REWIND	TITLE: COLLAPSIBLE REWIND ASSEMBLY	Dept. Code 70	F:\Engineering\Standard Parts\Applicator\360\Rewind\COLLAPSIBLE\ASS-200-3140-5
REV. 1	REV. DESCRIPTION REPLACED PM-BE1415 (BALL BRGS) w/ PM-BE1425 (CAMROLS)	REV. BY: TK	REV. DATE 09/19/06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

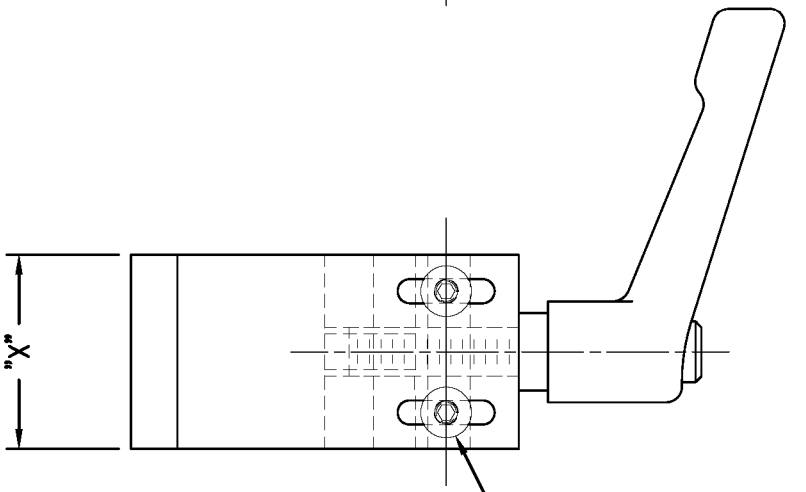
BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-0105-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	SPRING BLOCK	MP-211-0201	.
②	1	X" WIDE WEB TENSION SPRING (see note)	PM-211-0216-X	.
③	1	LOCK LEVER	PM-LL0902	.

ASS-211-0105-X	
1" WIDE	-0105-1
2" WIDE	-0105-2
3" WIDE	-0105-3
4" WIDE	-0105-4

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







#6-32 x 1/4 LG. PHILLIPS PAN HEAD SCREW (2) PLCS.

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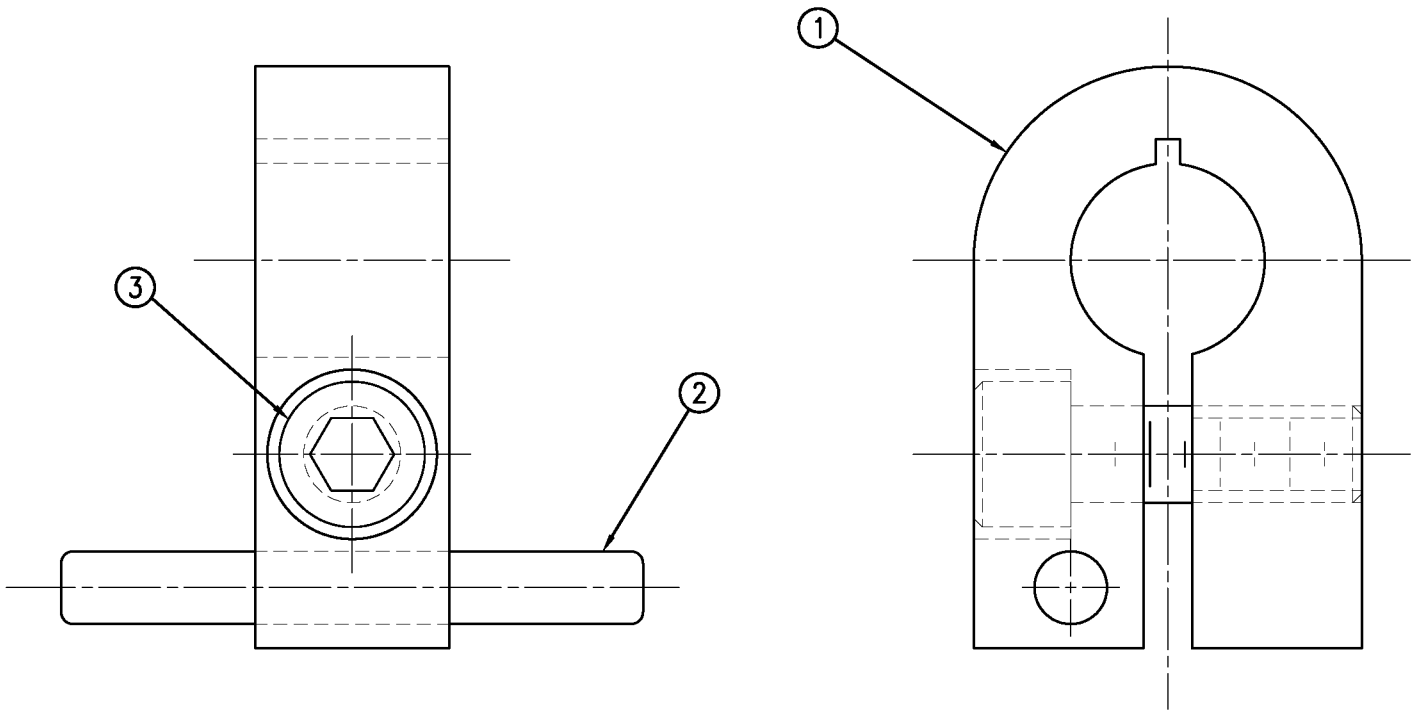
TITLE: 360/3600 SERIES APPLICATOR: TAMP/BLOW/MERGE/RVB ASSEMBLY	PART: SPRING BLOCK ASSEMBLY	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360 211\ASS-211-0105-X
0	UPDATED TITLEBLOCK	02/04/03	TDR	1=1	02/21/98	BOB S.	

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

ASS-211-0110



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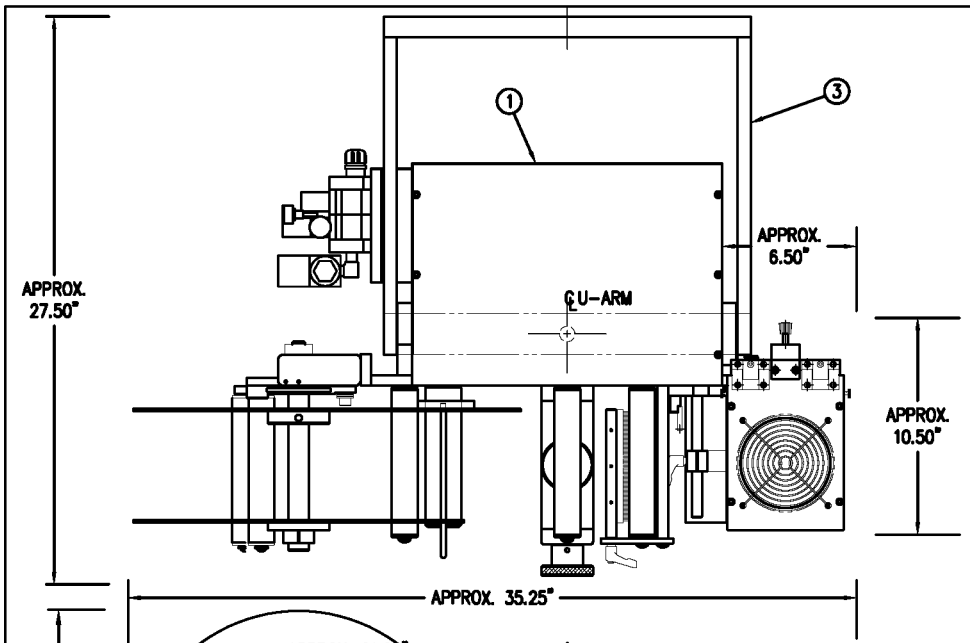
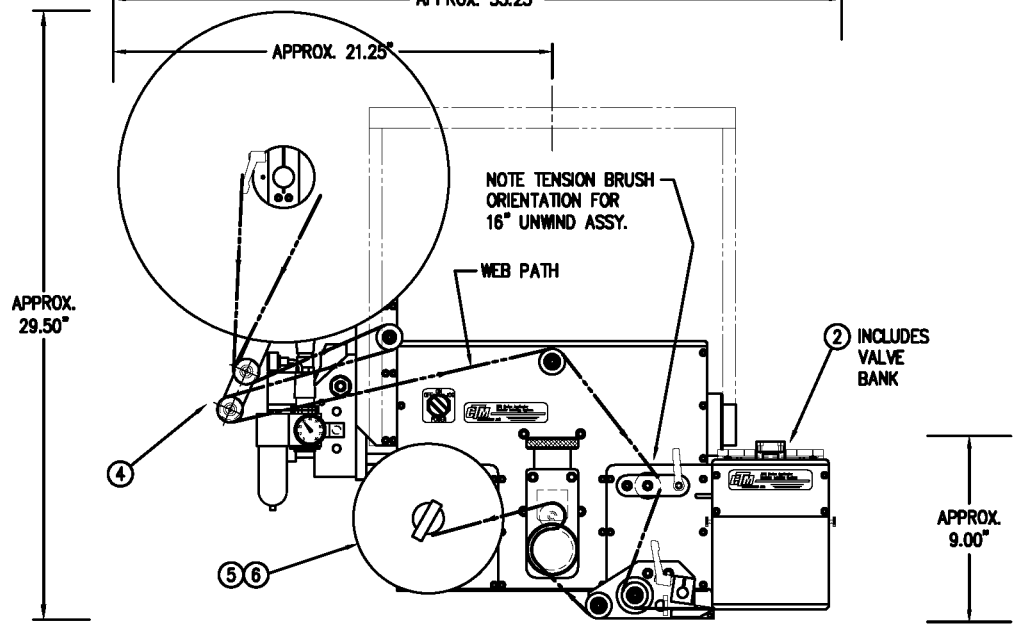
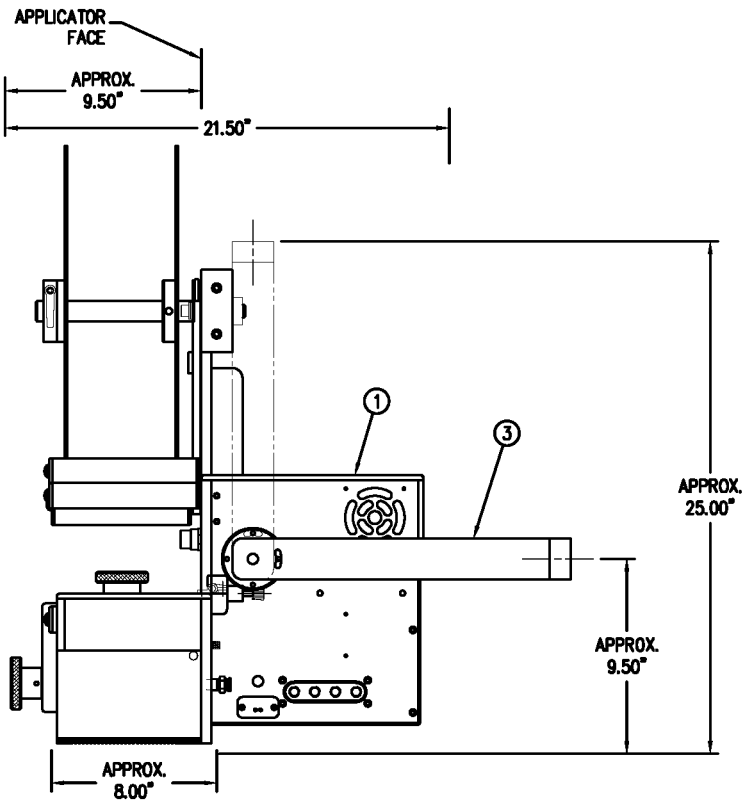
TITLE: 360/3600 SERIES APPLICATOR: TAMP/BLOW/MERGE/RVB	PART: SPRING BLOCK STOP COLLAR ASSEMBLY	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
0	NEW RELEASE	02/06/03	TDR	2=1	02/18/02	TDR	211\ASS-211-0110







BILL OF MATERIAL				SOLD	
ASSEMBLY		CTM-211a-0101RL-16X		S	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
①	1	5" WIDE; CORE UNIT	ASS-200a-0150R/L	.	
②	1	5" WIDE; AIR BLOW NOSE MODULE	MOD-211-0101R/L	S	
③	1	U-ARM ASSEMBLY	WAS-200-0247	.	
④	1	5" WIDE; 16" UNWIND w/ DISKS MOD.	MOD-200-3121R/L-5	S	
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	
⑧	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-0137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3110-5	S	← COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200a-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200a-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR & CABLE	ASS-200-0427	S	

CTM-211a-0101R/L-16X

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

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

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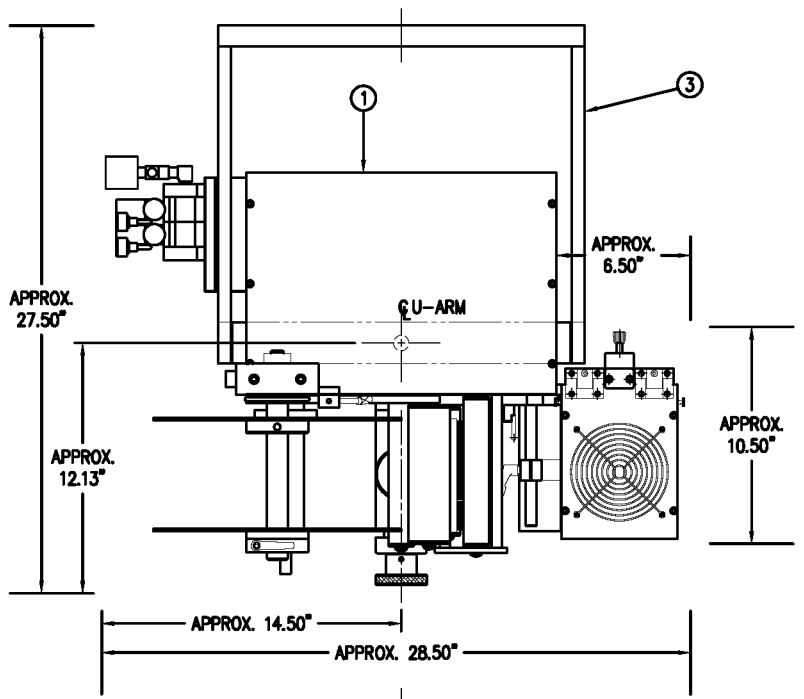
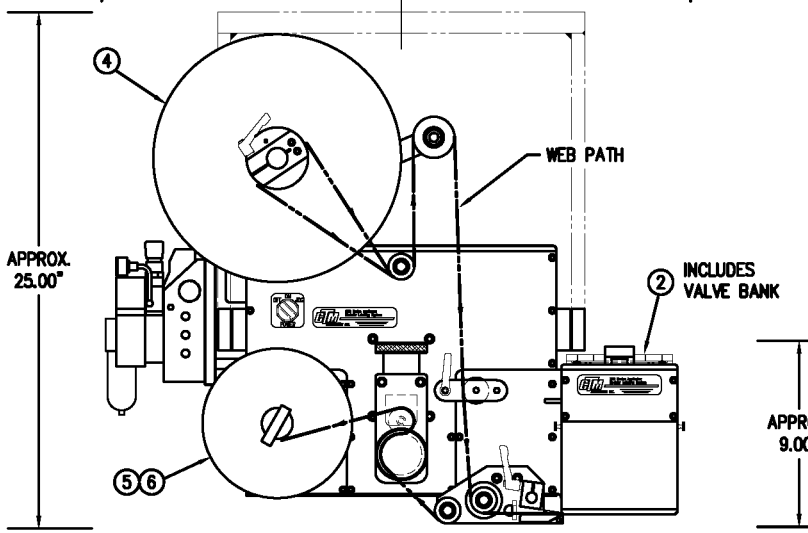
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
1	CHANGED COLLAPSIBLE RWD. MANDREL PART No. & REMOVED ASS-200-3116R/L	11/23/05	TDR

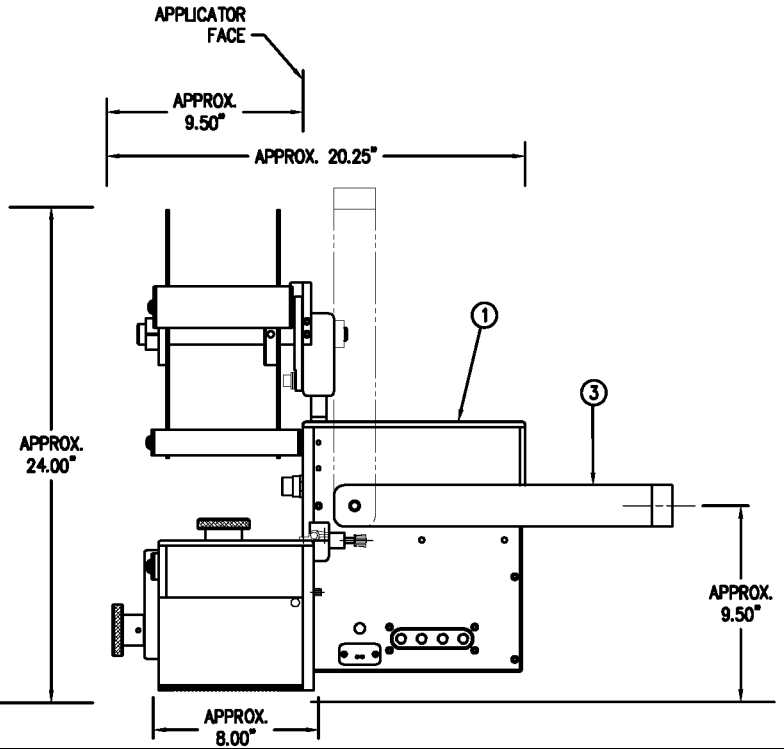
TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX

PART: 5" WIDE AIR BLOW w/ 16" UNWIND ASSEMBLY

Dept. Code 70 | Scale: 1=6 | Date: 02/26/07 | DRAWN BY: BOB S. | F:\Engineering\Standard Parts\Applicator\360 211\CTM-211a-0101RL-16X







BILL OF MATERIAL				SOLD	
ASSEMBLY		CTM-211a-0101RL-12X		S	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
①	1	5" WIDE; CORE UNIT	ASS-200a-0150R/L	.	
②	1	5" WIDE; AIR BLOW BOX NOSE MODULE	MOD-211-0101R/L	S	
③	1	U-ARM ASSEMBLY	WAS-200-0247	.	
④	1	5" WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-0121R/L	S	
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-0137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3131-5	S	← COLLAPSIBLE RWD
	1	DISPLAY UNIT	ASS-200a-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200a-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR & CABLE	ASS-200-0427	S	

CTM-211a-0101R/L-12X

STANDARD REWIND	-0101R/L-12S
COLLAPSIBLE REWIND	-0101R/L-12C
FILM REWIND	-0101R/L-12F

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

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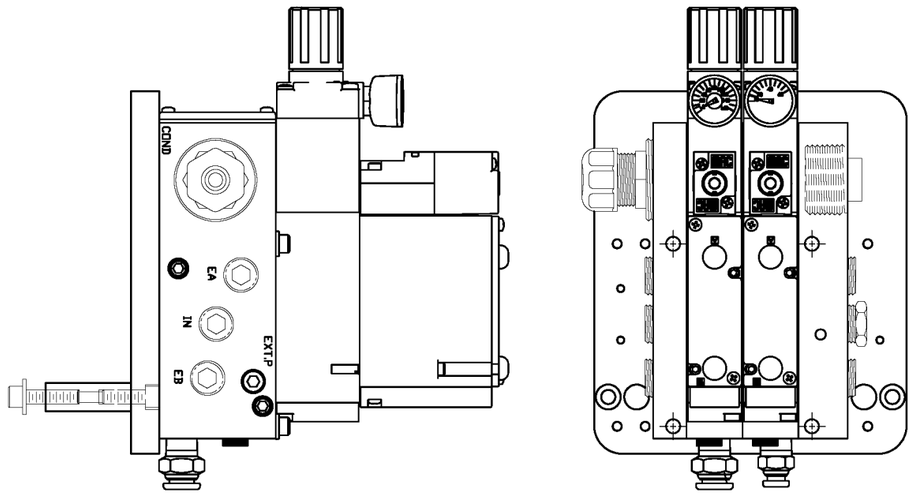
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	Dept. Code
0	DRAWING No. WAS 200-0105 & 200-0624	06/13/03	TDR	1=6	06/24/97	BOB S.	70

TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX
PART: 5" WIDE AIR BLOW w/ 12" UNWIND ASSEMBLY

F:\Engineering\Standard Parts\Applicator\360 211\CTM-211a-0101RL-12X

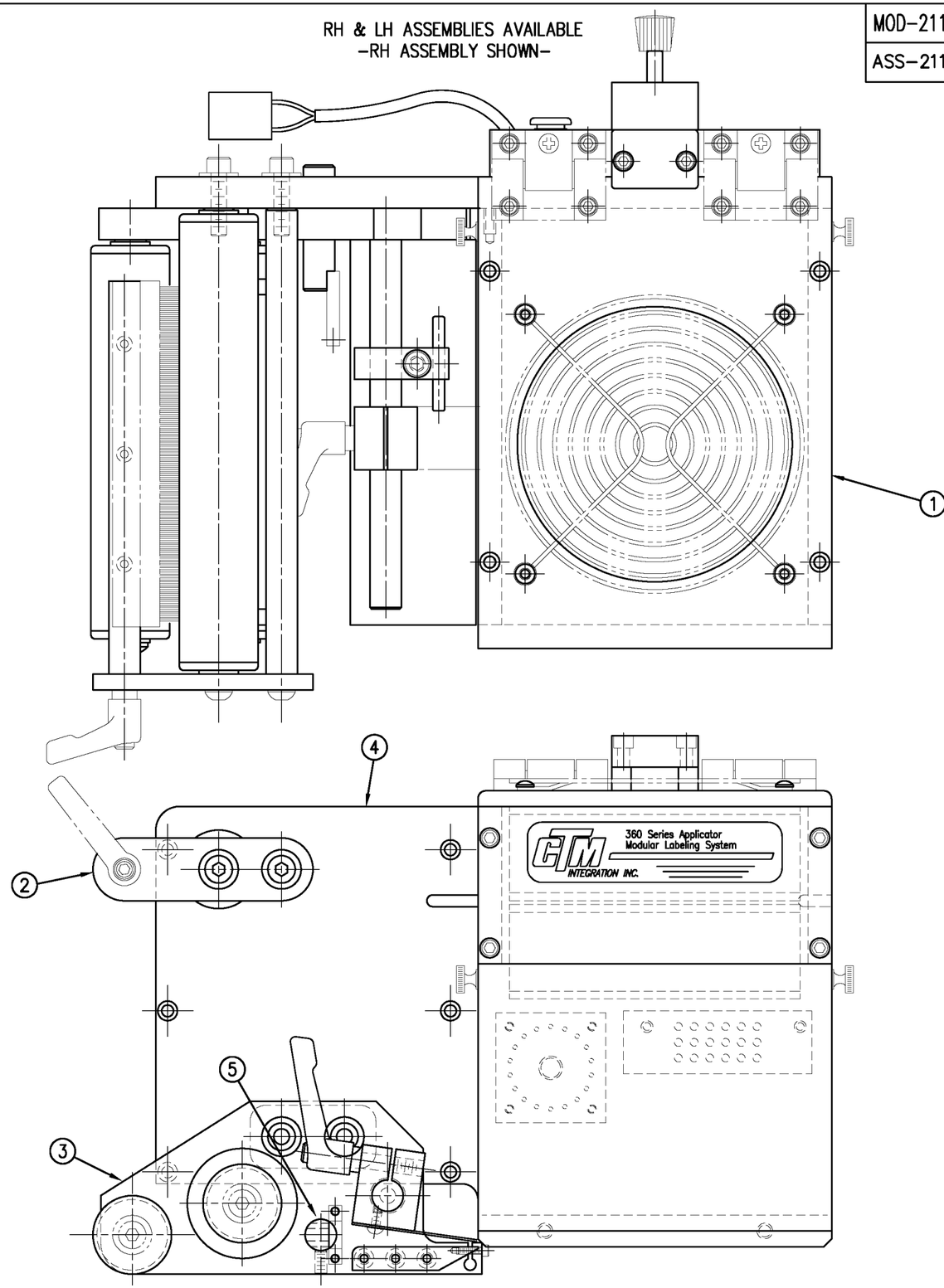
BILL OF MATERIAL			
MOD–211–0101R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS–211–0101R/L	AIR BLOW BOX w/ TRANSITION PLATE
⑥	1	ASS–211–0106M	AIR BLOW VALVE BANK ASSEMBLY (MAC)



NOT TO SCALE

⑥ VALVE BANK ASSEMBLY

RH & LH ASSEMBLIES AVAILABLE
–RH ASSEMBLY SHOWN–



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

MOD–211–0101R/L

ASS–211–0101R/L

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PART: 5" AIR BLOW BOX w/ TRANSITION PLATE

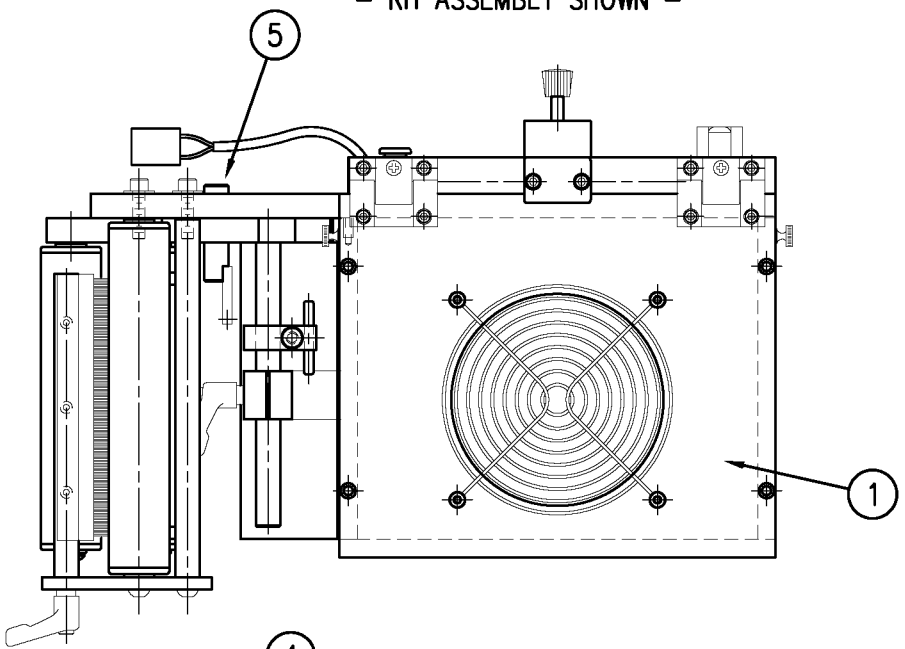
Dept. Code 70

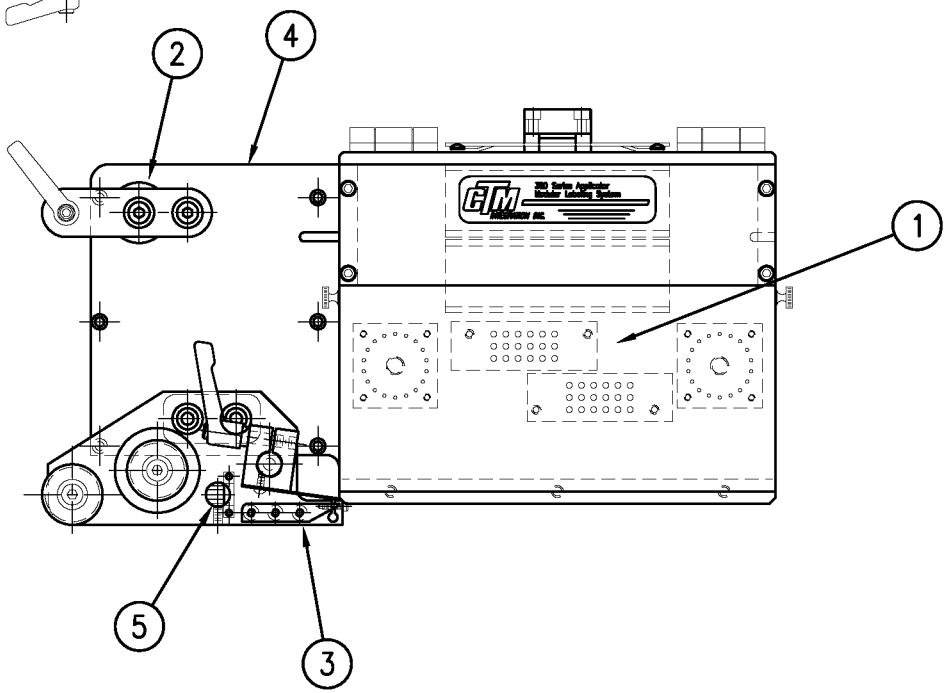
REV. BY: TDR | Scale: 1=2 | Date: 06/23/97 | DRAWN BY: BOB S. | F:\Engineering\Standard Parts\Applicator\360 211\MOD–211–0101RL

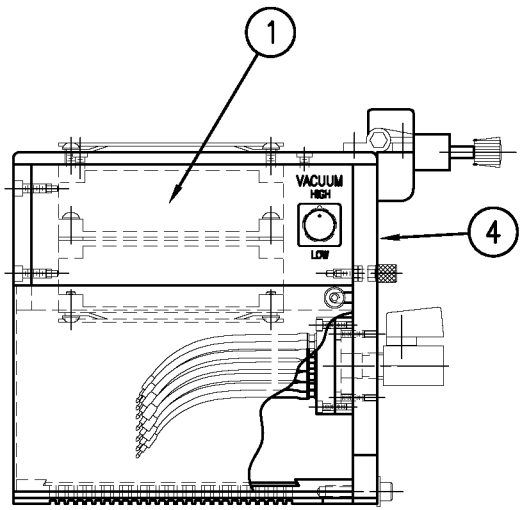
TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX

REV. | REV. DESCRIPTION | REV. DATE | REV. BY
0 | ADDED HINGED BRACKET; UPDATED TITLEBLOCK | 02/04/03 | TDR

RH & LH ASSEMBLIES AVAILABLE
– RH ASSEMBLY SHOWN –







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

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

MOD-211-0101ER/L

ASS-211-0101ER/L

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TITLE: 360 SERIES APPLICATOR: 5.5 x 9.0 AIR BLOW BOX			PART: BLOW BOX ASSEMBLY w/TRANSITION PLATE				Dept. Code 70
REV. 0	REV. DESCRIPTION –	REV. DATE –	REV. BY: XXX	Scale: 1=4	Date: 03/01/06	DRAWN BY: J. Greeneisen	F:\Engineering\Standard Parts\System Components: 360\MOD-211-0101ERL

BILL OF MATERIAL				SOLD
ASSEMBLY	ASS-211-X102R/L			S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
1	1	PEEL EDGE MOUNTING PLATE	MP-211-0212	.
2	2	5/7.5 TAMP/BLOW IDLER ROLL ASS'Y.	ASS-211-X120	S
3	2	GUIDE COLLAR w/ SET SCREW	MP-211-0210	S
4	1	SPRING BLOCK MOUNTING SHAFT	PM-211-X206	.
5	1	SPRING BLOCK ASSEMBLY	ASS-211-0105-1	S
6	1	SPRING BLOCK STOP COLLAR ASS'Y.	ASS-211-0110	S
7	1	5/7.5 WIDE BLOW/TAMP PEEL EDGE w/ UHMW TAPE	MP-211-X208	S
8	1	PEEL EDGE TIE NUT	MP-211-0207	.
9	1	5/7.5 AIR ASSIST TUBE	MP-211-X217-X	S
	2	SHCS, 1/4"-20 UNC x 1-1/4" LG.	NONE	.

RH & LH ASSY AVAILABLE
-RH ASSY SHOWN-

ASS-211-X102R/L	
5" WIDE	-0102R/L
7.5" WIDE	-2102R/L

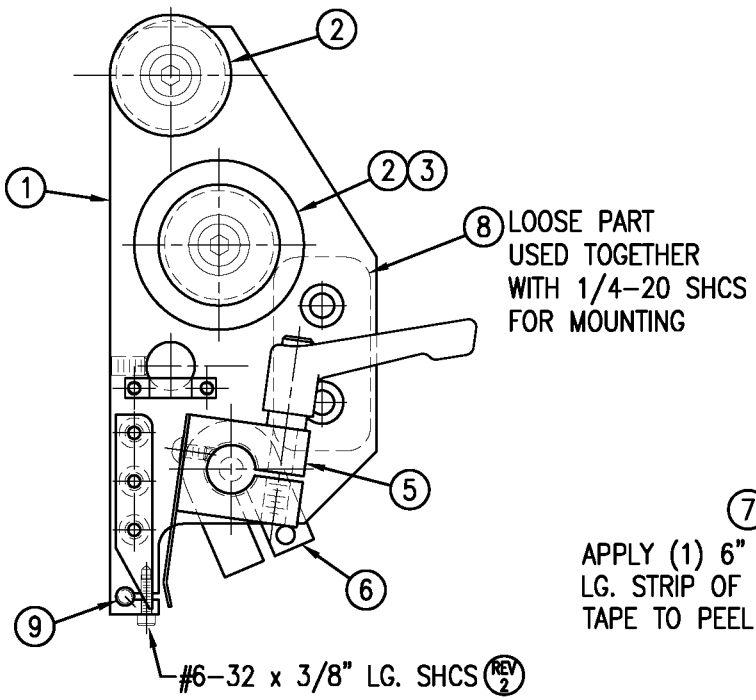
#4-40 x 3/8 LG.
BHCS - 2 PLACES

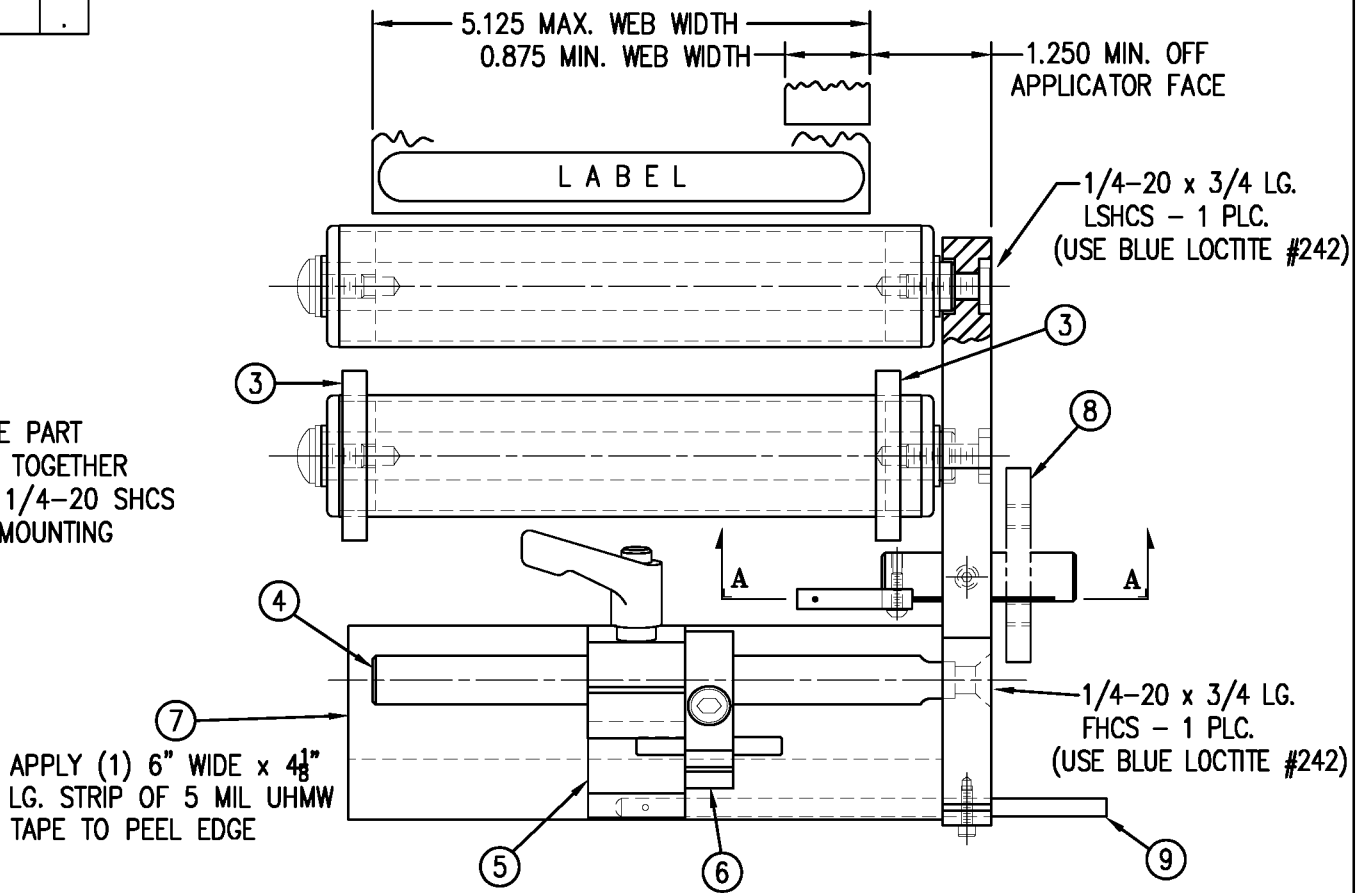
NOTE: SENSOR NOT INCLUDED IN ASS'Y

ONE OF THE FOLLOWING SENSOR OPTIONS MUST BE ORDERED IN ADDITION TO #ASS-211-X102R/L

1.) SENSOR (STD. MTG. ROD) ~ #ASS-211-0108
2.) SENSOR (EXTENDED REACH) ~ #ASS-211-0107

SECTION "A"





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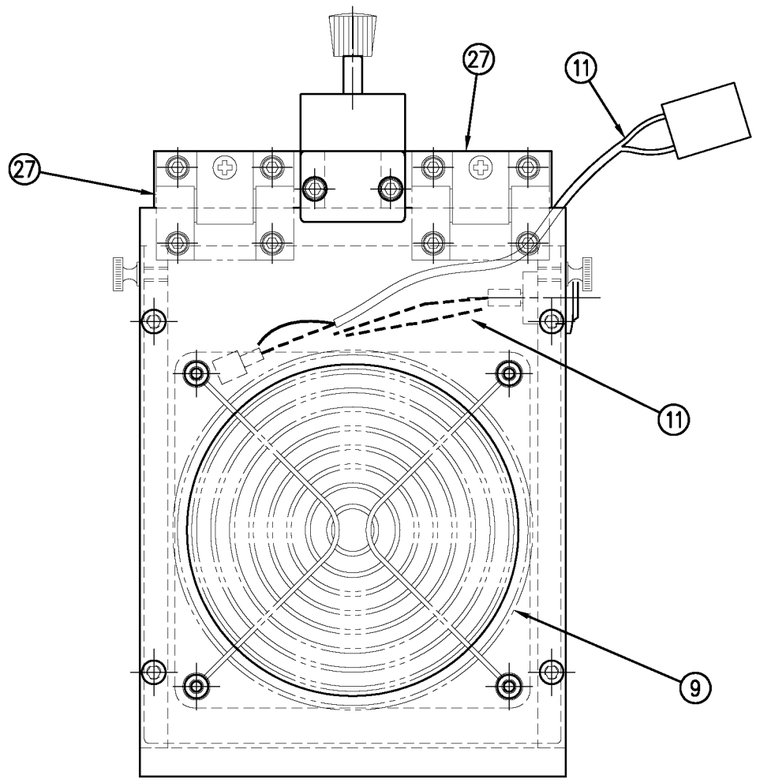
TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX/ RVB/TAMP SNORKLES	PART: 5/7.5 WIDE PEEL EDGE ASSEMBLY	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360 211\ASS-211-X102RL
3	MTG. FASTENER WAS 1" LONG	08/29/05	TDR	1=2	06/23/97	BOB S.	



BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-0104		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	FAN BOX FRONT	MP-211-0203	.
②	1	FAN BOX SIDE (SILK SCREEN)	MP-211-0202R	.
③	1	FAN BOX SIDE	MP-211-0202L	.
④	1	FAN BOX TOP	MP-211-0213	.
⑤	1	BLOW BOX GRID	MP-211-0214	.
⑥	1	BLOW BOX ACCESS DOOR	PM-211-0211	.
⑦	1	BLOW BOX TOP FAN	MP-211-0218	.
⑧	1	BLOW BOX BOTTOM FAN	MP-211-0219	.
⑨	2	FAN HOUSING GUARD	PE-FAN1080	.
⑩	1	HI/LO AIR BLOW SWITCH	PE-SW3000	.
⑪	1	BLOW BOX FAN WIRING HARNESS FOR STANDARD BLOW BOX	PE-200-0413-A	.
	1	BLOW BOX FAN WIRING HARNESS FOR 6" & 12" SNORKLES	ASS-200-0413-B	.
	1	BLOW BOX FAN WIRING HARNESS FOR 18" & 24" SNORKLES	ASS-200-0413-C	.
⑫	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	.

REV 2

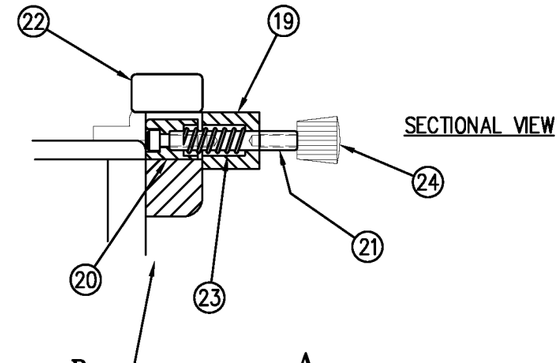
← FOR STD.

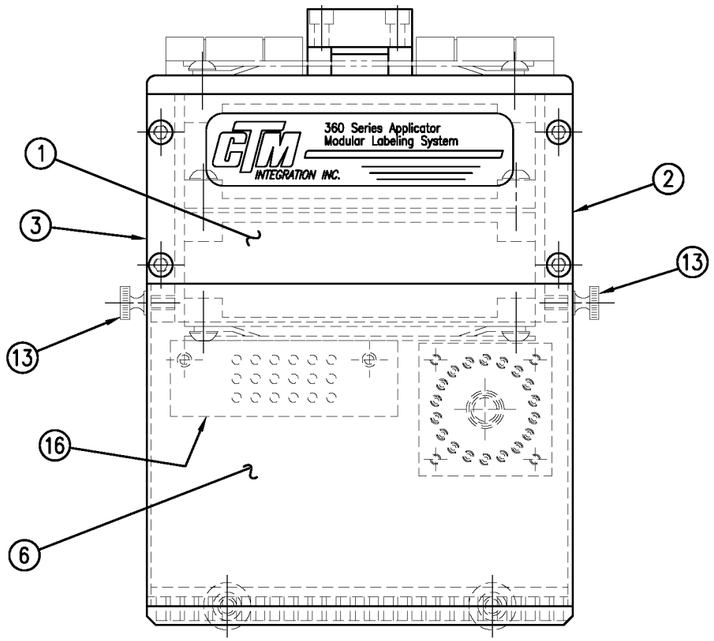
← FOR SNORKLES

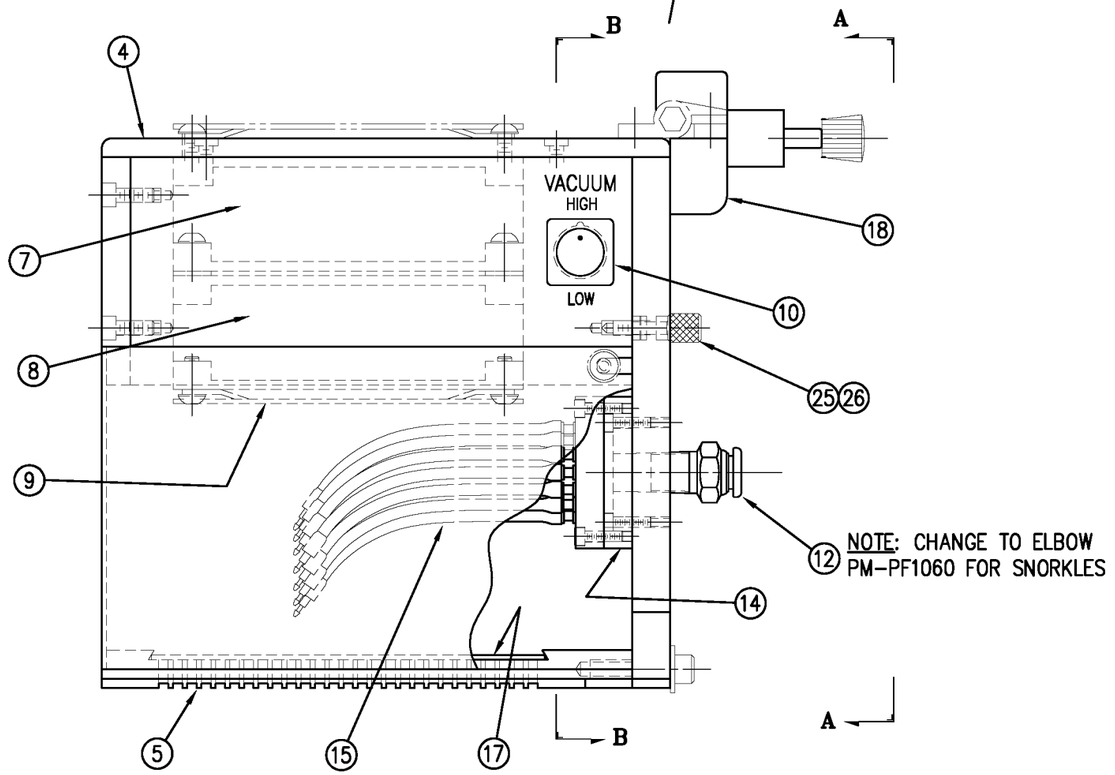
BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-211-0104 (continued)		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
⑲	1	SPRING PIN BRACKET	MP-211-0241	.
⑳	1	STOP BLOCK	MP-211-0242	.
㉑	1	SPRING PIN	MP-211-0243	.
㉒	1	STOP BLOCK	MP-211-0244	.
㉓	1	COMPRESSION SPRING	PM-FASP30430	S
㉔	1	PLASTIC KNOB	PM-HK1070	.
㉕	2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







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Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 211\ASS-211-0104-X

TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX

PART: HINGED AIR BLOW BOX

DRAWN BY: BOB S.

Date: 02/21/98

Scale: 1=2

REV. BY: TDR

REV. DATE 10/12/06

REV. DESCRIPTION

REV. 2

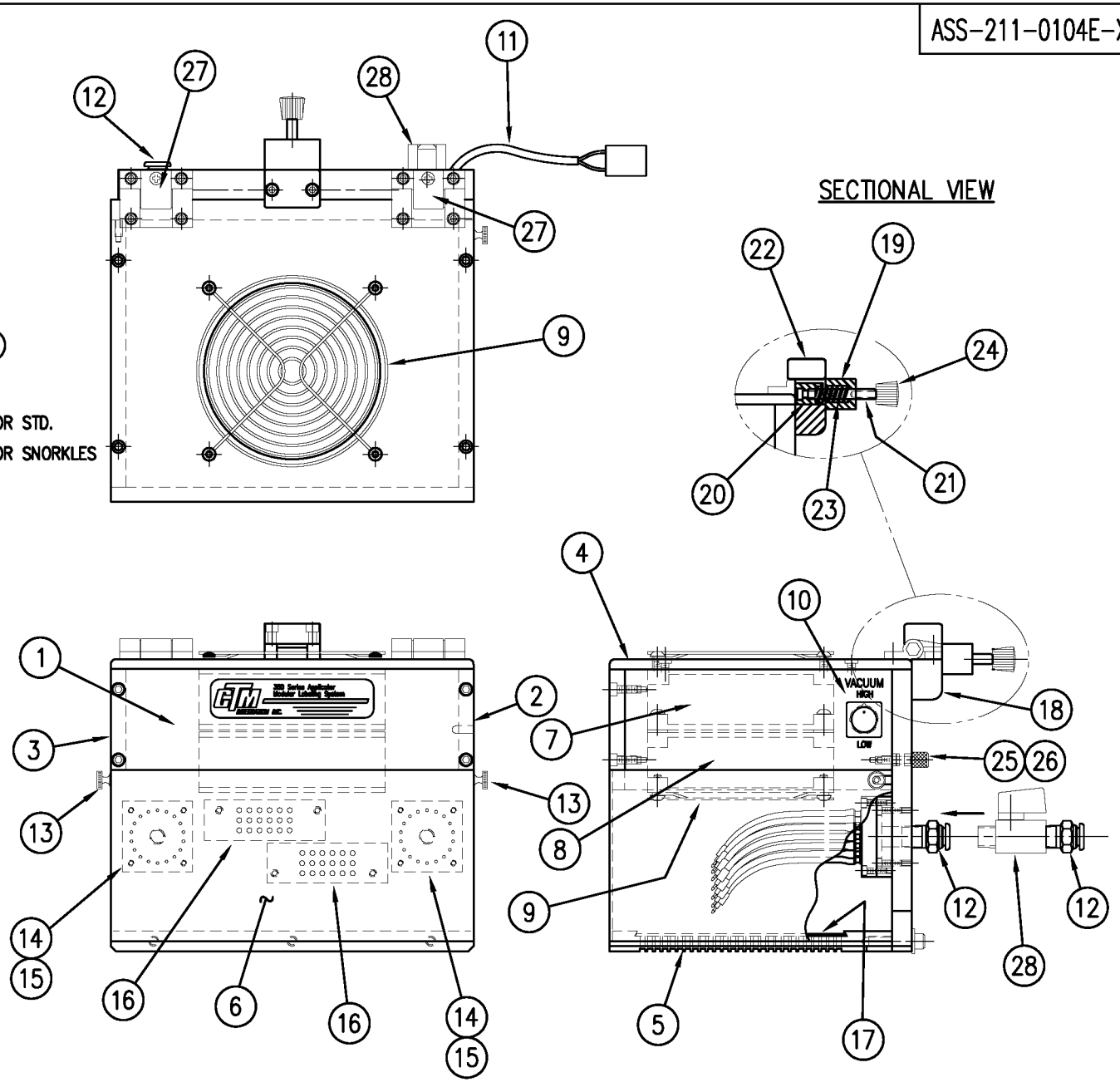
SNORKEL WIRE HARNESS NUMBERS WERE "PE"

ASS-211-0104E-X

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	.
	1	BLOW BOX FAN WIRING HARNESS FOR 6" & 12" SNORKLES	ASS-200-0413-B	. (REV 1)
	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	. —FOR STD.
	2	TUBE FTG, ELBOW (3/8 TUBE-1/4 NPT)	PM-PF1080	. —FOR SNORKLES
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	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	BALL VALVE, 1/4 NPT (MALE-FEMALE)	PM-FT1500	.
	1	WARNING LABEL	PM-WL1220	.

NOTE: TUBE HOLDERS SHOWN IN RH LAYOUT



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TITLE: 360 SERIES APPLICATOR: 5.5 x 9 AIR BLOW BOX	PART: BLOW BOX ASSEMBLY w/TRANSITION PLATE	Dept. Code 70

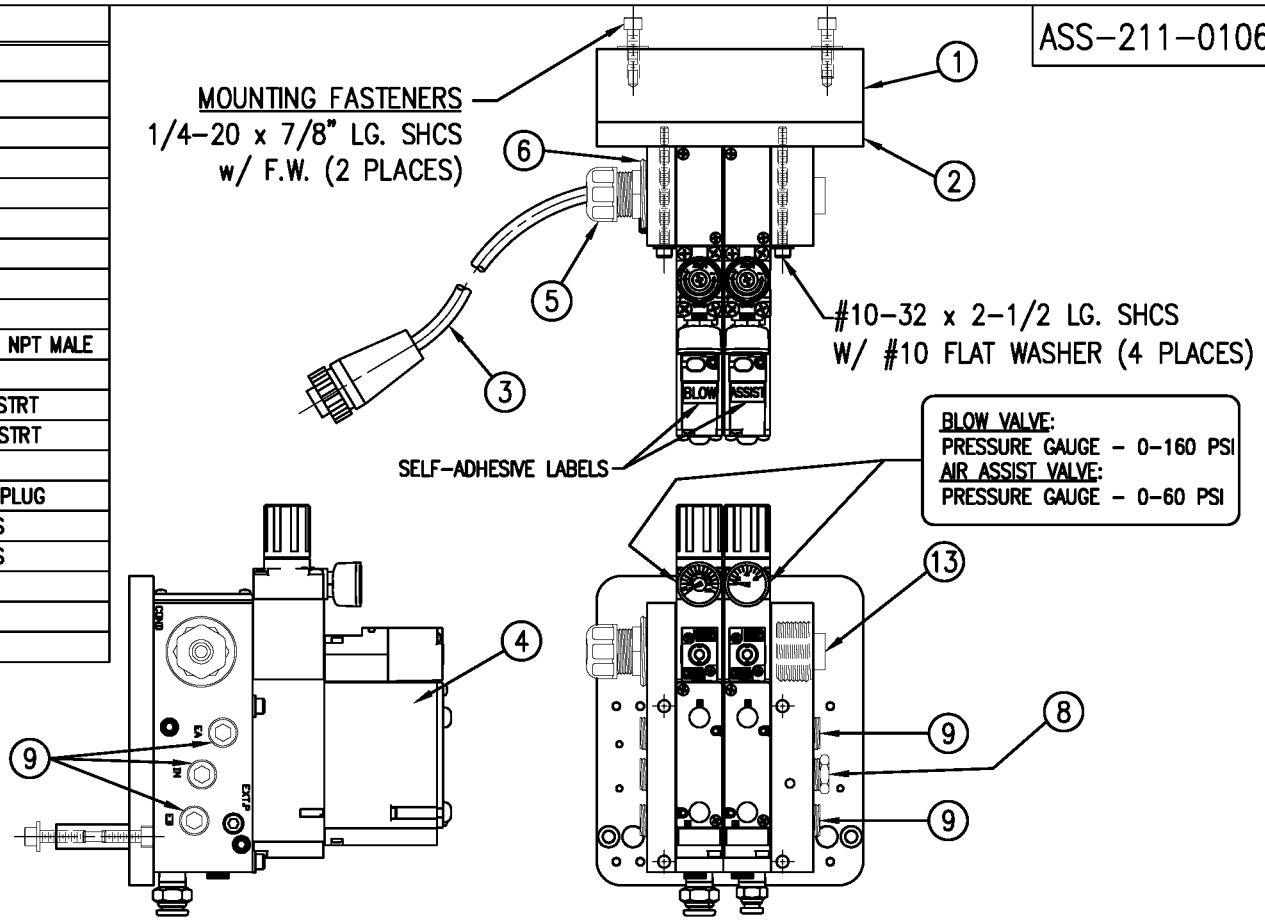
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\System Components:
2	ITEM #12 QUANTITY WAS 1; ITEM #15 NOW FOR EXT. BOX	03/22/07	TDR	1=4	03/01/06	J. Greeneisen	360\ASS-211-0104E-X

BILL OF MATERIAL

ASS-211-0106M

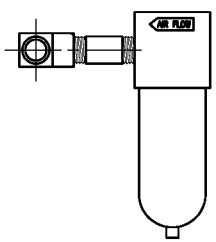
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0202	VALVE FASTENING PLATE
②	1	MP-214-0206	VALVE MOUNTING PLATE
③	1	PE-200-0405	VALVE CABLE
④	1	PM-VA2356M	2 STATION MAC VALVE BANK
⑤	1	PE-CO2000	CORD GRIP
⑥	1	PE-COND1084	STEEL REDUCER
⑦	2	PM-FT1200	1/4" NPT PLUG
⑧	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑨	5	PM-PF1167	3/8" NPT SOCKET HEAD PLUG
⑩	1	PM-PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
⑪	1	PM-PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
⑫	1	ASS-214-0106	AIR FILTER ASSEMBLY
⑬	1	PE-EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
◯	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

ASS-211-0106M



VALVE BANK SPARE PARTS:

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



⑫ AIR FILTER
SHIP LOOSE
-CUSTOMER TO INSTALL -

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APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:	TITLE:	Dept. Code
360	5"/7.5"/10"	VALVE BANKS	AIR BLOW 2 STATION VALVE BANK ASSEMBLY with FILTER	70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360\
0	-	-	XXX	1=4	04/03/07	E. SANOR	360\ASS-211-0106M

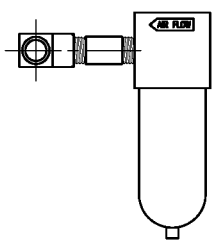
BILL OF MATERIAL

ASS-211-0106EM

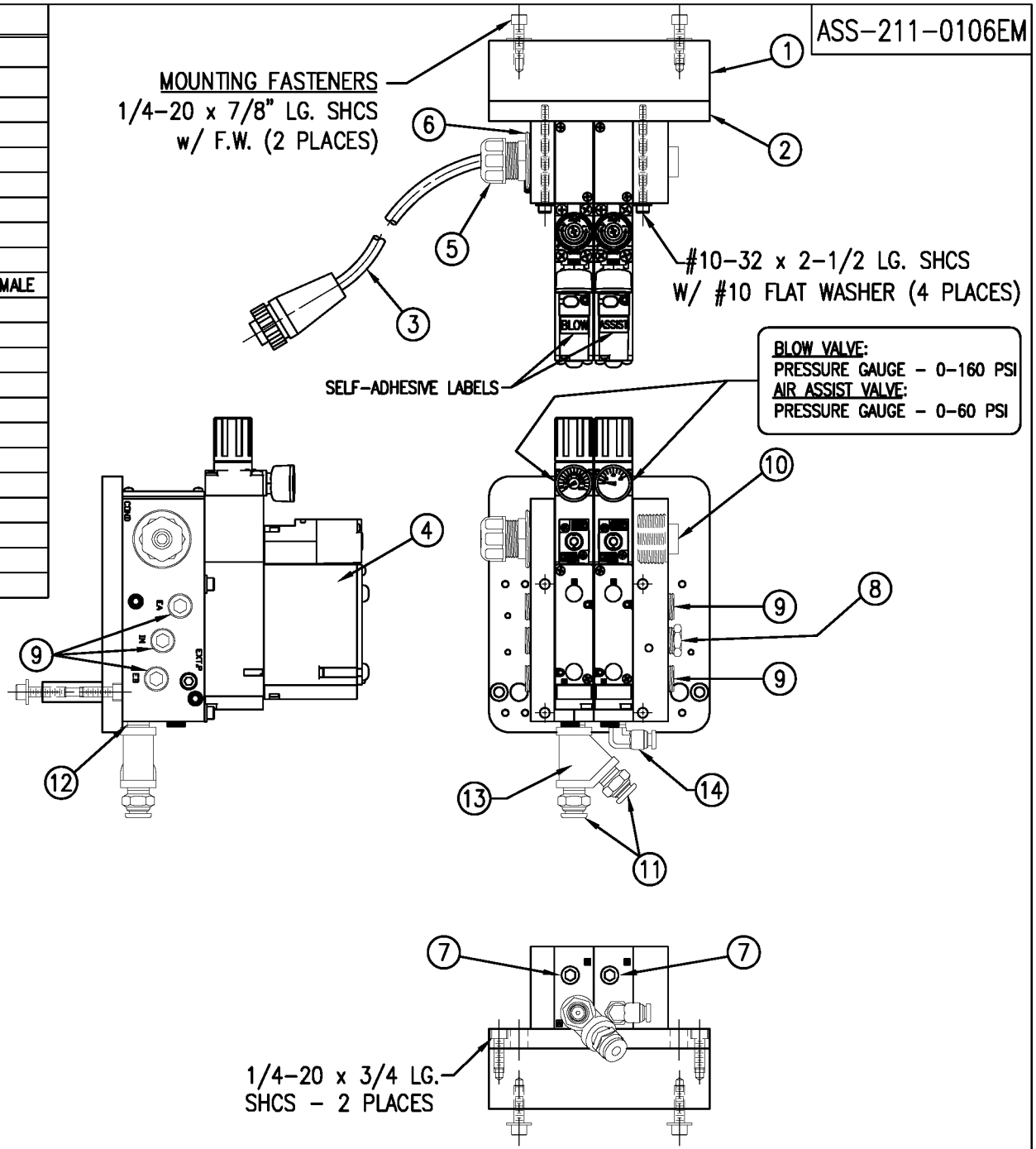
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0202	VALVE FASTENING PLATE
②	1	MP-214-0206	VALVE MOUNTING PLATE
③	1	PE-200-0405	VALVE CABLE
④	1	PM-VA2356M	2 STATION MAC VALVE BANK
⑤	1	PE-CO2000	CORD GRIP
⑥	1	PE-COND1084	STEEL REDUCER
⑦	2	PM-FT1200	1/4" NPT PLUG
⑧	1	PM-PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑨	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
◯	2	PM-FASH430079	1/4"-20 UNC x 7/8" LG. SS SHCS
◯	2	PM-FASH430078	1/4"-20 UNC x 3/4" LG. SS SHCS
◯	2	PM-FAW30275	1/4" SS FLAT WASHER
◯	4	PM-FASH429088	10-32 X 2 1/2" LG. SS SHCS
◯	4	PM-FAW30265	#10 SS FLAT WASHER

VALVE BANK SPARE PARTS:

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



⑮ AIR FILTER
SHIP LOOSE
-CUSTOMER TO INSTALL -



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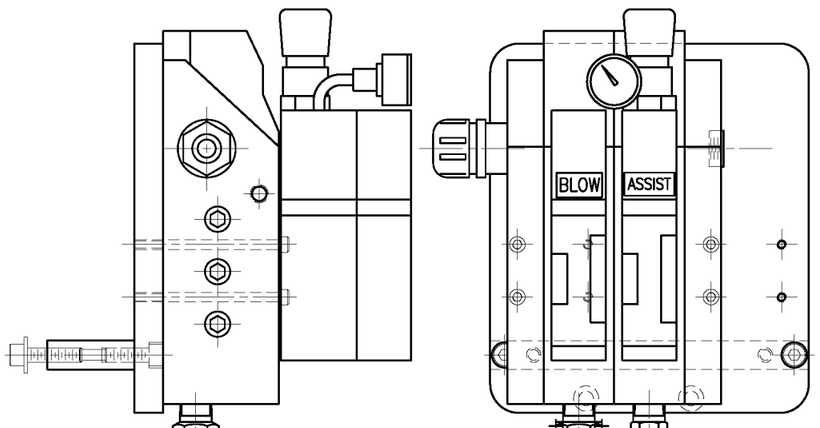
APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:	TITLE:	Dept. Code
360	5"/7.5"/10"	VALVE BANKS	EXTENDED AIR BLOW 2 STATION VALVE BANK ASSEMBLY with FILTER	70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360\
0	-	-	XXX	1=4	04/09/07	E. SANOR	360\ASS-211-0106EM

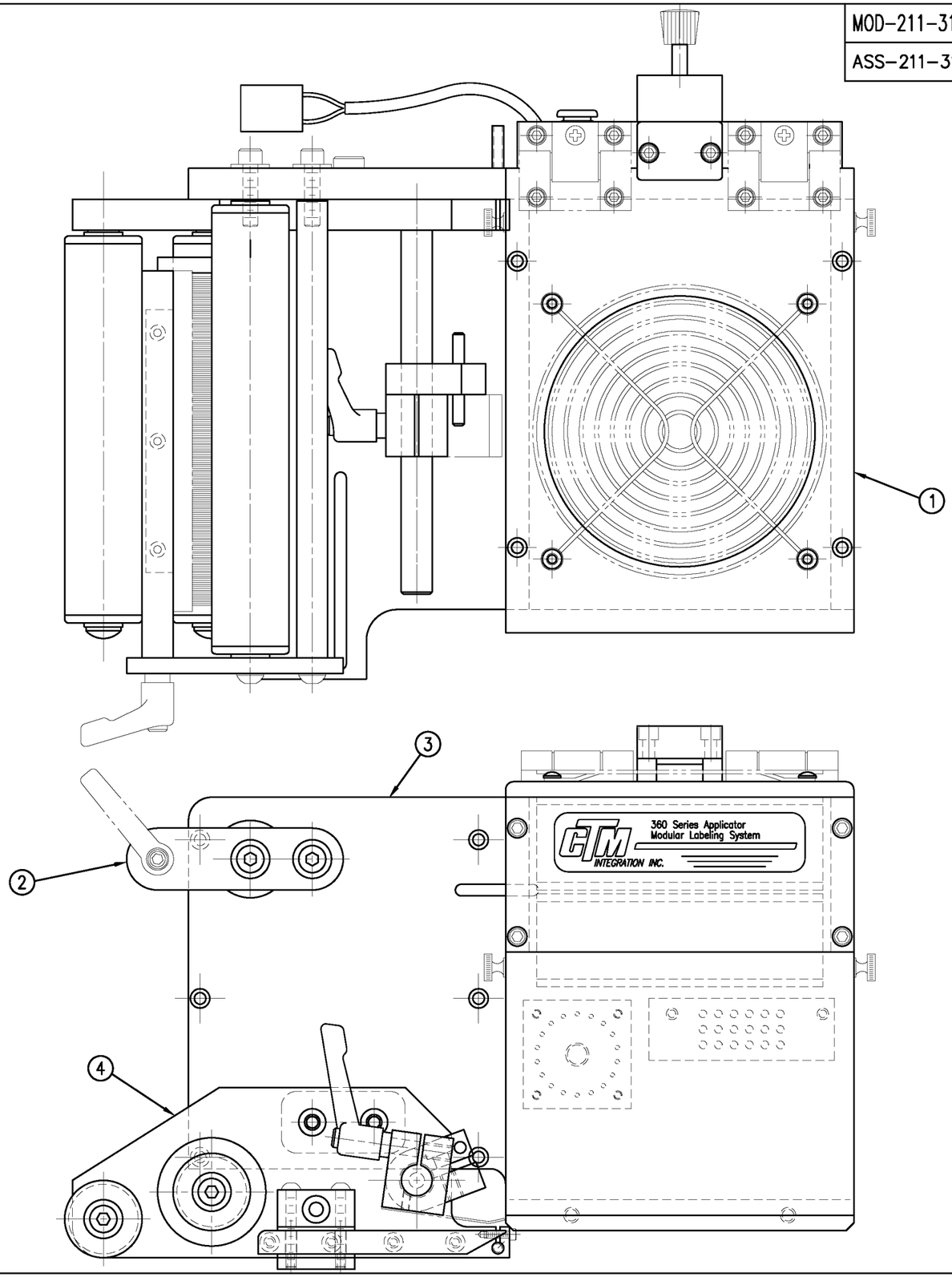
BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-211-3101R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	BLOW BOX ASS'Y w/ TRANSITION PLATE	ASS-211-3101R/L	S
⑤	1	AIR BLOW VALVE BANK ASSEMBLY	ASS-211-0106	S
	1	FTG, 1/4" TUBE to 1/4" NPT	PM-PF1010	.
	2	FTG, 3/8" TUBE to 1/4" NPT MALE	PM-PF1020	.
	1	BUSHING,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

ORDER CLEAR LABEL SENSOR SEPARATELY
#PE-SE2000 ~ FOR LRD2100
#PE-SE2050 ~ FOR LRD6110

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



⑤ VALVE BANK ASSEMBLY
SCALE: 8"=1'-0"



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

ORDER CLEAR LABEL SENSOR SEPARATELY
#PE-SE2000 ~ FOR LRD2100
#PE-SE2050 ~ FOR LRD6110

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

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TITLE: 360 SERIES APPLICATOR: AIR BLOW BOX: OPTIONS
PART: 5" WIDE/RH/AIR BLOW CLEAR LABEL SENSING
Dept. Code 70
F:\Engineering\Standard Parts\Applicator\360
DRAWN BY:
Date:
Scale:
REV. BY:
REV. DATE
REV. DESCRIPTION
REV.

BILL OF MATERIAL

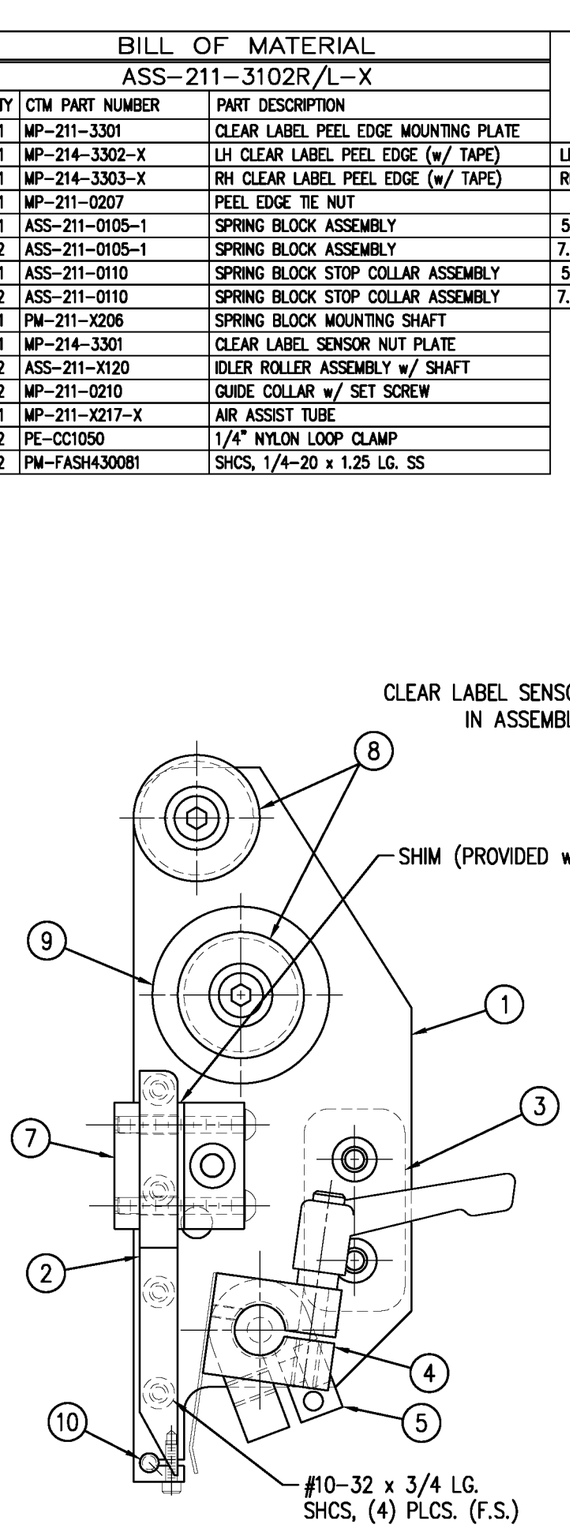
ASS-211-3102R/L-X

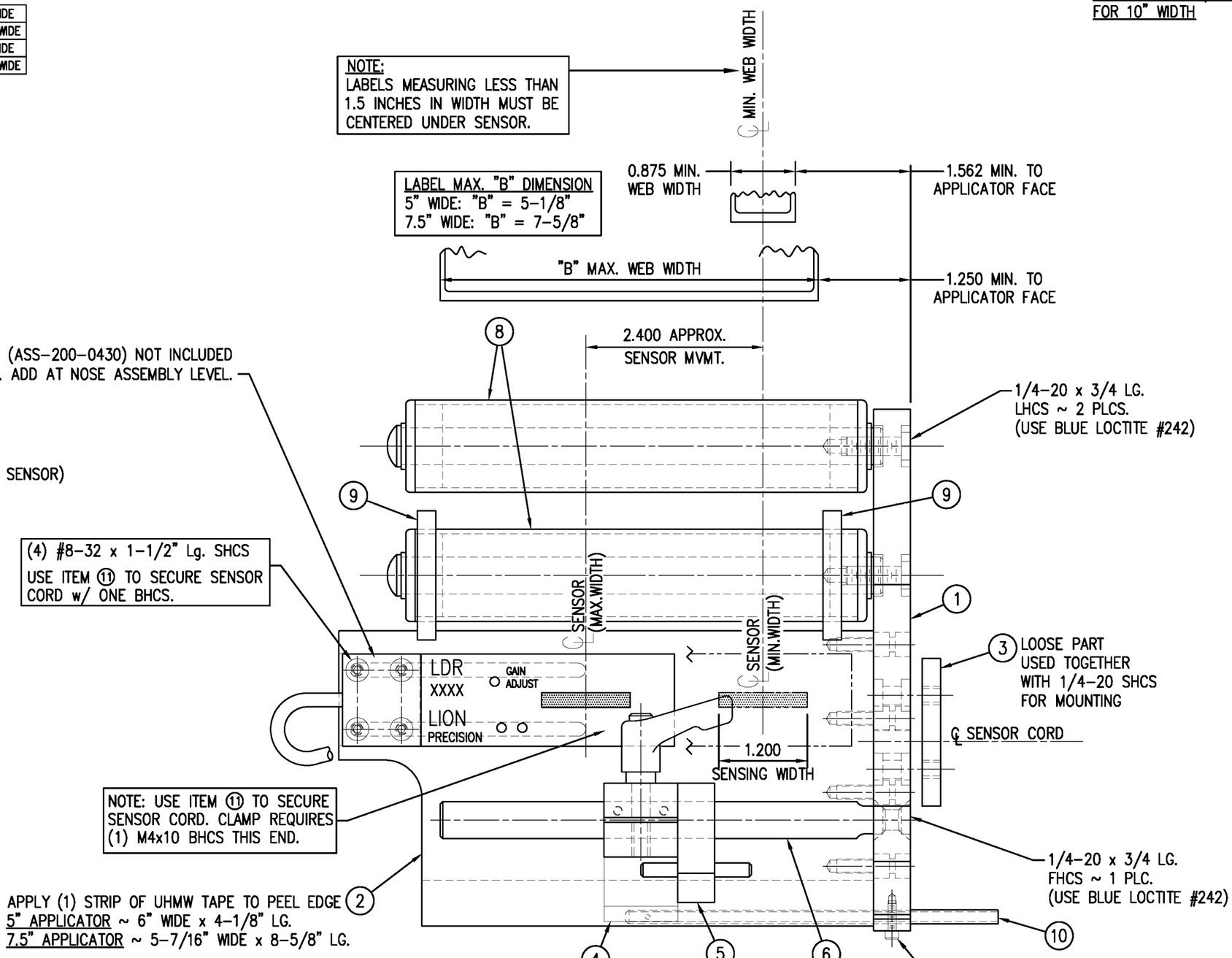
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	MP-211-3301	CLEAR LABEL PEEL EDGE MOUNTING PLATE	
②	1	MP-214-3302-X	LH CLEAR LABEL PEEL EDGE (w/ TAPE)	LH
	1	MP-214-3303-X	RH CLEAR LABEL PEEL EDGE (w/ TAPE)	RH
③	1	MP-211-0207	PEEL EDGE TIE NUT	
④	1	ASS-211-0105-1	SPRING BLOCK ASSEMBLY	5 WIDE
	2	ASS-211-0105-1	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	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	

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





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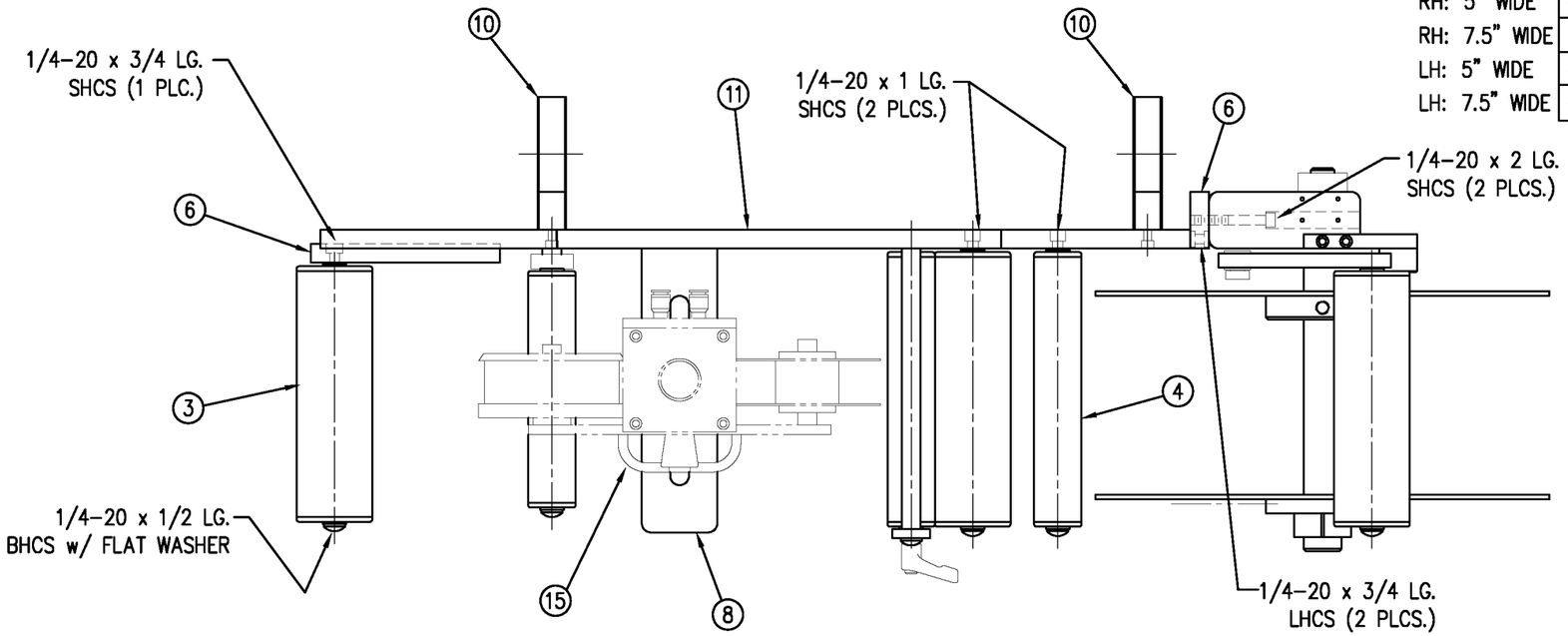
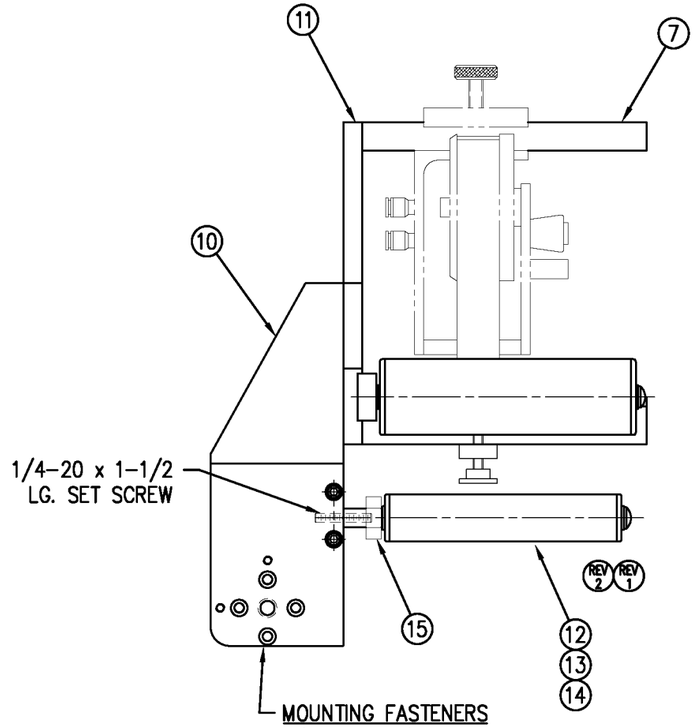
APPLICATOR SERIES: 360	APPLICATOR SERIES: 5"/7.5"	GROUP: AIR BLOW/RVB/TAMP SNORKEL	TITLE: CLEAR LABEL PEEL EDGE ASSEMBLY	Dept. Code 70	F:\Engineering\Standard Parts\Applicator\360\Shared Parts\PEEL EDGE\ASS-211-3102RL-X
REV. 6	REV. DESCRIPTION REMOVED LRD 2100 CLEAR LABEL SENSOR	REV. DATE 01/23/08	REV. BY: TDR	Date: 09/15/98	DRAWN BY: BOB S.
				Scale: 1=1.5	

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-200-4101R/L-X-12		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5"/7.5" WIDE; 12" UNWIND ASSY (MINUS MP-200-0209)	MOD-200-X121R/L	S
②	1	5"/7.5" TENSION BRUSH ASSEMBLY	ASS-200-X126R/L	S
③	1	5"/7.5" DANCER ROLLER ASSEMBLY	ASS-200-X131	S
④	1	5"/7.5" TENSION ROLLER ASSEMBLY	ASS-200-X135	S
⑤	1	5"/7.5" IMPRINTER GUIDE ROLLER ASSY	ASS-200-4104-X	S
⑥	1	UNWIND MOUNTING PLATE	MP-200-4201	
⑦	1	REGISTRATION ROLLER SLIDE PLATE	MP-200-4202	
⑧	1	IMPRINTER MOUNTING BAR	MP-200-4203	
⑨	1	IMPRESSION MOUNTING BAR	MP-200-4204	
⑩	2	IMPRINTER ASSY SUPPORT ARM	MP-200-4207	
⑪	1	IMPRINTER FACEPLATE	MP-200-4208	
⑫	1	5"/7.5" IDLER ROLLER	MP-211-X209	
⑬	1	5"/7.5" TENSION ROLLER SHAFT	PM-200-X254	
⑭	2	ROLLER CAP	PM-200-0295-1.25	
⑮	1	1/2" ID LOCK COLLAR	PM-C01005	
	8	SHCS, 1/4-20 x 7/8" Lg.	PM-FASH430079	

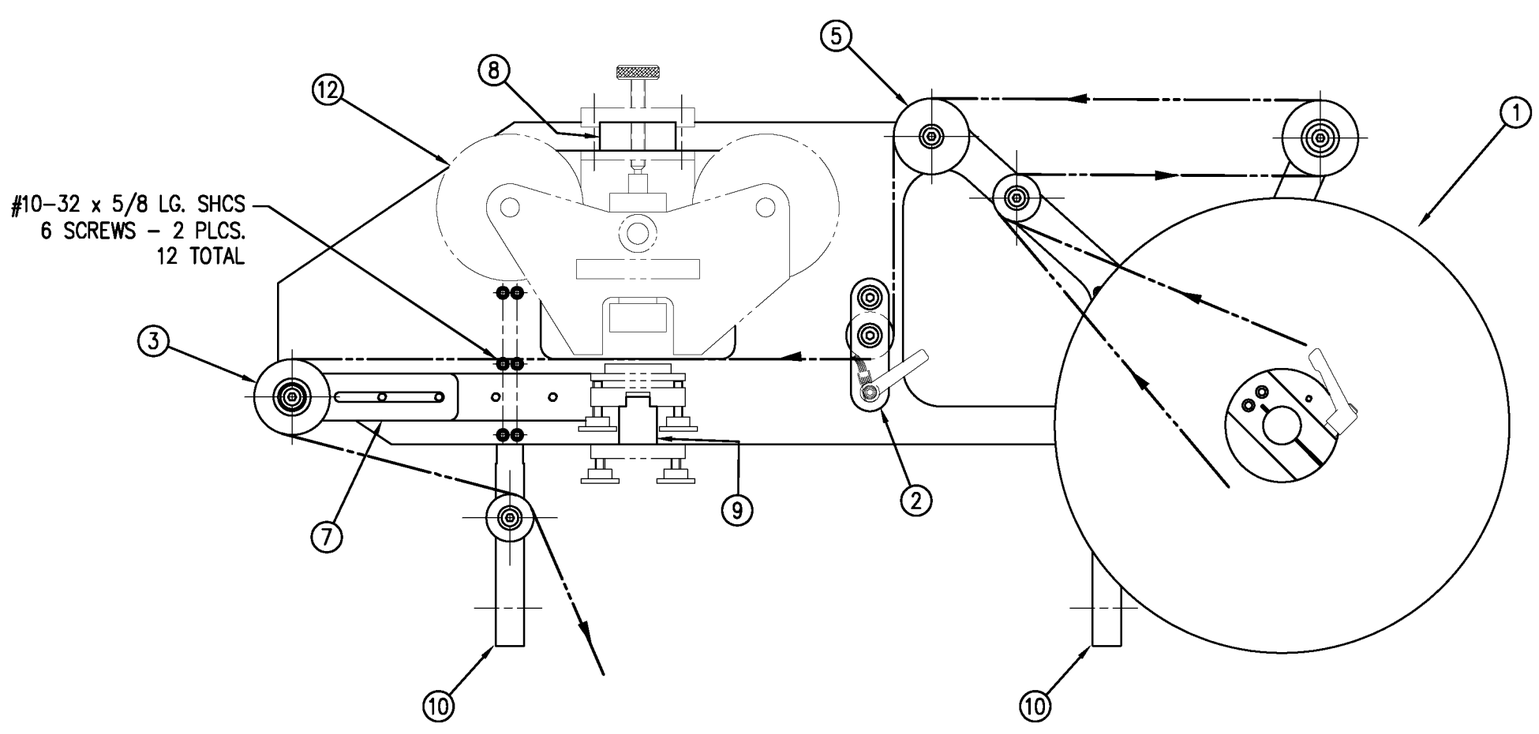
RH & LH ASSEMBLIES AVAILABLE
-LH ASSEMBLY SHOWN-

ASS-200-4101R/L-X-12	
RH: 5" WIDE	-4101R-5-12
RH: 7.5" WIDE	-4101R-7-12
LH: 5" WIDE	-4101L-5-12
LH: 7.5" WIDE	-4101L-7-12





MOUNTING FASTENERS
1/4-20 x 7/8 LG.
4 PLCS (N.S.)~ 4 PLCS (F.S.)
8 PLACES TOTAL



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TITLE: 360 SERIES APPLICATOR: GOTTSCHO IMPRINTER

PART: IMPRINTER ASSEMBLY w/ 12" UNWIND

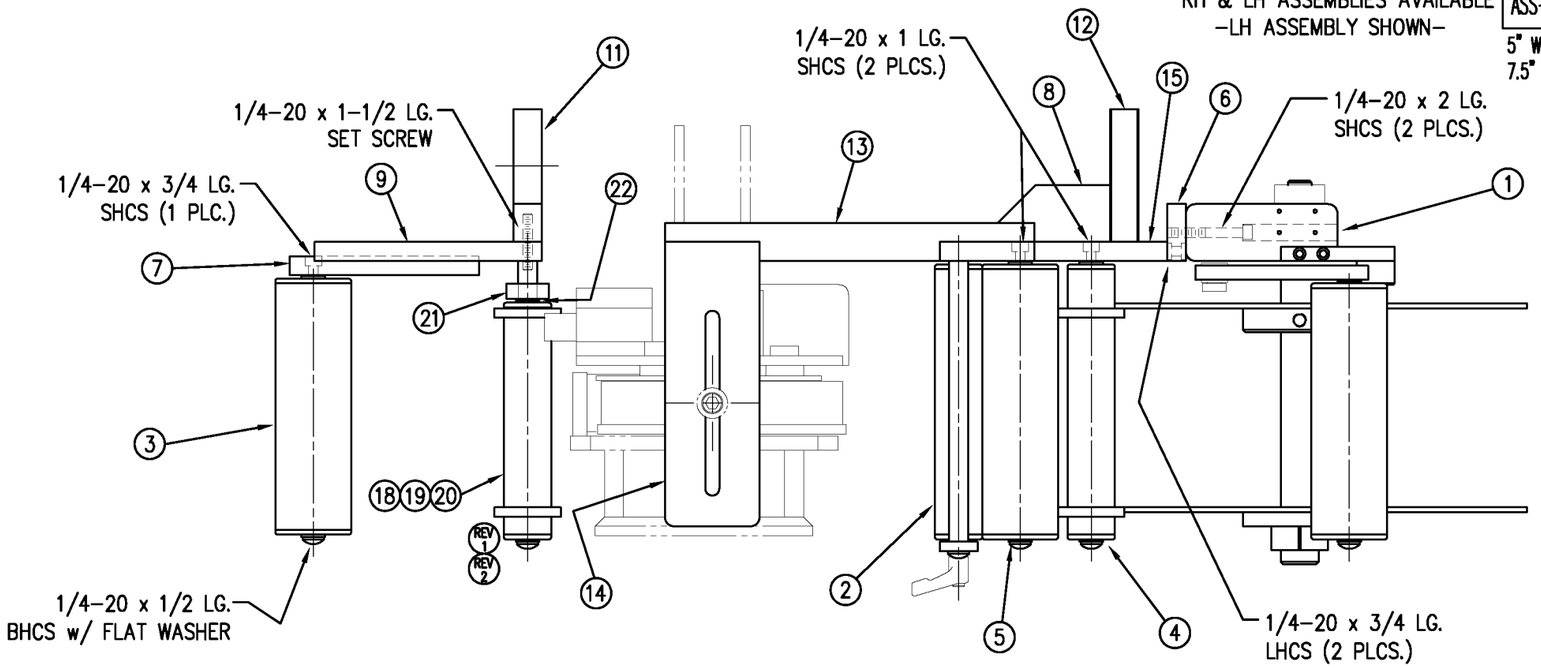
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
4	UPDATED B.O.M.	12/09/05	TDR

Scale:	Date:	DRAWN BY:
1=4	09/15/99	BOB S.

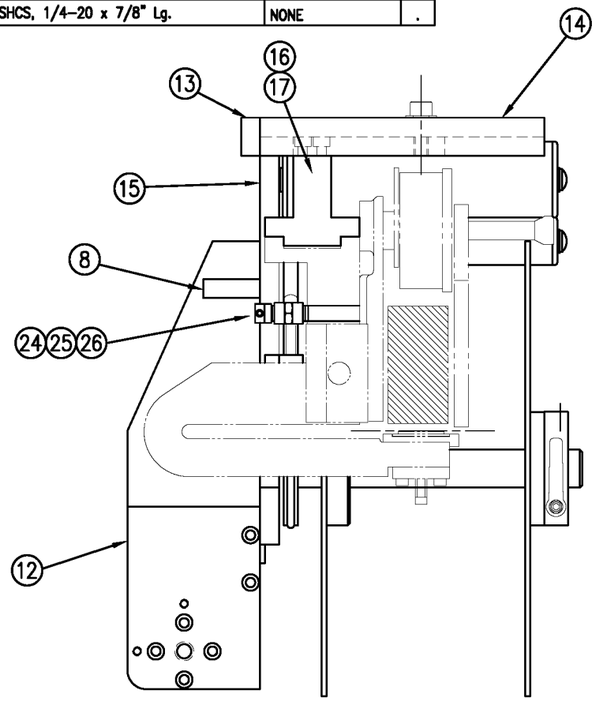
Dept. Code 70

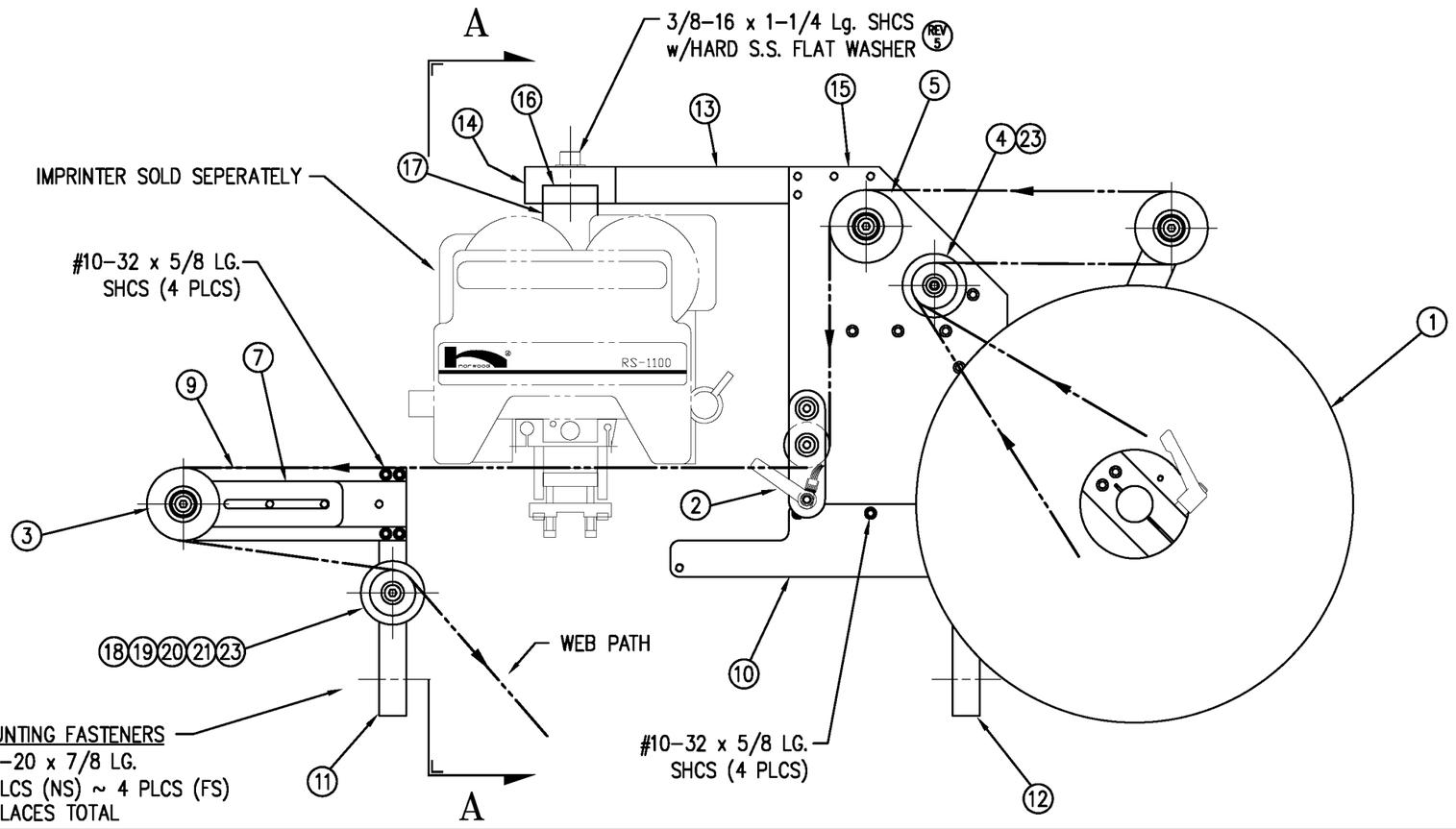
F:\Engineering\Standard Parts\Applicator\360 200\ASS-200-4101RL-X-12

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



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





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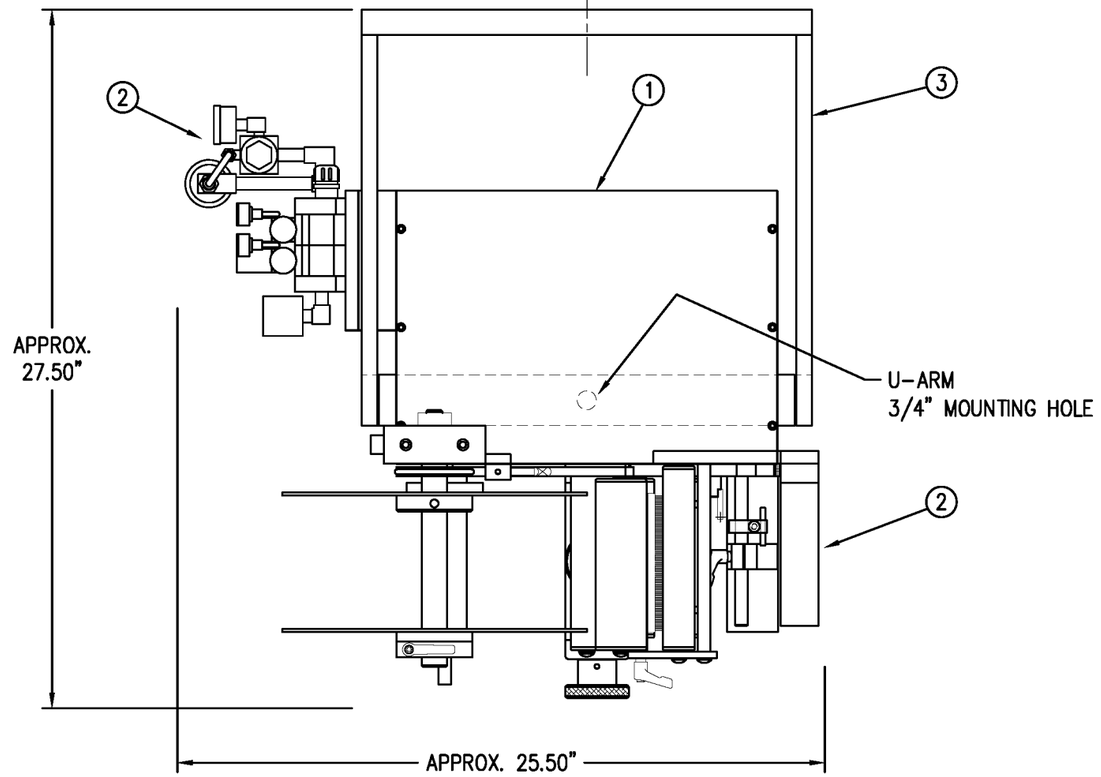
TITLE: 360 SERIES APPLICATOR: NOR-WOOD IMPRINTER

PART: 5"/7.5" WIDE IMPRINTER ASSEMBLY

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	Dept. Code
6	ADDED ITEMS 22 THRU 26	10/18/07	TDR	1=4	09/15/99	BOB S.	70

F:\Engineering\Standard Parts\Applicator\360 200\ASS-200-4102RL-X-12



BILL OF MATERIAL				SOLD	
ASSEMBLY		CTM-211a-0111RL-12X		S	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
①	1	5" WIDE; CORE UNIT	ASS-200a-0150R/L	.	
②	1	5" WIDE; RVB NOSE MODULE	MOD-211-0111R/L	S	
③	1	U-ARM ASSEMBLY	WAS-200-0247	.	
④	1	5" WIDE; 12" UNWIND ASSY	MOD-200-0121R/L	S	
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-0137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3131-5	S	← COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200a-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200a-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR & CABLE	ASS-200-0427	S	

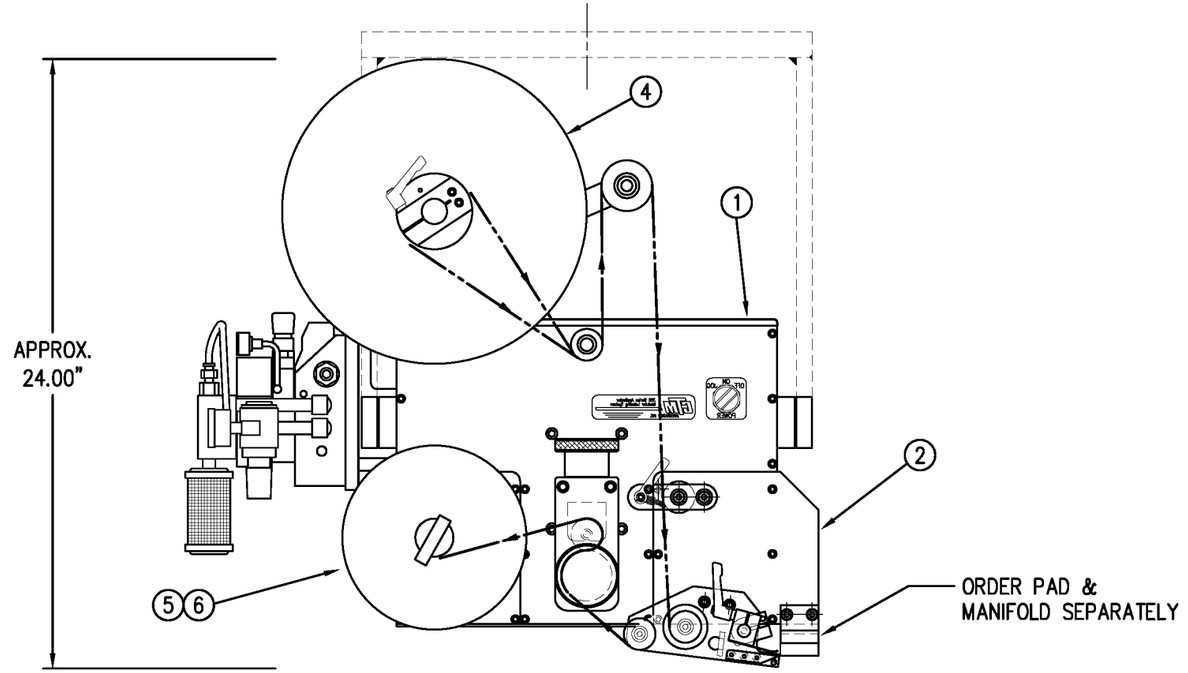
NOTE:
PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY. (FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)

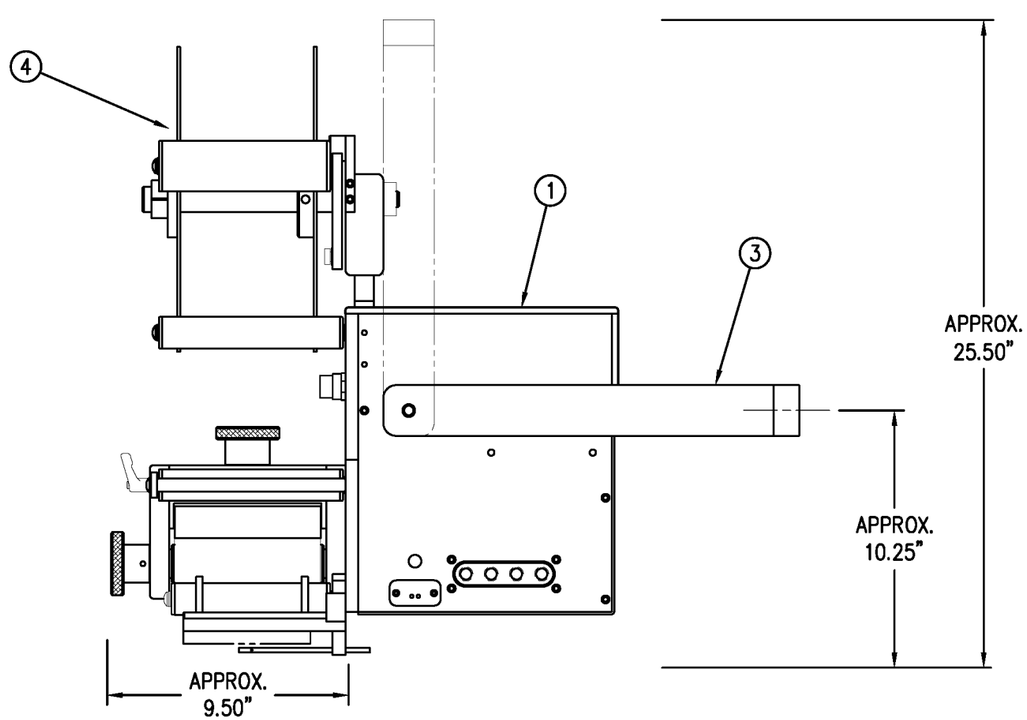
MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS. OTHER SIZES ARE CUSTOM.

CTM-211a-0111R/L-12X

STANDARD REWIND	-0111RL-12S
COLLAPSIBLE REWIND	-0111RL-12C
FILM REWIND	-0111RL-12F

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-





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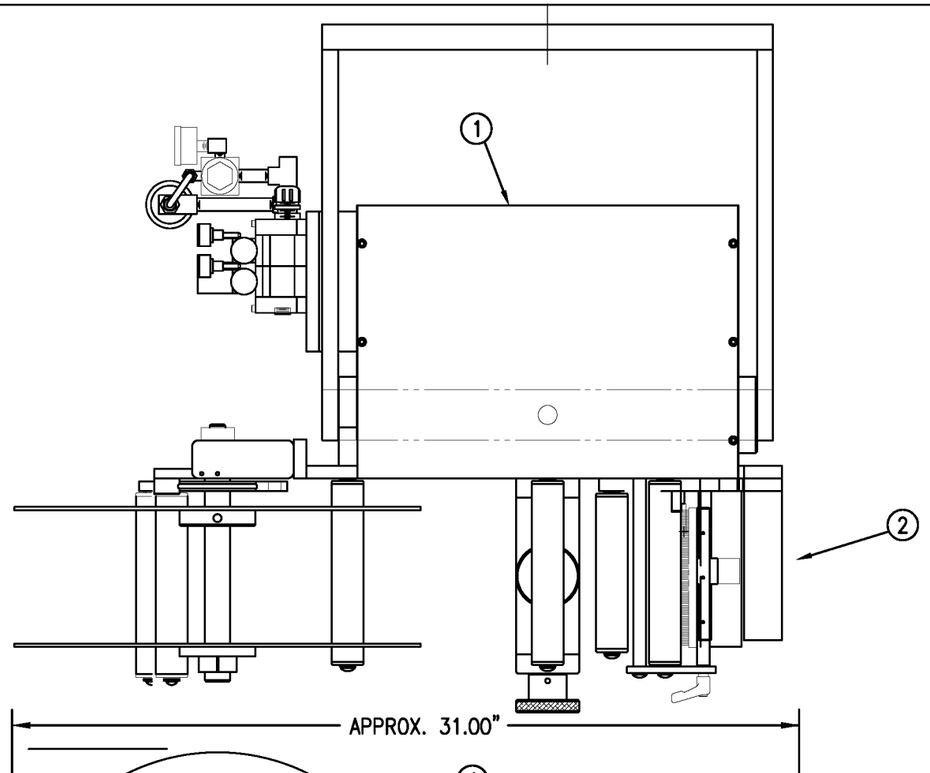
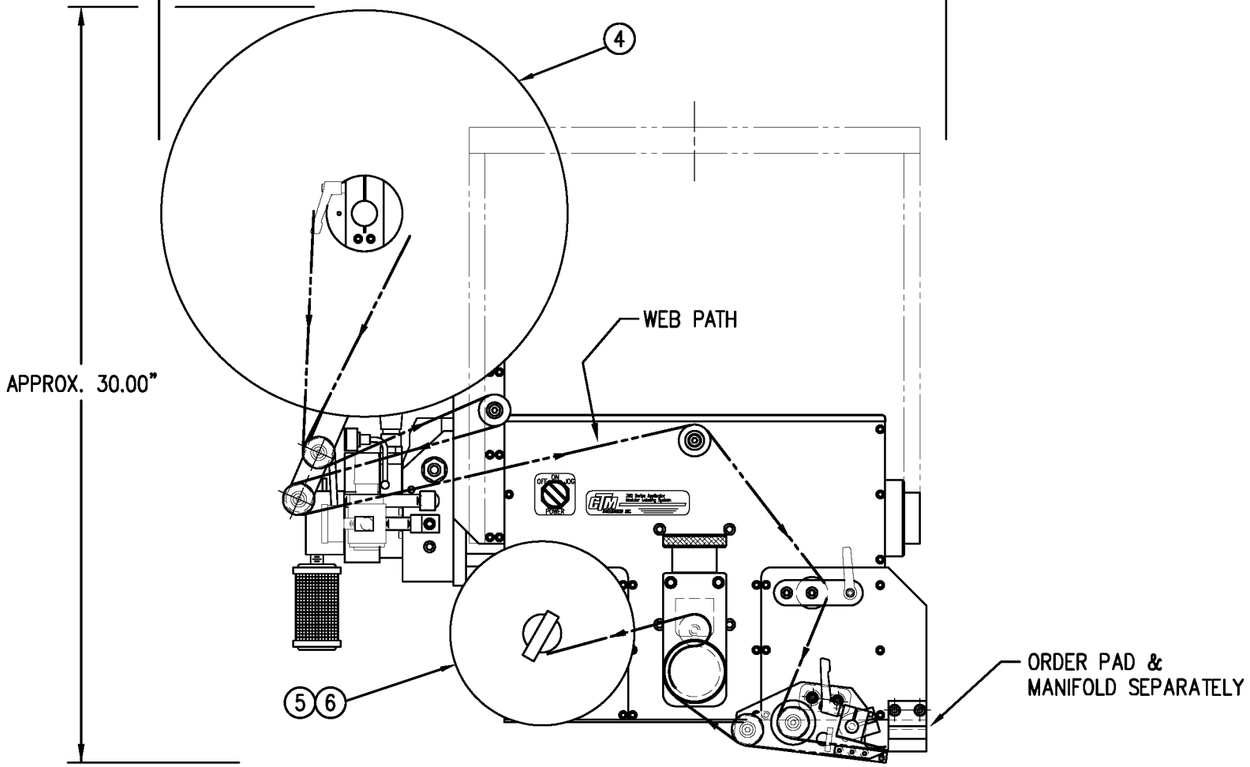
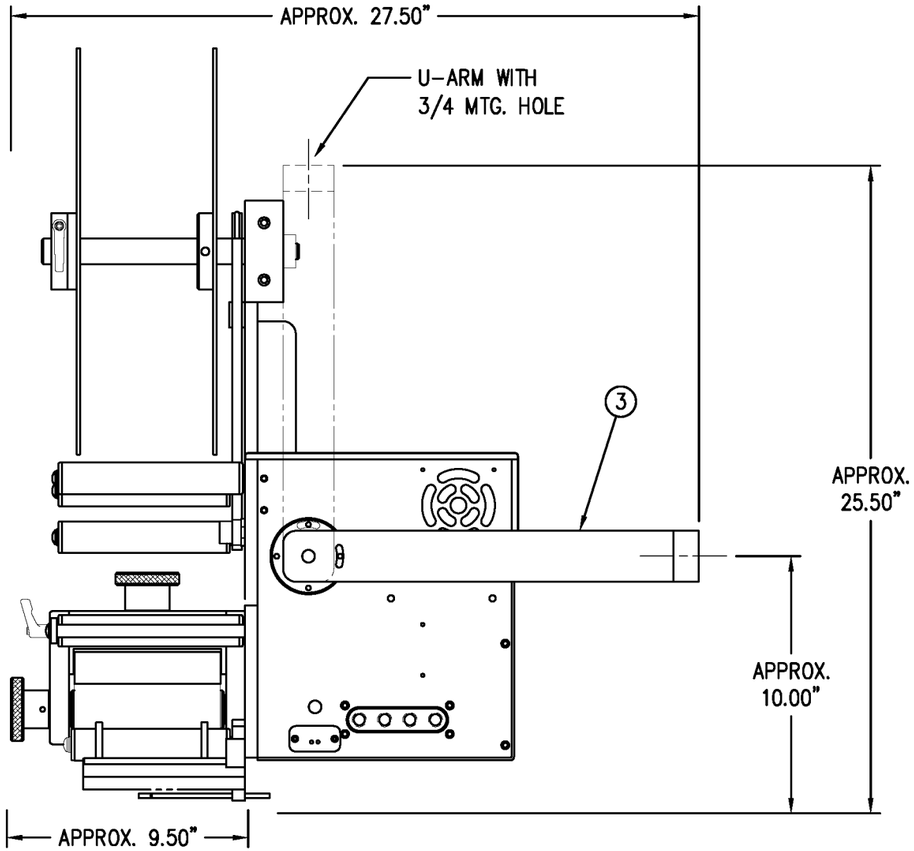
TITLE: 360 SERIES APPLICATOR: RVB
PART: 5" WIDE RVB w/ 12" UNWIND
REV. DESCRIPTION: DRAWING No. WAS 200-0108 & 200-0626
REV. DATE: 06/13/03
REV. BY: TDR
Scale: 1=6
Date: 02/26/07
DRAWN BY: BOB S.
Dept. Code 70
F:\Engineering\Standard Parts\Applicator\360 211\CTM-211a-0111RL-12X
REV. O







BILL OF MATERIAL

ASSEMBLY		CTM-211a-0111RL-16X		SOLD	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
1	1	5" WIDE; CORE UNIT	ASS-200a-0150R/L	.	
2	1	5" WIDE; RVB NOSE MODULE	MOD-211-0111R/L	S	
3	1	U-ARM ASSEMBLY	WAS-200-0247	.	
4	1	5" WIDE; 16" UNWIND ASSY	MOD-200-3121R/L-5	S	
5	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
6	1	STANDARD MANDREL (SHOWN)	ASS-200-0147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-0137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3131-5	S	← COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200a-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200a-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR & CABLE	ASS-200-0427	S	

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

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

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

STANDARD REWIND	-0111R/L-16S
COLLAPSIBLE REWIND	-0111R/L-16C
FILM REWIND	-0111R/L-16F

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

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TITLE: 360 SERIES APPLICATOR: RVB ASSEMBLY

PART: 5" WIDE RVB w/ 16" UNWIND

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
0	WAS DWG. No. 200-0631	06/13/03	TDR

Scale:	Date:	DRAWN BY:
1=6	02/26/07	BOB S.

Dept. Code 70

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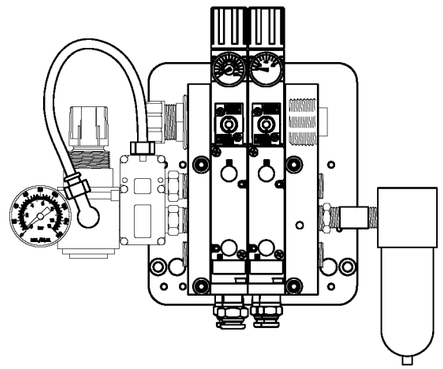
BILL OF MATERIAL			
MOD–211–0111R/L			
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
	1	ASS–211–0111	RVB w/ TRANSITION PLATE
⑥	1	ASS–211–0112M	RVB VALVE BANK ASSEMBLY (MAC)

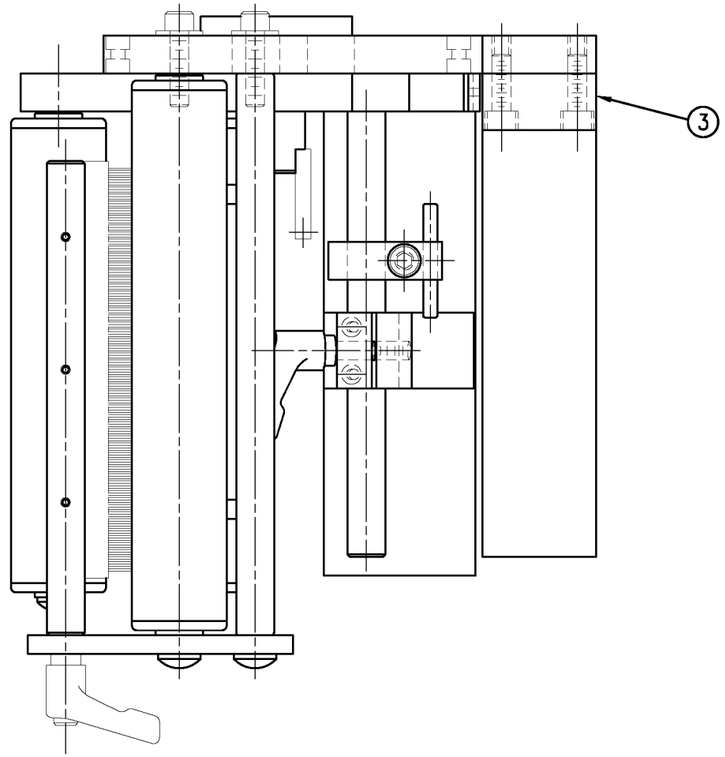
NOTE:
PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOMER TO ORDER SEPARATELY. (FOR MANIFOLD BLANKS REFER TO DWG. #MP–211–0238–X)

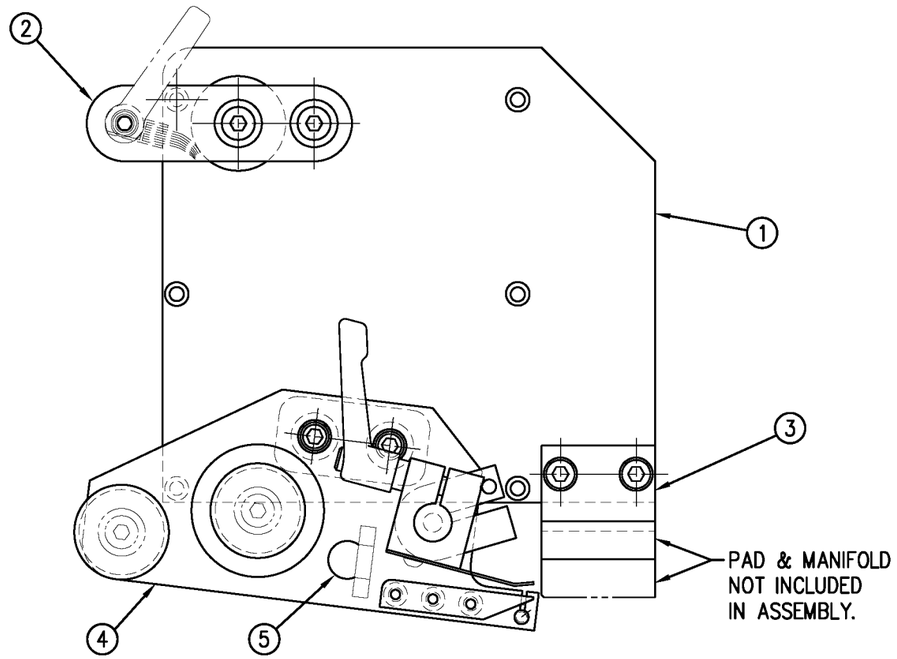
MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS. OTHER SIZES ARE CUSTOM.



⑥ VALVE BANK ASSEMBLY
SCALE: 3"=1'–0"

RH & LH ASSEMBLIES AVAILABLE
–RH ASSEMBLY SHOWN–





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

MOD–211–0111R/L

ASS–211–0111R/L

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TITLE: 360 SERIES APPLICATOR: RVB
PART: 5" WIDE RVB NOSE ASSEMBLY

REV.	REV. DESCRIPTION	REV. BY:	Scale:	Date:	DRAWN BY:	Dept. Code 70
0	NEW TITLEBLOCK; ADDED VALVE BANK FOR MODULE	TDR	1=2	09/01/99	BOB S.	F:\Engineering\Standard Parts\Applicator\360 211\MOD–211–0111RL

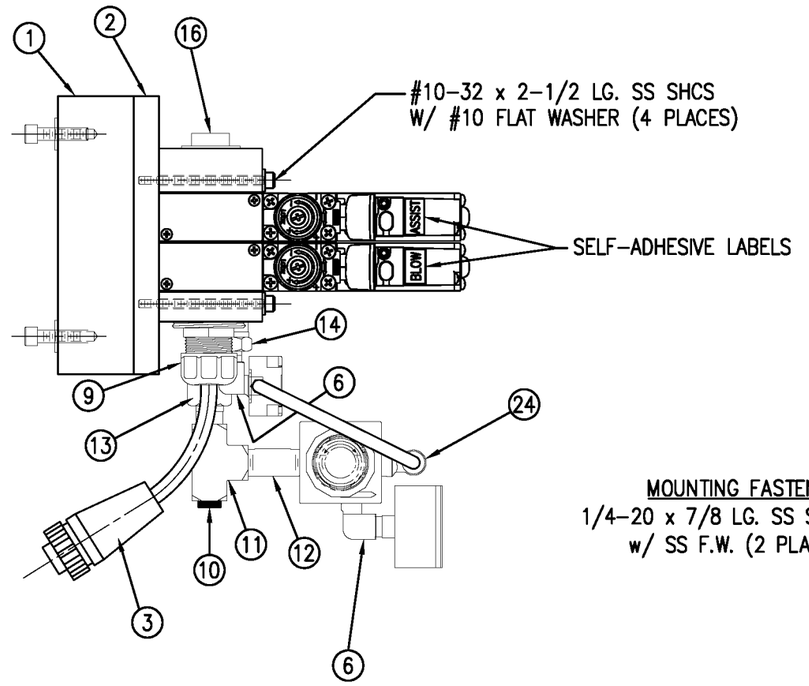
REV. DATE 04/21/03

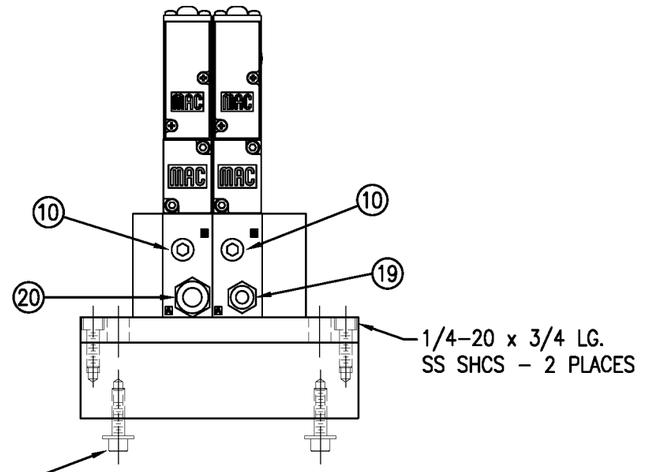
ASS-211-0112M

BILL OF MATERIAL

ASS-211-0112M

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



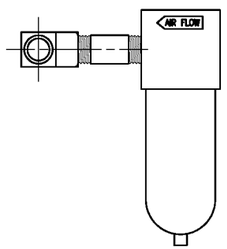


MOUNTING FASTENERS
1/4-20 x 7/8 LG. SS SHCS
w/ SS F.W. (2 PLACES)

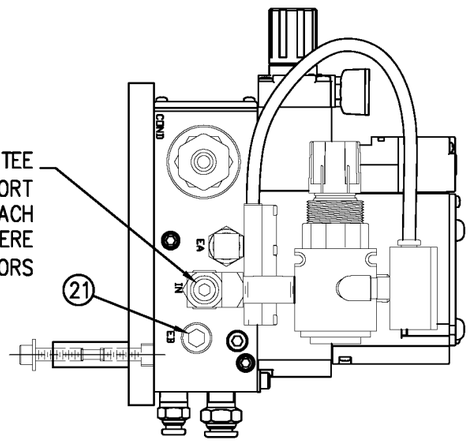
VIEW "A"
(VALVE BANK & MTG. ONLY)

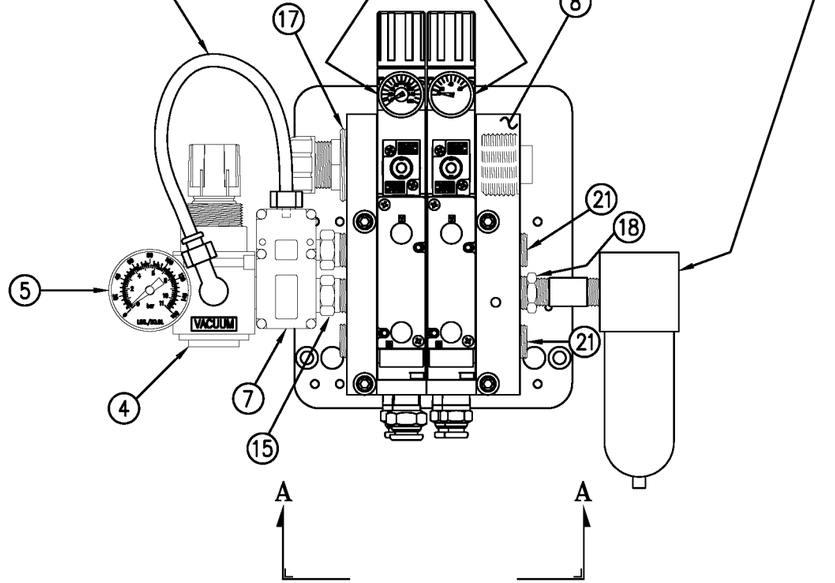
TAMP & BLOW VALVE:
PRESSURE GAUGE - 0-160 PSI
AIR ASSIST VALVE:
PRESSURE GAUGE - 0-60 PSI

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



㉓ AIR FILTER
SHIP LOOSE
-CUSTOMER TO INSTALL -





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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: VALVE BANKS	
REV. 0	REV. DESCRIPTION -	REV. DATE -	REV. XXX

TITLE: RVB 2 STATION VALVE BANK ASSEMBLY

Dept. Code 70

Scale: 1=3 | Date: 04/03/07 | DRAWN BY: E. SANOR | REV. BY: XXX

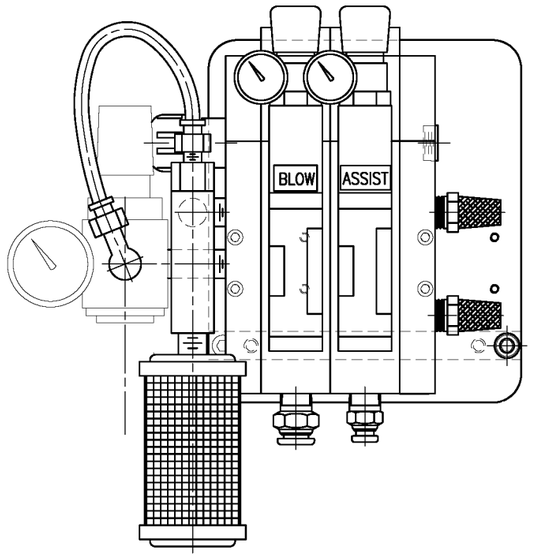
F:\Engineering\Standard Parts\Applicator\360\360\ASS-211-0112M

BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-211-3111R/L		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	RVB w/TRANSITION PLATE	ASS-211-3111R/L	S
⑤	1	RVB VALVE BANK ASSEMBLY	ASS-211-0112	S

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

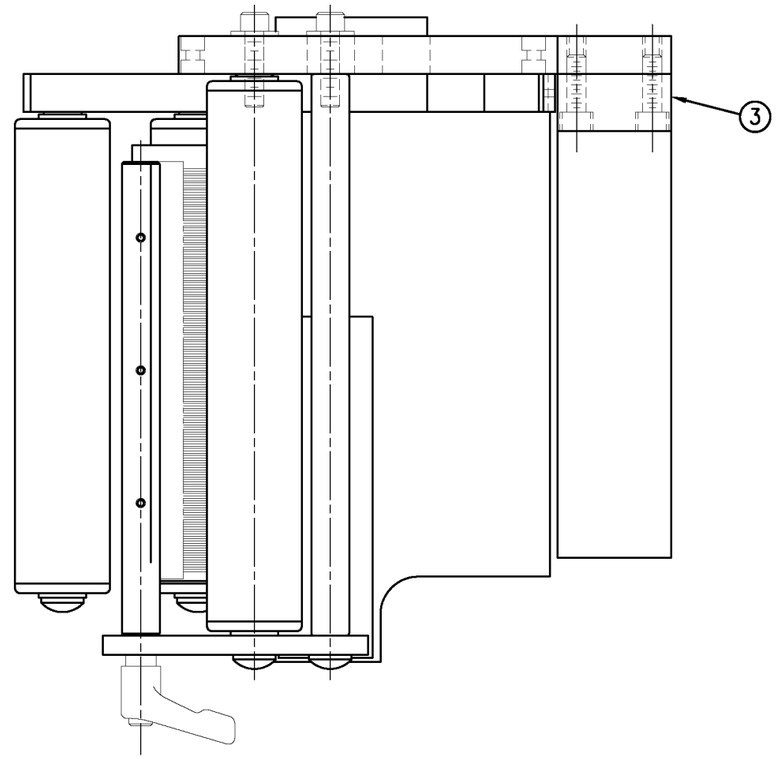
NOTE:
PAD & MANIFOLD ARE JOB SPECIFIC. CUSTOM TO ORDER SEPARATELY. (FOR MANIFOLD BLANKS REFER TO DWG. #MP-211-0238-X)

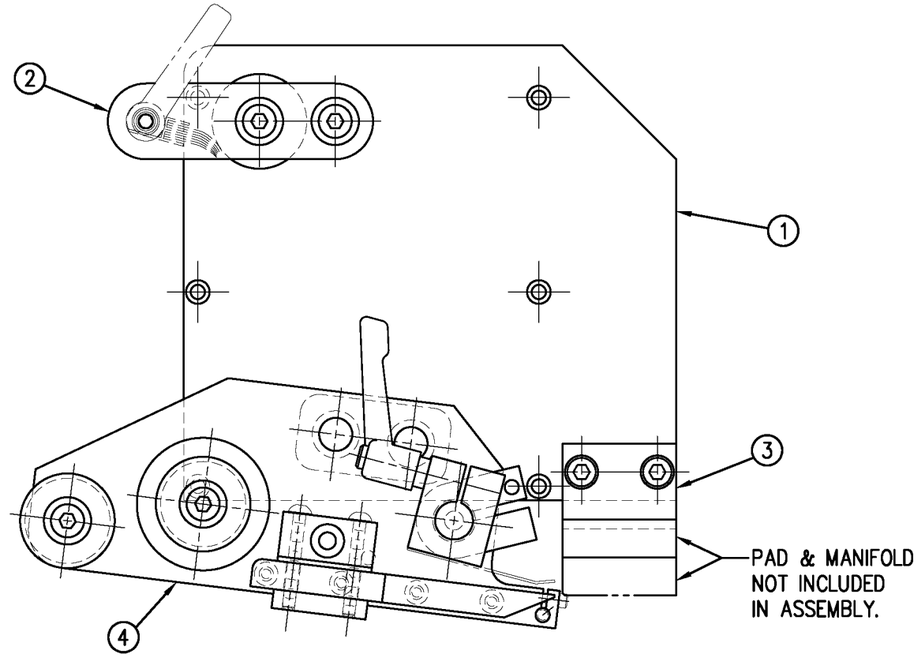
MANIFOLD TEMPLATES AVAILABLE FOR 2", 3", 4" AND 5" WIDE LABELS. OTHER SIZES ARE CUSTOM.



⑤ VALVE BANK ASSEMBLY
SCALE: 8"=1'-0"

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-





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

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

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

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TITLE: 360 SERIES APPLICATOR: RVB: CLEAR LABEL
PART: 5" WIDE RVB NOSE ASSEMBLY

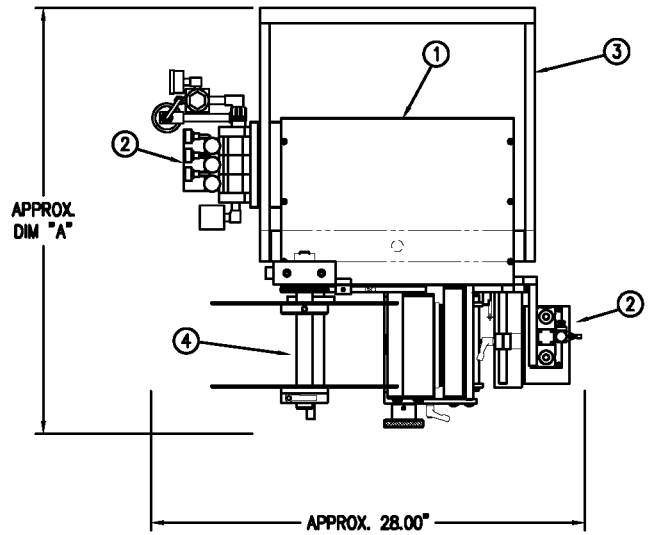
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
1	CHANGED PE-SE2000 TO ASS-200-0430-A & PE-SE2050 TO ASS-200-0430-B	02/28/06	TDR

Scale: 1=2 | Date: 09/01/99 | DRAWN BY: BOB S.

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 211\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

ASSEMBLY		CTM-214a-X101RL-12X		SOLD	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200a-X150R/L	.	
②	1	5/7.5/10 TAMP NOSE MODULE SPECIFY STROKE LENGTH	MOD-214-X101R/L	S	
③	1	U-ARM ASSEMBLY	WAS-200-0247	.	
④	1	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S	
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	— STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	— COLLAPSIBLE RWD
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	— STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-X137	S	— FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3131-X	S	— COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200a-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200a-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S	

ORDER THESE ITEMS SEPARATELY
1.) TAMP SLIDE w/ MOUNTING PLATES
2.) LABEL PAD
3.) LABEL MANIFOLD

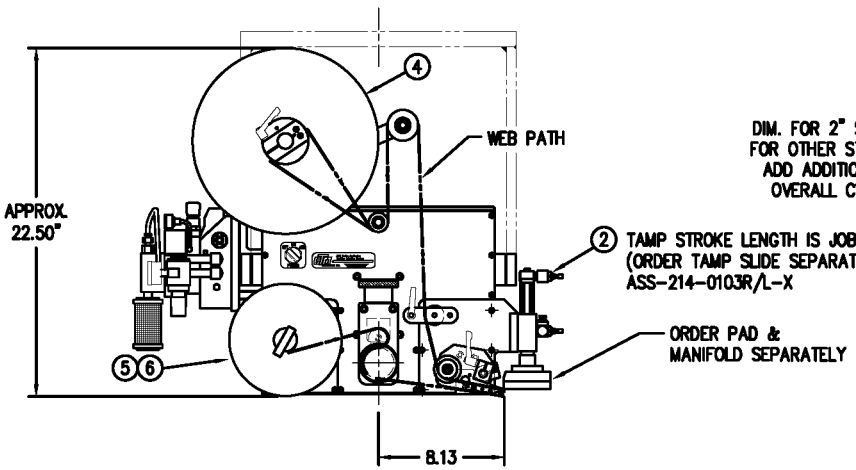
CTM-214a-X101R/L-12X

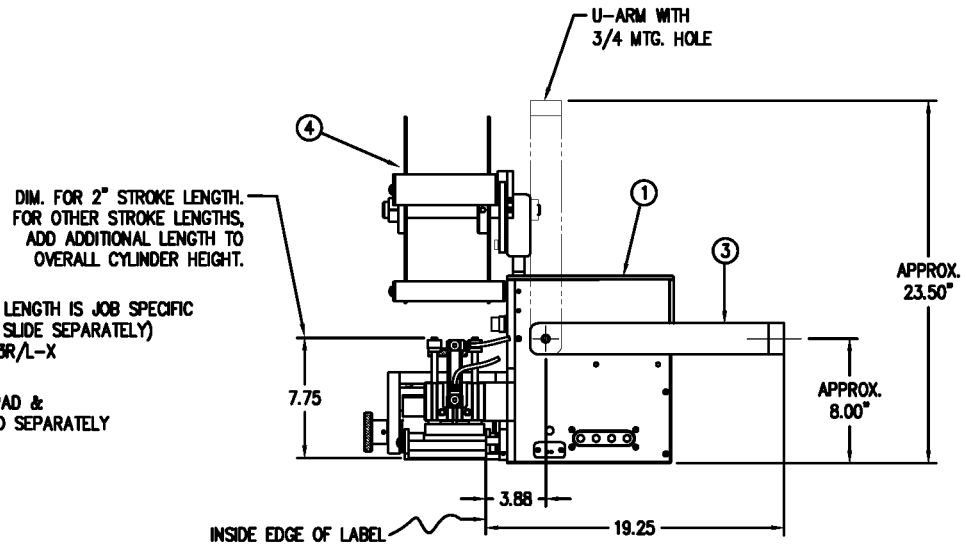
5" WIDE	-0101R/L-12	X
7.5" WIDE	-2101R/L-12	X
10" WIDE	-5101R/L-12	X

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

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

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





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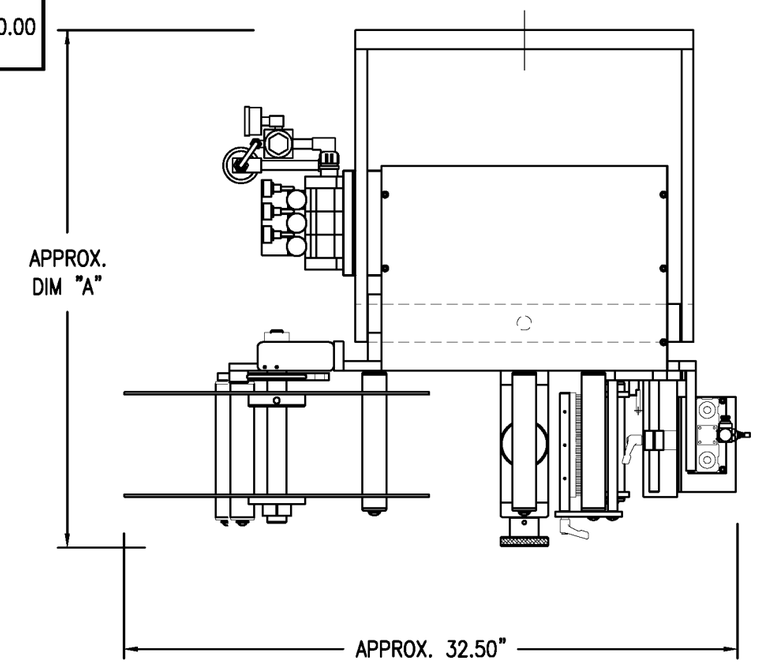
TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY
PART: 5"/7.5"/10" WIDE: TAMP w/12" UNWIND ASSEMBLY
REV. DESCRIPTION: DRAWING No. WAS 200-0623
REV. DATE: 07/16/03
REV. BY: TDR
Scale: 1=8
Date: 02/26/07
DRAWN BY: BOB S.
F:\Engineering\Standard Parts\Applicator\360 214\CTM-214a-X101RL-12X
Dept. Code 70
REV: 0

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

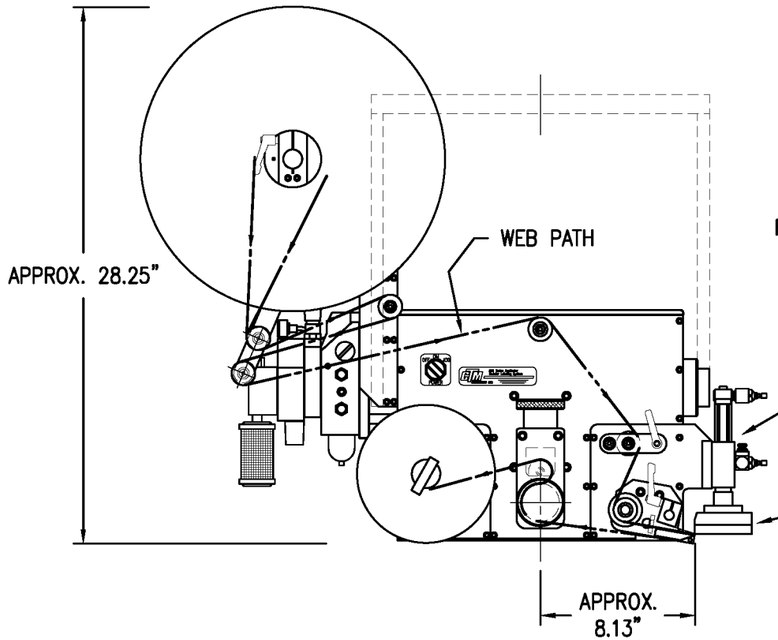


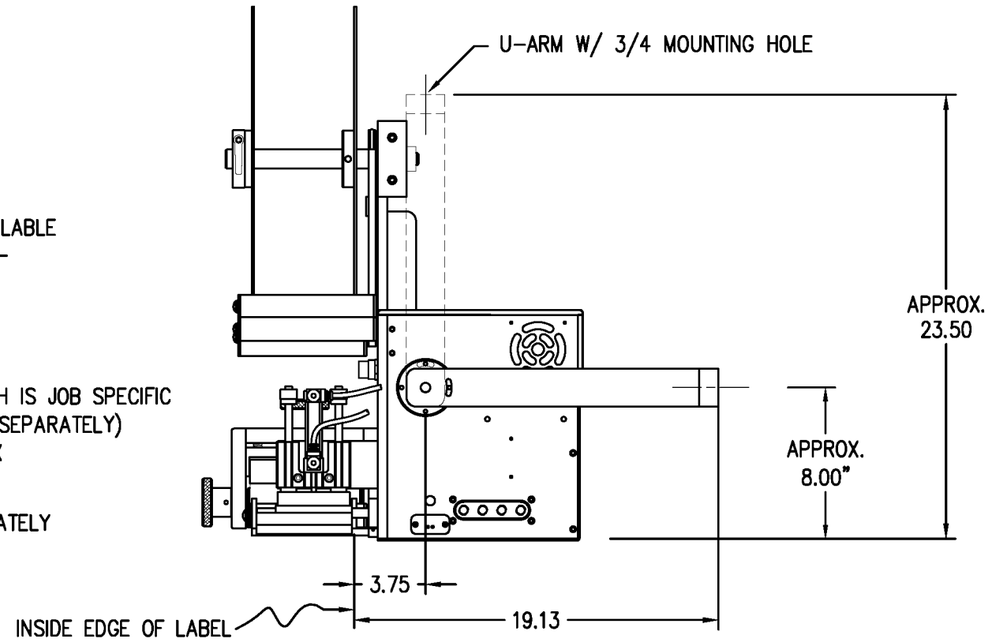
BILL OF MATERIAL				SOLD	
ASSEMBLY		CTM-214a-X101RL-16X		S	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
①	1	5/7.5 WIDE; CORE UNIT	ASS-200a-X150R/L	.	
②	1	5/7.5 WIDE; TAMP NOSE MODULE	MOD-214-X101R/L	S	
③	1	U-ARM ASSEMBLY	WAS-200-0247	.	
④	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.	
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3131-X	S	← COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200a-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200a-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S	

ORDER THESE ITEMS SEPARATELY
1.) TAMP SLIDE w/ MOUNTING PLATES
2.) LABEL PAD
3.) LABEL MANIFOLD

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

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F





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TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY
PART: 5/7.5/10 WIDE TAMP w/ 16" UNWIND ASSEMBLY
Dept. Code 70
F:\Engineering\Standard Parts\Applicator\360 214\CTM-214a-X101RL-16X
Scale: 1=8
Date: 02/26/07
DRAWN BY: BOB S.
REV. BY: TDR
REV. DATE 06/27/03
REV. DESCRIPTION DWG No. WAS 200-0630
REV. 0

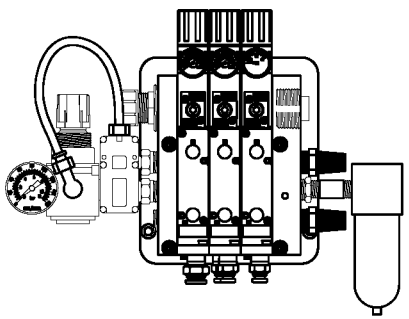
BILL OF MATERIAL

MOD-214-X101R/L

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

ORDER THESE ITEMS SEPARATELY:

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



⑤ VALVE BANK ASSEMBLY
SCALE: 2"=1'-0"

BILL OF MATERIAL

ASS-214-X101R/L

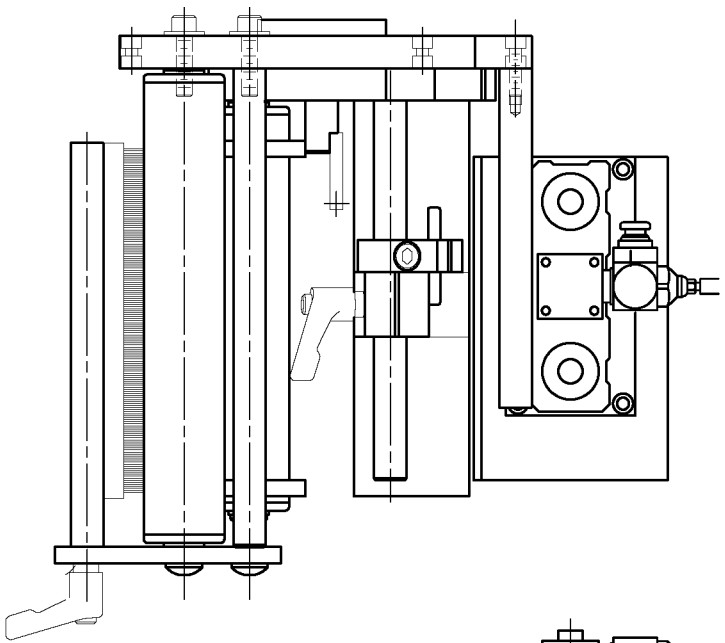
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP-214-0207	TAMP TRANSITION PLATE
②	1	ASS-200-X126R/L	TENSION BRUSH ASSEMBLY
③	1	ASS-214-X102R/L	TAMP PEEL EDGE ASSEMBLY
④	1	ASS-211-0108-2	FIBER OPTIC SENSOR w/ 2" MTG. SHAFT
	6	PM-FASH429075	SHCS, #10-32 x 5/8" Lg. SS

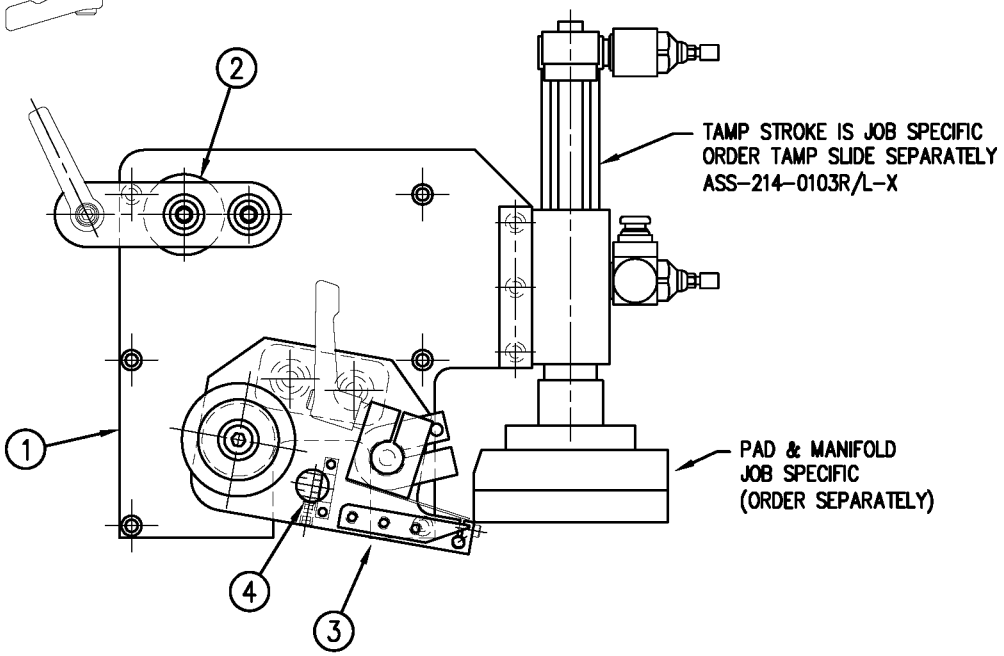
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

MOD-214-X101R/L

ASS-214-X101R/L

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





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TITLE:	PART:	Dept. Code
360 SERIES APPLICATOR: TAMP ASSEMBLY	TAMP ASSEMBLY w/ TRANSITION PLATE	70

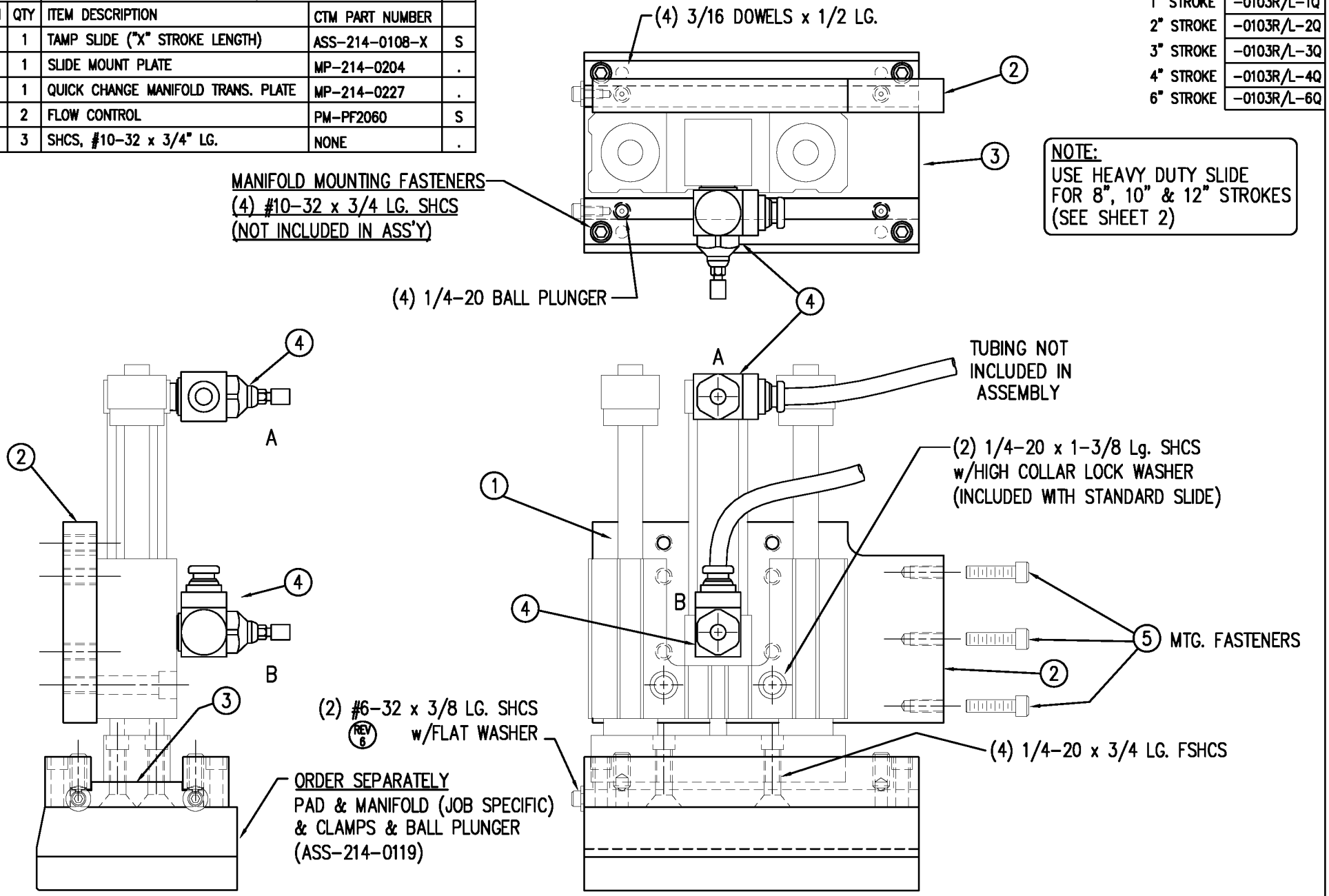
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
0	NEW TITLEBLOCK	04/08/03	TDR	1=3	06/14/97	BOB S.	214\MOD-214-X101RL

360 BILL OF MATERIAL

ASSEMBLY		ASS-214-0103R/L-XQ		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	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



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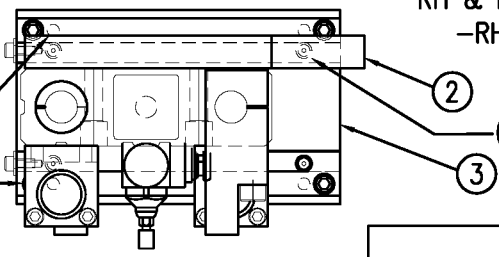
TITLE:	PART:	Dept. Code
360 SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 1 of 2)	STANDARD SLIDE ASS'Y FOR 360 APPLICATOR w/QUICK CHANGE PAD	70

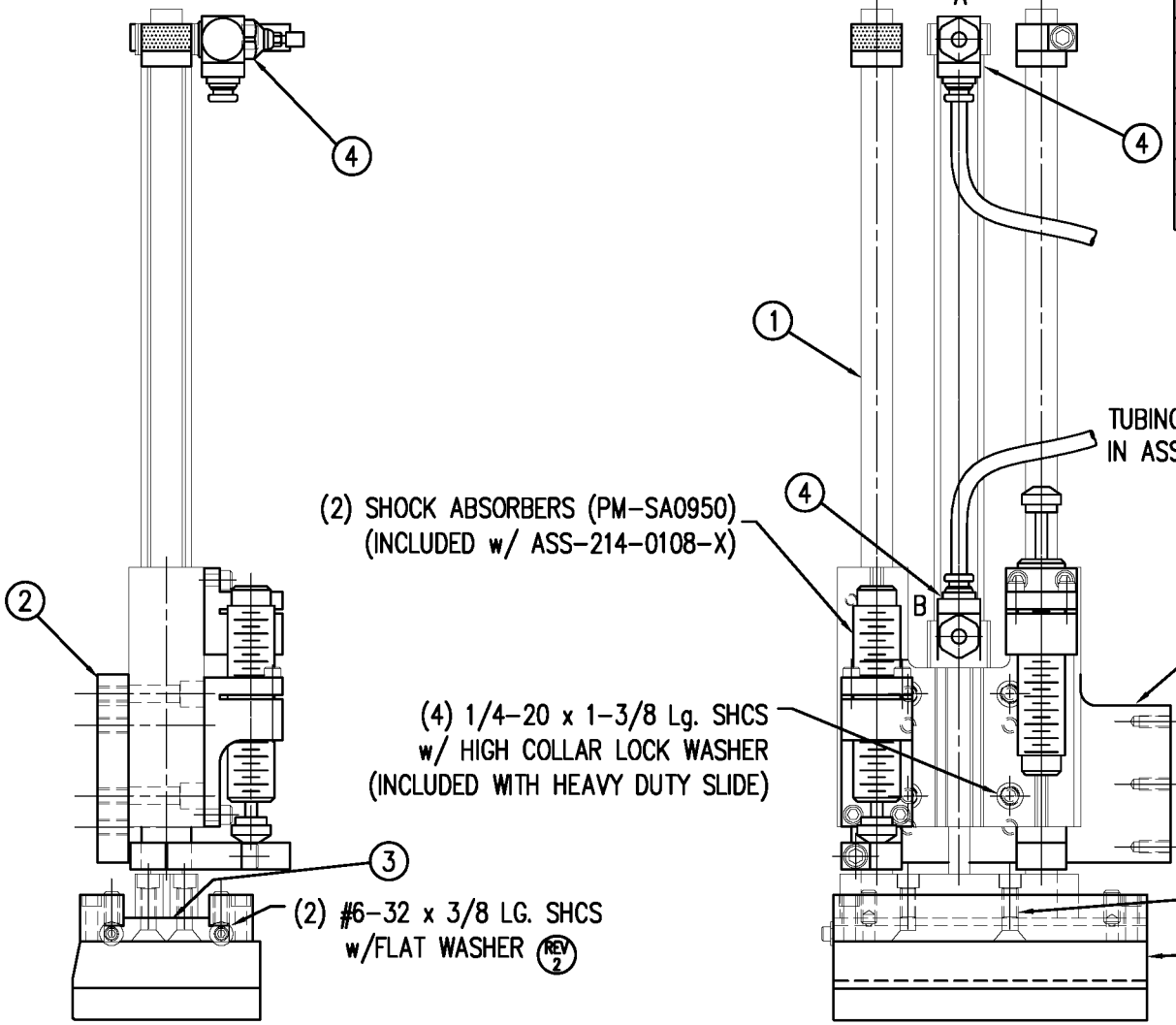
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
6	#6-32 SHCS WAS #4-40 BHCS	05/11/06	TDR	1=2	02/21/98	BOB S.	214\ASS-214-0103RL-XQs1

RH & LH MOUNTING AVAILABLE
-RH MOUNTING SHOWN-

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



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	.



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

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TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 2 of 2)	PART: HEAVY DUTY SLIDE ASS'Y FOR 360 APPLICATOR w/QUICK CHANGE PAD	Dept. Code 70

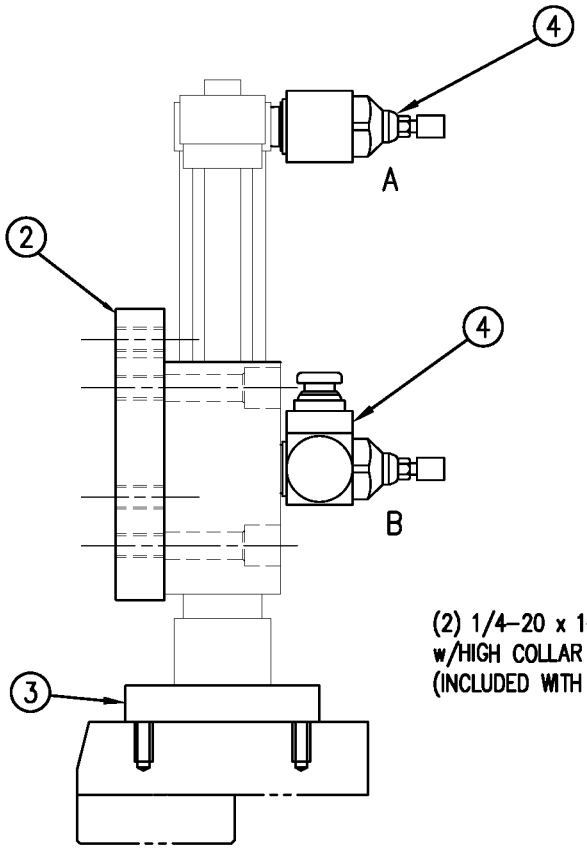
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
1	#6-32 SHCS WAS #4-40 BHCS	05/11/06	TDR	1=3	02/21/98	BOB S.	214\ASS-214-0103RL-XQs2

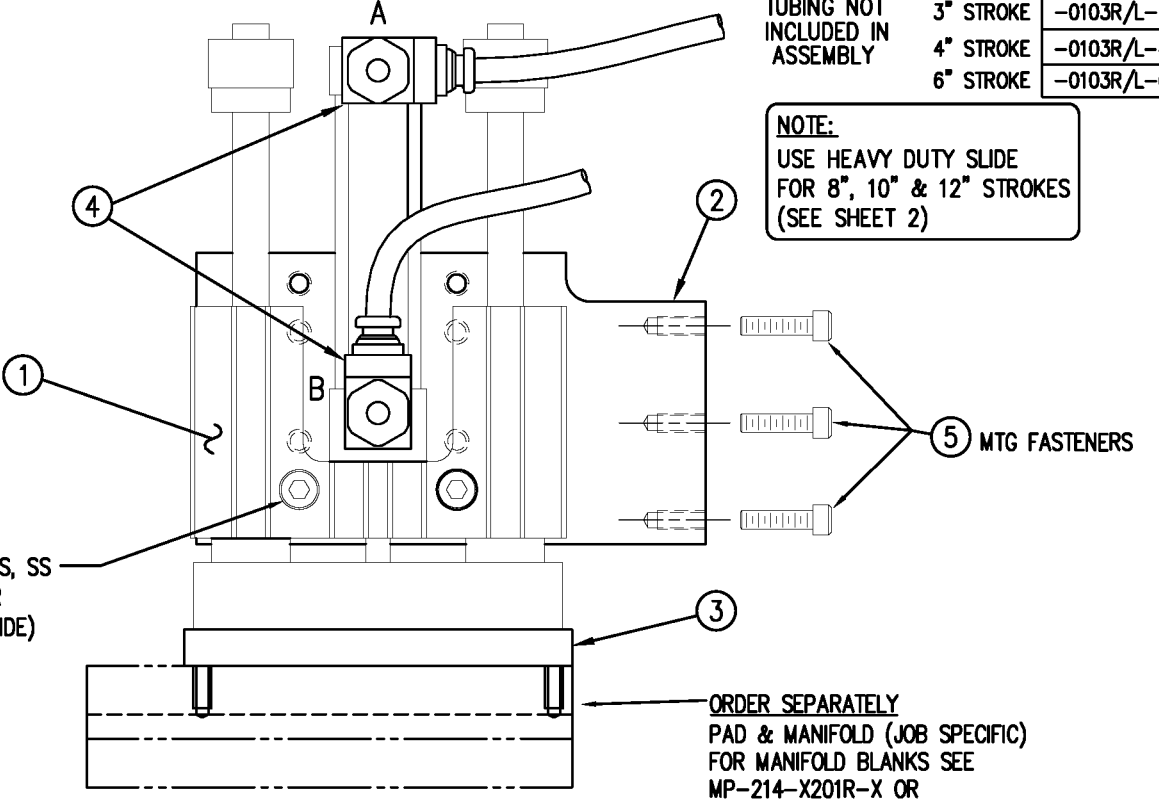
RH & LH MOUNTING AVAILABLE
-RH MOUNTING SHOWN-

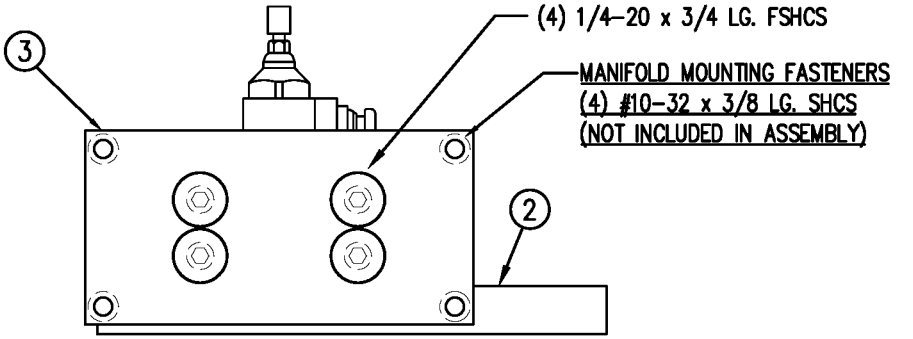
ASS-214-0103R/L-X	
1" STROKE	-0103R/L-1
2" STROKE	-0103R/L-2
3" STROKE	-0103R/L-3
4" STROKE	-0103R/L-4
6" STROKE	-0103R/L-6

TUBING NOT INCLUDED IN ASSEMBLY

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







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

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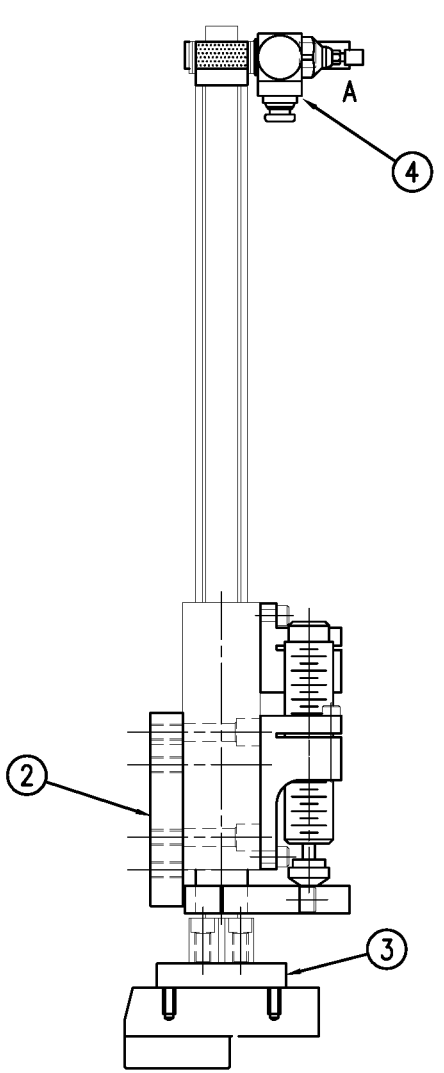
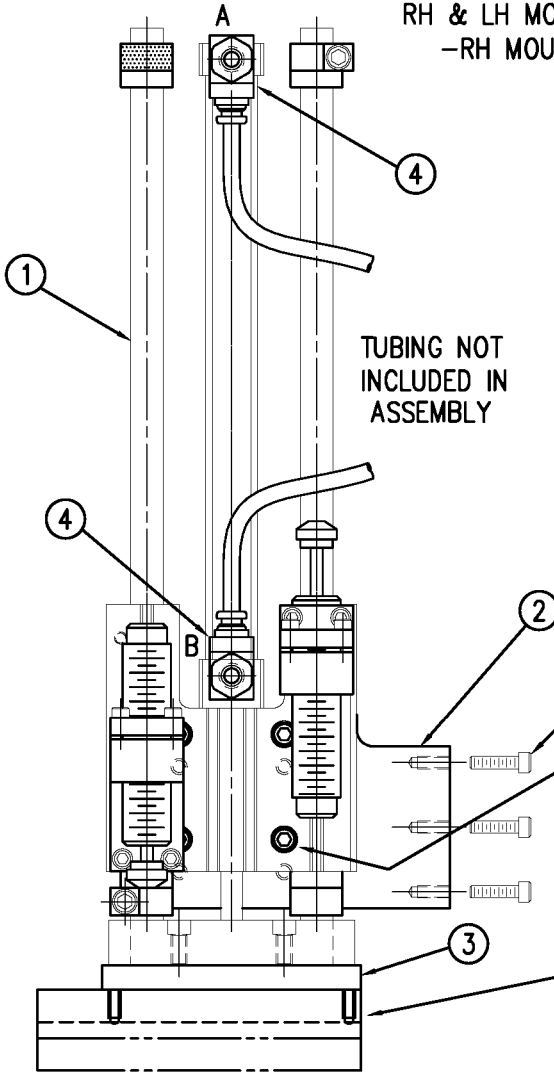
TITLE:	PART:	Dept. Code
360 SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 1 of 2)	STANDARD SLIDE ASSEMBLY FOR 360 APPLICATOR	70

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

RH & LH MOUNTING AVAILABLE
-RH MOUNTING SHOWN-

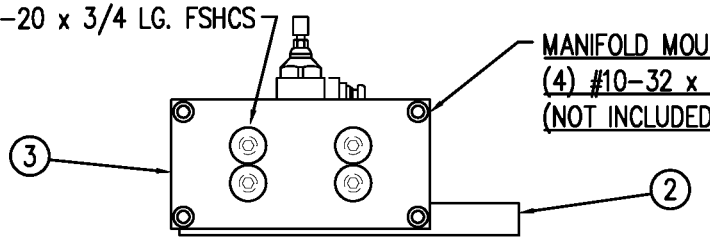
ASS-214-0103R/L-X	
8" STROKE	-0103R/L-8
10" STROKE	-0103R/L-10
12" STROKE	-0103R/L-12





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

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



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TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY (SHEET 2 of 2)	PART: HEAVY DUTY SLIDE ASSEMBLY FOR 360 APPLICATOR	Dept. Code 70

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

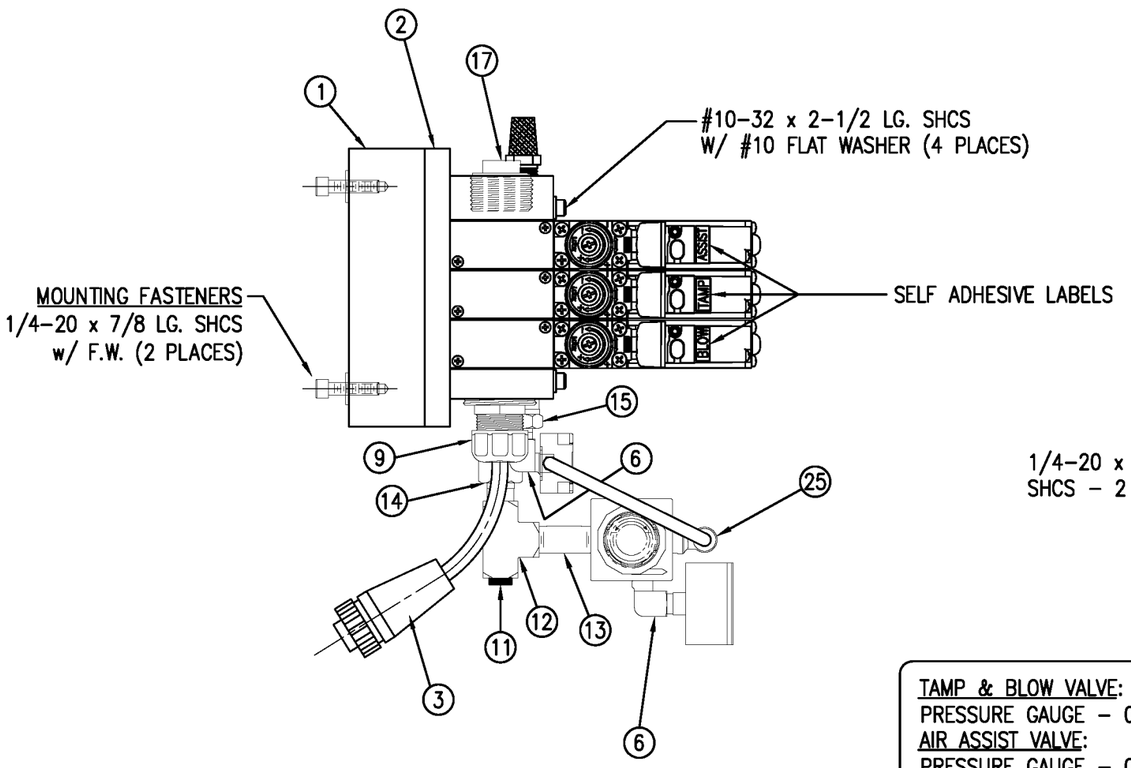
BILL OF MATERIAL

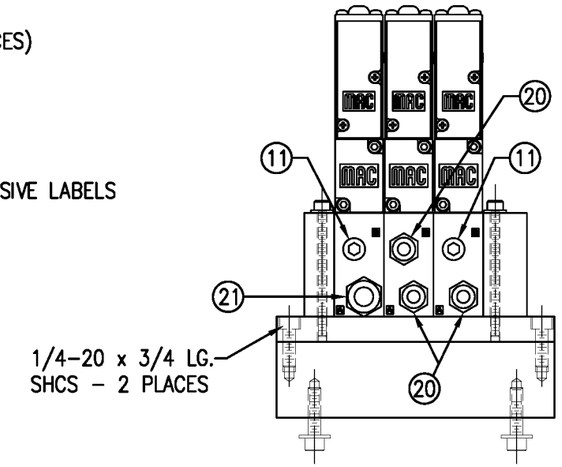
ASS–214–0105M

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP–214–0202	VALVE FASTENING MOUNTING PLATE
②	1	MP–214–0206	VALVE MOUNTING PLATE
③	1	PE–200–0405	VALVE CABLE
④	1	PM–REG1500	REGULATOR
⑤	1	PM–VA2384	0–160 PSI PRESSURE GUAGE
⑥	2	PM–PF1180	NPT 90° STREET ELBOW 1/8" FEMALE TO 1/8" MALE
⑦	1	PM–PUMP1010	VACUUM PUMP, 55 PSI FEED PRESSURE, MUFFLED EXHAUST
⑧	1	PM–VA2355M	3 STATION MAC VALVE BANK
⑨	1	PE–CO2000	CORD GRIP
⑩	2	PM–MU1027	3/8" NPT MALE BRONZE EXHAUST MUFFLER
⑪	3	PM–FT1200	1/4" NPT SOCKET HEAD PLUG
⑫	1	PM–PF1200	TEE 1/4" NPT FEMALE 3 ENDS
⑬	1	PM–PF1143	NIPPLE, 1/4" NPT X 1 1/2" LG.
⑭	1	PM–PF1220	ADAPTOR, 3/8" NPT FEMALE TO 1/4" NPT MALE
⑮	1	PM–PF1157	REDUCER, 3/8" NPT TO 1/8" NPT
⑯	1	PM–PF1159	FITTING, 3/8" NPT MALE BOTH ENDS
⑰	1	PE–EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑱	1	PE–COND1084	STEEL REDUCER
⑲	1	PM–PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑳	3	PM–PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
㉑	1	PM–PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
㉒	1	PM–PF1167	3/8" NPT SOCKET HEAD PLUG
㉓	10.5"	PM–PT1070	1/4" OD TUBING
㉔	1	ASS–214–0106	AIR FILTER
㉕	1	PM–PF1055	90° ELBOW 1/4" TUBE TO 1/4" NPT MALE
◯	2	PM–FASH430079	1/4"–20 UNC x 7/8" LG. SS SHCS
◯	2	PM–FAW30275	1/4" SS FLAT WASHER
◯	2	PM–FASH430078	1/4"–20 UNC x 3/4" LG. SS SHCS
◯	4	PM–FASH429088	10–32 X 2 1/2" LG. SS SHCS
◯	4	PM–FAW30265	#10 SS FLAT WASHER

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

ASS–214–0105M

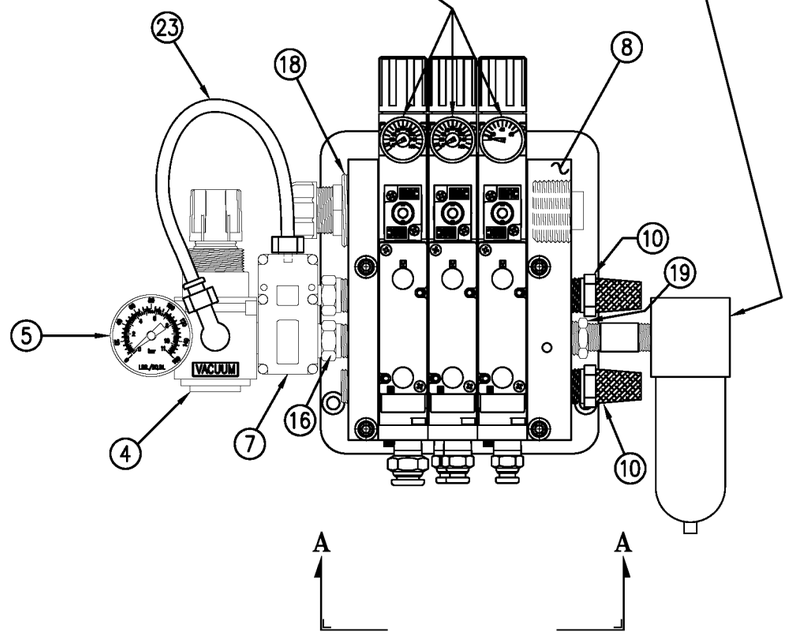




END VIEW "A"
(VALVE BANK & MTG. ONLY)

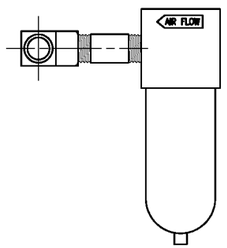
TAMP & BLOW VALVE:
PRESSURE GAUGE – 0–160 PSI
AIR ASSIST VALVE:
PRESSURE GAUGE – 0–60 PSI

AIR FILTER SHOWN IN
TYPICAL LOCATION FOR
LH APPLICATOR



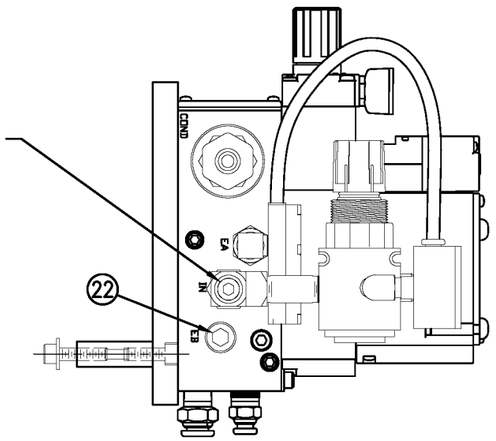
VALVE BANK SPARE PARTS:

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



㉔ AIR FILTER
SHIP LOOSE
–CUSTOMER TO INSTALL –

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



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: VALVE BANKS	REV. DATE –	REV. BY: XXX	Dept. Code 70
REV. 0	REV. DESCRIPTION –				

TITLE: 3 STATION VALVE BANK ASSEMBLY (TAMP)

Scale: 1=3 | Date: 03/28/07 | DRAWN BY: E. SANOR

F:\Engineering\Standard Parts\Applicator\360\360\ASS–214–0105M

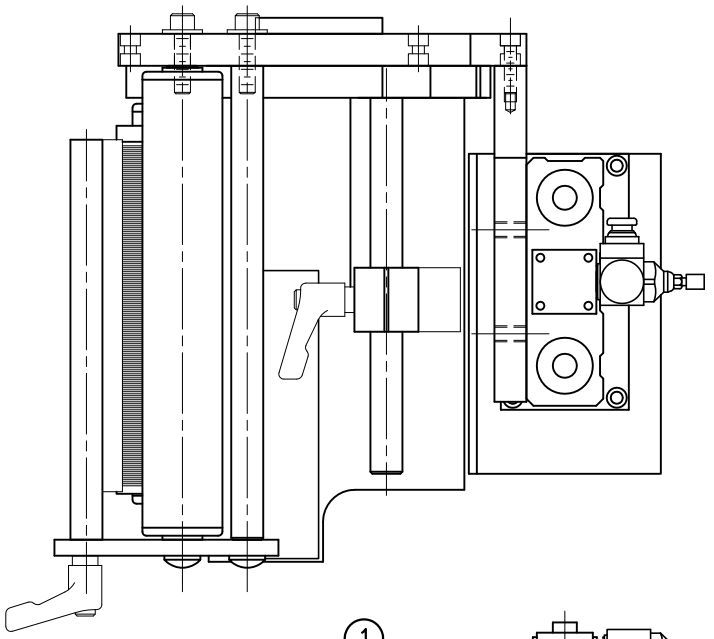
BILL OF MATERIAL

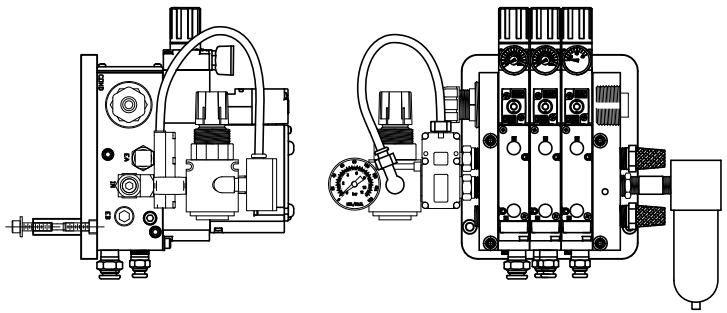
MOD-214-3101R/L-X

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

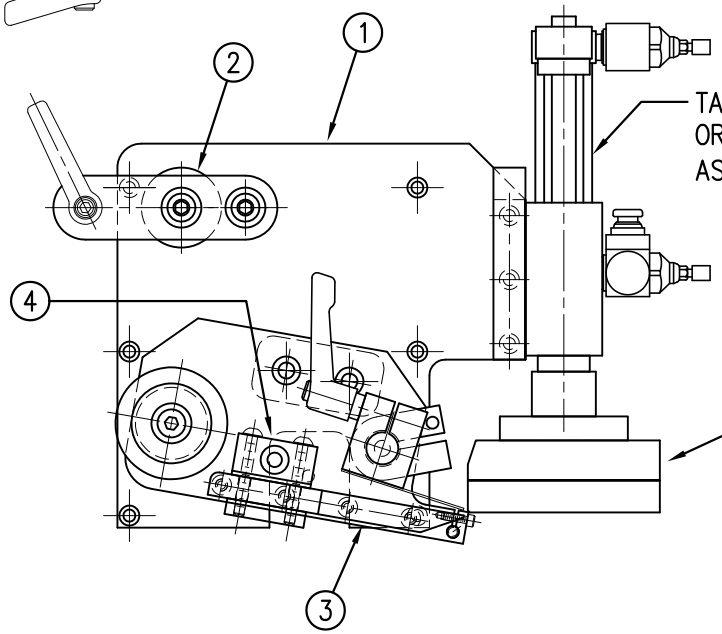
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

MOD-214-3101R/L-X	
ASS-214-3101R/L-X	
5" WIDE	-3101R/L-5
7.5" WIDE	-3101R/L-7





⑤ VALVE BANK ASSEMBLY
SCALE: 2"=1'-0"



BILL OF MATERIAL

ASS-214-3101R/L-X

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

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APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:	TITLE:	Dept. Code
360	5"/7.5"/10"	TAMP ASSEMBLY	TAMP CLEAR LABEL PEEL EDGE ASSEMBLY w/ TRANSITION PLATE	70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360\
0	-	-	XXX	1=3	06/14/97	BOB S.	TAMP\ASS-214-3101RL-X

BILL OF MATERIAL

ASS-214-3102R/L-X

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION	
①	1	MP-214-3304	CLEAR LABEL PEEL EDGE MOUNTING PLATE	
②	1	MP-214-3302-X	LH CLEAR LABEL PEEL EDGE (w/ TAPE)	LH
	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
	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	1	MP-214-3301	CLEAR LABEL SENSOR NUT PLATE	
⑧	1	ASS-211-X120	IDLER ROLLER ASSEMBLY	
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	

ORDER LRD 6110 CLEAR LABEL SENSOR SEPARATELY
#ASS-200-0430

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

ASS-214-3102R/L-X

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

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

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

℄ MIN. WEB WIDTH

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

0.875 MIN. WEB WIDTH

1.563 MIN. TO APPLICATOR FACE

"B" MAX. WEB WIDTH

1.250 MIN. TO APPLICATOR FACE

LABEL

SENSOR NOT INCLUDED IN ASSEMBLY

SHIM (PROVIDED w/ SENSOR)

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

2.400 APPROX. SENSOR MVMT.

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

℄ SENSOR (MAX.WIDTH)

℄ SENSOR (MIN.WIDTH)

LDR
XXXX
GAIN ADJUST
LION PRECISION

1.200 SENSING WIDTH

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

℄ SENSOR CORD

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

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

APPLY (1) STRIP OF UHMW TAPE TO PEEL EDGE ②
5" APPLICATOR ~ 6" WIDE x 4-1/8" LG.
7.5" APPLICATOR ~ 5-7/16" WIDE x 8-5/8" LG.

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

#6-32 x 1/2 LG. SHCS (REV 4) w/ FLATWASHER

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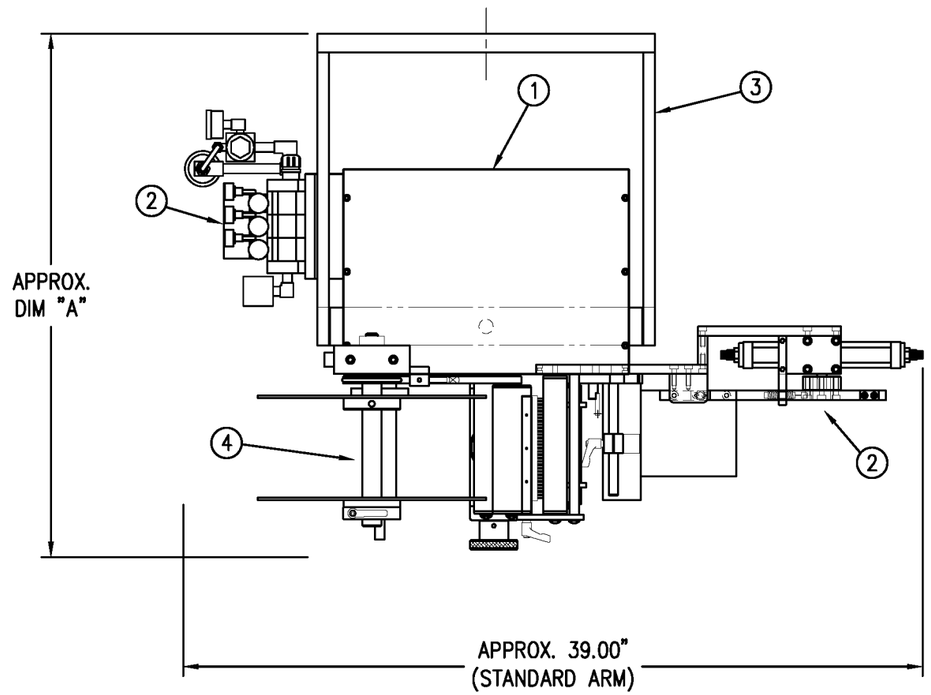
APPLICATOR SERIES: 360 SERIES	APPLICATOR SERIES: 5"/7.5"	GROUP: TAMP	TITLE: PEEL EDGE ASSEMBLY	REV. DATE 01/23/08	REV. BY: TDR
REV. 6	REV. DESCRIPTION REMOVED LRD 2100 CLEAR LABEL SENSOR				

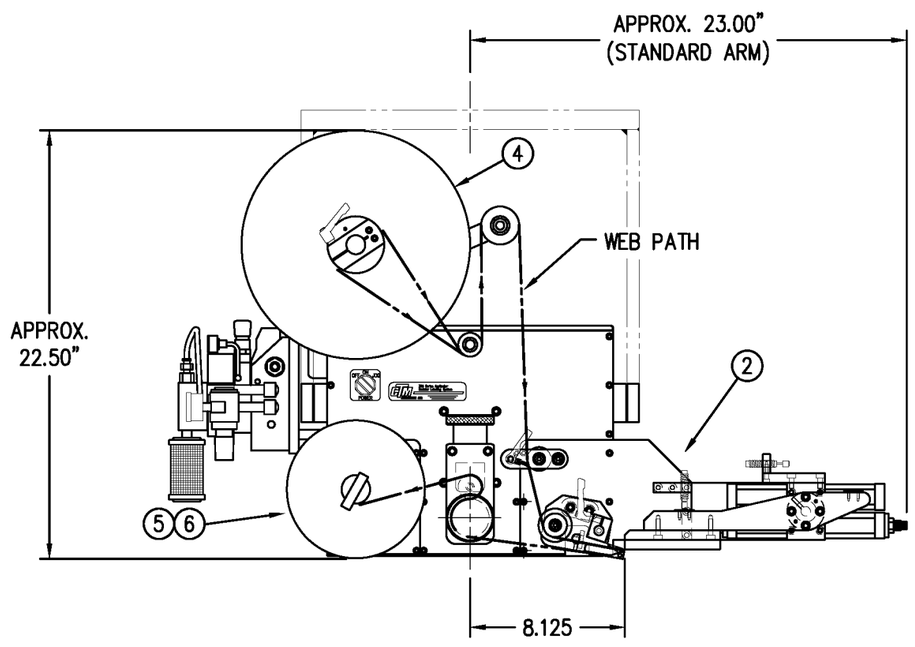
Dept. Code 70

DRAWN BY: BOB S. | Date: 09/03/98 | Scale: 1=1.5 | DR

F:\Engineering\Standard Parts\Applicator\360\Shared Parts\PEEL EDGE\ASS-214-3102RL-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	ASS-200-X150R/L	.	
2	1	5/7.5 SWING TAMP	MOD-214-X110R/L	S	
3	1	U-ARM ASSEMBLY	WAS-200-0247	.	
4	1	5/7.5 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S	
5	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
6	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S	← COLLAPSIBLE RWD
	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	.	

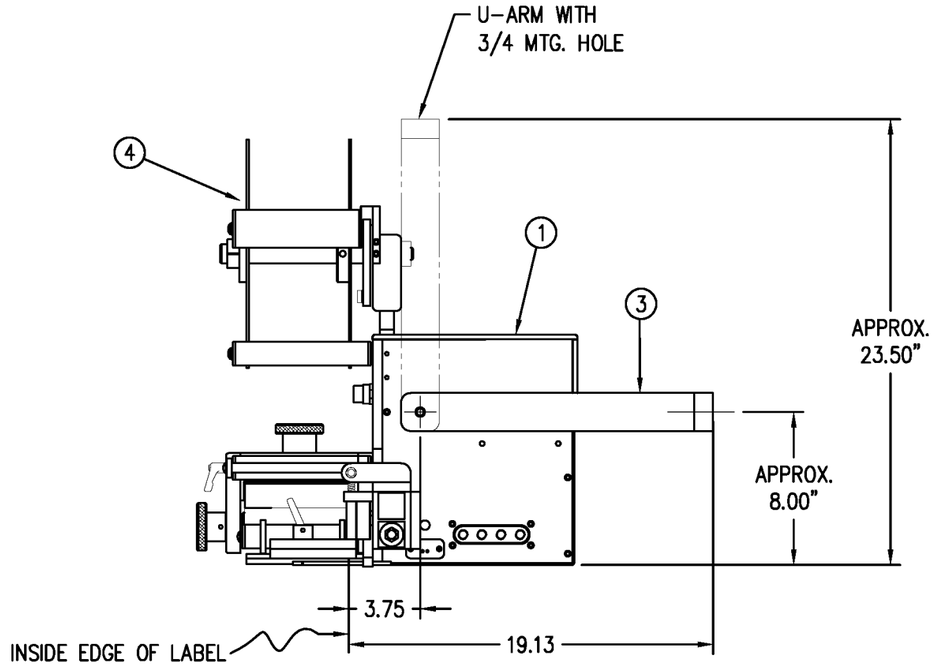
ORDER THESE ITEMS SEPARATELY:
1.) TAMP SLIDE
2.) LABEL PAD
3.) LABEL MANIFOLD
4.) PRODUCT DETECT SENSOR

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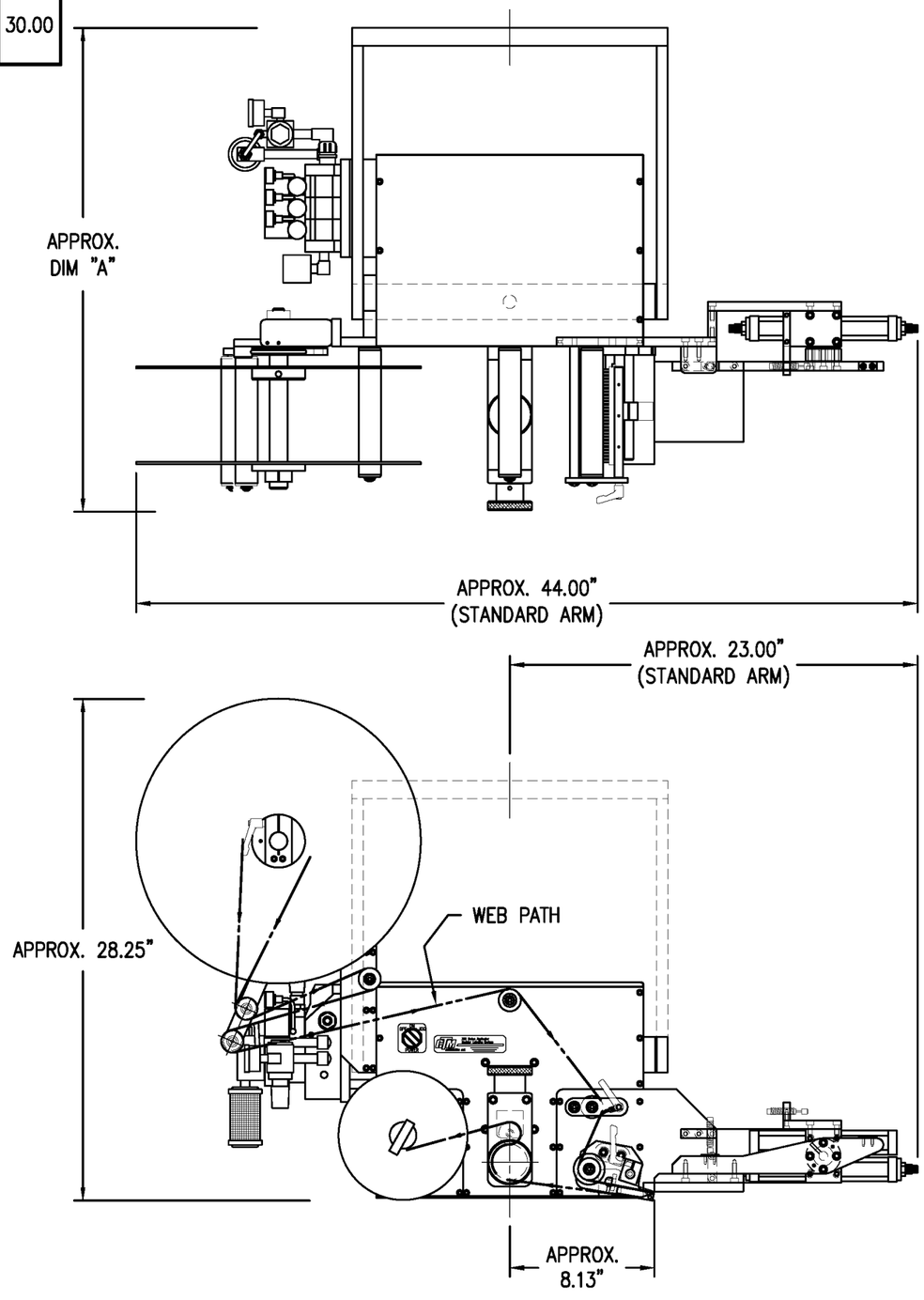
TITLE: 360 SERIES APPLICATOR: SWING TAMP ASSEMBLY
PART: 5"/7.5" WIDE: SWING TAMP w/12" UNWIND ASSEMBLY
Dept. Code 70
F:\Engineering\Standard Parts\Applicator\360 214\CTM-214-X110RL-X-12X
Scale: 1=8
Date: 11/04/99
DRAWN BY: BOB S.
REV. BY: TDR
REV. DATE 09/12/07
REV. DESCRIPTION
REV. 1 UPDATED BOM FOR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

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

ASSEMBLY		CTM-214-X110RL-16X		SOLD	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
1	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.	
2	1	5/7.5 WIDE; SWING TAMP	MOD-214-X110R/L	S	
3	1	U-ARM ASSEMBLY	WAS-200-0247	.	
4	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.	
5	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
6	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S	← COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	

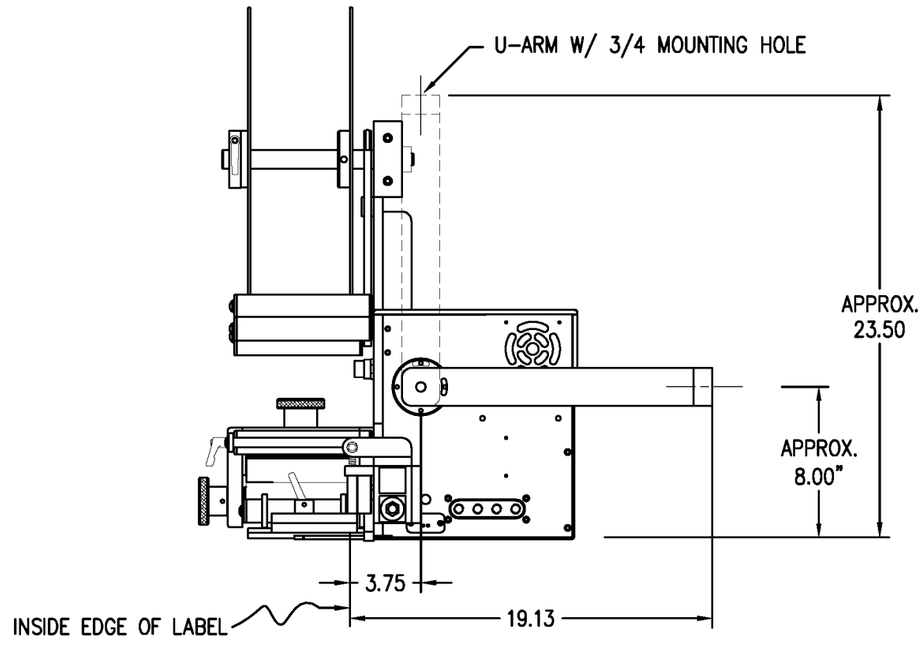
ORDER THESE ITEMS SEPARATELY:
1.) TAMP SLIDE
2.) LABEL PAD
3.) LABEL MANIFOLD
4.) PRODUCT DETECT SENSOR

CTM-214-X110R/L-16X

5" WIDE	-0110RL-16	X
7.5" WIDE	-2110RL-16	X

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



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TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY
PART: 5/7.5/10 WIDE SWING TAMP w/ 16" UNWIND ASSEMBLY
Dept. Code 70
F:\Engineering\Standard Parts\Applicator\360 214\CTM-214-X110RL-16X

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:
1	UPDATED BOM FOR NEW COLLAPSIBLE MANDREL	09/12/07	TDR	1=8	11/04/99	BOB S.

BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-214-X110R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	5/7.5 SWING TAMP ASSEMBLY	ASS-214-X110R/L-X	S
	1	TAMP 3-STATION VALVE BANK ASS'Y	ASS-214-0105M	S

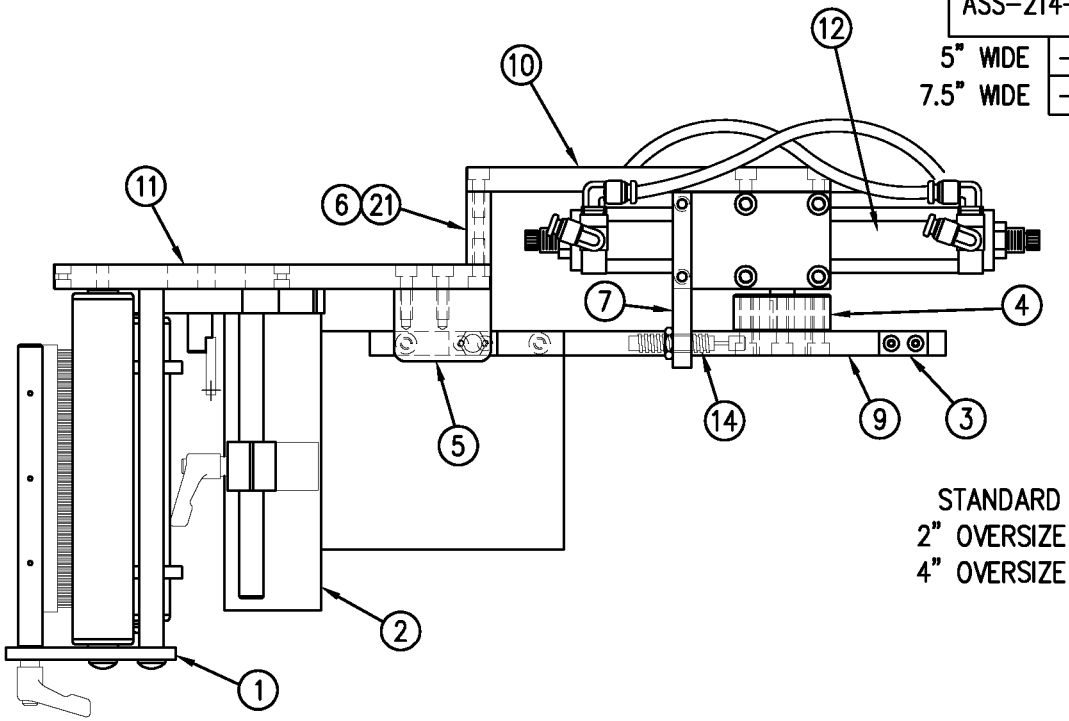
REV 3

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-X110R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
1	1	5/7.5 TENSION BRUSH ASS'Y	ASS-200-X126R/L	S
2	1	5/7.5 TAMP PEEL EDGE ASSEMBLY	ASS-214-X102R/L	.
3	2	SHOCK STRIKE PLATE	MP-214-0210	.
4	1	ROTARY ACTUATOR HUB DETAIL	MP-214-0211	.
5	1	HOME SHOCK MOUNT	MP-214-0212	.
6	1	OFFSET BLOCK	MP-214-0213	.
7	1	EXTEND SHOCK MOUNT	MP-214-0214	.
8	1	EXTEND SHOCK/ACTUATOR TRANS. PLATE	MP-214-0215	.
9	1	SWING ARM	MP-214-0217-X	.
10	1	ROTARY ACTUATOR MOUNTING PLATE	MP-214-0218-X	.
11	1	TRANSITION PLATE	MP-214-0219	.
12	1	90° ROTARY ACTUATOR	PM-AC1250	S
13	1	MC-25L SHOCK ABSORBER	PM-SA0990	.
14	1	MC-25H SHOCK ABSORBER	PM-SA1000	.
15	2	LOCK NUT (FOR LIGHT DUTY SHOCK)	MP-214-0242	.
16	1	SHOCK STOP COLLAR	PM-CO1040	.
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 ø DOWEL PIN x 1/2" Lg.	PM-FADP0930	.
	6	SHCS, #10-32 x 5/8" LG.	NONE	.
	1	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S

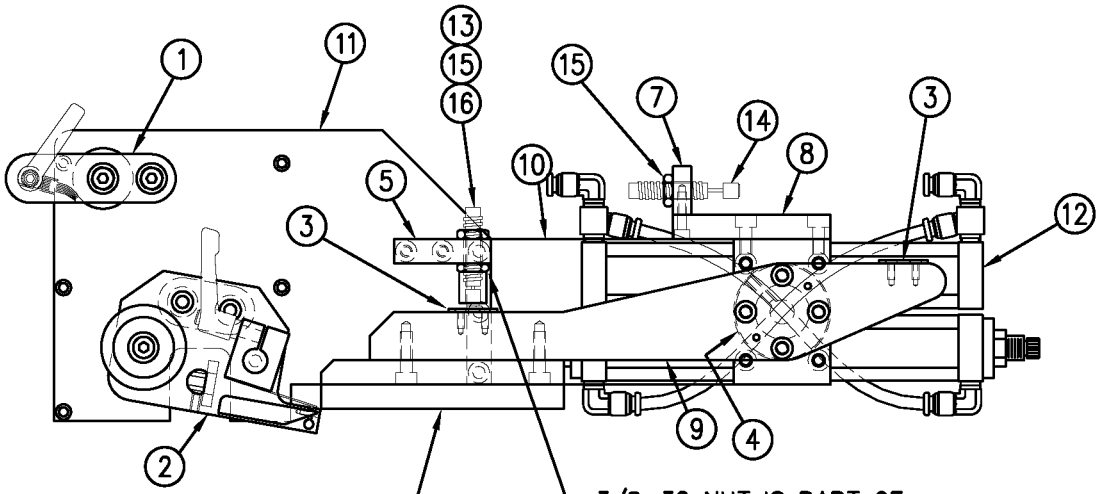
MOD-214-X110R/L-X

ASS-214-X110R/L-X

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



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



LABEL PAD & MANIFOLD (JOB SPECIFIC)

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

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TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY	PART: 5"/7.5" WIDE SWING TAMP ASSEMBLY	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
3	CHANGED TO MAC VALVE	09/12/07	TDR	1=3	11/4/99	BOB S.	214\MOD-214-X110RL-X

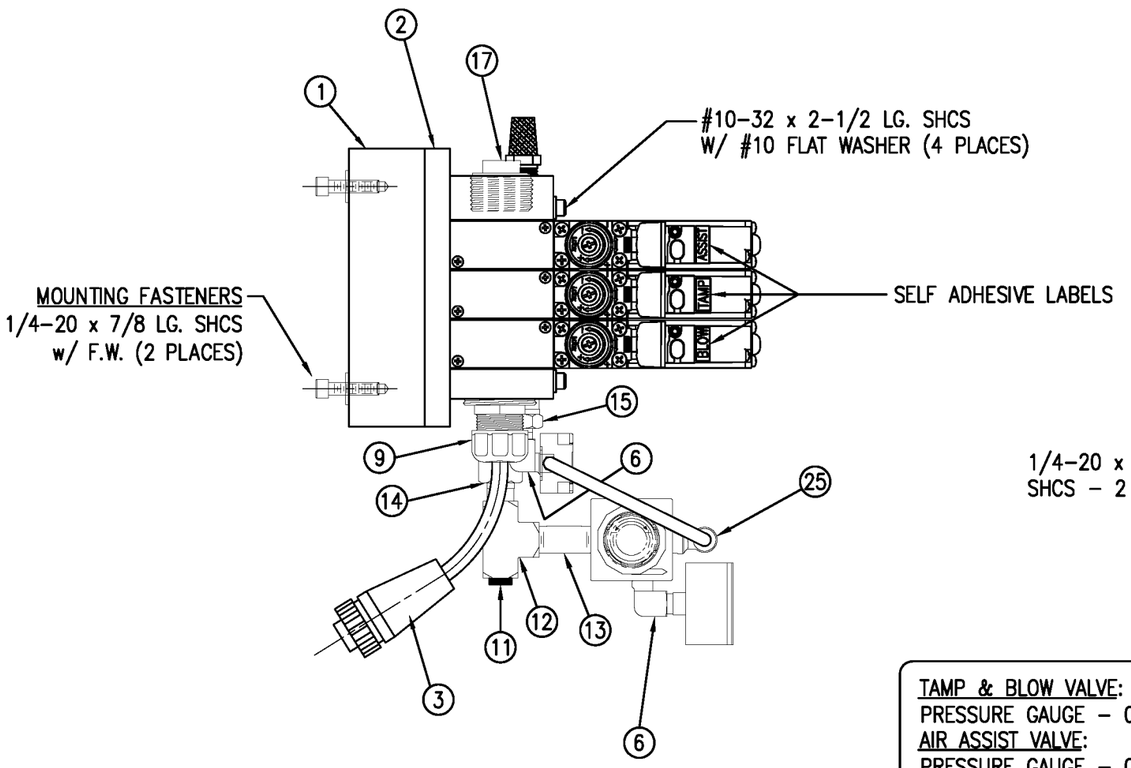
BILL OF MATERIAL

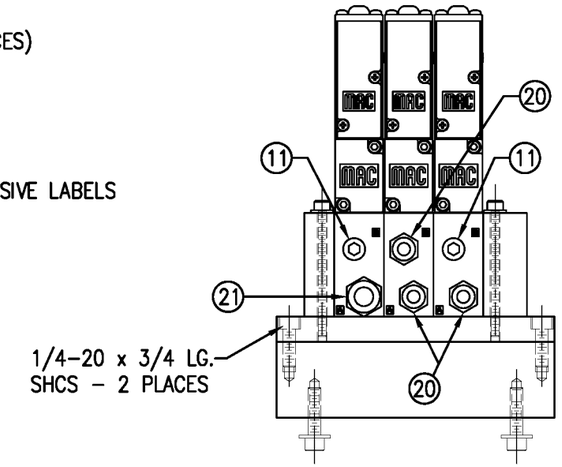
ASS–214–0105M

ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	MP–214–0202	VALVE FASTENING MOUNTING PLATE
②	1	MP–214–0206	VALVE MOUNTING PLATE
③	1	PE–200–0405	VALVE CABLE
④	1	PM–REG1500	REGULATOR
⑤	1	PM–VA2384	0–160 PSI PRESSURE GUAGE
⑥	2	PM–PF1180	NPT 90° STREET ELBOW 1/8" FEMALE TO 1/8" MALE
⑦	1	PM–PUMP1010	VACUUM PUMP, 55 PSI FEED PRESSURE, MUFFLED EXHAUST
⑧	1	PM–VA2355M	3 STATION MAC VALVE BANK
⑨	1	PE–CO2000	CORD GRIP
⑩	2	PM–MU1027	3/8" NPT MALE BRONZE EXHAUST MUFFLER
⑪	3	PM–FT1200	1/4" NPT SOCKET HEAD PLUG
⑫	1	PM–PF1200	TEE 1/4" NPT FEMALE 3 ENDS
⑬	1	PM–PF1143	NIPPLE, 1/4" NPT X 1 1/2" LG.
⑭	1	PM–PF1220	ADAPTOR, 3/8" NPT FEMALE TO 1/4" NPT MALE
⑮	1	PM–PF1157	REDUCER, 3/8" NPT TO 1/8" NPT
⑯	1	PM–PF1159	FITTING, 3/8" NPT MALE BOTH ENDS
⑰	1	PE–EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑱	1	PE–COND1084	STEEL REDUCER
⑲	1	PM–PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑳	3	PM–PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
㉑	1	PM–PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
㉒	1	PM–PF1167	3/8" NPT SOCKET HEAD PLUG
㉓	10.5"	PM–PT1070	1/4" OD TUBING
㉔	1	ASS–214–0106	AIR FILTER
㉕	1	PM–PF1055	90° ELBOW 1/4" TUBE TO 1/4" NPT MALE
◯	2	PM–FASH430079	1/4"–20 UNC x 7/8" LG. SS SHCS
◯	2	PM–FAW30275	1/4" SS FLAT WASHER
◯	2	PM–FASH430078	1/4"–20 UNC x 3/4" LG. SS SHCS
◯	4	PM–FASH429088	10–32 X 2 1/2" LG. SS SHCS
◯	4	PM–FAW30265	#10 SS FLAT WASHER

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

ASS–214–0105M

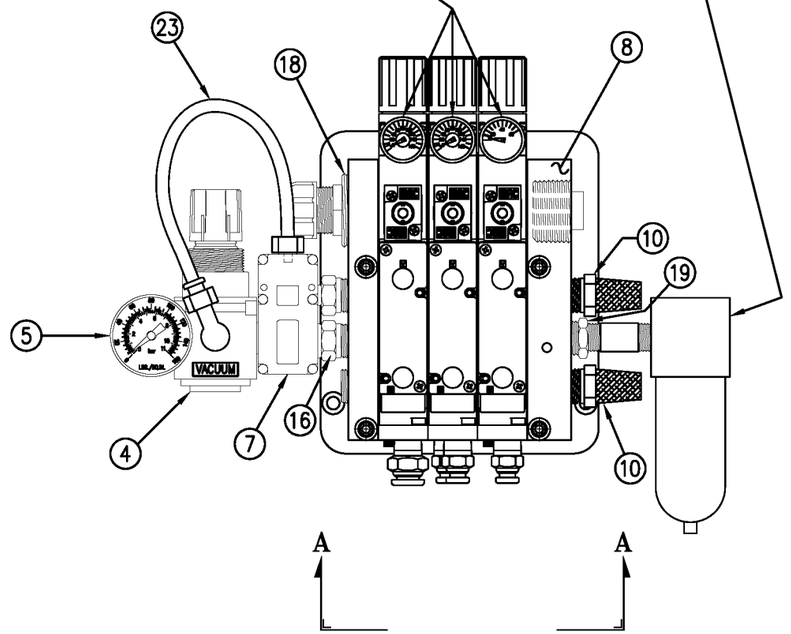




END VIEW "A"
(VALVE BANK & MTG. ONLY)

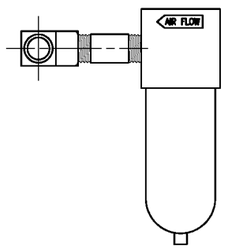
TAMP & BLOW VALVE:
PRESSURE GAUGE – 0–160 PSI
AIR ASSIST VALVE:
PRESSURE GAUGE – 0–60 PSI

AIR FILTER SHOWN IN
TYPICAL LOCATION FOR
LH APPLICATOR



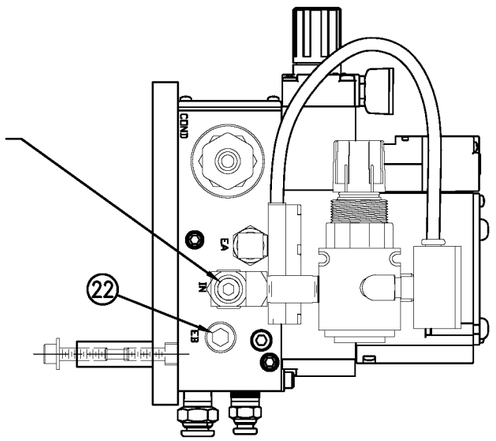
VALVE BANK SPARE PARTS:

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



㉔ AIR FILTER
SHIP LOOSE
–CUSTOMER TO INSTALL –

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



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APPLICATOR SERIES: 360	APPLICATOR WIDTH(S): 5"/7.5"/10"	GROUP: VALVE BANKS	REV. DATE –	REV. BY: XXX	Dept. Code 70
REV. 0	REV. DESCRIPTION –				

TITLE: 3 STATION VALVE BANK ASSEMBLY (TAMP)

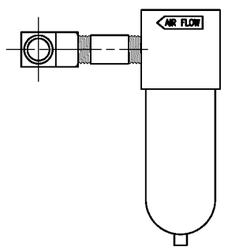
Scale: 1=3 | Date: 03/28/07 | DRAWN BY: E. SANOR

F:\Engineering\Standard Parts\Applicator\360\360\ASS–214–0105M

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-0105		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	VALVE FASTENING MOUNTING PLATE	MP-214-0202	.
②	1	VALVE MOUNTING PLATE	MP-214-0206	.
③	1	VALVE CABLE	PE-200-0405	.
④	1	REGULATOR/GAUGE (PM-VA2384)	PM-REG1500	.
⑤	1	VACUUM PUMP	PM-PUMP1000	.
⑥	1	VALVE BANK	PM-VA2355	.
⑦	1	CORD GRIP	PE-C02000	.
⑧	1	EXHAUST MUFFLER	PM-MU1021	.
⑨	2	1/4" BRONZE EXHAUST MUFFLER	PM-MU1025	.
⑩	1	3/4" NPT PLUG	PE-EN9110	.
⑪	1	1/4" x 3-1/2" LG. NIPPLE	PM-PF1141	.
⑫	2	1/4" x 1-1/2" LG. NIPPLE	PM-PF1143	.
⑬	1	1/4" TEE	PM-PF1200	.
⑭	1	1/4" STREET ELBOW	PM-PF1185	.
⑮	1	1/8" STREET ELBOW	PM-PF1180	.
⑯	4	1/4" NPT PLUG	PM-FT1200	.
⑰	3	FITTING, 1/4" TUBE w/ 1/4" NPT STRT	PM-PF1010	.
⑱	1	FITTING, 3/8" TUBE w/ 1/4" NPT STRT	PM-PF1020	.
⑲	1	FITTING, 1/4" TUBE w/ 1/8" NPT STRT	PM-PF1005	.
⑳	1	FITTING, 1/4" TUBE w/1/4" NPT ELBOW	PM-PF1055	.
㉑	1	BUSHING, NPT 3/4" MALE to 1/2" FEMALE	PE-COND1080	.
㉒	1	1/4" O.D. POLYURETHANE TUBING (CUT TO 7" LENGTH)	PM-PT1070	.
㉓	1	AIR FILTER	ASS-214-0106	.
	2	1/4"-20 UNC x 7/8" LG. SHCS	NONE	.
	2	1/4" FLAT WASHER	NONE	.

VALVE BANK SPARE PARTS:

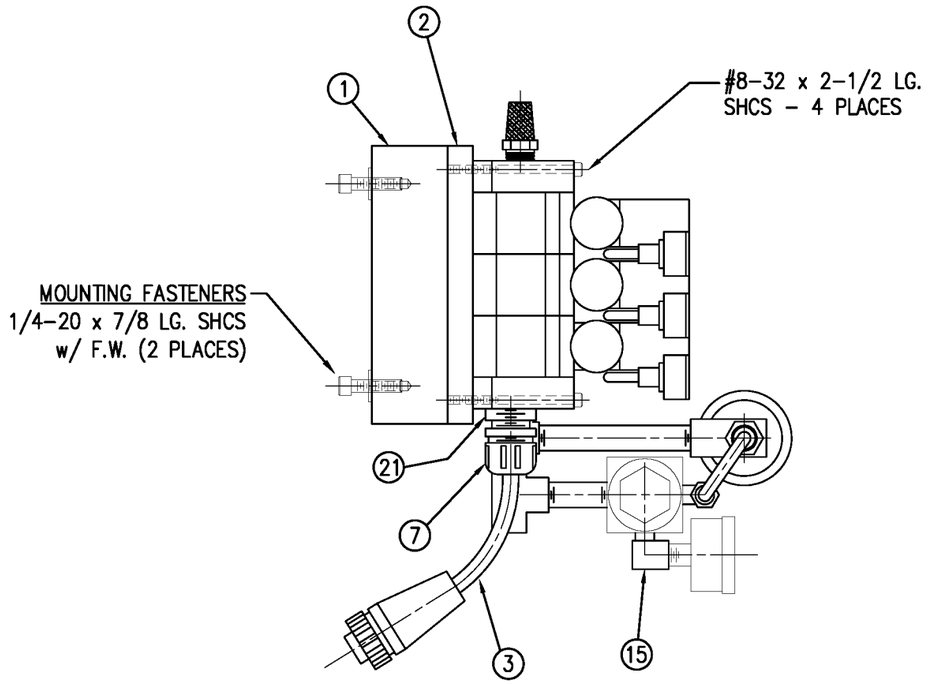
SOLENOID: #PM-VA2395
AIR ASSIST REGULATOR: #PM-VA2396
BLOW/TAMP/IMPRINTER REGULATORS: #PM-VA2397

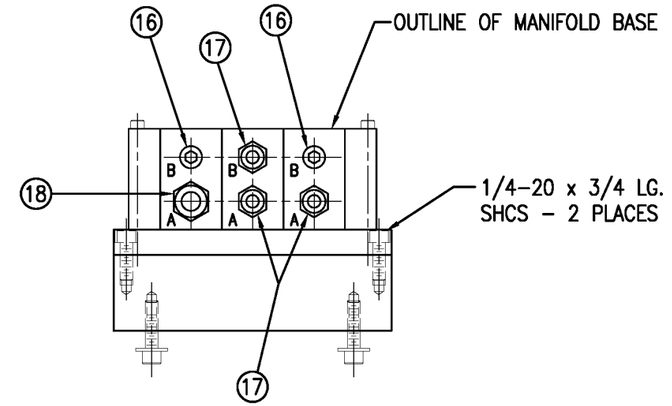


㉓ AIR FILTER
SHIP LOOSE
-CUSTOMER TO INSTALL -

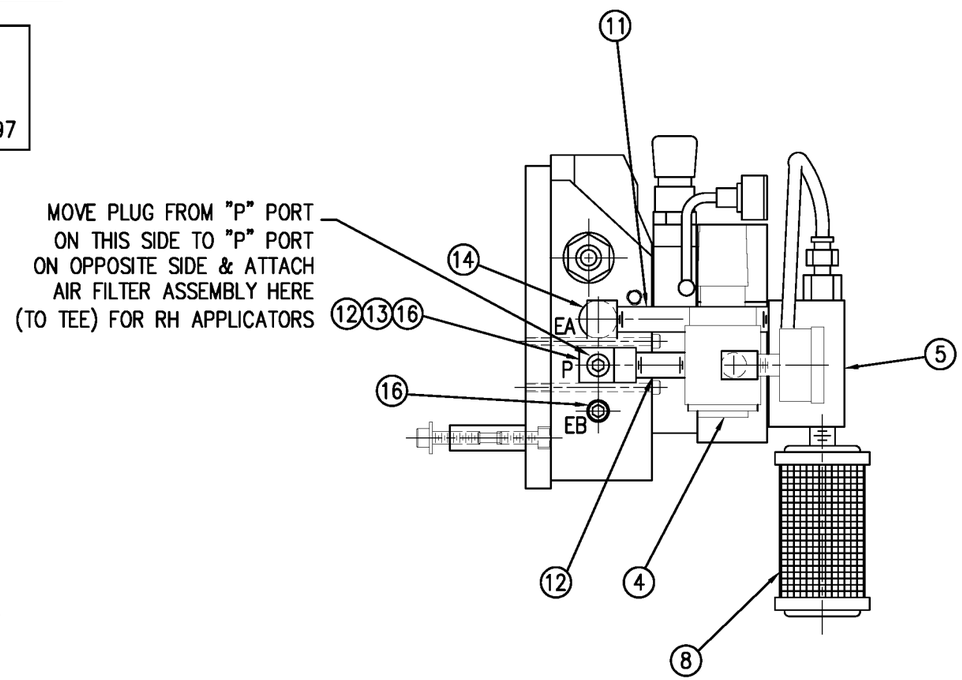
NOTE: AIR SUPPLY ALWAYS ENTERS FROM BACK OF APPLICATOR - CHANGE PIPING TO SUIT

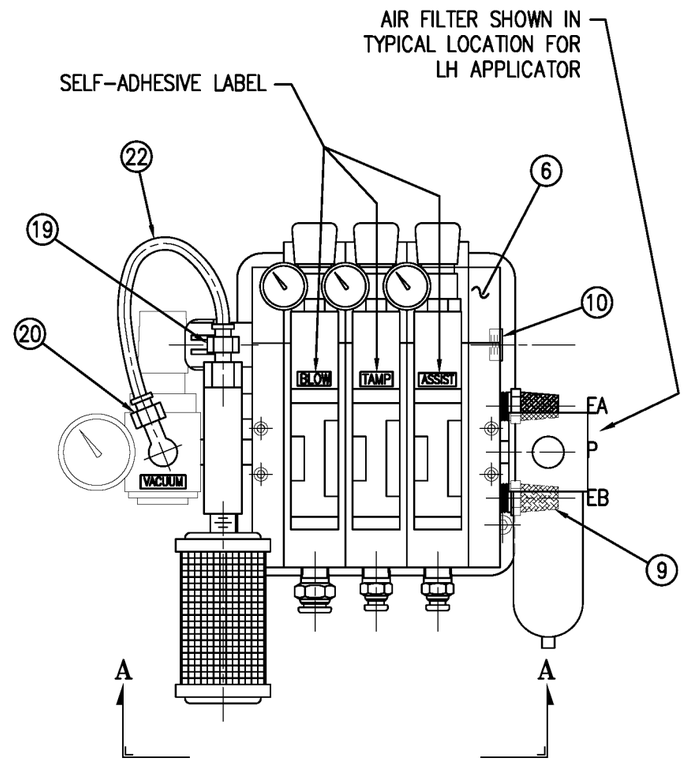
ASS-214-0105





END VIEW "A"
(VALVE BANK & MTG. ONLY)





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TITLE: 360 SERIES APPLICATOR: TAMP ASSEMBLY

PART: 3 STATION VALVE BANK ASSEMBLY

Dept. Code 70

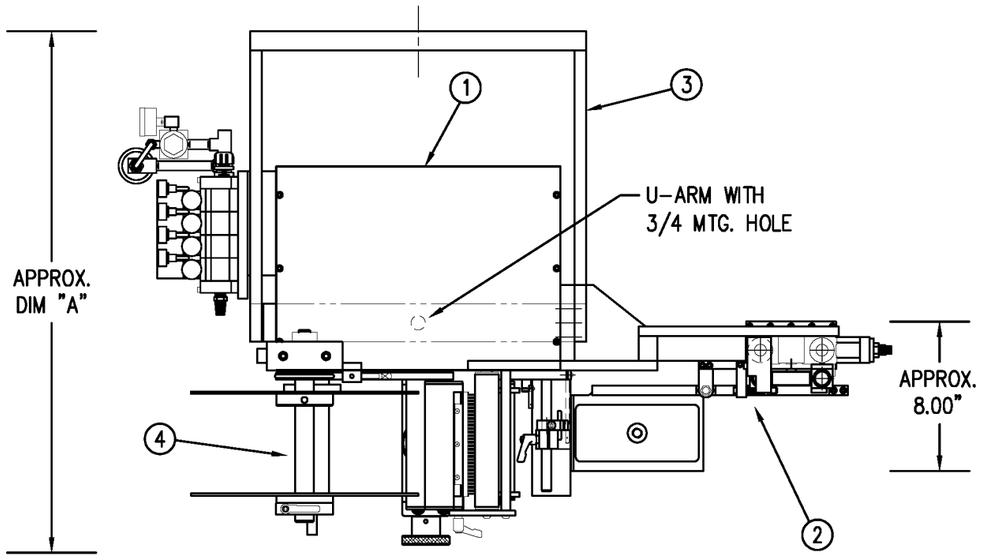
F:\Engineering\Standard Parts\Applicator\360 214\ASS-214-0105

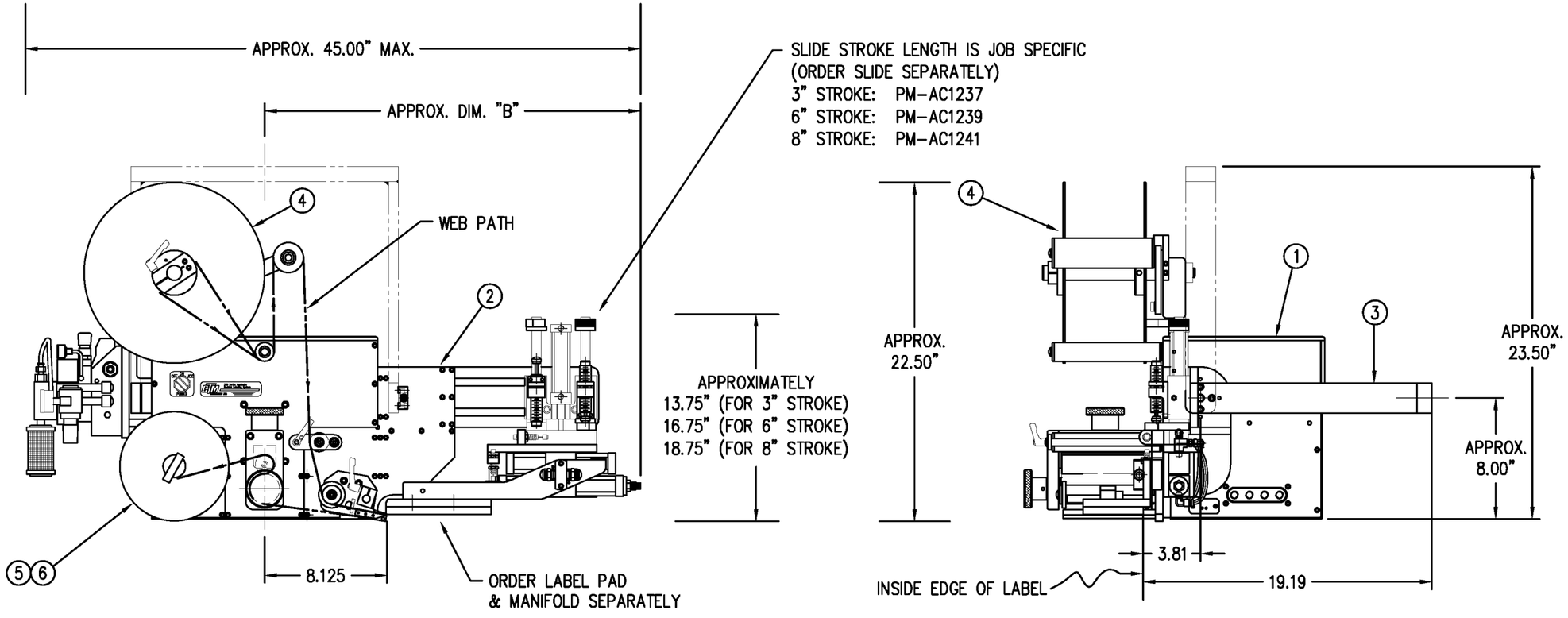
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:
3	ADDED SPARE PARTS LIST NOTE	02/16/05	TDR	1=3	06/02/98	BOB S.

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

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

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-





BILL OF MATERIAL				SOLD	
ASSEMBLY		CTM-214-X115RL-X-12X		S	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
1	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.	
2	1	5/7.5 DAT MODULE	MOD-214-X115R/L-X	S	
3	1	U-ARM ASSEMBLY	WAS-200-0247	.	
4	1	5/7.5 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S	
5	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
		COLLAPSIBLE RWD BLOCK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE REWIND
6	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
		FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
		COLLAPSIBLE MANDREL	ASS-200-3140-X	S	← COLLAPSIBLE REWIND
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S	

ORDER THESE ITEMS SEPARATELY:
1) TAMP SLIDE
2) LABEL PAD
3) LABEL MANIFOLD

CTM-214-X115R/L-X-12X	
5" WIDE; STD SWG STD REWIND	-0115R/L-0-12S
5" WIDE; STD SWG FILM REWIND	-0115R/L-0-12F
5" WIDE; STD SWG COLLAPSIBLE RWD	-0115R/L-0-12C
5" WIDE; 2 OS SWG STD REWIND	-0115R/L-2-12S
5" WIDE; 2 OS SWG FILM REWIND	-0115R/L-2-12F
5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-0115R/L-2-12C
5" WIDE; 4 OS SWG STD REWIND	-0115R/L-4-12S
5" WIDE; 4 OS SWG FILM REWIND	-0115R/L-4-12F
5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-0115R/L-4-12C
7.5" WIDE; STD SWG STD REWIND	-2115R/L-0-12S
7.5" WIDE; STD SWG FILM REWIND	-2115R/L-0-12F
7.5" WIDE; STD SWG COLLAPSIBLE RWD	-2115R/L-0-12C
7.5" WIDE; 2 OS SWG STD REWIND	-2115R/L-2-12S
7.5" WIDE; 2 OS SWG FILM REWIND	-2115R/L-2-12F
7.5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-2115R/L-2-12C
7.5" WIDE; 4 OS SWG STD REWIND	-2115R/L-4-12S
7.5" WIDE; 4 OS SWG FILM REWIND	-2115R/L-4-12F
7.5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-2115R/L-4-12C

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TITLE: 360 SERIES APPLICATOR: DUAL ACTION TAMP ASSEMBLY

PART: 5"/7.5" WIDE: IN-LINE DAT w/12" UNWIND ASSEMBLY

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 214\CTM-214-X115RL-X-12X

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
1	ADDED COLLAPSIBLE MANDREL OPTION	10/16/07	TDR

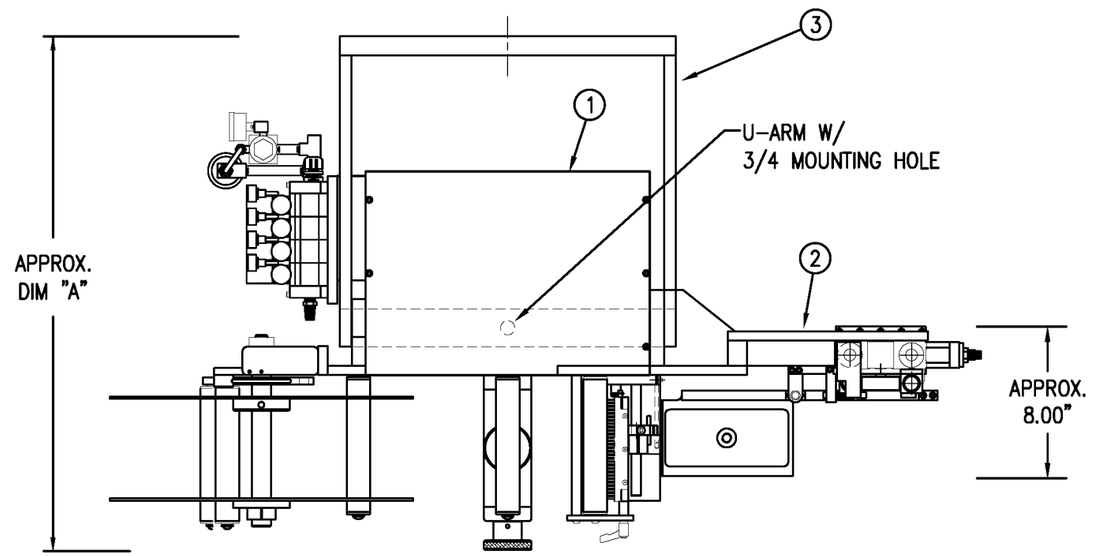
Scale: 1=8

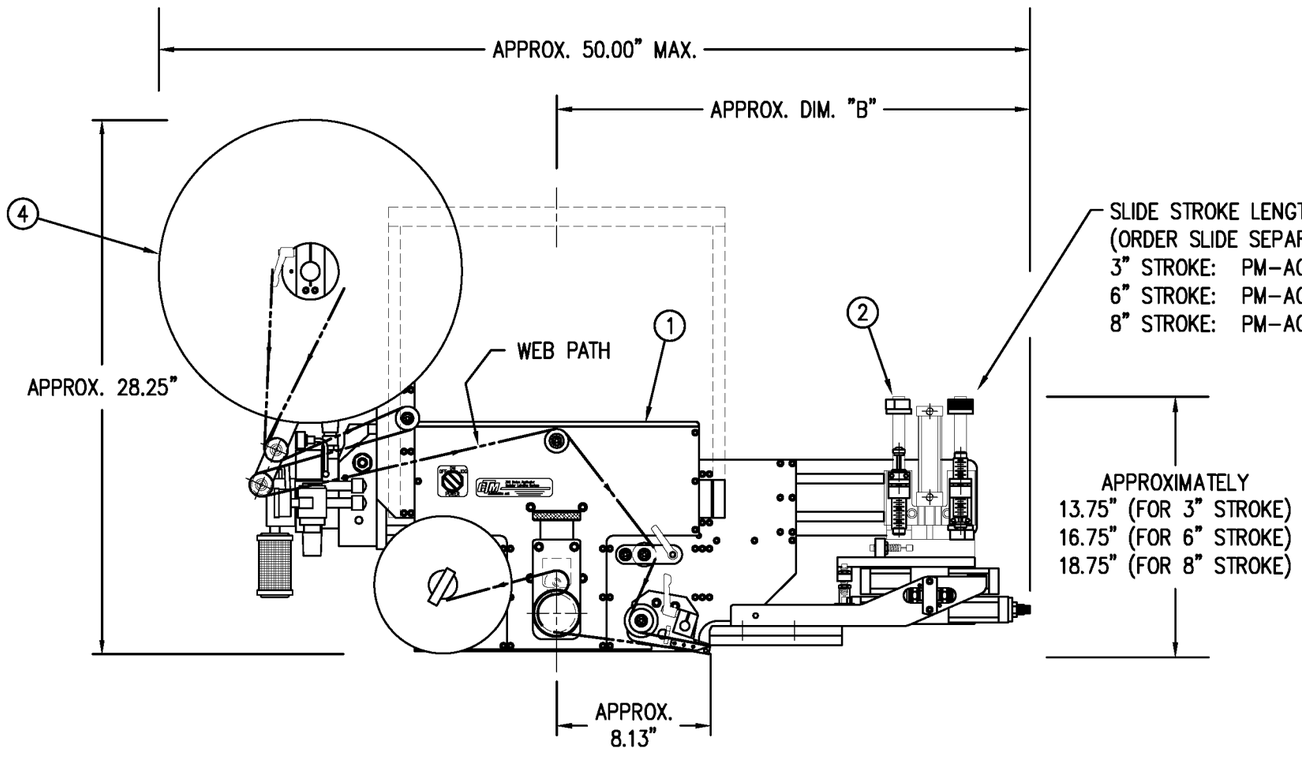
Date: 11/04/99

DRAWN BY: BOB S.

PART NO.	DIM "A"
CTM-214-0115R/L-X-16X	27.50
CTM-214-2115R/L-X-16X	30.00

PART NO.	DIM "B"
CTM-214-X115R/L-0-16X	25.00
CTM-214-X115R/L-2-16X	27.00
CTM-214-X115R/L-4-16X	29.00

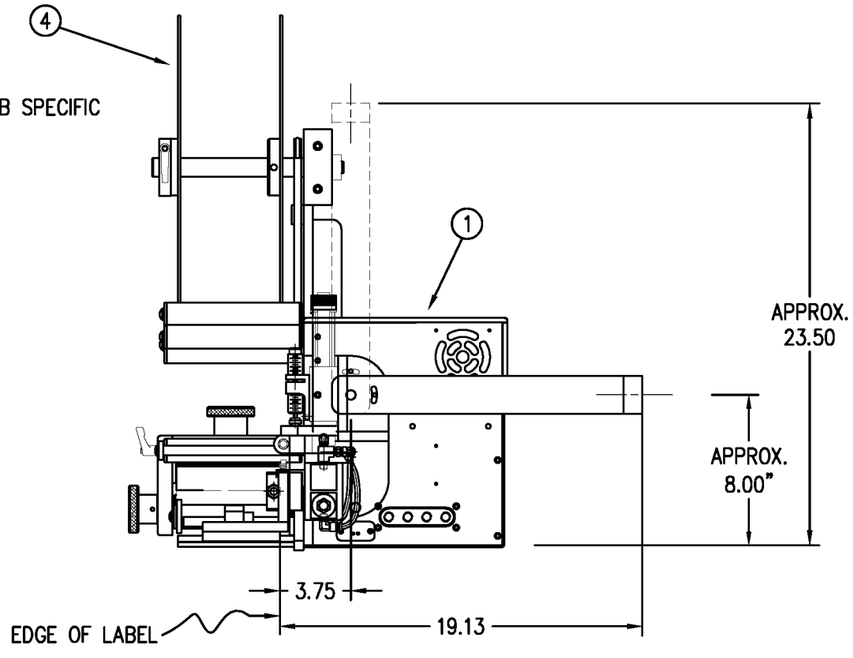




BILL OF MATERIAL				SOLD	
ASSEMBLY		CTM-214-X115RL-X-16X		S	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
1	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.	
2	1	5/7.5 WIDE; IN-LINE DAT ASS'Y	MOD-214-X115R/L-X	S	
3	1	U-ARM ASSEMBLY	WAS-200-0247	.	
4	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.	
5	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
6	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S	← COLLAPSIBLE RWD
	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

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



CTM-214-X115R/L-X-16X	
5" WIDE; STD SWG STD REWIND	-0115R/L-0-16S
5" WIDE; STD SWG FILM REWIND	-0115R/L-0-16F
5" WIDE; STD SWG COLLAPSIBLE RWD	-0115R/L-0-16C
5" WIDE; 2 OS SWG STD REWIND	-0115R/L-2-16S
5" WIDE; 2 OS SWG FILM REWIND	-0115R/L-2-16F
5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-0115R/L-2-16C
5" WIDE; 4 OS SWG STD REWIND	-0115R/L-4-16S
5" WIDE; 4 OS SWG FILM REWIND	-0115R/L-4-16F
5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-0115R/L-4-16C
7.5" WIDE; STD SWG STD REWIND	-2115R/L-0-16S
7.5" WIDE; STD SWG FILM REWIND	-2115R/L-0-16F
7.5" WIDE; STD SWG COLLAPSIBLE RWD	-2115R/L-0-16C
7.5" WIDE; 2 OS SWG STD REWIND	-2115R/L-2-16S
7.5" WIDE; 2 OS SWG FILM REWIND	-2115R/L-2-16F
7.5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-2115R/L-2-16C
7.5" WIDE; 4 OS SWG STD REWIND	-2115R/L-4-16S
7.5" WIDE; 4 OS SWG FILM REWIND	-2115R/L-4-16F
7.5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-2115R/L-4-16C

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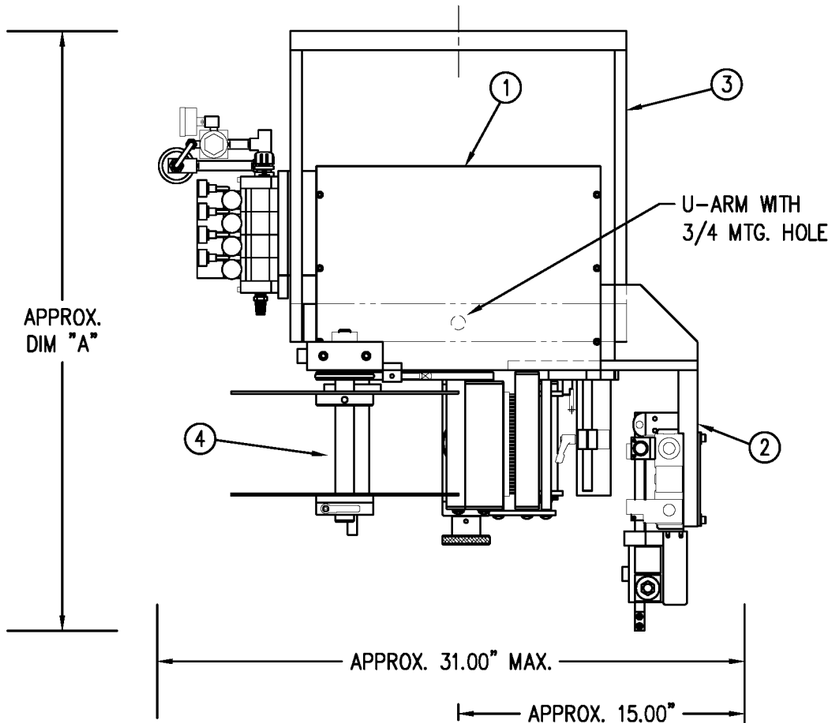
TITLE: 360 SERIES APPLICATOR: DUAL ACTION TAMP ASSEMBLY
PART: 5"/7.5" WIDE IN-LINE DAT TAMP w/ 16" UNWIND ASSEMBLY
Dept. Code 70
F:\Engineering\Standard Parts\Applicator\360 214\CTM-214-X115RL-X-16X
Scale: 1=8
Date: 11/04/99
DRAWN BY: BOB S.
REV. DESCRIPTION
1 UPDATED BOM FOR NEW COLLAPSIBLE MANDREL
REV. DATE 09/12/07
REV. BY: TDR

PART NO.	DIM "A"	DIM "B"
CTM-214-X116R/L-0-12X	31.75	24.50
CTM-214-X116R/L-2-12X	32.75	26.50
CTM-214-X116R/L-4-12X	34.75	28.50

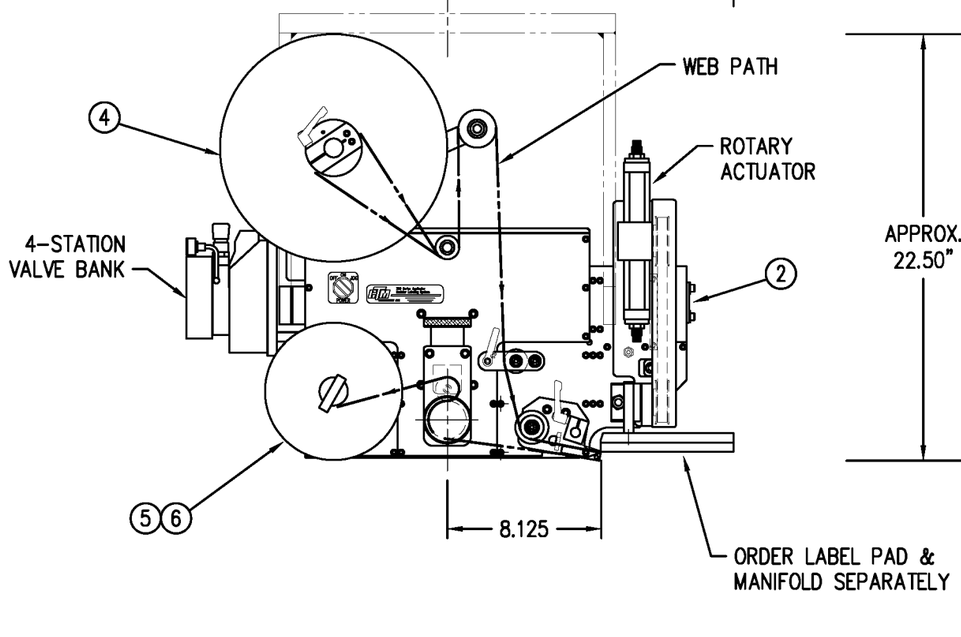
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

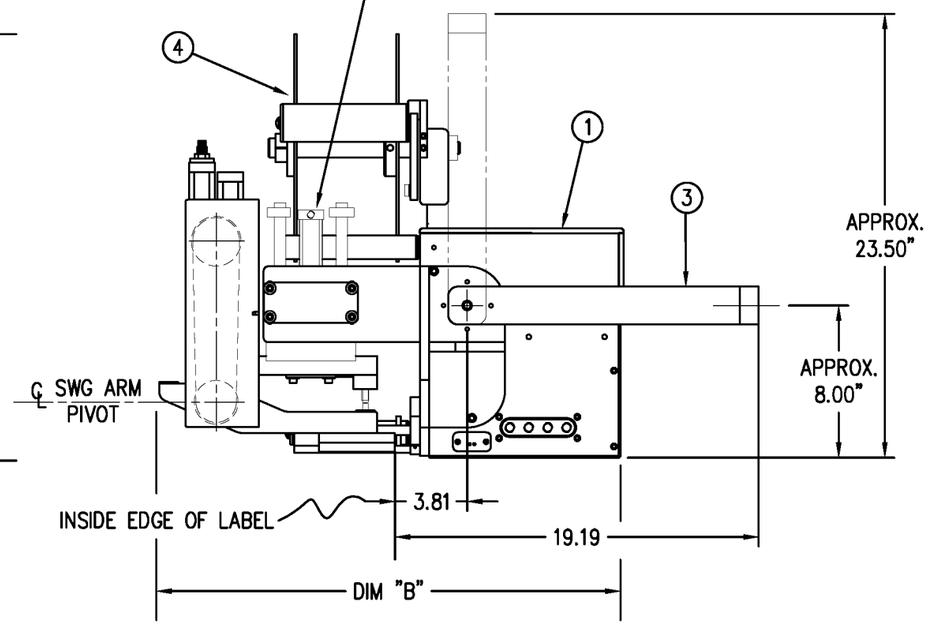


BILL OF MATERIAL				SOLD	
ASSEMBLY		CTM-214-X116RL-X-12X		S	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
1	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.	
2	1	5/7.5 DAT MODULE (PERPENDICULAR TO FLOW)	MOD-214-X116R/L-X	S	
3	1	U-ARM ASSEMBLY	WAS-200-0247	.	
4	1	5/7.5 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S	
5	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM RWD
		COLLAPSIBLE REWIND BLOCK & SHAFT	ASS-200-3167R/L	S	← COLLAPSE REWIND
6	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
		FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
		COLLAPSIBLE MANDREL	ASS-200-3140-X	S	← COLLAPSE REWIND
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S	

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

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





CTM-214-X116R/L-X-12X

5" WIDE; STD SWG STD REWIND	-0116R/L-0-12S
5" WIDE; STD SWG FILM REWIND	-0116R/L-0-12F
5" WIDE; STD SWG COLLAPSIBLE RWD	-0116R/L-0-12C
5" WIDE; 2 OS SWG STD REWIND	-0116R/L-2-12S
5" WIDE; 2 OS SWG FILM REWIND	-0116R/L-2-12F
5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-0116R/L-2-12C
5" WIDE; 4 OS SWG STD REWIND	-0116R/L-4-12S
5" WIDE; 4 OS SWG FILM REWIND	-0116R/L-4-12F
5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-0116R/L-4-12C
7.5" WIDE; STD SWG STD REWIND	-2116R/L-0-12S
7.5" WIDE; STD SWG FILM REWIND	-2116R/L-0-12F
7.5" WIDE; STD SWG COLLAPSIBLE RWD	-2116R/L-0-12C
7.5" WIDE; 2 OS SWG STD REWIND	-2116R/L-2-12S
7.5" WIDE; 2 OS SWG FILM REWIND	-2116R/L-2-12F
7.5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-2116R/L-2-12C
7.5" WIDE; 4 OS SWG STD REWIND	-2116R/L-4-12S
7.5" WIDE; 4 OS SWG FILM REWIND	-2116R/L-4-12F
7.5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-2116R/L-4-12C

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TITLE: 360 SERIES APPLICATOR: DUAL ACTION TAMP ASSEMBLY

PART: 5"/7.5"/10" WIDE: DAT (PERPENDICULAR TO FLOW) w/12" UNWIND ASSEMBLY

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 214\CTM-214-X116RL-X-12X

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
1	ADDED COLLAPSIBLE MANDREL OPTION	10/16/07	TDR

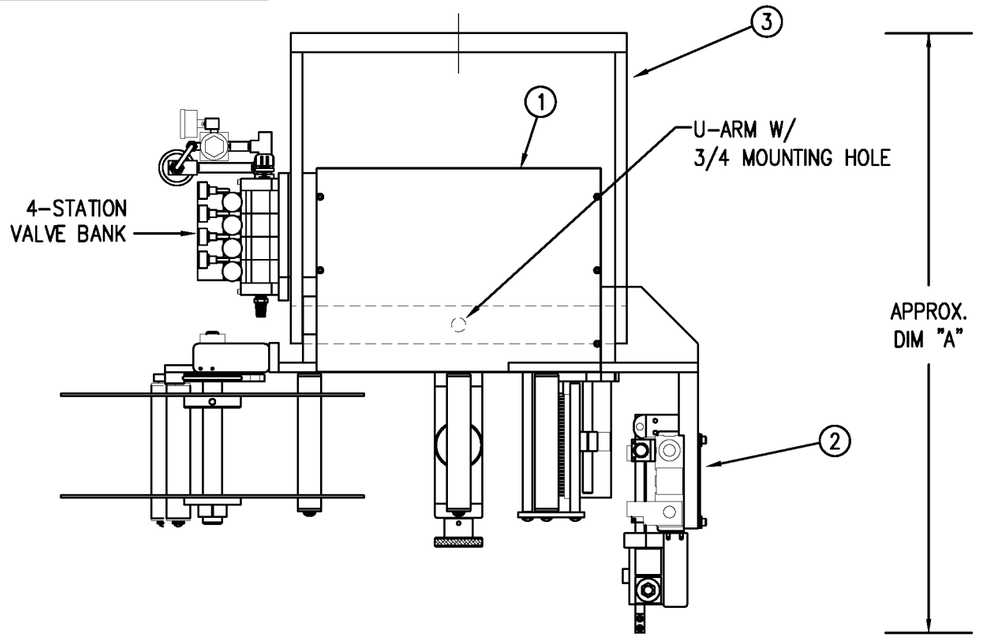
Scale: 1=8

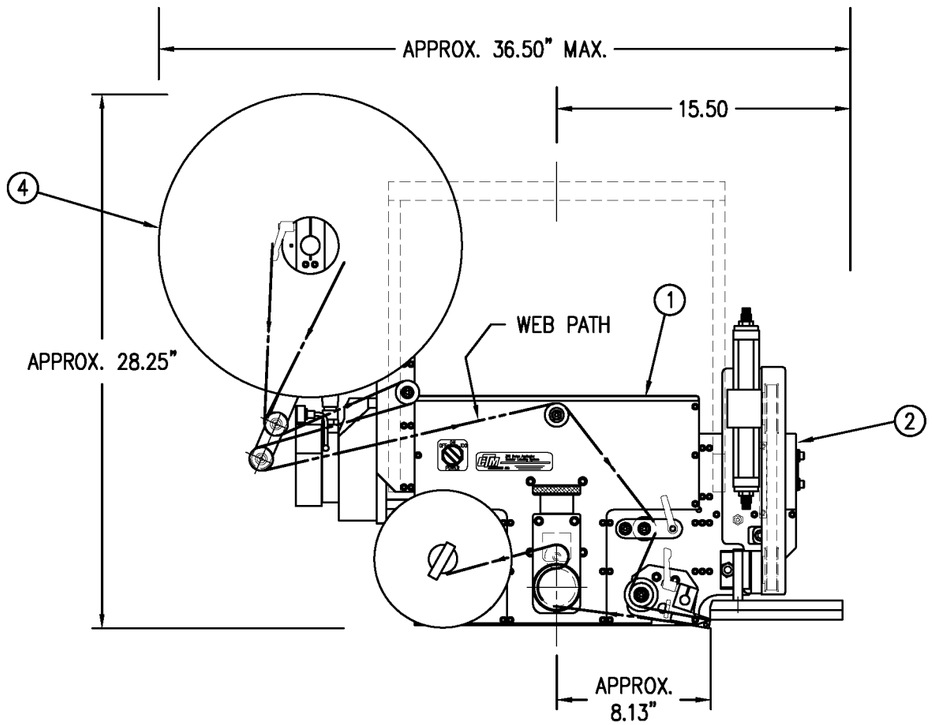
Date: 11/04/99

DRAWN BY: BOB S.

REV. BY: TDR

PART NO.	DIM "A"	DIM "B"
CTM-214-X116R/L-0-16X	31.75	24.50
CTM-214-X116R/L-2-16X	33.75	26.50
CTM-214-X116R/L-4-16X	35.75	28.50





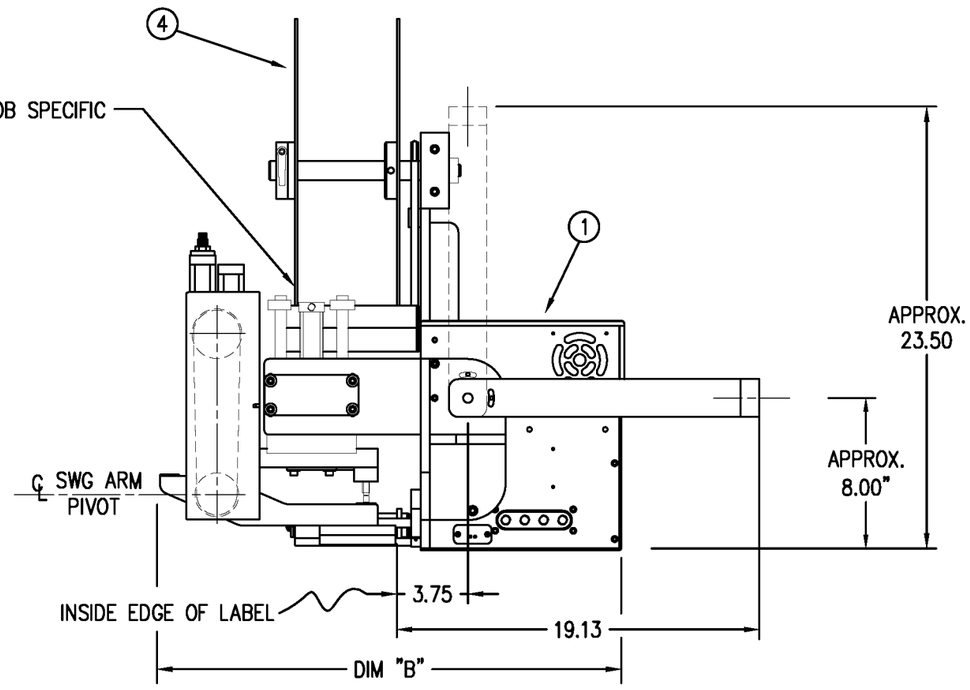
BILL OF MATERIAL

ASSEMBLY		CTM-214-X116RL-X-16X		SOLD	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
1	1	5/7.5 WIDE; CORE UNIT	ASS-200-X150R/L	.	
2	1	5/7.5 WIDE; IN-LINE DAT ASS'Y	MOD-214-X116R/L-X	S	
3	1	U-ARM ASSEMBLY	WAS-200-0247	.	
4	1	5/7.5 WIDE; 16" UNWIND ASSY	ASS-200-3121R/L-X	.	
5	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
6	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3140-X	S	← COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S	

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

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

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



CTM-214-X116R/L-X-16X	
5" WIDE; STD SWG STD REWIND	-0116R/L-0-16S
5" WIDE; STD SWG FILM REWIND	-0116R/L-0-16F
5" WIDE; STD SWG COLLAPSIBLE RWD	-0116R/L-0-16C
5" WIDE; 2 OS SWG STD REWIND	-0116R/L-2-16S
5" WIDE; 2 OS SWG FILM REWIND	-0116R/L-2-16F
5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-0116R/L-2-16C
5" WIDE; 4 OS SWG STD REWIND	-0116R/L-4-16S
5" WIDE; 4 OS SWG FILM REWIND	-0116R/L-4-16F
5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-0116R/L-4-16C
7.5" WIDE; STD SWG STD REWIND	-2116R/L-0-16S
7.5" WIDE; STD SWG FILM REWIND	-2116R/L-0-16F
7.5" WIDE; STD SWG COLLAPSIBLE RWD	-2116R/L-0-16C
7.5" WIDE; 2 OS SWG STD REWIND	-2116R/L-2-16S
7.5" WIDE; 2 OS SWG FILM REWIND	-2116R/L-2-16F
7.5" WIDE; 2 OS SWG COLLAPSIBLE RWD	-2116R/L-2-16C
7.5" WIDE; 4 OS SWG STD REWIND	-2116R/L-4-16S
7.5" WIDE; 4 OS SWG FILM REWIND	-2116R/L-4-16F
7.5" WIDE; 4 OS SWG COLLAPSIBLE RWD	-2116R/L-4-16C

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PART: 5/7.5/10 WIDE DAT PERPENDICULAR FLOW w/ 16" UNWIND ASS'Y

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 214\CTM-214-X116RL-X-16X

DRAWN BY: BOB S.

Date: 11/04/99

Scale: 1=8

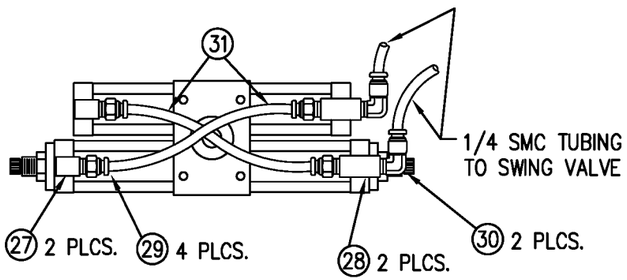
REV. BY: TDR

TITLE: 360 SERIES APPLICATOR: DUAL ACTION TAMP ASSEMBLY

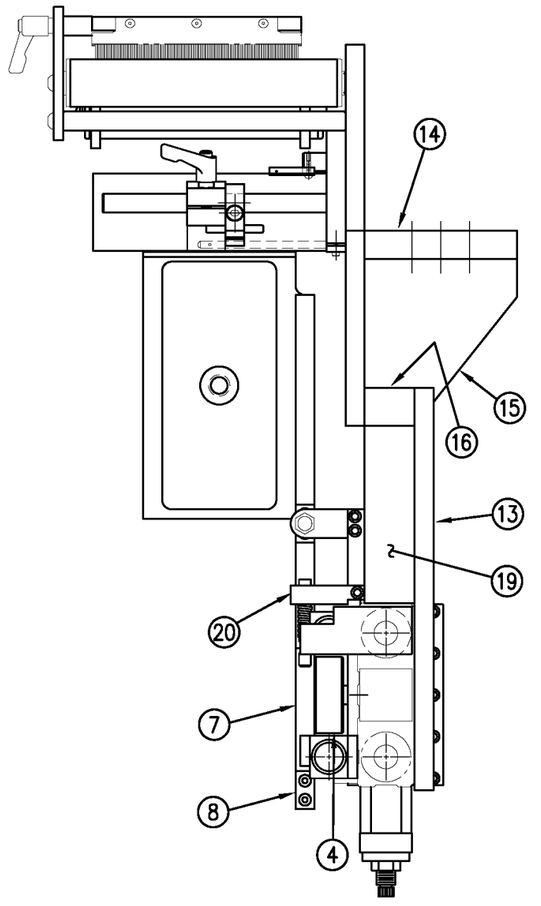
REV.	REV. DESCRIPTION	REV. DATE
1	UPDATED BOM FOR NEW COLLAPSIBLE MANDREL	09/12/07

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-CO1040	.
㉕	1	MOUNTING EAR NUT	MP-214-0240	.
㉖	1	LOCK NUT (FOR LIGHT DUTY SHOCK)	MP-214-0242	.
㉗	2	1/8 NPT STREET ELBOW	PM-PF1180	.
㉘	2	1/8 NPT BRANCH TEE	PM-PF1203	.
㉙	4	FTG, 1/4 TUBE x 1/8 NPT STRAIGHT	PM-PF1005	.
㉚	4	FTG, 1/4 TUBE x 1/8 NPT 90 ELBOW	PM-PF1050	.
㉛	2	1/4" OD SMC TUBING x 7" LG.	PM-PT1070	.
	4	SHCS, 1/4-20 x 7/8" LG.	NONE	.
	1	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S
ORDER PAD & MANIFOLD SEPARATELY ORDER PNEUMATIC SLIDE SEPARATELY				

BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-214-X115R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	360 DAT ASSEMBLY (REELS UP)	ASS-214-X115R/L-X	S
㉜	1	AIR ASSIST TUBE	MP-211-2217-7	.
㉝	1	AIR ASSIST TUBING x 15" LG.	PM-AH1000	.
㉞	1	4-STATION VALVE BANK	ASS-238-0142M	S
㉟	1	VALVE MOUNTING PLATE	MP-214-0206	.
㊱	1	VALVE FASTENING PLATE	MP-214-0202	.
	1	1/4" OD SMC TUBING x 169" LG. (CUT TO SUIT)	PM-PT1070	.
	1	3/8" OD SMC TUBING x 68" LG. (CUT TO SUIT)	PM-PT1080	S
	4	FTG, 1/4 TUBE x 1/8 NPT 90° MALE EL SW	PM-PF1030	.
	1	FTG, 3/8 TUBE x 1/4 NPT 90° MALE EL SW	PM-PF1045	.
	4	FTG, 1/4 TUBE x 1/8 NPT STRAIGHT	PM-PF1005	.
	1	FTG, 3/8 TUBE x 1/4 NPT 90° MALE EL	PM-PF1060	.
ORDER PAD & MANIFOLD SEPARATELY ORDER PNEUMATIC SLIDE SEPARATELY				

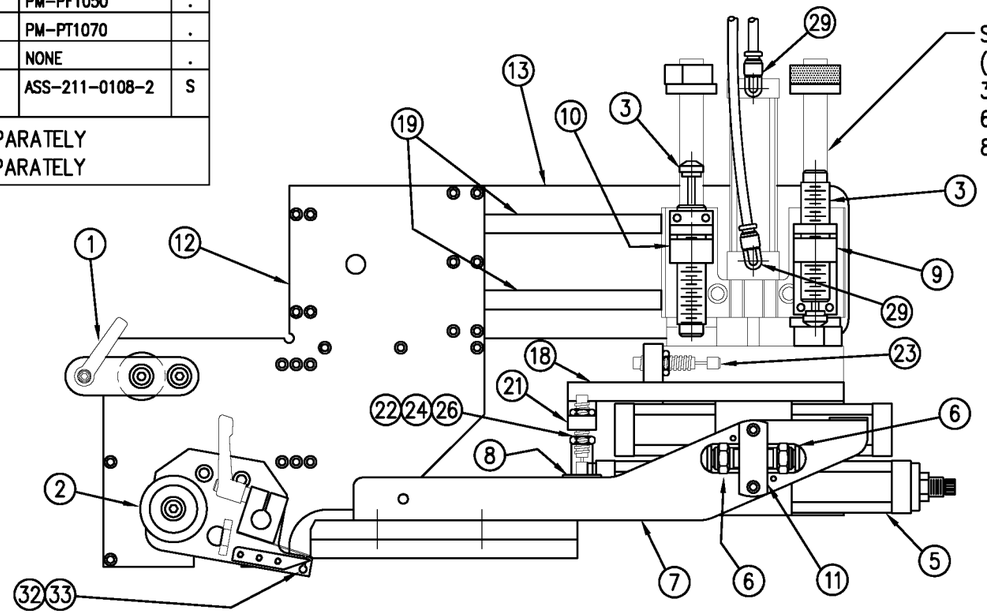


VIEW "A-A"

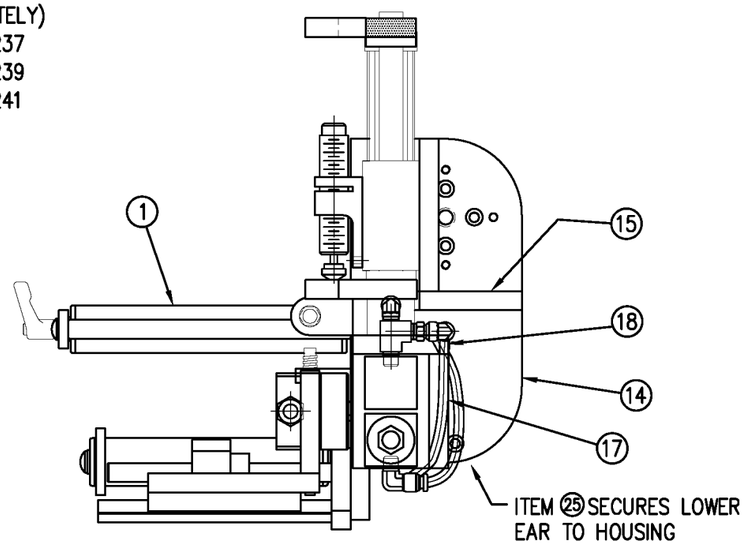


MOD-214-X115R/L-X	
ASS-214-X115R/L-X	
5" WIDE	-0115R/L-X
7.5" WIDE	-2115R/L-X

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



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



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TITLE: 360 SERIES APPLICATOR: DAT (REELS UP CONFIG.)

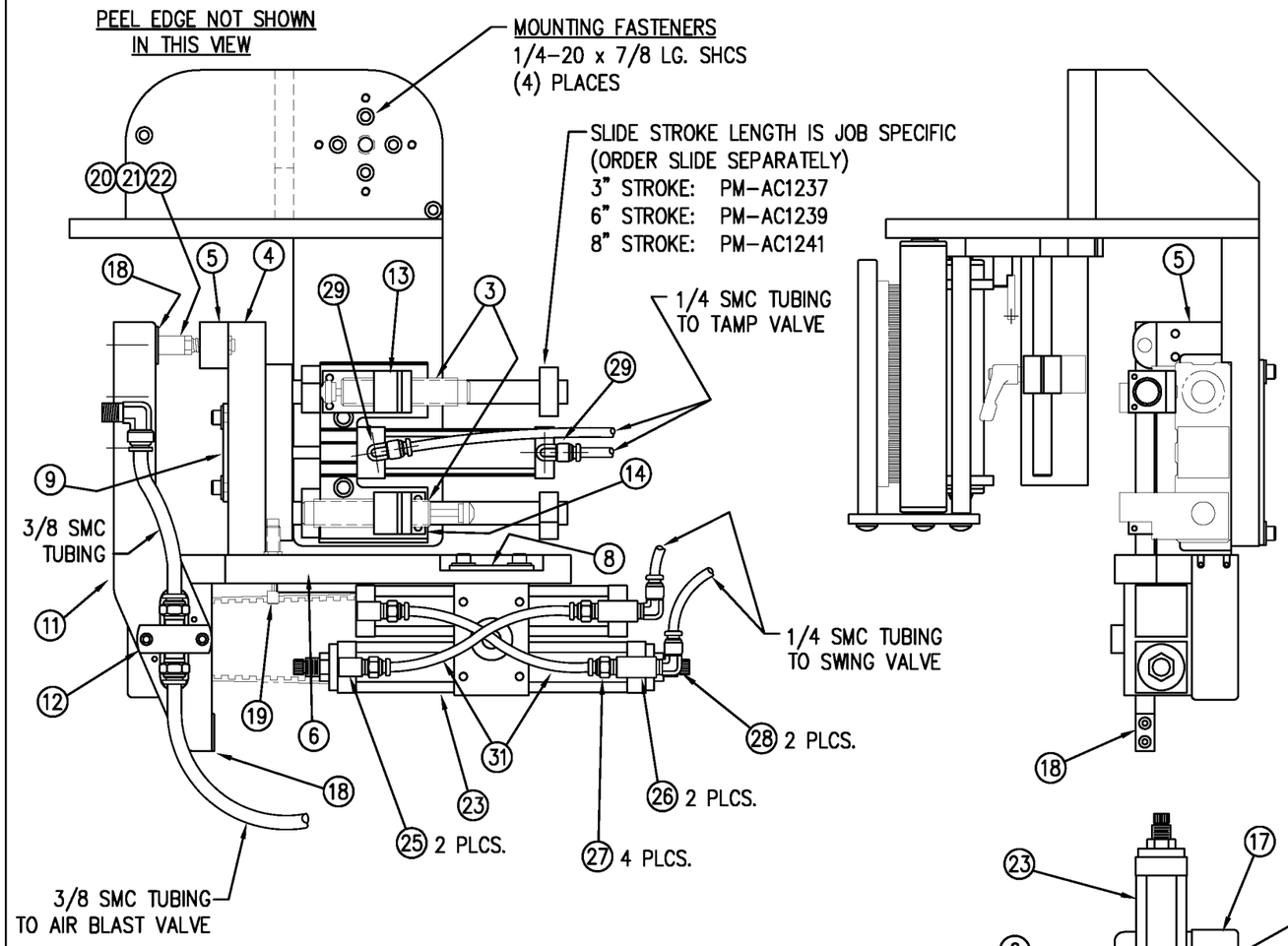
PART: 5/7.5 WIDE; DAT NOSE ASSEMBLY

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360\214\MOD-214-X115RL-X

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
2	FIXED VALVE BANK BOM ENTRIES	09/12/07	TDR

DRAWN BY:	Date:	Scale:
DKM	03/27/03	1=4



BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-X116R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
1	1	5/7.5 TENSION BRUSH ASSEMBLY	ASS-200-X126R/L	S
2	1	5/7.5 TAMP PEEL EDGE ASSEMBLY	ASS-214-X102R/L	S
3	2	SC-300 SHOCK ABSORBER	PM-SA0950	.
4	1	SLIDE TRANSITION PLATE	MP-238-0302R/L	.
5	1	SWING HOME SHOCK MOUNT	MP-238-0303	.
6	1	ROTARY ACTUATOR MOUNT PLATE	MP-238-0304R/L	.
7	1	ROTARY MOUNT NUT PLATE	PM-238-0305	.
8	1	ROTARY ACTUATOR NUT PLATE	PM-238-0306	.
9	1	SLIDE NOSE NUT PLATE	PM-238-0307	.
10	1	SLIDE BODY NUT PLATE	PM-238-0308	.
11	1	STD/2" OS/4" OS SWING ARM	MP-238-0312R/L-X	.
12	1	SWING ARM AIR MANIFOLD	MP-238-0313	.
13	1	SLIDE HOME SHOCK MOUNT	MP-238-0314	.
14	1	SLIDE EXTEND SHOCK MOUNT	MP-238-0315	.
15	1	GUARD SUPPORT	MP-238-0316	.
16	1	ROTARY ACTUATOR PULLEY	MP-238-0318	.
17	1	SWING ASSEMBLY DRIVE GUARD	PM-238-0319R/L	.
18	2	SHOCK STRIKE PLATES	MP-214-0210	.
19	1	MC25H SWING EXTEND SHOCK	PM-SA1000	S
20	1	MC25L SWING HOME SHOCK	PM-SA0990	S

CONTINUED

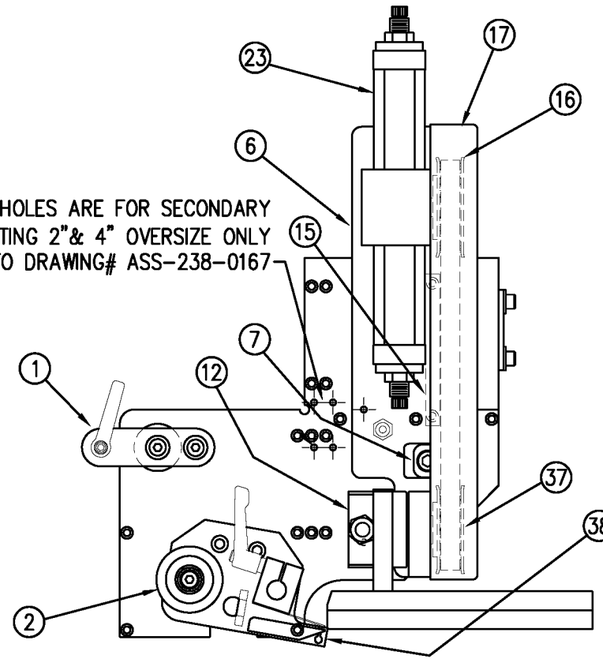
RH & LH ASSEMBLIES AVAILIBLE
-RH ASSEMBLY SHOWN-

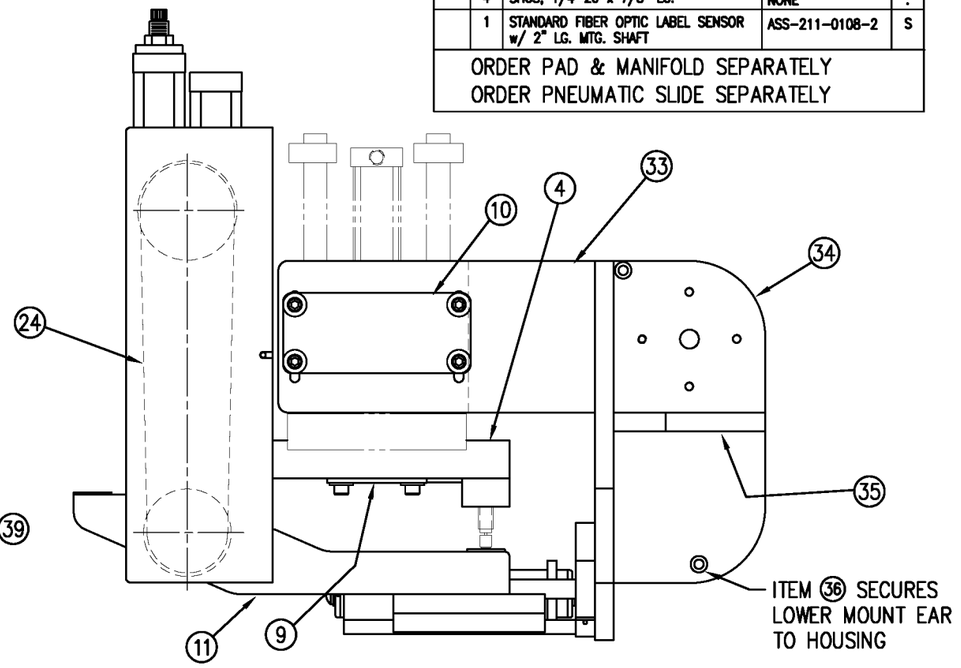
MOD-214-X116R/L-X
ASS-214-X116R/L-X
5" WIDE -0116R/L-X
7.5" WIDE -2116R/L-X

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

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-214-X116R/L-X (CONTINUED)		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
21	1	SHOCK STOP COLLAR	PM-C01040	.
22	1	LOCK NUT FOR MC25L SHOCK	MP-214-0242	.
23	1	ROTARY ACTUATOR	PM-AC1248	S
24	1	SWING ARM TIMING BELT	PM-BELT1039	S
25	2	1/8 NPT STREET ELBOW	PM-PF1180	.
26	2	1/8 NPT BRANCH TEE	PM-PF1203	.
27	4	FTG, 1/4 TUBE x 1/8 NPT STRAIGHT	PM-PF1005	.
28	4	FTG, 1/4 TUBE x 1/8 NPT 90 ELBOW	PM-PF1050	.
29	.	.		.
30	2	3/8 TUBE x 1/4 NPT MALE CONNECTOR	PM-PF1020	.
31	2	1/4" OD SMC TUBING x 7" LONG	PM-PT1070	.
32	1	DAT TRANSITION PLATE	MP-214-0230	.
33	1	STD/2" OS/4" OS DAT SLIDE MOUNT PLATE	MP-214-0241-X	.
34	1	DAT MOUNTING EAR	MP-214-0232	.
35	1	DAT MOUNT GUSSET	MP-214-0233	.
36	1	MOUNTING EAR NUT	MP-214-0240	.
37	1	SWING ARM PIVOT ASSEMBLY	ASS-238-0141	.
	4	SHCS, 1/4-20 x 7/8" LG.	NONE	.
	1	STANDARD FIBER OPTIC LABEL SENSOR w/ 2" LG. MTG. SHAFT	ASS-211-0108-2	S

ORDER PAD & MANIFOLD SEPARATELY
ORDER PNEUMATIC SLIDE SEPARATELY





BILL OF MATERIAL				SOLD
ASSEMBLY		MOD-214-X116R/L-X		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
	1	360 DAT ASSEMBLY	ASS-214-X116R/L-X	S
38	1	AIR ASSIST TUBE	MP-211-2217-7	.
39	1	AIR ASSIST TUBING x 15" LG.	PM-AH1000	.
	1	4-STATION VALVE BANK	ASS-238-0142M	S
	1	VALVE MOUNTING PLATE	MP-214-0206E	.
	1	VALVE FASTENING PLATE	MP-238-0238	.
	1	VALVE NUT PLATE	MP-238-0239	.
	1	1/4" OD SMC TUBING x 169" LG. (CUT TO SUIT)	PM-PT1070	.
	1	3/8" OD SMC TUBING x 68" LG. (CUT TO SUIT)	ASS-214-0107	S
	4	FTG, 1/4 TUBE x 1/8 NPT 90° MALE EL SW	PM-PF1030	.
	1	FTG, 3/8 TUBE x 1/4 NPT 90° MALE EL SW	PM-PF1045	.
	4	FTG, 1/4 TUBE x 1/8 NPT STRAIGHT	PM-PF1005	.
	1	FTG, 3/8 TUBE x 1/4 NPT 90° MALE EL	PM-PF1060	.

ORDER PAD & MANIFOLD SEPARATELY
ORDER PNEUMATIC SLIDE SEPARATELY

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TITLE: 360 SERIES APPLICATOR: DAT ASSEMBLY
PART: 5/7.5 WIDE; DAT NOSE ASSEMBLY
Dept. Code 70
F:\Engineering\Standard Parts\Applicator\360 214\MOD-214-X116RL-X
REV. 3 | REV. DESCRIPTION: ITEM #22 WAS PM-FANU20015 | REV. BY: TDR | Scale: 1=4 | Date: 03/08/03 | DRAWN BY: DKM | REV. DATE: 08/29/05

BILL OF MATERIAL

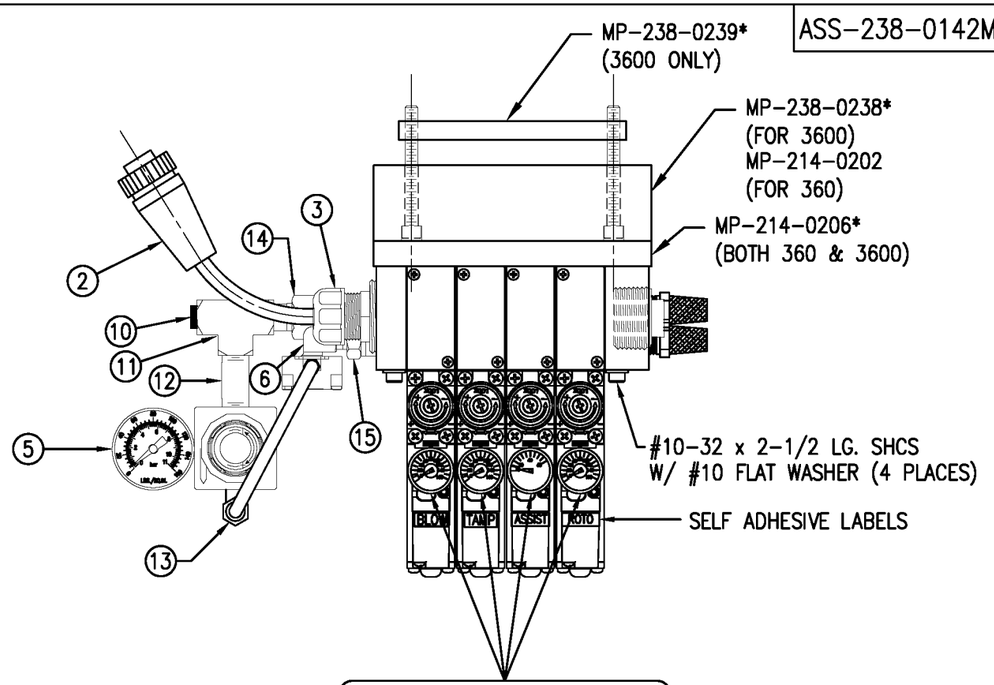
ASS–238–0142M

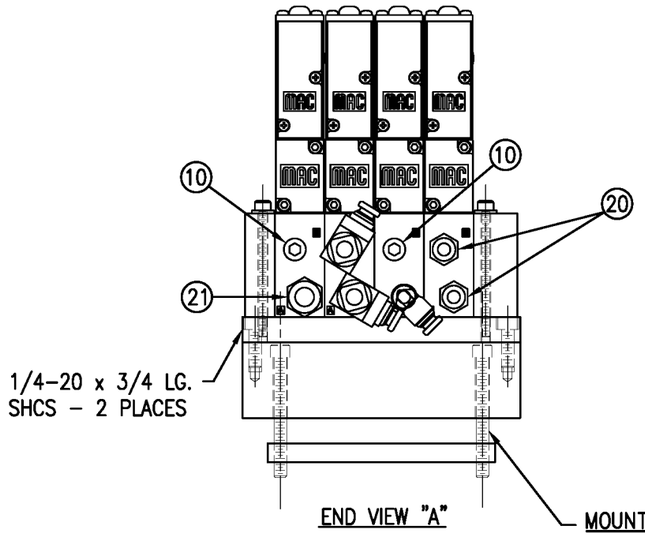
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	PM–VA2361M	4 STATION MAC VALVE BANK
②	1	PE–200–0405	VALVE CABLE
③	1	PE–C02000	CORD GRIP
④	1	PM–REG1500	REGULATOR
⑤	1	PM–VA2384	0–160 PSI PRESSURE GUAGE
⑥	5	PM–PF1180	NPT 90° STREET ELBOW 1/8" FEMALE TO 1/8" MALE
⑦	1	PM–PUMP1010	VACUUM PUMP, 55 PSI FEED PRESSURE, MUFFLED EXHAUST
⑧	2	PM–MU1027	3/8" NPT MALE BRONZE EXHAUST MUFFLER
⑨	1	PM–PF1110	BUSHING, 1/4" NPT FEMALE TO 3/8" NPT MALE
⑩	3	PM–FT1200	1/4" NPT SOCKET HEAD PLUG
⑪	1	PM–PF1200	TEE 1/4" NPT FEMALE 3 ENDS
⑫	1	PM–PF1143	NIPPLE, 1/4" NPT X 1 1/2" LG.
⑬	1	PM–PF1055	FTG, 1/4 TUBE to 1/4 NPT 90° ELBOW
⑭	1	PM–PF1220	ADAPTOR, 3/8" NPT FEMALE TO 1/4" NPT MALE
⑮	1	PM–PF1157	REDUCER, 3/8" NPT TO 1/8" NPT
⑯	1	PM–PF1159	FITTING, 3/8" NPT MALE BOTH ENDS
⑰	1	PE–EN9125	1 1/4" BLACK PLASTIC THREADED PLUG
⑱	1	PE–COND1084	STEEL REDUCER
⑲	1	PM–PF1167	3/8" NPT SOCKET HEAD PLUG
⑳	2	PM–PF1010	FITTING, 1/4" TUBE w/ 1/4" NPT STRT
㉑	1	PM–PF1020	FITTING, 3/8" TUBE w/ 1/4" NPT STRT
㉒	10.5"	PM–PT1070	1/4" OD TUBING
㉓	1	PM–PF1085	FTG, 1/4 NPT COUPLING
㉔	2	PM–PF2070	FLOW CONTROL, 1/4 TUBE x 1/4 NPT
㉕	1	PM–PF1035	FTG, 1/4 TUBE to 1/4 NPT 90° SWVL.
㉖	1	PM–PF1120	1/8 NPT CLOSE NIPPLE (3/4" Lg.)
㉗	1	PM–PF1170	FTG, 1/8 NPT to 1/8 NPT 90° FEMALE ELB.
◯	4	PM–FASH429088	10–32 X 2 1/2" LG. SS SHCS
◯	4	PM–FAW30265	#10 SS FLAT WASHER

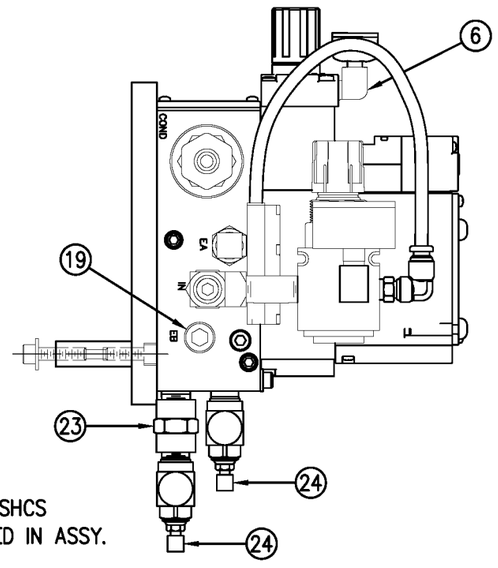
* MOUNTING PLATES NOT INCLUDED IN ASSEMBLY

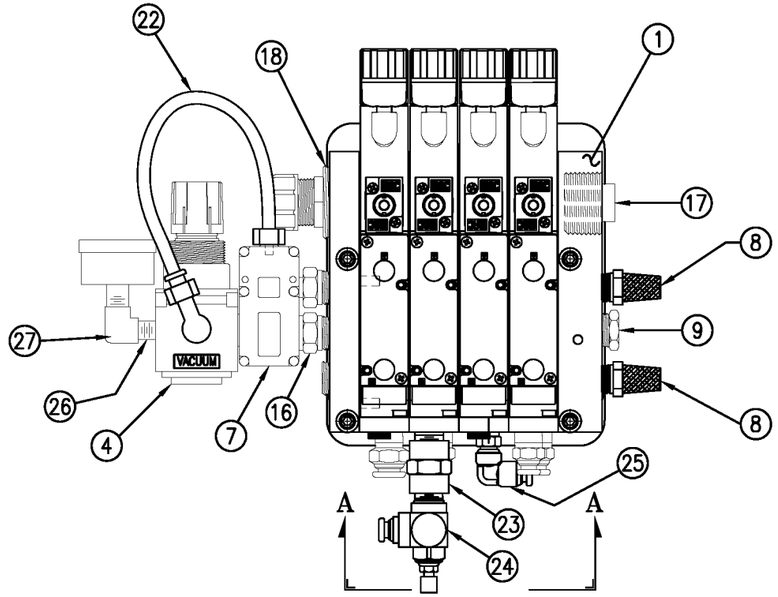
VALVE BANK SPARE PARTS:

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









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TITLE: DAT 4–STATION VALVE BANK ASSEMBLY
Dept. Code 70
APPLICATOR SERIES: 360/3600
APPLICATOR WIDTH(S): 5"/7.5"/10"
GROUP: VALVE BANKS
Scale: 1=3
Date: 04/09/07
DRAWN BY: E. SANOR
F:\Engineering\Standard Parts\Applicator\360\3600\ASS–238–0142M
REV. BY: XXX
REV. DATE: –
REV. DESCRIPTION
REV. 0 –

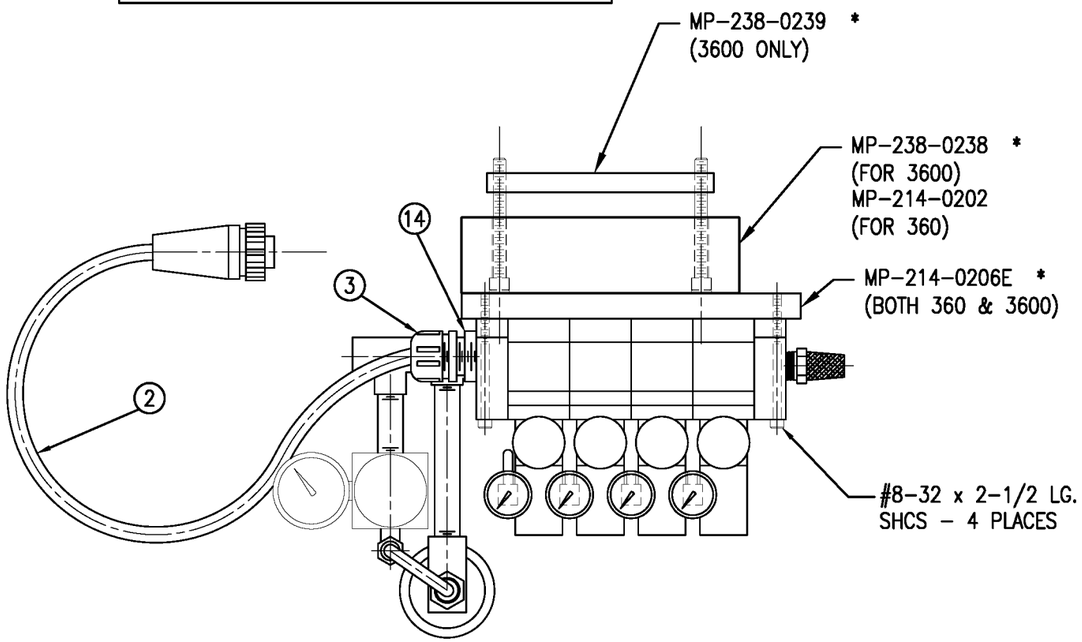
BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-238-0142		S
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	4 STATION VALVE BANK	PM-VA2361	S
②	1	VALVE CABLE	PE-200-0405	.
③	1	CORD GRIP	PE-C02000	.
④	1	REGULATOR / GAUGE	PM-REG1500	.
⑤	1	VACUUM PUMP	PM-PUMP1000	.
⑥	1	EXHAUST MUFFLER	PM-MU1021	.
⑦	2	1/4" BRONZE EXHAUST MUFFLER	PM-MU1025	.
⑧	1	3/4" NPT PLUG	PM-EN9110	.
⑨	4	1/4" NPT PLUG	PM-FT1200	.
⑩	1	1/4" NPT STREET ELBOW	PM-PF1185	.
⑪	4	STREET ELBOW, #10-32 THREAD	PM-PF2050	.
⑫	2	PIPE NIPPLE, 1/4" NPT x 1-1/2" Lg.	PM-PF1143	.
⑬	1	PIPE NIPPLE, 1/4" NPT x 3-1/2" Lg.	PM-PF1141	.
⑭	1	BUSHING, 3/4" NPT to 1/2" NPT	PE-COND1080	.
⑮	1	1/4" NPT TEE, FEMALE 3-ENDS	PM-PF1200	.
⑯	2	FTG, 1/4 TUBE to 1/4 NPT STRAIGHT	PM-PF1010	.
⑰	1	FTG, 3/8 TUBE to 1/4 NPT STRAIGHT	PM-PF1020	.
⑱	1	FTG, 1/4 TUBE to 1/8 NPT STRAIGHT	PM-PF1005	.
⑲	1	FTG, 1/4 TUBE to 1/4 NPT 90° ELBOW	PM-PF1055	.
⑳	1	1/4" O.D. POLYURETHANE TUBING (CUT TO 7" LENGTH)	PM-PT1070	.
㉑	2	FLOW CONTROL, 1/4 TUBE x 1/4 NPT	PM-PF2070	.
㉒	1	FTG, 1/4 NPT COUPLING	PM-PF1085	.
㉓	1	1/4 NPT CLOSE NIPPLE	PM-PF1125	.
㉔	1	FTG, 1/4 TUBE to 1/4 NPT 90° SWVL.	PM-PF1035	.
㉕	1	1/8 NPT CLOSE NIPPLE (3/4" Lg.)	PM-PF1120	.
㉖	1	FTG, 1/8 NPT to 1/8 NPT 90° FEMALE ELB.	PM-PF1170	.

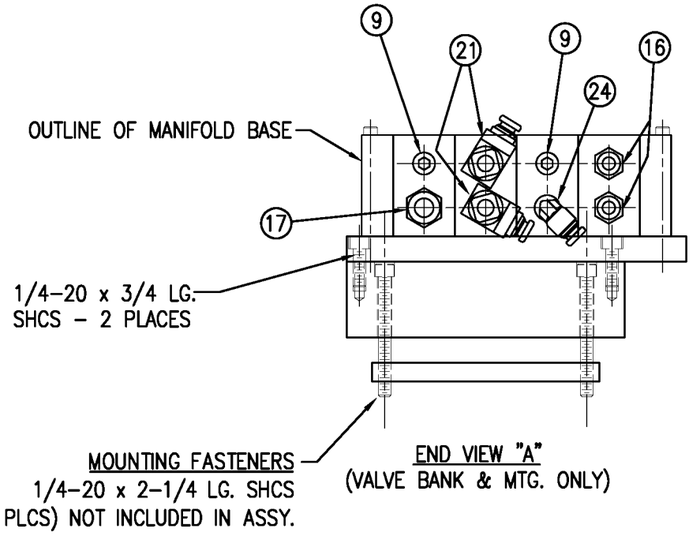
ASSEMBLY NOTE:
TURN GAUGES TO 90°, ADD FLOW CONTROLS @ VALVE BANK, PUT 90° SWIVEL ELBOW @ ASSIST ON VALVE BANK

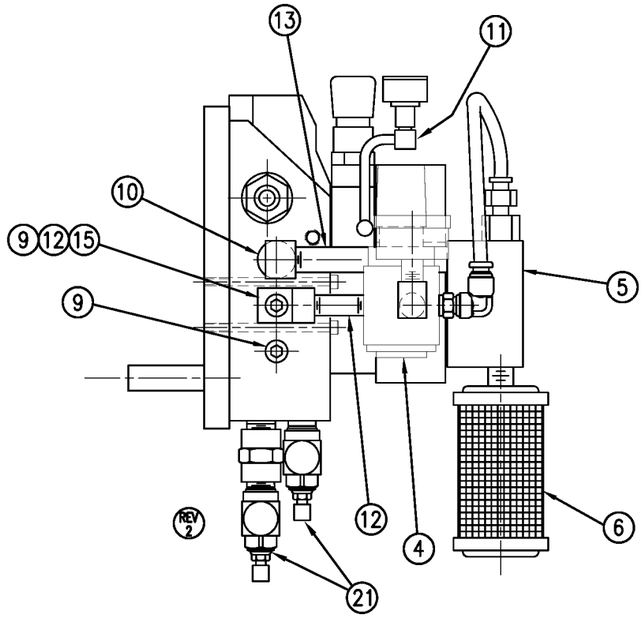
VALVE BANK SPARE PARTS:
SOLENOID: #PM-VA2395
AIR ASSIST REGULATOR: #PM-VA2396
BLOW/TAMP/ROTARY ACTUATOR REGULATORS: #PM-VA2397

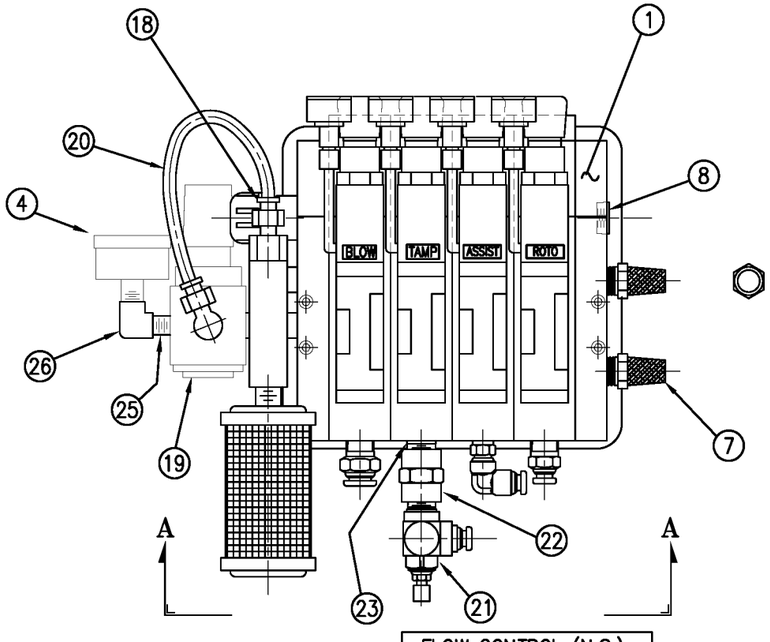
ASS-238-0142

* MOUNTING PLATES NOT INCLUDED IN ASSEMBLY









FLOW CONTROL (N.S.)
NOT SHOWN FOR CLARITY

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TITLE: 360/3600-PA SERIES APPLICATOR: DAT

PART: 4-STATION VALVE BANK ASSEMBLY

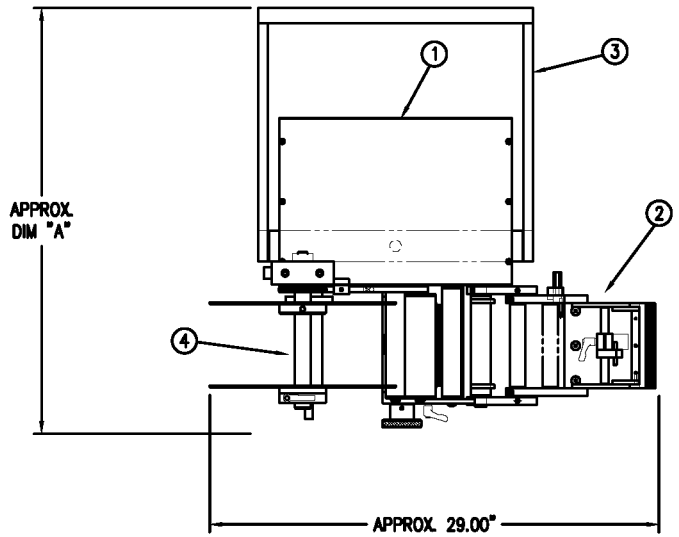
Dept. Code 70

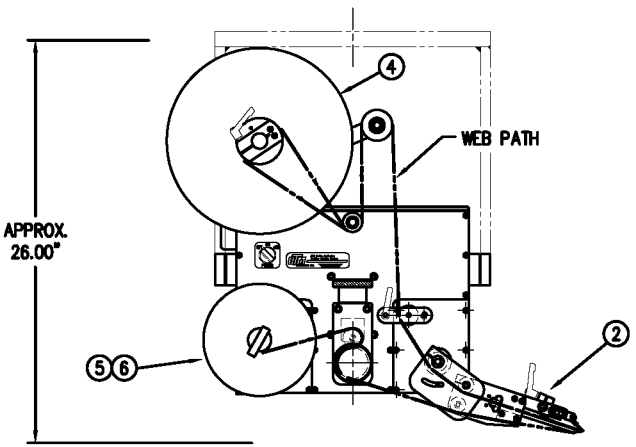
F:\Engineering\Standard Parts\Applicator\3600 238\ASS-238-0142

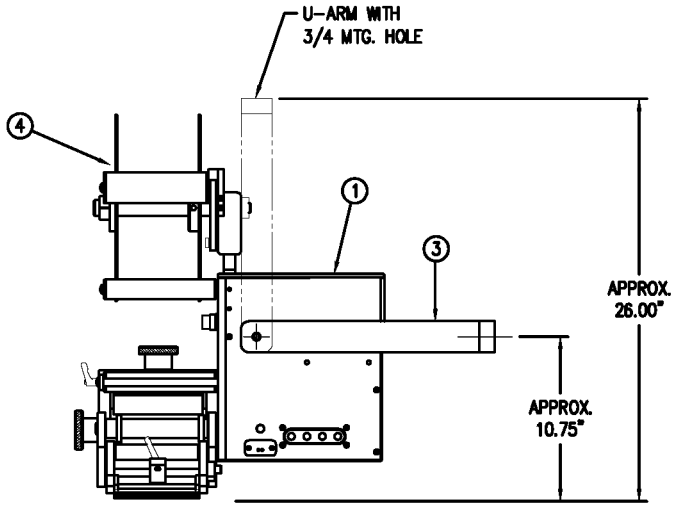
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
4	ADDED #25 & #26, #11 WAS 1/8 NPT STR. EL.; ROT. GAUGES 90°	12/08/05	TDR
3	ADDED #24	10/19/05	TDR
2	ADDED #22 & #23	10/12/05	TDR
1	ADDED #21	10/11/05	TDR

Scale: 1=3 | Date: 01/08/02 | DRAWN BY: BOB S.

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







BILL OF MATERIAL

ASSEMBLY		CTM-215a-X105RL-12X		SOLD	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
①	1	5/7.5/10 WIDE; CORE UNIT	ASS-200a-X150R/L	.	
②	1	5/7.5/10 MERGE NOSE MODULE	MOD-215-X105R/L	S	
③	1	U-ARM ASSEMBLY	WAS-200-0247	.	
④	1	5/7.5/10 WIDE; 12" UNWIND w/ DISKS MOD.	MOD-200-X121R/L	S	
⑤	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	— STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	— COLLAPSIBLE RWD
⑥	1	STANDARD MANDREL (SHOWN)	ASS-200-X147	S	— STANDARD RWD
	1	FILM REWIND MANDREL	ASS-200-X137	S	— FILM REWIND
	1	COLLAPSIBLE MANDREL	ASS-200-3131-X	S	— COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200a-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200a-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S	

CTM-215a-X105R/L-12X

5" WIDE	-0105R/L-12	X
7.5" WIDE	-2105R/L-12	X
10" WIDE	-5105R/L-12	X

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F

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

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

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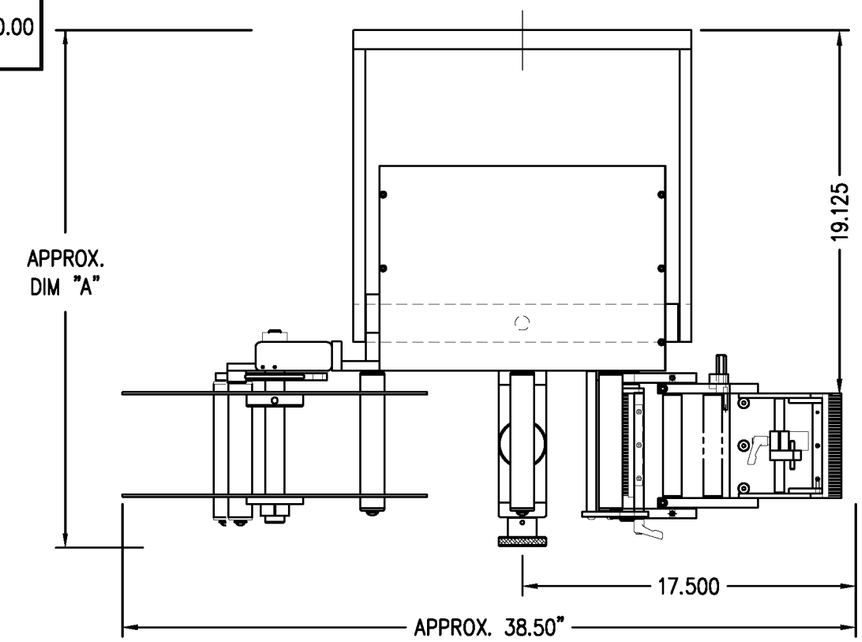
TITLE: 360 SERIES APPLICATOR: MERGE ASSEMBLY

PART: 5"/7.5"/10" WIDE: MERGE w/12" UNWIND ASSEMBLY

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	Dept. Code:	F:\Engineering\Standard Parts\Applicator\360
0	DRAWING No. WAS 200-0623	07/16/03	TDR	1=8	02/26/07	BOB S.	70	215\CTM-215a-X105RL-12X

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

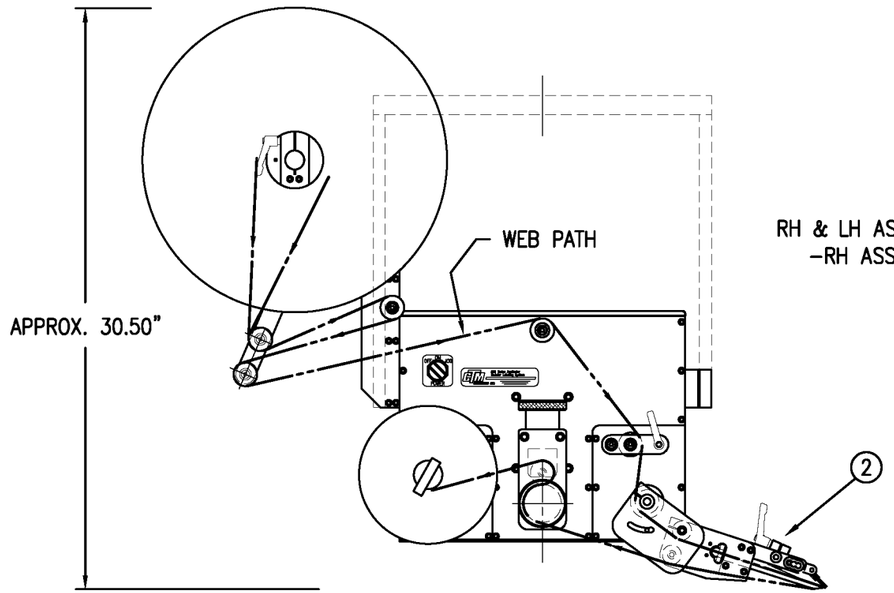


BILL OF MATERIAL

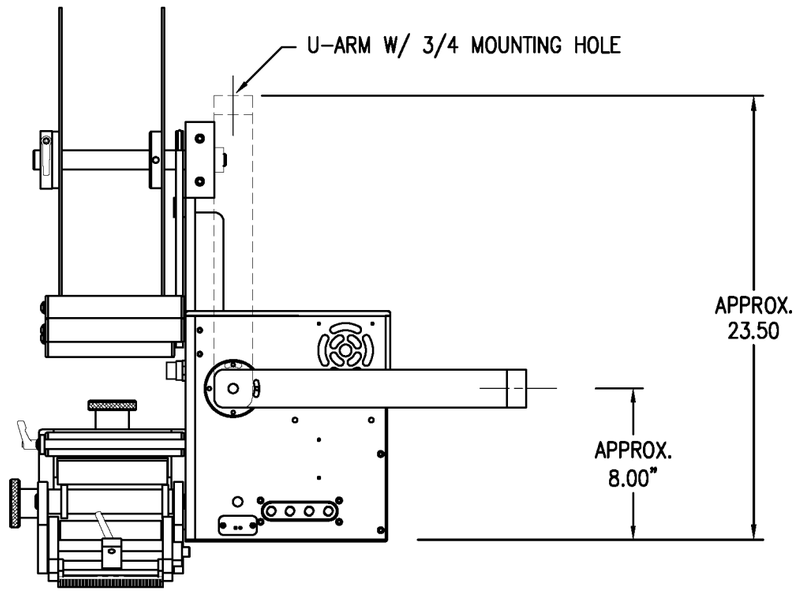
ASSEMBLY		CTM-215a-X105RL-16X		SOLD	
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER		
1	1	5/7.5 WIDE; CORE UNIT	ASS-200a-X150R/L	.	
2	1	5/7.5 WIDE;MERGE NOSE MODULE	MOD-215-X105R/L	S	
3	1	U-ARM ASSEMBLY	WAS-200-0247	.	
4	1	5/7.5 WIDE; 16" UNWIND ASSY	MOD-200-3121R/L-X	.	
5	1	STD REWIND BLOCK & SHAFT (SHOWN)	ASS-200-0145R/L	S	← STD & FILM REWIND
	1	COLLAPSIBLE REWIND BLK & SHAFT	ASS-200-3167R/L	S	← COLLAPSIBLE RWD
6	1	5/7.5 STANDARD MANDREL (SHOWN)	ASS-200-X147	S	← STANDARD RWD
	1	5/7.5 FILM REWIND MANDREL	ASS-200-X137	S	← FILM REWIND
	1	5/7.5 COLLAPSIBLE MANDREL	ASS-200-3131-X	S	← COLLAPSIBLE RWD
	1	DISPLAY UNIT ASSEMBLY	ASS-200a-0125	S	
	1	APPLICATOR TO DISPLAY UNIT-5' CABLE	PE-200a-0407-5	S	
	1	DISPLAY UNIT MOUNT ASSEMBLY	ASS-200-0138	.	
	1	PRODUCT DETECT SENSOR	ASS-200-0427	S	

CTM-215a-X105R/L-16X		
5" WIDE	-0105RL-16	X
7.5" WIDE	-2105RL-16	X

STANDARD REWIND	S
COLLAPSIBLE REWIND	C
FILM REWIND	F



RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-



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TITLE: 360 SERIES APPLICATOR: MERGE ASSEMBLY

REV.	REV. DESCRIPTION	REV. DATE
0	DWG No. WAS 200-0632	06/27/03

REV. BY:	Scale:	Date:	DRAWN BY:
TDR	1=8	02/26/07	BOB S.

PART: 5/7.5/10 WIDE: MERGE w/ 16" UNWIND ASSEMBLY

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360 215\CTM-215a-X105RL-16X

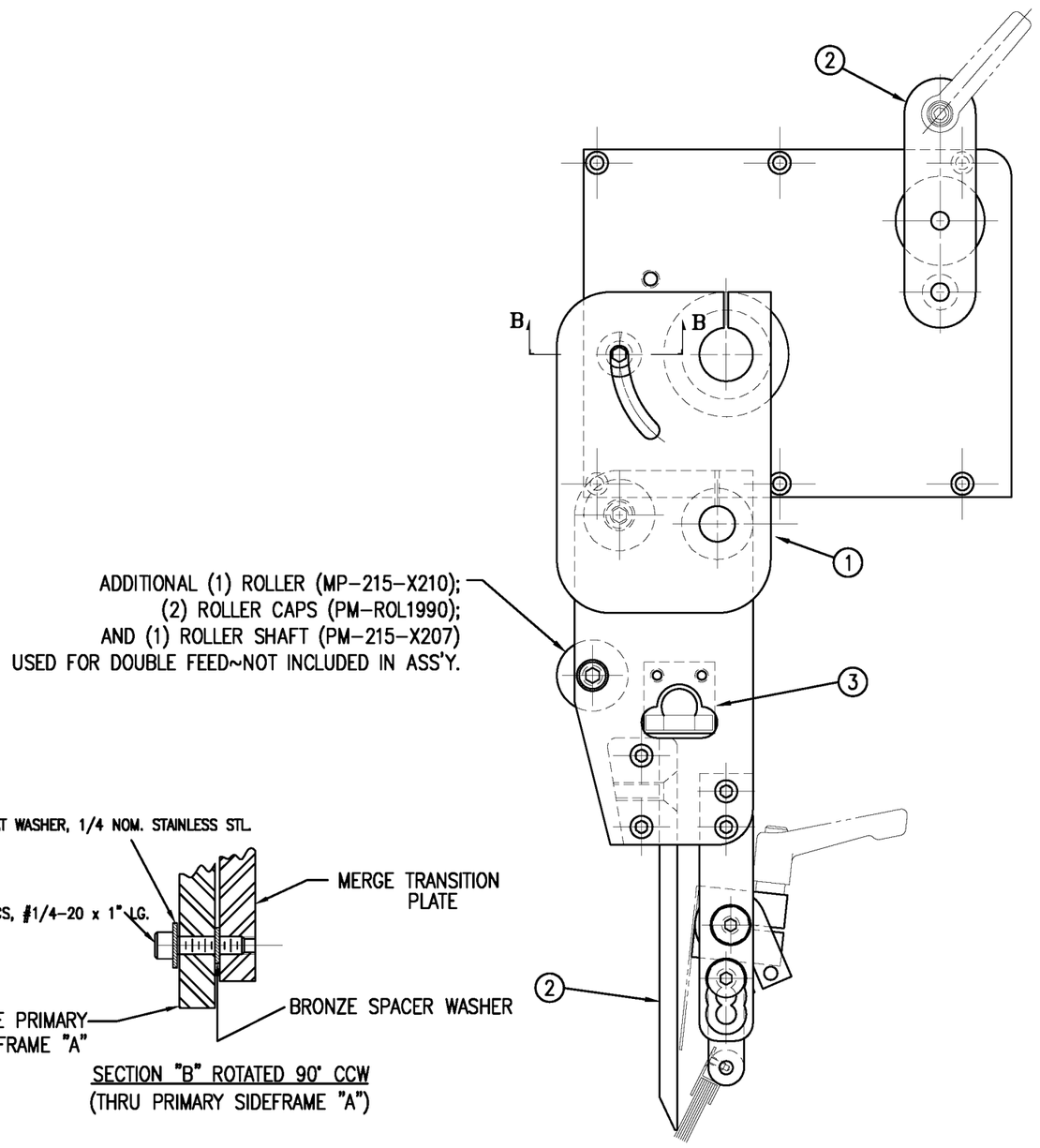
BILL OF MATERIAL

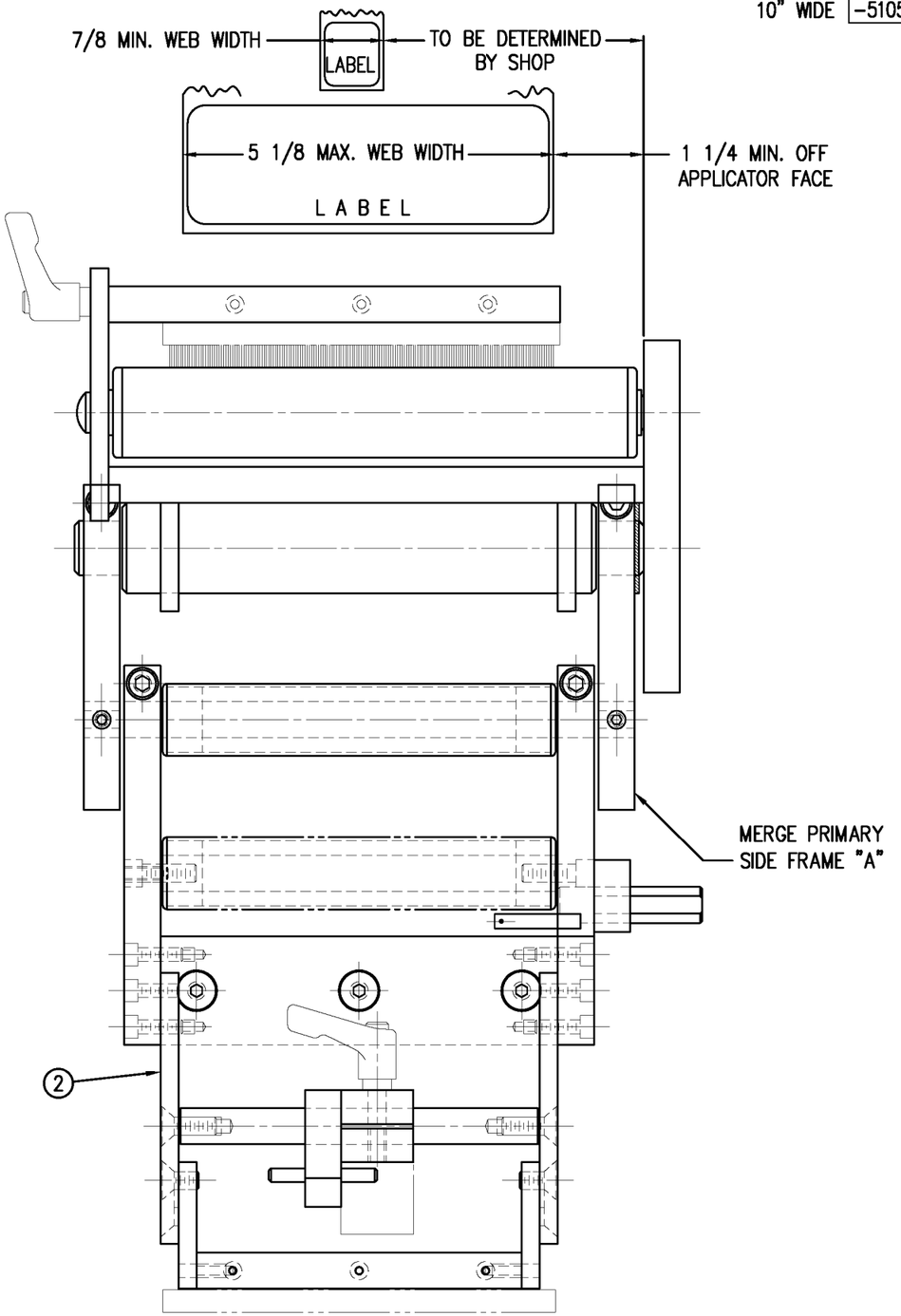
MOD–215–X105R/L

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

RH & LH MODULES AVAILABLE
–RH MODULE SHOWN–

MOD–215–X105R/L	
5" WIDE	–0105R/L
7.5" WIDE	–2105R/L
10" WIDE	–5105R/L





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TITLE: STANDARD NOSE ASSEMBLY WITH TRANSITION PLATE

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360\215\MOD–215–X105RL

APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:	DRAWN BY:	Date:	REV. BY:
360/360A	5"/7.5"/10"	MERGE	BOB S.	02/11/00	ES

REV.	REV. DESCRIPTION	REV. DATE
0	NEW TITLEBLOCK& UPDATED BOM	05/23/07

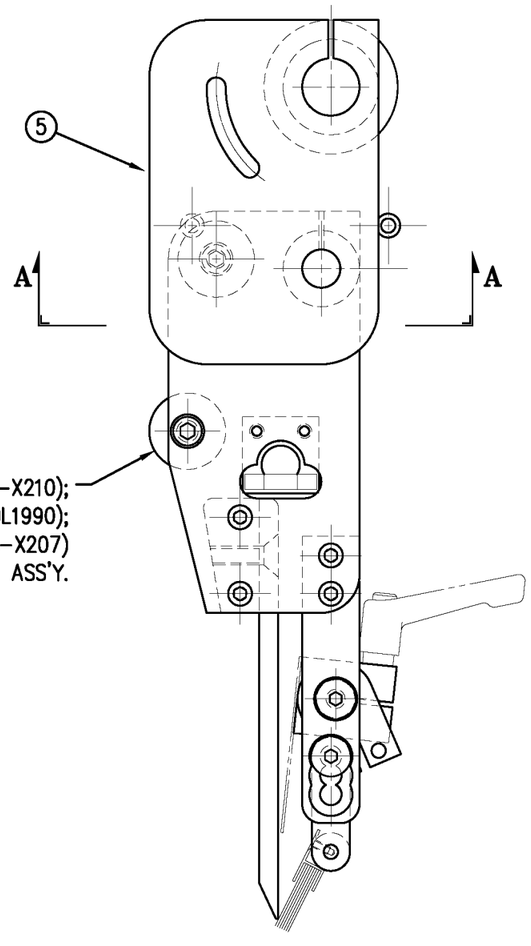
BILL OF MATERIAL

ASS-215-X106R/L

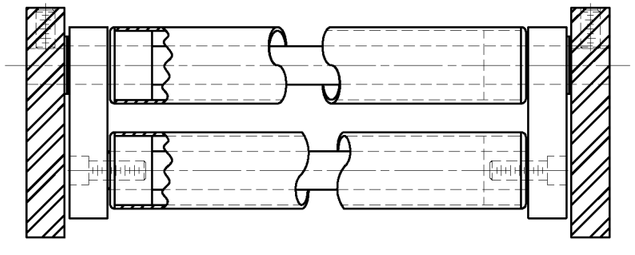
ITEM	QTY	CTM PART NUMBER	PART DESCRIPTION
①	1	ASS-215-X115	MERGE PRIMARY ROLLER ASSEMBLY
②	1	MP-215-X209	5/7.5/10 PRIMARY ROLLER SHAFT
③	2	MP-211-0210	GUIDE COLLAR
④	1	PM-BEBT1028	BRONZE WASHER
⑤	1	SAS-215-X105AR/L	MERGE NOSE ASSEMBLY
⑥	1	ASS-211-0108-2	FIBER OPTIC LABEL SENSOR ASSEMBLY with 2" MOUNTING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

RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

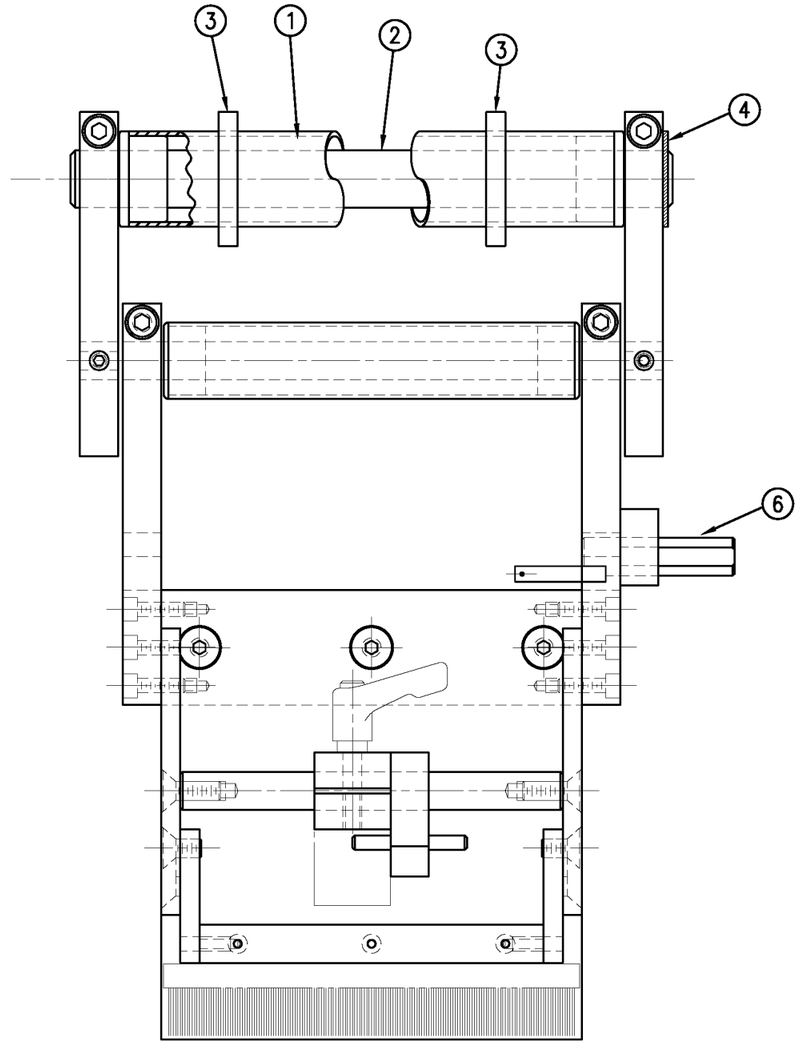
ASS-215-X106R/L	
5" WIDE	-0106R/L
7.5" WIDE	-2106R/L
10" WIDE	-5106R/L



ADDITIONAL (1) ROLLER (MP-215-X210);
(2) ROLLER CAPS (PM-ROL1990);
AND (1) ROLLER SHAFT (MP-215-X207)
USED FOR DOUBLE FEED~NOT INCLUDED IN ASS'Y.



SECTION "A" – ROTATED 90° CCW
(SHOWING SECONDARY MERGE ROLLERS)



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TITLE: 5/7.5/10 NOSE ASSEMBLY

Dept. Code 70

F:\Engineering\Standard Parts\Applicator\360\ASS-215-X106RL

APPLICATOR SERIES: 360/360A | APPLICATOR WIDTH(S): 5"/7.5"/10" | GROUP: MERGE | Scale: 1=2 | Date: 02/11/00 | DRAWN BY: BOB S.

REV: O | REV. DESCRIPTION: NEW TITLEBLOCK & UPDATED BOM | REV. DATE: 05/08/07 | REV. BY: ES

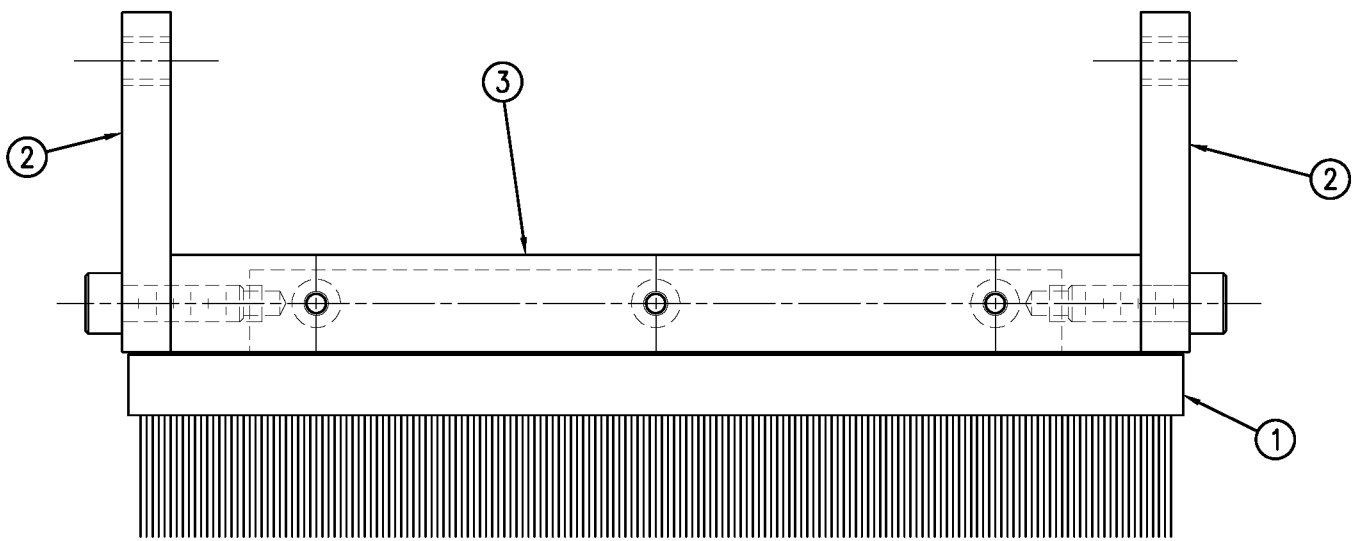
BILL OF MATERIAL

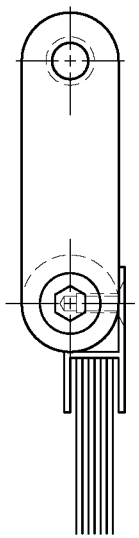
ASS-215-X107X

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

ASS-215-X107X		
5" WIDE	-0107	X
7.5" WIDE	-2107	X
10" WIDE	-5107	X

(REV 1) RUBBER SQUEEGE [R]





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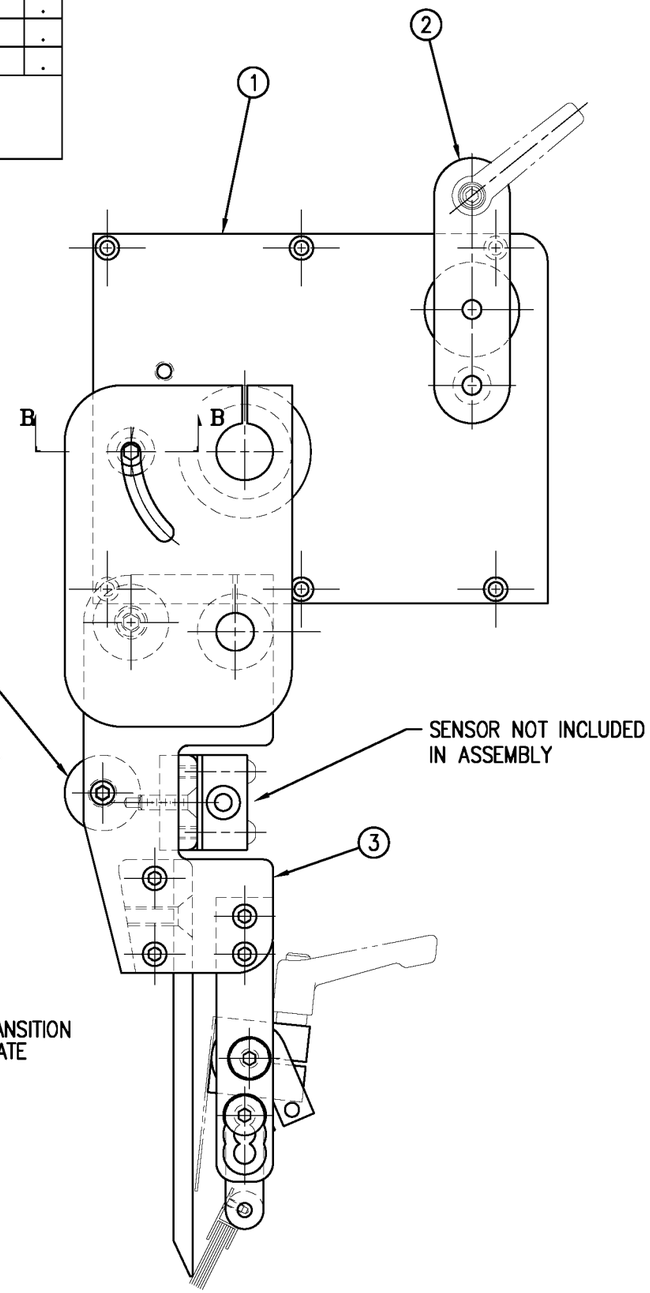
APPLICATOR SERIES:	APPLICATOR WIDTH(S):	GROUP:	TITLE:	Dept. Code
360/360A	5"/7.5"/10"	MERGE	5/7.5/10 NOSE BRUSH ASSEMBLY	70

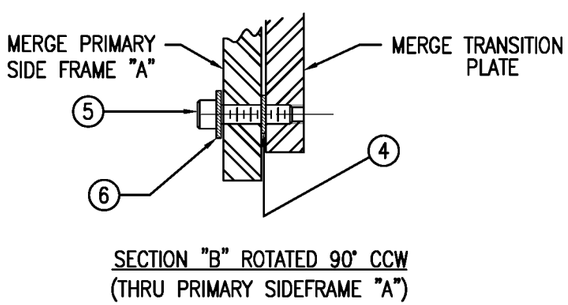
REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360\
1	NEW TITLEBLOCK AND TABULATED FOR BRUSH/RUBBER SQUEEGE	05/22/07	ES	1=1	02/11/00	BOB S.	215\ASS-215-X107X

BILL OF MATERIAL

ASSEMBLY		MOD-215-3101R/L-X		SOLD
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
1	1	MERGE TRANSITION PLATE	MP-215-0212	.
2	1	5/7.5/10 TENSION BRUSH ASSEMBLY	ASS-200-X126R/L	S
3	1	5/7.5/10 MERGE CLR. LABEL NOSE ASS'Y	ASS-215-3102R/L-X	. (REV 1)
4	1	BRONZE SPACER WASHER	PM-BEBT1000	.
5	1	SHCS, #1/4-20 x 1" LG.	.	.
6	1	FLAT WASHER, 1/4 NOM. STAINLESS STL.	.	.
	6	SHCS, #10-32 x 5/8" LG.	NONE	.

ORDER CLEAR LABEL SENSOR SEPARATELY
#PE-SE2000 ~ FOR LRD2100
#PE-SE2050 ~ FOR LRD6110

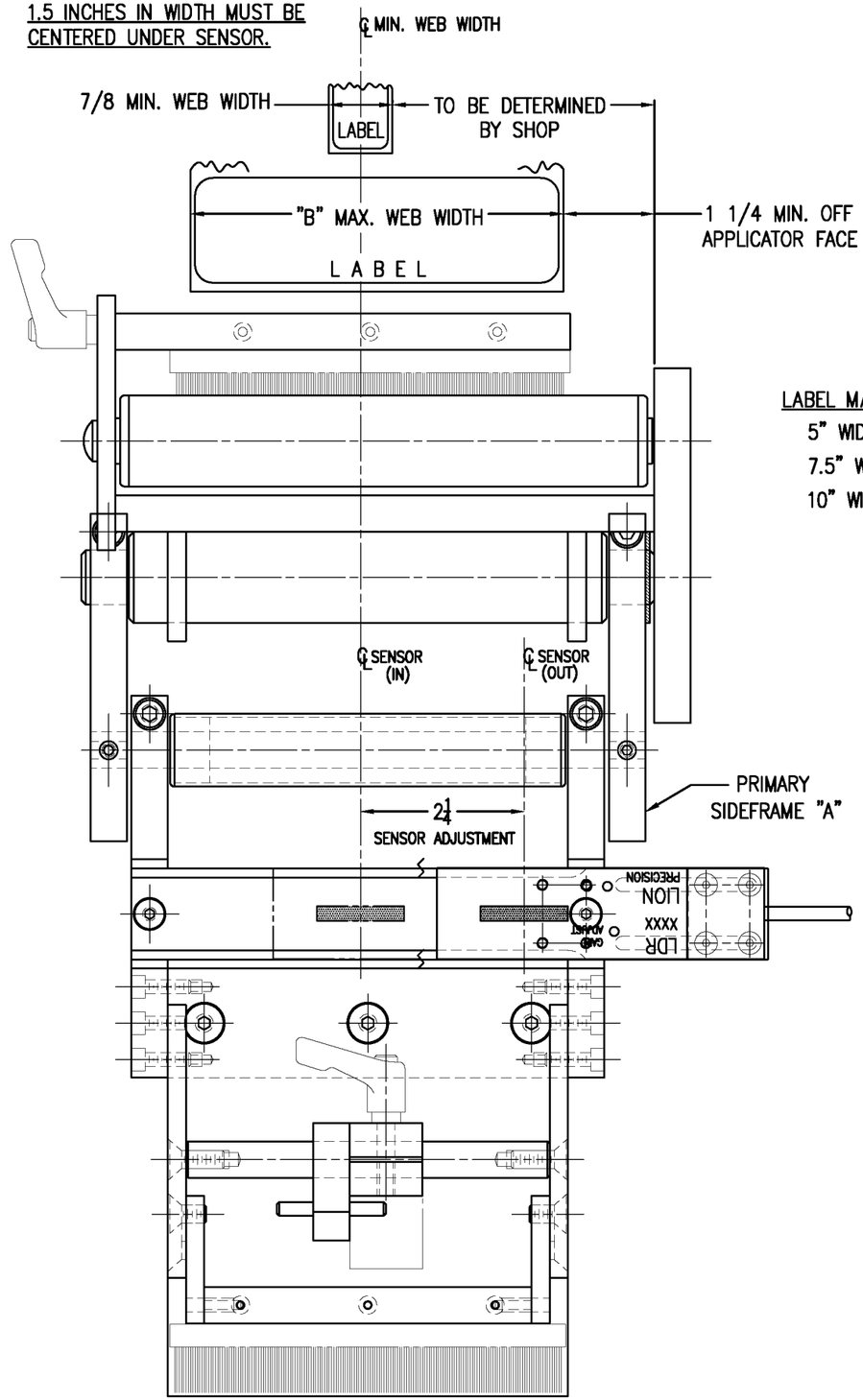




SECTION "B" ROTATED 90° CCW
(THRU PRIMARY SIDEFRAME "A")

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

RH & LH MODULES AVAILABLE
-RH MODULE SHOWN-



MOD-215-3101R/L-X	
5" WIDE	-3101R/L-5
7.5" WIDE	-3101R/L-7
10" WIDE	-3101R/L-10

LABEL MAX. WIDTH ("B" DIM.)
5" WIDE: "B" = 5-1/8"
7.5" WIDE: "B" = 7-5/8"
10" WIDE: "B" = 10-1/8"

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PART: CLEAR LABEL NOSE ASSEMBLY WITH TRANSITION PLATE

Dept. Code 70

TITLE: 360 SERIES APPLICATOR: MERGE ASSEMBLY

F:\Engineering\Standard Parts\Applicator\360 215\MOD-215-3101RL-X

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
1	FIXED TYPO	07/26/05	TDR

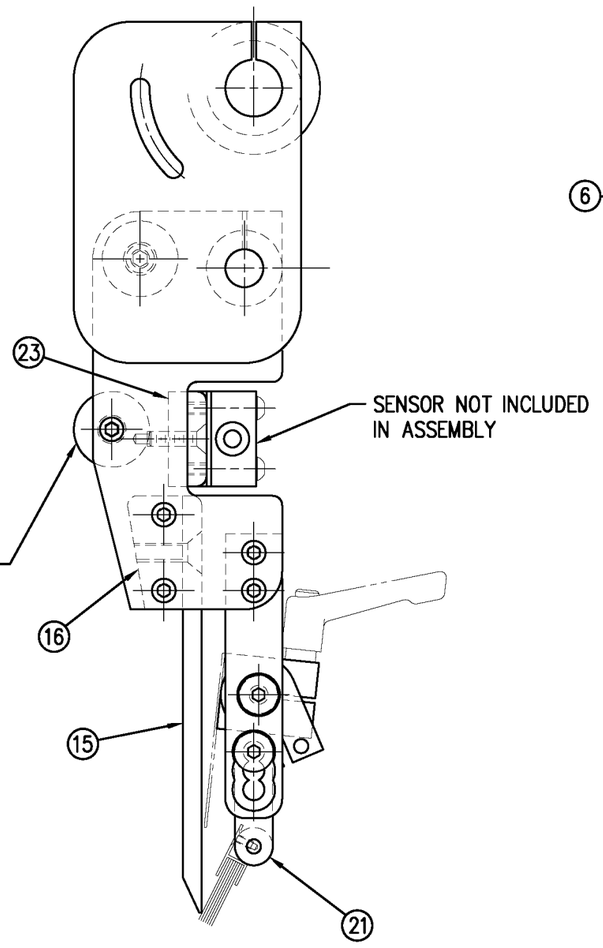
Scale: 1=2 | Date: 02/11/00 | DRAWN BY: BOB S. | REV. BY: TDR

BILL OF MATERIAL				SOLD
ASSEMBLY		ASS-215-3102R/L-X		.
ITEM	QTY	ITEM DESCRIPTION	CTM PART NUMBER	
①	1	5/7.5/10 PRIMARY ROLLER	MP-215-X211	.
②	2	ROLL CAP	MP-215-0215	.
③	1	PRIMARY ROLLER SHAFT	MP-215-0209	.
④	2	GUIDE COLLAR	MP-211-0210	S
⑤	1	BRONZE WASHER	PM-BEBT1028	.
⑥	2	MERGE PRIMARY SIDE FRAME (1 AS DETAILED - 1 OPPOSITE HAND)	MP-215-0221	.
⑦	1	SECONDARY SIDE FRAME (AS DETAILED)	MP-215-3303A	.
⑧	1	SECONDARY SIDE FRAME (OPP. HAND)	MP-215-33030	.
⑨	2	5/7.5/10 SECONDARY ROLLER	MP-215-X210	.
⑩	4	ROLL CAP	PM-200-0295-1	.
⑪	1	5/7.5/10 SECONDARY ROLLER SHAFT	PM-215-X207	.
⑫	1	5/7.5/10 SECONDARY PIVOT PIN	MP-215-X225	.
⑬	1	BRUSH MOUNT EXT. PLATE (AS DETAILED)	MP-215-0220A	.
⑭	1	BRUSH MOUNT EXT. PLATE (OPP. HAND)	MP-215-02200	.
⑮	1	MERGE PEEL EDGE	MP-215-0214	S
⑯	1	PEEL EDGE SUPPORT	MP-215-0204	.
⑰	1	SPRING BLOCK MOUNTING ROD	PM-215-0222	.
⑱	1	SPRING BLOCK	ASS-211-0105-1	S ← FOR 5" WIDE
	2	SPRING BLOCK	ASS-211-0105-1	S ← FOR 7.5" & 10" WIDE
⑲	1	SPRING BLOCK STOP COLLAR	ASS-211-0110	S ← FOR 5" WIDE
	2	SPRING BLOCK STOP COLLAR	ASS-211-0110	S ← FOR 7.5" & 10" WIDE
⑳	4	FIBER WASHER 3/4" O.D. x 1/2" I.D. x .03" THICK	PM-FAW30920	.
㉑	1	MERGE NOSE BRUSH ASSEMBLY	ASS-215-X107	S
㉒	1	CLEAR LABEL SENSOR MOUNT	MP-215-3302	.
㉓	1	CLEAR LABEL SENSOR NUT PLATE	MP-214-3301	.
㉔	2	1/4" BLK. NYLON LOOP STRAP	PE-CC1050	.

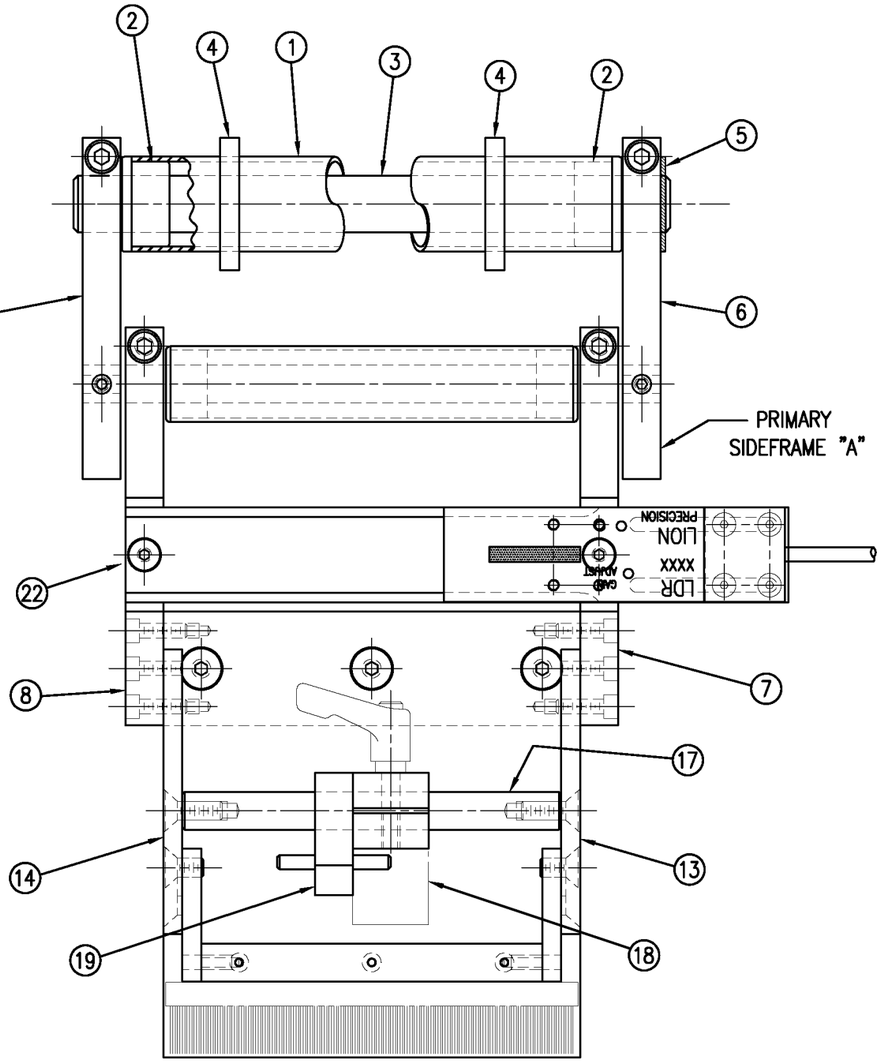
NOTE: ORDER LRD 6110 CLEAR LABEL SENSOR SEPARATELY
CLEAR LABEL SENSOR (#LRD6110) ~ #PE-SE2050

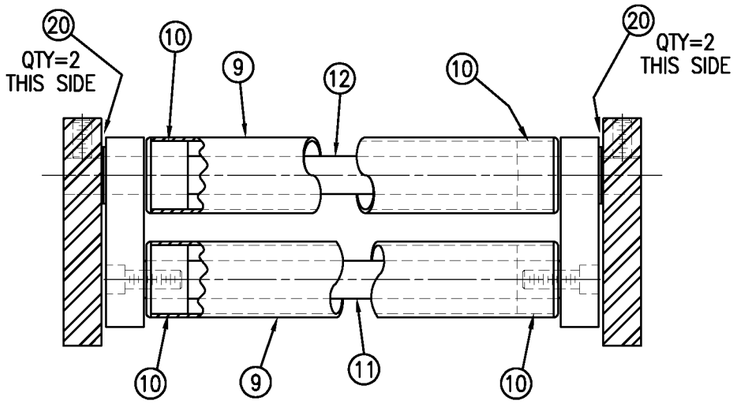
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

ASS-215-3102R/L-X	
5" WIDE	-3102R/L-5
7.5" WIDE	-3102R/L-7
10" WIDE	-3102R/L-10



ADDITIONAL (1) ROLLER (MP-215-X210);
(2) ROLLER CAPS (PM-ROL1990);
AND (1) ROLLER SHAFT (MP-215-X207)
USED FOR DOUBLE FEED~NOT INCLUDED IN ASS'Y.





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

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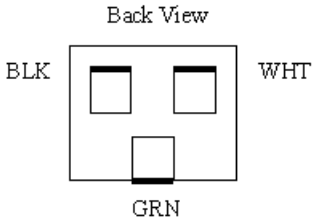
TITLE: 360 SERIES APPLICATOR: MERGE ASSEMBLY
PART: 5/7.5/10 CLEAR LABEL NOSE ASSEMBLY
Dept. Code 70
F:\Engineering\Standard Parts\Applicator\360 215\ASS-215-3102RL-X
Scale: 1=2 | Date: 02/11/00 | DRAWN BY: BOB S.
REV. | REV. DESCRIPTION | REV. DATE | REV. BY: | Scale: 1=2
2 | REMOVED LRD 2100 CLEAR LABEL SENSOR | 01/23/08 | TDR

Power Entry Module Wiring



BILL OF MATERIAL

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"
④	6	MP-215-0202	GUIDE COLLAR FOR 1.00" DIA. ROLLERS
	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

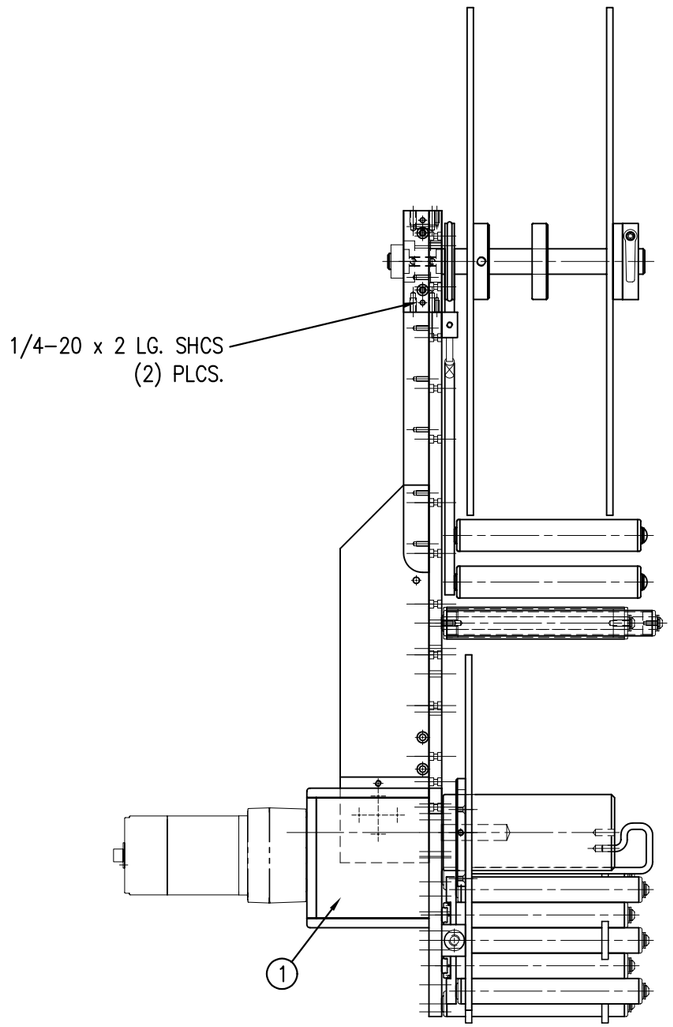
NOTE: POWERED REWIND REQUIRES A HI/LO PRESSURE REGULATOR
ADD EITHER ASS-200-3106 (FOR APPLICATORS WITH VALVE BANKS)
OR ASS-200-3107 (FOR APPLICATORS WITH OUT VALVE BANKS)
TO THE CTM BOM ALONG WITH MOD-200X-3156R/L-X

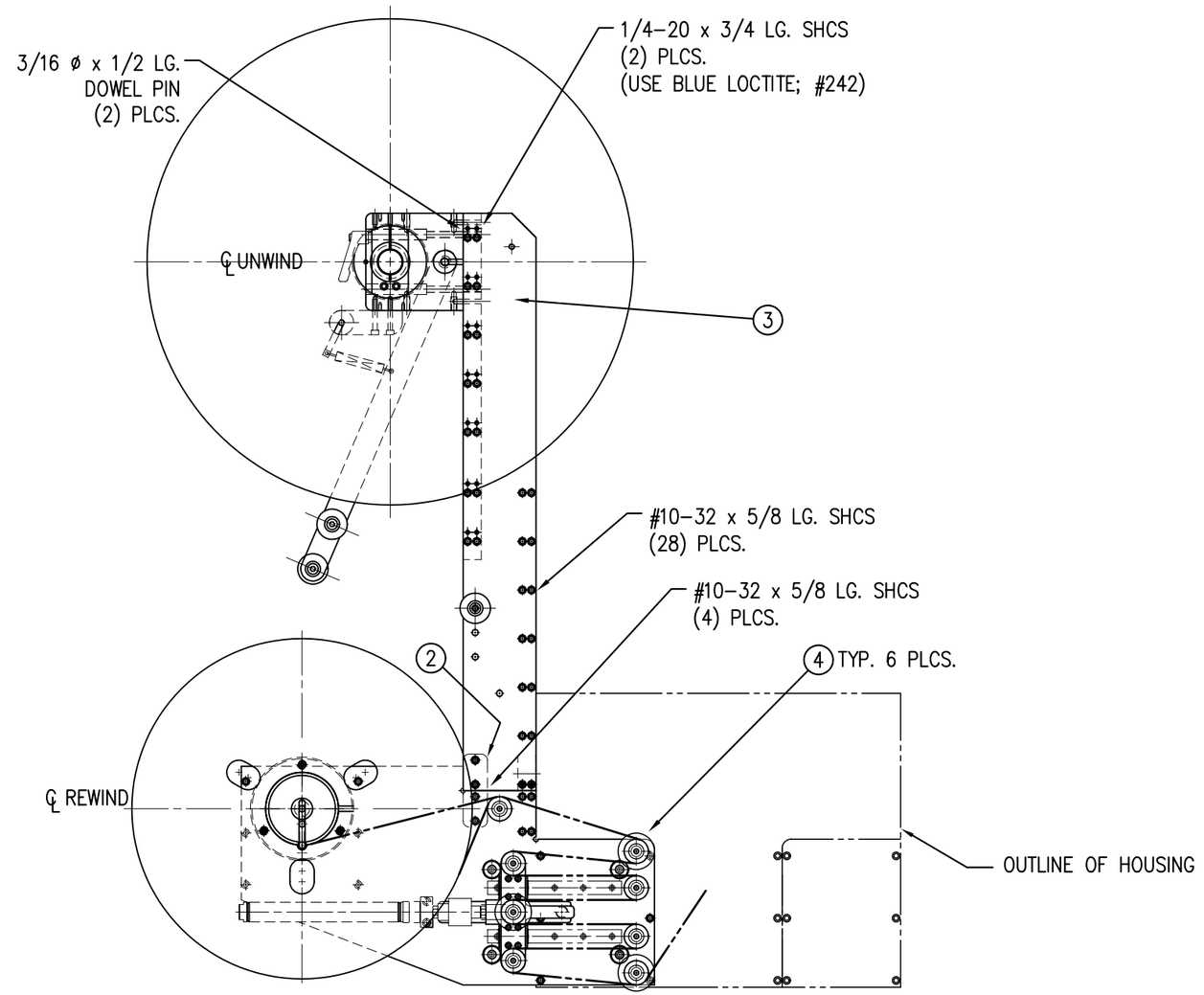
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

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

MOD-200-3156R/L-X

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





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TITLE: 360/360A SERIES APPLICATOR: REWIND ASSEMBLY

PART: 20" NON-POWERED UNWIND w/ 14" POWERED REWIND

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	Dept. Code
O	MP-200-3393-20 WAS SHOWN AS MP-200-3393-16	07-16-09	ES	1=6	02/28/08	Jeffery Mendenhall	70

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BILL OF MATERIAL

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"
④	6	MP-215-0202	GUIDE COLLAR FOR 1.00" DIA. ROLLERS
	32	PM-FASH429075	SHCS, #10-32 UNF x 5/8" LG.

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

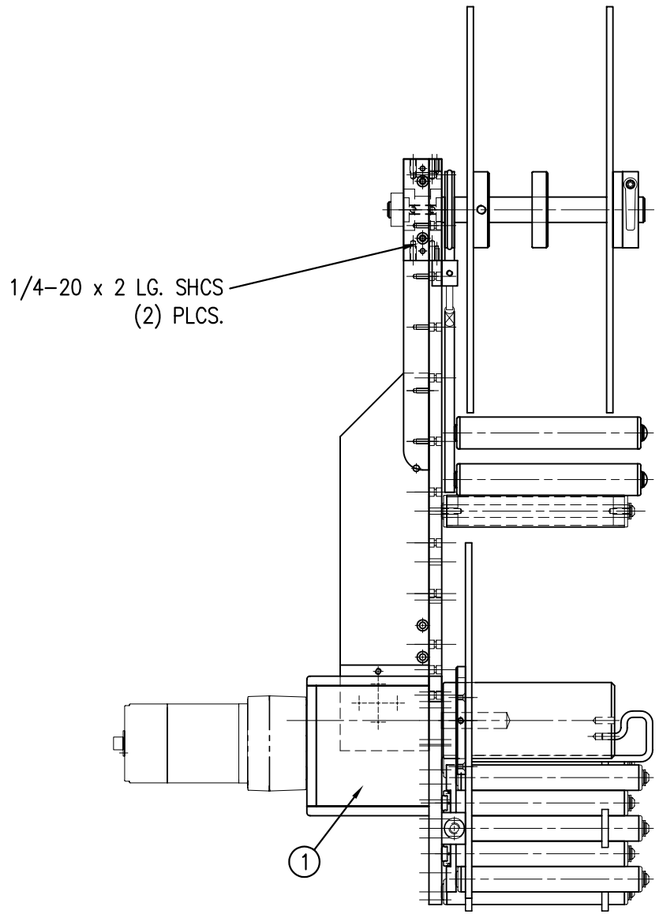
NOTE: POWERED REWIND REQUIRES A HI/LO PRESSURE REGULATOR
ADD EITHER ASS-200-3106 (FOR APPLICATORS WITH VALVE BANKS)
OR ASS-200-3107 (FOR APPLICATORS WITH OUT VALVE BANKS)
TO THE CTM BOM ALONG WITH MOD-200-3157R/L-S-XX

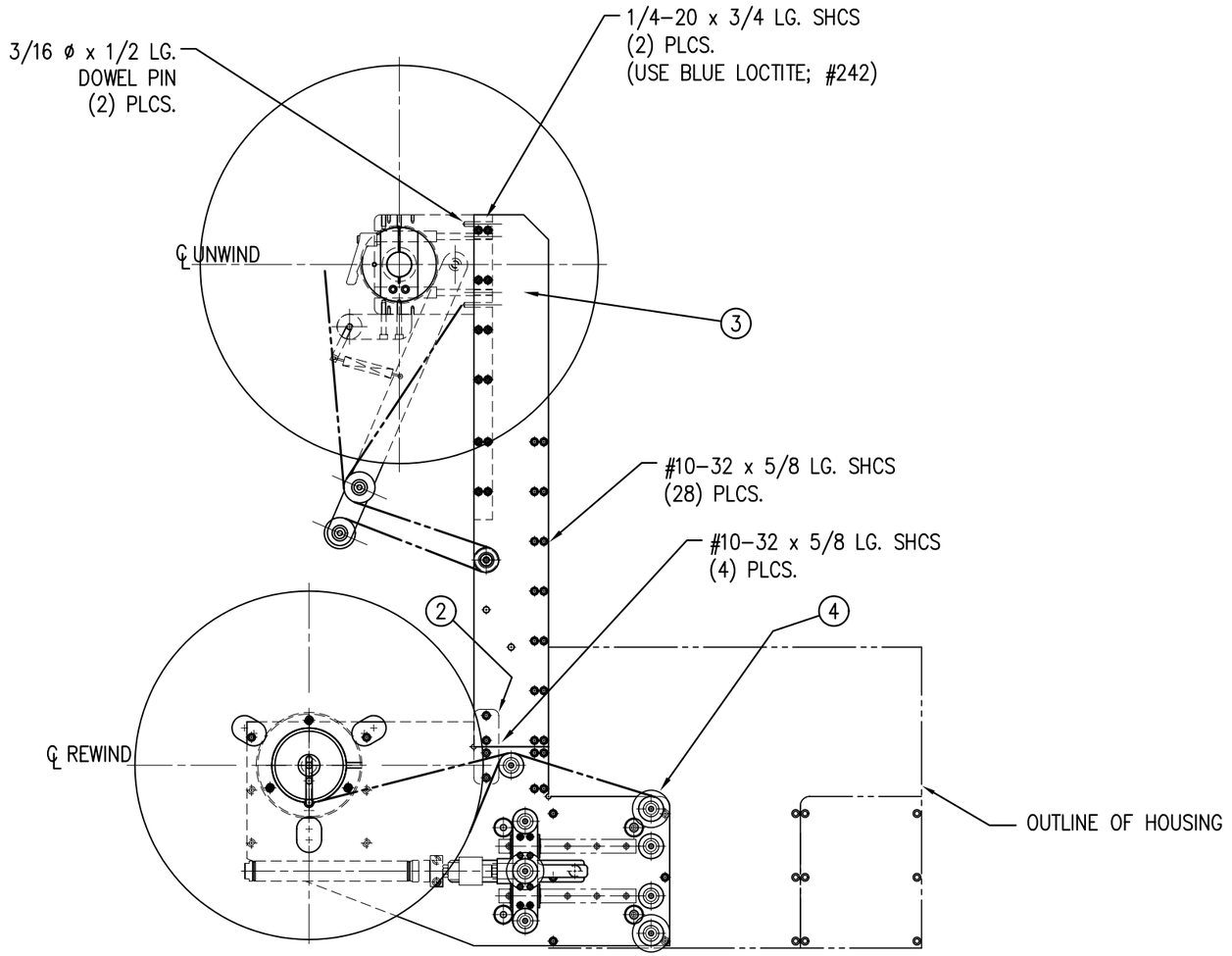
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

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

MOD-200-3157R/L-X

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





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TITLE: 360/360A SERIES APPLICATOR: REWIND ASSEMBLY

PART: 16" UNWIND w/ 14" POWERED Std. REWIND, 5/7.5, L.H./R.H.

Dept. Code 70

Scale: 1=6 | Date: 02/26/08 | DRAWN BY: Jeffery Mendenhall | F:\Engineering\Standard Parts\Applicator\360\MOD-200-3157RL-X

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:
1	ADDED GUIDE COLLARS	07/09/08	TDR

BILL OF MATERIAL

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"
④	6	MP-215-0202	GUIDE COLLAR FOR 1.00" DIA. ROLLERS
	32	PM-FASH429075	SHCS, #10-32 UNF x 5/8" LG.

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

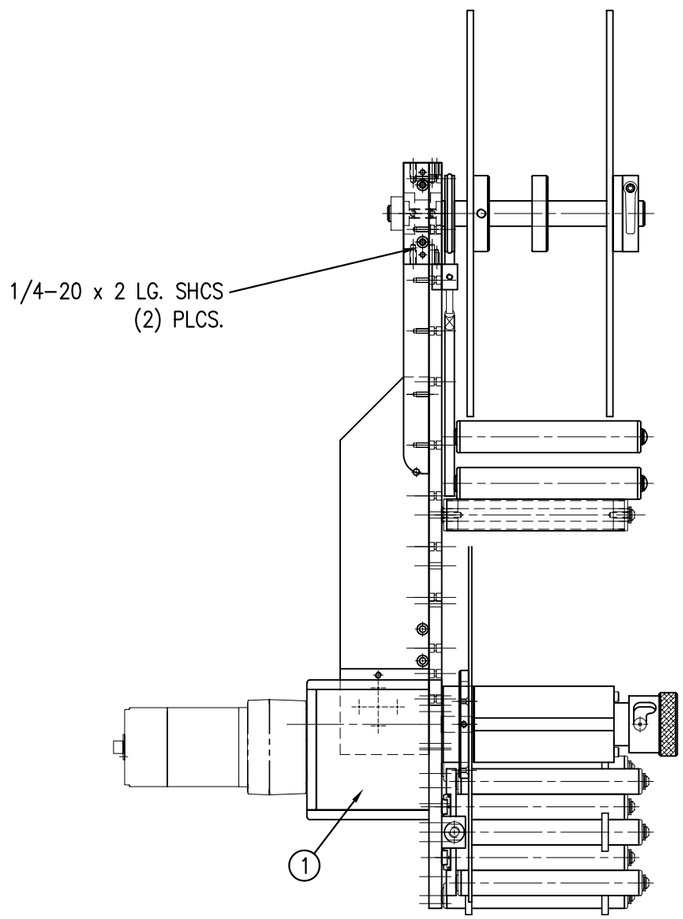
NOTE: POWERED REWIND REQUIRES A HI/LO PRESSURE REGULATOR
ADD EITHER ASS-200-3106 (FOR APPLICATORS WITH VALVE BANKS)
OR ASS-200-3107 (FOR APPLICATORS WITH OUT VALVE BANKS)
TO THE CTM BOM ALONG WITH MOD-200-3157R/L-S-XX

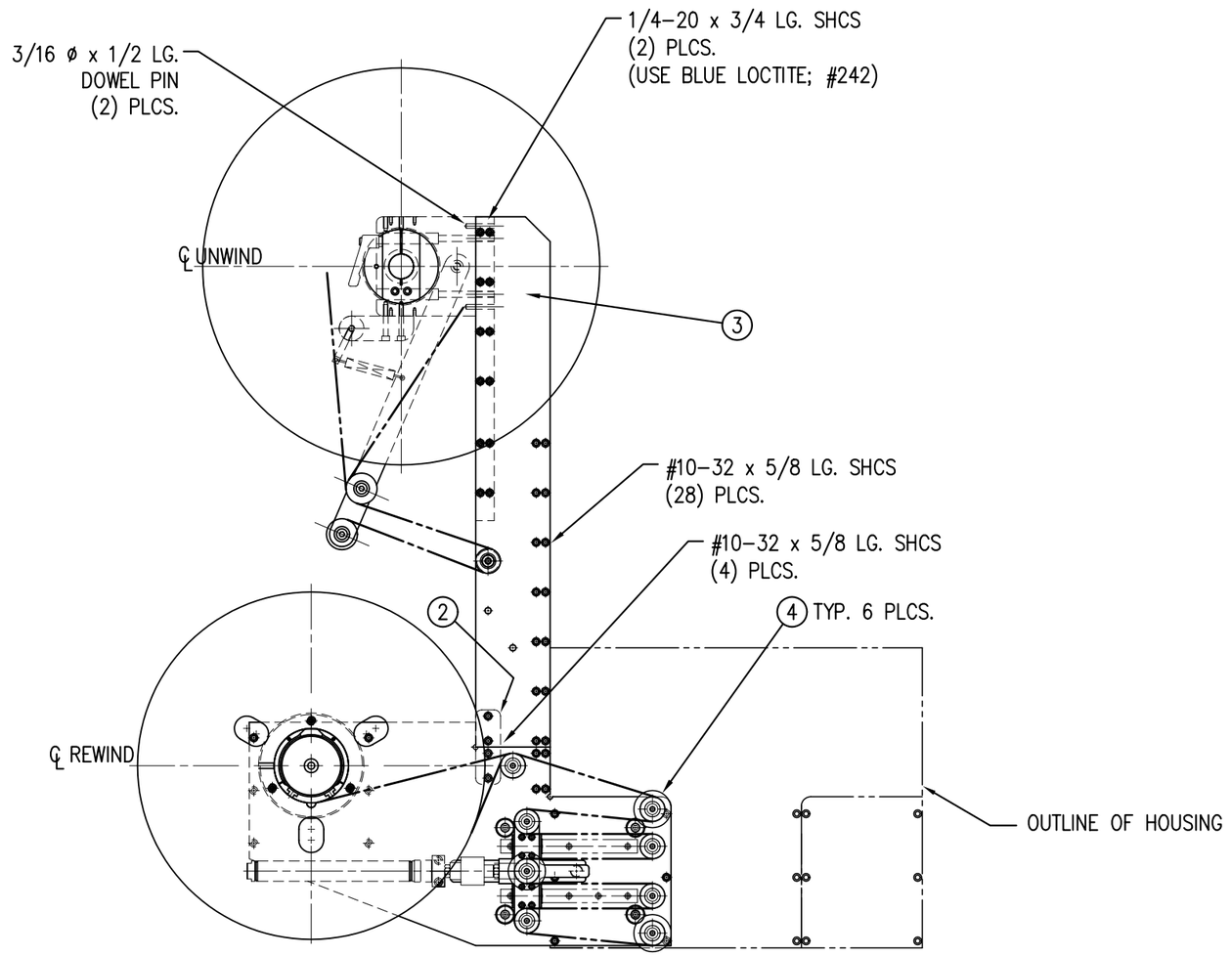
RH & LH ASSEMBLIES AVAILABLE
-RH ASSEMBLY SHOWN-

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

MOD-200-3158R/L-X

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





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PART: 16" UNWIND w/14" COLLAPSIBLE PWD. REWIND, 5/7.5, L/R

Dept. Code 70

Scale: 1=6

Date: 02/26/08

DRAWN BY: Jeffery Mendenhall

REV. BY: TDR

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TITLE: 360/360A SERIES APPLICATOR: REWIND ASSEMBLY

REV.	REV. DESCRIPTION	REV. DATE
1	ADDED GUIDE COLLARS	07/09/08

BILL OF MATERIAL

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"
④	6	MP–215–0202	GUIDE COLLAR FOR 1.00" DIA. ROLLERS
	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

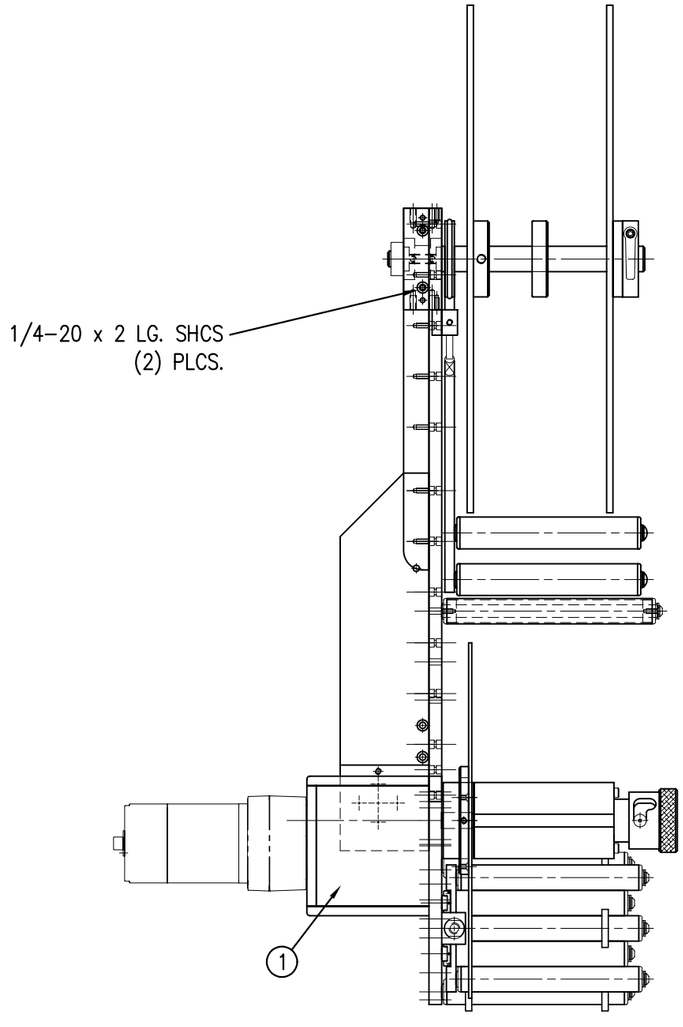
NOTE: POWERED REWIND REQUIRES A HI/LO PRESSURE REGULATOR
ADD EITHER ASS–200–3106 (FOR APPLICATORS WITH VALVE BANKS)
OR ASS–200–3107 (FOR APPLICATORS WITH OUT VALVE BANKS)
TO THE CTM BOM ALONG WITH MOD–200X–3156R/L–X

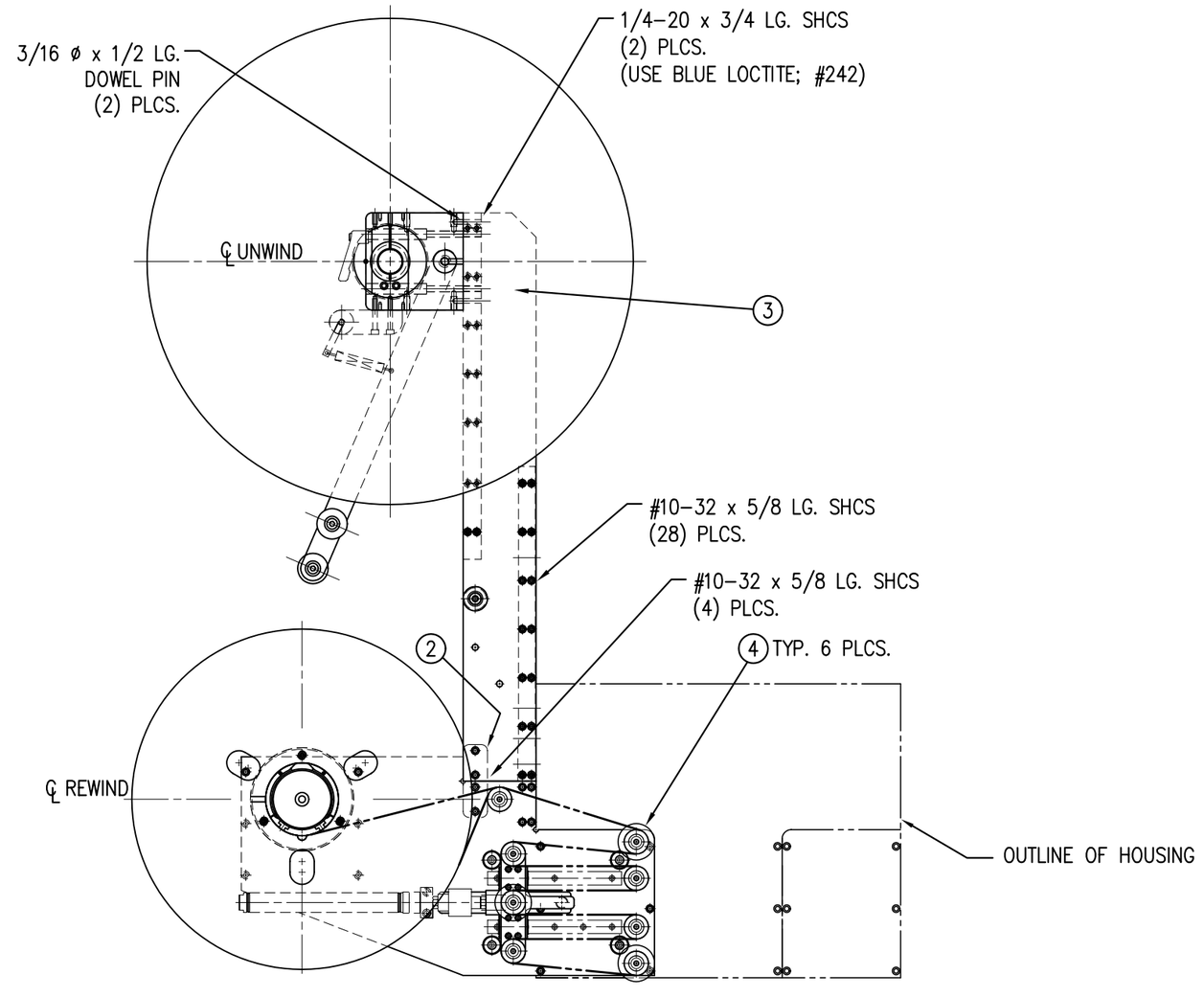
MOD–200–3159R/L–X

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: 360/360A SERIES APPLICATOR: REWIND ASSEMBLY

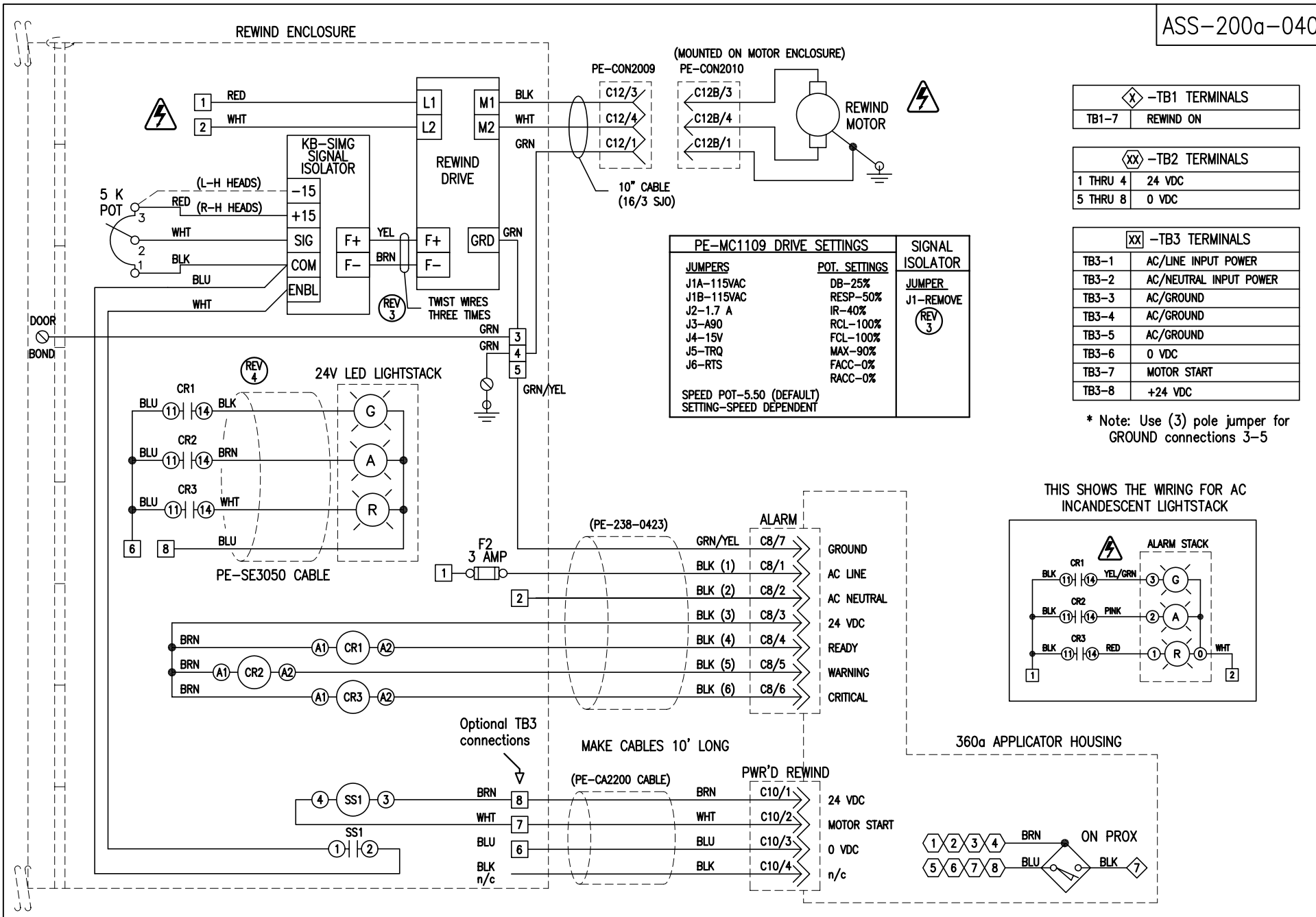
PART: 20" NON–POWERED UNWIND w/14" PWR'D COLLAPSIBLE REWIND

Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:
1	ADDED GUIDE COLLARS	07/09/08	TDR	1=6

Date: 02/29/08 | DRAWN BY: Jeffery Mendenhall | F:\Engineering\Standard Parts\Applicator\360\MOD–200–3159RL–X

ASS-200a-0403



PE-MC1109 DRIVE SETTINGS		SIGNAL ISOLATOR
JUMPERS	POT. SETTINGS	JUMPER
J1A-115VAC	DB-25%	J1-REMOVE (REV 3)
J1B-115VAC	RESP-50%	
J2-1.7 A	IR-40%	
J3-A90	RCL-100%	
J4-15V	FCL-100%	
J5-TRQ	MAX-90%	
J6-RTS	FACC-0%	
	RACC-0%	

SPEED POT-5.50 (DEFAULT)
SETTING-SPEED DEPENDENT

X -TB1 TERMINALS	
TB1-7	REWIND ON

XX -TB2 TERMINALS	
1 THRU 4	24 VDC
5 THRU 8	0 VDC

XX -TB3 TERMINALS	
TB3-1	AC/LINE INPUT POWER
TB3-2	AC/NEUTRAL INPUT POWER
TB3-3	AC/GROUND
TB3-4	AC/GROUND
TB3-5	AC/GROUND
TB3-6	0 VDC
TB3-7	MOTOR START
TB3-8	+24 VDC

* Note: Use (3) pole jumper for GROUND connections 3-5

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TITLE: 360a SERIES APPLICATOR: ELECTRICAL	PART: POWERED REWIND MODULE SCHEMATICS	Dept. Code 70

REV.	REV. DESCRIPTION	REV. DATE	REV. BY:	Scale:	Date:	DRAWN BY:	F:\Engineering\Standard Parts\Applicator\360
4	Changed wiring to support Banner light stacks	08-28-09	dkm	1=2	04-12-07	dkm	200\ASS-200a-0403